



PD/PM SERIES

Paralel Şaft Montajlı Redüktör
Parallel Shaft Mounted Gear Units
Flachgetriebemotoren

IE2 | IE3



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PGR[®]
DRIVE TECHNOLOGIES



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TR KALİTE POLİTİKAMIZ

Polat Group Redüktör San. ve Tic. A.Ş., en iyiyi yakalamak için; İş Sağlığı ve Güvenliği, Çevre Güvenliği ve Kalite Yönetim Sistemi uygulamalarını, Üretim ve Hizmet sürecinin vazgeçilmez bir unsuru olarak değerlendirmekte ve uygulamaktadır.

Bu doğrultuda;

- Yayınlanmış ulusal/uluslararası yasal şartlar ve diğer şartlara uymak ve güncelliğini takip etmeyi;
- Atıkları kaynağında azaltmak ve teknolojik imkanlar ile çevre etkilerini kontrol altında tutmayı;
- Bünyemizde uygulanan yönetim sistemlerinin performansının değerlendirmek ve sürekli iyileştirmeyi;
- Eğitimlerle çalışanlarımızı çevre, iş sağlığı ve güvenliği ve Kalite yönetim sistemleri konusunda bilinçlendirmeyi;
- Çalışan sağlığının ve çevrenin korunması için çalışmalarını güncel tutmayı;
- Sektöründeki teknolojik gelişmeleri takip etmeyi, pazar payındaki istikrarını sürdürmek için müşterilerinin istek ve beklentilerine eksiksiz ve zamanında cevap vererek sürekli artan müşteri memnuniyetini sağlamayı, eğitimli çalışanlarının performansını, huzurlu bir çalışma ortamı sağlayarak artırmayı;

Şirket politikası olarak benimsemiştir.

VİZYONUMUZ

Müşteri ve çalışan memnuniyetini en üst düzeyde tutan, gelişmeleri izleyen değil yaratan bir dünya şirketi olmaktır.

MİSYONUMUZ

Müşterilerimizin ihtiyaçlarını karşılayacak çözümleri bilgi teknolojilerini kullanarak en verimli ve kaliteli şekilde sunmaktır.

Polat Group Redüktör olarak birçok farklı ürün yelpazesi ile, müşteri ihtiyacını maksimum seviyede karşılamak için eş zamanlı mühendislik yöntemlerini kullanarak çalışmalarını sürdürmektedir. Tasarım faaliyetleri, ürün geliştirme programları ve bilgisayar destekli çalışmalarımız sürekli gelişen bir grafik çizmektedir. Rekabetçi ve güçlü kalite politikamız müşteri yelpazemizi genişletmektedir.

EN OUR QUALITY POLICY

Polat Group Redüktör San. ve Tic. A.Ş., considers and applies Occupational Health and Safety, Environmental Safety and Quality Management System as the inseparable part of Production and Service process.

In line with this, our company adopts:

- Complying with published national/international legal provisions and other conditions and following up-to-datedness thereof;
- Reducing wastes in resources and keeping environmental impacts under control with technological opportunities;
- Assessing and constantly improving performance of management systems applied within our company;
- Raising awareness of our employees about occupational health and safety and quality management systems through trainings;
- Keeping our activities up-to-dated to protect personnel health and environmental protection;
- Following technological developments in the sector, ensuring ever-increasing customer satisfaction by responding to requests and expectations of customers completely and duly to sustain stability in the market share and increasing performance of trained employees by providing a peaceful working environment;

as the company policy.

OUR VISION

Our vision is to become a world company which meets and surpasses the customer satisfaction and which not only follows the development but also creates the development itself.

OUR MISSION

Our mission is to provide the solutions to our customers in the most efficient and qualified way by making use of the information technologies.

Our reducer group carries out its work using simultaneous engineering methods in order to meet the demands of our customers by presenting several different product ranges. Design and planning activities, product development programmes and computer supporting work show a continuously growing chart. Our competitive and strong quality policy is to develop our customer spectrum.

DE UNSERE QUALITÄTSPOLITIK

Polat Group Redüktör San. ve Tic. A.Ş., um an das Beste zu gelangen; es bewertet und implementiert die Praktiken des Arbeitsschutz-, Umweltsicherheits- und Qualitätsmanagementsystems als unverzichtbares Element des Produktions- und Serviceprozesses.

In diese Richtung;

- Einhaltung und Befolgung der aktualisierten nationalen / internationalen gesetzlichen und sonstigen Anforderungen;
- Abfall an seiner Quelle zu reduzieren und technologische Möglichkeiten und Umweltauswirkungen unter Kontrolle zu halten;
- Bewertung und kontinuierliche Verbesserung der Leistung der in unserer Struktur implementierten Managementsysteme;
- Sensibilisierung unserer Mitarbeiter für Umwelt-, Arbeitsschutz- und Qualitätsmanagementsysteme durch Schulungen;
- Um unsere Arbeit zum Schutz der Gesundheit und der Umwelt der Mitarbeiter auf dem neuesten Stand zu halten;
- Verfolgung der technologischen Entwicklungen in der Branche, Gewährleistung der stetig steigenden Kundenzufriedenheit durch vollständige und pünktliche Reaktion auf die Anforderungen und Erwartungen ihrer Kunden, um ihre Marktanteilstabilität zu erhalten, Steigerung der Leistung ihrer geschulten Mitarbeiter durch Schaffung eines friedlichen Arbeitsumfelds;

hat sie als Unternehmenspolitik übernommen.

UNSERE VISION

Unsere Vision ist ein Weltunternehmen zu erschaffen, das die Kunden - und Mitarbeiterzufriedenheit ständig im höchsten Zustand haltet und die Entwicklungen nicht nur verfolgt, sondern auch gestaltet.

UNSER ZIEL

Unser Ziel ist unseren Kunden die Produkte, Qualitäts- und Dienstleistungen sowie Lösungen, die die Kundenerwartungen übertreffen und im besten und leistungsfähigsten Zustand mit Hilfe der neuesten Informationstechnologien zu bieten.

Polat Group Redüktör GmbH führt sämtliche Tätigkeiten des Ingenieurwesens gleichzeitig weiter, um die Kundenerwartungen an alle unsere Produkte aus verschiedenen Produktpaletten im höchsten Zustand zu übertreffen. Unsere Entwurfstätigkeiten und Produktentwicklungsprogramme und EDV unterstützten Arbeitsprozesse zeigen eine steigende Grafik. Unsere wettbewerbsfähige und kräftige Qualitätspolitik vergrößert unseren Kundenumfang weiter.

Redüktör Seçimi

Bir redüktör seçilirken, PGR üç fazlı asenkron AC motorları ve tek fazlı AC motorları kullanıldığını öngörür. Bu aynı zamanda teknik olarak karşılaştırılabilen tüm motorlar için de geçerlidir. Herhangi başka bir motor kullanımı halinde PGR'ye danışınız. Dişli ünitesinin seçimi yapılırken aşağıda belirtilen ana esaslara bağlı kalınmaz ise ünite de istenmeyen aşırı yüklenme durumları açığa çıkabilir. Bu durumda tarafımızdan verilen tüm garantiler kapsam dışına çıkar. Kullanılacak redüktörden yüksek verim alabilmenin ilk adımı size uygun olan doğru ürünü seçebilmektir.

Redüktör seçimi yapılırken aşağıdaki kritik hususlara dikkat edilmelidir. Bunlar Mekanik kontrol, termal limit kontrolü, redüktör mili üzerine gelebilecek radyal ve eksenel yük kontrolleri ve servis faktörü kontrolüdür.

Hangi redüktörün sizin makinanız için uygun olduğuna, makinanızın çalışma şartlarına göre gerekli giriş gücü, istenilen tahvil oranı ve servis faktörü değerlerinin belirlenmesinden sonra karar verilmelidir. Optimum çalışma şartları sağlanacak redüktördeki aşırı yüklenmeden kaynaklı tüm problemlerin oluşması engellenmelidir.

Seçim yapılırken dikkat edilmesi gereken önemli unsurlardan biri de kullanılan harici yedek parçalar, giriş ve çıkış aksesuarlarıdır. PGR'nin önerdiği ürünler haricinde ekipman kullanımı veya redüktörün zarar görebileceği şüpheli durumlarda PGR satış departmanı ile irtibata geçilmeli, teknik veriler ve tasarım tekrar kontrol edilmelidir.

Firmadan habersiz yapılan uygulama ve yanlış seçimler sonucunda redüktör ile ilgili yaşanan problemlerde tarafımızdan verilen tüm garantiler kapsam dışına çıkar.

Redüktör Seçim Kriterleri

1.Mekanik kontrol:

İlk olarak makinanızın çalışma şartlarının bilinmesi gerekir. Bunlar günlük çalışma süresi, saatteki start-stop sayısı ve makineden gelecek yükün hangi yük sınıfı içerisinde olduğunun belirlenmesidir.

Yük sınıfı ise motor miline indirgenmiş toplam dış atalet momentinin, motor atalet momentine oranından elde edilen sayıya (m_{af}) göre belirlenir. $m_{af} \leq 0.25$ ise düzgün çalışma yük sınıfı (U), $0.25 < m_{af} \leq 3$ ise orta darbeli yük sınıfı (M) ve $3 < m_{af} \leq 10$ ise çalışmanın ağır darbeli yük sınıfında (H) olduğu anlamına gelir.

Günlük çalışma süresi ve saatteki start-stop sayısı makinanın çalışma şartlarından kolayca belirlenir. Sonrasında sayfa 5'deki diyagram 1 kullanılarak mekanik yönden gerekli servis faktörü değeri bulunur.

2.Termal Limit Kontrolü

Redüktörde bazı çalışma koşullarında aşırı ısınma gözlemlenir. Termal sınırlar kataloglardaki termal yönden müsaade edilen motor güç değerlerine bakılarak kontrol edilmelidir. Termal güç değerlerinin yeterli olmadığı durumlarda çalışma koşullarına göre verilecek ilave soğutucularla (fan, serpantin, eşanjör, radyatör vb.) termal güç değerlerini arttırmak mümkündür.

Redüktörün aşırı ısınmaması için güç transferi sürelerinin belirlenen çalışma zamanının aşılması gereklidir. Termal olarak transfer edilebilen güç süresi (3saat) sadece PA/PF 62, PD/PM 62, PKD 6390 ve daha büyük gövdeler için olası bir sınırı temsil eder.

Gearbox Selection

When selecting gear unit , PGR assumes that three-phase AC motor or single phase AC motor are used. This is also valid for technically comperable motors. If you intend to use a motor other than PGR, please contact with PGR. If you do not obey the main instructions which are given below, you may have some problems like overloading. In these situations, our all guarantees will be invalid. If you want get high efficiency from our products, the main step is choosing right product.

At reducer choosing step, you should be careful about following points like mechanical control, thermal limit control, the radial and axial loads control which is on reducer shaft and service factor.

After deciding input power, desired ratio number and service factor, you should decide which reducer is suitable for your machines. If you want to ensure optimal working conditions, all problems caused by overloading should be prevented.

At choosing step, external spare parts, input and output accessories has also impotence. When using equipments which are not advised by PGR and under suspecious situation which can harm reducer, please consult to PGR sales office department which is responsible for giving technical information to you.

Applications which are done without information of us and wrong selections are out of guarantee.

The conditions of selecting gear unit are as the following:

1.Mechanical control:

Firstly, you should know working conditions of your machine. These are daily working time,revolution per hours and loads which are applied from driven machine to gear unit should be known in which load classification.

Load Classification can be determined from ratio between external moment of inertia and motor moment of inertia(m_{af}) If $m_{af} \leq 0.25$ it is Uniform application(U) $0.25 < m_{af} \leq 3$ it is Moderate impact application(M) $3 < m_{af} \leq 10$ it is Heavy impact application(H)

You can easily decide to daily working time, revolution per hours from working conditions of machine. After that, you can choose service factor from diagram at page 5 on mechanical way.

2.Thermal Limit Control

Overheating may happen in gearbox under some operating conditions. Thermal limits should be checked by looking at the thermally permissible motor power values at catalogues. If thermal power values are not enough, it will be possible to increase the thermal power values with additional coolers like fan, coil, heat exchanger, radiator, etc.,and they should be given according to the operating conditions.

For the gearbox does not to be overheated, the power transfer times must not exceed the specified operating time. Thermally transferable power time (3hour) shows a possible limit only for PA/PF 62, PD/PM 62, PKD 6390 and larger cases.

Getriebeauswahl

Bei der Getriebeauswahl prognostiziert PGR den Einsatz von Drehstrom-Asynchronmotoren und Einphasen-Wechselstrommotoren. Dies gilt auch für alle technisch vergleichbaren Motoren. Wenden Sie sich an PGR, wenn ein anderer Motor verwendet wird. Unerwünschte Überlastsituationen im Aggregat können auftreten, wenn bei der Auswahl des Getriebes folgende Hauptprinzipien nicht beachtet werden. In diesem Fall erlöschen alle von uns gegebenen Garantien. Der erste Schritt, um eine hohe Effizienz des zu verwendenden Reduzierstücks zu erzielen, besteht darin, das richtige Produkt auszuwählen, das zu Ihnen passt.

Bei der Auswahl des Reduzierstücks sollten die folgenden kritischen Punkte berücksichtigt werden. Dies sind mechanische Kontrolle, thermische Grenzkontrolle, quer und axiale Lastkontrolle an der Getriebewelle und Betriebsfaktorkontrolle.

Welches Getriebe für Ihre Maschine geeignet ist, sollte nach Ermittlung der erforderlichen Eingangsleistung, des gewünschten Übersetzungsverhältnisses und der Betriebsfaktorwerte entsprechend den Arbeitsbedingungen Ihrer Maschine entschieden werden. Es sollen optimale Arbeitsbedingungen geschaffen werden und alle Probleme durch Überlastung im Getriebe sollen vermieden werden.

Einer der wichtigsten Faktoren, die bei der Auswahl zu berücksichtigen sind, sind die externen Ersatzteile sowie das Eingangs- und Ausgangszubehör. Wenn andere Geräte als die von PGR empfohlenen Produkte verwendet werden oder der Verdacht auf eine Beschädigung des Getriebes besteht, sollte der PGR-Vertrieb kontaktiert und die technischen Daten und das Design erneut überprüft werden.

Alle von uns gegebenen Garantien erlöschen im Falle von Problemen im Zusammenhang mit dem Reduzierstück aufgrund der Anwendung und falscher Entscheidungen, die ohne Wissen des Unternehmens getroffen wurden.

Auswahlkriterien für Getriebe

1.Mechanische Kontrolle:

Zunächst sollten die Arbeitsbedingungen Ihrer Maschine bekannt sein. Dies sind die tägliche Arbeitszeit, die Anzahl der Starts-Stopps pro Stunde und die Ermittlung der Belastungsklasse der Maschine.

Der Stoßgrad ergibt sich aus der Gleichmäßigkeit des Betriebes und aus dem Massenbeschleunigungsfaktor (m_{af}). Bei $m_{af} \leq 0,25$ gleichmäßiger Betrieb (U), bei $0,25 < m_{af} \leq 3$ ungleichmäßiger Betrieb (M) und bei $3 < m_{af} \leq 10$ stark ungleichmäßiger Betrieb (H).

Die tägliche Arbeitszeit und die Anzahl der Starts-Stopps pro Stunde lassen sich leicht aus den Arbeitsbedingungen der Maschine ermitteln. Anschließend wird anhand von Diagramm 1 auf Seite 5 der mechanisch erforderliche Betriebsfaktor-Wert ermittelt.

2. Thermische Limitkontrolle

Unter bestimmten Betriebsbedingungen kann eine Überhitzung des Getriebes beobachtet werden. Thermische Grenzen sollten anhand der thermisch zulässigen Motorleistungswerte in den Katalogen überprüft werden. In Fällen, in denen die thermischen Leistungswerte nicht ausreichen, ist es möglich, die thermischen Leistungswerte mit zusätzlichen Kühlern (Lüfter, Serpentin-Kühler, Wärmetauscher, Öl/Wasserkühler usw.) entsprechend den Betriebsbedingungen zu erhöhen.

Damit das Getriebe nicht überhitzt, dürfen die Kraftübertragungszeiten die angegebene Betriebszeit nicht überschreiten.

Die thermisch übertragbare Leistungszeit beträgt (3h) und stellt nur bei PA/PF 62, PD/PM 62, PKD 6390 und größeren Körpern eine mögliche Grenze dar.

TR

TEKNİK BİLGİLER

Aşağıdaki maddelerden iki veya daha fazlasının geçerli olması durumunda redüktörün belirli operasyonel durumu kontrol edilmelidir. PGR ile iletişime geçmenizi öneririz.

- Ortam sıcaklığı 40°C fazla ise
- Dönme hızı n_1 1400 min⁻¹ üzerinde ise
- Motor gücü P_1 100 kW ve üzeri ise
- IEC, PAM ve W adaptör bağlı redüktör söz konusu ise
- Dik olarak montaj söz konusu ise (M2 – M4)
- Tahvil oranı $itop < 20$ (Konik dişliler için $itop < 40$)

Redüktörün korunup sağlıklı çalışması için, ısı radyasyonu yoğun alanda çalışma, dar alanda çalışma, kapalı alanda çalışma gibi özel çevresel montaj koşullarının olduğu durumlarda PGR'ye danışınız.

3. Giriş gücü ve servis faktörü

Her bir uygulama için gerekli olan giriş gücü, hesaplama ile belirlenir. Motor anma gücü (P_1), bu giriş gücünden sonra seçilir. Motor anma gücü istenilen güç değerinden biraz daha yüksektir. Bunun sebebi çalışma koşullarının standart dışı özel olabilesidir.

Montajı yapılacak 3 fazlı bir AC motorunun anma gücünü seçerken kısa aralıklı seyrek tork tesirini hesaplamaya gerek yoktur. İlave faktörler belirli bir frekans invertöründe çalışan 3 fazlı bir AC motor için anma gücünün seçimini etkiler. Dişli ünitesinin seçimini AC motorun aksine kısa aralıklı seyrek tork tesirleri etkiler. Dişli ünitesinin yük sınıfı belirlenirken bu kısa aralıklı seyrek tork tesirleri göz önünde bulundurulmalıdır. Redüktör servis faktörü f_B bunu ve redüktör üzerindeki diğer etkileri yeterli doğrulukta hesaba katar.

5. Sayfadaki diyagram 1 günlük çalışma süresi, yük sınıflandırması, saatteki start-stop sayısı ile servis faktörü arasındaki ilişkiyi göstermektedir.

EN

TECHNICAL INFORMATION

If the two or more of below items are valid, the specific operational condition of the reducer should be checked. Please kindly contact with PGR.

- If the ambient temperature is above 40°
- If the rotation speed n_1 is over 1400 min⁻¹
- If the motor power P_1 is 100 kW and above
- If there is IEC, PAM and W adaptor connected gearbox
- In case of vertical mounting preferred (M2 – M4)
- The ratio $itop < 20$ (For bevel gears $itop < 40$)

Please kindly consult to PGR, in case of work in heat radiation-intensive area, work in narrow space, work in confined space to be prevented and worked healthier gearboxes.

3.Input power and service factor

For every application, the requiring input power should be calculated. Motor rated power (P_1) should be selected after choosing input power. The motor rated power is slightly higher than the desired power value. The reason for this situation is working conditions are non-standart, they are special

It is not necessary to calculate the short-range rare torque effect when choosing the rated power of a 3-phase AC motor to be mounted. Additional factors affect the choice of rated power for a 3-phase AC motor operating in a particular frequency inverter. Unlike the AC motor, short-range infrequent torque effects affect the choice of gear unit. These short-range infrequent torque effects should be taken into account when determining the load class of the gear unit. The gear unit service factor f_B takes this and other effects on the gear unit into account with sufficient accuracy.

Diagram 1 which is shown on page 5, presents relation between types of load, revolution per hour and minimum service factor depend on operation hours or day.

DE

TECHNISCHE INFORMATION

Wenn zwei oder mehr der folgenden Punkte zutreffen, sollte der spezifische Betriebszustand des Getriebes überprüft werden. Wir empfehlen Ihnen, sich an PGR zu wenden.

- Wenn die Umgebungstemperatur mehr als 40°C beträgt
- Wenn die Drehzahl n_1 über 1400 min⁻¹ liegt
- Wenn die Motorleistung P_1 100 kW und mehr beträgt
- Bei IEC, PAM und W Adapter angeschlossenem Getriebe
- Bei vertikaler Montage (M2 – M4)
- Bindungsverhältnis $itop < 20$ ($itop < 40$ für Kegelhäder)

Wenden Sie sich an PGR in Fällen, in denen besondere Umgebungsbedingungen für die Montage herrschen, wie z. B. Arbeiten in einem wärmestrahlungsintensiven Bereich, Arbeiten in einem engen Bereich, Arbeiten in einem geschlossenen Bereich, zum Schutz und zum gesunden Betrieb des Getriebes.

3. Eingangsleistung und Servicefaktor

Die für jede Anwendung benötigte Eingangsleistung wird rechnerisch ermittelt. Die Motornennleistung (P_1) wird nach dieser Eingangsleistung gewählt.

Die Motornennleistung könnte etwas höher sein als der gewünschte Leistungswert. Dies liegt daran, dass die Arbeitsbedingungen vom Standard abweichen können.

Bei der Auswahl der Nennleistung eines zu installierenden 3-Phasen-Wechselstrommotors muss der kurzzeitige seltene Drehmomenteffekt nicht berechnet werden. Zusätzliche Faktoren beeinflussen die Wahl der Nennleistung für einen 3-Phasen-Wechselstrommotor, der in einem bestimmten Frequenzrichter betrieben wird. Im Gegensatz zum Wechselstrommotor beeinflussen seltene Drehmomenteffekte im Nahbereich die Wahl des Getriebes. Diese kurzreichweitigen seltenen Drehmomenteffekte sollten bei der Bestimmung der Belastungsklasse des Getriebes berücksichtigt werden. Der Getriebebetriebsfaktor f_B berücksichtigt diese und weitere Auswirkungen auf das Getriebe mit ausreichender Genauigkeit

Das Diagramm auf Seite 5 zeigt den Zusammenhang zwischen 1-Tages-Betriebszeit, Lastklassifizierung, Anzahl Starts-Stops pro Stunde und Betriebsfaktor.

TR

SERVİS FAKTÖRÜ

EN

SERVICE FACTOR

DE

SERVICEFAKTOR

Diyagram 1 günlük çalışma zamanına (saat), saatteki start sayısına ve uygulanan yük tipi sınıflandırmasına "U", "M", "H" göre gerekli servis faktörünü gösterir. Çalışma düzgünlüğüne ve kütle hız faktörüne (m_{af}) bağlı olarak, üç yük sınıflandırması belirlenmiştir. Hareket ettirilen mekanizmaya gelen dış etkiler çalışma düzgünlüğü sınıflamasını tanımlarken kütleli ivme faktörüne bağlı olarak 3 farklı yük sınıflandırması belirlenir. Diagram 1 kullanılarak belirlenen servis faktörü, motorlu seçim tablolarında verilen servis faktörüne eşit ya da küçük olmalıdır.

Not : Elde edilen servis faktörü f_B kullanılan sürücü (tahrik) tipine göre "k" katsayısı ile çarpılır.

k = 1 ; elektrik motoru veya hidromotor,
k = 1.25 ; çok silindirli içten yanmalı motor,
k = 1.50 ; tek silindirli içten yanmalı motor

The diagram 1 shows the required service factor according to daily working time (hours), revolution per hours, and the applied load type "U", "M", "H". Three load classifications are determined, and they are depending on the working regularity and the mass acceleration factor (m_{af}). While the external effects on the driven mechanism define the working smoothness classification, 3 different load classifications are determined depending on the mass acceleration factor. Service factor which is determined by using Diagram 1 must be less than or equal to the service factor given in the motor selection tables.

Note : Service factor f_B which is obtained, should be multiplied with factor "k" which depends on drive type.

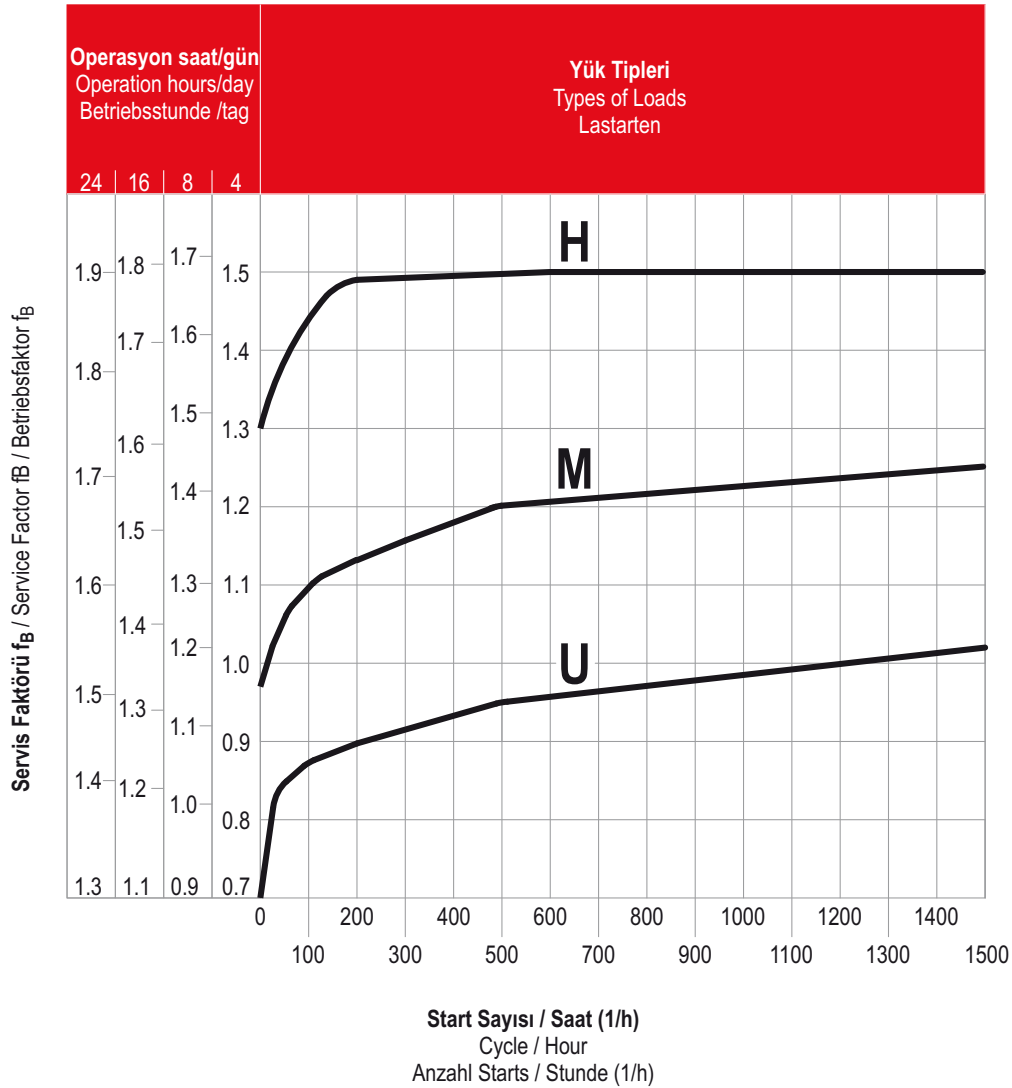
k = 1 ; hydraulic motor and electrical motor
k = 1.25 ; multi-cylinder engine
k = 1.50 ; single-cylinder engine

Das Diagramm zeigt den erforderlichen Betriebsfaktor entsprechend der 1-Tages-Betriebszeit (Stunden), der Anzahl der Starts pro Stunde und der angewendeten Lastartenklassifizierung "U", "M", "H". Auf Basis der Laufruhe und des Massengeschwindigkeitsfaktors (m_{af}) wurden drei Belastungsklassen ermittelt. Während die äußeren Einwirkungen auf den angetriebenen Mechanismus die Laufruheklasse bestimmen, werden in Abhängigkeit vom Massenbeschleunigungsfaktor 3 verschiedene Lastklassen bestimmt. Der nach Diagramm 1 ermittelte Betriebsfaktor muss kleiner oder gleich dem in den Motorauswahltabellen angegebenen Betriebsfaktor sein.

Hinweis: Der resultierende Betriebsfaktor f_B wird mit dem Koeffizienten "k" entsprechend der verwendeten Antriebsart (Antrieb) multipliziert.

k = 1 ; Elektromotor oder Hydromotor
k = 1,25 ; Mehrzylinder-Verbrennungsmotor
k = 1,50 ; Einzylinder-Verbrennungsmotor

Diyagram / Diagram / Diagramm - 1



Yük Sınıfının Belirlenmesi:**U) Düzgün çalışma**

Küçük karıştırıcılar, asansörler, konveyörler, montaj bantları, doldurma makinaları, bantlı konveyörler, temizleme makinaları, fanlar, test makinaları, santrifuj pompalar (ince sıvı pompalar).

M) Yumuşak şoklar, düzgün olmayan çalışma

Ağır yük konveyör bantları, değirmenler, ahır gübre makinaları, vinç hareket mekanizmaları, bükme makinaları, çimento karıştırıcılar, ahşap işleme makinaları için tahrik mekanizmaları, vinçler, kayar kapılar, balans makinaları, paketleme makinaları, dişli pompalar, santrifuj pompalar (yarı sıvı pompalar), vana döndürme dişlileri, dokuma tezgahları, hallaç makinaları, harman makinaları, taneleme (debegat) tekneleri, kolenderler, agidatörler, kurutma merdaneleri.

H) Ağır şoklar, aşırı düzgün olmayan çalışma

Taş kırıcılar, eksantrik presler, doğrayıcılar, presler, taşlama milleri, çekiçli kırıcılar, kağıt öğütücüler, ağır yük karıştırıcılar, delme makinaları, katlama makinaları, dönen tezgahlar, yatay karıştırıcılar, kesiciler, vibratörler, santrifuj makinaları, döner tablalar, ağır yük vinç ve asansörler, plaka-silindir-soğuk haddeleme makinaları, hız ayarlı sabit silindirler, kağıt hamur makinaları, kurutma silindirleri, perdelama silindirleri.

Yük sınıfı (çalışma düzgünlüğü) aşağıdaki tabloya göre kütle hız faktörü (m_{af}) den belirlenir. Eğer çalışma düzgünlüğü ile hesap ettiğimiz maf birbirleriyle uyumlu değilse (Örneğin: yumuşak geçişli düzgün olmayan çalışma koşulu ve m_{af} :0,2 için gerekli yük sınıfımız "M" olmalıdır ya da düzgün çalışma koşulu ve maf: 0,28 için gerekli yük sınıfımız yine M olmalıdır.) daha ağır çalışma sınıfı gurbuna giren geçerlidir.

Determination of Load Class:**U) Regular operation**

Small agitator, elevators, conveyors, mounting belt, filling machines, belt conveyors, cleaning machines, fans, testing machines, centrifugal pumps (fine liquid pumps).

M) Moderate shocks, non-uniform application

Heavy conveyor belts, mills, barn manure machine, crane motion mechanisms, bending machines, cement mixer, driving gear mechanisms for wood processing machines, cranes, sliding door, balancing machines, packaging machines, gear pumps, centrifugal pumps, valve turning gears, weaving looms, carding-machines, treshing machines, granulation vats, corrianders, agitators, drying rollers.

H) Heavy shocks, non-uniform application

Stone crushers, eccentric press machines, choppers, press machines, grindingmills, hammer mills, shredders, heavy mixers, boring machines, folding machines, turning looms, horizontal mixers, cutters, vibrators, centrifugal machines, heavy cranes and elevators, plate-cylinder-cold extrusion machines, fixed cylinder with regulated velocity, sluch machines, drying cylinders, polishing cylinders,

The load classification is determined from the mass velocity factor (m_{af}) according to the below table. If the working regularity and the mass acceleration factor we calculated are not compatible with each other (For example: our required load class should be "M" for moderate shocks, non-uniform application and m_{af} :0,2, or our required load class for regular application and maf: 0.28 is still M. It should be valid), the heavier running classification is valid.

Bestimmung der Belastungsklasse:**U) gleichmäßiger Betrieb**

Kleinmischer, Elevatoren, Förderer, Montagebänder, Abfüllmaschinen, Bandförderer, Reinigungsmaschinen, Ventilatoren, Prüfmaschinen, Kreiselpumpen (Feinflüssigkeitspumpen).

M) Weiche Stöße, ungleichmäßiger Betrieb

Schwerlastförderbänder, Mühlen, Stallmistmaschinen, Kranantriebe, Biegemaschinen, Betonmischer, Antriebe für Holzbearbeitungsmaschinen, Kräne, Schiebetüren, Auswuchtmaschinen, Verpackungsmaschinen, Zahnradschneidemaschinen, Kreiselpumpen (Halbflüssigkeitspumpen), Ventilatorvorrichtungen, Webstühle, Putzereimaschinen, Dreschmaschinen, Granulier-(Debegat-) Behälter, Siebe, Rührwerke, Trockenwalzen.

H) Starke Stöße, stark ungleichmäßiger Betrieb

Steinbrecher, Exzenterpressen, Häcksler, Pressen, Mahlspeindeln, Hammerbrecher, Aktenvernichter, Hochleistungsmischer, Stanzmaschinen, Abkantmaschinen, Rundtische, Horizontalmischer, Schneidgeräte, Vibratoren, Zentrifugen, Rundtische, Schwerlastkräne und Aufzüge, Plattenzylinder - Kaltwalzmaschinen, geschwindigkeitsregulierbare Festwalzen, Auflösungsmaschinen, Trockenwalzen, Kalandarwalzen.

Klassifizierung der Gleichmäßigkeit des Betriebes: Der Stoßgrad ergibt sich aus der Gleichmäßigkeit des Betriebes und aus dem Massenbeschleunigungsfaktor (m_{af}) gemäß der folgenden Tabelle. Hierbei gilt jeweils der größere Stoßgrad aus Betrieb und Massenbeschleunigungsfaktor. (Beispiel: ungleichmäßiger Betrieb und m_{af} = 0,2 ergibt Stoßgrad "M".)

Yük Sınıfı Load Classification Stoßgrad	Çalışma Operation Betrieb	Kütle hız faktörü Mass Acceleration Factor Massenbeschleunigungs-faktor
U	Düzgün çalışma / Uniform application / gleichmäßiger Betrieb	$m_{af} \leq 0.25$
M	Düzgün olmayan çalışma / Non-uniform application / ungleichmäßiger Betrieb	$0.25 < m_{af} \leq 3$
H	Aşırı düzgün olmayan çalışma / Extreme non-uniform application / stark ungleichmäßiger Betrieb	$3 < m_{af} \leq 10$

$$m_{af} = \frac{J_{ex.red}}{J_{mot}} = \frac{J_{ex}}{J_{mot}} \times \left(\frac{1}{i_{ges}} \right)^2$$

i_{ges} = Tahvil oranı

$J_{ex.red}$ = Tahrik motoru üzerindeki azaltılmış dış kütle atalet momentleri toplamı

J_{ex} = Dış kütle atalet momentleri toplamı

J_{mot} = Motorun kütle atalet momenti toplamı

i_{ges} = Total gear unit ratio

$J_{ex.red}$ = All external mass moment of inertia on the drive motor, reduced

J_{ex} = All external mass moment of inertia

J_{mot} = Mass moment of inertia of the motors

i_{ges} = Getriebeübersetzung

$J_{ex.red}$ = alle externen Massenträgheitsmomente auf Antriebsmotor reduziert

J_{ex} = alle externen Massenträgheitsmomente

J_{mot} = Massenträgheitsmoment des Motors

Kütle hız faktörü m_{af} , çıkış tarafındaki dış kütleler ile giriş tarafındaki yüksek hızlı kütlelerin arasındaki ilişkiyi gösterir.

Kütle hız faktörünün dişli ünitesinin tork tesir seviyesine önemli ölçüde sistem başlatma, frenleme ve titreşim üzerinden etkisi vardır.

Örneğin bir bantlı konveyör sistemini ele alalım. Burada dış kütle atalet momentini konveyör bant üzerinde taşınan malzemenin kütle hız faktörü oluşturur. Eğer $m_{af} > 10$ ise transfer elemanlarında büyük deplasman (yük değişimi) var ise ya da yük sınıflandırmamızda bir belirsizlik var ise PGR'ye danışınız. Bu ve benzeri hususlarla belirli şüpheleriniz var ise PGR'ye danışınız.

The mass acceleration factor (m_{af}) shows the relationship between the outer masses on the output side and the high speed masses on the input side.

The mass acceleration factor has an important effect on the torque effect level of the gear unit through system starting, braking and vibration

Take, for example, a belt conveyor system. Here, the mass load of the material carried on the conveyor belt creates the external mass moment of inertia. If m_{af} is > 10 , there is a large displacement (load change) in the transfer elements or if there is an uncertainty in our load classification, consult PGR. If you have certain doubts about these and similar issues, consult PGR.

Der Massenbeschleunigungsfaktor m_{af} stellt das Verhältnis von externen abtriebsseitigen und schnelllaufenden antriebsseitigen Massen dar. Der Massenbeschleunigungsfaktor hat wesentlichen Einfluss auf die Höhe der Drehmomentstöße im Getriebe bei Anlauf- und Bremsvorgängen und Schwingungen. Die externen Massenträgheitsmomente beinhalten auch die Last wie z.B. das Fördergut und Transportbändern. Bei $m_{af} > 10$ bei großem Spiel in Übertragungselementen, Schwingungen im System, bei Unklarheiten zum Stoßgrad oder in Zweifelsfällen bitten wir Sie um Rücksprache mit PGR.

TR

TEKNİK BİLGİLER

Redüktörümüzün servis faktörü f_B 'dir. Redüktörümüz için geçerli maksimum çıkış momenti M_{amax} 'dir. Motor gücümüz P_1 'dir. Redüktör çıkış devrimiz n_2 'dir. Redüktörümüzün operasyonel çıkış momenti M_2 'dir.

Sistemimiz mekanik bir sistem olduğu için sistem ünitemizde kayıplarımız mevcuttur. Giriş gücümüz %100 kayıpsız olarak çıkışa iletilmez. Bu sebeple yüzde cinsinden verimliliği göz önünde bulundurmakta ve bunu hesaplarımızdaki formüllere eklemekteyiz. Redüktör verimliliği: η 'dir

EN

TECHNICAL INFORMATION

f_B is the service factor of our gear unit. M_{amax} is maximum output moment of our gear unit. P_1 is the motor power. Gear unit output rotation is n_2 . M_2 is the operational output moment.

Since our system is a mechanical system, we have losses in our system unit. Our input power cannot be transmitted to the output as 100% lossless. For this reason, we consider the efficiency in percent and add it to the formulas in our calculations. Gear unit efficiency: η

DE

TECHNISCHE INFORMATION

Der Betriebsfaktor des Getriebes (f_B). Das gültige maximale Abtriebsdrehmoment für Getriebe (M_{amax}). Motorleistung (P_1) Abtriebsdrehzahl (n_2) Abtriebsdrehmoment (M_2)

Da unser System ein mechanisches System ist, haben wir Verluste in unserer Systemeinheit. Unsere Eingangsleistung kann nicht 100% verlustfrei auf den Ausgang übertragen werden. Aus diesem Grund betrachten wir den Wirkungsgrad in Prozent und fügen ihn in unseren Berechnungen zu den Formeln hinzu. Getriebewirkungsgrad: η

$$M_2 = \frac{P_1 \cdot 9550 \cdot \eta}{n_2} \quad [\text{Nm}] \quad P_1 \quad [\text{kW}], \quad n_2 \quad [\text{min}^{-1}]$$

$$f_B = \frac{M_{amax}}{M_2}$$

$$P_1 = \frac{M_2 \cdot n_2}{9550 \cdot \eta} \quad [\text{kW}] \quad M_2 \quad [\text{Nm}], \quad n_2 \quad [\text{min}^{-1}]$$

Redüktörümüzün doğru seçimi, motorlu seçim tablolarımızda mevcut olan f_B Servis faktörü değerinin Diyagram 1'den bulduğumuz minimum servis faktörümüz $f_{B \text{ min}}$ değerlerinden büyük veya eşit olması durumunda mümkündür.

Selection of gear unit is correctly done if service factor which is taken from selection of gear motors table must be greater than or equal to minimum service factor $f_{B \text{ min}}$ which is taken from diagram-1

Die richtige Auswahl unseres Getriebes ist möglich, wenn der in unseren Motorauswahltabellen verfügbare Wert f_B Servicefaktor größer oder gleich unserem minimalen Servicefaktor $f_{B \text{ min}}$ ist, den wir aus Diagramm 1 gefunden haben.

$$f_B \geq f_{B \text{ min}}$$

Helisel dişli redüktörler, Paralel shaft montajlı redüktörler ve Helisel konik dişli redüktörler her bir kademede çok yüksek verime sahiptir (kademe başına yaklaşık %96 - %98 veya $\eta = 0,96 - 0,98$). Bu yüzden hesaplamalarda verim $\eta = 1,0$ alınması yeterli ve doğru sonuçlara ulaşılmasına yardımcı olur. Helisel sonsuz dişli redüktörlerin verimliliği (η), her bir çıkış hızı (n_2) için oranlar IEC, PAM, W Seçim tablolarında belirtilmiştir. W kovani montajlı (serbest hareket mili) redüktörde çıkış gücü aşağıdaki formülden hesaplanır.

Helical gear reducers has higher efficiencies than Parallel shaft mounted gear units and Helical bevel gear reducers. (approx. 96% - 98% per step or $\eta = 0.96 - 0.98$). Therefore, taking efficiency $\eta = 1.0$ in calculations helps to achieve sufficient and correct results. For efficiency (η) of helical worm gear units, the ratio of each output speed (n_2) are specified in the IEC, PAM, W selection tables. Output power is calculated from the below formula for the W (free input shaft) gear unit.

Stirnradgetriebe, Flachgetriebe und Kegelradgetriebe haben einen sehr hohen Wirkungsgrad (ca. 96% - 98% je Getriebe-stufe oder $\eta = 0,96 - 0,98$). Daher führt der vereinfachte Getriebewirkungsgrad $\eta = 1,0$ in der Regel zu hinreichend und korrekte Ergebnissen. Bei Stirnradschneckengetrieben ist der Getriebewirkungsgrad (η) der Schneckengetriebe in den Leistungs- und Übersetzungstabellen (IEC, PAM, W) für die jeweilige Abtriebsdrehzahl (n_2) aufgeführt. Bei Getrieben mit freier Antriebswelle Typ W darf die installierte Antriebsleistung P_1 höchstens betragen:

$$P_1 = \frac{M_{amax} \cdot n_2}{9550 \cdot f_{B \text{ min}} \cdot \eta} \quad [\text{kW}] \quad M_{amax} \quad [\text{Nm}], \quad n_2 \quad [\text{min}^{-1}]$$

Redüktörümüzün güvenli ve verimli bir şekilde çalışması için maksimum tahrik gücü P_{1max} 'in aşılmaması gerekir.

For the safe and efficient operation of our gearbox, the maximum drive power P_{1max} must not be exceeded.

Hierbei darf die maximale Antriebsleistung P_{1max} nicht überschritten werden.

$$P_1 \leq P_{1max}$$

IEC, PAM, W bağlantılı redüktörler için IEC, PAM, W seçim tablolarında her bir çıkış devri (n_2) ve maksimum çıkış momenti (M_{amax}) için P_{1max} değerleri tablo halinde listelenmiştir.

For gear units with IEC, PAM, W connection, P_{1max} values for each output speed (n_2) and maximum output torque (M_{amax}) are listed in the IEC, PAM, W selection tables.

$P_1 \leq P_{1max}$ Die Leistungs- und Übersetzungstabellen (IEC, PAM, W) führen die jeweiligen Abtriebsdrehzahl n_2 das maximale Getriebeabtriebsdrehmoment M_{amax} und die maximale Motorleistung P_{1max} auf.

Tahrik tarafına fren bağlanmış (Öm: frenli motorlar) redüktörlerin seçimi yapılırken fren momenti de göz önüne alınmalıdır. Dış kütle atalet momentinin yüksek olduğu ($m_{af} > 2$) uygulamalarda (örn; çember dişlilerde, döner tablolarda, karıştırıcılarda, yüzey havalandırıcılarında veya kapı sistemlerinin tahriklerinde) fren torkunun nominal anma momentinin 1,2 katından büyük olmaması, bu değer in aşılmaması tavsiye edilir. Belirtilen değerlerden daha yüksek fren torku kullanılacak ise bu durum redüktör seçimi yapılırken göz önünde bulundurulmalıdır. Lütfen istenmeyen durumları engellemek için PGR'ye başvurunuz.

The braking torque must also be taken into account when selecting gear units with brakes on the drive side (eg brake motors). In applications in which the external mass moment of inertia is high ($m_{af} > 2$) (e.g. ring gears, rotary trays, mixers, surface aerators or drives of door systems), it is recommended that the braking torque should not be greater than 1.2 times the rated torque, so it can not exceed this value. If specified value is higher than braking torque, this should be taken into account while selecting the gear unit. Please contact PGR to prevent undesirable situations.

Bei angebauten antriebsseitigen Bremsen, wie z.B. bei Bremsmotoren ist bei der Getriebeauswahl auch das Bremsmoment zu beachten. Bei Anwendungen mit relativ hohen externen Massenträgheitsmomenten ($m_{af} < 2$) wie z.B. häufig bei Fahrtriebwerken, Drehwerken, Drehtischen, Torantrieben, Rührwerken und Oberflächenbelüftern wird empfohlen, ein Bremsmoment zu wählen, dass nicht größer als das 1,2-fache Motornennmoment ist. Wenn höhere Bremsmomente zum Einsatz kommen sollen, ist dies bei der Getriebeauswahl zu berücksichtigen. Wir bitten dann um Ihre Anfrage.

Radyal ve Eksenel Kuvvetler

Motorlu seçim tablolarında, çıkış mili üzerine müsaade edilebilir radyal kuvvetler (FR) ve eksenel kuvvetler (FA) ile listelenmiştir. Opsiyonel olarak birçok redüktör tipimizde güçlendirilmiş çıkış mili yataklarımız mevcuttur.

Motorlu seçim tablolarında güçlendirilmiş yataklara etki eden radyal kuvvetler (FRGR) ve eksenel kuvvetler (FAGR) olarak değerleri belirtilmiştir. Tablolarda belirtilen radyal ve eksenel kuvvetler, ayak montajlı ve flanş montajlı dişli ünitelerinin dolu mil çıkışlı montajları için geçerlidir. Verilen bu eksenel ve radyal kuvvetlerin aynı anda çıkış miline etkilememesi koşuluna dayanmaktadır.

Ayrıca motorlu seçim tablolarında yer alan radyal ve eksenel kuvvet değerleri sistemin servis faktörünün ($f_B=1$) bire eşit olduğu durum için verilmiştir. Darbeli yükler, darbeli tekrarlı yükler, uzun süreli çalışmalı (>8 saat/gün) gibi uygulamalarda servis faktörünün ($f_B>1$) birden büyük olduğu duruma karşılık gelen radyal ve eksenel kuvvetler dikkate alınmalıdır. İzin verilen FA ve FR kuvvetleri buna göre azaltılır.

Motorlu seçim tablolarında verilen radyal ve eksenel kuvvet değerleri milin orta noktasına etkiyen bir kuvveti ifade eder. İzin verilen radyal ve eksenel kuvvetler belirlenirken uygulanan kuvvetin uygulama istikameti ve dönüş yönünün en elverişsiz olması durumu varsayılmıştır.

Daha yüksek radyal ve eksenel kuvvetler potansiyel olarak kuvvet yönünün uygulama doğrultusuna ve dönüş yönüne göre mümkündür. Kesin bir hesaplama için bu tip uygulamalar söz konusu ise operasyonel kuvvet yönünü, dönüş yönünü ayrıca istenilen servis süresini (gerekli olan) detaylı olarak PGR'ye iletiniz.

Çıkış miline ilave transfer elemanı takılırsa, mile etkiyen radyal kuvvetin belirlenmesinde aşağıdaki tablodan bulunacak olan fz faktörü de dikkate alınmalıdır.

fz için Tablo

Transfer Elemanları	Faktör fz	Açıklama
Dişliler	1.1	$z \leq 17$ diş
Zincir Dişliler	1.4	$z \leq 13$ diş
Zincir Dişliler	1.2	$z \leq 20$ diş
Dar V-Kayış Kasnakları	1.7	ön gerilim
Düz kayış Kasnakları	2.5	kuvveti
Dişli Kayış Kasnakları	1.5	

Radial and Axial Forces

In the motor selection tables, allowable radial forces (FR) and axial forces (FA) for over output shaft are listed. Optionally, we have reinforced output shaft bearings in many gearbox types.

They are given as a radial forces (FRGR) and axial forces (FAGR) acting on the reinforced bearings in the motor selection tables. The radial and axial forces indicated in the tables are valid for solid shaft output mountings of foot-mounted and flange-mounted gear units. This is valid on the condition that axial and radial forces do not affect the output shaft at the same time.

In addition, the radial and axial force values in the selection tables with motor are valid for the case where the service factor of the system ($f_B=1$) is equal to one. In applications such as shock loads, pulsed repetitive loads, long-term operation (>8 hours/day), you should take into account radial and axial forces corresponding to the case where the service factor ($f_B>1$) is greater than one. The allowable FA and FR forces are reduced accordingly.

The radial and axial force values which is given in the motor selection tables represent a force acting on the midpoint of the shaft. While determining the allowable radial and axial forces, we assumed the application direction of the applied force and the most unfavorable rotation direction.

Higher radial and axial forces are potentially possible with respect to the direction of application and the direction of rotation of the force direction. For an exact calculation, if such applications are in calculation, please inform PGR in detail the operational force direction, the direction of rotation, and the required service time (required).

If an additional transfer element is attached to the output shaft, the fz factor from the table below should also be taken into account in determining the radial force acting on the shaft.

fz values are shown at table

Transfer Elements	Factor fz	Explanation
Gears	1.1	$z \leq 17$ teeth
Chain Sprockets	1.4	$z \leq 13$ teeth
Chain Sprockets	1.2	$z \leq 20$ teeth
Narrow V-belt pulleys	1.7	by
Flat belt pulleys	2.5	pretension force
Gear belt pulleys	1.5	

Quer- und Axialkräfte

In den Tabellen der Leistungs- und Drehzahlübersichten sind die zulässigen Querkräfte (FR) und Axialkräfte (FA) die auf den äußeren Zapfen der Abtriebswelle wirken dürfen aufgeführt.

Für vielen Getriebetypen sind optional verstärkte Abtriebswellenlager lieferbar. Die Werte der auf die verstärkten Lager wirkenden Querkräfte (FRGR) und Axialkräfte (FAGR) sind in den Motorauswahltabellen angegeben. Die in den Tabellen angegebenen Quer- und Axialkräfte gelten für Fuß- und Flanschgetrieben mit Vollwelle. Die Kraftangaben beziehen sich auf den Fall, dass Quer- und Axialkraft nicht gleichzeitig vorliegen.

Außerdem liegt den Kraftangaben in den Tabellen der Leistungs- und Drehzahlübersicht ein Betriebsfaktor für Quer- und Axialkräfte ($f_B=1$) zugrunde. Bei stoßartigen Kräften und längeren Laufzeiten > 8 Stunden/Tag ist auch für die Quer- und Axialkräfte ein entsprechender Betriebsfaktor ($f_B>1$) zu berücksichtigen. Die zulässigen Querkräfte FA- und FR- werden entsprechend reduziert.

Die Querkraftangaben beziehen sich auf Kraftangriff in der Mitte des Wellenendes. Bei der Ermittlung der zulässigen Quer- und Axialkräfte wurde die ungünstigste Kraftangriffsrichtung und Drehrichtung angenommen.

Höhere Quer- und Axialkräfte sind eventuell möglich. Wenn solche Anwendungen in Frage kommen, teilen Sie PGR bitte detailliert für eine genaue Berechnung, die Angaben der tatsächlichen Kraft- und Drehrichtung sowie der erforderlichen Lebensdauer mit.

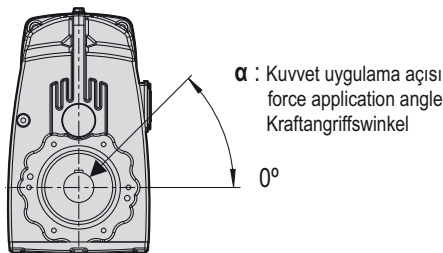
Werden auf der Abtriebswelle Übertragungselemente aufgesetzt, so ist bei der Ermittlung der auftretenden Querkraft ein entsprechender Faktor (fz) zu beachten.

Querkraft-Faktor fz

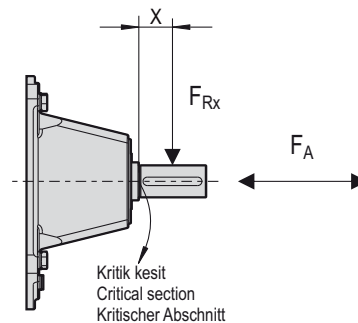
Übertragungselemente	Faktor fz	Hinweise
Zahnräder	1.1	$z \leq 17$ Zähne
Kettenräder	1.4	$z \leq 13$ Zähne
Kettenräder	1.2	$z \leq 20$ Zähne
Schmalkeilriemenscheiben	1.7	durch
Flachriemenscheiben	2.5	Vorspannkraft
Zahnriemenscheiben	1.5	

Kuvvet uygulama noktası:

Kuvvet uygulama noktası aşağıdaki şekillere göre tanımlanır.

**Definition of force application point:**

The point of force application is defined according to the following figure.

**Definition des Kraftangriffs:**

Der Kraftangriff wird gemäß dem folgenden Bild definiert

F_{RX} : "X" Uygulama noktasındaki müsaade edilen radyal kuvvet [N]

F_A : Müsaade edilen eksenel kuvvet [N]

F_{RX} : Permitted overhung load at point [N]

F_A : Permitted axial force [N]

F_{RX} : zulässige Querkraft bei Abstand [N]

F_A : zulässige Axialkraft [N]

TR

TEKNİK BİLGİLER

Mil üzerinde ortaya çıkan radyal kuvvet, aşağıdaki formül kullanılarak hesaplanmıştır.

EN

TECHNICAL INFORMATION

The radial force on the shaft was calculated using the formula below.

$$F_{R\text{vorth}} = \frac{2 \cdot M_a}{d_0} f_z \leq F_R$$

M_2 : Redüktör çıkış momenti [Nm]
 f_z : Tablodaki radyal kuvvet faktörü
 d_0 : Etkin daire çapı [mm]
 F_R : Seçim tablolarından alınan müsaade edilebilir radyal kuvvet [kN]
 $F_{R\text{vorth}}$: Mil üzerindeki radyal kuvvet [kN]

M_2 : Output torque of gear unit [Nm]
 f_z : Factor which is taken from table
 d_0 : Effective circular diameter [mm]
 F_R : Permitted radial force which is taken from the speed and output moment tables. [kN]
 $F_{R\text{vorth}}$: Radial force on the gear unit shaft [kN]

DE

TECHNISCHE INFORMATION

Die auftretende Querkraft an der Getriebewelle wird wie folgt bestimmt:

Eğer kuvvet mil ortasına uygulanmazsa kuvvetin etki ettiği herhangi bir "x" noktasındaki müsaade edilen radyal kuvvet değeri aşağıdaki formül 1 ve formül 2 kullanılarak hesaplanır.

Formula 1 and formula 2 is used when force is not acting on the middle of shaft, by this way you can calculate permissible radial force value at any "x" point where the force acts

Ist der Kraftangriff nicht auf Wellenmitte, so kann die zulässige Querkraft mit Hilfe der Gleichungen 1 und 2 auf jede beliebige Stelle "x" umgerechnet werden.

Formül / Formula / Gleichung - I

$$F_{RXL} = F_R \cdot \frac{z}{y+x}$$

Formül / Formula / Gleichung - II

$$F_{RXW} = \frac{c}{(f+x)}$$

X : mil faturasından (kritik kesitinden) kuvvet uygulama noktasına olan uzaklık [mm]
 F_{RXW} : x noktasına etkiyen müsaade edilebilir radyal kuvvet (Mil dayanımına göre)
 F_R : Motorlu seçim tablolarından gelen milin ortasına etkiyen radyal kuvvet [kN]
 F_{RXL} : x noktasına etkiyen müsaade edilebilir radyal kuvvet (yataklama, rulman servis ömrüne göre)
 z,y,f : Radyal yük dönüşümü için dişli ünitesi sabitleri
 c : Radyal yük dönüşümü için dişli ünitesi sabiti

X : distance from the shaft collar to the point of force application [mm]
 F_{RXW} : permitted overhung force point X - shaft stability
 F_R : overhung force from the speed and output tables, force applied at the middle of the shaft [kN] point X - bearing service life
 F_{RXL} : permitted radial force acting on point X (according to bearing service life)
 z,y,f : Gear unit constants for radial load conversion
 c : Gear unit constant for radial load conversion

X : Abstand von Wellenbund bis Kraftangriff (mm)
 F_{RXW} : zul. Querkraft an Stelle x Wellenfestigkeit
 F_R : Querkraft aus Drehzahl- und Leistungstabelle, Kraftangriff auf Wellenmitte (kN)
 F_{RXL} : zul. Querkraft an Stelle x Lagerlebensdauer
 z,y,f : Faktoren siehe Tabelle
 c : Faktoren siehe Tabelle

c	[Nmm]
C_{GR}	[Nmm]
f	[mm]
y	[mm]
z	[mm]

Burada hesaplamalarda formül 1'in yatak servis ömrüyle formül 2'nin mil dayanımıyla bağlantılı olduğu unutulmamalıdır. Yatak servis ömrüyle alakalı hesaplamalarda formül 1'den gelen sonuç, mil dayanımı ile alakalı hesaplamalarda formül 2'den gelen sonuç kullanılmalıdır.

It should be noted here that in calculations, formula 1 is related to service life and formula 2 is related to shaft stability. The result from formula 1 should be used in calculations related to service life, and the result from formula 2 should be used in calculations related to shaft stability.

Hierbei ist zu beachten, dass grundsätzlich nach Gleichung 1 (Lebensdauer) und Gleichung 2 (Wellenfestigkeit) gerechnet wird, wobei der kleinere Wert als zulässig anzugeben ist.

TR

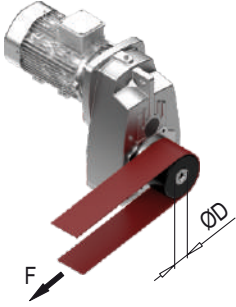
RADYAL YÜK HESABI

EN

CALCULATION OF RADIAL LOADS

DE

BERECHNUNG VON QUERKRAFT

**RADYAL YÜKLERİN HESABI**

Radyal yük F(N)'nin hesaplanmasında gerekli tahrik momenti M (Nm), kasnak veya dişli çapı D (mm) olmak üzere aşağıdaki formüller kullanılır.

1 - Elastik Kaplin

Çalışma sırasında oluşan sapmalar kaplinin güvenlik sınırları içerisinde ise kuvvetler ihmal edilebilir.

CALCULATION OF OVERHUNG LOADS

Radial load F (N) is calculated with the following formulas where required moment M (Nm) and hoop or gear diameter D (mm) is used.

1 - Elastic Coupling

If elastic coupling is working in its reliable working area, the overhung loads can be neglected.

BERECHNUNG VON QUERKRAFT

Radiallast F (N) Berechnung erforderlich Antriebsmoment M (Nm), Durchmesser der Riemenscheibe oder des Gewindes D (mm) die folgenden Formeln es wird verwendet.

1 - Elastische Kupplung

Abweichungen im Betrieb gewährleisten die Sicherheit der Kupplung. Kräfte können vernachlässigt werden.

2 - Düz Dişli (20° kavrama açılı)**2 - For Spur Gear (Pressure angle 20°)**

$$F_R = \frac{2.1 \times M_2}{D}$$

2 - Stirnrad (20° Kupplungswinkel)**3 - Küçük Hızlarda Zincir Dişli (Z < 17)****3 - For Chain Drive With Low Speed (Z < 17)**

$$F_R = \frac{2.1 \times M_2}{D}$$

3 - Kettenrad bei kleinen Geschwindigkeiten (Z < 17)**4 - Triger Kayış****4 - For Trigger Belt**

$$F_R = \frac{2.5 \times M_2}{D}$$

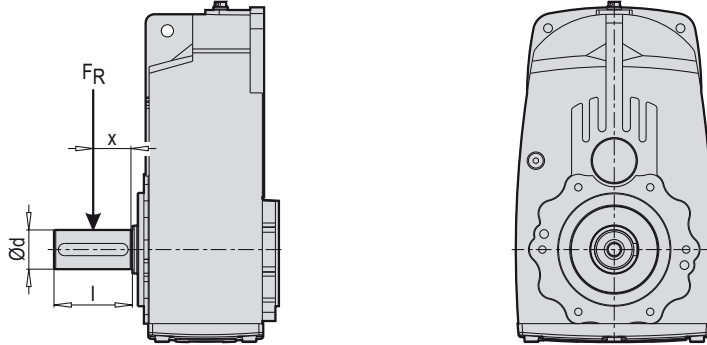
4 - Zahnriemen**5 - V Kayış****5 - For V Belt**

$$F_R = \frac{5 \times M_2}{D}$$

5 - Keilriemen**6 - Gerdirme Makaralı Kayış****6 - Flat Belt With Spanning Puley**

$$F_R = \frac{5 \times M_2}{D}$$

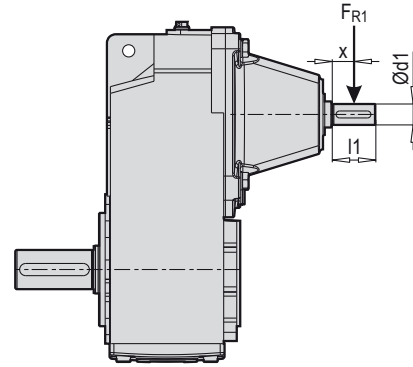
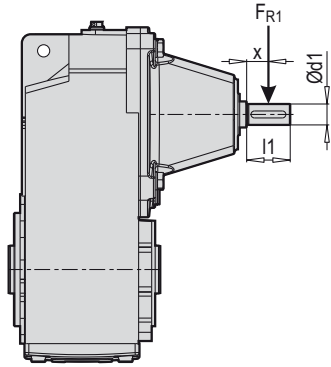
6 - Spannrollenriemen



ÇIKIŞ ŞAFTINDAKİ RADYAL VE EKSENEL YÜK HESAPLAMALARI İÇİN DEĞERLER
VALUE TABLE FOR RADIAL AND AXIAL LOADS AT OUTPUT SHAFT
WERTE FÜR QUER UND AXIALKRAFT AN DER AUSGANGSWELLE

Redüktör Tipi Gearbox Type Reduzierertyp	y (mm)	z (mm)	c Normal Normal (Nmm)	CGR Güçlendirilmiş / Reinforced / Verstärkt (Nmm)	f (mm)	d (mm)	l (mm)
PM A02	80.0	104.5	0.13 X 10 ⁶	0.18 X 10 ⁶	0	25	50
PM B02	112.0	138.0	0.12 X 10 ⁶	0.17 X 10 ⁶	0	25	50
PM C13	145.0	176.0	0.16 X 10 ⁶	0.26 X 10 ⁶	0	30	60
PM 12 - PM 13	95.1	125.1	0.18 X 10 ⁶	0.27 X 10 ⁶	0	30	60
PM 22 - PM 23	109.6	144.6	0.27 X 10 ⁶	0.44 X 10 ⁶	0	35	70
PM 32 - PM 33	135.6	180.6	0.61 X 10 ⁶	0.94 X 10 ⁶	0	45	90
PM 42 - PM 43	158.1	213.1	0.90 X 10 ⁶	1.48 X 10 ⁶	0	55	110
PM 52 - PM 53	179.6	244.6	1.63 X 10 ⁶	2.60 X 10 ⁶	0	65	130
PM 62 - PM 63	235.6	305.6	1.82 X 10 ⁶	3.42 X 10 ⁶	0	75	140
PM 72 - PM 73	253.0	338.0	3.81 X 10 ⁶	6.19 X 10 ⁶	0	90	170
PM 82 - PM 83	300.0	405.0	8.31 X 10 ⁶	12.79 X 10 ⁶	0	110	210
PM 92 - PM 93	353.6	478.6	16.32 X 10 ⁶	24.92 X 10 ⁶	0	140	250
PM 102 - PM 103	425.0	575.0	-	18.95 X 10 ⁶	0	160	300
PM 112 - PM 113	453.0	603.0	-	19.15 X 10 ⁶	0	180	300
PM 123	453.0	603.0	-	20.30 X 10 ⁶	0	180	300

- W ADAPTÖR
- W ADAPTER



GİRİŞ ŞAFTINDAKİ RADYAL VE EKSENEL YÜK HESAPLAMALARI İÇİN DEĞERLER
VALUE TABLE FOR RADIAL AND AXIAL LOADS AT INPUT SHAFT
WERTE FÜR QUER UND AXIALKRAFT AN DER EINGANGSWELLE

f=0

Redüktör Tipi Gearbox Type Reduzierertyp	y (mm)	z (mm)	c (Nmm)	d1 (mm)	l1 (mm)
PD/PM A02 PD/PM B02	58.5	78.5	0.027×10^6	14	40
PD/PM C13	58.5	78.5	0.037×10^6	16	40
PD/PM 12 PD/PM 13 PD/PM 23 PD/PM 33	70.0	90.0	3.64×10^4	16	40
PD/PM 22 PD/PM 32 PD/PM 43 PD/PM 53	96.5	121.5	1.07×10^5	24	50
PD/PM 42 PD/PM 52 PD/PM 63	110.5	150.5	4.70×10^5	38	80
PD/PM 62 PD/PM 72 PD/PM 63* PD/PM 73 PD/PM 83 PD/PM 93	149.5	204.5	4.60×10^5	42	110
PD/PM 82 PD/PM 92 PD/PM 83* PD/PM 93*	207.5	277.5	1.82×10^6	65	140
PD/PM 102 PD/PM 103 PD/PM 112 PD/PM 113 PD/PM 123	413.0	482.0	-	70	140

* Simgesi güçlendirilmiş W adaptörleri için verilen değerleri gösterir.

* Sign shows that value which is given on table, for reinforced W adapter.

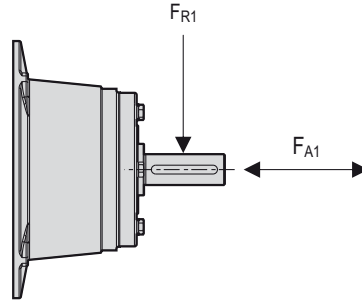
Das *-Symbol zeigt die Werte für verstärkte W-Ausführungen an.

TR RADYAL YÜK HESABI

EN CALCULATION OF RADIAL LOADS

DE BERECHNUNG VON QUERKRAFT

- W ADAPTÖR
- W ADAPTER



Tip Type Typ	PD/PM A02 PD/PM B02		PD/PM C13		PD/PM 12 PD/PM 13 PD/PM 23 PD/PM 33		PD/PM 22 PD/PM 32 PD/PM 43 PD/PM 53		PD/PM 42 PD/PM 52 PD/PM 63		PD/PM 62 PD/PM 72 PD/PM 63* PD/PM 73 PD/PM 83 PD/PM 93		PD/PM 82 PD/PM 92 PD/PM 83* PD/PM 93*		PD/PM 102 PD/PM 103 PD/PM 113 PD/PM 123	
	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1	[kN] FA1	[kN] FR1
P1 (kW)																
0.12	1.2	0.55	1.2	0.85	1.2	0.85	2.9	2.1	-	-	-	-	-	-	-	-
0.18	1.1	0.54	1.1	0.82	1.1	0.82	2.9	2.1	-	-	-	-	-	-	-	-
0.25	1.0	0.53	1.0	0.78	1.0	0.78	2.8	2.1	-	-	-	-	-	-	-	-
0.37	0.89	0.50	0.89	0.75	0.89	0.75	2.6	2.1	4.1	2.1	-	-	-	-	-	-
0.55	0.77	0.47	0.77	0.72	0.77	0.72	2.5	2.0	3.9	2.8	-	-	-	-	-	-
0.75	0.58	0.44	0.58	0.70	0.58	0.70	2.3	1.9	3.8	2.4	6.1	4.4	-	-	-	-
1.10	0.35	0.37	0.35	0.61	0.35	0.61	2.1	1.8	3.5	2.7	5.9	4.3	-	-	-	-
1.50	0.29	0.30	0.29	0.43	0.29	0.43	2.0	1.8	3.3	2.6	5.8	4.2	-	-	-	-
2.20	-	-	0.20	0.42	0.20	0.42	1.7	1.7	2.7	2.4	5.5	4.1	-	-	-	-
3.00	-	-	0.15	0.23	0.15	0.23	1.5	1.6	2.5	2.3	5.2	3.9	4.3	11.0	-	-
4.00	-	-	-	-	-	-	0.98	1.1	2.3	2.1	4.9	3.7	4.2	10.9	-	-
5.50	-	-	-	-	-	-	0.65	1.0	1.6	1.8	4.4	3.4	4.1	10.8	-	-
7.50	-	-	-	-	-	-	0.27	1.0	1.4	1.3	4.3	3.4	3.8	10.4	-	-
9.20	-	-	-	-	-	-	-	-	1.0	0.98	3.9	3.1	3.6	10.1	-	-
11.0	-	-	-	-	-	-	-	-	0.59	0.47	3.3	2.7	3.4	9.9	13.4	17.3
15.0	-	-	-	-	-	-	-	-	-	-	3.3	2.7	3.1	9.5	13.7	17.1
18.5	-	-	-	-	-	-	-	-	-	-	2.7	2.3	3.0	9.3	13.4	16.9
22.0	-	-	-	-	-	-	-	-	-	-	2.2	1.8	2.9	9.3	13.1	11.7
30.0	-	-	-	-	-	-	-	-	-	-	1.1	1.2	2.3	8.4	12.5	16.1
37.0	-	-	-	-	-	-	-	-	-	-	0.74	0.87	2.0	8.1	12.0	15.7
45.0	-	-	-	-	-	-	-	-	-	-	-	-	2.2	8.3	11.7	15.2
55.0	-	-	-	-	-	-	-	-	-	-	-	-	1.5	7.4	11.0	14.5
75.0	-	-	-	-	-	-	-	-	-	-	-	-	0.78	4.6	9.6	13.2
90.0	-	-	-	-	-	-	-	-	-	-	-	-	0.24	5.2	8.5	12.1
110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	10.7
132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	9.0
160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	6.9
200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	3.6

* Simgesi güçlendirilmiş W adaptörleri için verilen değerleri gösterir.

* Sign shows that value which is given on table, for reinforced W adapter.

Das *-Symbol zeigt die Werte für verstärkte W-Ausführungen an.

FA1 → FR1=0
FR1 → FA1=0



9

TR	KISALTMALAR	EN	ABBREVIATIONS	DE	ABKÜRZUNGEN
f_B	= Servis Faktörü (M_{amax} / M_a)	f_B	= Service factor (M_{amax} / M_a)	f_B	= Betriebsfaktor (M_{amax} / M_a)
F_A	= Çıkış tarafındaki müsaade edilebilir eksenel yük [kN]	F_A	= Permissible axial load at the output side [kN]	F_A	= zulässige axiale Belastung auf der Abtriebsseite [kN]
F_R	= Çıkış tarafındaki, milin orta noktasına etkiyen müsaade edilebilir radyal yük [kN]	F_R	= Permissible overhung load at the output side, force acting at the shaft's midpoint [kN]	F_R	= Querkraft aus Drehzahl- Leistungstabellen, Kraftangriff auf Wellenmitte [kN]
F_D	= Reaksiyon yükü [kN]	F_D	= Reaction [kN]	F_D	= Reaktionsbelastung [kN]
i_{toplam}	= Dişli ünitesindeki toplam tahvil oranı	i_{total}	= Gear units total ratio	i_{total}	= Gesamtübersetzungsverhältnis
i_{ges}	= Tahvil oranı	i_{ges}	= Reduction ratio	i_{ges}	= Übersetzungsverhältnis
M_2	= Çıkış momenti [Nm]	M_2	= Output torque [Nm]	M_2	= Abtriebsdrehmoment [Nm]
M_{amax}	= Müsaade edilebilir maksimum çıkış momenti [Nm]	M_{amax}	= Max. permissible output torque [Nm]	M_{amax}	= zul. Maximale Drehmoment [Nm]
n_2	= Çıkış devri [d/dk]	n_2	= Output speed [min ⁻¹]	n_2	= Abtriebsdrehzahl [min ⁻¹]
P_e	= Mamax referans alınarak hesaplanan güç [kW]	P_e	= Calculated power [kW] with reference to Mamax	P_e	= Mit der Referenz Mamax berechnete Leistung [kW]
P_n	= Motor güç oranı [kW]	P_n	= Rated power of motor [kW]	P_n	= Motorleistung [kW]
η	= Verim [%]	η	= Efficiency [%]	η	= Leistung [%]
kg	= Redüktörün ağırlığı	kg	= Weight of the geared motor	kg	= Gewicht des Getriebes

1) 4 ve 5 kademeli redüktörlerin 0,75 kW'a kadar olan 4 kutuplu motorlarında kayıp yaklaşık 40 W olarak hesaplanmıştır. Kayıp, motor hızına bağlı olarak o oranda değişir.

1) Gear units or gear motors which have 4 and 5 stage reduction 4 pole motor up to 0,75 kW losses are calculated nearly 40 W, losses are dependent motor speed.

1) Bei vier-, fünfstufigen Getrieben gibt es aufgrund der vielen sich drehenden Teile und der relativ kleinen Antriebsleistungen relevanten Leerlaufverluste. Daher wird hier bei 4-poligen Motoren bis 0,75 kW eine Leerlaufverlustleistung von ca. 40 Watt (W) in den Tabellen berücksichtigt.

TR

PD/PM TANITIMI

PARALEL ŞAFT MONTAJLI REDÜKTÖRLER (PD/PM)

Polat Group Redüktör ürünü olan Paralel şaft montajlı (PD/PM) serisi 26 farklı gövde büyüklüğü ile hizmete sunulmaktadır.

Redüktörler;

- PD/PM A02...52 arası 2 kademeli,
- PD/PM 12...52 arası 2 kademeli redüktörlere indirgeyici gövde montajlanarak 3 kademeli (PD/PM 13...53),
- PD/PM 62...112 ve PD/PM 63...123 arası redüktörler aynı tip gövdede 2 veya 3 kademeli olarak sunulmaktadır
- Yüksek tahvil oranları için 4, 5 ve 6 kademeli redüktörlerimiz de mevcuttur.

Her bir gövde büyüklüğü için çıkış olarak, mil çıkışı veya delik milli opsiyonlarımız mevcuttur. PD/PM serisi redüktörlerimiz giriş ve çıkış yönü paralel eksenli gövde yapısıyla dar alanlarda uygulama kolaylığı ve ağır çalışma şartlarına uygun tasarımı ile tercih edilmektedir. Delik milli redüktörler uygulanma alanındaki sisteme direkt olarak montajlanabilir.

Yeni nesil PGR dişli ünitelerimiz UNICASE ilkesine göre geliştirilmiştir. Redüktörlerimiz bu prensibe göre yekpare olarak tasarlanmıştır. Yekpare gövdemiz tüm rulmanların entegre edildiği tek bir muhafazadır. Yekpare gövdemizin son ölçülerine getirilmesi güncel ve son teknoloji CNC ünitelerimizde gerçekleştirilir. Unicase konsepti en yüksek düzeyde hassasiyet, rijitlik ve dayanıklılık sağlar. Eksenel kuvvetlere ve torqa maruz kalabilen redüktör gövdemizin üzerinde ayrı bağlantı elemanı yoktur. Unicase prensibi şaft eksenlerinin kademeli olmasına izin verir, bu da daha uzun bir çalışma ömrünü garanti etmek için daha büyük yatakla elemanı (rulman) kullanma olanağı sunar. Unicase prensibinin getirdiği hassas mil (şaft) hizalaması ve yüksek yüklem kapasitesi, uzun hizmet ömrü ve düşük gürültü sağlar. Dişliler, yataklar, miller DIN 3990 DIN ISO 281 uluslararası normlara göre hesaplanmıştır. Çıkış tarafı ile giriş arasında eksen kaçıklığına neden olabilecek çıkıntı veya tork yüklerine maruz kalan herhangi bir bağlantı elemanı (vida vb) yoktur. PİK / sfero veya alüminyum gövdeler için gövdeden sağlanan montaj kolaylığı ile vibrasyon salınım etkisi en aza indirilir.

Her bir dişli kademesi için ayrı olarak 0,96...0,98 arasında yüksek bir verimlilikle (her bir kademenin bağımsız olarak verimliliği bu değerler arasındadır) dişli ünitelerimiz sunulmaktadır.

Fabrikamızda bulunan son sistem CNC tezgahlarında açılan dişliler yüksek ve geniş yelpazeli imalat toleransı ile günümüz uluslararası standartlarının tamamını karşılamaktadır. Redüktör gövdelerimiz GG 25-30, GGG 50-60 ya da alüminyum yapılmıştır.

Yataklar ve dişliler tribolojinin kurallarına göre optimize edilmiş bir yağ banyosunda çalışır.

Dişli ünitelerimizin sızdırmazlığında NBR keçe kullanılır. Opsiyonel olarak viton (FKM) keçe kullanımımız da mevcuttur. Dövme malzemeden yapılan dişlilerimiz gerekli ısıtma işlemi, sementasyon, honlama, gibi proseslerden geçirilerek redüktörümüzün sorunsuz çalışması sağlanır. Dişli dizaynındaki doğru oluşturulan geometri ve doğru malzeme seçimi, çalışan dişlilerimizin daha sessiz, daha hafif ve daha yüksek hızlarda daha fazla yük taşıırken daha az ısı üretmesini mümkün kılmaktadır. Redüktörlerimiz sessiz, yüksek dayanımlı ve servis ömrü uzun çalışma sağlamaktadır. Bu da zorlu çalışma koşullarında güvenli çalışmayı beraberinde getirir. PD/PM serisi redüktörlerimiz her türlü endüstriyel uygulamada kullanılabilir.

EN

DESCRIPTION OF PD\PM

PARALLEL SHAFT MOUNTED GEAR UNITS (PD/PM)

The series of Parallel Shaft Mounted Gear Units of PGR has 26 different case dimensions.

Gear Units;

- Gear units from PD/PM A02 to 52 have 2 stage
- Gear units from PD/PM 12 to 52 can be made 3 stage (From PD/PM 13 to 53) by using reductive case.,
- Gear units from PD/PM 62 to 112 and from PD/PM 63 to 123 are come out as a 2 or 3 stages in the same kind of case.
- We have 4,5 and 6 stage reducers for high ratio numbers.

We have hollow shaft and solid shaft versions for every case dimensions. PD/PM series are suitable for heavy working conditions and ease of usage at narrow place since they has parallel axis case design between input and output. Hollow shaft reducers can be connected to the system of application area easily.

Our new generation PGR gear units have been developed according to the UNICASE principle. Our gear units are designed as a one-piece according to this principle. Our one-piece body is a single housing in which all bearings are integrated. Bringing our one-piece body to its final dimensions is carried out in our updated technology CNC units. The Unicase concept provides the highest level of precision, rigidity and durability. We do not have different connection element on our gear unit body, which can be exposed to axial forces and torque. The Unicase principle allows the shaft axes to have stages, which offers the possibility to use larger bearings (bearings) to guarantee a longer durability. The precise shaft alignment and high loading capacity which is provided by Unicase principle ensure durability and low noise. Gears, bearings, shafts are calculated according to DIN 3990 DIN ISO 281 international norms. There are no connector (screws, etc.) that are exposed to protrusion or torque loads that may cause axial misalignment between the output side and the input side. Vibration oscillation effect is minimized with the ease of mount provided from the body for ductile iron or aluminum bodies.

By our offered gear units with a high efficiency of 0.96...0.98 for each gear stage separately (the efficiency of each stage independently is between these values).

The gears produced on the cutting-edge technology system CNC machines in our factory encounter provides all today's international standards with high and wide range with manufacturing tolerances. Our gear unit bodies are made of GG 25-30, GGG 50-60 or aluminum.

Bearings and gears work in an optimized oil bath according to the rules of tribology.

NBR seal is used in the leekproofing of our gear units. We have viton seal (FKM) as optional. Our gear units, which are made of forged material, are passed through the necessary processes such as heat treatment, cementation, honing. After that, our gear units is ensured working without problem. Correctly created geometry and correct material selection in gear design make it possible for our working gears to be quiet, lighter and they can generate less heat while carrying more loads at higher velocity. Our gear units provide quiet working and durability. This situation brings safe working in hard working conditions. Our PD/PM series gear units can be used in all kinds of industrial applications.

DE

PD/PM-EINFÜHRUNG

FLACHGETRIEBE (PD/PM)

Die Flachgetriebe (PD/PM) von PGR werden in 26 verschiedenen Gehäusegrößen angeboten.

Getriebe:

- 2-stufig zwischen A02 und A52
- durch Montage von Reduziergehäuse an 2-stufige Getriebe zwischen PD/PM 12 und PD/PM 52, 3-stufig zwischen PD/PM 13 und 53
- Zwischen PD/PM 62 und PD/PM 112 und PD/PM 63 und PD/PM 123 bei gleichen Gehäusen 2- oder 3-stufig lieferbar.
- Für hohe Untersetzungsverhältnisse sind 4-, 5- und 6-stufige Getriebe vorhanden.

Für alle Gehäusegrößen sind Optionen mit Vollwelle oder Hohlwelle vorhanden. Unsere Getriebe der PD/PM-Serie werden bevorzugt mit ihrer parallelen Antriebs- und Abtriebswelle und ihrer dadurch einfachen Anwendung in engen Bereichen und ihrem Design, das für schwere Arbeitsbedingungen geeignet ist. Getriebe mit Hohlwellen können direkt an das System im Anwendungsbereich angeschlossen werden.

Unsere PGR-Getriebe der neuen Generation wurden nach dem UNICASE-Prinzip entwickelt. Unsere Reduzierstücke werden nach diesem Prinzip als Einzelstück konstruiert. Unser solider Körper ist ein einziges Gehäuse, in dem alle Lager integriert sind. In unseren aktuellen und hochmodernen CNC-Anlagen wird unser Massivkörper auf Endmaß gebracht. Das Unicase-Konzept bietet ein Höchstmaß an Präzision, Festigkeit und Widerstandsfähigkeit. An unserem Reduzierkörper befindet sich kein separates Verbindungselement, das axialen Kräften und Drehmomenten ausgesetzt werden kann. Durch das Unicase-Prinzip können die Wellenachsen versetzt werden, was die Möglichkeit bietet, größere Lager zu verwenden, um eine längere Lebensdauer zu gewährleisten. Präzise Wellenausrichtung und hohe Belastbarkeit durch das Unicase-Prinzip sorgen für lange Lebensdauer und geringe Geräuschentwicklung. Zahnräder, Lager, Wellen werden nach den internationalen Normen DIN 3990 DIN ISO 281 berechnet. Es gibt keine Befestigungselemente (Schrauben usw.) zwischen der Abtriebsseite und dem Eingang, die Überstands- oder Drehmomentbelastungen ausgesetzt sind, die eine axiale Fehlausrichtung verursachen könnten. Der Schwingungseffekt wird durch die einfache Montage des Gehäuses für Guss-/Sphäroguss- oder Aluminiumkörper minimiert. Wird von unseren Getrieben mit einem hohen Wirkungsgrad zwischen 0,96...0,98 für jede Getriebestufe separat angeboten. (der Wirkungsgrad jeder Stufe liegt unabhängig zwischen diesen Werten).

Die in unserem Werk auf modernsten System - CNC-Maschinen geöffneten Verzahnungen erfüllen alle heutigen internationalen Standards mit hohen und weiten Fertigungstoleranzen. Unsere Reduzierkörper werden aus GG 25-30, GGG 50-60 oder Aluminium gefertigt.

Lager und Getriebe arbeiten in einem optimierten Ölbad nach den Regeln der Tribologie. Zur Abdichtung unserer Getriebe wird NBR-Filz verwendet. Optional ist auch Viton (FKM)-Filz erhältlich. Unsere Zahnräder aus geschmiedetem Material durchlaufen die notwendigen Prozesse wie Wärmebehandlung, Zementieren, Honen und sorgen für einen reibungslosen Betrieb unseres Getriebes. Eine richtig erstellte Geometrie und die richtige Materialauswahl in der Zahnradkonstruktion machen es möglich, dass unsere Zahnräder leiser, leichter und weniger Wärme erzeugen und gleichzeitig mehr Lasten bei höheren Geschwindigkeiten tragen. Unsere Getriebe zeichnen sich durch leiser Betrieb, hohe Festigkeit und lange Lebensdauer aus. Dies bringt sicheres Arbeiten unter schwierigen Arbeitsbedingungen mit sich. Unsere Getriebe der Baureihe PKD können in allen Arten von Industrieanwendungen eingesetzt werden.

TR

PD/PM TANITIMI

Motorlu ya da motorsuz seçeneklerde, W kovanlı, PAM ve IEC adaptörlü giriş opsiyonlu olarak ürettiğimiz Paralel şaft montajlı redüktörlerde standart olarak sunduğumuz çıkış opsiyonlarımız;

·Delik millî
·Çıkış millî
·Konik sıkırtma, delik millî

Aksesuarlarımız,

·Lastik Takoz
·B5 / B14 flanşlı
·Çektirmeli
·Konik sıkırtmalı
·Kilitli
·Koruma kapaklı
·Ayak montajlı (sadece PD/PM A02... C13 ile PD/PM 92 ve üst gövde boyutları için) tasarımlarımız mevcuttur.

Paralel Şaft Montajlı Redüktörler :

0.12 kW dan 200 kW'ya kadar değişen güçleri ile maksimum 94000 Nm'ye kadar çıkış momenti sağlayabilmektedir.

EN

DESCRIPTION OF PD\PM

For motor and without motor versions, we have input options of free input shaft, with PAM, IEC adaptors. The standart output options for them,

Hollow Shaft
Solid Shaft
Shrink disc,hollow shaft

Accessories,

Rubber Buffer
B5/B14 flange
Fixing element
Shrink disc
With backstop
Protection cover
Foot mounted designs (only for between PD/PM A02 and PD/PM C13 and upper than PD/PM 92 cases)

Parallel Shaft Mounted gear units;

with various power ranging between 0,12 kW and 200 kW, supplies at most 94000 Nm output moment.

DE

PD/PM-EINFÜHRUNG

Bei Auswahlmöglichkeiten mit oder ohne Motor gibt es Antriebsoptionen mit freier Antriebswelle, PAM- und IEC-Adapter. Bei diesen Getrieben sind die Standard-Abtriebsoptionen wie folgt:

·Hohlwelle
·Abtriebswelle
·Schrumpfscheibe, Hohlwelle


Unzer Zubehör,

·Gummipuffer
·B5- / B14- Flansch
·Abziehscheibe
·Schrumpfscheibe
·Rücklaufperre
·Schutzklappe
·Fußbefestigung verfügbar (nur Gehäusegrößen PD/PM A02... C13 und ab PD/PM 92).















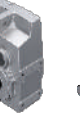











Flachgetriebe:

Bieten ein Abtriebsmoment von max. 94000 Nm bei einer Leistung zwischen 0,12 kW und 200 kW.

MAX. MÜSAADE EDİLEBİLİR ÇIKIŞ MOMENTİ M_a max.
MAX. PERMISSIBLE OUTPUT TORQUES M_a max.
MAX. ZULÄSSIGE AUSGANGSMOMENTE M_a max.

 245 - 267

İki ve Üç kademeli paralel şaftlı redüktör
Parallel shaft gear units, double and triple stage reduction
Zwei und dreistufiges, Flachgetriebemotoren

Tip / Type / Typ	M_a max. (Nm)	Tip / Type / Typ	M_a max. (Nm)	Tip / Type / Typ	M_a max. (Nm)	Tip / Type / Typ	M_a max. (Nm)	Tip / Type / Typ	M_a max. (Nm)
	120		300		270		4540		17930
	170		560		560		6470		32000
	370		1020		1040		10620		42000
			2000		2080		6000		25400
			3240		3200		8300		37200
							13200		69000
									90000

TR

IEC, PAM VE W ADAPTÖRÜ

W kovanlı (serbest giriş millî) redüktörler için geçerli maksimum tahrik gücü, uygun tahvil oranı ve çıkış devrine göre (min-1) W, IEC, PAM seçim tablolarında belirlenmiştir. IEC'li ve PAM'lı redüktörlerde her bir gövde büyüklüğü için DIN EN 50347 standardına göre standart güçler verilir. Ancak maksimum çıkış gücü, tahvil oranlarına göre tablolarda verilmiştir. Eğer IEC, PAM, W seçim tablolarındaki listelenen P1 güç değerlerinden daha fazla bir güç istenirse özel hesaplamalar gerekmektedir. Bu durumda lütfen firmamıza danışınız.

W kovanlı redüktörlerin giriş mili yatakları (rulmanları) düzenli olarak yağlanmalıdır. PA/PF 62-63, PD/PM 62-63, PKD 6390 ve üst gövdeler için her 4000 çalışma saatine göre yaklaşık 20-25 gr gres ile otomatik yağlayıcılar ya da gresölük kullanılarak giriş şaftı yatakları düzenli olarak yağlanmalıdır. Yağlayıcı olarak Petamo GHY 133N önerilir. W kovanlı redüktörlerde yağlamanın yanı sıra redüktörün soğutulmasını iyileştirmek için harici bir fan talep üzerine yapılabilir. Lütfen böyle bir istek için tarafımıza danışınız.

Otomatik yağlayıcı ünitesini IEC adaptör girişli redüktörlerimiz için PA/PF 62-63, PD/PM 62-63, PKD 6390 ve üstü gövde büyüklüklerine bağlanabilmektedir. Otomatik yağlama ünitesi giriş mili üzerindeki rulmanlara kalıcı bir yağlama sağlamaktadır. Redüktör devreye alınmadan önce otomatik yağlayıcı aktive edilmeli ve her 12 ay periyodunda değiştirilmelidir. Bu süre ortalama günlük çalışma süresinin ≤ 8 saat olduğu durumlarda geçerlidir. Günlük çalışma süresi 8 saatin üzerindeki tüm durumlarda otomatik yağlayıcı 6 ayda bir değiştirilmelidir.

Otomatik yağlayıcı içindeki gres 0°C...40° arasındaki ortam sıcaklığında çalışmaya göre tasarlanmıştır. Eğer ortam sıcaklığı belirtilen standart pozisyonu (0°C...40°) çok uzun süre farklı kalıyorsa özel yağlayıcılar kullanılmalıdır. Bunun gibi durumlar için firmamıza danışınız.

Otomatik yağlayıcı, motor gövde büyüklüğü 160 ve üzeri IEC adaptörlü redüktörlerde, motorun dikey olarak durduğu montaj pozisyonları tarafımızca önerilmez. Bu tarz durumlarda doğrudan motor montajı tavsiye edilir. Eğer redüktör, motor gövde büyüklüğü 160 ve üzeri IEC adaptörlü ve dikey montaj pozisyonu (M4) kullanılması gerekiyorsa, gerçek çalışma koşulları ile tarafımızca kontrol edilmeli ve onaylanmalıdır.

Montaj pozisyonu M2 olduğu dikey çalışma koşullarında, redüktör üzerindeki bazı sızdırmazlık elemanlarının ömrü azalabilir. Bu gibi durumlarda bakım aralıklarının daha kısa olması öneriyoruz. PA/PF 52, PD/PM 52 PKD 5390'a kadar olan gövde büyüklüğündeki IEC adaptörlü redüktörlerimiz, çalışma ömürleri boyunca özel sızdırmazlığa sahip yağlanmış rulmanlar içerir. Bu rulmanların yağlanması için herhangi bir ilave yağlama ünitesine gerek duyulmaz. Bu gövdeler için önerilen bakım süreleri kullanım kılavuzunda belirtilmiştir.

Motor gövde büyüklüğü 63'den 180'e kadar olan IEC adaptörlerin kaplinleri arızaya karşı emniyetli değildir. Ancak motor gövde büyüklüğü 160 ve 180 olan IEC adaptörlerinin kaplinleri otomatik yağlayıcı kullanılıyor ise arızalara karşı emniyetlidir. Motor gövde büyüklüğü 200 olan IEC adaptörlerin kaplinleri arızalara karşı emniyetli değildir. Kaldırıcılar, asansörler ve yaralanmalar vs. gibi kazalara sebep olabilecek özel durumlar için özel önlemler ve özel hesaplamalar gerekebilir. Bu durumlar için PGR'ye danışınız.

Doğrudan monte edilen akuple motorla karşılaştırıldığında IEC adaptöründe ek bir şaft kaplini ve ek rulman yatakları bulunur. Doğrudan monte edilen akuple motorla karşılaştırıldığında IEC bağlantılı redüktörlerde yük kayıpları seviyesi çok daha yüksektir. Sadece teknik avantajlar değil ayrıca fiyat avantajı da sunduğu için PGR olarak akuple motor montajı önerilmektedir.

EN

IEC, PAM AND W ADAPTER

For gear units with W cylinder (with free input shaft), the maximum drive power, proper ratio rate, and output speed (min-1) is given at W, IEC, PAM selection tables. In gear units with IEC and PAM, standard powers are given for each body size according to DIN EN 50347 standard. However, the maximum output power is given in the tables according to the reduction ratio. Special calculations are required if more power is required than the P1 power values which is listed in the IEC, PAM, W selection tables. In this case, please kindly consult our company.

Input shaft bearings of gear units with W cylinder (free input shaft) must be lubricated regularly. Input shaft bearings of PA/PF 62-63, PD/PM 62-63, PKD 6390 and upper cases should be lubricated regularly with 20-25 gr grease using automatic lubricators or a grease fitting for approximately per 4000 operation hours. Petamo GHY 133N is recommended as a lubricant. For gear units with W (free input shaft), an external fan is available on request to improve the cooling of the gear unit. Please consult us for such a request.

The automatic lubricator unit can be connected to with IEC adapter input cases of PA/PF 62-63, PD/PM 62-63, PKD 6390 and upper cases. The automatic lubrication unit provides permanent lubrication to the bearings on the input shaft. Before the gear unit is used, the automatic lubricator must be activated and changed every 12 months. This period is valid when the average daily working time is ≤ 8 hours. In all cases with a daily operating time of more than 8 hours, the automatic lubricator have to be replaced every 6 months.

The grease which is in the automatic lubricator is designed for operation at ambient temperatures between 0°C...40°. If the ambient temperature differs from the specified standard values (0°C...40°) for too long time, special lubricants have to be used. For such cases, consult our company.

We do not recommend vertical mounting positions for gear units with automatic lubricator, motor body size 160 and above with IEC adapter. In such cases, direct motor mounting is recommended.

If motor body size 160 and above, with IEC adapter and vertical mounting position (M4) must be used, it have to be checked and approved by our company with the actual operating conditions.

In vertical operating conditions where the mounting position is M2, the life of some leakproofing elements on the gear unit may be reduced. In such cases, we recommend shorter maintenance time. Our cases up to PA/PF 52, PD/PM 52 and PKD 5390 with IEC adapter contain bearings which is lubricated and these bearings have special leakproofing for their working life. Additional lubrication unit is not required for the lubrication of these bearings. Recommended maintenance times for these bodies are specified in the user manual.

Couplings of IEC adapters from motor frame sizes 63 to 180 are not fail-safe, they are not safe for faults. However, couplings of IEC adapters with motor body sizes 160 and 180 are fail-safe if automatic lubricator is used. Couplings of IEC adapters with motor body size 200 are not fail-safe. For situations which can lead to accidents like lifters, lifts and injuries etc, you should make special calculations and precautions. For such cases, consult our company. Compared to a directly mounted coupled motor, the IEC adapter has an additional shaft coupling and additional bearings. Compared to a directly mounted coupled motor, the level of load losses is much higher in gear units with IEC connection. Coupled engine installation is recommended as PGR, as it offers not only technical advantages but also price advantage.

DE

IEC, PAM UND W ADAPTER

Bei Getrieben mit freier Antriebswelle, Typ W, gilt die in den Leistungs- und Übersetzungstabellen angegebene maximale Antriebsleistung. Bei Getrieben mit IEC-Anbau, gilt die Normleistung der jeweiligen Baugröße nach DIN EN 50347, maximale jedoch die in den Leistungs- und Übersetzungstabellen angegebene Antriebsleistung. Bei höheren Drehzahlen, als in den Leistungs- und Übersetzungstabellen angegeben, sind eventuell Sondermaßnahmen erforderlich, wir bitten um Anfrage.

Bei Getrieben mit freier Antriebswelle, Typ W, muss die Antriebswellenlagerung ab Größe PA/PF 62-63, PD/PM 62-63, PKD 6390 regelmäßig nachgeschmiert werden. Wir empfehlen, über den vorgesehenen Schmiermippel, das äußere Wälzlager der Antriebswelle ca. pro 4000 Betriebsstunden mit ca. 20-25 g Fett nachzuschmieren. Empfohlene Fettsorte: Petamo GHY 133N. Auf Wunsch ist auch ein Lüfter auf der Antriebswelle zu besseren Getriebekühlung lieferbar. Wir bitten um Anfrage.

Getriebe mit IEC-Adapter ab Größe PA/PF 62-63, PD/PM 62-63, PKD 6390 können standardmäßig einen automatischen Schmierstoffgeber, der das äußere Wälzlager der Antriebswelle mit Schmierstoff versorgt haben. Der Schmierstoffgeber fördert permanent Schmierstoff zum Lager. Vor Inbetriebnahme des Getriebes ist der automatische Schmierstoffgeber zu aktivieren und dann alle 12 Monate auszutauschen. Dies gilt für eine durchschnittliche Laufzeit ≤ 8 Stunden/Tag. Bei längeren Laufzeiten verkürzt sich der Wechsellintervall auf 6 Monate.

Der Schmierstoffgeber ist ausgelegt für normalen Einsatz bei 0°C bis 40°C Umgebungstemperatur. Weicht die Umgebungstemperatur über längere Zeiträume von dem genannten Richtwert ab, sind Sonderschmierstoffgeber zu verwenden, wir bitten um Anfrage.

Der IEC-Adapter bei Motorgröße ≥ 160 mit dem automatischen Schmierstoffgeber ist unter bestimmten Betriebsbedingungen serienmäßig nicht geeignet für senkrechte Anordnungen, bei denen der Motor senkrecht nach oben steht. Hier ist unbedingt Direktanbau des Motors zu empfehlen!

Der senkrechte IEC-Adapter bei Motorbaugröße ≥ 160 (Einbaulage M4) muss durch PGR unter Bekanntgabe der Betriebsbedingungen geprüft und freigegeben werden. Wir bitten um Beachtung.

Bei senkrechten Anordnungen bei denen der Motor nach unten hängt (Einbaulage M2), kann sich die Lebensdauer der Abdichtung verringern. Hier empfehlen wir kürzere Wartungsintervalle. Die kleineren Getriebe mit IEC-Adapter bis PA/PF 52, PD/PM 52 PKD 5390 Getrieben haben speziell abgedichtete, lebensdauer geschmierte Lager, die keine Wartung benötigen.

Die Kupplung des IEC-Adapters für die Motorbaugrößen 63 bis 180 ist nicht durchschlagsicher. (Ausnahme: Bei den IEC Motorbaugrößen 160 und 180, wenn der automatische Schmierstoffgeber vorhanden ist. Ab IEC 200 sind die verwendeten Kupplungen durchschlagsicher). Bei Hubwerken, Aufzügen und anderen Einsatzfällen mit Personengefährdung sind Sondermaßnahmen erforderlich, hier bitten wir um Anfrage.

Der IEC-Adapter hat gegenüber dem Direktanbau des Motors eine zusätzliche Wellenkupplung und zusätzliche Lagerstellen. Hierdurch entstehen gegenüber dem Direktanbau, des Motors höhere Leerlaufverluste. Wir empfehlen den Direktanbau des Motors, da er nicht nur technische Vorteile, sondern auch zusätzlich noch Preisvorteile bietet.

TR	UYGULAMA ALANLARI	EN	APPLICATION AREAS	DE	EINSATZBEREICHE
	UYGULAMALAR		APPLICATIONS		ANWENDUNGEN
	KARIŞTIRICILAR		AGITATORS (MIXERS)		MISCHER
	* Saf Sıvılar * Sıvılar ve Katılar * Değişken Yoğunluklu Sıvılar		* Pure Liquids * Liquids and Solids * Liquids - Variable Density		* Reine Flüssigkeiten * Flüssigkeiten und Feststoffe * Flüssigkeiten mit variabler Dichte
	HAVALANDIRMA TERTİBATLARI		BLOWERS		BELÜFTUNGSVORRICHTUNGEN
	* Santrifüj * Lob * Pervane		* Centrifugal * Lobe * Vane		* Zentrifuge * Lob * Propeller
	MAYALAMA VE DAMITMA		BREWING AND DISTILLING		GÄREN UND DESTILLIEREN
	* Şişeleme Mekanizması * Mayalama Kazanları - Kesintisiz İş * Fırınlr, Ocaklar - Kesintisiz İş * Ezme, Karışım Kazanları - Kesintisiz İş * Ölçü Haznesi - Sık Sık Başlama		* Bottling Machinery * Brew Kettles - Continuous Duty * Cookers - Continuous Duty * Mash Tubs - Continuous Duty * Scale Hopper - Frequent Starts		* Abfüllmechanismus * Gärkessel - Ununterbrochene Arbeit * Öfen, Herde - Ununterbrochener Betrieb * Zerkleinern, Mischkesseln - Ununterbrochenes Arbeiten * Messbehälter - Häufiger Start
	TOPRAK İŞLEME MAKİNELERİ		CLAY WORKING MACHINERY		BODENBEARBEITUNGSMASCHINEN
	* Tuğla Presi * Briket Makinesi * Çamur Karma Makinesi		* Brick Press * Briquette Machine * Pug Mill		* Ziegelpresse * Briquetmaschine * Schlammischer
	KOMPRESÖRLER		COMPRESSORS		KOMPRESSOREN
	* Santrifüj * Lob * Çok Pistonlu * Tek Pistonlu		* Centrifugal * Lobe * Reciprocating, Multi-Cylinder * Reciprocating, Single-Cylinder		* Zentrifuge * Lob * Mehrkolben * Einzelkolben
	KONVEYÖRLER - GENEL MAKSATLI		CONVEYORS - GENERAL PURPOSE		FÖRDERER - ALLGEMEINE ZWECKE
	* Üniform Yüklü * Üniform Yüklü Olmayan * Pistonlu veya Karıştırıcı		* Uniformly Loaded or Fed * Not Uniformly fed * Reciprocating Or Shaker		* Uniform geladen * Nicht einheitlich belastet * Mit Kolben oder Mischer
	VİNÇLER		CRANES		KRÄNE
	* Kuru Havuz Ana Kaldırma vinci Yardımcı Vinç Direkli Vinç Döndürme İşi Çekme İşi * Endüstriyel İşi Ana Kaldırma Vinci		* Dry Dock Main Hoist Auxiliary Hoist Boom Hoist Slewing Drive Traction Drive * Industrial Duty Main Hoist		* Trockenbecken Haupthebkran Hilfskran Mastkran Rotationsarbeit Zieharbeit * Industrielle Haupthebwinde
	ASANSÖRLER		ELEVATORS		AUFZÜGE
	* Kova * Santrifüj Boşaltma * Yürüyen Merdiven * Taşıma, Nakliye * Yerçekimi Boşaltım		* Bucket * Centrifugal Discharge * Escalators * Freight * Gravity Discharge		* Eimer * Zentrifugalentladung * Rolltreppe * Abwicklung, Versand * Schwerkraftentladung
	KIRMA MAKİNELERİ		CRUSHER		ZERKLEINERUNGSMASCHINEN
	* Taş ya da Maden		* Stone or Ore		* Stein oder Mine

TR	UYGULAMA ALANLARI	EN	APPLICATION AREAS	DE	EINSATZBEREICHE
	UYGULAMALAR		APPLICATIONS		ANWENDUNGEN
	TARAMA MAKİNELERİ		DREDGES		SIEBMASCHINEN
	* Kablo Bobinleri * Konveyörler * Pompalar * İstifleme Makineleri * Vinçler		* Cable Reels * Conveyors * Pumps * Stackers * Winches		* Kabelspulen * Förderer * Pumpen * Stapelmaschinen * Kräne
	EKSTRUDERLER		EXTRUDERS		EXTRUDER
	* Genel * Plastikler Değişken Hızlı Tahrir Sabit Hızlı Tahrir * Kauçuk, Lastik Kesintisiz Vida İşlemleri Kesintili Vida İşlemleri		* General * Plastics Variable Speed Drive Fixed Speed Drive * Rubber Continuous Screw Operation Intermittent Screw Operation		* Allgemeines * Kunststoffe Antrieb mit variabler Geschwindigkeit Antrieb mit konstanter Geschwindigkeit * Gummi, Kautschuk Kontinuierlicher Schraubetrieb Intermittierende Schrauboperationen
	FANLAR		FANS		LÜFTER
	* Santrifüj * Yüksek Emişli * İndüklenmiş Çekiş * Endüstriyel ve Maden Ocağı		* Centrifugal * Forced Draft * Induced Draft * Industrial and Mine		* Zentrifuge * Starke Saugleistung * Induzierte Traktion * Industrie und Bergbau
	BESLEME ÜNİTELERİ		FEEDERS		FÜTTERUNGSMASCHINEN
	* Palet * Bant * Disk * Pistonlu * Vida		* Apron * Belt * Disc * Reciprocating * Screw		* Palette * Band * Scheibe * Kolben * Schrauben
	GIDA ENDÜSTRİSİ		FOOD INDUSTRY		NAHRUNGSMITTELINDUSTRIE
	* Hububat Fırını * Hamur Karıştırıcı * Kıyma Makinesi * Dilimleyici		* Cereal Cooker * Dough Mixer * Meat Grinder * Slicer		* Getreideofen * Knetmaschine * Fleischwolf * Schneidemaschine
	METAL İŞLEMELERİ		METAL MILLS		METALL VERARBEITUNG
	* Çekme Makinesi Taşıma ve Ana Tahrir * Hammadde İtici * Makaslar * Tel Çekme * Tel Sargı Makinesi * Salgı Tezgahı Geri Dönmesiz Tek Tahrir Grup Tahriri		* Draw Bench Carriage and Main Drive * Slab Pushers * Shears * Wire Drawing * Wire Winding Machine * Runout Table Non-Reversing Individual Drives Group Drives		* Traktionsmaschinen-Förderung und Hauptantrieb * Rohstoffschieber * Schere * Drahtziehen * Drahtwickelmaschine * Sekretbank Ohne Rückkehr Einzelantrieb Gruppenablage
	DÖNER İŞLEMELER		MILLS (ROTARY TYPE)		DREHARBEITEN
	* Küresel ve Çubuk Düz Halka Dişli Helisel Halka Dişli Doğrudan Bağlı * Çimento Fırını * Kurutucular ve Soğutucular		* Ball and Rod Spur Ring Gear Helical Ring Gear Direct Connected * Cement Kilns * Dryers and Coolers		* Sphärisch und Stab Flachringgetriebe Schrägverzahntes Hohlrad Direkter Anschluss * Zementofen * Trockner und Kühler

UYGULAMALAR

APPLICATIONS

ANWENDUNGEN

KERESTE ENDÜSTRİSİ

LUMBER INDUSTRY

HOLZINDUSTRIE

- * Kabuk Soyucular
 - Besleme Tamburu
 - Ana Tahrık
- * Konveyörler
 - Brülör
 - Ana Yük veya Ağır Yük
 - Ana Kütük
 - Hızır ve Taşıma Bandı
 - Kalın Dilim
 - Taşıma
- * Kesme Testereleeri
 - Zincir
 - Sürükleme
- * İndirme Boşaltma Tamburları
- * Uzun Deste
- * Tomruk Çekme-Eğme
- * Kütük Döndürme Aygıtları
- * Sıralama Tablası
- * Taşıma
 - Zincir
 - Kreynyolu
- * Tabla Tahriki

- * Barkers
 - Spindle Feed
 - Main Drive
- * Conveyors
 - Burner
 - Main or Heavy Duty
 - Main Log
 - Re-saw, Merry-Go-Round
 - Slab
 - Transfer
- * Cut-Off Saws
 - Chain
 - Drag
- * Debarking Drums
- * Long Deck
- * Log Hauls - Incline
- * Log Turning Devices
- * Sorting Table
- * Transfers
 - Chain
 - Causeway
- * Tray Drives

- * Schalenschäler
 - Zuführtrommel
 - Hauptantrieb
- * Förderer
 - Brenner
 - Hauptlast oder Schwerlast
 - Baumstumpf
 - Sägewerk und Förderband
 - Platte
 - Transport
- * Trennsägen
 - Kette
 - Schleppen
- * Entladetrommeln
- * Langes Deck
- * Kloben ziehen und abbiegen
- * Drehvorrichtungen für Baumstufpe
- * Sortiertabelle
- * Transport
 - Kette
 - Kranbahn
- * Tischlaufwerk

KAĞIT İŞLEMELERİ

PAPER MILLS

PAPIERFÜHRUNG

- * Karıştırıcı
- * Saf çözeltiler için Karıştırıcı
- * Kabuk Soyma Tromelleri
- * Mekanik Kabuk Soyucu
- * Dövcü - Öğütücü
- * Düzleştirme Makinesi
- * Kalenderleme
- * Yüzey Pürüzlendirici
- * Çentik Besleyici
- * Kaplama Merdanesi
- * Konveyörler
 - Çentik, Kabuk, Kimyasal
 - Kalın Dilimler İçeren Kütükler
- * Kesici
- * Silindir Kalıpları
- * Kurutucu
 - Kağıt Makinesi
 - Konveyör Tip
- * Kabartmalı Basıcı
- * Ekstrüder
- * Kağıt Merdaneleri
- * Presler
- * Küspe Makinesi
- * Pompalar

- * Agitator (Mixer)
- * Agitator for Pure Liquors
- * Barking Drums
- * Mechanical Barkers
- * Beater
- * Breaker Stack
- * Calender
- * Chipper
- * Chip Feeder
- * Coating Rolls
- * Conveyors
 - Chip, Bark, Chemical
 - Log (including Slab)
- * Cutter
- * Cylinder Molds
- * Dryer
 - Paper Machine
 - Conveyor Type
- * Embosser
- * Extruder
- * Paper Rolls
- * Presses
- * Pulper
- * Pumps

- * Rührgerät
- * Mischer für reine Lösungen
- * Peeling Tromeln
- * Mechanischer Schäler
- * Schlag - Mahlwerk
- * Richtmaschine
- * Kalandrieren
- * Oberflächenaufrauung
- * Kerbzuführung
- * Beschichtungswalze
- * Förderer
 - Kerbe, Schale, Chemisch
 - Stämme mit dicken Scheiben
- * Schneider
- * Zylinderformen
- * Trockner
 - Papiermaschine
 - Förderertyp
- * Geprägter Presser
- * Extruder
- * Papierrollen
- * Pressen
- * Teigmacher
- * Pumpen

FİLTRELER

SCREENS

FILTER

- * Havalı Yıkama
- * Döner - Taş veya Çakıl
- * Hareketli Su Girişi

- * Air Washing
- * Rotary - Stone or Gravel
- * Traveling Water Intake

- * Luftwäsche
- * Rotierer - Stein oder Kies
- * Beweglicher Wassereinfluss

TR	UYGULAMA ALANLARI	EN	APPLICATION AREAS	DE	EINSATZBEREICHE
	UYGULAMALAR		APPLICATIONS		ANWENDUNGEN
	PLASTİK ENDÜSTRİSİ İLK İŞLEMLER		PLASTIC INDUSTRY PRIMARY PROCESSING		KUNSTSTOFFINDUSTRIE ERSTE AKTIONEN
	* Yoğun İç Karıştırıcılar Harmanlayıcı Kesintisiz Karıştırıcı		* Intensive Internal Mixers Batch Mixers Continuous Mixers		* Intensive interne Mixer Mixer Kontinuierlicher Mischer
	PLASTİK ENDÜSTRİSİ İKİNCİL İŞLEMLER		PLASTIC INDUSTRY SECONDARY PROCESSING		KUNSTSTOFFINDUSTRIE SEKUNDÄRE PROZESSE
	* Hacim Kalıpcıları * Kaplama * Tabaka * Boru * Ön Plastikleştirme * Rot * Saç, Plaka * Borular		* Blow Molders * Coating * Film * Pipe * Pre-Plasticizers * Rods * Sheet * Tubing		* Volumenformer * Glasur * Schicht * Rohr * Vorplastifizieren * Auswuchten * Haare, Platte * Rohre
	POMPALAR		PUMPS		PUMPEN
	* Santrifüj * Oranlama * Pistonlu Tek Tesirli - 3 veya daha fazla Silindir Çift Tesirli - 2 veya daha fazla Silindir * Döner Şanzuman Tipi Lob Pervane		* Centrifugal * Proportioning * Reciprocating Single Acting - 3 or more cylinders Double Acting - 2 or more cylinders * Rotary Gear Type Lobe Vane		* Zentrifuge * Bewertung * Kolben Einfachwirkend - 3 oder mehr Zylinder Doppeltwirkend - 2 oder mehr Zylinder * rotierend Übertragungsart Lob Propeller
	KAUÇUK - LASTİK ENDÜSTRİSİ		RUBBER INDUSTRY		KAUTSCHUK - REIFENINDUSTRIE
	* Yoğun İç Karıştırıcılar Harmanlayıcılar Kesintisiz Karıştırıcılar * Karıştırma İşlemi 2 Yumuşak Merdane 1 veya 2 Oluklu Merdane * Toplu İşleme - 2 Yumuşak Silindir * Kırıcı ve Isıtıcı - 2 Merdane, 1 Oluklu Merdane * Kırıcı - 2 Oluklu Merdane * Tutma, Besleme, Karıştırma İşlemi - 2 Merdane * Artıcı - 2 Merdane * Kalenderler		* Intensive Internal Mixers Batch Mixers Continuous Mixers * Mixing Mill 2 Smooth Rolls 1 or 2 corrugated Rolls * Batch Drop Mill - 2 Smooth Rolls * Cracker Warner-2 Rolls, 1 Corr. Roll * Cracker - 2 Corrugated Rolls * Holding, Feed and Blend Mill - 2 Rolls * Refiner - 2 Rolls * Calenders		* Intensive interne Mixer Mixer Kontinuierliche Mischer * Mischprozess 2 weiche Rollen 1 oder 2 gerillte Rollen * Stapelverarbeitung - 2 weiche Walzen * Brecher und Heizung - 2 Walzen, 1 Wellwalze * Brecher - 2 Wellwalzen * Halte-, Fütterungs-, Mischprozess - 2 Rollen * Refiner - 2 Walzen * Kalendrieren
	ATIK SU BOŞALTIM EKİPMANLARI		SEWAGE DISPOSAL EQUIPMENT		AUSRÜSTUNG FÜR ABWASSERENTLEERUNG
	* Çubuklu Elek * Kimyasal Besleme Üniteleri * Su Boşaltma Eleği * Köpük Kesici * Yavaş veya Hızlı Karıştırıcılar * Tortu Toplayıcı * Koyulaştırıcı * Vakumlu Filtre		* Bar Screens * Chemical Feeders * Dewatering Screen * Scum Breaker * Slow or Rapid Mixers * Sludge Collector * Thickener * Vacuum Filter		* Stick Sieb * Chemikalienzufuhrreinheiten * Wasserablaufsieb * Schaumschneider * Langsame oder schnelle Mixer * Sedimentsammler * Verdickungsmittel * Vakuumfilter
	KOMPAKTÖRLER		COMPACTORS		VERDICHTER
	ÇEKİRMELER - YAVAŞ VE KUVVETLİ		PULLERS - BARGE HAUL		AUFZIEHVORRICHTUNGEN - LANGSAM UND STARK

TR

UYGULAMA ALANLARI

EN

APPLICATION AREAS

DE

EINSATZBEREICHE

UYGULAMALAR

APPLICATIONS

ANWENDUNGEN

ŞEKER ENDÜSTRİSİSUGAR INDUSTRYZUCKERINDUSTRIE

- * Pancar Dilimleme Aleti
- * Kamış Bıçakları
- * Kıрма Makineleri

- * Beet Slicer
- * Cane Knives
- * Crushers

- * Rübenschneider
- * Schilfklingen
- * Zerkleinerungsmaschinen

TEKSTİL ENDÜSTRİSİTEXTILE INDUSTRYTEXTILINDUSTRIE

- * Harman Ölçer
- * Kalenderler
- * Şablonlar
- * Kuru Konserveler
- * Boyama Makinesi
- * Dokuma Tezgahları
- * Çamaşır Sıkma Makinesi - Merdane
- * Kaplama
- * Doldurma Makinesi
- * Haşıl Makinesi
- * Halat Yıkama Makinesi
- * Eğirme Makinesi
- * Germe Kurutma Makineleri
- * Yıkama Makineleri
- * Masura Sarıcısı

- * Batcher
- * Calenders
- * Cards
- * Dry Cans
- * Dyeing Machinery
- * Looms
- * Mangle
- * Napper
- * Pads
- * Sishers
- * Soapers
- * Spinners
- * Tenter Frames
- * Washers
- * Winders

- * Dreschmesser
- * Kalendrieren
- * Vorlagen
- * Trockenkonserven
- * Färbemaschine
- * Webstühle
- * Waschmaschine - Roller
- * Glasur
- * Abfüllmaschine
- * Kalibriermaschine
- * Seilwaschmaschine
- * Spinnmaschine
- * Stretch-Trocknungsmaschinen
- * Waschmaschinen
- * Spuler

DAMPERLİ ARAÇLARCAR DUMPERSDIPPER FAHRZEUGEÇEKİCİ ARAÇLARCAR PULLERSTURMFAHRZEUGEARITICILARCLARIFIERSREINIGUNGSMASCHINENKONSERVE DOLUM MAKİNELERİCAN FILLING MACHINESDOSENFÜLLMASCHINEN

REDÜKTÖR TİPİ / GEAR TYPE / GETRIEBETYP

Delik Milli Seri (PD Serisi)
Hollow Shaft Series (PD Series)
Hohlwelle (PD-Serie)

- PD A02 ... PD 112 = **İki kademeli, paralel şaftlı redüktör**
Double reduction, parallel shaft gear unit series
Zweistufiges Flachgetriebe
- PD C13 ... PD 123 = **Üç kademeli, paralel şaftlı redüktör**
Triple reduction, parallel shaft gear unit series
Dreistufiges Flachgetriebe
- PD 12/02 ... PD 52/12 = **Dört kademeli, paralel şaftlı redüktör**
Quadruple reduction, parallel shaft gear unit series
Vierstufiges Flachgetriebe
- PD 63/22 ... PD 113/52 = **Beş kademeli, paralel şaftlı redüktör**
Quintuple reduction, parallel shaft gear unit series
Fünfstufiges Flachgetriebe

Çıkış Milli Seri (PM Serisi)
Solid Shaft Series (PM Series)
Abtriebswelle (PM-Serie)

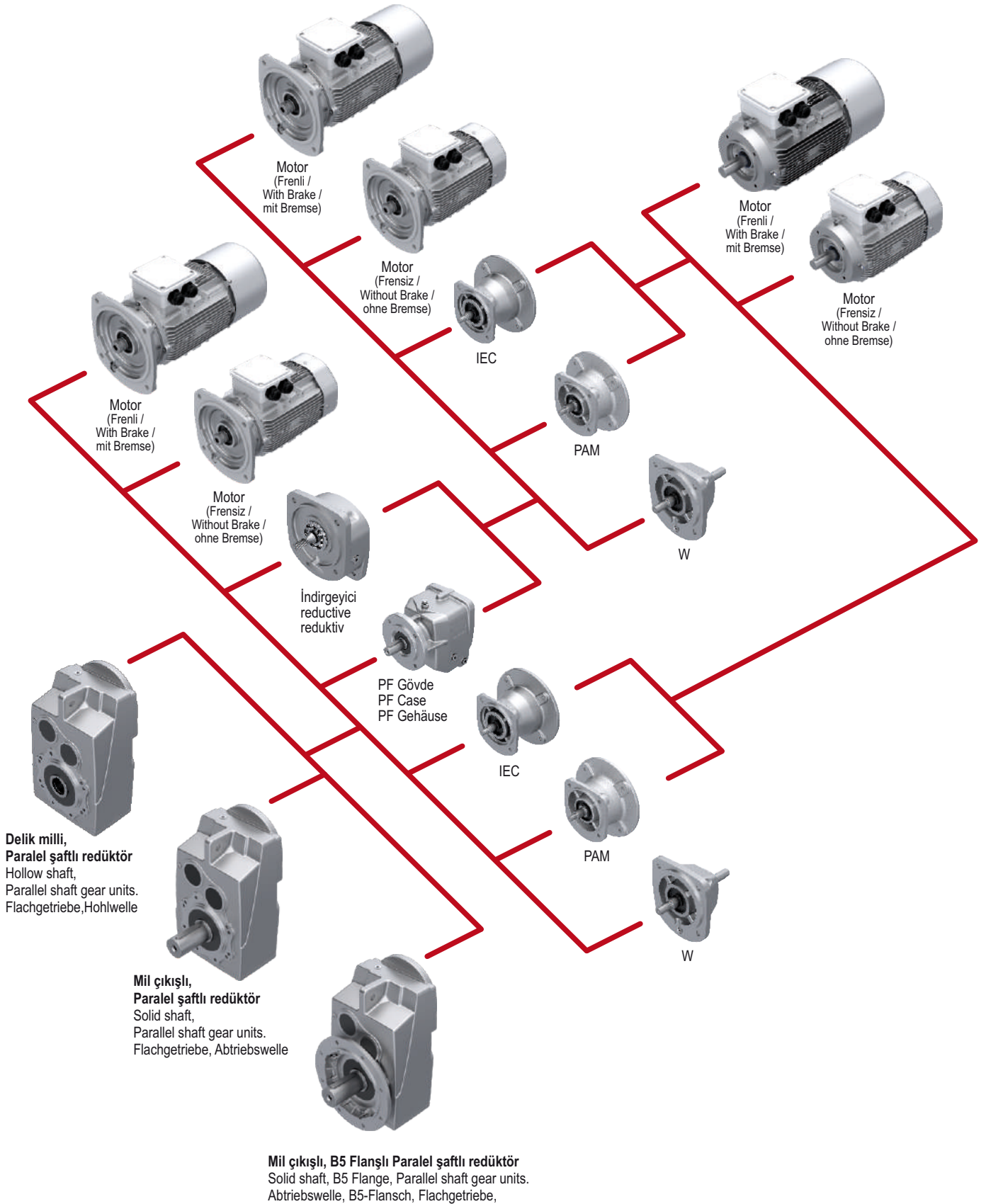
- PM A02 ... PM 112 = **İki kademeli, paralel şaftlı redüktör**
Double reduction, parallel shaft gear unit series
Zweistufiges Flachgetriebe
- PM C13 ... PM 123 = **Üç kademeli, paralel şaftlı redüktör**
Triple reduction, parallel shaft gear unit series
Dreistufiges Flachgetriebe
- PM 12/02 ... PM 52/12 = **Dört kademeli, paralel şaftlı redüktör**
Quadruple reduction, parallel shaft gear unit series
Vierstufiges Flachgetriebe
- PM 63/22 ... PM 113/52 = **Beş kademeli, paralel şaftlı redüktör**
Quintuple reduction, parallel shaft gear unit series
Fünfstufiges Flachgetriebe

REDÜKTÖR DİZAYNI / GEAR DESIGN / GETRIEBE - KURZZEICHEN

- PD... = **Delik milli**
Hollow shaft
Hohlwelle
- PM... = **Mil çıkışlı**
Solid shaft
Vollwelle
- PD... LT = **Delik milli, Lastik takozlu**
Hollow shaft, Rubber buffer
Hohlwelle, Gummipuffer
- PM... LT = **Mil çıkışlı, Lastik takozlu**
Solid shaft, Rubber buffer
Vollwelle, Gummipuffer
- PD... Ç = **Delik milli, Çektirmeli**
Hollow shaft with fixing element
Hohlwelle, mit Aufziehvorrichtung
- PD... Ç/LT = **Delik milli, Çektirmeli, Lastik takozlu**
Hollow shaft with fixing element, Rubber buffer
Hohlwelle, Aufziehvorrichtung, Gummipuffer
- PD... KS = **Delik milli, Konik sıkırtmalı**
Hollow shaft with shrink disc connector
Hohlwelle, Schrumpfscheibe
- PD... KS/LT = **Delik milli, Konik sıkırtmalı, Lastik takozlu**
Hollow shaft with shrink disc connector, Rubber buffer
Hohlwelle, Schrumpfscheibe, Gummipuffer
- PD... B14 = **Delik milli, B14 flanşlı**
Hollow shaft, B14 flange
Hohlwelle, B14-Flansch
- PD... B5 = **Delik milli, B5 flanşlı**
Hollow shaft, B5 flange
Hohlwelle, B5-Flansch
- PM... B14 = **Mil çıkışlı, B14 flanşlı**
Solid shaft, B14 flange
mit Vollwelle, B14-Flansch
- PM... B5 = **Mil çıkışlı, B5 flanşlı**
Solid shaft, B5 flange
mit Vollwelle, B5-Flansch
- PD... Ç/B5 = **Delik milli, Çektirmeli, B5 flanşlı**
Hollow shaft with fixing element, B5 flange
Hohlwelle, mit Aufziehvorrichtung, mit B5-Flansch
- PD... Ç/B14 = **Delik milli, Çektirmeli, B14 flanşlı**
Hollow shaft with fixing element, B14 flange
Hohlwelle, Aufziehvorrichtung, B14 Flansch
- PD... KS/B14 = **Delik milli, Konik sıkırtmalı, B14 flanşlı**
Hollow shaft with shrink disc connector, B14 flange
Hohlwelle, Schrumpfscheibe, Flansch B14
- PD... KS/B5 = **Delik milli, Konik sıkırtmalı, B5 flanşlı**
Hollow shaft with shrink disc connector, B5 flange
Hohlwelle, Schrumpfscheibe, Flansch B5

TR	KULLANILAN TERİMLER	EN	NOMENCLATURE	DE	BEGRIFFE
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Giriş Aksamları Input Options Eingabeoptionen	Motor Motor Motor	Kutup Numarası Number of Poles Anzahl der Pole	Motor Seçenekleri Motor Options Motoroptionen
<p>IEC = DIN 42677' ye göre standart motorlar için aksamlar</p> <p>For assembly with IEC standard motors acc. to DIN 42677</p> <p>Bei Getrieben mit IEC-Anbau gilt die Normleistung der jeweiligen Baugröße nach DIN 42677,</p>	<p>Üç fazlı motor Motor boyutu 63 - 315</p> <p>Three phase motor Motor size 63 - 315</p> <p>Drehstrommotor Motorgröße 63 - 315</p>	<p>2 = 2 Kutuplu 2 Poles 2 Pole</p> <p>4 = 4 Kutuplu 4 Poles 4 Pole</p> <p>6 = 6 Kutuplu 6 Poles 6 Pole</p>	<p>BRE = Frenli With brake Mit Bremse</p>
<p>PAM= DIN 42677' ye göre standart motorlar için aksamlar</p> <p>For assembly with PAM standard motors acc. to DIN 42677</p> <p>Bei Getrieben mit PAM-Anbau gilt die Normleistung der jeweiligen Baugröße nach DIN 42677,</p>	<p>EExell= Patlamaya karşı güvenliği artırılmış üç fazlı motor</p> <p>Explosion proof three phase motor increased safety</p> <p>Drehstrommotor mit erhöhter Explosionssicherheit</p>	<p>4 - 2 = 1:2 oranında hız değiştirici dahlander bağlantısı</p> <p>Pole changing 1:2 Dahlander connection</p> <p>Geschwindigkeitswechsler DAHLANDER</p>	<p>EF = Tek fazlı, fanlı Single phase, Separate fan Einphasig, mit Lüfter</p> <p>ZF = Çift fazlı, fanlı Double phase, Separate fan, Zweiphasig, mit Lüfter</p> <p>DF = Üç fazlı, fanlı Separate fan, three phase Dreiphasig, mit Lüfter</p>
<p>W = Motorsuz girişli redüktörler için aksam</p> <p>With free input shaft</p> <p>Bei Getrieben mit freier Antriebswelle</p>	<p>EExell= Patlamaya karşı güvenliği artırılmış üç fazlı motor</p> <p>Explosion proof three phase motor increased safety</p> <p>Drehstrommotor mit erhöhter Explosionssicherheit</p>	<p>8 - 2 = 1:4 oranında hız değiştirici ayrılmış sarmal dizilişli</p> <p>Pole changing 1:4 Separate windings</p> <p>Geschwindigkeitswechsler- getrennte spiralförmige Anordnung</p>	<p>IG = Enkoderli With encoder Mit encoder</p> <p>KK/FK = Debriyajlı With clutches Mit Kupplung</p> <p>SR = Toza karşı korumalı fren Brake dust - proof Staubgeschützte Bremse</p>
<p>T = Turbo kaplin</p> <p>Turbo coupling</p> <p>Turbokupplung</p>	<p>EExell= Patlamaya karşı güvenliği artırılmış üç fazlı motor</p> <p>Explosion proof three phase motor increased safety</p> <p>Drehstrommotor mit erhöhter Explosionssicherheit</p>	<p>Diğer kutup kombinasyonları istendiğinde karşılanacaktır</p> <p>Other pole combinations on request</p> <p>Andere Polkombinationen sind auf Anfrage erhältlich</p>	<p>TF = Termistörlü Thermistor Mit Thermistor</p> <p>RG = Korozyon korumalı frenli Brake corrosion protected Mit Korrosionsschutzbremse</p> <p>WU = Yumuşak kalkışlı rotor Soft start rotor Sanftanlaufrotor</p> <p>RLS = Geri dönmeye karşı kilitli Backstop Rücklaufsperre</p> <p>TW = Isıya duyarlı Thermal trip Wärmeempfindliche</p> <p>HL = Manuel frenli motor Brake motor with hand release Motor mit Handbremse</p> <p>F = Extra Fan Auxiliary Fan Fremdlüfter</p>



TR MEVCUT DİZAYNLARA GENEL BAKIŞ

EN OVERVIEW TO AVAILABLE DESIGNS

DE ÜBERSICHT AKTUELLE DESIGNS

Kısaltmalar Abbrev. Abkürzungen	Anlamı Meaning Bedeutung	Paralel Şaftlı Redüktör Parallel Shaft Gear Units Stirnradgetriebe
D	Delik milli / Hollow shaft / Hohlwelle,	✓
M	Mil çıkışlı / Solid shaft / Vollwelle	✓
B5	B5 Flanşı / Flange B5 / B5-Flansch	✓
B14	B14 Flanşı / Flange B14 / B14-Flansch	✓
Ç	Çektirme Kiti / Puller Kit / Befestigungsbausatz	✓
LT	Lastik takoz / Rubber buffer for torque arm / Gummipuffer	✓
KS	Konik sıkırtma / Shrink disc connector / Schrumpfscheibe	✓
DIN 5480	Kayıcı delik milli DIN 5480 / Splined hollow shaft, DIN 5480 / Hohlwelle mit DIN 5480	✓ (2)
KK	Koruma kapağı / Cover as a touch guard / Mit Schutzdeckel	✓
B	Kilit / Integrated Backstop / Rücklaufsperr	✓
GR	Güçlendirilmiş rulman / Reinforced bearing / Verstärktes Lager	✓
WB	W Kilidi / Backstop in W adapter / W-Sperre	✓
GKS	Güçlendirilmiş konik sıkırtma / Hollow shaft with reinforced shrink disc connector / Verstärkte Schrumpfscheibe	✓
GB5	Güçlendirilmiş B5 Flanşı / Agitator design / Verstärkter B5-Flansch	✓
PD A - B - C	Delik milli, ayak montajlı / Hollow shaft, foot mounted / Hohlwelle, Fußbefestigung,	✓ (1)
PM A - B - C	Mil çıkışlı, ayak montajlı / Solid shaft, foot mounted / Vollwelle, Fußbefestigung,	✓ (1)
PD... B5	Delik milli, B5 Flanşlı / Hollow shaft, Flange B5 / Hohlwelle, B5-Flansch	✓
PD... B14	Delik milli, B14 Flanşlı / Hollow shaft, Flange B14 / Hohlwelle, B14-Flansch	✓
PM... B5	Mil çıkışlı, B5 Flanşlı / Solid shaft, Flange B5 / Vollwelle, B5-Flansch	✓
Ç-LT	Çektirme Kiti, Lastik takozlu / Puller Kit, Rubber buffer / Befestigungsbausatz, Gummipuffer	✓
KS-LT	Konik sıkırtmalı, Lastik takozlu / Hollow shaft with shrink disc connector, Rubber buffer for torque arm / Schrumpfscheibe, Gummipuffer	✓
Ç-B5	Çektirmeli, B5 Flanşlı / Puller Kit, Flange B5 / Befestigungsbausatz, B5-Flansch	✓
Ç-B14	Çektirmeli, B14 Flanşlı / Puller Kit, Flange B14 / Befestigungsbausatz, B14-Flansch	✓
KS-B5	Konik sıkırtmalı, B5 Flanşlı / Hollow shaft with shrink disc connector, Flange B5 / Schrumpfscheibe, B5-Flansch	✓
KS-B14	Konik sıkırtmalı, B14 Flanşlı / Hollow shaft with shrink disc connector, Flange B14 / Schrumpfscheibe, B14-Flansch	✓
IEC	IEC Adaptörü / Adapter for mounting standard motors to gear unit / IEC-Adapter	✓
PAM	PAM adaptörü / PAM Adapter / PAM Adapter	✓
W	W Kovanı / Free input shaft / W-Adapter	✓

✓ Mevcut tasarımlar onay işareti ile belirtilmiştir.

✓ Sign is presented which designs are existed for gear units.

✓ Vorhandene Designs sind mit einem Häkchen gekennzeichnet.

1-) PD/PM A02 - B02 - C13 redüktör tipleri ayak montajı opsiyonu içermektedir.

1-) PD/PM A02 - B02 - C13 gear unit series include foot mounted option

1-) PD/PM A02 - B02 - C13 Getriebetypen beinhalten eine Fußbefestigungsoption.

2-) DIN 5480 opsiyonu PD A02 - B02 - C13 ile PD 102 dahil ve üst gövdeler için mevcut değildir.

2-) DIN 5480 option is not available for PD A02 - B02 - C13 and PD 102 inclusive and higher gear unit types.

2-) Die Option DIN 5480 ist nicht verfügbar für größere Gehäuse einschließlich PD A02 - B02 - C13 und PD 102.

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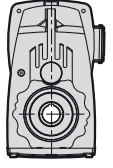
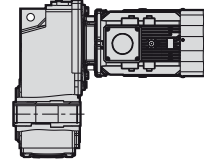
DE

UNSERE PRODUKTE

1) PD 32... - 80M/4A

Delik millî, İki kademeli, Paralel şaftlı, Motorlu redüktör

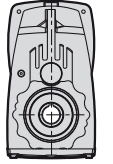
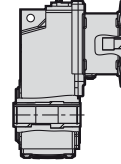
Hollow shaft, Double reduction, Parallel shaft gear unit, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Mit Motor



PD 32... - IEC 90

Delik millî, İki kademeli, Paralel şaftlı, IEC adaptörlü redüktör

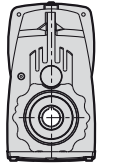
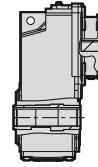
Hollow shaft, Double reduction, Parallel shaft gear unit, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Mit IEC-Adapter



PD 32... - PAM 90

Delik millî, İki kademeli, Paralel şaftlı, PAM adaptörlü redüktör

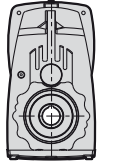
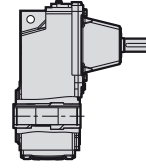
Hollow shaft, Double reduction, Parallel shaft gear unit, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Mit PAM adapter



PD 32... - W

Delik millî, İki kademeli, Paralel şaftlı, W kovanlı redüktör

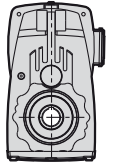
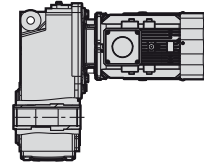
Hollow shaft, Double reduction, Parallel shaft gear unit, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Mit W-adapter



2) PD 32... **LT** - 80M/4A

Delik millî, İki kademeli, Paralel şaftlı, Lastik takozlu, Motorlu redüktör

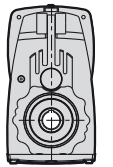
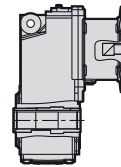
Hollow shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With Motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit Motor



PD 32... **LT** - IEC 90

Delik millî, İki kademeli, Paralel şaftlı, Lastik takozlu, IEC adaptörlü redüktör

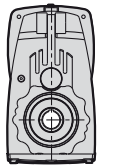
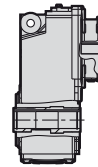
Hollow shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit IEC-Adapter



PD 32... **LT** - PAM 90

Delik millî, İki kademeli, Paralel şaftlı, Lastik takozlu, PAM adaptörlü redüktör

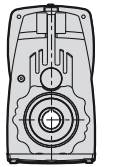
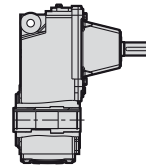
Hollow shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit PAM adapter



PD 32... **LT** - W

Delik millî, İki kademeli, Paralel şaftlı, Lastik takozlu, W kovanlı redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit W-adapter



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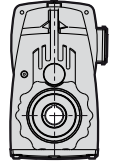
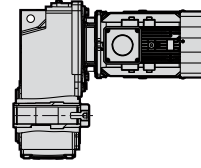
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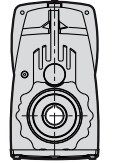
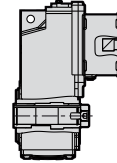
3) PD 32... Ç - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, Motorlu redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, fixing element, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Mit Motor



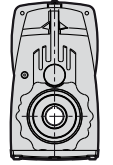
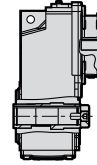
PD 32... Ç - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, IEC adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, fixing elements, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Mit IEC-Adapter



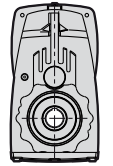
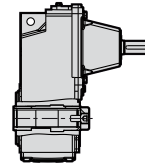
PD 32... Ç - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, PAM adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, fixing elements, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Mit PAM-Adapter



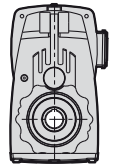
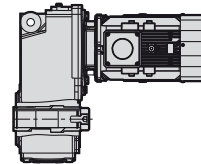
PD 32... Ç - W

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, W kovanlı redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, fixing element, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Mit W-adapter



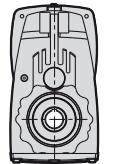
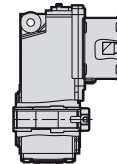
4) PD 32... Ç / LT - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, Lastik takozlu, Motorlu redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, rubber buffer, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Gummipuffer, Mit Motor



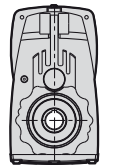
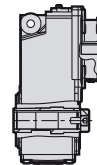
PD 32... Ç / LT - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, Lastik takozlu, IEC adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, rubber buffer, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Gummipuffer, Mit IEC adapter



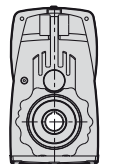
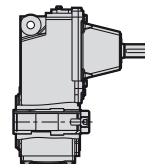
PD 32... Ç / LT - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, Lastik takozlu, IEC adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, rubber buffer, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Gummipuffer, Mit PAM adapter



PD 32... Ç / LT - W

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, Lastik takozlu, W kovanlı redüktör.
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, rubber buffer, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, Gummipuffer, Mit W-adapter



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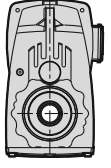
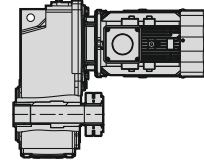
DE

UNSERE PRODUKTE

5) PD 32... **KS** - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, Motorlu redüktör

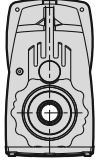
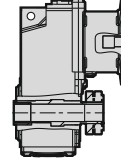
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Mit Motor



PD 32... **KS** - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, IEC adaptörlü redüktör

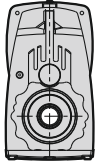
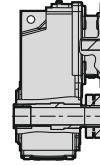
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Mit IEC-Adapter



PD 32... **KS** - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, PAM adaptörlü redüktör

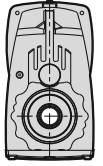
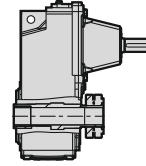
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Mit PAM-Adapter



PD 32... **KS** - W

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, W kovanlı redüktör

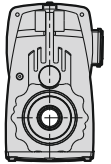
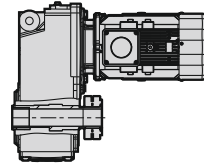
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Mit W-adapter



6) PD 32... **KS / LT** - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, Lastik takozlu, Motorlu redüktör

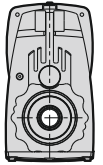
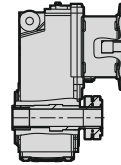
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, rubber buffer, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Gummipuffer, Mit Motor



PD 32... **KS / LT** - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, Lastik takozlu, IEC adaptörlü redüktör

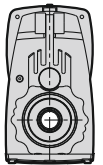
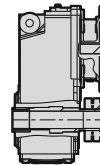
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, rubber buffer, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Gummipuffer, Mit IEC-Adapter



PD 32... **KS / LT** - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, Lastik takozlu, PAM adaptörlü redüktör

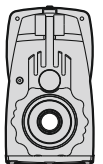
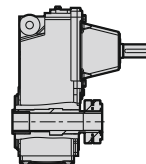
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, rubber buffer, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Gummipuffer, Mit PAM-Adapter



PD 32... **KS / LT** - W

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, Lastik takozlu, W kovanlı redüktör

Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, rubber buffer, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, Gummipuffer, Mit W-adapter



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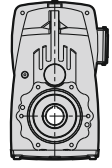
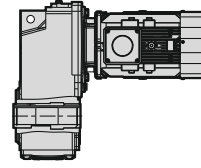
UNSERE PRODUKTE

7) PD 32... B14 - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, B14 Flanşlı, Motorlu redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, With B14 flange, With motor

Hohlwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit Motor

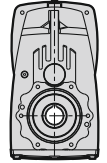
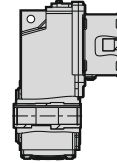


PD 32... B14 - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, B14 Flanşlı, IEC adaptörlü redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, B14 flange, With IEC adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit IEC-Adapter

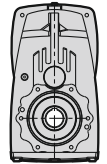
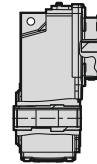


PD 32... B14 - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, B14 Flanşlı, PAM adaptörlü redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, B14 flange, With PAM adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit PAM-Adapter

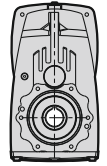
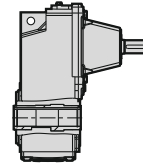


PD 32... B14 - W

Delik milli, İki kademeli, Paralel şaftlı, B14 Flanşlı, W kovanlı redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, B14 flange, With W adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit W-adapter

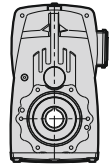
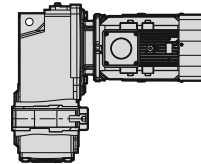


8) PD 32... Ç / B14 - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, B14 Flanşlı, Motorlu redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B14 flange, With motor

Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B14-Flansch, Mit Motor

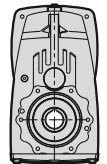
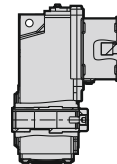


PD 32... Ç / B14 - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, B14 Flanşlı, IEC adaptörlü redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B14 flange, With IEC adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B14-Flansch, Mit IEC-Adapter

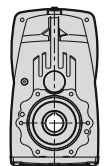
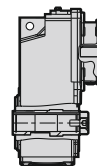


PD 32... Ç / B14 - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, B14 Flanşlı, PAM adaptörlü redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B14 flange and PAM adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B14-Flansch, Mit PAM-Adapter

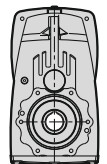
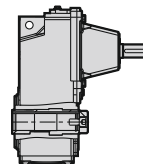


PD 32... Ç / B14 - W

Delik milli, İki kademeli, Paralel şaftlı, Çektirmeli, B14 Flanşlı, W kovanlı redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B14 flange, With W adapter

Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B14-Flansch, Mit W-adapter



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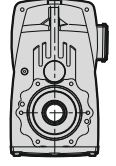
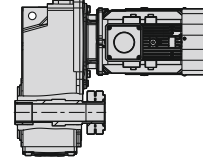
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9) PD 32... **KS / B14** - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, B14 Flanşlı, Motorlu redüktör

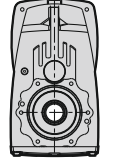
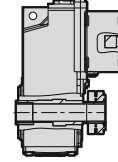
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, B14 flange, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B14-Flansch, Mit Motor



PD 32... **KS / B14** - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, B14 Flanşlı, IEC adaptörlü redüktör

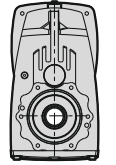
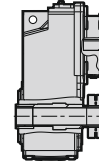
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, B14 flange, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B14-Flansch, Mit IEC-Adapter



PD 32... **KS / B14** - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, B14 Flanşlı, PAM adaptörlü redüktör

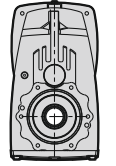
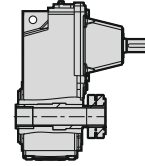
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, B14 flange, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B14-Flansch, Mit PAM-Adapter



PD 32... **KS / B14** - W

Delik milli, İki kademeli, Paralel şaftlı, Konik sıkırtmalı, B14 Flanşlı, W kovanlı redüktör.

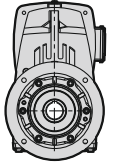
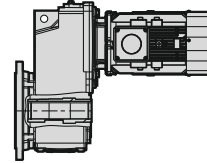
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, B14 flange, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B14-Flansch, Mit W-adapter



10) PD 32... **B5** - 80M/4A

Delik milli, İki kademeli, Paralel şaftlı, B5 Flanşlı, Motorlu redüktör

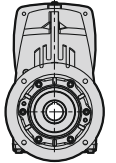
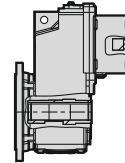
Hollow shaft, Double reduction, Parallel shaft gear unit, B5 flange, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit Motor



PD 32... **B5** - IEC 90

Delik milli, İki kademeli, Paralel şaftlı, B5 Flanşlı, IEC adaptörlü redüktör

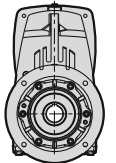
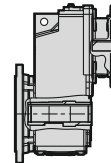
Hollow shaft, Double reduction, Parallel shaft gear unit, B5 flange, With IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit IEC-Adapter



PD 32... **B5** - PAM 90

Delik milli, İki kademeli, Paralel şaftlı, B5 Flanşlı, PAM adaptörlü redüktör

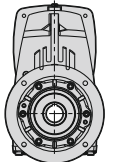
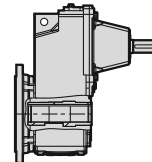
Hollow shaft, Double reduction, Parallel shaft gear unit, B5 flange, With PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit PAM-Adapter



PD 32... **B5** - W

Delik milli, İki kademeli, Paralel şaftlı, B5 Flanşlı, W kovanlı redüktör

Hollow shaft, Double reduction, Parallel shaft gear unit, B5 flange, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit W-adapter



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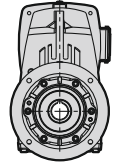
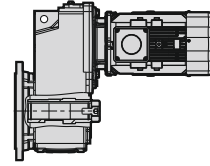
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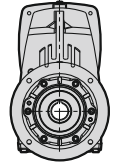
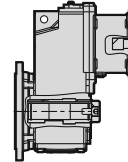
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11) PD 32... Ç / B5 - 80M/4A

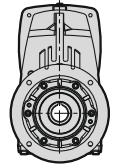
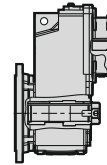
Delik millî, İki kademeli, Paralel şaftlı, Çektirmeli, B5 Flanşlı, Motorlu redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, fixing element, B5 flange, With motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B5-Flansch, Mit Motor

**PD 32... Ç / B5 - IEC 90**

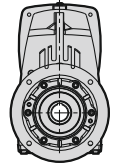
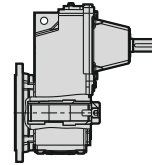
Delik millî, İki kademeli, Paralel şaftlı, Çektirmeli, B5 Flanşlı, IEC adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B5 flange and IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B5-Flansch, Mit IEC-Adapter

**PD 32... Ç / B5 - PAM 90**

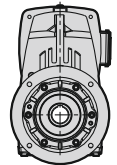
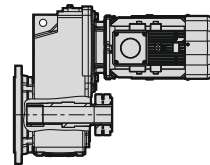
Delik millî, İki kademeli, Paralel şaftlı, Çektirmeli, B5 Flanşlı, PAM adaptörlü redüktör
Hollow shaft, Double reduction, Parallel shaft gear unit, With fixing element, B5 flange and PAM adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B5-Flansch, Mit PAM-Adapter

**PD 32... Ç / B5 - W**

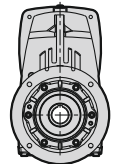
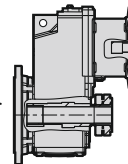
Delik millî, İki kademeli, Paralel şaftlı, Çektirmeli, B5 Flanşlı, W kovanlı redüktör.
Hollow shaft, Double reduction, parallel shaft gear unit, With fixing element, B5 flange, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Befestigungsbausatz, B5-Flansch, Mit W-adapter

**12) PD 32... KS / B5 - 80M/4A**

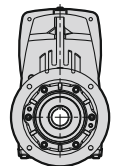
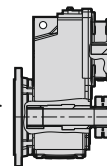
Delik millî, İki kademeli, Paralel şaftlı, Konik sıkırmalı, B5 Flanşlı, Motorlu redüktör
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With B5 flange and motor
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B5-Flansch, Mit Motor

**PD 32... KS / B5 - IEC 90**

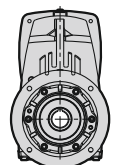
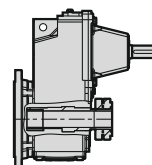
Delik millî, İki kademeli, Paralel şaftlı, Konik sıkırmalı, B5 Flanşlı, IEC adaptörlü redüktör
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With B5 flange and IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B5-Flansch, Mit IEC-Adapter

**PD 32... KS / B5 - PAM 90**

Delik millî, İki kademeli, Paralel şaftlı, Konik sıkırmalı, B5 Flanşlı, IEC adaptörlü redüktör
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, With B5 flange and IEC adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B5-Flansch, Mit PAM-Adapter

**PD 32... KS / B5 - W**

Delik millî, İki kademeli, Paralel şaftlı, Konik sıkırmalı, B5 Flanşlı, W kovanlı redüktör
Hollow shaft with shrink disc connector, Double reduction, Parallel shaft gear unit, B5 flange, With W adapter
Hohlwelle, Zweistufig, Stirnradgetriebe, Schrumpfscheibe, B5-Flansch, Mit W-adapter



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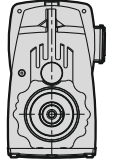
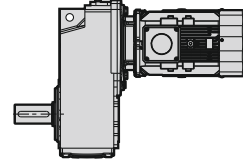
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UNSERE PRODUKTE

1) **PM 32... - 80M/4A**

Mil çıkışlı, İki kademeli, Paralel şaftlı, Motorlu redüktör

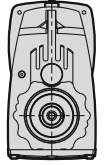
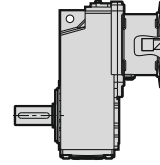
Solid shaft, Double reduction, Parallel shaft gear unit, With motor
Vollwelle, Zweistufig, Stirnradgetriebe, Mit Motor



PM 32... - IEC 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, IEC adaptörlü redüktör

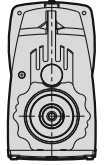
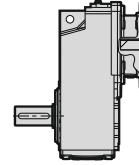
Solid shaft, Double reduction, Parallel shaft gear unit, With IEC adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Mit IEC-Adapter



PM 32... - PAM 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, IEC adaptörlü redüktör

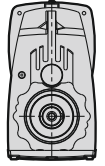
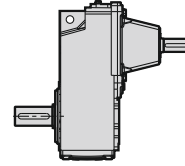
Solid shaft, Double reduction, Parallel shaft gear unit, With IEC adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Mit PAM adapter



PM 32... - W

Mil çıkışlı, İki kademeli, Paralel şaftlı, W kovanlı redüktör.

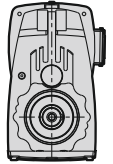
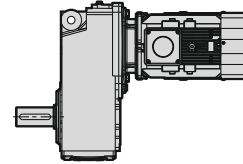
Solid shaft, Double reduction, Parallel shaft gear unit, With W adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Mit W-adapter



2) **PM 32... LT - 80M/4A**

Mil çıkışlı, İki kademeli, Paralel şaftlı, Lastik takozlu, Motorlu redüktör

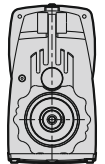
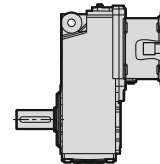
Solid shaft, Double reduction, Parallel shaft gear unit, rubber buffer, Mit Motor
Vollwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit Motor



PM 32... LT - IEC 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, Lastik takozlu, IEC adaptörlü redüktör

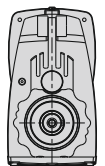
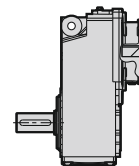
Solid shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With IEC adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit IEC-Adapter



PM 32... LT - PAM 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, Lastik takozlu, PAM adaptörlü redüktör

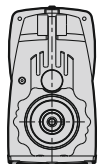
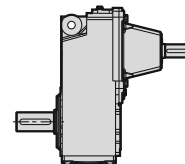
Solid shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With PAM adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit PAM adapter



PM 32... LT - W

Mil çıkışlı, İki kademeli, Paralel şaftlı, Lastik takozlu, W kovanlı redüktör

Solid shaft, Double reduction, Parallel shaft gear unit, rubber buffer, With W adapter
Vollwelle, Zweistufig, Stirnradgetriebe, Gummipuffer, Mit W-adapter



TR

ÜRÜNLERİMİZ

EN

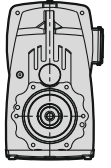
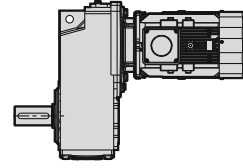
OUR PRODUCTS

DE

UNSERE PRODUKTE

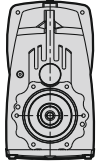
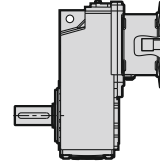
3) PM 32... B14 - 80M/4A

Mil çıkışlı, İki kademeli, Paralel şaftlı, B14 Flanşlı, Motorlu redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, B14 flange, With motor
Vollwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit Motor



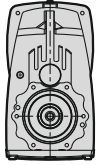
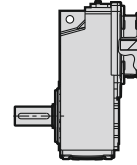
PM 32... B14 - IEC 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, B14 Flanşlı, IEC adaptörlü redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, With B14 flange and IEC adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit IEC-Adapter



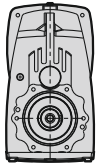
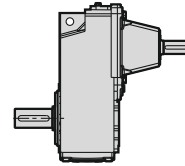
PM 32... B14 - PAM 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, B14 Flanşlı, PAM adaptörlü redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, With B14 flange and PAM adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit PAM adapter



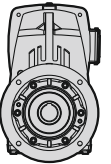
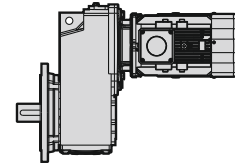
PM 32... B14 - W

Mil çıkışlı, İki kademeli, Paralel şaftlı, B14 Flanşlı, W kovanlı redüktör.
Solid shaft, Double reduction, Parallel shaft gear unit, B14 flange, With W adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B14-Flansch, Mit W-adapter



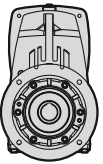
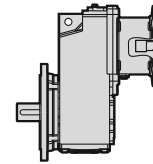
4) PM 32... B5 - 80M/4A

Mil çıkışlı, İki kademeli, Paralel şaftlı, B5 Flanşlı, Motorlu redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, B5 flange, With motor
Vollwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit Motor



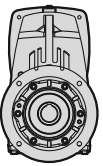
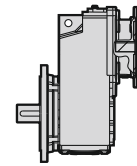
PM 32... B5 - IEC 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, B5 Flanşlı, IEC adaptörlü redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, With B5 flange and IEC adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit IEC-Adapter



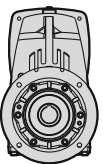
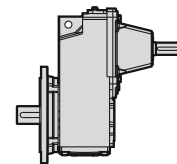
PM 32... B5 - PAM 90

Mil çıkışlı, İki kademeli, Paralel şaftlı, B5 Flanşlı, PAM adaptörlü redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, With B5 flange and PAM adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit PAM adapter



PM 32... B5 - W

Mil çıkışlı, İki kademeli, Paralel şaftlı, B5 Flanşlı, W kovanlı redüktör
Solid shaft, Double reduction, Parallel shaft gear unit, B5 flange, With W adapter
Vollwelle, Zweistufig, Stirnradgetriebe, B5-Flansch, Mit W-adapter



TR REDÜKTÖR SEÇİM FORMU

1- REDÜKTÖR

Kullanılacak Sektör:

Uygulama Yeri:

Günlük Çalışma Saati:

<4 [] 4-8 [] 8-16 [] >16 []

Saatteki Dur-Kalk Sayısı:

0-50 [] 50-100 [] 100-200 [] 200-300 []
300-500 [] 500-700 [] 700-1000 [] >1000 []

Giriş Seçeneği: Motorlu [] Motorsuz []

Talep Edilen Motor Gücü:kW

Talep Edilen Motor Devri:d/dak

Talep Edilen Çıkış Devri:d/dak

2 - GİRİŞ - ÇIKIŞ

Tahrik Tipi:

AC Motor [] AC Motor + Invertör [] Servo Motor []
Hidro Motor [] Serbest Giriş Mili [] Diğer []

Motor Bağlantı Flanşı (Elektirik Motorlu ise):

Akuple [] IEC B5 [] PAM B5 []
PAM B14 [] NEMA []

Giriş Mili Özelliği (Serbest Giriş Milli ise):

Kamalı [] Diğer.....

Giriş Mili Tahrik Tipi (Serbest Giriş Milli ise):

Elastik Kaplin [] Hidrolik Kaplin [] Küçük Hızlarda Zincir Dişli [] Düz Dişli []
Triger Kayış [] V Kayış [] Gergirme Makaralı Kayış []

Giriş Mili Yük Durumu (Serbest Giriş Milli ise):

Radyal yük.....N
Eksenel Yük.....N / Çeki [] Bası []

Çıkış Mili Özelliği (Serbest Giriş Milli ise):

Mil Çıkışlı [] Delik Milli [] Konik Sıkırma Şaftlı []
Diğer.....

Çıkış Mili Tahrik Tipi:

Direkt [] Elastik Kaplin [] Hidrolik Kaplin [] Küçük Hızlarda Zincir Dişli []
Düz Dişli [] Triger Kayış [] V Kayış [] Gerdirme Makaralı Kayış []

Çıkış Mili Yük Durumu :

Radyal yük.....N
Eksenel Yük.....N / Çeki [] Bası []

3 - MONTAJ

Montaj Pozisyonu:

M1 [] M2 [] M3 [] M4 [] M5 [] M6 []

Kilit Durumu:

Var [] Yok []

Deniz Seviyesinden Yükseklik:

0-1000 [] 1000-2000 [] 2000-3000 [] 3000-4000 [] 4000-5000 []

Ortam Durumu:

Açık (1,25 m/sn) [] Kapalı (4 m/sn) []

Ortam Şartları:

Normal [] Tozlu [] Nemli [] Kuru []

Diğer.....

Ortam Sıcaklığı:.....°C

4 - MOTOR

Elektiriksel Değer:

Voltaj.....V

Frekans.....Hz

Koruma Sınıfı:

IP55 [] IP65 [] Exproof []

Diğer IP.....

Terminal Kutusu Yönü:

1 [] 2 [] 3 [] 4 []

Termistör:

Var [] Yok []

Fren Durumu:

Var [] Yok []

Atex:

2G [] 2D [] Yok []

Diğer.....

Diğer Notlar:

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

Lütfen doğru redüktör seçimi yapabilmek için gerekli bilgileri doldurunuz!

EN GEARBOX SELECTION FORM

1- GEAR UNIT

Sector for which will be used:

Application area:.....

Daily working hour:
 <4 [] 4-8 [] 8-16 [] >16 []

Revolution per hours:
 0-50 [] 50-100 [] 100-200 [] 200-300 []
 300-500 [] 500-700 [] 700-1000 [] >1000 []

Input option: With motor [] Without motor []

Requested Motor Power:.....kW

Requested Motor Rotation:.....min⁻¹

Requested Output Rotation:.....min⁻¹

2 - INPUT - OUTPUT

Drive type:
 AC Motor [] AC Motor + Invertor [] Servo Motor []
 Hydromotor [] Free Input Shaft [] Other []

Motor Connection Flange (With Electric Motor):
 Direct [] IEC B5 [] PAM B5 []
 PAM B14 [] NEMA []

Property of Input Shaft (with free input shaft):
 With Key [] Other.....

Driving type of Input Shaft(with free input shaft):
 Elastic Coupling [] Hydraulic Coupling [] For Chain Drive With Low Speed []
 For Spur Gear [] For Trigger Belt [] For V belt [] Flat Belt With Spanning Pulley []

Input Shaft Load case (with free input shaft):
 Radial Load.....N
 Axial Load.....N / Draw [] Impression []

Property of Output Shaft (with free input shaft):
 Solid Shaft [] Hollow shaft [] Shaft for Shrink Disc []
 Other.....

Output Shaft Drive type:
 Direct [] Elastic Coupling [] Hydraulic Coupling [] Chain Drive With Low Speed []
 Spur Gear [] Trigger Belt [] V Belt [] Flat Belt With Spanning Pulley []

Output Shaft Load case:
 Radial Load.....N
 Axial Load.....N / Draw [] Impression []

3 - MOUNTING

Mounting Position:
 M1 [] M2 [] M3 [] M4 [] M5 [] M6 []

Backstop Situation:
 Yes [] No []

Altitude above sea level:
 0-1000 [] 1000-2000 [] 2000-3000 [] 3000-4000 [] 4000-5000 []

Ambient Situation:
 Open (1,25 m/sn) [] Close (4 m/sn) []

Ambient Conditions:
 Normal [] Dusty [] Humid [] Dry []
 Other.....

Ambient Temperature :°C

4 - MOTOR

Elektrical Value:
 Voltage.....V
 Frequency.....Hz

Protection Class :
 IP55 [] IP65 [] Exproof []
 Other IP.....

Terminal Box Position:
 1 [] 2 [] 3 [] 4 []

Thermistor :
 Yes [] No []

Brake Situation:
 Yes [] No []

Atex:
 2G [] 2D [] Yok []
 Other.....

Other Notes:

Please give required informations for selecting correct reducer!

DE FORMULAR FÜR GETRIEBEAUSWAHL

1- GETRIEBE

Sektor :

Anwendungsbereich:.....

Betriebsstunden/Tag:

<4 [] 4-8 [] 8-16 [] >16 []

Anlauf pro Stunde:

0-50 [] 50-100 [] 100-200 [] 200-300 []
300-500 [] 500-700 [] 700-1000 [] >1000 []

Antriebsoption: mit Motor [] ohne Motor []

Geforderte Motorleistung:.....kW

Angeforderte Motordrehzahl:.....min⁻¹

Angeforderter Abtriebsdrehzahl:.....min⁻¹

2 - ANTRIEB - ABTRIEB

Antriebstyp:

Wechselstrommotor [] Wechselstrommotor + Wechselrichter [] Servomotor []
Hydromotor [] Freie Antriebswelle [] Sonstiges []

Motoranschlussflansch (bei Elektromotor):

Gekoppelt [] IEC B5 [] PAM B5 []
PAM B14 [] NEMA []

Antriebswelleneigenschaft (bei freier Antriebswelle):

mit Passfeder [] Sonstiges.....

Antriebsart der Antriebswelle (bei freier Antriebswelle):

Elastische Kupplung [] Hydraulische Kupplung [] Kettenrad bei kleinen Drehzahlen []
Stirnrad [] Zahnriemen [] Keilriemen [] Spannrollenriemen []

Belastungsart der Antriebswelle (bei freier Antriebswelle):

Radiale BelastungN
Axiale Belastung.....N / Zug [] Druck []

Abtriebswelleneigenschaft (bei freier Abtriebswelle):

Vollwelle [] Hohlwelle [] Welle mit Schrumpfscheibe []
Sonstiges.....

Antriebsart der Abtriebswelle:

Direkt [] Elastische Kupplung [] Hydraulische Kupplung [] Stirnrad [] Keilriemen []
Kettenrad bei kleinen Drehzahlen [] Zahnriemen [] Spannrollenriemen []

Belastungsart der Abtriebswelle:

Radiale BelastungN
Axiale Belastung.....N / Zug [] Druck []

3 - MONTAGE

Einbaulage:

M1 [] M2 [] M3 [] M4 [] M5 [] M6 []

Rücklaufsperre:

Ja [] Nein []

Höhe über dem Meeresspiegel:

0-1000 [] 1000-2000 [] 2000-3000 [] 3000-4000 [] 4000-5000 []

Umgebungsbedingungen:

Ein (1,25 m/sn) [] Aus (4 m/sn) []

Umweltbedingungen:

Normal [] staubig [] feucht [] trocken []

Sonstiges.....

Umgebungstemperatur:.....°C

4 - MOTOR

Elektrischer Wert:

Stromspannung.....V

Frequenz.....Hz

Schutzklasse:

IP55 [] IP65 [] Ex-geschützt []

Andere IP.....

Ausrichtung des Klemmenkastens:

1 [] 2 [] 3 [] 4 []

Thermistor:

Ja [] Nein []

Bremse:

Ja [] Nein []

Atex:

2G [] 2D [] Nein []

Sonstiges.....

Andere Notizen:

.....
.....
.....
.....
.....
.....
.....
.....
.....

Bitte geben Sie die notwendigen Informationen an, um das richtige Getriebe auswählen zu können!

TR

SİPARİŞ ÖRNEĞİ

EN

EXAMPLE FOR ORDERING

DE

BEISPIEL BESTELLBESCHREIBUNG

PD - PM

93 / 52

410.49

B5

-

PAM 132 - B5

-

132M / 4 BRE



IEC

63
71
80
90
100
112
132
160
180
200
225
250
280
315

PAM B5

63
71
80
90
100
112
132
160
180
200
225
250
280

PAM B14

63
71
80
90
100
112
132

W

122
172
213
253
288
397

AKUPLE



MOTOR

İges: Tahvil Oranı
İges: Reduction Ratio
İges: Verkleinerungsfaktor
 77 - 183

Standart Ürünler (B5 Flanşlı)
Available standard products (B5: B5 Flange)
Standardprodukte (Flansch B5)

LT	Ç*	Ç/LT*	KS*	KS/LT*	B5
B14	Ç/B14*	Ç/B5*	KS/B5*	KS/B14*	27 - 34

* İşareti ile belirtilen opsiyonlar sadece Polat Delik Milli serisi için geçerlidir.
* Sign shows that this option is acceptable only for Polat Hollow Shaft gear unit series.
* Markierte Optionen nur für PGR Serie mit Hohlwelle gültig.

Motor Gövde
Büyükklüğü
Case Width
Kistenweite

63 M
71 M
80 M
90 S/L
100 L
112 M
132 S/M
160 M/L
180 M/L
200 L
225 S/M
250 S/M/L
280 S/M/L
315 S/M/L

Kutup Sayısı
Number of Poles
Anzahl der Pole

2
4
6
2 - 4
2 - 8

Diğer Kutup
kombinasyonları
istendiğinde
karşılacaktır.
Other pole
combinations
on request
Sonstige
Polkombinationen
auf Wunsch

Motor Aksesuarları
Motor Accessories
Motorzubehör

BRE
RG
SR
HL
TF
TW
WU
EF
ZF
DF
IG
KK/FK
RLS

24

9
Gövde Büyükklüğü
Case Width
Kistenweite

A0
B0
C1
1
2
3
4
5
6
7
8
9
10
11
12

185 - 243

3
Kademe
Reduction
Übersetzungstufen

2
3

PF GÖVDE
PF CASE
PF GEHÄUSE

5
Gövde Büyükklüğü
Case Width
Kistenweite

0
1
2
3
4
5

245 - 267

2
Kademe
Reduction
Übersetzungstufen

2

Tip: PD (Delik Milli Redüktör / Hollow Shaft Gear Unit / Hohlwelle)
PM (Mil Çıkışlı Redüktör / Solid Shaft Gear Unit / Vollwelle)

Not: Redüktör tiplerinden PD/PM A02, PD/PM B02 dişli üniteleri 2 kademeli, PD/PM C13 dişli ünitesi 3 kademeli olup A0, B0 ve C1 gövde büyüklüğünü göstermektedir.

Not: Gear units which are PD/PM A02, PD/PM B02 and PD/PM C13 are, 2 and 3 stage reduction respectively, but A0, B0 and C1 codes in this gear unit type determine case width.

Hinweis: Getriebe PD/PM A02, PD/PM B02 sind 2-stufige Getriebe, PD/PM C13 Getriebe sind 3-stufig und die Baugrößen A0, B0 und C1 werden angezeigt.

TR

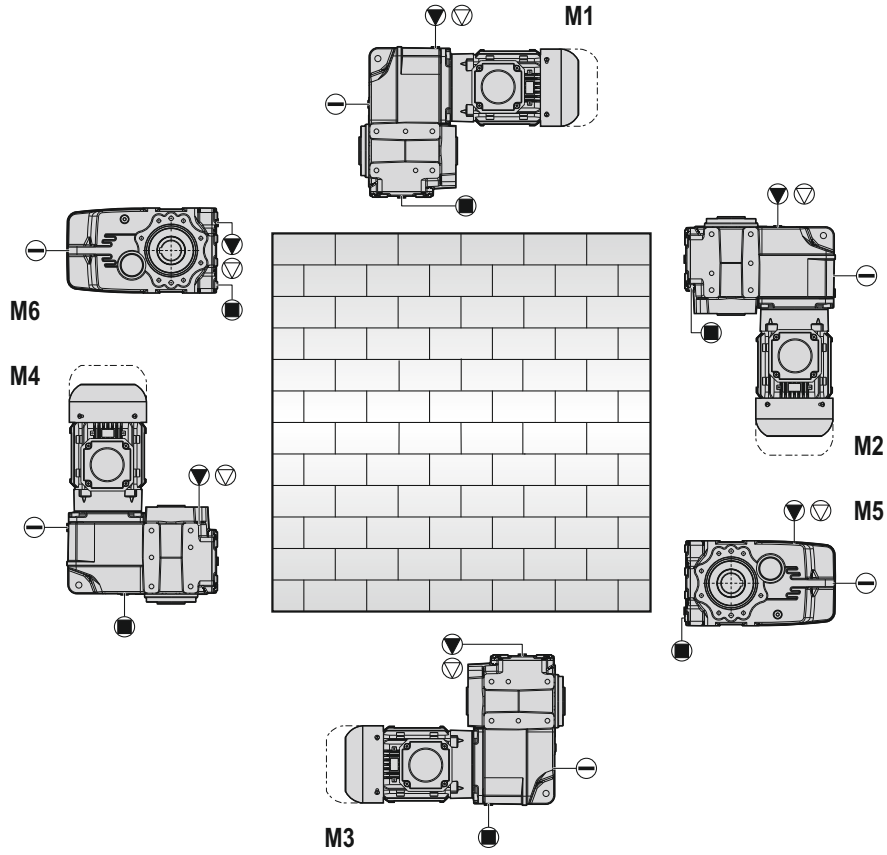
MONTAJ POZİSYONLARI

EN

MOUNTING POSITIONS

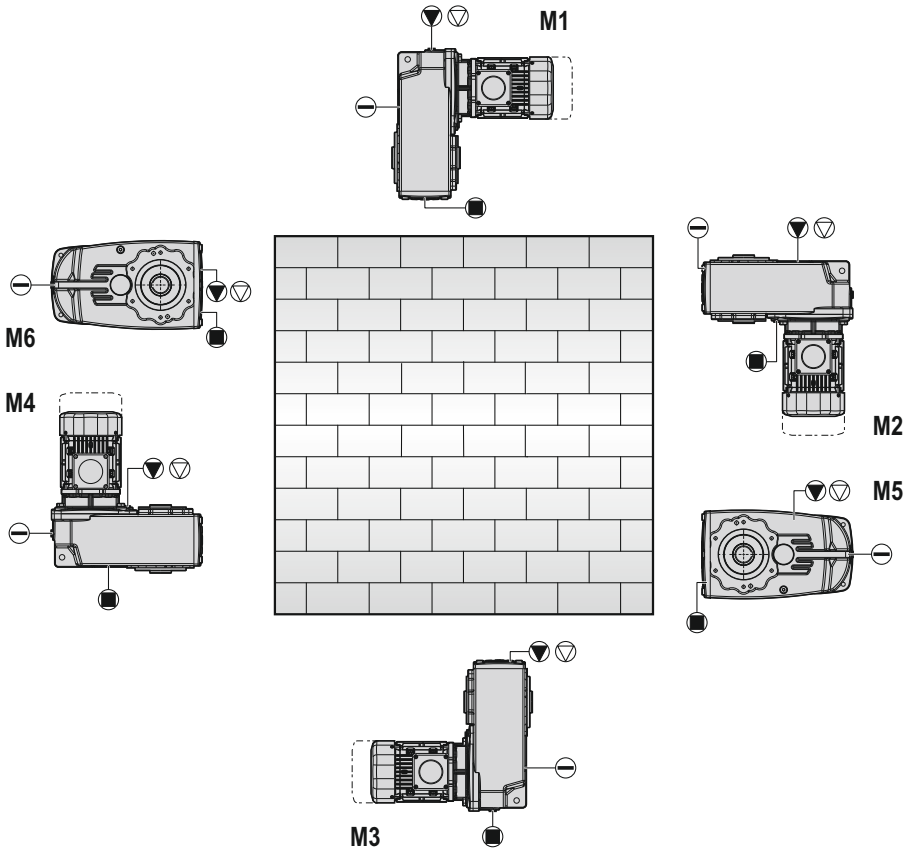
DE

MONTAGE POSITIONEN



PD A02
PD B02
PD C13

PD 12
PD 22
PD 32
PD 42
PD 52
PD 13
PD 23
PD 33
PD 43
PD 53



▽ Havalandırma tapası /
Vent plug / Entlüftung

● Doldurma tapası /
Filling plug / Einfüllstopfen

○ Yağ Seviye tapası /
Oil level / Ölstand

■ Boşaltma tapası /
Drain plug / Ölablass

TR

MONTAJ POZİSYONLARI

EN

MOUNTING POSITIONS

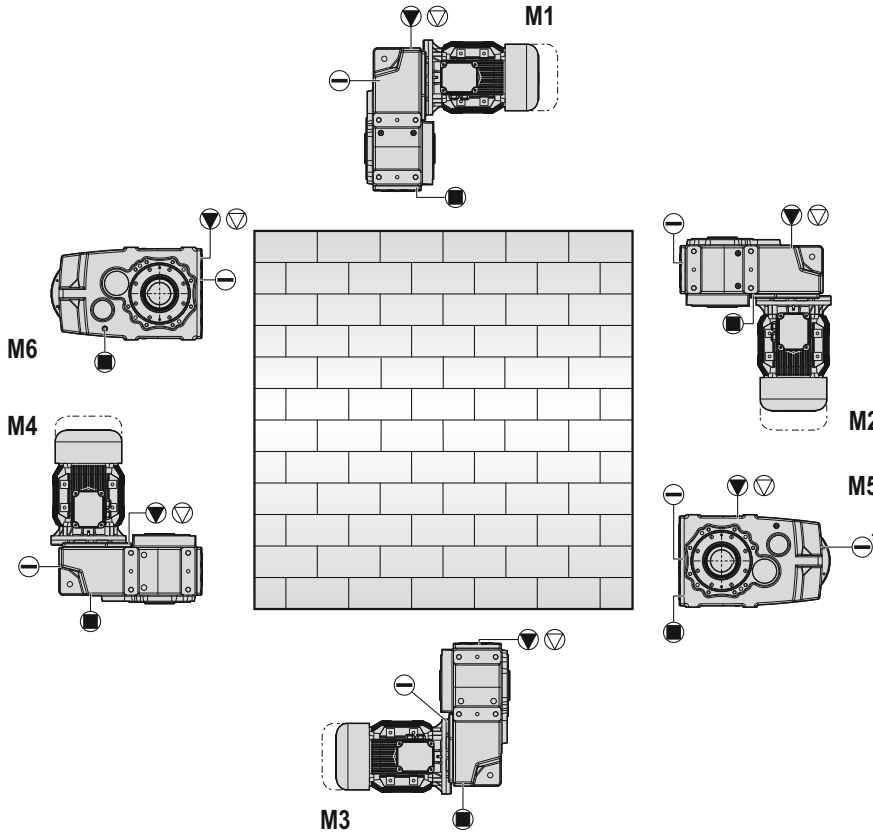
DE

MONTAGE POSITIONEN

* İşareti PD 63...123' e kadar olan redüktörler için yağ seviye tapası kullanım yerini gösterir.

* Sign shows that position of oil level plug for gear units which are from PD 63 to PD 123.

Das *-Zeichen kennzeichnet den Einsatzort der Ölstandsschraube für Getriebe zwischen PD 63...123.



PD 62
 PD 72
 PD 82
 PD 92
 PD 102
 PD 112
 * PD 63
 * PD 73
 * PD 83
 * PD 93
 * PD 103
 * PD 113
 * PD 123

☐ Havalandırma tapası /
 Vent plug / Entlüftung

● Doldurma tapası /
 Filling plug / Einfüllstopfen

⊖ Yağ Seviye tapası /
 Oil level / Ölstand

● Boşaltma tapası /
 Drain plug / Ölabblass

TR

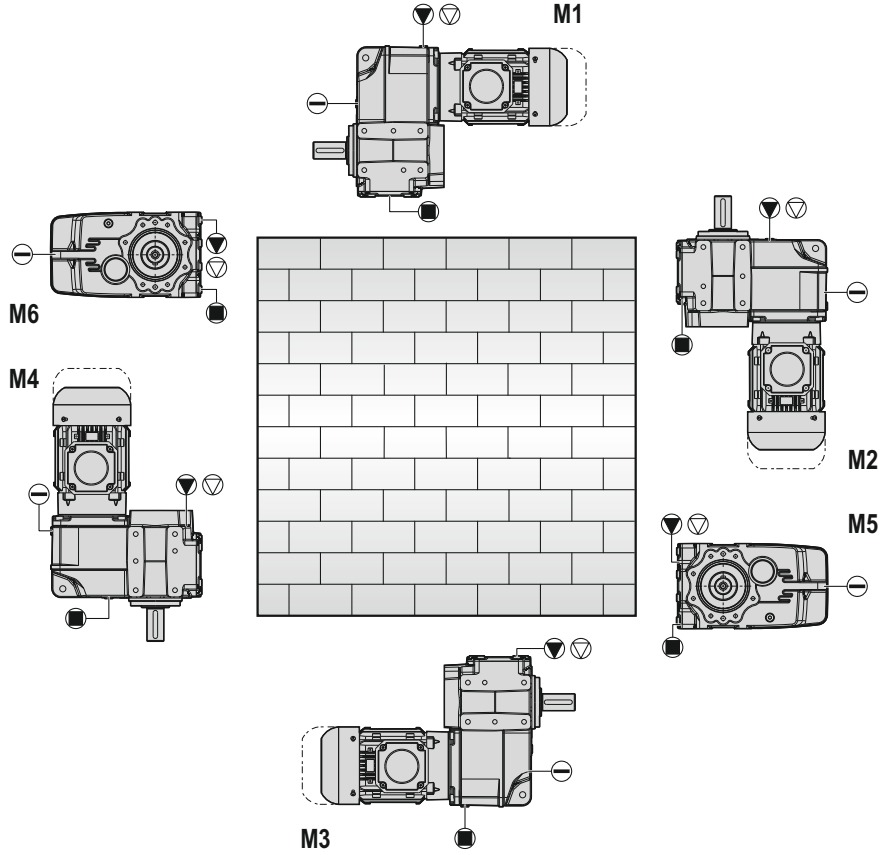
MONTAJ POZİSYONLARI

EN

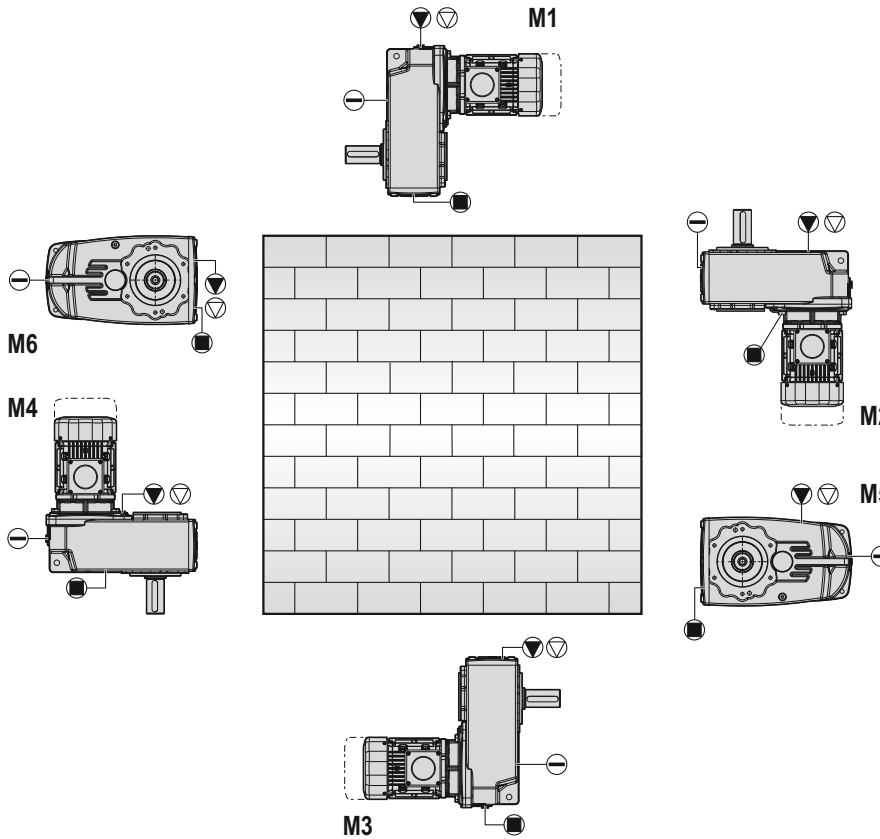
MOUNTING POSITIONS

DE

MONTAGE POSITIONEN



PM A02
PM B02
PM C13



PM 12
PM 22
PM 32
PM 42
PM 52
PM 13
PM 23
PM 33
PM 43
PM 53

▽ Havalandırma tapası /
Vent plug / Entlüftung

● Doldurma tapası /
Filling plug / Einfüllstopfen

○ Yağ Seviye tapası /
Oil level / Ölstand

■ Boşaltma tapası /
Drain plug / Ölablass

TR

MONTAJ POZİSYONLARI

EN

MOUNTING POSITIONS

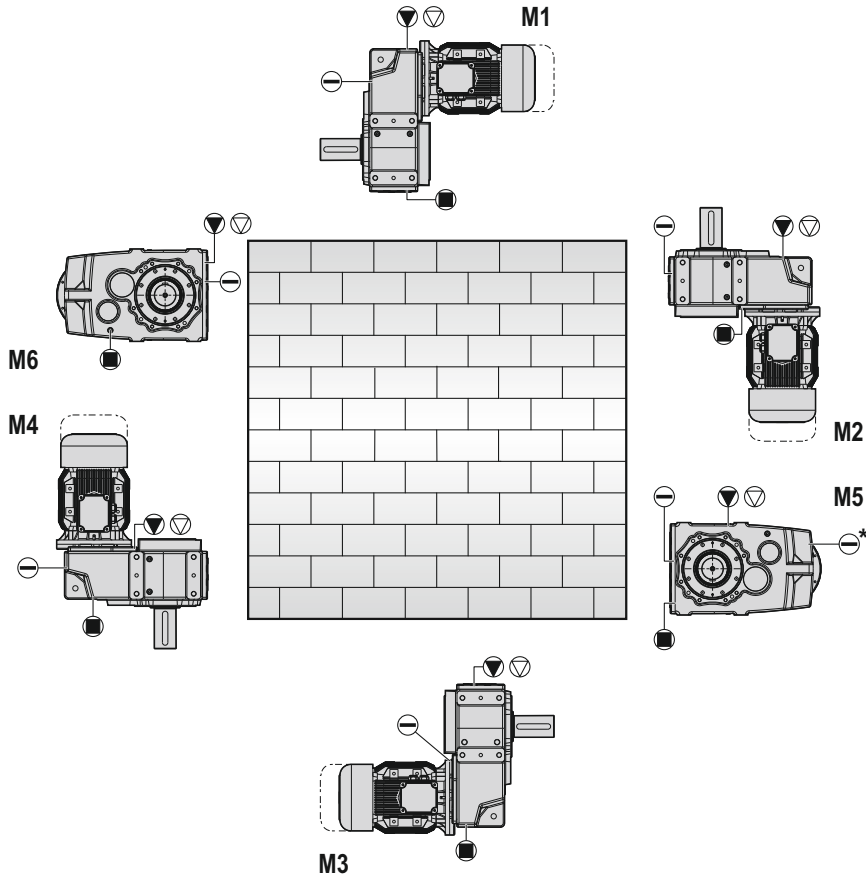
DE

MONTAGE POSITIONEN

* İşareti PM 63...123' e kadar olan redüktörler için yağ seviye tapası kullanım yerini gösterir.

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PM 62
 PM 72
 PM 82
 PM 92
 PM 102
 PM 112
 * PM 63
 * PM 73
 * PM 83
 * PM 93
 * PM 103
 * PM 113
 * PM 123

▽ Havalandırma tapası /
 Vent plug / Entlüftung

▲ Doldurma tapası /
 Filling plug / Einfüllstopfen

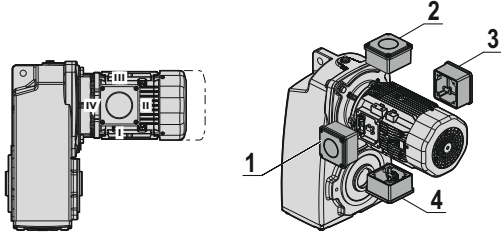
○ Yağ Seviye tapası /
 Oil level / Ölstand

■ Boşaltma tapası /
 Drain plug / Ölabblass

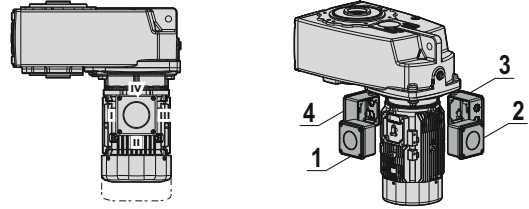
PD

TERMİNAL KUTUSU VE KABLO GİRİŞ YÖNLERİ / POSITION OF TERMINAL BOX AND CABLE ENTRY /
KLEMMENKASTENLAGE UND KABELNMFÜHRUNG

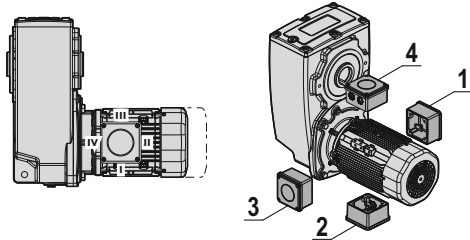
M1



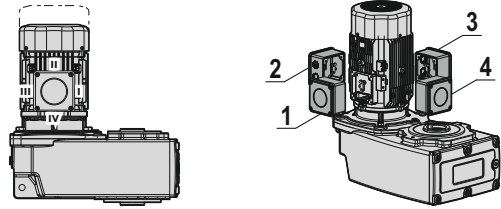
M2



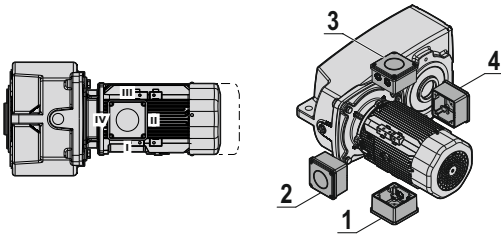
M3



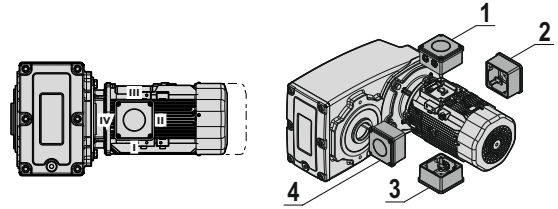
M4



M5



M6



* 1 - 2 - 3 - 4 : Terminal kutusu yönlerini gösterir.

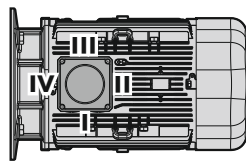
* I - II - III - IV: Kablo giriş yönlerini gösterir.

* 1 - 2 - 3 - 4 : Shows terminal box position

* I - II - III - IV: Shows cable entry position

* 1 - 2 - 3 - 4 : Zeigt die Position des Klemmkastens an

* I - II - III - IV: Zeigt die kabeleinführungsposition an



TR MONTAJ POZİSYONLARI

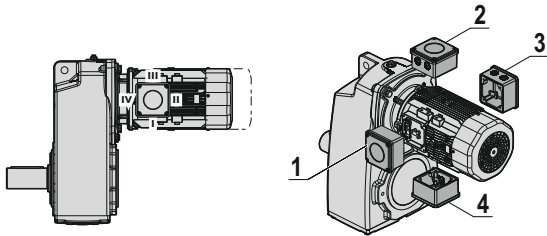
EN MOUNTING POSITIONS

DE MONTAGE POSITIONEN

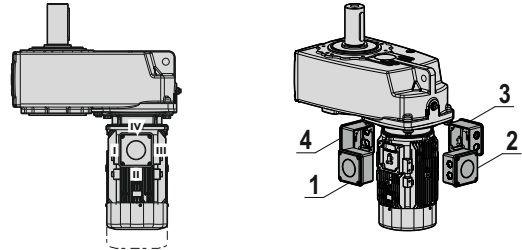
PM

TERMİNAL KUTUSU VE KABLO GİRİŞ YÖNLERİ / POSITION OF TERMINAL BOX AND CABLE ENTRY /
KLEMMENKASTENLAGE UND KABELNİFÜHRUNG

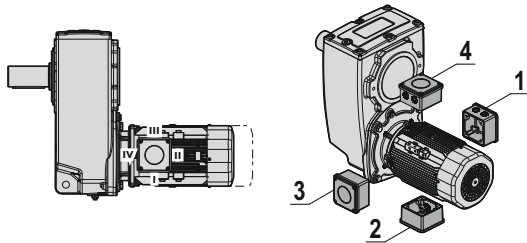
M1



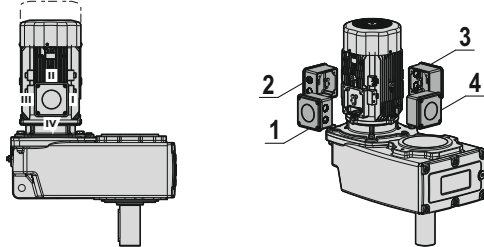
M2



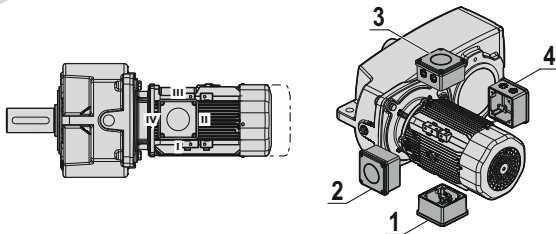
M3



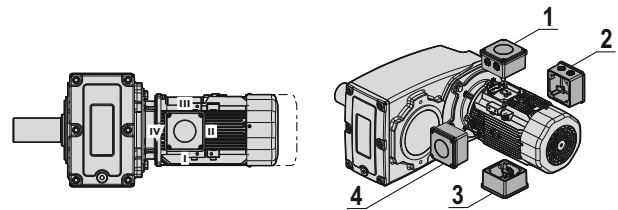
M4



M5



M6



* 1 - 2 - 3 - 4 : Terminal kutusu yönlerini gösterir.

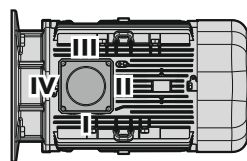
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* I - II - III - IV: Shows cable entry position

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TR

MONTAJ POZİSYONLARI

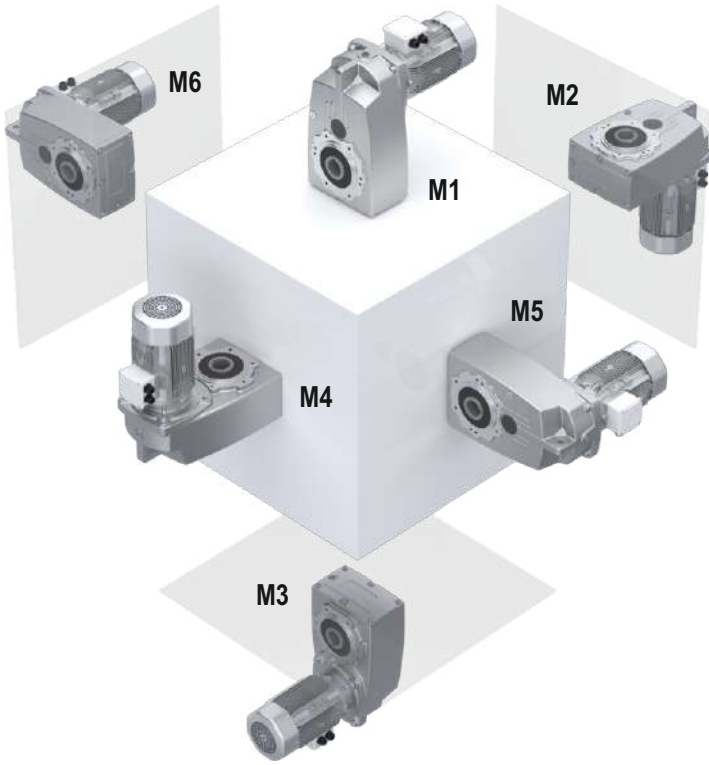
EN

MOUNTING POSITIONS

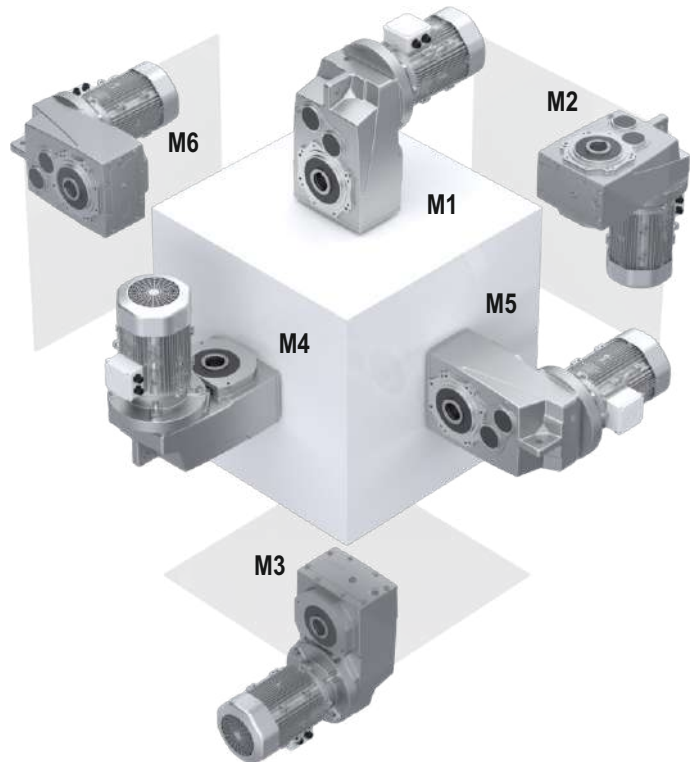
DE

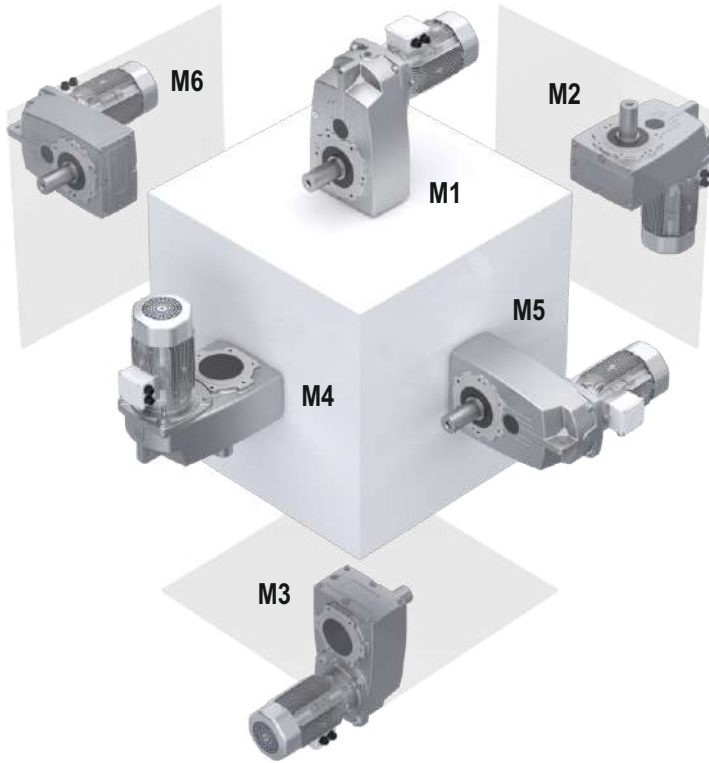
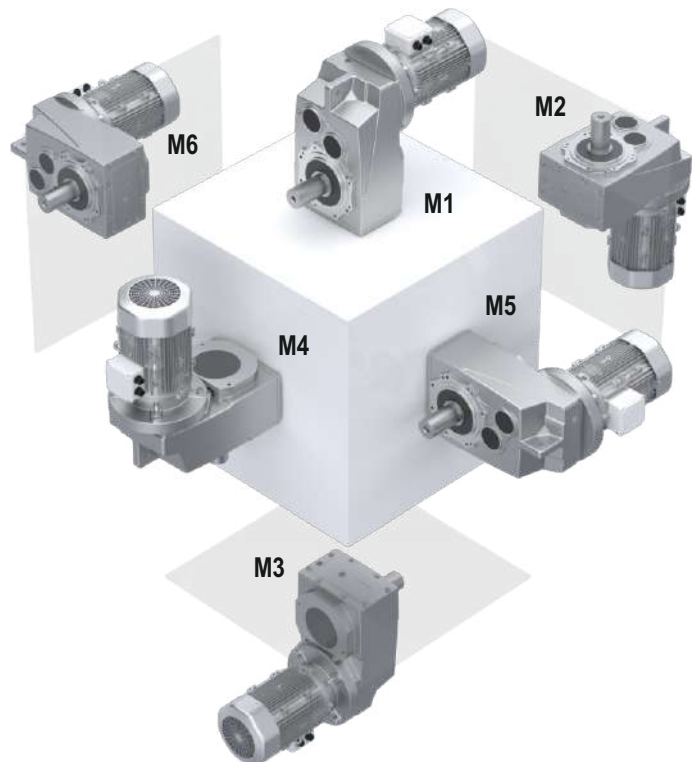
MONTAGE POSITIONEN

PD A02 - PD 52
PD C13 - PD 53



PD 62 - PD 112
PD 63 - PD 123



PM A02 - PM 52
PM C13 - PM 53PM 62 - PM 112
PM 63 - PM 123

TR

YAĞLAMA

EN

LUBRICATION

DE

SCHMIERUNG

Redüktör içerisindeki yağın basıncının artması yağ sızıntılarına neden olabilmektedir. Bunu önlemek için çalıştırılmadan ya da uzun süreli depolama yapılmadan önce havalandırma tapasının kapağı sökülmelidir.

Montaj aşamasında redüktörlerimiz en uygun mineral yağ ile yağlama prosesini en iyi yapacak şekilde doldurur ve sevkiyatta bu şekilde gönderilir. Yapılan bu ilk doldurma, aşağıdaki tablodan uygun ortam sıcaklığına karşılık gelen (normal tasarım) uygun yağlayıcı ile yapılır. Bunlar dışındaki ortam sıcaklıkları için uygun yağlayıcılar ek bir ücret karşılığında tarafımızca temin edilebilir.

Redüktöre doldurulan yağlayıcı (mineral yağ) her 10000 saat çalışma süresi ya da 2 yıl içinde değiştirilmelidir. Eğer sentetik yağlayıcı kullanılır ise bu süreler 2 katına çıkarılabilir. Yani her 20000 saat veya 4 yılda bir değişim sağlanabilir. Çalışma süresi saat cinsinden belirtilen süreye gelmiş ise yağ değişimi için çalışma yılının dolması beklenmez. Yağ değişiminin daha sık aralıklarla yapılması tavsiye edilir. Bu gibi durumlarda yağ değişiminin yanı sıra kapsamlı bir temizlik de yapılmalıdır.

Yağ değişimi sonrasında özellikle ilk dolulmadan sonra ilk birkaç saatlik çalışma esnasında yağ seviyesinde azalmalar gözlemlenebilir. Bu azalma tolerans dahilinde de öngörülen bir azalmadır.

Müşterinin açık talebi üzerine ek bir ücret karşılığında yağ seviyesi gösterge tapası takabilmekteyiz. Yağ seviyesi gösterge tapası kullanarak müşterinin yağ seviyesini gözlemlemesi ve yaklaşık olarak seviye düzeltilmesini yapmasını tavsiye ederiz. İki saatlik bir operasyonel çalışmanın ardından redüktör stabil bir hale gelir ve soğur. Bu süre zarfında yağ seviyesi gösterge tapasından gerekli kontrol yapılır ve gerekli yağ seviye düzeltilmesi yapılabilir.

Redüktör normal olarak mineral yağ ile dolu olarak gelmektedir. Extra ücretlendirme ile sentetik yağ talep edilebilir.

-30°C nin altında ve 60°C nin üzerindeki ortam sıcaklıkları için shaft üzerinde kullanılan tüm sızdırmazlık elemanları özel kalite malzeme olmalıdır.

If the pressure of oil within reducer increases, there may be leakage. To prevent this, before working or storage for a long time, the cover of ventilation plug should be removed.

At montage step, reducers are filling with more suitable mineral oil and this oil makes lubrication process the best. Products are sent to shipment in this way. This initial filling is done with suitable lubricant corresponding to the appropriate ambient temperature (normal design) from the table below. Lubricants which are suitable for temperatures other than these ambient temperatures can be supplied by us with an additional cost.

The lubricant (mineral oil) which is filled to the reducer should be changed every 10000 hours of operation or at most two years period. If synthetic oil is used, these times could be twice. That is, it can be replaced every 20000 hours of operation or 4 years period. If the working time has reached the specified time in hours, it is not necessary to wait finish working year. It is advised that you should change lubricant more frequently. In this case, addition to lubrication change, you should clean it comprehensively. After changing lubrication, especially for first time, you can see decrease at lubrication level. This decrease is in our tolerance.

If our customer has request from us for oil level plug, we can deliver it with additional costs. We advice to customer that they should check oil level by oil level plug, and correct oil level. After operational working 2 hours, the reducer will be stable and cool. In this time period, you can check oil level from the window of oil level plug and correct oil level.

Normally, reducer will come with mineral oil but, with extra price, you can obtain synthetic oil.

Different materials should be used for sealings at operation temperature where temperature is below -30 °C and above 60 °C

Vor Inbetriebnahme und längerem Lagern ist der Verschleiß der Entlüftungsschraube zu entfernen, um einen Überdruck im Getriebe und eine damit verbundene mögliche Undichtigkeit zu vermeiden.

Getriebe sind bei der Auslieferung, betriebsfertig mit geeignetem Mineralöl befüllt. Die Erstbefüllung erfolgt mit geeignetem Schmierstoff entsprechend der geeigneten Umgebungstemperatur (Normalausführung) aus der folgenden Tabelle. Für andere Umgebungstemperaturen sind die entsprechenden Schmierstoffe gegen Mehrpreis erhältlich. Bei Befüllung mit Mineralöl sollte ein Schmierstoffwechsel alle 10.000 Betriebsstunden oder nach zwei Jahren durchgeführt werden. Bei synthetischem Öl verdoppeln sich diese Laufzeiten. Ein Wechsel kann somit alle 20.000 Stunden oder 4 Jahre durchgeführt werden. Wenn die Betriebszeit die angegebene Zeit in Stunden erreicht hat, ist das Betriebsjahr für den Ölwechsel nicht abzuwarten. Kürzere Intervalle für den Ölwechsel werden empfohlen. Es ist empfehlenswert, den Schmierstoffwechsel mit gründlicher Reinigung des Getriebes zu verbinden. Nach einem Schmierstoffwechsel und insbesondere nach der Erstfüllung kann sich der Ölstand in den ersten Betriebsstunden geringfügig ändern, da sich Ölkanäle und Hohlräume erst im Betrieb langsam füllen. Der Ölstand liegt dann immer noch in der zulässigen Toleranz.

Falls auf ausdrücklichen Kundenwunsch gegen Mehrpreis ein Ölschauglas eingebaut wird, empfehlen wir kundenseitig den Ölstand zu beobachten und diesen ungefähr zu korrigieren. Nach zwei Stunden Betriebszeit stabilisiert sich das Getriebe und kühlt ab. Während dieser Zeit erfolgt die notwendige Kontrolle über das Ölschauglas und die notwendige Ölstandskorrektur kann vorgenommen werden. Die Normalbefüllung der Getriebe ist Mineralöl. Synthetisches Öl ist gegen Mehrpreis lieferbar.

Bei Umgebungstemperaturen unterhalb -30°C und oberhalb 60°C sind alle an der Welle verwendeten Dichtelemente in besonderer Werkstoffqualität einzusetzen.

Not: Sentetik ve mineral yağlayıcılar birbirine karıştırılmamalıdır.

Note: It is important that different kinds of oil (synthetic and mineral oil) should not be mixed.

Bemerkung: Synthetische und mineralische Schmierstoffe dürfen nicht gemischt werden.

Redüktör Tipi Type of gearbox Getriebetyp	Yağ Tipi Type of Lubricant Schmierstoffsorte	Ortam Sıcaklığı / Ambient Temp. °C / Umgebungs-temperatur	ISO viskozite sınıfı viscosity class Viskositäts-klasse	SHELL	MOBİL	BP	ESSO	DEA	ARAL	CASTROL	TRIBOL	KLÜBER
Helisel Dişli Redüktör Helical Gearboxes	Mineral yağ Mineral oil Mineralöl	- 5...40 Normal	ISO VG 220	Shell Omala Oel 220	Mobilgear 600 XP 220	Energol GR-XP 220	Spartan EP 220	Deagear DX SAE 85W-90 Falcon CLP 220	Degol BG 220	Alpha SP 220 Alpha MW 220 Alpha MAX 220	Tribol 1100/220	Klüberoil GEM 1-220
		-15...25	ISO VG 100	Shell omala Oel 100	Mobilgear 600 XP 150	Energol GR-XP 100	Spartan EP 100	Deagear DX SAE 80W Falcon CLP 150	Degol BG 100	Alpha SP 100 Alpha MW 100 Alpha MAX 220	Tribol 1100/100	Klüberoil GEM 1-100
	# - 50...-15	ISO VG 15	Shell Tellus Oel T 15	Mobil DTE 10 Excel 15	Bartran HV 15	Univis J 13	Alkraft Hydraulic Oil 15	Vitamol 1010	Hyspin SP 15 Hyspin ZZ 15	Tribol 770	Isoflex MT 30 rot	
Stirradgetriebe	Sentetik yağ Synthetic oil Synthetisches Öl	- 25...80	ISO VG 220	Shell Tivela Oel WB	Mobil Glygoyle 30	Enersyn SG-XP 220	ESSO Glycolube 220	Polydea PGLP 220	Degol GS 220	Alphasyn PG 220	Tribol 800/220	Klübersynth GH 6 - 220
		- 25...80	ISO VG 220					Plantogear 220 S	Bio-Degol S 220	Carelube GES 220	Tribol Bio Top1418/220	Klüber - Bio GM 2 - 220
	Gıda yağları Food - grade oil Lebensmittelle	- 25...80	ISO VG 220	Cassida 220	Mobil SHC Cibus 220		GEAR OIL FM 220	Renolin 220	Degol FG 220	OPTIMOL optleb GE 220	Tribol Food Proof 1810/220	Klüberoil 4UH1 - 220
Rulmanlar Bearings Lager	Akışkan sentetik gres Synthetic fluid grease Fließendes synthetisches Fett	- 35...60		Shell Tivela compound A	Mobil SHC Polyrex 005	Enersyn GSF	Fliessfett S 420	Glissando 6833 EP 00	Aralub SKA 00	Alpha Gel 00	Tribol 800/1000	Klübersynth GE 46 -1200
		- 30...60 Normal		Alvania Fett R 3 oder Alvania Fett RL 3	Mobilux 3 Mobilux 2	Energrease LS 3 Energrease LS 2	Beacon 3 Beacon 2	Glissando 30 Glissando 20 Glissando FT 3	Aralub HL 3 Aralub HL 2 Aralub BAB EP 2	Spheerol AP 3 Spheerol AP 2 LZV - EP Spheerol EPL 2	Tribol 3030/100-2 Tribol 4020/220-2 Tribol 3785	Centoplex 3 Centoplex 2
	# 50...110		Aero Shell Grease 16 oder 7	Mobiltemp SHC 32		Beacon 325	Discor 8 - EP 2	Aralub SKL 2	Product 783/46	Tribol 3499	Isoflex Topas NB52	

TR

YAĞ MİKTAR TABLOSU

EN

LUBRICATION LEVELS

DE

SCHMIERSTOFFTABELLE

İki KADEME / DOUBLE STAGE / ZWEISTUFIG


Yağ Miktarı - Litre (L)

	Tip / Type Typ	M1	M2	M3	M4	M5	M6
	PD/PM A02		0.50	0.70	0.50	0.60	0.35

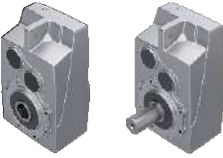
Yağ Miktarı - Litre (L)

	Tip / Type Typ	M1	M2	M3	M4	M5	M6
	PD/PM B02		0.80	1.10	0.90	0.80	0.75

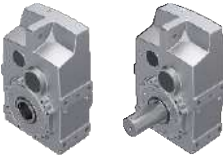
Yağ Miktarı - Litre (L)

	Tip / Type Typ	M1	M2	M3	M4	M5	M6
	PD/PM 12	0.90	1.40	1.00	1.30	0.90	0.90
	PD/PM 22	1.70	2.50	2.10	2.10	1.50	1.50
	PD/PM 32	3.20	4.20	3.70	4.20	2.70	2.70
	PD/PM 42	4.80	6.60	5.40	5.50	4.20	4.20
	PD/PM 52	7.60	9.00	8.50	9.50	6.60	6.60

Yağ Miktarı - Litre (L)



	Tip / Type Typ	M1	M2	M3	M4	M5	M6
	PD/PM 62	16.00	17.50	12.50	17.60	10.10	13.50
	PD/PM 72	24.00	25.00	21.00	27.10	16.10	20.00
	PD/PM 82	35.00	40.00	33.50	41.50	28.50	30.50

Yağ Miktarı - Litre (L)



	Tip / Type Typ	M1	M2	M3	M4	M5	M6
	PD/PM 92	68.00	77.00	55.50	75.00	50.00	56.00
	PD/PM 102	90.10	90.10	40.10	90.10	60.10	82.10
	PD/PM 112	166.00	161.00	146.00	196.00	101.00	141.00

ÜÇ KADEME / TRIPLE STAGE / DREISTUFIG



Yağ Miktarı - Litre (L)

		Tip / Type Typ	M1	M2	M3	M4	M5	M6
		PD/PM C13	1.40	2.40	1.50	2.20	1.80	1.80


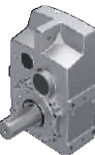
Yağ Miktarı - Litre (L)

		Tip / Type Typ	M1	M2	M3	M4	M5	M6
		PD/PM 13	1.50	1.70	1.50	1.80	1.10	1.10
		PD/PM 23	1.80	2.70	2.00	3.10	1.60	1.60
		PD/PM 33	4.20	4.20	3.40	5.50	3.00	3.00
		PD/PM 43	6.00	7.80	5.00	8.70	4.70	4.70
		PD/PM 53	11.50	12.00	6.80	13.50	7.00	7.00

Yağ Miktarı - Litre (L)

		Tip / Type Typ	M1	M2	M3	M4	M5	M6
		PD/PM 63	16.00	17.50	10.50	18.10	14.50	12.50
		PD/PM 73	22.10	20.10	16.10	26.00	22.00	18.50
		PD/PM 83	33.80	37.50	25.10	38.50	34.00	29.00

Yağ Miktarı - Litre (L)

		Tip / Type Typ	M1	M2	M3	M4	M5	M6
		PD/PM 93	70.00	73.00	45.10	74.10	62.50	54.00
		PD/PM 103	84.50	97.50	74.00	101.00	74.00	66.00
		PD/PM 113	161.00	156.00	141.00	211.00	156.00	136.00
		PD/PM 123	161.00	156.00	141.00	211.00	156.00	136.00

TR

KİLİT

Opsiyonel olarak redüktörlerimize kilit sistemi koymaktayız. Kilit sistemimiz yalnızca tek bir dönüş yönüne müsaade vermektedir (saat yönü ya da saatin tersi yönü). Aksi yönde dönüş, kilit sistemi tarafından engellenmektedir.

Üç fazlı motor gövde büyüklüğü 80 ve üzeri AC motorlar ve W (serbest giriş mili) kovanları yağlaması yapılmış kilit sistemi ile donatılabilir.

Kilit sistemi istenildiğinde çıkartılabilir. Kilit sistemi merkezkaç kuvveti tarafından kontrol edilir ve dönüş hızı $n1 > 900$ dev/dk ise yağlanma ile aşınmasız çalışır.

Dönüş yönünün tanımlanması her zaman çıkış şaftına ya da miline göre olur. Konik sıkırtma kullanılan redüktörlerde konik sıkırtma diski, kullanılan konik sıkırtma şaftının aksi tarafında bulunur. Konik sıkırtmalı redüktörler için dönüş yönü, konik sıkırtmalı şafta göre belirlenir.

Dikkat: Sistemi devreye almadan önce motorun ve redüktörün dönüş yönleri kontrol edilmelidir. Redüktör üzerindeki oklar size dönüş yönünü gösterecektir.

CW : Saat yönü

CCW : Saat yönü tersi

EN

BACKSTOP

Our reducers includes backstop system optionally. Backstop system permits only one direction of rotation (clockwise or counterclockwise). Opposite direction of rotation is prevented by backstop system.

Motors which are three phase and case dimensions upper than 80 and free input shafts can be used with lubricated backstop systems.

You can remove backstop system when you want. Backstop system is controlled by centrifugal force and works without corrosion if the rotation speed upper than 900 min^{-1} .

Rotation direction is decided according to output shaft. For reducers with shrink disc, it is at opposite direction of tip of output shaft which includes shrink disc connector.

Caution: Before starting, the direction of rotation of the gear unit and motor must be checked to avoid the risk of a breakage.

CW : Clockwise

CCW : Counterclockwise

DE

RÜCKLAUFSPERRE

Optional bieten wir für unsere Getriebe Rücklaufsperran. Rücklaufsperran ermöglichen den Lauf in nur eine Drehrichtung (im Uhrzeigersinn oder gegen den Uhrzeigersinn). Drehung in die entgegengesetzte Richtung wird durch die Rücklaufsperran verhindert.

Drehstrommotoren ab Baugröße 80, Wechselstrommotoren und W-Adapter (freie Antriebswelle) können mit geschmierten Rücklaufsperran ausgestattet werden.

Die Rücklaufsperran kann auf Wunsch entfernt werden. Die Rücklaufsperran ist fliehkraftgesteuert und läuft bei einer Drehzahl $n1 > 900 \text{ U/min}$ mit Ölung verschleißfrei.

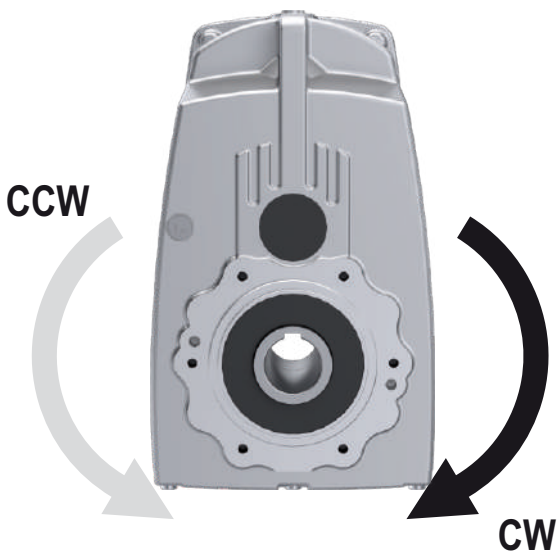
Die Drehrichtung wird immer mit Blick auf die Abtriebs-Hohlwelle oder -Vollwelle angegeben. Bei Getrieben mit Schrumpfscheibe befindet sich die Schrumpfscheibe gegenüber dem Abtriebswellenende. Die Drehrichtung für Getriebe mit Schrumpfscheibe wird auch nach diesem Abtriebswellenende bestimmt.

Achtung: Vor Inbetriebnahme der Anlage die Drehrichtung des Motors und des Getriebes prüfen. Pfeile auf dem Getriebe zeigen die Drehrichtung an.

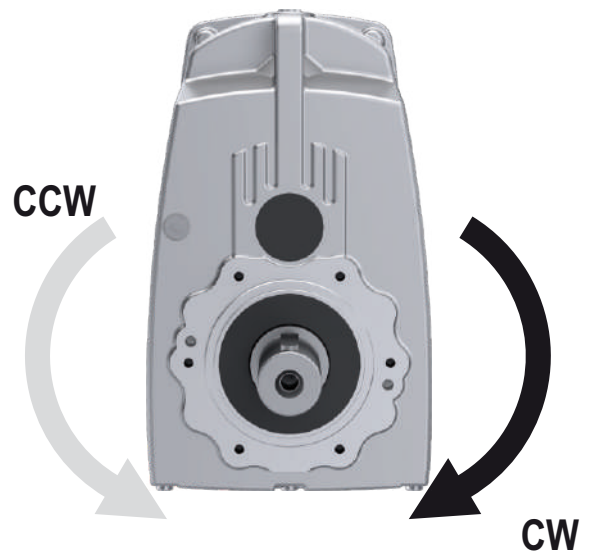
CW: Im Uhrzeigersinn

CCW: Gegen den Uhrzeigersinn

PD



PM



TR

TOLERANSLAR

MOTOR VE REDÜKTÖRLERDE BOYUT - ÇİZİM BİLGİLERİ

Motor ölçüleri istenen opsiyona göre değişebilir.

DELİK MİLLİLER

Delik mil çapı toleransı için (DIN 748) ISO H7.
Müşteri mili çap toleransı ISO h6.
"H" yükleme tipi bulunuyorsa ISO k6.

IEC - ADAPTÖR


Flanş merkezi çap toleransı için ISO H7

GİRİŞ VE ÇIKIŞ ŞAFTLARI

Mil çapı toleransı (DIN 748):

Ø 14 ile Ø 50 mm arası için ISO k6,
Ø 50 mm üzeri için ISO m6

Şaftta diş çekilmiş delikler için DIN 332/2 ye göre;

= Ø 13 - Ø 16	M5	
> Ø 16 - Ø 21	M6	
> Ø 21 - Ø 24	M8	
> Ø 24 - Ø 30	M10	
> Ø 30 - Ø 38	M12	 185 - 243
> Ø 38 - Ø 50	M16	
> Ø 50 - Ø 85	M20	
> Ø 85 - Ø 130	M24	

Kama yatakları DIN 6885 Şaft boyu "h" DIN 747

FLANŞLAR

Flanş merkezi çap toleransı (DIN 42948);
≤ Ø 230 mm' ye kadar ISO j6,
> Ø 230 mm üzeri için ISO h6

EN

TOLERANCES

DIMENSION - DRAWINGS

Motor dimension could be changed according to customer purchase.

HOLLOW SHAFTS

Tolerance of hollow shaft (DIN 748) ISO H7.
Tolerance of customer's solid shaft which is used for hollow shaft ISO h6.
With type of load classification 'H' which is heavys shock operation ISO k6.

IEC - ADAPTER


Diameter tolerance of flange centering is machined according to ISO H7

INPUT AND OUTPUT SHAFT

Tolerances of solid shaft (DIN 748):

between Ø 14 - Ø 50 mm to ISO k6,
greater than Ø 50 mm to ISO m6.

Tapped center hole is machined according to DIN 332, sheet 2;

= Ø 13 - Ø 16	M5	
> Ø 16 - Ø 21	M6	
> Ø 21 - Ø 24	M8	
> Ø 24 - Ø 30	M10	
> Ø 30 - Ø 38	M12	 185 - 243
> Ø 38 - Ø 50	M16	
> Ø 50 - Ø 85	M20	
> Ø 85 - Ø 130	M24	

Keyways are machined according to DIN 6885, sheet 1
Shaft heights are machined according to "h" to DIN 747

FLANGES

Diameter tolerance of flange centering is machined according to (DIN 42948);
≤ Ø 230 mm to ISO j6,
> Ø 230 mm to ISO h6

DE

TOLERANZEN

**ABMESSUNGEN - ZEICHNUNGSINFORMATIONEN
MOTOR UND GETRIEBE**

Die Abmessungen des Motors können je nach gewünschter Option geändert werden.

HOHLWELLEN

Toleranz der Hohlwellen-Durchmesser (DIN 748) nach ISO H7.
Toleranz der kundenseitigen Welle nach ISO h6, bei Lastgrad "H" nach ISO k6.

IEC - ADAPTER


Toleranz der Flanschzentrierung nach ISO H7

EIN- UND AUSGANGSWELLE

Toleranz der Wellen-Durchmesser (DIN 748):

Ø 14 bis Ø 50 mm= ISO k6
> Ø 50 mm= ISO m6

Gewindebohrungen nach DIN 332/2;

= Ø 13 - Ø 16	M5	
> Ø 16 - Ø 21	M6	
> Ø 21 - Ø 24	M8	
> Ø 24 - Ø 30	M10	
> Ø 30 - Ø 38	M12	 185 - 243
> Ø 38 - Ø 50	M16	
> Ø 50 - Ø 85	M20	
> Ø 85 - Ø 130	M24	

Paßfedern nach DIN 6885 Achshöhe "h" nach DIN 747

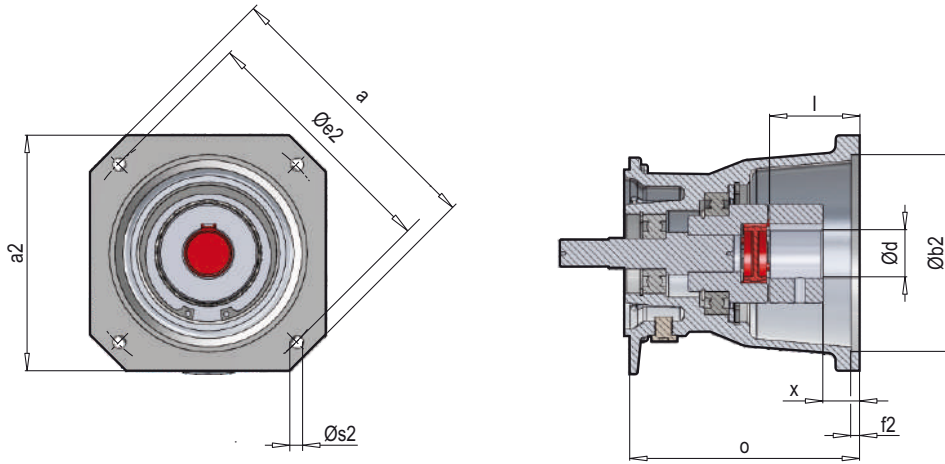
FLANSCHEN

Toleranz der Flanschzentrierung (DIN 42948);
≤ Ø 230 mm nach ISO j6,
> Ø 230 mm nach ISO h6

TR SERVOMOTOR ADAPTÖRÜ

EN SERVOMOTOR ADAPTERS

DE ADAPTER ZUM ANBAU VON SERVOMOTOREN



Redüktör Tipi Gear Unit Type Getriebetyp	Motor Büyüklüğü / Motor Size / Motorbaumaße							Shaft Ebatı Shaft Size Wellenmaße		Silindir Cylinder Zylinder	M _{knom} [Nm]	Adaptör tipi Adapter type Adaptertyp
	a	a2	b2	e2	f2	s2	x	d	l			
PD/PM 12	120	96	80	100	4	M6	15	19	40	124	10	Servo 100 / 160 S
PD/PM 12	165	126	110	130	4	M8	20	24	50	136	35	Servo 130 / 160 S
PD/PM 22 , PD/PM 32	155	126	110	130	4	M8	20	24	50	150	35	Servo 130 / 250 S
PD/PM 12	186	155	130	165	5	M10	23	32	58	151	95	Servo 165 / 160 S
PD/PM 22 , PD/PM 32	186	155	130	165	5	M10	23	32	58	166	95	Servo 165 / 250 S
PD/PM 22 , PD/PM 32	240	192	180	215	5	M12	45	38	80	187	95	Servo 215/ 250 S
PD/PM 42 , PD/PM 52	240	192	180	215	5	M12	24	38	80	229	310	Servo 215/ 300 S
PD/PM 42 , PD/PM 52	350	260	250	300	5	M16	26	48	82	231	310	Servo 300/ 300 S
PD/PM 62 , PD/PM 72 PD/PM 82 , PD/PM 92	350	260	250	300	5	M16	26	48	82	249	310	Servo 300/ 350 S

SEP tipi servo motor bağlantı adaptörünün bağlantısı kamalı olarak yapılmaktadır. SEK tiplerinde ise servo motor adaptörünün bağlantısı setuskur civata sıkırtması ile yapılmaktadır. Servo motor bağlantı adaptörünün bağlantı flanşının farklı olması durumunda yüksek adetli siparişler üretime alınır.

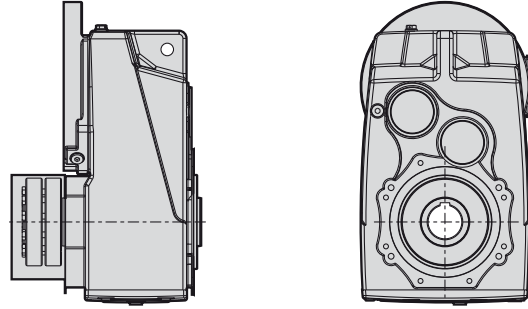
For connecting SEP adapter which is shown above, servo motor's output shaft is designed with locking key. For connecting SEK type adapter, connecting is supplied with a clamp coupling sleeve. An intermediate flange is required when other servo motor types are used with IEC adapter. Offers are manufactured gladly by PGR.

Der Anschluss des Servomotor-Anschlussadapters Typ SEP erfolgt mit Paßfeder. Bei den SEK-Typen erfolgt der Anschluss des Servomotoradapters durch Anziehen der Anschluss des Servomotoradapters durch Anziehen der Gewindestifte. Bei abweichendem Anschlussflansch des Servomotor-Anschlussadapters werden Aufträge in hoher Stückzahl in Produktion genommen.

TR KONİK SIKTIRMA

EN SHRINK DISC

DE SCHRUMPFSCHEIBE



Redüktör Tipi Gear Unit Type Getriebetyp	Konik Sıkırtma Shrink Disc Schrumpfscheibe				Altıköşe Başlı Cıvata Hexagonal Screw Sechskantschraube DIN 931 / DIN 933* 10.9Vz		
	Tip Type Typ	M _{amax} [Nm]	s _{h6}	s _{f6}	d x l	Zs	M _A [Nm]
PD B02 KS-KK	KS 30 / 40	165	5.9	5.2	M6 X 35*	8	12
PD C13 KS-KK	KS 35 / 46	370	3.8	3.4	M6 X 35*	10	12
PD 12 KS-KK	KS 30 / 40	296	3.3	2.9	M6 X 35*	8	12
PD 22 KS-KK	KS 35 / 46	563	2.6	2.2	M6 X 35*	10	12
PD 32 KS-KK	KS 40 / 55	1039	2.3	2.0	M8 X 40	8	30
PD 42 KS-KK	KS 50 / 62	2000	2.2	2.0	M8 X 40	10	30
PD 52 KS-KK	KS 60 / 76	3235	2.5	2.3	M10 X 50	10	59
PD 62 KS-KK	KS 70 / 90	6000	2.3	2.2	M12 X 70*	10	100
PD 72 KS-KK	KS 80 / 108	8300	2.5	2.4	M12 X 70*	14	100
PD 82 KS-KK	KS 100 / 128	13200	2.3	2.2	M16 X 80*	8	250
PD 92 KS-KK	KS 125 / 158	25400	2.3	2.2	M16 X 80*	12	250
PD 102 KS-KK	KS 160 / 210	37200	3.6	3.4	M20 X 100	14	490
PD 112 KS-KK	KS 180 / 230	69000	1.9	1.8	M20 X 100*	12	490
PD 122 KS-KK	KS 180 / 230	90000	4.5	4.4	M30 X 200	16	1700

Aşağıda verilen değerler güçlendirilmiş konik sıkırtma ölçüleridir / The values given below is for reinforced shrink disc / Die unten angegebenen Werte sind Maaße für verstärkte Schrumpfscheiben.

PD 72 GKS-KK	GKS 85 / 108	8300	3.90	3.65	M16 X 90	10	250
PD 82 GKS-KK	GKS 100 / 128	13200	3.57	3.35	M20 X 100	8	490
PD 92 GKS-KK	GKS 130 / 158	25400	3.89	3.71	M20 X 130	12	490
PD 112 GKS-KK	GKS 180 / 230	69000	3.69	3.57	M24 X 150	16	840

Daha iyi ve kolay montaj ve demontaj için konik sıkırtımlı tavsiye edilebilir. Hs ölçüsü, cıvata sıkılmadan önceki ölçüsüdür. Konik sıkırtma genellikle kullanıcının mili kullandığı yönün karşısına montaj edilmelidir. Kullanıcı mil uzunluğu ile şaft uzunluğu (mH) uyuşmalıdır. Şaft çapı ISO h6 veya f6'ya göre imal edilmelidir. (f6= Kolay montaj)

S = h6 veya f6 ile konik sıkırtmanın güvenilirliği.
M_A = Cıvata sıkım için gerekli olan tork
Zs = Vida miktarı
M_{amax} = max. izin verilebilir çıkış momenti

Yukarıdaki bütün ölçüler W kovanlı, IEC ve PAM adaptörlü helisel konik dişli redüktörler için de geçerlidir.

PGR recommends to use shrink disc for easier installation and disassembly Hs values show dimension before tightening screw. When customer shaft is installed to the gear unit, shrink disc should be mounted on opposite side of it. Consider that, customer shaft must be equal 'mH' dimension which is length of hollow shaft and customer diameter shaft should be machined according to ISO h6 or f6 tolerances.

S = Assurance of shrink disc (with h6 and f6 tolerance)
M_A = Screw torque for tightening
Zs = Amount of screw
M_{amax} = maximum allowable output moment

All of the above dimensions are also valid for helical bevel gear units with free input shaft, IEC and PAM adaptor.

Zur besseren und einfacheren Montage und Demontage kann eine Schrumpfscheibe empfohlen werden. Hs ist die Größe vor dem Anziehen der Schraube. Die Schrumpfscheibe sollten grundsätzlich entgegen der Antriebsrichtung der Kundenwelle montiert werden. Die Länge der Kundenwelle muss der Hohlwelle (mH) entsprechen. Der Durchmesser der Hohlwelle sollte nach ISO h6 oder f6 gefertigt werden. (f6= einfache Montage)

Zuverlässigkeit der Schrumpfscheibe mit S = h6 oder f6.
M_A = Erforderliches Drehmoment zum Anziehen der Schraube
Zs = Schraubenanzahl
M_{amax} = max. zulässiges Abtriebsdrehmoment

Alle oben genannten Maße gelten auch für Kegelradgetriebe mit freier Antriebswelle, IEC- und PAM-Adapter.

TR

KONİK SIKTIRMA

EN

SHRINK DISC

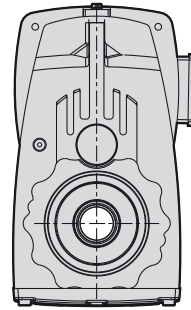
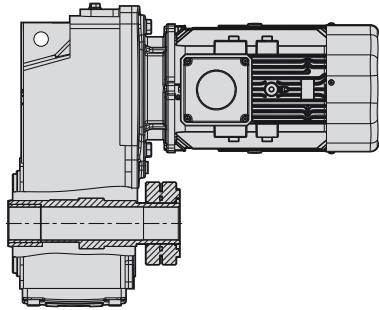
DE

SCHRUMPFSCHEIBE

Motorlu redüktör üniteleri için mevcut konik sıkırtmalı tasarımlar. Tüm çok kademeli motorlu redüktörler için konik sıkırtmalı tasarım mevcuttur.

Parallel shaft geared motor with obtainable shrink disc design. Shrink disc design is obtainable for all multi-stage parallel shaft geared motor.

Vorhandene Schrumpfscheibenausführungen für Motor-Getriebe-Einheiten. Schrumpfscheibenausführung für alle mehrstufigen Getriebemotoren erhältlich.



Redüktör Tipi Gear Unit Type Getriebetyp	63 M	71 M	80 M	90 S/L	100 L	112 M	132 S/M	160 S/M	180 M/L	200 L	225 S/M	250 M	280 S/M/L	315 S/M/L
PD B02 KS	✓													
PD C13 KS	✓													
PD 12 KS	✓	✓	✓											
PD 22 KS		✓	✓	✓	✓									
PD 32 KS		✓	✓	✓	✓									
PD 33 KS			✓	✓										
PD 42 KS				✓	✓	✓	✓							
PD 52 KS				✓	✓	✓	✓	✓	*					
PD 62 KS					✓	✓	✓	✓	✓					
PD 63 KS				✓	✓	✓	✓	✓	✓					
PD 72 KS							✓	✓	✓	✓	*			
PD 73 KS					✓	✓	✓	✓	✓	✓	*			
PD 82 KS							✓	✓	✓	✓	✓			
PD 83 KS					✓	✓	✓	✓	✓	✓	✓			
PD 92 KS										✓	✓	✓	✓	
PD 93 KS							✓	✓	✓	✓	✓	✓	✓	
PD 102 KS													✓	✓
PD 103 KS								✓	✓	✓	✓	✓	✓	✓
PD 112 KS													✓	✓
PD 113 KS								✓	✓	✓	✓	✓	✓	✓
PD 123 KS										✓	✓	✓	✓	✓

Aşağıda verilen bilgiler güçlendirilmiş konik sıkırtma içindir / The information given below is for reinforced shrink disc. /

Die folgenden Informationen gelten für eine verstärkte Schrumpfscheibe

PD 72 GKS							✓	✓	✓					
PD 73 GKS					✓	✓	✓	✓	✓					
PD 82 GKS							✓	✓	✓	✓	*			
PD 83 GKS					✓	✓	✓	✓	✓	✓	*			
PD 92 GKS										✓	✓	✓	✓	
PD 93 GKS								✓	✓	✓	✓	✓	✓	
PD 112 GKS													✓	✓
PD 113 GKS								✓	✓	✓	✓	✓	✓	✓

* İşareti talep doğrultusunda temin edilebileceğini gösterir. Lütfen PGR'ye danışınız.

* Sign shows that it could be provided on your demand. Please, consult PGR.

Das *-Zeichen zeigt an, dass diese auf Anfrage erhältlich ist. Bitte wenden Sie sich an PGR.

TR KONİK SIKTIRMA

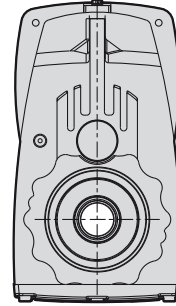
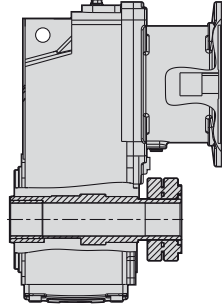
IEC adaptörlü redüktör üniteleri için mevcut konik sıkırtmalı tasarımlar. Tüm çok kademeli IEC adaptörlü redüktörler için konik sıkırtmalı tasarım mevcuttur.

EN SHRINK DISC

Parallel shaft gear unit with IEC adapter and obtainable shrink disc designs. Shrink disc design is obtainable for all multi-stage parallel shaft gear unit with IEC adapter.

DE SCHRUMPFSCHEIBE

Vorhandene Schrumpfscheibenausführungen für Getriebe mit IEC-Adapter Schrumpfscheibenausführung für alle mehrstufigen Getriebe mit IEC-Adapter erhältlich.



Redüktör Tipi Type of Gear Unit Getriebetyp	IEC 63	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250	IEC 280	IEC 315
PD B02 KS	✓	✓	✓	✓										
PD C13 KS	✓	✓	✓	✓										
PD 12 KS	✓	✓	✓	✓										
PD 22 KS		✓	✓	✓	✓	✓								
PD 32 KS		✓	✓	✓	✓	✓	✓							
PD 33 KS	✓	✓	✓	✓										
PD 42 KS				✓	✓	✓	✓	✓						
PD 52 KS				✓	✓	✓	✓	✓	✓					
PD 62 KS					✓	✓	✓	✓	✓	✓	✓			
PD 63 KS				✓	✓	✓	✓	✓	✓					
PD 72 KS							✓	✓	✓	✓	✓			
PD 73 KS					✓	✓	✓	✓	✓	✓	✓			
PD 82 KS							✓	✓	✓	✓	✓	✓	✓	
PD 83 KS					✓	✓	✓	✓	✓	✓	✓			
PD 92 KS									✓	✓	✓	✓	✓	✓
PD 93 KS							✓	✓	✓	✓	✓	✓	✓	✓
PD 102 KS												✓	✓	✓
PD 103 KS								✓	✓	✓	✓	✓	✓	✓
PD 112 KS												✓	✓	✓
PD 113 KS								✓	✓	✓	✓	✓	✓	✓
PD 123 KS								✓	✓	✓	✓	✓	✓	✓

Aşağıda verilen bilgiler güçlendirilmiş konik sıkırtma içindir / The information given below is for reinforced shrink disc. / Die folgenden Informationen gelten für eine verstärkte Schrumpfscheibe

PD 72 GKS							✓	✓	✓	✓	✓			
PD 73 GKS					✓	✓	✓	✓	✓	✓	✓			
PD 82 GKS							✓	✓	✓	✓	✓			
PD 83 GKS					✓	✓	✓	✓	✓	✓	✓			
PD 92 GKS								✓	✓	✓	✓	✓	✓	✓
PD 93 GKS							✓	✓	✓	✓	✓	✓	✓	✓
PD 112 GKS												✓	✓	✓
PD 113 GKS								✓	✓	✓	✓	✓	✓	✓

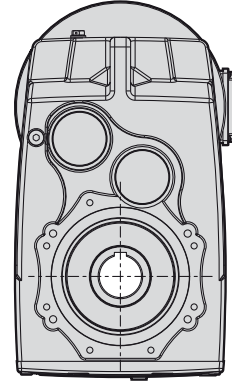
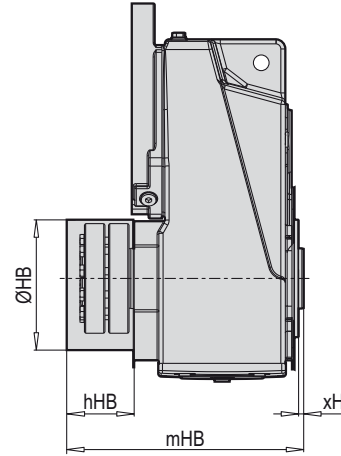
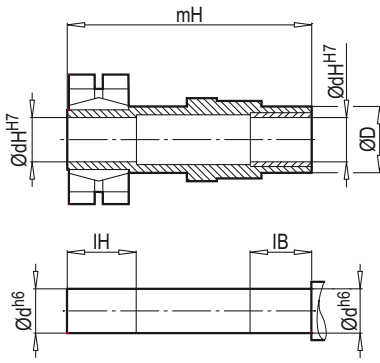
TR

 GÜÇLENDİRİLMİŞ
 KONİK ŞİKTİRMA KAPAĞI

EN

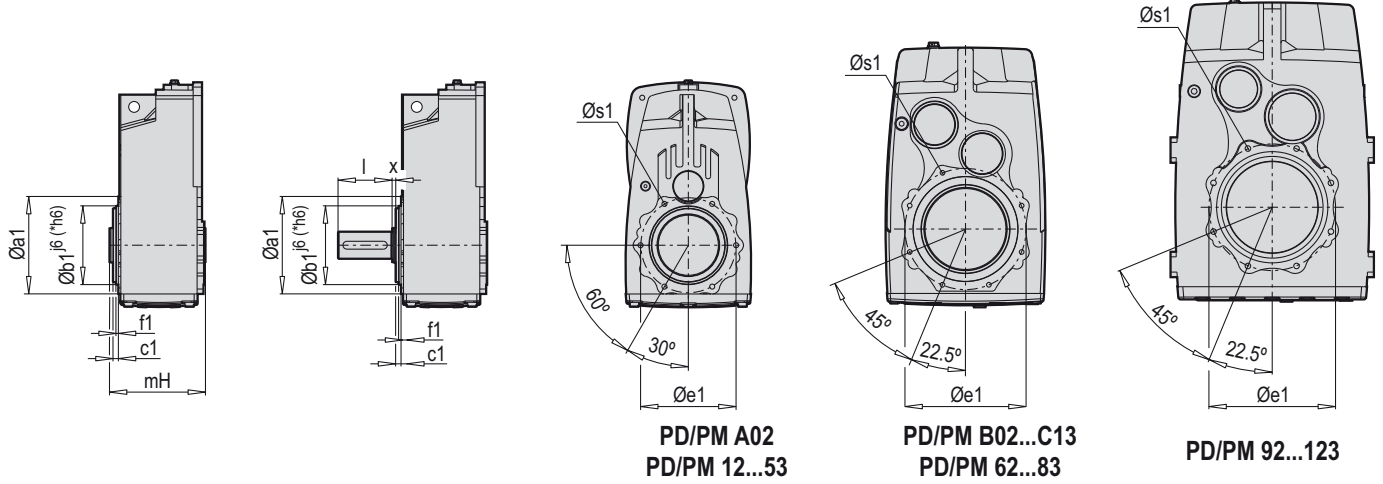
COVER OF REINFORCED SHRINK DISC

DE

 SCHUTZDECKEL FÜR VERSTÄRKT
 SCHRUMPFSCHEIBE


Tip / Type / Typ	ØD	ØdH ^{H7}	Ød ^{h6}	IB	IH	mH	xH	hHB	HB	mHB
PD 72 GKS - KK PD 73 GKS - KK	110	85	85	56	120	429	6.0	149	260	448
PD 82 GKS - KK PD 83 GKS - KK	130	100	100	71.5	149	510	7.0	200	308	546
PD 92 GKS - KK PD 93 GKS - KK	160	130	130	82	182	607	10.0	238	367	634
PD 112 GKS - KK PD 113 GKS - KK	240	180	180	101.5	195	755	10.0	258	458	786

PD\PM B14 FLANŞLI ÖLÇÜ TABLOSU
DIMENSION TABLE OF PD/PM WITH B14 FLANGE / PD/PM B14 FLANSCH ABMESSUNGSTABELLE



Tip / Type / Typ	Øa1	Øb1	c1	Øe1	f1	Øs1	mH	l	x
PD/PM A02 B14	100	70	-	85	3	M8X14	100	50	3
PD/PM B02 B14	120	80	-	100	3	M6X10	122	50	3
PD/PM C13 B14	140	95	-	115	6	M8X13	176	60	3
PD/PM 12 B14	140	95	13	115	6	M8X13	122	60	4
PD/PM 13 B14									
PD/PM 22 B14	160	110	12	130	5	M8X13	139	70	5
PD/PM 23 B14									
PD/PM 32 B14	200	130	-	165	7	M10X16	174	90	6
PD/PM 33 B14									
PD/PM 42 B14	230	160	11	194	5	M12X20	195	110	7
PD/PM 43 B14									
PD/PM 52 B14	250	180	9	215	5	M12X20	230	130	7.5
PD/PM 53 B14									
PD/PM 62 B14	300	230	11	265	4	M12X20	290	140	8.5
PD/PM 63 B14									
PD/PM 72 B14	350	*250	11	300	5	M16X25	310	170	6
PD/PM 73 B14									
PD/PM 82 B14	400	*300	13	350	5	M16X25	366	210	7
PD/PM 83 B14									
PD/PM 92 B14	450	*350	14	400	5	M20X30	430	250	10
PD/PM 93 B14									
PD 102-103 KS-B14 PM 102-103 B14	550	*450	-	500	8	M24X36	660	300	10
PD 112-113 KS-B14 PM 112-113 B14	550	*450	-	500	8	M24X36	675	300	10
PD 123 KS-B14 PM 123 B14	550	*450	18	500	8	M24X36	845	300	10

TR

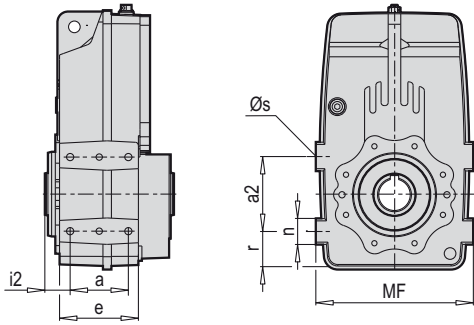
MONTAJ ÖLÇÜLERİ

EN

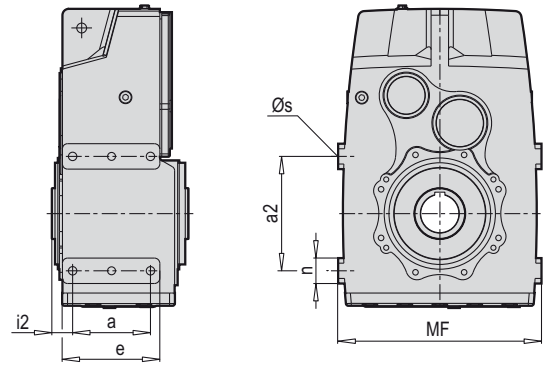
INSTALLATION DIMENSIONS

DE

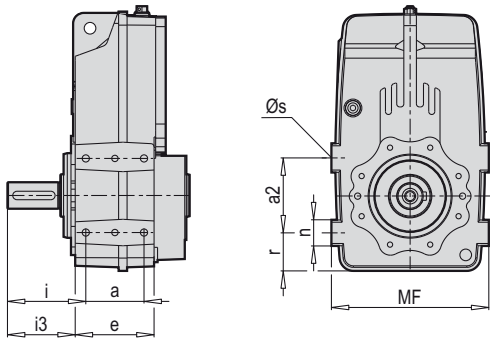
ABMESSUNGEN MONTAGE



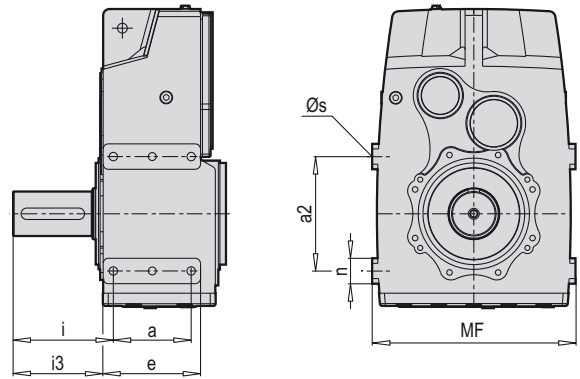
PD A02...C13



PD 92 - PD 93



PM A02...C13



PM 92 - PM 93

Tip / Type / Typ	a	e	MF	a2	n	Øs	r	i	i2	i3
PD A02	64	78	110	50	16	M6x12	27	—	20	—
PM A02	64	78	110	50	16	M6x12	27	70	—	63
PD B02	55	74.5	150	70	25	M8x13	35	—	24	—
PM B02	55	74.5	150	70	25	M8x13	35	74	—	64
PD C13	100	126	152	70	30	M10x13	42	—	31	—
PM C13	100	126	152	70	30	M10x13	42	91	—	79
PD 92 PD 93	245	306	640	360	80	M30x45	—	—	65	—
PM 92 PM 93	245	306	640	360	80	M30x45	—	315	—	283.5
PD/PM 102-103 PD/PM 112-113 PD/PM 123	Sayfa 228...237'ye bakınız / See page 228...237 / Siehe Seiten 228...237									

TR

MERKEZLEME PİMİ

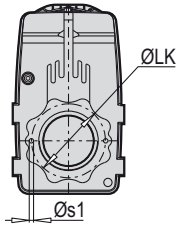
EN

CENTRING PINS

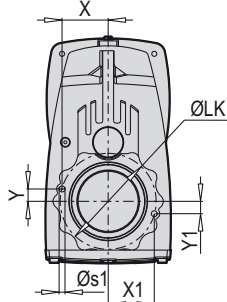
DE

ZENTRIERSTIFT

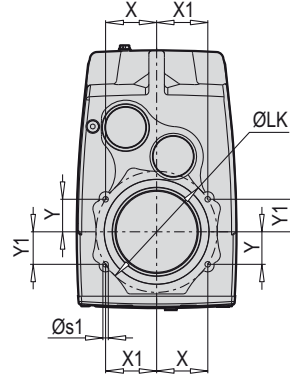
MERKEZLEME PİMİ ÖLÇÜ TABLOSU /
DIMENSION TABLES OF CENTRING PINS / ABMESSUNGSTABELLE ZENTRIERSTIFT



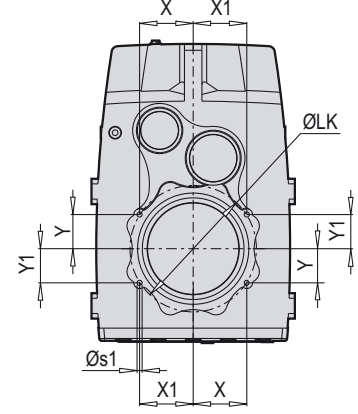
PD/PM B02
PD/PM C13



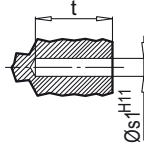
PD/PM A02
PD/PM 12 - PD/PM 53



PD/PM 62 - PD/PM 83



PD/PM 92 - PD/PM 123

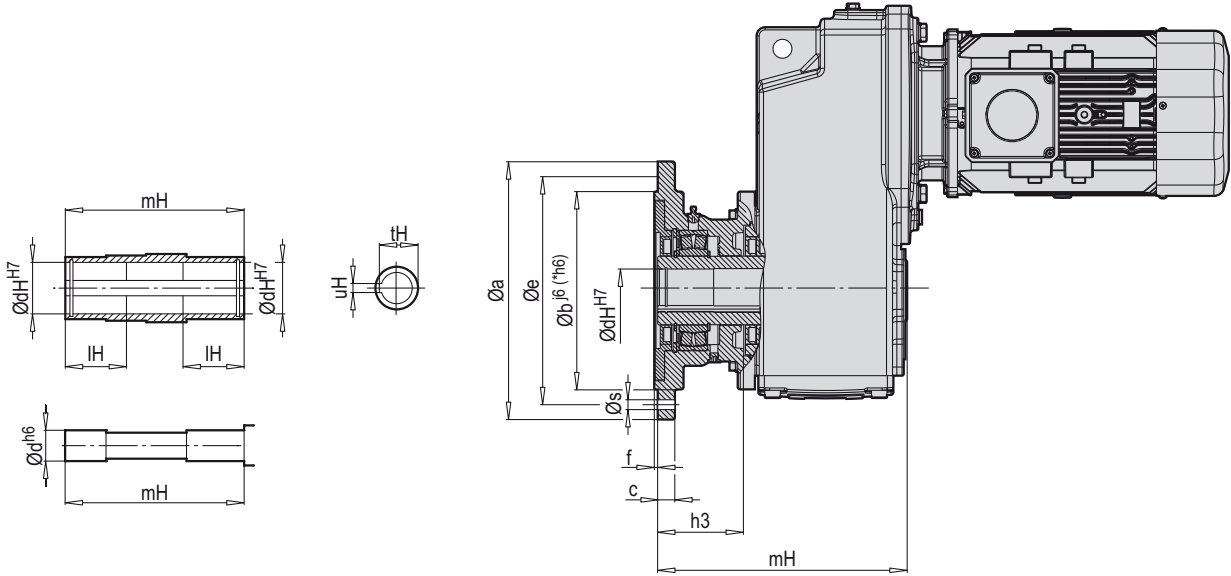


Tip / Type / Typ	Øs1 ^{H11} x t	ØLK	X	X1	Y	Y1
PD/PM A02 B14	Ø 6 X 10	85	41.05	-	11.00	-
PD/PM B02 B14	Ø 6 X 12	100	-	-	-	-
PD/PM C13 B14	Ø 8 X 12	115	-	-	-	-
PD/PM 12 B14 PD/PM 13 B14	Ø 8 X 12	115	56.15	56.15	12.45	12.45
PD/PM 22 B14 PD/PM 23 B14	Ø 8 X 12	130	62.80	62.80	16.80	16.80
PD/PM 32 B14 PD/PM 33 B14	Ø 10 X 15	165	80.55	80.55	17.85	17.85
PD/PM 42 B14 PD/PM 43 B14	Ø 12 X 20	194	93.70	93.70	25.10	25.10
PD/PM 52 B14 PD/PM 53 B14	Ø 12 X 20	215	104.95	104.95	23.25	23.25
PD/PM 62 B14 PD/PM 63 B14	Ø 12 X 20	265	111.75	111.75	71.20	71.20
PD/PM 72 B14 PD/PM 73 B14	Ø 16 X 30	300	126.50	126.50	80.60	80.60
PD/PM 82 B14 PD/PM 83 B14	Ø 16 X 30	350	147.60	147.60	94.05	94.05
PD/PM 92 B14 PD/PM 93 B14	Ø 16 X 30	400	168.70	168.70	107.45	107.45
PD/PM 102 B14 PD/PM 103 B14	Ø 25 X 35	500	176.80	204.80	176.80	143.40
PD/PM 112 B14 PD/PM 113 B14	Ø 25 X 25	500	176.80	204.80	176.80	143.40
PD/PM 123 B14	Ø 25 X 25	500	176.80	204.80	176.80	143.40

PD SERİSİ İÇİN
 GÜÇLENDİRİLMİŞ B5 FLANŞI

 REINFORCED B5 FLANGE FOR
 AGITATOR DESIGN AT PD SERIES

DE

 VERSTÄRKTER B5 FLANSCH
 FÜR SERIE PD


Tip / Type / Typ	a	b	c	e	f	h3	Øs	Ød ^{h6}	uH	tH	mH	ØdH ^{h7}	IH
PD 12 GB5 PD 13 GB5	200	130	12	165	3.5	75	4 x 11	30	8	33.3	180	30	40
PD 22 GB5 PD 23 GB5	250	180	16	215	4.0	86	4 x 14	35	10	38.3	208	35	50
PD 32 GB5 PD 33 GB5	300	230	20	265	4.0	85	4 x 14	40	12	43.3	246	40	58
PD 42 GB5 PD 43 GB5	300	230	20	265	4.0	113	4 x 14	50	14	53.8	290	50	65
PD 52 GB5 PD 53 GB5	350	*250	20	300	5.0	135	4 x 18	60	18	64.4	348	60	79
PD 62 GB5 PD 63 GB5	400	*300	22	350	5.0	166	4 x 18	70	20	74.9	437	70	120
PD 72 GB5 PD 73 GB5	450	*350	24	400	5.0	184	8 x 18	80	22	85.4	477	80	126
PD 82 GB5 PD 83 GB5	550	*450	28	500	5.0	210	8 x 18	100	28	106.4	556	100	154
PD 92 GB5 PD 93 GB5	660	*550	32	600	6.0	262	8 x 22	120	32	127.4	668	120	186

PGR, özellikle karıştırıcılarda kullanılması için shaft üzerindeki rulman mesafelerinin arttırıldığı ve güçlendirilmiş B5 flanşının kullanıldığı redüktörü kullanıma sunmaktadır.

Bu tasarım, daha uzun rulman ömrünün yanı sıra daha yüksek radyal ve aksel kuvvetlere karşı dayanım sağlar. Buradaki oynak makaralı rulman kullanımı özellikle (uzun karıştırıcı millerinde ya da shaftlarında) oluşan eksen kaçıklıklarının karşılanması için idealdir.

PGR makes available reducers with longer dimension bearings which is over the shaft for usage of agitators.

This design enables, besides more durable bearings, more durability for higher radial and axial forces. The usage of spherical roller bearing absorbs the misalignments especially for long shaft agitators.

Insbesondere für Rührwerke hat PGR den Lagerabstand der Welle durch die Verwendung des verstärkten B5-Flansches vergrößert.

Dieses Design ermöglicht die Aufnahme hoher radialer und axialer Kräfte bei erhöhter Lagerlebensdauer. Die Pendelrollenlagerung eignet sich besonders für längere Rührwerkswellen, da Fluchtungsfehler ausgeglichen werden.

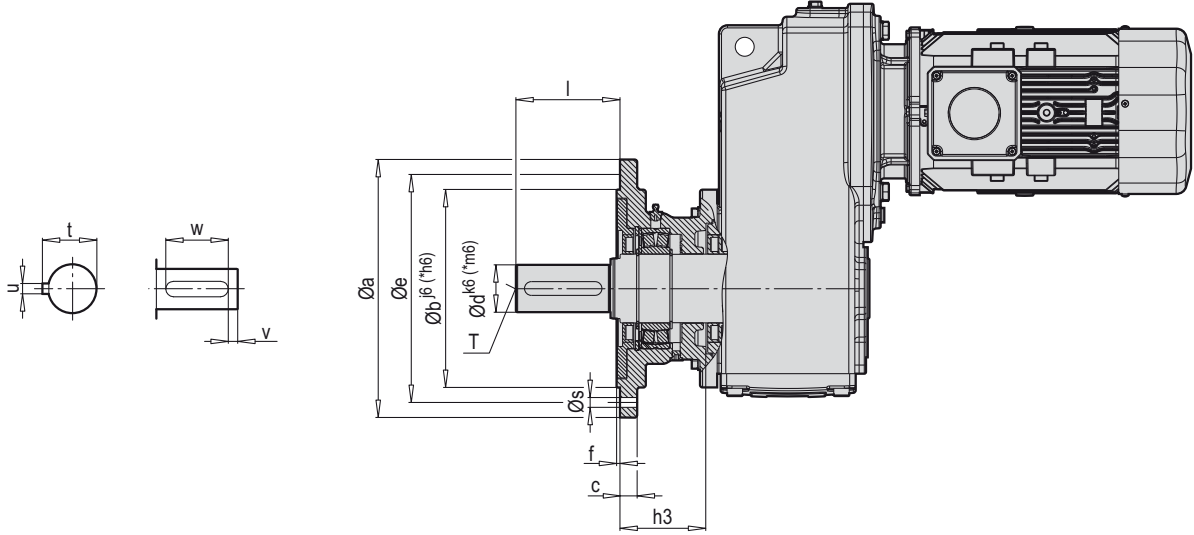
TR

PM SERİSİ İÇİN
GÜÇLENDİRİLMİŞ B5 FLANŞI

REINFORCED B5 FLANGE FOR
AGITATOR DESIGN AT PM SERIES

DE

VERSTÄRKTER B5 FLANSCH FÜR
PM-SERIE



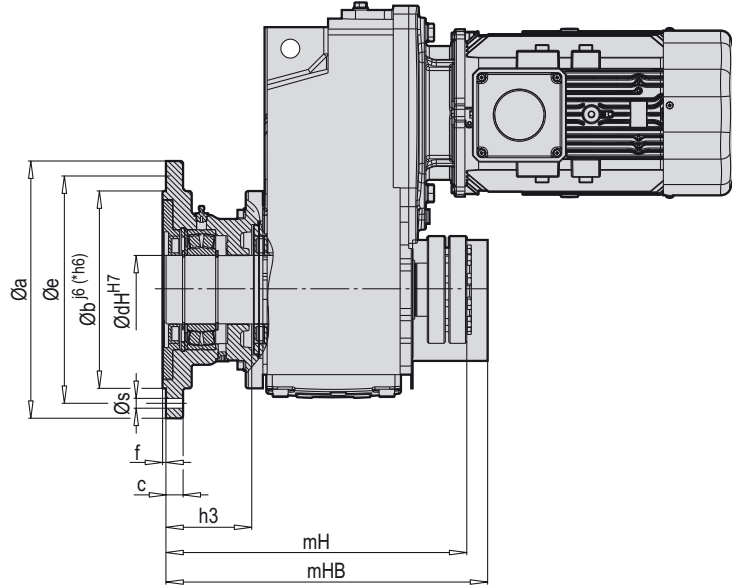
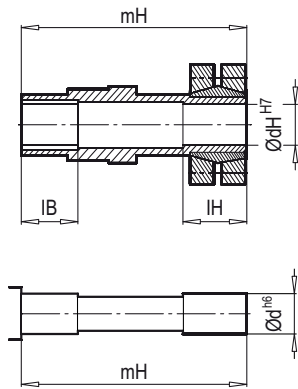
Tip / Type / Typ	a	b	c	e	f	h3	Øs	Ød	l	t	u	v	w	T
PM 12 GB5 PM 13 GB5	200	130	12	165	3.5	75	4 x 11	30	60	33.0	8	5	50	M10
PM 22 GB5 PM 23 GB5	250	180	16	215	4.0	86	4 x 14	35	70	38.0	10	5	60	M12
PM 32 GB5 PM 33 GB5	300	230	20	265	4.0	85	4 x 14	45	90	48.5	14	5	80	M16
PM 42 GB5 PM 43 GB5	300	230	20	265	4.0	113	4 x 14	*55	110	59.0	16	10	90	M20
PM 52 GB5 PM 53 GB5	350	*250	20	300	5.0	135	4 x 18	*65	130	69.0	18	15	100	M20
PM 62 GB5 PM 63 GB5	400	*300	22	350	5.0	166	4 x 18	*75	140	79.5	20	7.5	125	M20
PM 72 GB5 PM 73 GB5	450	*350	24	400	5.0	184	8 x 18	*90	170	95.0	25	15	140	M24
PM 82 GB5 PM 83 GB5	550	*450	28	500	5.0	210	8 x 18	*110	210	116.0	28	15	180	M24
PM 92 GB5 PM 93 GB5	660	*550	32	600	6.0	262	8 x 22	*140	250	148.0	36	25	200	M24
PM 102 GB5 PM 103 GB5	660	*550	35	600	8.0	302	8 x 26	*160	300	169.0	40	25	250	M24
PM 112 GB5 PM 113 GB5	660	*550	35	600	8.0	302	8 x 26	*180	300	190.0	45	25	250	M24
PM 123 GB5	660	*550	35	600	8.0	302	8 x 26	*180	300	190.0	45	25	250	M24

KONİK SIKTIRMALI
 GÜÇLENDİRİLMİŞ B5 FLANŞLI

EN

 WITH REINFORCED B5 FLANGE
 AND SHRINK DISC

DE

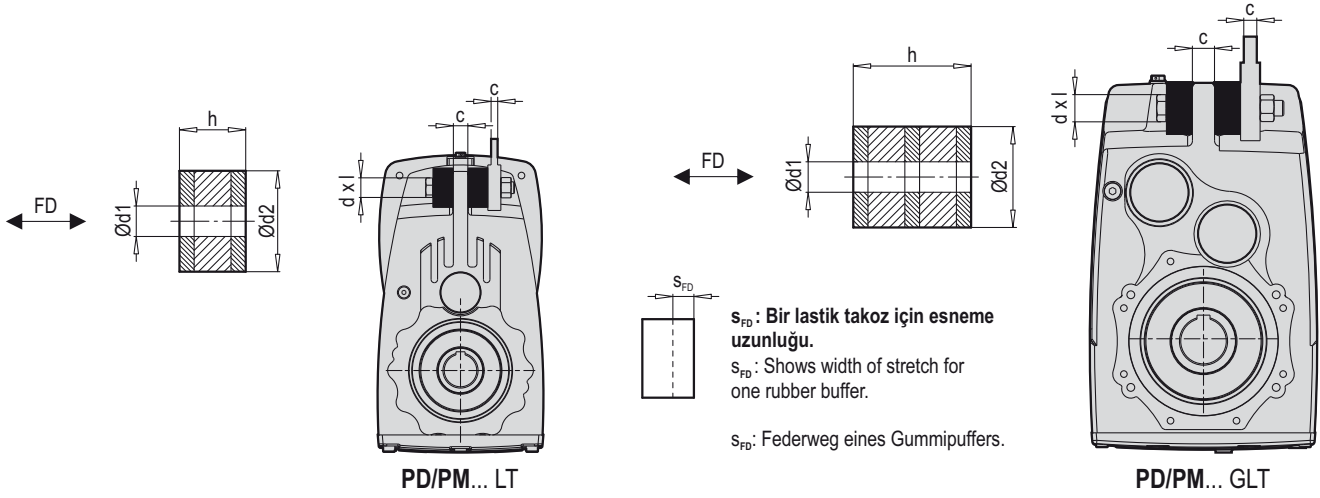
 VERSTÄRKTER B5 FLANSCH MIT
 SCHRUMPFSCHEIBE


Tip / Type / Typ	a	b	c	e	f	h3	Øs	ØdH ^{H7}	mH	mHB	IB	IH	Ød ^{h6}
PD 12 KS-GB5 PD 13 KS-GB5	200	130	12	165	3.5	75	4 X 11	30	220	233	31	40	30
PD 22 KS-GB5	250	180	16	215	4.0	86	4 X 14	35	264	284	41	45	35
PD 32 KS-GB5 PD 33 KS-GB5	300	230	20	265	4.0	85	4 X 14	40	297	317	41	55	40
PD 42 KS-GB5	300	230	20	265	4.0	113	4 X 14	50	356	329	51	55	50
PD 52 KS-GB5	350	*250	20	300	5.0	135	4 X 18	60	413	437	60	70	60
PD 62 KS-GB5 PD 63 KS-GB5	400	*300	22	350	5.0	166	4 X 18	70	517	540	71	85	70
PD 72 KS-GB5 PD 73 KS-GB5	450	*350	24	400	5.0	184	8 X 18	80	562	582	81	90	80
PD 82 KS-GB5 PD 83 KS-GB5	550	*450	28	500	5.0	210	8 X 18	100	645	672	71	95	100
PD 92 KS-GB5 PD 93 KS-GB5	660	*550	32	600	6.0	262	8 X 22	125	773	797	82	110	125
PD 102 KS-GB5 PD 103 KS-GB5	660	*550	35	600	8.0	302	8 X 26	160	944	970	122	130	160
PD 112 KS-GB5 PD 113 KS-GB5	660	*550	35	600	8.0	302	8 X 26	180	958	1000	101	110	180
PD 123 KS-GB5	660	*550	35	600	8.0	302	8 X 26	180	1129	1169	101	269	180

TR NORMAL VE GÜÇLENDİRİLMİŞ
LASTİK TAKOZ TAŞARIMI (LT/GLT)

EN NORMAL AND REINFORCED DESIGN
OF RUBBER BUFFER (LT/GLT)

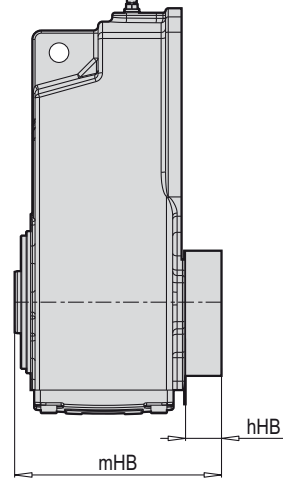
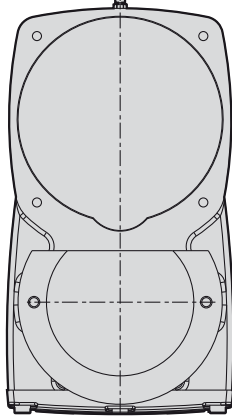
DE DESIGN FÜR NORMALE UND
VERSTÄRKT GUMMIPUFFER- (LT/GLT)



Tip / Type / Typ	Ød1	Ød2	h	c	d x l	FD [kN]	s _{FD} [mm]
PD/PM A02 LT	10.70	30	15	12	M10 x 70	0.95	1.5
PD/PM B02 LT	10.70	30	15	14	M10 x 70	1.05	1.7
PD/PM C13 LT	10.70	30	15	16	M10 x 80	2.25	3.6
PD/PM 12 LT PD/PM 13 LT	10.70	30	15	15	M10 x 80	1.80	2.8
PD/PM 22 LT PD/PM 23 LT	12.60	40	15	17	M12 x 90	2.65	1.8
PD/PM 32 LT PD/PM 33 LT	12.60	40	15	19	M12 x 90	4.15	2.9
PD/PM 42 LT PD/PM 43 LT	21.60	60	30	24	M20 x 150	7.40	7.3
PD/PM 52 LT PD/PM 53 LT	21.60	60	30	28	M20 x 150	9.50	9.4
PD/PM 62 LT PD/PM 63 LT	25.30	80	40	35	M24 x 190	16.80	9.2
PD/PM 72 LT PD/PM 73 LT	25.30	80	40	40	M24 x 200	20.80	11.4
PD/PM 82 LT PD/PM 83 LT	30.80	100	50	50	M30 x 260	28.40	16.3
PD/PM 92 LT PD/PM 93 LT	30.80	100	50	55	M30 x 260	43.50	24.9

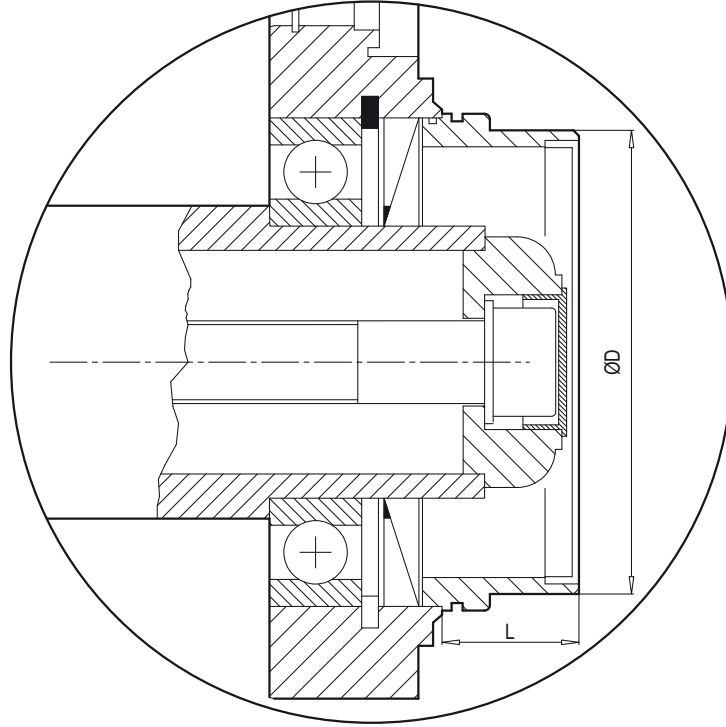
Tip / Type	Ød1	Ød2	h	c	d x l	FD [kN]	s _{FD} [mm]
PD/PM 72 GLT PD/PM 73 GLT	25.0	85	60	40	M24 x 240	20.80	12.2
PD/PM 82 GLT PD/PM 83 GLT	31.0	110	90	50	M30 x 340	28.40	19.3
PD/PM 92 GLT PD/PM 93 GLT	31.0	140	110	55	M30 x 380	43.50	21.2
PD/PM 102 GLT PD/PM 103 GLT	31.0	140	110	80	M30 x 430	56.35	27.4
PD/PM 112 GLT PD/PM 113 GLT	49.0	180	150	90	M48 x 550	80.90	38.5
PD/PM 123 GLT	49.0	180	150	90	M48 x 550	105.50	50.2

ŞAFT KORUMA KAPAĞI ÖLÇÜ TABLOSU
DIMENSION TABLE OF SHAFT COVER / MASSTABELLE FÜR WELLENSCHUTZDECKEL



Tip Type Typ	Montaj ve Ana Ölçüleri Outline and Mounting Dimensions Montage und Hauptabmessungen	
	hHB	mHB
PD A02 KK PD A02 B14-KK	26	123
PD B02 KK PD B02 B14-KK	32	151
PD C13 KK PD C13 B14-KK	37	210
PD 12 KK PD 12 B14-KK PD 13 KK PD 13 B14-KK	32	152
PD 22 KK PD 22 B14-KK PD 23 KK PD 23 B14-KK	44	176
PD 32 KK PD 32 B14-KK PD 33 KK PD 33 B14-KK	46	215
PD 42 KK PD 42 B14-KK PD 43 KK PD 43 B14-KK	46	235

Tip Type Typ	Montaj ve Ana Ölçüleri Outline and Mounting Dimensions Montage und Hauptabmessungen	
	hHB	mHB
PD 52 KK PD 52 B14-KK PD 53 KK PD 53 B14-KK	54	278
PD 62 KK PD 62 B14-KK PD 63 KK PD 63 B14-KK	55	337
PD 72 KK PD 72 B14-KK PD 73 KK PD 73 B14-KK	55	359
PD 82 KK PD 82 B14-KK PD 83 KK PD 83 B14-KK	59	418
PD 92 KK PD 92 B14-KK PD 93 KK PD 93 B14-KK	62	482



Tip / Type / Typ	ØD	L
PD 12 KK 66 PD 12 B14/KK 66	81	25
PD 22 KK 66 PD 22 B14/KK 66	57	38
PD 32 KK 66 PD 32 B14/KK 66	105	35
PD 42 KK 66 PD 42 B14/KK 66	105	34
PD 52 KK 66 PD 52 B14/KK 66	155	38
PD 62 KK 66 PD 62 B14/KK 66	189	44
PD 72 KK 66 PD 72 B14/KK 66	216	35
PD 82 KK 66 PD 82 B14/KK 66	246	50

TR

SU SOĞUTMALI

Helisel konik dişli ve Paralel şaft montajlı redüktörler için opsiyonel olarak entegre edilmiş bir ısı eşanjörü mevcuttur. Redüktörü soğutan soğutma suyu eşanjörün içinden akar. PGR redüktör sıcaklığının ve soğutma suyunun akışının izlenmesini önerir. Bunun sebebi soğutma serpantinini herhangi bir yağ haznesinde bulunmamasıdır. Bu soğutma aynı zamanda patlama potansiyeli olan atmosferlere (ATEX) sahip uygulamalar için de uygundur. Düşük sıcaklıklarda ısı eşanjörü aynı zamanda redüktöre ısı sağlayabilir.

EN

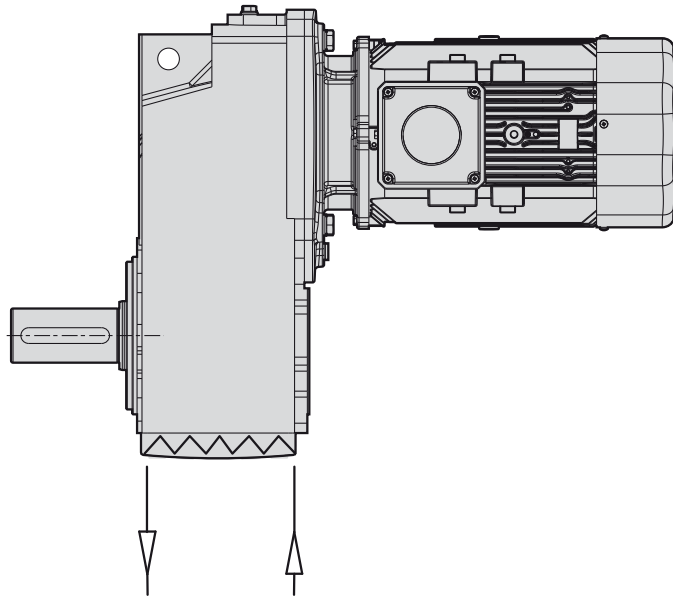
WATER COOLING

The heat exchanger is available for helical bevel gear units and parallel shaft mounted reducers optionally. The coolant which cool reducer flows inside exchanger. PGR advice you to follow flowing of coolant. The reason for this is cooling serpentine is not inside any oil tube. This cooler is also suitable for implementations which has risk of explosion. (ATEX) At low temperature, heat exchanger may provide heat to reducer.

DE

MIT WASSERKÜHLUNG

Bei Flachgetrieben und Kegelradgetrieben ist optional ein integrierter Wärmetauscher möglich. Der Wärmetauscher wird vom Kühlwasser durchströmt, welches das Getriebe kühlt. PGR empfiehlt eine Temperaturüberwachung oder Kühlwasserdurchflußüberwachung. Denn die Kühlschlange liegt nicht im Ölraum. Diese Kühlung ist auch für Anwendungen in explosionsgefährdeten Bereichen (ATEX) geeignet. Bei niedrigen Temperaturen kann der Wärmetauscher auch das Getriebe mit Wärme versorgen.



Su soğutma ünitesinin kullanılabileceği montaj pozisyonları

Table shows that suitability of water cooling for which mounting positions
Mögliche Einbaulagen bei Wasserkühlung

Tip / Type / Typ	Montaj Pozisyonları / Mounting Positions / Montagepositionen					
	M1	M2	M3	M4	M5	M6
PD/PM 62 - PD/PM 63	✓	✓	—	✓	✓	✓
PD/PM 72 - PD/PM 73	✓	✓	—	✓	✓	✓
PD/PM 82 - PD/PM 83	✓	✓	—	✓	✓	✓
PD/PM 92 - PD/PM 93	✓	✓	—	✓	✓	✓
PD/PM 102 - PD/PM 103	✓	✓	—	✓	✓	✓
PD/PM 112 - PD/PM 113	✓	✓	—	✓	✓	✓
PD/PM 123	✓	✓	—	✓	✓	✓

TR M4 MONTAJ POZİSYONU İÇİN İLAVE YAĞ HACMİ VE YAĞ TANKI

Motorlu ve mil girişli dikey olarak monte edilmiş redüktörlerde 1. Kademenin yağlanması için yağ seviyesi yüksektir. Dikey montaj pozisyonu olan M4 pozisyonunda isteğe bağlı olarak ilave yağ hacim ünitesinin kullanılması, yağın köpürme yaptığı durumlarda extra bir hacim sağlayarak havalandırma tapasından yağ sızmasını önler.

PGR tahvil oranının 20'den küçük olduğu ve PA/PF 42, PD/PM 42, PKD 4390 dan büyük, gövdelerin dikey montajlarında ilave yağ hacim ünitesinin kullanımı kesinlikle önerilir. Aksi kullanım durumunda PGR ürünü garanti kapsamına almamaktadır.

PGR ayrıca tahvil oranının 20'den küçük ve motor dönüş hızının 1800 d/dk'den büyük olduğu küçük gövdeli redüktörler için de ilave yağ hacim ünitesinin kullanımını önemle tavsiye eder.

EN ADDITIONAL LUBRICANT VOLUME AND OIL TANK FOR MOUNTING POSITION M4

Reducers which are with motor, solid shaft and vertical mounting position has high oil level for lubricating first stage. The usage of additional lubricant tube at M4 mounting position upon request prevents leakage when oil is foamed by providing extra volume.

PGR strictly recommends usage of additional oil tube when the ratio number is less than 20, larger than PA/PF 42, PD/PM 42, PKD 4390 cases and vertical mounting positions. Otherwise, the reducer is at out of guarantee.

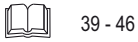
In addition to this, PGR strictly recommends usage of additional oil tube when the ratio number is less than 20, motor rotation speed is bigger than 1800 min⁻¹ and smaller cases.

DE ZUSÄTZLICHES ÖLVOLUMEN FÜR M4 EINBAUPOSITION

Bei Getrieben mit Motor- und Wellenantrieb, die vertikal eingebaut sind, ist zur Schmierung der 1. Stufe der Ölstand höher. Der optionale Einsatz eines zusätzlichen Ölausgleichsbehälters bei der vertikalen Einbaulage M4 verhindert Ölaustritt am Entlüftungsstopfen durch zusätzliches Volumen bei eventueller Ölschaumbildung.

PGR empfiehlt daher dringend bei Übersetzungen $i_{ges} < 20$ und bei Gehäusen ab PA/PF 42, PD/PM 42, PKD 4390 Ölausgleichsbehälter bei der vertikalen Einbaulage einzusetzen. Andernfalls ist das Getriebe von der Garantie ausgenommen.

PGR empfiehlt außerdem dringend die Verwendung eines zusätzlichen Ölausgleichsbehälters für kleinere Getriebe mit einem Übersetzungsverhältnis von weniger als 20 und einer Motordrehzahl von mehr als 1800 U/min.



39 - 46



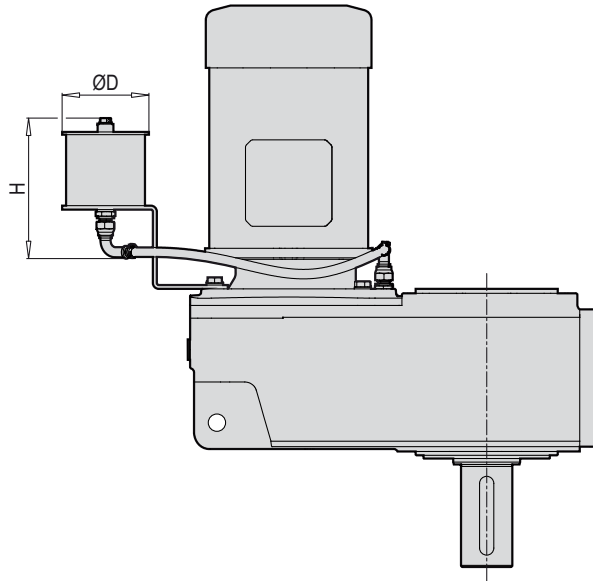
39 - 46



39 - 46

İLAVE YAĞ HACMİ / ADDITIONAL LUBRICANT VOLUME / ZUSÄTZLICHES ÖLVOLUMEN

PD/PM 42...83



Tip Type Typ	Boyut Size Baugröße	ØD [mm]	H [mm]	[kg]	Kapasite Capacity Kapazität [L]
PD/PM 42 - PD/PM 43	I	110	180	2.5	0.7
PD/PM 52 - PD/PM 53					
PD/PM 63					
PD/PM 62	II	155	300	6	3
PD/PM 72 - PD/PM 73					
PD/PM 82 - PD/PM 83	III	190	300	8	5

* Model yapılan geliştirmeye bağlı değişiklik gösterebilir. Hassas montaj alanları için iletişime geçiniz.

* The model may vary depending on the development. Please contact for sensitive assembly areas.

* Das Modell kann sich je nach Entwicklung variieren. Bitte kontaktieren Sie uns für empfindliche Montagebereiche.

TR M4 MONTAJ POZİSYONU İÇİN İLAVE YAĞ HACMİ VE YAĞ TANKI

YAĞ TANKI

Yağ tankları ek havalandırma tüpü içerdiği için ilave yağ hacmi ünitesine göre daha büyüktür. Yağ tankındaki yağ seviyesi sürekli olarak kontrol edilmelidir. PGR PD/PM 92...123 arasındaki büyük gövdelerin M4 dikey montaj pozisyonlarında yağ tankının kullanımı önerir. PGR M4 montaj pozisyonunda yağ tankı kullanılmayan uygulamalarda oluşabilecek problemlerden sorumlu değildir.

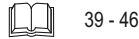


39 - 46

EN ADDITIONAL LUBRICANT VOLUME AND OIL TANK FOR MOUNTING POSITION M4

OIL TANK

If we compare oil tank and additional lubricant volume, oil tank has large volume than additional lubricant volume because there are two tubes which one of them is vent tube and the other one is oil tube. Oil level must be checked all the time. PGR suggests that, oil tanks should be used at M4 vertical mounting positions for large cases of parallel shaft gear units which are from PD/PM 92 to PD/PM 123. PGR is not responsible for any problem that may occur while oil tank is not used at M4 vertical mounting position for large cases of parallel shaft gear unit.

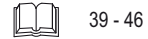


39 - 46

DE ZUSÄTZLICHES ÖLVOLUMEN FÜR M4 EINBAUPOSITION

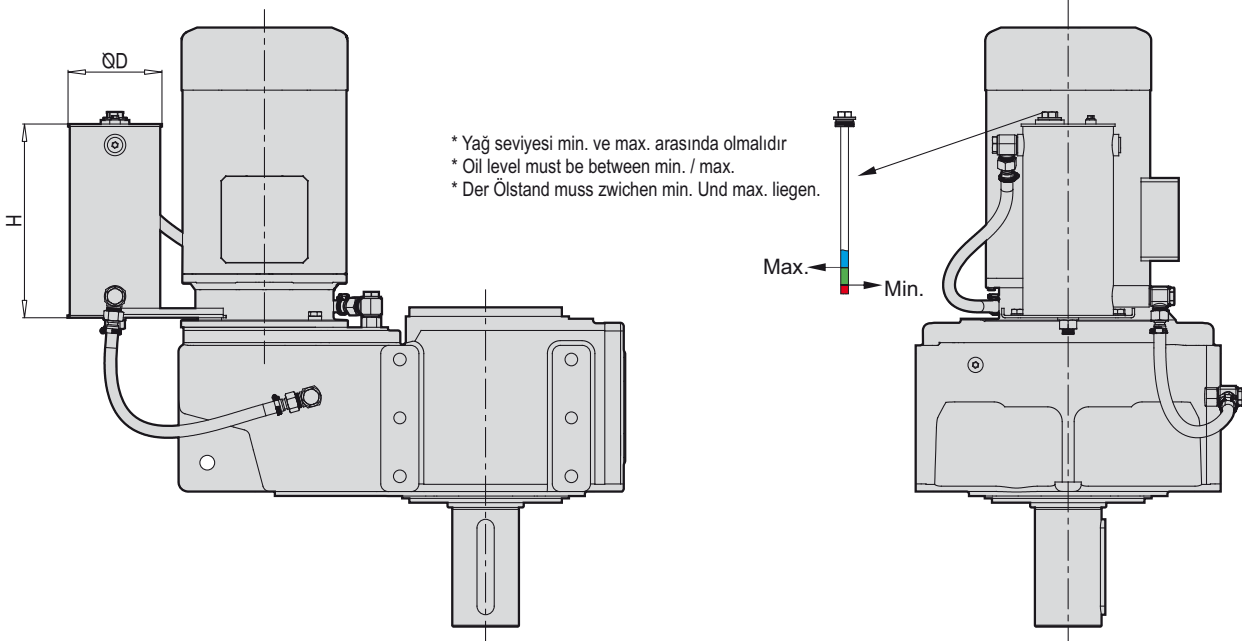
ÖLSTANDSBEHÄLTER

Ölstandsbehälter sind aufgrund der zusätzlichen Entlüftungslleitung größer als Ölausgleichsbehälter. Der Ölstand im Ölstandsbehälter ist zu kontrollieren. PGR empfiehlt zwischen PD/PM 92 und 123 in der vertikalen Einbaulage M4 Ölstandsbehälter einzusetzen. Bei Anwendungen, bei denen in der Einbaulage M4 kein Ölstandsbehälter verwendet wird, übernimmt PGR für eventuelle Probleme keine Gewährleistung.



39 - 46

PD/PM 92...123



Tip Type Typ	Boyut Size Baugröße	ØD [mm]	H [mm]	[kg]	Kapasite Capacity Kapazität [L]
PD/PM 92 - PD/PM 93	A	195	405	15	10
PD/PM 102 - PD/PM 103					
PD/PM 112 - PD/PM 113	B	325	460	25	30
PD/PM 123					

* Model yapılan geliştirmeye bağlı değişiklik gösterebilir. Hassas montaj alanları için iletişime geçiniz.

* The model may vary depending on the development. Please contact for sensitive assembly areas.

* Das Modell kann sich je nach Entwicklung variieren. Bitte kontaktieren Sie uns für empfindliche Montagebereiche.

TR

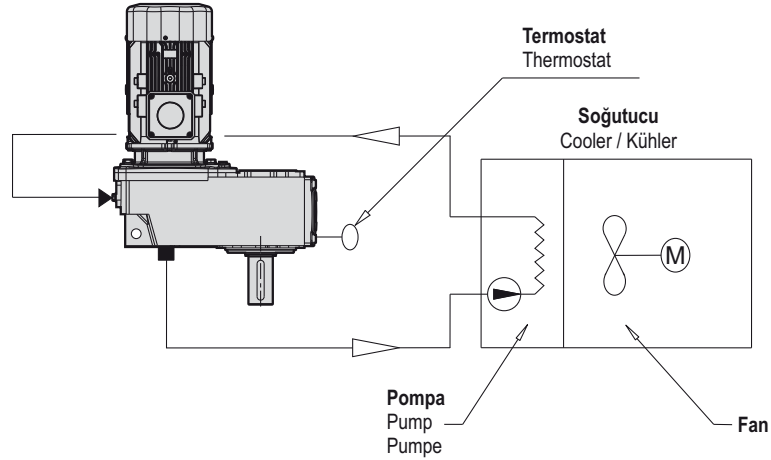
YAĞ SOĞUTMALI

EN

OIL COOLING

DE

ÖLKÜHLER



■ Çıkış = Emme hattı

■ Output = Suction line

■ Ablaß = Saugleitung

▼ Yağ seviyesi = Basınç hattı

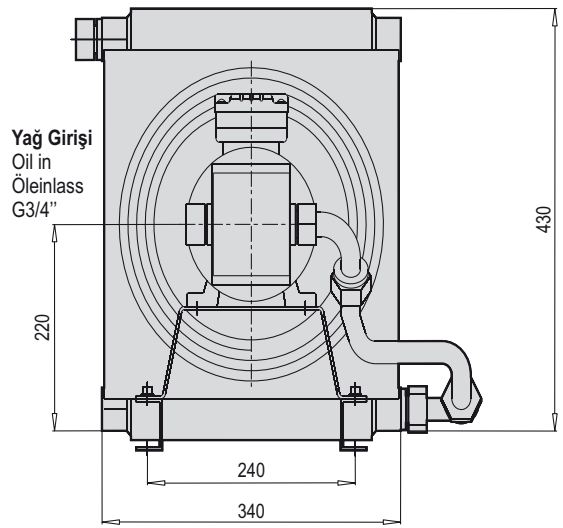
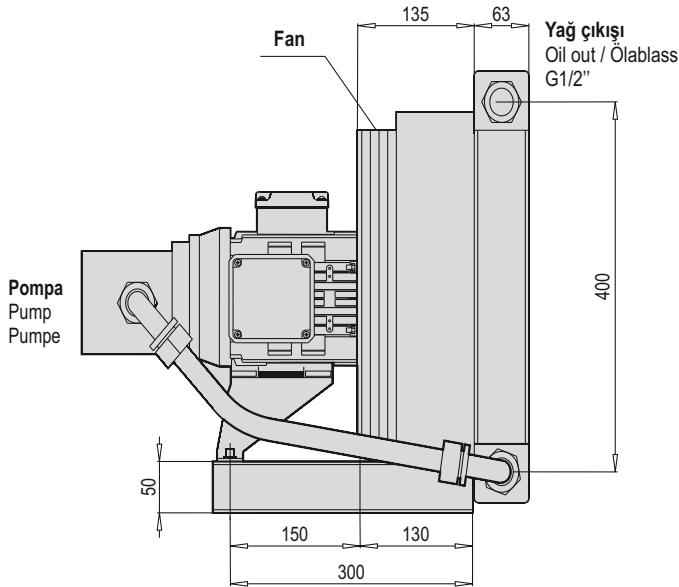
▼ Oil level = Pressure line

▼ Ölstand = Druckleitung

Redüktör içerisindeki yağ bir pompa vasıtası ile çekilir ve bu yağ bir ısı eşanjöründen geçer. Yağ, bir fan tarafından oluşturulan hava akımı ile soğutulur. Yağ ısı eşanjöründen dışarıya taşınır ve redüktöre geri gönderilir. Sıcaklık bir termostat ile kontrol edilir. PGR bu sıcaklığın izlenmesini önerir.

Picture which is above on this page shows cycle of the cooling unit. There is a thermostat on the gear unit for checking oil temperature. Oil flows from suction line to pressure line which is provided by a pump. In this way, oil temperature is cooled down by a fan which is supplying air flow of oil. Then, oil flows to the house of gear unit.

Das Getriebeöl wird von einer Pumpe angesaugt und durchströmt einen Wärmetauscher. Durch einen von einem Ventilator erzeugten Luftstrom erfolgt die Ölkühlung. Aus dem Wärmetauscher wird das Öl wieder in das Gehäuse zurückgefördert. Die Temperaturregelung erfolgt über einen Thermostaten. Eine Temperaturüberwachung wird empfohlen.



* Potansiyel patlayıcı atmosferli alanlar için uygun değildir.

* Not suited for areas with potentially explosive atmospheres

*Nicht geeignet für Bereiche mit explosionsgefährdeter Atmosphäre.

Dizayn

Soğutucu : TFS/A 8,5-400-F-03-11
Düşürme : Dış 1/2" iç 3/4"
Motorlar : Spannung 3x400 V
Çıkış gücü : 0,55 kW
Akım : 1,7 A
Hız : 1350 d/dk
Koruma sınıfı : IP 55
Yalıtım sınıfı : F
Sıcaklık sınıfı : B

Design

Cooler : TFS/A 8,5-400-F-03-11
Reduction : Out 1/2" in 3/4"
Motors : Spannung 3x400 V
Output Power : 0,55 kW
Rated Current : 1,7 A
Speed : 1350 rpm
Protection Class : IP 55
Insulation Class : F
Temperature Class : B

Entwurf

Kühler : TFS/A 8,5-400-F-03-11
Reduzierung : Aus 1/2" in 3/4"
Motoren : Spannung 3x400 V
Leistung : 0,55 kW
Strom : 1,7 A
Drehzahl : 1350 min
Schutzklasse : IP 55
Isolationsklasse : F
Temperaturklasse : B

Aşağıdaki özelliklerde mevcuttur:

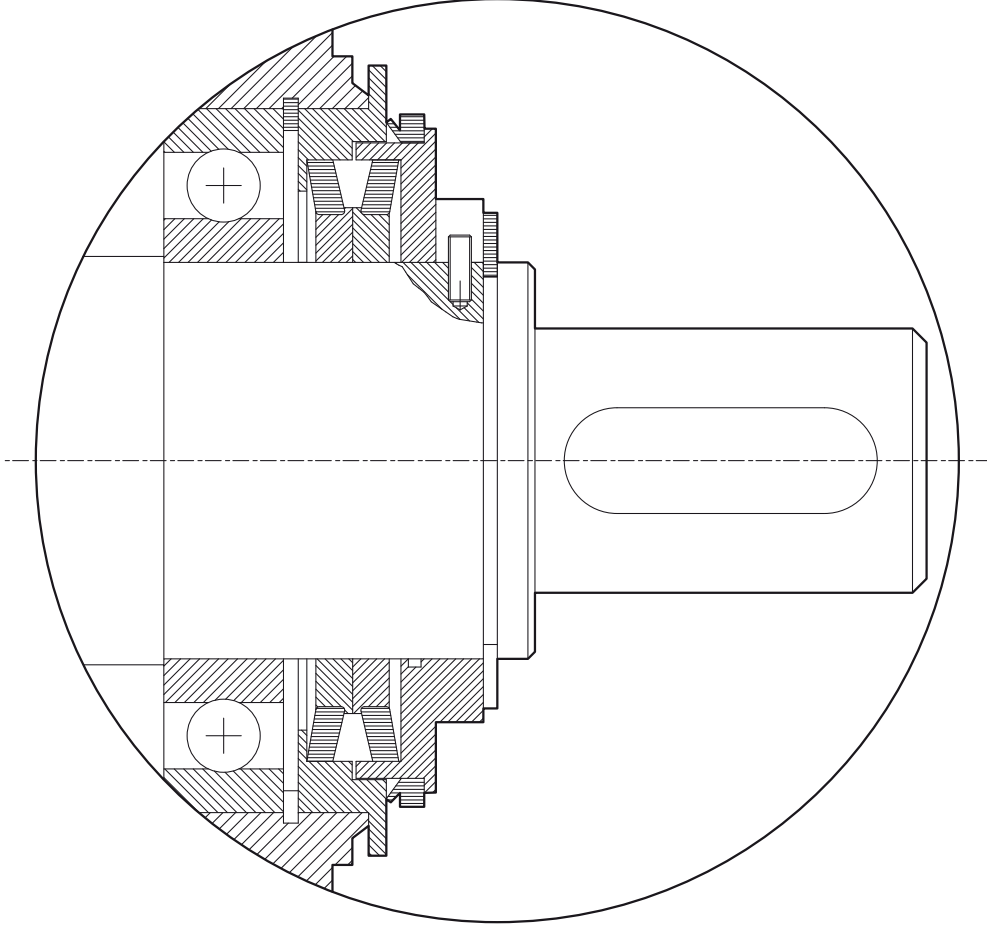
- Özel voltaj 60 HZ - Özel motor
Ağırlık : 35 kg

Available with:

- Special voltage 60 HZ - Special motor
Weight : 35 kg

Lieferbar mit

- Spezialspannung 60 Hz - Sondermotor
Gewicht: 32 kg



Mekanik keçe kullanımı özellikle uzun süreli maruz kalınan kötü çalışma koşullarına uygundur. Sıvı yoğunluğunun çok olduğu daldırmalı çalışma ortamlarında maximum seviye sızdırmazlık sağlar. Bu keçe tipi birçok olumsuz dış çevre koşullarından (Aşırı tozlu, sulu) yüksek seviyede koruma sağlar.

The use of mechanical seals is especially suitable for long-term poor working conditions. It provides maximum level of leakproofing for working areas which is immersion and high density of liquid. This type of seal provides a high level of protection from many unfavorable external environmental conditions (extreme dust, water).

Der Einsatz von Gleitringdichtungen eignen sich besonders bei langfristiger Belastung durch schlechte Arbeitsbedingungen. Diese bieten maximale Undurchlässigkeit in Arbeitsumgebungen unter Wasser mit hoher Feuchtigkeit. Dieser Dichtungstyp bietet einen hohen Schutz vor vielen schädlichen Umwelteinwirkungen (extremer Staub, Wasser).

TR

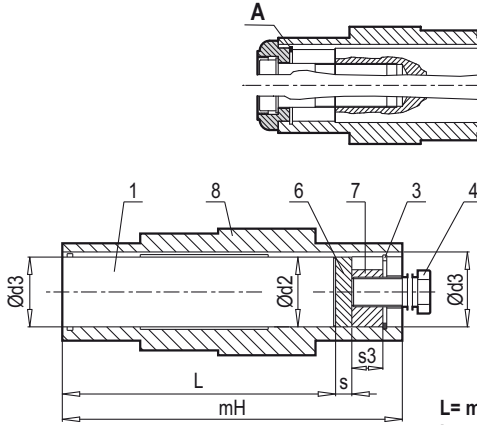
ÇEKTİRME KİTİ

Çektirme Kiti

Değişik gövde büyüklükleri için opsiyonel olarak çektirme kitlemiz şaft çıkışlı dizaynlarımızda mevcuttur.

Çektirme kiti için kullanım gereksinimleri:

- Kullanılan müşteri milinin alın tarafının merkezinde DIN 332/2 standartlarına uygun bir delik olmalıdır.
- Müşteri mili, faturalı ya da faturasız olsa da çektirme kiti ile uyumludur.
- I numaralı montaj pozisyonu olması halinde, müşteri mili redüktör şaftının içinde bulunan segman ile tutturulur. (Parça A)
- II numaralı montaj pozisyonu olması halinde, müşteri milinin üzerinde bulunan fatura kullanılarak doğrudan redüktör şaftı üzerine tutturulur. (Parça B)



DEMONTAJ / DISASSEMBLY

Puller Kit

The puller kit is optionally available on shaft mounted gear units.

Using conditions:

- The centre hole must be DIN 332/2 for customer solid shaft.
- The customer shaft can be fixed with the puller kit (with shoulder or without shoulder)
- When the assembly in Fig. I is used, the customer shaft is fasten by the circlip in the gear unit shaft.(Track A)
- When the assembly in Fig. II is used,It is fasten directly to the gearbox shaft using the invoice on the customer shaft.

L= max. kullanıcı şaft boyu
L= maximum length of the solid shaft
L= max. Kundenwellenlänge

- 1) Müşteri mili
 - 2) Rondela DIN 127
 - 3) * İç Segman DIN 472
 - 4) * Çektirme civatası
 - 5) Alyan başlı civata DIN 912
 - 6) * Yaylı rondela
 - 7) * Somun
 - 8) Redüktör şaftı
 - 9) Çektirme rondelası
- *PGR tarafından temin edilmez.

DEMONTAJ:

- 1) Alyanbaşı civata sökülmelidir. (5)
- 2) Çektirme rondelası takılmalıdır. (9)
- 3) Yaylı rondela takılmalıdır. (6)
- 4) Somun yerleştirilmelidir. (7)
- 5) Segman takılmalıdır. (8)
- 6) Çektirme civatası gevşetilerek müşteri mili şafttan ayrılmalıdır. (4)

MONTAJ:

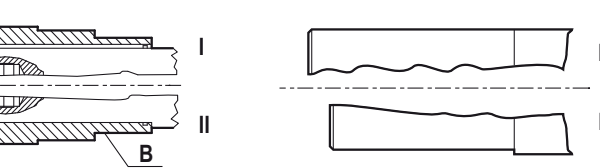
- 1) Müşteri mili, redüktör şaftının içine yerleştirilmelidir. (8)
- 2) Çektirme rondelası redüktör şaftının içine yerleştirilmelidir. (9)
- 3) Çektirme rondelası ile alyan başlı civata ve rondela birbirine sabitlenmelidir. (9-5-2)

Kullanım Koşulları (Montaj için):

- Müşteri milinin merkezinde DIN 332/2 standartlarına dışı açılmış delik bulunmalıdır.
- Müşteri milinin boyu "L" uzunluğundan büyük olmamalıdır. Aksi halde çektirme elemanlarını kullanmak mümkün olmayacaktır. (3-6-7)

Kullanım Koşulları (Demontaj için):

- Demontaj ölçüleri fabrika standartlarından yararlanılarak alınabilir.
- Demontaj işlemi yalnızca boyutu "L" yi aşmayan delik mile geçecek dolu miller için geçerlidir.



MONTAJ / ASSEMBLY

- 1) Customer's shaft
 - 2) Washer DIN 127
 - 3) * Circlip DIN 472
 - 4) * Puller screw
 - 5) Socket head screw DIN 912
 - 6) * Thrust washer
 - 7) * Nut
 - 8) Hollow shaft
 - 9) Puller washer
- *Star signs are shown this item are not provided by PGR

DISASSEMBLING:

- 1) Loosen the socket head screw (5)
- 2) Remove puller washer (9)
- 3) Install spring washer (6)
- 4) Install nut(7)
- 5) Install circlip (3)
- 6) Remove solid shaft from hollow shaft with using puller screw (4)

ASSEMBLING:

- 1) The customer shaft must be mounted inside the gear units shaft. (8)
- 2) The puller washer must be mounted inside the gear units shaft. (9)
- 3) The bolt and washer must be fixed with the puller washer. (9-5-2)

Usage Conditions (Assembling):

- The user shaft must be threaded to the center according to DIN 332/2.
- The customer shaft must not exceed the "L" length, otherwise the puller cannot be applied. (pos. 3,6,7)

Usage Conditions (for disassembly):

- Disassembly dimensions can be taken by using factory standards.
- The disassembly procedure is only valid for solid shafts which will be connected to solid shaft and dimension does not exceed "L".

Aufziehvorrichtung

Für verschiedene Gehäusegrößen sind optional Abziehvorrichtungen für Ausführungen mit Hohlwellenabtrieb erhältlich.

Nutzungsanforderungen für die Abziehvorrichtung:

- In der Stirnmitte der Kundenwelle sollte eine Bohrung nach DIN 332/2 vorhanden sein.
- Die Kundenwelle ist mit der Abziehvorrichtung kompatibel, mit oder ohne Wellenabsatz.
- Bei Bauform I wird die Kundenwelle mit dem Sicherungsring in der Getriebewelle befestigt. (Teil A)
- Bei Einbaulage II wird die Kundenwelle am Wellenabsatz direkt auf der Getriebewelle befestigt (Teil B)

- 1) Kundenwelle
 - 2) Federring DIN 127
 - 3) * Sicherungsring DIN 472
 - 4) * Abziehschraube
 - 5) Innensechskantschraube DIN 912
 - 6) * Federscheibe
 - 7) * Schraubenmutter
 - 8) Getriebewelle
 - 9) Abziehscheibe
- *wird Nicht von PGR bereitgestellt.

DEMONTAGE:

- 1) Innensechskantschraube muss entfernt werden. (5)
- 2) Die Abziehscheibe muss entfernt werden. (9)
- 3) Federscheibe muss eingelegt sein. (6)
- 4) Die Schraubenmutter muss eingesetzt werden. (7)
- 5) Der Sicherungsring muss montiert sein. (3)
- 6) Die Kundenwelle sollte durch Lösen der Abziehschraube von der Welle getrennt werden. (4)

MONTAGE:

- 1) Die Kundenwelle muss in der Getriebewelle befestigt werden. (8)
- 2) Die Abziehscheibe muss in die Getriebewelle eingelegt werden. (9)
- 3) Die Abziehscheibe und die Sechskantschraube und der Federring müssen miteinander befestigt werden. (9-5-2)

Nutzungsbedingungen (für Montage):

- In der Mitte der Kundenwelle muss eine Gewindebohrung nach DIN 332/2 vorhanden sein.
- Die Länge der Kundenwelle darf die Länge „L“ nicht überschreiten. Andernfalls können die Abziehelemente nicht verwendet werden. (3, 6,7)

Nutzungsbedingungen (für Demontage):

- Demontagemasse können anhand von Werksnormen übernommen werden.
- Das Demontageverfahren gilt nur für Vollwellen, deren Abmessung „L“ nicht überschreitet.

TR ÇEKTİRME ÖLÇÜ TABLOSU

EN DIMENSION TABLE OF FIXING ELEMENT

DE GRÖßENTABELLE ABZIEHVORRICHTUNG

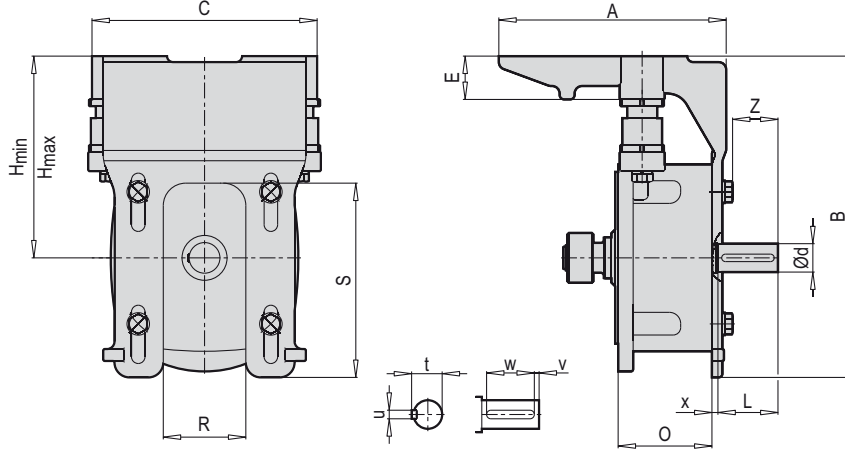
Tip / Type / Typ	1	2	3	4	5	6		7		8	9		
	L					d2	s	d3	s3	d x mH	a	D	
PD A02 Ç	78	A10	125 x 1.5	M10	M10 X 45	24.9	3	24.9	12	M10	25 X 100	20	38
PD B02 Ç	98	A10	130 x 1.5	M12	M10 X 45	29.9	3	29.9	12	M12	30 X 122	20	40
PD C13 Ç	146	A12	135 x 1.75	M16	M12 X 55	34.9	3	34.9	16	M16	35 X 176	24.5	45
PD 12 Ç	98	A10	130 x 1.2	M12	M10 X 45	29.9	3	29.9	12	M12	30 X 122	20	40
PD 22 Ç	109	A12	135 x 1.5	M16	M12 X 55	34.9	3	34.9	16	M16	35 X 139	24.5	45
PD 32 Ç	142	A16	140 x 1.75	M16	M16 X 70	39.9	4	39.9	16	M16	40 X 174	24.7	55
PD 42 Ç	155	A16	150 x 2.0	M20	M16 X 70	49.9	4	49.9	20	M20	50 X 195	25.7	65
PD 52 Ç	185	A20	160 x 2.0	M24	M20 X 90	59.9	5	59.9	24	M24	60 X 230	30	75
PD 62 Ç	245	A20	170 x 2.5	M24	M20 X 90	69.9	5	69.9	24	M24	70 X 290	31.3	95
PD 72 Ç	255	A20	180 x 2.5	M30	M20 X 100	79.9	8	79.9	30	M30	80 X 310	31	102
PD 82 Ç	311	A24	1100 x 3.0	M30	M24 X 110	99.9	8	99.9	30	M30	100 X 366	36.5	120
PD 92 Ç	370	A24	1120 x 4.0	M36	M24 X 110	119.9	10	119.9	32	M36	120 X 430	36.5	150

Tabloda belirtilen numaralar Sayfa 71' de açıklanmaktadır.

The numbers which are specified at table are explained on Page 71.

Die in der Tabelle angegebenen Nummern werden auf Seite 71 erklärt.

Motor Platformu Ölçüleri /
Motor Platform Dimensions / Abmessungen der Motorkonsole



Tip Type Typ	Bağlantı boyutları ve platform ölçüleri Connection and Platform dimensions Anschlussmaße und Motorkonsolemaße										Mil Ölçüleri Shaft size Wellenmaße				Flanş Flange Flansch
	A	B	C	E	R	S	H _{min}	H _{max}	Z	O	d l	t u	v w	x	
MK I 63 M - 100 L	224	253	206	45	60	140	153	173	41	121.5	24 50	27 8	5 40	8	160 S
MK II 80 M - 112 M	238	320	252	50	66	145	199	224	48	115.5	28 60	31 8	5 50	9	250 S
MK III-A 90 S - 132 M	305	430	302	58	110	260	254	286	61	127	38 80	41 10	5 70	8	300 S
MK III-B 90 S - 132 M	305	430	302	58	110	260	254	286	91	172	42 110	45 12	10 90	8	Ø250
MK IV 112 M - 200 L	478	530	402	75	130	315	315	355	116	254	65 140	69 18	15 110	8	Ø350
MK V 200 L - 250 M	664	690	572	105	382	369	465	515	119	247	65 140	69 18	15 110	12	Ø450

Motor Platform Montajı

Müşteri motor platformunu kullanarak farklı makina ve sistem tasarlarken çok fazla yapıcı olanaklar elde edilebilir.

Motor platform tasarımı PGR monoblok dişli ünitesi serileri için tüm montaj pozisyonlarında kullanılabilir. 5 çeşit motor platformu tüm motor-redüktör montaj kombinasyonlarını kapsar. Çok kademeli redüktör tasarımları için de yine seçim tablolarından motor platformu seçimi yapılabilir.

PGR motor platformu kullanımının müşteriye sağladığı avantajlar;

- * Hafif ve değişken titreşimleri etkileyen yapı
- * Korozyona dayanıklı sabitleme elemanları
- * Tüm montaj pozisyonlarında kullanılabilirlik
- * Optimum kayış gerginliğini yakalamak adına ayarlanabilir yükseklik ayarı
- * Birçok motor ve gövde büyüklüğü için motor platformu üzerinde bulunduğu bağlantı delikleri
- * 90° her yöne döndürülebilir yapı
- * Seçim tablolarından tahvil oranının $i=1$ 'e eşit olduğu durumlar için önerilir.

Assembling of Motor Platform

By using motor platform, you may have a lot of facility for designing different machines and systems.

Motor platform design may be used at all mounting positions for monoblock gear units. 5 types of motor platform covers all motor-reducer mounting combinations. For multi stage gear units, you can also select motor platform from selection tables.

The advantages of using motor platform to customer

- * Structure that affects light and variable vibrations
- * Fixing elements resistive for corrosion.
- * Usability at all mounting positions
- * Adjustable height adjustment to achieve optimum belt tension
- * Connection holes over motor platform for a lot of motor and motor case dimension
- * 90° rotation all direction
- * It is recommended for situations where the ratio is equal to $i=1$ from the selection tables

MOTORKONSOLE MONTAGE

Durch den Einsatz der Motorkonsole stehen dem Planer weitere konstruktive Möglichkeiten bei der Auslegung von Maschinen und Anlagen zur Verfügung. Die Motorkonsole ist so ausgelegt, dass sie in Verbindung mit allen PGR-Blokgehäusegetrieben in allen Bauformen kombiniert werden kann. Fünf Baugrößen decken alle Motor-Gtriebekombinationen ab. Die jeweils möglichen Zuordnungen entnehmen Sie den Auswahl tabellen, die auch für die entsprechenden mehrstufigen Getriebeauführung Gültigkeit haben.

- **Vorteile der PGR-Motorkonsole für den Anwender;**
- * Leichte und variable Vibrationen dämpfende Konstruktion
- * Korrosionssichere Befestigungselemente
- * In allen Einbaupositionen einsetzbar
- * Leicht zu handhabende Höhenverstellung für optimale Riemenspannung
- * Motorkonsole mit Bohrungen für mehrere Motorbaugrößen
- * In alle Richtungen um 90° schwenkbar
- * Empfohlen für Situationen, in denen gemäß Auswahl tabelle Übersetzungen $i=1,0$ sind

Tip Type Typ	PD/PM 12	PD/PM 22 PD/PM 32	PD/PM 42 PD/PM 52 PD/PM 63	PD/PM 62 PD/PM 72 PD/PM 73 PD/PM 83 PD/PM 93	PD/PM 82 PD/PM 92 PD/PM 103	PD/PM 93	PD/PM 113 PD/PM 123
Motor	W III	W II	W III	W III W IV	W V W IV	W V W IV	W IV
63 M	MK I						
71 M	MK I						
80 M	MK I	MK II					
90 S 90 L	MK I	MK II	MK III - A	MK III - B			
100 L	MK I	MK II	MK III - A	MK III - B			
112 M		MK II	MK III - A	MK III - B	MK IV		
132 S 132 M			MK III - A	MK III - B	MK IV		
160 M 160 L				MK IV	MK IV		
180 M 180 L				MK IV	MK IV		
200 L				MK IV	MK IV		MK V
225 S 225 M					MK V	MK V	MK V
250 M					MK V	MK V	MK V

Motor platformu seçim örneği:

Öncelikle gerekli çıkış hız veya gerekli çıkış gücü ihtiyacına bağlı olarak kullanacağımız temel redüktör tipini belirlemeliyiz. Motorlu seçim tablolarında motor çıkış gücü ve tahvil oranına göre redüktör seçimi yapınız.

0.25 kW, 13.3 d/dk, $i = 109.45 \rightarrow$ PD 12 - 71 M

Redüktör tipinin seçilmesinin ardından motor gövde büyüklüğü ve redüktör tipine bağlı tabloyu kullanarak motor platformu tipini (MK) tespit ediniz (Sayfa 75).

71 M \rightarrow PD 12 \rightarrow MK1

MK1 tipi platforma göre motor gövde büyüklüğü satırını göz önüne alarak kayış tipi, ayar aralığı, kayış uzunluğu, 2 mil arası eksen mesafesi ve kayış sayısı bilgileri elde edilebilir. (Sayfa 75)

Example of motor platform selection:

First of all, we must determine the basic gearbox type we will use depending on the required output speed or the required output power requirement. In the motor selection tables, select the reducer according to the motor output power and bond ratio.

0.25 kW, 13.3 min⁻¹, $i = 109.45 \rightarrow$ PD 12 - 71 M

After selecting the gearbox type, determine the motor platform type (MK) using the table depending on the motor body size and gearbox type (Page 75).

71 M \rightarrow PD 12 \rightarrow MK1

Belt type, adjustment range, belt length, axis distance between 2 shafts and number of belts can be obtained by considering the motor body size line according to the MK1 type platform. (Page 75)

Beispiel für die Auswahl der Motorkonsole:

Zunächst ist je nach geforderter Abtriebsdrehzahl bzw. geforderter Abtriebsleistung der zu verwendende Getriebetyp zu bestimmen. Wählen Sie in den Auswahltabellen für Motoren das Getriebe entsprechend der Abtriebsleistung und dem Übersetzungsverhältnis.

0.25 kW, 13.3 min⁻¹, $i = 109.45 \rightarrow$ PD 12 - 71 M

Nach Auswahl des Getriebetyps ermitteln Sie den Motorkonsolentyp (MK) anhand der Tabelle in Abhängigkeit von Motorbaugröße und Getriebetyp (Seite 75).

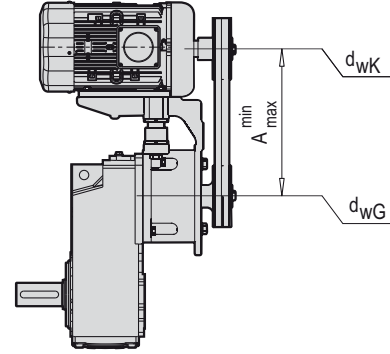
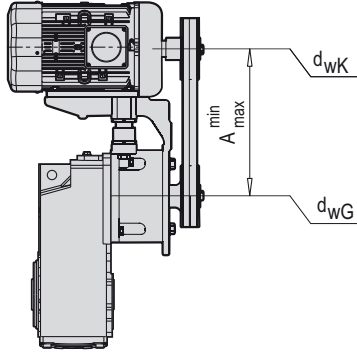
71 M \rightarrow PD 12 \rightarrow MK1

Informationen zu Riementyp, Verstellbereich, Riemenlänge, Achsabstand zwischen 2 Wellen und Anzahl der Riemen können unter Berücksichtigung der Zeile für die Motorgröße gemäß dem MK1- Motorkonsolentyp ermittelt werden. (Seite 75)

TR V KAYIŞ VE KAYIŞ KASNAK SEÇİMİ

EN V BELT AND BELT PULLEY SELECTION

DE AUSWAHL VON V RIEMEN UND RIEMENSCHLEIBE



	Motor	Çıkış Output Abtrieb (kW)	Ayar aralığı Adjustment range Einstellbereich		Kayış uzunluğu Belt length Riemenlänge	Mil merkezi uzaklığı Shaft centre distance Wellenmittenabstand A	Kayış sayısı Number of belts Anzahl Riemen
			Amin	Amax			
MK I Kayış Tipi SPZ Belt type SPZ Riementyp SPZ	63 M/4A	0.12	216	236	(d _{wG} = 80) (i = 1) Lw 697	223	1
	63 M/4B	0.18	216	236	697	223	1
	71 M/4A	0.25	224	244	710	229	1
	71 M/4B	0.37	224	244	710	229	1
	80 M/4A	0.55	233	253	737	243	1
	80 M/4B	0.75	233	253	737	243	1
	90 S/4A	1.10	243	263	750	249	1
	90 L/4A	1.50	243	263	750	249	2
	100 L/4A	2.20	253	273	772	260	2
	100 L/4B	3.00	253	273	772	260	3
MK II Kayış Tipi XPZ Belt type XPZ Riementyp SPZ	80 M/4A	0.55	279	304	(d _{wG} = 112) (i = 1) Lw 930	289	1
	80 M/4B	0.75	279	304	930	289	1
	90 S/4A	1.10	289	314	950	299	1
	90 L/4A	1.50	289	314	950	299	1
	100 L/4A	2.20	299	324	980	314	1
	100 L/4B	3.00	299	324	980	314	2
	112 M/4B	4.00	311	336	1000	324	2
MK III Kayış Tipi SPZ Belt type SPZ Riementyp SPZ	90 S/4A	1.10	344	376	(d _{wG} = 160) (i = 1) Lw 1222	360	1
	90 L/4B	1.50	344	376	1222	360	1
	100 L/4A	2.20	354	386	1250	374	1
	100 L/4B	3.00	354	386	1250	374	1
	112 M/4B	4.00	366	398	1262	380	2
	132 S/4C	5.50	386	418	1312	405	2
	132 M/4B	7.50	386	418	1312	405	3
132 M/4	9.20	386	418	1312	405	3	
MK IV Kayış Tipi XPA Belt type XPA Riementyp SPA	112 M/4B	4.00	427	467	(d _{wG} = 200) (i = 1) Lw 1500	436	1
	132 S/4C	5.50	447	487	1550	461	1
	132 M/4B	7.50	447	487	1550	461	2
	132 M/4	9.20	447	487	1550	461	2
	160 M/4B	11.0	475	515	1600	486	2
	160 L/4A	15.0	475	515	1600	486	3
	180 M/4B	18.5	495	535	1650	511	3
	180 L/4B	22.0	495	535	1650	511	4
200 L/4C	30.0	515	555	1700	536	4	
MK V Kayış Tipi SPA Belt type SPA Riementyp SPA	200 L/4C	30.0	665	715	(d _{wG} = 250) (i = 1) Lw 2182	698	4
	225 S/4A	37.0	690	740	2207	710	4
	225 M/4C	45.0	690	740	2207	710	5
MK V Kayış Tipi SPB Belt type SPB Riementyp SPB	250 M/4C	55.0	715	765	(d _{wG} = 250) (i = 1) Lw 2240	727	4

* Kayış kasnak aksesuarları PGR tarafından temin edilmemektedir.

*Belt pulley accessories are not provided by PGR.

*Riemenscheibenzubehör wird nicht von PGR geliefert.

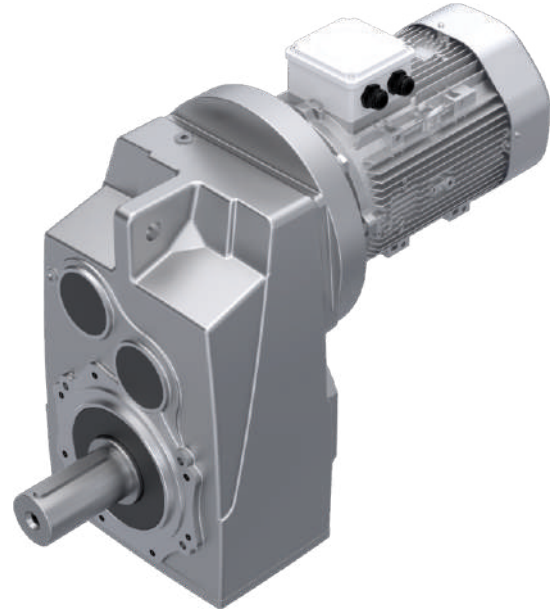
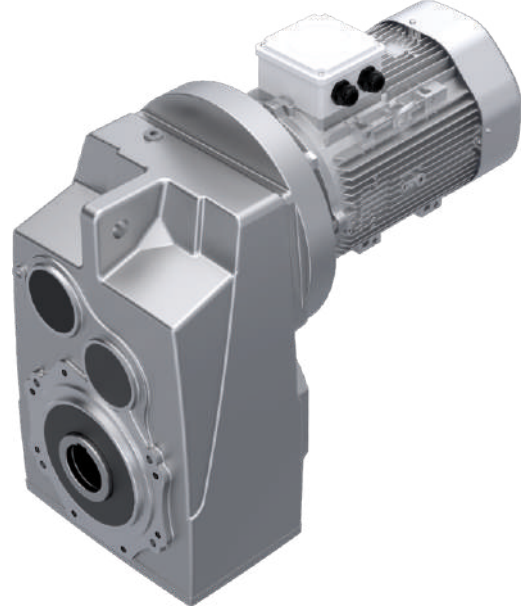


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Motorlu Seçim Tabloları

Selection Tables of
Geared motors

Auswahltabellen der
Getriebemotoren



PD/PM

0.37 kW

Redüktör motor gücü
Gear unit motor power
Getriebemotorleistung

Motor gücü

Rated motor power
Motormennleistung

Çıkış devri

Output speed
Leistungsgeschwindigkeit

Çıkış momenti

Output torque
Abtriebsdrehmoment

Servis faktörü

Service factor
Betriebsfaktor

Tahvil oranı

Reduction ratio
Übersetzungsverhältnis

Redüktör tipi

Gear unit motor type
Getriebetyp

Ağırlık

Weight
Gewicht

Ölçü sayfaları
Drawing pages
Zeichnungsseite

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.37	1.8	1856	0.8	782.28	20.0	22.0	29.0	30.0	PD/PM 43 71M4B / 71M4C	78	205
	2.1	1551	0.8	653.66	21.0	22.0	30.0	30.0			
	2.6	1264	1.6	532.76	20.0	22.0	29.0	30.0			
	3.1	1056	1.6	445.16	21.0	22.0	30.0	30.0			
	3.6	928	2.2	391.14	21.0	22.0	30.0	30.0			
	4.3	775	2.4	326.83	21.0	22.0	30.0	30.0			
	5.1	646	2.4	272.49	22.0	22.0	30.0	30.0			

Müsaade edilebilir radyal yükler
Normal rulmanlarda
FR için listelenmiş değerlerde
FA = 0 (N) olarak hesaplanmıştır

Permissible radial force or load on output shaft while normal bearings are used. For this load FA is assumed equal zero. FA = 0 (N)

Die aufgeführten Werte für zulässige Radiallasten FR für Normallager werden mit FA = 0 (N) berechnet.

Müsaade edilebilir eksenel yükler
Normal rulmanlarda
FA için listelenmiş değerlerde
FR = 0 (N) olarak hesaplanmıştır

Permissible axial force or load on output shaft while normal bearings are used. For this load FR is assumed equal zero. FR = 0 (N)

Die aufgeführten Werte für zulässige Axiallasten FA für Normallager werden mit FR = 0 (N) berechnet.

Müsaade edilebilir eksenel yükler
Güçlendirilmiş rulmanlarda
FA için listelenmiş değerlerde
FR = 0 (N) olarak hesaplanmıştır

Permissible axial force on output shaft while reinforced bearings are used. For this load FR is assumed equal to zero. FR = 0 (N)



Die aufgeführten Werte für zulässige Axiallasten FA für verstärkte Lager werden mit FR = 0 (N) berechnet.



Müsaade edilebilir radyal yükler
Güçlendirilmiş rulmanlarda
FR için listelenmiş değerlerde
FA = 0 (N) olarak hesaplanmıştır



Permissible radial force or load on output shaft while reinforced bearings are used. For this load FA is assumed equal to zero. FA = 0 (N)



Die aufgeführten Werte für zulässige Radiallasten FR für verstärkte Lager werden mit FA = 0 (N) berechnet

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.12	0.3	3320	0.9	2769.78	31.0	32.0	-	-	PD/PM 52/12 63M6C / 63M6B	106	238
	0.4	2656	1.2	2215.83	31.0	32.0	-	-			
	0.5	2161	1.5	1802.82	31.0	32.0	-	-			
	0.8	1312	2.4	1094.40	31.0	32.0	44.0	40.0			
	0.5	2086	1.4	2769.78	-	-	-	-	PD/PM 52/12 63M4A	106	238
	0.6	1669	1.8	2215.83	-	-	-	-			
	0.8	1358	2.2	1802.82	-	-	-	-			
	1.0	1056	2.2	2769.78	31.0	32.0	-	-	PD/PM 52/12 63M2K	106	238
	1.3	845	2.7	2215.83	31.0	32.0	-	-			
	0.5	2194	0.9	1830.33	21.0	22.0	-	-	PD/PM 42/12 63M6C / 63M6B	70	238
	0.7	1611	1.2	1343.79	21.0	22.0	30.0	30.0			
	0.8	1332	1.4	1111.10	22.0	22.0	30.0	30.0			
	1.0	1048	1.8	874.48	22.0	22.0	31.0	30.0			
	1.3	839	2.3	699.58	6.0	10.0	31.0	30.0			
	1.6	669	2.8	557.93	6.0	10.0	31.0	30.0			
	0.5	2097	0.9	2783.90	-	-	-	-	PD/PM 42/12 63M4A	70	238
	0.6	1694	1.1	2249.64	-	-	-	-			
	0.8	1378	1.3	1830.33	-	-	-	-			
	1.0	1012	1.8	1343.79	21.0	22.0	30.0	30.0			
	1.3	837	2.2	1111.10	22.0	22.0	30.0	30.0			
	1.6	659	2.7	874.48	22.0	22.0	31.0	30.0			
	1.0	988	1.4	2783.90	21.0	22.0	-	-	PD/PM 42/12 63M2K	70	238
	1.2	798	1.7	2249.64	21.0	22.0	-	-			
	1.5	650	2.1	1830.33	21.0	22.0	-	-			
	2.1	477	2.9	1343.79	21.0	22.0	30.0	30.0			
	1.1	1021	0.9	851.83	13.0	15.0	-	-			
	1.3	821	1.2	684.80	13.0	15.0	-	-	PD/PM 32/12 63M6C / 63M6B	55	238
	1.7	624	1.5	521.00	13.0	15.0	-	-			
	2.0	553	1.7	461.30	13.0	15.0	-	-			
	2.5	429	2.2	358.19	4.0	7.0	-	-			
	3.3	324	2.9	270.47	4.0	7.0	-	-			
	1.0	1005	0.9	1335.13	-	-	-	-	PD/PM 32/12 63M4A	55	238
	1.3	804	1.1	1068.11	-	-	-	-			
	1.6	642	1.4	851.83	-	-	-	-			
	2.0	516	1.7	684.80	-	-	-	-			
	2.7	392	2.3	521.00	-	-	-	-			
	3.0	347	2.6	461.30	13.0	15.0	-	-			
	1.2	797	0.9	2246.56	13.0	15.0	-	-	PD/PM 32/12 63M2K	55	238
	1.7	602	1.1	1696.40	13.0	15.0	-	-			
	2.1	474	1.4	1335.13	13.0	15.0	-	-			
2.6	379	1.8	1068.11	13.0	15.0	21.0	20.0				
3.3	302	2.3	851.83	13.0	15.0	-	-				
4.1	243	2.8	684.80	13.0	15.0	-	-				
1.0	1118	0.8	918.90	15.0	15.0	22.0	20.0	PD/PM 33 63M6C / 63M6B	53	201	
1.1	984	1.1	808.52	15.0	15.0	22.0	20.0				
1.2	884	1.1	726.57	15.0	15.0	22.0	20.0				
1.5	711	1.5	584.11	16.0	15.0	22.0	20.0				
1.9	587	1.5	482.75	16.0	15.0	23.0	20.0				
2.2	497	1.7	408.52	16.0	15.0	23.0	20.0				
3.1	349	2.8	287.08	11.0	15.0	23.0	20.0				
1.4	787	1.0	1022.54	15.0	15.0	22.0	20.0	PD/PM 33 63M4A	53	201	
1.5	707	1.2	918.90	15.0	15.0	22.0	20.0				
1.7	622	1.7	808.52	15.0	15.0	22.0	20.0				
1.9	559	1.7	726.57	15.0	15.0	22.0	20.0				
2.4	449	2.2	584.11	16.0	15.0	22.0	20.0				
2.9	371	2.3	482.75	16.0	15.0	23.0	20.0				
3.4	314	2.5	408.42	16.0	15.0	23.0	20.0				
2.7	376	1.6	1022.54	15.0	15.0	22.0	20.0	PD/PM 33 63M2K	53	201	
3.0	338	1.8	918.90	15.0	15.0	22.0	20.0				
3.5	297	2.7	808.52	15.0	15.0	22.0	20.0				
3.9	267	2.7	726.57	15.0	15.0	22.0	20.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
0.12	1.8	616	0.9	514.10	8.0	12.0	13.0	15.0	PD/PM 22/02 63M6C / 63M6B	38	238
	2.1	508	1.1	424.03	7.0	12.0	12.0	15.0			
	2.5	427	1.3	356.48	7.0	12.0	-	-			
	3.1	345	1.6	288.06	7.0	12.0	-	-			
	4.2	260	2.1	216.66	5.0	10.0	-	-			
	5.1	210	2.6	175.52	5.0	10.0	-	-			
	1.7	621	0.8	825.15	-	-	-	-	PD/PM 22/02 63M4A	38	238
	2.1	499	1.0	662.62	-	-	12.0	15.0			
	2.7	387	1.3	514.10	8.0	12.0	13.0	15.0			
	3.3	319	1.6	424.03	7.0	12.0	12.0	15.0			
	3.9	268	1.9	356.48	-	-	-	-			
	4.9	217	2.4	288.06	7.0	12.0	-	-			
	2.0	505	0.8	1423.90	8.0	12.0	12.0	15.0	PD/PM 22/02 63M2K	38	238
	2.6	378	1.0	1065.19	8.0	12.0	-	-			
	3.4	293	1.3	825.15	8.0	12.0	-	-			
	4.2	235	1.7	662.62	8.0	12.0	12.0	15.0			
	5.4	182	2.2	514.10	8.0	12.0	13.0	15.0			
	6.6	150	2.6	424.03	7.0	12.0	12.0	15.0			
	1.9	587	0.9	482.49	9.0	12.0	12.0	15.0	PD/PM 23 63M6C / 63M6B	37	197
	2.3	476	1.2	390.87	9.0	12.0	13.0	15.0			
	2.7	402	1.5	330.43	10.0	12.0	13.0	15.0			
	3.3	336	1.7	276.32	10.0	12.0	14.0	15.0			
	3.8	287	1.7	235.73	10.0	12.0	14.0	15.0			
	4.9	225	2.4	185.19	7.0	12.0	14.0	15.0			
	6.0	183	3.0	150.03	7.0	12.0	-	-			
	2.2	479	1.1	622.96	8.0	12.0	13.0	15.0	PD/PM 23 63M4A	37	197
	2.9	371	1.4	482.49	9.0	12.0	13.0	15.0			
	3.6	301	1.7	390.87	9.0	12.0	14.0	15.0			
	4.2	254	2.2	330.43	10.0	12.0	14.0	15.0			
	5.1	213	2.6	276.32	10.0	12.0	14.0	15.0			
	5.9	181	2.6	235.73	10.0	12.0	14.0	15.0			
	3.7	281	1.2	762.96	8.0	12.0	13.0	15.0	PD/PM 23 63M2K	37	197
	4.5	229	1.7	622.96	8.0	12.0	13.0	15.0			
	5.8	177	2.2	482.49	9.0	12.0	13.0	15.0			
	7.2	144	2.8	390.87	9.0	12.0	14.0	15.0			
	2.7	393	0.8	328.02	6.0	7.0	-	-	PD/PM 12/02 63M6C / 63M6B	27	238
	3.2	340	0.9	284.03	6.0	7.0	-	-			
	3.9	275	1.1	229.52	6.0	7.0	-	-			
	3.4	306	0.9	405.92	6.0	7.0	9.0	7.0	PD/PM 12/02 63M4A	27	238
	4.3	247	1.2	328.02	-	-	9.0	7.0			
	4.9	214	1.4	284.03	6.0	7.0	9.0	7.0			
	6.1	173	1.7	229.52	6.0	7.0	9.0	7.0			
	3.4	293	0.8	824.73	6.0	7.0	8.0	7.0	PD/PM 12/02 63M2K	27	238
	4.2	235	0.9	662.28	6.0	7.0	8.0	7.0			
	5.1	194	1.1	546.25	6.0	7.0	9.0	7.0			
	6.9	144	1.5	405.92	6.0	7.0	9.0	7.0			
	8.5	116	1.9	328.02	6.0	7.0	9.0	7.0			
	9.9	101	2.2	284.03	6.0	7.0	9.0	7.0			
12.2	81	2.7	229.52	6.0	7.0	9.0	7.0				
3.0	336	0.8	301.08	6.0	7.0	-	-	PD/PM 13 63M6C / 63M6B	23	193	
3.6	306	0.9	251.58	6.0	7.0	-	-				
4.3	255	1.0	209.76	7.0	7.0	-	-				
5.5	199	1.2	163.92	6.0	7.0	-	-				
7.0	157	1.5	129.01	6.0	7.0	-	-				
8.5	128	2.2	105.32	6.0	7.0	-	-				
10.2	107	2.7	88.00	6.0	7.0	-	-				
3.8	284	0.8	368.83	6.0	7.0	-	-	PD/PM 13 63M4A	23	193	
4.6	232	1.2	301.08	6.0	7.0	-	-				
5.6	194	1.4	251.58	6.0	7.0	-	-				
6.7	161	1.5	209.76	7.0	7.0	-	-				
8.5	126	1.8	163.92	6.0	7.0	-	-				
10.9	99	2.3	129.01	-	-	-	-				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
0.12	5.0	205	0.8	556.59	6.0	7.0	-	-	PD/PM 13 63M2K	23	193
	5.9	174	1.0	472.42	6.0	7.0	-	-			
	6.7	153	1.1	414.87	6.0	7.0	-	-			
	7.6	136	1.3	368.83	6.0	7.0	-	-			
	9.3	111	1.9	301.08	6.0	7.0	-	-			
	11.1	93	2.3	251.58	6.0	7.0	-	-			
	13.3	77	2.3	209.76	7.0	7.0	-	-			
	17.1	60	2.8	163.92	6.0	7.0	-	-			
	8.2	135	1.6	109.45	7.0	7.0	10.0	7.0	PD/PM 12 63M6C / 63M6B	19	192
	9.7	114	2.1	92.43	4.0	7.0	10.0	7.0			
	12.8	86	2.4	109.45	7.0	7.0	10.0	7.0	PD/PM 12 63M4A	19	192
	2.4	463	0.8	380.81	6.0	7.0	8.0	11.0	PD/PM C13 63M6C / 63M6B	25	190
	3.0	367	1.1	301.44	6.0	7.0	8.0	11.0			
	3.5	313	1.2	257.36	7.0	7.0	8.0	11.0			
	4.4	248	1.6	203.72	7.0	7.0	8.0	11.0			
	5.7	193	2.0	158.21	7.0	7.0	8.0	11.0			
	6.6	166	2.3	136.54	3.0	5.0	8.0	11.0			
	7.6	144	2.7	118.07	3.0	5.0	8.0	11.0			
	8.5	129	3.0	106.03	3.0	5.0	8.0	11.0			
	3.7	293	1.3	380.81	6.0	7.0	8.0	11.0	PD/PM C13 63M4A	25	190
	4.6	232	1.6	301.44	6.0	7.0	8.0	11.0			
	5.4	198	1.9	257.36	7.0	7.0	8.0	11.0			
	6.9	157	2.4	203.72	7.0	7.0	8.0	11.0			
	8.8	122	3.0	158.21	7.0	7.0	8.0	11.0			
	7.4	140	2.0	380.81	6.0	7.0	8.0	11.0	PD/PM C13 63M2K	25	190
	9.3	111	2.5	301.44	6.0	7.0	8.0	11.0			
	10.9	95	3.0	257.36	7.0	7.0	8.0	11.0			
	8.7	128	1.1	103.90	5.0	5.0	7.0	5.0	PD/PM B02 63M6C / 63M6B	13	188
	10.5	106	1.4	85.67	5.0	5.0	7.0	5.0			
	11.3	98	1.4	79.42	5.0	5.0	7.0	5.0			
	13.6	82	1.8	66.00	5.0	5.0	7.0	5.0			
	15.9	70	2.4	56.55	3.0	5.0	7.0	5.0			
	17.4	64	2.4	51.60	3.0	5.0	7.0	5.0			
	10.1	109	1.0	139.15	5.0	5.0	7.0	5.0	PD/PM B02 63M4A	13	188
	13.5	82	1.6	103.09	5.0	5.0	7.0	5.0			
	16.3	67	2.1	85.67	5.0	5.0	7.0	5.0			
17.6	62	2.1	79.42	5.0	5.0	7.0	5.0				
21.2	52	2.7	66.00	5.0	5.0	7.0	5.0				
20.1	53	1.6	139.15	5.0	5.0	7.0	5.0	PD/PM B02 63M2K	13	188	
27.2	39	2.5	103.09	5.0	5.0	7.0	5.0				
15.2	73	1.6	59.32	5.0	5.0	5.0	8.0	PD/PM A02 63M6C / 63M6B	9	186	
18.1	61	1.7	49.62	5.0	5.0	5.0	8.0				
21.5	52	1.7	41.88	5.0	5.0	5.0	8.0				
23.9	47	2.3	37.71	5.0	5.0	5.0	8.0				
25.9	43	2.5	34.80	5.0	5.0	5.0	8.0				
28.3	39	2.5	31.83	5.0	5.0	5.0	8.0				
17.1	64	1.0	81.73	5.0	5.0	5.0	8.0				
23.6	47	2.4	59.32	5.0	5.0	5.0	8.0	PD/PM A02 63M4A	9	186	
28.2	39	2.6	49.62	5.0	5.0	5.0	8.0				
33.4	33	2.6	41.88	5.0	5.0	5.0	8.0				
34.3	31	1.6	81.73	5.0	5.0	5.0	8.0				
0.18	0.1	11691	1.1	6601.35	21.0	36.0	-	-	PD/PM 83/32 71M6B / 71M6A	408	240
	0.2	9748	1.3	5504.36	21.0	36.0	-	-			
	0.2	8660	0.9	4889.70	16.0	26.0	-	-	PD/PM 73/22 71M6B / 71M6A	272	240
	0.4	3650	2.0	2061.26	16.0	26.0	-	-			
	0.5	3199	2.3	1806.13	16.0	26.0	-	-			
	0.3	6121	0.9	3456.44	16.0	26.0	-	-	PD/PM 63/22 71M6B / 71M6A	199	240
	0.3	4849	1.0	2738.15	16.0	26.0	-	-			
	0.7	2233	2.5	1260.77	16.0	26.0	57.0	60.0			
	0.8	1956	2.9	1104.71	16.0	26.0	57.0	60.0			



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3		
0.18	0.4	3984	0.8	2215.83	31.0	32.0	-	-	PD/PM 52/12 71M6B / 71M6A	109	238
	0.5	3241	1.0	1802.82	31.0	32.0	-	-			
	0.7	2398	1.3	1333.49	31.0	32.0	40.0	40.0			
	0.8	1968	1.6	1094.40	31.0	32.0	44.0	40.0			
	1.0	1549	2.0	861.34	31.0	32.0	44.0	40.0			
	1.3	1239	2.5	689.07	31.0	32.0	44.0	40.0	PD/PM 52/12 63M4B	106	238
	0.5	3129	1.0	2769.78	-	-	-	-			
	0.6	2503	1.2	2215.83	-	-	-	-			
	0.8	2037	1.5	1802.82	-	-	-	-			
	1.3	1236	2.4	1094.40	31.0	32.0	44.0	40.0	PD/PM 52/12 63M2A	106	238
	1.0	1475	1.5	2769.78	31.0	32.0	-	-			
	1.3	1180	1.9	2215.83	31.0	32.0	-	-			
	1.6	960	2.4	1802.82	31.0	32.0	-	-	PD/PM 42/12 71M6B / 71M6A	73	238
	0.7	2416	0.8	1343.79	20.0	22.0	29.0	30.0			
	0.8	1998	0.9	1111.10	21.0	22.0	30.0	30.0			
	1.0	1572	1.2	874.48	21.0	22.0	30.0	30.0			
	1.3	1258	1.5	699.58	22.0	22.0	30.0	30.0			
	1.6	1003	1.9	557.93	22.0	22.0	31.0	30.0			
	2.2	736	2.6	409.62	21.0	22.0	31.0	30.0			
	0.8	2068	0.9	1830.33	-	-	-	-			
	1.0	1518	1.2	1343.79	20.0	22.0	29.0	30.0			
	1.3	1255	1.4	1111.10	21.0	22.0	30.0	30.0			
	1.6	988	1.8	874.48	21.0	22.0	30.0	30.0			
	2.0	790	2.3	699.58	22.0	22.0	30.0	30.0			
	2.5	630	2.9	557.93	22.0	22.0	31.0	30.0	PD/PM 42/12 63M2A	70	238
	1.0	1482	0.9	2783.90	20.0	22.0	-	-			
	1.2	1198	1.1	2249.64	20.0	22.0	-	-			
	1.5	974	1.4	1830.33	20.0	22.0	-	-			
	2.1	715	1.9	1343.79	20.0	22.0	29.0	30.0			
	2.5	592	2.3	1111.10	21.0	22.0	30.0	30.0			
	3.2	466	2.9	874.48	21.0	22.0	30.0	30.0	PD/PM 43 71M6B / 71M6A	78	205
	0.8	2062	0.8	1129.42	16.0	22.0	27.0	30.0			
	1.2	1428	1.1	782.28	16.0	22.0	29.0	30.0			
	1.4	1193	1.1	653.66	16.0	22.0	30.0	30.0			
	1.7	972	2.2	532.76	16.0	22.0	30.0	30.0			
	2.0	813	2.2	445.16	16.0	22.0	30.0	30.0			
	2.3	714	2.9	391.14	16.0	22.0	30.0	30.0	PD/PM 32/12 71M6B / 71M6A	58	238
	1.3	1231	0.8	684.80	13.0	15.0	-	-			
	1.7	937	1.0	521.00	13.0	15.0	-	-			
	2.0	829	1.1	461.30	13.0	15.0	21.0	20.0			
	2.5	644	1.5	358.19	13.0	15.0	22.0	20.0			
	3.3	486	1.9	270.47	13.0	15.0	-	-			
	4.1	391	2.4	217.44	13.0	15.0	-	-			
	5.0	323	2.9	179.71	13.0	15.0	-	-	PD/PM 32/12 63M4B	55	238
	1.6	962	0.9	851.83	-	-	-	-			
2.0	774	1.2	684.80	-	-	-	-				
2.7	589	1.5	521.00	-	-	-	-				
3.0	521	1.7	461.30	13.0	15.0	21.0	20.0				
3.9	405	2.2	358.19	15.0	15.0	22.0	20.0				
5.2	306	2.9	270.47	-	-	-	-	PD/PM 32/12 63M2A	55	238	
1.7	903	0.8	1696.40	13.0	15.0	-	-				
2.1	711	1.0	1335.13	13.0	15.0	-	-				
2.6	569	1.2	1068.11	13.0	15.0	21.0	20.0				
3.3	454	1.5	851.83	13.0	15.0	-	-				
4.1	365	1.9	684.80	13.0	15.0	-	-				
5.4	277	2.5	521.00	13.0	15.0	-	-				
6.1	246	2.8	461.30	13.0	15.0	21.0	20.0	PD/PM 33 71M6B / 71M6A	56	201	
1.5	1066	1.0	584.11	15.0	15.0	22.0	20.0				
1.9	881	1.0	482.75	15.0	15.0	22.0	20.0				
2.2	746	1.1	408.52	16.0	15.0	22.0	20.0				
3.1	524	1.9	287.08	16.0	15.0	23.0	20.0				
3.9	421	2.5	230.79	15.0	15.0	23.0	20.0				
4.7	348	2.6	190.74	15.0	15.0	23.0	20.0				
5.6	295	2.8	161.38	15.0	15.0	-	-				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
0.18	1.5	1061	0.8	918.90	15.0	15.0	22.0	20.0	PD/PM 33 63M4B	53	201
	1.7	933	1.1	808.52	13.0	15.0	21.0	20.0			
	1.9	839	1.1	726.57	14.0	15.0	21.0	20.0			
	2.4	674	1.5	584.11	15.0	15.0	22.0	20.0			
	2.9	557	1.6	482.75	15.0	15.0	22.0	20.0			
	3.4	472	1.7	408.42	16.0	15.0	22.0	20.0			
	4.9	331	2.8	287.08	16.0	15.0	23.0	20.0			
	2.7	564	1.1	1022.54	15.0	15.0	22.0	20.0	PD/PM 33 63M2A	53	201
	3.0	507	1.2	918.90	15.0	15.0	22.0	20.0			
	3.5	446	1.8	808.52	13.0	15.0	21.0	20.0			
	3.9	401	1.8	726.57	14.0	15.0	21.0	20.0			
	4.8	322	2.4	584.11	15.0	15.0	22.0	20.0			
	5.8	266	2.5	482.75	15.0	15.0	22.0	20.0			
	6.9	225	2.7	408.52	16.0	15.0	22.0	20.0			
	2.5	641	0.9	356.48	7.0	12.0	-	-	PD/PM 22/02 71M6B / 71M6A	41	238
	3.1	518	1.1	288.06	7.0	12.0	-	-			
	4.2	390	1.4	216.66	7.0	12.0	-	-			
	5.1	316	1.7	175.52	7.0	12.0	-	-			
	2.7	581	0.9	514.10	8.0	12.0	13.0	15.0	PD/PM 22/02 63M4B	38	238
	3.3	479	1.1	424.03	7.0	12.0	12.0	15.0			
	3.9	403	1.3	356.48	-	-	-	-			
	4.9	325	1.6	288.06	7.0	12.0	12.0	15.0			
	6.5	245	2.1	216.66	-	-	-	-			
	8.0	198	2.6	175.52	7.0	12.0	12.0	15.0			
	3.4	439	0.9	825.15	8.0	12.0	-	-	PD/PM 22/02 63M2A	38	238
	4.2	353	1.1	662.62	8.0	12.0	12.0	15.0			
	5.4	274	1.4	514.10	8.0	12.0	13.0	15.0			
	6.6	226	1.8	424.03	7.0	12.0	12.0	15.0			
	7.9	190	2.1	356.48	7.0	12.0	-	-			
	9.7	153	2.6	288.06	7.0	12.0	12.0	15.0			
	2.3	713	0.8	390.87	8.0	12.0	13.0	15.0	PD/PM 23 71M6B / 71M6A	40	197
	2.7	603	1.0	330.43	9.0	12.0	13.0	15.0			
	3.3	504	1.2	276.32	9.0	12.0	14.0	15.0			
	3.8	430	1.2	235.73	10.0	12.0	14.0	15.0			
	4.9	338	1.6	185.19	10.0	12.0	14.0	15.0			
	6.0	274	2.0	150.03	8.0	12.0	-	-			
	6.8	240	2.3	131.68	9.0	12.0	-	-			
	7.7	212	2.6	116.40	9.0	12.0	-	-			
	2.9	557	0.9	482.49	7.0	12.0	13.0	15.0			
	3.6	451	1.2	390.87	8.0	12.0	14.0	15.0			
	4.2	381	1.5	330.43	9.0	12.0	14.0	15.0			
	5.1	319	1.7	276.32	9.0	12.0	14.0	15.0			
	5.9	272	1.7	235.73	10.0	12.0	14.0	15.0			
	7.6	214	2.4	185.19	10.0	12.0	14.0	15.0			
	9.3	173	3.0	150.03	-	-	-	-			
	3.7	421	0.8	762.96	7.0	12.0	13.0	15.0	PD/PM 23 63M2A	37	197
	4.5	344	1.2	622.96	7.0	12.0	13.0	15.0			
	5.8	266	1.5	482.49	7.0	12.0	12.0	15.0			
7.2	216	1.8	390.87	8.0	12.0	13.0	15.0				
8.5	182	2.3	330.43	9.0	12.0	13.0	15.0				
10.1	152	2.8	276.32	9.0	12.0	14.0	15.0				
11.9	130	2.8	235.73	10.0	12.0	14.0	15.0				
7.1	236	1.7	127.46	6.0	7.0	14.0	15.0	PD/PM 22 71M6B / 71M6A	33	196	
8.6	193	2.2	104.07	6.0	7.0	14.0	15.0				
8.9	187	2.5	100.98	6.0	7.0	14.0	15.0				
4.3	371	0.8	328.02	6.0	7.0	9.0	7.0	PD/PM 12/02 63M4B	27	238	
4.9	321	0.9	284.03	6.0	7.0	9.0	7.0				
6.1	259	1.1	229.52	6.0	7.0	9.0	7.0				
5.1	291	0.8	546.25	6.0	7.0	9.0	7.0	PD/PM 12/02 63M2A	27	238	
6.9	216	1.0	405.92	6.0	7.0	9.0	7.0				
8.5	175	1.3	328.02	6.0	7.0	9.0	7.0				
9.9	151	1.5	284.03	6.0	7.0	9.0	7.0				
12.2	122	1.8	229.52	6.0	7.0	9.0	7.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.18	5.5	299	0.8	163.92	6.0	7.0	-	-	PD/PM 13 71M6B / 71M6A	26	193
	7.0	235	1.0	129.01	6.0	7.0	-	-			
	8.5	192	1.5	105.32	6.0	7.0	-	-			
	10.2	161	1.8	88.00	6.0	7.0	-	-			
	4.6	348	0.8	301.08	6.0	7.0	-	-	PD/PM 13 63M4B	23	193
	5.6	290	0.9	251.58	6.0	7.0	-	-			
	6.7	242	1.0	209.76	6.0	7.0	-	-			
	8.5	189	1.2	163.92	6.0	7.0	-	-			
	10.9	149	1.5	129.01	-	-	-	-			
	13.3	122	2.2	105.32	6.0	7.0	-	-			
	15.9	102	2.7	88.00	-	-	-	-			
	7.6	203	0.8	368.83	6.0	7.0	-	-	PD/PM 13 63M2A	23	193
	9.3	166	1.2	301.08	6.0	7.0	-	-			
	11.1	139	1.5	251.58	6.0	7.0	-	-			
	13.3	116	1.5	209.76	6.0	7.0	-	-			
	17.1	90	1.9	163.92	6.0	7.0	-	-			
	21.7	71	2.4	129.01	6.0	7.0	-	-			
	8.2	203	1.1	109.45	7.0	7.0	10.0	7.0	PD/PM 12 71M6B / 71M6A	22	192
	9.7	171	1.4	92.43	7.0	7.0	10.0	7.0			
	11.1	150	2.1	81.17	7.0	7.0	10.0	7.0			
	12.5	134	2.3	72.16	7.0	7.0	9.0	7.0			
	13.6	123	2.3	66.26	7.0	7.0	10.0	7.0			
	15.3	109	2.7	58.91	7.0	7.0	10.0	7.0			
	16.3	103	2.4	55.37	7.0	7.0	10.0	7.0			
	18.3	91	3.0	49.22	7.0	7.0	10.0	7.0			
	19.5	86	2.4	46.16	7.0	7.0	10.0	7.0			
	21.9	76	3.0	41.04	7.0	7.0	10.0	7.0			
	12.8	129	1.6	109.45	7.0	7.0	10.0	7.0	PD/PM 12 63M4B	19	192
	15.1	109	2.1	92.43	7.0	7.0	10.0	7.0			
	25.6	63	2.5	109.45	7.0	7.0	9.0	7.0	PD/PM 12 63M2A	19	192
	3.5	470	0.8	257.36	6.0	7.0	8.0	11.0	PD/PM C13 71M6B / 71M6A	28	190
	4.4	372	1.0	203.72	6.0	7.0	8.0	11.0			
	5.7	289	1.3	158.21	7.0	7.0	8.0	11.0			
	6.6	249	1.6	136.54	7.0	7.0	8.0	11.0			
	7.6	216	1.8	118.07	7.0	7.0	8.0	11.0			
	8.5	194	2.0	106.03	7.0	7.0	8.0	11.0			
	8.9	184	2.1	101.01	6.0	7.0	8.0	11.0			
	10.1	162	2.4	88.92	6.0	7.0	8.0	11.0			
11.4	144	2.7	78.83	6.0	7.0	8.0	11.0				
	3.7	440	0.8	380.81	4.0	7.0	8.0	11.0	PD/PM C13 63M4B	25	190
	4.6	348	1.1	301.44	5.0	7.0	8.0	11.0			
	5.4	297	1.2	257.36	6.0	7.0	8.0	11.0			
	6.9	235	1.6	203.72	6.0	7.0	8.0	11.0			
	8.8	183	2.0	158.21	7.0	7.0	8.0	11.0			
	10.3	158	2.3	136.54	7.0	7.0	8.0	11.0			
	11.9	136	2.7	118.07	7.0	7.0	8.0	11.0			
13.2	122	3.0	106.03	7.0	7.0	8.0	11.0				
	7.4	210	1.3	380.81	4.0	7.0	8.0	11.0	PD/PM C13 63M2A	25	190
	9.3	166	1.7	301.44	5.0	7.0	8.0	11.0			
	10.9	142	2.0	257.36	6.0	7.0	8.0	11.0			
	13.7	112	2.5	203.72	6.0	7.0	8.0	11.0			
	10.5	159	0.9	85.67	5.0	5.0	7.0	5.0	PD/PM B02 71M6B / 71M6A	16	188
	11.3	147	0.9	79.42	5.0	5.0	7.0	5.0			
	13.6	122	1.2	66.00	5.0	5.0	7.0	5.0			
	15.9	105	1.6	56.55	5.0	5.0	7.0	5.0			
	17.4	96	1.6	51.60	5.0	5.0	7.0	5.0			
	20.3	82	2.1	44.23	5.0	5.0	7.0	5.0			
	22.3	75	2.3	40.35	5.0	5.0	7.0	5.0			
	26.3	63	2.5	34.16	5.0	5.0	7.0	5.0			
	29.9	56	2.4	30.08	5.0	5.0	7.0	5.0			
	34.7	48	2.8	25.96	5.0	5.0	7.0	5.0			



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
0.18	13.5	122	1.1	103.09	5.0	5.0	7.0	5.0	PD/PM B02 63M4B	13	188
	16.3	101	1.4	85.67	5.0	5.0	7.0	5.0			
	17.6	94	1.4	79.42	5.0	5.0	7.0	5.0			
	21.2	78	1.8	66.00	5.0	5.0	7.0	5.0			
	24.8	67	2.4	56.55	5.0	5.0	7.0	5.0			
	27.1	61	2.4	51.60	5.0	5.0	7.0	5.0			
	20.1	80	1.1	139.15	5.0	5.0	7.0	5.0	PD/PM B02 63M2A	13	188
	27.2	59	1.7	103.90	5.0	5.0	7.0	5.0			
	32.7	49	2.2	85.67	5.0	5.0	7.0	5.0			
	35.3	45	2.2	79.42	5.0	5.0	7.0	5.0			
	42.4	38	2.8	66.00	5.0	5.0	7.0	5.0			
	15.2	110	1.1	59.32	5.0	5.0	5.0	8.0	PD/PM A02 71M6B / 71M6A	12	186
	18.1	92	1.1	49.62	5.0	5.0	5.0	8.0			
	21.5	78	1.1	41.88	5.0	5.0	5.0	8.0			
	23.9	70	1.5	37.71	5.0	5.0	5.0	8.0			
	25.9	64	1.7	34.80	5.0	5.0	5.0	8.0			
	28.3	59	1.7	31.83	5.0	5.0	5.0	8.0			
	30.9	54	2.1	29.11	5.0	5.0	5.0	8.0			
	36.6	46	2.7	24.57	5.0	5.0	5.0	8.0			
	40.3	41	2.8	22.34	5.0	5.0	5.0	8.0			
	47.9	35	2.9	18.77	5.0	5.0	5.0	8.0			
	60.4	28	2.9	14.91	5.0	5.0	5.0	8.0			
	23.6	70	1.6	59.32	5.0	5.0	5.0	8.0	PD/PM A02 63M4B	9	186
	28.2	58	1.7	49.62	5.0	5.0	5.0	8.0			
33.4	49	1.7	41.88	5.0	5.0	5.0	8.0				
37.1	44	2.2	37.71	5.0	5.0	5.0	8.0				
40.2	41	2.5	34.80	5.0	5.0	5.0	8.0				
44.0	38	2.5	31.83	5.0	5.0	5.0	8.0				
34.3	47	1.1	81.73	5.0	5.0	5.0	8.0	PD/PM A02 63M2A	9	186	
47.2	34	2.5	59.32	5.0	5.0	5.0	8.0				
56.4	28	2.7	49.62	5.0	5.0	5.0	8.0				
66.9	24	2.7	41.88	5.0	5.0	5.0	8.0				
0.25	0.1	16237	0.8	6601.35	92.0	73.0	-	-	PD/PM 83/32 71M6C / 71M6D	408	240
	0.2	13539	0.9	5504.36	92.0	73.0	-	-			
	0.2	10132	1.2	6601.35	-	-	-	-	PD/PM 83/32 71M4A / 71M4B	408	240
	0.3	8448	1.4	5504.36	-	-	-	-			
	0.4	5070	1.5	2061.26	57.0	58.0	-	-	PD/PM 73/22 71M6C / 71M6D	272	240
	0.5	4443	1.7	1806.13	57.0	58.0	-	-			
	0.7	3302	2.3	1342.44	16.0	26.0	81.0	80.0			
	0.9	2563	2.9	1042.00	16.0	26.0	81.0	80.0			
	0.2	8673	0.8	5651.03	-	-	-	-	PD/PM 73/22 71M4A / 71M4B	272	240
	0.3	7505	0.9	4889.70	-	-	-	-			
	0.7	3164	2.2	2061.26	-	-	-	-			
	0.8	2772	2.6	1806.13	-	-	-	-			
	0.7	3101	1.8	1260.77	16.0	27.0	57.0	60.0	PD/PM 63/22 71M6C / 71M6D	199	240
	0.8	2717	2.1	1104.71	16.0	27.0	57.0	60.0			
	1.1	2020	2.8	821.10	16.0	27.0	58.0	60.0			
	0.4	5305	1.0	3456.44	-	-	-	-	PD/PM 63/22 71M4A / 71M4B	199	240
	0.5	4203	1.1	2738.15	-	-	-	-			
	1.1	1935	2.8	1260.77	39.0	47.0	57.0	60.0			
	0.7	3330	0.9	1333.49	25.0	32.0	40.0	40.0	PD/PM 52/12 71M6C / 71M6D	109	238
	0.8	2733	1.2	1094.40	31.0	32.0	44.0	40.0			
1.0	2151	1.5	861.34	31.0	32.0	44.0	40.0				
1.3	1721	1.8	689.07	31.0	32.0	44.0	40.0				
1.6	1372	2.3	549.54	31.0	32.0	-	-				
2.0	1119	2.8	448.15	31.0	32.0	-	-				
0.6	3476	0.9	2215.83	-	-	-	-	PD/PM 52/12 71M4A / 71M4B	109	238	
0.8	2828	1.1	1802.82	-	-	-	-				
1.0	2092	1.4	1333.49	25.0	32.0	40.0	40.0				
1.3	1717	1.7	1094.40	31.0	32.0	44.0	40.0				
1.6	1351	2.2	861.34	31.0	32.0	44.0	40.0				
2.0	1081	2.8	689.07	31.0	32.0	44.0	40.0				

P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
0.25	1.0	2048	1.1	2769.78	25.0	32.0	-	-	PD/PM 52/12 63M2B	106	238
	1.3	1638	1.4	2215.83	25.0	32.0	-	-			
	1.6	1333	1.7	1802.82	25.0	32.0	-	-			
	2.6	809	2.8	1094.40	31.0	32.0	44.0	40.0			
	1.0	2184	0.9	874.48	20.0	22.0	30.0	30.0	PD/PM 42/12 71M6C / 71M6D	73	238
	1.3	1747	1.1	699.58	21.0	22.0	30.0	30.0			
	1.6	1393	1.4	557.93	21.0	22.0	30.0	30.0			
	2.2	1023	1.8	409.62	22.0	22.0	31.0	30.0			
	2.6	852	2.2	341.25	20.0	22.0	31.0	30.0			
	3.0	754	2.5	302.14	20.0	22.0	31.0	30.0			
	1.0	2108	0.9	1343.79	17.0	22.0	27.0	30.0	PD/PM 42/12 71M4A / 71M4B	73	238
	1.3	1743	1.0	1111.10	19.0	22.0	28.0	30.0			
	1.6	1372	1.3	874.48	20.0	22.0	30.0	30.0			
	2.0	1098	1.6	699.58	21.0	22.0	30.0	30.0			
	2.5	875	2.1	557.93	21.0	22.0	30.0	30.0			
	3.4	643	2.8	409.62	22.0	22.0	31.0	30.0			
	1.2	1663	0.8	2249.64	17.0	22.0	-	-	PD/PM 42/12 63M2B	70	238
	1.5	1353	1.0	1830.33	17.0	22.0	-	-			
	2.1	994	1.4	1343.79	17.0	22.0	27.0	30.0			
	2.5	822	1.7	1111.10	19.0	22.0	28.0	30.0			
	3.2	647	2.1	874.48	20.0	22.0	30.0	30.0			
	4.0	517	2.6	699.58	21.0	22.0	30.0	30.0			
	1.2	1983	0.8	782.28	20.0	22.0	29.0	30.0	PD/PM 43 71M6C / 71M6D	78	205
	1.4	1657	0.8	653.66	21.0	22.0	30.0	30.0			
	1.7	1351	1.6	532.76	21.0	22.0	30.0	30.0			
	2.0	1129	1.6	445.16	22.0	22.0	30.0	30.0			
	2.3	992	2.1	391.14	16.0	22.0	30.0	30.0			
	2.8	829	2.4	326.83	16.0	22.0	31.0	30.0			
	3.3	691	2.4	272.49	16.0	22.0	31.0	30.0			
	1.2	1811	0.9	1129.42	17.0	22.0	27.0	30.0	PD/PM 43 71M4A / 71M4B	78	205
	1.8	1254	1.2	782.28	20.0	22.0	29.0	30.0			
	2.1	1048	1.2	653.66	21.0	22.0	30.0	30.0			
	2.6	854	2.3	532.76	21.0	22.0	30.0	30.0			
	3.1	714	2.3	445.16	22.0	22.0	30.0	30.0			
	2.0	1152	0.8	461.30	13.0	15.0	21.0	20.0	PD/PM 32/12 71M6C / 71M6D	58	238
	2.5	894	1.1	358.19	15.0	15.0	22.0	20.0			
	3.3	675	1.4	270.47	13.0	15.0	-	-			
	4.1	543	1.7	217.44	13.0	15.0	-	-			
	5.0	449	2.1	179.71	13.0	15.0	-	-			
	6.4	353	2.7	141.42	13.0	15.0	-	-			
	2.0	1074	0.8	684.80	-	-	-	-	PD/PM 32/12 71M4A / 71M4B	58	238
	2.7	817	1.1	521.00	-	-	-	-			
	3.0	724	1.2	461.30	13.0	15.0	21.0	20.0			
	3.9	562	1.6	358.19	15.0	15.0	22.0	20.0			
	5.2	424	2.1	270.47	-	-	-	-			
	6.4	341	2.6	217.44	-	-	-	-			
	2.6	790	0.9	1068.11	13.0	15.0	21.0	20.0	PD/PM 32/12 63M2B	55	238
	3.3	630	1.1	851.83	13.0	15.0	-	-			
	4.1	506	1.4	684.80	13.0	15.0	-	-			
	5.4	385	1.8	521.00	13.0	15.0	-	-			
	6.1	341	2.0	461.30	13.0	15.0	21.0	20.0			
	7.8	265	2.6	358.19	15.0	15.0	22.0	20.0			
	2.2	1036	0.8	408.52	15.0	15.0	22.0	20.0	PD/PM 33 71M6C / 71M6D	56	201
	3.1	728	1.4	287.08	16.0	15.0	23.0	20.0			
	3.9	585	1.8	230.79	16.0	15.0	23.0	20.0			
	4.7	484	1.9	190.74	16.0	15.0	23.0	20.0			
	5.6	409	2.0	161.38	15.0	15.0	-	-			
	7.1	322	2.5	127.01	15.0	15.0	-	-			
	8.7	263	2.9	103.92	15.0	15.0	-	-			
	10.1	227	2.9	89.45	15.0	15.0	-	-			



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3				
0.25	1.7	1296	0.8	808.52	13.0	15.0	21.0	20.0	PD/PM 33 71M4A / 71M4B	56	201		
	1.9	1165	0.8	726.57	12.0	15.0	20.0	20.0					
	2.4	936	1.1	584.11	14.0	15.0	21.0	20.0					
	2.9	774	1.1	482.75	15.0	15.0	22.0	20.0					
	3.4	655	1.2	408.42	15.0	15.0	22.0	20.0					
	4.9	460	2.0	287.08	16.0	15.0	23.0	20.0					
	6.1	370	2.7	230.79	16.0	15.0	23.0	20.0					
	7.3	306	2.8	190.74	16.0	15.0	23.0	20.0					
	8.7	259	3.0	161.38	-	-	-	-					
	2.7	784	0.8	1022.54	13.0	15.0	-	-	PD/PM 33 63M2B	53	201		
	3.0	704	0.9	918.90	13.0	15.0	-	-					
	3.5	620	1.3	808.52	13.0	15.0	21.0	20.0					
	3.9	557	1.3	726.57	12.0	15.0	20.0	20.0					
	4.8	448	1.7	584.11	14.0	15.0	21.0	20.0					
	5.8	370	1.8	482.75	15.0	15.0	22.0	20.0					
	6.9	313	1.9	408.52	16.0	15.0	22.0	20.0					
	8.0	289	2.8	112.23	5.0	12.0	23.0	20.0	PD/PM 32 71M6C / 71M6D	48	200		
	5.1	438	1.2	175.52	7.0	12.0	12.0	15.0	PD/PM 22/02 71M6C / 71M6D	41	238		
	4.2	541	1.0	216.66	7.0	12.0	-	-					
	5.1	719	0.8	288.06	7.0	12.0	-	-					
	3.3	665	0.8	424.03	7.0	12.0	12.0	15.0	PD/PM 22/02 71M4A / 71M4B	41	238		
	3.9	559	0.9	356.48	-	-	-	-					
	4.9	452	1.2	288.06	7.0	12.0	12.0	15.0					
	6.5	340	1.5	216.66	-	-	-	-					
	8.0	275	1.9	175.52	7.0	12.0	12.0	15.0					
	4.2	490	0.8	662.62	7.0	12.0	-	-	PD/PM 22/02 63M2B	38	238		
	5.4	380	1.0	514.10	7.0	12.0	-	-					
	6.6	314	1.3	424.03	7.0	12.0	-	-					
	7.9	264	1.5	356.48	7.0	12.0	-	-					
	9.7	213	1.9	288.06	7.0	12.0	12.0	15.0					
	12.9	160	2.5	216.66	7.0	12.0	-	-					
	16.0	130	3.0	175.52	7.0	12.0	12.0	15.0					
	3.3	701	0.8	276.32	9.0	12.0	13.0	15.0	PD/PM 23 71M6C / 71M6D	40	197		
	3.8	598	0.8	235.73	9.0	12.0	13.0	15.0					
	4.9	469	1.2	185.19	10.0	12.0	14.0	15.0					
	6.0	380	1.4	150.03	8.0	12.0	-	-					
	6.8	334	1.6	131.68	8.0	12.0	-	-					
	7.7	295	1.9	116.40	8.0	12.0	-	-					
	9.1	249	2.4	98.40	8.0	12.0	-	-					
	10.9	209	2.8	82.29	8.0	12.0	-	-					
	3.6	627	0.8	390.87	7.0	12.0	12.0	15.0				PD/PM 23 71M4A / 71M4B	40
	4.2	530	1.1	330.43	8.0	12.0	13.0	15.0					
	5.1	443	1.2	276.32	9.0	12.0	13.0	15.0					
	5.9	378	1.3	235.73	9.0	12.0	13.0	15.0					
	7.6	297	1.8	185.19	10.0	12.0	14.0	15.0					
	9.3	241	2.2	150.03	-	-	-	-					
	10.6	211	2.5	131.68	-	-	-	-					
12.0	187	2.8	116.40	8.0	12.0	12.0	15.0						
4.5	477	0.8	622.96	7.0	12.0	-	-	PD/PM 23 63M2B	37	197			
5.8	370	1.1	482.49	7.0	12.0	12.0	15.0						
7.2	300	1.3	390.87	7.0	12.0	12.0	15.0						
8.5	253	1.7	330.43	8.0	12.0	13.0	15.0						
10.1	212	2.0	276.32	9.0	12.0	13.0	15.0						
11.9	181	2.0	235.73	9.0	12.0	13.0	15.0						
15.1	142	2.8	185.19	10.0	12.0	14.0	15.0						
7.1	328	1.2	127.46	10.0	12.0	14.0	15.0	PD/PM 22 71M6C / 71M6D	33	196			
8.6	268	1.6	104.07	9.0	12.0	14.0	15.0						
8.9	260	1.8	100.98	10.0	12.0	14.0	15.0						
10.9	212	2.4	82.45	6.0	7.0	14.0	15.0						
12.9	179	2.6	69.70	6.0	7.0	14.0	15.0						
11.0	209	1.8	127.46	10.0	12.0	14.0	15.0	PD/PM 22 71M4A / 71M4B	33	196			
13.5	170	2.3	104.07	9.0	12.0	13.0	15.0						
13.9	165	2.7	100.98	10.0	12.0	13.0	15.0						
6.1	360	0.8	229.52	6.0	7.0	9.0	7.0	PD/PM 12/02 71M4A / 71M4B	30	238			



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm	
0.25	8.5 9.9 12.2	243 210 170	0.9 1.0 1.3	328.02 284.03 229.52	6.0 6.0 6.0	7.0 7.0 7.0	9.0 9.0 9.0	7.0 7.0 7.0	PD/PM 12/02 63M2B	27	238	
	8.5 10.2	267 223	1.1 1.3	105.32 88.00	6.0 6.0	7.0 7.0	- -	- -	PD/PM 13 71M6C / 71M6D	26	193	
	8.5 10.9 13.3 15.9	263 207 169 141	0.9 1.1 1.6 1.9	163.92 129.01 105.32 88.00	6.0 - - -	7.0 - - -	- - - -	- - - -	PD/PM 13 71M4A / 71M4B	26	193	
	9.3 11.1 13.3 17.1 21.7 26.6	231 193 161 126 99 81	0.9 1.1 1.1 1.4 1.7 2.5	301.08 251.58 209.76 163.92 129.01 105.32	6.0 6.0 6.0 6.0 6.0 6.0	7.0 7.0 7.0 7.0 7.0 7.0	- - - - - -	- - - - - -	PD/PM 13 63M2B	23	193	
	8.2 9.7 11.1 12.5 13.6 15.3 16.3 18.3 19.5 21.9 28.1	282 238 209 186 171 152 143 127 119 106 83	0.8 1.0 1.5 1.7 1.7 2.0 1.7 2.2 1.7 2.2 2.9	109.45 92.43 81.17 72.16 66.26 58.91 55.37 49.22 46.16 41.04 32.07	7.0 7.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 7.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	- 9.0 9.0 9.0 9.0 10.0 10.0 10.0 10.0 10.0 10.0	- 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	PD/PM 12 71M6C / 71M6D	22	192	
	12.8 15.1 17.2 19.4 21.1 23.8 25.3 30.3	179 151 133 118 108 96 91 76	1.2 1.5 2.2 2.5 2.5 2.9 2.6 2.6	109.45 92.43 81.17 72.16 66.26 58.91 55.37 46.16	7.0 7.0 6.0 6.0 6.0 6.0 6.0 6.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	9.0 9.0 10.0 9.0 10.0 10.0 10.0 10.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	PD/PM 12 71M4A / 71M4B	22	192	
	25.6 30.3	87 73	1.8 2.4	109.45 92.43	7.0 7.0	7.0 7.0	9.0 9.0	7.0 7.0	PD/PM 12 63M2B	19	192	
	4.4 5.7 6.6 7.6 8.5 8.9 10.1 11.4 13.2 15.0 16.9	516 401 346 299 269 256 225 200 173 152 135	0.8 1.0 1.1 1.3 1.4 1.5 1.7 1.9 2.2 2.6 2.8	203.72 158.21 136.54 118.07 106.03 101.01 88.92 78.83 68.27 60.09 53.28	6.0 6.0 7.0 7.0 7.0 7.0 7.0 7.0 6.0 6.0 6.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 71M6C / 71M6D	28	190	
	4.6 5.4 6.9 8.8 10.3 11.9 13.2 13.9 15.7 17.8	483 413 327 254 219 189 170 162 143 126	0.8 0.9 1.1 1.5 1.7 2.0 2.2 2.3 2.6 2.9	301.44 257.36 203.72 158.21 136.54 118.07 106.03 101.01 88.92 78.83	5.0 5.0 6.0 6.0 7.0 7.0 7.0 7.0 7.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 71M4A / 71M4B	28	190	
	7.4 9.3 10.9 13.7 17.7 20.5	292 231 197 156 121 105	1.0 1.2 1.4 1.8 2.3 2.7	380.81 301.44 257.36 203.72 158.21 136.54	5.0 5.0 5.0 6.0 6.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 63M2B	25	190	



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
0.25	13.6	170	0.9	66.00	5.0	5.0	7.0	5.0	PD/PM B02 71M6C / 71M6D	16	188			
	15.9	146	1.2	56.55	5.0	5.0	7.0	5.0						
	17.4	133	1.2	51.60	5.0	5.0	7.0	5.0						
	20.3	114	1.5	44.23	5.0	5.0	7.0	5.0						
	22.3	104	1.7	40.35	5.0	5.0	7.0	5.0						
	26.3	88	1.8	34.16	5.0	5.0	7.0	5.0						
	29.9	77	1.7	30.08	4.0	5.0	7.0	5.0						
	34.7	67	2.0	25.96	4.0	5.0	7.0	5.0						
	39.7	58	2.3	22.68	5.0	5.0	7.0	5.0						
	41.7	56	2.6	21.58	5.0	5.0	7.0	5.0						
	45.1	51	2.6	19.94	5.0	5.0	7.0	5.0						
	51.1	45	3.0	17.62	5.0	5.0	7.0	5.0						
	13.5	170	0.8	103.90	5.0	5.0	7.0	5.0				PD/PM B02 71M4A / 71M4B	16	188
	16.3	140	1.0	85.67	5.0	5.0	7.0	5.0						
	17.6	130	1.0	79.42	5.0	5.0	7.0	5.0						
	21.2	108	1.3	66.00	5.0	5.0	7.0	5.0						
	24.8	93	1.7	56.55	5.0	5.0	7.0	5.0						
	27.1	84	1.7	51.60	5.0	5.0	7.0	5.0						
	31.7	72	2.3	44.23	5.0	5.0	7.0	5.0						
	34.7	66	2.5	40.35	5.0	5.0	7.0	5.0						
	41.0	56	2.7	34.16	5.0	5.0	7.0	5.0						
	46.5	49	2.6	30.08	4.0	5.0	7.0	5.0						
	56.9	43	3.0	25.96	4.0	5.0	7.0	5.0						
	20.1	110	0.8	139.15	5.0	5.0	7.0	5.0	PD/PM B02 63M2B	13	188			
	27.2	82	1.2	103.09	5.0	5.0	7.0	5.0						
	32.7	68	1.6	85.67	5.0	5.0	7.0	5.0						
	35.3	63	1.6	79.42	5.0	5.0	7.0	5.0						
	42.4	52	2.0	66.00	5.0	5.0	7.0	5.0						
	49.5	45	2.7	56.55	5.0	5.0	7.0	5.0						
	54.3	41	2.7	51.60	5.0	5.0	7.0	5.0						
	15.2	153	0.8	59.32	5.0	5.0	5.0	8.0	PD/PM A02 71M6C / 71M6D	12	186			
	18.1	128	0.8	49.62	5.0	5.0	5.0	8.0						
	21.5	108	0.8	41.88	5.0	5.0	5.0	8.0						
	23.9	97	1.1	37.71	5.0	5.0	5.0	8.0						
	25.9	90	1.2	34.80	5.0	5.0	5.0	8.0						
	28.3	82	1.2	31.83	4.0	5.0	5.0	8.0						
	30.9	75	1.5	29.11	4.0	5.0	5.0	8.0						
	36.6	63	1.9	24.57	4.0	5.0	5.0	8.0						
	40.3	57	2.0	22.34	4.0	5.0	5.0	8.0						
	47.9	48	2.1	18.77	5.0	5.0	5.0	8.0						
	54.4	43	2.5	16.54	5.0	5.0	5.0	8.0						
	60.4	38	2.1	14.91	5.0	5.0	5.0	8.0						
	23.6	97	1.1	59.32	5.0	5.0	5.0	8.0	PD/PM A02 71M4A / 71M4B	12	186			
	28.2	81	1.2	49.62	5.0	5.0	5.0	8.0						
	33.4	69	1.2	41.88	5.0	5.0	5.0	8.0						
	37.1	62	1.6	37.71	5.0	5.0	5.0	8.0						
	40.2	57	1.8	34.80	5.0	5.0	5.0	8.0						
	44.0	52	1.8	31.83	4.0	5.0	5.0	8.0						
48.1	48	2.3	29.11	4.0	5.0	5.0	8.0							
57.0	40	2.9	24.57	4.0	5.0	5.0	8.0							
62.7	37	3.0	22.34	4.0	5.0	5.0	8.0							
34.3	65	0.8	81.73	5.0	5.0	5.0	8.0	PD/PM A02 63M2B	9	186				
47.2	47	1.8	59.32	5.0	5.0	5.0	8.0							
56.4	39	1.9	49.62	5.0	5.0	5.0	8.0							
66.9	33	1.9	41.88	5.0	5.0	5.0	8.0							
74.3	30	2.5	37.71	5.0	5.0	5.0	8.0							
80.5	28	2.8	34.80	5.0	5.0	5.0	8.0							
88.0	25	2.9	31.83	4.0	5.0	5.0	8.0							
0.37	0.2	15300	0.8	4202.93	92.0	73.0	-	-	PD/PM 83/32 80M6A	410	240			
	0.3	12811	1.0	3519.07	92.0	73.0	-	-						
	0.3	10907	1.2	2996.11	92.0	73.0	-	-						
	0.4	8768	1.4	2408.64	92.0	73.0	-	-						
	0.5	6162	2.1	1692.65	92.0	73.0	-	-						
	0.7	4962	2.6	1362.94	92.0	73.0	100.0	100.0						
	0.2	14995	0.8	6601.35	-	-	-	-	PD/PM 83/32 71M4B / 71M4C	408	240			
	0.3	12503	1.0	5504.36	-	-	-	-						
	0.4	6971	1.3	6601.35	92.0	73.0	-	-	PD/PM 83/32 71M2A	408	240			
0.5	5813	1.6	5504.36	92.0	73.0	-	-							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.37	0.3	9574	0.8	2629.95	57.0	58.0	-	-	PD/PM 73/22 80M6A	274	240
	0.4	7504	1.0	2061.26	57.0	58.0	-	-			
	0.5	6575	1.1	1806.13	57.0	58.0	-	-			
	0.7	4887	1.5	1342.44	57.0	58.0	81.0	80.0			
	0.9	3793	2.0	1042.00	57.0	58.0	81.0	80.0			
	1.0	3394	2.2	932.25	57.0	58.0	81.0	80.0			
	1.3	2586	2.9	710.29	57.0	58.0	82.0	80.0			
	0.7	4682	1.5	2061.26	-	-	-	-	PD/PM 73/22 71M4B / 71M4C	272	240
	0.8	4103	1.7	1806.13	-	-	-	-			
	1.0	3049	2.3	1342.44	57.0	58.0	81.0	80.0			
	1.3	2367	3.0	1042.00	57.0	58.0	81.0	80.0			
	0.5	5968	0.9	5651.03	57.0	58.0	-	-	PD/PM 73/22 71M2A	272	240
	0.6	5164	1.0	4889.70	57.0	58.0	-	-			
	1.4	2177	2.5	2061.26	57.0	58.0	-	-			
	1.6	1907	2.8	1806.13	57.0	58.0	-	-			
	0.5	6768	0.8	1859.06	39.0	47.0	-	-	PD/PM 63/22 80M6A	201	240
	0.7	4590	1.2	1260.77	39.0	47.0	57.0	60.0			
	0.8	4022	1.4	1104.71	40.0	47.0	57.0	60.0			
	1.1	2989	1.9	821.10	41.0	47.0	58.0	60.0			
	1.4	2320	2.4	637.34	16.0	27.0	58.0	60.0			
	1.6	2076	2.7	570.21	16.0	27.0	58.0	60.0			
	0.5	6220	0.8	2738.15	-	-	-	-	PD/PM 63/22 71M4B / 71M4C	199	240
	1.1	2864	1.9	1260.77	39.0	47.0	57.0	60.0			
	1.3	2509	2.2	1104.71	40.0	47.0	57.0	60.0			
	1.7	1865	2.9	821.10	41.0	47.0	58.0	60.0			
	0.7	4393	0.8	4160.29	39.0	47.0	-	-	PD/PM 63/22 71M2A	199	240
	0.8	3650	1.1	3456.44	39.0	47.0	-	-			
	1.0	2892	1.3	2738.15	39.0	47.0	-	-			
	0.8	4045	0.8	1094.40	28.0	32.0	40.0	40.0	PD/PM 52/12 80M6A	111	238
	1.0	3183	1.0	861.34	31.0	32.0	-	-			
	1.3	2547	1.2	689.07	31.0	32.0	-	-			
	1.6	2031	1.6	549.54	25.0	32.0	-	-			
	2.0	1656	1.9	448.15	25.0	32.0	-	-			
	2.7	1251	2.5	338.40	25.0	32.0	-	-			
	1.0	3096	1.0	1333.49	25.0	32.0	40.0	40.0	PD/PM 52/12 71M4B / 71M4C	109	238
	1.3	2541	1.2	1094.40	28.0	32.0	42.0	40.0			
	1.6	2000	1.5	861.34	31.0	32.0	44.0	40.0			
	2.0	1600	1.9	689.07	31.0	32.0	44.0	40.0			
	2.5	1276	2.4	549.54	-	-	-	-			
	3.1	1041	2.9	448.15	-	-	-	-			
	1.0	3031	0.8	2769.78	25.0	32.0	-	-	PD/PM 52/12 71M2A	109	238
	1.3	2425	0.9	2215.83	25.0	32.0	-	-			
	1.6	1973	1.2	1802.82	25.0	32.0	-	-			
	2.1	1459	1.6	1333.49	25.0	32.0	40.0	40.0			
	2.6	1198	1.9	1094.40	28.0	32.0	42.0	40.0			
	3.3	943	2.4	861.34	31.0	32.0	44.0	40.0			
	1.0	3514	0.8	936.55	21.0	32.0	39.0	40.0	PD/PM 53 80M6A	120	209
	1.3	2625	1.3	699.67	21.0	32.0	42.0	40.0			
1.6	2141	1.4	570.63	21.0	32.0	43.0	40.0				
1.7	1969	1.7	524.75	21.0	32.0	43.0	40.0				
2.1	1606	2.1	427.97	21.0	32.0	44.0	40.0				
2.5	1357	2.2	361.64	21.0	32.0	44.0	40.0				
2.7	1244	2.7	331.54	21.0	32.0	44.0	40.0				
3.3	1015	2.8	270.40	21.0	32.0	44.0	40.0				
1.6	2062	0.9	557.93	17.0	22.0	28.0	30.0	PD/PM 42/12 80M6A	75	238	
2.2	1514	1.2	409.62	22.0	22.0	-	-				
2.6	1261	1.5	341.25	22.0	22.0	-	-				
3.0	1117	1.7	302.14	22.0	22.0	-	-				
3.8	867	2.2	234.61	20.0	22.0	-	-				
5.1	655	2.9	177.15	20.0	22.0	-	-				
1.6	2031	0.9	874.48	17.0	22.0	27.0	30.0	PD/PM 42/12 71M4B / 71M4C	73	238	
2.0	1624	1.1	699.58	21.0	22.0	30.0	30.0				
2.5	1296	1.4	557.93	17.0	22.0	28.0	30.0				
3.4	951	1.9	409.62	22.0	22.0	31.0	30.0				
4.1	792	2.3	341.25	22.0	22.0	31.0	30.0				
4.6	702	2.6	302.14	22.0	22.0	31.0	30.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.37	2.1	1471	0.9	1343.79	17.0	22.0	27.0	30.0	PD/PM 42/12 71M2A	73	238
	2.5	1216	1.1	1111.10	17.0	22.0	28.0	30.0			
	3.2	957	1.4	874.48	17.0	22.0	27.0	30.0			
	4.0	766	1.8	699.58	21.0	22.0	30.0	30.0			
	5.0	611	2.2	557.93	17.0	22.0	28.0	30.0			
	1.7	1999	1.1	532.76	20.0	22.0	29.0	30.0	PD/PM 43 80M6A	80	205
	2.0	1670	1.0	445.16	21.0	22.0	30.0	30.0			
	2.2	1548	1.3	412.63	21.0	22.0	29.0	30.0			
	2.3	1468	1.4	391.14	21.0	22.0	30.0	30.0			
	2.6	1294	1.3	344.78	22.0	22.0	29.0	30.0			
	2.8	1226	1.6	326.83	21.0	22.0	30.0	30.0			
	3.0	1137	1.9	302.94	22.0	22.0	30.0	30.0			
	3.3	1022	1.6	272.49	22.0	22.0	30.0	30.0			
	3.6	950	2.2	253.13	20.0	22.0	30.0	30.0			
	4.3	792	2.2	211.05	20.0	22.0	30.0	30.0			
	4.7	719	2.9	191.52	20.0	22.0	31.0	30.0			
	5.6	600	2.9	160.03	20.0	22.0	31.0	30.0			
	1.8	1856	0.8	782.28	20.0	22.0	29.0	30.0	PD/PM 43 71M4B / 71M4C	78	205
	2.1	1551	0.8	653.66	21.0	22.0	30.0	30.0			
	2.6	1264	1.6	532.76	20.0	22.0	29.0	30.0			
	3.1	1056	1.6	445.16	21.0	22.0	30.0	30.0			
	3.6	928	2.2	391.14	21.0	22.0	30.0	30.0			
	4.3	775	2.4	326.83	21.0	22.0	30.0	30.0			
	5.1	646	2.4	272.49	22.0	22.0	30.0	30.0			
	2.5	1281	0.9	1129.42	20.0	22.0	27.0	30.0	PD/PM 43 71M2A	78	205
	3.6	887	1.3	782.28	20.0	22.0	29.0	30.0			
	4.3	741	1.3	653.66	21.0	22.0	30.0	30.0			
	5.3	604	2.5	532.76	20.0	22.0	29.0	30.0			
	6.3	505	2.5	445.16	21.0	22.0	30.0	30.0			
	3.3	1000	0.9	270.47	13.0	15.0	-	-	PD/PM 32/12 80M6A	60	238
	4.1	804	1.2	217.44	13.0	15.0	-	-			
	5.0	664	1.4	179.71	13.0	15.0	-	-			
	6.4	523	1.8	141.42	13.0	15.0	-	-			
	7.9	421	2.2	114.01	13.0	15.0	-	-			
	10.3	324	2.9	87.71	13.0	15.0	-	-			
	3.0	1071	0.8	461.30	13.0	15.0	21.0	20.0	PD/PM 32/12 71M4B / 71M4C	58	238
	3.9	832	1.1	358.19	15.0	15.0	22.0	20.0			
	5.2	628	1.4	270.47	-	-	-	-			
	6.4	505	1.8	217.44	-	-	-	-			
	7.8	417	2.2	179.71	-	-	-	-			
	9.9	328	2.7	141.42	13.0	15.0	21.0	20.0			
	4.1	749	0.9	684.80	13.0	15.0	-	-	PD/PM 32/12 71M2A	58	238
	5.4	570	1.2	521.00	13.0	15.0	-	-			
	6.1	505	1.4	461.30	13.0	15.0	21.0	20.0			
	7.8	392	1.7	358.19	15.0	15.0	22.0	20.0			
	10.4	296	2.3	270.47	13.0	15.0	-	-			
	12.9	238	2.9	217.44	13.0	15.0	-	-			
	3.1	1077	0.9	287.08	15.0	15.0	22.0	20.0	PD/PM 33 80M6A	58	201
3.9	866	1.2	230.79	16.0	15.0	22.0	20.0				
4.7	716	1.3	190.74	16.0	15.0	23.0	20.0				
5.6	606	1.4	161.38	13.0	15.0	-	-				
7.1	477	1.7	127.01	13.0	15.0	-	-				
8.7	390	2.0	103.92	13.0	15.0	-	-				
10.1	336	1.9	89.45	13.0	15.0	-	-				
2.9	1145	0.8	482.75	15.0	15.0	22.0	20.0	PD/PM 33 71M4B / 71M4C	56	201	
3.4	969	0.8	408.42	15.0	15.0	22.0	20.0				
4.9	681	1.4	287.08	15.0	15.0	22.0	20.0				
6.1	548	1.8	230.79	16.0	15.0	22.0	20.0				
7.3	453	1.9	190.74	16.0	15.0	23.0	20.0				
8.7	383	2.1	161.38	-	-	-	-				
11.0	301	2.6	127.01	-	-	-	-				
13.5	247	3.0	103.92	-	-	-	-				
15.7	212	2.9	89.45	-	-	-	-				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.37	3.5	917	0.9	808.52	15.0	15.0	21.0	20.0	PD/PM 33 71M2A	56	201
	3.9	824	0.9	726.57	15.0	15.0	20.0	20.0			
	4.8	662	1.1	584.11	15.0	15.0	21.0	20.0			
	5.8	547	1.2	482.75	15.0	15.0	22.0	20.0			
	6.9	463	1.3	408.52	15.0	15.0	22.0	20.0			
	9.8	326	2.2	287.08	15.0	15.0	22.0	20.0			
	12.1	262	2.9	230.79	16.0	15.0	22.0	20.0			
	14.7	216	3.0	190.74	16.0	15.0	23.0	20.0			
	8.0	428	1.9	112.23	15.0	15.0	23.0	20.0	PD/PM 32 80M6A	50	200
	8.9	384	2.2	100.85	5.0	12.0	23.0	20.0			
	10.1	338	2.9	88.74	5.0	12.0	22.0	20.0			
	11.3	304	2.9	79.75	5.0	12.0	23.0	20.0			
	12.8	269	2.2	70.52	5.0	12.0	-	-			
	12.5	272	2.8	112.23	15.0	15.0	23.0	20.0	PD/PM 32 71M4B / 71M4C	48	200
	5.1	649	0.8	175.52	7.0	12.0	-	-	PD/PM 22/02 80M6A	43	238
	4.9	669	0.8	288.06	7.0	12.0	12.0	15.0	PD/PM 22/02 71M4B / 71M4C	41	238
	6.5	503	1.0	216.66	-	-	-	-			
	8.0	408	1.3	175.52	7.0	12.0	12.0	15.0			
	6.6	464	0.9	424.03	7.0	12.0	-	-	PD/PM 22/02 71M2A	41	238
	7.9	390	1.0	356.48	7.0	12.0	-	-			
	9.7	315	1.3	288.06	7.0	12.0	-	-			
	12.9	237	1.7	216.66	7.0	12.0	-	-			
	16.0	192	2.1	175.52	7.0	12.0	12.0	15.0			
	4.9	695	0.8	185.19	10.0	12.0	14.0	15.0	PD/PM 23 80M6A	42	197
	6.0	563	1.0	150.03	8.0	12.0	-	-			
	6.8	494	1.1	131.68	8.0	12.0	-	-			
	7.7	437	1.3	116.40	8.0	12.0	12.0	15.0			
	9.1	369	1.6	98.40	5.0	12.0	-	-			
	10.9	309	1.9	82.29	7.0	12.0	-	-			
	5.1	656	0.8	276.32	6.0	12.0	11.0	15.0	PD/PM 23 71M4B / 71M4C	40	197
	5.9	559	0.8	235.73	7.0	12.0	12.0	15.0			
	7.6	439	1.2	185.19	10.0	12.0	14.0	15.0			
	9.3	356	1.5	150.03	-	-	-	-			
	10.6	312	1.7	131.68	-	-	-	-			
	12.0	276	1.9	116.40	8.0	12.0	12.0	15.0			
	14.2	233	2.4	98.40	5.0	12.0	11.0	15.0			
	17.0	195	2.9	82.29	-	-	-	-			
	7.2	443	0.9	390.87	6.0	12.0	12.0	15.0	PD/PM 23 71M2A	40	197
	8.5	375	1.1	330.43	6.0	12.0	13.0	15.0			
	10.1	313	1.3	276.32	6.0	12.0	11.0	15.0			
	11.9	267	1.3	235.73	7.0	12.0	12.0	15.0			
	15.1	210	1.9	185.19	10.0	12.0	14.0	15.0			
	18.7	170	2.3	150.03	8.0	12.0	-	-			
	21.3	149	2.7	131.68	8.0	12.0	-	-			
	24.1	132	3.0	116.40	8.0	12.0	12.0	15.0			
	7.1	486	0.8	127.46	9.0	12.0	14.0	15.0	PD/PM 22 80M6A	35	196
	8.6	396	1.1	104.07	9.0	12.0	13.0	15.0			
	8.9	385	1.2	100.98	10.0	12.0	14.0	15.0			
10.9	314	1.6	82.45	10.0	12.0	14.0	15.0				
12.9	266	1.8	69.70	10.0	12.0	14.0	15.0				
14.1	243	2.2	63.86	10.0	12.0	14.0	15.0				
16.7	206	2.6	53.98	10.0	12.0	14.0	15.0				
17.4	197	2.8	51.73	10.0	12.0	-	-				
19.9	172	2.7	45.14	10.0	12.0	14.0	15.0				
11.0	309	1.2	127.46	9.0	12.0	14.0	15.0	PD/PM 22 71M4B / 71M4C	33	196	
13.5	252	1.6	104.07	9.0	12.0	13.0	15.0				
13.9	245	1.8	100.98	10.0	12.0	14.0	15.0				
17.0	200	2.4	82.45	10.0	12.0	14.0	15.0				
20.1	169	2.6	69.70	10.0	12.0	14.0	15.0				
22.0	150	1.9	127.46	9.0	12.0	13.0	15.0	PD/PM 22 71M2A	33	196	
26.9	122	2.5	104.07	9.0	12.0	13.0	15.0				
27.7	119	2.8	100.98	10.0	12.0	13.0	15.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.37	12.2	251	0.9	229.52	6.0	7.0	-	-	PD/PM 12/02 71M2A	30	238
	13.3 15.9	250 209	1.1 1.3	105.32 88.00	6.0 -	7.0 -	- -	- -	PD/PM 13 71M4B / 71M4C	26	193
	13.3 17.1 21.7 26.6 31.8	238 186 146 119 100	0.8 0.9 1.2 1.7 2.1	209.76 163.92 129.01 105.32 88.00	6.0 6.0 6.0 6.0 6.0	7.0 7.0 7.0 7.0 7.0	- - - - -	- - - - -	PD/PM 13 71M2A	26	193
	12.5 15.3 18.3 21.9 28.1 31.7 35.7	275 224 187 156 122 108 96	1.1 1.3 1.5 1.5 2.0 2.2 2.5	72.16 58.91 49.22 41.04 32.07 28.35 25.24	6.0 6.0 5.0 5.0 5.0 7.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0	9.0 10.0 10.0 10.0 10.0 10.0 10.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0	PD/PM 12 80M6A	24	192
	12.8 15.1 17.2 19.4 21.1 23.8 25.3 28.4 30.3 34.1 43.7	265 224 197 175 161 143 134 119 112 99 78	0.8 1.0 1.5 1.7 1.7 2.0 1.8 2.2 1.8 2.2 3.0	109.45 92.43 81.17 72.16 66.26 58.91 55.37 49.22 46.16 41.04 32.07	7.0 6.0 6.0 6.0 6.0 6.0 6.0 5.0 5.0 5.0 5.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	9.0 9.0 9.0 9.0 9.0 10.0 10.0 10.0 10.0 10.0 10.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	PD/PM 12 71M4B / 71M4C	22	192
	25.6 30.3 34.5 38.8 42.3 50.6 60.7	129 109 95 85 78 65 54	1.2 1.6 2.4 2.7 2.6 2.7 2.7	109.45 92.43 81.17 72.16 66.26 55.37 46.16	7.0 6.0 6.0 6.0 6.0 6.0 5.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0	9.0 9.0 9.0 9.0 9.0 10.0 10.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0	PD/PM 12 71M2A	22	192
	6.6 7.6 8.5 8.9 10.1 11.4 13.2 15.0 16.9 20.3 23.2 25.2 30.3 34.6	512 443 398 379 334 296 256 225 200 166 146 134 111 98	0.8 0.9 1.0 1.0 1.2 1.3 1.5 1.7 1.9 2.1 2.3 2.4 2.7 2.9	136.54 118.07 106.03 101.01 88.92 78.83 68.27 60.09 53.28 44.33 38.83 35.71 29.71 26.02	6.0 6.0 5.0 6.0 7.0 7.0 7.0 7.0 7.0 6.0 6.0 6.0 6.0 6.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 80M6A	30	190
	6.9 8.8 10.3 11.9 13.2 13.9 15.7 17.8 20.5 23.3 26.3	483 375 324 280 252 240 211 187 162 143 126	0.8 1.0 1.1 1.3 1.5 1.5 1.8 2.0 2.3 2.6 2.8	203.72 158.21 136.54 118.07 106.03 101.01 88.92 78.83 68.27 60.09 53.28	6.0 5.0 6.0 6.0 5.0 6.0 7.0 7.0 7.0 7.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 71M4B / 71M4C	28	190
	9.3 10.9 13.7 17.7 20.5 23.7 26.4 27.7 31.5	342 292 231 179 155 134 120 115 101	0.8 1.0 1.2 1.6 1.8 2.1 2.3 2.5 2.8	301.44 257.36 203.72 158.21 136.54 118.07 106.03 101.01 88.92	6.0 6.0 6.0 5.0 6.0 6.0 5.0 6.0 7.0	7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11.0	PD/PM C13 71M2A	28	190



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
0.37	15.9	215	0.8	56.55	5.0	5.0	7.0	5.0	PD/PM B02 80M6A	18	188			
	17.4	197	0.8	51.60	5.0	5.0	7.0	5.0						
	20.3	168	1.0	44.23	5.0	5.0	7.0	5.0						
	22.3	154	1.1	40.35	4.0	5.0	7.0	5.0						
	26.3	130	1.2	34.16	4.0	5.0	7.0	5.0						
	29.9	115	1.2	30.08	4.0	5.0	7.0	5.0						
	34.7	99	1.4	25.96	4.0	5.0	7.0	5.0						
	39.7	86	1.6	22.68	4.0	5.0	7.0	5.0						
	41.7	82	1.8	21.58	4.0	5.0	7.0	5.0						
	45.1	76	1.8	19.94	4.0	5.0	7.0	5.0						
	51.1	67	2.0	17.62	4.0	5.0	7.0	5.0						
	54.3	63	2.3	16.57	5.0	5.0	7.0	5.0						
	21.2	160	0.9	66.00	5.0	5.0	7.0	5.0				PD/PM B02 71M4B / 71M4C	16	188
	24.8	137	1.2	56.55	5.0	5.0	7.0	5.0						
	27.1	125	1.2	51.60	5.0	5.0	7.0	5.0						
	31.7	107	1.5	44.23	5.0	5.0	7.0	5.0						
	34.7	98	1.7	40.35	4.0	5.0	7.0	5.0						
	41.0	83	1.8	34.16	4.0	5.0	7.0	5.0						
	46.5	73	1.8	30.08	4.0	5.0	7.0	5.0						
	53.9	63	2.1	25.96	4.0	5.0	7.0	5.0						
	61.7	55	2.3	22.68	4.0	5.0	7.0	5.0						
	64.9	52	2.7	21.58	4.0	5.0	7.0	5.0						
	70.2	48	2.7	19.94	4.0	5.0	7.0	5.0						
	79.5	43	3.0	17.62	4.0	5.0	7.0	5.0						
	27.2	121	0.8	103.09	5.0	5.0	7.0	5.0	PD/PM B02 71M2A	16	188			
	32.7	101	1.1	85.67	5.0	5.0	7.0	5.0						
	35.3	93	1.1	79.42	5.0	5.0	7.0	5.0						
	42.4	78	1.4	66.00	5.0	5.0	7.0	5.0						
	49.5	66	1.8	56.55	5.0	5.0	7.0	5.0						
	54.3	61	1.8	51.60	5.0	5.0	7.0	5.0						
	63.3	52	2.4	44.23	5.0	5.0	7.0	5.0						
	69.4	47	2.6	40.35	4.0	5.0	7.0	5.0						
	82.0	40	2.9	34.16	4.0	5.0	7.0	5.0						
	93.1	35	2.8	30.08	4.0	5.0	7.0	5.0						
	25.9	133	0.8	34.80	4.0	5.0	5.0	8.0	PD/PM A02 80M6A	14	186			
	28.3	121	0.8	31.83	4.0	5.0	5.0	8.0						
	30.9	111	1.0	29.11	4.0	5.0	5.0	8.0						
	36.6	94	1.3	24.57	4.0	5.0	5.0	8.0						
	40.3	85	1.3	22.34	4.0	5.0	5.0	8.0						
	47.9	71	1.4	18.77	4.0	5.0	5.0	8.0						
	54.4	63	1.7	16.54	4.0	5.0	5.0	8.0						
	60.4	57	1.4	14.91	3.0	5.0	5.0	8.0						
	65.1	53	2.2	13.83	5.0	5.0	5.0	8.0						
	77.1	44	2.6	11.67	5.0	5.0	5.0	8.0						
	23.6	144	0.8	59.32	5.0	5.0	5.0	8.0	PD/PM A02 71M4B / 71M4C	12	186			
	28.2	120	0.8	49.62	5.0	5.0	5.0	8.0						
	33.4	101	0.8	41.88	4.0	5.0	5.0	8.0						
	37.1	91	1.1	37.71	4.0	5.0	5.0	8.0						
40.2	84	1.2	34.80	4.0	5.0	5.0	8.0							
44.0	77	1.2	31.83	4.0	5.0	5.0	8.0							
48.1	71	1.6	29.11	4.0	5.0	5.0	8.0							
57.0	60	1.9	24.57	4.0	5.0	5.0	8.0							
62.7	54	2.0	22.34	4.0	5.0	5.0	8.0							
74.6	45	2.1	18.77	4.0	5.0	5.0	8.0							
84.6	40	2.5	16.54	4.0	5.0	5.0	8.0							
93.9	36	2.1	14.91	3.0	5.0	5.0	8.0							
47.2	70	1.2	59.32	5.0	5.0	5.0	8.0	PD/PM A02 71M2A				12	186	
56.4	58	1.3	49.62	5.0	5.0	5.0	8.0							
66.9	49	1.3	41.88	4.0	5.0	5.0	8.0							
74.3	44	1.7	37.71	4.0	5.0	5.0	8.0							
80.5	41	1.9	34.80	4.0	5.0	5.0	8.0							
88.0	37	1.9	31.83	4.0	5.0	5.0	8.0							
96.2	34	2.4	29.11	4.0	5.0	5.0	8.0							
0.55	0.3	16213	0.8	2996.11	92.0	73.0	-	-	PD/PM 83/32 80M6B	410	240			
	0.4	13034	1.0	2408.64	92.0	73.0	-	-						
	0.5	9160	1.4	1692.65	92.0	73.0	-	-						
	0.7	7375	1.7	1362.94	92.0	73.0	100.0	100.0						
	0.8	5746	2.2	1061.83	92.0	73.0	100.0	100.0						
	1.0	4811	2.6	889.06	92.0	73.0	100.0	100.0						



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.55	0.3	14192	0.9	4202.93	-	-	-	-	PD/PM 83/32 80M4B / 80M4C	410	240
	0.4	11883	1.0	3519.07	-	-	-	-			
	0.5	10117	1.2	2996.11	-	-	-	-			
	0.6	8133	1.5	2408.64	-	-	-	-			
	0.8	5715	2.1	1692.65	-	-	-	-			
	1.0	4602	2.6	1362.94	92.0	73.0	100.0	100.0			
	0.4	10363	0.9	6601.35	92.0	73.0	-	-	PD/PM 83/32 71M2B	408	240
	0.5	8641	1.1	5504.36	92.0	73.0	-	-			
	0.5	9774	0.8	1806.13	55.0	58.0	-	-	PD/PM 73/22 80M6B	274	240
	0.7	7264	1.0	1342.44	55.0	58.0	80.0	80.0			
	0.9	5639	1.3	1042.00	57.0	58.0	81.0	80.0			
	1.0	5045	1.5	932.25	57.0	58.0	81.0	80.0			
	1.3	3844	1.9	710.29	58.0	58.0	82.0	80.0			
	1.6	3088	2.4	570.70	57.0	58.0	82.0	80.0			
	0.5	8880	0.8	2629.95	-	-	-	-	PD/PM 73/22 80M4B / 80M4C	274	240
	0.7	6960	1.0	2061.26	-	-	-	-			
	0.8	6099	1.2	1806.13	-	-	-	-			
	1.0	4533	1.6	1342.44	55.0	58.0	80.0	80.0			
	1.3	3518	2.0	1042.00	57.0	58.0	81.0	80.0			
	1.5	3148	2.2	932.25	57.0	58.0	81.0	80.0			
	2.0	2398	3.0	710.29	58.0	58.0	82.0	80.0			
	1.4	3236	1.7	2061.26	55.0	58.0	-	-	PD/PM 73/22 71M2B	272	240
	1.6	2835	1.9	1806.13	55.0	58.0	-	-			
	2.1	2107	2.6	1342.44	55.0	58.0	80.0	80.0			
	0.7	6822	0.8	1260.77	34.0	47.0	54.0	60.0	PD/PM 63/22 80M6B	201	240
	0.8	5978	0.9	1104.71	36.0	47.0	54.0	60.0			
	1.1	4443	1.3	821.10	39.0	47.0	57.0	60.0			
	1.4	3449	1.6	637.34	40.0	47.0	58.0	60.0			
	1.6	3086	1.8	570.21	41.0	47.0	58.0	60.0			
	2.1	2351	2.4	434.44	39.0	47.0	58.0	60.0			
	2.6	1889	3.0	349.07	39.0	47.0	-	-			
	0.8	6277	0.9	1859.06	-	-	-	-	PD/PM 63/22 80M4B / 80M4C	201	240
	1.1	4257	1.3	1260.77	34.0	47.0	54.0	60.0			
	1.3	3730	1.4	1104.71	36.0	47.0	54.0	60.0			
	1.7	2773	1.9	821.10	39.0	47.0	57.0	60.0			
	2.2	2152	2.5	637.34	40.0	47.0	58.0	60.0			
	2.5	1925	2.8	570.21	41.0	47.0	58.0	60.0			
	0.8	5426	0.8	3456.44	34.0	47.0	-	-	PD/PM 63/22 71M2B	199	240
	1.0	4298	0.8	2738.15	34.0	47.0	-	-			
	2.2	1979	2.1	1260.77	34.0	47.0	54.0	60.0			
	2.5	1734	2.4	1104.71	36.0	47.0	54.0	60.0			
	1.3	3786	0.8	689.07	31.0	32.0	-	-	PD/PM 52/12 80M6B	111	238
1.6	3019	1.0	549.54	25.0	32.0	-	-				
2.0	2462	1.3	448.15	25.0	32.0	-	-				
2.7	1859	1.7	338.40	25.0	32.0	-	-				
3.3	1499	2.1	272.80	28.0	32.0	-	-				
3.9	1278	2.5	232.65	28.0	32.0	-	-				
1.3	3777	0.8	1094.40	28.0	32.0	42.0	40.0	PD/PM 52/12 80M4B / 80M4C	111	238	
1.6	2973	1.0	861.34	31.0	32.0	44.0	40.0				
2.0	2378	1.3	689.07	31.0	32.0	44.0	40.0				
2.5	1897	1.6	549.54	-	-	-	-				
3.1	1547	1.9	448.15	-	-	-	-				
4.1	1168	2.6	338.40	-	-	-	-				
1.6	2933	0.8	1802.82	28.0	32.0	-	-	PD/PM 52/12 71M2B	109	238	
2.1	2169	1.1	1333.49	28.0	32.0	40.0	40.0				
2.6	1780	1.3	1094.40	28.0	32.0	42.0	40.0				
3.3	1401	1.6	861.34	31.0	32.0	44.0	40.0				
4.1	1121	2.0	689.07	31.0	32.0	44.0	40.0				
5.1	894	2.6	549.54	25.0	32.0	-	-				

P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
0.55	1.3	3902	0.9	699.67	28.0	32.0	37.0	40.0	PD/PM 53 80M6B	120	209
	1.6	3183	0.9	570.63	29.0	32.0	43.0	40.0			
	1.7	2927	1.1	524.75	29.0	32.0	38.0	40.0			
	2.1	2387	1.4	427.97	30.0	32.0	40.0	40.0			
	2.5	2017	1.5	361.64	31.0	32.0	42.0	40.0			
	2.7	1849	1.8	331.54	31.0	32.0	42.0	40.0			
	3.3	1508	1.9	270.40	31.0	32.0	43.0	40.0			
	3.6	1387	2.4	248.66	21.0	32.0	43.0	40.0			
	4.4	1131	3.0	202.80	21.0	32.0	-	-			
	1.5	3303	0.8	936.55	24.0	32.0	39.0	40.0	PD/PM 53 80M4B / 80M4C	120	209
	2.0	2468	1.3	699.67	28.0	32.0	42.0	40.0			
	2.5	2012	1.4	570.63	29.0	32.0	43.0	40.0			
	2.7	1851	1.7	524.75	29.0	32.0	43.0	40.0			
	3.3	1509	2.1	427.97	30.0	32.0	43.0	40.0			
	3.9	1275	2.2	361.64	31.0	32.0	44.0	40.0			
	4.2	1169	2.7	331.54	31.0	32.0	44.0	40.0			
	5.2	954	2.8	270.40	31.0	32.0	44.0	40.0			
	2.2	2250	0.8	409.62	22.0	22.0	-	-	PD/PM 42/12 80M6B	75	238
	2.6	1875	1.0	341.25	22.0	22.0	-	-			
	3.0	1660	1.1	302.14	22.0	22.0	-	-			
	3.8	1289	1.5	234.61	17.0	22.0	-	-			
	5.1	973	1.9	177.15	17.0	22.0	-	-			
	5.9	838	2.3	152.50	17.0	22.0	-	-			
	7.1	700	2.7	127.43	17.0	22.0	-	-			
	2.5	1926	0.9	557.93	17.0	22.0	28.0	30.0	PD/PM 42/12 80M4B / 80M4C	75	238
	3.4	1414	1.3	409.62	22.0	22.0	31.0	30.0			
	4.1	1178	1.5	341.25	22.0	22.0	31.0	30.0			
	4.6	1043	1.7	302.14	22.0	22.0	31.0	30.0			
	6.0	810	2.2	234.61	-	-	-	-			
	7.9	611	2.9	177.15	-	-	-	-			
	2.5	1807	0.8	1111.10	17.0	22.0	28.0	30.0			
	3.2	1423	1.0	874.48	17.0	22.0	27.0	30.0			
	4.0	1138	1.2	699.58	17.0	22.0	30.0	30.0			
	5.0	908	1.5	557.93	17.0	22.0	28.0	30.0			
	6.8	666	2.1	409.62	22.0	22.0	-	-			
	8.2	555	2.5	341.25	22.0	22.0	-	-			
	9.3	492	2.8	302.14	22.0	22.0	-	-			
	2.2	2301	0.9	412.63	19.0	22.0	29.0	30.0	PD/PM 43 80M6B	80	205
	2.3	2182	1.0	391.14	19.0	22.0	29.0	30.0			
	2.6	1923	0.9	344.78	20.0	22.0	29.0	30.0			
	2.8	1823	1.1	326.83	20.0	22.0	30.0	30.0			
	3.0	1690	1.3	302.94	21.0	22.0	30.0	30.0			
	3.3	1520	1.1	272.49	21.0	22.0	30.0	30.0			
	3.6	1412	1.5	253.13	21.0	22.0	30.0	30.0			
4.3	1177	1.5	211.05	21.0	22.0	30.0	30.0				
4.7	1068	2.0	191.52	22.0	22.0	30.0	30.0				
5.6	893	1.9	160.03	22.0	22.0	31.0	30.0				
6.4	784	2.7	140.61	20.0	22.0	31.0	30.0				
2.6	1879	1.1	532.76	17.0	22.0	27.0	30.0	PD/PM 43 80M4B / 80M4C	80	205	
3.1	1570	1.1	445.16	19.0	22.0	28.0	30.0				
3.4	1455	1.4	412.63	19.0	22.0	29.0	30.0				
3.6	1379	1.4	391.14	19.0	22.0	29.0	30.0				
4.1	1216	1.4	344.78	20.0	22.0	29.0	30.0				
4.3	1153	1.6	326.83	20.0	22.0	30.0	30.0				
4.6	1068	1.9	302.94	21.0	22.0	30.0	30.0				
5.1	961	1.6	272.49	21.0	22.0	30.0	30.0				
5.5	893	2.2	253.13	21.0	22.0	30.0	30.0				
6.6	744	2.2	211.05	21.0	22.0	30.0	30.0				
7.3	675	2.9	191.52	22.0	22.0	30.0	30.0				
8.7	564	2.9	160.03	22.0	22.0	31.0	30.0				
3.6	1319	0.9	782.28	17.0	22.0	29.0	30.0	PD/PM 43 71M2B	78	205	
4.3	1102	0.9	653.66	17.0	22.0	30.0	30.0				
5.3	898	1.7	532.76	17.0	22.0	27.0	30.0				
6.3	750	1.7	445.16	19.0	22.0	28.0	30.0				
7.2	659	2.3	391.14	19.0	22.0	29.0	30.0				
8.6	551	2.6	326.83	20.0	22.0	30.0	30.0				
10.3	459	2.6	272.49	21.0	22.0	30.0	30.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.55	4.1	1195	0.8	217.44	13.0	15.0	-	-	PD/PM 32/12 80M6B	60	238
	5.0	987	1.0	179.71	13.0	15.0	-	-			
	6.4	777	1.2	141.42	13.0	15.0	21.0	20.0			
	7.9	626	1.5	114.01	11.0	15.0	-	-			
	10.3	482	2.0	87.71	13.0	15.0	-	-			
	5.2	934	1.0	270.47	-	-	-	-	PD/PM 32/12 80M4B / 80M4C	60	238
	6.4	751	1.2	217.44	-	-	-	-			
	7.8	620	1.5	179.71	-	-	-	-			
	9.9	488	1.8	141.42	13.0	15.0	21.0	20.0			
	12.3	394	2.3	114.01	11.0	15.0	21.0	20.0			
	16.0	303	3.0	87.71	-	-	-	-			
	5.4	848	0.8	521.00	13.0	15.0	-	-	PD/PM 32/12 71M2B	58	238
	6.1	750	0.9	461.30	13.0	15.0	21.0	20.0			
	7.8	583	1.2	358.19	13.0	15.0	22.0	20.0			
	10.4	440	1.6	270.47	13.0	15.0	-	-			
	12.9	354	1.9	217.44	13.0	15.0	-	-			
	15.6	292	2.3	179.71	13.0	15.0	-	-			
	19.8	230	3.0	141.42	13.0	15.0	-	-			
	3.9	1287	0.8	230.79	15.0	15.0	22.0	20.0	PD/PM 33 80M6B	58	201
	4.7	1064	0.9	190.74	15.0	15.0	22.0	20.0			
	5.6	900	0.9	161.38	15.0	15.0	-	-			
	7.1	708	1.1	127.01	15.0	15.0	-	-			
	8.7	580	1.3	103.92	15.0	15.0	-	-			
	10.1	499	1.3	89.45	15.0	15.0	-	-			
	4.9	1012	0.9	287.08	13.0	15.0	21.0	20.0	PD/PM 33 80M4B / 80M4C	58	201
	6.1	814	1.2	230.79	15.0	15.0	22.0	20.0			
	7.3	673	1.3	190.74	15.0	15.0	22.0	20.0			
	8.7	569	1.4	161.38	-	-	-	-			
	11.0	448	1.7	127.01	-	-	-	-			
	13.5	366	2.0	103.92	-	-	-	-			
	15.7	315	2.0	89.45	-	-	-	-			
	4.8	985	0.8	584.11	13.0	15.0	-	-	PD/PM 33 71M2B	56	201
	5.8	814	0.8	482.75	13.0	15.0	-	-			
	6.9	689	0.9	408.52	13.0	15.0	-	-			
	9.8	484	1.5	287.08	13.0	15.0	21.0	20.0			
	12.1	389	2.0	230.79	15.0	15.0	22.0	20.0			
	14.7	322	2.0	190.74	15.0	15.0	22.0	20.0			
	17.4	272	2.2	161.38	15.0	15.0	-	-			
	22.0	214	2.7	127.01	15.0	15.0	-	-			
	8.0	635	1.3	112.23	15.0	15.0	23.0	20.0			
8.9	571	1.5	100.85	14.0	15.0	23.0	20.0				
10.1	502	2.0	88.74	14.0	15.0	23.0	20.0				
11.3	452	2.0	79.75	13.0	15.0	23.0	20.0				
12.8	399	1.5	70.52	13.0	15.0	23.0	20.0				
13.7	373	2.1	65.91	15.0	15.0	23.0	20.0				
14.0	363	2.9	64.11	15.0	15.0	23.0	20.0				
16.1	316	2.1	55.76	15.0	15.0	23.0	20.0				
17.0	300	3.0	52.98	15.0	15.0	22.0	20.0				
18.8	272	2.1	48.00	15.0	15.0	22.0	20.0				
20.1	254	3.0	44.83	15.0	15.0	21.0	20.0				
23.3	219	3.0	38.59	15.0	15.0	20.0	20.0				
12.5	404	1.9	112.23	15.0	15.0	23.0	20.0	PD/PM 32 80M4B / 80M4C	50	200	
13.9	363	2.2	100.85	14.0	15.0	23.0	20.0				
15.8	320	3.0	88.74	14.0	15.0	23.0	20.0				
17.6	287	3.0	79.75	13.0	15.0	23.0	20.0				
19.9	254	2.2	70.52	13.0	15.0	23.0	20.0				
24.9	196	3.0	112.23	15.0	15.0	23.0	20.0	PD/PM 32 71M2B	48	200	
8.0	606	0.9	175.52	7.0	12.0	12.0	15.0	PD/PM 22/02 80M4B / 80M4C	43	238	
9.7	469	0.8	288.06	7.0	12.0	12.0	15.0	PD/PM 22/02 71M2B	41	238	
12.9	352	1.1	216.66	7.0	12.0	-	-				
16.0	286	1.4	175.52	7.0	12.0	12.0	15.0				
7.7	649	0.8	116.40	8.0	12.0	12.0	15.0	PD/PM 23 80M6B	42	197	
9.1	549	1.1	98.40	5.0	12.0	11.0	15.0				
10.9	459	1.3	82.29	6.0	12.0	-	-				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
0.55	7.6	653	0.8	185.19	10.0	12.0	14.0	15.0	PD/PM 23 80M4B / 80M4C	42	197			
	9.3	529	1.0	150.03	-	-	-	-						
	10.6	464	1.1	131.68	-	-	-	-						
	12.0	411	1.3	116.40	8.0	12.0	12.0	15.0						
	14.2	347	1.6	98.40	5.0	12.0	11.0	15.0						
	17.0	290	1.9	82.29	-	-	-	-						
	8.5	557	0.8	330.43	10.0	12.0	13.0	15.0				PD/PM 23 71M2B	40	197
	10.1	466	0.9	276.32	10.0	12.0	11.0	15.0						
	11.9	397	0.9	235.73	10.0	12.0	12.0	15.0						
	15.1	312	1.3	185.19	10.0	12.0	-	-						
	18.7	253	1.6	150.03	8.0	12.0	-	-						
	21.3	222	1.8	131.68	8.0	12.0	-	-						
	24.1	196	2.0	116.40	8.0	12.0	12.0	15.0						
	28.5	166	2.6	98.40	5.0	12.0	11.0	15.0						
	8.9	572	0.8	100.98	9.0	12.0	12.0	15.0	PD/PM 22 80M6B	35	196			
	10.9	467	1.1	82.45	10.0	12.0	13.0	15.0						
	12.9	395	1.2	69.70	10.0	12.0	14.0	15.0						
	14.1	362	1.5	63.86	10.0	12.0	14.0	15.0						
	16.7	306	1.7	53.98	10.0	12.0	14.0	15.0						
	17.4	293	1.9	51.73	9.0	12.0	13.0	15.0						
	19.9	256	1.8	45.14	10.0	12.0	14.0	15.0						
	20.6	248	2.4	43.73	9.0	12.0	14.0	15.0						
	24.2	211	2.3	37.18	9.0	12.0	14.0	15.0						
	24.6	207	2.5	36.57	9.0	12.0	14.0	15.0						
	28.8	177	2.6	31.20	9.0	12.0	14.0	15.0						
	33.6	152	3.0	26.81	9.0	12.0	14.0	15.0						
	11.0	459	0.8	127.46	9.0	12.0	13.0	15.0	PD/PM 22 80M4B / 80M4C	35	196			
	13.5	375	1.1	104.07	9.0	12.0	13.0	15.0						
	13.9	364	1.2	100.98	9.0	12.0	13.0	15.0						
	17.0	297	1.6	82.45	10.0	12.0	14.0	15.0						
	20.1	251	1.8	69.70	10.0	12.0	14.0	15.0						
	21.9	230	2.3	63.86	10.0	12.0	14.0	15.0						
	25.9	194	2.6	53.98	10.0	12.0	14.0	15.0						
	27.1	186	2.8	51.73	9.0	12.0	13.0	15.0						
	31.0	163	2.8	45.14	10.0	12.0	14.0	15.0						
	22.0	223	1.3	127.46	9.0	12.0	13.0	15.0	PD/PM 22 71M2B	33	196			
	26.9	182	1.7	104.07	9.0	12.0	13.0	15.0						
	27.7	176	1.9	100.98	9.0	12.0	13.0	15.0						
	34.0	144	2.5	82.45	10.0	12.0	14.0	15.0						
	40.2	122	2.8	69.70	10.0	12.0	14.0	15.0						
	21.7	217	0.8	129.01	6.0	7.0	-	-	PD/PM 13 71M2B	26	196			
	26.6	178	1.2	105.32	6.0	7.0	-	-						
	31.8	148	1.4	88.00	6.0	7.0	-	-						
	12.5	409	0.8	72.16	5.0	7.0	9.0	7.0	PD/PM 12 80M6B	24	192			
	15.3	334	0.9	58.91	5.0	7.0	9.0	7.0						
	18.3	279	1.0	49.22	5.0	7.0	9.0	7.0						
	21.9	232	1.0	41.04	5.0	7.0	9.0	7.0						
	28.1	182	1.3	32.07	5.0	7.0	10.0	7.0						
31.7	161	1.5	28.35	5.0	7.0	10.0	7.0							
35.7	143	1.7	25.24	4.0	7.0	10.0	7.0							
43.7	117	2.0	20.61	4.0	7.0	10.0	7.0							
52.3	98	2.4	17.22	6.0	7.0	10.0	7.0							
63.9	80	2.8	14.09	6.0	7.0	10.0	7.0							
19.4	260	1.1	72.16	5.0	7.0	9.0	7.0	PD/PM 12 80M4B / 80M4C	24	192				
23.8	212	1.3	58.91	5.0	7.0	9.0	7.0							
28.4	177	1.5	49.22	5.0	7.0	9.0	7.0							
34.1	148	1.5	41.04	5.0	7.0	9.0	7.0							
43.7	116	2.0	32.07	5.0	7.0	10.0	7.0							
49.4	102	2.2	28.35	5.0	7.0	10.0	7.0							
55.5	91	2.5	25.24	4.0	7.0	10.0	7.0							
67.9	74	3.0	20.61	4.0	7.0	10.0	7.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.55	25.6	191	0.8	109.45	5.0	7.0	9.0	7.0	PD/PM 12 71M2B	22	192
	30.3	161	1.1	92.43	5.0	7.0	9.0	7.0			
	34.5	142	1.6	81.17	5.0	7.0	9.0	7.0			
	38.8	126	1.8	72.16	5.0	7.0	9.0	7.0			
	42.3	116	1.8	66.26	5.0	7.0	9.0	7.0			
	47.5	103	2.1	58.91	5.0	7.0	9.0	7.0			
	50.6	97	1.8	55.37	5.0	7.0	10.0	7.0			
	56.9	86	2.3	49.22	5.0	7.0	9.0	7.0			
	60.7	81	1.8	46.16	5.0	7.0	10.0	7.0			
	68.2	72	2.3	41.04	5.0	7.0	9.0	7.0			
	10.1	496	0.8	88.92	6.0	7.0	8.0	11.0	PD/PM C13 80M6B	30	190
	11.4	440	0.9	78.83	6.0	7.0	8.0	11.0			
	13.2	381	1.0	68.27	6.0	7.0	8.0	11.0			
	15.0	335	1.2	60.09	7.0	7.0	8.0	11.0			
	16.9	297	1.3	53.28	6.0	7.0	8.0	11.0			
	20.3	247	1.4	44.33	6.0	7.0	8.0	11.0			
	23.2	217	1.6	38.83	6.0	7.0	8.0	11.0			
	25.2	199	1.6	35.71	6.0	7.0	8.0	11.0			
	30.3	166	1.8	29.71	6.0	7.0	8.0	11.0			
	34.6	145	2.0	26.02	5.0	7.0	8.0	11.0			
	37.2	135	2.2	24.17	6.0	7.0	8.0	11.0			
	48.0	105	2.4	18.76	6.0	7.0	8.0	11.0			
	55.6	90	2.7	16.20	6.0	7.0	8.0	11.0			
	10.3	482	0.8	136.54	6.0	7.0	8.0	11.0	PD/PM C13 80M4B / 80M4C	30	190
	11.9	416	0.9	118.07	5.0	7.0	8.0	11.0			
	13.2	374	1.0	106.03	5.0	7.0	8.0	11.0			
	13.9	356	1.0	101.01	5.0	7.0	8.0	11.0			
	15.7	314	1.2	88.92	6.0	7.0	8.0	11.0			
	17.8	278	1.3	78.83	6.0	7.0	8.0	11.0			
	20.5	241	1.5	68.27	6.0	7.0	8.0	11.0			
	23.3	212	1.7	60.09	7.0	7.0	8.0	11.0			
	26.3	188	1.9	53.28	6.0	7.0	8.0	11.0			
	31.6	156	2.2	44.33	6.0	7.0	8.0	11.0			
	36.1	137	2.4	38.83	6.0	7.0	8.0	11.0			
	39.2	126	2.4	35.71	6.0	7.0	8.0	11.0			
	47.1	105	2.7	29.71	6.0	7.0	8.0	11.0			
	53.8	92	3.0	26.02	5.0	7.0	8.0	11.0			
	13.7	343	0.8	203.72	6.0	7.0	8.0	11.0	PD/PM C13 71M2B	28	190
	17.7	267	1.1	158.21	6.0	7.0	8.0	11.0			
	20.5	230	1.2	136.54	6.0	7.0	8.0	11.0			
	23.7	199	1.4	118.07	5.0	7.0	8.0	11.0			
	26.4	179	1.6	106.03	5.0	7.0	8.0	11.0			
	27.7	170	1.7	101.01	5.0	7.0	8.0	11.0			
	31.5	150	1.9	88.92	6.0	7.0	8.0	11.0			
	35.5	133	2.1	78.83	6.0	7.0	8.0	11.0			
	41.0	115	2.4	68.27	6.0	7.0	8.0	11.0			
	46.6	101	2.8	60.09	7.0	7.0	8.0	11.0			
	52.6	90	3.0	53.28	6.0	7.0	8.0	11.0			
	22.3	228	0.8	40.35	4.0	5.0	7.0	5.0	PD/PM B02 80M6B	18	188
	26.3	193	0.8	34.16	4.0	5.0	7.0	5.0			
29.9	170	0.8	30.08	4.0	5.0	7.0	5.0				
34.7	147	0.9	25.96	4.0	5.0	7.0	5.0				
39.7	128	1.1	22.68	4.0	5.0	7.0	5.0				
41.7	122	1.2	21.58	4.0	5.0	7.0	5.0				
45.1	113	1.2	19.94	4.0	5.0	7.0	5.0				
51.1	100	1.4	17.62	4.0	5.0	7.0	5.0				
54.3	94	1.6	16.57	3.0	5.0	7.0	5.0				
63.4	80	2.1	14.20	5.0	5.0	7.0	5.0				
69.4	73	2.3	12.96	5.0	5.0	7.0	5.0				
79.8	64	2.3	11.28	5.0	5.0	7.0	5.0				
82.0	62	2.6	10.97	5.0	5.0	7.0	5.0				
93.1	55	2.7	9.67	5.0	5.0	7.0	5.0				
102.0	50	2.9	8.82	5.0	5.0	7.0	5.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
0.55	24.8	204	0.8	56.55	5.0	5.0	7.0	5.0	PD/PM B02 80M4B / 80M4C	18	188			
	27.1	186	0.8	51.60	4.0	5.0	7.0	5.0						
	31.7	159	1.0	44.23	4.0	5.0	7.0	5.0						
	34.7	145	1.1	40.35	4.0	5.0	7.0	5.0						
	41.0	123	1.2	34.16	4.0	5.0	7.0	5.0						
	46.5	108	1.2	30.08	4.0	5.0	7.0	5.0						
	53.9	94	1.4	25.96	4.0	5.0	7.0	5.0						
	61.7	82	1.6	22.68	4.0	5.0	7.0	5.0						
	64.9	78	1.8	21.58	4.0	5.0	7.0	5.0						
	70.2	72	1.8	19.94	4.0	5.0	7.0	5.0						
	79.5	63	2.0	17.62	4.0	5.0	7.0	5.0						
	84.5	60	2.3	16.57	3.0	5.0	7.0	5.0						
	42.4	115	0.9	66.00	5.0	5.0	7.0	5.0				PD/PM B02 71M2B	16	188
	49.5	99	1.2	56.55	5.0	5.0	7.0	5.0						
	54.3	90	1.2	51.60	4.0	5.0	7.0	5.0						
	63.3	77	1.6	44.23	4.0	5.0	7.0	5.0						
	69.4	70	1.8	40.35	4.0	5.0	7.0	5.0						
	82.0	60	1.9	34.16	4.0	5.0	7.0	5.0						
	93.1	53	1.9	30.08	4.0	5.0	7.0	5.0						
	107.9	45	2.2	25.96	4.0	5.0	7.0	5.0						
	123.5	40	2.5	22.68	4.0	5.0	7.0	5.0						
	129.7	38	2.8	21.58	4.0	5.0	7.0	5.0						
	140.4	35	2.8	19.94	4.0	5.0	7.0	5.0						
	36.6	139	0.9	24.57	4.0	5.0	5.0	8.0	PD/PM A02 80M6B	14	186			
	40.3	126	0.9	22.34	4.0	5.0	5.0	8.0						
	47.9	106	0.9	18.77	3.0	5.0	5.0	8.0						
	54.4	94	1.1	16.54	3.0	5.0	5.0	8.0						
	60.4	84	0.9	14.91	3.0	5.0	5.0	8.0						
	65.1	78	1.5	13.83	3.0	5.0	5.0	8.0						
	77.1	66	1.7	11.67	3.0	5.0	5.0	8.0						
	94.8	54	2.1	9.49	4.0	5.0	5.0	8.0						
	104.3	49	2.4	8.63	4.0	5.0	5.0	8.0						
	124.1	41	2.9	7.25	4.0	5.0	5.0	8.0						
	40.2	125	0.8	34.80	4.0	5.0	5.0	8.0				PD/PM A02 80M4B / 80M4C	14	186
	44.0	115	0.8	31.83	4.0	5.0	5.0	8.0						
	48.1	105	1.0	29.11	4.0	5.0	5.0	8.0						
	57.0	88	1.3	24.57	4.0	5.0	5.0	8.0						
	62.7	80	1.4	22.34	4.0	5.0	5.0	8.0						
	74.6	68	1.4	18.77	3.0	5.0	5.0	8.0						
	84.6	60	1.7	16.54	3.0	5.0	5.0	8.0						
	93.9	54	1.4	14.91	3.0	5.0	5.0	8.0						
	101.2	50	2.2	13.83	3.0	5.0	5.0	8.0						
	120.0	42	2.6	11.67	3.0	5.0	5.0	8.0						
	47.2	104	0.8	59.32	4.0	5.0	5.0	8.0	PD/PM A02 71M2B	12	186			
	56.4	87	0.9	49.62	4.0	5.0	5.0	8.0						
	66.9	73	0.9	41.88	4.0	5.0	5.0	8.0						
	74.3	66	1.2	37.71	4.0	5.0	5.0	8.0						
	80.5	61	1.3	34.80	4.0	5.0	5.0	8.0						
88.0	56	1.3	31.83	4.0	5.0	5.0	8.0							
96.2	51	1.6	29.11	4.0	5.0	5.0	8.0							
114.0	43	2.1	24.57	4.0	5.0	5.0	8.0							
125.3	39	2.1	22.34	4.0	5.0	5.0	8.0							
149.2	33	2.2	18.77	3.0	5.0	5.0	8.0							
169.3	29	2.6	16.54	3.0	5.0	5.0	8.0							
187.8	26	2.2	14.91	3.0	5.0	5.0	8.0							
0.75	0.2	29526	2.1	4001.34	-	-	-	-	PD/PM 113/52 90S6B / 90L6C	1132	242			
	0.2	27472	2.3	3722.96	-	-	-	-						
	0.3	22600	2.8	3062.69	-	-	-	-						
	0.2	34514	1.1	4677.24	-	-	-	-	PD/PM 103/52 90S6B / 90L6C	1324	242			
	0.4	17958	1.4	2433.68	34.0	64.0	-	-	PD/PM 93/42 90S6B / 90L6C	731	242			
	0.4	16255	1.6	2202.85	34.0	64.0	-	-						
	0.5	12875	2.0	1744.83	34.0	64.0	-	-						
	0.6	10461	2.4	1417.68	34.0	64.0	120.0	130.0						
	0.8	8688	2.9	1177.36	34.0	64.0	120.0	130.0						

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.75	0.5	12490	1.0	1692.65	92.0	73.0	-	-	PD/PM 83/32 90S6B / 90L6C	414	240
	0.7	10057	1.3	1362.94	90.0	73.0	100.0	100.0			
	0.8	7835	1.6	1061.83	92.0	73.0	100.0	100.0			
	1.0	6560	1.9	889.06	92.0	73.0	100.0	100.0			
	1.3	5287	2.4	716.55	92.0	73.0	100.0	100.0			
	1.5	4502	2.8	610.07	92.0	73.0	100.0	100.0			
	0.5	13795	0.9	2996.11	-	-	-	-	PD/PM 83/32 80M4C / 80M4D	410	240
	0.6	11090	1.1	2408.64	-	-	-	-			
	0.8	7794	1.6	1692.65	-	-	-	-			
	1.0	6276	1.9	1362.94	90.0	73.0	100.0	100.0			
	1.3	4889	2.5	1061.83	92.0	73.0	100.0	100.0			
	1.6	4094	3.0	889.06	92.0	73.0	100.0	100.0			
	0.5	11783	0.8	5504.36	92.0	73.0	-	-	PD/PM 83/32 80M2B / 80M2C	410	240
	0.7	8997	1.0	4202.93	92.0	73.0	-	-			
	0.8	7533	1.2	3519.07	92.0	73.0	-	-			
	0.9	6414	1.4	2996.11	92.0	73.0	-	-			
	1.2	5156	1.8	2408.64	92.0	73.0	-	-			
	1.7	3623	2.5	1692.65	92.0	73.0	-	-			
	0.7	9906	0.8	1342.44	50.0	58.0	77.0	80.0	PD/PM 73/22 90S6B / 90L6C	278	240
	0.9	7689	1.0	1042.00	54.0	58.0	79.0	80.0			
	1.0	6879	1.1	932.25	55.0	58.0	80.0	80.0			
	1.3	5241	1.4	710.29	57.0	58.0	81.0	80.0			
	1.6	4211	1.8	570.70	58.0	58.0	82.0	80.0			
	2.1	3209	2.3	434.82	55.0	58.0	81.0	80.0			
	2.4	2776	2.7	376.24	55.0	58.0	81.0	80.0			
	0.8	8316	0.9	1806.13	-	-	-	-	PD/PM 73/22 80M4C / 80M4D	274	240
	1.0	6181	1.1	1342.44	50.0	58.0	77.0	80.0			
	1.3	4798	1.5	1042.00	54.0	58.0	79.0	80.0			
	1.5	4293	1.6	932.25	55.0	58.0	80.0	80.0			
	2.0	3271	2.2	710.29	57.0	58.0	81.0	80.0			
	2.5	2628	2.7	570.70	58.0	58.0	82.0	80.0			
	1.1	5630	1.0	2629.95	50.0	58.0	-	-	PD/PM 73/22 80M2B / 80M2C	274	240
	1.4	4412	1.2	2061.26	50.0	58.0	-	-			
	1.6	3866	1.4	1806.13	50.0	58.0	-	-			
	2.1	2874	1.9	1342.44	50.0	58.0	77.0	80.0			
	2.7	2231	2.4	1042.00	54.0	58.0	79.0	80.0			
	3.0	1996	2.7	932.25	55.0	58.0	80.0	80.0			
	4.0	1649	3.0	223.50	-	-	-	-	PD/PM 63/32 90S6B / 90L6C	216	240
	1.1	6059	0.9	821.10	39.0	47.0	57.0	60.0	PD/PM 63/22 90S6B / 90L6C	205	240
	1.4	4703	1.2	637.34	22.0	47.0	47.0	60.0			
	1.6	4208	1.3	570.21	41.0	47.0	58.0	60.0			
	2.1	3206	1.8	434.44	23.0	47.0	58.0	60.0			
	2.6	2576	2.2	349.07	34.0	47.0	-	-			
	3.0	2215	2.6	300.12	34.0	47.0	-	-			
	1.1	5805	0.9	1260.77	25.0	47.0	48.0	60.0	PD/PM 63/22 80M4C / 80M4D	201	240
	1.3	5087	1.1	1104.71	28.0	47.0	50.0	60.0			
	1.7	3781	1.4	821.10	39.0	47.0	57.0	60.0			
	2.2	2935	1.8	637.34	22.0	47.0	47.0	60.0			
2.5	2626	2.1	570.21	41.0	47.0	58.0	60.0				
3.2	2000	2.7	434.44	23.0	47.0	47.0	60.0				
1.3	4730	0.9	2209.62	25.0	47.0	-	-	PD/PM 63/22 80M2B / 80M2C	201	240	
1.5	3980	1.0	1859.06	25.0	47.0	-	-				
2.2	2699	1.5	1260.77	25.0	47.0	48.0	60.0				
2.5	2365	1.7	1104.71	28.0	47.0	50.0	60.0				
3.4	1758	2.3	821.10	39.0	47.0	57.0	60.0				
4.4	1364	3.0	637.34	22.0	47.0	47.0	60.0				
1.6	4199	1.3	552.15	14.0	22.0	54.0	60.0	PD/PM 63 90S6B / 90L6C	186	213	
2.0	3391	1.3	445.80	14.0	22.0	56.0	60.0				
2.3	2992	2.1	393.43	14.0	22.0	57.0	60.0				
2.8	2416	2.5	317.64	14.0	22.0	57.0	60.0				
3.6	1914	2.5	251.63	14.0	22.0	58.0	60.0				
4.0	1718	2.5	225.83	14.0	22.0	58.0	60.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
0.75	1.6	4117	0.8	549.54	21.0	32.0	-	-	PD/PM 52/12 90S6B / 90L6C	115	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2.0	3357	0.9	448.15	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	2.7	2535	1.2	338.40	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.3	2044	1.5	272.80	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.9	1743	1.8	232.65	28.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.2	1307	2.4	174.49	31.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.3	1066	3.0	142.31	31.0	32.0	-	-	2.0	3243	0.9	689.07	31.0	32.0	44.0	40.0	PD/PM 52/12 80M4C / 80M4D	111	238	2.5	2587	1.2	549.54	-	-	-	-	3.1	2109	1.4	448.15	-	-	-	-	4.1	1593	1.9	338.40	-	-	-	-	5.1	1284	2.3	272.80	21.0	32.0	38.0	40.0	6.0	1095	2.7	232.65	-	-	-	-	2.1	2958	0.8	1333.49	31.0	32.0	40.0	40.0	PD/PM 52/12 80M2B / 80M2C	111	238	2.6	2428	0.9	1094.40	31.0	32.0	42.0	40.0	3.3	1911	1.2	861.34	31.0	32.0	-	-	4.1	1529	1.5	689.07	31.0	32.0	-	-	5.1	1219	1.9	549.54	21.0	32.0	-	-	6.2	994	2.3	448.15	21.0	32.0	-	-	8.3	751	3.0	338.40	21.0	32.0	-	-	1.7	3991	0.8	524.75	27.0	32.0	41.0	40.0	PD/PM 53 90S6B / 90L6C	124	209	2.1	3255	1.0	427.97	29.0	32.0	43.0	40.0	2.5	2750	1.1	361.64	30.0	32.0	43.0	40.0	2.7	2522	1.3	331.54	30.0	32.0	43.0	40.0	3.3	2057	1.4	270.40	31.0	32.0	44.0	40.0	3.6	1891	1.8	248.66	31.0	32.0	44.0	40.0	4.4	1542	2.2	202.80	28.0	32.0	43.0	40.0	5.3	1303	2.3	171.36	28.0	32.0	-	-	5.8	1170	2.9	153.85	28.0	32.0	-	-	2.0	3365	1.0	699.67	23.0	32.0	39.0	40.0	PD/PM 53 80M4C / 80M4D	120	209	2.5	2744	1.0	570.63	26.0	32.0	41.0	40.0	2.7	2524	1.3	524.75	27.0	32.0	41.0	40.0	3.3	2058	1.6	427.97	29.0	32.0	43.0	40.0	3.9	1739	1.6	361.64	30.0	32.0	43.0	40.0	4.2	1594	2.0	331.54	30.0	32.0	43.0	40.0	5.2	1300	2.1	270.40	31.0	32.0	44.0	40.0	5.6	1196	2.7	248.66	31.0	32.0	44.0	40.0	3.0	2153	1.0	936.55	23.0	32.0	39.0	40.0	PD/PM 53 80M2B / 80M2C	120	209	4.0	1608	1.5	699.67	23.0	32.0	42.0	40.0	4.9	1312	1.6	570.63	26.0	32.0	43.0	40.0	5.3	1206	2.0	524.75	27.0	32.0	38.0	40.0	6.5	984	2.5	427.97	29.0	32.0	40.0	40.0	7.7	831	2.6	361.64	30.0	32.0	42.0	40.0	6.7	1035	2.7	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90S6B / 90L6C	105	208	9.0	773	3.0	100.15	12.0	22.0	44.0	40.0	11.0	631	3.0	81.68	12.0	22.0	44.0	40.0	3.0	2263	0.8	302.14	22.0	22.0	-	-	PD/PM 42/12 90S6B / 90L6C	79	238	3.8	1758	1.1	234.61	16.0	22.0	-	-	5.1	1327	1.4	177.15	16.0	22.0	-	-	5.9	1142	1.7	152.50	16.0	22.0	-	-	7.1	955	2.0	127.43	17.0	22.0	-	-	3.4	1928	0.9	409.62	22.0	22.0	31.0	30.0	PD/PM 42/12 80M4C / 80M4D	75	238	4.1	1606	1.1	341.25	22.0	22.0	31.0	30.0	4.6	1422	1.3	302.14	22.0	22.0	31.0	30.0	6.0	1104	1.6	234.61	-	-	-	-	7.9	834	2.2	177.15	-	-	-	-	9.2	718	2.5	152.50	16.0	22.0	26.0	30.0	11.0	600	3.0	127.43	-	-	-	-	4.0	1552	0.9	699.58	22.0	22.0	-	-	PD/PM 42/12 80M2B / 80M2C	75	238	5.0	1238	1.1	557.93	22.0	22.0	28.0	30.0	6.8	909	1.5	409.62	22.0	22.0	-	-	8.2	757	1.8	341.25	22.0	22.0	-	-	9.3	670	2.0	302.14	22.0	22.0	-	-	11.9	520	2.6	234.61	16.0	22.0	-	-
	2.0	3243	0.9	689.07	31.0	32.0	44.0	40.0	PD/PM 52/12 80M4C / 80M4D	111	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2.5	2587	1.2	549.54	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.1	2109	1.4	448.15	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.1	1593	1.9	338.40	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.1	1284	2.3	272.80	21.0	32.0	38.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.0	1095	2.7	232.65	-	-	-	-	2.1	2958	0.8	1333.49	31.0	32.0	40.0	40.0	PD/PM 52/12 80M2B / 80M2C	111	238	2.6	2428	0.9	1094.40	31.0	32.0	42.0	40.0	3.3	1911	1.2	861.34	31.0	32.0	-	-	4.1	1529	1.5	689.07	31.0	32.0	-	-	5.1	1219	1.9	549.54	21.0	32.0	-	-	6.2	994	2.3	448.15	21.0	32.0	-	-	8.3	751	3.0	338.40	21.0	32.0	-	-				1.7	3991	0.8	524.75	27.0	32.0	41.0	40.0	PD/PM 53 90S6B / 90L6C	124	209	2.1	3255	1.0	427.97	29.0	32.0	43.0	40.0	2.5	2750	1.1	361.64	30.0	32.0	43.0	40.0	2.7	2522	1.3	331.54	30.0	32.0	43.0	40.0	3.3	2057	1.4	270.40	31.0	32.0	44.0	40.0	3.6	1891	1.8	248.66	31.0	32.0	44.0	40.0	4.4	1542	2.2	202.80	28.0				32.0	43.0	40.0	5.3	1303	2.3	171.36	28.0	32.0	-	-	5.8	1170	2.9	153.85	28.0	32.0	-	-	2.0	3365	1.0	699.67	23.0	32.0	39.0	40.0	PD/PM 53 80M4C / 80M4D	120	209	2.5	2744	1.0	570.63	26.0	32.0	41.0	40.0	2.7	2524	1.3	524.75	27.0	32.0	41.0	40.0	3.3	2058	1.6	427.97	29.0	32.0	43.0	40.0	3.9	1739	1.6	361.64	30.0	32.0	43.0	40.0	4.2	1594	2.0	331.54	30.0	32.0	43.0	40.0	5.2	1300				2.1	270.40	31.0	32.0	44.0	40.0	5.6	1196	2.7	248.66	31.0	32.0	44.0	40.0	3.0	2153	1.0	936.55	23.0	32.0	39.0	40.0	PD/PM 53 80M2B / 80M2C	120	209	4.0	1608	1.5	699.67	23.0	32.0	42.0	40.0	4.9	1312	1.6	570.63	26.0	32.0	43.0	40.0	5.3	1206	2.0	524.75	27.0	32.0	38.0	40.0	6.5	984	2.5	427.97	29.0	32.0	40.0	40.0	7.7	831	2.6	361.64	30.0	32.0	42.0	40.0	6.7	1035	2.7	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90S6B / 90L6C	105	208	9.0	773	3.0	100.15	12.0	22.0	44.0	40.0	11.0	631	3.0	81.68	12.0	22.0	44.0	40.0	3.0	2263	0.8	302.14	22.0	22.0	-	-	PD/PM 42/12 90S6B / 90L6C	79	238	3.8	1758	1.1	234.61	16.0	22.0	-	-	5.1	1327	1.4	177.15	16.0	22.0	-	-	5.9	1142	1.7	152.50	16.0	22.0	-	-	7.1	955	2.0	127.43	17.0	22.0	-	-	3.4	1928	0.9	409.62	22.0	22.0	31.0	30.0	PD/PM 42/12 80M4C / 80M4D	75	238	4.1	1606	1.1	341.25	22.0	22.0	31.0	30.0	4.6	1422	1.3	302.14	22.0	22.0	31.0	30.0	6.0	1104	1.6	234.61	-	-	-	-	7.9	834	2.2	177.15	-	-	-	-	9.2	718	2.5	152.50	16.0	22.0	26.0				30.0	11.0	600	3.0	127.43	-	-	-	-	4.0	1552	0.9	699.58	22.0	22.0	-	-	PD/PM 42/12 80M2B / 80M2C	75	238	5.0	1238	1.1	557.93	22.0	22.0	28.0	30.0	6.8	909	1.5	409.62	22.0	22.0	-	-	8.2	757	1.8	341.25	22.0	22.0	-	-	9.3	670	2.0	302.14	22.0	22.0	-	-	11.9	520	2.6	234.61	16.0	22.0	-	-																																							
	2.1	2958	0.8	1333.49	31.0	32.0	40.0	40.0	PD/PM 52/12 80M2B / 80M2C	111	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2.6	2428	0.9	1094.40	31.0	32.0	42.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.3	1911	1.2	861.34	31.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.1	1529	1.5	689.07	31.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.1	1219	1.9	549.54	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.2	994	2.3	448.15	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.3	751	3.0	338.40	21.0	32.0	-	-				1.7	3991	0.8	524.75	27.0	32.0	41.0	40.0	PD/PM 53 90S6B / 90L6C	124	209	2.1	3255	1.0	427.97	29.0	32.0	43.0	40.0	2.5	2750	1.1	361.64	30.0	32.0	43.0	40.0	2.7	2522	1.3	331.54	30.0	32.0	43.0	40.0	3.3	2057	1.4	270.40	31.0	32.0	44.0	40.0	3.6	1891	1.8	248.66	31.0	32.0	44.0	40.0	4.4	1542	2.2	202.80	28.0	32.0	43.0	40.0	5.3	1303	2.3	171.36	28.0	32.0	-	-				5.8	1170	2.9	153.85	28.0	32.0	-	-	2.0	3365	1.0	699.67	23.0	32.0	39.0	40.0	PD/PM 53 80M4C / 80M4D	120	209	2.5	2744	1.0	570.63	26.0	32.0	41.0	40.0	2.7	2524	1.3	524.75	27.0	32.0	41.0	40.0	3.3	2058	1.6	427.97	29.0	32.0	43.0	40.0	3.9	1739	1.6	361.64	30.0	32.0	43.0	40.0	4.2	1594	2.0	331.54	30.0	32.0	43.0	40.0	5.2	1300	2.1	270.40	31.0	32.0	44.0	40.0	5.6	1196	2.7	248.66	31.0	32.0	44.0	40.0				3.0	2153	1.0	936.55	23.0	32.0	39.0	40.0	PD/PM 53 80M2B / 80M2C	120	209	4.0	1608	1.5	699.67	23.0	32.0	42.0	40.0	4.9	1312	1.6	570.63	26.0	32.0	43.0	40.0	5.3	1206	2.0	524.75	27.0	32.0	38.0	40.0	6.5	984	2.5	427.97	29.0	32.0	40.0	40.0	7.7	831	2.6	361.64	30.0	32.0	42.0	40.0	6.7	1035	2.7	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90S6B / 90L6C	105	208	9.0	773	3.0	100.15	12.0	22.0	44.0	40.0	11.0	631	3.0	81.68	12.0	22.0	44.0	40.0	3.0	2263	0.8	302.14	22.0	22.0	-	-	PD/PM 42/12 90S6B / 90L6C	79	238	3.8	1758	1.1	234.61	16.0	22.0	-	-	5.1	1327	1.4	177.15	16.0	22.0	-	-	5.9	1142	1.7	152.50	16.0	22.0	-	-	7.1	955	2.0	127.43	17.0	22.0	-	-	3.4	1928	0.9	409.62	22.0	22.0	31.0	30.0	PD/PM 42/12 80M4C / 80M4D	75	238	4.1	1606	1.1	341.25	22.0	22.0	31.0	30.0	4.6	1422	1.3	302.14	22.0	22.0	31.0	30.0	6.0	1104	1.6	234.61	-	-	-	-	7.9	834	2.2	177.15	-	-	-	-	9.2	718	2.5	152.50	16.0	22.0	26.0	30.0	11.0	600	3.0	127.43	-	-	-	-	4.0	1552	0.9	699.58	22.0	22.0	-	-	PD/PM 42/12 80M2B / 80M2C	75	238	5.0	1238	1.1	557.93	22.0	22.0	28.0	30.0	6.8	909	1.5	409.62	22.0	22.0	-	-	8.2	757	1.8	341.25	22.0	22.0	-	-	9.3	670	2.0	302.14	22.0	22.0	-	-	11.9	520	2.6	234.61	16.0	22.0	-	-																																																																																																					
	1.7	3991	0.8	524.75	27.0	32.0	41.0	40.0	PD/PM 53 90S6B / 90L6C	124	209																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2.1	3255	1.0	427.97	29.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	2.5	2750	1.1	361.64	30.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	2.7	2522	1.3	331.54	30.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.3	2057	1.4	270.40	31.0	32.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.6	1891	1.8	248.66	31.0	32.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.4	1542	2.2	202.80	28.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.3	1303	2.3	171.36	28.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.8	1170	2.9	153.85	28.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	2.0	3365	1.0	699.67	23.0	32.0	39.0	40.0	PD/PM 53 80M4C / 80M4D	120	209																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2.5	2744	1.0	570.63	26.0	32.0	41.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	2.7	2524	1.3	524.75	27.0	32.0	41.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.3	2058	1.6	427.97	29.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.9	1739	1.6	361.64	30.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.2	1594	2.0	331.54	30.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.2	1300	2.1	270.40	31.0	32.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.6	1196	2.7	248.66	31.0	32.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.0	2153	1.0	936.55	23.0	32.0	39.0	40.0	PD/PM 53 80M2B / 80M2C	120	209																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	4.0	1608	1.5	699.67	23.0	32.0	42.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.9	1312	1.6	570.63	26.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.3	1206	2.0	524.75	27.0	32.0	38.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.5	984	2.5	427.97	29.0	32.0	40.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
7.7	831	2.6	361.64	30.0	32.0	42.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
6.7	1035	2.7	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90S6B / 90L6C	105	208																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
9.0	773	3.0	100.15	12.0	22.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
11.0	631	3.0	81.68	12.0	22.0	44.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
3.0	2263	0.8	302.14	22.0	22.0	-	-	PD/PM 42/12 90S6B / 90L6C	79	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
3.8	1758	1.1	234.61	16.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
5.1	1327	1.4	177.15	16.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
5.9	1142	1.7	152.50	16.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
7.1	955	2.0	127.43	17.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
3.4	1928	0.9	409.62	22.0	22.0	31.0	30.0	PD/PM 42/12 80M4C / 80M4D	75	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
4.1	1606	1.1	341.25	22.0	22.0	31.0	30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
4.6	1422	1.3	302.14	22.0	22.0	31.0	30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
6.0	1104	1.6	234.61	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
7.9	834	2.2	177.15	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
9.2	718	2.5	152.50	16.0	22.0	26.0	30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
11.0	600	3.0	127.43	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
4.0	1552	0.9	699.58	22.0	22.0	-	-	PD/PM 42/12 80M2B / 80M2C	75	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
5.0	1238	1.1	557.93	22.0	22.0	28.0	30.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
6.8	909	1.5	409.62	22.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
8.2	757	1.8	341.25	22.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
9.3	670	2.0	302.14	22.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
11.9	520	2.6	234.61	16.0	22.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
0.75	2.8	2486	0.8	326.83	19.0	22.0	28.0	30.0	PD/PM 43 90S6B / 90L6C	84	205			
	3.0	2304	0.9	302.94	19.0	22.0	29.0	30.0						
	3.3	2072	0.8	272.49	20.0	22.0	29.0	30.0						
	3.6	1925	1.1	253.13	20.0	22.0	29.0	30.0						
	4.3	1605	1.1	211.05	21.0	22.0	30.0	30.0						
	4.7	1457	1.4	191.52	21.0	22.0	30.0	30.0						
	5.6	1217	1.4	160.03	21.0	22.0	30.0	30.0						
	6.4	1069	2.0	140.61	22.0	22.0	30.0	30.0						
	7.6	901	2.3	118.53	19.0	22.0	31.0	30.0						
	8.7	790	2.7	103.86	19.0	22.0	31.0	30.0						
	2.6	2562	0.8	532.76	17.0	22.0	27.0	30.0				PD/PM 43 80M4C / 80M4D	80	205
	3.1	2141	0.8	445.16	19.0	22.0	28.0	30.0						
	3.4	1984	1.0	412.63	16.0	22.0	27.0	30.0						
	3.6	1881	1.1	391.14	17.0	22.0	27.0	30.0						
	4.1	1658	1.0	344.78	18.0	22.0	28.0	30.0						
	4.3	1572	1.2	326.83	19.0	22.0	28.0	30.0						
	4.6	1457	1.4	302.94	19.0	22.0	29.0	30.0						
	5.1	1310	1.2	272.49	20.0	22.0	29.0	30.0						
	5.5	1217	1.6	253.13	20.0	22.0	29.0	30.0						
	6.6	1015	1.6	211.05	21.0	22.0	30.0	30.0						
	7.3	921	2.2	191.52	21.0	22.0	30.0	30.0						
	8.7	770	2.2	160.03	21.0	22.0	30.0	30.0						
	10.0	676	3.0	140.61	22.0	22.0	30.0	30.0						
	4.6	1393	0.8	605.88	17.0	22.0	-	-	PD/PM 43 80M2B / 80M2C	80	205			
	5.3	1225	1.2	532.76	17.0	22.0	27.0	30.0						
	6.3	1023	1.2	445.16	19.0	22.0	28.0	30.0						
	6.8	949	1.6	412.63	16.0	22.0	27.0	30.0						
	7.2	899	1.7	391.14	17.0	22.0	27.0	30.0						
	8.1	793	1.6	344.78	18.0	22.0	28.0	30.0						
	8.6	751	1.9	326.83	19.0	22.0	28.0	30.0						
	9.2	696	2.3	302.94	19.0	22.0	29.0	30.0						
	10.3	626	1.9	272.49	20.0	22.0	29.0	30.0						
	11.1	582	2.6	253.13	20.0	22.0	29.0	30.0						
	13.3	485	2.6	211.05	21.0	22.0	30.0	30.0						
	5.8	1200	1.1	155.40	13.0	15.0	30.0	30.0				PD/PM 42 90S6B / 90L6C	69	204
	8.1	855	2.0	110.73	13.0	15.0	30.0	30.0						
	9.9	699	2.4	90.52	13.0	15.0	30.0	30.0						
	6.4	1059	0.9	141.42	13.0	15.0	21.0	20.0	PD/PM 32/12 90S6B / 90L6C	64	238			
	7.9	854	1.1	114.01	11.0	15.0	20.0	20.0						
	10.3	657	1.4	87.71	13.0	15.0	-	-						
	6.4	1023	0.9	217.44	-	-	-	-	PD/PM 32/12 80M4C / 80M4D	60	238			
	7.8	846	1.1	179.71	-	-	-	-						
	9.9	666	1.4	141.42	13.0	15.0	21.0	20.0						
	12.3	537	1.7	114.01	11.0	15.0	20.0	20.0						
	16.0	413	2.2	87.71	-	-	-	-						
	7.8	795	0.9	358.19	13.0	15.0	21.0	20.0				PD/PM 32/12 80M2B / 80M2C	60	238
	10.4	600	1.1	270.47	13.0	15.0	-	-						
	12.9	482	1.4	217.44	13.0	15.0	-	-						
15.6	399	1.7	179.71	13.0	15.0	-	-							
19.8	314	2.2	141.42	13.0	15.0	21.0	20.0							
24.6	253	2.7	114.01	11.0	15.0	20.0	20.0							
7.1	966	0.8	127.01	13.0	15.0	-	-	PD/PM 33 90S6B / 90L6C	62	201				
8.7	790	1.0	103.92	13.0	15.0	-	-							
10.1	680	1.0	89.45	13.0	15.0	-	-							
6.1	1110	0.9	230.79	13.0	15.0	20.0	20.0	PD/PM 33 80M4C / 80M4D	58	201				
7.3	917	0.9	190.74	14.0	15.0	21.0	20.0							
8.7	776	1.0	161.38	-	-	-	-							
11.0	611	1.3	127.01	-	-	-	-							
13.5	500	1.5	103.92	-	-	-	-							
15.7	430	1.4	89.45	-	-	-	-							
9.8	660	1.1	287.08	13.0	15.0	21.0	20.0	PD/PM 33 80M2B / 80M2C	58	201				
12.1	531	1.4	230.79	13.0	15.0	20.0	20.0							
14.7	438	1.5	190.74	14.0	15.0	21.0	20.0							
17.4	371	1.6	161.38	13.0	15.0	-	-							
22.0	292	2.0	127.01	13.0	15.0	-	-							
26.9	239	2.3	103.92	13.0	15.0	-	-							
31.3	206	2.3	89.45	13.0	15.0	-	-							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.75	8.0	867	0.9	112.23	14.0	15.0	22.0	20.0	PD/PM 32 90S6B / 90L6C	54	200
	8.9	779	1.1	100.85	14.0	15.0	22.0	20.0			
	10.1	685	1.4	88.74	13.0	15.0	23.0	20.0			
	11.3	616	1.4	79.75	13.0	15.0	23.0	20.0			
	12.8	545	1.1	70.52	13.0	15.0	23.0	20.0			
	13.7	509	1.6	65.91	12.0	15.0	23.0	20.0			
	14.0	495	2.2	64.11	12.0	15.0	23.0	20.0			
	16.1	431	1.6	55.76	12.0	15.0	23.0	20.0			
	17.0	409	2.2	52.98	11.0	15.0	22.0	20.0			
	18.8	371	1.6	48.00	11.0	15.0	22.0	20.0			
	20.1	346	2.2	44.83	15.0	15.0	21.0	20.0			
	21.4	325	3.0	42.05	15.0	15.0	21.0	20.0			
	23.3	298	2.2	38.59	15.0	15.0	20.0	20.0			
	23.8	292	3.0	37.79	15.0	15.0	21.0	20.0			
	12.5	551	1.4	112.23	14.0	15.0	22.0	20.0			
	13.9	495	1.6	100.85	14.0	15.0	22.0	20.0			
	15.8	436	2.2	88.74	13.0	15.0	23.0	20.0			
	17.6	392	2.2	79.75	13.0	15.0	23.0	20.0			
	19.9	346	1.6	70.52	13.0	15.0	23.0	20.0			
	21.2	324	2.3	65.91	12.0	15.0	23.0	20.0			
	25.1	274	2.3	55.76	12.0	15.0	23.0	20.0	PD/PM 32 80M2B / 80M2C	50	200
	29.2	236	2.3	48.00	11.0	15.0	22.0	20.0			
	24.9	267	2.2	112.23	14.0	15.0	22.0	20.0			
	27.8	240	2.6	100.85	14.0	15.0	22.0	20.0	PD/PM 32 80M2B / 80M2C	50	200
	39.7	168	2.6	70.52	13.0	15.0	23.0	20.0			
	12.9	481	0.8	216.66	7.0	12.0	-	-			
	16.0	389	1.0	175.52	7.0	12.0	12.0	15.0	PD/PM 22/02 80M2B / 80M2C	43	238
	9.1	748	0.8	98.40	5.0	12.0	11.0	15.0	PD/PM 23 90S6B / 90L6C	46	197
	10.9	626	0.9	82.29	10.0	12.0	-	-			
	10.6	633	0.8	131.68	-	-	-	-	PD/PM 23 80M4C / 80M4D	42	197
	12.0	560	0.9	116.40	8.0	12.0	12.0	15.0			
	14.2	473	1.2	98.40	5.0	12.0	11.0	15.0			
	17.0	396	1.4	82.29	-	-	-	-			
	15.1	426	0.9	185.19	8.0	12.0	-	-	PD/PM 23 80M2B / 80M2C	42	197
	18.7	345	1.1	150.03	8.0	12.0	-	-			
	21.3	303	1.3	131.68	8.0	12.0	-	-			
	24.1	268	1.5	116.40	8.0	12.0	12.0	15.0			
	28.5	226	1.9	98.40	5.0	12.0	11.0	15.0			
	34.0	189	2.3	82.29	10.0	12.0	-	-			
	10.9	637	0.8	82.45	9.0	12.0	13.0	15.0	PD/PM 22 90S6B / 90L6C	39	196
	12.9	538	0.9	69.70	9.0	12.0	14.0	15.0			
	14.1	493	1.1	63.86	9.0	12.0	14.0	15.0			
	16.7	417	1.3	53.98	10.0	12.0	14.0	15.0			
	17.4	399	1.4	51.73	9.0	12.0	13.0	15.0			
	19.9	349	1.4	45.14	10.0	12.0	14.0	15.0			
20.6	338	1.8	43.73	9.0	12.0	14.0	15.0				
24.6	282	1.9	36.57	9.0	12.0	14.0	15.0				
28.8	241	1.9	31.20	9.0	12.0	14.0	15.0				
30.4	229	2.3	29.64	9.0	12.0	14.0	15.0				
33.6	207	2.2	26.81	9.0	12.0	14.0	15.0				
36.0	193	2.7	24.98	9.0	12.0	14.0	15.0				
37.5	185	2.5	23.99	9.0	12.0	14.0	15.0				
41.1	169	3.0	21.89	9.0	12.0	14.0	15.0				
13.5	511	0.8	104.07	9.0	12.0	13.0	15.0	PD/PM 22 80M4C / 80M4D			
13.9	496	0.9	100.98	8.0	12.0	13.0	15.0				
17.0	405	1.2	82.45	9.0	12.0	13.0	15.0				
20.1	342	1.3	69.70	9.0	12.0	14.0	15.0				
21.9	314	1.7	63.86	9.0	12.0	14.0	15.0				
25.9	265	1.9	53.98	10.0	12.0	14.0	15.0				
27.1	254	2.1	51.73	9.0	12.0	13.0	15.0				
31.0	222	2.0	45.14	10.0	12.0	14.0	15.0				
32.0	215	2.6	43.73	9.0	12.0	14.0	15.0				
37.7	183	2.5	37.18	9.0	12.0	14.0	15.0				
38.3	180	2.8	36.57	9.0	12.0	14.0	15.0				
44.9	153	2.9	31.20	9.0	12.0	14.0	15.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
0.75	22.0	304	1.0	127.46	9.0	12.0	13.0	15.0	PD/PM 22 80M2B / 80M2C	35	196
	26.9	248	1.2	104.07	9.0	12.0	13.0	15.0			
	27.7	241	1.4	100.98	8.0	12.0	13.0	15.0			
	34.0	196	1.8	82.45	9.0	12.0	13.0	15.0			
	40.2	166	2.0	69.70	9.0	12.0	14.0	15.0			
	43.8	152	2.6	63.86	9.0	12.0	14.0	15.0			
	51.9	129	3.0	53.98	10.0	12.0	14.0	15.0	PD/PM 12 90S6B / 90L6C	28	192
	28.1	248	1.0	32.07	4.0	7.0	9.0	7.0			
	31.7	219	1.1	28.35	4.0	7.0	10.0	7.0			
	35.7	195	1.2	25.24	4.0	7.0	10.0	7.0			
	43.7	159	1.5	20.61	4.0	7.0	10.0	7.0			
	52.3	133	1.8	17.22	4.0	7.0	10.0	7.0			
	63.9	109	2.0	14.09	3.0	7.0	10.0	7.0			
	76.6	91	2.4	11.75	5.0	7.0	10.0	7.0			
	87.0	80	2.6	10.34	5.0	7.0	9.0	7.0			
	98.3	71	2.8	9.16	5.0	7.0	9.0	7.0			
	110.0	63	2.7	8.18	5.0	7.0	9.0	7.0	PD/PM 12 80M4C / 80M4D	24	192
	19.4	354	0.8	72.16	5.0	7.0	8.0	7.0			
	23.8	289	1.0	58.91	5.0	7.0	9.0	7.0			
	28.4	242	1.1	49.22	5.0	7.0	9.0	7.0			
	34.1	202	1.1	41.04	5.0	7.0	9.0	7.0			
	43.7	158	1.5	32.07	4.0	7.0	9.0	7.0			
	49.4	139	1.6	28.35	4.0	7.0	9.0	7.0			
	55.5	124	1.8	25.24	4.0	7.0	10.0	7.0			
	67.9	101	2.2	20.61	4.0	7.0	10.0	7.0			
	81.3	85	2.6	17.22	4.0	7.0	10.0	7.0			
	99.4	69	3.0	14.09	3.0	7.0	10.0	7.0	PD/PM 12 80M2B / 80M2C	24	192
	38.8	172	1.3	72.16	5.0	7.0	8.0	7.0			
	47.5	140	1.5	58.91	5.0	7.0	9.0	7.0			
	56.9	117	1.7	49.22	5.0	7.0	9.0	7.0			
	68.2	98	1.7	41.04	5.0	7.0	9.0	7.0			
	87.3	76	2.3	32.07	4.0	7.0	9.0	7.0			
	98.8	68	2.5	28.35	4.0	7.0	10.0	7.0	PD/PM C13 90S6B / 90L6C	34	190
	110.9	60	2.8	25.24	4.0	7.0	10.0	7.0			
	15.0	457	0.9	60.09	6.0	7.0	8.0	11.0			
	16.9	405	0.9	53.28	6.0	7.0	8.0	11.0			
	20.3	337	1.0	44.33	6.0	7.0	8.0	11.0			
	23.2	295	1.2	38.83	6.0	7.0	8.0	11.0			
	25.2	272	1.2	35.71	6.0	7.0	8.0	11.0			
	30.3	226	1.3	29.71	5.0	7.0	8.0	11.0			
	34.6	198	1.4	26.02	5.0	7.0	8.0	11.0			
	37.2	184	1.6	24.17	5.0	7.0	8.0	11.0			
	48.0	143	1.8	18.76	5.0	7.0	8.0	11.0			
	55.6	123	2.0	16.20	4.0	7.0	8.0	11.0	PD/PM C13 80M4C / 80M4D	30	190
	13.9	486	0.8	101.01	5.0	7.0	8.0	11.0			
	15.7	428	0.9	88.92	4.0	7.0	8.0	11.0			
	17.8	379	1.0	78.83	5.0	7.0	8.0	11.0			
	20.5	328	1.1	68.27	6.0	7.0	8.0	11.0			
23.3	289	1.3	60.09	6.0	7.0	8.0	11.0				
26.3	256	1.4	53.28	6.0	7.0	8.0	11.0				
31.6	213	1.6	44.33	6.0	7.0	8.0	11.0				
36.1	187	1.7	38.83	6.0	7.0	8.0	11.0				
39.2	172	1.7	35.71	6.0	7.0	8.0	11.0				
47.1	143	2.0	29.71	5.0	7.0	8.0	11.0				
53.8	125	2.2	26.02	5.0	7.0	8.0	11.0				
57.9	116	2.4	24.17	5.0	7.0	8.0	11.0				
74.6	90	2.7	18.76	5.0	7.0	8.0	11.0				
86.4	78	3.0	16.20	4.0	7.0	8.0	11.0				
17.7	364	0.8	158.21	5.0	7.0	8.0	11.0	PD/PM C13 80M2B / 80M2C	30	190	
20.5	314	0.9	136.54	5.0	7.0	8.0	11.0				
23.7	271	1.0	118.07	5.0	7.0	8.0	11.0				
26.4	244	1.2	106.03	5.0	7.0	8.0	11.0				
27.7	232	1.2	101.01	5.0	7.0	8.0	11.0				
31.5	204	1.4	88.92	4.0	7.0	8.0	11.0				
35.5	181	1.6	78.83	5.0	7.0	8.0	11.0				
41.0	157	1.8	68.27	6.0	7.0	8.0	11.0				
46.6	138	2.0	60.09	6.0	7.0	8.0	11.0				
52.6	122	2.2	53.28	6.0	7.0	8.0	11.0				
63.2	102	2.5	44.33	6.0	7.0	8.0	11.0				
72.1	89	2.8	38.83	6.0	7.0	8.0	11.0				
78.4	82	2.8	35.71	6.0	7.0	8.0	11.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3		
0.75	39.7	175	0.8	22.68	4.0	5.0	7.0	5.0	PD/PM B02 90S6B / 90L6C	22	188
	41.7	167	0.9	21.58	3.0	5.0	7.0	5.0			
	45.1	154	0.9	19.94	3.0	5.0	7.0	5.0			
	51.1	136	1.0	17.62	3.0	5.0	7.0	5.0			
	54.3	128	1.1	16.57	3.0	5.0	7.0	5.0			
	63.4	110	1.6	14.20	3.0	5.0	7.0	5.0			
	69.4	100	1.7	12.96	3.0	5.0	7.0	5.0			
	79.8	87	1.7	11.28	3.0	5.0	7.0	5.0			
	82.0	85	1.9	10.97	3.0	5.0	7.0	5.0			
	93.1	75	2.0	9.67	3.0	5.0	7.0	5.0			
	102.0	68	2.1	8.82	4.0	5.0	7.0	5.0			
	120.5	58	2.4	7.47	4.0	5.0	7.0	5.0			
	140.0	50	2.6	6.43	4.0	5.0	-	-			
	150.0	46	2.7	6.00	4.0	5.0	-	-			
	174.1	40	3.0	5.17	4.0	5.0	-	-			
	31.7	217	0.8	44.23	4.0	5.0	7.0	5.0	PD/PM B02 80M4C / 80M4D	18	188
	34.7	198	0.8	40.35	4.0	5.0	7.0	5.0			
	41.0	168	0.9	34.16	4.0	5.0	7.0	5.0			
	46.5	148	0.9	30.08	4.0	5.0	7.0	5.0			
	53.9	128	1.0	25.96	4.0	5.0	7.0	5.0			
	61.7	111	1.2	22.68	4.0	5.0	7.0	5.0			
	64.9	106	1.3	21.58	3.0	5.0	7.0	5.0			
	70.2	98	1.3	19.94	3.0	5.0	7.0	5.0			
	79.5	87	1.5	17.62	3.0	5.0	7.0	5.0			
	84.5	81	1.7	16.57	3.0	5.0	7.0	5.0			
	98.6	70	2.3	14.20	3.0	5.0	7.0	5.0			
	108.0	64	2.5	12.96	3.0	5.0	7.0	5.0			
	124.1	55	2.5	11.28	3.0	5.0	7.0	5.0			
	127.6	54	2.8	10.97	3.0	5.0	7.0	5.0			
	144.8	47	3.0	9.67	3.0	5.0	7.0	5.0			
	49.5	135	0.9	56.55	4.0	5.0	7.0	5.0	PD/PM B02 80M2B / 80M2C	18	188
	54.3	123	0.9	51.60	4.0	5.0	7.0	5.0			
	63.3	105	1.2	44.23	4.0	5.0	7.0	5.0			
	69.4	96	1.3	40.35	4.0	5.0	7.0	5.0			
	82.0	81	1.4	34.16	4.0	5.0	7.0	5.0			
	93.1	72	1.4	30.08	4.0	5.0	7.0	5.0			
	107.9	62	1.6	25.96	4.0	5.0	7.0	5.0			
	123.5	54	1.8	22.68	4.0	5.0	7.0	5.0			
	129.7	51	2.1	21.58	3.0	5.0	7.0	5.0			
	140.4	47	2.1	19.94	3.0	5.0	7.0	5.0			
	158.9	42	2.3	17.62	3.0	5.0	7.0	5.0			
	169.0	39	2.7	16.57	3.0	5.0	7.0	5.0			
	54.4	128	0.8	16.54	3.0	5.0	5.0	8.0	PD/PM A02 90S6B / 90L6C	18	186
	65.1	107	1.1	13.83	3.0	5.0	5.0	8.0			
	77.1	90	1.3	11.67	3.0	5.0	5.0	8.0			
	94.8	73	1.6	9.49	3.0	5.0	5.0	8.0			
	104.3	67	1.8	8.63	3.0	5.0	5.0	8.0			
	124.1	56	2.1	7.25	4.0	5.0	5.0	8.0			
	141.7	49	2.4	6.35	4.0	5.0	5.0	8.0			
	168.9	41	2.3	5.33	4.0	5.0	5.0	8.0			
	212.3	33	2.3	4.24	4.0	5.0	5.0	8.0			
		48.1	143	0.8	29.11	4.0	5.0	5.0			
57.0		121	1.0	24.57	3.0	5.0	5.0	8.0			
62.7		110	1.0	22.34	3.0	5.0	5.0	8.0			
74.6		92	1.0	18.77	3.0	5.0	5.0	8.0			
84.6		81	1.2	16.54	3.0	5.0	5.0	8.0			
93.9		73	1.0	14.91	3.0	5.0	5.0	8.0			
101.2		68	1.6	13.83	3.0	5.0	5.0	8.0			
120.0		57	1.9	11.67	3.0	5.0	5.0	8.0			
147.5		47	2.4	9.49	3.0	5.0	5.0	8.0			
162.2		42	2.7	8.63	3.0	5.0	5.0	8.0			

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
0.75	74.3	90	0.8	37.71	4.0	5.0	5.0	8.0	PD/PM A02 80M2B / 80M2C	14	186
	80.5	83	0.9	34.80	4.0	5.0	5.0	8.0			
	88.0	76	1.0	31.83	4.0	5.0	5.0	8.0			
	96.2	69	1.2	29.11	4.0	5.0	5.0	8.0			
	114.0	59	1.5	24.57	3.0	5.0	5.0	8.0			
	125.3	53	1.6	22.34	3.0	5.0	5.0	8.0			
	149.2	45	1.6	18.77	3.0	5.0	5.0	8.0			
	169.3	39	1.9	16.54	3.0	5.0	5.0	8.0			
	187.8	36	1.6	14.91	3.0	5.0	5.0	8.0			
	202.5	33	2.5	13.83	3.0	5.0	5.0	8.0			
239.9	28	3.0	11.67	3.0	5.0	5.0	8.0				
1.10	0.2	43305	1.5	4001.34	-	-	-	-	PD/PM 113/52 90L6C / 90L6D	1132	242
	0.2	40292	1.6	3722.96	-	-	-	-			
	0.3	33147	1.9	3062.69	-	-	-	-			
	0.4	25200	2.5	2328.41	-	-	-	-			
	0.3	27022	2.2	4001.34	-	-	-	-	PD/PM 113/52 90L4B / 90L4C	1132	242
	0.4	25142	2.4	3722.96	-	-	-	-			
	0.5	20683	2.9	3062.69	-	-	-	-			
	0.6	15335	2.4	1416.90	-	-	127.0	150.0	PD/PM 103/52 90L6C / 90L6D	1324	242
	0.8	12615	2.9	1165.61	-	-	130.0	150.0			
	0.3	31586	1.1	4677.24	-	-	-	-	PD/PM 103/52 90L4B / 90L4C	1324	242
	0.6	16226	2.2	2404.69	-	-	-	-			
	0.4	26339	1.0	2433.68	120.0	102.0	-	-	PD/PM 93/42 90L6C / 90L6D	731	242
	0.4	23841	1.1	2202.85	120.0	102.0	-	-			
	0.5	18884	1.3	1744.83	120.0	102.0	-	-			
	0.6	15343	1.6	1417.68	120.0	102.0	120.0	130.0			
	0.8	12742	2.0	1177.36	120.0	102.0	120.0	130.0			
	1.0	9585	2.6	885.67	34.0	64.0	120.0	130.0			
	0.6	16435	1.5	2433.68	-	-	-	-	PD/PM 93/42 90L4B / 90L4C	731	242
	0.6	14876	1.6	2202.85	-	-	-	-			
	0.8	11783	2.0	1744.83	-	-	-	-			
	1.0	9574	2.5	1417.68	120.0	102.0	120.0	130.0			
	1.2	7951	3.0	1177.36	120.0	102.0	120.0	130.0			
	1.6	5956	2.1	550.29	84.0	73.0	100.0	100.0	PD/PM 83/42 90L6C / 90L6D	429	242
	1.9	5074	2.5	468.82	84.0	73.0	100.0	100.0			
	0.7	14751	0.9	1362.94	85.0	73.0	100.0	100.0	PD/PM 83/32 90L6C / 90L6D	414	240
	0.8	11492	1.1	1061.83	89.0	73.0	100.0	100.0			
	1.0	9622	1.3	889.06	90.0	73.0	100.0	100.0			
	1.3	7755	1.6	716.55	91.0	73.0	100.0	100.0			
	1.5	6603	1.9	610.07	92.0	73.0	100.0	100.0			
	0.8	11431	1.1	1692.65	-	-	-	-	PD/PM 83/32 90L4B / 90L4C	414	240
	1.0	9204	1.3	1362.94	85.0	73.0	100.0	100.0			
	1.3	7171	1.7	1061.83	89.0	73.0	100.0	100.0			
1.6	6004	2.0	889.06	90.0	73.0	100.0	100.0				
2.0	4839	2.5	716.55	91.0	73.0	100.0	100.0				
2.3	4120	2.9	610.07	92.0	73.0	100.0	100.0				
0.8	11048	0.8	3519.07	92.0	73.0	-	-	PD/PM 83/32 80M2C / 80M2D	410	240	
0.9	9407	1.0	2996.11	92.0	73.0	-	-				
1.2	7562	1.2	2408.64	92.0	73.0	-	-				
1.7	5314	1.7	1692.65	92.0	73.0	-	-				
2.1	4279	2.1	1362.94	85.0	73.0	100.0	100.0				
2.6	3334	2.8	1061.83	89.0	73.0	100.0	100.0				
3.1	3193	2.3	295.06	51.0	58.0	81.0	80.0	PD/PM 73/32 90L6C / 90L6D	289	240	
1.3	7687	1.0	710.29	54.0	58.0	79.0	80.0	PD/PM 73/22 90L6C / 90L6D	278	240	
1.6	6177	1.2	570.70	56.0	58.0	80.0	80.0				
2.1	4706	1.6	434.82	57.0	58.0	81.0	80.0				
2.4	4072	1.8	376.24	56.0	58.0	81.0	80.0				
1.0	9066	0.8	1342.44	50.0	58.0	77.0	80.0	PD/PM 73/22 90L4B / 90L4C	278	240	
1.3	7037	1.0	1042.00	46.0	58.0	74.0	80.0				
1.5	6296	1.1	932.25	50.0	58.0	76.0	80.0				
2.0	4797	1.5	710.29	54.0	58.0	79.0	80.0				
2.5	3854	1.8	570.70	56.0	58.0	80.0	80.0				
3.2	2936	2.4	434.82	57.0	58.0	81.0	80.0				
3.7	2541	2.8	376.24	56.0	58.0	81.0	60.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
1.10	1.4	6472	0.8	2061.26	50.0	58.0	-	-	PD/PM 73/22 80M2C / 80M2D	274	240
	1.6	5671	0.9	1806.13	50.0	58.0	-	-			
	2.1	4215	1.3	1342.44	50.0	58.0	77.0	80.0			
	2.7	3271	1.6	1042.00	46.0	58.0	74.0	80.0			
	3.0	2927	1.8	932.25	50.0	58.0	76.0	80.0			
	3.9	2230	2.4	710.29	54.0	58.0	79.0	80.0			
	4.9	1792	3.0	570.70	56.0	58.0	80.0	80.0			
	4.0	2419	2.1	223.50	-	-	-	-	PD/PM 63/32 90L6C / 90L6D	216	240
	4.7	2069	2.4	191.13	-	-	-	-			
	5.7	1720	2.9	158.90	-	-	-	-			
	1.4	6898	0.8	637.34	22.0	47.0	47.0	60.0	PD/PM 63/22 90L6C / 90L6D	205	240
	1.6	6171	0.9	570.21	41.0	47.0	58.0	60.0			
	2.1	4702	1.2	434.44	23.0	47.0	47.0	60.0			
	2.6	3778	1.5	349.07	16.0	47.0	-	-			
	3.0	3248	1.7	300.12	25.0	47.0	-	-			
	1.7	5545	1.0	821.10	39.0	47.0	57.0	60.0	PD/PM 63/22 90L4B / 90L4C	205	240
	2.2	4304	1.3	637.34	22.0	47.0	47.0	60.0			
	2.5	3851	1.4	570.21	41.0	47.0	58.0	60.0			
	3.2	2934	1.8	434.44	23.0	47.0	58.0	60.0			
	4.0	2357	2.3	349.07	16.0	47.0	44.0	60.0			
	4.7	2027	2.7	300.12	-	-	-	-			
	2.2	3958	1.0	1260.77	39.0	47.0	48.0	60.0			
	2.5	3468	1.2	1104.71	39.0	47.0	50.0	60.0	PD/PM 63/22 80M2C / 80M2D	201	240
	3.4	2578	1.6	821.10	39.0	47.0	57.0	60.0			
	4.4	2001	2.1	637.34	22.0	47.0	47.0	60.0			
	4.9	1790	2.3	570.21	41.0	47.0	58.0	60.0			
	6.4	1364	3.0	434.44	23.0	47.0	47.0	60.0			
	1.6	6159	0.9	552.15	35.0	47.0	54.0	60.0	PD/PM 63 90L6C / 90L6D	186	213
	2.0	4973	0.9	445.80	38.0	47.0	56.0	60.0			
	2.3	4389	1.4	393.43	39.0	47.0	57.0	60.0			
	2.8	3543	1.7	317.64	40.0	47.0	57.0	60.0			
	3.6	2807	1.7	251.63	41.0	47.0	58.0	60.0			
	4.0	2519	1.7	225.83	41.0	47.0	58.0	60.0			
	2.5	3895	1.3	552.15	35.0	47.0	54.0	60.0	PD/PM 63 90L4B / 90L4C	186	213
	3.1	3144	1.3	445.80	38.0	47.0	56.0	60.0			
	3.6	2775	2.1	393.43	39.0	47.0	57.0	60.0			
	4.4	2240	2.5	317.64	40.0	47.0	57.0	60.0			
	5.6	1775	2.5	251.63	41.0	47.0	58.0	60.0			
	6.2	1593	2.5	225.83	41.0	47.0	58.0	60.0			
	2.7	3718	0.8	338.40	21.0	32.0	-	-	PD/PM 52/12 90L6C / 90L6D	115	238
	3.3	2997	1.1	272.80	21.0	32.0	38.0	40.0			
	3.9	2556	1.2	232.65	31.0	32.0	-	-			
	5.2	1917	1.6	174.49	31.0	32.0	-	-			
	6.3	1564	2.0	142.31	21.0	32.0	-	-			
	2.5	3794	0.8	549.54	-	-	-	-	PD/PM 52/12 90L4B / 90L4C	115	238
	3.1	3094	1.0	448.15	-	-	-	-			
	4.1	2336	1.3	338.40	-	-	-	-			
5.1	1883	1.6	272.80	21.0	32.0	38.0	40.0				
6.0	1606	1.9	232.65	-	-	-	-				
8.0	1205	2.5	174.49	-	-	-	-				
3.3	2802	0.8	861.34	21.0	32.0	-	-	PD/PM 52/12 80M2C / 80M2D	111	238	
4.1	2242	1.0	689.07	21.0	32.0	-	-				
5.1	1788	1.3	549.54	21.0	32.0	-	-				
6.2	1458	1.6	448.15	21.0	32.0	-	-				
8.3	1101	2.1	338.40	21.0	32.0	-	-				
10.3	888	2.6	272.80	21.0	32.0	38.0	40.0				
12.0	757	3.0	323.65	31.0	32.0	-	-				
2.7	3698	0.9	331.54	28.0	32.0	42.0	40.0	PD/PM 53 90L6C / 90L6D	124	209	
3.3	3016	0.9	270.40	29.0	32.0	43.0	40.0				
3.6	2774	1.2	248.66	30.0	32.0	43.0	40.0				
4.4	2262	1.5	202.80	29.0	32.0	43.0	40.0				
5.3	1911	1.5	171.36	28.0	32.0	42.0	40.0				
5.8	1716	2.0	153.85	28.0	32.0	43.0	40.0				
6.5	1548	2.2	138.78	27.0	32.0	43.0	40.0				
7.7	1308	2.2	117.27	27.0	32.0	-	-				
9.8	1021	3.0	91.51	27.0	32.0	-	-				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
1.10	2.7	3701	0.9	524.75	21.0	32.0	38.0	40.0	PD/PM 53 90L4B / 90L4C	124	209			
	3.3	3019	1.1	427.97	25.0	32.0	40.0	40.0						
	3.9	2551	1.1	361.64	27.0	32.0	42.0	40.0						
	4.2	2338	1.4	331.54	28.0	32.0	42.0	40.0						
	5.2	1907	1.4	270.40	29.0	32.0	43.0	40.0						
	5.6	1754	1.8	248.66	30.0	32.0	43.0	40.0						
	6.9	1430	2.2	202.80	29.0	32.0	43.0	40.0						
	8.2	1209	2.3	171.36	28.0	32.0	42.0	40.0						
	9.1	1085	2.9	153.85	28.0	32.0	43.0	40.0						
	4.0	2359	1.0	699.67	21.0	32.0	39.0	40.0				PD/PM 53 80M2C / 80M2D	120	209
	4.9	1924	1.1	570.63	21.0	32.0	41.0	40.0						
	5.3	1769	1.4	524.75	21.0	32.0	38.0	40.0						
	6.5	1443	1.7	427.97	25.0	32.0	40.0	40.0						
	7.7	1219	1.7	361.64	27.0	32.0	42.0	40.0						
	8.4	1118	2.2	331.54	28.0	32.0	42.0	40.0						
	10.4	912	2.3	270.40	29.0	32.0	43.0	40.0						
	11.3	838	2.9	248.66	30.0	32.0	43.0	40.0						
	6.7	1518	1.8	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90L6C / 90L6D	105	208			
	9.0	1134	2.1	100.15	12.0	22.0	44.0	40.0						
	11.0	925	2.1	81.68	12.0	22.0	44.0	40.0						
	10.4	966	2.7	134.05	31.0	32.0	44.0	40.0	PD/PM 52 90L4B / 90L4C	105	208			
	5.1	1946	1.0	177.15	16.0	22.0	-	-	PD/PM 42/12 90L6C / 90L6D	79	238			
	5.9	1676	1.1	152.50	16.0	22.0	26.0	30.0						
	7.1	1400	1.3	127.43	22.0	22.0	-	-						
	4.1	2356	0.8	341.25	22.0	22.0	31.0	30.0	PD/PM 42/12 90L4B / 90L4C	79	238			
	4.6	2086	0.9	302.14	22.0	22.0	31.0	30.0						
	6.0	1620	1.1	234.61	-	-	-	-						
	7.9	1223	1.5	177.15	-	-	-	-						
	9.2	1053	1.7	152.50	16.0	22.0	26.0	30.0						
	11.0	880	2.0	127.43	-	-	-	-						
	5.0	1815	0.8	557.93	22.0	22.0	28.0	30.0				PD/PM 42/12 80M2C / 80M2D	75	238
	6.8	1333	1.0	409.62	22.0	22.0	-	-						
	8.2	1110	1.2	341.25	22.0	22.0	-	-						
	9.3	983	1.4	302.14	22.0	22.0	-	-						
	11.9	763	1.8	234.61	16.0	22.0	-	-						
	15.8	576	2.4	177.15	16.0	22.0	-	-						
	18.4	496	2.8	152.50	16.0	22.0	26.0	30.0						
	4.7	2136	1.0	191.52	17.0	22.0	28.0	30.0	PD/PM 43 90L6C / 90L6D	84	205			
	5.6	1785	1.0	160.03	21.0	22.0	30.0	30.0						
	6.4	1568	1.3	140.61	16.0	22.0	27.0	30.0						
	7.6	1322	1.6	118.53	17.0	22.0	28.0	30.0						
	8.7	1159	1.8	103.86	15.0	22.0	31.0	30.0						
	10.4	968	2.1	86.78	19.0	22.0	-	-						
	4.3	2305	0.8	326.83	14.0	22.0	25.0	30.0	PD/PM 43 90L4B / 90L4C	84	205			
	4.6	2137	1.0	302.94	15.0	22.0	26.0	30.0						
	5.1	1922	0.8	272.49	17.0	22.0	27.0	30.0						
	5.5	1785	1.1	253.13	18.0	22.0	28.0	30.0						
	6.6	1489	1.1	211.05	16.0	22.0	27.0	30.0						
7.3	1351	1.5	191.52	17.0	22.0	28.0	30.0							
8.7	1129	1.5	160.03	21.0	22.0	30.0	30.0							
10.0	992	2.0	140.61	16.0	22.0	27.0	30.0							
11.8	836	2.4	118.53	17.0	22.0	28.0	30.0							
13.5	733	2.7	103.86	15.0	22.0	27.0	30.0							
5.3	1796	0.8	532.76	14.0	22.0	27.0	30.0	PD/PM 43 80M2C / 80M2D				80	205	
6.3	1501	0.8	445.16	14.0	22.0	28.0	30.0							
6.8	1391	1.1	412.63	14.0	22.0	27.0	30.0							
7.2	1319	1.2	391.14	14.0	22.0	27.0	30.0							
8.1	1162	1.1	344.78	14.0	22.0	28.0	30.0							
8.6	1102	1.3	326.83	14.0	22.0	25.0	30.0							
9.2	1021	1.5	302.94	15.0	22.0	26.0	30.0							
10.3	919	1.3	272.49	17.0	22.0	27.0	30.0							
11.1	853	1.7	253.13	18.0	22.0	28.0	30.0							
13.3	712	1.7	211.05	16.0	22.0	27.0	30.0							
14.6	646	2.3	191.52	17.0	22.0	28.0	30.0							
17.5	540	2.3	160.03	21.0	22.0	30.0	30.0							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3		
1.10	5.8	1760	0.8	155.40	21.0	22.0	30.0	30.0	PD/PM 42 90L6C / 90L6D	69	204
	8.1	1254	1.3	110.73	20.0	22.0	30.0	30.0			
	9.9	1025	1.6	90.52	19.0	22.0	30.0	30.0			
	9.0	1119	1.1	155.40	21.0	22.0	30.0	30.0	PD/PM 42 90L4B / 90L4C	69	204
	12.6	798	2.0	110.73	20.0	22.0	30.0	30.0			
	15.5	652	2.5	90.52	19.0	22.0	30.0	30.0			
	7.9	1253	0.8	114.01	11.0	15.0	20.0	20.0	PD/PM 32/12 90L6C / 90L6D	64	238
	10.3	964	1.0	87.71	13.0	15.0	-	-			
	9.9	976	0.9	141.42	13.0	15.0	21.0	20.0	PD/PM 32/12 90L4B / 90L4C	64	238
	12.3	787	1.1	114.01	11.0	15.0	20.0	20.0			
	16.0	605	1.5	87.71	-	-	-	-			
	10.4	880	0.8	270.47	13.0	15.0	-	-	PD/PM 32/12 80M2C / 80M2D	60	238
	12.9	707	1.0	217.44	13.0	15.0	-	-			
	15.6	585	1.2	179.71	13.0	15.0	-	-			
	19.8	460	1.5	141.42	13.0	15.0	21.0	20.0			
	24.6	371	1.8	114.01	11.0	15.0	20.0	20.0			
	31.9	285	2.4	87.71	13.0	15.0	-	-			
	11.0	896	0.9	127.01	-	-	-	-	PD/PM 33 90L4B / 90L4C	62	201
	13.5	733	1.0	103.92	-	-	-	-			
	15.7	631	1.0	89.45	-	-	-	-			
	12.1	778	1.0	230.79	13.0	15.0	20.0	20.0	PD/PM 33 80M2C / 80M2D	58	201
	14.7	643	1.0	190.74	13.0	15.0	21.0	20.0			
	17.4	544	1.1	161.38	13.0	15.0	-	-			
	22.0	428	1.4	127.01	13.0	15.0	-	-			
	26.9	350	1.6	103.92	13.0	15.0	-	-			
	31.3	302	1.6	89.45	13.0	15.0	-	-			
	10.1	1005	1.0	88.74	12.0	15.0	22.0	20.0	PD/PM 32 90L6C / 90L6D	54	200
11.3	903	1.0	79.75	12.0	15.0	22.0	20.0				
13.7	746	1.1	65.91	12.0	15.0	23.0	20.0				
14.0	726	1.5	64.11	12.0	15.0	23.0	20.0				
16.1	631	1.1	55.76	11.0	15.0	22.0	20.0				
17.0	600	1.5	52.98	11.0	15.0	22.0	20.0				
18.8	544	1.1	48.00	11.0	15.0	21.0	20.0				
20.1	508	1.5	44.83	11.0	15.0	21.0	20.0				
21.4	476	2.0	42.05	10.0	15.0	21.0	20.0				
23.3	437	1.5	38.59	10.0	15.0	20.0	20.0				
23.8	428	2.0	37.79	14.0	15.0	20.0	20.0				
28.2	361	2.5	31.90	14.0	15.0	19.0	20.0				
31.4	325	2.8	28.67	14.0	15.0	18.0	20.0				
34.8	293	3.0	25.86	14.0	15.0	17.0	20.0				
12.5	808	1.0	112.23	13.0	15.0	22.0	20.0	PD/PM 32 90L4B / 90L4C			
13.9	726	1.1	100.85	13.0	15.0	22.0	20.0				
15.8	639	1.5	88.74	12.0	15.0	22.0	20.0				
17.6	574	1.5	79.75	12.0	15.0	22.0	20.0				
19.9	508	1.1	70.52	12.0	15.0	22.0	20.0				
21.2	475	1.6	65.91	12.0	15.0	23.0	20.0				
21.8	462	2.2	64.11	12.0	15.0	23.0	20.0				
25.1	402	1.6	55.76	11.0	15.0	22.0	20.0				
26.4	382	2.2	52.98	11.0	15.0	22.0	20.0				
29.2	346	1.6	48.00	11.0	15.0	21.0	20.0				
31.2	323	2.3	44.83	11.0	15.0	21.0	20.0				
36.3	278	2.3	38.59	10.0	15.0	20.0	20.0				
24.9	392	1.5	112.23	13.0	15.0	22.0	20.0	PD/PM 32 80M2C / 80M2D	50	200	
27.8	352	1.7	100.85	13.0	15.0	22.0	20.0				
31.6	310	2.3	88.74	12.0	15.0	22.0	20.0				
35.1	279	2.3	79.75	12.0	15.0	22.0	20.0				
39.7	246	1.7	70.52	12.0	15.0	22.0	20.0				
42.5	230	2.5	65.91	12.0	15.0	23.0	20.0				
50.2	195	2.5	55.76	11.0	15.0	22.0	20.0				
58.3	168	2.5	48.00	11.0	15.0	21.0	20.0				
14.2	694	0.8	98.40	5.0	12.0	11.0	15.0	PD/PM 23 90L4B / 90L4C	46	197	
17.0	580	1.0	82.29	-	-	-	-				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm		
1.10	18.7	506	0.8	150.03	5.0	12.0	-	-	PD/PM 23 80M2C / 80M2D	42	197		
	21.3	444	0.9	131.68	5.0	12.0	-	-					
	24.1	392	1.0	116.40	5.0	12.0	12.0	15.0					
	28.5	332	1.3	98.40	5.0	12.0	11.0	15.0					
	34.0	277	1.5	82.29	8.0	12.0	-	-					
	14.1	723	0.8	63.86	9.0	12.0	13.0	15.0	PD/PM 22 90L6C / 90L6D	39	196		
	16.7	611	0.9	53.98	9.0	12.0	13.0	15.0					
	17.4	586	0.9	51.73	9.0	12.0	13.0	15.0					
	19.9	511	0.9	45.14	9.0	12.0	14.0	15.0					
	20.6	495	1.2	43.73	9.0	12.0	14.0	15.0					
	24.6	414	1.3	36.57	9.0	12.0	14.0	15.0					
	28.8	353	1.3	31.20	9.0	12.0	14.0	15.0					
	30.4	336	1.6	29.64	9.0	12.0	14.0	15.0					
	33.6	304	1.5	26.81	8.0	12.0	14.0	15.0					
	36.0	283	1.8	24.98	8.0	12.0	14.0	15.0					
	37.5	272	1.7	23.99	8.0	12.0	14.0	15.0					
	41.1	248	2.0	21.89	8.0	12.0	14.0	15.0					
	48.6	210	2.4	18.51	9.0	12.0	14.0	15.0					
	54.3	188	2.6	16.56	9.0	12.0	14.0	15.0					
	68.2	149	2.8	13.20	9.0	12.0	13.0	15.0					
	76.2	134	3.0	11.81	9.0	12.0	13.0	15.0					
	107.7	95	2.8	8.36	9.0	12.0	11.0	15.0					
	120.3	85	3.0	7.48	9.0	12.0	11.0	15.0					
	17.0	594	0.8	82.45	7.0	12.0	12.0	15.0	PD/PM 22 90L4B / 90L4C	39	196		
	20.1	502	0.9	69.70	8.0	12.0	13.0	15.0					
	21.9	460	1.1	63.86	9.0	12.0	13.0	15.0					
	25.9	389	1.3	53.98	9.0	12.0	13.0	15.0					
	27.1	373	1.4	51.73	9.0	12.0	13.0	15.0					
	31.0	325	1.4	45.14	9.0	12.0	14.0	15.0					
	32.0	315	1.8	43.73	9.0	12.0	14.0	15.0					
	38.3	263	1.9	36.57	9.0	12.0	14.0	15.0					
	44.9	225	2.0	31.20	9.0	12.0	14.0	15.0					
	47.2	214	2.3	29.64	9.0	12.0	14.0	15.0					
	52.2	193	2.3	26.81	8.0	12.0	14.0	15.0					
	56.0	180	2.7	24.98	8.0	12.0	14.0	15.0					
	58.4	173	2.5	23.99	8.0	12.0	14.0	15.0					
	64.0	158	3.0	21.89	8.0	12.0	14.0	15.0					
	26.9	364	0.8	104.07	7.0	12.0	-	-	PD/PM 22 80M2C / 80M2D	35	196		
	27.7	353	0.9	100.98	7.0	12.0	-	-					
	34.0	288	1.3	82.45	7.0	12.0	12.0	15.0					
	40.2	244	1.4	69.70	8.0	12.0	13.0	15.0					
	43.8	223	1.8	63.86	9.0	12.0	13.0	15.0					
	51.9	189	2.0	53.98	9.0	12.0	13.0	15.0					
	54.1	181	2.2	51.73	9.0	12.0	13.0	15.0					
	62.0	158	2.2	45.14	9.0	12.0	14.0	15.0					
	64.0	153	2.8	43.73	9.0	12.0	14.0	15.0					
	75.3	130	2.7	37.18	9.0	12.0	-	-					
	76.6	128	3.0	36.57	9.0	12.0	14.0	15.0					
35.7	286	0.8	25.24	4.0	7.0	9.0	7.0	PD/PM 12 90L6C / 90L6D	28	192			
43.7	233	1.0	20.61	4.0	7.0	10.0	7.0						
52.3	195	1.2	17.22	4.0	7.0	10.0	7.0						
63.9	160	1.4	14.09	3.0	7.0	10.0	7.0						
76.6	133	1.6	11.75	3.0	6.0	10.0	7.0						
87.0	117	1.8	10.34	3.0	6.0	9.0	7.0						
98.3	104	1.9	9.16	3.0	6.0	9.0	7.0						
109.4	93	2.2	8.23	3.0	5.0	9.0	7.0						
110.0	93	1.8	8.18	3.0	5.0	9.0	7.0						
124.1	82	2.4	7.25	4.0	7.0	8.0	7.0						
140.2	73	2.6	6.42	4.0	7.0	8.0	7.0						
164.5	62	2.9	5.47	4.0	7.0	7.0	7.0						
188.3	54	2.5	4.78	4.0	7.0	7.0	7.0						
43.7	231	1.0	32.07	4.0	7.0	9.0	7.0				PD/PM 12 90L4B / 90L4C	28	192
49.4	204	1.1	28.35	4.0	7.0	9.0	7.0						
55.5	182	1.2	25.24	4.0	7.0	9.0	7.0						
67.9	148	1.5	20.61	4.0	7.0	10.0	7.0						
81.3	124	1.8	17.22	4.0	7.0	10.0	7.0						
99.4	101	2.1	14.09	3.0	7.0	10.0	7.0						
119.1	85	2.4	11.75	3.0	6.0	10.0	7.0						
135.4	74	2.6	10.34	3.0	6.0	9.0	7.0						
152.8	66	2.9	9.16	3.0	6.0	9.0	7.0						
171.1	59	2.7	8.18	3.0	5.0	9.0	7.0						



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm		
1.10	38.8	252	0.9	72.16	4.0	7.0	8.0	7.0	PD/PM 12 80M2C / 80M2D	24	192		
	47.5	206	1.0	58.91	4.0	7.0	9.0	7.0					
	56.9	172	1.1	49.22	4.0	7.0	9.0	7.0					
	68.2	143	1.2	41.04	4.0	7.0	9.0	7.0					
	87.3	112	1.6	32.07	4.0	7.0	9.0	7.0					
	98.8	99	1.7	28.35	4.0	7.0	9.0	7.0					
	110.9	88	1.9	25.24	4.0	7.0	9.0	7.0					
	135.9	72	2.4	20.61	4.0	7.0	10.0	7.0					
	162.6	60	2.8	17.22	4.0	7.0	10.0	7.0					
	23.2	433	0.8	38.83	5.0	7.0	8.0	11.0	PD/PM C13 90L6C / 90L6D	34	190		
	25.2	398	0.8	35.71	5.0	7.0	8.0	11.0					
	30.3	331	0.9	29.71	5.0	7.0	8.0	11.0					
	34.6	290	1.0	26.02	5.0	7.0	8.0	11.0					
	37.2	270	1.1	24.17	5.0	7.0	8.0	11.0					
	48.0	209	1.2	18.76	5.0	7.0	8.0	11.0					
	55.6	181	1.3	16.20	4.0	7.0	8.0	11.0					
	20.5	482	0.8	68.27	6.0	7.0	8.0	11.0	PD/PM C13 90L4B / 90L4C	34	190		
	23.3	424	0.9	60.09	4.0	7.0	8.0	11.0					
	26.3	376	0.9	53.28	5.0	7.0	8.0	11.0					
	31.6	313	1.1	44.33	5.0	7.0	8.0	11.0					
	36.1	274	1.2	38.83	5.0	7.0	8.0	11.0					
	39.2	252	1.2	35.71	5.0	7.0	8.0	11.0					
	47.1	210	1.3	29.71	5.0	7.0	8.0	11.0					
	53.8	184	1.5	26.02	5.0	7.0	8.0	11.0					
	57.9	170	1.6	24.17	5.0	7.0	8.0	11.0					
	74.6	132	1.8	18.76	5.0	7.0	8.0	11.0					
	86.4	114	2.0	16.20	4.0	7.0	8.0	11.0					
	26.4	357	0.8	106.03	6.0	7.0	8.0	11.0	PD/PM C13 80M2C / 80M2D	30	190		
	27.7	341	0.8	101.01	6.0	7.0	8.0	11.0					
	31.5	300	0.9	88.92	6.0	7.0	8.0	11.0					
	35.5	266	1.1	78.83	6.0	7.0	8.0	11.0					
	41.0	230	1.2	68.27	6.0	7.0	8.0	11.0					
	46.6	203	1.4	60.09	4.0	7.0	8.0	11.0					
	52.6	180	1.5	53.28	5.0	7.0	8.0	11.0					
	63.2	149	1.7	44.33	5.0	7.0	8.0	11.0					
	72.1	131	1.9	38.83	5.0	7.0	8.0	11.0					
	78.4	120	1.9	35.71	5.0	7.0	8.0	11.0					
	94.2	100	2.1	29.71	5.0	7.0	8.0	11.0					
	107.6	88	2.3	26.02	5.0	7.0	8.0	11.0					
	115.8	81	2.6	24.17	5.0	7.0	8.0	11.0					
	149.3	63	2.9	18.76	5.0	7.0	8.0	11.0					
	54.3	188	0.8	16.57	3.0	5.0	7.0	5.0	PD/PM B02 90L6C / 90L6D	22	188		
	63.4	161	1.1	14.20	3.0	5.0	7.0	5.0					
	69.4	147	1.1	12.96	3.0	5.0	7.0	5.0					
	79.8	128	1.2	11.28	3.0	5.0	7.0	5.0					
	82.0	124	1.3	10.97	3.0	5.0	7.0	5.0					
	93.1	110	1.4	9.67	3.0	5.0	7.0	5.0					
	102.0	100	1.5	8.82	3.0	5.0	7.0	5.0					
120.5	85	1.6	7.47	3.0	4.0	7.0	5.0						
140.0	73	1.8	6.43	2.0	4.0	7.0	5.0						
150.0	68	1.9	6.00	2.0	4.0	7.0	5.0						
174.1	59	2.0	5.17	4.0	5.0	7.0	5.0						
192.7	53	2.2	4.67	4.0	5.0	7.0	5.0						
223.9	46	2.4	4.02	4.0	5.0	7.0	5.0						
61.7	163	0.8	22.68	4.0	5.0	7.0	5.0	PD/PM B02 90L4B / 90L4C				22	188
64.9	155	0.9	21.58	3.0	5.0	7.0	5.0						
70.2	144	0.9	19.94	3.0	5.0	7.0	5.0						
79.5	127	1.0	17.62	3.0	5.0	7.0	5.0						
84.5	119	1.2	16.57	3.0	5.0	7.0	5.0						
98.6	102	1.6	14.20	3.0	5.0	7.0	5.0						
108.0	93	1.7	12.96	3.0	5.0	7.0	5.0						
124.1	81	1.7	11.28	3.0	5.0	7.0	5.0						
127.6	79	1.9	10.97	3.0	5.0	7.0	5.0						
144.8	70	2.0	9.67	3.0	5.0	7.0	5.0						
158.7	64	2.2	8.82	3.0	5.0	7.0	5.0						
187.4	54	2.4	7.47	3.0	4.0	7.0	5.0						
217.7	46	2.7	6.43	2.0	4.0	7.0	5.0						
233.3	43	2.8	6.00	2.0	4.0	7.0	5.0						

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
1.10	63.3	155	0.8	44.23	4.0	5.0	7.0	5.0	PD/PM B02 80M2C / 80M2D	18	188
	69.4	141	0.9	40.35	4.0	5.0	7.0	5.0			
	82.0	119	1.0	34.16	4.0	5.0	7.0	5.0			
	93.1	105	0.9	30.08	4.0	5.0	7.0	5.0			
	107.9	91	1.1	25.96	4.0	5.0	7.0	5.0			
	123.5	79	1.2	22.68	4.0	5.0	7.0	5.0			
	129.7	75	1.4	21.58	3.0	5.0	7.0	5.0			
	140.4	70	1.4	19.94	3.0	5.0	7.0	5.0			
	158.9	62	1.6	17.62	3.0	5.0	7.0	5.0			
	169.0	58	1.8	16.57	3.0	5.0	7.0	5.0			
	197.2	50	2.5	14.20	3.0	5.0	7.0	5.0			
	216.0	45	2.7	12.96	3.0	5.0	7.0	5.0			
	248.2	39	2.7	11.28	3.0	5.0	7.0	5.0			
	255.2	38	3.0	10.97	3.0	5.0	7.0	5.0			
	77.1	132	0.9	11.67	3.0	5.0	5.0	8.0			
	94.8	107	1.1	9.49	3.0	5.0	5.0	8.0			
	104.3	98	1.2	8.63	3.0	5.0	5.0	8.0			
	124.1	82	1.4	7.25	3.0	4.0	5.0	8.0			
	141.7	72	1.6	6.35	3.0	4.0	5.0	8.0			
	168.9	60	1.6	5.33	2.0	4.0	5.0	8.0			
	212.3	48	1.6	4.24	2.0	4.0	5.0	8.0			
	84.6	119	0.8	16.54	3.0	5.0	5.0	8.0	PD/PM A02 90L4B / 90L4C	18	186
	101.2	100	1.1	13.83	3.0	5.0	5.0	8.0			
	120.0	84	1.3	11.67	3.0	5.0	5.0	8.0			
	147.5	68	1.6	9.49	3.0	5.0	5.0	8.0			
	162.2	62	1.8	8.63	3.0	5.0	5.0	8.0			
	193.1	52	2.1	7.25	3.0	4.0	5.0	8.0			
	220.5	46	2.4	6.35	3.0	4.0	5.0	8.0			
	262.7	38	2.4	5.33	2.0	4.0	5.0	8.0			
	330.2	31	2.4	4.24	2.0	4.0	5.0	8.0			
	96.2	102	0.8	29.11	3.0	5.0	5.0	8.0			
	114.0	86	1.0	24.57	3.0	5.0	5.0	8.0			
	125.3	78	1.1	22.34	3.0	5.0	5.0	8.0			
	149.2	66	1.1	18.77	3.0	5.0	5.0	8.0			
	169.3	58	1.3	16.54	3.0	5.0	5.0	8.0			
	187.8	52	1.1	14.91	3.0	5.0	5.0	8.0			
202.5	48	1.7	13.83	3.0	5.0	5.0	8.0				
239.9	41	2.1	11.67	3.0	5.0	5.0	8.0				
295.0	33	2.5	9.49	3.0	5.0	5.0	8.0				
324.4	30	2.9	8.63	3.0	5.0	5.0	8.0				
1.50	0.2	59053	1.1	4001.34	-	-	-	-	PD/PM 113/52 100L6C / 100L6D	2180	242
	0.2	54944	1.1	3722.96	-	-	-	-			
	0.3	45200	1.4	3062.69	-	-	-	-			
	0.4	34363	1.8	2328.41	-	-	-	-			
	0.5	27000	2.3	1829.47	-	-	-	-			
	0.3	36848	1.6	4001.34	-	-	-	-	PD/PM 113/52 90L4C / 90L4D	1132	242
	0.4	34284	1.8	3722.96	-	-	-	-			
	0.5	28204	2.1	3062.69	-	-	-	-			
	0.6	21442	2.8	2328.41	-	-	-	-			
	0.7	17131	2.7	4001.34	-	-	-	-	PD/PM 113/52 90L2B / 90L2C	1132	242
	0.8	15939	2.9	3722.96	-	-	-	-			
	0.3	41272	0.9	2796.57	-	-	-	-	PD/PM 103/52 100L6C / 100L6D	1334	242
	0.6	20911	1.8	1416.90	-	-	127.0	150.0			
	0.8	17202	2.1	1165.61	-	-	130.0	150.0			
	1.0	13516	2.7	915.84	-	-	134.0	150.0			
	0.3	43072	0.8	4677.24	-	-	-	-	PD/PM 103/52 90L4C / 90L4D	1324	242
	0.6	22126	1.6	2404.69	-	-	-	-			
	1.0	13048	2.7	1416.90	-	-	-	-			
	0.6	20025	1.3	4677.24	-	-	-	-	PD/PM 103/52 90L2B / 90L2C	1324	242
	0.4	32510	0.8	2202.85	120.0	102.0	-	-	PD/PM 93/42 100L6C / 100L6D	741	242
	0.5	25751	1.0	1744.83	120.0	102.0	-	-			
	0.6	20922	1.2	1417.68	120.0	102.0	120.0	130.0			
	0.8	17376	1.5	1177.36	119.0	102.0	120.0	130.0			
	1.0	13071	1.9	885.67	110.0	102.0	120.0	130.0			
1.3	10557	2.4	715.36	120.0	102.0	120.0	130.0				
1.5	9133	2.8	618.83	120.0	102.0	120.0	130.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
1.50	0.6	22412	1.1	2433.68	-	-	-	-	PD/PM 93/42 90L4C / 90L4D	731	242
	0.6	20286	1.2	2202.85	-	-	-	-			
	0.8	16068	1.5	1744.83	-	-	-	-			
	1.0	13055	1.8	1417.68	120.0	102.0	120.0	130.0			
	1.2	10842	2.2	1177.36	119.0	102.0	120.0	130.0			
	1.6	8156	2.9	885.67	110.0	102.0	120.0	130.0			
	1.2	10419	1.8	2433.68	120.0	102.0	-	-	PD/PM 93/42 90L2B / 90L2C	731	242
	1.3	9431	1.9	2202.85	120.0	102.0	-	-			
	1.6	7470	2.4	1744.83	120.0	102.0	-	-			
	2.0	6069	3.0	1417.68	120.0	102.0	120.0	130.0			
	1.6	8121	1.6	550.29	88.0	73.0	100.0	100.0	PD/PM 83/42 100L6C / 100L6D	439	242
	1.9	6919	1.8	468.82	84.0	73.0	100.0	100.0			
	2.6	5118	2.5	346.82	84.0	73.0	100.0	100.0			
	3.0	4361	2.9	295.48	84.0	73.0	-	-			
	2.5	5068	2.4	550.29	88.0	73.0	100.0	100.0	PD/PM 83/42 90L4C / 90L4D	429	242
	3.0	4317	2.8	468.82	84.0	73.0	100.0	100.0			
	0.8	15671	0.8	1061.83	84.0	73.0	100.0	100.0	PD/PM 83/32 100L6C / 100L6D	424	240
	1.0	13121	1.0	889.06	87.0	73.0	100.0	100.0			
	1.3	10575	1.2	716.55	89.0	73.0	100.0	100.0			
	1.5	9004	1.4	610.07	92.0	73.0	100.0	100.0			
	0.8	15587	0.8	1692.65	-	-	-	-	PD/PM 83/32 90L4C / 90L4D	414	240
	1.0	12551	1.0	1362.94	76.0	73.0	100.0	100.0			
	1.3	9778	1.2	1061.83	84.0	73.0	100.0	100.0			
	1.6	8187	1.5	889.06	87.0	73.0	100.0	100.0			
	2.0	6599	1.8	716.55	89.0	73.0	100.0	100.0			
	2.3	5618	2.2	610.07	90.0	73.0	100.0	100.0			
	1.2	10312	0.9	2408.64	76.0	73.0	-	-	PD/PM 83/32 90L2B / 90L2C	414	240
	1.7	7247	1.3	1692.65	76.0	73.0	-	-			
	2.1	5835	1.6	1362.94	76.0	73.0	100.0	100.0			
	2.6	4546	2.0	1061.83	84.0	73.0	100.0	100.0			
	3.1	3806	2.4	889.06	87.0	73.0	100.0	100.0			
	3.9	3068	3.0	716.55	89.0	73.0	100.0	100.0			
	2.3	5877	2.3	386.39	28.0	46.0	100.0	105.0			
	2.8	4839	2.8	318.11	28.0	46.0	100.0	105.0			
	3.1	4355	1.7	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 100L6C / 100L6D	299	240
	4.0	3291	2.3	223.01	51.0	58.0	82.0	80.0			
	4.7	2717	2.6	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 90L4C / 90L4D	289	240
	1.6	8423	0.9	570.70	52.0	58.0	78.0	80.0	PD/PM 73/22 100L6C / 100L6D	288	240
	2.1	6417	1.2	434.82	55.0	58.0	80.0	80.0			
	2.4	5553	1.3	376.24	56.0	58.0	81.0	80.0			
	1.5	8585	0.8	932.25	50.0	58.0	76.0	80.0	PD/PM 73/22 90L4C / 90L4D	278	240
	2.0	6541	1.1	710.29	49.0	58.0	76.0	80.0			
2.5	5256	1.3	570.70	52.0	58.0	78.0	80.0				
3.2	4004	1.8	434.82	55.0	58.0	80.0	80.0				
3.7	3465	2.0	376.24	56.0	58.0	81.0	80.0				
2.1	5747	0.9	1342.44	50.0	58.0	77.0	80.0	PD/PM 73/22 90L2B / 90L2C	278	240	
2.7	4461	1.2	1042.00	50.0	58.0	74.0	80.0				
3.0	3991	1.3	932.25	50.0	58.0	76.0	80.0				
3.9	3041	1.8	710.29	49.0	58.0	76.0	80.0				
4.9	2443	2.2	570.70	52.0	58.0	78.0	80.0				
6.4	1862	2.9	434.82	55.0	58.0	80.0	80.0				
2.7	5147	1.5	338.37	17.0	28.0	79.0	80.0	PD/PM 73 100L6C / 100L6D	269	217	
3.3	4157	1.9	273.32	17.0	28.0	80.0	80.0				
4.2	3292	2.6	216.45	17.0	28.0	81.0	80.0				
4.4	3114	2.5	204.72	17.0	28.0	81.0	80.0				
5.6	2466	2.7	162.12	17.0	28.0	-	-				
4.0	3298	1.5	223.50	-	-	-	-	PD/PM 63/32 100L6C / 100L6D	226	240	
4.7	2821	1.8	191.13	-	-	-	-				
5.7	2345	2.1	158.90	-	-	-	-				
6.3	2058	2.3	223.50	-	-	-	-	PD/PM 63/32 90L4C / 90L4D	216	240	
7.3	1760	2.7	191.13	-	-	-	-				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
1.50	2.1	6412	0.9	434.44	23.0	47.0	47.0	60.0	PD/PM 63/22 100L6C / 100L6D	215	240
	2.6	5152	1.1	349.07	16.0	47.0	44.0	60.0			
	3.0	4429	1.3	300.12	39.0	47.0	-	-			
	2.2	5869	0.9	637.34	22.0	47.0	47.0	60.0	PD/PM 63/22 90L4C / 90L4D	205	240
	2.5	5251	1.0	570.21	41.0	47.0	58.0	60.0			
	3.2	4001	1.3	434.44	23.0	47.0	47.0	60.0			
	4.0	3215	1.7	349.07	16.0	47.0	44.0	60.0			
	4.7	2764	2.0	300.12	-	-	-	-			
	2.2	5398	0.8	1260.77	22.0	47.0	48.0	60.0	PD/PM 63/22 90L2B / 90L2C	205	240
	2.5	4730	0.9	1104.71	22.0	47.0	50.0	60.0			
	3.4	3515	1.2	821.10	22.0	47.0	-	-			
	4.4	2729	1.5	637.34	22.0	47.0	47.0	60.0			
	4.9	2441	1.7	570.21	41.0	47.0	-	-			
	6.4	1860	2.2	434.44	23.0	47.0	47.0	60.0			
	8.0	1494	2.7	349.07	16.0	47.0	44.0	60.0			
	2.3	5985	1.0	393.43	36.0	47.0	54.0	60.0	PD/PM 63 100L6C / 100L6D	196	213
	2.8	4832	1.2	317.64	38.0	47.0	56.0	60.0			
	3.4	4076	1.5	267.94	40.0	47.0	55.0	60.0			
	3.6	3828	1.2	251.63	40.0	47.0	57.0	60.0			
	4.0	3435	1.2	225.83	40.0	47.0	58.0	60.0			
	4.2	3230	1.5	212.36	35.0	47.0	56.0	60.0			
	5.3	2607	2.2	171.37	35.0	47.0	57.0	60.0			
	5.6	2435	2.5	160.11	35.0	47.0	58.0	60.0			
	7.1	1929	2.5	126.84	35.0	47.0	58.0	60.0			
	2.5	5311	1.0	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L4C / 90L4D	186	213
	3.1	4288	1.0	445.80	34.0	47.0	53.0	60.0			
	3.6	3784	1.6	393.43	36.0	47.0	54.0	60.0			
	4.4	3055	1.8	317.64	38.0	47.0	56.0	60.0			
	5.6	2420	1.9	251.63	40.0	47.0	57.0	60.0			
	6.2	2172	1.9	225.83	40.0	47.0	58.0	60.0			
	5.1	2538	1.5	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L2B / 90L2C	186	213
	6.3	2050	1.5	445.80	34.0	47.0	53.0	60.0			
	7.1	1809	2.5	393.43	36.0	47.0	54.0	60.0			
	8.8	1460	2.9	317.64	38.0	47.0	56.0	60.0			
	11.1	1157	2.9	251.63	40.0	47.0	57.0	60.0			
	12.4	1038	2.9	225.83	40.0	47.0	58.0	60.0			
	3.3	4087	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L6C / 100L6D	125	238
	3.9	3486	0.9	232.65	21.0	32.0	-	-			
	5.2	2614	1.2	174.49	21.0	32.0	-	-			
	6.3	2132	1.5	142.31	21.0	32.0	-	-			
	4.1	3186	0.9	338.40	-	-	-	-	PD/PM 52/12 90L4C / 90L4D	115	238
	5.1	2568	1.2	272.80	21.0	32.0	38.0	40.0			
	6.0	2190	1.4	232.65	-	-	-	-			
	8.0	1643	1.8	174.49	-	-	-	-			
	9.8	1340	2.2	142.31	-	-	-	-			
	5.1	2438	0.9	549.54	21.0	32.0	-	-	PD/PM 52/12 90L2B / 90L2C	115	238
	6.2	1988	1.1	448.15	21.0	32.0	-	-			
	8.3	1501	1.5	338.40	21.0	32.0	-	-			
10.3	1210	1.9	272.80	21.0	32.0	38.0	40.0				
12.0	1032	2.2	232.65	21.0	32.0	-	-				
16.0	774	2.9	174.49	21.0	32.0	-	-				
3.6	3782	0.9	248.66	28.0	32.0	42.0	40.0	PD/PM 53 100L6C / 100L6D	134	209	
4.4	3085	1.1	202.80	29.0	32.0	43.0	40.0				
5.3	2607	1.1	171.36	28.0	32.0	42.0	40.0				
5.8	2340	1.4	153.85	28.0	32.0	43.0	40.0				
6.5	2111	1.6	138.78	28.0	32.0	43.0	40.0				
7.7	1784	1.6	117.27	22.0	32.0	-	-				
9.8	1392	2.2	91.51	28.0	32.0	-	-				
10.9	1256	2.3	82.55	28.0	32.0	-	-				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
1.50	3.3	4116	0.8	427.97	25.0	32.0	40.0	40.0	PD/PM 53 90L4C / 90L4D	124	209			
	3.9	3478	0.8	361.64	23.0	32.0	39.0	40.0						
	4.2	3189	1.0	331.54	24.0	32.0	40.0	40.0						
	5.2	2601	1.0	270.40	27.0	32.0	41.0	40.0						
	5.6	2392	1.3	248.66	28.0	32.0	42.0	40.0						
	6.9	1951	1.6	202.80	29.0	32.0	43.0	40.0						
	8.2	1648	1.7	171.36	28.0	32.0	42.0	40.0						
	9.1	1480	2.2	153.85	28.0	32.0	43.0	40.0						
	10.1	1335	2.4	138.78	28.0	32.0	43.0	40.0						
	11.9	1128	2.4	117.27	22.0	32.0	40.0	40.0						
	4.0	3217	0.8	699.67	25.0	32.0	39.0	40.0				PD/PM 53 90L2B / 90L2C	124	209
	4.9	2623	0.8	570.63	25.0	32.0	41.0	40.0						
	5.3	2413	1.0	524.75	25.0	32.0	38.0	40.0						
	6.5	1968	1.2	427.97	25.0	32.0	43.0	40.0						
	7.7	1663	1.3	361.64	23.0	32.0	39.0	40.0						
	8.4	1524	1.6	331.54	24.0	32.0	40.0	40.0						
	10.4	1243	1.7	270.40	27.0	32.0	41.0	40.0						
	11.3	1143	2.1	248.66	28.0	32.0	42.0	40.0						
	13.8	932	2.6	202.80	29.0	32.0	43.0	40.0						
	16.3	788	2.7	171.36	28.0	32.0	42.0	40.0						
	6.7	2070	1.3	134.05	30.0	32.0	44.0	40.0	PD/PM 52 100L6C / 100L6D	115	208			
	9.0	1547	1.5	100.15	28.0	32.0	44.0	40.0						
	9.8	1418	2.0	91.82	31.0	32.0	44.0	40.0						
	11.0	1261	1.5	81.68	31.0	32.0	44.0	40.0						
	13.1	1059	2.9	68.60	31.0	32.0	44.0	40.0						
	10.4	1317	2.0	134.05	30.0	32.0	44.0	40.0	PD/PM 52 90L4C / 90L4D	105	208			
	14.0	984	2.3	100.15	28.0	32.0	44.0	40.0						
	5.9	2285	0.8	152.50	16.0	22.0	26.0	30.0	PD/PM 42/12 100L6C / 100L6D	89	238			
	7.1	1909	1.0	127.43	22.0	22.0	-	-						
	6.0	2209	0.8	234.61	-	-	-	-	PD/PM 42/12 90L4C / 90L4D	79	238			
	7.9	1668	1.1	177.15	-	-	-	-						
	9.2	1436	1.3	152.50	16.0	22.0	26.0	30.0						
	9.2	1436	1.3	152.50	16.0	22.0	26.0	30.0						
	11.0	1200	1.5	127.43	-	-	-	-						
	6.8	1817	0.8	409.62	16.0	22.0	-	-	PD/PM 42/12 90L2B / 90L2C	79	238			
	8.2	1514	0.9	341.25	16.0	22.0	-	-						
	9.3	1340	1.0	302.14	16.0	22.0	-	-						
	11.9	1041	1.3	234.61	16.0	22.0	-	-						
	15.8	786	1.7	177.15	16.0	22.0	-	-						
	18.4	677	2.0	152.50	16.0	22.0	26.0	30.0						
	22.0	565	2.4	127.43	22.0	22.0	-	-						
	6.4	2139	1.0	140.61	16.0	22.0	27.0	30.0				PD/PM 43 100L6C / 100L6D	94	205
	7.6	1803	1.2	118.53	17.0	22.0	28.0	30.0						
	8.7	1580	1.3	103.86	15.0	22.0	27.0	30.0						
	10.4	1320	1.6	86.78	12.0	22.0	-	-						
	5.5	2435	0.8	253.13	12.0	22.0	25.0	30.0	PD/PM 43 90L4C / 90L4D	84	205			
	6.6	2030	0.8	211.05	16.0	22.0	27.0	30.0						
	7.3	1842	1.1	191.52	17.0	22.0	28.0	30.0						
8.7	1539	1.1	160.03	21.0	22.0	30.0	30.0							
10.0	1352	1.5	140.61	16.0	22.0	27.0	30.0							
11.8	1140	1.8	118.53	17.0	22.0	28.0	30.0							
13.5	999	2.0	103.86	15.0	22.0	27.0	30.0							
16.1	835	2.4	86.78	12.0	22.0	26.0	30.0							
6.8	1897	0.8	412.63	12.0	22.0	27.0	30.0	PD/PM 43 90L2B / 90L2C				84	205	
7.2	1798	0.8	391.14	12.0	22.0	27.0	30.0							
8.1	1585	0.8	344.78	12.0	22.0	28.0	30.0							
8.6	1503	1.0	326.83	12.0	22.0	25.0	30.0							
9.2	1393	1.1	302.94	12.0	22.0	26.0	30.0							
10.3	1253	1.0	272.49	12.0	22.0	27.0	30.0							
11.1	1164	1.3	253.13	12.0	22.0	25.0	30.0							
13.3	970	1.3	211.05	16.0	22.0	27.0	30.0							
14.6	881	1.7	191.52	17.0	22.0	28.0	30.0							
17.5	736	1.7	160.03	21.0	22.0	30.0	30.0							
19.9	646	2.4	140.61	16.0	22.0	27.0	30.0							
23.6	545	2.8	118.53	17.0	22.0	28.0	30.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
1.50	8.1	1710	1.0	110.73	19.0	22.0	30.0	30.0	PD/PM 42 100L6C / 100L6D	79	204			
	9.9	1398	1.2	90.52	19.0	22.0	30.0	30.0						
	11.9	1165	1.4	75.41	21.0	22.0	30.0	30.0						
	14.6	952	2.0	61.64	21.0	22.0	30.0	30.0						
	17.2	807	2.4	52.23	21.0	22.0	30.0	30.0						
	20.0	696	2.4	45.06	21.0	22.0	30.0	30.0						
	20.6	674	2.5	43.64	21.0	22.0	29.0	30.0						
	22.1	630	2.6	40.79	21.0	22.0	29.0	30.0						
	24.4	569	2.6	36.84	21.0	22.0	28.0	30.0						
	24.7	562	2.6	36.39	21.0	22.0	28.0	30.0						
	9.0	1526	0.8	155.40	19.0	22.0	29.0	30.0				PD/PM 42 90L4C / 90L4D	69	204
	12.6	1088	1.5	110.73	19.0	22.0	30.0	30.0						
	15.5	889	1.8	90.52	19.0	22.0	30.0	30.0						
	18.0	740	1.3	155.40	19.0	22.0	29.0	30.0	PD/PM 42 90L2B / 90L2C	69	204			
	25.3	528	2.3	110.73	19.0	22.0	30.0	30.0						
	30.9	431	2.8	90.52	19.0	22.0	30.0	30.0						
	12.3	1073	0.8	114.01	11.0	15.0	20.0	20.0	PD/PM 32/12 90L4C / 90L4D	64	238			
	16.0	826	1.1	87.71	-	-	-	-						
	15.6	797	0.9	179.71	11.0	15.0	-	-	PD/PM 32/12 90L2B / 90L2C	64	238			
	19.8	627	1.1	141.42	11.0	15.0	21.0	20.0						
	24.6	506	1.4	114.01	11.0	15.0	20.0	20.0						
	31.9	389	1.8	87.71	13.0	15.0	-	-						
	14.7	877	0.8	190.74	13.0	15.0	21.0	20.0	PD/PM 33 90L2B / 90L2C	62	201			
	17.4	742	0.8	161.38	13.0	15.0	-	-						
	22.0	584	1.0	127.01	13.0	15.0	-	-						
	26.9	478	1.2	103.92	13.0	15.0	-	-						
	31.3	411	1.1	89.45	13.0	15.0	-	-						
	14.0	990	1.1	64.11	11.0	15.0	22.0	20.0	PD/PM 32 100L6C / 100L6D	64	200			
	17.0	818	1.1	52.98	10.0	15.0	22.0	20.0						
	20.1	692	1.1	44.83	10.0	15.0	21.0	20.0						
	21.4	649	1.5	42.05	10.0	15.0	20.0	20.0						
	23.3	596	1.1	38.59	10.0	15.0	20.0	20.0						
	23.8	584	1.5	37.79	10.0	15.0	20.0	20.0						
	28.2	493	1.9	31.90	9.0	15.0	19.0	20.0						
	31.4	443	2.1	28.67	12.0	15.0	18.0	20.0						
	34.8	399	2.2	25.86	12.0	15.0	18.0	20.0						
	38.0	366	2.3	23.69	12.0	15.0	18.0	20.0						
	40.1	346	2.4	22.42	12.0	15.0	17.0	20.0						
	42.1	330	2.3	21.37	12.0	15.0	17.0	20.0						
	44.7	311	2.8	20.15	12.0	15.0	16.0	20.0						
	13.9	991	0.8	100.85	13.0	15.0	22.0	20.0				PD/PM 32 90L4C / 90L4D	54	200
	15.8	872	1.1	88.74	11.0	15.0	22.0	20.0						
	17.6	783	1.1	79.75	11.0	15.0	22.0	20.0						
	19.9	693	0.8	70.52	12.0	15.0	22.0	20.0						
	21.2	647	1.2	65.91	11.0	15.0	22.0	20.0						
	21.8	630	1.6	64.11	11.0	15.0	22.0	20.0						
	25.1	548	1.2	55.76	10.0	15.0	22.0	20.0						
	26.4	520	1.6	52.98	10.0	15.0	22.0	20.0						
29.2	471	1.2	48.00	10.0	15.0	21.0	20.0							
31.2	440	1.7	44.83	10.0	15.0	21.0	20.0							
33.3	413	2.2	42.05	10.0	15.0	20.0	20.0							
36.3	379	1.7	38.59	10.0	15.0	20.0	20.0							
37.0	371	2.2	37.79	10.0	15.0	20.0	20.0							
43.9	313	2.8	31.90	9.0	15.0	19.0	20.0							
24.9	535	1.1	112.23	13.0	15.0	22.0	20.0	PD/PM 32 90L2B / 90L2C	54	200				
27.8	480	1.3	100.85	13.0	15.0	22.0	20.0							
31.6	423	1.7	88.74	11.0	15.0	22.0	20.0							
35.1	380	1.7	79.75	11.0	15.0	22.0	20.0							
39.7	336	1.3	70.52	12.0	15.0	22.0	20.0							
42.5	314	1.8	65.91	11.0	15.0	22.0	20.0							
43.7	305	2.5	64.11	11.0	15.0	22.0	20.0							
50.2	266	1.8	55.76	10.0	15.0	22.0	20.0							
52.9	252	2.5	52.98	10.0	15.0	22.0	20.0							
58.3	229	1.8	48.00	10.0	15.0	21.0	20.0							
62.5	214	2.6	44.83	10.0	15.0	21.0	20.0							
72.6	184	2.6	38.59	10.0	15.0	20.0	20.0							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1.50	28.5	452	0.9	98.40	5.0	12.0	11.0	15.0	PD/PM 23 90L2B / 90L2C	46	197																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	34.0	378	1.1	82.29	5.0	12.0	-	-				20.6	675	0.9	43.73	9.0	12.0	13.0	15.0	PD/PM 22 100L6C / 100L6D	49	196	24.6	565	0.9	36.57	8.0	12.0	13.0	15.0	28.8	482	1.0	31.20	8.0	12.0	14.0	15.0	30.4	458	1.1	29.64	8.0	12.0	14.0	15.0	33.6	414	1.1	26.81	8.0	12.0	14.0	15.0	36.0	386	1.3	24.98	8.0	12.0	14.0	15.0	37.5	370	1.2	23.99	8.0	12.0	14.0	15.0	41.1	338	1.5	21.89	8.0	12.0	14.0	15.0	48.6	286	1.8	18.51	7.0	12.0	14.0	15.0	54.3	256	1.9	16.56	7.0	12.0	14.0	15.0	68.2	204	2.1	13.20	9.0	12.0	13.0	15.0	76.2	182	2.2	11.81	9.0	12.0	13.0	15.0	88.6	157	2.4	10.16	9.0	12.0	12.0	15.0	100.0	139	2.5	9.00	9.0	12.0	11.0	15.0	107.7	129	2.1	8.36	9.0	12.0	11.0	15.0	120.3	116	2.2	7.48	9.0	12.0	11.0	15.0	140.0	99	2.4	6.43	9.0	12.0	10.0	15.0	157.9	88	2.5	5.70	9.0	12.0	10.0	15.0	199.6	70	2.8	4.51	9.0	12.0	9.0	15.0	1.50	21.9	627	0.8	63.86	7.0	12.0	12.0	15.0	PD/PM 22 90L4C / 90L4D	39	196	25.9	530	1.0	53.98	8.0	12.0	13.0	15.0	27.1	508	1.0	51.73	8.0	12.0	13.0	15.0	31.0	443	1.0	45.14	9.0	12.0	13.0	15.0	32.0	430	1.3	43.73	9.0	12.0	13.0	15.0	38.3	359	1.4	36.57	8.0	12.0	13.0	15.0	44.9	306	1.5	31.20	8.0	12.0	14.0	15.0	47.2	291	1.7	29.64	8.0	12.0	14.0	15.0	52.2	263	1.7	26.81	8.0	12.0	14.0	15.0	56.0	245	2.0	24.98	8.0	12.0	14.0	15.0	58.4	236	1.8	23.99	8.0	12.0	14.0	15.0	64.0	215	2.2	21.89	8.0	12.0	14.0	15.0	75.6	182	2.7	18.51	7.0	12.0	14.0	15.0	84.5	163	2.9	16.56	7.0	12.0	14.0	15.0	1.50	34.0	393	0.9	82.45	7.0	12.0	12.0	15.0	PD/PM 22 90L2B / 90L2C	39	196	40.2	332	1.0	69.70	7.0	12.0	13.0	15.0	43.8	304	1.3	63.86	7.0	12.0	12.0	15.0	51.9	257	1.5	53.98	8.0	12.0	13.0	15.0	54.1	246	1.6	51.73	8.0	12.0	13.0	15.0	62.0	215	1.6	45.14	9.0	12.0	13.0	15.0	64.0	208	2.1	43.73	9.0	12.0	13.0	15.0	76.6	174	2.2	36.57	8.0	12.0	13.0	15.0	89.7	149	2.3	31.20	8.0	12.0	14.0	15.0	94.5	141	2.7	29.64	8.0	12.0	14.0	15.0	104.4	128	2.6	26.81	8.0	12.0	14.0	15.0	116.7	114	2.9	23.99	8.0	12.0	14.0	15.0	1.50	52.3	266	0.9	17.22	3.0	6.0	9.0	7.0	PD/PM 12 100L6C / 100L6D	38	192	63.9	218	1.0	14.09	3.0	6.0	10.0	7.0	76.6	181	1.2	11.75	3.0	6.0	9.0	7.0	87.0	160	1.3	10.34	3.0	6.0	9.0	7.0	98.3	141	1.4	9.16	3.0	6.0	9.0	7.0	109.4	127	1.6	8.23	3.0	5.0	9.0	7.0	110.0	126	1.3	8.18	3.0	5.0	9.0	7.0	124.1	112	1.8	7.25	3.0	5.0	8.0	7.0	140.2	99	1.9	6.42	3.0	5.0	8.0	7.0	164.5	84	2.1	5.47	2.0	4.0	7.0	7.0	188.3	74	1.8	4.78	2.0	4.0	7.0	7.0	1.50	49.4	278	0.8	28.35	3.0	7.0	9.0	7.0	PD/PM 12 90L4C / 90L4D	28	192	55.5	248	0.9	25.24	3.0	7.0	9.0	7.0	67.9	202	1.1	20.61	3.0	7.0	9.0	7.0	81.3	169	1.3	17.22	3.0	6.0	9.0	7.0	99.4	138	1.5	14.09	3.0	6.0	10.0	7.0	119.1	115	1.8	11.75	3.0	6.0	9.0	7.0	135.4	102	1.9	10.34	3.0	6.0	9.0	7.0	152.8	90	2.1	9.16	3.0	6.0	9.0	7.0	170.1	81	2.4	8.23	3.0	5.0	9.0	7.0	171.1	80	2.0	8.18	3.0	5.0	9.0	7.0	193.1	71	2.6	7.25	3.0	5.0	8.0	7.0	218.1	63	2.9	6.42	3.0	5.0	8.0	7.0	292.9	47	2.7	4.78	2.0
	20.6	675	0.9	43.73	9.0	12.0	13.0	15.0	PD/PM 22 100L6C / 100L6D	49	196																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	24.6	565	0.9	36.57	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	28.8	482	1.0	31.20	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	30.4	458	1.1	29.64	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	33.6	414	1.1	26.81	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	36.0	386	1.3	24.98	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	37.5	370	1.2	23.99	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	41.1	338	1.5	21.89	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	48.6	286	1.8	18.51	7.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	54.3	256	1.9	16.56	7.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	68.2	204	2.1	13.20	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	76.2	182	2.2	11.81	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	88.6	157	2.4	10.16	9.0	12.0	12.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	100.0	139	2.5	9.00	9.0	12.0	11.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	107.7	129	2.1	8.36	9.0	12.0	11.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	120.3	116	2.2	7.48	9.0	12.0	11.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
140.0	99	2.4	6.43	9.0	12.0	10.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
157.9	88	2.5	5.70	9.0	12.0	10.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
199.6	70	2.8	4.51	9.0	12.0	9.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1.50	21.9	627	0.8	63.86	7.0	12.0	12.0	15.0	PD/PM 22 90L4C / 90L4D	39	196																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	25.9	530	1.0	53.98	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	27.1	508	1.0	51.73	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	31.0	443	1.0	45.14	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	32.0	430	1.3	43.73	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	38.3	359	1.4	36.57	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	44.9	306	1.5	31.20	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	47.2	291	1.7	29.64	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	52.2	263	1.7	26.81	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	56.0	245	2.0	24.98	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	58.4	236	1.8	23.99	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	64.0	215	2.2	21.89	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	75.6	182	2.7	18.51	7.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	84.5	163	2.9	16.56	7.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1.50	34.0	393	0.9	82.45	7.0	12.0	12.0	15.0	PD/PM 22 90L2B / 90L2C	39	196																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		40.2	332	1.0	69.70	7.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		43.8	304	1.3	63.86	7.0	12.0	12.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		51.9	257	1.5	53.98	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
54.1		246	1.6	51.73	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
62.0		215	1.6	45.14	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
64.0		208	2.1	43.73	9.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
76.6		174	2.2	36.57	8.0	12.0	13.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
89.7		149	2.3	31.20	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
94.5		141	2.7	29.64	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
104.4		128	2.6	26.81	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
116.7		114	2.9	23.99	8.0	12.0	14.0	15.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1.50	52.3	266	0.9	17.22	3.0	6.0	9.0	7.0	PD/PM 12 100L6C / 100L6D	38	192																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	63.9	218	1.0	14.09	3.0	6.0	10.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	76.6	181	1.2	11.75	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	87.0	160	1.3	10.34	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	98.3	141	1.4	9.16	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	109.4	127	1.6	8.23	3.0	5.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	110.0	126	1.3	8.18	3.0	5.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	124.1	112	1.8	7.25	3.0	5.0	8.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	140.2	99	1.9	6.42	3.0	5.0	8.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	164.5	84	2.1	5.47	2.0	4.0	7.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	188.3	74	1.8	4.78	2.0	4.0	7.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1.50	49.4	278	0.8	28.35	3.0	7.0	9.0				7.0	PD/PM 12 90L4C / 90L4D	28	192																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
55.5		248	0.9	25.24	3.0	7.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
67.9		202	1.1	20.61	3.0	7.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
81.3		169	1.3	17.22	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
99.4		138	1.5	14.09	3.0	6.0	10.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
119.1		115	1.8	11.75	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
135.4		102	1.9	10.34	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
152.8		90	2.1	9.16	3.0	6.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
170.1		81	2.4	8.23	3.0	5.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
171.1		80	2.0	8.18	3.0	5.0	9.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
193.1		71	2.6	7.25	3.0	5.0	8.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
218.1		63	2.9	6.42	3.0	5.0	8.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
292.9		47	2.7	4.78	2.0	4.0	7.0	7.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
1.50	47.5	281	0.8	58.91	3.0	7.0	9.0	7.0	PD/PM 12 90L2B / 90L2C	28	192
	56.9	234	0.8	49.22	3.0	7.0	9.0	7.0			
	68.2	196	0.8	41.04	3.0	7.0	9.0	7.0			
	87.3	153	1.1	32.07	3.0	7.0	9.0	7.0			
	98.8	135	1.3	28.35	3.0	7.0	9.0	7.0			
	110.9	120	1.4	25.24	3.0	7.0	9.0	7.0			
	135.9	98	1.7	20.61	3.0	7.0	9.0	7.0			
	162.6	82	2.1	17.22	3.0	6.0	9.0	7.0			
	198.7	67	2.4	14.09	3.0	6.0	10.0	7.0			
	238.3	56	2.8	11.75	3.0	6.0	9.0	7.0			
	270.8	49	3.0	10.34	3.0	6.0	9.0	7.0			
	37.2	368	0.8	24.17	4.0	7.0	8.0	11.0			
	48.0	285	0.9	18.76	4.0	7.0	8.0	11.0			
	55.6	246	1.0	16.20	4.0	7.0	8.0	11.0			
	31.6	426	0.8	44.33	-	-	8.0	11.0	PD/PM C13 90L4C / 90L4D	34	190
	36.1	373	0.9	38.83	4.0	7.0	8.0	11.0			
	39.2	343	0.9	35.71	4.0	7.0	8.0	11.0			
	47.1	286	1.0	29.71	4.0	7.0	8.0	11.0			
	53.8	250	1.1	26.02	4.0	7.0	8.0	11.0			
	57.9	232	1.2	24.17	4.0	7.0	8.0	11.0			
	74.6	180	1.3	18.76	4.0	7.0	8.0	11.0			
	86.4	156	1.5	16.20	4.0	7.0	8.0	11.0			
	35.5	362	0.8	78.83	4.0	7.0	8.0	11.0	PD/PM C13 90L2B / 90L2C	34	190
	41.0	314	0.9	68.27	4.0	7.0	8.0	11.0			
	46.6	276	1.0	60.09	4.0	7.0	8.0	11.0			
	52.6	245	1.1	53.28	4.0	7.0	8.0	11.0			
	63.2	204	1.3	44.33	4.0	7.0	8.0	11.0			
	72.1	179	1.4	38.83	4.0	7.0	8.0	11.0			
	78.4	164	1.4	35.71	4.0	7.0	8.0	11.0			
	94.2	137	1.6	29.71	4.0	7.0	8.0	11.0			
	107.6	120	1.7	26.02	4.0	7.0	8.0	11.0			
	115.8	111	1.9	24.17	4.0	7.0	8.0	11.0			
	149.3	86	2.1	18.76	4.0	7.0	8.0	11.0			
	172.8	74	2.4	16.20	4.0	7.0	8.0	11.0			
	84.5	163	0.9	16.57	3.0	5.0	7.0	5.0	PD/PM B02 90L4C / 90L4D	22	188
	98.6	139	1.2	14.20	3.0	5.0	7.0	5.0			
	108.0	127	1.3	12.96	3.0	5.0	7.0	5.0			
	124.1	111	1.3	11.28	3.0	5.0	7.0	5.0			
	127.6	108	1.4	10.97	3.0	4.0	7.0	5.0			
	144.8	95	1.5	9.67	3.0	4.0	7.0	5.0			
	158.7	87	1.6	8.82	3.0	4.0	7.0	5.0			
	187.4	73	1.8	7.47	2.0	4.0	7.0	5.0			
	217.7	63	1.9	6.43	2.0	4.0	7.0	5.0			
	233.3	59	2.1	6.00	2.0	4.0	7.0	5.0			
	270.8	51	2.2	5.17	2.0	4.0	7.0	5.0			
	299.8	46	2.4	4.67	2.0	4.0	7.0	5.0			
	348.3	39	2.6	4.02	2.0	3.0	7.0	5.0			
	107.9	124	0.8	25.96	3.0	5.0	7.0	5.0	PD/PM B02 90L2B / 90L2C	22	188
123.5	108	0.9	22.68	4.0	5.0	7.0	5.0				
129.7	103	1.0	21.58	3.0	5.0	7.0	5.0				
140.4	95	1.0	19.94	3.0	5.0	7.0	5.0				
158.9	84	1.2	17.62	3.0	5.0	7.0	5.0				
169.0	79	1.3	16.57	3.0	5.0	7.0	5.0				
197.2	68	1.8	14.20	3.0	5.0	7.0	5.0				
216.0	62	2.0	12.96	3.0	5.0	7.0	5.0				
248.2	54	2.0	11.28	3.0	5.0	7.0	5.0				
255.2	52	2.2	10.97	3.0	4.0	7.0	5.0				
289.6	46	2.3	9.67	3.0	4.0	7.0	5.0				
317.5	42	2.5	8.82	3.0	4.0	7.0	5.0				
374.8	36	2.8	7.47	2.0	4.0	7.0	5.0				
101.2	136	0.8	13.83	3.0	5.0	5.0	8.0	PD/PM A02 90L4C / 90L4D	18	186	
120.0	115	1.0	11.67	3.0	5.0	5.0	8.0				
147.5	93	1.2	9.49	3.0	5.0	5.0	8.0				
162.2	85	1.3	8.63	3.0	5.0	5.0	8.0				
193.1	71	1.6	7.25	3.0	4.0	5.0	8.0				
220.5	62	1.8	6.35	3.0	4.0	5.0	8.0				
262.7	52	1.8	5.33	2.0	4.0	5.0	8.0				
330.2	42	1.8	4.24	2.0	4.0	5.0	8.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
1.50	169.3	79	1.0	16.54	3.0	5.0	5.0	8.0	PD/PM A02 90L2B / 90L2C	18	186
	202.5	66	1.3	13.83	3.0	5.0	5.0	8.0			
	239.9	56	1.5	11.67	3.0	5.0	5.0	8.0			
	295.0	45	1.8	9.49	3.0	5.0	5.0	8.0			
	324.4	41	2.1	8.63	3.0	5.0	5.0	8.0			
	386.2	35	2.5	7.25	3.0	4.0	5.0	8.0			
	440.9	30	2.8	6.35	3.0	4.0	5.0	8.0			
	525.3	25	2.8	5.33	2.0	4.0	5.0	8.0			
660.4	20	2.7	4.24	2.0	4.0	5.0	8.0				
2.20	0.2	80585	0.8	3722.96	-	-	-	-	PD/PM 113/52 112M6C / 112M6D	2203	242
	0.3	66293	1.0	3062.69	-	-	-	-			
	0.4	50399	1.3	2328.41	-	-	-	-			
	0.5	39600	1.6	1829.47	-	-	-	-			
	0.7	29930	2.1	1382.74	-	-	142.0	170.0			
	0.8	24996	2.5	1154.79	-	-	139.0	170.0			
	0.9	20826	3.0	962.15	-	-	144.0	170.0			
	0.3	54044	1.1	4001.34	-	-	-	-			
	0.4	50284	1.2	3722.96	-	-	-	-			
	0.5	41366	1.5	3062.69	-	-	-	-			
	0.6	31449	1.9	2328.41	-	-	-	-			
	0.8	24710	2.4	1829.47	-	-	-	-			
	0.7	25125	1.8	4001.34	-	-	-	-	PD/PM 113/52 90L2D	1132	242
	0.8	23377	2.0	3722.96	-	-	-	-			
	0.9	19231	2.4	3062.69	-	-	-	-			
	0.6	30669	1.2	1416.90	-	-	127.0	150.0	PD/PM 103/52 112M6C / 112M6D	1342	242
	0.8	25230	1.5	1165.61	-	-	130.0	150.0			
	1.0	19824	1.9	915.84	-	-	134.0	150.0			
	1.3	14983	2.5	692.20	-	-	133.0	150.0			
	1.6	12513	2.9	578.09	-	-	134.0	150.0			
	0.5	37772	0.9	2796.57	-	-	-	-	PD/PM 103/52 100L4B / 100L4C	1334	242
	0.6	32452	1.1	2404.69	-	-	-	-			
	1.0	19137	1.8	1416.90	-	-	127.0	150.0			
	1.2	15743	2.2	1165.61	-	-	130.0	150.0			
	1.5	12370	2.8	915.84	-	-	134.0	150.0			
	0.6	29369	0.9	4677.24	-	-	-	-	PD/PM 103/52 90L2D	1324	242
	2.0	8897	3.0	1416.90	-	-	127.0	150.0			
	2.2	8885	2.8	410.49	60.0	102.0	120.0	130.0	PD/PM 93/52 112M6C / 112M6D	778	242
	0.6	30686	0.8	1417.68	111.0	102.0	120.0	130.0	PD/PM 93/42 112M6C / 112M6D	749	242
	0.8	25484	1.0	1177.36	109.0	102.0	120.0	130.0			
	1.0	19171	1.3	885.67	103.0	102.0	120.0	130.0			
	1.3	15484	1.6	715.36	99.0	102.0	120.0	130.0			
1.5	13395	1.9	618.83	96.0	102.0	120.0	130.0				
2.0	9759	2.6	450.86	120.0	102.0	120.0	130.0				
0.6	29753	0.8	2202.85	-	-	-	-	PD/PM 93/42 100L4B / 100L4C	741	242	
0.8	23566	1.0	1744.83	-	-	-	-				
1.0	19148	1.3	1417.68	111.0	102.0	120.0	130.0				
1.2	15902	1.5	1177.36	109.0	102.0	120.0	130.0				
1.6	11962	2.0	885.67	103.0	102.0	120.0	130.0				
2.0	9662	2.5	715.36	99.0	102.0	120.0	130.0				
2.3	8358	2.9	618.83	96.0	102.0	120.0	130.0				
1.2	15282	1.2	2433.68	111.0	102.0	-	-				PD/PM 93/42 90L2D
1.3	13832	1.3	2202.85	111.0	102.0	-	-				
1.6	10956	1.7	1744.83	111.0	102.0	-	-				
2.0	8902	2.0	1417.68	111.0	102.0	120.0	130.0				
2.4	7393	2.5	1177.36	109.0	102.0	120.0	130.0				
1.6	11911	1.1	550.29	81.0	73.0	100.0	100.0	PD/PM 83/42 112M6C / 112M6D	447	242	
1.9	10148	1.3	468.82	78.0	73.0	100.0	100.0				
2.6	7507	1.7	346.82	78.0	73.0	100.0	100.0				
3.0	6396	2.0	295.48	88.0	73.0	-	-				
4.0	4842	2.6	223.71	88.0	73.0	-	-				
2.5	7432	1.6	550.29	81.0	73.0	100.0	100.0	PD/PM 83/42 100L4B / 100L4C	439	242	
3.0	6332	1.9	468.82	78.0	73.0	100.0	100.0				
4.0	4684	2.6	346.82	78.0	73.0	100.0	100.0				
4.7	3991	3.0	295.48	-	-	-	-				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
2.20	5.1	3455	2.7	550.29	81.0	73.0	100.0	100.0	PD/PM 83/42 90L2D	429	242
	1.3 1.5	15510 13205	0.8 1.0	716.55 610.07	84.0 82.0	73.0 73.0	100.0 100.0	100.0 100.0	PD/PM 83/32 112M6C / 112M6D	432	240
	1.3 1.6 2.0 2.3	14342 12008 9678 8240	0.8 1.0 1.3 1.5	1061.83 889.06 716.55 610.07	84.0 79.0 84.0 82.0	73.0 73.0 73.0 73.0	100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0	PD/PM 83/32 100L4B / 100L4C	424	240
	1.7 2.1 2.6 3.1 3.9 4.6	10628 8558 6667 5583 4499 3831	0.9 1.1 1.4 1.6 2.0 2.4	1692.65 1362.94 1061.83 889.06 716.55 610.07	84.0 84.0 84.0 79.0 84.0 82.0	73.0 73.0 73.0 73.0 73.0 73.0	- 100.0 100.0 100.0 100.0 100.0	- 100.0 100.0 100.0 100.0 100.0	PD/PM 83/32 90L2D	414	240
	2.3 2.8 4.5	8620 7097 4480	1.5 1.9 2.5	386.39 318.11 200.83	76.0 72.0 28.0	73.0 73.0 46.0	100.0 100.0 100.0	105.0 105.0 105.0	PD/PM 83 112M6C / 112M6D	402	221
	3.6 4.4	5451 4487	2.3 2.9	386.39 318.11	76.0 72.0	73.0 73.0	100.0 100.0	105.0 105.0	PD/PM 83 100L4B / 100L4C	394	221
	3.1 4.0	6387 4827	1.2 1.5	295.06 223.01	57.0 57.0	58.0 58.0	81.0 82.0	80.0 80.0	PD/PM 73/32 112M6C / 112M6D	307	240
	4.7 6.3	3985 3012	1.8 2.3	295.06 223.01	57.0 57.0	58.0 58.0	81.0 82.0	80.0 80.0	PD/PM 73/32 100L4B / 100L4C	299	240
	9.5	1853	2.9	295.06	57.0	58.0	-	-	PD/PM 73/32 90L2D	289	240
	2.1 2.4	9412 8144	0.8 0.9	434.82 376.24	51.0 53.0	58.0 58.0	77.0 79.0	80.0 80.0	PD/PM 73/22 112M6C / 112M6D	296	240
	2.5 3.2 3.7	7708 5873 5082	0.9 1.2 1.4	570.70 434.82 376.24	45.0 51.0 53.0	58.0 58.0 58.0	73.0 77.0 79.0	80.0 80.0 80.0	PD/PM 73/22 100L4B / 100L4C	288	240
	2.7 3.0 3.9 4.9 6.4 7.4	6543 5854 4460 3584 2730 2362	0.8 0.9 1.2 1.5 2.0 2.3	1042.00 932.25 710.29 570.70 434.82 376.24	45.0 45.0 45.0 45.0 51.0 53.0	58.0 58.0 58.0 58.0 58.0 58.0	74.0 76.0 76.0 73.0 77.0 79.0	80.0 80.0 80.0 80.0 80.0 80.0	PD/PM 73/22 90L2D	278	240
	2.7 3.3 4.2 4.4 5.6 6.0 7.3	7549 6098 4829 4567 3617 3354 2747	1.0 1.3 1.8 1.7 1.8 2.4 2.9	338.37 273.32 216.45 204.72 162.12 150.32 123.12	55.0 56.0 53.0 53.0 47.0 17.0 17.0	58.0 58.0 58.0 58.0 58.0 28.0 28.0	79.0 81.0 81.0 81.0 81.0 81.0 82.0	80.0 80.0 80.0 80.0 80.0 80.0 80.0	PD/PM 73 112M6C / 112M6D	277	217
	4.1 5.1 6.5 6.8 8.6	4773 3856 3053 2888 2287	1.6 2.0 2.7 2.6 2.7	338.37 273.32 216.45 204.72 162.12	55.0 56.0 53.0 53.0 47.0	58.0 58.0 58.0 58.0 58.0	79.0 81.0 81.0 81.0 -	80.0 80.0 80.0 80.0 -	PD/PM 73 100L4B / 100L4C	269	217
	4.0 4.7 5.7	4838 4137 3439	1.0 1.2 1.5	223.50 191.13 158.90	- - -	- - -	- - -	- - -	PD/PM 63/32 112M6C / 112M6D	234	240
	6.3 7.3 8.8	3019 2581 2146	1.6 1.9 2.2	223.50 191.13 158.90	- - -	- - -	- - -	- - -	PD/PM 63/32 100L4B / 100L4C	226	240
	12.5 14.6	1403 1200	2.6 3.0	223.50 191.13	- -	- -	- -	- -	PD/PM 63/32 90L2D	216	240
	2.6 3.0	7556 6496	0.8 0.9	349.07 300.12	16.0 22.0	47.0 47.0	44.0 -	60.0 -	PD/PM 63/22 112M6C / 112M6D	223	240
	3.2 4.0 4.7	5868 4715 4054	0.9 1.1 1.3	434.44 349.07 300.12	23.0 16.0 -	47.0 47.0 -	47.0 44.0 -	60.0 60.0 -	PD/PM 63/22 100L4B / 100L4C	215	240



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm																																																																																																																																																																																																																																																																																																																																																																																																																																																																
2.20	3.4	5156	0.8	821.10	23.0	47.0	-	-	PD/PM 63/22 90L2D	205	240																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	4.4	4002	1.0	637.34	23.0	47.0	47.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.9	3580	1.1	570.21	23.0	47.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.4	2728	1.5	434.44	23.0	47.0	47.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.0	2192	1.9	349.07	16.0	47.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	9.3	1885	2.2	300.12	22.0	47.0	-	-	2.8	7086	0.8	317.64	33.0	47.0	53.0	60.0	PD/PM 63 112M6C / 112M6D	204	213	3.4	5978	1.0	267.94	36.0	47.0	55.0	60.0	3.6	5614	0.8	251.63	37.0	47.0	55.0	60.0	4.0	5038	0.8	225.83	38.0	47.0	56.0	60.0	4.2	4738	1.0	212.36	39.0	47.0	56.0	60.0	5.3	3823	1.5	171.37	40.0	47.0	57.0	60.0	5.6	3572	1.7	160.11	40.0	47.0	58.0	60.0	7.1	2830	1.7	126.84	41.0	47.0	58.0	60.0	7.8	2561	2.4	114.79	36.0	47.0	58.0	60.0	9.7	2068	3.0	92.68	36.0	47.0	59.0	60.0	3.6	5550	1.1	393.43	28.0	47.0	50.0	60.0	PD/PM 63 100L4B / 100L4C	196	213	4.4	4481	1.3	317.64	33.0	47.0	53.0	60.0	5.2	3780	1.6	267.94	36.0	47.0	55.0	60.0	5.6	3550	1.3	251.63	37.0	47.0	55.0	60.0	6.2	3186	1.3	225.83	38.0	47.0	56.0	60.0	6.6	2996	1.6	212.36	39.0	47.0	56.0	60.0	8.2	2417	2.3	171.37	40.0	47.0	57.0	60.0	8.7	2259	2.6	160.11	40.0	47.0	58.0	60.0	11.0	1789	2.6	126.84	41.0	47.0	58.0	60.0	5.1	3723	1.1	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L2D	186	213	6.3	3006	1.1	445.80	34.0	47.0	53.0	60.0	7.1	2653	1.7	393.43	28.0	47.0	50.0	60.0	8.8	2142	2.0	317.64	33.0	47.0	53.0	60.0	11.1	1697	2.0	251.63	37.0	47.0	55.0	60.0	12.4	1523	2.0	225.83	38.0	47.0	56.0	60.0	11.2	1818	2.4	80.26	20.0	32.0	58.0	60.0	PD/PM 62 112M6C / 112M6D	207	212	13.8	1482	2.4	65.45	20.0	32.0	58.0	60.0	5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238	6.3	3127	1.0	142.31	21.0	32.0	-	-	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-	-	-	-	9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-
	2.8	7086	0.8	317.64	33.0	47.0	53.0	60.0	PD/PM 63 112M6C / 112M6D	204	213																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	3.4	5978	1.0	267.94	36.0	47.0	55.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	3.6	5614	0.8	251.63	37.0	47.0	55.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.0	5038	0.8	225.83	38.0	47.0	56.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	4.2	4738	1.0	212.36	39.0	47.0	56.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.3	3823	1.5	171.37	40.0	47.0	57.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.6	3572	1.7	160.11	40.0	47.0	58.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	7.1	2830	1.7	126.84	41.0	47.0	58.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	7.8	2561	2.4	114.79	36.0	47.0	58.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	9.7	2068	3.0	92.68	36.0	47.0	59.0	60.0	3.6	5550	1.1	393.43	28.0	47.0	50.0	60.0	PD/PM 63 100L4B / 100L4C	196	213	4.4	4481	1.3	317.64	33.0	47.0	53.0	60.0	5.2	3780	1.6	267.94	36.0	47.0	55.0	60.0	5.6	3550	1.3	251.63	37.0	47.0	55.0	60.0	6.2	3186	1.3	225.83	38.0	47.0	56.0	60.0	6.6	2996	1.6	212.36	39.0	47.0	56.0	60.0	8.2	2417	2.3	171.37	40.0	47.0	57.0	60.0	8.7	2259	2.6	160.11	40.0	47.0	58.0	60.0	11.0	1789	2.6	126.84	41.0	47.0	58.0	60.0	5.1	3723	1.1	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L2D	186	213	6.3	3006	1.1	445.80	34.0	47.0	53.0	60.0	7.1	2653	1.7	393.43	28.0	47.0	50.0	60.0	8.8	2142	2.0	317.64	33.0	47.0	53.0	60.0	11.1	1697	2.0	251.63	37.0	47.0	55.0	60.0	12.4	1523	2.0	225.83	38.0	47.0	56.0	60.0	11.2	1818	2.4	80.26	20.0	32.0	58.0	60.0	PD/PM 62 112M6C / 112M6D	207	212	13.8	1482	2.4	65.45	20.0	32.0	58.0	60.0	5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238	6.3	3127	1.0	142.31	21.0	32.0	-	-	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-	-	-	-	9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																			
	3.6	5550	1.1	393.43	28.0	47.0	50.0	60.0	PD/PM 63 100L4B / 100L4C	196	213																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	4.4	4481	1.3	317.64	33.0	47.0	53.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.2	3780	1.6	267.94	36.0	47.0	55.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	5.6	3550	1.3	251.63	37.0	47.0	55.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.2	3186	1.3	225.83	38.0	47.0	56.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	6.6	2996	1.6	212.36	39.0	47.0	56.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.2	2417	2.3	171.37	40.0	47.0	57.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.7	2259	2.6	160.11	40.0	47.0	58.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	11.0	1789	2.6	126.84	41.0	47.0	58.0	60.0	5.1	3723	1.1	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L2D	186	213	6.3	3006	1.1	445.80	34.0	47.0	53.0	60.0	7.1	2653	1.7	393.43	28.0	47.0	50.0	60.0	8.8	2142	2.0	317.64	33.0	47.0	53.0	60.0	11.1	1697	2.0	251.63	37.0	47.0	55.0	60.0	12.4	1523	2.0	225.83	38.0	47.0	56.0	60.0	11.2	1818	2.4	80.26	20.0	32.0	58.0	60.0	PD/PM 62 112M6C / 112M6D	207	212	13.8	1482	2.4	65.45	20.0	32.0	58.0	60.0	5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238	6.3	3127	1.0	142.31	21.0	32.0	-	-	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-	-	-	-	9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																														
	5.1	3723	1.1	552.15	28.0	47.0	50.0	60.0	PD/PM 63 90L2D	186	213																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	6.3	3006	1.1	445.80	34.0	47.0	53.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	7.1	2653	1.7	393.43	28.0	47.0	50.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.8	2142	2.0	317.64	33.0	47.0	53.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	11.1	1697	2.0	251.63	37.0	47.0	55.0	60.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	12.4	1523	2.0	225.83	38.0	47.0	56.0	60.0	11.2	1818	2.4	80.26	20.0	32.0	58.0	60.0	PD/PM 62 112M6C / 112M6D	207	212	13.8	1482	2.4	65.45	20.0	32.0	58.0	60.0	5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238	6.3	3127	1.0	142.31	21.0	32.0	-	-	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-	-	-	-	9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0				PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-				-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																											
	11.2	1818	2.4	80.26	20.0	32.0	58.0	60.0	PD/PM 62 112M6C / 112M6D	207	212																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	13.8	1482	2.4	65.45	20.0	32.0	58.0	60.0				5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238	6.3	3127	1.0	142.31	21.0	32.0	-	-	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-				-	-	-	9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775				1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096				1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0				40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																																					
	5.2	3834	0.8	174.49	21.0	32.0	-	-	PD/PM 52/12 112M6C / 112M6D	133	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	6.3	3127	1.0	142.31	21.0	32.0	-	-				5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238	6.0	3212	0.9	232.65	-	-	-	-	8.0	2409	1.2	174.49	-	-	-	-				9.8	1965	1.5	142.31	-	-	-	-	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0				12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135				2.0	174.49	21.0	32.0	-	-	19.7	926	2.5	142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209	5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0				32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0				40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6	82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417				1.2	171.36	28.0	32.0	42.0	40.0	9.1				2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																																															
	5.1	3766	0.8	272.80	21.0	32.0	38.0	40.0	PD/PM 52/12 100L4B / 100L4C	125	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	6.0	3212	0.9	232.65	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	8.0	2409	1.2	174.49	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	9.8	1965	1.5	142.31	-	-	-	-				6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238	8.3	2202	1.0	338.40	21.0	32.0	-	-	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0	12.0	1514	1.5	232.65	21.0	32.0	-	-	16.0	1135	2.0	174.49	21.0	32.0	-	-	19.7	926	2.5				142.31	21.0	32.0	-	-	5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D	142	209				5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0	6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0	7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0	9.8	2042	1.5	91.51	25.0	32.0	-	-	10.9	1842	1.6				82.55	25.0	32.0	-	-	5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0				40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-				17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																																																																																								
	6.2	2916	0.8	448.15	21.0	32.0	-	-	PD/PM 52/12 90L2D	115	238																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	8.3	2202	1.0	338.40	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	10.3	1775	1.3	272.80	21.0	32.0	38.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	12.0	1514	1.5	232.65	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	16.0	1135	2.0	174.49	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	19.7	926	2.5	142.31	21.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
5.3	3823	0.8	171.36	28.0	32.0	42.0	40.0	PD/PM 53 112M6C / 112M6D				142	209																																																																																																																																																																																																																																																																																																																																																																																																																																																														
5.8	3432	1.0	153.85	28.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
6.5	3096	1.1	138.78	28.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
7.7	2616	1.1	117.27	22.0	32.0	40.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
9.8	2042	1.5	91.51	25.0	32.0	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
10.9	1842	1.6	82.55	25.0	32.0	-	-		5.6	3508	0.9			248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209	6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0	8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0	9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0	10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0	11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0	15.3	1291	2.2	91.51	-	-	-	-	17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																														
5.6	3508	0.9	248.66	23.0	32.0	39.0	40.0	PD/PM 53 100L4B / 100L4C	134	209																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
6.9	2861	1.1	202.80	26.0	32.0	41.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
8.2	2417	1.2	171.36	28.0	32.0	42.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
9.1	2170	1.5	153.85	28.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
10.1	1958	1.6	138.78	28.0	32.0	43.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
11.9	1654	1.7	117.27	22.0	32.0	40.0	40.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
15.3	1291	2.2	91.51	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
17.0	1165	2.4	82.55	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
2.20	6.5	2886	0.8	427.97	23.0	32.0	40.0	40.0	PD/PM 53 90L2D	124	209			
	7.7	2439	0.9	361.64	23.0	32.0	39.0	40.0						
	8.4	2236	1.1	331.54	23.0	32.0	40.0	40.0						
	10.4	1823	1.1	270.40	23.0	32.0	41.0	40.0						
	11.3	1677	1.5	248.66	23.0	32.0	39.0	40.0						
	13.8	1367	1.8	202.80	26.0	32.0	41.0	40.0						
	16.3	1155	1.8	171.36	28.0	32.0	42.0	40.0						
	18.2	1037	2.3	153.85	28.0	32.0	43.0	40.0						
	20.2	936	2.6	138.78	28.0	32.0	43.0	40.0						
	23.9	791	2.6	117.27	22.0	32.0	-	-						
	6.7	3036	0.9	134.05	28.0	32.0	43.0	40.0				PD/PM 52 112M6C / 112M6D	123	208
	9.0	2268	1.0	100.15	26.0	32.0	44.0	40.0						
	9.8	2080	1.4	91.82	26.0	32.0	44.0	40.0						
	11.0	1850	1.0	81.68	25.0	32.0	44.0	40.0						
	13.1	1554	2.0	68.60	24.0	32.0	44.0	40.0						
	16.1	1267	2.2	55.94	30.0	32.0	43.0	40.0						
	16.2	1258	2.1	55.55	30.0	32.0	45.0	40.0						
	19.0	1071	2.4	47.27	30.0	32.0	41.0	40.0						
	22.1	924	2.8	40.79	30.0	32.0	40.0	40.0						
	10.4	1931	1.4	134.05	28.0	32.0	43.0	40.0	PD/PM 52 100L4B / 100L4C	115	208			
	14.0	1443	1.6	100.15	26.0	32.0	44.0	40.0						
	15.2	1323	2.1	91.82	26.0	32.0	44.0	40.0						
	17.1	1177	2.4	81.68	25.0	32.0	44.0	40.0						
	20.4	988	3.0	68.60	24.0	32.0	44.0	40.0						
	20.9	937	2.2	134.05	28.0	32.0	43.0	40.0	PD/PM 52 90L2D	105	208			
	28.0	700	2.4	100.15	26.0	32.0	44.0	40.0						
	34.3	571	2.4	81.68	25.0	32.0	44.0	40.0						
	9.2	2106	0.9	152.50	16.0	22.0	26.0	30.0	PD/PM 42/12 100L4B / 100L4C	89	238			
	11.0	1759	1.0	127.43	-	-	-	-						
	11.9	1527	0.9	234.61	16.0	22.0	-	-	PD/PM 42/12 90L2D	79	238			
	15.8	1153	1.2	177.15	16.0	22.0	-	-						
	18.4	992	1.4	152.50	16.0	22.0	26.0	30.0						
	22.0	829	1.6	127.43	16.0	22.0	-	-						
	7.6	2644	0.8	118.53	17.0	22.0	28.0	30.0	PD/PM 43 112M6C / 112M6D	102	205			
	8.7	2317	0.9	103.86	15.0	22.0	27.0	30.0						
	10.4	1936	1.1	86.78	12.0	22.0	26.0	30.0						
	10.0	1984	1.0	140.61	16.0	22.0	27.0	30.0	PD/PM 43 100L4B / 100L4C	94	205			
	11.8	1672	1.2	118.53	17.0	22.0	28.0	30.0						
	13.5	1465	1.4	103.86	15.0	22.0	27.0	30.0						
	16.1	1224	1.6	86.78	12.0	22.0	26.0	30.0						
	9.2	2043	0.8	302.94	16.0	22.0	26.0	30.0	PD/PM 43 90L2D	84	205			
	11.1	1707	0.9	253.13	16.0	22.0	25.0	30.0						
	13.3	1423	0.9	211.05	16.0	22.0	27.0	30.0						
	14.6	1291	1.2	191.52	16.0	22.0	28.0	30.0						
	17.5	1079	1.2	160.03	16.0	22.0	-	-						
	19.9	948	1.6	140.61	16.0	22.0	27.0	30.0						
23.6	799	1.9	118.53	17.0	22.0	28.0	30.0							
27.0	700	2.2	103.86	15.0	22.0	27.0	30.0							
32.3	585	2.6	86.78	12.0	22.0	26.0	30.0							
9.9	2050	0.8	90.52	17.0	22.0	29.0	30.0	PD/PM 42 112M6C / 112M6D				87	204	
11.9	1708	1.0	75.41	16.0	22.0	30.0	30.0							
14.6	1396	1.3	61.64	16.0	22.0	30.0	30.0							
17.2	1183	1.6	52.23	15.0	22.0	30.0	30.0							
20.0	1021	1.6	45.06	15.0	22.0	29.0	30.0							
20.6	988	1.7	43.64	15.0	22.0	29.0	30.0							
22.1	924	1.8	40.79	14.0	22.0	29.0	30.0							
24.4	834	1.8	36.84	14.0	22.0	28.0	30.0							
24.7	824	1.8	36.39	14.0	22.0	28.0	30.0							
27.9	732	2.3	32.31	19.0	22.0	27.0	30.0							
34.3	595	2.8	26.25	19.0	22.0	25.0	30.0							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3					
2.20	12.6	1595	1.0	110.73	17.0	22.0	29.0	30.0	PD/PM 42 100L4B / 100L4C	79	204			
	15.5	1304	1.2	90.52	17.0	22.0	29.0	30.0						
	18.6	1086	1.5	75.41	16.0	22.0	30.0	30.0						
	22.7	888	2.0	61.64	16.0	22.0	30.0	30.0						
	26.8	752	2.4	52.23	15.0	22.0	30.0	30.0						
	31.1	649	2.5	45.06	15.0	22.0	29.0	30.0						
	32.1	629	2.5	43.64	15.0	22.0	29.0	30.0						
	34.3	588	2.6	40.79	14.0	22.0	29.0	30.0						
	38.0	531	2.6	36.84	14.0	22.0	28.0	30.0						
	38.5	524	2.6	36.39	14.0	22.0	28.0	30.0						
	18.0	1086	0.9	155.40	17.0	22.0	29.0	30.0				PD/PM 42 90L2D	69	204
	25.3	774	1.6	110.73	17.0	22.0	29.0	30.0						
	30.9	633	1.9	90.52	17.0	22.0	29.0	30.0						
	24.6	742	0.9	114.01	11.0	15.0	20.0	20.0	PD/PM 32/12 90L2D	64	238			
	31.9	571	1.2	87.71	11.0	15.0	-	-						
	26.9	701	0.8	103.92	13.0	15.0	-	-	PD/PM 33 90L2D	62	201			
	31.3	603	0.8	89.45	13.0	15.0	-	-						
	20.1	1015	0.8	44.83	9.0	15.0	20.0	20.0	PD/PM 32 112M6C / 112M6D	72	200			
	21.4	952	1.0	42.05	9.0	15.0	20.0	20.0						
	23.3	874	0.8	38.59	9.0	15.0	19.0	20.0						
	23.8	856	1.0	37.79	9.0	15.0	19.0	20.0						
	28.2	723	1.3	31.90	9.0	15.0	18.0	20.0						
	31.4	649	1.4	28.67	9.0	15.0	18.0	20.0						
	34.8	586	1.5	25.86	8.0	15.0	17.0	20.0						
	38.0	537	1.6	23.69	8.0	15.0	17.0	20.0						
	40.1	508	1.7	22.42	8.0	15.0	17.0	20.0						
	42.1	484	1.6	21.37	8.0	15.0	17.0	20.0						
	44.7	456	1.9	20.15	8.0	15.0	16.0	20.0						
	54.1	377	2.3	16.65	11.0	15.0	16.0	20.0						
	63.9	319	2.8	14.09	11.0	15.0	15.0	20.0						
	21.8	924	1.1	64.11	9.0	15.0	21.0	20.0				PD/PM 32 100L4B / 100L4C	64	200
	26.4	763	1.1	52.98	9.0	15.0	20.0	20.0						
	31.2	646	1.1	44.83	9.0	15.0	20.0	20.0						
	33.3	606	1.5	42.05	9.0	15.0	20.0	20.0						
	36.3	556	1.1	38.59	9.0	15.0	19.0	20.0						
	37.0	544	1.5	37.79	9.0	15.0	19.0	20.0						
	43.9	460	1.9	31.90	9.0	15.0	18.0	20.0						
	48.8	413	2.1	28.67	9.0	15.0	18.0	20.0						
	54.1	373	2.3	25.86	8.0	15.0	17.0	20.0						
	59.1	341	2.4	23.69	8.0	15.0	17.0	20.0						
	62.4	323	2.5	22.42	8.0	15.0	17.0	20.0						
	65.5	308	2.3	21.37	8.0	15.0	17.0	20.0						
69.5	290	2.8	20.15	8.0	15.0	16.0	20.0							
27.8	705	0.9	100.85	9.0	15.0	22.0	20.0	PD/PM 32 90L2D	54	200				
31.6	620	1.2	88.74	9.0	15.0	22.0	20.0							
35.1	557	1.2	79.75	9.0	15.0	22.0	20.0							
39.7	493	0.9	70.52	9.0	15.0	22.0	20.0							
42.5	461	1.3	65.91	9.0	15.0	22.0	20.0							
43.7	448	1.7	64.11	9.0	15.0	21.0	20.0							
50.2	390	1.3	55.76	9.0	15.0	22.0	20.0							
52.9	370	1.7	52.98	9.0	15.0	20.0	20.0							
58.3	335	1.3	48.00	9.0	15.0	21.0	20.0							
62.5	313	1.8	44.83	9.0	15.0	20.0	20.0							
66.6	294	2.4	42.05	9.0	15.0	20.0	20.0							
72.6	270	1.8	38.59	9.0	15.0	19.0	20.0							
74.1	264	2.4	37.79	9.0	15.0	19.0	20.0							
87.8	223	3.0	31.90	9.0	15.0	18.0	20.0							
34.0	555	0.8	82.29	5.0	12.0	-	-				PD/PM 23 90L2D	46	197	

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
2.20	30.4	671	0.8	29.64	7.0	12.0	13.0	15.0	PD/PM 22 112M6C / 112M6D	57	196
	33.6	607	0.8	26.81	7.0	12.0	13.0	15.0			
	36.0	566	0.9	24.98	7.0	12.0	14.0	15.0			
	37.5	543	0.8	23.99	7.0	12.0	14.0	15.0			
	41.1	496	1.0	21.89	7.0	12.0	14.0	15.0			
	48.6	419	1.2	18.51	7.0	12.0	14.0	15.0			
	54.3	375	1.3	16.56	7.0	12.0	13.0	15.0			
	68.2	299	1.4	13.20	6.0	12.0	13.0	15.0			
	76.2	267	1.5	11.81	6.0	12.0	12.0	15.0			
	88.6	230	1.6	10.16	6.0	11.0	12.0	15.0			
	100.0	204	1.7	9.00	6.0	11.0	11.0	15.0			
	107.7	189	1.4	8.36	6.0	11.0	11.0	15.0			
	120.3	169	1.5	7.48	5.0	10.0	11.0	15.0			
	140.0	146	1.6	6.43	5.0	10.0	10.0	15.0			
	157.9	129	1.7	5.70	5.0	9.0	10.0	15.0			
	199.6	102	1.9	4.51	5.0	8.0	9.0	15.0			
	32.0	630	0.9	43.73	7.0	12.0	12.0	15.0	PD/PM 22 100L4B / 100L4C	49	196
	38.3	527	1.0	36.57	8.0	12.0	13.0	15.0			
	44.9	449	1.0	31.20	7.0	12.0	13.0	15.0			
	47.2	427	1.2	29.64	7.0	12.0	13.0	15.0			
	52.2	386	1.1	26.81	7.0	12.0	13.0	15.0			
	56.0	360	1.4	24.98	7.0	12.0	14.0	15.0			
	58.4	346	1.3	23.99	7.0	12.0	14.0	15.0			
	64.0	315	1.5	21.89	7.0	12.0	14.0	15.0			
	75.6	267	1.8	18.51	7.0	12.0	14.0	15.0			
	84.5	239	2.0	16.56	7.0	12.0	13.0	15.0			
	106.1	190	2.1	13.20	6.0	12.0	13.0	15.0			
	118.5	170	2.3	11.81	6.0	12.0	12.0	15.0			
	137.8	146	2.4	10.16	6.0	11.0	12.0	15.0			
	155.6	130	2.6	9.00	6.0	11.0	11.0	15.0			
	167.5	120	2.1	8.36	6.0	11.0	11.0	15.0			
	187.2	108	2.3	7.48	5.0	10.0	11.0	15.0			
217.7	93	2.4	6.43	5.0	10.0	10.0	15.0				
245.6	82	2.6	5.70	5.0	9.0	10.0	15.0				
310.4	65	2.9	4.51	5.0	8.0	9.0	15.0				
43.8	446	0.9	63.86	7.0	12.0	12.0	15.0	PD/PM 22 90L2D	39	196	
51.9	377	1.0	53.98	7.0	12.0	13.0	15.0				
54.1	361	1.1	51.73	7.0	12.0	13.0	15.0				
62.0	315	1.1	45.14	7.0	12.0	13.0	15.0				
64.0	306	1.4	43.73	7.0	12.0	12.0	15.0				
76.6	256	1.5	36.57	7.0	12.0	13.0	15.0				
89.7	218	1.6	31.20	7.0	12.0	13.0	15.0				
94.5	207	1.8	29.64	7.0	12.0	13.0	15.0				
104.4	187	1.8	26.81	7.0	12.0	13.0	15.0				
112.1	175	2.1	24.98	7.0	12.0	14.0	15.0				
116.7	168	2.0	23.99	7.0	12.0	14.0	15.0				
127.9	153	2.4	21.89	7.0	12.0	14.0	15.0				
151.3	129	2.9	18.51	7.0	12.0	14.0	15.0				
76.6	266	0.8	11.75	3.0	5.0	9.0	7.0	PD/PM 12 112M6C / 112M6D	46	192	
87.0	234	0.9	10.34	3.0	5.0	9.0	7.0				
98.3	207	1.0	9.16	3.0	5.0	9.0	7.0				
109.4	186	1.1	8.23	3.0	5.0	8.0	7.0				
110.0	185	0.9	8.18	3.0	5.0	9.0	7.0				
124.1	164	1.2	7.25	3.0	5.0	8.0	7.0				
140.2	145	1.3	6.42	2.0	4.0	8.0	7.0				
164.5	124	1.5	5.47	2.0	4.0	7.0	7.0				
188.3	108	1.2	4.78	2.0	4.0	7.0	7.0				
67.9	297	0.8	20.61	-	-	9.0	7.0	PD/PM 12 100L4B / 100L4C	38	192	
81.3	248	0.9	17.22	3.0	5.0	9.0	7.0				
99.4	203	1.0	14.09	3.0	5.0	9.0	7.0				
119.1	169	1.2	11.75	3.0	5.0	9.0	7.0				
135.4	149	1.3	10.34	3.0	5.0	9.0	7.0				
152.8	132	1.4	9.16	3.0	5.0	9.0	7.0				
170.1	119	1.6	8.23	3.0	5.0	8.0	7.0				
171.1	118	1.4	8.18	3.0	5.0	9.0	7.0				
193.1	104	1.8	7.25	3.0	5.0	8.0	7.0				
218.1	92	2.0	6.42	2.0	4.0	8.0	7.0				
255.9	79	2.2	5.47	2.0	4.0	7.0	7.0				
292.9	69	1.9	4.78	2.0	4.0	7.0	7.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
2.20	87.3	224	0.8	32.07	3.0	5.0	9.0	7.0	PD/PM 12 90L2D	28	192			
	98.8	198	0.9	28.35	3.0	5.0	9.0	7.0						
	110.9	176	1.0	25.24	3.0	5.0	9.0	7.0						
	135.9	144	1.2	20.61	3.0	5.0	9.0	7.0						
	162.6	120	1.4	17.22	3.0	5.0	9.0	7.0						
	198.7	98	1.6	14.09	3.0	5.0	9.0	7.0						
	238.3	82	1.9	11.75	3.0	5.0	9.0	7.0						
	270.8	72	2.1	10.34	3.0	5.0	9.0	7.0						
	305.7	64	2.2	9.16	3.0	5.0	9.0	7.0						
	340.2	58	2.5	8.23	3.0	5.0	8.0	7.0						
	342.3	57	2.1	8.18	3.0	5.0	9.0	7.0						
	386.2	51	2.8	7.25	3.0	5.0	8.0	7.0						
	585.8	33	2.9	4.78	2.0	4.0	7.0	7.0						
	57.9	341	0.8	24.17	4.0	7.0	8.0	11.0				PD/PM C13 100L4B / 100L4C	44	190
	74.6	265	0.9	18.76	4.0	7.0	8.0	11.0						
	86.4	229	1.0	16.20	4.0	7.0	8.0	11.0						
	52.6	359	0.8	53.28	4.0	7.0	8.0	11.0	PD/PM C13 90L2D	34	190			
	63.2	299	0.9	44.33	4.0	7.0	8.0	11.0						
	72.1	262	0.9	38.83	4.0	7.0	8.0	11.0						
	78.4	241	0.9	35.71	4.0	7.0	8.0	11.0						
	94.2	200	1.1	29.71	4.0	7.0	8.0	11.0						
	107.6	175	1.2	26.02	4.0	7.0	8.0	11.0						
	115.8	163	1.3	24.17	4.0	7.0	8.0	11.0						
	149.3	126	1.5	18.76	4.0	7.0	8.0	11.0						
	172.8	109	1.6	16.20	4.0	7.0	8.0	11.0						
	158.9	123	0.8	17.62	3.0	5.0	7.0	5.0	PD/PM B02 90L2D	22	188			
	169.0	116	0.9	16.57	3.0	5.0	7.0	5.0						
	197.2	99	1.2	14.20	3.0	5.0	7.0	5.0						
	216.0	91	1.3	12.96	3.0	5.0	7.0	5.0						
	248.2	79	1.3	11.28	3.0	5.0	7.0	5.0						
	255.2	77	1.5	10.97	3.0	5.0	7.0	5.0						
	289.6	68	1.6	9.67	3.0	5.0	7.0	5.0						
	317.5	62	1.7	8.82	3.0	5.0	7.0	5.0						
	374.8	52	1.9	7.47	3.0	5.0	7.0	5.0						
	435.5	45	2.1	6.43	3.0	5.0	7.0	5.0						
	466.7	42	2.2	6.00	3.0	5.0	7.0	5.0						
	541.6	36	2.4	5.17	3.0	5.0	7.0	5.0						
	599.6	33	2.6	4.67	3.0	5.0	7.0	5.0						
	696.5	28	2.8	4.02	3.0	5.0	7.0	5.0						
	202.5	97	0.9	13.83	3.0	5.0	-	-	PD/PM A02 90L2D	18	186			
	239.9	82	1.0	11.67	3.0	5.0	-	-						
	295.0	66	1.3	9.49	3.0	5.0	-	-						
	324.4	60	1.4	8.63	3.0	5.0	-	-						
	386.2	51	1.7	7.25	3.0	5.0	-	-						
	440.9	44	1.9	6.35	3.0	5.0	-	-						
525.3	37	1.9	5.33	3.0	5.0	-	-							
660.4	30	1.9	4.24	3.0	5.0	-	-							
3.00	0.4	68726	0.9	2328.41	-	-	-	-	PD/PM 113/52 132S6A	2214	242			
	0.5	53999	1.2	1829.47	-	-	-	-						
	0.7	40813	1.5	1382.74	-	-	134.0	170.0						
	0.8	34085	1.8	1154.79	-	-	139.0	170.0						
	0.9	28399	2.2	962.15	-	-	144.0	170.0						
	1.2	21590	2.9	731.47	-	-	147.0	170.0						
	0.3	73696	0.8	4001.34	-	-	-	-	PD/PM 113/52 100L4C / 100L4D	2180	242			
	0.4	68569	0.9	3722.96	-	-	-	-						
	0.5	56408	1.1	3062.69	-	-	-	-						
	0.6	42884	1.4	2328.41	-	-	-	-						
	0.8	33695	1.8	1829.47	-	-	-	-						
	1.0	25467	2.4	1382.74	-	-	134.0	170.0						
	1.2	21269	2.8	1154.79	-	-	139.0	170.0						
	0.7	34262	1.3	4001.34	-	-	-	-	PD/PM 113/52 100L2C / 100L2D	2180	242			
	0.8	31878	1.4	3722.96	-	-	-	-						
	0.9	26224	1.7	3062.69	-	-	-	-						
	1.2	19937	2.3	2328.41	-	-	-	-						
	1.5	15665	2.9	1829.47	-	-	-	-						



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
3.00	0.6	41822	0.9	1416.90	-	-	117.0	150.0	PD/PM 103/52 132S6A	1364	242
	0.8	34405	1.1	1165.61	-	-	124.0	150.0			
	1.0	27032	1.4	915.84	-	-	129.0	150.0			
	1.3	20431	1.8	692.20	-	-	133.0	150.0			
	1.6	17063	2.2	578.09	-	-	134.0	150.0			
	1.9	14077	2.6	476.93	-	-	135.0	150.0			
	0.6	44252	0.8	2404.69	-	-	-	-	PD/PM 103/52 100L4C / 100L4D	1334	242
	1.0	26096	1.3	1416.90	-	-	117.0	150.0			
	1.2	21468	1.6	1165.61	-	-	124.0	150.0			
	1.5	16868	2.1	915.84	-	-	129.0	150.0			
	2.0	12749	2.7	692.20	-	-	133.0	150.0			
	0.8	30141	0.9	3520.13	-	-	-	-	PD/PM 103/52 100L2C / 100L2D	1334	242
	1.0	23946	1.1	2796.57	-	-	-	-			
	2.0	12132	2.2	1416.90	-	-	117.0	150.0			
	2.4	9981	2.7	1165.61	-	-	124.0	150.0			
	2.2	12116	2.1	410.49	60.0	102.0	120.0	130.0			
	3.1	8683	2.9	294.19	60.0	102.0	120.0	130.0	PD/PM 93/52 132S6A	800	242
	1.0	26142	1.0	885.67	94.0	102.0	120.0	130.0	PD/PM 93/42 132S6A	771	242
	1.3	21115	1.2	715.36	93.0	102.0	120.0	130.0			
	1.5	18266	1.4	618.83	90.0	102.0	120.0	130.0			
	2.0	13308	1.9	450.86	85.0	102.0	120.0	130.0			
	1.0	26111	0.9	1417.68	97.0	102.0	120.0	130.0	PD/PM 93/42 100L4C / 100L4D	741	242
	1.2	21684	1.1	1177.36	97.0	102.0	120.0	130.0			
	1.6	16312	1.5	885.67	94.0	102.0	120.0	130.0			
	2.0	13175	1.8	715.36	93.0	102.0	120.0	130.0			
	2.3	11398	2.1	618.83	90.0	102.0	120.0	130.0			
	3.1	8304	2.9	450.86	85.0	102.0	120.0	130.0			
	1.2	20839	0.9	2433.68	97.0	102.0	-	-			
	1.3	18862	1.0	2202.85	97.0	102.0	-	-	PD/PM 93/42 100L2C / 100L2D	741	242
	1.6	14940	1.2	1744.83	97.0	102.0	-	-			
	2.0	12139	1.5	1417.68	97.0	102.0	120.0	130.0			
	2.4	10081	1.8	1177.36	97.0	102.0	120.0	130.0			
	3.2	7584	2.4	885.67	94.0	102.0	120.0	130.0			
	3.9	6125	3.0	715.36	93.0	102.0	120.0	130.0			
	2.6	10713	2.5	352.16	31.0	46.0	-	-			
	3.1	8851	2.8	290.94	31.0	46.0	-	-	PD/PM 93 132S6A	726	225
	1.6	16243	0.8	550.29	74.0	73.0	100.0	100.0	PD/PM 83/42 132S6A	469	242
	1.9	13838	0.9	468.82	73.0	73.0	100.0	100.0			
	2.6	10237	1.2	346.82	78.0	73.0	-	-			
	3.0	8722	1.5	295.48	81.0	73.0	-	-			
	4.0	6603	1.9	223.71	81.0	73.0	-	-			
	4.8	5506	2.3	186.54	81.0	73.0	-	-			
	2.5	10135	1.2	550.29	74.0	73.0	100.0	100.0	PD/PM 83/42 100L4C / 100L4D	439	242
	3.0	8635	1.4	468.82	73.0	73.0	100.0	100.0			
	4.0	6388	1.9	346.82	78.0	73.0	100.0	100.0			
	4.7	5442	2.2	295.48	-	-	-	-			
	6.3	4120	2.9	223.71	-	-	-	-			
	5.1	4712	2.0	550.29	74.0	73.0	100.0	100.0			
6.0	4014	2.3	468.82	73.0	73.0	100.0	100.0	PD/PM 83/42 100L2C / 100L2D	439	242	
2.0	13197	0.9	716.55	74.0	73.0	100.0	100.0	PD/PM 83/32 100L4C / 100L4D	424	240	
2.3	11236	1.1	610.07	74.0	73.0	100.0	100.0				
2.1	11670	0.8	1362.94	74.0	73.0	100.0	100.0	PD/PM 83/32 100L2C / 100L2D	424	240	
2.6	9092	1.0	1061.83	74.0	73.0	100.0	100.0				
3.1	7613	1.2	889.06	74.0	73.0	100.0	100.0				
3.9	6135	1.5	716.55	74.0	73.0	100.0	100.0				
4.6	5224	1.8	610.07	74.0	73.0	100.0	100.0				
2.3	11755	1.1	386.39	71.0	73.0	100.0	105.0				
2.8	9678	1.4	318.11	68.0	73.0	100.0	105.0	PD/PM 83 132S6A	424	221	
3.1	8942	1.5	293.92	62.0	73.0	100.0	105.0				
3.7	7362	1.9	241.98	62.0	73.0	100.0	105.0				
4.5	6110	1.9	200.83	62.0	73.0	100.0	105.0				
4.9	5645	2.4	185.56	76.0	73.0	100.0	105.0				
5.9	4648	3.0	152.77	76.0	73.0	100.0	105.0				
6.3	4378	3.0	143.91	76.0	73.0	100.0	105.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
3.00	3.6	7433	1.7	386.39	71.0	73.0	100.0	105.0	PD/PM 83 100L4C / 100L4D	394	221
	4.4	6119	2.1	318.11	68.0	73.0	100.0	105.0			
	7.0	3863	2.8	200.83	62.0	73.0	100.0	105.0			
	7.2	3553	2.7	386.39	71.0	73.0	100.0	105.0	PD/PM 83 100L2C / 100L2D	394	221
	3.1	8709	0.9	295.06	57.0	58.0	-	-	PD/PM 73/32 132S6A	329	240
	4.0	6582	1.1	223.01	57.0	58.0	-	-			
	4.7	5434	1.3	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 100L4C / 100L4D	299	240
	6.3	4107	1.7	223.01	57.0	58.0	82.0	80.0			
	9.5	2526	2.1	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 100L2C / 100L2D	299	240
	12.6	1910	2.8	223.01	57.0	58.0	82.0	80.0			
	3.2	8008	0.9	434.82	43.0	58.0	72.0	80.0	PD/PM 73/22 100L4C / 100L4D	288	240
	3.7	6930	1.0	376.24	48.0	58.0	75.0	80.0			
	3.9	6082	0.9	710.29	49.0	58.0	76.0	80.0	PD/PM 73/22 100L2C / 100L2D	288	240
	4.9	4887	1.1	570.70	45.0	58.0	73.0	80.0			
	6.4	3723	1.4	434.82	43.0	58.0	72.0	80.0			
	7.4	3222	1.7	376.24	48.0	58.0	75.0	80.0			
	2.7	10294	0.8	338.37	50.0	58.0	76.0	80.0	PD/PM 73 132S6A	299	217
	3.3	8315	1.0	273.32	52.0	58.0	79.0	80.0			
	4.2	6585	1.3	216.45	50.0	58.0	80.0	80.0			
	4.4	6228	1.3	204.72	50.0	58.0	80.0	80.0			
	5.6	4932	1.3	162.12	47.0	58.0	81.0	80.0			
	6.0	4573	1.7	150.32	47.0	58.0	81.0	80.0			
	7.3	3746	2.1	123.12	55.0	58.0	82.0	80.0			
	8.4	3241	2.4	106.53	55.0	58.0	82.0	80.0			
	9.7	2831	2.8	93.05	55.0	58.0	82.0	80.0			
	4.1	6509	1.2	338.37	50.0	58.0	76.0	80.0	PD/PM 73 100L4C / 100L4D	269	217
	5.1	5258	1.4	273.32	52.0	58.0	79.0	80.0			
	6.5	4164	2.0	216.45	50.0	58.0	80.0	80.0			
	6.8	3938	1.9	204.72	50.0	58.0	80.0	80.0			
	8.6	3119	2.0	162.12	47.0	58.0	81.0	80.0			
	9.3	2892	2.6	150.32	47.0	58.0	81.0	80.0			
	8.3	3111	1.8	338.37	50.0	58.0	76.0	80.0	PD/PM 73 100L2C / 100L2D	269	217
	10.2	2513	2.3	273.32	52.0	58.0	79.0	80.0			
	13.7	1882	3.0	204.72	50.0	58.0	80.0	80.0			
	12.9	2156	2.8	69.80	29.0	50.0	-	-	PD/PM 72 132S6A	292	216
	4.0	6597	0.8	223.50	-	-	-	-	PD/PM 63/32 132S6A	256	240
	4.7	5641	0.9	191.13	-	-	-	-			
	5.7	4690	1.1	158.90	-	-	-	-			
	6.3	4116	1.2	223.50	-	-	-	-	PD/PM 63/32 100L4C / 100L4D	226	240
	7.3	3520	1.4	191.13	-	-	-	-			
8.8	2927	1.6	158.90	-	-	-	-				
12.5	1914	1.9	223.50	-	-	-	-	PD/PM 63/32 100L2C / 100L2D	226	240	
14.6	1637	2.2	191.13	-	-	-	-				
17.6	1361	2.7	158.90	-	-	-	-				
4.0	6429	0.8	349.07	16.0	47.0	44.0	60.0	PD/PM 63/22 100L4C / 100L4D	215	240	
4.7	5528	1.0	300.12	-	-	-	-				
4.4	5457	0.8	637.34	16.0	47.0	-	-	PD/PM 63/22 100L2C / 100L2D	215	240	
4.9	4882	0.8	570.21	16.0	47.0	-	-				
6.4	3720	1.1	434.44	16.0	47.0	47.0	60.0				
8.0	2989	1.4	349.07	16.0	47.0	44.0	60.0				
9.3	2570	1.6	300.12	23.0	47.0	-	-				
3.4	8151	0.8	267.94	30.0	47.0	51.0	60.0	PD/PM 63 132S6A	226	213	
4.2	6460	0.8	212.36	35.0	47.0	54.0	60.0				
5.3	5213	1.1	171.37	38.0	47.0	56.0	60.0				
5.6	4871	1.2	160.11	38.0	47.0	56.0	60.0				
7.1	3859	1.2	126.84	40.0	47.0	57.0	60.0				
7.8	3492	1.8	114.79	40.0	47.0	57.0	60.0				
9.7	2820	2.2	92.68	33.0	47.0	58.0	60.0				
12.0	2291	2.8	75.30	33.0	47.0	58.0	60.0				
12.3	2234	2.6	73.42	33.0	47.0	58.0	60.0				

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
3.00	3.6	7568	0.8	393.43	28.0	47.0	50.0	60.0	PD/PM 63 100L4C / 100L4D	196	213			
	4.4	6110	0.9	317.64	23.0	47.0	47.0	60.0						
	5.2	5154	1.1	267.94	30.0	47.0	51.0	60.0						
	5.6	4840	0.9	251.63	31.0	47.0	52.0	60.0						
	6.2	4344	0.9	225.83	34.0	47.0	53.0	60.0						
	6.6	4085	1.1	212.36	35.0	47.0	54.0	60.0						
	8.2	3297	1.7	171.37	38.0	47.0	56.0	60.0						
	8.7	3080	1.9	160.11	38.0	47.0	56.0	60.0						
	11.0	2440	1.9	126.84	40.0	47.0	57.0	60.0						
	12.2	2208	2.7	114.79	40.0	47.0	57.0	60.0						
	7.1	3618	1.2	393.43	28.0	47.0	50.0	60.0				PD/PM 63 100L2C / 100L2D	196	213
	8.8	2921	1.5	317.64	23.0	47.0	47.0	60.0						
	10.5	2464	1.8	267.94	30.0	47.0	51.0	60.0						
	11.1	2314	1.5	251.63	31.0	47.0	52.0	60.0						
	12.4	2076	1.5	225.83	34.0	47.0	53.0	60.0						
	13.2	1952	1.8	212.36	38.0	47.0	54.0	60.0						
	16.3	1576	2.7	171.37	38.0	47.0	56.0	60.0						
	17.5	1472	3.0	160.11	38.0	47.0	56.0	60.0						
	22.1	1166	3.0	126.84	40.0	47.0	57.0	60.0						
	11.2	2479	1.7	80.26	37.0	47.0	58.0	60.0	PD/PM 62 132S6A	229	212			
	13.8	2021	1.7	65.45	33.0	47.0	58.0	60.0						
	14.7	1886	2.5	61.05	20.0	32.0	58.0	60.0						
	18.1	1538	2.8	49.79	20.0	32.0	58.0	60.0						
	22.8	1218	2.8	39.44	20.0	32.0	56.0	60.0						
	17.4	1577	2.6	80.26	37.0	47.0	58.0	60.0	PD/PM 62 100L4C / 100L4D	199	212			
	21.4	1286	2.6	65.45	33.0	47.0	58.0	60.0						
	8.0	3285	0.9	174.49	-	-	-	-	PD/PM 52/12 100L4C / 100L4D	125	238			
	9.8	2679	1.1	142.31	-	-	-	-						
	8.3	3003	0.8	338.40	21.0	32.0	-	-	PD/PM 52/12 100L2C / 100L2D	125	238			
	10.3	2421	0.9	272.80	21.0	32.0	38.0	40.0						
	12.0	2064	1.1	232.65	21.0	32.0	-	-						
	16.0	1548	1.5	174.49	21.0	32.0	-	-						
	19.7	1263	1.8	142.31	21.0	32.0	-	-						
	6.9	3901	0.8	202.80	20.0	32.0	37.0	40.0	PD/PM 53 100L4C / 100L4D	134	209			
	8.2	3296	0.8	171.36	24.0	32.0	39.0	40.0						
	9.1	2960	1.1	153.85	26.0	32.0	40.0	40.0						
	10.1	2670	1.2	138.78	25.0	32.0	41.0	40.0						
	11.9	2256	1.2	117.27	22.0	32.0	40.0	40.0						
	15.3	1760	1.6	91.51	-	-	-	-						
	17.0	1588	1.8	82.55	-	-	-	-						
	8.4	3048	0.8	331.54	20.0	32.0	40.0	40.0	PD/PM 53 100L2C / 100L2D	134	209			
	10.4	2486	0.8	270.40	20.0	32.0	41.0	40.0						
	11.3	2286	1.1	248.66	20.0	32.0	39.0	40.0						
	13.8	1865	1.3	202.80	20.0	32.0	37.0	40.0						
	16.3	1576	1.4	171.36	24.0	32.0	39.0	40.0						
	18.2	1415	1.7	153.85	26.0	32.0	40.0	40.0						
	20.2	1276	1.9	138.78	25.0	32.0	41.0	40.0						
	23.9	1078	1.9	117.27	22.0	32.0	40.0	40.0						
30.6	841	2.6	91.51	23.0	32.0	-	-							
33.9	759	2.8	82.55	23.0	32.0	-	-							
9.8	2836	1.0	91.82	24.0	32.0	43.0	40.0	PD/PM 52 132S6A				145	208	
13.1	2119	1.5	68.60	23.0	32.0	44.0	40.0							
16.1	1728	1.6	55.94	22.0	32.0	43.0	40.0							
16.2	1716	1.5	55.55	17.0	32.0	45.0	30.0							
17.5	1589	2.1	51.45	21.0	32.0	40.0	40.0							
19.0	1460	1.7	47.27	21.0	32.0	41.0	40.0							
21.4	1296	2.6	41.96	28.0	32.0	38.0	40.0							
22.1	1260	2.1	40.79	28.0	32.0	40.0	40.0							
25.4	1095	2.6	35.45	28.0	32.0	37.0	40.0							
26.9	1032	2.3	33.41	28.0	32.0	38.0	40.0							
10.4	2634	1.0	134.05	26.0	32.0	42.0	40.0		PD/PM 52 100L4C / 100L4D	115	208			
14.0	1968	1.1	100.15	25.0	32.0	43.0	40.0							
15.2	1804	1.5	91.82	24.0	32.0	43.0	40.0							
17.1	1605	1.8	81.68	24.0	32.0	44.0	40.0							
20.4	1348	2.2	68.60	23.0	32.0	44.0	40.0							
25.0	1099	2.4	55.94	22.0	32.0	43.0	40.0							
25.2	1091	2.3	55.55	17.0	32.0	41.0	40.0							
29.6	929	2.6	47.27	21.0	32.0	41.0	40.0							



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
3.00	20.9	1277	1.6	134.05	26.0	32.0	42.0	40.0	PD/PM 52 100L2C / 100L2D	115	208
	28.0	954	1.8	100.15	25.0	32.0	43.0	40.0			
	30.5	875	2.4	91.82	24.0	32.0	43.0	40.0			
	34.3	778	1.8	81.68	24.0	32.0	44.0	40.0			
	11.0	2399	0.8	127.43	-	-	-	-	PD/PM 42/12 100L4C / 100L4D	89	238
	15.8	1572	0.9	177.15	16.0	22.0	-	-	PD/PM 42/12 100L2C / 100L2D	89	238
	18.4	1353	1.0	152.50	16.0	22.0	26.0	30.0			
	22.0	1131	1.2	127.43	16.0	22.0	-	-			
	11.8	2280	0.9	118.53	14.0	22.0	26.0	30.0	PD/PM 43 100L4C / 100L4D	94	205
	13.5	1998	1.0	103.86	15.0	22.0	27.0	30.0			
	16.1	1669	1.2	86.78	12.0	22.0	26.0	30.0			
	14.6	1761	0.9	191.52	14.0	22.0	28.0	30.0	PD/PM 43 100L2C / 100L2D	94	205
	17.5	1471	0.9	160.03	14.0	22.0	-	-			
	19.9	1293	1.2	140.61	14.0	22.0	27.0	30.0			
	23.6	1090	1.4	118.53	14.0	22.0	26.0	30.0			
	27.0	955	1.6	103.86	15.0	22.0	27.0	30.0			
	32.3	798	1.9	86.78	12.0	22.0	26.0	30.0			
	14.6	1904	1.0	61.64	15.0	22.0	30.0	30.0			
	17.2	1613	1.2	52.23	14.0	22.0	30.0	30.0			
	20.0	1392	1.2	45.06	14.0	22.0	29.0	30.0			
	20.6	1348	1.2	43.64	14.0	22.0	28.0	30.0			
	22.1	1260	1.3	40.79	14.0	22.0	28.0	30.0			
	23.5	1184	1.8	38.35	13.0	22.0	25.0	30.0			
	24.4	1138	1.3	36.84	13.0	22.0	27.0	30.0			
	24.7	1124	1.3	36.39	13.0	22.0	27.0	30.0			
	27.9	998	1.7	32.31	13.0	22.0	27.0	30.0			
	28.1	990	1.9	32.04	17.0	22.0	25.0	30.0			
	33.7	825	2.0	26.72	17.0	22.0	24.0	30.0			
34.1	816	2.3	26.41	17.0	22.0	25.0	30.0				
34.3	811	2.1	26.25	17.0	22.0	25.0	30.0				
40.2	691	2.6	22.38	17.0	22.0	24.0	30.0				
41.9	663	2.7	21.46	17.0	22.0	24.0	30.0				
15.5	1778	0.9	90.52	15.0	22.0	28.0	30.0	PD/PM 42 100L4C / 100L4D	79	204	
18.6	1481	1.1	75.41	15.0	22.0	29.0	30.0				
22.7	1211	1.5	61.64	15.0	22.0	30.0	30.0				
26.8	1026	1.8	52.23	14.0	22.0	30.0	30.0				
31.1	885	1.8	45.06	14.0	22.0	29.0	30.0				
32.1	857	1.9	43.64	14.0	22.0	28.0	30.0				
34.3	801	1.9	40.79	14.0	22.0	28.0	30.0				
38.0	724	1.9	36.84	13.0	22.0	27.0	30.0				
38.5	715	1.9	36.39	13.0	22.0	27.0	30.0				
43.3	635	2.6	32.31	13.0	22.0	27.0	30.0				
25.3	1055	1.2	110.73	15.0	22.0	29.0	30.0	PD/PM 42 100L2C / 100L2D	79	204	
30.9	863	1.4	90.52	15.0	22.0	28.0	30.0				
37.1	719	1.7	75.41	15.0	22.0	29.0	30.0				
45.4	587	2.3	61.64	15.0	22.0	30.0	30.0				
53.6	498	2.8	52.23	14.0	22.0	30.0	30.0				
62.1	429	2.8	45.06	14.0	22.0	29.0	30.0				
64.2	416	2.9	43.64	14.0	22.0	28.0	30.0				
68.6	389	3.0	40.79	14.0	22.0	28.0	30.0				
76.0	351	3.0	36.84	13.0	22.0	27.0	30.0				
76.9	347	3.0	36.39	13.0	22.0	27.0	30.0				
31.9	778	0.9	87.71	11.0	15.0	-	-	PD/PM 32/12 100L2C / 100L2D	74	238	
40.1	692	1.2	22.42	8.0	14.0	16.0	20.0	PD/PM 32 132S6A	94	200	
44.7	622	1.4	20.15	8.0	14.0	16.0	20.0				
54.1	514	1.7	16.65	7.0	13.0	15.0	20.0				
63.9	435	2.1	14.09	9.0	15.0	15.0	20.0				
79.3	351	2.5	11.35	9.0	15.0	14.0	20.0				
92.1	302	2.9	9.77	9.0	15.0	13.0	20.0				
108.6	256	2.8	8.29	9.0	15.0	13.0	19.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
3.00	21.8	1259	0.8	64.11	9.0	15.0	21.0	20.0	PD/PM 32 100L4C / 100L4D	64	200
	26.4	1041	0.8	52.98	-	-	20.0	20.0			
	31.2	881	0.8	44.83	9.0	15.0	20.0	20.0			
	33.3	826	1.1	42.05	8.0	15.0	19.0	20.0			
	36.3	758	0.8	38.59	9.0	15.0	19.0	20.0			
	37.0	742	1.1	37.79	8.0	18.0	18.0	20.0			
	43.9	627	1.4	31.90	8.0	15.0	18.0	20.0			
	48.8	563	1.5	28.67	8.0	15.0	17.0	20.0			
	54.1	508	1.7	25.86	8.0	15.0	17.0	20.0			
	59.1	465	1.7	23.69	8.0	14.0	17.0	20.0			
	62.4	440	1.8	22.42	8.0	14.0	16.0	20.0			
	65.5	420	1.7	21.37	8.0	14.0	16.0	20.0			
	69.5	396	2.1	20.15	8.0	14.0	16.0	20.0			
	84.1	327	2.6	16.65	7.0	13.0	15.0	20.0			
	43.7	611	1.3	64.11	9.0	15.0	21.0	20.0			
	52.9	505	1.3	52.98	9.0	15.0	20.0	20.0			
	62.5	427	1.3	44.83	9.0	15.0	20.0	20.0			
	66.6	401	1.8	42.05	8.0	15.0	19.0	20.0			
	72.6	368	1.3	38.59	9.0	15.0	19.0	20.0			
	74.1	360	1.8	37.79	8.0	18.0	18.0	20.0			
	87.8	304	2.2	31.90	8.0	15.0	18.0	20.0			
	97.7	273	2.4	28.67	8.0	15.0	17.0	20.0			
	108.3	246	2.6	25.86	8.0	15.0	17.0	20.0			
	118.2	226	2.7	23.69	8.0	14.0	17.0	20.0			
	124.9	214	2.8	22.42	8.0	14.0	16.0	20.0			
	131.0	204	2.7	21.37	8.0	14.0	16.0	20.0			
	47.2	582	0.9	29.64	7.0	12.0	12.0	15.0	PD/PM 22 100L4C / 100L4D	49	196
	52.2	527	0.8	26.81	7.0	12.0	13.0	15.0			
	56.0	491	1.0	24.98	7.0	12.0	13.0	15.0			
	58.4	471	0.9	23.99	7.0	12.0	13.0	15.0			
	64.0	430	1.1	21.89	7.0	12.0	13.0	15.0			
	75.6	364	1.3	18.51	6.0	12.0	13.0	15.0			
	84.5	325	1.4	16.56	6.0	12.0	13.0	15.0			
	106.1	259	1.6	13.20	6.0	12.0	12.0	15.0			
	118.5	232	1.7	11.81	6.0	11.0	12.0	15.0			
	137.8	200	1.8	10.16	6.0	11.0	12.0	15.0			
	155.6	177	1.9	9.00	6.0	10.0	11.0	15.0			
	167.5	164	1.6	8.36	5.0	10.0	11.0	15.0			
	187.2	147	1.7	7.48	5.0	10.0	11.0	15.0			
	217.7	126	1.8	6.43	5.0	9.0	10.0	15.0			
	245.6	112	1.9	5.70	5.0	9.0	10.0	15.0			
	310.4	89	2.1	4.51	5.0	8.0	9.0	15.0			
	54.1	493	0.8	51.73	7.0	12.0	13.0	15.0	PD/PM 22 100L2C / 100L2D	49	196
	64.0	417	1.0	43.73	7.0	12.0	12.0	15.0			
	76.6	348	1.1	36.57	7.0	12.0	13.0	15.0			
89.7	297	1.1	31.20	7.0	12.0	13.0	15.0				
94.5	282	1.3	29.64	7.0	12.0	12.0	15.0				
104.4	255	1.3	26.81	7.0	12.0	13.0	15.0				
112.1	238	1.6	24.98	7.0	12.0	13.0	15.0				
116.7	229	1.4	23.99	7.0	12.0	13.0	15.0				
127.9	209	1.7	21.89	7.0	12.0	13.0	15.0				
151.3	176	2.1	18.51	6.0	12.0	13.0	15.0				
169.1	158	2.3	16.56	6.0	12.0	13.0	15.0				
212.1	126	2.4	13.20	6.0	12.0	12.0	15.0				
237.1	113	2.6	11.81	6.0	11.0	12.0	15.0				
275.6	97	2.8	10.16	6.0	11.0	12.0	15.0				
311.1	86	3.0	9.00	6.0	10.0	11.0	15.0				
334.9	80	2.4	8.36	5.0	10.0	11.0	15.0				
374.3	71	2.6	7.48	5.0	10.0	11.0	15.0				
435.5	61	2.8	6.43	5.0	9.0	10.0	15.0				
491.2	54	3.0	5.70	5.0	9.0	10.0	15.0				
99.4	277	0.8	14.09	3.0	5.0	9.0	7.0	PD/PM 12 100L4C / 100L4D	38	192	
119.1	231	0.9	11.75	2.0	4.0	9.0	7.0				
135.4	203	1.0	10.34	2.0	4.0	9.0	7.0				
152.8	180	1.1	9.16	2.0	4.0	8.0	7.0				
170.1	162	1.2	8.23	2.0	4.0	8.0	7.0				
171.1	161	1.0	8.18	3.0	5.0	9.0	7.0				
193.1	142	1.3	7.25	2.0	4.0	8.0	7.0				
218.1	126	1.4	6.42	2.0	4.0	8.0	7.0				
255.9	107	1.6	5.47	2.0	4.0	7.0	7.0				
292.9	94	1.4	4.78	2.0	4.0	7.0	7.0				

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
3.00	135.9	196	0.9	20.61	3.0	5.0	9.0	7.0	PD/PM 12 100L2C / 100L2D	38	192			
	162.6	164	1.0	17.22	3.0	5.0	9.0	7.0						
	198.7	134	1.2	14.09	3.0	5.0	9.0	7.0						
	238.3	112	1.4	11.75	2.0	4.0	9.0	7.0						
	270.8	99	1.5	10.34	2.0	4.0	9.0	7.0						
	305.7	87	1.6	9.16	2.0	4.0	8.0	7.0						
	340.2	78	1.9	8.23	2.0	4.0	8.0	7.0						
	342.3	78	1.6	8.18	3.0	5.0	8.0	7.0						
	386.2	69	2.1	7.25	2.0	4.0	8.0	7.0						
	436.1	61	2.2	6.42	2.0	4.0	8.0	7.0						
	511.9	52	2.5	5.47	2.0	4.0	7.0	7.0						
	585.8	46	2.1	4.78	2.0	4.0	7.0	7.0						
	94.2	273	0.8	29.71	4.0	7.0	8.0	11.0				PD/PM C13 100L2C / 100L2D	44	190
	107.6	239	0.9	26.02	4.0	7.0	8.0	11.0						
115.8	222	0.9	24.17	4.0	7.0	8.0	11.0							
149.3	172	1.1	18.76	4.0	7.0	8.0	11.0							
172.8	149	1.2	16.20	4.0	7.0	8.0	11.0							
4.00	0.5	71999	0.9	1829.47	-	-	-	-	PD/PM 113/52 132M6A	2214	242			
	0.7	54418	1.2	1382.74	-	-	118.0	170.0						
	0.8	45447	1.4	1154.79	-	-	133.0	170.0						
	0.9	37866	1.7	962.15	-	-	138.0	170.0						
	1.2	28787	2.2	731.47	-	-	144.0	170.0						
	1.5	23750	2.7	603.47	-	-	146.0	170.0						
	0.5	75211	0.8	3062.69	-	-	-	-	PD/PM 113/52 112M4C / 112M4D	2203	242			
	0.6	57179	1.0	2328.41	-	-	-	-						
	0.8	44927	1.3	1829.47	-	-	-	-						
	1.0	33956	1.8	1382.74	-	-	118.0	170.0						
	1.2	28358	2.1	1154.79	-	-	133.0	170.0						
	1.5	23628	2.5	962.15	-	-	138.0	170.0						
	0.7	45682	1.0	4001.34	-	-	-	-	PD/PM 113/52 112M2B / 112M2C	2203	242			
	0.8	42504	1.1	3722.96	-	-	-	-						
	0.9	34966	1.3	3062.69	-	-	-	-						
	1.2	26583	1.7	2328.41	-	-	-	-						
	1.5	20887	2.2	1829.47	-	-	-	-						
	2.0	15786	2.9	1382.74	-	-	118.0	170.0						
	0.8	45873	0.8	1165.61	-	-	111.0	150.0	PD/PM 103/52 132M6A	1364	242			
	1.0	36043	1.0	915.84	-	-	124.0	150.0						
	1.3	27242	1.3	692.20	-	-	130.0	150.0						
	1.6	22751	1.6	578.09	-	-	132.0	150.0						
	1.9	18770	2.0	476.93	-	-	134.0	150.0						
	2.5	14411	2.6	366.18	-	-	133.0	150.0						
	1.0	34795	1.0	1416.90	-	-	98.0	150.0	PD/PM 103/52 112M4C / 112M4D	1342	242			
	1.2	28624	1.2	1165.61	-	-	111.0	150.0						
	1.5	22490	1.6	915.84	-	-	124.0	150.0						
	2.0	16998	2.1	692.20	-	-	130.0	150.0						
	2.4	14196	2.5	578.09	-	-	132.0	150.0						
	2.9	11712	3.0	476.93	-	-	134.0	150.0						
	1.0	31928	0.8	2796.57	-	-	-	-	PD/PM 103/52 112M2B / 112M2C	1342	242			
	2.0	16176	1.6	1416.90	-	-	98.0	150.0						
2.4	13307	2.0	1165.61	-	-	111.0	150.0							
3.1	10456	2.5	915.84	-	-	124.0	150.0							
2.2	16155	1.6	410.49	78.0	102.0	120.0	130.0	PD/PM 93/52 132M6A	800	242				
3.1	11578	2.2	294.19	60.0	102.0	120.0	130.0							
3.4	10080	2.4	410.49	78.0	102.0	120.0	130.0	PD/PM 93/52 112M4C / 112M4D	778	242				
1.3	28153	0.9	715.36	84.0	102.0	120.0	130.0	PD/PM 93/42 132M6A	771	242				
1.5	24354	1.0	618.83	83.0	102.0	120.0	130.0							
2.0	17744	1.4	450.86	79.0	102.0	120.0	130.0							
1.2	28913	0.8	1177.36	82.0	102.0	120.0	130.0	PD/PM 93/42 112M4C / 112M4D	749	242				
1.6	21750	1.1	885.67	83.0	102.0	120.0	130.0							
2.0	17567	1.4	715.36	84.0	102.0	120.0	130.0							
2.3	15197	1.6	618.83	83.0	102.0	120.0	130.0							
3.1	11072	2.2	450.86	79.0	102.0	120.0	130.0							



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
4.00	1.6	19920	0.9	1744.83	82.0	102.0	-	-	PD/PM 93/42 112M2B / 112M2C	749	242
	2.0	16185	1.1	1417.68	82.0	102.0	120.0	130.0			
	2.4	13442	1.4	1177.36	82.0	102.0	120.0	130.0			
	3.2	10111	1.8	885.67	83.0	102.0	120.0	130.0			
	3.9	8167	2.2	715.36	84.0	102.0	120.0	130.0			
	4.5	7065	2.6	618.83	83.0	102.0	120.0	130.0			
	2.6	14285	1.9	352.16	31.0	46.0	120.0	130.0	PD/PM 93 132M6A	726	225
	3.1	11801	2.1	290.94	31.0	46.0	120.0	130.0			
	4.4	8302	2.8	204.66	31.0	46.0	120.0	130.0			
	2.6	13649	0.9	346.82	78.0	73.0	-	-	PD/PM 83/42 132M6A	469	242
	3.0	11629	1.1	295.48	74.0	73.0	-	-			
	4.0	8804	1.4	223.71	74.0	73.0	-	-			
	4.8	7341	1.7	186.54	74.0	73.0	-	-			
	2.5	13514	0.9	550.29	64.0	73.0	100.0	100.0	PD/PM 83/42 112M4C / 112M4D	447	242
	3.0	11513	1.1	468.82	64.0	73.0	100.0	100.0			
	4.0	8517	1.4	346.82	78.0	73.0	100.0	100.0			
	4.7	7256	1.7	295.48	-	-	-	-			
	6.3	5494	2.2	223.71	-	-	-	-			
	7.5	4581	2.6	186.54	-	-	-	-			
	5.1	6283	1.5	550.29	64.0	73.0	100.0	100.0			
	6.0	5352	1.7	468.82	64.0	73.0	100.0	100.0			
	8.1	3960	2.3	346.82	78.0	73.0	-	-			
	9.5	3373	2.7	295.48	74.0	73.0	-	-			
	2.3	14982	0.8	610.07	64.0	73.0	100.0	100.0	PD/PM 83/32 112M4C / 112M4D	432	240
	2.6	12123	0.8	1061.83	64.0	73.0	-	-			
	3.1	10150	0.9	889.06	64.0	73.0	-	-	PD/PM 83/32 112M2B / 112M2C	432	240
	3.9	8181	1.1	716.55	64.0	73.0	100.0	100.0			
	4.6	6965	1.3	610.07	64.0	73.0	100.0	100.0			
	2.3	15673	0.9	386.39	65.0	73.0	100.0	105.0			
	2.8	12903	1.1	318.11	63.0	73.0	100.0	105.0			
	3.1	11922	1.1	293.92	59.0	73.0	100.0	105.0			
	3.7	9815	1.4	241.98	59.0	73.0	100.0	105.0			
	4.5	8146	1.4	200.83	59.0	73.0	100.0	105.0			
	4.9	7527	1.8	185.56	71.0	73.0	100.0	105.0			
	5.9	6197	2.2	152.77	71.0	73.0	100.0	105.0			
	6.3	5837	2.2	143.91	71.0	73.0	100.0	105.0			
7.2	5081	2.5	125.27	71.0	73.0	100.0	105.0				
7.6	4806	2.7	118.48	71.0	73.0	100.0	105.0				
8.7	4183	3.0	103.13	71.0	73.0	100.0	105.0				
3.6	9910	1.3	386.39	65.0	73.0	100.0	105.0	PD/PM 83 112M4C / 112M4D	402	221	
4.4	8159	1.6	318.11	63.0	73.0	100.0	105.0				
7.0	5151	2.1	200.83	59.0	73.0	100.0	105.0				
7.2	4737	2.0	386.39	65.0	73.0	100.0	105.0	PD/PM 83 112M2B / 112M2C	402	221	
8.8	3900	2.5	318.11	63.0	73.0	100.0	105.0				
12.5	2972	2.8	72.17	57.0	58.0	-	-	PD/PM 82 132M6A	420	220	
15.1	2447	2.8	59.41	57.0	58.0	-	-				
4.0	8777	0.8	223.01	57.0	58.0	-	-	PD/PM 73/32 132M6A	329	240	
4.7	7246	1.0	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 112M4C / 112M4D	307	240	
6.3	5476	1.3	223.01	57.0	58.0	82.0	80.0				
9.5	3369	1.6	295.06	57.0	58.0	81.0	80.0	PD/PM 73/32 112M2B / 112M2C	307	240	
12.6	2546	2.1	223.01	57.0	58.0	82.0	80.0				
3.7	9239	0.8	376.24	48.0	58.0	75.0	80.0	PD/PM 73/22 112M4C / 112M4D	296	240	
4.9	6516	0.8	570.70	48.0	58.0	73.0	80.0	PD/PM 73/22 112M2B / 112M2C	296	240	
6.4	4964	1.1	434.82	48.0	58.0	72.0	80.0				
7.4	4295	1.3	376.24	48.0	58.0	75.0	80.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
4.00	4.2	8780	1.0	216.45	46.0	58.0	78.0	80.0	PD/PM 73 132M6A	299	217			
	4.4	8304	1.0	204.72	46.0	58.0	79.0	80.0						
	5.6	6576	1.0	162.12	44.0	58.0	80.0	80.0						
	6.0	6097	1.3	150.32	44.0	58.0	81.0	80.0						
	7.3	4994	1.6	123.12	42.0	58.0	81.0	80.0						
	8.4	4321	1.8	106.53	41.0	58.0	82.0	80.0						
	9.7	3774	2.1	93.05	50.0	58.0	82.0	80.0						
	11.4	3194	2.4	78.75	50.0	58.0	82.0	80.0						
	13.2	2764	2.7	68.14	50.0	58.0	79.0	80.0						
		4.1	8679	0.9	338.37	43.0	58.0	72.0				80.0	PD/PM 73 112M4C / 112M4D	277
5.1		7010	1.1	273.32	47.0	58.0	76.0	80.0						
6.5		5552	1.5	216.45	46.0	58.0	78.0	80.0						
6.8		5251	1.4	204.72	46.0	58.0	79.0	80.0						
8.6		4158	1.5	162.12	44.0	58.0	80.0	80.0						
9.3		3855	2.0	150.32	44.0	58.0	81.0	80.0						
11.4		3158	2.4	123.12	42.0	58.0	81.0	80.0						
13.1		2732	2.8	106.53	41.0	58.0	82.0	80.0						
	8.3	4148	1.4	338.37	43.0	58.0	72.0	80.0	PD/PM 73 112M2B / 112M2C	277	217			
	10.2	3351	1.7	273.32	47.0	58.0	76.0	80.0						
	12.9	2654	2.4	216.45	46.0	58.0	78.0	80.0						
	13.7	2510	2.3	204.72	46.0	58.0	79.0	80.0						
	17.3	1988	2.4	162.12	44.0	58.0	80.0	80.0						
	12.9	2874	2.1	69.80	29.0	50.0	76.0	80.0	PD/PM 72 132M6A	292	216			
	15.8	2343	2.5	56.90	29.0	50.0	73.0	80.0						
	20.0	1856	2.5	45.06	29.0	50.0	-	-						
	5.7	6254	0.8	158.90	-	-	-	-	PD/PM 63/32 132M6A	256	240			
	6.3	5489	0.9	223.50	-	-	-	-						
	7.3	4694	1.0	191.13	-	-	-	-						
	8.8	3902	1.2	158.90	-	-	-	-	PD/PM 63/32 112M4C / 112M4D	234	240			
	12.5	2552	1.4	223.50	-	-	-	-						
	14.6	2182	1.7	191.13	-	-	-	-						
	17.6	1814	2.0	158.90	-	-	-	-	PD/PM 63/32 112M2B / 112M2C	234	240			
	6.4	4960	0.8	434.44	16.0	47.0	47.0	60.0				PD/PM 63/22 112M2B / 112M2C	223	240
	8.0	3985	1.0	349.07	16.0	47.0	44.0	60.0						
9.3	3426	1.2	300.12	16.0	47.0	-	-							
	5.3	6951	0.8	171.37	34.0	47.0	53.0	60.0	PD/PM 63 132M6A	226	213			
	5.6	6495	0.9	160.11	35.0	47.0	54.0	60.0						
	7.1	5145	0.9	126.84	38.0	47.0	56.0	60.0						
	7.8	4656	1.3	114.79	37.0	47.0	57.0	60.0						
	9.7	3759	1.7	92.68	36.0	47.0	57.0	60.0						
	12.0	3054	2.1	75.30	34.0	47.0	58.0	60.0						
	12.3	2978	2.0	73.42	34.0	47.0	58.0	60.0						
	15.1	2420	2.4	59.65	30.0	47.0	58.0	60.0						
	17.6	2069	2.6	51.01	30.0	47.0	58.0	60.0						
	21.2	1720	2.8	42.41	30.0	47.0	58.0	60.0						
	5.2	6872	0.9	267.94	15.0	47.0	44.0	60.0	PD/PM 63 112M4C / 112M4D	204	213			
	6.6	5447	0.9	212.36	28.0	47.0	50.0	60.0						
	8.2	4395	1.3	171.37	34.0	47.0	53.0	60.0						
	8.7	4107	1.4	160.11	35.0	47.0	54.0	60.0						
	11.0	3253	1.4	126.84	38.0	47.0	56.0	60.0						
	12.2	2944	2.0	114.79	37.0	47.0	57.0	60.0						
	15.1	2377	2.5	92.68	36.0	47.0	57.0	60.0						
	19.1	1883	3.0	73.42	34.0	47.0	58.0	60.0						
		7.1	4823	0.9	393.43	15.0	47.0	50.0				60.0	PD/PM 63 112M2B / 112M2C	204
8.8		3894	1.1	317.64	15.0	47.0	47.0	60.0						
10.5		3285	1.4	267.94	15.0	47.0	44.0	60.0						
11.1		3085	1.1	251.63	34.0	47.0	52.0	60.0						
12.4		2769	1.1	225.83	34.0	47.0	53.0	60.0						
13.2		2604	1.4	212.36	34.0	47.0	50.0	60.0						
16.3		2101	2.0	171.37	34.0	47.0	53.0	60.0						
17.5		1963	2.2	160.11	35.0	47.0	54.0	60.0						
22.1		1555	2.2	126.84	38.0	47.0	56.0	60.0						



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
4.00	11.2	3305	1.3	80.26	35.0	47.0	58.0	60.0	PD/PM 62 132M6A	229	212
	13.8	2695	1.3	65.45	33.0	47.0	58.0	60.0			
	14.7	2514	1.9	61.05	31.0	47.0	58.0	60.0			
	18.1	2050	2.1	49.79	37.0	47.0	58.0	60.0			
	22.8	1624	2.1	39.44	37.0	47.0	56.0	60.0			
	17.4	2102	2.0	80.26	35.0	47.0	58.0	60.0	PD/PM 62 112M4C / 112M4D	207	212
	21.4	1714	2.0	65.45	33.0	47.0	58.0	60.0			
	22.9	1599	2.8	61.05	31.0	47.0	58.0	60.0			
	9.8	3572	0.8	142.31	-	-	-	-	PD/PM 52/12 112M4C / 112M4D	133	238
	12.0	2752	0.8	232.65	21.0	32.0	-	-	PD/PM 52/12 112M2B / 112M2C	133	238
	16.0	2064	1.1	174.49	21.0	32.0	-	-			
	19.7	1684	1.4	142.31	21.0	32.0	-	-			
	9.1	3946	0.8	153.85	20.0	32.0	37.0	40.0	PD/PM 53 112M4C / 112M4D	142	209
	10.1	3560	0.9	138.78	22.0	32.0	38.0	40.0			
	11.9	3008	0.9	117.27	22.0	32.0	40.0	40.0			
	15.3	2347	1.2	91.51	-	-	-	-			
	17.0	2117	1.3	82.55	-	-	-	-			
	11.3	3049	0.8	248.66	20.0	32.0	39.0	40.0	PD/PM 53 112M2B / 112M2C	142	209
	13.8	2486	1.0	202.80	20.0	32.0	37.0	40.0			
	16.3	2101	1.0	171.36	20.0	32.0	39.0	40.0			
	18.2	1886	1.3	153.85	20.0	32.0	37.0	40.0			
	20.2	1701	1.4	138.78	22.0	32.0	38.0	40.0			
	23.9	1438	1.5	117.27	22.0	32.0	40.0	40.0			
	30.6	1122	2.0	91.51	20.0	32.0	-	-			
	33.9	1012	2.1	82.55	20.0	32.0	-	-			
	9.8	3781	0.8	91.82	22.0	32.0	42.0	40.0	PD/PM 52 132M6A	145	208
	13.1	2825	1.1	68.60	21.0	32.0	43.0	40.0			
	16.1	2304	1.2	55.94	20.0	32.0	42.0	40.0			
	16.2	2288	1.1	55.55	17.0	32.0	39.0	40.0			
	17.5	2119	1.6	51.45	20.0	32.0	40.0	40.0			
	19.0	1947	1.3	47.27	20.0	32.0	40.0	40.0			
	21.4	1728	1.9	41.96	19.0	32.0	38.0	40.0			
22.1	1680	1.6	40.79	19.0	32.0	39.0	40.0				
25.4	1460	1.9	35.45	19.0	32.0	37.0	40.0				
26.9	1376	1.8	33.41	19.0	32.0	37.0	40.0				
29.5	1255	2.4	30.47	25.0	32.0	36.0	40.0				
36.1	1028	3.0	24.96	25.0	32.0	34.0	40.0				
10.4	3511	0.8	134.05	-	-	42.0	40.0	PD/PM 52 112M4C / 112M4D	123	208	
14.0	2623	0.9	100.15	25.0	32.0	43.0	40.0				
15.2	2405	1.1	91.82	22.0	32.0	42.0	40.0				
17.1	2140	1.3	81.68	22.0	32.0	43.0	40.0				
20.4	1797	1.7	68.60	21.0	32.0	43.0	40.0				
25.0	1465	1.8	55.94	20.0	32.0	42.0	40.0				
25.2	1455	1.7	55.55	17.0	32.0	45.0	40.0				
29.6	1238	1.9	47.27	20.0	32.0	40.0	40.0				
34.3	1068	2.3	40.79	19.0	32.0	39.0	40.0				
41.9	875	2.6	33.41	19.0	32.0	37.0	40.0				
20.9	1703	1.2	134.05	-	-	42.0	40.0	PD/PM 52 112M2B / 112M2C	123	208	
28.0	1272	1.3	100.15	25.0	32.0	43.0	40.0				
30.5	1167	1.8	91.82	22.0	32.0	42.0	40.0				
34.3	1038	1.3	81.68	22.0	32.0	43.0	40.0				
40.8	872	2.6	68.60	21.0	32.0	43.0	40.0				
50.1	711	2.8	55.94	20.0	32.0	42.0	40.0				
50.4	706	2.7	55.55	17.0	32.0	42.0	40.0				
59.2	601	3.0	47.27	20.0	32.0	40.0	40.0				
18.4	1804	0.8	152.50	16.0	22.0	-	-	PD/PM 42/12 112M2B / 112M2C	97	238	
22.0	1508	0.9	127.43	16.0	22.0	-	-				
13.5	2664	0.8	103.86	15.0	22.0	27.0	30.0	PD/PM 43 112M4C / 112M4D	102	205	
16.1	2226	0.9	86.78	12.0	22.0	26.0	30.0				
19.9	1724	0.9	140.61	15.0	22.0	27.0	30.0	PD/PM 43 112M2B / 112M2C	102	205	
23.6	1453	1.0	118.53	15.0	22.0	26.0	30.0				
27.0	1273	1.2	103.86	15.0	22.0	27.0	30.0				
32.3	1064	1.4	86.78	12.0	22.0	26.0	30.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
4.00	17.2	2151	0.9	52.23	13.0	22.0	28.0	30.0	PD/PM 42 132M6A	109	204
	20.0	1856	0.9	45.06	13.0	22.0	28.0	30.0			
	20.6	1797	0.9	43.64	13.0	22.0	27.0	30.0			
	22.1	1680	1.0	40.79	13.0	22.0	27.0	30.0			
	23.5	1579	1.3	38.35	12.0	22.0	25.0	30.0			
	24.4	1517	1.0	36.84	12.0	22.0	27.0	30.0			
	24.7	1499	1.0	36.39	12.0	22.0	26.0	30.0			
	27.9	1331	1.3	32.31	12.0	22.0	26.0	30.0			
	28.1	1319	1.4	32.04	12.0	22.0	25.0	30.0			
	33.7	1100	1.5	26.72	12.0	22.0	24.0	30.0			
	34.1	1088	1.7	26.41	12.0	22.0	25.0	30.0			
	34.3	1081	1.6	26.25	11.0	21.0	25.0	30.0			
	40.2	922	1.9	22.38	11.0	21.0	23.0	30.0			
	41.9	884	2.0	21.46	11.0	21.0	23.0	30.0			
	49.5	749	2.5	18.18	15.0	22.0	22.0	30.0			
	59.2	626	3.0	15.19	15.0	22.0	21.0	30.0			
	18.6	1975	0.8	75.41	13.0	22.0	27.0	30.0	PD/PM 42 112M4C / 112M4D	87	204
	22.7	1615	1.1	61.64	13.0	22.0	28.0	30.0			
	26.8	1368	1.3	52.23	13.0	22.0	28.0	30.0			
	31.1	1180	1.4	45.06	13.0	22.0	28.0	30.0			
	32.1	1143	1.4	43.64	13.0	22.0	27.0	30.0			
	34.3	1068	1.5	40.79	13.0	22.0	27.0	30.0			
	38.0	965	1.5	36.84	12.0	22.0	27.0	30.0			
	38.5	953	1.4	36.39	12.0	22.0	26.0	30.0			
	43.3	846	1.9	32.31	12.0	22.0	26.0	30.0			
	53.0	692	2.6	26.41	12.0	22.0	25.0	30.0			
	53.3	688	2.3	26.25	-	-	-	-			
	62.6	586	2.9	22.38	11.0	21.0	23.0	30.0			
	65.2	562	3.0	21.46	11.0	21.0	23.0	30.0			
	25.3	1407	0.9	110.73	13.0	22.0	29.0	30.0			
	30.9	1150	1.1	90.52	13.0	22.0	28.0	30.0			
	37.1	958	1.3	75.41	13.0	22.0	27.0	30.0			
45.4	783	1.7	61.64	13.0	22.0	28.0	30.0				
53.6	664	2.1	52.23	13.0	22.0	28.0	30.0				
62.1	572	2.1	45.06	13.0	22.0	28.0	30.0				
64.2	554	2.2	43.64	13.0	22.0	27.0	30.0				
68.6	518	2.3	40.79	13.0	22.0	27.0	30.0				
76.0	468	2.3	36.84	12.0	22.0	27.0	30.0				
76.9	462	2.3	36.39	12.0	22.0	26.0	30.0				
86.7	410	3.0	32.31	12.0	22.0	26.0	30.0				
40.1	923	0.9	22.42	7.0	13.0	16.0	20.0	PD/PM 32 132M6A	94	200	
44.7	830	1.0	20.15	7.0	13.0	15.0	20.0				
54.1	686	1.3	16.65	7.0	12.0	15.0	20.0				
63.9	580	1.6	14.09	7.0	12.0	14.0	20.0				
79.3	467	1.8	11.35	6.0	11.0	14.0	20.0				
92.1	402	2.2	9.77	8.0	15.0	13.0	20.0				
108.6	341	2.1	8.29	8.0	15.0	12.0	19.0				
134.7	275	2.3	6.68	8.0	15.0	12.0	18.0				
159.0	233	2.5	5.66	8.0	15.0	11.0	17.0				
200.9	184	2.6	4.48	8.0	15.0	10.0	16.0				
33.3	1101	0.8	42.05	7.0	13.0	18.0	20.0	PD/PM 32 112M4C / 112M4D	72	200	
37.0	990	0.8	37.79	7.0	13.0	17.0	20.0				
43.9	836	1.0	31.90	7.0	13.0	17.0	20.0				
48.8	751	1.2	28.67	7.0	13.0	17.0	20.0				
54.1	677	1.2	25.86	7.0	13.0	16.0	20.0				
59.1	621	1.3	23.69	7.0	13.0	16.0	20.0				
62.4	587	1.4	22.42	7.0	13.0	16.0	20.0				
65.5	560	1.3	21.37	7.0	13.0	16.0	20.0				
69.5	528	1.6	20.15	7.0	13.0	15.0	20.0				
84.1	436	1.9	16.65	7.0	12.0	15.0	20.0				
99.4	369	2.3	14.09	7.0	12.0	14.0	20.0				
123.3	297	2.8	11.35	6.0	11.0	14.0	20.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
4.00	43.7	814	0.9	64.11	7.0	13.0	21.0	20.0	PD/PM 32 112M2B / 112M2C	72	200			
	52.9	673	1.0	52.98	7.0	13.0	20.0	20.0						
	62.5	570	1.0	44.83	7.0	13.0	20.0	20.0						
	66.6	534	1.3	42.05	7.0	13.0	18.0	20.0						
	72.6	490	1.0	38.59	9.0	13.0	19.0	20.0						
	74.1	480	1.3	37.79	7.0	13.0	17.0	20.0						
	87.8	405	1.6	31.90	7.0	13.0	17.0	20.0						
	97.7	364	1.8	28.67	7.0	13.0	17.0	20.0						
	108.3	329	2.0	25.86	7.0	13.0	16.0	20.0						
	118.2	301	2.0	23.69	7.0	13.0	16.0	20.0						
	124.9	285	2.1	22.42	7.0	13.0	16.0	20.0						
	131.0	271	2.0	21.37	7.0	13.0	16.0	20.0						
	139.0	256	2.4	20.15	7.0	13.0	15.0	20.0						
	168.2	212	3.0	16.65	7.0	12.0	15.0	20.0						
	64.0	573	0.8	21.89	6.0	11.0	12.0	15.0				PD/PM 22 112M4C / 112M4D	57	196
	75.6	485	1.0	18.51	6.0	11.0	13.0	15.0						
	84.5	434	1.1	16.56	6.0	11.0	13.0	15.0						
	106.1	346	1.2	13.20	5.0	10.0	12.0	15.0						
	118.5	309	1.2	11.81	5.0	10.0	12.0	15.0						
	137.8	266	1.3	10.16	5.0	10.0	11.0	15.0						
	155.6	236	1.4	9.00	5.0	10.0	11.0	15.0						
	167.5	219	1.2	8.36	5.0	9.0	11.0	15.0						
	187.2	196	1.2	7.48	5.0	9.0	10.0	15.0						
	217.7	168	1.3	6.43	5.0	9.0	10.0	15.0						
	245.6	149	1.4	5.70	5.0	8.0	10.0	15.0						
	310.4	118	1.6	4.51	4.0	8.0	9.0	15.0						
	64.0	556	0.8	43.73	6.0	11.0	12.0	15.0	PD/PM 22 112M2B / 112M2C	57	196			
	76.6	465	0.8	36.57	6.0	11.0	13.0	15.0						
	89.7	396	0.9	31.20	6.0	11.0	13.0	15.0						
	94.5	377	1.0	29.64	6.0	11.0	12.0	15.0						
	104.4	341	1.0	26.81	6.0	11.0	13.0	15.0						
	112.1	317	1.2	24.98	6.0	11.0	13.0	15.0						
	116.7	305	1.1	23.99	6.0	11.0	13.0	15.0						
	127.9	278	1.3	21.89	6.0	11.0	12.0	15.0						
	151.3	235	1.6	18.51	6.0	11.0	13.0	15.0						
	169.1	210	1.7	16.56	6.0	11.0	13.0	15.0						
	212.1	168	1.8	13.20	5.0	10.0	12.0	15.0						
	237.1	150	1.9	11.81	5.0	10.0	12.0	15.0						
	275.6	129	2.1	10.16	5.0	10.0	11.0	15.0						
	311.1	114	2.2	9.00	5.0	10.0	11.0	15.0						
	334.9	106	1.8	8.36	5.0	9.0	11.0	15.0						
	374.3	95	1.9	7.48	5.0	9.0	10.0	15.0						
	435.5	82	2.1	6.43	5.0	9.0	10.0	15.0						
	491.2	72	2.2	5.70	5.0	8.0	10.0	15.0						
	620.8	57	2.5	4.51	4.0	8.0	9.0	15.0						
	152.8	240	0.8	9.16	2.0	3.0	8.0	7.0	PD/PM 12 112M4C / 112M4D	46	192			
	170.1	216	0.9	8.23	2.0	3.0	8.0	7.0						
	193.1	190	1.0	7.25	2.0	3.0	8.0	7.0						
218.1	168	1.1	6.42	2.0	3.0	7.0	7.0							
255.9	143	1.2	5.47	2.0	3.0	7.0	7.0							
292.9	125	1.0	4.78	2.0	3.0	7.0	7.0							
162.6	219	0.8	17.22	2.0	3.0	9.0	7.0	PD/PM 12 112M2B / 112M2C	46	196				
198.7	179	0.9	14.09	2.0	3.0	9.0	7.0							
238.3	149	1.0	11.75	2.0	3.0	9.0	7.0							
270.8	131	1.1	10.34	2.0	3.0	9.0	7.0							
305.7	116	1.2	9.16	2.0	3.0	8.0	7.0							
340.2	105	1.4	8.23	2.0	3.0	8.0	7.0							
342.3	104	1.2	8.18	2.0	3.0	8.0	7.0							
386.2	92	1.5	7.25	2.0	3.0	8.0	7.0							
436.1	82	1.7	6.42	2.0	3.0	7.0	7.0							
511.9	69	1.9	5.47	2.0	3.0	7.0	7.0							
585.8	61	1.6	4.78	2.0	3.0	7.0	7.0							
5.50	0.7	74825	0.8	1382.74	-	-	77.0				170.0	PD/PM 113/52 132M6B	2214	242
	0.8	62490	1.0	1154.79	-	-	113.0	170.0						
	0.9	52065	1.2	962.15	-	-	124.0	170.0						
	1.2	39582	1.6	731.47	-	-	137.0	170.0						
	1.5	32656	1.9	603.47	-	-	141.0	170.0						

P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3		
5.50	0.6	78621	0.8	2328.41	-	-	-	-	PD/PM 113/52 132S4A / 132S4B	2214	242
	0.8	61774	1.0	1829.47	-	-	-	-			
	1.0	46690	1.3	1382.74	-	-	77.0	170.0			
	1.2	38993	1.5	1154.79	-	-	113.0	170.0			
	1.5	32488	1.8	962.15	-	-	124.0	170.0			
	1.9	24699	2.4	731.47	-	-	137.0	170.0			
	2.3	20377	2.9	603.47	-	-	141.0	170.0			
	0.8	58443	0.8	3722.96	-	-	-	-	PD/PM 113/52 132S2B / 132S2C	2214	242
	0.9	48078	0.9	3062.69	-	-	-	-			
	1.2	36551	1.2	2328.41	-	-	-	-			
	1.5	28719	1.6	1829.47	-	-	-	-			
	2.0	21706	2.1	1382.74	-	-	77.0	170.0			
	2.4	18128	2.5	1154.79	-	-	113.0	170.0			
	2.9	15104	3.0	962.15	-	-	124.0	170.0			
	1.3	37457	1.0	692.20	-	-	122.0	150.0	PD/PM 103/52 132M6B	1364	242
	1.6	31282	1.2	578.09	-	-	127.0	150.0			
	1.9	25808	1.4	476.93	-	-	130.0	150.0			
	2.5	19815	1.9	366.18	-	-	133.0	150.0			
	3.0	16348	2.2	302.10	-	-	-	-			
	1.2	39358	0.9	1165.61	-	-	81.0	150.0	PD/PM 103/52 132S4A / 132S4B	1364	242
	1.5	30924	1.1	915.84	-	-	109.0	150.0			
	2.0	23373	1.5	692.20	-	-	122.0	150.0			
	2.4	19520	1.8	578.09	-	-	127.0	150.0			
	2.9	16104	2.2	476.93	-	-	130.0	150.0			
	3.8	12364	2.8	366.18	-	-	133.0	150.0			
	1.5	29635	0.9	1887.83	-	-	-	-			
	2.0	22243	1.2	1416.90	-	-	-	-			
	2.4	18298	1.5	1165.61	-	-	81.0	150.0			
	3.1	14377	1.9	915.84	-	-	109.0	150.0			
	4.0	10866	2.4	692.20	-	-	122.0	150.0			
	4.8	9075	2.9	578.09	-	-	127.0	150.0			
	2.2	22213	1.1	410.49	71.0	102.0	120.0	130.0	PD/PM 93/52 132M6B	800	242
	3.1	15920	1.6	294.19	73.0	102.0	120.0	130.0			
	3.4	13861	1.7	410.49	71.0	102.0	120.0	130.0	PD/PM 93/52 132S4A / 132S4B	800	242
	4.8	9934	2.4	294.19	73.0	102.0	120.0	130.0			
	6.8	6444	2.8	410.49	71.0	102.0	120.0	130.0	PD/PM 93/52 132S2B / 132S2C	800	242
	1.5	33487	0.8	618.83	71.0	102.0	120.0	130.0	PD/PM 93/42 132M6B	771	242
	2.0	24398	1.0	450.86	71.0	102.0	120.0	130.0			
	1.6	29906	0.8	885.67	83.0	102.0	120.0	130.0	PD/PM 93/42 132S4A / 132S4B	771	242
	2.0	24155	1.0	715.36	70.0	102.0	120.0	130.0			
	2.3	20895	1.1	618.83	71.0	102.0	120.0	130.0			
	3.1	15224	1.6	450.86	71.0	102.0	120.0	130.0			
	2.0	22255	0.8	1417.68	83.0	102.0	120.0	130.0			
	2.4	18482	1.0	1177.36	83.0	102.0	120.0	130.0	PD/PM 93/42 132S2B / 132S2C	771	242
	3.2	13903	1.3	885.67	83.0	102.0	120.0	130.0			
	3.9	11230	1.6	715.36	70.0	102.0	120.0	130.0			
	4.5	9714	1.9	618.83	71.0	102.0	120.0	130.0			
6.2	7078	2.6	450.86	71.0	102.0	120.0	130.0				
2.6	19641	1.4	352.16	86.0	102.0	120.0	130.0	PD/PM 93 132M6B			
3.1	16227	1.6	290.94	82.0	102.0	120.0	130.0				
4.4	11415	2.0	204.66	77.0	102.0	120.0	130.0				
5.1	9762	2.7	175.03	31.0	46.0	120.0	130.0				
4.0	12420	2.0	352.16	86.0	102.0	120.0	130.0		PD/PM 93 132S4A / 132S4B	726	225
4.8	10261	2.3	290.94	82.0	102.0	120.0	130.0				
6.8	7218	3.0	204.66	77.0	102.0	120.0	130.0				
3.0	15989	0.8	295.48	64.0	73.0	-	-	PD/PM 83/42 132M6B	469	242	
4.0	12106	1.0	223.71	64.0	73.0	-	-				
4.8	10094	1.3	186.54	64.0	73.0	-	-				
3.0	15830	0.8	468.82	-	-	100.0	100.0	PD/PM 83/42 132S4A / 132S4B	469	242	
4.0	11711	1.0	346.82	78.0	73.0	100.0	100.0				
4.7	9977	1.2	295.48	-	-	-	-				
6.3	7554	1.6	223.71	-	-	-	-				
7.5	6299	1.9	186.54	-	-	-	-				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
5.50	5.1	8638	1.1	550.29	78.0	73.0	100.0	100.0	PD/PM 83/42 132S2B / 132S2C	469	242
	6.0	7360	1.2	468.82	78.0	73.0	100.0	100.0			
	8.1	5444	1.7	346.82	78.0	73.0	-	-			
	9.5	4638	2.0	295.48	64.0	73.0	-	-			
	12.5	3512	2.6	223.71	64.0	73.0	-	-			
	3.9	11248	0.8	716.55	64.0	73.0	100.0	100.0	PD/PM 83/32 132S2B / 132S2C	454	240
	4.6	9577	1.0	610.07	64.0	73.0	100.0	100.0			
	2.8	17742	0.8	318.11	55.0	73.0	100.0	105.0	PD/PM 83 132M6B	424	221
	3.1	16393	0.8	293.92	56.0	73.0	100.0	105.0			
	3.7	13496	1.0	241.98	55.0	73.0	100.0	105.0			
	4.5	11201	1.0	200.83	54.0	73.0	100.0	105.0			
	4.9	10349	1.3	185.56	54.0	73.0	100.0	105.0			
	5.9	8521	1.6	152.77	52.0	73.0	100.0	105.0			
	6.3	8026	1.6	143.91	52.0	73.0	100.0	105.0			
	7.2	6987	1.8	125.27	50.0	73.0	100.0	105.0			
	7.6	6608	2.0	118.48	46.0	73.0	100.0	105.0			
	8.7	5752	2.2	103.13	65.0	73.0	97.0	105.0			
	9.9	5064	2.5	90.79	65.0	73.0	95.0	105.0			
	11.9	4222	3.0	75.70	65.0	73.0	91.0	105.0			
	3.6	13627	0.9	386.39	55.0	73.0	100.0	105.0	PD/PM 83 132S4A / 132S4B	424	221
	4.4	11219	1.2	318.11	55.0	73.0	100.0	105.0			
	4.8	10366	1.2	293.92	56.0	73.0	100.0	105.0			
	5.8	8534	1.5	241.98	55.0	73.0	100.0	105.0			
	7.0	7083	1.5	200.83	54.0	73.0	100.0	105.0			
	7.5	6544	1.9	185.56	54.0	73.0	100.0	105.0			
	9.2	5388	2.5	152.77	52.0	73.0	100.0	105.0			
	9.7	5075	2.5	143.91	52.0	73.0	100.0	105.0			
	11.2	4418	2.8	125.27	50.0	73.0	100.0	105.0			
	11.8	4178	3.0	118.48	46.0	73.0	100.0	105.0			
	7.2	6514	1.5	386.39	55.0	73.0	100.0	105.0	PD/PM 83 132S2B / 132S2C	424	221
	8.8	5362	1.8	318.11	55.0	73.0	100.0	105.0			
	9.5	4955	1.9	293.92	56.0	73.0	100.0	105.0			
	11.6	4079	2.4	241.98	55.0	73.0	100.0	105.0			
	13.9	3385	2.4	200.83	54.0	73.0	100.0	105.0			
	12.5	4087	2.0	72.17	43.0	73.0	-	-	PD/PM 82 132M6B	420	220
	15.1	3364	2.0	59.41	39.0	66.0	-	-			
	19.4	2599	3.0	72.17	43.0	73.0	-	-	PD/PM 82 132S4A / 132S4B	420	220
	23.6	2140	3.0	59.41	39.0	66.0	-	-			
	6.3	7530	0.9	223.01	57.0	58.0	82.0	80.0	PD/PM 73/32 132S4A / 132S4B	329	240
	9.5	4632	1.2	295.06	57.0	58.0	-	-	PD/PM 73/32 132S2B / 132S2C	329	240
	12.6	3501	1.5	223.01	57.0	58.0	-	-			
	6.0	8384	0.9	150.32	40.0	58.0	79.0	80.0	PD/PM 73 132M6B	299	217
	7.3	6867	1.2	123.12	39.0	58.0	80.0	80.0			
	8.4	5942	1.3	106.53	38.0	58.0	81.0	80.0			
9.7	5190	1.5	93.05	37.0	58.0	81.0	80.0				
11.4	4392	1.8	78.75	36.0	58.0	81.0	80.0				
13.2	3800	2.0	68.14	33.0	58.0	76.0	80.0				
15.1	3320	2.2	59.52	46.0	58.0	73.0	80.0				
16.8	2979	2.5	53.42	46.0	58.0	71.0	80.0				
19.3	2602	2.9	46.66	46.0	58.0	68.0	80.0				
5.1	9639	0.8	273.32	38.0	58.0	69.0	80.0	PD/PM 73 132S4A / 132S4B			
6.5	7633	1.1	216.45	40.0	58.0	74.0	80.0				
6.8	7220	1.0	204.72	40.0	58.0	75.0	80.0				
8.6	5717	1.1	162.12	40.0	58.0	78.0	80.0				
9.3	5301	1.4	150.32	40.0	58.0	79.0	80.0				
11.4	4342	1.7	123.12	39.0	58.0	80.0	80.0				
13.1	3757	2.0	106.53	38.0	58.0	81.0	80.0				
15.0	3282	2.3	93.05	37.0	58.0	81.0	80.0				
17.8	2777	2.7	78.75	36.0	58.0	81.0	80.0				
20.5	2403	3.0	68.14	33.0	58.0	76.0	80.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
5.50	8.3	5704	1.0	338.37	38.0	58.0	72.0	80.0	PD/PM 73 132S2B / 132S2C	299	217
	10.2	4607	1.2	273.32	38.0	58.0	69.0	80.0			
	12.9	3649	1.7	216.45	40.0	58.0	74.0	80.0			
	13.7	3451	1.7	204.72	40.0	58.0	75.0	80.0			
	17.3	2733	1.7	162.12	40.0	58.0	78.0	80.0			
	18.6	2534	2.3	150.32	40.0	58.0	79.0	80.0			
	22.7	2075	2.8	123.12	39.0	58.0	80.0	80.0	PD/PM 72 132M6B	292	216
	12.9	3952	1.5	69.80	33.0	58.0	76.0	80.0			
	15.8	3222	1.8	56.90	32.0	56.0	73.0	80.0			
	20.0	2551	1.8	45.06	29.0	50.0	67.0	80.0	PD/PM 72 132S4A / 132S4B	292	216
	20.1	2514	2.3	69.80	33.0	58.0	76.0	80.0			
	24.6	2049	2.7	56.90	32.0	56.0	73.0	80.0			
	31.1	1623	2.7	45.06	29.0	50.0	67.0	80.0	PD/PM 63/32 132S4A / 132S4B	256	240
	8.8	5365	0.9	158.90	-	-	-	-			
	12.5	3509	1.0	223.50	-	-	-	-			
	14.6	3000	1.2	191.13	-	-	-	-	PD/PM 63/32 132S2B / 132S2C	256	240
	17.6	2494	1.5	158.90	-	-	-	-			
	7.8	6402	1.0	114.79	34.0	47.0	55.0	60.0			
	9.7	5169	1.2	92.68	33.0	47.0	56.0	60.0			
	12.0	4200	1.5	75.30	32.0	47.0	57.0	60.0			
	12.3	4095	1.4	73.42	32.0	47.0	57.0	60.0			
	15.1	3327	1.7	59.65	31.0	47.0	58.0	60.0			
	17.6	2845	1.9	51.01	30.0	47.0	58.0	60.0			
	21.2	2365	2.0	42.41	29.0	47.0	57.0	60.0			
	24.8	2023	2.4	36.27	34.0	47.0	55.0	60.0			
	29.1	1723	2.8	30.90	34.0	47.0	52.0	60.0			
	31.4	1598	3.0	28.66	34.0	47.0	51.0	60.0			
	8.2	6044	0.9	171.37	24.0	47.0	48.0	60.0	PD/PM 63 132S4A / 132S4B	226	213
	8.7	5647	1.0	160.11	27.0	47.0	49.0	60.0			
	11.0	4473	1.0	126.84	33.0	47.0	53.0	60.0			
	12.2	4048	1.5	114.79	34.0	47.0	55.0	60.0			
	15.1	3269	1.8	92.68	33.0	47.0	56.0	60.0			
	18.6	2656	2.3	75.30	32.0	47.0	57.0	60.0			
	19.1	2589	2.2	73.42	32.0	47.0	57.0	60.0			
	23.5	2104	2.6	59.65	31.0	47.0	58.0	60.0			
	27.4	1799	2.8	51.01	30.0	47.0	58.0	60.0			
33.0	1496	3.0	42.41	29.0	47.0	57.0	60.0	PD/PM 63 132S2B / 132S2C			
10.5	4517	1.0	267.94	24.0	47.0	44.0	60.0				
13.2	3578	1.0	212.36	24.0	47.0	50.0	60.0				
16.3	2889	1.5	171.37	24.0	47.0	48.0	60.0				
17.5	2699	1.6	160.11	27.0	47.0	49.0	60.0				
22.1	2138	1.6	126.84	33.0	47.0	53.0	60.0				
24.4	1935	2.3	114.79	34.0	47.0	55.0	60.0				
30.2	1562	2.9	92.68	33.0	47.0	55.0	60.0	PD/PM 62 132M6B	229	212	
11.2	4545	1.0	80.26	33.0	47.0	57.0	60.0				
13.8	3706	1.0	65.45	31.0	47.0	57.0	60.0				
14.7	3457	1.4	61.05	31.0	47.0	58.0	60.0				
18.1	2819	1.5	49.79	30.0	47.0	58.0	60.0				
22.8	2233	1.5	39.44	28.0	47.0	56.0	60.0				
30.1	1692	2.8	29.89	35.0	47.0	52.0	60.0	PD/PM 62 132S4A / 132S4B	229	212	
17.4	2891	1.4	80.26	33.0	47.0	57.0	60.0				
21.4	2357	1.4	65.45	31.0	47.0	57.0	60.0				
22.9	2199	2.1	61.05	31.0	47.0	58.0	60.0				
28.1	1793	2.3	49.79	30.0	47.0	58.0	60.0				
35.5	1421	2.3	39.44	28.0	47.0	56.0	60.0	PD/PM 62 132S2B / 132S2C	229	212	
34.9	1402	2.2	80.26	33.0	47.0	57.0	60.0				
42.8	1143	2.2	65.45	31.0	47.0	57.0	60.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm	
5.50	13.1	3884	0.8	68.60	19.0	32.0	42.0	40.0	PD/PM 52 132M6B	145	208	
	16.1	3168	0.9	55.94	19.0	32.0	41.0	40.0				
	16.2	3145	0.8	55.55	17.0	32.0	41.0	40.0				
	17.5	2913	1.2	51.45	19.0	32.0	40.0	40.0				
	19.0	2677	0.9	47.27	18.0	32.0	39.0	40.0				
	21.4	2376	1.4	41.96	18.0	32.0	38.0	40.0				
	22.1	2310	1.1	40.79	18.0	32.0	38.0	40.0				
	25.4	2007	1.4	35.45	17.0	32.0	37.0	40.0				
	26.9	1892	1.3	33.41	18.0	32.0	36.0	40.0				
	29.5	1725	1.8	30.47	17.0	32.0	36.0	40.0				
	36.1	1413	2.2	24.96	22.0	32.0	34.0	40.0				
	44.2	1153	2.8	20.36	22.0	32.0	31.0	40.0				
	47.7	1068	2.6	18.86	22.0	32.0	31.0	40.0				
	51.1	997	2.9	17.61	22.0	32.0	30.0	40.0				
		15.2	3307	0.8	91.82	19.0	32.0	40.0				40.0
		20.4	2471	1.2	68.60	19.0	32.0	42.0	40.0			
		25.0	2015	1.3	55.94	19.0	32.0	41.0	40.0			
		25.2	2001	1.2	55.55	17.0	32.0	39.0	40.0			
		27.2	1853	1.7	51.45	19.0	32.0	40.0	40.0			
		29.6	1703	1.4	47.27	18.0	32.0	39.0	40.0			
		33.4	1511	2.1	41.96	18.0	32.0	38.0	40.0			
		34.3	1469	1.7	40.79	18.0	32.0	38.0	40.0			
		39.5	1277	2.1	35.45	17.0	32.0	37.0	40.0			
		41.9	1203	1.9	33.41	18.0	32.0	36.0	40.0			
		45.9	1097	2.6	30.47	17.0	32.0	36.0	40.0			
		30.5	1604	1.3	91.82	19.0	32.0	40.0	40.0	PD/PM 52 132S2B /132S2C	145	208
		40.8	1198	1.9	68.60	19.0	32.0	42.0	40.0			
		50.1	977	2.0	55.94	19.0	32.0	41.0	40.0			
		50.4	970	2.0	55.55	17.0	32.0	41.0	40.0			
		54.4	899	2.7	51.45	19.0	32.0	40.0	40.0			
		59.2	826	2.2	47.27	18.0	32.0	39.0	40.0			
		68.6	713	2.7	40.79	18.0	32.0	38.0	40.0			
		83.8	584	3.0	33.41	18.0	32.0	36.0	40.0			
		23.5	2172	1.0	38.35	11.0	21.0	25.0	30.0	PD/PM 42 132M6B	109	204
		27.9	1830	0.9	32.31	12.0	22.0	26.0	30.0			
		28.1	1814	1.0	32.04	11.0	21.0	25.0	30.0			
		33.7	1513	1.1	26.72	11.0	20.0	24.0	30.0			
		34.1	1495	1.3	26.41	11.0	21.0	24.0	30.0			
		34.3	1486	1.1	26.25	11.0	21.0	25.0	30.0			
		40.2	1267	1.4	22.38	11.0	20.0	23.0	30.0			
		41.9	1215	1.5	21.46	11.0	20.0	23.0	30.0			
		49.5	1029	1.8	18.18	10.0	19.0	22.0	30.0			
		59.2	860	2.2	15.19	13.0	22.0	21.0	30.0			
		71.0	717	2.6	12.67	13.0	22.0	20.0	30.0			
		83.1	613	2.9	10.83	13.0	22.0	19.0	30.0			
	108.0	472	2.8	8.33	13.0	22.0	17.0	29.0				
	22.7	2220	0.8	61.64	11.0	21.0	26.0	30.0	PD/PM 42 132S4A /132S4B			
	26.8	1881	1.0	52.23	11.0	21.0	27.0	30.0				
	31.1	1623	1.0	45.06	11.0	22.0	26.0	30.0				
	32.1	1572	1.0	43.64	11.0	21.0	26.0	30.0				
	34.3	1469	1.1	40.79	11.0	22.0	26.0	30.0				
	36.5	1381	1.4	38.35	11.0	21.0	25.0	30.0				
	38.0	1327	1.1	36.84	11.0	22.0	25.0	30.0				
	38.5	1311	1.0	36.39	11.0	21.0	25.0	30.0				
	43.3	1164	1.4	32.31	12.0	22.0	26.0	30.0				
	43.7	1154	1.5	32.04	11.0	21.0	25.0	30.0				
	52.4	962	1.7	26.72	11.0	20.0	24.0	30.0				
	53.0	951	1.9	26.41	11.0	21.0	24.0	30.0				
	53.3	945	1.7	26.25	-	-	-	-				
	62.6	806	2.1	22.38	11.0	20.0	23.0	30.0				
	65.2	773	2.2	21.46	11.0	20.0	23.0	30.0				
	77.0	655	2.7	18.18	10.0	19.0	22.0	30.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
5.50	37.1	1317	0.9	75.41	11.0	21.0	-	-	PD/PM 42 132S2B /132S2C	109	204			
	45.4	1077	1.3	61.64	11.0	21.0	26.0	30.0						
	53.6	912	1.5	52.23	11.0	21.0	27.0	30.0						
	62.1	787	1.5	45.06	11.0	22.0	26.0	30.0						
	64.2	762	1.6	43.64	11.0	21.0	26.0	30.0						
	68.6	713	1.7	40.79	11.0	22.0	26.0	30.0						
	73.0	670	2.3	38.35	11.0	21.0	25.0	30.0						
	76.0	644	1.7	36.84	11.0	22.0	25.0	30.0						
	76.9	636	1.6	36.39	11.0	21.0	25.0	30.0						
	86.7	564	2.2	32.31	12.0	22.0	25.0	30.0						
	87.4	560	2.4	32.04	11.0	21.0	25.0	30.0						
	104.8	467	2.6	26.72	11.0	20.0	24.0	30.0						
	106.0	461	2.9	26.41	11.0	21.0	24.0	30.0						
	106.7	459	2.7	26.25	11.0	21.0	24.0	30.0						
	44.7	1141	0.8	20.15	6.0	11.0	15.0	20.0				PD/PM 32 132M6B	94	200
	54.1	943	0.9	16.65	6.0	11.0	14.0	20.0						
	63.9	798	1.1	14.09	6.0	10.0	14.0	20.0						
	79.3	643	1.3	11.35	6.0	10.0	13.0	19.0						
	92.1	553	1.6	9.77	6.0	10.0	13.0	19.0						
	108.6	469	1.5	8.29	5.0	9.0	12.0	18.0						
	134.7	378	1.7	6.68	5.0	9.0	11.0	17.0						
	159.0	320	1.9	5.66	5.0	8.0	11.0	17.0						
	200.9	254	1.9	4.48	5.0	8.0	10.0	16.0						
	62.4	808	1.0	22.42	6.0	11.0	15.0	20.0	PD/PM 32 132S4A /132S4B	94	200			
	69.5	726	1.1	20.15	6.0	11.0	15.0	20.0						
	84.1	600	1.4	16.65	6.0	11.0	14.0	20.0						
	99.4	507	1.7	14.09	6.0	10.0	14.0	20.0						
	123.3	409	2.0	11.35	6.0	10.0	13.0	19.0						
	143.3	352	2.4	9.77	6.0	10.0	13.0	19.0						
	168.9	299	2.3	8.29	5.0	9.0	12.0	18.0						
	209.6	241	2.5	6.68	5.0	9.0	11.0	17.0						
	247.3	204	2.8	5.66	5.0	8.0	11.0	17.0						
	312.5	161	2.9	4.48	5.0	8.0	10.0	16.0						
	124.9	392	1.6	22.42	6.0	11.0	15.0	20.0	PD/PM 32 132S2B /132S2C	94	200			
	139.0	352	1.8	20.15	6.0	11.0	15.0	20.0						
	168.2	291	2.2	16.65	6.0	11.0	14.0	20.0						
198.7	246	2.6	14.09	6.0	10.0	14.0	20.0							
7.50	0.9	70998	0.9	962.15	-	-	94.0	170.0	PD/PM 113/52 160M6B / 160M6C	2245	242			
	1.2	53976	1.2	731.47	-	-	122.0	170.0						
	1.5	44531	1.4	603.47	-	-	132.0	170.0						
	1.9	35409	1.8	479.85	-	-	133.0	170.0						
	2.5	26802	2.0	363.21	-	-	141.0	170.0						
	2.9	23040	2.3	312.23	-	-	144.0	170.0						
	1.0	63668	0.9	1382.74	-	-	36.0	170.0	PD/PM 113/52 132M4C / 132M4D	2214	242			
	1.2	53172	1.1	1154.79	-	-	65.0	170.0						
	1.5	44302	1.4	962.15	-	-	94.0	170.0						
	1.9	33680	1.8	731.47	-	-	122.0	170.0						
	2.3	27787	2.2	603.47	-	-	132.0	170.0						
	1.2	49843	0.9	2328.41	-	-	-	-	PD/PM 113/52 132S2C /132S2D	2214	242			
	1.5	39162	1.2	1829.47	-	-	-	-						
	2.0	29599	1.5	1382.74	-	-	36.0	170.0						
	2.4	24720	1.8	1154.79	-	-	65.0	170.0						
	2.9	20596	2.2	962.15	-	-	94.0	170.0						
	3.8	15658	2.9	731.47	-	-	122.0	170.0						
	1.6	42658	0.9	578.09	-	-	117.0	150.0	PD/PM 103/52 160M6B / 160M6C	1400	242			
	1.9	35193	1.0	476.93	-	-	124.0	150.0						
	2.5	27021	1.4	366.18	-	-	129.0	150.0						
	3.0	22292	1.6	302.10	-	-	-	-						
	1.5	42170	0.8	915.84	-	-	77.0	150.0	PD/PM 103/52 132M4C / 132M4D	1364	242			
	2.0	31872	1.1	692.20	-	-	107.0	150.0						
	2.4	26618	1.3	578.09	-	-	117.0	150.0						
2.9	21960	1.6	476.93	-	-	124.0	150.0							
3.8	16861	2.1	366.18	-	-	129.0	150.0							
4.6	13910	2.5	302.10	-	-	-	-							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm		
7.50	2.0	30331	0.9	1416.90	-	-	-	-	PD/PM 103/52 132S2C / 132S2D	1364	242		
	2.4	24951	1.1	1165.61	-	-	81.0	150.0					
	3.1	19605	1.4	915.84	-	-	77.0	150.0					
	4.0	14817	1.8	692.20	-	-	107.0	150.0					
	4.8	12375	2.1	578.09	-	-	117.0	150.0					
	5.9	10209	2.6	476.93	-	-	124.0	150.0					
	2.5	27182	1.4	357.40	-	-	130.0	150.0	PD/PM 103 160M6B / 160M6C	1326	229		
	2.7	25299	1.5	332.64	-	-	131.0	150.0					
	3.2	21512	1.6	282.85	-	-	133.0	150.0					
	3.4	20022	1.7	263.25	-	-	134.0	150.0					
	5.0	13742	2.7	180.68	-	-	135.0	150.0					
	5.4	12789	2.9	168.16	-	-	-	-					
	2.2	30290	0.8	410.49	61.0	102.0	120.0	130.0	PD/PM 93/52 160M6B / 160M6C	836	242		
	3.1	21709	1.2	294.19	73.0	102.0	120.0	130.0					
	3.9	17215	1.5	233.30	71.0	102.0	-	-					
	4.5	14795	1.7	200.50	71.0	102.0	-	-					
	3.4	18901	1.3	410.49	61.0	102.0	120.0	130.0	PD/PM 93/52 132M4C / 132M4D	800	242		
	4.8	13546	1.8	294.19	73.0	102.0	120.0	130.0					
	6.8	8787	2.1	410.49	61.0	102.0	120.0	130.0	PD/PM 93/52 132S2C / 132S2D	800	242		
	9.5	6298	2.9	294.19	73.0	102.0	120.0	130.0					
	2.0	33269	0.8	450.86	60.0	102.0	120.0	130.0	PD/PM 93/42 160M6B / 160M6C	807	242		
	2.3	28494	0.8	618.83	56.0	102.0	120.0	130.0					
	3.1	20760	1.2	450.86	60.0	102.0	120.0	130.0	PD/PM 93/42 132M4C / 132M4D	771	242		
	3.2	18959	1.0	885.67	56.0	102.0	120.0	130.0					
	3.9	15313	1.2	715.36	56.0	102.0	120.0	130.0	PD/PM 93/42 132S2C / 132S2D	771	242		
	4.5	13247	1.4	618.83	56.0	102.0	120.0	130.0					
	6.2	9651	1.9	450.86	60.0	102.0	120.0	130.0					
	2.6	26784	1.0	352.16	78.0	102.0	120.0	130.0					
	3.1	22128	1.1	290.94	75.0	102.0	120.0	130.0	PD/PM 93 160M6B / 160M6C	762	225		
	4.4	15566	1.5	204.66	72.0	102.0	120.0	130.0					
	5.1	13312	2.0	175.03	70.0	102.0	120.0	130.0					
	6.2	10998	2.3	144.60	86.0	102.0	120.0	130.0					
	6.6	10318	2.6	135.66	86.0	102.0	120.0	130.0					
	7.8	8785	3.0	115.51	86.0	102.0	117.0	130.0					
	4.0	16936	1.5	352.16	78.0	102.0	120.0	130.0					
	4.8	13992	1.7	290.94	75.0	102.0	120.0	130.0					
	6.8	9842	2.2	204.66	72.0	102.0	120.0	130.0	PD/PM 93 132M4C / 132M4D	726	225		
	8.0	8417	3.0	175.03	70.0	102.0	120.0	130.0					
	8.0	8095	2.4	352.16	78.0	102.0	120.0	130.0	PD/PM 93 132S2C / 132S2D	726	225		
	9.6	6688	2.7	290.94	75.0	102.0	120.0	130.0					
	4.0	16508	0.8	223.71	78.0	73.0	-	-	PD/PM 83/42 160M6B / 160M6C	505	242		
	4.8	13765	0.9	186.54	-	-	-	-					
4.0	15969	0.8	346.82	78.0	73.0	100.0	100.0	PD/PM 83/42 132M4C / 132M4D	469	242			
4.7	13605	0.9	295.48	-	-	-	-						
6.3	10301	1.2	223.71	-	-	-	-						
7.5	8589	1.4	186.54	-	-	-	-						
5.1	11780	0.8	550.29	78.0	73.0	100.0	100.0	PD/PM 83/42 132S2C / 132S2D	469	242			
6.0	10036	0.9	468.82	78.0	73.0	100.0	100.0						
8.1	7424	1.2	346.82	78.0	73.0	-	-						
9.5	6325	1.5	295.48	78.0	73.0	-	-						
12.5	4789	1.9	223.71	78.0	73.0	-	-						
15.0	3993	2.3	186.54	78.0	73.0	-	-						
4.9	14113	0.9	185.56	48.0	73.0	100.0	105.0				PD/PM 83 160M6B / 160M6C	460	221
5.9	11619	1.2	152.77	47.0	73.0	100.0	105.0						
6.3	10945	1.2	143.91	47.0	73.0	100.0	105.0						
7.2	9527	1.3	125.27	43.0	73.0	98.0	105.0						
7.6	9011	1.5	118.48	46.0	73.0	100.0	105.0						
8.7	7844	1.6	103.13	45.0	73.0	97.0	105.0						
9.9	6905	1.8	90.79	44.0	73.0	95.0	105.0						
11.9	5757	2.2	75.70	55.0	73.0	91.0	105.0						
13.8	4956	2.4	65.16	55.0	73.0	86.0	105.0						
15.7	4360	2.9	57.32	55.0	73.0	83.0	105.0						



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm				
7.50	4.4	15298	0.8	318.11	55.0	73.0	100.0	105.0	PD/PM 83 132M4C / 132M4D	424	221				
	4.8	14135	0.9	293.92	46.0	73.0	100.0	105.0							
	5.8	11637	1.1	241.98	47.0	73.0	100.0	105.0							
	7.0	9658	1.1	200.83	54.0	73.0	100.0	105.0							
	7.5	8924	1.4	185.56	48.0	73.0	100.0	105.0							
	9.2	7347	1.8	152.77	47.0	73.0	100.0	105.0							
	9.7	6921	1.8	143.91	47.0	73.0	100.0	105.0							
	11.2	6024	2.0	125.27	43.0	73.0	100.0	105.0							
	11.8	5698	2.2	118.48	46.0	73.0	100.0	105.0							
	13.6	4960	2.4	103.13	45.0	73.0	97.0	105.0							
15.4	4366	2.8	90.79	44.0	73.0	95.0	105.0								
	7.2	8882	1.1	386.39	55.0	73.0	100.0	105.0	PD/PM 83 132S2C / 132S2D	424	221				
	8.8	7312	1.4	318.11	55.0	73.0	100.0	105.0							
	9.5	6756	1.4	293.92	46.0	73.0	100.0	105.0							
	11.6	5562	1.8	241.98	47.0	73.0	100.0	105.0							
	13.9	4617	1.8	200.83	54.0	73.0	100.0	105.0							
	15.1	4266	2.3	185.56	48.0	73.0	100.0	105.0							
	18.3	3512	2.9	152.77	47.0	73.0	100.0	105.0							
	19.5	3308	2.9	143.91	47.0	73.0	100.0	105.0							
		12.5	5573	1.5	72.17	43.0	73.0	-				-	PD/PM 82 160M6B / 160M6C	456	220
		15.1	4587	1.5	59.41	39.0	66.0	-				-			
18.9		3668	3.0	47.51	43.0	73.0	-	-							
	19.4	3545	2.2	72.17	43.0	73.0	-	-	PD/PM 82 132M4C / 132M4D	420	220				
	23.6	2918	2.2	59.41	39.0	66.0	-	-							
	9.5	6316	0.8	295.06	57.0	58.0	-	-	PD/PM 73/32 132S2C / 132S2D	329	240				
	12.6	4774	1.1	223.01	57.0	58.0	-	-							
	7.3	9364	0.8	123.12	34.0	58.0	78.0	80.0	PD/PM 73 160M6B / 160M6C	335	217				
	8.4	8102	1.0	106.53	34.0	58.0	79.0	80.0							
	9.7	7077	1.1	93.05	34.0	58.0	80.0	80.0							
	11.4	5989	1.3	78.75	33.0	58.0	78.0	80.0							
	13.2	5182	1.5	68.14	33.0	58.0	76.0	80.0							
	15.1	4527	1.6	59.52	32.0	57.0	73.0	80.0							
	16.8	4063	1.8	53.42	32.0	55.0	71.0	80.0							
	19.3	3549	2.1	46.66	40.0	58.0	68.0	80.0							
	24.4	2810	2.5	36.95	40.0	58.0	64.0	80.0							
	29.5	2319	3.0	30.49	40.0	58.0	60.0	80.0							
	6.5	10409	0.8	216.45	40.0	58.0	74.0	80.0	PD/PM 73 132M4C / 132M4D	299	217				
	6.8	9845	0.8	204.72	40.0	58.0	75.0	80.0							
	8.6	7797	0.8	162.12	33.0	58.0	74.0	80.0							
	9.3	7229	1.0	150.32	34.0	58.0	75.0	80.0							
	11.4	5921	1.3	123.12	34.0	58.0	78.0	80.0							
	13.1	5123	1.5	106.53	34.0	58.0	79.0	80.0							
	15.0	4475	1.7	93.05	34.0	58.0	80.0	80.0							
	17.8	3787	2.0	78.75	33.0	58.0	78.0	80.0							
	20.5	3277	2.2	68.14	33.0	58.0	76.0	80.0							
	23.5	2862	2.5	59.52	32.0	57.0	73.0	80.0							
26.2	2569	2.8	53.42	32.0	55.0	71.0	80.0								
	10.2	6283	0.9	273.32	40.0	58.0	69.0	80.0	PD/PM 73 132S2C / 132S2D	299	217				
	12.9	4976	1.3	216.45	40.0	58.0	74.0	80.0							
	13.7	4706	1.2	204.72	40.0	58.0	75.0	80.0							
	17.3	3727	1.3	162.12	33.0	58.0	74.0	80.0							
	18.6	3455	1.7	150.32	34.0	58.0	75.0	80.0							
	22.7	2830	2.0	123.12	34.0	58.0	78.0	80.0							
	26.3	2449	2.3	106.53	34.0	58.0	79.0	80.0							
	30.1	2139	2.7	93.05	34.0	58.0	80.0	80.0							
	12.9	5390	1.1	69.80	33.0	58.0	76.0	80.0	PD/PM 72 160M6B / 160M6C	328	216				
	15.8	4393	1.3	56.90	32.0	56.0	73.0	80.0							
	19.7	3526	1.7	45.66	29.0	50.0	67.0	80.0							
	20.0	3479	1.3	45.06	29.0	50.0	67.0	80.0							
	24.2	2874	2.4	37.22	33.0	58.0	63.0	80.0							
	25.9	2679	2.3	34.69	33.0	58.0	62.0	80.0							
33.5	2076	2.9	26.89	33.0	58.0	-	-								
	20.1	3428	1.7	69.80	33.0	58.0	76.0	80.0	PD/PM 72 132M4C / 132M4D	292	216				
	24.6	2795	2.0	56.90	32.0	56.0	73.0	80.0							
	31.1	2213	2.0	45.06	29.0	50.0	67.0	80.0							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm	
7.50	40.1	1663	2.7	69.80	33.0	58.0	76.0	80.0	PD/PM 72 132S2C / 132S2D	292	216	
	12.5 14.6 17.6	4784 4091 3401	0.8 0.9 1.1	223.50 191.13 158.90	- - -	- - -	- - -	- - -	PD/PM 63/32 132S2C / 132S2D	256	240	
	9.7 12.0 12.3 15.1 17.6 21.2 24.8 29.1 31.4 36.9	7049 5727 5584 4537 3880 3226 2759 2350 2180 1857	0.9 1.1 1.0 1.3 1.4 1.5 1.7 2.0 2.2 2.7	92.68 75.30 73.42 59.65 51.01 42.41 36.27 30.90 28.66 24.42	29.0 29.0 29.0 28.0 26.0 27.0 26.0 34.0 34.0 34.0	47.0 47.0 47.0 47.0 45.0 46.0 44.0 47.0 47.0 47.0	53.0 55.0 56.0 57.0 57.0 56.0 54.0 52.0 51.0 48.0	60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0	PD/PM 63 160M6B / 160M6C	262	213	
	11.0 12.2 15.1 18.6 19.1 23.5 27.4 33.0 38.6	6100 5520 4457 3621 3531 2869 2453 2040 1744	0.8 1.1 1.3 1.7 1.6 1.9 2.1 2.2 2.6	126.84 114.79 92.68 75.30 73.42 59.65 51.01 42.41 36.27	33.0 29.0 29.0 29.0 29.0 28.0 26.0 27.0 26.0	47.0 47.0 47.0 47.0 47.0 47.0 45.0 46.0 44.0	53.0 50.0 53.0 55.0 56.0 57.0 56.0 56.0 54.0	60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0	PD/PM 63 132M4C / 132M4D	226	213	
	16.3 17.5 22.1 24.4 30.2 37.2 38.1 46.9	3939 3681 2916 2639 2130 1731 1688 1371	1.1 1.2 1.2 1.7 2.1 2.6 2.5 3.0	171.37 160.11 126.84 114.79 92.68 75.30 73.42 59.65	33.0 33.0 33.0 29.0 29.0 29.0 29.0 28.0	47.0 47.0 47.0 47.0 47.0 47.0 47.0 47.0	48.0 49.0 53.0 50.0 50.0 55.0 56.0 57.0	60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0	PD/PM 63 132S2C / 132S2D	226	213	
	14.7 18.1 22.8 30.1 34.6 39.3 84.6	4714 3844 3045 2308 2009 1769 822	1.0 1.1 1.1 2.1 2.4 2.7 2.6	61.05 49.79 39.44 29.89 26.02 22.91 10.64	29.0 28.0 26.0 33.0 33.0 33.0 33.0	47.0 47.0 45.0 47.0 47.0 47.0 47.0	57.0 57.0 55.0 52.0 50.0 48.0 -	60.0 60.0 60.0 60.0 60.0 60.0 -	PD/PM 62 160M6B / 160M6C	265	212	
	17.4 21.4 22.9 28.1 35.5	3942 3215 2998 2445 1937	1.0 1.0 1.5 1.7 1.7	80.26 65.45 61.05 49.79 39.44	33.0 - 29.0 28.0 26.0	47.0 - 47.0 47.0 45.0	57.0 57.0 57.0 57.0 55.0	60.0 60.0 60.0 60.0 60.0	PD/PM 62 132M4C / 132M4D	229	212	
	34.9 42.8 45.9 56.2 71.0	1912 1559 1454 1186 940	1.6 1.6 2.4 2.6 2.6	80.26 65.45 61.05 49.79 39.44	33.0 29.0 29.0 28.0 26.0	47.0 47.0 47.0 47.0 45.0	57.0 57.0 57.0 57.0 55.0	60.0 60.0 60.0 60.0 60.0	PD/PM 62 132S2C / 132S2D	229	212	
	22.1 26.9 29.5 36.1 44.2 47.7 51.1 58.5 69.2	3150 2580 2353 1927 1572 1456 1360 1188 1004	0.8 0.9 1.3 1.6 2.1 1.9 2.1 2.3 2.8	40.79 33.41 30.47 24.96 20.36 18.86 17.61 15.38 13.00	17.0 16.0 16.0 15.0 15.0 15.0 19.0 19.0 19.0	31.0 30.0 31.0 29.0 27.0 27.0 32.0 32.0 32.0	37.0 35.0 35.0 33.0 31.0 31.0 30.0 29.0 27.0	40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0 40.0	PD/PM 52 160M6B / 160M6C	181	208	



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3		
7.50	20.4	3369	0.9	68.60	21.0	32.0	43.0	40.0	PD/PM 52 132M4C / 132M4D	145	208
	25.0	2747	0.9	55.94	19.0	32.0	41.0	40.0			
	25.2	2728	0.9	55.55	17.0	32.0	39.0	40.0			
	27.2	2527	1.3	51.45	17.0	32.0	38.0	40.0			
	29.6	2322	1.0	47.27	18.0	32.0	39.0	40.0			
	33.4	2061	1.6	41.96	16.0	32.0	37.0	40.0			
	34.3	2003	1.2	40.79	17.0	31.0	37.0	40.0			
	39.5	1741	1.6	35.45	16.0	31.0	35.0	40.0			
	41.9	1641	1.4	33.41	16.0	30.0	35.0	40.0			
	45.9	1497	1.9	30.47	16.0	31.0	35.0	40.0			
56.1	1226	2.4	24.96	15.0	29.0	33.0	40.0				
74.2	926	2.8	18.86	15.0	27.0	31.0	40.0				
	30.5	2187	1.0	91.82	21.0	32.0	40.0	40.0	PD/PM 52 132S2C / 132S2D	145	208
	40.8	1634	1.4	68.60	21.0	32.0	42.0	40.0			
	50.1	1333	1.5	55.94	19.0	32.0	41.0	40.0			
	50.4	1323	1.4	55.55	17.0	32.0	39.0	40.0			
	54.4	1226	2.0	51.45	17.0	32.0	38.0	40.0			
	59.2	1126	1.6	47.27	18.0	32.0	39.0	40.0			
	66.7	1000	2.4	41.96	16.0	32.0	37.0	40.0			
	68.6	972	2.0	40.79	17.0	31.0	37.0	40.0			
	79.0	844	2.4	35.45	16.0	31.0	35.0	40.0			
	83.8	796	2.2	33.41	16.0	30.0	35.0	40.0			
91.9	726	3.0	30.47	16.0	31.0	35.0	40.0				
	34.1	2039	0.9	26.41	10.0	18.0	23.0	30.0	PD/PM 42 160M6B / 160M6C	145	204
	34.3	2027	0.8	26.25	9.0	17.0	21.0	30.0			
	40.2	1728	1.0	22.38	9.0	17.0	22.0	30.0			
	41.9	1657	1.1	21.46	10.0	17.0	22.0	30.0			
	49.5	1404	1.3	18.18	9.0	17.0	21.0	30.0			
	59.2	1173	1.6	15.19	9.0	16.0	20.0	30.0			
	71.0	978	1.9	12.67	9.0	15.0	19.0	30.0			
	83.1	836	2.1	10.83	11.0	21.0	19.0	30.0			
	97.5	713	2.4	9.23	11.0	21.0	18.0	30.0			
	108.0	643	2.1	8.33	11.0	21.0	17.0	29.0			
	126.2	551	2.3	7.13	11.0	21.0	17.0	28.0			
	148.3	469	2.7	6.07	11.0	21.0	16.0	27.0			
	165.4	420	2.6	5.44	11.0	21.0	15.0	26.0			
	180.0	386	2.8	5.00	11.0	21.0	15.0	25.0			
	191.9	362	3.0	4.69	11.0	21.0	15.0	25.0			
	34.3	2003	0.8	40.79	9.0	17.0	24.0	30.0	PD/PM 42 132M4C / 132M4D	109	204
	36.5	1884	1.1	38.35	9.0	17.0	24.0	30.0			
	38.0	1809	0.8	36.84	-	-	27.0	30.0			
	38.5	1787	0.8	36.39	-	-	26.0	30.0			
	43.3	1587	1.0	32.31	12.0	22.0	26.0	30.0			
	43.7	1574	1.1	32.04	9.0	17.0	23.0	30.0			
	52.4	1312	1.2	26.72	9.0	17.0	22.0	30.0			
	53.0	1297	1.4	26.41	10.0	18.0	23.0	30.0			
	53.3	1289	1.2	26.25	-	-	-	-			
	62.6	1099	1.5	22.38	9.0	17.0	22.0	30.0			
	65.2	1054	1.6	21.46	10.0	17.0	22.0	30.0			
	77.0	893	2.0	18.18	9.0	17.0	21.0	30.0			
	92.2	746	2.4	15.19	9.0	16.0	20.0	30.0			
	110.5	622	2.8	12.67	9.0	15.0	19.0	30.0			
		45.4	1468	0.9	61.64	9.0	17.0	26.0			
53.6		1244	1.1	52.23	9.0	17.0	27.0	30.0			
62.1		1073	1.1	45.06	9.0	17.0	26.0	30.0			
64.2		1040	1.2	43.64	9.0	17.0	26.0	30.0			
68.6		972	1.2	40.79	9.0	17.0	24.0	30.0			
73.0		914	1.7	38.35	9.0	17.0	24.0	30.0			
76.0		878	1.2	36.84	12.0	22.0	25.0	30.0			
76.9		867	1.2	36.39	12.0	22.0	25.0	30.0			
86.7		770	1.6	32.31	12.0	22.0	25.0	30.0			
87.4		763	1.8	32.04	9.0	17.0	23.0	30.0			
104.8		636	1.9	26.72	9.0	17.0	22.0	30.0			
106.0		629	2.2	26.41	10.0	18.0	23.0	30.0			
106.7		625	2.0	26.25	9.0	17.0	23.0	30.0			
125.1		533	2.4	22.38	9.0	17.0	22.0	30.0			
130.5		511	2.5	21.46	10.0	17.0	22.0	30.0			



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
7.50	69.5	990	0.8	20.15	5.0	8.0	14.0	19.0	PD/PM 32 132M4C / 132M4D	94	200			
	84.1	818	1.0	16.65	5.0	8.0	13.0	19.0						
	99.4	692	1.2	14.09	5.0	8.0	13.0	19.0						
	123.3	557	1.5	11.35	5.0	8.0	13.0	18.0						
	143.3	480	1.7	9.77	5.0	8.0	12.0	18.0						
	168.9	407	1.7	8.29	5.0	8.0	12.0	17.0						
	209.6	328	1.9	6.68	5.0	8.0	11.0	17.0						
	247.3	278	2.0	5.66	5.0	7.0	11.0	16.0						
	312.5	220	2.1	4.48	5.0	7.0	10.0	15.0						
	124.9	534	1.1	22.42	5.0	8.0	15.0	20.0				PD/PM 32 132S2C / 132S2D	94	200
	139.0	480	1.3	20.15	5.0	8.0	14.0	19.0						
	168.2	397	1.6	16.65	5.0	8.0	13.0	19.0						
	198.7	336	1.9	14.09	5.0	8.0	13.0	19.0						
	246.7	270	2.3	11.35	5.0	8.0	13.0	18.0						
	286.6	233	2.7	9.77	5.0	8.0	12.0	18.0						
	337.8	197	2.6	8.29	5.0	8.0	12.0	17.0						
	419.2	159	2.9	6.68	5.0	8.0	11.0	17.0						
	9.20	1.2	66210	1.0	731.47	-	-	105.0						
1.5		54624	1.2	603.47	-	-	121.0	170.0						
1.9		43435	1.5	479.85	-	-	133.0	170.0						
2.5		32877	1.6	363.21	-	-	141.0	170.0						
2.9		28262	1.9	312.23	-	-	144.0	170.0						
1.0		78099	0.8	1382.74	-	-	36.0	170.0	PD/PM 113/52 132M4	2214	242			
1.2		65224	0.9	1154.79	-	-	18.0	170.0						
1.5		54344	1.1	962.15	-	-	42.0	170.0						
1.9		41314	1.5	731.47	-	-	105.0	170.0						
2.3		34085	1.8	603.47	-	-	121.0	170.0						
1.5		48039	0.9	1829.47	-	-	-	-	PD/PM 113/52 132M2	2214	242			
2.0		36309	1.3	1382.74	-	-	65.0	170.0						
2.4		30323	1.5	1154.79	-	-	18.0	170.0						
2.9		25265	1.8	962.15	-	-	42.0	170.0						
3.8		19207	2.4	731.47	-	-	105.0	170.0						
4.6		15846	2.9	603.47	-	-	121.0	170.0						
1.9		43170	0.9	476.93	-	-	116.0	150.0	PD/PM 103/52 160M6	1400	242			
2.5		33145	1.1	366.18	-	-	126.0	150.0						
3.0		27345	1.3	302.10	-	-	-	-						
2.0		39096	0.9	692.20	-	-	87.0	150.0	PD/PM 103/52 132M4	1364	242			
2.4		32651	1.1	578.09	-	-	105.0	150.0						
2.9		26938	1.3	476.93	-	-	116.0	150.0						
3.8		20682	1.7	366.18	-	-	126.0	150.0						
4.6		17063	2.1	302.10	-	-	-	-						
2.4		30607	0.9	1165.61	-	-	81.0	150.0	PD/PM 103/52 132M2	1364	242			
3.1		24049	1.1	915.84	-	-	77.0	150.0						
4.0		18176	1.5	692.20	-	-	87.0	150.0						
4.8		15180	1.8	578.09	-	-	105.0	150.0						
5.9		12523	2.1	476.93	-	-	116.0	150.0						
7.6		9615	2.8	366.18	-	-	126.0	150.0						
2.5	33344	1.1	357.40	-	-	126.0	150.0	PD/PM 103 160M6	1326	229				
2.7	31034	1.3	332.64	-	-	128.0	150.0							
3.2	26388	1.3	282.85	-	-	130.0	150.0							
3.4	24560	1.4	263.25	-	-	131.0	150.0							
5.0	16857	2.2	180.68	-	-	135.0	150.0							
5.4	15688	2.3	168.16	-	-	131.0	150.0							
6.4	13100	2.8	140.41	-	-	133.0	150.0							
3.1	26629	0.9	294.19	61.0	102.0	-	-	PD/PM 93/52 160M6	836	242				
3.9	21118	1.2	233.30	61.0	102.0	-	-							
4.5	18149	1.4	200.50	61.0	102.0	-	-							
3.4	23185	1.0	410.49	52.0	102.0	120.0	130.0	PD/PM 93/52 132M4	800	242				
4.8	16616	1.4	294.19	-	-	-	-							
6.8	10779	1.7	410.49	52.0	102.0	120.0	130.0	PD/PM 93/52 132M2	800	242				
9.5	7725	2.4	294.19	61.0	102.0	-	-							
3.1	25465	0.9	450.86	51.0	102.0	120.0	130.0	PD/PM 93/42 132M4	771	242				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
9.20	3.2	23256	0.8	885.67	51.0	102.0	-	-	PD/PM 93/42 132M2	771	242			
	3.9	18784	1.0	715.36	51.0	102.0	120.0	130.0						
	4.5	16250	1.1	618.83	51.0	102.0	120.0	130.0						
	6.2	11839	1.5	450.86	51.0	102.0	120.0	130.0						
	2.6	32855	0.8	352.16	70.0	102.0	120.0	130.0	PD/PM 93 160M6	762	225			
	3.1	27143	0.9	290.94	69.0	102.0	120.0	130.0						
	4.4	19094	1.2	204.66	68.0	102.0	120.0	130.0						
	5.1	16329	1.6	175.03	67.0	102.0	120.0	130.0						
	6.2	13490	1.9	144.60	64.0	102.0	120.0	130.0						
	6.6	12656	2.1	135.66	78.0	102.0	120.0	130.0						
	7.8	10776	2.5	115.51	78.0	102.0	117.0	130.0						
	8.9	9395	2.8	100.70	78.0	102.0	115.0	130.0						
	4.0	20775	1.2	352.16	70.0	102.0	120.0	130.0	PD/PM 93 132M4	726	225			
	4.8	17163	1.4	290.94	69.0	102.0	120.0	130.0						
	6.8	12073	1.8	204.66	68.0	102.0	120.0	130.0						
	8.0	10325	2.5	175.03	67.0	102.0	120.0	130.0						
	9.7	8530	2.8	144.60	64.0	102.0	120.0	130.0						
	8.0	9930	1.9	352.16	70.0	102.0	120.0	130.0	PD/PM 93 132M2	726	225			
	9.6	8204	2.2	290.94	69.0	102.0	120.0	130.0						
	13.7	5771	2.9	204.66	68.0	102.0	120.0	130.0						
	4.8	16885	0.8	186.54	78.0	73.0	-	-	PD/PM 83/42 160M6	505	242			
	6.3	12635	1.0	223.71	-	-	-	-						
	7.5	10536	1.1	186.54	-	-	-	-	PD/PM 83/42 132M4	469	242			
	8.1	9107	1.0	346.82	78.0	73.0	-	-						
	9.5	7759	1.2	295.48	78.0	73.0	-	-	PD/PM 83/42 132M2	469	242			
	12.5	5874	1.6	223.71	78.0	73.0	-	-						
	15.0	4898	1.9	186.54	78.0	73.0	-	-						
	4.9	17312	0.8	185.56	42.0	73.0	100.0	105.0				PD/PM 83 160M6	460	221
	5.9	14253	1.0	152.77	42.0	73.0	100.0	105.0						
6.3	13426	1.0	143.91	43.0	73.0	100.0	105.0							
7.2	11687	1.1	125.27	43.0	73.0	98.0	105.0							
7.6	11054	1.2	118.48	42.0	73.0	95.0	105.0							
8.7	9621	1.3	103.13	42.0	73.0	95.0	105.0							
9.9	8470	1.5	90.79	41.0	73.0	92.0	105.0							
11.9	7062	1.8	75.70	41.0	70.0	89.0	105.0							
13.8	6079	2.0	65.16	40.0	67.0	86.0	105.0							
15.7	5348	2.4	57.32	48.0	73.0	83.0	105.0							
18.8	4459	2.8	47.79	48.0	73.0	76.0	105.0							
20.7	4060	2.7	43.52	48.0	73.0	75.0	105.0							
	5.8	14275	0.9	241.98	39.0	73.0	100.0	105.0	PD/PM 83 132M4	424	221			
	7.0	11847	0.9	200.83	-	-	100.0	105.0						
	7.5	10947	1.2	185.56	42.0	73.0	100.0	105.0						
	9.2	9012	1.5	152.77	42.0	73.0	100.0	105.0						
	9.7	8489	1.5	143.91	43.0	73.0	100.0	105.0						
	11.2	7390	1.6	125.27	43.0	73.0	98.0	105.0						
	11.8	6989	1.8	118.48	-	-	100.0	105.0						
	13.6	6084	2.0	103.13	42.0	73.0	95.0	105.0						
	15.4	5356	2.3	90.79	41.0	73.0	92.0	105.0						
	18.5	4466	2.7	75.70	41.0	70.0	89.0	105.0						
21.5	3844	2.9	65.16	40.0	67.0	86.0	105.0							
	7.2	10895	0.9	386.39	39.0	73.0	100.0	105.0	PD/PM 83 132M2	424	221			
	8.8	8970	1.1	318.11	39.0	73.0	100.0	105.0						
	9.5	8288	1.2	293.92	39.0	73.0	100.0	105.0						
	11.6	6823	1.5	241.98	39.0	73.0	100.0	105.0						
	13.9	5663	1.4	200.83	42.0	73.0	100.0	105.0						
	15.1	5232	1.8	185.56	42.0	73.0	100.0	105.0						
	18.3	4308	2.3	152.77	42.0	73.0	100.0	105.0						
	19.5	4058	2.3	143.91	43.0	73.0	100.0	105.0						
	22.4	3532	2.6	125.27	43.0	73.0	98.0	105.0						
	23.6	3341	2.8	118.48	42.0	73.0	95.0	105.0						
	12.5	6836	1.2	72.17	41.0	70.0	-	-	PD/PM 82 160M6	456	220			
	15.1	5627	1.2	59.41	39.0	66.0	-	-						
	18.9	4500	2.5	47.51	43.0	73.0	-	-						
	23.0	3705	2.6	39.12	43.0	73.0	-	-						

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
9.20	19.4 23.6	4348 3579	1.8 1.8	72.17 59.41	41.0 39.0	70.0 66.0	- -	- -	PD/PM 82 132M4	420	220
	38.8 47.1	2109 1736	2.8 2.8	72.17 59.41	41.0 39.0	70.0 66.0	- -	- -	PD/PM 82 132M2	420	220
	12.6	5856	0.9	223.01	57.0	58.0	-	-	PD/PM 73/32 132M2	329	240
	8.4 9.7 11.4 13.2 15.1 16.8 19.3 24.4 29.5 33.4	9939 8681 7347 6357 5553 4984 4353 3447 2845 2511	0.8 0.9 1.1 1.2 1.3 1.5 1.7 2.0 2.4 2.8	106.53 93.05 78.75 68.14 59.52 53.42 46.66 36.95 30.49 26.92	31.0 31.0 31.0 31.0 30.0 30.0 29.0 28.0 34.0 34.0	58.0 58.0 56.0 55.0 53.0 52.0 50.0 47.0 58.0 58.0	77.0 78.0 76.0 74.0 72.0 70.0 68.0 64.0 60.0 58.0	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	PD/PM 73 160M6	335	217
	9.3 11.4 13.1 15.0 17.8 20.5 23.5 26.2 30.0 37.9	8868 7263 6284 5489 4646 4020 3511 3151 2753 2180	0.9 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.6 3.0	150.32 123.12 106.53 93.05 78.75 68.14 59.52 53.42 46.66 36.95	29.0 31.0 31.0 31.0 31.0 31.0 30.0 30.0 29.0 28.0	58.0 58.0 58.0 58.0 56.0 55.0 53.0 52.0 50.0 47.0	71.0 75.0 77.0 78.0 76.0 74.0 72.0 70.0 68.0 64.0	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	PD/PM 73 132M4	299	217
	12.9 13.7 17.3 18.6 22.7 26.3 30.1 35.6 41.1	6103 5773 4571 4239 3472 3004 2624 2221 1921	1.0 1.0 1.0 1.4 1.7 1.9 2.2 2.5 2.8	216.45 204.72 162.12 150.32 123.12 106.53 93.05 78.75 68.14	29.0 29.0 29.0 29.0 31.0 31.0 31.0 31.0 31.0	58.0 58.0 58.0 58.0 58.0 58.0 58.0 56.0 55.0	74.0 75.0 74.0 71.0 75.0 77.0 78.0 76.0 74.0	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	PD/PM 73 132M2	299	217
	12.9 15.8 19.7 20.0 24.2 25.9 33.5 39.3	6611 5389 4325 4268 3525 3286 2547 2169	0.9 1.1 1.4 1.1 1.9 1.9 2.4 2.8	69.80 56.90 45.66 45.06 37.22 34.69 26.89 22.90	31.0 30.0 29.0 29.0 33.0 33.0 33.0 33.0	56.0 53.0 50.0 50.0 58.0 58.0 58.0 58.0	74.0 71.0 66.0 67.0 63.0 62.0 57.0 -	80.0 80.0 80.0 80.0 80.0 80.0 80.0 -	PD/PM 72 160M6	328	216
	20.1 24.6 31.1 40.4	4205 3428 2715 2090	1.4 1.6 1.6 2.8	69.80 56.90 45.06 34.69	31.0 30.0 29.0 -	56.0 53.0 50.0 -	74.0 71.0 67.0 62.0	80.0 80.0 80.0 80.0	PD/PM 72 132M4	292	216
	40.1 49.2 62.1	2040 1663 1317	2.2 2.5 2.5	69.80 56.90 45.06	31.0 30.0 29.0	56.0 53.0 50.0	74.0 71.0 67.0	80.0 80.0 80.0	PD/PM 72 132M2	292	216
	17.6	4172	0.9	158.90	-	-	-	-	PD/PM 63/32 132M2	256	240
	12.0 12.3 15.1 17.6 21.2 24.8 29.1 31.4 36.9	7025 6850 5565 4759 3957 3384 2883 2674 2278	0.9 0.9 1.0 1.1 1.2 1.4 1.7 1.8 2.2	75.30 73.42 59.65 51.01 42.41 36.27 30.90 28.66 24.42	26.0 26.0 26.0 26.0 25.0 25.0 24.0 24.0 29.0	47.0 47.0 47.0 45.0 44.0 42.0 40.0 40.0 47.0	53.0 54.0 55.0 56.0 55.0 53.0 51.0 50.0 48.0	60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0	PD/PM 63 160M6	262	213



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
9.20	12.2	6772	0.9	114.79	19.0	47.0	45.0	60.0	PD/PM 63 132M4	226	213			
	15.1	5467	1.1	92.68	26.0	47.0	50.0	60.0						
	18.6	4442	1.4	75.30	26.0	47.0	53.0	60.0						
	19.1	4331	1.3	73.42	26.0	47.0	54.0	60.0						
	23.5	3519	1.6	59.65	26.0	47.0	55.0	60.0						
	27.4	3009	1.7	51.01	26.0	45.0	56.0	60.0						
	33.0	2502	1.8	42.41	25.0	44.0	55.0	60.0						
	38.6	2140	2.1	36.27	25.0	42.0	53.0	60.0						
	45.3	1823	2.5	30.90	24.0	40.0	51.0	60.0						
	48.8	1691	2.7	28.66	24.0	40.0	50.0	60.0						
	16.3	4832	0.9	171.37	19.0	47.0	48.0	60.0				PD/PM 63 132M2	226	213
	17.5	4515	1.0	160.11	19.0	47.0	49.0	60.0						
	22.1	3577	1.0	126.84	19.0	47.0	53.0	60.0						
	24.4	3237	1.4	114.79	19.0	47.0	45.0	60.0						
	30.2	2613	1.7	92.68	26.0	47.0	50.0	60.0						
	37.2	2123	2.1	75.30	26.0	47.0	53.0	60.0						
	38.1	2070	2.0	73.42	26.0	47.0	54.0	60.0						
	46.9	1682	2.5	59.65	26.0	47.0	55.0	60.0						
	54.9	1438	2.7	51.01	26.0	45.0	56.0	60.0						
	66.0	1196	2.9	42.41	25.0	44.0	55.0	60.0						
	14.7	5782	0.8	61.05	27.0	47.0	55.0	60.0	PD/PM 62 160M6	265	212			
	18.1	4716	0.9	49.79	26.0	46.0	56.0	60.0						
	22.8	3736	0.9	39.44	25.0	43.0	54.0	60.0						
	30.1	2831	1.7	29.89	24.0	40.0	51.0	60.0						
	34.6	2464	1.9	26.02	24.0	39.0	49.0	60.0						
	39.3	2170	2.2	22.91	29.0	47.0	48.0	60.0						
	48.2	1769	2.6	18.68	29.0	47.0	-	-						
	84.6	1008	2.1	10.64	29.0	47.0	-	-						
	17.4	4835	0.9	80.26	-	-	57.0	60.0	PD/PM 62 132M4	229	212			
	21.4	3943	0.9	65.45	-	-	57.0	60.0						
	22.9	3678	1.2	61.05	27.0	47.0	55.0	60.0						
	28.1	3000	1.3	49.79	26.0	46.0	56.0	60.0						
	35.5	2376	1.3	39.44	25.0	43.0	54.0	60.0						
	46.8	1801	2.5	29.89	24.0	40.0	51.0	60.0						
	48.8	1728	2.6	28.68	-	-	-	-						
	53.8	1568	2.9	26.02	24.0	39.0	49.0	60.0						
	34.9	2345	1.3	80.26	27.0	47.0	57.0	60.0				PD/PM 62 132M2	229	212
	42.8	1912	1.3	65.45	27.0	47.0	57.0	60.0						
	45.9	1784	1.9	61.05	27.0	47.0	55.0	60.0						
	56.2	1455	2.1	49.79	26.0	46.0	56.0	60.0						
	71.0	1152	2.1	39.44	25.0	43.0	54.0	60.0						
	26.9	3164	0.8	33.41	15.0	27.0	34.0	40.0	PD/PM 52 160M6	181	208			
	29.5	2886	1.1	30.47	15.0	28.0	33.0	40.0						
	36.1	2364	1.3	24.96	15.0	27.0	32.0	40.0						
	44.2	1928	1.7	20.36	14.0	26.0	31.0	40.0						
	47.7	1786	1.5	18.86	14.0	25.0	30.0	40.0						
	51.1	1668	1.7	17.61	14.0	25.0	30.0	40.0						
	58.5	1457	1.9	15.38	13.0	24.0	29.0	40.0						
69.2	1231	2.2	13.00	17.0	32.0	27.0	40.0							
83.9	1016	2.6	10.73	17.0	32.0	25.0	40.0							
95.0	897	2.7	9.47	17.0	32.0	24.0	40.0							
103.6	823	3.0	8.69	17.0	32.0	24.0	40.0							
25.0	3370	0.8	55.94	-	-	41.0	40.0	PD/PM 52 132M4				145	208	
27.2	3100	1.0	51.45	15.0	30.0	37.0	40.0							
29.6	2848	0.8	47.27	-	-	39.0	40.0							
33.4	2528	1.3	41.96	15.0	29.0	35.0	40.0							
34.3	2457	1.0	40.79	15.0	28.0	36.0	40.0							
39.5	2136	1.3	35.45	15.0	29.0	34.0	40.0							
41.9	2013	1.1	33.41	15.0	27.0	34.0	40.0							
45.9	1836	1.6	30.47	15.0	28.0	33.0	40.0							
56.1	1504	1.9	24.96	15.0	27.0	32.0	40.0							
68.8	1227	2.5	20.36	14.0	26.0	31.0	40.0							
74.2	1136	2.3	18.86	14.0	25.0	30.0	40.0							
79.5	1061	2.6	17.61	14.0	25.0	30.0	40.0							
91.0	927	2.8	15.38	13.0	24.0	29.0	40.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
9.20	30.5	2683	0.8	91.82	15.0	30.0	40.0	40.0	PD/PM 52 132M2	145	208			
	40.8	2005	1.1	68.60	15.0	30.0	42.0	40.0						
	50.1	1635	1.2	55.94	15.0	30.0	41.0	40.0						
	50.4	1623	1.2	55.55	15.0	30.0	39.0	40.0						
	54.4	1503	1.6	51.45	15.0	30.0	37.0	40.0						
	59.2	1381	1.3	47.27	15.0	29.0	39.0	40.0						
	66.7	1226	2.0	41.96	15.0	29.0	35.0	40.0						
	68.6	1192	1.6	40.79	15.0	28.0	36.0	40.0						
	79.0	1036	2.0	35.45	15.0	29.0	34.0	40.0						
	83.8	976	1.8	33.41	15.0	27.0	34.0	40.0						
91.9	890	2.5	30.47	15.0	28.0	33.0	40.0							
112.2	729	3.0	24.96	15.0	27.0	32.0	40.0							
	34.1	2501	0.8	26.41	8.0	15.0	22.0	30.0	PD/PM 42 160M6	145	204			
	40.2	2120	0.8	22.38	8.0	15.0	21.0	30.0						
	41.9	2033	0.9	21.46	9.0	15.0	21.0	30.0						
	49.5	1722	1.1	18.18	9.0	15.0	20.0	30.0						
	59.2	1439	1.3	15.19	8.0	15.0	20.0	30.0						
	71.0	1200	1.5	12.67	8.0	14.0	19.0	30.0						
	83.1	1026	1.7	10.83	8.0	14.0	18.0	30.0						
	97.5	874	2.0	9.23	8.0	13.0	18.0	29.0						
	108.0	789	1.7	8.33	8.0	13.0	17.0	28.0						
	126.2	675	1.9	7.13	7.0	12.0	16.0	27.0						
	148.3	575	2.2	6.07	9.0	17.0	16.0	26.0						
	165.4	515	2.1	5.44	9.0	17.0	15.0	26.0						
	180.0	474	2.3	5.00	9.0	17.0	15.0	25.0						
	191.9	444	2.4	4.69	9.0	17.0	15.0	25.0						
	36.5	2310	0.9	38.35	7.0	14.0	22.0	30.0	PD/PM 42 132M4	109	204			
	43.3	1947	0.8	32.31	-	-	22.0	30.0						
	43.7	1930	0.9	32.04	8.0	14.0	22.0	30.0						
	52.4	1610	1.0	26.72	8.0	14.0	21.0	30.0						
	53.0	1591	1.1	26.41	8.0	15.0	22.0	30.0						
	53.3	1581	1.0	26.25	-	-	-	-						
	62.6	1348	1.3	22.38	8.0	15.0	21.0	30.0						
	65.2	1293	1.3	21.46	9.0	15.0	21.0	30.0						
	77.0	1095	1.6	18.18	9.0	15.0	20.0	30.0						
	92.2	915	2.0	15.19	8.0	15.0	20.0	30.0						
	110.5	763	2.3	12.67	8.0	14.0	19.0	30.0						
	129.3	652	2.6	10.83	8.0	14.0	18.0	30.0						
	151.7	556	2.9	9.23	8.0	13.0	18.0	29.0						
	168.1	502	2.5	8.33	8.0	13.0	17.0	28.0						
	196.4	430	2.8	7.13	7.0	12.0	16.0	27.0						
	45.4	1801	0.8	61.64	7.0	14.0	26.0	30.0	PD/PM 42 132M2	109	204			
	53.6	1526	0.9	52.23	7.0	14.0	27.0	30.0						
	62.1	1317	0.9	45.06	7.0	14.0	26.0	30.0						
	64.2	1275	1.0	43.64	7.0	14.0	26.0	30.0						
	68.6	1192	1.0	40.79	7.0	14.0	24.0	30.0						
	73.0	1121	1.4	38.35	7.0	14.0	22.0	30.0						
	76.0	1076	1.0	36.84	8.0	14.0	25.0	30.0						
	76.9	1063	1.0	36.39	8.0	14.0	25.0	30.0						
	86.7	944	1.3	32.31	8.0	14.0	25.0	30.0						
	87.4	936	1.4	32.04	8.0	14.0	22.0	30.0						
	104.8	781	1.6	26.72	8.0	14.0	21.0	30.0						
	106.0	772	1.8	26.41	8.0	15.0	22.0	30.0						
	106.7	767	1.6	26.25	8.0	15.0	22.0	30.0						
	125.1	654	2.0	22.38	8.0	15.0	21.0	30.0						
	130.5	627	2.0	21.46	9.0	15.0	21.0	30.0						
154.0	531	2.6	18.18	9.0	15.0	20.0	30.0							
	84.1	1003	0.8	16.65	4.0	7.0	13.0	18.0	PD/PM 32 132M4	94	200			
	99.4	849	1.0	14.09	4.0	7.0	12.0	18.0						
	123.3	684	1.2	11.35	4.0	7.0	12.0	17.0						
	143.3	589	1.4	9.77	4.0	7.0	12.0	17.0						
	168.9	499	1.4	8.29	4.0	7.0	11.0	16.0						
	209.6	402	1.5	6.68	4.0	7.0	11.0	16.0						
	247.3	341	1.7	5.66	4.0	7.0	10.0	16.0						
	312.5	270	1.7	4.48	4.0	7.0	10.0	15.0						



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
9.20	124.9	655	0.9	22.42	4.0	7.0	15.0	20.0	PD/PM 32 132M2	94	200
	139.0	589	1.1	20.15	4.0	7.0	14.0	19.0			
	168.2	487	1.3	16.65	4.0	7.0	13.0	18.0			
	198.7	412	1.6	14.09	4.0	7.0	12.0	18.0			
	246.7	332	1.9	11.35	4.0	7.0	12.0	17.0			
	286.6	285	2.2	9.77	4.0	7.0	12.0	17.0			
	337.8	242	2.1	8.29	4.0	7.0	11.0	16.0			
	419.2	195	2.4	6.68	4.0	7.0	11.0	16.0			
	494.7	165	2.6	5.66	4.0	7.0	10.0	16.0			
625.0	131	2.7	4.48	4.0	7.0	10.0	15.0				
11.0	1.2	79165	0.8	731.47	-	-	77.0	170.0	PD/PM 113/52 160L6B / 160L6D	2245	242
	1.5	65312	1.0	603.47	-	-	105.0	170.0			
	1.9	51933	1.2	479.85	-	-	124.0	170.0			
	2.5	39309	1.3	363.21	-	-	137.0	170.0			
	2.9	33792	1.6	312.23	-	-	141.0	170.0			
	1.2	77985	0.8	1154.79	-	-	18.0	170.0	PD/PM 113/52 160M4C	2245	242
	1.5	64976	0.9	962.15	-	-	21.0	170.0			
	1.9	49398	1.2	731.47	-	-	77.0	170.0			
	2.3	40754	1.5	603.47	-	-	105.0	170.0			
	2.9	32405	1.9	479.85	-	-	124.0	170.0			
	3.9	24528	2.0	363.21	-	-	137.0	170.0			
	4.5	21086	2.4	312.23	-	-	141.0	170.0			
	1.5	57438	0.8	1829.47	-	-	-	-	PD/PM 113/52 160M2B / 160M2C	2245	242
	2.0	43413	1.1	1382.74	-	-	36.0	170.0			
	2.4	36256	1.3	1154.79	-	-	18.0	170.0			
	2.9	30208	1.5	962.15	-	-	21.0	170.0			
	3.8	22965	2.0	731.47	-	-	77.0	170.0			
	4.6	18947	2.4	603.47	-	-	105.0	170.0			
	5.8	15065	3.0	479.85	-	-	124.0	170.0			
	4.0	25072	2.9	224.76	-	-	146.0	170.0	PD/PM 113 160L6B / 160L6D	2171	233
	2.5	39630	0.9	366.18	-	-	120.0	150.0	PD/PM 103/52 160L6B / 160L6D	1400	242
	3.0	32695	1.1	302.10	-	-	-	-			
	2.4	39040	0.9	578.09	-	-	87.0	150.0	PD/PM 103/52 160M4C	1400	242
	2.9	32208	1.1	476.93	-	-	107.0	150.0			
	3.8	24729	1.4	366.18	-	-	120.0	150.0			
	4.6	20401	1.7	302.10	-	-	101.0	150.0			
	3.1	28754	0.9	915.84	-	-	77.0	150.0	PD/PM 103/52 160M2B / 160M2C	1400	242
	4.0	21732	1.2	692.20	-	-	87.0	150.0			
	4.8	18150	1.5	578.09	-	-	87.0	150.0			
	5.9	14974	1.8	476.93	-	-	107.0	150.0			
	7.6	11497	2.3	366.18	-	-	120.0	150.0			
	9.3	9485	2.8	302.10	-	-	101.0	150.0			
	2.5	39867	0.9	357.40	-	-	121.0	150.0	PD/PM 103 160L6B / 160L6D	1326	229
	2.7	37105	1.0	332.64	-	-	124.0	150.0			
	3.2	31551	1.1	282.85	-	-	128.0	150.0			
	3.4	29365	1.2	263.25	-	-	129.0	150.0			
5.0	20155	1.8	180.68	-	-	134.0	150.0				
5.4	18758	2.0	168.16	-	-	131.0	150.0				
6.4	15662	2.4	140.41	-	-	133.0	150.0				
3.9	25209	1.4	357.40	-	-	121.0	150.0	PD/PM 103 160M4C	1326	229	
4.2	23462	1.6	332.64	-	-	124.0	150.0				
4.9	19950	1.7	282.85	-	-	128.0	150.0				
5.3	18568	1.8	263.25	-	-	129.0	150.0				
7.7	12744	2.7	180.68	-	-	134.0	150.0				
8.3	11861	3.0	168.16	-	-	128.0	150.0				
7.8	12050	2.2	357.40	-	-	121.0	150.0	PD/PM 103 160M2B / 160M2C	1326	229	
8.4	11215	2.5	332.64	-	-	124.0	150.0				
9.9	9536	2.6	282.85	-	-	128.0	150.0				
10.6	8875	2.8	263.25	-	-	129.0	150.0				
3.1	31839	0.8	294.19	73.0	102.0	-	-	PD/PM 93/52 160L6B / 160L6D	836	242	
3.9	25249	1.0	233.30	27.0	57.0	98.0	123.0				
4.5	21699	1.2	200.50	30.0	61.0	98.0	123.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm		
11.0	3.4	27721	0.9	410.49	43.0	91.0	120.0	130.0	PD/PM 93/52 160M4C	836	242		
	4.8	19867	1.2	294.19	73.0	102.0	120.0	130.0					
	6.0	15755	1.5	233.30	27.0	57.0	98.0	123.0					
	7.0	13540	1.8	200.50	30.0	61.0	98.0	123.0					
	6.8	12888	1.4	410.49	43.0	91.0	120.0	130.0	PD/PM 93/52 160M2B / 160M2C	836	242		
	9.5	9236	2.0	294.19	73.0	102.0	-	-					
	12.0	7325	2.5	233.30	27.0	57.0	98.0	123.0					
	14.0	6295	2.9	200.50	30.0	61.0	98.0	123.0					
	3.1	30448	0.8	450.86	51.0	102.0	120.0	130.0	PD/PM 93/42 160M4C	807	242		
	3.9	22459	0.8	715.36	51.0	102.0	-	-	PD/PM 93/42 160M2B / 160M2C	807	242		
	4.5	19429	0.9	618.83	51.0	102.0	120.0	130.0					
	6.2	14155	1.3	450.86	51.0	102.0	120.0	130.0					
	3.1	32454	0.8	290.94	62.0	102.0	120.0	130.0	PD/PM 93 160L6B / 160L6D	762	225		
	4.4	22829	1.0	204.66	64.0	102.0	120.0	130.0					
	5.1	19524	1.4	175.03	63.0	102.0	120.0	130.0					
	6.2	16130	1.6	144.60	61.0	102.0	120.0	130.0					
	6.6	15133	1.8	135.66	61.0	102.0	120.0	130.0					
	7.8	12885	2.1	115.51	70.0	102.0	115.0	130.0					
	8.9	11233	2.4	100.70	70.0	102.0	113.0	130.0					
	10.8	9280	2.7	83.19	70.0	102.0	106.0	130.0					
	4.0	24839	1.0	352.16	62.0	102.0	120.0	130.0	PD/PM 93 160M4C	762	225		
	4.8	20521	1.2	290.94	62.0	102.0	120.0	130.0					
	6.8	14435	1.5	204.66	64.0	102.0	120.0	130.0					
	8.0	12345	2.1	175.03	63.0	102.0	120.0	130.0					
	9.7	10199	2.4	144.60	61.0	102.0	120.0	130.0					
	10.3	9569	2.7	135.66	61.0	102.0	120.0	130.0					
	8.0	11873	1.6	352.16	62.0	102.0	120.0	130.0	PD/PM 93 160M2B / 160M2C	762	225		
	9.6	9809	1.9	290.94	62.0	102.0	120.0	130.0					
	13.7	6900	2.4	204.66	64.0	102.0	120.0	130.0					
	6.3	15108	0.8	223.71	-	-	-	-	PD/PM 83/42 160M4C	505	242		
	7.5	12597	1.0	186.54	-	-	-	-					
	8.1	10889	0.8	346.82	78.0	73.0	-	-	PD/PM 83/42 160M2B / 160M2C	505	242		
	9.5	9277	1.0	295.48	78.0	73.0	-	-					
	12.5	7024	1.3	223.71	78.0	73.0	-	-					
	15.0	5857	1.6	186.54	78.0	73.0	-	-					
	5.9	17041	0.8	152.77	38.0	72.0	98.0	105.0					
	6.3	16053	0.8	143.91	39.0	73.0	98.0	105.0	PD/PM 83 160L6B / 160L6D	460	221		
	7.2	13974	0.9	125.27	43.0	73.0	98.0	105.0					
	7.6	13216	1.0	118.48	39.0	71.0	95.0	105.0					
	8.7	11504	1.1	103.13	39.0	70.0	92.0	105.0					
9.9	10127	1.3	90.79	39.0	68.0	90.0	105.0						
11.9	8444	1.5	75.70	38.0	66.0	87.0	105.0						
13.8	7268	1.6	65.16	38.0	64.0	84.0	105.0						
15.7	6394	2.0	57.32	37.0	62.0	82.0	105.0						
18.8	5331	2.4	47.79	42.0	73.0	76.0	105.0						
20.7	4855	2.3	43.52	42.0	73.0	75.0	105.0						
5.8	17068	0.8	241.98	39.0	73.0	100.0	105.0	PD/PM 83 160M4C				460	221
7.5	13088	1.0	185.56	37.0	73.0	100.0	105.0						
9.2	10775	1.2	152.77	38.0	72.0	98.0	105.0						
9.7	10150	1.2	143.91	39.0	73.0	98.0	105.0						
11.2	8836	1.4	125.27	43.0	73.0	98.0	105.0						
11.8	8357	1.5	118.48	39.0	71.0	95.0	105.0						
13.6	7274	1.7	103.13	39.0	70.0	92.0	105.0						
15.4	6404	1.9	90.79	39.0	68.0	90.0	105.0						
18.5	5339	2.3	75.70	38.0	66.0	87.0	105.0						
21.5	4596	2.5	65.16	38.0	64.0	84.0	105.0						
24.4	4043	3.0	57.32	37.0	62.0	82.0	105.0						
9.5	9909	1.0	293.92	39.0	73.0	100.0	105.0		PD/PM 83 160M2B / 160M2C	460	221		
11.6	8158	1.2	241.98	39.0	73.0	100.0	105.0						
15.1	6256	1.5	185.56	37.0	73.0	100.0	105.0						
18.3	5151	1.9	152.77	38.0	72.0	98.0	105.0						
19.5	4852	2.0	143.91	39.0	73.0	98.0	105.0						
22.4	4223	2.2	125.27	43.0	73.0	98.0	105.0						
23.6	3995	2.4	118.48	39.0	71.0	95.0	105.0						
27.2	3477	2.6	103.13	39.0	70.0	92.0	105.0						
30.8	3061	3.0	90.79	39.0	68.0	90.0	105.0						



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
11.0	12.5	8173	1.0	72.17	38.0	66.0	-	-	PD/PM 82 160L6B / 160L6D	456	220
	15.1	6728	1.0	59.41	37.0	62.0	-	-			
	18.9	5380	2.1	47.51	41.0	70.0	-	-			
	23.0	4430	2.2	39.12	41.0	70.0	-	-			
	19.4	5199	1.5	72.17	38.0	66.0	-	-	PD/PM 82 160M4C	456	220
	23.6	4280	1.5	59.41	37.0	62.0	-	-			
	38.8	2521	2.4	72.17	38.0	66.0	-	-	PD/PM 82 160M2B / 160M2C	456	220
	47.1	2076	2.4	59.41	37.0	62.0	-	-			
	9.7	10380	0.8	93.05	28.0	53.0	75.0	80.0	PD/PM 73 160L6B / 160L6D	335	217
	11.4	8784	0.9	78.75	28.0	51.0	73.0	80.0			
	13.2	7601	1.0	68.14	28.0	51.0	72.0	80.0			
	15.1	6639	1.1	59.52	28.0	50.0	69.0	80.0			
	16.8	5959	1.2	53.42	28.0	49.0	69.0	80.0			
	19.3	5205	1.4	46.66	28.0	48.0	67.0	80.0			
	24.4	4122	1.7	36.95	27.0	45.0	63.0	80.0			
	29.5	3401	2.0	30.49	31.0	58.0	60.0	80.0			
	33.4	3003	2.3	26.92	31.0	58.0	58.0	80.0			
	38.3	2618	2.7	23.47	31.0	58.0	57.0	80.0			
	11.4	8684	0.9	123.12	26.0	53.0	72.0	80.0			
	13.1	7514	1.0	106.53	28.0	53.0	75.0	80.0			
	15.0	6563	1.1	93.05	28.0	53.0	75.0	80.0			
	17.8	5555	1.3	78.75	28.0	51.0	73.0	80.0			
	20.5	4806	1.5	68.14	28.0	51.0	72.0	80.0			
	23.5	4198	1.7	59.52	28.0	50.0	69.0	80.0			
	26.2	3768	1.9	53.42	28.0	49.0	69.0	80.0			
	30.0	3291	2.2	46.66	28.0	48.0	67.0	80.0			
	37.9	2606	2.5	36.95	27.0	45.0	63.0	80.0			
	22.7	4151	1.4	123.12	26.0	53.0	72.0	80.0	PD/PM 73 160M2B / 160M2C	335	217
	26.3	3592	1.6	106.53	28.0	53.0	75.0	80.0			
	30.1	3137	1.8	93.05	28.0	53.0	75.0	80.0			
	35.6	2655	2.1	78.75	28.0	51.0	73.0	80.0			
	41.1	2297	2.4	68.14	28.0	51.0	72.0	80.0			
	47.0	2007	2.7	59.52	28.0	50.0	69.0	80.0			
	52.4	1801	3.0	53.42	28.0	49.0	69.0	80.0			
	12.9	7905	0.8	69.80	29.0	52.0	72.0	80.0	PD/PM 72 160L6B / 160L6C	328	216
	15.8	6444	0.9	56.90	28.0	50.0	69.0	80.0			
	19.7	5171	1.2	45.66	28.0	48.0	66.0	80.0			
	20.0	5103	0.9	45.06	29.0	50.0	67.0	80.0			
	24.2	4215	1.6	37.22	27.0	46.0	63.0	80.0			
	25.9	3929	1.6	34.69	27.0	45.0	62.0	80.0			
	33.5	3045	2.0	26.89	31.0	56.0	57.0	80.0			
	39.3	2593	2.3	22.90	31.0	56.0	54.0	78.0			
	45.1	2260	2.7	19.96	31.0	56.0	52.0	78.0			
	20.1	5028	1.2	69.80	29.0	52.0	72.0	80.0	PD/PM 72 160M4C	328	216
	24.6	4099	1.4	56.90	28.0	50.0	69.0	80.0			
	30.7	3289	1.8	45.66	28.0	48.0	66.0	80.0			
	31.1	3246	1.4	45.06	29.0	50.0	67.0	80.0			
	37.6	2681	2.4	37.22	27.0	46.0	63.0	80.0			
	40.4	2499	2.3	34.69	27.0	45.0	62.0	80.0			
	52.1	1937	3.0	26.89	-	-	57.0	80.0			
	40.1	2439	1.8	69.80	29.0	52.0	72.0	80.0	PD/PM 72 160M2B / 160M2C	328	216
	49.2	1988	2.1	56.90	28.0	50.0	69.0	80.0			
	61.3	1595	2.8	45.66	28.0	48.0	66.0	80.0			
	62.1	1574	2.1	45.06	29.0	50.0	67.0	80.0			
	12.0	8400	0.8	75.30	23.0	44.0	50.0	60.0	PD/PM 63 160L6B / 160L6D	262	213
	15.1	6654	0.9	59.65	24.0	43.0	54.0	60.0			
	17.6	5690	0.9	51.01	24.0	42.0	55.0	60.0			
	21.2	4731	1.0	42.41	24.0	41.0	53.0	60.0			
	24.8	4046	1.2	36.27	23.0	40.0	51.0	60.0			
	29.1	3447	1.4	30.90	23.0	38.0	50.0	60.0			
	31.4	3197	1.5	28.66	23.0	38.0	49.0	60.0			
	36.9	2724	1.8	24.42	22.0	36.0	47.0	60.0			



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
11.0	15.1	6537	0.9	92.68	21.0	43.0	46.0	60.0	PD/PM 63 160M4C	262	213			
	18.6	5311	1.1	75.30	23.0	44.0	50.0	60.0						
	19.1	5179	1.1	73.42	23.0	43.0	51.0	60.0						
	23.5	4207	1.3	59.65	24.0	43.0	54.0	60.0						
	27.4	3598	1.4	51.01	24.0	42.0	55.0	60.0						
	33.0	2991	1.5	42.41	24.0	41.0	53.0	60.0						
	38.6	2558	1.8	36.27	23.0	40.0	51.0	60.0						
	45.3	2179	2.1	30.90	23.0	38.0	50.0	60.0						
	48.8	2021	2.3	28.66	23.0	38.0	49.0	60.0						
	57.3	1722	2.7	24.42	22.0	36.0	47.0	60.0						
	24.4	3870	1.2	114.79	21.0	43.0	45.0	60.0				PD/PM 63 160M2B / 160M2C	262	213
	30.2	3125	1.5	92.68	21.0	43.0	46.0	60.0						
	37.2	2539	1.8	75.30	23.0	44.0	50.0	60.0						
	38.1	2475	1.7	73.42	23.0	43.0	51.0	60.0						
	46.9	2011	2.1	59.65	24.0	43.0	54.0	60.0						
	54.9	1720	2.2	51.01	24.0	42.0	55.0	60.0						
	66.0	1430	2.4	42.41	24.0	41.0	53.0	60.0						
	77.2	1223	2.8	36.27	23.0	40.0	51.0	60.0						
	18.1	5639	0.8	49.79	24.0	42.0	55.0	60.0	PD/PM 62 160L6B / 160L6D	265	212			
	22.8	4466	0.8	39.44	23.0	40.0	52.0	60.0						
	30.1	3385	1.4	29.89	23.0	38.0	50.0	60.0						
	34.6	2947	1.6	26.02	23.0	37.0	48.0	60.0						
	39.3	2594	1.8	22.91	22.0	36.0	47.0	60.0						
	48.2	2115	2.2	18.68	27.0	47.0	43.0	60.0						
	60.8	1676	2.8	14.80	27.0	47.0	41.0	59.0						
	84.6	1205	1.8	10.64	27.0	47.0	-	-						
	96.1	1061	2.7	9.37	27.0	47.0	-	-						
	22.9	4398	1.0	61.05	24.0	44.0	54.0	60.0				PD/PM 62 160M4C	265	212
	28.1	3587	1.1	49.79	24.0	42.0	55.0	60.0						
	35.5	2841	1.1	39.44	23.0	40.0	52.0	60.0						
	46.8	2153	2.1	29.89	23.0	38.0	50.0	60.0						
	48.8	2066	2.1	28.68	-	-	-	-						
	53.8	1874	2.4	26.02	23.0	37.0	48.0	60.0						
	61.1	1650	2.7	22.91	22.0	36.0	47.0	60.0						
	131.6	766	2.6	10.64	-	-	-	-						
	45.9	2133	1.6	61.05	24.0	44.0	54.0	60.0	PD/PM 62 160M2B / 160M2C	265	212			
	56.2	1740	1.8	49.79	24.0	42.0	55.0	60.0						
	71.0	1378	1.8	39.44	23.0	40.0	52.0	60.0						
	29.5	3451	0.9	30.47	14.0	26.0	33.0	40.0	PD/PM 52 160L6B / 160L6D	181	208			
	36.1	2827	1.1	24.96	14.0	26.0	31.0	40.0						
	44.2	2306	1.4	20.36	13.0	24.0	30.0	40.0						
	47.7	2136	1.3	18.86	13.0	24.0	30.0	40.0						
	51.1	1994	1.4	17.61	13.0	24.0	29.0	40.0						
	58.5	1742	1.6	15.38	13.0	23.0	28.0	40.0						
	69.2	1472	1.9	13.00	12.0	22.0	27.0	40.0						
	83.9	1215	2.2	10.73	15.0	29.0	25.0	40.0						
	95.0	1072	2.3	9.47	15.0	29.0	24.0	40.0						
	103.6	984	2.5	8.69	15.0	29.0	24.0	40.0						
125.5	812	2.8	7.17	15.0	29.0	23.0	38.0							
157.9	646	2.9	5.70	15.0	29.0	22.0	36.0							
168.2	606	3.0	5.35	15.0	29.0	21.0	35.0							
34.3	2938	0.9	40.79	13.0	25.0	34.0	40.0	PD/PM 52 160M4C				181	208	
41.9	2407	1.0	33.41	14.0	25.0	33.0	40.0							
45.9	2195	1.3	30.47	14.0	26.0	33.0	40.0							
56.1	1798	1.6	24.96	14.0	26.0	31.0	40.0							
68.8	1467	2.1	20.36	13.0	24.0	30.0	40.0							
74.2	1359	1.9	18.86	13.0	24.0	30.0	40.0							
79.5	1269	2.2	17.61	13.0	24.0	29.0	40.0							
91.0	1108	2.3	15.38	13.0	23.0	28.0	40.0							
107.7	936	2.8	13.00	12.0	22.0	27.0	40.0							
68.6	1425	1.3	40.79	13.0	25.0	34.0	40.0		PD/PM 52 160M2B / 160M2C	181	208			
83.8	1167	1.5	33.41	14.0	25.0	33.0	40.0							
91.9	1065	2.1	30.47	14.0	26.0	33.0	40.0							
112.2	872	2.5	24.96	14.0	26.0	31.0	40.0							
148.5	659	3.0	18.86	13.0	24.0	30.0	40.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
11.0	49.5	2059	0.9	18.18	8.0	13.0	20.0	30.0	PD/PM 42 160L6B / 160L6D	145	204			
	59.2	1720	1.1	15.19	8.0	13.0	19.0	30.0						
	71.0	1435	1.3	12.67	8.0	13.0	18.0	30.0						
	83.1	1226	1.5	10.83	8.0	13.0	18.0	29.0						
	97.5	1045	1.6	9.23	7.0	13.0	17.0	28.0						
	108.0	943	1.4	8.33	7.0	12.0	17.0	27.0						
	126.2	807	1.6	7.13	7.0	12.0	16.0	27.0						
	148.3	687	1.8	6.07	7.0	11.0	16.0	26.0						
	165.4	616	1.8	5.44	7.0	11.0	15.0	25.0						
	180.0	566	1.9	5.00	7.0	11.0	15.0	25.0						
	191.9	531	2.0	4.69	8.0	15.0	15.0	24.0						
	53.0	1902	0.9	26.41	7.0	13.0	21.0	30.0				PD/PM 42 160M4C	145	204
	53.3	1891	0.9	26.25	7.0	13.0	21.0	30.0						
	62.6	1612	1.1	22.38	7.0	13.0	20.0	30.0						
	65.2	1546	1.1	21.46	8.0	13.0	20.0	30.0						
	77.0	1310	1.4	18.18	8.0	13.0	20.0	30.0						
	92.2	1094	1.6	15.19	8.0	13.0	19.0	30.0						
	110.5	913	1.9	12.67	8.0	13.0	18.0	30.0						
	129.3	780	2.2	10.83	8.0	13.0	18.0	29.0						
	151.7	665	2.5	9.23	7.0	13.0	17.0	28.0						
	168.1	600	2.1	8.33	7.0	12.0	17.0	27.0						
	196.4	514	2.3	7.13	7.0	12.0	16.0	27.0						
	230.6	437	2.7	6.07	7.0	11.0	16.0	26.0						
	257.4	392	2.6	5.44	7.0	11.0	15.0	25.0						
	280.0	360	2.9	5.00	7.0	11.0	15.0	25.0						
	86.7	1129	1.1	32.31	7.0	13.0	-	-	PD/PM 42 160M2B / 160M2C	145	204			
	106.0	923	1.5	26.41	7.0	13.0	21.0	30.0						
	106.7	917	1.3	26.25	7.0	13.0	21.0	30.0						
	125.1	782	1.7	22.38	7.0	13.0	20.0	30.0						
	130.5	750	1.7	21.46	8.0	13.0	20.0	30.0						
154.0	635	2.2	18.18	8.0	13.0	20.0	30.0							
184.3	531	2.6	15.19	8.0	13.0	19.0	30.0							
221.0	443	3.0	12.67	8.0	13.0	18.0	30.0							
-	-	-	-	-	-	-	-							
15.0	1.9	70817	0.9	479.85	-	-	94.0	170.0	PD/PM 113/52 180L6A / 180L6B	2290	242			
	2.5	53603	1.0	363.21	-	-	122.0	170.0						
	2.9	46080	1.1	312.23	-	-	131.0	170.0						
	1.9	67361	0.9	731.47	-	-	5.0	170.0	PD/PM 113/52 160L4B	2245	242			
	2.3	55573	1.1	603.47	-	-	31.0	170.0						
	2.9	44189	1.4	479.85	-	-	94.0	170.0						
	3.9	33448	1.5	363.21	-	-	122.0	170.0						
	4.5	28753	1.7	312.23	-	-	131.0	170.0						
	2.0	59199	0.8	1382.74	-	-	-	-	PD/PM 113/52 160M2C / 160M2D	2245	242			
	2.4	49440	0.9	1154.79	-	-	18.0	170.0						
	2.9	41192	1.1	962.15	-	-	42.0	170.0						
	3.8	31316	1.5	731.47	-	-	5.0	170.0						
	4.6	25836	1.8	603.47	-	-	31.0	170.0						
	5.8	20544	2.2	479.85	-	-	94.0	170.0						
	7.7	15550	2.4	363.21	-	-	122.0	170.0						
	9.0	13367	2.8	312.23	-	-	131.0	170.0						
	4.0	34188	2.1	224.76	-	-	141.0	169.0	PD/PM 113 180L6A / 180L6B	2220	233			
	5.2	26157	2.8	171.96	-	-	142.0	155.0						
	3.0	44585	0.8	302.10	-	-	101.0	150.0	PD/PM 103/52 180L6A / 180L6B	1441	242			
	2.9	43920	0.8	476.93	-	-	72.0	150.0	PD/PM 103/52 160L4B	1400	242			
	3.8	33721	1.0	366.18	-	-	103.0	150.0						
	4.6	27820	1.3	302.10	-	-	101.0	150.0						
	4.0	29635	0.9	692.20	-	-	87.0	150.0	PD/PM 103/52 160M2C / 160M2D	1400	242			
	4.8	24750	1.1	578.09	-	-	87.0	150.0						
5.9	20419	1.3	476.93	-	-	72.0	150.0							
7.6	15677	1.7	366.18	-	-	103.0	150.0							
9.3	12934	2.1	302.10	-	-	101.0	150.0							
-	-	-	-	-	-	-	-							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
15.0	2.7	50598	0.8	332.64	-	-	110.0	150.0	PD/PM 103 180L6A / 180L6B	1367	229
	3.2	43025	0.8	282.85	-	-	118.0	150.0			
	3.4	40043	0.9	263.25	-	-	121.0	150.0			
	5.0	27483	1.3	180.68	-	-	130.0	150.0			
	5.4	25579	1.4	168.16	-	-	131.0	150.0			
	6.4	21358	1.7	140.41	-	-	133.0	150.0			
	8.6	15928	2.3	104.71	-	-	132.0	150.0			
	9.9	13895	2.7	91.35	-	-	134.0	141.0			
	3.9	34375	1.0	357.40	-	-	105.0	150.0	PD/PM 103 160L4B	1326	229
	4.2	31994	1.2	332.64	-	-	110.0	150.0			
	4.9	27205	1.2	282.85	-	-	118.0	150.0			
	5.3	25320	1.3	263.25	-	-	121.0	150.0			
	7.7	17378	2.0	180.68	-	-	130.0	150.0			
	8.3	16174	2.2	168.16	-	-	131.0	150.0			
	10.0	13505	2.6	140.41	-	-	133.0	150.0			
	7.8	16431	1.6	357.40	-	-	105.0	150.0	PD/PM 103 160M2C / 160M2D	1326	229
	8.4	15293	1.8	332.64	-	-	110.0	150.0			
	9.9	13004	1.9	282.85	-	-	118.0	150.0			
	10.6	12103	2.1	263.25	-	-	121.0	150.0			
	4.5	29590	0.9	200.50	30.0	61.0	98.0	123.0	PD/PM 93/52 180L6A / 180L6B	887	242
	4.8	27092	0.9	294.19	73.0	102.0	120.0	130.0	PD/PM 93/52 160L4B	836	242
	6.0	21484	1.1	233.30	27.0	57.0	98.0	123.0			
	7.0	18464	1.3	200.50	30.0	61.0	98.0	123.0			
	6.8	17574	1.0	410.49	73.0	102.0	120.0	130.0	PD/PM 93/52 160M2C / 160M2D	836	242
	9.5	12595	1.4	294.19	73.0	102.0	-	-			
	12.0	9988	1.8	233.30	27.0	57.0	98.0	123.0			
	14.0	8584	2.1	200.50	30.0	61.0	98.0	123.0			
	6.2	19303	0.9	450.86	51.0	102.0	120.0	130.0	PD/PM 93/42 160M2C / 160M2D	807	242
	5.1	26624	1.0	175.03	55.0	102.0	120.0	130.0	PD/PM 93 180L6A / 180L6B	803	225
	6.2	21995	1.1	144.60	54.0	100.0	117.0	130.0			
	6.6	20635	1.3	135.66	55.0	100.0	116.0	130.0			
	7.8	17570	1.5	115.51	54.0	97.0	112.0	130.0			
	8.9	15318	1.7	100.70	54.0	95.0	110.0	130.0			
	10.8	12654	2.0	83.19	52.0	89.0	103.0	130.0			
	12.5	10978	2.3	72.17	62.0	87.0	101.0	130.0			
	13.8	9907	2.6	65.13	62.0	84.0	99.0	130.0			
	16.2	8436	3.0	55.46	62.0	76.0	93.0	122.0			
	4.8	27983	0.9	290.94	47.0	101.0	120.0	130.0			
	6.8	19685	1.1	204.66	54.0	102.0	120.0	130.0			
	8.0	16835	1.5	175.03	55.0	102.0	120.0	130.0			
	9.7	13908	1.7	144.60	54.0	100.0	117.0	130.0			
	10.3	13048	1.9	135.66	55.0	100.0	116.0	130.0			
	12.1	11110	2.3	115.51	54.0	97.0	112.0	130.0			
	13.9	9686	2.6	100.70	54.0	95.0	110.0	130.0			
	16.8	8001	3.0	83.19	52.0	89.0	103.0	130.0			
	8.0	16190	1.2	352.16	47.0	101.0	120.0	130.0	PD/PM 93 160M2C / 160M2D	762	225
	9.6	13376	1.4	290.94	47.0	101.0	120.0	130.0			
13.7	9409	1.8	204.66	54.0	102.0	120.0	130.0				
16.0	8047	2.4	175.03	55.0	102.0	120.0	130.0				
19.4	6648	2.7	144.60	54.0	100.0	117.0	130.0				
12.5	9578	1.0	223.71	78.0	73.0	-	-	PD/PM 83/42 160M2C / 160M2D	505	242	
15.0	7986	1.2	186.54	78.0	73.0	-	-				
8.7	15687	0.8	103.13	32.0	58.0	86.0	105.0	PD/PM 83 180L6A / 180L6B	501	221	
9.9	13810	0.9	90.79	33.0	58.0	85.0	105.0				
11.9	11515	1.1	75.70	33.0	58.0	83.0	105.0				
13.8	9912	1.2	65.16	33.0	57.0	81.0	105.0				
15.7	8719	1.5	57.32	33.0	56.0	79.0	105.0				
18.8	7269	1.7	47.79	33.0	54.0	76.0	105.0				
20.7	6620	1.7	43.52	33.0	53.0	75.0	105.0				
25.1	5450	2.3	35.83	38.0	72.0	71.0	102.0				
29.2	4691	2.7	30.84	38.0	72.0	69.0	99.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
15.0	9.2	14694	0.9	152.77	27.0	56.0	89.0	105.0	PD/PM 83 160L4B	460	221			
	9.7	13842	0.9	143.91	29.0	57.0	90.0	105.0						
	11.2	12049	1.0	125.27	43.0	73.0	98.0	105.0						
	11.8	11396	1.1	118.48	30.0	58.0	88.0	105.0						
	13.6	9919	1.2	103.13	32.0	58.0	86.0	105.0						
	15.4	8732	1.4	90.79	33.0	58.0	85.0	105.0						
	18.5	7281	1.7	75.70	33.0	58.0	83.0	105.0						
	21.5	6267	1.8	65.16	33.0	57.0	81.0	105.0						
	24.4	5513	2.2	57.32	33.0	56.0	79.0	105.0						
	29.3	4597	2.6	47.79	33.0	54.0	76.0	105.0						
32.2	4186	2.5	43.52	33.0	53.0	75.0	105.0							
	11.6	11125	0.9	241.98	27.0	56.0	100.0	105.0	PD/PM 83 160M2C / 160M2D	460	221			
	15.1	8531	1.1	185.56	27.0	56.0	100.0	105.0						
	18.3	7024	1.4	152.77	27.0	56.0	89.0	105.0						
	19.5	6616	1.4	143.91	29.0	57.0	90.0	105.0						
	22.4	5759	1.6	125.27	43.0	73.0	98.0	105.0						
	23.6	5447	1.7	118.48	30.0	58.0	88.0	105.0						
	27.2	4741	1.9	103.13	32.0	58.0	86.0	105.0						
	30.8	4174	2.2	90.79	33.0	58.0	85.0	105.0						
	37.0	3480	2.6	75.70	33.0	58.0	83.0	105.0						
	43.0	2996	2.9	65.16	33.0	57.0	81.0	105.0						
	18.9	7337	1.5	47.51	33.0	54.0	-	-	PD/PM 82 180L6A / 180L6B	497	220			
	23.0	6041	1.6	39.12	32.0	52.0	-	-						
	31.7	4378	2.4	28.35	28.0	66.0	66.0	95.0						
	36.7	3785	2.9	24.51	28.0	66.0	-	-						
	19.4	7089	1.1	72.17	34.0	58.0	-	-	PD/PM 82 160L4B	456	220			
	23.6	5836	1.1	59.41	33.0	56.0	-	-						
	29.5	4667	2.3	47.51	33.0	54.0	-	-						
	35.8	3843	2.4	39.12	32.0	52.0	-	-						
	38.8	3438	1.7	72.17	34.0	58.0	-	-	PD/PM 82 160M2C / 160M2D	456	220			
	47.1	2830	1.7	59.41	33.0	56.0	-	-						
	15.1	9054	0.8	59.52	24.0	42.0	66.0	80.0	PD/PM 73 180L6A / 180L6B	376	217			
	16.8	8126	0.9	53.42	24.0	43.0	65.0	80.0						
	19.3	7098	1.0	46.66	24.0	42.0	64.0	80.0						
	24.4	5621	1.2	36.95	24.0	40.0	60.0	80.0						
	29.5	4638	1.5	30.49	24.0	39.0	58.0	80.0						
	33.4	4095	1.7	26.92	23.0	38.0	57.0	80.0						
	38.3	3570	1.9	23.47	21.0	34.0	54.0	78.0						
	15.0	8950	0.8	93.05	21.0	42.0	70.0	80.0						
17.8	7574	1.0	78.75	22.0	42.0	68.0	80.0							
	20.5	6554	1.1	68.14	23.0	42.0	67.0	80.0	PD/PM 73 160L4B	335	217			
	23.5	5725	1.2	59.52	24.0	42.0	66.0	80.0						
	26.2	5138	1.4	53.42	24.0	43.0	65.0	80.0						
	30.0	4488	1.6	46.66	24.0	42.0	64.0	80.0						
	37.9	3554	1.9	36.95	24.0	40.0	60.0	80.0						
	45.9	2933	2.3	30.49	24.0	39.0	58.0	80.0						
	52.0	2589	2.6	26.92	23.0	38.0	57.0	80.0						
	59.7	2257	2.9	23.47	21.0	34.0	54.0	78.0						
	22.7	5660	1.0	123.12	21.0	42.0	72.0	80.0						
	26.3	4898	1.2	106.53	21.0	42.0	75.0	80.0						
	30.1	4278	1.3	93.05	21.0	42.0	70.0	80.0	PD/PM 73 160M2C / 160M2D	335	217			
	35.6	3621	1.6	78.75	22.0	42.0	68.0	80.0						
	41.1	3133	1.7	68.14	23.0	42.0	67.0	80.0						
	47.0	2736	2.0	59.52	24.0	42.0	66.0	80.0						
	52.4	2456	2.2	53.42	24.0	43.0	65.0	80.0						
	60.0	2145	2.5	46.66	24.0	42.0	64.0	80.0						
	75.8	1699	3.0	36.95	24.0	40.0	60.0	80.0						
	19.7	7051	0.9	45.66	25.0	43.0	64.0	80.0				PD/PM 72 180L6A / 180L6B	369	216
	24.2	5748	1.2	37.22	24.0	41.0	61.0	80.0						
	25.9	5357	1.1	34.69	25.0	41.0	60.0	80.0						
33.5	4153	1.5	26.89	24.0	39.0	57.0	80.0							
39.3	3536	1.7	22.90	22.0	35.0	54.0	78.0							
45.1	3082	2.0	19.96	22.0	34.0	52.0	76.0							
55.3	2513	2.7	16.27	29.0	52.0	49.0	71.0							
90.8	1530	2.9	9.91	29.0	52.0	-	-							



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
15.0	20.1	6856	0.8	69.80	24.0	44.0	68.0	80.0	PD/PM 72 160L4B	328	216
	24.6	5589	1.0	56.90	24.0	43.0	66.0	80.0			
	30.7	4485	1.3	45.66	25.0	43.0	64.0	80.0			
	31.1	4426	1.0	45.06	-	-	67.0	80.0			
	37.6	3656	1.8	37.22	24.0	41.0	61.0	80.0			
	40.4	3408	1.7	34.69	25.0	41.0	60.0	80.0			
	52.1	2641	2.2	26.89	24.0	39.0	57.0	80.0			
	61.1	2249	2.6	22.90	22.0	35.0	54.0	78.0			
	70.1	1961	3.0	19.96	22.0	34.0	52.0	76.0			
	40.1	3325	1.3	69.80	24.0	44.0	68.0	80.0			
49.2	2711	1.6	56.90	24.0	43.0	66.0	80.0				
61.3	2175	2.0	45.66	25.0	43.0	64.0	80.0				
62.1	2147	1.6	45.06	24.0	41.0	67.0	80.0				
75.2	1773	2.8	37.22	24.0	41.0	61.0	80.0				
80.7	1653	2.7	34.69	25.0	41.0	60.0	80.0				
29.1	4700	1.0	30.90	20.0	34.0	48.0	60.0	PD/PM 63 180L6A / 180L6B	303	213	
31.4	4360	1.1	28.66	20.0	34.0	47.0	60.0				
36.9	3715	1.3	24.42	20.0	33.0	45.0	60.0				
18.6	7243	0.8	75.30	5.0	33.0	41.0	60.0	PD/PM 63 160L4B	262	213	
19.1	7062	0.8	73.42	14.0	33.0	43.0	60.0				
23.5	5737	1.0	59.65	18.0	34.0	49.0	60.0				
27.4	4906	1.0	51.01	19.0	35.0	51.0	60.0				
33.0	4079	1.1	42.41	20.0	35.0	50.0	60.0				
38.6	3489	1.3	36.27	20.0	35.0	49.0	60.0				
45.3	2972	1.5	30.90	20.0	34.0	48.0	60.0				
48.8	2757	1.7	28.66	20.0	34.0	47.0	60.0				
57.3	2349	2.0	24.42	20.0	33.0	45.0	60.0				
24.4	5277	0.8	114.79	5.0	33.0	45.0	60.0				PD/PM 63 160M2C / 160M2D
30.2	4261	1.1	92.68	5.0	33.0	46.0	60.0				
37.2	3462	1.3	75.30	5.0	33.0	41.0	60.0				
38.1	3375	1.3	73.42	14.0	33.0	43.0	60.0				
46.9	2742	1.5	59.65	18.0	34.0	49.0	60.0				
54.9	2345	1.6	51.01	19.0	35.0	51.0	60.0				
66.0	1950	1.8	42.41	20.0	35.0	50.0	60.0				
77.2	1668	2.1	36.27	20.0	35.0	49.0	60.0				
90.6	1421	2.4	30.90	20.0	34.0	48.0	60.0				
97.7	1318	2.7	28.66	20.0	34.0	47.0	60.0				
30.1	4616	1.0	29.89	21.0	35.0	48.0	60.0	PD/PM 62 180L6A / 180L6B	306	212	
34.6	4018	1.2	26.02	21.0	34.0	46.0	60.0				
39.3	3538	1.3	22.91	20.0	33.0	45.0	60.0				
48.2	2885	1.6	18.68	15.0	23.0	43.0	60.0				
60.8	2286	2.1	14.80	15.0	23.0	41.0	59.0				
72.9	1906	2.4	12.34	15.0	23.0	39.0	56.0				
84.6	1643	1.3	10.64	15.0	23.0	-	-				
84.7	1640	2.8	10.62	15.0	23.0	37.0	53.0				
96.1	1447	2.0	9.37	15.0	23.0	35.0	50.0				
115.2	1206	2.3	7.81	24.0	42.0	34.0	48.0				
133.7	1039	3.0	6.73	24.0	42.0	-	-				
150.3	925	2.7	5.99	24.0	42.0	-	-				
155.7	893	2.7	5.78	24.0	42.0	-	-				
163.9	848	2.8	5.49	24.0	42.0	-	-				
183.7	757	3.0	4.90	24.0	42.0	-	-				
22.9	5997	0.8	61.05	19.0	36.0	49.0	60.0	PD/PM 62 160L4B	265	212	
28.1	4891	0.8	49.79	20.0	35.0	52.0	60.0				
35.5	3874	0.8	39.44	20.0	35.0	49.0	60.0				
46.8	2936	1.5	29.89	21.0	35.0	48.0	60.0				
48.8	2817	1.6	28.68	-	-	-	-				
53.8	2556	1.8	26.02	21.0	34.0	46.0	60.0				
61.1	2250	2.0	22.91	20.0	33.0	45.0	60.0				
131.6	1045	1.9	10.64	-	-	-	-				
149.4	920	3.0	9.37	15.0	23.0	35.0	50.0				
45.9	2909	1.2	61.05	19.0	36.0	49.0	60.0				PD/PM 62 160M2C / 160M2D
56.2	2372	1.3	49.79	20.0	35.0	52.0	60.0				
71.0	1879	1.3	39.44	20.0	35.0	49.0	60.0				
93.7	1424	2.4	29.89	21.0	35.0	48.0	60.0				
107.6	1240	2.8	26.02	21.0	34.0	46.0	60.0				
263.2	507	3.0	10.64	15.0	23.0	37.0	53.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
15.0	36.1	3855	0.8	24.96	12.0	22.0	30.0	40.0	PD/PM 52 180L6A / 180L6B	222	208			
	44.2	3144	1.0	20.36	12.0	21.0	28.0	40.0						
	47.7	2913	0.9	18.86	12.0	21.0	28.0	40.0						
	51.1	2719	1.1	17.61	12.0	21.0	28.0	40.0						
	58.5	2375	1.1	15.38	12.0	21.0	27.0	40.0						
	69.2	2008	1.4	13.00	11.0	20.0	26.0	40.0						
	83.9	1657	1.6	10.73	11.0	19.0	25.0	40.0						
	95.0	1462	1.7	9.47	11.0	18.0	24.0	40.0						
	103.6	1342	1.8	8.69	11.0	18.0	24.0	40.0						
	125.5	1107	2.0	7.17	14.0	17.0	23.0	38.0						
	142.2	978	2.3	6.33	14.0	26.0	22.0	37.0						
	157.9	880	2.1	5.70	14.0	26.0	22.0	36.0						
	168.2	826	2.2	5.35	14.0	26.0	21.0	35.0						
	179.3	775	2.3	5.02	14.0	26.0	20.0	34.0						
	208.3	667	2.4	4.32	14.0	26.0	20.0	33.0						
	45.9	2993	1.0	30.47	11.0	22.0	30.0	40.0				PD/PM 52 160L4B	181	208
	56.1	2452	1.2	24.96	12.0	22.0	30.0	40.0						
	68.8	2000	1.6	20.36	12.0	21.0	28.0	40.0						
	74.2	1853	1.4	18.86	12.0	21.0	28.0	40.0						
	79.5	1730	1.6	17.61	12.0	21.0	28.0	40.0						
	91.0	1511	1.7	15.38	12.0	21.0	27.0	40.0						
	107.7	1277	2.1	13.00	11.0	20.0	26.0	40.0						
	130.5	1054	2.4	10.73	11.0	19.0	25.0	40.0						
	147.8	930	2.5	9.47	11.0	18.0	24.0	40.0						
	161.1	854	2.8	8.69	11.0	18.0	24.0	40.0						
	68.6	1943	1.0	40.79	11.0	22.0	34.0	40.0	PD/PM 52 160M2C / 160M2D	181	208			
	83.8	1592	1.1	33.41	11.0	22.0	33.0	40.0						
	91.9	1452	1.5	30.47	11.0	22.0	30.0	40.0						
	112.2	1189	1.9	24.96	12.0	22.0	30.0	40.0						
	137.5	970	2.4	20.36	12.0	21.0	28.0	40.0						
	148.5	899	2.2	18.86	12.0	21.0	28.0	40.0						
	159.0	839	2.5	17.61	12.0	21.0	28.0	40.0						
	182.1	733	2.7	15.38	12.0	21.0	27.0	40.0						
	62.6	2198	0.8	22.38	5.0	8.0	18.0	28.0	PD/PM 42 160L4B	145	204			
	65.2	2108	0.8	21.46	5.0	9.0	18.0	28.0						
	77.0	1786	1.0	18.18	6.0	10.0	18.0	28.0						
	92.2	1492	1.2	15.19	6.0	10.0	18.0	28.0						
	110.5	1245	1.4	12.67	6.0	10.0	17.0	27.0						
	129.3	1064	1.6	10.83	6.0	10.0	17.0	27.0						
	151.7	907	1.8	9.23	7.0	11.0	16.0	26.0						
	168.1	818	1.6	8.33	6.0	10.0	16.0	26.0						
	196.4	700	1.7	7.13	6.0	10.0	15.0	25.0						
	230.6	596	2.0	6.07	6.0	10.0	15.0	24.0						
	257.4	534	1.9	5.44	6.0	10.0	15.0	24.0						
	280.0	491	2.1	5.00	6.0	10.0	14.0	24.0						
	298.5	461	2.2	4.69	6.0	10.0	14.0	23.0						
	86.7	1539	0.8	32.31	5.0	8.0	22.0	30.0				PD/PM 42 160M2C / 160M2D	145	204
	106.0	1258	1.1	26.41	5.0	8.0	21.0	30.0						
106.7	1251	1.0	26.25	5.0	8.0	21.0	30.0							
125.1	1066	1.2	22.38	5.0	8.0	18.0	28.0							
130.5	1022	1.3	21.46	5.0	9.0	18.0	28.0							
154.0	866	1.6	18.18	6.0	10.0	18.0	28.0							
184.3	724	1.9	15.19	6.0	10.0	18.0	28.0							
221.0	604	2.2	12.67	6.0	10.0	17.0	27.0							
258.5	516	2.5	10.83	6.0	10.0	17.0	27.0							
303.4	440	2.8	9.23	7.0	11.0	16.0	26.0							
336.1	397	2.4	8.33	6.0	10.0	16.0	26.0							
392.7	340	2.7	7.13	6.0	10.0	15.0	25.0							
514.7	259	3.0	5.44	6.0	10.0	15.0	24.0							
18.5	4.5	37849	2.5	201.75	-	-	116.0	136.0	PD/PM 123 200L6B / 200L6C	2391	236			
	2.3	68540	0.9	603.47	-	-	2.0	170.0	PD/PM 113/52 180M4A / 180M4B	2290	242			
	2.9	54500	1.1	479.85	-	-	39.0	170.0						
	3.9	41252	1.2	363.21	-	-	104.0	170.0						
	4.5	35462	1.4	312.23	-	-	119.0	170.0						

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
18.5	2.9	50804	0.9	962.15	-	-	21.0	170.0	PD/PM 113/52 160M2D / 160L2C	2245	242
	3.8	38623	1.2	731.47	-	-	5.0	170.0			
	4.6	31865	1.4	603.47	-	-	2.0	170.0			
	5.8	25337	1.8	479.85	-	-	39.0	170.0			
	7.7	19178	2.0	363.21	-	-	104.0	170.0			
	9.0	16486	2.3	312.23	-	-	119.0	170.0			
	5.2	32260	2.2	171.96	-	-	142.0	155.0	PD/PM 113 200L6B / 200L6C	2286	233
	5.9	28679	2.5	152.87	-	-	144.0	151.0			
	6.9	24525	3.0	130.73	-	-	144.0	144.0			
	6.2	26662	2.6	224.76	-	-	135.0	165.0	PD/PM 113 180M4A / 180M4B	2220	233
	3.8	41590	0.8	366.18	-	-	80.0	150.0	PD/PM 103/52 180M4A / 180M4B	1441	242
	4.6	34312	1.0	302.10	-	-	101.0	150.0			
	4.8	30525	0.9	578.09	-	-	87.0	150.0	PD/PM 103/52 160M2D / 160L2C	1400	242
	5.9	25183	1.1	476.93	-	-	72.0	150.0			
	7.6	19335	1.4	366.18	-	-	80.0	150.0			
	9.3	15952	1.7	302.10	-	-	101.0	150.0			
	6.4	26341	1.4	140.41	-	-	130.0	150.0	PD/PM 103 200L6B / 200L6C	1425	229
	8.6	19644	1.9	104.71	-	-	132.0	146.0			
	9.9	17138	2.2	91.35	-	-	134.0	141.0			
	12.4	13641	2.9	72.71	-	-	133.0	130.0			
	13.8	12277	3.0	65.44	-	-	134.0	128.0			
	3.9	42396	0.8	357.40	-	-	105.0	150.0	PD/PM 103 180M4A / 180M4B	1367	229
	4.2	39459	0.9	332.64	-	-	110.0	150.0			
	4.9	33553	1.0	282.85	-	-	118.0	150.0			
	5.3	31228	1.1	263.25	-	-	121.0	150.0			
	7.7	21433	1.6	180.68	-	-	126.0	150.0			
	8.3	19948	1.8	168.16	-	-	128.0	150.0			
	10.0	16656	2.1	140.41	-	-	130.0	150.0			
	13.4	12421	2.8	104.71	-	-	133.0	150.0			
	7.8	20265	1.3	357.40	-	-	105.0	150.0	PD/PM 103 160M2D / 160L2C	1326	229
	8.4	18861	1.5	332.64	-	-	110.0	150.0			
	9.9	16038	1.6	282.85	-	-	118.0	150.0			
	10.6	14927	1.7	263.25	-	-	121.0	150.0			
	15.5	10245	2.6	180.68	-	-	126.0	150.0			
	16.7	9535	2.8	168.16	-	-	128.0	150.0			
	6.0	26497	0.9	233.30	27.0	57.0	98.0	123.0	PD/PM 93/52 180M4A / 180M4B	877	242
	7.0	22772	1.1	200.50	30.0	61.0	98.0	123.0			
	6.8	21675	0.8	410.49	27.0	57.0	120.0	130.0	PD/PM 93/52 160M2D / 160L2C	836	242
	9.5	15534	1.2	294.19	27.0	57.0	-	-			
	12.0	12319	1.5	233.30	27.0	57.0	98.0	123.0			
	14.0	10587	1.7	200.50	30.0	61.0	98.0	123.0			
	6.2	23806	0.8	450.86	51.0	102.0	-	-	PD/PM 93/42 160M2D / 160L2C	807	242
	6.6	25450	1.0	135.66	49.0	91.0	112.0	130.0	PD/PM 93 200L6B / 200L6C	861	225
	7.8	21670	1.2	115.51	50.0	89.0	108.0	130.0			
	8.9	18892	1.4	100.70	50.0	88.0	107.0	130.0			
	10.8	15607	1.6	83.19	48.0	83.0	101.0	130.0			
	12.5	13539	1.9	72.17	48.0	82.0	99.0	129.0			
	13.8	12219	2.1	65.13	55.0	102.0	97.0	127.0			
16.2	10404	2.4	55.46	55.0	102.0	93.0	122.0				
18.6	9071	2.8	48.35	55.0	102.0	90.0	118.0				
6.8	24278	0.9	204.66	54.0	102.0	120.0	130.0	PD/PM 93 180M4A / 180M4B	803	225	
8.0	20763	1.2	175.03	47.0	91.0	117.0	130.0				
9.7	17153	1.4	144.60	48.0	89.0	112.0	130.0				
10.3	16093	1.6	135.66	49.0	91.0	112.0	130.0				
12.1	13702	1.9	115.51	50.0	89.0	108.0	130.0				
13.9	11946	2.1	100.70	50.0	88.0	107.0	130.0				
16.8	9868	2.4	83.19	48.0	83.0	101.0	130.0				
19.4	8561	2.8	72.17	48.0	82.0	99.0	129.0				



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	$F_{R GR}$ [kN]	$F_{A GR}$ [kN]	Tip / Type / Typ IE2 / IE3		
18.5	8.0	19968	1.0	352.16	54.0	102.0	-	-	PD/PM 93 160M2D / 160L2C	762	225
	9.6	16497	1.1	290.94	54.0	102.0	120.0	130.0			
	13.7	11605	1.4	204.66	54.0	102.0	120.0	130.0			
	16.0	9925	1.9	175.03	47.0	91.0	117.0	130.0			
	19.4	8199	2.2	144.60	48.0	89.0	112.0	130.0			
	20.6	7692	2.5	135.66	49.0	91.0	112.0	130.0			
	24.2	6550	2.9	115.51	50.0	89.0	108.0	130.0			
	26.2	6544	2.6	34.36	78.0	73.0	68.0	89.0	PD/PM 92 200L6B / 200L6C	856	224
	12.5	11812	0.8	223.71	78.0	73.0	-	-	PD/PM 83/42 160M2D / 160L2C	505	242
	15.0	9850	0.9	186.54	78.0	73.0	-	-			
	11.9	14202	0.9	75.70	29.0	51.0	79.0	105.0	PD/PM 83 200L6B / 200L6C	559	221
	13.8	12224	1.0	65.16	29.0	51.0	77.0	105.0			
	15.7	10753	1.2	57.32	30.0	51.0	76.0	105.0			
	18.8	8966	1.4	47.79	30.0	49.0	73.0	105.0			
	20.7	8165	1.4	43.52	30.0	49.0	73.0	104.0			
	25.1	6722	1.9	35.83	30.0	47.0	69.0	99.0			
	29.2	5786	2.2	30.84	29.0	58.0	67.0	97.0			
	11.2	14860	0.8	125.27	43.0	73.0	98.0	105.0	PD/PM 83 180M4A / 180M4B	501	221
	11.8	14055	0.9	118.48	23.0	46.0	82.0	105.0			
	13.6	12234	1.0	103.13	25.0	49.0	81.0	105.0			
	15.4	10770	1.1	90.79	27.0	50.0	80.0	105.0			
	18.5	8980	1.3	75.70	29.0	51.0	79.0	105.0			
	21.5	7730	1.5	65.16	29.0	51.0	77.0	105.0			
	24.4	6800	1.8	57.32	30.0	51.0	76.0	105.0			
	29.3	5669	2.1	47.79	30.0	49.0	73.0	105.0			
	32.2	5163	2.1	43.52	30.0	49.0	73.0	104.0			
	39.1	4250	2.8	35.83	30.0	47.0	69.0	99.0			
	15.1	10522	0.9	185.56	43.0	73.0	100.0	105.0	PD/PM 83 160M2D / 160L2C	460	221
	18.3	8662	1.2	152.77	43.0	73.0	89.0	105.0			
	19.5	8160	1.2	143.91	43.0	73.0	90.0	105.0			
	22.4	7103	1.3	125.27	43.0	73.0	-	-			
	23.6	6718	1.4	118.48	23.0	46.0	82.0	105.0			
	27.2	5848	1.6	103.13	25.0	49.0	81.0	105.0			
	30.8	5148	1.8	90.79	27.0	50.0	80.0	105.0			
	37.0	4292	2.1	75.70	29.0	51.0	79.0	105.0			
	43.0	3695	2.3	65.16	29.0	51.0	77.0	105.0			
	48.8	3250	2.8	57.32	30.0	51.0	76.0	105.0			
	18.9	9049	1.2	47.51	30.0	50.0	-	-	PD/PM 82 200L6B / 200L6C	555	220
	23.0	7462	1.5	39.18	30.0	48.0	-	-			
	23.0	7451	1.3	39.12	30.0	48.0	-	-			
	27.9	6142	1.8	32.25	29.0	45.0	-	-			
	31.7	5400	1.9	28.35	29.0	45.0	66.0	95.0			
	36.7	4668	2.4	24.51	33.0	54.0	63.0	90.0			
	42.6	4026	2.8	21.14	33.0	54.0	58.0	84.0			
	19.4	8743	0.9	72.17	48.0	82.0	-	-	PD/PM 82 180M4A / 180M4B	497	220
	23.6	7197	0.9	59.41	33.0	56.0	-	-			
	29.5	5756	1.8	47.51	30.0	50.0	-	-			
35.8	4739	2.0	39.12	30.0	48.0	-	-				
49.4	3435	2.9	28.35	29.0	45.0	66.0	95.0				
38.8	4241	1.4	72.17	48.0	82.0	-	-	PD/PM 82 160M2D / 160L2C	456	220	
47.1	3491	1.4	59.41	33.0	56.0	-	-				
58.9	2792	2.9	47.51	30.0	50.0	-	-				
19.3	8754	0.8	46.66	21.0	37.0	61.0	80.0	PD/PM 73 200L6B / 200L6C	434	217	
24.4	6932	1.0	36.95	22.0	36.0	58.0	80.0				
29.5	5720	1.2	30.49	22.0	36.0	56.0	80.0				
33.4	5050	1.4	26.92	22.0	35.0	55.0	80.0				
38.3	4403	1.6	23.47	21.0	34.0	54.0	78.0				
17.8	9342	0.8	78.75	17.0	34.0	64.0	80.0	PD/PM 73 180M4A / 180M4B	376	217	
20.5	8083	0.9	68.14	18.0	35.0	63.0	80.0				
23.5	7061	1.0	59.52	20.0	36.0	62.0	80.0				
26.2	6337	1.1	53.42	21.0	37.0	62.0	80.0				
30.0	5535	1.3	46.66	21.0	37.0	61.0	80.0				
37.9	4383	1.5	36.95	22.0	36.0	58.0	80.0				
45.9	3617	1.8	30.49	22.0	36.0	56.0	80.0				
52.0	3193	2.1	26.92	22.0	35.0	55.0	80.0				
59.7	2784	2.4	23.47	21.0	34.0	54.0	78.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
18.5	22.7	6981	0.8	123.12	17.0	34.0	72.0	80.0	PD/PM 73 160M2D / 160L2C	335	217			
	26.3	6040	0.9	106.53	17.0	34.0	75.0	80.0						
	30.1	5276	1.1	93.05	17.0	34.0	70.0	80.0						
	35.6	4465	1.3	78.75	17.0	34.0	64.0	80.0						
	41.1	3864	1.4	68.14	18.0	35.0	63.0	80.0						
	47.0	3375	1.6	59.52	20.0	36.0	62.0	80.0						
	52.4	3029	1.8	53.42	21.0	37.0	62.0	80.0						
	60.0	2646	2.0	46.66	21.0	37.0	61.0	80.0						
	75.8	2095	2.4	36.95	22.0	36.0	58.0	80.0						
	91.8	1729	2.9	30.49	22.0	36.0	56.0	80.0						
	24.2	7089	1.0	37.22	22.0	37.0	59.0	80.0				PD/PM 72 200L6B / 200L6C	427	216
	33.5	5121	1.2	26.89	22.0	36.0	56.0	80.0						
	39.3	4362	1.4	22.90	22.0	35.0	54.0	78.0						
	45.1	3802	1.6	19.96	22.0	34.0	52.0	76.0						
	55.3	3099	2.2	16.27	25.0	43.0	49.0	71.0						
	69.8	2455	2.5	12.89	25.0	43.0	44.0	65.0						
	90.8	1887	2.4	9.91	25.0	43.0	42.0	61.0						
	104.2	1646	2.7	8.64	25.0	43.0	40.0	59.0						
	24.6	6893	0.8	56.90	24.0	43.0	66.0	80.0	PD/PM 72 180M4A / 180M4B	369	216			
	30.7	5532	1.1	45.66	22.0	38.0	61.0	80.0						
	31.1	5459	0.8	45.06	-	-	67.0	80.0						
	37.6	4509	1.4	37.22	22.0	37.0	59.0	80.0						
	40.4	4203	1.4	34.69	22.0	38.0	58.0	80.0						
	52.1	3258	1.8	26.89	22.0	36.0	56.0	80.0						
	61.1	2774	2.1	22.90	22.0	35.0	54.0	78.0						
	70.1	2418	2.4	19.96	22.0	34.0	52.0	76.0						
	40.1	4101	1.1	69.80	24.0	43.0	68.0	80.0	PD/PM 72 160M2D / 160L2C	328	216			
	49.2	3343	1.3	56.90	24.0	43.0	66.0	80.0						
	61.3	2683	1.6	45.66	22.0	38.0	61.0	80.0						
	62.1	2648	1.3	45.06	22.0	37.0	61.0	80.0						
	75.2	2187	2.2	37.22	22.0	37.0	59.0	80.0						
	80.7	2038	2.2	34.69	22.0	38.0	58.0	80.0						
	104.1	1580	2.8	26.89	22.0	36.0	56.0	80.0						
	45.3	3666	1.2	30.90	18.0	30.0	46.0	60.0				PD/PM 63 180M4A / 180M4B	303	213
	48.8	3400	1.4	28.66	18.0	30.0	45.0	60.0						
	57.3	2897	1.6	24.42	18.0	30.0	44.0	60.0						
	30.2	5255	0.9	92.68	18.0	30.0	46.0	60.0	PD/PM 63 160M2D / 160L2C	262	213			
	37.2	4270	1.1	75.30	18.0	30.0	41.0	60.0						
	38.1	4163	1.0	73.42	18.0	30.0	43.0	60.0						
	46.9	3382	1.2	59.65	18.0	30.0	49.0	60.0						
	54.9	2892	1.3	51.01	18.0	30.0	48.0	60.0						
	66.0	2405	1.4	42.41	18.0	30.0	47.0	60.0						
	77.2	2057	1.7	36.27	18.0	30.0	47.0	60.0						
	90.6	1752	2.0	30.90	18.0	30.0	46.0	60.0						
	97.7	1625	2.2	28.66	18.0	30.0	45.0	60.0						
	114.7	1385	2.6	24.42	18.0	30.0	44.0	60.0						
	39.3	4363	1.1	22.91	19.0	30.0	43.0	60.0				PD/PM 62 200L6B / 200L6C	364	212
	48.2	3558	1.3	18.68	18.0	27.0	41.0	58.0						
60.8	2819	1.7	14.80	18.0	27.0	39.0	56.0							
72.9	2350	2.0	12.34	17.0	26.0	38.0	54.0							
84.7	2023	2.2	10.62	15.0	23.0	36.0	52.0							
96.1	1785	1.6	9.37	15.0	23.0	35.0	50.0							
115.2	1487	1.9	7.81	15.0	22.0	34.0	48.0							
133.7	1282	2.4	6.73	21.0	35.0	31.0	45.0							
150.3	1141	2.2	5.99	21.0	35.0	31.0	44.0							
155.7	1101	2.2	5.78	21.0	35.0	30.0	44.0							
163.9	1046	2.3	5.49	21.0	35.0	30.0	43.0							
183.7	933	2.4	4.90	21.0	35.0	29.0	42.0							
205.5	834	2.6	4.38	21.0	35.0	28.0	41.0							
46.8	3621	1.3	29.89	19.0	31.0	46.0	60.0	PD/PM 62 180M4A / 180M4B	306	212				
48.8	3475	1.3	28.68	-	-	-	-							
53.8	3152	1.4	26.02	19.0	31.0	45.0	60.0							
61.1	2776	1.6	22.91	19.0	30.0	44.0	60.0							
94.6	1793	2.5	14.80	18.0	27.0	40.0	57.0							
113.5	1495	2.9	12.34	17.0	26.0	38.0	55.0							
131.6	1289	1.6	10.64	-	-	-	-							
149.4	1135	2.4	9.37	15.0	23.0	35.0	50.0							
179.3	946	2.8	7.81	15.0	22.0	34.0	48.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
18.5	45.9	3587	1.0	61.05	19.0	31.0	49.0	60.0	PD/PM 62 160M2D / 160L2C	265	212			
	56.2	2926	1.0	49.79	19.0	31.0	52.0	60.0						
	71.0	2317	1.0	39.44	19.0	31.0	49.0	60.0						
	93.7	1756	2.0	29.89	19.0	31.0	46.0	60.0						
	107.6	1529	2.3	26.02	19.0	31.0	45.0	60.0						
	122.2	1346	2.6	22.91	19.0	30.0	44.0	60.0						
	263.2	625	2.5	10.64	15.0	23.0	37.0	63.0						
	45.9	3691	0.8	30.47	-	-	30.0	40.0				PD/PM 52 180M4A / 180M4B	222	208
	56.1	3024	1.0	24.96	10.0	19.0	28.0	40.0						
	68.8	2467	1.3	20.36	10.0	19.0	27.0	40.0						
	74.2	2285	1.1	18.86	10.0	19.0	27.0	40.0						
	79.5	2133	1.3	17.61	10.0	19.0	27.0	40.0						
	91.0	1863	1.4	15.38	10.0	19.0	26.0	40.0						
	107.7	1575	1.7	13.00	10.0	18.0	25.0	40.0						
	130.5	1300	1.9	10.73	10.0	18.0	24.0	40.0						
	147.8	1147	2.0	9.47	10.0	17.0	24.0	40.0						
	161.1	1053	2.2	8.69	10.0	17.0	23.0	39.0						
	195.3	869	2.5	7.17	10.0	16.0	22.0	37.0						
	221.2	767	2.8	6.33	9.0	15.0	22.0	36.0						
	245.6	691	2.6	5.70	9.0	15.0	21.0	35.0						
	261.7	648	2.7	5.35	9.0	15.0	21.0	35.0						
	278.9	608	2.8	5.02	9.0	15.0	20.0	34.0						
	324.1	523	3.0	4.32	9.0	14.0	20.0	33.0						
	68.6	2397	0.8	40.79	10.0	19.0	34.0	40.0	PD/PM 52 160M2D / 160L2C	181	208			
	83.8	1963	0.9	33.41	10.0	19.0	33.0	40.0						
	91.9	1790	1.2	30.47	10.0	19.0	30.0	40.0						
	112.2	1467	1.5	24.96	10.0	19.0	28.0	40.0						
	137.5	1196	2.0	20.36	10.0	19.0	27.0	40.0						
	148.5	1108	1.8	18.86	10.0	19.0	27.0	40.0						
	159.0	1035	2.0	17.61	10.0	19.0	27.0	40.0						
	182.1	904	2.2	15.38	10.0	19.0	26.0	40.0						
	215.4	764	2.6	13.00	10.0	18.0	25.0	40.0						
	261.0	630	3.0	10.73	10.0	18.0	24.0	40.0						
	106.0	1552	0.9	26.41	5.0	8.0	21.0	30.0	PD/PM 42 160M2D / 160L2C	145	204			
	106.7	1542	0.8	26.25	5.0	8.0	21.0	30.0						
	125.1	1315	1.0	22.38	5.0	8.0	18.0	28.0						
	130.5	1261	1.0	21.46	5.0	8.0	18.0	28.0						
	154.0	1068	1.3	18.18	5.0	8.0	18.0	28.0						
	184.3	893	1.5	15.19	5.0	8.0	18.0	28.0						
	221.0	744	1.8	12.67	5.0	8.0	17.0	27.0						
	258.5	636	2.0	10.83	5.0	8.0	17.0	27.0						
	303.4	542	2.3	9.23	5.0	8.0	16.0	26.0						
	336.1	489	2.0	8.33	5.0	8.0	16.0	26.0						
	392.7	419	2.2	7.13	5.0	8.0	15.0	25.0						
	461.3	357	2.6	6.07	5.0	8.0	15.0	24.0						
	514.7	320	2.5	5.44	5.0	8.0	15.0	24.0						
	560.0	294	2.7	5.00	5.0	8.0	14.0	24.0						
	597.0	276	2.9	4.69	5.0	8.0	14.0	23.0						
22.0	4.5	45010	2.1	201.75	-	-	116.0	136.0				PD/PM 123 200L6C / 200L6D	2391	236
	5.8	34435	2.7	154.35	-	-	120.0	125.0						
	2.9	64811	0.9	479.85	-	-	18.0	170.0	PD/PM 113/52 180M4B / 180L4B	2290	242			
	3.9	49057	1.0	363.21	-	-	77.0	170.0						
	4.5	42171	1.2	312.23	-	-	100.0	169.0						
	2.9	60415	0.8	962.15	-	-	-	-	PD/PM 113/52 180M2A	2290	242			
	3.8	45930	1.0	731.47	-	-	-	-						
	4.6	37893	1.2	603.47	-	-	-	-						
	5.8	30131	1.5	479.85	-	-	18.0	170.0						
	7.7	22807	1.7	363.21	-	-	77.0	170.0						
	9.0	19606	1.9	312.23	-	-	100.0	169.0						
	5.2	38364	1.9	171.96	-	-	138.0	152.0	PD/PM 113 200L6C / 200L6D	2286	233			
	5.9	34105	2.1	152.87	-	-	141.0	149.0						
	6.9	29165	2.5	130.73	-	-	144.0	144.0						
	8.0	25072	2.9	112.38	-	-	146.0	139.0						
	6.2	31706	2.2	224.76	-	-	128.0	160.0	PD/PM 113 180M4B / 180L4B	2220	233			
8.1	24258	2.8	171.96	-	-	138.0	152.0							
4.6	40803	0.9	302.10	-	-	81.0	150.0	PD/PM 103/52 180M4B / 180L4B	1441	242				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm		
22.0	5.9	29947	0.9	476.93	-	-	72.0	150.0	PD/PM 103/52 180M2A	1441	242		
	7.6	22993	1.2	366.18	-	-	80.0	150.0					
	9.3	18969	1.4	302.10	-	-	81.0	150.0					
	6.4	31325	1.2	140.41	-	-	127.0	150.0	PD/PM 103 200L6C / 200L6D	1425	229		
	8.6	23360	1.6	104.71	-	-	132.0	146.0					
	9.9	20380	1.8	91.35	-	-	134.0	141.0					
	12.4	16221	2.4	72.71	-	-	133.0	130.0					
	13.8	14599	2.5	65.44	-	-	134.0	128.0					
	15.9	12663	2.9	56.76	-	-	133.0	120.0					
	4.2	46925	0.8	332.64	-	-	110.0	150.0	PD/PM 103 180M4B / 180L4B	1367	229		
	4.9	39901	0.8	282.85	-	-	118.0	150.0					
	5.3	37136	0.9	263.25	-	-	121.0	150.0					
	7.7	25488	1.4	180.68	-	-	120.0	150.0					
	8.3	23722	1.5	168.16	-	-	123.0	150.0					
	10.0	19807	1.8	140.41	-	-	127.0	150.0					
	13.4	14771	2.4	104.71	-	-	132.0	146.0					
	15.3	12886	2.7	91.35	-	-	134.0	141.0					
	7.8	24099	1.1	357.40	-	-	105.0	150.0	PD/PM 103 180M2A	1367	229		
	8.4	22430	1.3	332.64	-	-	110.0	150.0					
	9.9	19072	1.3	282.85	-	-	118.0	150.0					
	10.6	17751	1.4	263.25	-	-	121.0	150.0					
	15.5	12183	2.2	180.68	-	-	120.0	150.0					
	16.7	11339	2.3	168.16	-	-	123.0	150.0					
	19.9	9468	2.8	140.41	-	-	127.0	150.0					
	6.0	31510	0.8	233.30	27.0	57.0	98.0	123.0	PD/PM 93/52 180M4B / 180L4B	887	242		
	7.0	27080	0.9	200.50	20.0	46.0	91.0	113.0					
	9.5	18473	1.0	294.19	27.0	57.0	-	-	PD/PM 93/52 180M2A	877	242		
	12.0	14649	1.2	233.30	27.0	57.0	98.0	123.0					
	14.0	12590	1.4	200.50	20.0	46.0	91.0	113.0					
	6.6	30265	0.9	135.66	44.0	82.0	108.0	130.0	PD/PM 93 200L6C / 200L6D	861	225		
	7.8	25770	1.0	115.51	45.0	81.0	105.0	130.0					
	8.9	22466	1.2	100.70	45.0	81.0	104.0	130.0					
	10.8	18559	1.4	83.19	45.0	78.0	100.0	129.0					
	12.5	16101	1.6	72.17	45.0	76.0	97.0	126.0					
	13.8	14530	1.8	65.13	44.0	75.0	95.0	124.0					
	16.2	12373	2.0	55.46	47.0	91.0	91.0	119.0					
	18.6	10787	2.3	48.35	47.0	91.0	88.0	116.0					
	21.5	9357	2.7	41.94	47.0	91.0	85.0	112.0					
	6.8	28871	0.8	204.66	54.0	102.0	120.0	130.0				PD/PM 93 180M4B / 180L4B	803
	8.0	24691	1.0	175.03	39.0	79.0	111.0	130.0					
	9.7	20398	1.2	144.60	41.0	79.0	108.0	130.0					
	10.3	19137	1.3	135.66	44.0	82.0	108.0	130.0					
	12.1	16295	1.6	115.51	45.0	81.0	105.0	130.0					
	13.9	14205	1.8	100.70	45.0	81.0	104.0	130.0					
	16.8	11735	2.0	83.19	45.0	78.0	100.0	129.0					
	19.4	10181	2.4	72.17	45.0	76.0	97.0	126.0					
	21.5	9188	2.6	65.13	44.0	75.0	95.0	124.0					
	8.0	23746	0.8	352.16	54.0	102.0	-	-	PD/PM 93 180M2A	803	225		
9.6	19618	0.9	290.94	54.0	102.0	120.0	130.0						
13.7	13800	1.2	204.66	54.0	102.0	120.0	130.0						
16.0	11802	1.6	175.03	39.0	79.0	111.0	130.0						
19.4	9750	1.9	144.60	41.0	79.0	108.0	130.0						
20.6	9147	2.1	135.66	44.0	82.0	108.0	130.0						
24.2	7789	2.5	115.51	45.0	81.0	105.0	130.0						
27.8	6790	2.8	100.70	45.0	81.0	104.0	130.0						
26.2	7782	2.2	34.36	78.0	73.0	68.0	89.0	PD/PM 92 200L6C / 200L6D	856	224			
29.2	6974	2.7	30.79	78.0	73.0	64.0	84.0						
33.5	6081	3.0	26.85	78.0	73.0	63.0	82.0						
11.9	16888	0.8	75.70	24.0	44.0	75.0	105.0	PD/PM 83 200L6C / 200L6D	559	221			
13.8	14537	0.8	65.16	25.0	45.0	74.0	105.0						
15.7	12788	1.0	57.32	26.0	45.0	73.0	105.0						
18.8	10662	1.2	47.79	27.0	45.0	71.0	102.0						
20.7	9709	1.1	43.52	28.0	45.0	71.0	101.0						
25.1	7994	1.6	35.83	28.0	44.0	68.0	97.0						
29.2	6880	1.8	30.84	27.0	43.0	66.0	95.0						



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
22.0	13.6	14548	0.8	103.13	19.0	39.0	76.0	105.0	PD/PM 83 180M4B / 180L4B	501	221			
	15.4	12807	0.9	90.79	21.0	42.0	76.0	105.0						
	18.5	10679	1.1	75.70	24.0	44.0	75.0	105.0						
	21.5	9192	1.2	65.16	25.0	45.0	74.0	105.0						
	24.4	8086	1.5	57.32	26.0	45.0	73.0	105.0						
	29.3	6742	1.8	47.79	27.0	45.0	71.0	102.0						
	32.2	6139	1.7	43.52	28.0	45.0	71.0	101.0						
	39.1	5054	2.4	35.83	28.0	44.0	68.0	97.0						
	45.4	4351	2.8	30.84	27.0	43.0	66.0	95.0						
	15.1	12512	0.8	185.56	19.0	39.0	-	-				PD/PM 83 180M2A	501	221
	18.3	10301	1.0	152.77	19.0	39.0	89.0	105.0						
	19.5	9704	1.0	143.91	19.0	39.0	90.0	105.0						
	22.4	8447	1.1	125.27	19.0	39.0	-	-						
	23.6	7989	1.2	118.48	19.0	39.0	82.0	105.0						
	27.2	6954	1.3	103.13	19.0	39.0	76.0	105.0						
	30.8	6122	1.5	90.79	21.0	42.0	76.0	105.0						
	37.0	5104	1.8	75.70	24.0	44.0	75.0	105.0						
	43.0	4394	2.0	65.16	25.0	45.0	74.0	105.0						
	48.8	3865	2.4	57.32	26.0	45.0	73.0	105.0						
	58.6	3222	2.9	47.79	27.0	45.0	71.0	102.0						
	64.3	2935	2.7	43.52	28.0	45.0	71.0	101.0						
	18.9	10761	1.0	47.51	28.0	46.0	-	-	PD/PM 82 200L6C / 200L6D	555	220			
	23.0	8874	1.3	39.18	28.0	44.0	-	-						
	23.0	8860	1.1	39.12	28.0	44.0	-	-						
	27.9	7304	1.5	32.25	27.0	43.0	-	-						
	31.7	6421	1.6	28.35	27.0	43.0	65.0	93.0						
	36.7	5551	2.0	24.51	27.0	41.0	63.0	90.0						
	42.6	4788	2.3	21.14	30.0	50.0	58.0	84.0						
	51.7	3943	2.6	17.41	30.0	50.0	56.0	80.0						
	59.2	3440	2.9	15.19	30.0	50.0	53.0	76.0						
	19.4	10397	0.8	72.17	45.0	76.0	-	-	PD/PM 82 180M4B / 180L4B	497	220			
	23.6	8559	0.8	59.41	33.0	56.0	-	-						
	29.5	6845	1.6	47.51	28.0	46.0	-	-						
	35.8	5636	1.7	39.12	28.0	44.0	-	-						
	49.4	4084	2.4	28.35	27.0	43.0	65.0	93.0						
	57.1	3531	3.0	24.51	27.0	41.0	63.0	90.0						
	38.8	5043	1.2	72.17	45.0	76.0	-	-	PD/PM 82 180M2A	497	220			
	47.1	4151	1.2	59.41	33.0	56.0	-	-						
	58.9	3320	2.4	47.51	28.0	46.0	-	-						
	71.6	2734	2.6	39.12	28.0	44.0	-	-						
	24.4	8243	0.8	36.95	19.0	33.0	56.0	80.0	PD/PM 73 200L6C / 200L6D	434	217			
	29.5	6802	1.0	30.49	20.0	33.0	55.0	80.0						
	33.4	6006	1.2	26.92	20.0	32.0	54.0	78.0						
	38.3	5236	1.3	23.47	20.0	32.0	52.0	76.0						
	23.5	8396	0.8	59.52	15.0	29.0	59.0	80.0	PD/PM 73 180M4B / 180L4B	376	217			
	26.2	7536	0.9	53.42	17.0	32.0	59.0	80.0						
	30.0	6582	1.1	46.66	18.0	33.0	58.0	80.0						
	37.9	5212	1.3	36.95	19.0	33.0	56.0	80.0						
45.9	4301	1.5	30.49	20.0	33.0	55.0	80.0							
52.0	3798	1.7	26.92	20.0	32.0	54.0	78.0							
59.7	3311	2.0	23.47	20.0	32.0	52.0	76.0							
26.3	7183	0.8	106.53	15.0	29.0	-	-	PD/PM 73 180M2A				376	217	
30.1	6274	0.9	93.05	15.0	29.0	70.0	80.0							
35.6	5310	1.1	78.75	15.0	29.0	64.0	80.0							
41.1	4595	1.2	68.14	15.0	29.0	63.0	80.0							
47.0	4013	1.3	59.52	15.0	29.0	59.0	80.0							
52.4	3602	1.5	53.42	17.0	32.0	59.0	80.0							
60.0	3146	1.7	46.66	18.0	33.0	58.0	80.0							
75.8	2492	2.0	36.95	19.0	33.0	56.0	80.0							
91.8	2056	2.4	30.49	20.0	33.0	55.0	80.0							
104.0	1815	2.8	26.92	20.0	32.0	54.0	78.0							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
22.0	24.2	8430	0.8	37.22	19.0	33.0	57.0	80.0	PD/PM 72 200L6C / 200L6D	427	216
	33.5	6090	1.0	26.89	21.0	33.0	54.0	79.0			
	39.3	5187	1.2	22.90	21.0	33.0	53.0	77.0			
	45.1	4521	1.3	19.96	20.0	32.0	51.0	75.0			
	55.3	3685	1.8	16.27	20.0	30.0	49.0	71.0			
	69.8	2920	2.1	12.89	16.0	24.0	44.0	65.0			
	80.5	2532	2.6	11.18	16.0	24.0	43.0	63.0			
	90.8	2245	2.0	9.91	16.0	24.0	42.0	61.0			
	104.2	1957	2.3	8.64	22.0	37.0	40.0	59.0			
	120.0	1699	2.8	7.50	22.0	37.0	39.0	57.0			
	30.7	6578	0.9	45.66	19.0	34.0	59.0	80.0	PD/PM 72 180M4B / 180L4B	369	216
	37.6	5362	1.2	37.22	19.0	33.0	57.0	80.0			
	40.4	4998	1.2	34.69	20.0	34.0	57.0	80.0			
	52.1	3874	1.5	26.89	21.0	33.0	54.0	79.0			
	61.1	3299	1.8	22.90	21.0	33.0	53.0	77.0			
	70.1	2876	2.0	19.96	20.0	32.0	51.0	75.0			
	86.0	2344	2.8	16.27	20.0	30.0	49.0	71.0			
	141.3	1428	3.0	9.91	16.0	24.0	42.0	61.0			
	40.1	4877	0.9	69.80	19.0	34.0	68.0	80.0	PD/PM 72 180M2A	369	216
	49.2	3976	1.1	56.90	19.0	34.0	66.0	80.0			
	61.3	3190	1.4	45.66	19.0	34.0	59.0	80.0			
	62.1	3149	1.1	45.06	19.0	33.0	59.0	80.0			
	75.2	2601	1.9	37.22	19.0	33.0	57.0	80.0			
	80.7	2424	1.8	34.69	20.0	34.0	57.0	80.0			
	104.1	1879	2.3	26.89	21.0	33.0	54.0	79.0			
	122.3	1600	2.8	22.90	21.0	33.0	53.0	77.0			
	45.3	4359	1.0	30.90	15.0	27.0	44.0	60.0	PD/PM 63 180M4B / 180L4B	303	213
	48.8	4043	1.1	28.66	16.0	27.0	43.0	60.0			
	57.3	3445	1.4	24.42	16.0	27.0	42.0	60.0			
	90.6	2084	1.7	30.90	15.0	27.0	44.0	60.0	PD/PM 63 180M2A	303	213
	97.7	1933	1.8	28.66	16.0	27.0	43.0	60.0			
	114.7	1647	2.2	24.42	16.0	27.0	42.0	60.0			
	39.3	5189	0.9	22.91	17.0	28.0	43.0	60.0	PD/PM 62 200L6C / 200L6D	364	212
	48.2	4231	1.1	18.68	17.0	27.0	41.0	58.0			
	60.8	3352	1.4	14.80	17.0	26.0	39.0	56.0			
	72.9	2795	1.6	12.34	16.0	25.0	38.0	54.0			
	84.7	2405	1.9	10.62	16.0	24.0	36.0	52.0			
	96.1	2122	1.4	9.37	15.0	23.0	35.0	50.0			
	115.2	1769	1.6	7.81	15.0	22.0	34.0	48.0			
	133.7	1524	2.1	6.73	13.0	19.0	31.0	45.0			
	150.3	1357	1.9	5.99	13.0	19.0	31.0	44.0			
	155.7	1309	1.9	5.78	13.0	18.0	30.0	44.0			
	163.9	1243	1.9	5.49	13.0	18.0	30.0	43.0			
	183.7	1110	2.0	4.90	31.0	18.0	29.0	42.0			
	205.5	992	2.2	4.38	31.0	17.0	28.0	41.0			
		46.8	4306	1.1	29.89	16.0	28.0	44.0			
48.8		4132	1.1	28.68	-	-	-	-			
53.8		3749	1.2	26.02	17.0	28.0	43.0	60.0			
61.1		3301	1.4	22.91	17.0	28.0	43.0	60.0			
94.6		2132	2.1	14.80	17.0	26.0	39.0	56.0			
113.5		1778	2.5	12.34	16.0	25.0	38.0	54.0			
131.6		1533	1.3	10.64	-	-	-	-			
131.8		1530	2.8	10.62	16.0	24.0	36.0	52.0			
149.4		1350	2.0	9.37	15.0	23.0	35.0	50.0			
179.3		1125	2.4	7.81	15.0	22.0	34.0	48.0			
233.7		863	2.8	5.99	13.0	19.0	31.0	44.0			
242.2		833	2.8	5.78	13.0	18.0	30.0	44.0			
255.0		791	2.9	5.49	13.0	18.0	30.0	43.0			
	45.9	4266	0.8	61.05	16.0	28.0	49.0	60.0	PD/PM 62 180M2A	306	212
	56.2	3479	0.9	49.79	16.0	28.0	52.0	60.0			
	71.0	2756	0.9	39.44	16.0	28.0	49.0	60.0			
	93.7	2089	1.7	29.89	16.0	28.0	44.0	60.0			
	107.6	1818	1.9	26.02	17.0	28.0	43.0	60.0			
	122.2	1601	2.2	22.91	17.0	28.0	43.0	60.0			
	149.9	1305	2.6	18.68	17.0	26.0	41.0	58.0			
	263.2	743	2.1	10.64	16.0	24.0	36.0	52.0			



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
22.0	56.1	3596	0.8	24.96	8.0	16.0	27.0	40.0	PD/PM 52 180M4B / 180L4B	222	208			
	68.8	2933	1.1	20.36	8.0	16.0	26.0	40.0						
	74.2	2717	1.0	18.86	9.0	17.0	26.0	40.0						
	79.5	2537	1.1	17.61	9.0	16.0	26.0	40.0						
	91.0	2216	1.2	15.38	9.0	17.0	25.0	40.0						
	107.7	1873	1.4	13.00	9.0	16.0	25.0	40.0						
	130.5	1546	1.6	10.73	9.0	16.0	24.0	39.0						
	147.8	1364	1.7	9.47	9.0	16.0	23.0	39.0						
	161.1	1252	1.9	8.69	9.0	15.0	23.0	38.0						
	195.3	1033	2.1	7.17	9.0	15.0	22.0	36.0						
	221.2	912	2.3	6.33	9.0	15.0	21.0	35.0						
	245.6	821	2.2	5.70	9.0	14.0	21.0	35.0						
	261.7	771	2.3	5.35	9.0	14.0	20.0	34.0						
	278.9	723	2.4	5.02	9.0	14.0	20.0	34.0						
	324.1	622	2.5	4.32	9.0	13.0	19.0	33.0						
	91.9	2129	1.0	30.47	8.0	16.0	30.0	40.0				PD/PM 52 180M2A	222	208
	112.2	1744	1.3	24.96	8.0	16.0	27.0	40.0						
	137.5	1423	1.7	20.36	8.0	16.0	26.0	40.0						
	148.5	1318	1.5	18.86	9.0	17.0	26.0	40.0						
	159.0	1231	1.7	17.61	9.0	16.0	26.0	40.0						
182.1	1075	1.8	15.38	9.0	17.0	25.0	40.0							
215.4	908	2.2	13.00	9.0	16.0	25.0	40.0							
261.0	750	2.5	10.73	9.0	16.0	24.0	39.0							
295.7	662	2.6	9.47	9.0	16.0	23.0	39.0							
322.2	607	3.0	8.69	9.0	15.0	23.0	38.0							
30.0	4.5	61377	1.5	201.75	-	-	116.0	136.0	PD/PM 123 225M6B / 225M6C	2491	236			
	5.8	46957	2.0	154.35	-	-	120.0	125.0						
	6.6	41745	2.3	137.22	-	-	116.0	116.0						
	7.7	35700	2.6	117.35	-	-	-	-						
	6.9	38809	2.3	201.75	-	-	116.0	136.0	PD/PM 123 200L4C / 200L4D	2391	236			
	9.1	29691	3.0	154.35	-	-	120.0	125.0						
	5.2	52314	1.4	171.96	-	-	126.0	145.0	PD/PM 113 225M6B / 225M6C	2386	233			
	5.9	46506	1.6	152.87	-	-	132.0	142.0						
	6.9	39771	1.8	130.73	-	-	137.0	138.0						
	8.0	34188	2.1	112.38	-	-	141.0	134.0						
	9.8	28010	2.5	92.07	-	-	141.0	124.0						
	11.7	23428	2.8	77.01	-	-	144.0	120.0						
	8.1	33079	2.1	171.96	-	-	126.0	145.0	PD/PM 113 200L4C / 200L4D	2286	233			
	9.2	29407	2.3	152.87	-	-	-	-						
	10.7	25148	2.7	130.73	-	-	137.0	138.0						
	6.4	42716	0.9	140.41	-	-	117.0	147.0	PD/PM 103 225M6B / 225M6C	1498	229			
	8.6	31855	1.2	104.71	-	-	127.0	139.0						
	9.9	27791	1.3	91.35	-	-	130.0	136.0						
	12.4	22120	1.8	72.71	-	-	133.0	130.0						
	13.8	19908	1.9	65.44	-	-	134.0	128.0						
	15.9	17268	2.1	56.76	-	-	133.0	120.0						
	18.8	14587	2.5	47.95	-	-	135.0	115.0						
	22.0	12473	2.9	41.00	-	-	-	-						
	10.0	27010	1.3	140.41	-	-	117.0	147.0	PD/PM 103 200L4C / 200L4D	1425	229			
	13.4	20142	1.8	104.71	-	-	127.0	139.0						
	15.3	17572	2.0	91.35	-	-	130.0	136.0						
	19.3	13987	2.7	72.71	-	-	133.0	130.0						
	21.4	12588	2.8	65.44	-	-	134.0	128.0						
	19.9	12911	2.1	140.41	-	-	117.0	147.0	PD/PM 103 200L2B / 200L2C	1425	229			
	26.7	9628	2.8	104.71	-	-	127.0	139.0						
7.8	35141	0.8	115.51	34.0	64.0	98.0	124.0	PD/PM 93 225M6B / 225M6C	934	225				
8.9	30635	0.9	100.70	36.0	65.0	96.0	122.0							
10.8	25308	1.0	83.19	36.0	65.0	93.0	119.0							
12.5	21956	1.1	72.17	37.0	65.0	91.0	118.0							
13.8	19814	1.3	65.13	38.0	65.0	90.0	116.0							
16.2	16872	1.5	55.46	38.0	64.0	87.0	113.0							
18.6	14709	1.7	48.35	38.0	63.0	85.0	111.0							
21.5	12759	2.0	41.94	38.0	61.0	83.0	108.0							
25.4	10797	2.3	35.49	41.0	79.0	80.0	104.0							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
30.0	10.3	26096	1.0	135.66	30.0	61.0	99.0	124.0	PD/PM 93 200L4C / 200L4D	861	225			
	12.1	22220	1.1	115.51	34.0	64.0	98.0	124.0						
	13.9	19371	1.3	100.70	36.0	65.0	96.0	122.0						
	16.8	16003	1.5	83.19	36.0	65.0	93.0	119.0						
	19.4	13883	1.7	72.17	37.0	65.0	91.0	118.0						
	21.5	12529	1.9	65.13	38.0	65.0	90.0	116.0						
	25.2	10669	2.2	55.46	38.0	64.0	87.0	113.0						
	29.0	9301	2.6	48.35	38.0	63.0	85.0	111.0						
	33.4	8068	3.0	41.94	38.0	61.0	83.0	108.0						
	20.6	12474	1.5	135.66	30.0	61.0	99.0	124.0				PD/PM 93 200L2B / 200L2C	861	225
	24.2	10621	1.8	115.51	34.0	64.0	98.0	124.0						
	27.8	9259	2.1	100.70	36.0	65.0	96.0	122.0						
	33.7	7649	2.4	83.19	36.0	65.0	93.0	119.0						
	38.8	6636	2.7	72.17	37.0	65.0	91.0	118.0						
	26.2	10612	1.6	34.36	31.0	46.0	68.0	89.0	PD/PM 92 225M6B / 225M6C	929	224			
	29.2	9510	2.0	30.79	28.0	41.0	64.0	84.0						
	33.5	8293	2.2	26.85	28.0	41.0	63.0	82.0						
	38.8	7156	2.4	23.17	28.0	41.0	61.0	80.0						
	44.8	6205	2.7	20.09	28.0	41.0	57.0	75.0						
	51.9	5356	3.0	17.34	28.0	41.0	55.0	72.0						
	40.7	6750	2.4	34.36	31.0	46.0	68.0	89.0	PD/PM 92 200L4C / 200L4D	856	224			
	45.5	6049	3.0	30.79	28.0	41.0	64.0	84.0						
	18.8	14539	0.9	47.79	21.0	36.0	65.0	94.0	PD/PM 83 225M6B / 225M6C	632	221			
	20.7	13240	0.8	43.52	22.0	37.0	64.0	94.0						
	25.1	10900	1.2	35.83	23.0	37.0	64.0	91.0						
	29.2	9382	1.4	30.84	23.0	37.0	62.0	90.0						
	18.5	14562	0.8	75.70	13.0	28.0	66.0	96.0	PD/PM 83 200L4C / 200L4D	559	221			
	21.5	12534	0.9	65.16	16.0	31.0	66.0	96.0						
	24.4	11026	1.1	57.32	19.0	34.0	66.0	95.0						
	29.3	9193	1.3	47.79	21.0	36.0	65.0	94.0						
	32.2	8372	1.3	43.52	22.0	37.0	65.0	94.0						
	39.1	6892	1.8	35.83	23.0	37.0	64.0	91.0						
	45.4	5933	2.0	30.84	23.0	37.0	62.0	90.0						
	30.8	8348	1.1	90.79	13.0	28.0	76.0	105.0				PD/PM 83 200L2B / 200L2C	559	221
	37.0	6961	1.3	75.70	13.0	28.0	66.0	96.0						
	43.0	5991	1.4	65.16	16.0	31.0	66.0	96.0						
	48.8	5271	1.7	57.32	19.0	34.0	66.0	95.0						
	58.6	4394	2.1	47.79	21.0	36.0	65.0	94.0						
	64.3	4002	2.0	43.52	22.0	37.0	65.0	94.0						
	78.1	3295	2.8	35.83	23.0	37.0	64.0	91.0						
	23.0	12101	0.9	39.18	28.0	44.0	-	-	PD/PM 82 225M6B / 225M6C	628	220			
	27.9	9961	1.1	32.25	24.0	37.0	-	-						
	31.7	8756	1.2	28.35	24.0	37.0	62.0	88.0						
	36.7	7570	1.5	24.51	24.0	36.0	60.0	86.0						
	42.6	6529	1.7	21.14	24.0	36.0	58.0	84.0						
	51.7	5377	1.9	17.41	23.0	34.0	56.0	80.0						
	59.2	4692	2.1	15.19	28.0	46.0	53.0	76.0						
	69.3	4012	2.7	12.99	28.0	46.0	51.0	74.0						
93.1	2987	2.3	9.67	28.0	46.0	48.0	68.0							
108.8	2554	3.0	8.27	28.0	46.0	46.0	66.0							
29.5	9334	1.1	47.51	28.0	46.0	-	-	PD/PM 82 200L4C / 200L4D				555	220	
35.7	7697	1.4	39.18	-	-	-	-							
35.8	7685	1.2	39.12	28.0	44.0	-	-							
43.4	6336	1.6	32.25	-	-	-	-							
49.4	5570	1.8	28.35	24.0	37.0	62.0	88.0							
57.1	4815	2.2	24.51	24.0	36.0	60.0	86.0							
66.2	4153	2.6	21.14	24.0	36.0	58.0	84.0							
80.4	3420	2.8	17.41	23.0	34.0	56.0	80.0							
58.9	4527	1.8	47.51	28.0	46.0	-	-	PD/PM 82 200L2B / 200L2C	555	220				
71.5	3733	2.2	39.18	28.0	44.0	-	-							
71.6	3728	1.9	39.12	28.0	44.0	-	-							
86.8	3073	2.6	32.25	24.0	37.0	-	-							
98.8	2701	2.8	28.35	24.0	37.0	62.0	88.0							
33.4	8190	0.8	26.92	16.0	26.0	50.0	73.0	PD/PM 73 225M6B / 225M6C	507	217				
38.3	7140	1.0	23.47	16.0	26.0	49.0	72.0							



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm
30.0	30.0	8976	0.8	46.66	11.0	22.0	52.0	76.0	PD/PM 73 200L4C / 200L4D	434	217
	37.9	7108	0.9	36.95	13.0	24.0	52.0	75.0			
	45.9	5865	1.1	30.49	15.0	26.0	51.0	74.0			
	52.0	5178	1.3	26.92	16.0	26.0	50.0	73.0			
	59.7	4515	1.5	23.47	16.0	26.0	49.0	72.0			
	47.0	5473	1.0	59.52	11.0	22.0	59.0	80.0	PD/PM 73 200L2B / 200L2C	434	217
	60.0	4290	1.3	46.66	11.0	22.0	52.0	76.0			
	75.8	3398	1.5	36.95	13.0	24.0	52.0	75.0			
	91.8	2804	1.8	30.49	15.0	26.0	51.0	74.0			
	104.0	2475	2.0	26.92	16.0	26.0	50.0	73.0			
	119.3	2158	2.3	23.47	16.0	26.0	49.0	72.0			
	39.3	7073	0.9	22.90	17.0	28.0	50.0	72.0	PD/PM 72 225M6B / 225M6C	500	216
	45.1	6165	1.0	19.96	17.0	27.0	49.0	71.0			
	55.3	5025	1.4	16.27	17.0	27.0	47.0	68.0			
	69.8	3981	1.5	12.89	17.0	25.0	44.0	65.0			
	80.5	3453	1.9	11.18	17.0	25.0	43.0	63.0			
	90.8	3061	1.5	9.91	16.0	24.0	42.0	61.0			
	95.1	2922	2.3	9.46	16.0	23.0	42.0	60.0			
	104.2	2669	1.7	8.64	16.0	23.0	40.0	59.0			
	120.0	2316	2.0	7.50	19.0	33.0	39.0	57.0			
	142.0	1958	2.4	6.34	19.0	33.0	37.0	54.0			
	151.0	1841	2.5	5.96	19.0	33.0	35.0	52.0			
	169.8	1637	2.6	5.30	19.0	33.0	35.0	51.0			
	178.9	1554	2.7	5.03	19.0	33.0	34.0	50.0			
	211.3	1316	2.9	4.26	19.0	33.0	33.0	49.0			
	37.6	7312	0.9	37.22	19.0	33.0	57.0	80.0	PD/PM 72 200L4C / 200L4D	427	216
	52.1	5283	1.1	26.89	17.0	27.0	51.0	74.0			
	61.1	4499	1.3	22.90	17.0	28.0	50.0	72.0			
	70.1	3921	1.5	19.96	17.0	27.0	49.0	71.0			
	86.0	3196	2.0	16.27	17.0	27.0	47.0	68.0			
	108.6	2532	2.3	12.89	17.0	25.0	44.0	65.0			
	125.2	2196	2.8	11.18	17.0	25.0	43.0	63.0			
	141.3	1947	2.2	9.91	16.0	24.0	42.0	61.0			
	162.0	1697	2.5	8.64	16.0	23.0	40.0	59.0			
	61.3	4351	1.0	45.66	19.0	33.0	59.0	80.0	PD/PM 72 200L2B / 200L2C	427	216
	75.2	3546	1.4	37.22	19.0	33.0	57.0	80.0			
	104.1	2562	1.7	26.89	17.0	27.0	51.0	74.0			
	122.3	2182	2.0	22.90	17.0	28.0	50.0	72.0			
	140.3	1902	2.3	19.96	17.0	27.0	49.0	71.0			
	48.2	5769	0.8	18.68	14.0	22.0	38.0	55.0	PD/PM 62 225M6B / 225M6C	437	212
	60.8	4571	1.0	14.80	14.0	22.0	37.0	53.0			
	72.9	3811	1.2	12.34	14.0	22.0	36.0	51.0			
	84.7	3280	1.4	10.62	14.0	21.0	35.0	50.0			
	96.1	2894	1.0	9.37	14.0	20.0	33.0	48.0			
	115.2	2412	1.2	7.81	14.0	20.0	32.0	46.0			
	133.7	2079	1.5	6.73	13.0	19.0	31.0	45.0			
	150.3	1850	1.4	5.99	13.0	19.0	31.0	44.0			
	155.7	1785	1.4	5.78	13.0	18.0	30.0	44.0			
163.9	1696	1.4	5.49	13.0	18.0	30.0	43.0				
183.7	1513	1.5	4.90	13.0	18.0	29.0	42.0				
205.5	1353	1.6	4.38	13.0	17.0	28.0	41.0				
53.8	5112	0.9	26.02	-	-	43.0	60.0	PD/PM 62 200L4C / 200L4D			
61.1	4501	1.0	22.91	13.0	22.0	39.0	56.0				
94.6	2908	1.5	14.80	14.0	22.0	38.0	55.0				
113.5	2424	1.8	12.34	14.0	22.0	37.0	53.0				
131.8	2086	2.1	10.62	14.0	21.0	36.0	51.0				
149.4	1841	1.5	9.37	14.0	20.0	35.0	50.0				
179.3	1534	1.7	7.81	14.0	20.0	33.0	48.0				
208.0	1322	2.3	6.73	13.0	19.0	32.0	46.0				
233.7	1177	2.0	5.99	13.0	19.0	31.0	45.0				
242.2	1136	2.1	5.78	13.0	18.0	31.0	44.0				
255.0	1079	2.1	5.49	13.0	18.0	30.0	44.0				
285.7	963	2.2	4.90	13.0	18.0	30.0	43.0				
319.6	860	2.4	4.38	13.0	17.0	29.0	42.0				



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
30.0	122.2	2183	1.6	22.91	13.0	22.0	39.0	56.0	PD/PM 62 200L2B / 200L2C	364	212
	149.9	1780	1.9	18.68	14.0	22.0	38.0	55.0			
	189.2	1410	2.4	14.80	14.0	22.0	37.0	53.0			
	226.9	1176	2.8	12.34	14.0	22.0	36.0	51.0			
	298.8	893	2.3	9.37	14.0	20.0	33.0	48.0			
358.5	744	2.7	7.81	14.0	20.0	32.0	46.0				
37.0	6.9	47865	1.9	201.75	-	-	92.0	126.0	PD/PM 123 225M4A / 225M4B	2491	236
	9.1	36619	2.5	154.35	-	-	120.0	125.0			
	10.2	32555	2.8	137.22	-	-	116.0	116.0			
	13.9	22879	3.0	201.75	-	-	92.0	126.0	PD/PM 123 200L2B / 200L2C	2391	236
	8.1	40797	1.7	171.96	-	-	111.0	138.0	PD/PM 113 225M4A / 225M4B	2386	233
	9.2	36268	1.9	152.87	-	-	121.0	136.0			
	10.7	31016	2.2	130.73	-	-	129.0	133.0			
	12.5	26662	2.6	112.38	-	-	135.0	129.0			
	15.2	21844	3.0	92.07	-	-	141.0	124.0			
	16.3	19501	2.7	171.96	-	-	111.0	138.0	PD/PM 113 200L2C / 200L2D	2286	233
	18.3	17336	3.0	152.87	-	-	121.0	136.0			
	10.0	33312	1.1	140.41	-	-	104.0	140.0	PD/PM 103 225M4A / 225M4B	1498	229
	13.4	24842	1.4	104.71	-	-	122.0	134.0			
	15.3	21673	1.6	91.35	-	-	126.0	131.0			
	19.3	17250	2.2	72.71	-	-	130.0	126.0			
	21.4	15526	2.3	65.44	-	-	131.0	124.0			
	24.7	13466	2.6	56.76	-	-	133.0	120.0			
	19.9	15923	1.7	140.41	-	-	104.0	140.0	PD/PM 103 200L2C / 200L2D	1425	229
	26.7	11875	2.3	104.71	-	-	122.0	134.0			
	30.7	10359	2.6	91.35	-	-	126.0	131.0			
	10.3	32185	0.8	135.66	18.0	43.0	91.0	112.0	PD/PM 93 225M4A / 225M4B	934	225
	12.1	27405	0.9	115.51	23.0	49.0	91.0	113.0			
	13.9	23891	1.1	100.70	27.0	52.0	90.0	113.0			
	16.8	19737	1.2	83.19	29.0	53.0	88.0	111.0			
	19.4	17122	1.4	72.17	31.0	55.0	87.0	111.0			
	21.5	15452	1.6	65.13	32.0	55.0	85.0	109.0			
	25.2	13158	1.8	55.46	33.0	56.0	84.0	108.0			
29.0	11471	2.1	48.35	34.0	56.0	82.0	106.0				
33.4	9950	2.4	41.94	34.0	56.0	80.0	104.0				
39.4	8420	2.9	35.49	34.0	54.0	78.0	101.0				
20.6	15384	1.3	135.66	18.0	43.0	91.0	112.0	PD/PM 93 200L2C / 200L2D	861	225	
24.2	13099	1.5	115.51	23.0	49.0	91.0	113.0				
27.8	11420	1.7	100.70	27.0	52.0	90.0	113.0				
33.7	9434	1.9	83.19	29.0	53.0	88.0	111.0				
38.8	8184	2.2	72.17	31.0	55.0	87.0	111.0				
43.0	7386	2.5	65.13	32.0	55.0	85.0	109.0				
50.5	6289	2.9	55.46	33.0	56.0	84.0	108.0				
40.7	8325	2.0	34.36	28.0	42.0	66.0	85.0	PD/PM 92 225M4A / 225M4B	929	224	
45.5	7460	2.4	30.79	28.0	41.0	64.0	84.0				
52.1	6506	2.6	26.85	28.0	40.0	63.0	82.0				
60.4	5614	2.9	23.17	27.0	39.0	61.0	80.0				
24.4	13599	0.9	57.32	12.0	24.0	60.0	87.0	PD/PM 83 225M4A / 225M4B	632	221	
29.3	11338	1.1	47.79	15.0	28.0	61.0	88.0				
32.2	10325	1.0	43.52	17.0	30.0	61.0	88.0				
39.1	8501	1.4	35.83	18.0	31.0	60.0	86.0				
45.4	7317	1.7	30.84	20.0	32.0	59.0	85.0				
30.8	10296	0.9	90.79	12.0	24.0	76.0	105.0	PD/PM 83 200L2C / 200L2D	559	221	
37.0	8585	1.1	75.70	12.0	24.0	66.0	96.0				
43.0	7389	1.2	65.16	12.0	24.0	66.0	96.0				
48.8	6500	1.4	57.32	12.0	24.0	60.0	87.0				
58.6	5420	1.7	47.79	15.0	28.0	61.0	88.0				
64.3	4935	1.6	43.52	17.0	30.0	61.0	88.0				
78.1	4063	2.3	35.83	18.0	31.0	60.0	86.0				
90.8	3497	2.6	30.84	20.0	32.0	59.0	85.0				



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3					
37.0	35.7	9493	1.1	39.18	-	-	-	-	PD/PM 82 225M4A / 225M4B	628	220			
	43.4	7814	1.3	32.25	-	-	-	-						
	49.4	6869	1.5	28.35	21.0	32.0	59.0	84.0						
	57.1	5939	1.8	24.51	21.0	32.0	58.0	83.0						
	66.2	5122	2.1	21.14	21.0	32.0	56.0	81.0						
	80.4	4218	2.3	17.41	21.0	31.0	54.0	78.0						
	92.2	3680	2.6	15.19	21.0	31.0	53.0	76.0						
	144.8	2343	2.8	9.67	20.0	27.0	48.0	68.0						
	58.9	5583	1.4	47.51	21.0	32.0	-	-				PD/PM 82 200L2C / 200L2D	555	220
	71.5	4604	1.8	39.18	21.0	32.0	-	-						
	71.6	4597	1.5	39.12	21.0	32.0	-	-						
	86.8	3790	2.1	32.25	21.0	32.0	-	-						
98.8	3332	2.3	28.35	21.0	32.0	59.0	84.0							
114.2	2880	2.8	24.51	21.0	32.0	58.0	83.0							
37.9	8766	0.8	36.95	13.0	24.0	52.0	75.0	PD/PM 73 225M4A / 225M4B	507	217				
45.9	7234	0.9	30.49	11.0	20.0	47.0	69.0							
52.0	6387	1.0	26.92	12.0	21.0	47.0	68.0							
59.7	5568	1.2	23.47	13.0	22.0	47.0	68.0							
47.0	6750	0.8	59.52	13.0	24.0	59.0	80.0	PD/PM 73 200L2C / 200L2D	434	217				
60.0	5291	1.0	46.66	13.0	24.0	52.0	76.0							
75.8	4190	1.2	36.95	13.0	24.0	52.0	75.0							
91.8	3458	1.5	30.49	11.0	20.0	47.0	69.0							
104.0	3053	1.6	26.92	12.0	21.0	47.0	68.0							
119.3	2662	1.9	23.47	13.0	22.0	47.0	68.0							
52.1	6515	0.9	26.89	13.0	22.0	48.0	70.0	PD/PM 72 225M4A / 225M4B	500	216				
61.1	5549	1.0	22.90	14.0	23.0	47.0	69.0							
70.1	4836	1.2	19.96	15.0	24.0	47.0	67.0							
86.0	3942	1.6	16.27	15.0	23.0	45.0	65.0							
108.6	3123	1.9	12.89	15.0	23.0	43.0	62.0							
125.2	2709	2.3	11.18	15.0	23.0	42.0	61.0							
141.3	2401	1.8	9.91	15.0	22.0	40.0	59.0							
148.0	2292	2.7	9.46	15.0	22.0	40.0	59.0							
162.0	2093	2.0	8.64	15.0	21.0	39.0	57.0							
186.7	1817	2.5	7.50	15.0	21.0	38.0	56.0							
220.8	1536	2.9	6.34	14.0	20.0	37.0	54.0							
234.9	1444	3.0	5.96	-	-	35.0	52.0							
61.3	5366	0.8	45.66	13.0	22.0	59.0	80.0				PD/PM 72 200L2C / 200L2D	427	216	
75.2	4374	1.1	37.22	13.0	22.0	57.0	80.0							
104.1	3160	1.4	26.89	13.0	22.0	48.0	70.0							
122.3	2691	1.6	22.90	14.0	23.0	47.0	69.0							
140.3	2346	1.9	19.96	15.0	24.0	47.0	67.0							
172.1	1912	2.6	16.27	15.0	23.0	45.0	65.0							
217.2	1515	2.9	12.89	15.0	23.0	43.0	62.0							
282.5	1165	2.8	9.91	15.0	22.0	40.0	59.0							
61.1	5551	0.8	22.91	10.0	17.0	37.0	52.0	PD/PM 62 225M4A / 225M4B	437	212				
94.6	3586	1.2	14.80	12.0	19.0	35.0	50.0							
113.5	2990	1.5	12.34	13.0	19.0	34.0	49.0							
131.8	2573	1.7	10.62	13.0	19.0	33.0	48.0							
149.4	2270	1.2	9.37	12.0	18.0	32.0	46.0							
179.3	1892	1.4	7.81	12.0	18.0	31.0	45.0							
208.0	1631	1.8	6.73	12.0	17.0	30.0	44.0							
233.7	1451	1.6	5.99	12.0	17.0	30.0	43.0							
242.2	1400	1.7	5.78	12.0	17.0	30.0	42.0							
255.0	1330	1.7	5.49	12.0	17.0	29.0	42.0							
285.7	1187	1.8	4.90	12.0	17.0	29.0	41.0							
319.6	1061	1.9	4.38	12.0	16.0	28.0	40.0							
122.2	2692	1.3	22.91	10.0	17.0	37.0	52.0	PD/PM 62 200L2C / 200L2D	364	212				
149.9	2195	1.5	18.68	11.0	18.0	36.0	51.0							
189.2	1739	2.0	14.80	12.0	19.0	35.0	50.0							
226.9	1450	2.3	12.34	13.0	19.0	34.0	49.0							
263.7	1248	2.6	10.62	13.0	19.0	33.0	48.0							
298.8	1101	1.9	9.37	12.0	18.0	32.0	46.0							
358.5	918	2.2	7.81	12.0	18.0	31.0	45.0							
416.0	791	2.9	6.73	12.0	17.0	30.0	44.0							
467.4	704	2.6	5.99	12.0	17.0	30.0	43.0							
484.4	679	2.6	5.78	12.0	17.0	30.0	42.0							
510.0	645	2.7	5.49	12.0	17.0	29.0	42.0							
571.4	576	2.8	4.90	12.0	17.0	29.0	41.0							
639.3	515	3.0	4.38	12.0	16.0	28.0	40.0							

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
45.0	6.9	58214	1.5	201.75	-	-	92.0	126.0	PD/PM 123 225M4B / 225M4C	2491	236
	9.1	44537	2.0	154.35	-	-	101.0	116.0			
	10.2	39594	2.3	137.22	-	-	116.0	116.0			
	11.9	33861	2.7	117.35	-	-	113.0	107.0			
13.9	27826	2.5	201.75	-	-	92.0	126.0	PD/PM 123 225M2B	2491	236	
8.1	49618	1.4	171.96	-	-	85.0	130.0	PD/PM 113 225M4B / 225M4C	2386	233	
	9.2	44110	1.6	152.87	-	-	-				-
	10.7	37722	1.8	130.73	-	-	116.0				127.0
	12.5	32427	2.1	112.38	-	-	127.0				124.0
	15.2	26566	2.5	92.07	-	-	136.0				120.0
	18.2	22221	2.8	77.01	-	-	141.0				117.0
16.3	23717	2.2	171.96	-	-	85.0	130.0	PD/PM 113 225M2B	2386	233	
	18.3	21084	2.5	152.87	-	-	103.0				129.0
	21.4	18031	2.9	130.73	-	-	116.0				127.0
10.0	40515	0.9	140.41	-	-	104.0	140.0	PD/PM 103 225M4B / 225M4C	1498	299	
	13.4	30214	1.2	104.71	-	-	113.0				128.0
	15.3	26359	1.3	91.35	-	-	120.0				125.0
	19.3	20980	1.8	72.71	-	-	126.0				122.0
	21.4	18882	1.9	65.44	-	-	128.0				120.0
	24.7	16378	2.1	56.76	-	-	131.0				116.0
	29.2	13836	2.5	47.95	-	-	133.0				112.0
	34.1	11830	3.0	41.00	-	-	133.0				106.0
19.9	19366	1.4	140.41	-	-	104.0	140.0	PD/PM 103 225M2B	1498	299	
	26.7	14442	1.9	104.71	-	-	113.0				128.0
	30.7	12599	2.1	91.35	-	-	120.0				125.0
	38.5	10028	2.8	72.71	-	-	126.0				122.0
	42.8	9026	3.0	65.44	-	-	128.0				120.0
12.1	33330	0.8	115.51	11.0	32.0	83.0	101.0	PD/PM 93 225M4B / 225M4C	934	225	
	13.9	29057	0.9	100.70	16.0	38.0	83.0				103.0
	16.8	24004	1.0	83.19	20.0	41.0	82.0				102.0
	19.4	20824	1.2	72.17	23.0	44.0	82.0				103.0
	21.5	18793	1.3	65.13	32.0	32.0	85.0				109.0
	25.2	16003	1.5	55.46	27.0	48.0	80.0				102.0
	29.0	13951	1.7	48.35	29.0	49.0	79.0				101.0
	33.4	12102	2.0	41.94	30.0	49.0	77.0				99.0
	39.4	10241	2.3	35.49	31.0	49.0	75.0				97.0
20.6	18711	1.0	135.66	11.0	32.0	91.0	112.0	PD/PM 93 225M2B	934	225	
	24.2	15932	1.2	115.51	11.0	32.0	83.0				101.0
	27.8	13889	1.4	100.70	16.0	38.0	83.0				103.0
	33.7	11474	1.6	83.19	20.0	41.0	82.0				102.0
	38.8	9954	1.8	72.17	23.0	44.0	82.0				103.0
	43.0	8983	2.1	65.13	32.0	32.0	85.0				109.0
	50.5	7649	2.4	55.46	27.0	48.0	80.0				102.0
	57.9	6669	2.7	48.35	29.0	49.0	79.0				101.0
40.7	10125	1.6	34.36	25.0	37.0	64.0	82.0	PD/PM 92 225M4B / 225M4C	929	224	
	45.5	9073	2.0	30.79	25.0	37.0	62.0				81.0
	52.1	7912	2.2	26.85	25.0	37.0	61.0				79.0
	60.4	6828	2.4	23.17	25.0	36.0	59.0				77.0
	69.7	5920	2.7	20.09	25.0	35.0	57.0				75.0
	80.7	5110	3.0	17.34	25.0	34.0	55.0				72.0
81.5	4911	2.5	34.36	25.0	37.0	64.0	82.0	PD/PM 92 225M2B	929	224	
29.3	13790	0.9	47.79	8.0	18.0	55.0	80.0	PD/PM 83 225M4B / 225M4C	632	221	
	32.2	12558	0.8	43.52	11.0	22.0	56.0				81.0
	39.1	10339	1.2	35.83	13.0	24.0	56.0				80.0
	45.4	8899	1.4	30.84	15.0	26.0	55.0				80.0
37.0	10441	0.9	75.70	8.0	18.0	66.0	96.0	PD/PM 83 225M2B	632	221	
	43.0	8987	1.0	65.16	8.0	18.0	66.0				96.0
	48.8	7906	1.2	57.32	8.0	18.0	60.0				87.0
	58.6	6591	1.4	47.79	8.0	18.0	55.0				80.0
	64.3	6002	1.3	43.52	11.0	22.0	56.0				81.0
	78.1	4942	1.9	35.83	13.0	24.0	56.0				80.0
	90.8	4254	2.2	30.84	15.0	26.0	55.0				80.0



P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
45.0	35.7	11546	0.9	39.18	-	-	-	-	PD/PM 82 225M4B / 225M4C	628	220			
	43.4	9504	1.1	32.25	-	-	-	-						
	49.4	8354	1.2	28.35	-	-	-	-						
	57.1	7223	1.5	24.51	18.0	28.0	55.0	79.0						
	66.2	6230	1.7	21.14	19.0	28.0	54.0	78.0						
	80.4	5130	1.9	17.41	19.0	28.0	52.0	75.0						
	92.2	4476	2.1	15.19	19.0	28.0	51.0	73.0						
	107.8	3828	2.7	12.99	19.0	27.0	50.0	71.0						
	144.8	2850	2.3	9.67	18.0	25.0	46.0	67.0						
	169.3	2437	3.0	8.27	18.0	25.0	45.0	65.0						
	71.5	5600	1.4	39.18	18.0	28.0	-	-				PD/PM 82 225M2B	628	220
	86.8	4609	1.7	32.25	-	-	-	-						
	98.8	4052	1.9	28.35	-	-	59.0	84.0						
	114.2	3503	2.3	24.51	18.0	28.0	55.0	79.0						
	132.5	3021	2.7	21.14	19.0	28.0	54.0	78.0						
	160.8	2488	3.0	17.41	19.0	28.0	52.0	75.0						
	45.9	8798	0.8	30.49	11.0	20.0	47.0	69.0	PD/PM 73 225M4B / 225M4C	507	217			
	52.0	7768	0.9	26.92	8.0	15.0	44.0	63.0						
	59.7	6772	1.0	23.47	9.0	17.0	43.0	63.0						
	60.0	6436	0.8	46.66	11.0	20.0	52.0	76.0	PD/PM 73 225M2B	507	217			
	75.8	5096	1.0	36.95	11.0	20.0	52.0	75.0						
	91.8	4205	1.2	30.49	11.0	20.0	47.0	69.0						
	104.0	3713	1.4	26.92	8.0	15.0	44.0	63.0						
	119.3	3237	1.6	23.47	9.0	17.0	43.0	63.0						
	61.1	6748	0.9	22.90	11.0	18.0	44.0	65.0				PD/PM 72 225M4B / 225M4C	500	216
	70.1	5882	1.0	19.96	12.0	20.0	44.0	64.0						
	86.0	4795	1.3	16.27	13.0	20.0	43.0	62.0						
	108.6	3798	1.5	12.89	13.0	20.0	41.0	60.0						
	125.2	3295	1.9	11.18	14.0	20.0	40.0	59.0						
	141.3	2920	1.5	9.91	13.0	19.0	39.0	57.0						
	148.0	2788	2.2	9.46	14.0	20.0	39.0	57.0						
	162.0	2546	1.7	8.64	13.0	19.0	38.0	56.0						
	186.7	2210	2.0	7.50	13.0	19.0	37.0	54.0						
	220.8	1868	2.4	6.34	13.0	18.0	36.0	52.0						
	234.9	1756	2.5	5.96	13.0	18.0	35.0	52.0						
	264.2	1562	2.6	5.30	13.0	18.0	35.0	50.0						
	278.3	1482	2.7	5.03	13.0	18.0	34.0	50.0						
	328.6	1255	2.9	4.26	13.0	17.0	33.0	48.0						
	104.1	3843	1.1	26.89	11.0	18.0	48.0	70.0	PD/PM 72 225M2B	500	216			
	122.3	3273	1.3	22.90	11.0	18.0	44.0	65.0						
	140.3	2853	1.5	19.96	12.0	20.0	44.0	64.0						
	172.1	2325	2.1	16.27	13.0	20.0	43.0	62.0						
	217.2	1842	2.4	12.89	13.0	20.0	41.0	60.0						
	250.4	1598	3.0	11.18	14.0	20.0	40.0	59.0						
	282.5	1416	2.3	9.91	13.0	19.0	39.0	57.0						
	324.1	1235	2.6	8.64	13.0	19.0	38.0	56.0						
	94.6	4361	1.0	14.80	12.0	19.0	35.0	50.0	PD/PM 62 225M4B / 225M4C	437	212			
	113.5	3636	1.2	12.34	10.0	16.0	32.0	46.0						
131.8	3130	1.4	10.62	11.0	16.0	32.0	46.0							
149.4	2761	1.0	9.37	12.0	18.0	32.0	46.0							
179.3	2301	1.2	7.81	11.0	16.0	30.0	43.0							
208.0	1983	1.5	6.73	11.0	16.0	29.0	42.0							
233.7	1765	1.4	5.99	11.0	16.0	29.0	41.0							
242.2	1703	1.4	5.78	11.0	16.0	29.0	41.0							
255.0	1618	1.4	5.49	11.0	15.0	28.0	41.0							
285.7	1444	1.5	4.90	11.0	15.0	28.0	40.0							
319.6	1291	1.6	4.38	11.0	15.0	27.0	39.0							
122.2	3274	1.1	22.91	10.0	17.0	37.0	52.0	PD/PM 62 225M2B	437	212				
149.9	2670	1.3	18.68	11.0	18.0	36.0	51.0							
189.2	2115	1.6	14.80	12.0	19.0	35.0	50.0							
226.9	1764	1.9	12.34	10.0	16.0	32.0	46.0							
263.7	1518	2.2	10.62	11.0	16.0	32.0	46.0							
298.8	1339	1.6	9.37	12.0	18.0	32.0	46.0							
358.5	1116	1.8	7.81	11.0	16.0	30.0	43.0							
416.0	962	2.4	6.73	11.0	16.0	29.0	42.0							
467.4	856	2.1	5.99	11.0	16.0	29.0	41.0							
484.4	826	2.1	5.78	11.0	16.0	29.0	41.0							
510.0	785	2.2	5.49	11.0	15.0	28.0	41.0							
571.4	700	2.3	4.90	11.0	15.0	28.0	40.0							
639.3	626	2.5	4.38	11.0	15.0	27.0	39.0							



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
55.0	9.1	54434	1.7	154.35	-	-	67.0	105.0	PD/PM 123 250M4A / 250M4B	2644	236
	10.2	48393	1.9	137.22	-	-	94.0	106.0			
	11.9	41386	2.2	117.35	-	-	113.0	107.0			
	13.9	35577	2.5	100.88	-	-	124.0	106.0			
	18.1	26019	2.6	154.35	-	-	67.0	105.0	PD/PM 123 250M2A	2644	236
	20.4	23132	3.0	137.22	-	-	94.0	106.0			
	8.1	60645	1.1	171.96	-	-	49.0	121.0	PD/PM 113 250M4A / 250M4B	2539	233
	9.2	53912	1.3	152.87	-	-	-	-			
	10.7	46104	1.5	130.73	-	-	94.0	120.0			
	12.5	39633	1.7	112.38	-	-	113.0	118.0			
	15.2	32470	2.0	92.07	-	-	128.0	116.0			
	18.2	27159	2.3	77.01	-	-	135.0	113.0			
	22.1	22373	2.7	63.44	-	-	140.0	109.0			
	16.3	28988	1.8	171.96	-	-	49.0	121.0	PD/PM 113 250M2A	2539	233
	18.3	25770	2.0	152.87	-	-	69.0	120.0			
	21.4	22038	2.4	130.73	-	-	94.0	120.0			
	24.9	18944	2.8	112.38	-	-	113.0	118.0			
	13.4	36928	1.0	104.71	-	-	99.0	119.0	PD/PM 103 250M4A / 250M4B	1671	229
	15.3	32216	1.1	91.35	-	-	109.0	119.0			
	19.3	25642	1.5	72.71	-	-	120.0	116.0			
	21.4	23079	1.5	65.44	-	-	125.0	114.0			
	24.7	20017	1.7	56.76	-	-	128.0	112.0			
	29.2	16910	2.1	47.95	-	-	131.0	109.0			
	34.1	14459	2.4	41.00	-	-	133.0	106.0			
	40.8	12114	2.9	34.35	-	-	134.0	102.0			
	26.7	17651	1.5	104.71	-	-	99.0	119.0	PD/PM 103 250M2A	1671	229
	30.7	15399	1.7	91.35	-	-	109.0	119.0			
	38.5	12257	2.3	72.71	-	-	120.0	116.0			
	42.8	11031	2.4	65.44	-	-	125.0	114.0			
	49.3	9568	2.8	56.76	-	-	128.0	112.0			
	16.8	29338	0.8	83.19	9.0	26.0	75.0	91.0	PD/PM 93 250M4A / 250M4B	1107	225
	19.4	25452	0.9	72.17	14.0	32.0	75.0	93.0			
	25.2	19559	1.2	55.46	21.0	38.0	75.0	94.0			
	29.0	17051	1.4	48.35	23.0	40.0	74.0	94.0			
	33.4	14791	1.6	41.94	25.0	41.0	73.0	93.0			
	39.4	12516	1.9	35.49	26.0	43.0	72.0	92.0			
	24.2	19472	1.0	115.51	9.0	26.0	83.0	101.0	PD/PM 93 250M2A	1107	225
	27.8	16975	1.1	100.70	9.0	26.0	83.0	103.0			
	33.7	14024	1.3	83.19	9.0	26.0	75.0	91.0			
	38.8	12166	1.5	72.17	14.0	32.0	75.0	93.0			
	50.5	9349	2.0	55.46	21.0	38.0	75.0	94.0			
	57.9	8151	2.2	48.35	23.0	40.0	74.0	94.0			
	66.8	7070	2.6	41.94	25.0	41.0	73.0	93.0			
	78.9	5983	3.0	35.49	26.0	43.0	72.0	92.0			
	40.7	12375	1.3	34.36	20.0	31.0	61.0	77.0	PD/PM 92 250M4A / 250M4B	1102	224
	45.5	11090	1.6	30.79	21.0	32.0	60.0	77.0			
	52.1	9671	1.8	26.85	22.0	32.0	59.0	75.0			
	60.4	8345	2.0	23.17	23.0	32.0	57.0	74.0			
	69.7	7236	2.2	20.09	22.0	31.0	55.0	72.0			
	80.7	6245	2.5	17.34	22.0	31.0	54.0	70.0			
	95.3	5291	2.8	14.69	22.0	30.0	52.0	68.0			
	137.1	3677	2.9	10.21	-	-	46.0	59.0			
	81.5	6002	2.1	34.36	20.0	31.0	61.0	77.0	PD/PM 92 250M2A	1102	224
	90.9	5379	2.5	30.79	21.0	32.0	60.0	77.0			
	104.3	4690	2.8	26.85	22.0	32.0	59.0	75.0			
	57.1	8828	1.2	24.51	14.0	22.0	52.0	74.0	PD/PM 82 250M4A / 250M4B	801	220
	66.2	7614	1.4	21.14	15.0	23.0	51.0	74.0			
	80.4	6271	1.5	17.41	16.0	24.0	50.0	72.0			
	92.2	5471	1.7	15.19	17.0	24.0	49.0	70.0			
	107.8	4679	2.2	12.99	17.0	24.0	48.0	69.0			
	128.7	3919	2.6	10.88	17.0	24.0	47.0	67.0			
	144.8	3483	1.9	9.67	17.0	23.0	45.0	65.0			
	169.3	2979	2.4	8.27	17.0	23.0	44.0	63.0			
	202.0	2496	2.7	6.93	17.0	22.0	42.0	61.0			
	309.7	1628	3.0	4.52	16.0	20.0	38.0	55.0			



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm	
55.0	114.2	4282	1.9	24.51	14.0	22.0	52.0	74.0	PD/PM 82 250M2A	801	220	
	132.5	3693	2.2	21.14	15.0	23.0	51.0	74.0				
	160.8	3041	2.4	17.41	16.0	24.0	50.0	72.0				
	184.3	2654	2.7	15.19	17.0	24.0	49.0	70.0				
	289.6	1689	2.9	9.67	17.0	23.0	45.0	65.0				
	94.6	5331	0.8	14.80	-	-	35.0	50.0	PD/PM 62 250M4A / 250M4B	610	212	
	113.5	4445	1.0	12.34	-	-	34.0	49.0				
	131.8	3825	1.1	10.62	-	-	33.0	48.0				
	149.4	3375	0.8	9.37	-	-	32.0	46.0				
	179.3	2813	1.0	7.81	-	-	31.0	45.0				
	208.0	2424	1.2	6.73	-	-	30.0	44.0				
	233.7	2157	1.1	5.99	-	-	30.0	43.0				
	242.2	2082	1.1	5.78	-	-	30.0	42.0				
	255.0	1977	1.2	5.49	-	-	29.0	42.0				
	285.7	1765	1.2	4.90	-	-	29.0	41.0				
	319.6	1578	1.3	4.38	-	-	28.0	40.0				
	75.0	9.1	74229	1.2	154.35	-	-	32.0	82.0	PD/PM 123 280M4B / 280M4C	2874	236
		10.2	65991	1.4	137.22	-	-	48.0	86.0			
11.9		56435	1.6	117.35	-	-	65.0	90.0				
13.9		48514	1.9	100.88	-	-	94.0	92.0				
16.9		39747	2.3	82.65	-	-	115.0	93.0				
20.3		33241	2.7	69.12	-	-	125.0	93.0				
18.1		35481	1.9	154.35	-	-	32.0	82.0	PD/PM 123 280M2B / 280M2C	2874	236	
20.4		31543	2.2	137.22	-	-	48.0	86.0				
23.9		26976	2.5	117.35	-	-	65.0	90.0				
27.8		23190	2.9	100.88	-	-	94.0	92.0				
8.1		82697	0.8	171.96	-	-	26.0	102.0	PD/PM 113 280M4B / 280M4C	2769	233	
9.2		73517	0.9	152.87	-	-	-	-				
10.7		62869	1.1	130.73	-	-	48.0	105.0				
12.5		54045	1.3	112.38	-	-	65.0	106.0				
15.2		44277	1.5	92.07	-	-	103.0	105.0				
18.2		37035	1.7	77.01	-	-	119.0	104.0				
22.1		30509	2.0	63.44	-	-	130.0	102.0				
25.8		26094	2.3	54.26	-	-	136.0	100.0				
30.0		22430	2.7	46.64	-	-	141.0	97.0				
16.3		39529	1.3	171.96	-	-	26.0	102.0	PD/PM 113 280M2B / 280M2C	2769	233	
18.3		35141	1.5	152.87	-	-	32.0	104.0				
21.4		30051	1.7	130.73	-	-	48.0	105.0				
24.9		25833	2.0	112.38	-	-	65.0	106.0				
30.4		21164	2.3	92.07	-	-	103.0	105.0				
36.4		17703	2.7	77.01	-	-	119.0	104.0				
40.2		17116	2.5	34.85	-	-	144.0	94.0	PD/PM 112 280M4B / 280M4C	2600	232	
46.8		14695	2.9	29.92	-	-	145.0	87.0				
15.3		43931	0.8	91.35	-	-	77.0	105.0	PD/PM 103 280M4B / 280M4C	1871	229	
19.3		34967	1.1	72.71	-	-	103.0	105.0				
21.4		31471	1.1	65.44	-	-	113.0	104.0				
24.7	27296	1.3	56.76	-	-	118.0	103.0					
29.2	23060	1.5	47.95	-	-	124.0	102.0					
34.1	19717	1.8	41.00	-	-	128.0	100.0					
40.8	16519	2.1	34.35	-	-	131.0	97.0					
47.0	14326	2.4	29.79	-	-	133.0	95.0					
51.5	13071	2.5	27.18	-	-	134.0	93.0					
59.4	11340	2.9	23.58	-	-	135.0	90.0					
26.7	24070	1.1	104.71	-	-	99.0	119.0	PD/PM 103 280M2C				1871
30.7	20999	1.3	91.35	-	-	77.0	105.0					
38.5	16714	1.7	72.71	-	-	103.0	105.0					
42.8	15043	1.8	65.44	-	-	113.0	104.0					
49.3	13048	2.0	56.76	-	-	118.0	103.0					
58.4	11022	2.4	47.95	-	-	124.0	102.0					
68.3	9425	2.8	41.00	-	-	128.0	100.0					
29.0	23252	1.0	48.35	10.0	23.0	66.0	81.0		PD/PM 93 280M4B / 280M4C	1307	225	
33.4	20169	1.2	41.94	13.0	26.0	66.0	82.0					
39.4	17068	1.4	35.49	17.0	30.0	66.0	82.0					



P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3		
75.0	27.8	23148	0.8	100.70	10.0	23.0	83.0	103.0	PD/PM 93 280M2B / 280M2C	1307	225
	33.7	19123	1.0	83.19	10.0	23.0	75.0	91.0			
	38.8	16590	1.1	72.17	10.0	23.0	75.0	93.0			
	57.9	11114	1.6	48.35	10.0	23.0	66.0	81.0			
	66.8	9641	1.9	41.94	13.0	26.0	66.0	82.0			
	78.9	8158	2.2	35.49	17.0	30.0	66.0	82.0			
	45.5	15122	1.2	30.79	13.0	22.0	55.0	69.0	PD/PM 92 280M4B / 280M4C	1302	224
	52.1	13187	1.3	26.85	15.0	23.0	54.0	69.0			
	60.4	11380	1.4	23.17	17.0	25.0	53.0	68.0			
	69.7	9867	1.6	20.09	17.0	24.0	52.0	66.0			
	80.7	8516	1.8	17.34	18.0	25.0	51.0	65.0			
	95.3	7215	2.0	14.69	19.0	25.0	50.0	64.0			
	116.3	5913	2.3	12.04	19.0	25.0	48.0	62.0			
	137.1	5015	2.2	10.21	18.0	24.0	46.0	59.0			
	161.8	4248	2.6	8.65	18.0	24.0	44.0	58.0			
	197.5	3482	2.9	7.09	18.0	23.0	42.0	56.0			
	90.9	7335	1.9	30.79	13.0	22.0	55.0	69.0	PD/PM 92 280M2B / 280M2C	1302	224
	104.3	6396	2.0	26.85	15.0	23.0	54.0	69.0			
	120.8	5519	2.3	23.17	17.0	25.0	53.0	68.0			
	139.4	4786	2.5	20.09	17.0	24.0	52.0	66.0			
	161.5	4131	2.9	17.34	18.0	25.0	51.0	65.0			
	66.2	10383	1.0	21.14	8.0	14.0	45.0	65.0	PD/PM 82 280M4B / 280M4C	1001	220
	80.4	8551	1.1	17.41	10.0	16.0	45.0	65.0			
	92.2	7460	1.3	15.19	11.0	17.0	45.0	64.0			
	107.8	6380	1.6	12.99	13.0	19.0	44.0	64.0			
	128.7	5344	1.9	10.88	14.0	19.0	43.0	62.0			
	144.8	4749	1.4	9.67	13.0	19.0	42.0	60.0			
	169.3	4062	1.8	8.27	14.0	19.0	41.0	59.0			
202.0	3404	2.0	6.93	14.0	19.0	40.0	58.0				
309.7	2220	2.2	4.52	14.0	18.0	37.0	53.0				
114.2	5839	1.4	24.51	8.0	14.0	45.0	65.0	PD/PM 82 280M2B / 280M2C			
132.5	5036	1.6	21.14	8.0	14.0	45.0	65.0				
160.8	4147	1.8	17.41	10.0	16.0	45.0	65.0				
184.3	3618	2.0	15.19	11.0	17.0	45.0	64.0				
215.6	3094	2.5	12.99	13.0	19.0	44.0	64.0				
257.4	2592	3.0	10.88	14.0	19.0	43.0	62.0				
289.6	2303	2.2	9.67	13.0	19.0	42.0	60.0				
338.6	1970	2.8	8.27	14.0	19.0	41.0	59.0				
90.0	9.1	89074	1.0	154.35	-	-	32.0	87.0	PD/PM 123 280M4C / 280M4D	2874	236
	10.2	79189	1.1	137.22	-	-	23.0	71.0			
	11.9	67722	1.3	117.35	-	-	28.0	77.0			
	13.9	58217	1.5	100.88	-	-	52.0	81.0			
	16.9	47697	1.9	82.65	-	-	94.0	84.0			
	20.3	39889	2.3	69.12	-	-	112.0	85.0			
	18.1	42577	1.6	154.35	-	-	32.0	82.0	PD/PM 123 280M2C / 280M2D	2874	236
	20.4	37852	1.8	137.22	-	-	23.0	71.0			
	23.9	32371	2.1	117.35	-	-	28.0	77.0			
	27.8	27828	2.5	100.88	-	-	52.0	81.0			
	33.9	22799	3.0	82.65	-	-	94.0	84.0			
	9.2	88220	0.8	152.87	-	-	-	-	PD/PM 113 280M4C / 280M4D	2769	233
	10.7	75443	0.9	130.73	-	-	32.0	94.0			
	12.5	64854	1.1	112.38	-	-	39.0	96.0			
	15.2	53133	1.2	92.07	-	-	72.0	98.0			
	18.2	44442	1.4	77.01	-	-	101.0	98.0			
	22.1	36611	1.6	63.44	-	-	120.0	97.0			
	25.8	31313	1.9	54.26	-	-	129.0	95.0			
	30.0	26916	2.2	46.64	-	-	136.0	94.0			
	36.6	22051	2.7	38.21	-	-	141.0	91.0			
	16.3	47435	1.1	171.96	-	-	26.0	102.0	PD/PM 113 280M2C / 280M2D	2769	233
	18.3	42169	1.2	152.87	-	-	21.0	92.0			
	21.4	36062	1.5	130.73	-	-	32.0	94.0			
	24.9	31000	1.7	112.38	-	-	39.0	96.0			
	30.4	25397	2.0	92.07	-	-	72.0	98.0			
	36.4	21243	2.2	77.01	-	-	101.0	98.0			
	44.1	17500	2.6	63.44	-	-	120.0	97.0			
	51.6	14968	3.0	54.26	-	-	129.0	95.0			



P_1 [kW]	n_2 [Min ⁻¹]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{RGR} [kN]	F_{AGR} [kN]	Tip / Type / Typ IE2 / IE3	Kg	mm			
90.0	40.2	20540	2.0	34.85	-	-	144.0	88.0	PD/PM 112 280M4C / 280M4D	2692	232			
	46.8	17634	2.4	29.92	-	-	143.0	90.0						
	55.0	15011	2.8	25.47	-	-	145.0	87.0						
	19.3	41960	0.9	72.71	-	-	84.0	97.0	PD/PM 103 280M4C / 280M4D	1871	229			
	21.4	37765	0.9	65.44	-	-	100.0	97.0						
	24.7	32756	1.1	56.76	-	-	109.0	97.0						
	29.2	27672	1.3	47.95	-	-	118.0	96.0						
	34.1	23661	1.5	41.00	-	-	124.0	95.0						
	40.8	19823	1.8	34.35	-	-	128.0	93.0						
	47.0	17192	2.0	29.79	-	-	130.0	91.0						
	51.5	15685	2.1	27.18	-	-	132.0	89.0						
	59.4	13608	2.4	23.58	-	-	133.0	87.0						
	66.7	12119	2.7	21.00	-	-	134.0	86.0						
	26.7	28884	0.9	104.71	-	-	99.0	119.0	PD/PM 103 280M2C / 280M2D	1871	229			
	30.7	25199	1.1	91.35	-	-	77.0	105.0						
	38.5	20057	1.4	72.71	-	-	84.0	97.0						
	42.8	18051	1.5	65.44	-	-	100.0	97.0						
	49.3	15657	1.7	56.76	-	-	109.0	97.0						
	58.4	13227	2.0	47.95	-	-	118.0	96.0						
	68.3	11310	2.4	41.00	-	-	124.0	95.0						
	81.5	9475	2.8	34.35	-	-	128.0	93.0						
	76.8	10750	3.0	18.24	-	-	135.0	84.0	PD/PM 102 280M4C / 280M4D	1871	228			
	29.0	27902	0.9	48.35	-	-	66.0	81.0	PD/PM 93 280M4C / 280M4D	1307	225			
	33.4	24203	1.0	41.94	-	-	66.0	82.0						
	39.4	20481	1.2	35.49	-	-	66.0	82.0						
	33.7	22948	0.8	83.19	10.0	23.0	75.0	91.0	PD/PM 93 280M2C / 280M2D	1307	225			
	38.8	19908	0.9	72.17	10.0	23.0	75.0	93.0						
	57.9	13337	1.4	48.35	10.0	23.0	66.0	81.0						
	66.8	11569	1.6	41.94	10.0	23.0	66.0	82.0						
	78.9	9790	1.9	35.49	10.0	23.0	66.0	82.0						
	45.5	18147	1.0	30.79	7.0	14.0	51.0	63.0				PD/PM 92 280M4C / 280M4D	1302	224
	52.1	15825	1.1	26.85	10.0	17.0	51.0	63.0						
	60.4	13656	1.2	23.17	13.0	19.0	51.0	64.0						
	69.7	11840	1.3	20.09	13.0	20.0	49.0	62.0						
	80.7	10220	1.5	17.34	15.0	21.0	49.0	62.0						
	95.3	8658	1.7	14.69	16.0	22.0	48.0	61.0						
	116.3	7096	1.9	12.04	17.0	22.0	46.0	60.0						
	137.1	6017	1.8	10.21	16.0	21.0	44.0	57.0						
	161.8	5098	2.2	8.65	17.0	21.0	43.0	56.0						
	197.5	4179	2.4	7.09	17.0	21.0	41.0	54.0						
	242.2	3407	2.6	5.78	17.0	21.0	40.0	52.0						
	261.2	3159	2.6	5.36	17.0	20.0	39.0	51.0						
	90.9	8801	1.5	30.79	7.0	14.0	51.0	63.0	PD/PM 92 280M2C / 280M2D	1302	224			
	104.3	7675	1.7	26.85	10.0	17.0	51.0	63.0						
	120.8	6623	1.9	23.17	13.0	19.0	51.0	64.0						
	139.4	5743	2.1	20.09	13.0	20.0	49.0	62.0						
	161.5	4957	2.4	17.34	15.0	21.0	49.0	62.0						
	190.6	4199	2.7	14.69	16.0	22.0	48.0	61.0						
232.6	3442	3.0	12.04	17.0	22.0	46.0	60.0							
274.2	2919	2.8	10.21	16.0	21.0	44.0	57.0							
66.2	12459	0.9	21.14	-	-	14.0	45.0	PD/PM 82 280M4C / 280M4D	1001	220				
80.4	10261	0.9	17.41	-	-	16.0	45.0							
92.2	8953	1.1	15.19	-	-	17.0	45.0							
107.8	7656	1.3	12.99	-	-	19.0	44.0							
128.7	6412	1.6	10.88	-	-	19.0	43.0							
144.8	5699	1.1	9.67	-	-	19.0	42.0							
169.3	4874	1.5	8.27	-	-	19.0	41.0							
202.0	4084	1.7	6.93	-	-	19.0	40.0							
309.7	2664	1.8	4.52	-	-	18.0	37.0							

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
90.0	114.2	7006	1.2	24.51	8.0	14.0	45.0	65.0	PD/PM 82 280M2C / 280M2D	1001	220
	132.5	6043	1.3	21.14	8.0	14.0	45.0	65.0			
	160.8	4977	1.5	17.41	8.0	14.0	45.0	65.0			
	184.3	4342	1.7	15.19	8.0	14.0	45.0	64.0			
	215.6	3713	2.1	12.99	8.0	14.0	44.0	64.0			
	257.4	3110	2.5	10.88	8.0	14.0	43.0	62.0			
	289.6	2764	1.8	9.67	8.0	14.0	42.0	60.0			
	338.6	2364	2.3	8.27	8.0	14.0	41.0	59.0			
	404.0	1981	2.6	6.93	8.0	14.0	40.0	58.0			
	619.5	1292	2.9	4.52	8.0	14.0	37.0	53.0			
110	10.2	96786	0.9	137.22	-	-	14.0	51.0	PD/PM 123 315S4C	3424	236
	11.9	82771	1.1	117.35	-	-	17.0	60.0			
	13.9	71154	1.3	100.88	-	-	27.0	66.0			
	16.9	58296	1.5	82.65	-	-	44.0	72.0			
	20.3	48753	1.8	69.12	-	-	94.0	76.0			
	20.4	46263	1.5	137.22	-	-	14.0	51.0	PD/PM 123 315S2C	3424	236
	23.9	39564	1.7	117.35	-	-	17.0	60.0			
	27.8	34011	2.0	100.88	-	-	27.0	66.0			
	33.9	27865	2.5	82.65	-	-	44.0	72.0			
	40.5	23304	2.9	69.12	-	-	94.0	76.0			
	12.5	79266	0.9	112.38	-	-	23.0	84.0	PD/PM 113 315S4C	3029	233
	15.2	64940	1.0	92.07	-	-	38.0	88.0			
	18.2	54318	1.1	77.01	-	-	64.0	89.0			
	22.1	44746	1.3	63.44	-	-	100.0	90.0			
	25.8	38272	1.6	54.26	-	-	117.0	89.0			
	30.0	32897	1.8	46.64	-	-	128.0	88.0			
	36.6	26951	2.2	38.21	-	-	136.0	87.0			
	43.8	22543	2.7	31.96	-	-	141.0	85.0			
	18.3	51540	1.0	152.87	-	-	21.0	92.0	PD/PM 113 315S2C	3029	233
	21.4	44075	1.2	130.73	-	-	32.0	94.0			
	24.9	37889	1.4	112.38	-	-	23.0	84.0			
	30.4	31041	1.6	92.07	-	-	38.0	88.0			
	36.4	25964	1.8	77.01	-	-	64.0	89.0			
	44.1	21389	2.1	63.44	-	-	100.0	90.0			
	51.6	18294	2.5	54.26	-	-	117.0	89.0			
	60.0	15725	2.9	46.64	-	-	128.0	88.0			
	40.2	25104	1.7	34.85	-	-	139.0	86.0	PD/PM 112 315S4C	2872	232
	46.8	21553	1.9	29.92	-	-	142.0	84.0			
	55.0	18347	2.3	25.47	-	-	145.0	82.0			
	65.4	15430	2.7	21.42	-	-	147.0	79.0			
	99.7	10114	2.6	14.04	-	-	147.0	67.0			
	80.3	12176	2.6	34.85	-	-	139.0	86.0	PD/PM 112 315S2C	2692	232
21.4	46157	0.8	65.44	-	-	74.0	87.0	PD/PM 103 315S4C	2236	229	
24.7	40035	0.9	56.76	-	-	92.0	88.0				
29.2	33821	1.0	47.95	-	-	107.0	89.0				
34.1	28919	1.2	41.00	-	-	116.0	89.0				
40.8	24228	1.4	34.35	-	-	123.0	88.0				
47.0	21012	1.7	29.79	-	-	127.0	87.0				
51.5	19171	1.7	27.18	-	-	129.0	85.0				
59.4	16632	2.0	23.58	-	-	131.0	84.0				
66.7	14812	2.2	21.00	-	-	132.0	82.0				
30.7	30798	0.9	91.35	-	-	77.0	105.0				PD/PM 103 315S2C
38.5	24514	1.2	72.71	-	-	84.0	97.0				
42.8	22063	1.2	65.44	-	-	74.0	87.0				
49.3	19136	1.4	56.76	-	-	92.0	88.0				
58.4	16166	1.6	47.95	-	-	107.0	89.0				
68.3	13823	1.9	41.00	-	-	116.0	89.0				
81.5	11581	2.3	34.35	-	-	123.0	88.0				
94.0	10044	2.6	29.79	-	-	127.0	87.0				
103.0	9164	2.7	27.18	-	-	129.0	85.0				
76.8	13139	2.4	18.24	-	-	134.0	81.0	PD/PM 102 315S4C	2236	228	
92.2	10942	2.9	15.19	-	-	135.0	78.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
110	52.1	19341	0.9	26.85	3.0	9.0	46.0	57.0	PD/PM 92 315S4C	1667	224
	60.4	16690	1.0	23.17	6.0	12.0	47.0	58.0			
	69.7	14472	1.1	20.09	8.0	13.0	46.0	57.0			
	80.7	12491	1.2	17.34	10.0	15.0	46.0	57.0			
	95.3	10582	1.4	14.69	12.0	17.0	45.0	57.0			
	116.3	8673	1.6	12.04	14.0	18.0	44.0	57.0			
	137.1	7355	1.5	10.21	14.0	18.0	43.0	54.0			
	161.8	6231	1.8	8.65	14.0	18.0	42.0	53.0			
	197.5	5107	2.0	7.09	15.0	19.0	40.0	52.0			
	242.2	4164	2.1	5.78	15.0	19.0	39.0	50.0			
	261.2	3861	2.2	5.36	15.0	18.0	38.0	50.0			
	104.3	9381	1.4	26.85	3.0	9.0	46.0	57.0			
	120.8	8095	1.5	23.17	6.0	12.0	47.0	58.0			
	139.4	7019	1.7	20.09	8.0	13.0	46.0	57.0			
	161.5	6058	1.9	17.34	10.0	15.0	46.0	57.0			
	190.6	5132	2.2	14.69	12.0	17.0	45.0	57.0			
	232.6	4206	2.5	12.04	14.0	18.0	44.0	57.0			
	274.2	3567	2.3	10.21	14.0	18.0	43.0	54.0			
	323.7	3022	2.8	8.65	14.0	18.0	42.0	53.0			
132	10.2	116143	0.8	137.22	-	-	14.0	51.0	PD/PM 123 315M4C / 315M4B	3424	236
	11.9	99325	0.9	117.35	-	-	17.0	60.0			
	13.9	85385	1.1	100.88	-	-	26.0	50.0			
	16.9	69955	1.3	82.65	-	-	32.0	59.0			
	20.3	58503	1.5	69.12	-	-	52.0	65.0			
	20.4	55516	1.2	137.22	-	-	14.0	51.0	PD/PM 123 315M2C / 315M2B	3424	236
	23.9	47477	1.4	117.35	-	-	17.0	60.0			
	27.8	40814	1.7	100.88	-	-	26.0	50.0			
	33.9	33438	2.0	82.65	-	-	32.0	59.0			
	40.5	27964	2.4	69.12	-	-	52.0	65.0			
	15.2	77928	0.8	92.07	-	-	44.0	76.0	PD/PM 113 315M4C / 315M4B	3029	233
	18.2	65181	1.0	77.01	-	-	52.0	80.0			
	22.1	53696	1.1	63.44	-	-	66.0	82.0			
	25.8	45926	1.3	54.26	-	-	97.0	83.0			
	30.0	39476	1.5	46.64	-	-	115.0	83.0			
	36.6	32341	1.9	38.21	-	-	128.0	82.0			
	43.8	27051	2.2	31.96	-	-	136.0	81.0			
	18.3	61848	0.8	152.87	-	-	21.0	92.0			
	21.4	52890	1.0	130.73	-	-	32.0	94.0	PD/PM 113 315M2C / 315M2B	3029	233
	24.9	45466	1.2	112.38	-	-	23.0	84.0			
	30.4	37249	1.3	92.07	-	-	44.0	76.0			
	36.4	31156	1.5	77.01	-	-	52.0	80.0			
	44.1	25666	1.8	63.44	-	-	66.0	82.0			
	51.6	21952	2.1	54.26	-	-	97.0	83.0			
	60.0	18869	2.4	46.64	-	-	115.0	83.0			
	73.3	15459	2.9	38.21	-	-	128.0	82.0			
	40.2	30125	1.4	34.85	-	-	139.0	86.0	PD/PM 112 315M4C / 315M4B	2952	232
	46.8	25863	1.6	29.92	-	-	138.0	80.0			
	55.0	22017	1.9	25.47	-	-	141.0	79.0			
	65.4	18516	2.3	21.42	-	-	144.0	74.0			
	76.6	15793	2.7	18.27	-	-	144.0	72.0			
	85.7	14116	3.0	16.33	-	-	145.0	71.0			
	99.7	12136	2.2	14.04	-	-	147.0	67.0			
117.1	10338	2.5	11.96	-	-	148.0	66.0				
139.3	8687	3.0	10.05	-	-	149.0	64.0				
80.3	14611	2.2	34.85	-	-	139.0	86.0	PD/PM 112 315M2C / 315M2B			
93.6	12544	2.5	29.92	-	-	138.0	80.0				
109.9	10678	3.0	25.47	-	-	141.0	79.0				
29.2	40585	0.9	47.95	-	-	107.0	89.0	PD/PM 103 315M4C / 315M4B	2236	229	
34.1	34703	1.0	41.00	-	-	105.0	82.0				
40.8	29074	1.2	34.35	-	-	116.0	82.0				
47.0	25214	1.4	29.79	-	-	122.0	82.0				
51.5	23005	1.4	27.18	-	-	125.0	81.0				
59.4	19958	1.7	23.58	-	-	128.0	80.0				
66.7	17774	1.9	21.00	-	-	130.0	79.0				

P₁ [kW]	n₂ [Min ⁻¹]	M₂ [Nm]	f_B	i_{ges}	F_R [kN]	F_A [kN]	F_{R GR} [kN]	F_{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm			
132	38.5	29417	1.0	72.71	-	-	84.0	97.0	PD/PM 103 315M2C / 315M2B	2236	229			
	42.8	26476	1.0	65.44	-	-	74.0	87.0						
	49.3	22964	1.2	56.76	-	-	92.0	88.0						
	58.4	19399	1.4	47.95	-	-	107.0	89.0						
	68.3	16588	1.6	41.00	-	-	105.0	82.0						
	81.5	13897	1.9	34.35	-	-	116.0	82.0						
	94.0	12052	2.2	29.79	-	-	122.0	82.0						
	103.0	10996	2.3	27.18	-	-	125.0	81.0						
	118.7	9540	2.6	23.58	-	-	128.0	80.0						
	133.3	8496	3.0	21.00	-	-	130.0	79.0						
	76.8	15767	2.0	18.24	-	-	132.0	78.0				PD/PM 102 315M4C / 315M4B	2236	228
	92.2	13130	2.4	15.19	-	-	134.0	76.0						
	103.7	11670	2.7	13.50	-	-	134.0	75.0						
	184.7	6552	2.9	7.58	-	-	137.0	65.0						
	60.4	20028	0.8	23.17	6.0	12.0	42.0	51.0	PD/PM 92 315M4C / 315M4B	1667	224			
	69.7	17366	0.9	20.09	1.0	6.0	42.0	51.0						
	80.7	14989	1.0	17.34	5.0	9.0	42.0	52.0						
	95.3	12698	1.2	14.69	8.0	12.0	42.0	53.0						
	116.3	10408	1.3	12.04	10.0	14.0	42.0	53.0						
	137.1	8826	1.2	10.21	10.0	14.0	40.0	51.0						
	161.8	7477	1.5	8.65	12.0	15.0	40.0	51.0						
	197.5	6129	1.7	7.09	13.0	16.0	39.0	50.0						
	242.2	4996	1.8	5.78	14.0	16.0	38.0	49.0						
	261.2	4633	1.8	5.36	14.0	16.0	37.0	48.0						
104.3	11257	1.2	26.85	6.0	12.0	41.0	49.0	PD/PM 92 315M2C / 315M2B	1667	224				
120.8	9714	1.3	23.17	6.0	12.0	42.0	51.0							
139.4	8423	1.4	20.09	1.0	6.0	42.0	51.0							
161.5	7270	1.6	17.34	5.0	9.0	42.0	52.0							
190.6	6159	1.8	14.69	8.0	12.0	42.0	53.0							
232.6	5048	2.1	12.04	10.0	14.0	42.0	53.0							
274.2	4281	1.9	10.21	10.0	14.0	40.0	51.0							
323.7	3627	2.3	8.65	12.0	15.0	40.0	51.0							
394.9	2972	2.6	7.09	13.0	16.0	39.0	50.0							
484.4	2423	2.8	5.78	14.0	16.0	38.0	49.0							
522.4	2247	2.8	5.36	14.0	16.0	37.0	48.0							
160	13.9	103497	0.9	100.88	-	-	26.0	50.0	PD/PM 123 315L4C / 315L4A	3424	236			
	16.9	84794	1.1	82.65	-	-	30.0	42.0						
	20.3	70913	1.3	69.12	-	-	77.0	49.0						
	20.4	67292	1.0	137.22	-	-	14.0	51.0	PD/PM123 315L2C / 315L2A	3424	236			
	23.9	57548	1.2	117.35	-	-	17.0	60.0						
	27.8	49471	1.4	100.88	-	-	26.0	50.0						
	33.9	40531	1.7	82.65	-	-	30.0	42.0						
	40.5	33896	2.0	69.12	-	-	77.0	49.0						
	18.2	79008	0.8	77.01	-	-	42.0	68.0	PD/PM 113 315L4C / 315L4A	3029	233			
	22.1	65086	0.9	63.44	-	-	45.0	72.0						
	25.8	55668	1.1	54.26	-	-	56.0	74.0						
	30.0	47850	1.3	46.64	-	-	94.0	76.0						
	36.6	39201	1.5	38.21	-	-	116.0	76.0						
	43.8	32789	1.8	31.96	-	-	127.0	76.0						
	21.4	64110	0.8	130.73	-	-	-	-	PD/PM 113 315L2C / 315L2A	3029	233			
	24.9	55111	1.0	112.38	-	-	23.0	84.0						
	30.4	45151	1.1	92.07	-	-	44.0	76.0						
	36.4	37765	1.3	77.01	-	-	42.0	68.0						
	44.1	31111	1.5	63.44	-	-	45.0	72.0						
	51.6	26609	1.7	54.26	-	-	56.0	74.0						
	60.0	22872	2.0	46.64	-	-	94.0	76.0						
	73.3	18738	2.4	38.21	-	-	116.0	76.0						
	87.6	15673	2.9	31.96	-	-	127.0	76.0						
	40.2	36515	1.2	34.85	-	-	139.0	86.0	PD/PM 112 315L4C / 315L4A	3102	232			
46.8	31349	1.3	29.92	-	-	131.0	76.0							
55.0	26687	1.6	25.47	-	-	136.0	75.0							
65.4	22443	1.9	21.42	-	-	141.0	74.0							
76.6	19143	2.2	18.27	-	-	144.0	72.0							
85.7	17110	2.5	16.33	-	-	145.0	71.0							
99.7	14711	1.8	14.04	-	-	147.0	67.0							
117.1	12531	2.1	11.96	-	-	148.0	66.0							
139.3	10530	2.5	10.05	-	-	149.0	64.0							
163.2	8990	2.8	8.58	-	-	150.0	61.0							
182.5	8036	3.0	7.67	-	-	148.0	60.0							

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
160	80.3	17710	1.8	34.85	-	-	139.0	86.0	PD/PM 112 315L2C / 315L2A	2692	232
	93.6	15205	2.1	29.92	-	-	131.0	76.0			
	109.9	12943	2.5	25.47	-	-	136.0	75.0			
	130.7	10885	2.9	21.42	-	-	141.0	74.0			
	199.4	7135	2.8	14.04	-	-	147.0	67.0			
	34.1	42064	0.8	41.00	-	-	85.0	74.0	PD/PM 103 315L4C / 315L4A	2236	229
	40.8	35241	1.0	34.35	-	-	104.0	75.0			
	47.0	30563	1.1	29.79	-	-	114.0	76.0			
	51.5	27885	1.2	27.18	-	-	118.0	75.0			
	59.4	24192	1.4	23.58	-	-	123.0	75.0			
	66.7	21545	1.5	21.00	-	-	126.0	75.0			
	38.5	35657	0.8	72.71	-	-	-	-	PD/PM 103 315L2C / 315L2A	2236	229
	42.8	32092	0.8	65.44	-	-	74.0	87.0			
	49.3	27835	1.0	56.76	-	-	92.0	88.0			
	58.4	23515	1.1	47.95	-	-	107.0	89.0			
	68.3	20106	1.3	41.00	-	-	85.0	74.0			
	81.5	16845	1.6	34.35	-	-	104.0	75.0			
	94.0	14609	1.8	29.79	-	-	114.0	76.0			
	103.0	13329	1.9	27.18	-	-	118.0	75.0			
	118.7	11564	2.2	23.58	-	-	123.0	75.0			
	133.0	10298	2.4	21.00	-	-	126.0	75.0			
	76.8	19111	1.7	18.24	-	-	129.0	74.0	PD/PM 102 315L4C / 315L4A	2236	228
	92.2	15916	2.0	15.19	-	-	132.0	73.0			
	103.7	14145	2.3	13.50	-	-	133.0	72.0			
	120.4	12186	2.6	11.63	-	-	134.0	70.0			
	134.4	10918	2.9	10.42	-	-	135.0	69.0			
	184.7	7942	2.4	7.58	-	-	136.0	64.0			
	207.7	7062	2.7	6.74	-	-	136.0	62.0			
	153.5	9269	2.6	18.24	-	-	129.0	74.0	PD/PM 102 315L2C / 315L2A	2236	228
	69.7	21050	0.8	20.09	1.0	6.0	36.0	43.0	PD/PM 92 315L4C / 315L4A	1667	224
	80.7	18168	0.9	17.34	5.0	9.0	38.0	46.0			
	95.3	15392	1.0	14.69	2.0	6.0	39.0	47.0			
	116.3	12615	1.1	12.04	6.0	9.0	39.0	48.0			
	137.1	10698	1.0	10.21	6.0	9.0	38.0	47.0			
	161.8	9063	1.2	8.65	8.0	11.0	37.0	47.0			
	197.5	7429	1.4	7.09	10.0	13.0	37.0	47.0			
	242.2	6056	1.5	5.78	11.0	14.0	36.0	46.0			
	261.2	5616	1.5	5.36	12.0	14.0	36.0	46.0			
	104.3	13645	1.0	26.85	1.0	6.0	41.0	49.0	PD/PM 92 315L2C / 315L2A	1667	224
	120.8	11775	1.1	23.17	1.0	6.0	42.0	51.0			
	139.4	10209	1.2	20.09	1.0	6.0	36.0	43.0			
	161.5	8812	1.3	17.34	5.0	9.0	38.0	46.0			
	190.6	7465	1.5	14.69	2.0	6.0	39.0	47.0			
	232.6	6119	1.7	12.04	6.0	9.0	39.0	48.0			
	274.2	5189	1.6	10.21	6.0	9.0	38.0	47.0			
	323.7	4396	1.9	8.65	8.0	1.0	37.0	47.0			
	394.9	3603	2.1	7.09	10.0	13.0	37.0	47.0			
	484.4	2937	2.3	5.78	11.0	14.0	36.0	46.0			
522.4	2724	2.3	5.36	12.0	14.0	36.0	46.0				
200	16.9	105993	0.8	82.65	-	-	30.0	42.0	PD/PM 123 315L4D / 315L4C	3424	236
	20.3	88641	1.0	69.12	-	-	70.0	28.0			
	20.4	84115	0.8	137.22	-	-	-	-	PD/PM 123 315L2D / 315L2C	3424	236
	23.9	71935	1.0	117.35	-	-	-	-			
	27.8	61839	1.1	100.88	-	-	26.0	50.0			
	33.9	50664	1.4	82.65	-	-	30.0	42.0			
	40.5	42370	1.6	69.12	-	-	70.0	28.0			
	25.8	69585	0.9	54.26	-	-	56.0	74.0	PD/PM 113 315L4D / 315L4C	3029	233
	30.0	59812	1.0	46.64	-	-	31.0	66.0			
	36.6	49002	1.2	38.21	-	-	90.0	68.0			
	43.8	40986	1.5	31.96	-	-	111.0	69.0			
	24.9	68888	0.8	112.38	-	-	-	-	PD/PM 113 315L2D / 315L2C	3029	233
	30.4	56438	0.9	92.07	-	-	44.0	76.0			
	36.4	47207	1.0	77.01	-	-	42.0	68.0			
	44.1	38888	1.2	63.44	-	-	45.0	72.0			
	51.6	33261	1.4	54.26	-	-	56.0	74.0			
60.0	28590	1.6	46.64	-	-	31.0	66.0				
73.3	23423	1.9	38.21	-	-	90.0	68.0				
87.6	19591	2.3	31.96	-	-	111.0	69.0				

P ₁ [kW]	n ₂ [Min ⁻¹]	M ₂ [Nm]	f _B	i _{ges}	F _R [kN]	F _A [kN]	F _{R GR} [kN]	F _{A GR} [kN]	Tip / Type / Typ IE2 / IE3	 Kg	 mm
200	40.2	45644	0.9	34.85	-	-	139.0	86.0	PD/PM 112 315L4D / 315L4C	3242	232
	46.8	39187	1.1	29.92	-	-	118.0	69.0			
	55.0	33358	1.3	25.47	-	-	127.0	69.0			
	65.4	28054	1.5	21.42	-	-	135.0	69.0			
	76.6	23928	1.8	18.27	-	-	140.0	68.0			
	85.7	21388	2.0	16.33	-	-	142.0	67.0			
	99.7	18388	1.4	14.04	-	-	145.0	64.0			
	117.1	15664	1.7	11.96	-	-	146.0	62.0			
	139.3	13163	2.0	10.05	-	-	148.0	61.0			
	163.2	11237	2.2	8.58	-	-	147.0	59.0			
	182.5	10046	2.4	7.67	-	-	144.0	58.0			
	80.3	22138	1.4	34.85	-	-	-	-			
	93.6	19006	1.7	29.92	-	-	118.0	69.0			
	109.9	16179	2.0	25.47	-	-	127.0	69.0			
	130.7	13607	2.3	21.42	-	-	135.0	69.0			
	153.3	11606	2.8	18.27	-	-	140.0	68.0			
	199.4	8919	2.3	14.04	-	-	145.0	64.0			
	234.1	7597	2.6	11.96	-	-	146.0	62.0			
	40.8	44051	0.8	34.35	-	-	104.0	75.0	PD/PM 103 315L4D / 315L4C	2236	229
	47.0	38204	0.9	29.79	-	-	114.0	76.0			
	51.5	34856	0.9	27.18	-	-	118.0	75.0			
	59.4	30240	1.1	23.58	-	-	123.0	75.0			
	66.7	26931	1.2	21.00	-	-	126.0	75.0			
	49.3	34794	0.8	56.76	-	-	-	-	PD/PM 103 315L2D / 315L2C	2236	229
	58.4	29393	0.9	47.95	-	-	-	-			
	68.3	25133	1.1	41.00	-	-	85.0	74.0			
	81.5	21056	1.3	34.35	-	-	104.0	75.0			
	94.0	18261	1.5	29.79	-	-	114.0	76.0			
	103.0	16661	1.5	27.18	-	-	118.0	75.0			
	118.7	14454	1.7	23.58	-	-	123.0	75.0			
	133.3	12873	1.9	21.00	-	-	126.0	75.0			
	76.8	23889	1.3	18.24	-	-	124.0	69.0	PD/PM 102 315L4D / 315L4C	2236	228
	92.2	19895	1.6	15.19	-	-	128.0	68.0			
	103.7	17681	1.8	13.50	-	-	130.0	68.0			
	120.4	15232	2.1	11.63	-	-	132.0	67.0			
	134.4	13647	2.3	10.42	-	-	133.0	66.0			
	152.2	12049	2.5	9.20	-	-	134.0	64.0			
	169.9	10792	2.8	8.24	-	-	135.0	63.0			
	184.7	9928	1.9	7.58	-	-	135.0	61.0			
	207.7	8827	2.2	6.74	-	-	133.0	60.0			
	241.4	7596	2.5	5.80	-	-	130.0	58.0			
	269.2	6811	2.8	5.20	-	-	127.0	57.0			
	153.5	11587	2.1	18.24	-	-	124.0	69.0	PD/PM 102 315L2D / 315L2C	2236	228
	184.3	9649	2.5	15.19	-	-	128.0	68.0			
	207.4	8576	2.8	13.50	-	-	130.0	68.0			
	369.4	4815	3.0	7.58	-	-	135.0	61.0			
	95.3	19240	0.8	14.69	-	-	39.0	47.0	PD/PM 92 315L4D / 315L4C	1667	224
	116.3	15769	0.9	12.04	-	-	39.0	48.0			
137.1	13372	0.8	10.21	-	-	38.0	47.0				
161.8	11329	1.0	8.65	-	-	37.0	47.0				
197.5	9286	1.1	7.09	-	-	37.0	47.0				
242.2	7570	1.2	5.78	-	-	36.0	46.0				
261.2	7020	1.2	5.36	-	-	36.0	46.0				
104.3	17056	0.8	26.85	1.0	6.0	41.0	49.0	PD/PM 92 315L2D / 315L2C	1667	224	
120.8	14718	0.8	23.17	1.0	6.0	42.0	51.0				
139.4	12762	0.9	20.09	1.0	6.0	36.0	43.0				
161.5	11015	1.1	17.34	1.0	6.0	38.0	46.0				
190.6	9332	1.2	14.69	1.0	6.0	39.0	47.0				
232.6	7648	1.4	12.04	1.0	6.0	39.0	48.0				
274.2	6486	1.3	10.21	1.0	6.0	38.0	47.0				
323.7	5495	1.5	8.65	1.0	6.0	37.0	47.0				
394.9	4504	1.7	7.09	1.0	6.0	37.0	47.0				
484.4	3672	1.8	5.78	1.0	6.0	36.0	46.0				
522.4	3405	1.9	5.36	1.0	6.0	36.0	46.0				

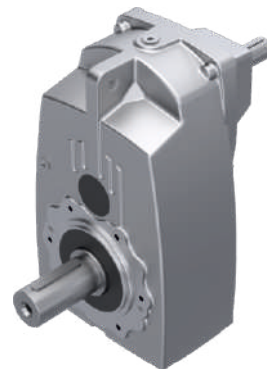
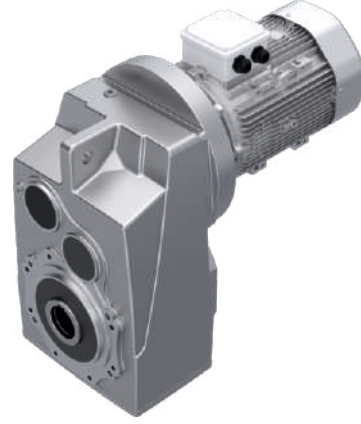


A series of horizontal dotted lines spanning the width of the page, intended for writing or drawing.

Ölçü Tabloları

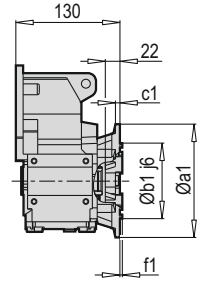
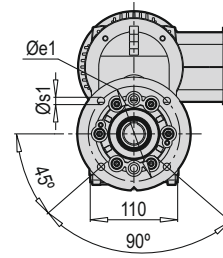
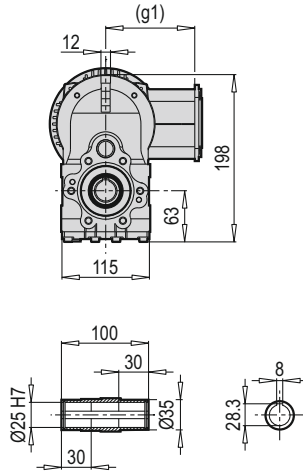
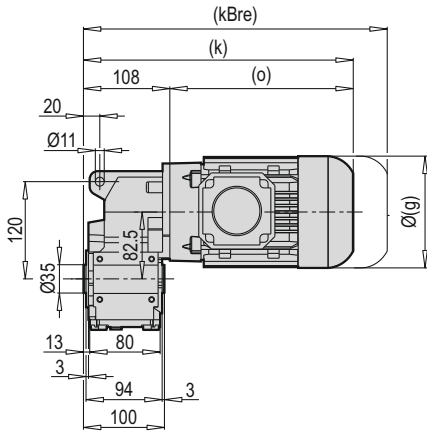
Dimension Tables

Maßtabellen



PD/PM

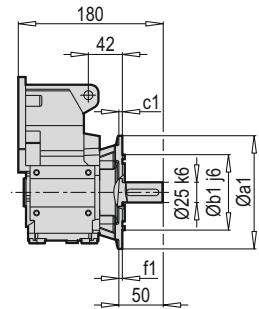
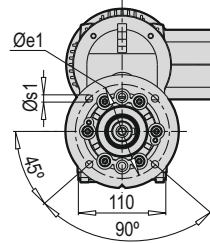
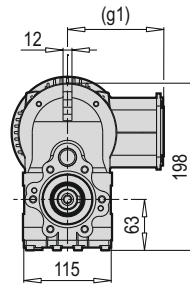
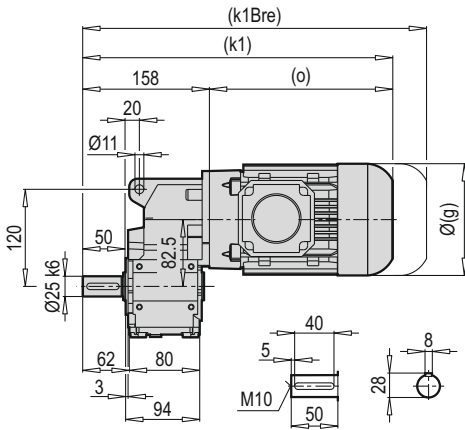
PD A02



PD A02 B5

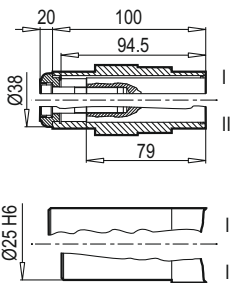
a1	b1	c1	e1	f1	s1
140	95	10	115	3	4x9

PM A02



PM A02 B5

PD A02 Ç 70 - 71

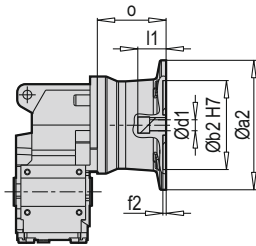


Ayak Delik Ölçüleri sayfa 58 / Dimension of foot is on page 58 / Fußlochmaße Seite 58

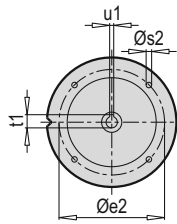
	63 M	71 M	80 M	90 S/L				
g	124	140	172	182				
g1	111	119	131	130				
k/k1	301/351	332/382	361/411	426/476				
kBre/k1Bre	353/403	392/442	431/481	494/544				
o	193	224	253	318				

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

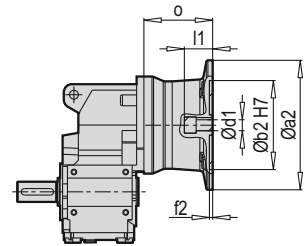
PD A02



IEC



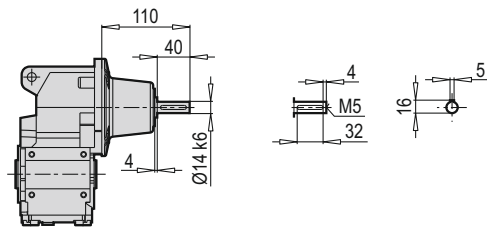
PM A02



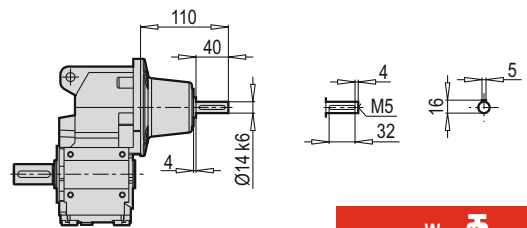
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM A02	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

~ Kg	
IEC	PD/PM A02
63	7
71	8
80	10
90	10

PD A02



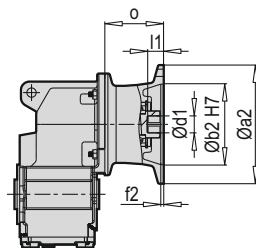
W



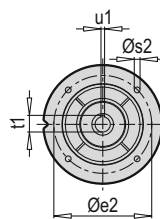
PM A02

W ~ Kg	
PD/PM A02	6

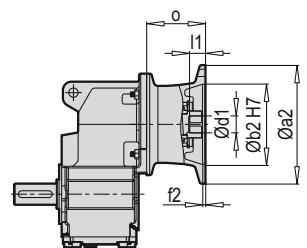
PD A02



PAM B5/B14



PM A02



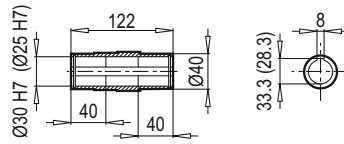
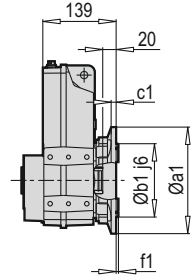
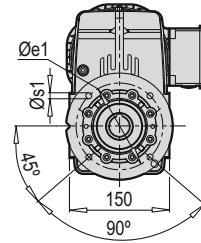
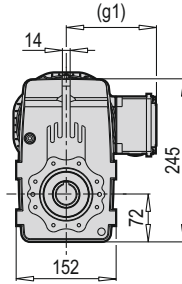
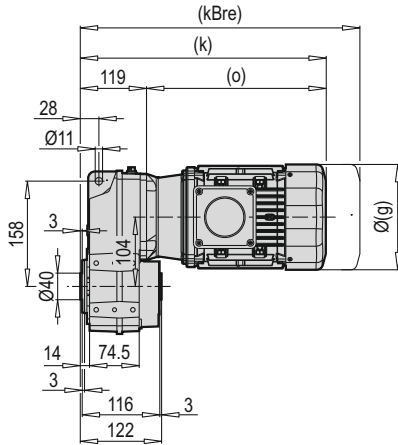
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM A02	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

~ Kg	
PAM B5	PD/PM A02
63	7
71	8
80	10
90	10

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM A02	63	90	60	75	3.5	6	11	23	12.8	4	85
	71	105	70	85	4.0	7	14	30	16.3	5	85
	80	120	80	100	4.0	7	19	40	21.8	6	103
	90	140	95	115	4.0	9	24	50	27.3	8	103

~ Kg	
PAM B14	PD/PM A02
63	6
71	7
80	9
90	9

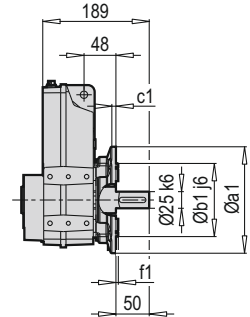
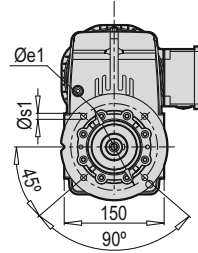
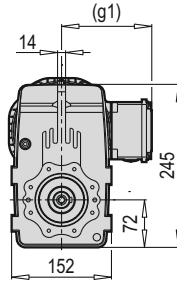
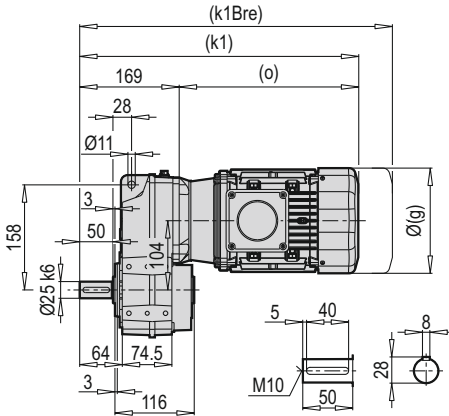
PD B02



PD B02 B5

a1	b1	c1	e1	f1	s1
160	110	12	130	3.5	4x9

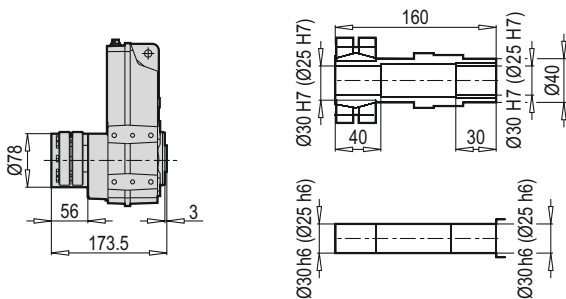
PM B02



PM B02 B5

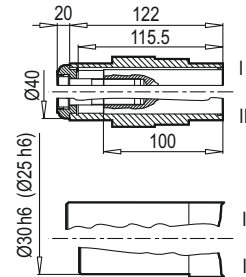
PD B02 KS

53 - 55



PD B02 Ç

70 - 71

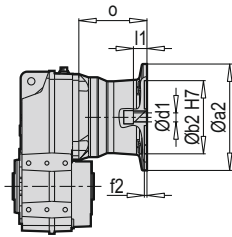


Ayak Delik Ölçüleri sayfa 58 / Dimension of foot is on page 58 / Fußlochmaße Seite 58

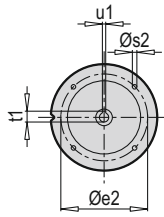
	63 M	71 M	80 M	90 S/L
g	124	140	172	182
g1	111	119	131	130
k/k1	312/362	343/393	370/420	435/485
kBre/k1Bre	364/414	403/453	440/490	503/553
o	193	224	253	318

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

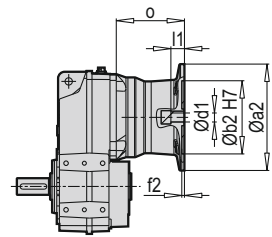
PD B02



IEC



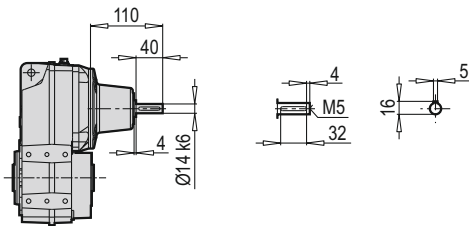
PM B02



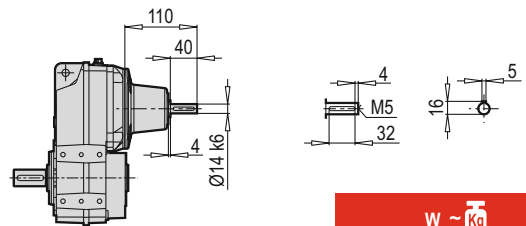
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM B02	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

~ Kg	
IEC	PD/PM B02
63	11
71	12
80	15
90	15

PD B02



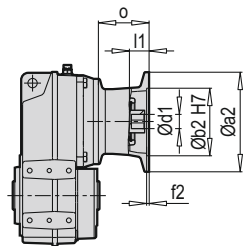
W



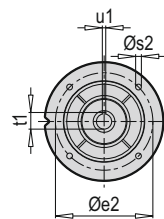
PM B02

W ~ Kg	
PD/PM B02	
	10

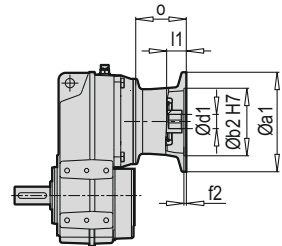
PD B02



PAM B5/B14



PM B02



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM B02	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103

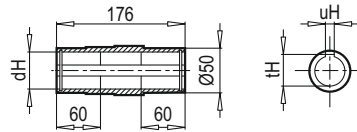
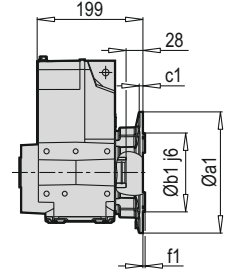
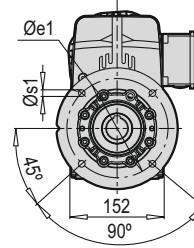
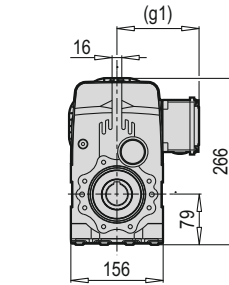
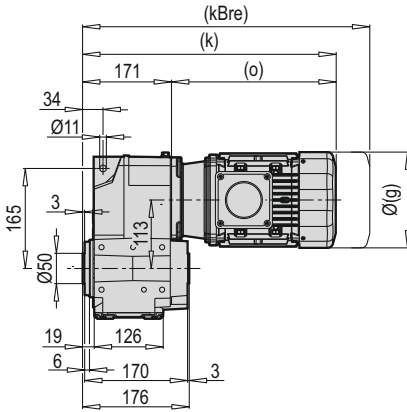
~ Kg	
PAM B5	PD/PM B02
63	10
71	11
80	14
90	14

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM B02	63	90	60	75	3.5	6	11	23	12.8	4	85
	71	105	70	85	4.0	7	14	30	16.3	5	85
	80	120	80	100	4.0	7	19	40	21.8	6	103
	90	140	95	115	4.0	9	24	50	27.3	8	103

~ Kg	
PAM B14	PD/PM B02
63	9
71	10
80	13
90	13

PD C13

PD C13 B5

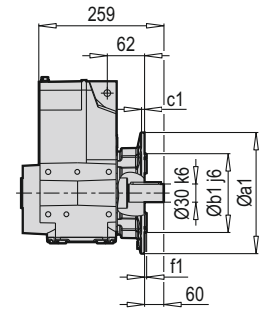
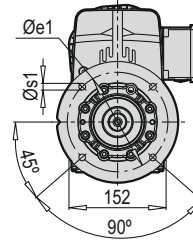
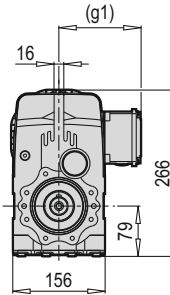
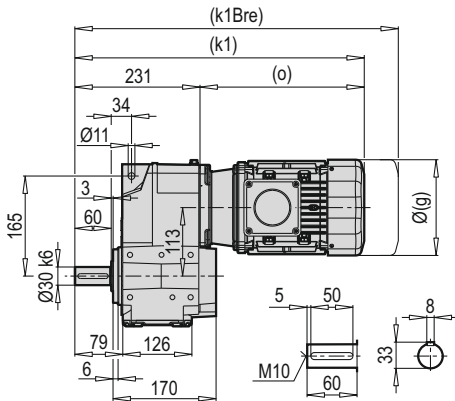


dH	Ø 35 (Ø 30) (Ø 25)
uH	10 (8) (8)
tH	38.3 (33.3) (28.3)

a1	b1	c1	e1	f1	s1
160	110	12	130	3.5	4x9
200	130	12	165	3.5	4x11

PM C13

PM C13 B5

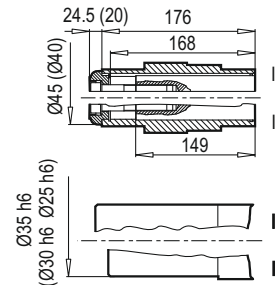
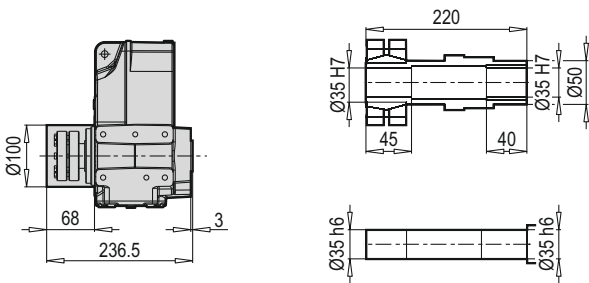


PD C13 KS

53 - 55

PD C13 Ç

70 - 71

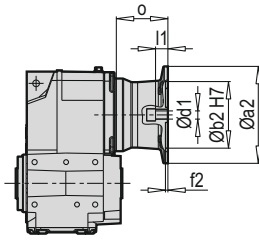


Ayak Delik Ölçüleri sayfa 58 / Dimension of foot is on page 58 / Fußlochmaße Seite 58

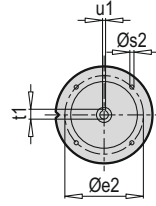
	63 M	71 M	80 M	90 S/L	100 L
g	124	140	172	182	202
g1	111	119	131	130	153
k/k1	364/424	395/455	419/479	484/544	524/584
kBre/k1Bre	416/476	455/515	489/549	552/612	607/667
o	193	224	253	318	358

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

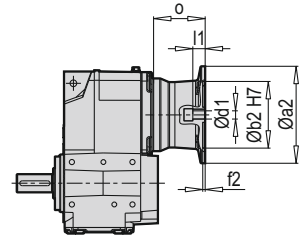
PD C13



IEC



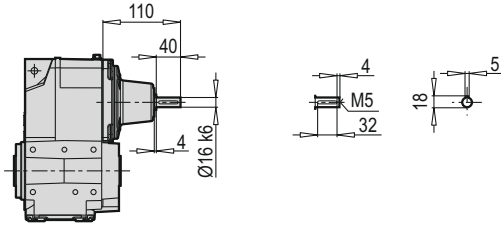
PM C13



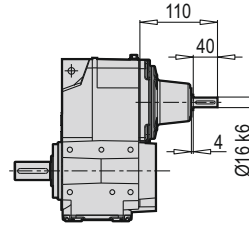
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM C13	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103
	100	250	180	215	5.0	M12	28	60	31.3	8	126

~ Kg	
IEC	PD/PM C13
63	24
71	25
80	27
90	27
100	32

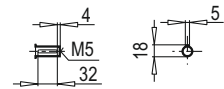
PD C13



W

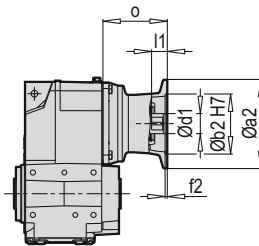


PM C13

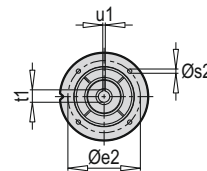


W ~ Kg	
PD/PM C13	23

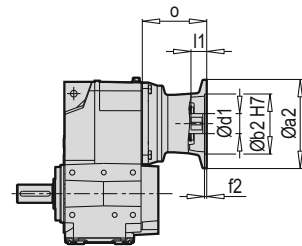
PD C13



PAM B5/B14



PM C13



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM C13	63	140	95	115	3.5	M8	11	23	12.8	4	85
	71	160	110	130	4.0	M8	14	30	16.3	5	85
	80	200	130	165	4.0	M10	19	40	21.8	6	103
	90	200	130	165	4.0	M10	24	50	27.3	8	103
	100	250	180	215	5.0	M12	28	60	31.3	8	126

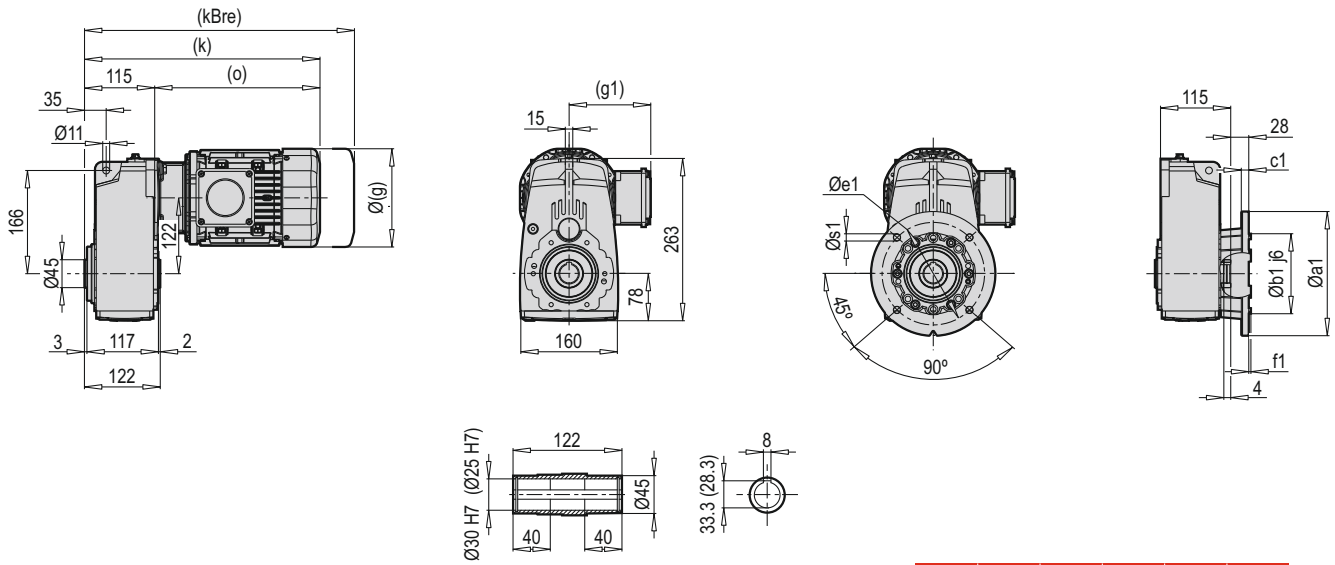
~ Kg	
PAM B5	PD/PM C13
63	23
71	24
80	26
90	26
100	31

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM C13	63	90	60	75	3.5	6	11	23	12.8	4	85
	71	105	70	85	4.0	7	14	30	16.3	5	85
	80	120	80	100	4.0	7	19	40	21.8	6	103
	90	140	95	115	4.0	9	24	50	27.3	8	103
	100	250	180	215	5.0	9	28	60	31.3	8	126

~ Kg	
PAM B14	PD/PM C13
63	22
71	23
80	25
90	25
100	30

PD 12

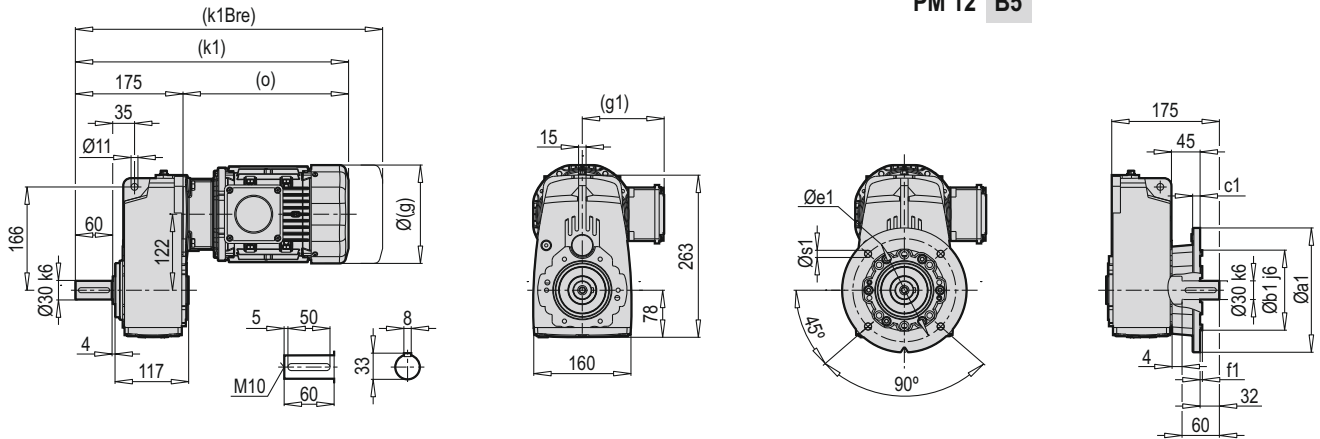
PD 12 B5



a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4x11

PM 12

PM 12 B5



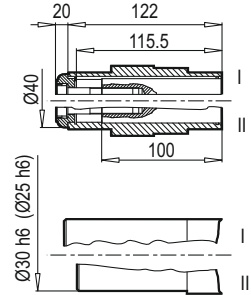
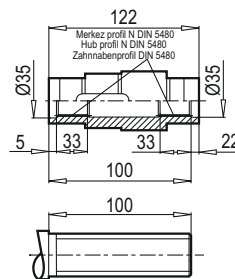
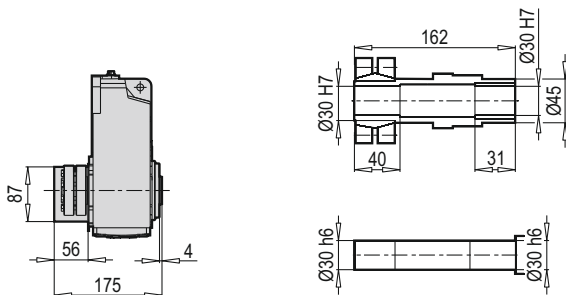
PD 12 KS

53 - 55

PD 12 DIN 5480

PD 12 Ç

70 - 71

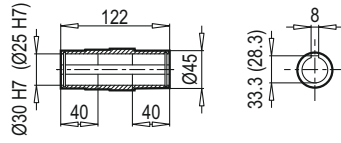
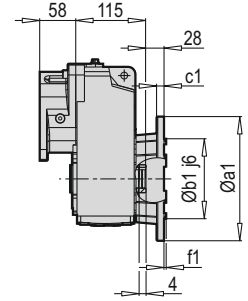
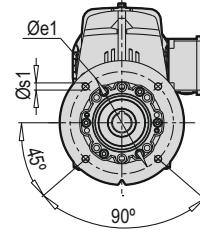
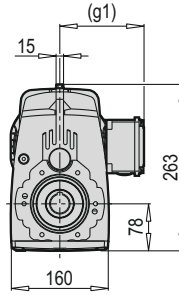
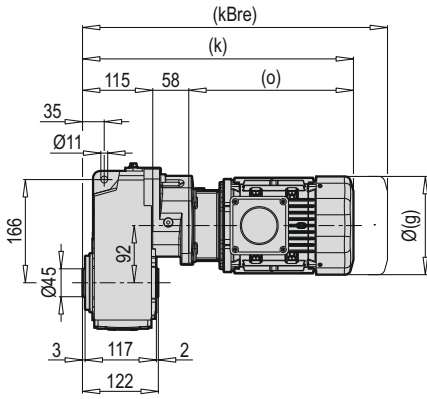


N30 x 1.25 x 30 x 22 x 9H

	63 M	71 M	80 M	90 S/L	100 L	112 M	
g	124	140	172	182	202	220	
g1	111	119	131	130	153	159	
k/k1	313/373	355/415	381/441	447/507	498/558	493/553	
kBre/k1Bre	365/425	415/475	451/511	455/515	582/642	593/653	
o	198	240	266	332	383	378	

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

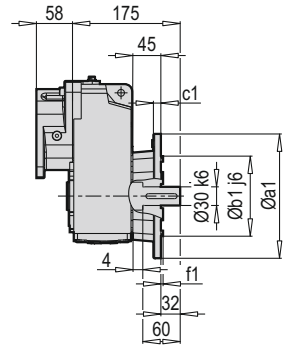
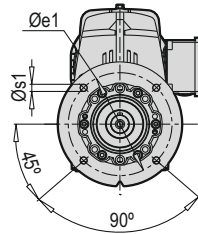
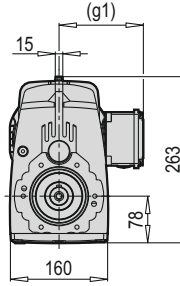
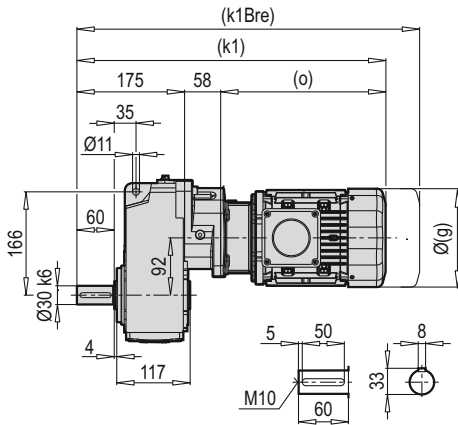
PD 13



PD 13 B5

a1	b1	c1	e1	f1	s1
200	130	12	165	3.5	4x11

PM 13

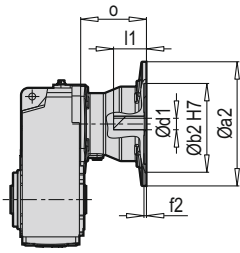


PM 13 B5

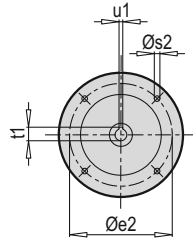
	63 M	71 M					
g	124	140					
g1	111	119					
k/k1	371/431	413/473					
kBre/k1Bre	423/483	473/533					
o	198	240					

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

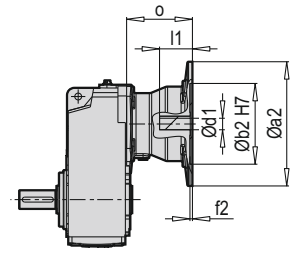
PD 12
PD 13



IEC



PM 12
PM 13

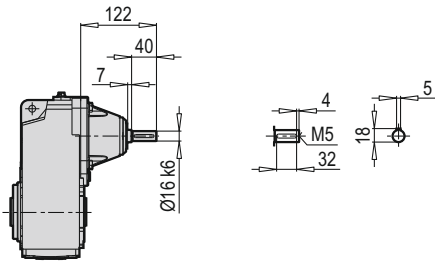


Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 12-13	63	140	95	115	3.5	M8	11	23	12.8	4	85
PD/PM 12-13	71	160	110	130	4.0	M8	14	30	16.3	5	89
PD/PM 12	80	200	130	165	4.0	M10	19	40	21.8	6	105
PD/PM 12	90	200	130	165	4.0	M10	24	50	27.3	8	105
PD/PM 12	100	250	180	215	5.0	M12	28	60	31.3	8	130
PD/PM 12	112	250	180	215	5.0	M12	28	60	31.3	8	130

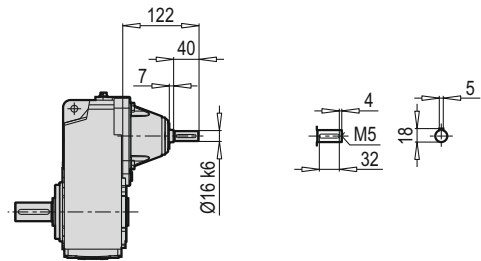
~ Kg		
IEC	PD/PM 12	PD/PM 13
63	20	24
71	21	25
80	24	-
90	24	-
100	31	-
112	31	-

PD 12
PD 13

W

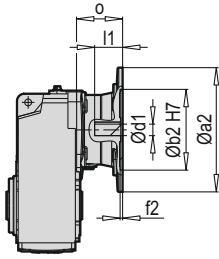


PM 12
PM 13

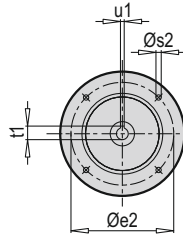


W ~ Kg	
PD/PM 12	19
PD/PM 13	23

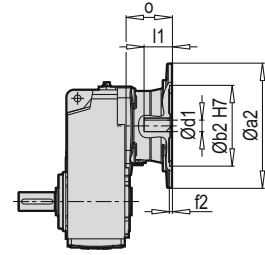
PD 12
PD 13



PAM B5/B14



PM 12
PM 13



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 12-13	63	140	95	115	3.5	M8	11	23	12.8	4	85
PD/PM 12-13	71	160	110	130	4.0	M8	14	30	16.3	5	55
PD/PM 12	80	200	130	165	4.0	M10	19	40	21.8	6	74
PD/PM 12	90	200	130	165	4.0	M10	24	50	27.3	8	74
PD/PM 12	100	250	180	215	5.0	M12	28	60	31.3	8	131.5
PD/PM 12	112	250	180	215	5.0	M12	28	60	31.3	8	131.5

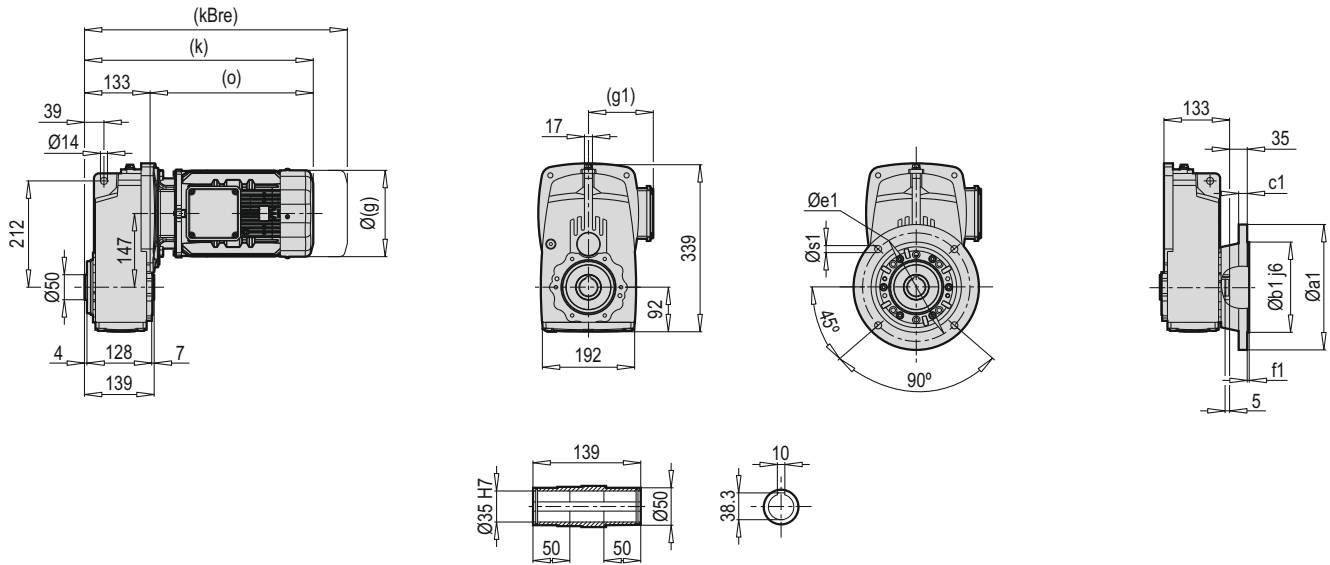
~ Kg		
PAM B5	PD/PM 12	PD/PM 13
63	18	22
71	18	22
80	19	-
90	19	-
100	26	-
112	26	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 12-13	63	90	60	75	3.5	6	11	23	12.8	4	60
PD/PM 12-13	71	105	70	85	4.0	7	14	30	16.3	5	55
PD/PM 12	80	120	80	100	4.0	7	19	40	21.8	6	74
PD/PM 12	90	140	95	115	4.0	9	24	50	27.3	8	74
PD/PM 12	100	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 12	112	160	110	130	5.0	9	28	60	31.3	8	75

~ Kg		
PAM B14	PD/PM 12	PD/PM 13
63	17	21
71	17	21
80	18	-
90	18	-
100	19	-
112	19	-

PD 22

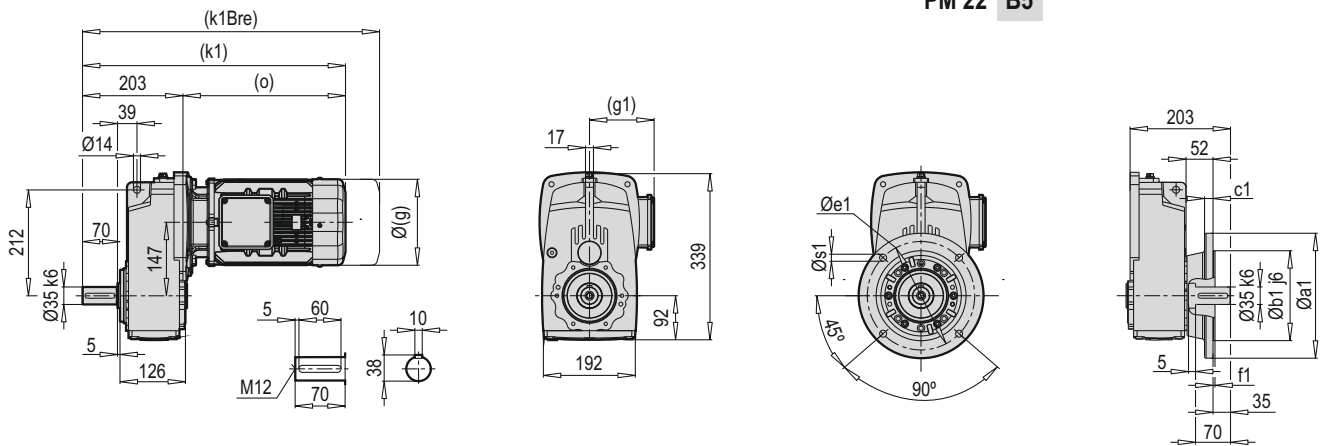
PD 22 B5



a1	b1	c1	e1	f1	s1
250	180	16	215	4	4x14

PM 22

PM 22 B5



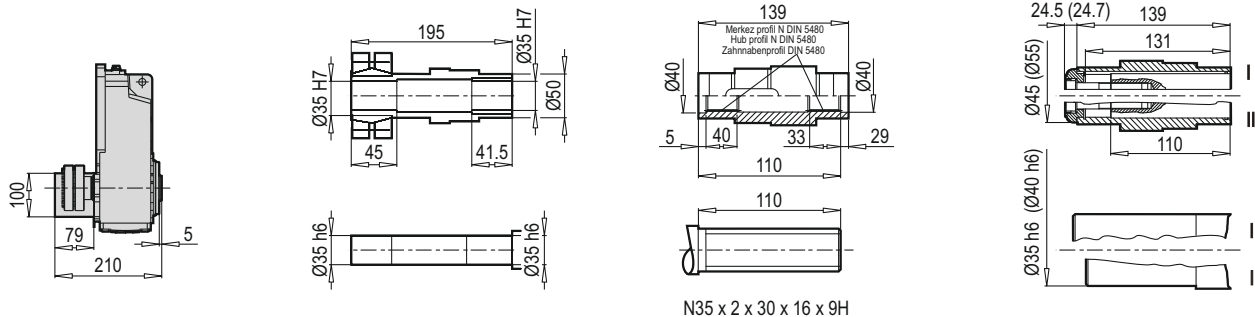
PD 22 KS

53 - 55

PD 22 DIN 5480

PD 22 Ç

70 - 71



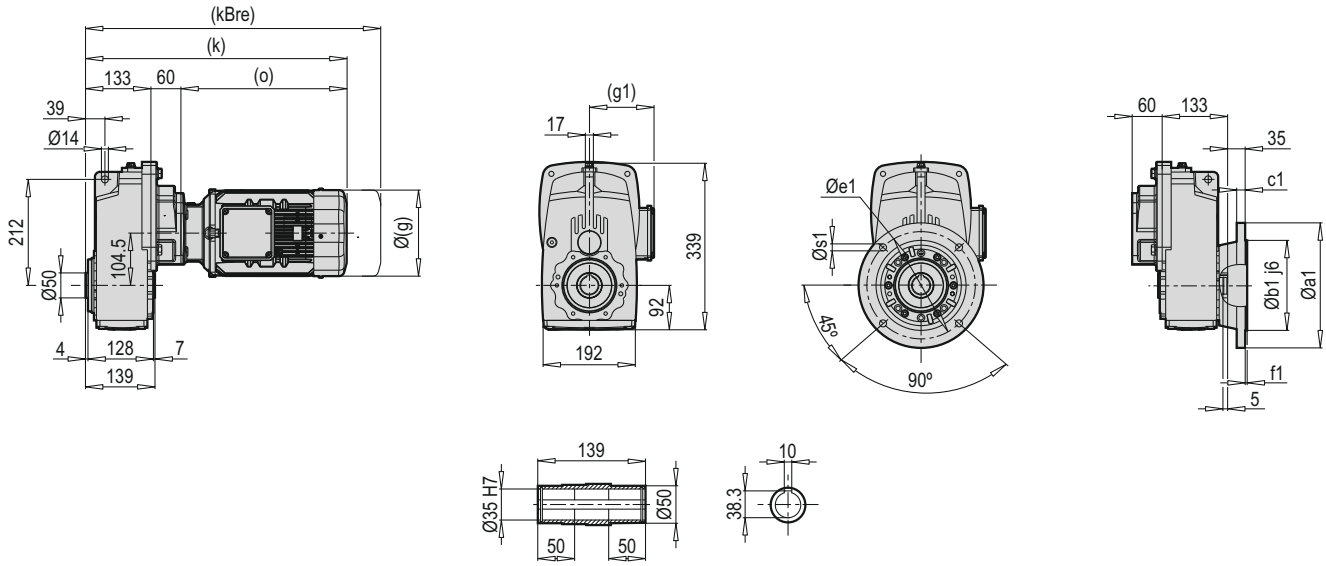
N35 x 2 x 30 x 16 x 9H

	71 M	80 M	90 S/L	100 L	112 M			
g	140	172	182	202	220			
g1	119	131	130	153	159			
k/k1	369/439	393/463	459/529	510/580	505/575			
kBre/k1Bre	429/499	463/533	527/597	594/664	605/675			
o	236	260	326	377	372			

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 23

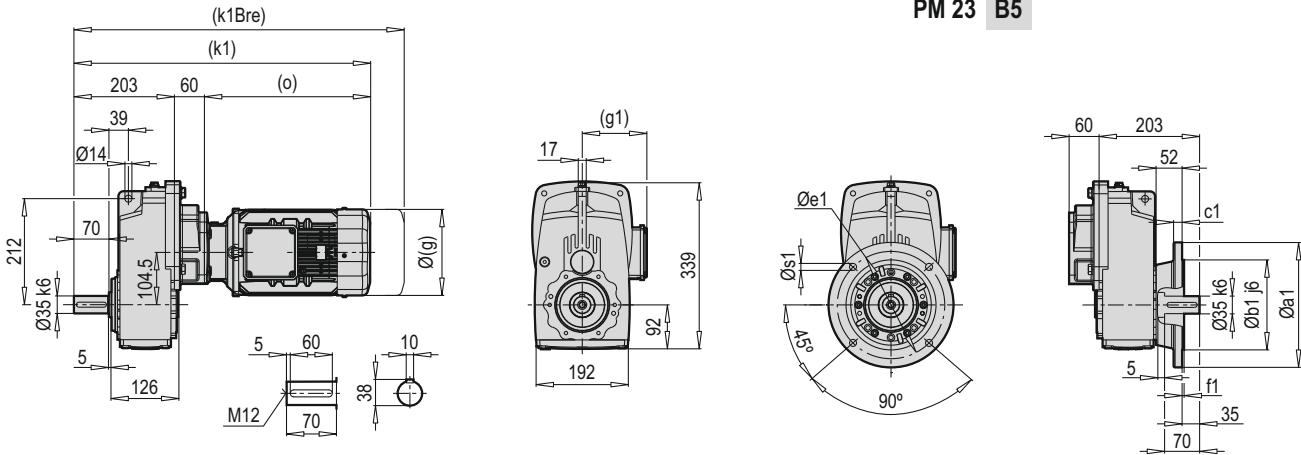
PD 23 B5



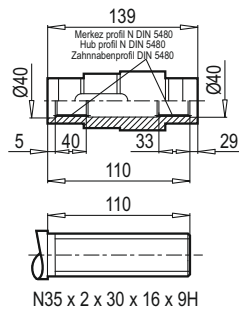
a1	b1	c1	e1	f1	s1
250	180	16	215	4	4x14

PM 23

PM 23 B5

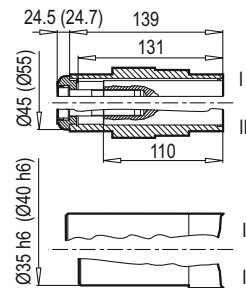


PD 23 DIN 5480



PD 23 Ç

70 - 71



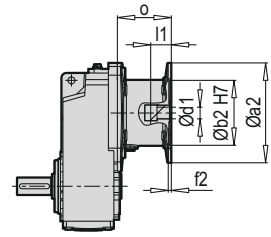
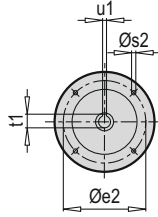
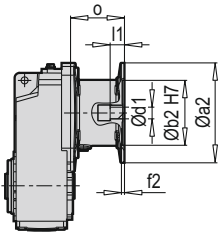
	63 M	71 M	80 M	90 S/L				
g	124	140	172	182				
g1	111	119	131	130				
k/k1	391/461	433/503	459/529	525/595				
kBre/k1Bre	443/513	493/563	529/599	533/603				
o	198	240	266	332				

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 22
PD 23

IEC

PM 22
PM 23



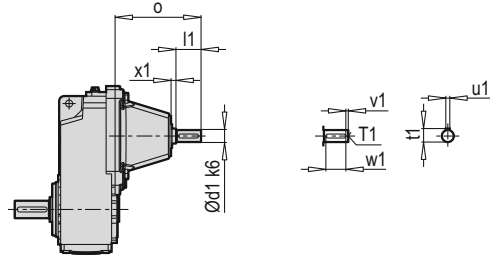
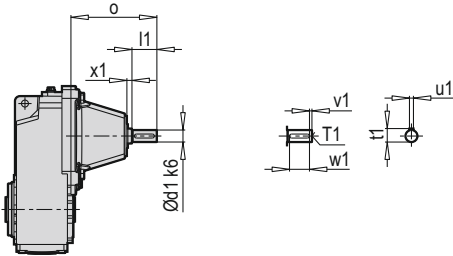
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	PD/PM 22 o	PD/PM 23 o
PD/PM 23	63	140	95	115	3.5	M8	11	23	12.8	4	85	85
PD/PM 22-23	71	160	110	130	4.0	M8	14	30	16.3	5	88	89
PD/PM 22-23	80	200	130	165	4.0	M10	19	40	21.8	6	105	105
PD/PM 22-23	90	200	130	165	4.0	M10	24	50	27.3	8	105	105
PD/PM 22	100	250	180	215	5.0	M12	28	60	31.3	8	130	-
PD/PM 22	112	250	180	215	5.0	M12	28	60	31.3	8	130	-

~ Kg		
IEC	PD/PM 22	PD/PM 23
63	-	38
71	34	40
80	38	43
90	38	43
100	43	-
112	43	-

PD 22
PD 23

W

PM 22
PM 23



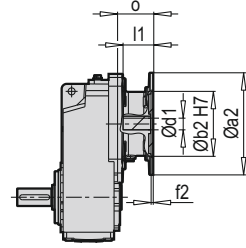
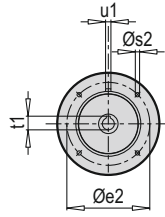
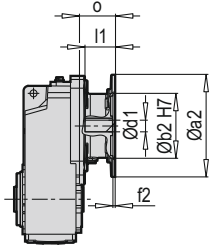
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 22	24	8	50	172	M8	27	8	5	40
PD/PM 23	16	7	40	122	M5	18	5	4	32

W ~ Kg	
PD/PM 22	PD/PM 23
36	37

PD 22
PD 23

PAM B5/B14

PM 22
PM 23



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 23	63	140	95	115	3.5	M8	11	23	12.8	4	85
PD/PM 22-23	71	160	110	130	4.0	M8	14	30	16.3	5	55
PD/PM 22-23	80	200	130	165	4.0	M10	19	40	21.8	6	74
PD/PM 22-23	90	200	130	165	4.0	M10	24	50	27.3	8	74
PD/PM 22	100	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 22	112	250	180	215	5.0	M12	28	60	31.3	8	75

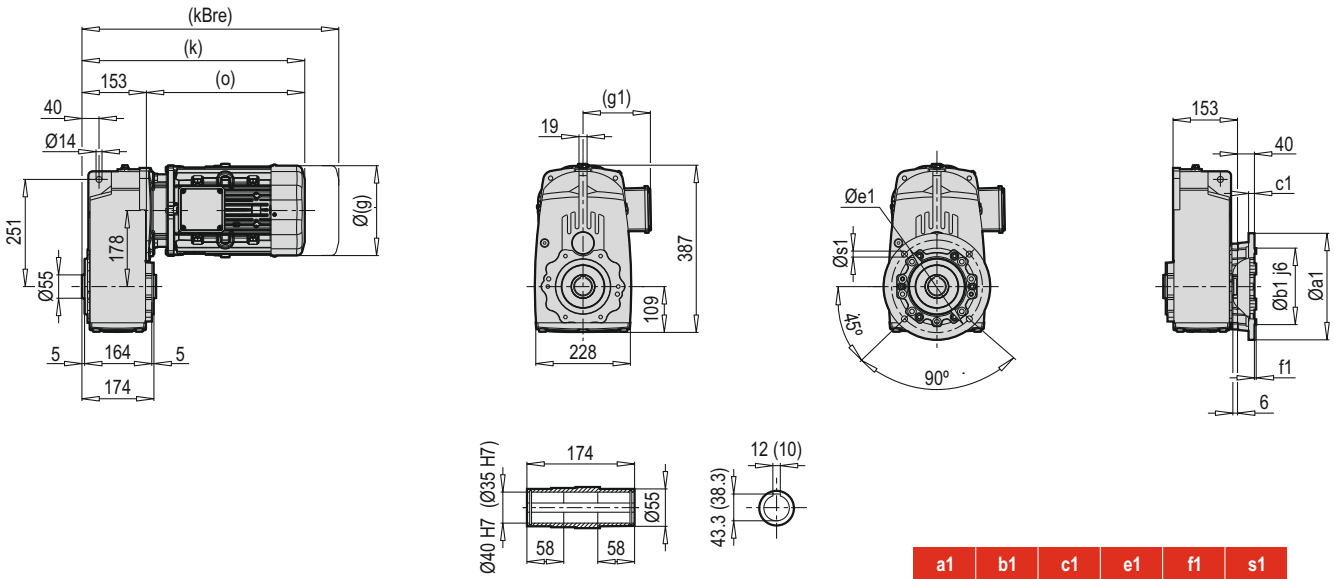
~ Kg		
PAM B5	PD/PM 22	PD/PM 23
63	-	36
71	32	36
80	33	37
90	33	37
100	34	-
112	34	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 23	63	90	60	75	3.5	6	11	23	12.8	4	60
PD/PM 22-23	71	105	70	85	4.0	7	14	30	16.3	5	55
PD/PM 22-23	80	120	80	100	4.0	7	19	40	21.8	6	74
PD/PM 22-23	90	140	95	115	4.0	9	24	50	27.3	8	74
PD/PM 22	100	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 22	112	160	110	130	5.0	9	28	60	31.3	8	75

~ Kg		
PAM B14	PD/PM 22	PD/PM 23
63	-	35
71	30	35
80	31	36
90	31	36
100	33	-
112	33	-

PD 32

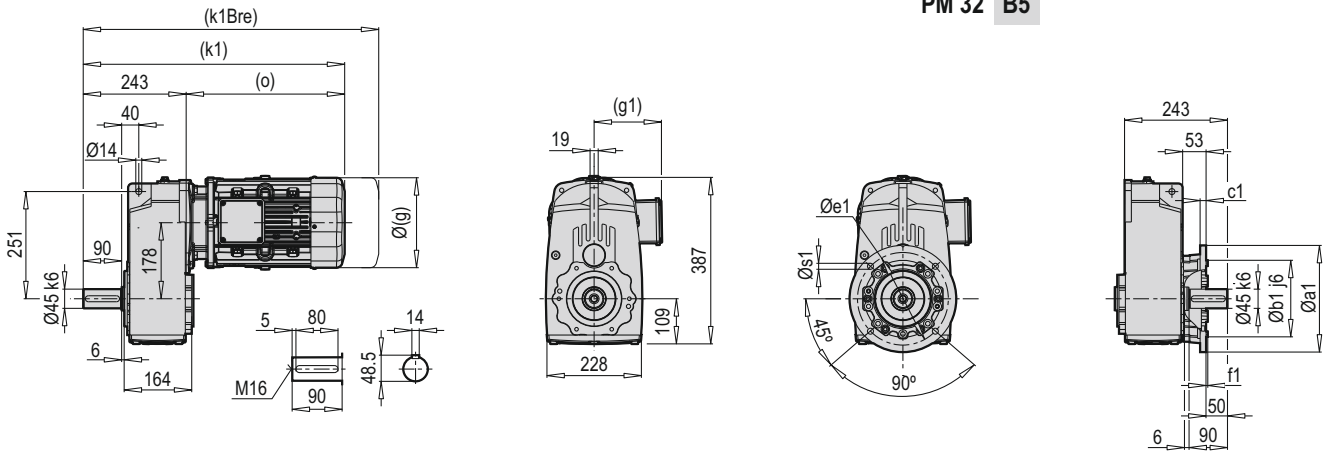
PD 32 B5



a1	b1	c1	e1	f1	s1
250	180	15	215	4	4x14
300	230	20	265	4	4x14

PM 32

PM 32 B5



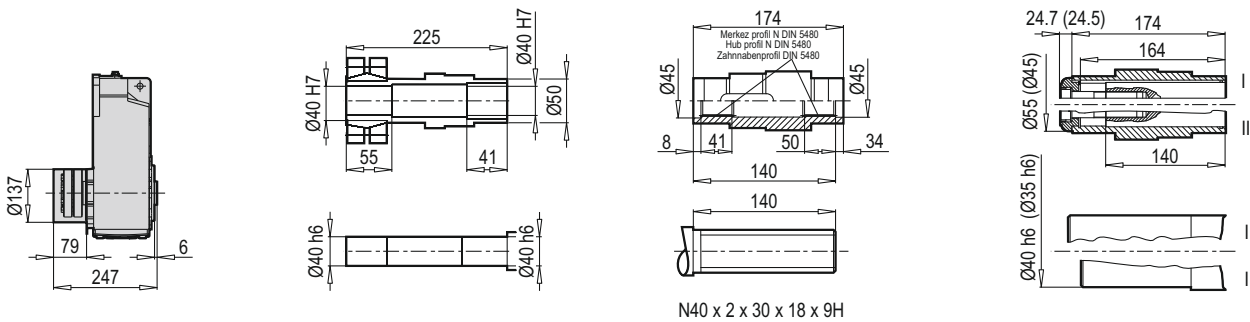
PD 32 KS

53 - 55

PD 32 DIN 5480

PD 32 Ç

70 - 71

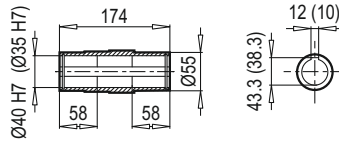
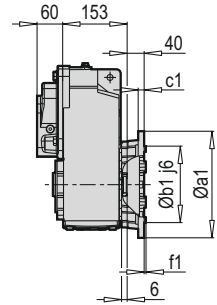
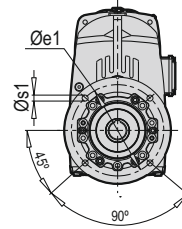
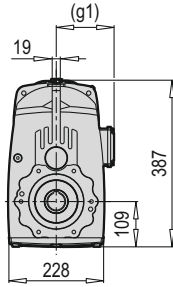
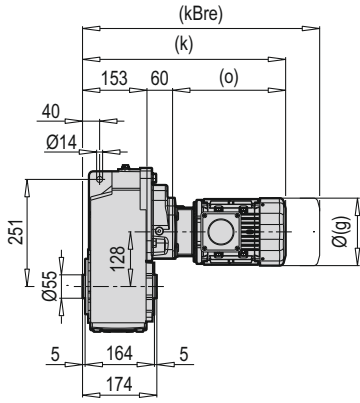


N40 x 2 x 30 x 18 x 9H

	71 M	80 M	90 S/L	100 L	112 M	132 S	132 M	
g	140	172	182	202	220	271	271	
g1	119	131	130	153	159	188	188	
k/k1	389/479	413/503	479/567	530/620	525/615	600/690	600/690	
kBre/k1Bre	449/539	483/573	547/637	614/704	625/715	699/789	727/817	
o	236	260	323	377	372	447	447	

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

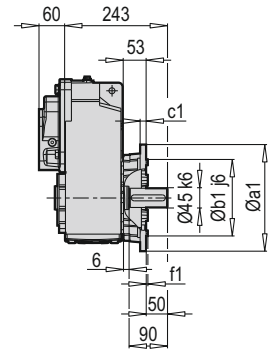
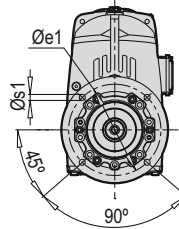
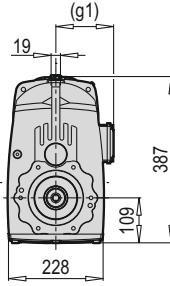
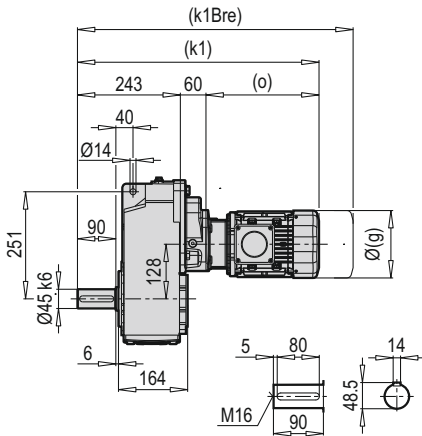
PD 33



PD 33 B5

a1	b1	c1	e1	f1	s1
250	180	15	215	4	4x14
300	230	20	265	4	4x14

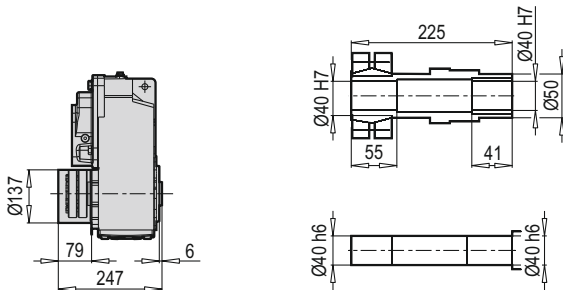
PM 33



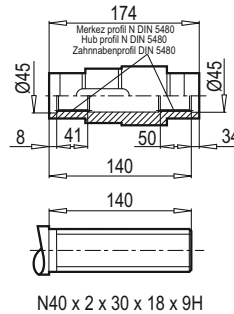
PM 33 B5

PD 33 KS

53 - 55

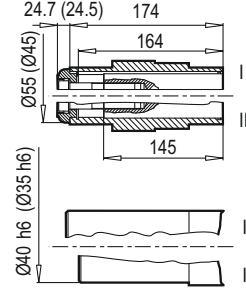


PD 33 DIN 5480



PD 33 Ç

70 - 71



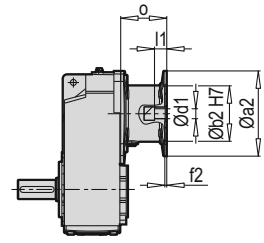
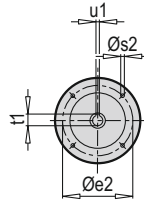
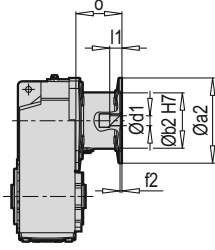
	63 M	71 M	80 M	90 S/L
g	124	140	172	182
g1	111	119	131	130
k/k1	411/501	453/543	479/569	545/635
kBre/k1Bre	463/553	513/603	549/639	553/643
o	198	240	266	332

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 32
PD 33

IEC

PM 32
PM 33



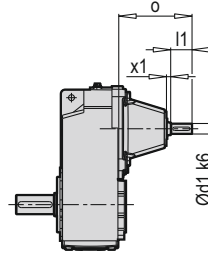
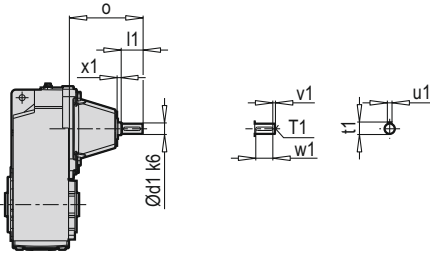
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	PD/PM 32 o	PD/PM 33 o
PD/PM 33	63	140	95	115	3.5	M8	11	23	12.8	4	-	85
PD/PM 32-33	71	160	110	130	4.0	M8	14	30	16.3	5	88	89
PD/PM 32-33	80	200	130	165	4.0	M10	19	40	21.8	6	107	105
PD/PM 32-33	90	200	130	165	4.0	M10	24	50	27.3	8	107	105
PD/PM 32-33	100	250	180	215	5.0	M12	28	60	31.3	8	124	130
PD/PM 32-33	112	250	180	215	5.0	M12	28	60	31.3	8	124	130
PD/PM 32	132	300	230	265	5.0	M12	38	80	41.3	10	156	-

~ Kg		
IEC	PD/PM 32	PD/PM 33
63	-	55
71	50	56
80	54	59
90	54	59
100	58	67
112	58	67
132	68	-

PD 32
PD 33

W

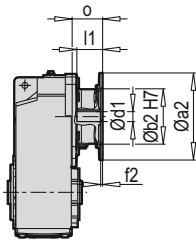
PM 32
PM 33



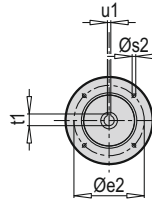
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 32	24	8	50	172	M8	27	8	5	40
PD/PM 33	16	7	40	122	M5	18	5	4	32

W ~ Kg	
PD/PM 32	PD/PM 33
52	54

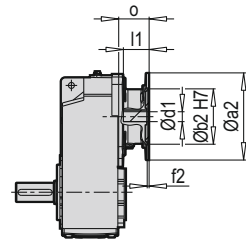
PD 32
PD 33



PAM B5/B14



PM 32
PM 33



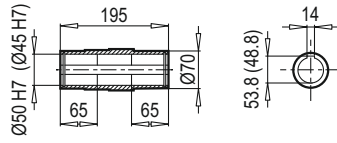
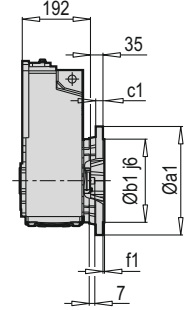
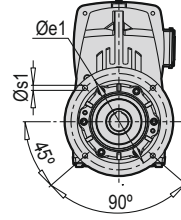
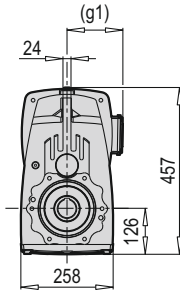
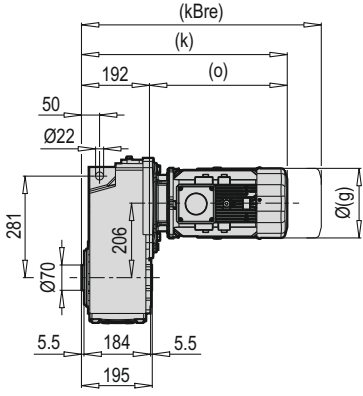
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	° (32)	° (33)
PD/PM 33	63	140	95	115	3.5	M8	11	23	12.8	4	-	85
PD/PM 32-33	71	160	110	130	4.0	M8	14	30	16.3	5	88	55
PD/PM 32-33	80	200	130	165	4.0	M10	19	40	21.8	6	72	74
PD/PM 32-33	90	200	130	165	4.0	M10	24	50	27.3	8	72	74
PD/PM 32-33	100	250	180	215	5.0	M12	28	60	31.3	8	75	131.5
PD/PM 32-33	112	250	180	215	5.0	M12	28	60	31.3	8	75	131.5
PD/PM 32	132	300	230	265	5.0	M12	38	80	41.3	10	94	-

~ kg		
PAM B5	PD/PM 32	PD/PM 33
63	-	52
71	47	52
80	48	53
90	48	53
100	49	60
112	49	60
132	59	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	° (32)	° (33)
PD/PM 33	63	90	60	75	3.5	6	11	23	12.8	4	-	60
PD/PM 32-33	71	105	70	85	4	7	14	30	16.3	5	55	55
PD/PM 32-33	80	120	80	100	4	7	19	40	21.8	6	72	74
PD/PM 32-33	90	140	95	115	4	9	24	50	27.3	8	72	74
PD/PM 32-33	100	160	110	130	5	9	28	60	31.3	8	75	75
PD/PM 32-33	112	160	110	130	5	9	28	60	31.3	8	75	75
PD/PM 32	132	200	130	165	5	11	38	80	41.3	10	94	-

~ kg		
PAM B14	PD/PM 32	PD/PM 33
63	-	51
71	45	51
80	46	52
90	46	52
100	48	53
112	48	53
132	52	-

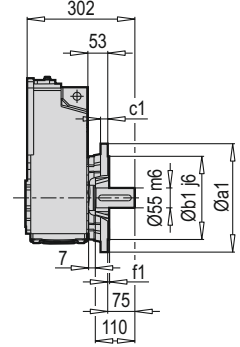
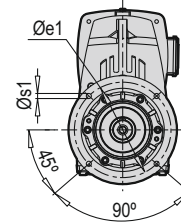
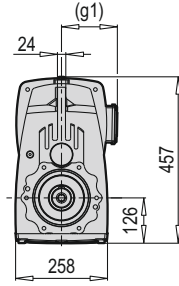
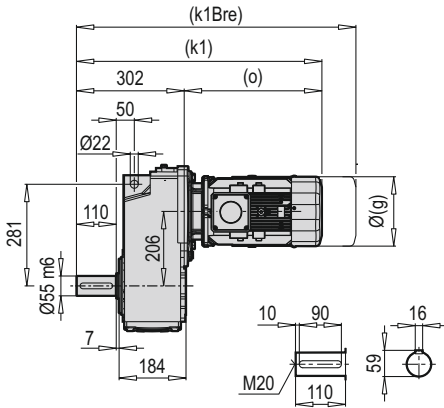
PD 42



PD 42 B5

a1	b1	c1	e1	f1	s1
300	230	20	265	4	4x14

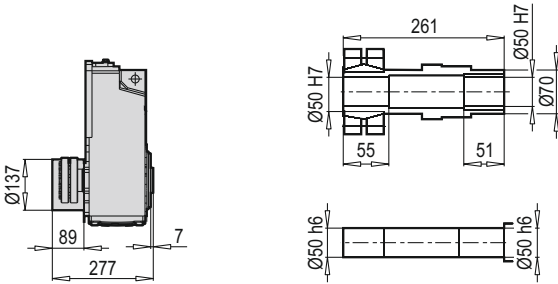
PM 42



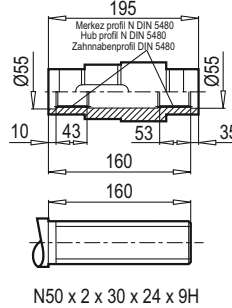
PM 42 B5

PD 42 KS

53 - 55

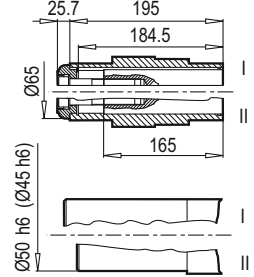


PD 42 DIN 5480



PD 42 Ç

70 - 71

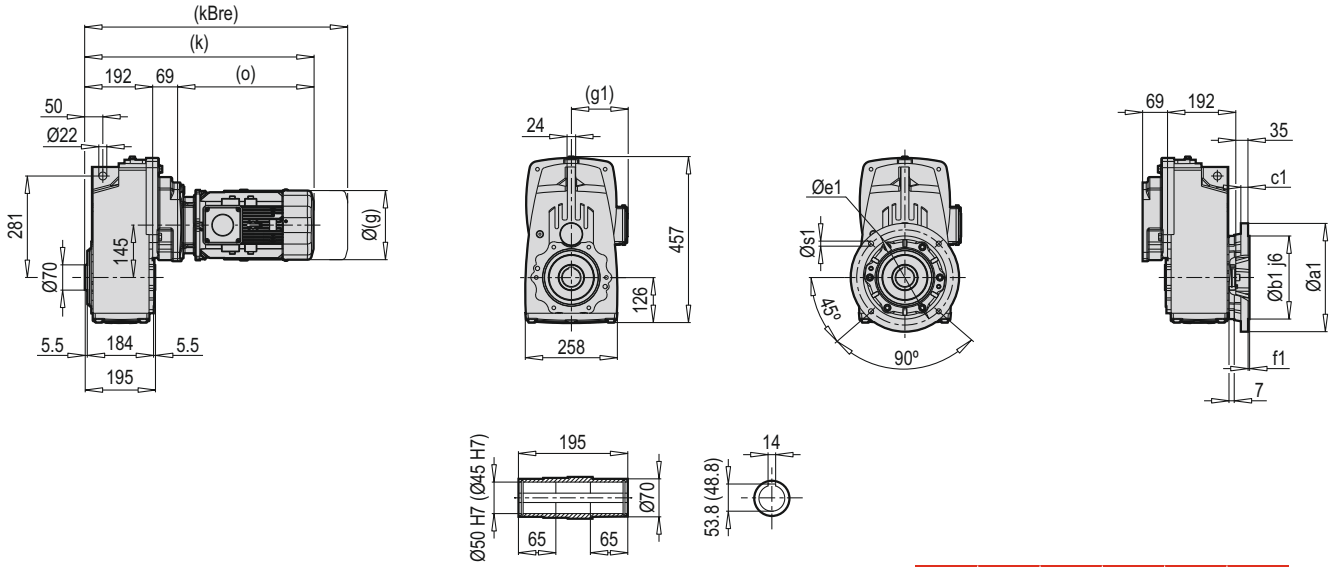


	90 S/L	100 L	112 M	132 S	132 M	160 M/L		
g	182	202	220	271	271	322		
g1	130	153	159	189	188	214		
k/k1	522/632	573/683	572/682	634/744	634/744	722/832		
kBre/k1Bre	590/700	657/767	672/782	733/843	753/863	827/937		
o	330	381	380	442	442	530		

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 43

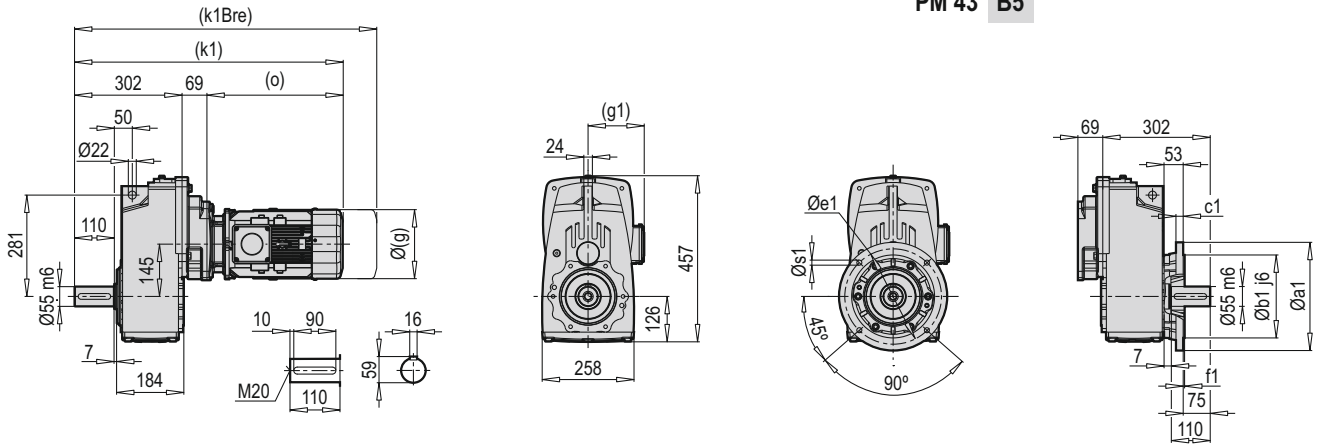
PD 43 B5



a1	b1	c1	e1	f1	s1
300	230	20	265	4	4x14

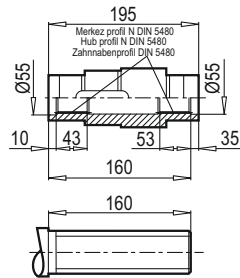
PM 43

PM 43 B5

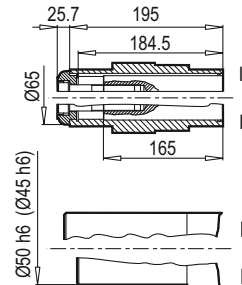


PD 43 DIN 5480

PD 43 Ç 70 - 71



N50 x 2 x 30 x 24 x 9H



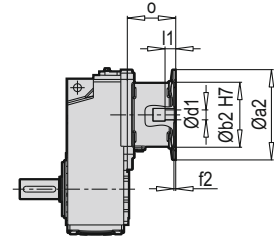
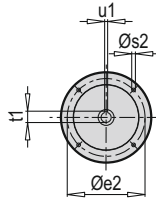
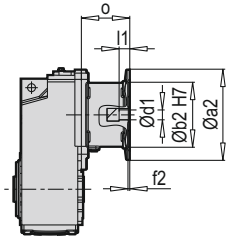
	71 M	80 M	90 S/L	100 L	112 M			
g	140	172	182	202	220			
g1	119	131	130	153	159			
k/k1	497/607	521/631	587/697	638/748	633/743			
kBre/k1Bre	557/667	591/701	655/765	722/832	733/843			
o	236	260	326	377	372			

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 42
PD 43

IEC

PM 42
PM 43



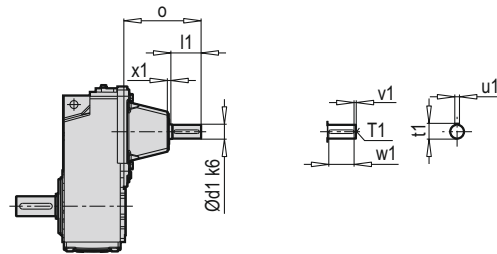
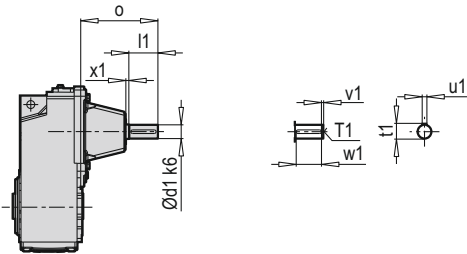
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	PD/PM 42 o	PD/PM 43 o
PD/PM 43	71	160	110	130	4	M8	14	30	16.3	5	-	88
PD/PM 43	80	200	130	165	4	M10	19	40	21.8	6	-	107
PD/PM 42-43	90	200	130	165	4	M10	24	50	27.3	8	109	107
PD/PM 42-43	100	250	180	215	5	M12	28	60	31.3	8	133	124
PD/PM 42-43	112	250	180	215	5	M12	28	60	31.3	8	133	124
PD/PM 42	132	300	230	265	5	M12	38	80	41.3	10	190	-
PD/PM 42	160	350	250	300	6	M16	42	110	45.3	12	194	-

~ Kg		
IEC	PD/PM 42	PD/PM 43
71	-	81
80	-	85
90	73	85
100	80	89
112	80	89
132	95	-
160	105	-

PD 42
PD 43

W

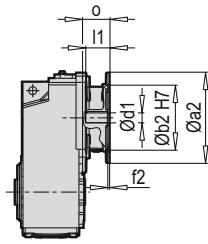
PM 42
PM 43



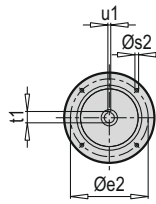
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 42	38	8	80	213	M12	41	10	5	70
PD/PM 43	24	8	50	172	M8	27	8	5	40

W ~ Kg	
PD/PM 42	PD/PM 43
78	83

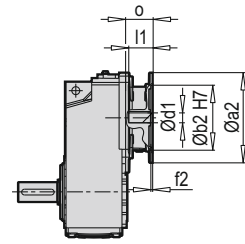
PD 42
PD 43



PAM B5/B14



PM 42
PM 43



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 43	71	160	110	130	4.0	M8	14	30	16.3	5	88
PD/PM 43	80	200	130	165	4.0	M10	19	40	21.8	6	72
PD/PM 42-43	90	200	130	165	4.0	M10	24	50	27.3	8	72
PD/PM 42-43	100	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 42-43	112	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 42	132	300	230	265	5.0	M12	38	80	41.3	10	94
PD/PM 42	160	350	250	300	6.0	M16	42	110	45.3	12	120

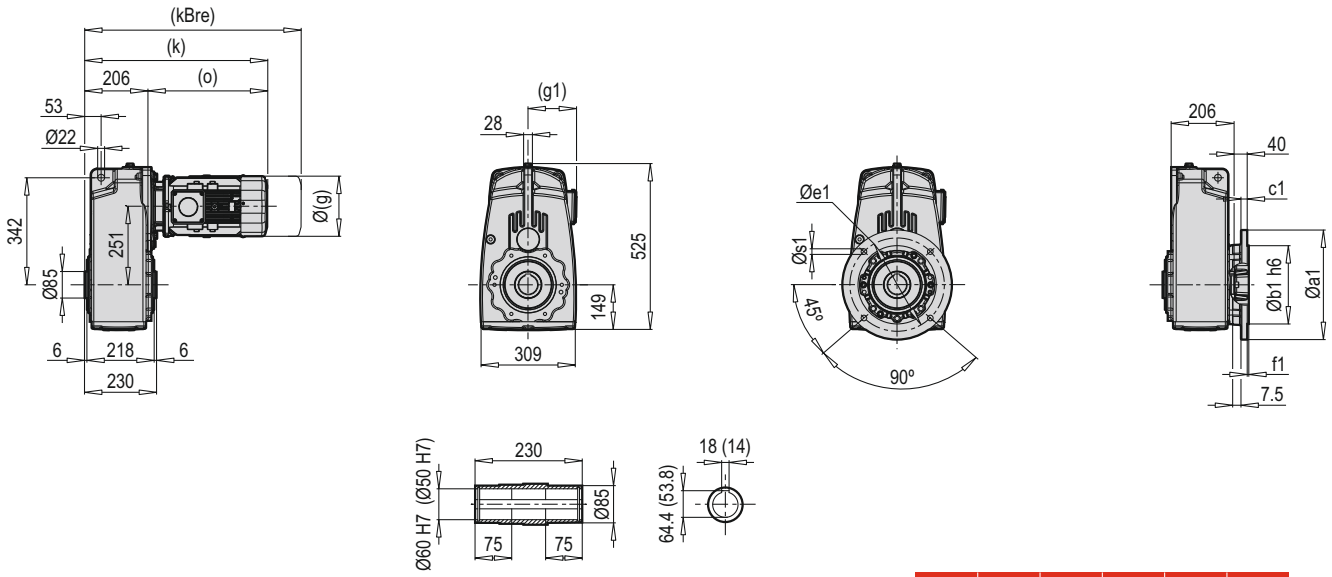
~ kg		
PAM B5	PD/PM 42	PD/PM 43
71	-	77
80	-	78
90	66	78
100	67	79
112	67	79
132	76	-
160	84	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 43	71	105	70	85	4	7	14	30	16.3	5	55
PD/PM 43	80	120	80	100	4	7	19	40	21.8	6	72
PD/PM 42-43	90	140	95	115	4	9	24	50	27.3	8	72
PD/PM 42-43	100	160	110	130	5	9	28	60	31.3	8	75
PD/PM 42-43	112	160	110	130	5	9	28	60	31.3	8	75
PD/PM 42	132	200	130	165	5	11	38	80	41.3	10	94

~ kg		
PAM B14	PD/PM 42	PD/PM 43
71	-	75
80	-	76
90	65	76
100	66	78
112	66	78
132	71	-

PD 52

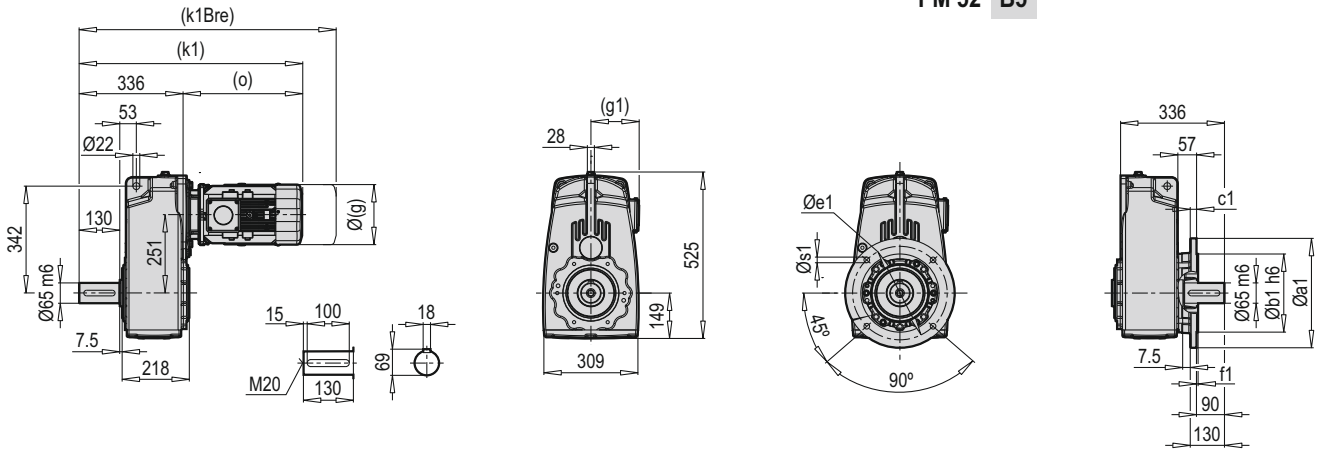
PD 52 B5



a1	b1	c1	e1	f1	s1
350	250	20	300	5	4x18

PM 52

PM 52 B5



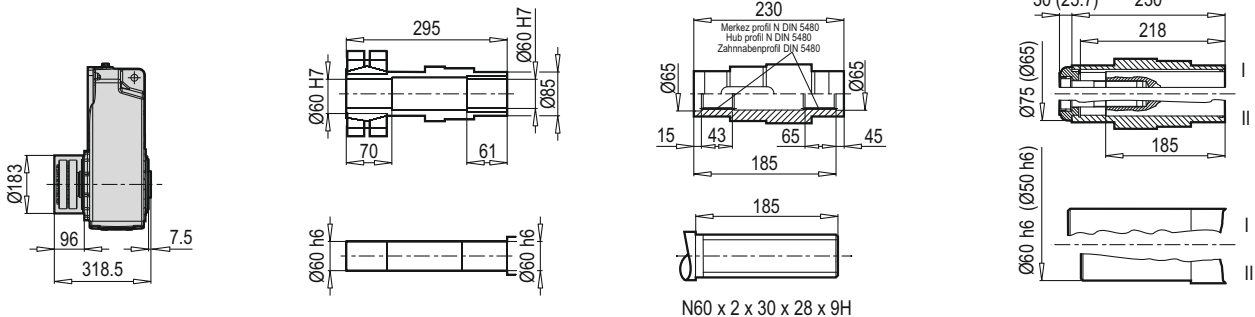
PD 52 KS

53 - 55

PD 52 DIN 5480

PD 52 Ç

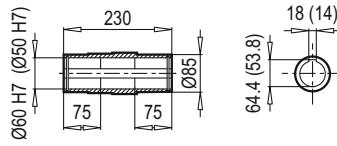
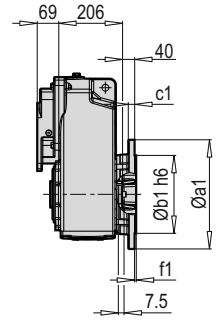
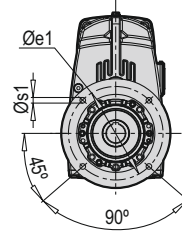
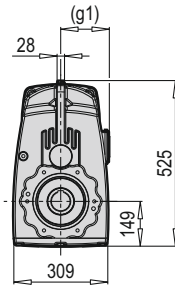
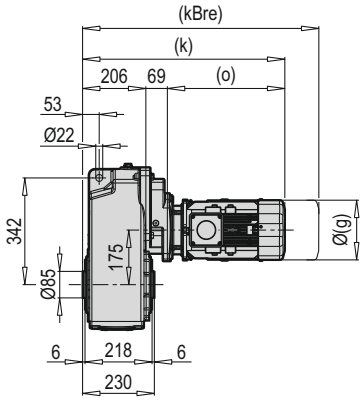
70 - 71



	90 S/L	100 L	112 M	132 S	132 M	160 M/L	180 M/L	
g	182	202	220	271	271	322	363	
g1	130	153	159	188	188	214	249	
k/k1	536/666	587/717	586/716	648/778	648/778	736/866	830/960	
kBre/k1Bre	604/734	671/801	686/816	747/877	767/897	841/971	931/1061	
o	330	381	380	442	442	530	624	

Not : (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

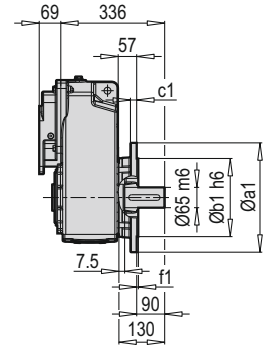
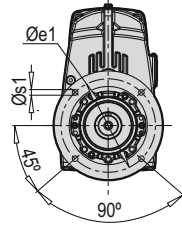
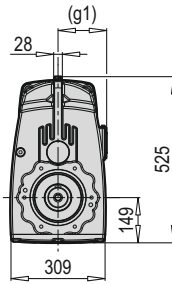
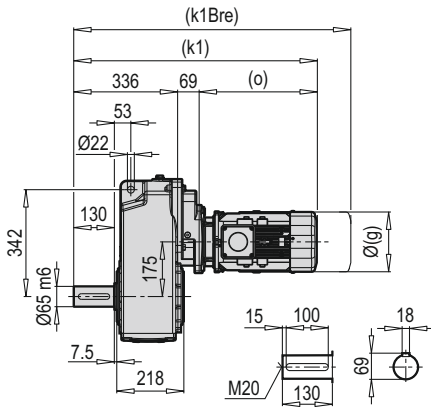
PD 53



PD 53 B5

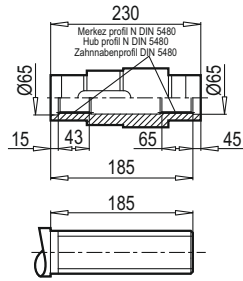
a1	b1	c1	e1	f1	s1
350	250	20	300	5	4x18

PM 53



PM 53 B5

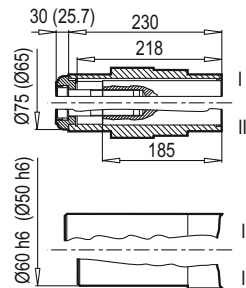
PD 53 DIN 5480



N60 x 2 x 30 x 28 x 9H

PD 53 Ç

70 - 71



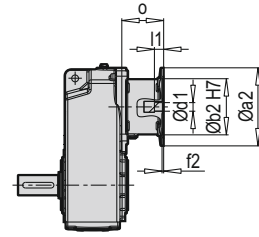
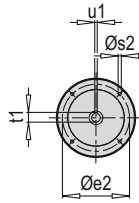
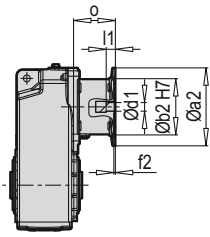
	80 M	90 S/L	100 L	112 M				
g	172	182	202	220				
g1	131	130	153	159				
k/k1	535/665	601/731	652/782	647/777				
kBre/k1Bre	605/735	669/799	736/866	747/877				
o	260	326	377	372				

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 52
PD 53

IEC

PM 52
PM 53



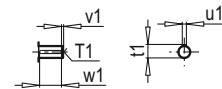
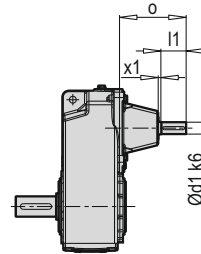
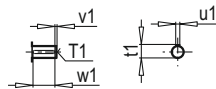
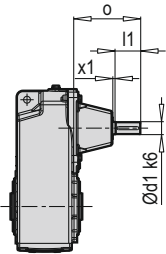
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	PD/PM 52 o	PD/PM 53 o
PD/PM 53	71	160	110	130	4.0	M8	14	30	16.3	5	-	88
PD/PM 53	80	200	130	165	4.0	M10	19	40	21.8	6	-	107
PD/PM 52-53	90	200	130	165	4.0	M10	24	50	27.3	8	109	107
PD/PM 52-53	100	250	180	215	5.0	M12	28	60	31.3	8	133	124
PD/PM 52-53	112	250	180	215	5.0	M12	28	60	31.3	8	133	124
PD/PM 52	132	300	230	265	5.0	M12	38	80	41.3	10	190	-
PD/PM 52	160	350	250	300	6.0	M16	42	110	45.3	12	194	-
PD/PM 52	180	350	250	300	6.0	M16	48	110	51.8	14	194	-

~ Kg		
IEC	PD/PM 52	PD/PM 53
71	-	124
80	-	128
90	111	128
100	119	132
112	119	132
132	133	-
160	144	-
180	144	-

PD 52
PD 53

W

PM 52
PM 53



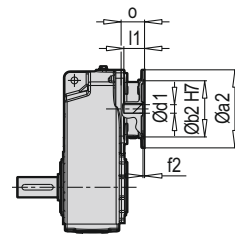
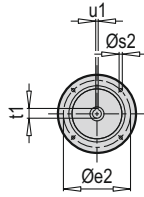
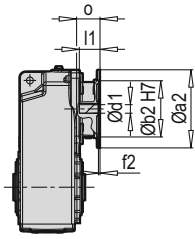
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 52	38	8	80	213	M12	41	10	5	70
PD/PM 53	24	8	50	172	M8	27	8	5	40

W ~ Kg	
PD/PM 52	117
PD/PM 53	126

PD 52
PD 53

PAM B5/B14

PM 52
PM 53



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 53	71	160	110	130	4.0	M8	14	30	16.3	5	88
PD/PM 53	80	200	130	165	4.0	M10	19	40	21.8	6	72
PD/PM 52-53	90	200	130	165	4.0	M10	24	50	27.3	8	72
PD/PM 52-53	100	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 52-53	112	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 52	132	300	230	265	5.0	M12	38	80	41.3	10	94
PD/PM 52	160	350	250	300	6.0	M16	42	110	45.3	12	120
PD/PM 52	180	350	250	300	6.0	M16	48	110	51.8	14	120

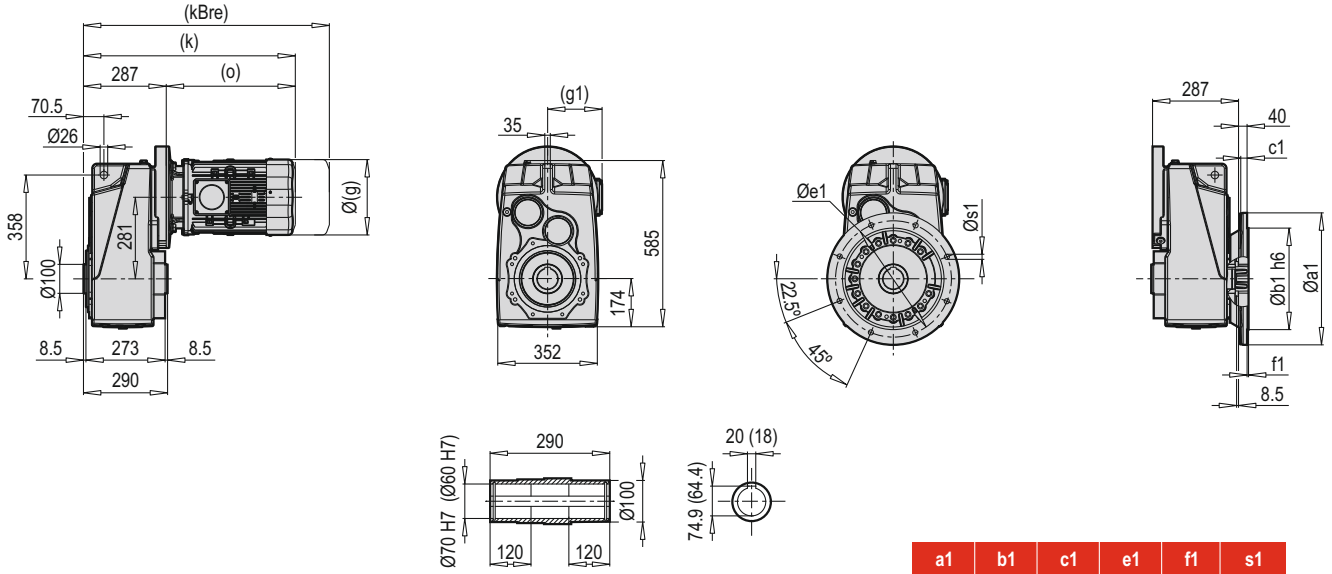
~ Kg		
PAM B5	PD/PM 52	PD/PM 53
71	-	117
80	-	118
90	102	118
100	103	119
112	103	119
132	112	-
160	120	-
180	120	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 53	71	105	70	85	4.0	7	14	30	16.3	5	55
PD/PM 53	80	120	80	100	4.0	7	19	40	21.8	6	72
PD/PM 52-53	90	140	95	115	4.0	9	24	50	27.3	8	72
PD/PM 52-53	100	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 52-53	112	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 52	132	200	130	165	5.0	11	38	80	41.3	10	94

~ Kg		
PAM B5	PD/PM 52	PD/PM 53
71	-	115
80	-	116
90	101	116
100	102	118
112	102	118
132	107	-

PD 62

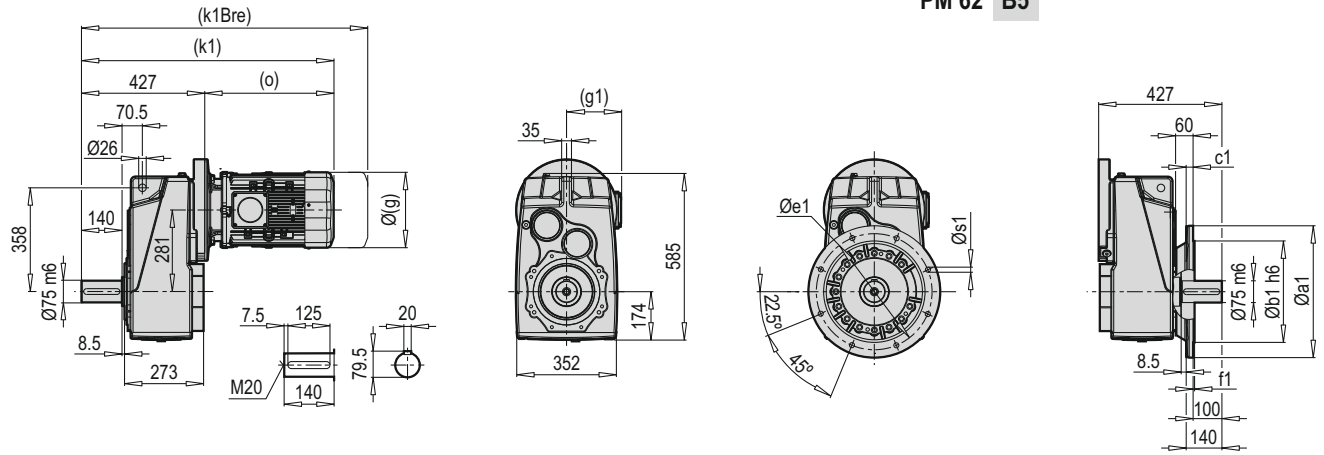
PD 62 B5



a1	b1	c1	e1	f1	s1
400	300	20	350	5	4x18
450	350	22	400	5	8x18

PM 62

PM 62 B5



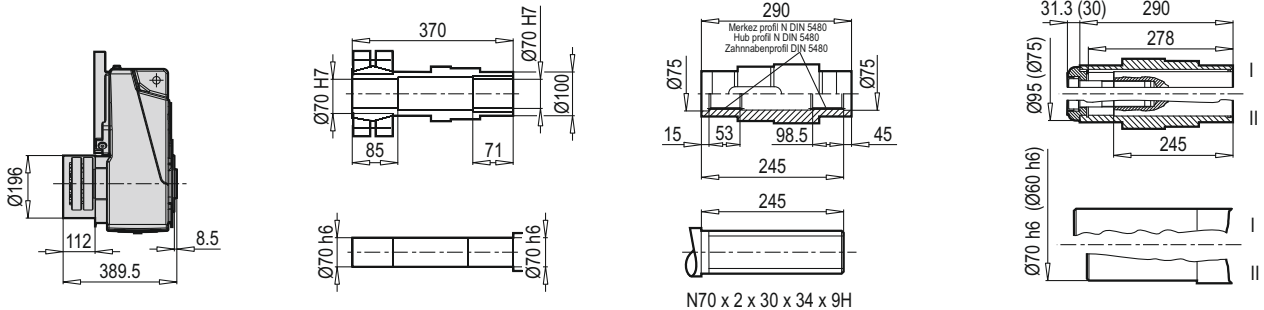
PD 62 KS

53 - 55

PD 62 DIN 5480

PD 62 Ç

70 - 71

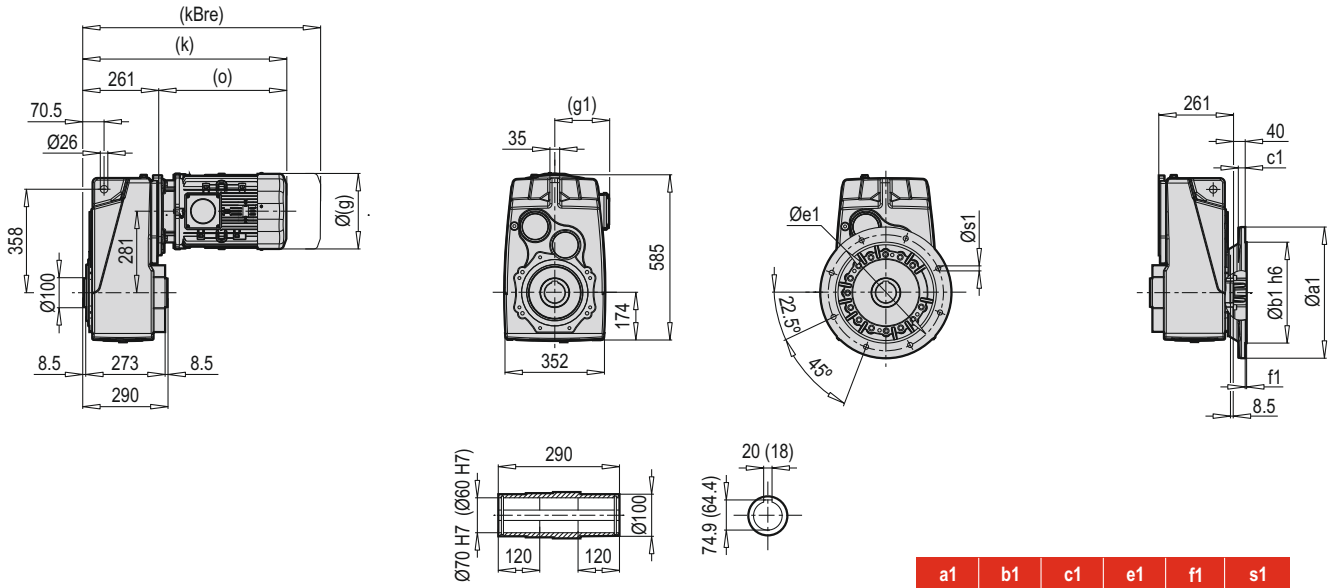


	100 L	112 M	132 S	132 M	160 M/L	180 M/L	200 L	225 M	250 M
g	202	220	271	271	322	363	363	456	495
g1	153	159	188	188	214	249	249	260	392
k/k1	667/807	666/806	732/872	732/872	817/957	911/1051	920/1060	987/1128	931/1131
kBre/k1Bre	751/891	766/906	832/972	852/992	922/1062	1030/1170	1038/1178	1159/1300	1071/1271
o	380	379	445	445	530	624	633	700	644

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 63

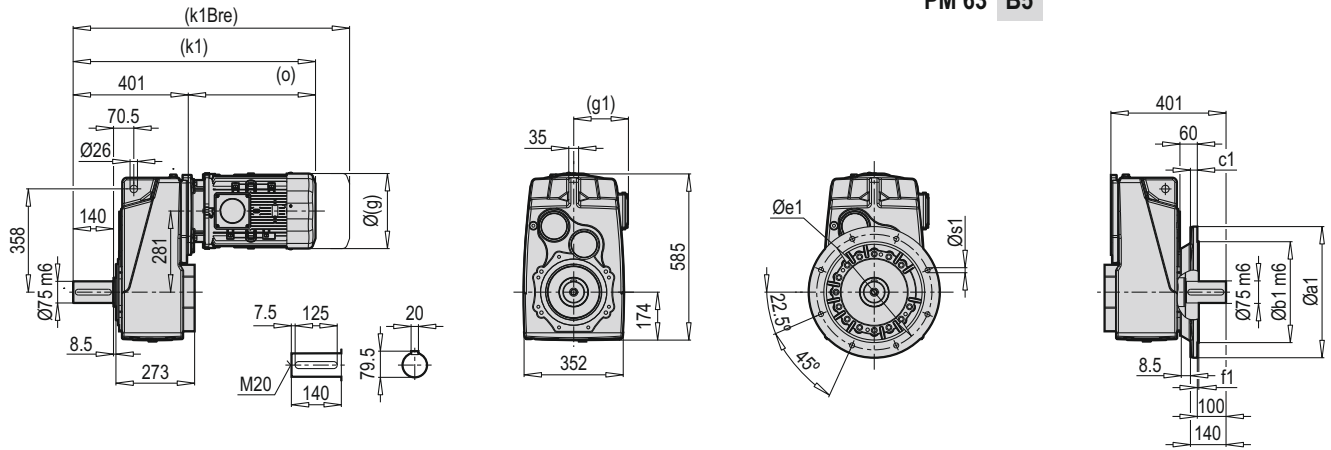
PD 63 B5



a1	b1	c1	e1	f1	s1
400	300	20	350	5	4x18
450	350	22	400	5	8x18

PM 63

PM 63 B5



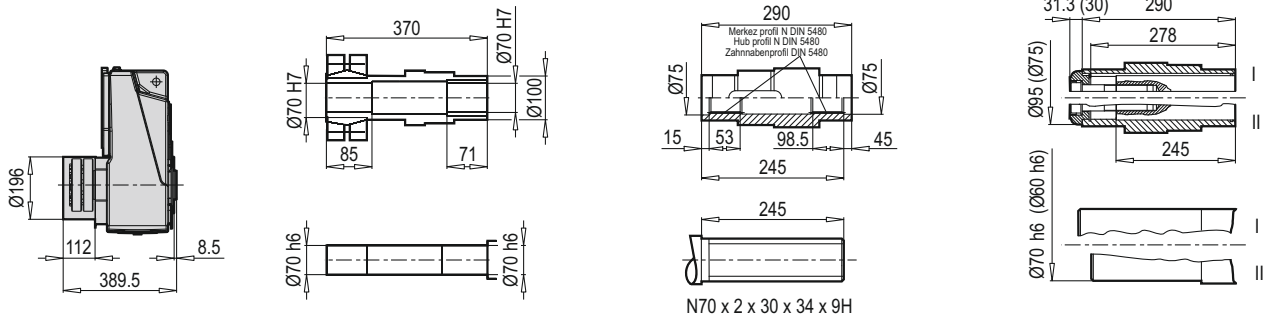
PD 63 KS

53 - 55

PD 63 DIN 5480

PD 63 Ç

70 - 71



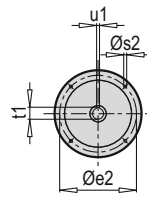
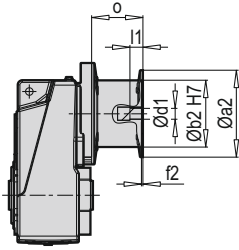
	90 S/L	100 L	112 M	132 S	132 M	160 M/L	180 M/L
g	182	202	220	271	271	322	363
g1	130	153	159	188	188	214	249
k/k1	591/731	642/782	641/781	703/843	703/843	791/931	885/1025
kBre/k1Bre	659/799	726/866	741/881	806/946	826/966	896/1036	1004/1144
o	330	381	380	442	442	530	624

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

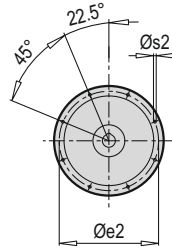
PD 62
PD 63

IEC

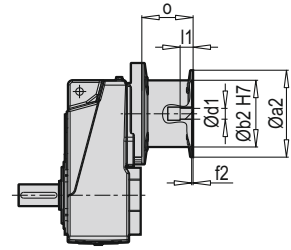
PM 62
PM 63



IEC 90...200



IEC 225...315



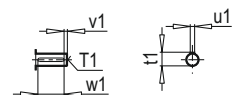
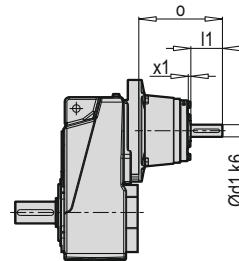
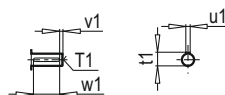
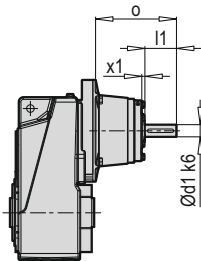
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	PD/PM 62 o	PD/PM 63 o
PD/PM 63	90	200	130	165	4.0	M10	24	50	27.3	8	-	109
PD/PM 62-63	100	250	180	215	5.0	M12	28	60	31.3	8	127	133
PD/PM 62-63	112	250	180	215	5.0	M12	28	60	31.3	8	127	133
PD/PM 62-63	132	300	230	265	5.0	M12	38	80	41.3	10	177	190
PD/PM 62-63	160	350	250	300	6.0	M16	42	110	45.3	12	266	194
PD/PM 62-63	180	350	250	300	6.0	M16	48	110	51.8	14	266	194
PD/PM 62	200	400	300	350	6.0	M16	55	110	59.3	16	229	-
PD/PM 62	225	450	350	400	6.0	M16	60	140	64.4	18	303	-

~ Kg		
IEC	PD/PM 62	PD/PM 63
90	-	196
100	213	204
112	213	204
132	227	218
160	253	229
180	253	229
200	268	-
225	284	-

PD 62
PD 63

W

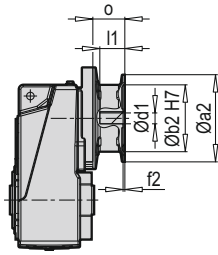
PM 62
PM 63



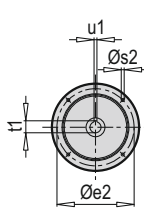
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 62	42	8	110	288	M16	45	12	10	90
PD/PM 63	38	8	80	213	M12	41	10	5	70

W ~ Kg	
PD/PM 62	226
PD/PM 63	202

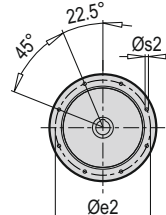
PD 62
PD 63



PAM B5/B14

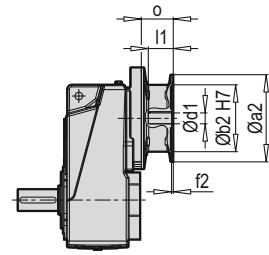


PAM 90...200



PAM 225...315

PM 62
PM 63



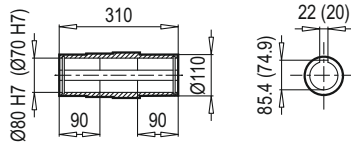
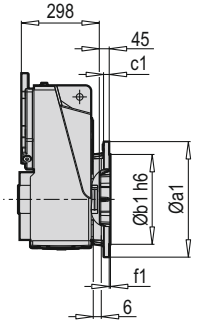
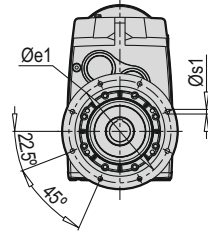
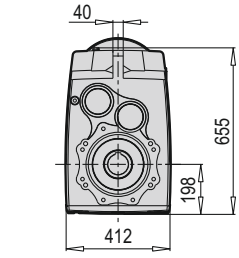
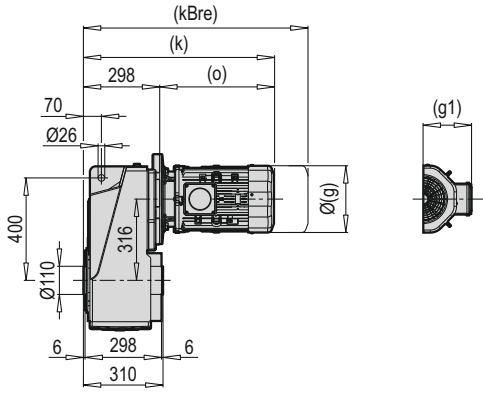
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	ø (62)	ø (63)
PD/PM 63	90	200	130	165	4.0	M10	24	50	27.3	8	-	72
PD/PM 62-63	100	250	180	215	5.0	M12	28	60	31.3	8	75	75
PD/PM 62-63	112	250	180	215	5.0	M12	28	60	31.3	8	75	75
PD/PM 62-63	132	300	230	265	5.0	M12	38	80	41.3	10	110	94
PD/PM 62-63	160	350	250	300	6.0	M16	42	110	45.3	12	145	120
PD/PM 62-63	180	350	250	300	6.0	M16	48	110	51.8	14	145	120
PD/PM 62	200	400	300	350	6.0	M16	55	110	59.3	16	157	-
PD/PM 62	225	450	350	400	6.0	M16	60	140	64.4	18	183	-

~ Kg		
PAM B5	PD/PM 62	PD/PM 63
90	-	183
100	190	184
112	190	184
132	201	193
160	218	201
180	218	201
200	225	-
225	225	-

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	ø (62)	ø (63)
PD/PM 63	90	140	95	115	4.0	9	24	50	27.3	8	75	75
PD/PM 62-63	100	160	110	130	5.0	9	28	60	31.3	8	75	75
PD/PM 62-63	112	160	110	130	5.0	9	28	60	31.3	8	110	94
PD/PM 62-63	132	200	130	165	5.0	11	38	80	41.3	10	110	94

~ Kg		
PAM B14	PD/PM 62	PD/PM 63
90	-	182
100	189	183
112	189	183
132	196	188

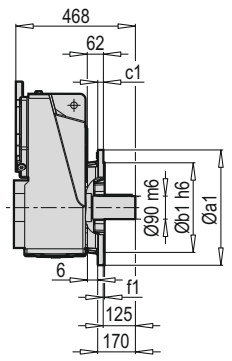
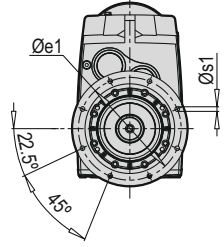
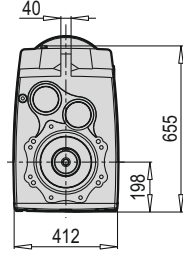
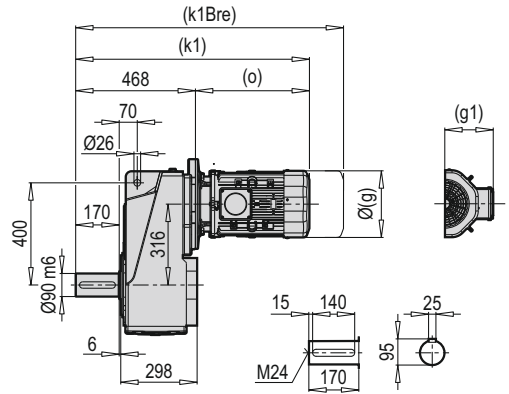
PD 72



PD 72 B5

a1	b1	c1	e1	f1	s1
450	350	22	400	5	8x18
550	450	28	500	5	8x18

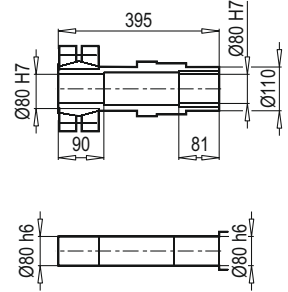
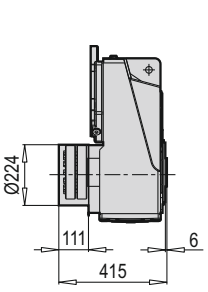
PM 72



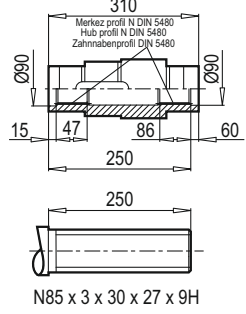
PM 72 B5

PD 72 KS

53 - 55

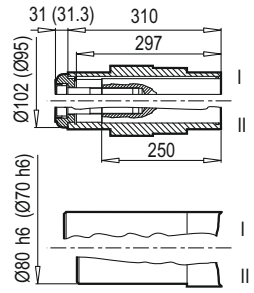


PD 72 DIN 5480



PD 72 Ç

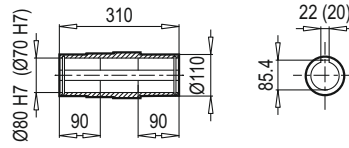
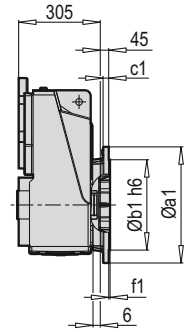
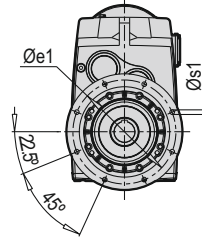
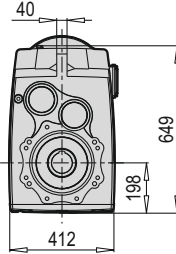
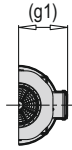
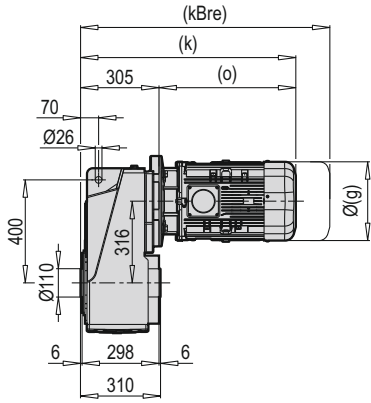
70 - 71



	132 S	132 M	160 M/L	180 M/L	200 L	225 S/M
g	271	271	322	363	363	456
g1	188	188	214	249	249	260
k/k1	743/913	743/913	828/998	922/1092	931/1101	998/1168
kBre/k1Bre	843/1013	863/1033	933/1103	1041/1211	1049/1219	1170/1340
o	445	445	530	624	633	700

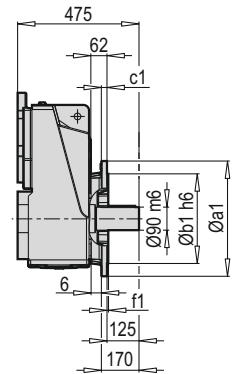
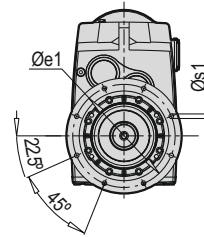
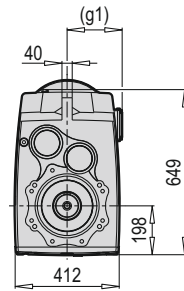
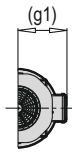
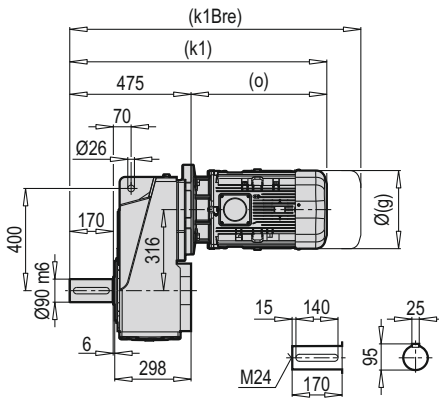
Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 73



a1	b1	c1	e1	f1	s1
450	350	22	400	5	8x18
550	450	28	500	5	8x18

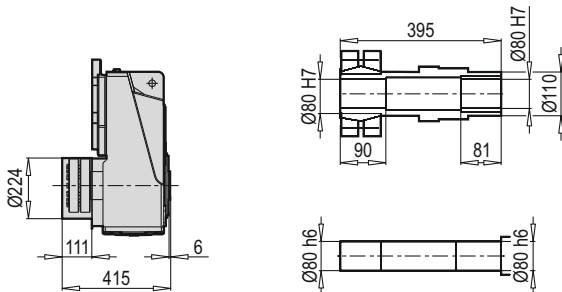
PM 73



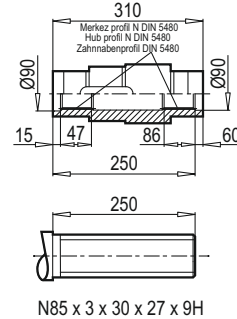
PM 73 B5

PD 73 KS

53 - 55

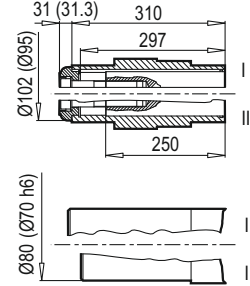


PD 73 DIN 5480



PD 73 Ç

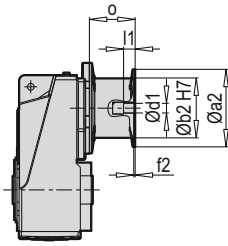
70 - 71



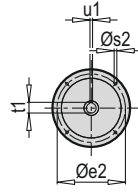
	100 L	112 M	132 S	132 M	160 M/L	180 M/L	200 L	225 S/M
g	202	220	271	271	322	363	363	456
g1	153	159	188	188	214	249	249	260
k/k1	685/855	684/854	750/920	750/920	835/1005	929/1099	938/1108	1005/1175
kBre/k1Bre	769/939	784/954	850/1020	870/1040	940/1110	1048/1217	1056/1226	1177/1347
o	380	379	445	445	530	624	633	700

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

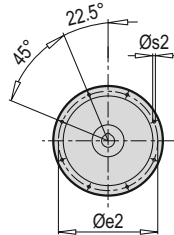
PD 72
PD 73



IEC

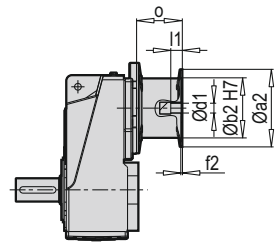


IEC 100...200



IEC 225...315

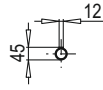
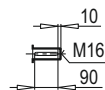
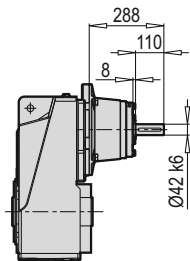
PM 72
PM 73



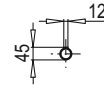
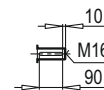
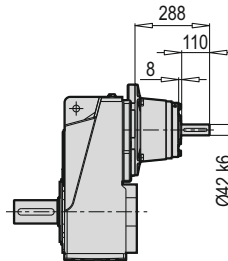
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 73	100	250	180	215	5.0	M12	28	60	31.3	8	127
PD/PM 73	112	250	180	215	5.0	M12	28	60	31.3	8	127
PD/PM 72-73	132	300	230	265	5.0	M12	38	80	41.3	10	177
PD/PM 72-73	160	350	250	300	6.0	M16	42	110	45.3	12	266
PD/PM 72-73	180	350	250	300	6.0	M16	48	110	51.8	14	266
PD/PM 72-73	200	400	300	350	6.0	M16	55	110	59.3	16	229
PD/PM 72-73	225	450	350	400	6.0	M16	60	140	64.4	18	303

~ Kg		
IEC	PD/PM 72	PD/PM 73
100	-	287
112	-	287
132	293	300
160	319	327
180	319	327
200	334	341
225	350	357

PD 72
PD 73



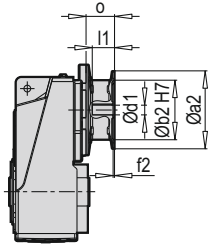
W



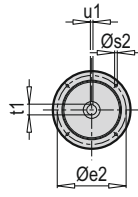
PM 72
PM 73

W ~ Kg	
PD/PM 72	292
PD/PM 73	299

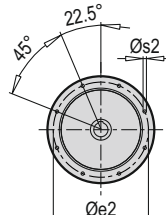
PD 72
PD 73



PAM B5/B14

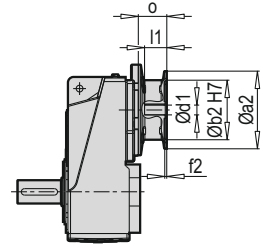


PAM 90...200



PAM 225...315

PM 72
PM 73



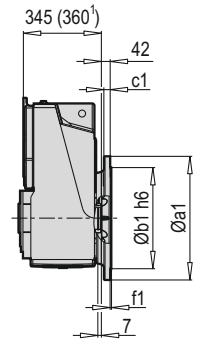
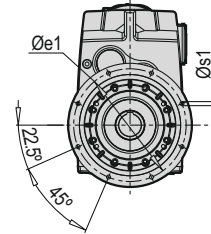
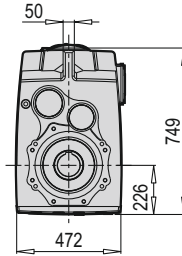
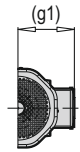
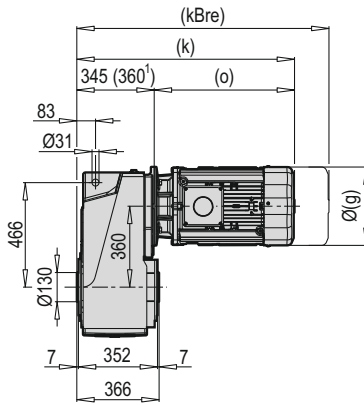
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 73	100	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 73	112	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 72-73	132	300	230	265	5.0	M12	38	80	41.3	10	110
PD/PM 72-73	160	350	250	300	6.0	M16	42	110	45.3	12	145
PD/PM 72-73	180	350	250	300	6.0	M16	48	110	51.8	14	145
PD/PM 72-73	200	400	300	350	6.0	M16	55	110	59.3	16	157
PD/PM 72-73	225	450	350	400	6.0	M16	60	140	64.4	18	183

~ Kg		
PAM B5	PD/PM 72	PD/PM 73
100	-	260
112	-	260
132	264	271
160	281	288
180	281	288
200	288	295
225	298	305

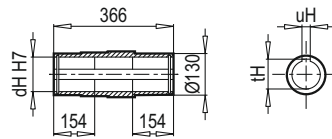
Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 73	100	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 73	112	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 72-73	132	200	130	165	5.0	11	38	80	41.3	10	110

~ Kg		
PAM B14	PD/PM 72	PD/PM 73
100	-	259
112	-	259
132	259	266

PD 82



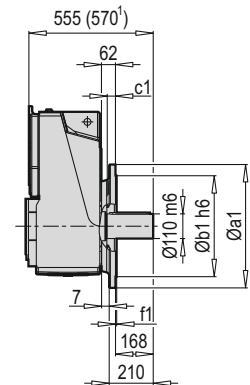
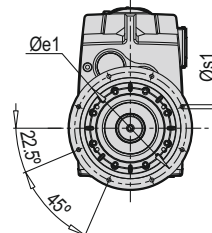
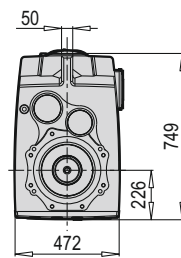
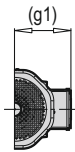
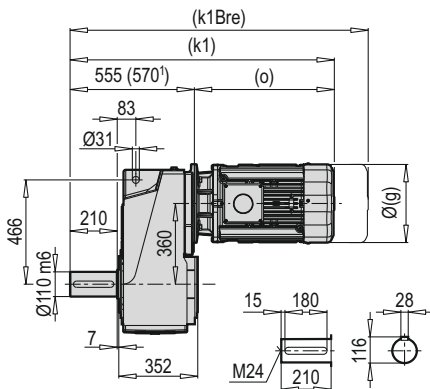
dH	Ø 100	(Ø 95)	(Ø 90)	(Ø 85)	(Ø 80)
uH	28	(25)	(25)	(22)	(22)
tH	106.4	(100.4)	(95.4)	(90.4)	(85.4)



PD 82 B5

a1	b1	c1	e1	f1	s1
550	450	28	500	5	8x18

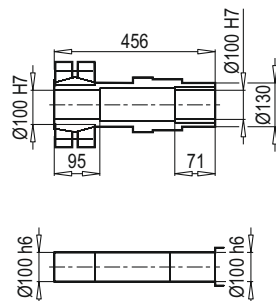
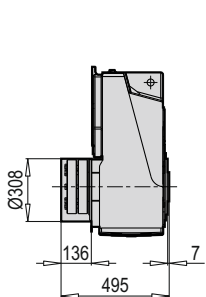
PM 82



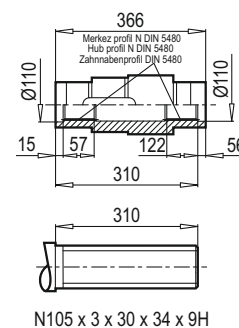
PM 82 B5

PD 82 KS

53 - 55

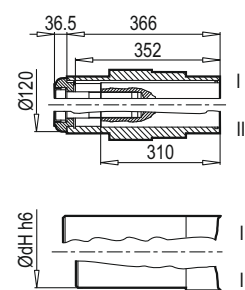


PD 82 DIN 5480



PD 82 Ç

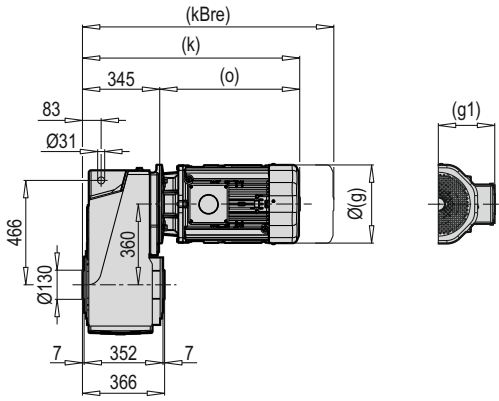
70 - 71



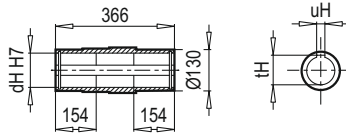
	132 S	132 M	160 M/L	180 M/L	200 L	225 S/M	250 M ¹⁾	280 S ¹⁾
g	271	271	322	363	363	456	495	527
g1	188	188	214	249	249	260	392	367
k/k1	790/1000	790/1000	875/1085	969/1179	978/1188	1045/1255	1004/1214	1259/1469
kBre/k1Bre	890/1100	910/1120	980/1190	1088/1298	1096/1306	1217/1427	1134/1344	-
o	445	445	530	624	633	700	644	914

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

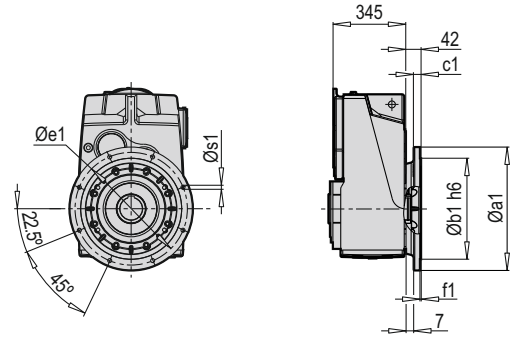
PD 83



dH	Ø 100	(Ø 95)	(Ø 90)	(Ø 85)	(Ø 80)
uH	28	(25)	(25)	(22)	(22)
tH	106.4	(100.4)	(95.4)	(90.4)	(85.4)

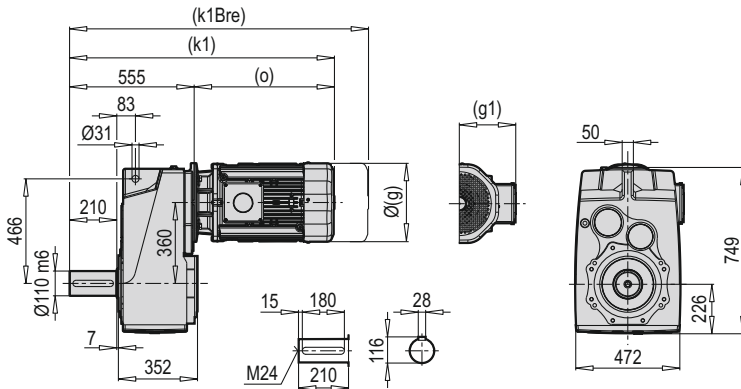


PD 83 B5

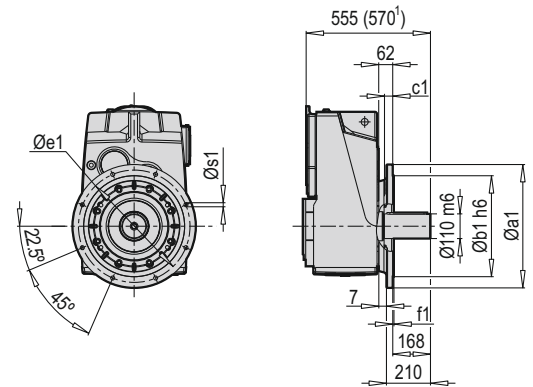


a1	b1	c1	e1	f1	s1
550	450	28	500	5	8x18

PM 83

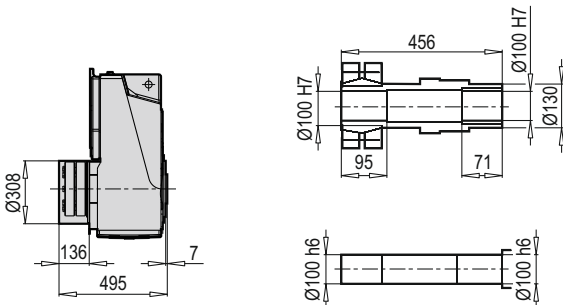


PM 83 B5

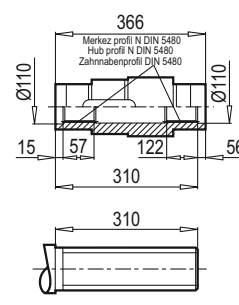


PD 83 KS

53 - 55



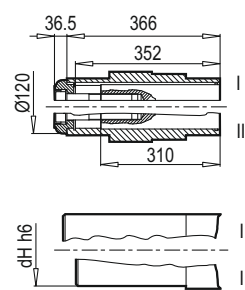
PD 83 DIN 5480



N105 x 3 x 30 x 34 x 9H

PD 83 Ç

70 - 71



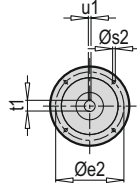
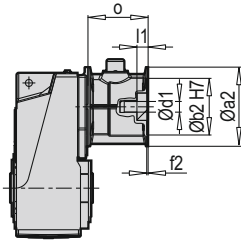
	100 L	112 M	132 S	132 M	160 M/L	180 M/L	200 L	225 S/M
g	202	220	271	271	322	363	363	456
g1	153	159	188	188	214	249	249	260
k/k1	725/935	724/934	790/1000	790/1000	875/1085	969/1179	978/1188	1045/1255
kBre/k1Bre	809/1019	824/1034	890/1100	910/1120	980/1190	1088/1298	1096/1306	1217/1427
o	380	379	445	445	530	624	632.5	700

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

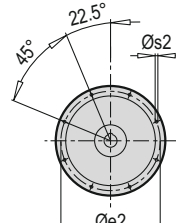
PD 82
PD 83

IEC

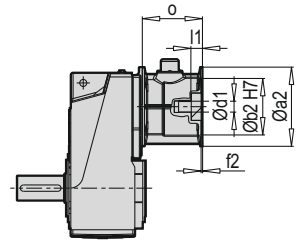
PM 82
PM 83



IEC 100...200



IEC 225...315



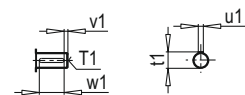
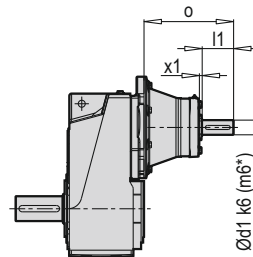
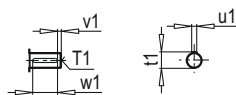
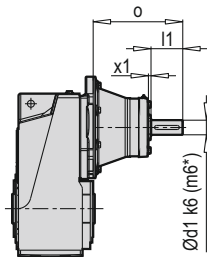
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f1	Øs2	Ød1	l1	t1	u1	o
PD/PM 83	100	250	180	215	5.0	M12	28	60	31.3	8	127
PD/PM 83	112	250	180	215	5.0	M12	28	60	31.3	8	127
PD/PM 82-83	132	300	230	265	5.0	M12	38	80	41.3	10	177
PD/PM 82-83	160	350	250	300	6.0	M16	42	110	45.3	12	266
PD/PM 82-83	180	350	250	300	6.0	M16	48	110	51.8	14	266
PD/PM 82-83	200	400	300	350	6.0	M16	55	110	59.3	16	229
PD/PM 82-83	225	450	350	400	6.0	M16	60	140	64.4	18	303
PD/PM 82	250	550	450	500	6.0	M16	65	140	69.4	18	304
PD/PM 82	280	550	450	500	6.0	M16	75	140	79.9	20	304

~ Kg		
IEC	PD/PM 82	PD/PM 83
100	-	422
112	-	422
132	431	436
160	458	462
180	458	462
200	473	477
225	489	493
250	547	-
280	547	-

PD 82
PD 83

W

PM 82
PM 83



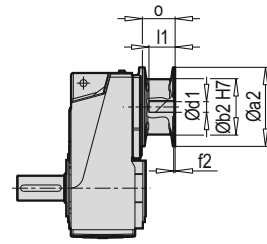
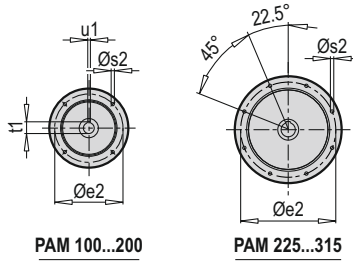
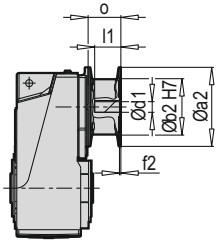
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 82	65*	12	140	397	M20	69	18	15	110
PD/PM 83	42	8	110	288	M16	45	12	10	90

W ~ Kg	
PD/PM 82	510
PD/PM 83	435

PD 82
PD 83

PAM B5/B14

PM 82
PM 83



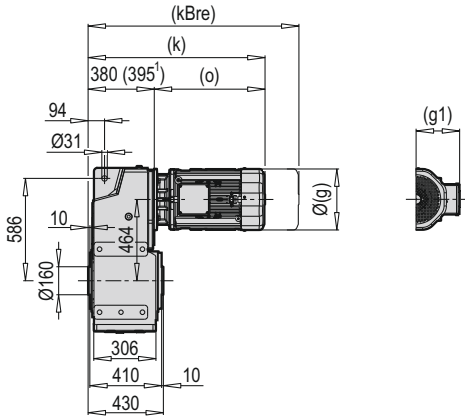
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 83	100	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 83	112	250	180	215	5.0	M12	28	60	31.3	8	75
PD/PM 82-83	132	300	230	265	5.0	M12	38	80	41.3	10	110
PD/PM 82-83	160	350	250	300	6.0	M16	42	110	45.3	12	145
PD/PM 82-83	180	350	250	300	6.0	M16	48	110	51.8	14	145
PD/PM 82-83	200	400	300	350	6.0	M16	55	110	59.3	16	157
PD/PM 82-83	225	450	350	400	6.0	M16	60	140	64.4	18	183
PD/PM 82	250	550	450	500	6.0	M16	65	140	69.4	18	202
PD/PM 82	280	550	450	500	6.0	M16	75	140	79.9	20	202

~ Kg		
PAM B5	PD/PM 82	PD/PM 83
100	-	385
112	-	385
132	392	396
160	409	413
180	409	413
200	416	419
225	426	430
250	486	-
280	486	-

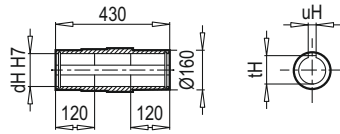
Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 83	100	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 83	112	160	110	130	5.0	9	28	60	31.3	8	75
PD/PM 82-83	132	200	130	165	5.0	11	38	80	41.3	10	110

~ Kg		
PAM B14	PD/PM 82	PD/PM 83
100	-	384
112	-	384
132	387	391

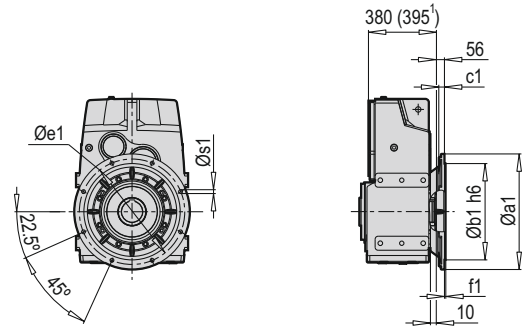
PD 92



dH	Ø 120	(Ø 125)	(Ø 110)	(Ø 100)
uH	32	(32)	(28)	(28)
tH	127.4	(132.4)	(116.4)	(106.4)

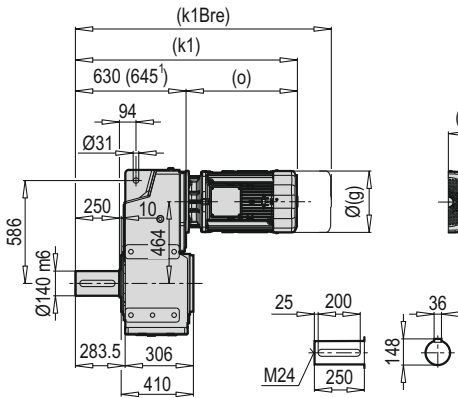


PD 92 B5

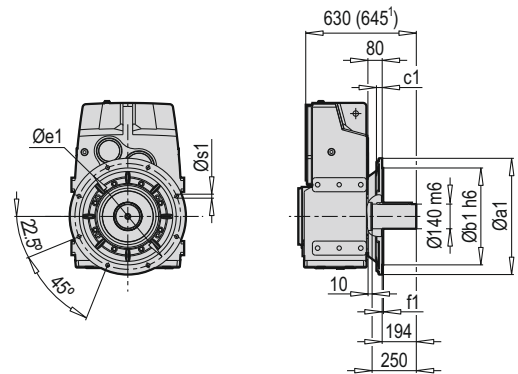


a1	b1	c1	e1	f1	s1
660	550	32	600	6	8x22

PM 92

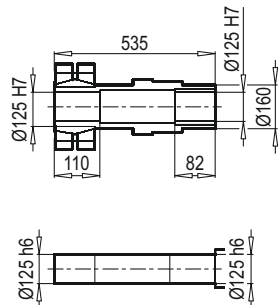
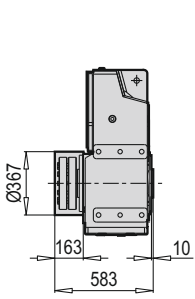


PM 92 B5

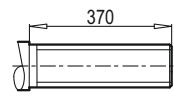
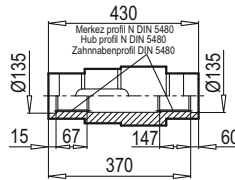


PD 92 KS

53 - 55



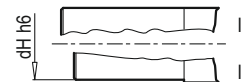
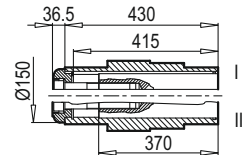
PD 92 DIN 5480



N130 x 5 x 30 x 24 x 9H

PD 92 Ç

70 - 71

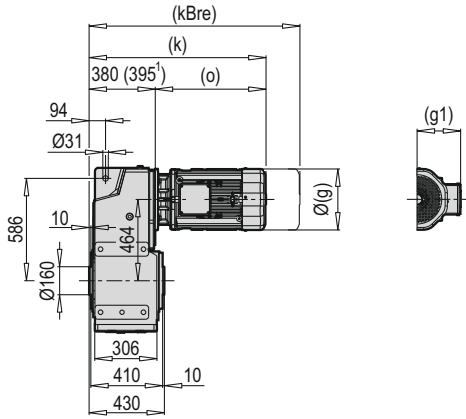


Ayak Delik Ölçüleri sayfa 58 / Dimension of foot is on page 58 / Fußlochmaße Seite 58

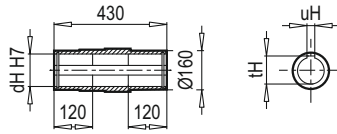
	200 L	225 S/M	250 M¹⁾	280 S¹⁾	280 M¹⁾	315 S¹⁾	315 M¹⁾	
g	363	456	495	527	527	-	-	
g1	249	260	392	367	367	-	-	
k/k1	1013/1263	1080/1330	1039/1289	1280/1530	1280/1530	-	-	
kBre/k1Bre	1131/1381	1252/1502	1169/1419	-	-	-	-	
o	633	700	644	885	885	-	-	

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

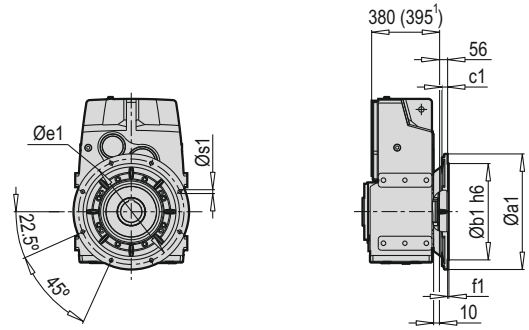
PD 93



dH	Ø 120	(Ø 125)	(Ø 110)	(Ø 100)
uH	32	(32)	(28)	(28)
tH	127.4	(132.4)	(116.4)	(106.4)

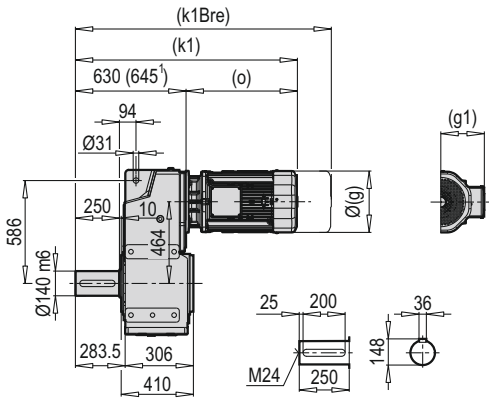


PD 93 B5

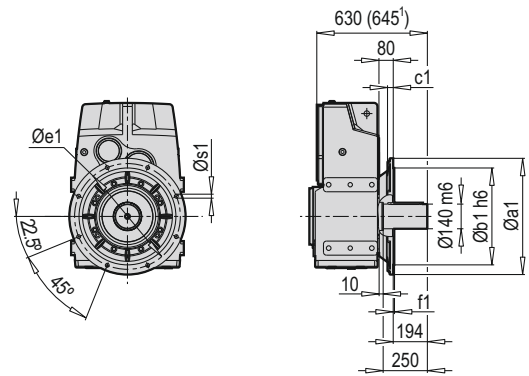


a1	b1	c1	e1	f1	s1
660	550	32	600	6	8x22

PM 93

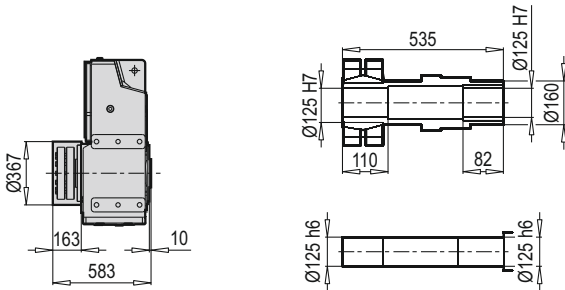


PM 93 B5

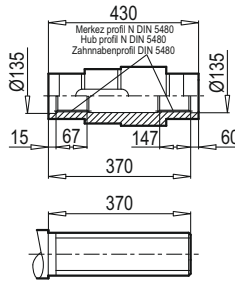


PD 93 KS

53 - 55



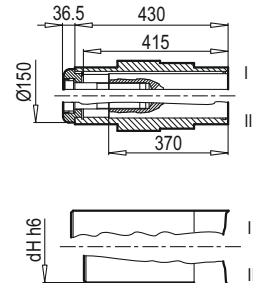
PD 93 DIN 5480



N130 x 5 x 30 x 24 x 9H

PD 93 Ç

70 - 71

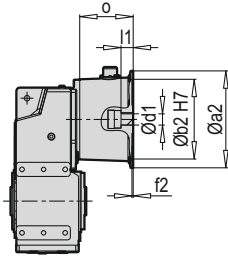


Ayak Delik Ölçüleri sayfa 58 / Dimension of foot is on page 58 / Fußlochmaße Seite 58

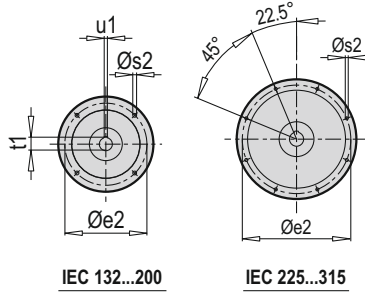
	132 S	132 M	160 M/L	180 M/L	200 L	225 S/M	250 M ¹⁾	280 S ¹⁾
g	271	271	322	363	363	456	495	527
g1	188	188	214	249	249	260	392	367
k/k1	825/1075	825/1075	910/1160	1004/1254	1013/1263	1080/1330	1039/1289	1280/1530
kBre/k1Bre	925/1175	945/1195	1015/1265	1223/1373	1131/1381	1252/1502	1169/1419	-
o	445	445	530	624	633	700	644	885

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

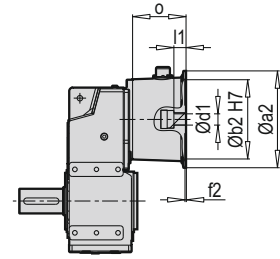
PD 92
PD 93



IEC



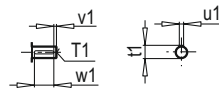
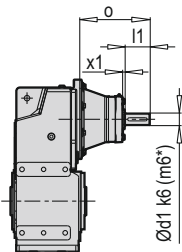
PM 92
PM 93



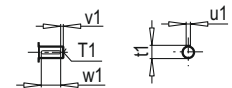
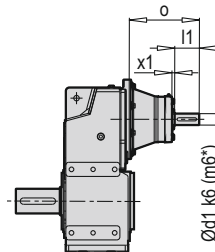
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 93	132	300	230	265	5.0	M12	38	80	41.3	10	177
PD/PM 93	160	350	250	300	6.0	M16	42	110	45.3	12	266
PD/PM 92-93	180	350	250	300	6.0	M16	48	110	51.8	14	266
PD/PM 92-93	200	400	300	350	6.0	M16	55	110	59.3	16	229
PD/PM 92-93	225	450	350	400	6.0	M16	60	140	64.4	18	303
PD/PM 92-93	250	550	450	500	6.0	M16	65	140	69.4	18	304
PD/PM 92-93	280	550	450	500	6.0	M16	75	140	79.9	20	304
PD/PM 92	315	660	550	600	7.0	M20	80	170	85.4	22	382

~ Kg		
IEC	PD/PM 92	PD/PM 93
132	-	756
160	-	782
180	777	782
200	792	797
225	808	813
250	866	871
280	866	871
315	951	-

PD 92
PD 93



W

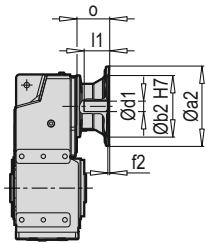


PM 92
PM 93

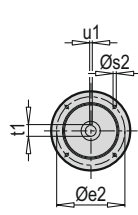
Tip / Type / Typ	Ød1	x1	l1	o	T1	t1	u1	v1	w1
PD/PM 92	65*	12	140	397	M20	69	18	15	110
PD/PM 93	42	8	110	288	M16	45	12	10	90

W ~ Kg	
PD/PM 92	829
PD/PM 93	755

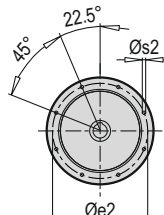
PD 92
PD 93



PAM B5/B14

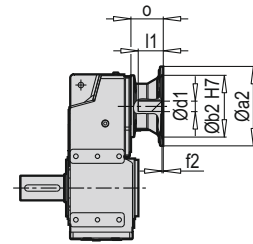


PAM 132...200



PAM 225...315

PM 92
PM 93



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 93	132	300	230	265	5.0	M12	38	80	41.3	10	110
PD/PM 93	160	350	250	300	6.0	M16	42	110	45.3	12	145
PD/PM 92-93	180	350	250	300	6.0	M16	48	110	51.8	14	145
PD/PM 92-93	200	400	300	350	6.0	M16	55	110	59.3	16	157
PD/PM 92-93	225	450	350	400	6.0	M16	60	140	64.4	18	183
PD/PM 92-93	250	550	450	500	6.0	M16	65	140	69.4	18	202
PD/PM 92-93	280	550	450	500	6.0	M16	75	140	79.9	20	202

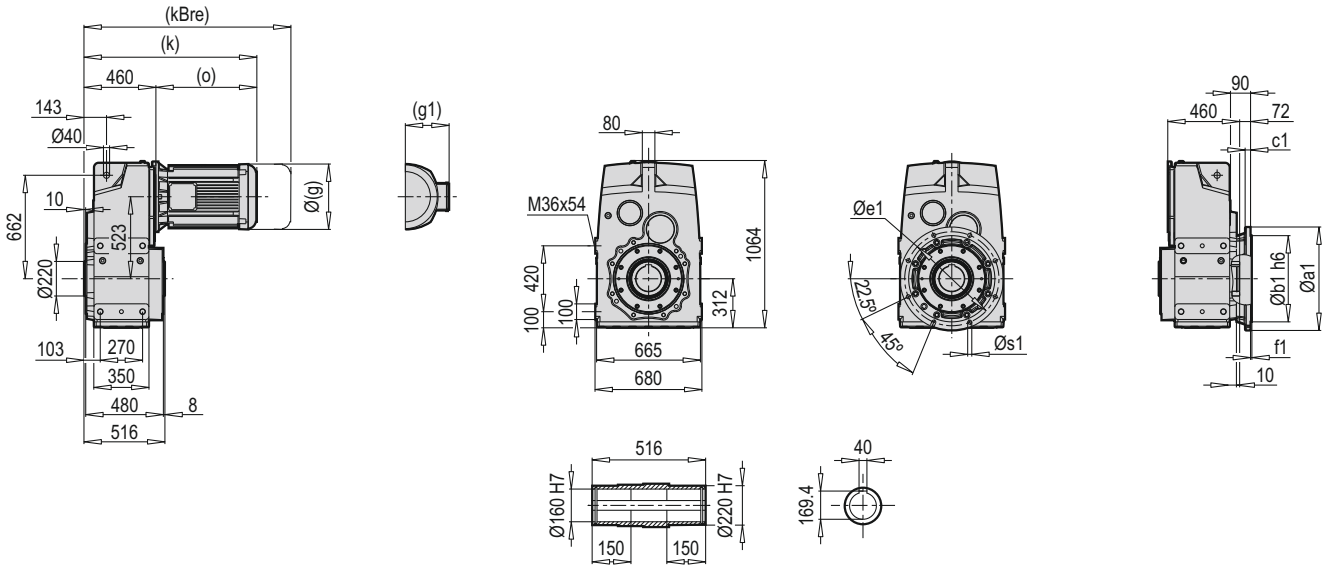
~ Kg		
PAM B5	PD/PM 92	PD/PM 93
132	-	698
160	-	715
180	710	715
200	717	722
225	727	722
250	787	792
280	787	792

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 93	132	200	130	165	5.0	11	38	80	41.3	10	110

~ Kg		
PAM B14	PD/PM 92	PD/PM 93
132	-	693

PD 102

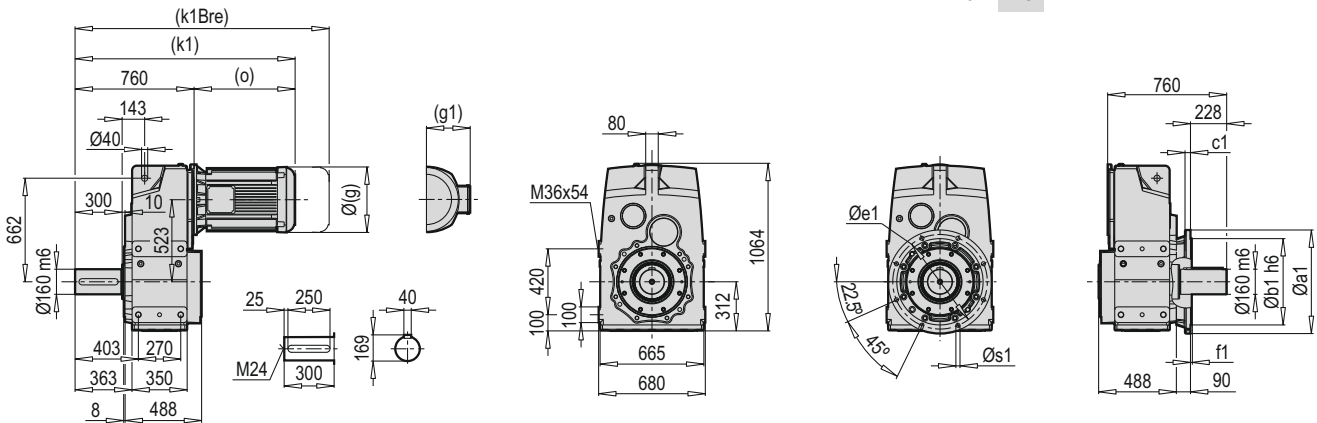
PD 102 B5



a1	b1	c1	e1	f1	s1
660	550	35	600	8	8x26

PM 102

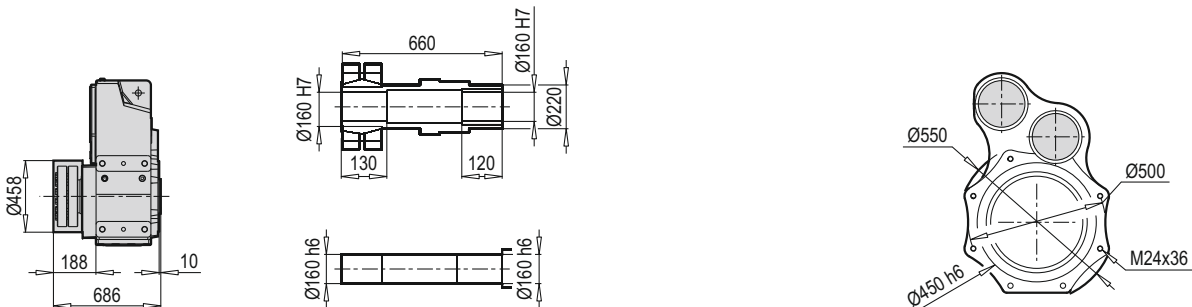
PM 102 B5



PD 102 KS

53 - 55

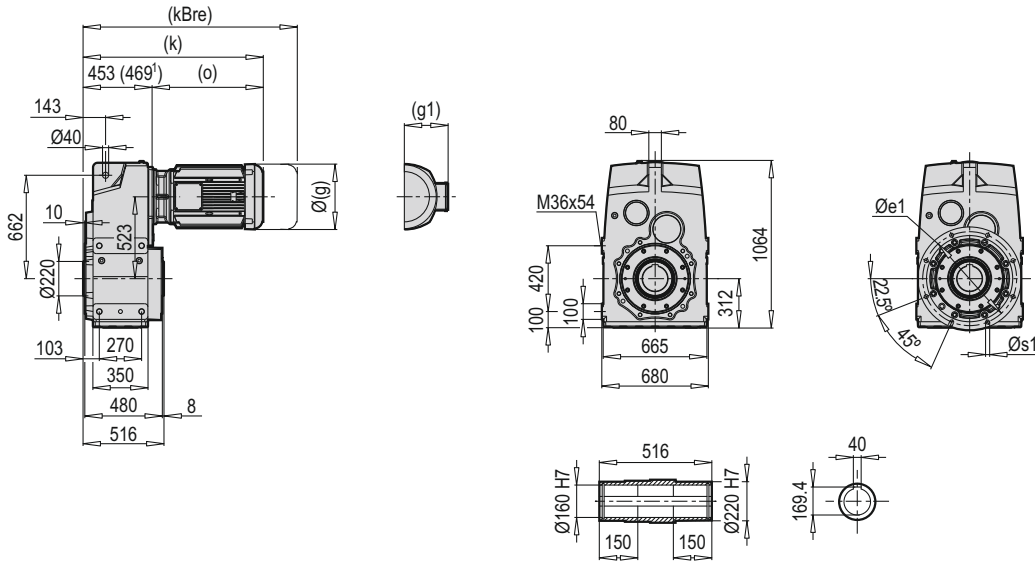
B14



	280 S	280 M	315 S	315 M	315 L			
g	527	527	-	-	-			
g1	367	367	-	-	-			
k/k1	1345/1645	1345/1645	-	-	-			
kBre/k1Bre	-	-	-	-	-			
o	885	885	-	-	-			

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

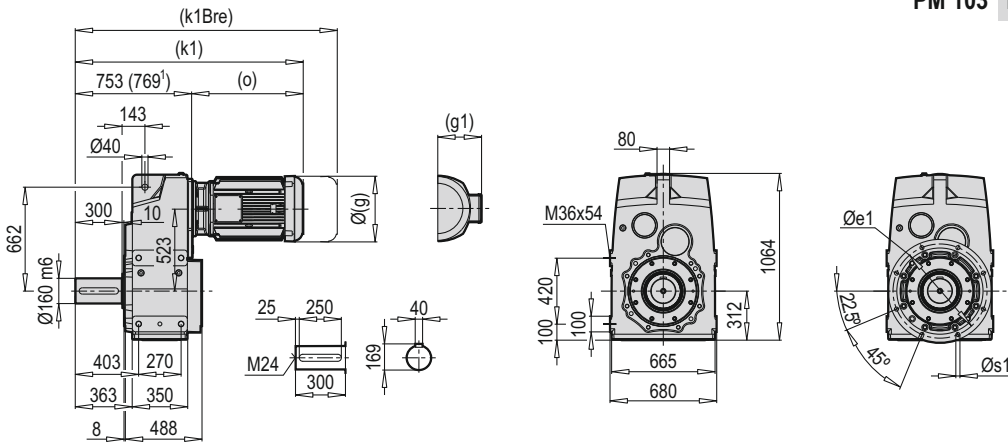
PD 103



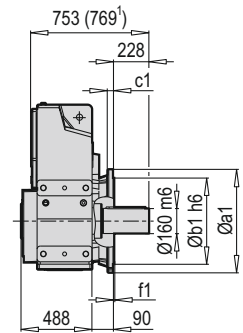
PD 103 B5

a1	b1	c1	e1	f1	s1
660	550	35	600	8	8x26

PM 103



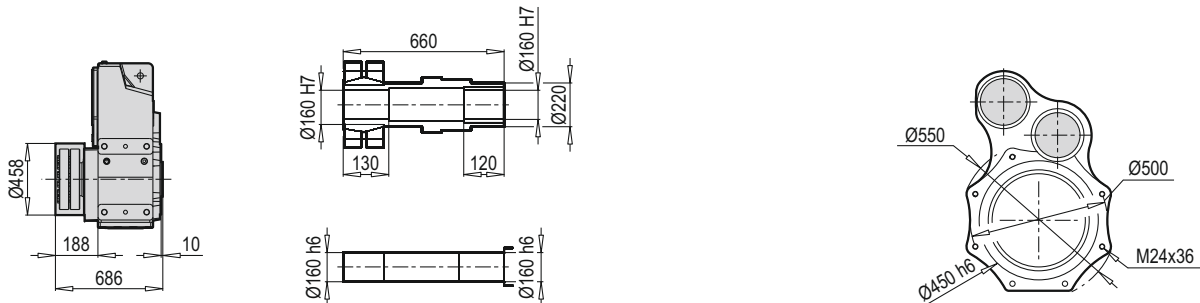
PM 103 B5



PD 103 KS

53 - 55

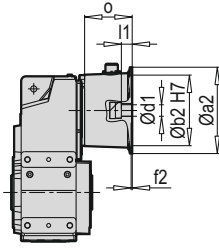
B14



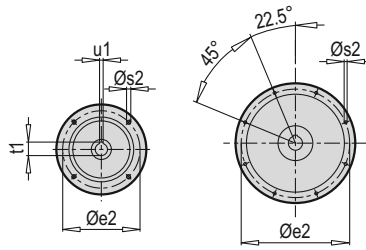
	160 M/L	180 M/L	200 L	225 S/M	250 M ¹⁾	280 S ¹⁾	280 M ¹⁾	315 S ¹⁾	315 M ¹⁾
g	322	363	363	456	495	527	527	-	-
g1	214	249	249	260	392	367	367	-	-
k/k1	983/1283	1077/1377	1086/1386	1153/1453	1113/1413	1354/1654	1354/1654	-	-
kBre/k1Bre	1088/1388	1196/1496	1204/1504	1325/1625	1243/1543	-	-	-	-
o	530	624	633	700	644	885	885	-	-

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 102
PD 103



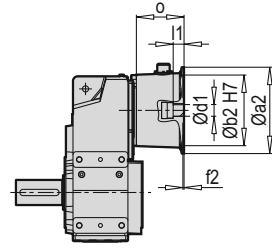
IEC



IEC 160...200

IEC 225...315

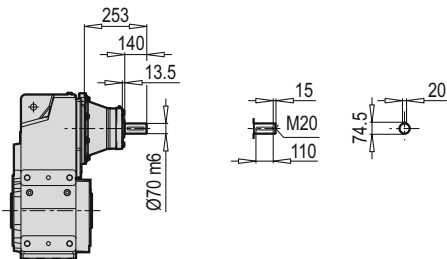
PM 102
PM 103



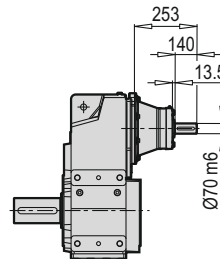
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 103	160	350	250	300	6.0	M16	42	110	45.3	12	266
PD/PM 103	180	350	250	300	6.0	M16	48	110	51.8	14	266
PD/PM 103	200	400	300	350	6.0	M16	55	110	59.3	16	229
PD/PM 103	225	450	350	400	6.0	M16	60	140	64.4	18	303
PD/PM 102-103	250	550	450	500	6.0	M16	65	140	69.4	18	304
PD/PM 102-103	280	550	450	500	6.0	M16	75	140	79.9	20	304
PD/PM 102-103	315	660	550	600	7.0	M20	80	170	85.4	22	382

~ Kg		
IEC	PD/PM 102	PD/PM 103
132	-	756
160	-	782
180	777	782
200	792	797
225	808	813
250	866	871
280	866	871

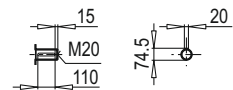
PD 102
PD 103



W

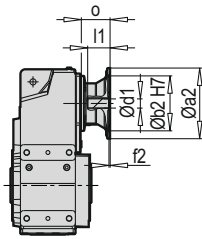


PM 102
PM 103

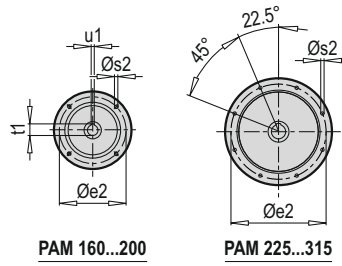


W ~ Kg	
PD/PM 102	1358
PD/PM 103	1384

PD 102
PD 103



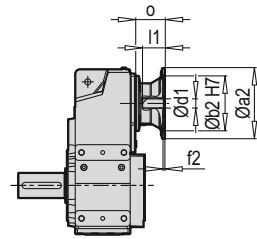
PAM B5



PAM 160...200

PAM 225...315

PM 102
PM 103

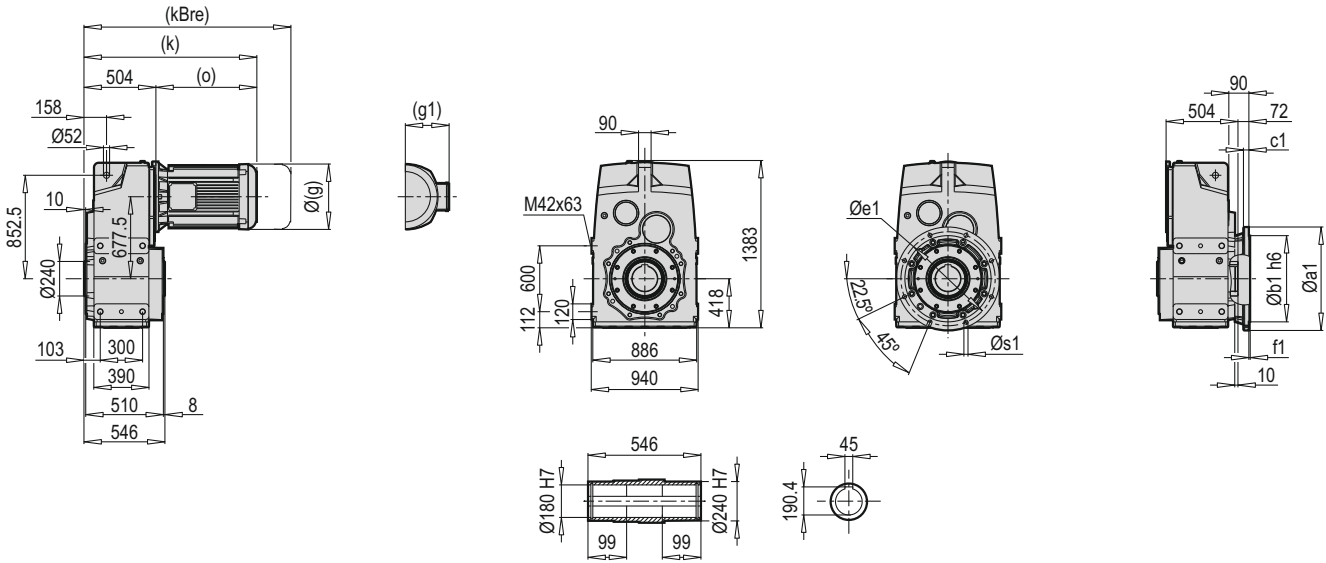


Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 103	160	350	250	300	6.0	M16	42	110	45.3	12	145
PD/PM 103	180	350	250	300	6.0	M16	48	110	51.8	14	145
PD/PM 103	200	400	300	350	6.0	M16	55	110	59.3	16	157
PD/PM 103	225	450	350	400	6.0	M16	60	140	64.4	18	183
PD/PM 102-103	250	550	450	500	6.0	M16	65	140	69.4	18	202
PD/PM 102-103	280	550	450	500	6.0	M16	75	140	79.9	20	202

~ Kg		
PAM B5	PD/PM 102	PD/PM 103
160	-	1279
180	-	1279
200	-	1286
225	-	1296
250	1331	1356
280	1331	1356

PD 112

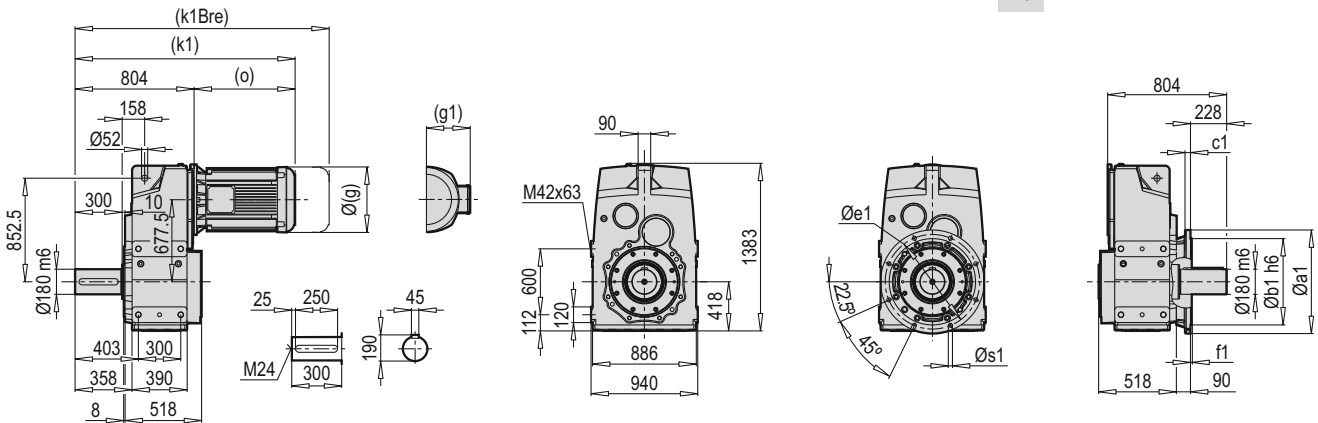
PD 112 B5



a1	b1	c1	e1	f1	s1
660	550	35	600	8	8x26

PM 112

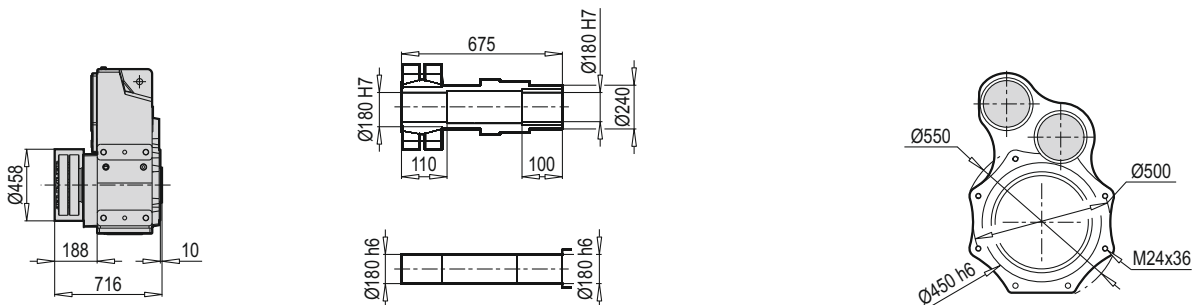
PM 112 B5



PD 112 KS

53 - 55

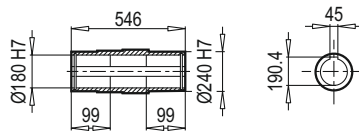
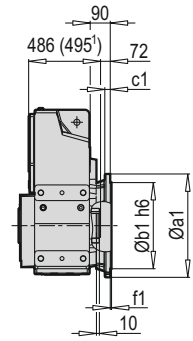
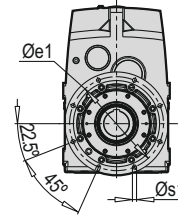
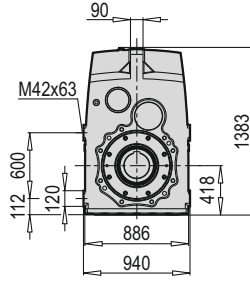
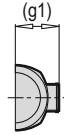
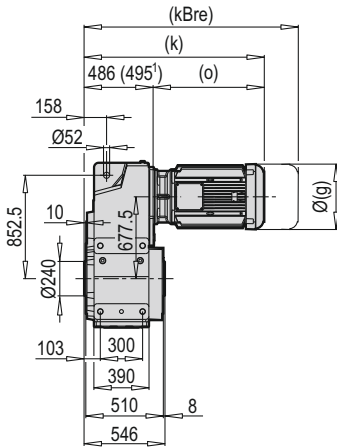
B14



	280 S	280 M	315 S	315 M	315 L			
g	527	527	-	-	-			
g1	367	367	-	-	-			
k/k1	1389/1689	1389/1689	-	-	-			
kBre/k1Bre	-	-	-	-	-			
o	885	885	-	-	-			

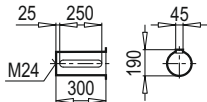
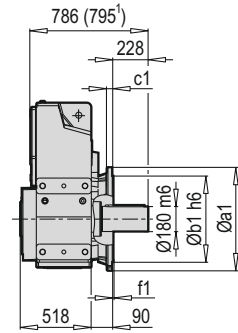
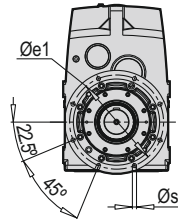
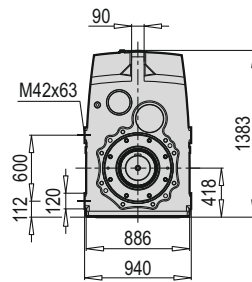
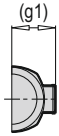
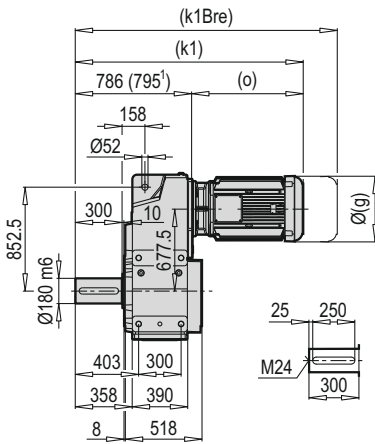
Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 113



a1	b1	c1	e1	f1	s1
660	550	35	600	8	8x26

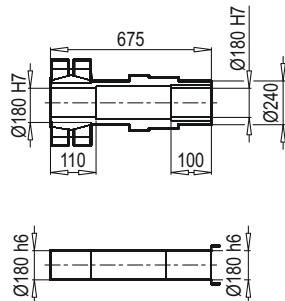
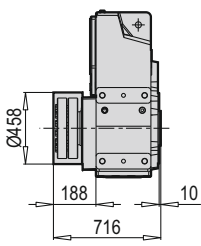
PM 113



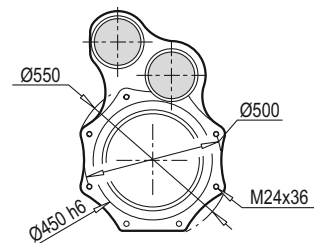
PM 113 B5

PD 113 KS

53 - 55



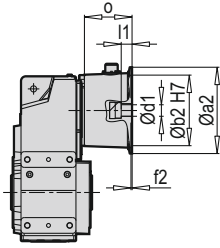
B14



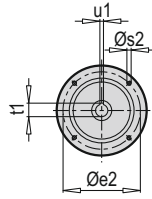
	160 M/L	180 M/L	200 L	225 S/M	250 M	280 S	280 M ¹⁾	315 S ¹⁾	315 M ¹⁾	315 L ¹⁾
g	322	363	363	456	495	527	527	-	-	-
g1	214	249	249	260	392	367	367	-	-	-
k/k1	1016/1316	1110/1410	1119/1419	1186/1486	1130/1430	1380/1680	1380/1680	-	-	-
kBre/k1Bre	1121/1421	1229/1529	1237/1537	1358/1658	1260/1560	-	-	-	-	-
o	530	624	633	700	644	885	885	-	-	-

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

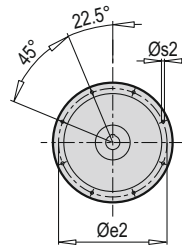
PD 112
PD 113



IEC

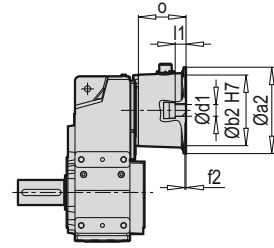


IEC 160...200



IEC 225...315

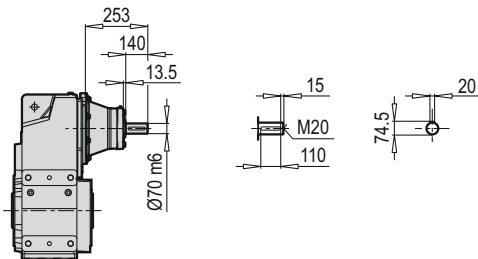
PM 112
PM 113



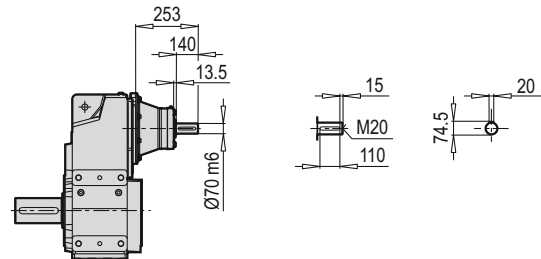
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 113	160	350	250	300	6.0	M16	42	110	45.3	12	266
PD/PM 113	180	350	250	300	6.0	M16	48	110	51.8	14	266
PD/PM 113	200	400	300	350	6.0	M16	55	110	59.3	16	229
PD/PM 113	225	450	350	400	6.0	M16	60	140	64.4	18	303
PD/PM 112-113	250	550	450	500	6.0	M16	65	140	69.4	18	304
PD/PM 112-113	280	550	450	500	6.0	M16	75	140	79.9	20	304
PD/PM 112-113	315	660	550	600	7.0	M20	80	170	85.4	22	382

~ Kg		
IEC	PD/PM 112	PD/PM 113
160	-	2268
180	-	2268
200	-	2283
225	-	2299
250	2276	2357
280	2276	2357
315	2361	2442

PD 112
PD 113



W



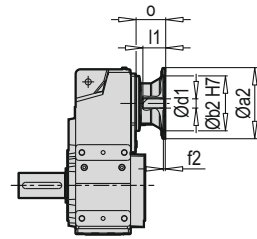
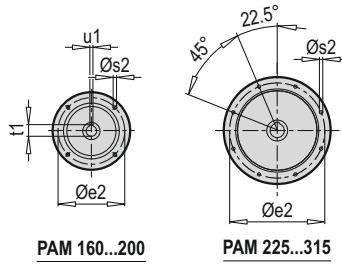
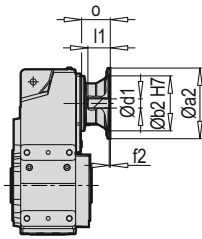
PM 112
PM 113

W ~ Kg	
PD/PM 112	2191
PD/PM 113	2273

PD 112
PD 113

PAM B5

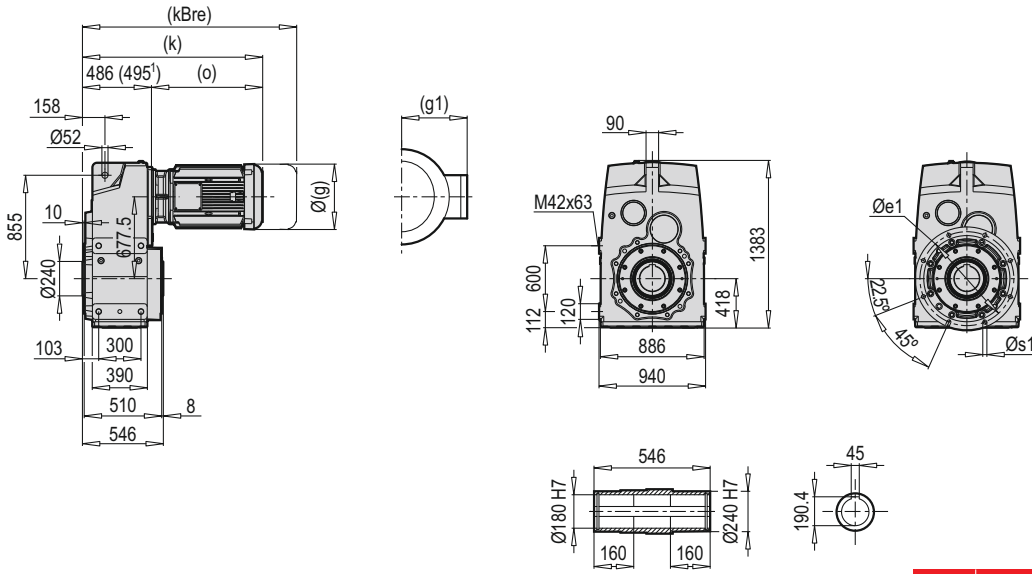
PM 112
PM 113



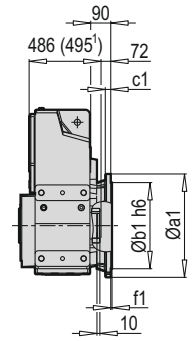
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 113	160	350	250	300	6.0	M16	42	110	45.3	12	145
PD/PM 113	180	350	250	300	6.0	M16	48	110	51.8	14	145
PD/PM 113	200	400	300	350	6.0	M16	55	110	59.3	16	157
PD/PM 113	225	450	350	400	6.0	M16	60	140	64.4	18	183
PD/PM 112-113	250	550	450	500	6.0	M16	65	140	69.4	18	202
PD/PM 112-113	280	550	450	500	6.0	M16	75	140	79.9	20	202

~ Kg		
PAM B5	PD/PM 112	PD/PM 113
160	-	2117
180	-	2117
200	-	2124
225	-	2134
250	2117	2194
280	2117	2194

PD 123

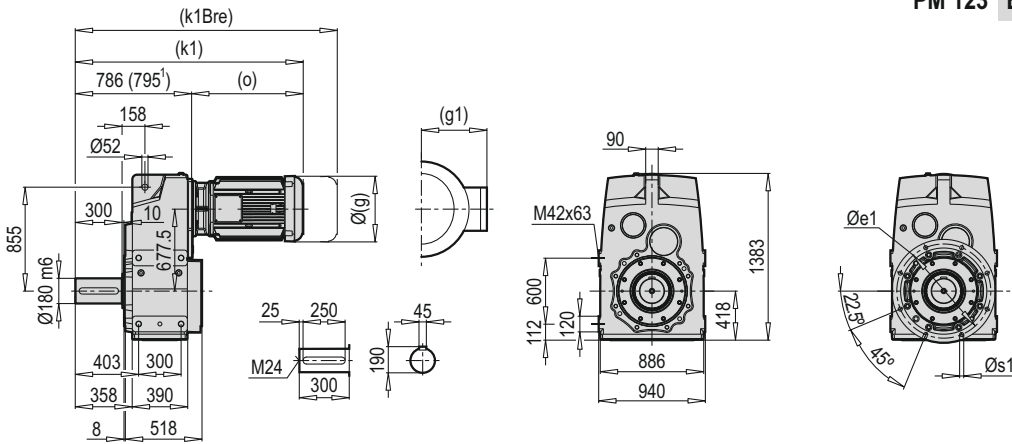


PD 123 B5

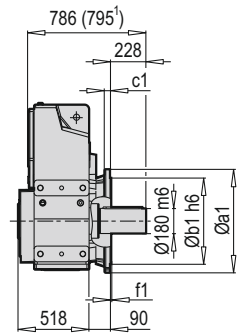


a1	b1	c1	e1	f1	s1
660	550	35	600	8	8x26

PM 123



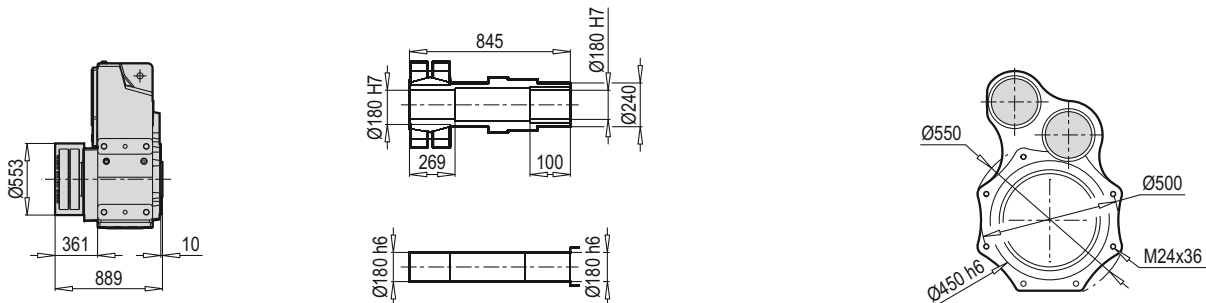
PM 123 B5



PD 123 KS

53 - 55

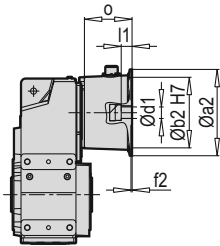
B14



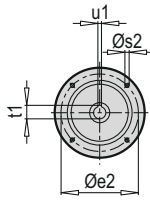
	200 L	225 S/M	250 M	280 S	280 M ¹⁾	315 S	315 M ¹⁾	315 L ¹⁾
g	363	456	495	527	527	-	-	-
g1	249	260	392	367	367	-	-	-
k/k1	1119/1419	1186/1486	1130/1430	1380/1680	1380/1680	-	-	-
kBre/k1Bre	1237/1537	1358/1658	1260/1560	-	-	-	-	-
o	633	700	644	885	885	-	-	-

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

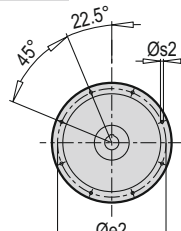
PD 123



IEC

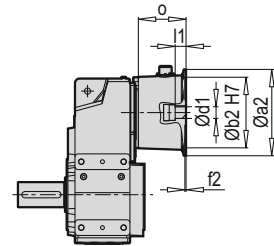


IEC 160...200



IEC 225...315

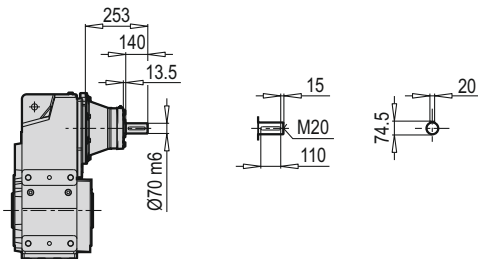
PM 123



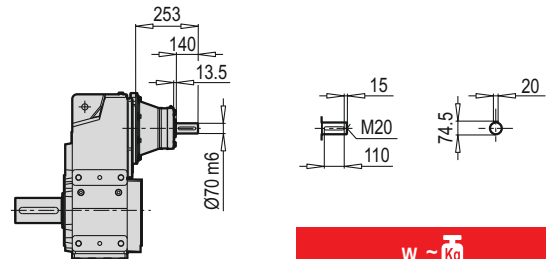
Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 123	160	350	250	300	6.0	M16	42	110	45.3	12	266
	180	350	250	300	6.0	M16	48	110	51.8	14	266
	200	400	300	350	6.0	M16	55	110	59.3	16	229
	225	450	350	400	6.0	M16	60	140	64.4	18	303
	250	550	450	500	6.0	M16	65	140	69.4	18	304
	280	550	450	500	6.0	M16	75	140	79.9	20	304
	315	660	550	600	7.0	M20	80	170	85.4	22	382

~ Kg	
IEC	PD/PM 123
160	2268
180	2268
200	2283
225	2299
250	2357
280	2357
315	2442

PD 123

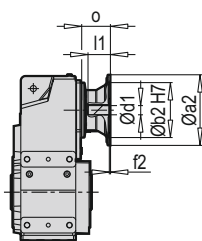


W

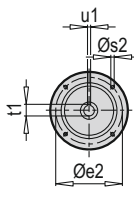


W ~ Kg	
PD/PM 123	2273

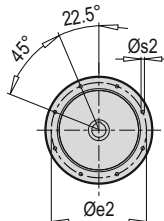
PD 123



PAM B5/B14

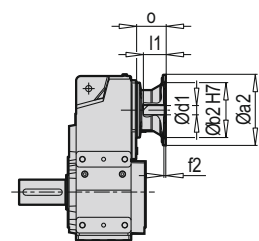


PAM 160...200



PAM 225...315

PM 123

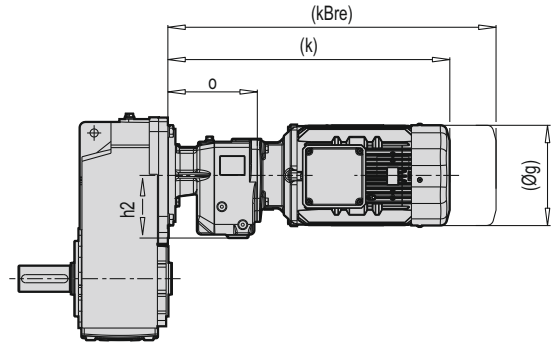
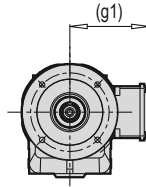
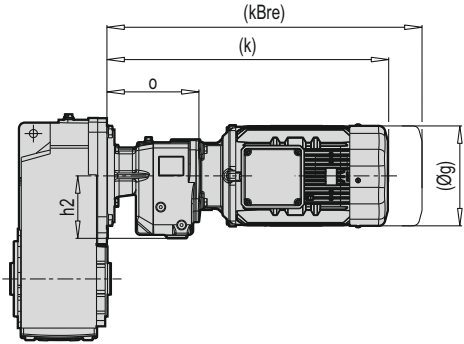


Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
PD/PM 123	160	350	250	300	6.0	M16	42	110	45.3	12	145
	180	350	250	300	6.0	M16	48	110	51.8	14	145
	200	400	300	350	6.0	M16	55	110	59.3	16	157
	225	450	350	400	6.0	M16	60	140	64.4	18	183
	250	550	450	500	6.0	M16	65	140	69.4	18	202
	280	550	450	500	6.0	M16	75	140	79.9	20	202

~ Kg	
PAM B5	PD/PM 123
160	2222
180	2222
200	2229
225	2239
250	2299
280	2299

PD 12/02 PD 32/12
 PD 22/02 PD 42/12
 PD 52/12

PM 12/02 PM 32/12
 PM 22/02 PM 42/12
 PM 52/12



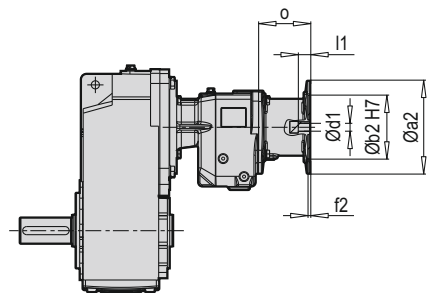
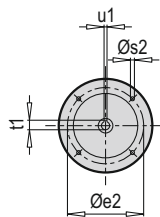
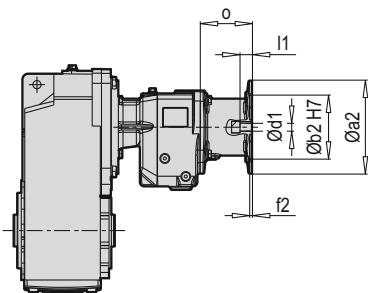
Tip / Type / Typ	Motor	g	g1	h2	o	k	kBre
PD/PM 12/02	63 M	124	111	91	143	341	393
	71 M	140	119				
PD/PM 22/02	63 M	124	111	91	159	373	425
	71 M	140	119				
	80 M	172	130.5				
PD/PM 32/12	63 M	124	111	108	172	386	438
	71 M	140	119				
	80 M	172	130.5				
	90 S/L	182	130				
	100 L	202	153				
PD/PM 42/12	63 M	124	111	108	176	386	438
	71 M	140	119				
	80 M	172	130.5				
	90 S/L	182	130				
	100 L	202	153				
112 M	220	158.5			554	654	

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 12/02 PD 32/12
 PD 22/02 PD 42/12
 PD 52/12

IEC

PM 12/02 PM 32/12
 PM 22/02 PM 42/12
 PM 52/12

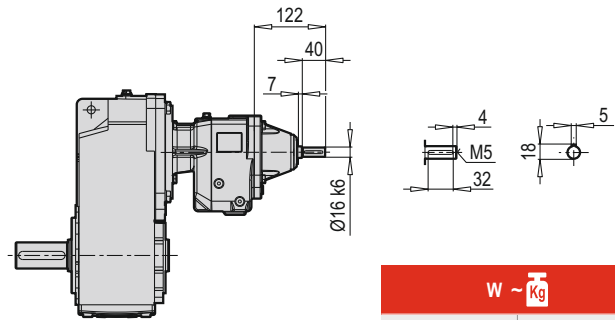
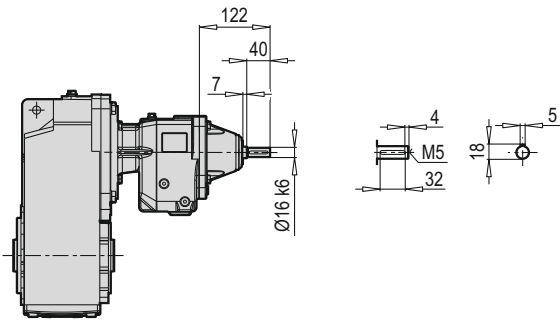


Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												IEC	PD/PM 12/02	PD/PM 22/02	PD/PM 32/12	PD/PM 42/12	PD/PM 52/12
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	63	140	95	115	3.5	M8	11	23	12.8	4	85	63	28	40	57	73	111
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	71	160	110	130	4.0	M8	14	30	16.3	5	89	71	29	41	58	74	112
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	80	200	130	165	4.0	M10	19	40	21.8	6	105	80	32	44	61	77	116
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	90	200	130	165	4.0	M10	24	50	27.3	8	105	90	32	44	61	77	116
PD/PM 32/12 - 42/12 - 52/12	100	250	180	215	5.0	M12	28	60	31.3	8	130	100	-	-	69	84	123
PD/PM 32/12 - 42/12 - 52/12	112	250	180	215	5.0	M12	28	60	31.3	8	130	112	-	-	69	84	123

PD 12/02 PD 32/12
PD 22/02 PD 42/12
PD 52/12

W

PM 12/02 PM 32/12
PM 22/02 PM 42/12
PM 52/12

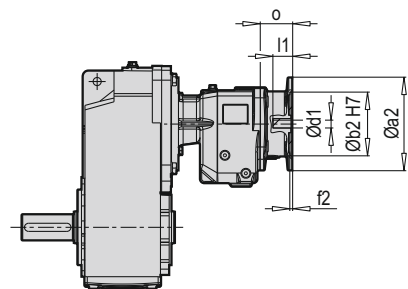
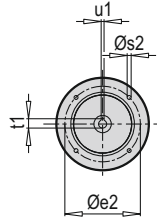
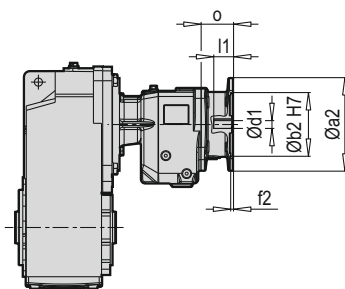


W ~ Kg	
PD/PM 12/02	27
PD/PM 22/02	38
PD/PM 32/12	56
PD/PM 43/12	72
PD/PM 53/12	110

PD 12/02 PD 32/12
PD 22/02 PD 42/12
PD 52/12

PAM B5/B14

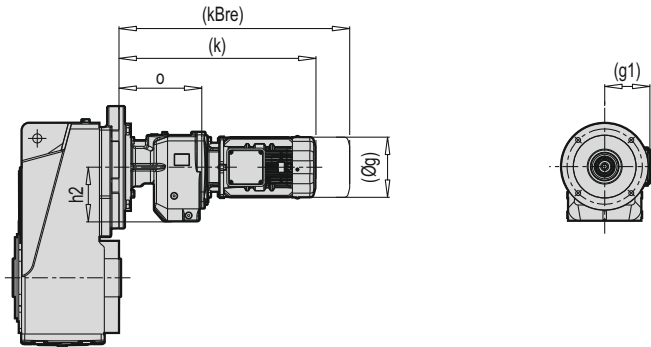
PM 12/02 PM 32/12
PM 22/02 PM 42/12
PM 52/12



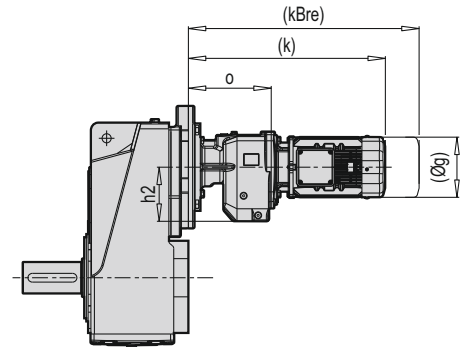
Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B5	PD/PM 12/02	PD/PM 22/02	PD/PM 32/12	PD/PM 42/12	PD/PM 52/12
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	63	140	95	115	3.5	M8	11	23	12.8	4	85	63	26	37	54	69	105
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	71	160	110	130	4.0	M8	14	30	16.3	5	55	71	26	37	54	69	105
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	80	200	130	165	4.0	M10	19	40	21.8	6	74	80	27	38	55	70	106
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	90	200	130	165	4.0	M10	24	50	27.3	8	74	90	27	38	55	70	106
PD/PM 32/12 - 42/12 - 52/12	100	250	180	215	5.0	M12	28	60	31.3	8	131.5	100	-	-	62	77	113
PD/PM 32/12 - 42/12 - 52/12	112	250	180	215	5.0	M12	28	60	31.3	8	131.5	112	-	-	62	77	113

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B14	PD/PM 12/02	PD/PM 22/02	PD/PM 32/12	PD/PM 42/12	PD/PM 52/12
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	63	90	60	75	3.5	6	11	23	12.8	4	60	63	25	36	53	68	104
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	71	105	70	85	4.0	7	14	30	16.3	5	55	71	25	36	53	68	104
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	80	120	80	100	4.0	7	19	40	21.8	6	74	80	26	37	54	69	105
PD/PM 12/02 - 22/02 - 32/12 - 42/12 - 52/12	90	140	95	115	4.0	9	24	50	27.3	8	74	90	26	37	54	69	105
PD/PM 32/12 - 42/12 - 52/12	100	160	110	130	5.0	9	28	60	31.3	8	75	100	-	-	55	70	106
PD/PM 32/12 - 42/12 - 52/12	112	160	110	130	5.0	9	28	60	31.3	8	75	112	-	-	55	70	106

PD 63/22 PD 63/32
 PD 73/22 PD 73/32
 PD 83/32



PM 63/22 PM 63/32
 PM 73/22 PM 73/32
 PM 83/32



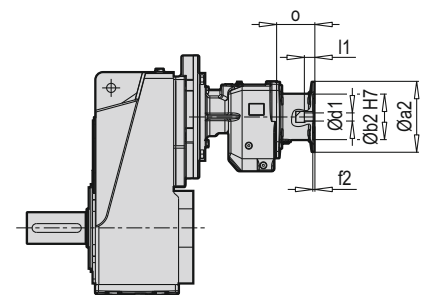
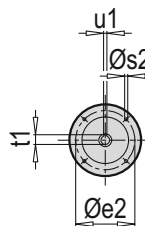
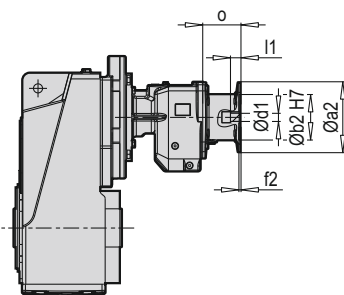
Tip / Type / Typ	Motor	g	g1	h2	o	k	kBre
PD/PM 63/22 PD/PM 73/22	71 M	140	119	127	195	416	476
	80 M	172	130.5			455	525
	90 S/L	182	130			521	589
	100 L	202	153			572	656
	112 M	220	158.5			567	667
PD/PM 63/32 PD/PM 73/32	90 S/L	182	130	159	237	563	631
	100 L	202	153			614	698
	112 M	220	158.5			609	710
	132 S	270.5	187.5			704	783
	132 M	270.5	187.5			704	811
PD/PM 83/32	71 M	140	119	159	237	470	532
	80 M	172	130.5			497	567
	90 S/L	182	130			563	631
	100 L	202	153			614	698
	112 M	220	158.5			609	709
	132 S	270.5	187.5			704	783
	132 M	270.5	187.5			704	811

Not: (...) İşaretili olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 63/22 PD 63/32
 PD 73/22 PD 73/32
 PD 83/32

IEC

PM 63/22 PM 63/32
 PM 73/22 PM 73/32
 PM 83/32

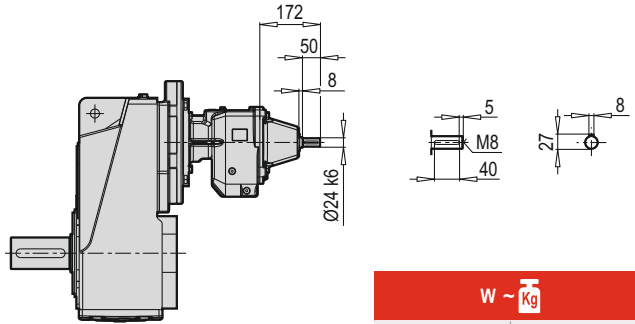
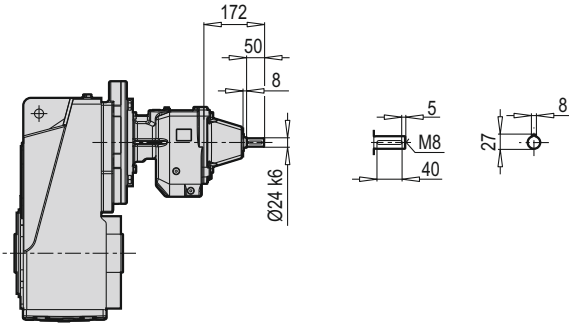


Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~Kg					
												IEC	PD/PM 63/22	PD/PM 73/22	PD/PM 63/32	PD/PM 73/32	PD/PM 83/32
PD/PM 63/22 - 73/22 - 83/32	71	160	110	130	4.0	M8	14	30	16.3	5	88	71	209	286	-	-	432
PD/PM 63/22 - 73/22 - 83/32	80	200	130	165	4.0	M10	19	40	21.8	6	107	80	213	290	-	-	437
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	90	200	130	165	4.0	M10	24	50	27.3	8	107	90	213	290	225	301	437
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	100	250	180	215	5.0	M12	28	60	31.3	8	124	100	217	294	229	306	441
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	112	250	180	215	5.0	M12	28	60	31.3	8	124	112	217	294	229	306	441
PD/PM 63/32 - 73/32 - 83/32	132	300	230	265	5.0	M12	38	80	41.3	10	156	132	-	-	238	315	451

PD 63/22 PD 63/32
PD 73/22 PD 73/32
PD 83/32

W

PM 63/22 PM 63/32
PM 73/22 PM 73/32
PM 83/32

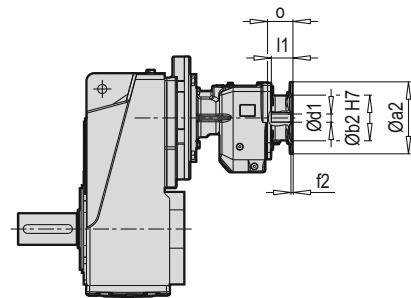
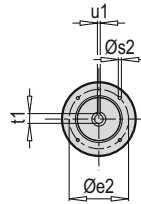
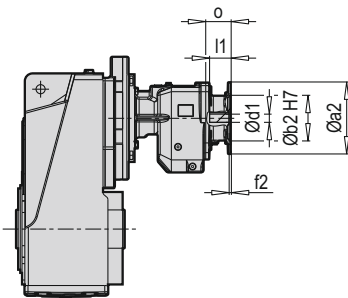


W ~ Kg	
PD/PM 63/22	211
PD/PM 73/22	288
PD/PM 63/32	223
PD/PM 73/32	299
PD/PM 83/32	435

PD 63/22 PD 63/32
PD 73/22 PD 73/32
PD 83/32

PAM B5/B14

PM 63/22 PM 63/32
PM 73/22 PM 73/32
PM 83/32

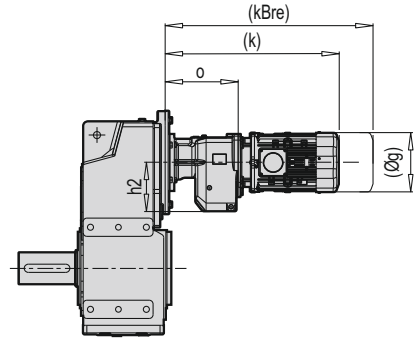
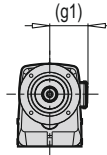
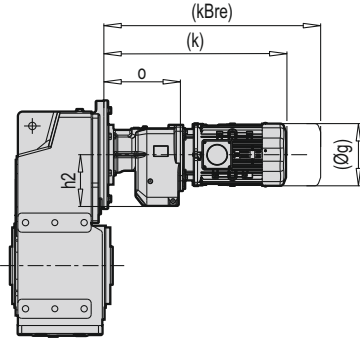


Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B5	PD/PM 63/22	PD/PM 73/22	PD/PM 63/32	PD/PM 73/32	PD/PM 83/32
PD/PM 63/22 - 73/22 - 83/32	71	160	110	130	4.0	M8	14	30	16.3	5	88	71	198	271	-	-	407
PD/PM 63/22 - 73/22 - 83/32	80	200	130	165	4.0	M10	19	40	21.8	6	72	80	199	272	-	-	408
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	90	200	130	165	4.0	M10	24	50	27.3	8	72	90	199	272	210	283	408
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	100	250	180	215	5.0	M12	28	60	31.3	8	75	100	200	273	211	284	409
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	112	250	180	215	5.0	M12	28	60	31.3	8	75	112	200	273	211	284	409
PD/PM 63/32 - 73/32 - 83/32	132	300	230	265	5.0	M12	38	80	41.3	10	94	132	-	-	221	294	419

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B14	PD/PM 63/22	PD/PM 73/22	PD/PM 63/32	PD/PM 73/32	PD/PM 83/32
PD/PM 63/22 - 73/22 - 83/32	71	105	70	85	4	7	14	30	16.3	5	55	71	196	269	-	-	405
PD/PM 63/22 - 73/22 - 83/32	80	120	80	100	4	7	19	40	21.8	6	72	80	197	270	-	-	406
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	90	140	95	115	4	9	24	50	27.3	8	72	90	197	270	208	281	406
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	100	160	110	130	5	9	28	60	31.3	8	75	100	199	272	210	283	408
PD/PM 63/22 - 73/22 - 63/32 - 73/32 - 83/32	112	160	110	130	5	9	28	60	31.3	8	75	112	199	272	210	283	408
PD/PM 63/32 - 73/32 - 83/32	132	200	130	165	5	11	38	80	41.3	10	94	132	-	-	214	287	412

PD 83/42 PD 93/52
 PD 93/42 PD 103/52
 PD 113/52

PM 83/42 PM 93/52
 PM 93/42 PM 103/52
 PM 113/52



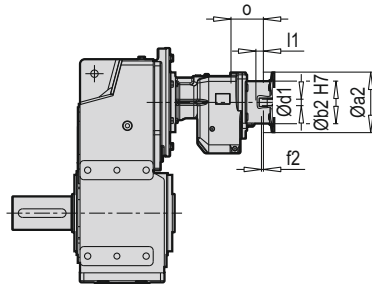
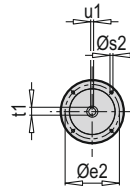
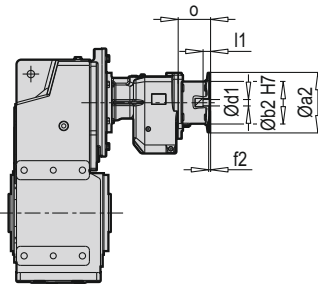
Tip / Type / Typ	Motor	g	g1	h2	o	k	kBre
PD/PM 83/42	90 S/L	182	130	179	280	610	678
	100 L	202	153			661	745
	112 M	220	158.5			660	760
	132 S	270.5	187.5			722	821
	132 M	270.5	187.5			722	841
	160 M/L	321.5	214			810	915
PD/PM 93/42	90 S/L	182	130	179	280	610	678
	100 L	202	153			661	745
	112 M	220	158.5			660	760
	132 S	270.5	187.5			722	821
	132 M	270.5	187.5			722	841
	160 M/L	321.5	214			810	915
PD/PM 93/52	112 M	220	158.5	218	320	700	800
	132 S	270.5	187.5			762	861
	132 M	270.5	187.5			762	881
	160 M/L	321.5	214			850	955
	180 M/L	363	249			944	1045
PD/PM 103/52	90S/L	182	130	218	320	650	718
	100 L	217	160			614	695
	112 M	220	158.5			700	800
	132 S	270.5	187.5			762	861
	132 M	270.5	187.5			762	881
	160 M/L	321.5	214			850	955
180 M/L	363	249	944	1045			

Not: (...) işaretli olan ölçüler motor markasına göre farklılık gösterir. / Note: The dimensions which have (...) sign vary depending on the motor. / Hinweis: (...) Die gekennzeichneten Maße unterscheiden sich je nach Motormarke.

PD 83/42 PD 93/52
 PD 93/42 PD 103/52
 PD 113/52

IEC

PM 83/42 PM 93/52
 PM 93/42 PM 103/52
 PM 113/52

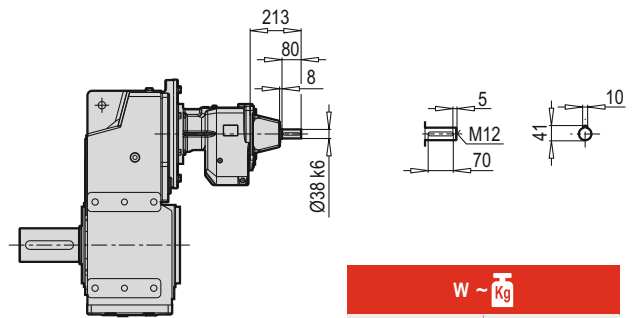
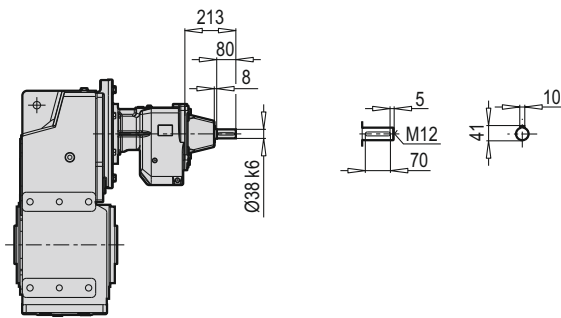


Tip / Type / Typ	IEC	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~Kg					
												IEC	PD/PM 83/42	PD/PM 93/42	PD/PM 93/52	PD/PM 103/52	PD/PM 113/52
PD/PM 83/42 - 93/42 - 103/52 - 113/52	90	200	130	165	4.0	M10	24	50	27.3	8	109	90	433	735	764	1328	2182
PD/PM 83/42 - 93/42 - 93/52 - 103/52 - 113/52	100	250	180	215	5.0	M12	28	60	31.3	8	133	100	441	743	772	1336	2190
PD/PM 83/42 - 93/42 - 93/52 - 103/52 - 113/52	112	250	180	215	5.0	M12	28	60	31.3	8	133	112	441	743	772	1336	2190
PD/PM 83/42 - 93/42 - 93/52 - 103/52 - 113/52	132	300	230	265	5.0	M12	38	80	41.3	10	190	132	455	757	786	1350	2230
PD/PM 83/42 - 93/42 - 93/52 - 103/52 - 113/52	160	350	250	300	6.0	M16	42	110	45.3	12	194	160	465	767	796	1360	2240
PD/PM 93/52 - 103/52 - 113/52	180	350	250	300	6.0	M16	48	110	51.8	14	194	180	465	767	796	1360	2240

PD 83/42 PD 93/52
PD 93/42 PD 103/52
PD 113/52

W

PM 83/42 PM 93/52
PM 93/42 PM 103/52
PM 113/52

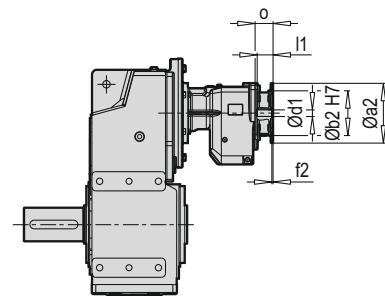
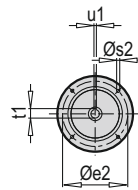
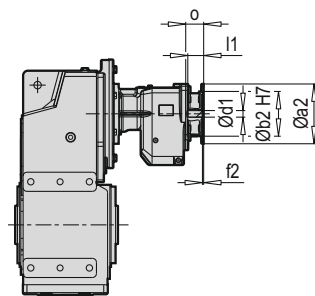


W - Kg	
PD/PM 83/42	432
PD/PM 93/42	734
PD/PM 93/52	763
PD/PM 103/52	1327
PD/PM 113/52	2181

PD 83/42 PD 93/52
PD 93/42 PD 103/52
PD 113/52

PAM B5/B14

PM 83/42 PM 93/52
PM 93/42 PM 103/52
PM 113/52



Tip / Type / Typ	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B5	PD/PM 83/42	PD/PM 93/42	PD/PM 93/52	PD/PM 103/52	PD/PM 113/52
PD/PM 83/42-93/42-103/52-113/52	90	200	130	165	4.0	M10	24	50	27.3	8	72	90	433	735	764	1328	2182
PD/PM 83/42-93/42-93/52-103/52-113/52	100	250	180	215	5.0	M12	28	60	31.3	8	75	100	441	743	772	1336	2190
PD/PM 83/42-93/42-93/52-103/52-113/52	112	250	180	215	5.0	M12	28	60	31.3	8	75	112	441	743	772	1336	2190
PD/PM 83/42-93/42-93/52-103/52-113/52	132	300	230	265	5.0	M12	38	80	41.3	10	94	132	455	757	786	1350	2230
PD/PM 83/42-93/42-93/52-103/52-113/52	160	350	250	300	6.0	M16	42	110	45.3	12	120	160	465	767	796	1360	2240
PD/PM 93/52-103/52-113/52	180	350	250	300	6.0	M16	48	110	51.8	14	120	180	465	767	796	1360	2240

Tip / Type / Typ	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o	~ Kg					
												PAM B14	PD/PM 83/42	PD/PM 93/42	PD/PM 93/52	PD/PM 103/52	PD/PM 113/52
PD/PM83/42-93/42-103/52-113/52	90	140	95	115	4.0	9	24	50	27.3	8	72	90	433	735	764	1328	2182
PD/PM83/42-93/42-93/52-103/52-113/52	100	160	110	130	5.0	9	28	60	31.3	8	75	100	441	743	772	1336	2190
PD/PM83/42-93/42-93/52-103/52-113/52	112	160	110	130	5.0	9	28	60	31.3	8	75	112	441	743	772	1336	2190
PD/PM83/42-93/42-93/52-103/52-113/52	132	200	130	165	5.0	11	38	80	41.3	10	94	132	455	757	786	1350	2230

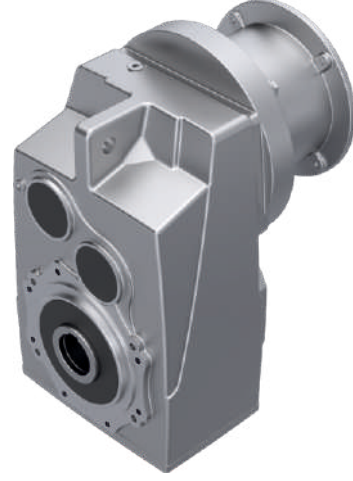


A series of horizontal dotted lines spanning the width of the page, intended for writing or drawing.

IEC - PAM ve W Adaptörü Seçim Tabloları

Selection of IEC - PAM and
W Adapters

Auswahltable von
IEC - PAM - W Adapters



PD/PM

TR TEKNİK AÇIKLAMALAR

EN TECHNICAL DESCRIPTIONS

DE TECHNISCHE BESCHREIBUNGEN

W, IEC ve PAM adaptörü performans tabloları yapısı:
Performance tables for W - IEC and PAM adapter type
Der Aufbau der Leistungstabelle für W - IEC und PAM-Adapter

IEC'li ya da PAM adaptörlü girişler için geçerli olan servis faktörü doğrudan motor montajlı redüktörler ile aynıdır. IEC ve PAM montajlı redüktörlerin servis faktörü f_B motorlu seçim sayılarından bulunabilir.

Service factor f_B could be checked from selection of geared motor tables. Because this value is the same for geared motor and geared motor with IEC-PAM adapters

Der Betriebsfaktor f_B für Antriebe mit IEC- oder PAM-Adapter ist der gleiche wie für Getriebe mit Motordirektanschluss. Den Betriebsfaktor f_B für Getriebe mit IEC- und PAM-Adapter finden Sie auf den Motorauswahltabellen.

Max. Giriş Gücü
Max. Input Power
Max. Antriebsleistung

Tip Type Typ	i_{ges}	4-pol. 50 Hz 1400 rpm n_2 [min^{-1}]	M_{amax} $f_B=1$ 4 - pol. [Nm]	W $P_{1max} - f_B \geq 1$				IEC - PAM $f_B \Rightarrow$ 77 - 183													
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]	f_B	f_B	f_B	f_B										
PD 32 PM 32	112.23	12.50	770	1.01	0.67	0.50	0.33	71	80	90*											
	100.85	13.90	807	1.17	0.78	0.59	0.39	71	80	90*											
	88.74	15.80	945	1.56	1.04	0.78	0.52		80	90											
	79.75	17.60	850	1.56	1.04	0.78	0.52		80	90											
	70.52	19.90	564	1.17	0.78	0.59	0.39	71	80	90*											
	65.91	21.20	758	1.69	1.12	0.84	0.56		80	90											
	64.11	21.80	1015	2.32	1.54	1.16	0.77														
					9.20	6.07	4.60	3.04													
				9.20	6.07	4.60	3.04														

Tip W azami tahrik gücü hesaplanırken italik olmayan değerler alınmıştır. P_{1max} ile $f_B = 1$

P_{1max} value which is non-italic is calculated when service factor f_B is equal to one.

Bei der Berechnung der maximalen Antriebsleistung des Typs W wurden nicht kursive Werte verwendet. P_{1max} und $f_B = 1$

P_{1max} hesaplanırken italik olan değerlerde $f_B > 1$ alınmıştır.

P_{1max} value which is *italic*, is calculated when service factor f_B is greater than one.

Bei der Berechnung von P_{1max} wurden für kursiv gedruckte Werte $f_B > 1$ verwendet.

Max. çıkış momenti
Max. output torque
Abtriebsdrehmoment

Çıkış Devri
Output speed
Leistungsgeschwindigkeit

Redüktör Tahvili
Reduction ratio
Verkleinerungsfaktor

Redüktör Tipi
Gear unit type
Getriebetyp

IEC motor büyüklükleri ve IEC standart çıkışları DIN EN 50347' e göre dir.
IEC motor sizes and IEC standart outputs as per DIN EN 50347
IEC-Motorgößen und IEC-Standard-Abtriebe entsprechen DIN EN 50347.

Yıldız işareti : Dikkat Tip W sütunundaki P_{1max} değerlerini aşmamalıdır.

Asterix indicates:
caution, don't exceed the max. driver power P_{1max} as per Type W column










*: Achtung P_{1max} in Spalte W darf nicht überschritten werden.

Rakamlı alanlar IEC adaptörünün, IEC motor büyüklüğü ve tahvil oranına uygun olduğunu belirtir.










This area which is colorless is shown IEC adapter is applicable for this IEC motor size and reduction ratio.

Digitale Bereichen zeigen, dass IEC Adapter für IEC Motorgöße und der Wechselkurse ist.

71	80
71	80
	80
	80
	80

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183												
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]													
								63	71*	80*	90*									
PD A02 PM A02   187 + IEC - PAM   187	81.73	17.10	65	0.12	0.08	0.06	0.04	63												
	59.32	23.60	110	0.27	0.18	0.14	0.09	63	71*											
	49.62	28.20	100	0.30	0.20	0.15	0.10	63	71*											
	41.88	33.40	85	0.30	0.20	0.15	0.10	63	71*											
	37.71	37.10	100	0.39	0.26	0.19	0.13	63	71	80*										
	34.80	40.20	103	0.43	0.29	0.22	0.14	63	71	80*										
	31.83	44.00	95	0.44	0.29	0.22	0.15	63	71	80*										
	29.11	48.10	110	0.55	0.37	0.28	0.18	63	71	80*										
	24.57	57.00	116	0.69	0.46	0.35	0.23	63	71	80*										
	22.34	62.70	109	0.72	0.48	0.36	0.24	63	71	80*										
	18.77	74.60	95	0.74	0.49	0.37	0.25	63	71	80										
	16.54	84.60	100	0.89	0.59	0.44	0.29	63	71	80	90*									
	14.91	93.90	75	0.74	0.49	0.37	0.24	63	71	80*										
	13.83	101.20	110	1.17	0.77	0.58	0.39	63	71	80	90*									
	11.67	120.00	110	1.38	0.92	0.69	0.46	63	71	80	90*									
	9.49	147.50	110	1.50	0.99	0.75	0.50	63	71	80	90									
	8.63	162.20	114	1.50	0.99	0.75	0.50	63	71	80	90									
	7.25	193.10	112	1.50	0.99	0.75	0.50	63	71	80	90									
	6.35	220.50	110	1.50	0.99	0.75	0.50	63	71	80	90									
	5.33	262.70	92	1.50	0.99	0.75	0.50	63	71	80	90									
4.24	330.20	73	1.50	0.99	0.75	0.50	63	71	80	90										
PD B02 PM B02   189 + IEC - PAM   189	139.15	10.10	110	0.12	0.08	0.06	0.04	63*												
	103.09	13.60	129	0.18	0.12	0.09	0.06	63	71*											
	85.67	16.30	140	0.24	0.16	0.12	0.08	63	71*											
	79.42	17.60	129	0.24	0.16	0.12	0.08	63	71*	80*										
	66.00	21.20	140	0.31	0.21	0.16	0.10	63	71*	80*										
	56.55	24.80	160	0.41	0.28	0.21	0.14	63	71	80*										
	51.60	27.10	146	0.41	0.28	0.21	0.14	63	71	80*										
	44.23	31.70	164	0.54	0.36	0.27	0.18	63	71	80*										
	40.35	34.70	165	0.60	0.40	0.30	0.20	63	71	80*										
	34.16	41.00	153	0.66	0.44	0.33	0.22	63	71	80*										
	30.08	46.50	129	0.63	0.42	0.31	0.21	63	71	80*	90*									
	25.96	53.90	129	0.73	0.48	0.36	0.24	63	71	80*	90*									
	22.68	61.70	129	0.83	0.55	0.42	0.28	63	71	80	90*									
	21.58	64.90	140	0.95	0.63	0.48	0.32	63	71	80	90*									
	19.94	70.20	129	0.95	0.63	0.47	0.32	63	71	80	90*									
	17.62	79.50	129	1.07	0.71	0.54	0.36	63	71	80	90*									
	16.57	84.50	140	1.24	0.82	0.62	0.41	63	71	80	90*									
	14.20	98.60	163	1.50	0.99	0.75	0.50	63	71	80	90									
	12.96	108.00	160	1.50	0.99	0.75	0.50	63	71	80	90									
	11.28	124.10	140	1.50	0.99	0.75	0.50	63	71	80	90									
10.97	127.60	152	1.50	0.99	0.75	0.50	63	71	80	90										
9.67	144.80	141	1.50	0.99	0.75	0.50	63	71	80	90										
8.82	158.70	138	1.50	0.99	0.75	0.50	63	71	80	90										
7.47	187.40	131	1.50	0.99	0.75	0.50	63	71	80	90										
6.43	217.70	123	1.50	0.99	0.75	0.50	63	71	80	90										
6.00	233.30	121	1.50	0.99	0.75	0.50	63	71	80	90										
5.17	270.80	114	1.50	0.99	0.75	0.50	63	71	80	90										
4.67	299.80	110	1.50	0.99	0.75	0.50	63	71	80	90										
4.02	348.30	103	1.50	0.99	0.75	0.50	63	71	80	90										










- IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung
- 63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich
- 80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183							
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]								
								63*	71*						
PD 12/02 PM 12/02   239 + IEC - PAM   238-239	3607.45	0.39	290	0.05	0.03	0.03	0.02	63*	71*						
	2448.00	0.57	290	0.06	0.04	0.03	0.02	63*	71*						
	1965.82	0.71	290	0.06	0.04	0.03	0.02	63*	71*						
	1621.40	0.86	290	0.07	0.04	0.03	0.02	63*	71*						
	1363.09	1.00	290	0.07	0.05	0.04	0.02	63*	71*						
	1064.65	1.30	290	0.08	0.05	0.04	0.03	63*	71*	80*	90*				
	824.73	1.70	290	0.09	0.06	0.05	0.03	63*	71*	80*	90*				
	662.28	2.10	290	0.10	0.07	0.05	0.03	63*	71*	80*	90*				
	546.25	2.60	290	0.12	0.08	0.06	0.04	63*	71*	80*	90*				
	405.92	3.40	290	0.14	0.09	0.07	0.05	63*	71*	80*	90*				
	328.02	4.30	290	0.17	0.11	0.08	0.06	63*	71*	80*	90*				
	284.03	4.90	290	0.19	0.12	0.09	0.06	63	71*	80*	90*				
	229.52	6.10	290	0.23	0.15	0.11	0.07	63	71*	80*	90*				
	PD C13 PM C13   191 + IEC   191	380.81	3.70	370	0.14	0.09	0.07	0.05	63*	71*					
301.44		4.60	370	0.18	0.12	0.09	0.06	63	71*	80*	90*				
257.36		5.40	370	0.21	0.14	0.11	0.07	63	71*						
203.72		6.90	370	0.27	0.18	0.13	0.09	63	71*	80*	90*				
158.21		8.80	370	0.34	0.23	0.17	0.11	63	71*	80*	90*				
136.54		10.30	370	0.40	0.26	0.20	0.13	63	71	80*	90*				
118.07		11.90	370	0.46	0.30	0.23	0.15	63	71	80*	90*				
106.03		13.20	370	0.51	0.34	0.26	0.17	63	71	80*	90*				
101.01		13.90	370	0.54	0.36	0.27	0.18	63	71	80*	90*				
88.92		15.70	370	0.61	0.41	0.30	0.20	63	71	80*	90*				
78.83		17.80	370	0.69	0.46	0.34	0.23	63	71	80*	90*	100*			
68.27		20.50	370	0.79	0.53	0.40	0.26	63	71	80	90*				
60.09		23.30	370	0.90	0.60	0.45	0.30	63	71	80	90*				
53.28		26.30	357	0.98	0.65	0.49	0.33	63	71	80	90*	100*			
44.33		31.60	337	1.11	0.74	0.56	0.37	63	71	80	90*	100*			
38.83		36.10	324	1.23	0.81	0.61	0.41	63	71	80	90*	100*			
35.71		39.20	300	1.23	0.82	0.62	0.41	63	71	80	90*	100*			
29.71		47.10	282	1.39	0.92	0.69	0.46	63	71	80	90*	100*			
26.02		53.80	271	1.53	1.01	0.76	0.51	63	71	80	90	100*			
24.17	57.90	277	1.67	1.11	0.84	0.56			80	90	100*				
18.76	74.60	243	1.90	1.26	0.95	0.63			80	90	100*				
16.20	86.40	231	2.08	1.38	1.04	0.69			80	90	100*				

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich










80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
PD 13 PM 13   194 + IEC - PAM   194-195	633.80	2.20	222	0.05	0.03	0.03	0.02	63*	71*								
	556.59	2.50	225	0.06	0.04	0.03	0.02	63*	71*								
	472.42	3.00	225	0.07	0.05	0.03	0.02	63*	71*								
	414.87	3.40	225	0.08	0.05	0.04	0.03	63*	71*								
	368.83	3.80	225	0.09	0.06	0.04	0.03	63*	71*								
	301.08	4.60	270	0.13	0.09	0.07	0.04	63*	71*								
	251.58	5.60	274	0.16	0.11	0.08	0.05	63*	71*								
	209.76	6.70	235	0.16	0.11	0.08	0.05	63*	71*								
	163.92	8.50	225	0.20	0.13	0.10	0.07	63	71*								
	129.01	10.90	225	0.26	0.17	0.13	0.08	63	71*								
	105.32	13.30	270	0.37	0.24	0.19	0.12	63	71								
	88.00	15.90	274	0.37	0.24	0.19	0.12	63	71								
PD 12 PM 12   194 + IEC - PAM   194-195	109.45	12.80	209	0.28	0.19	0.14	0.09	63	71*								
	92.43	15.10	232	0.37	0.24	0.18	0.12	63	71*								
	81.17	17.20	296	0.53	0.36	0.27	0.18	63	71								
	72.16	19.40	296	0.60	0.40	0.30	0.20		71	80*	90*						
	66.26	21.10	270	0.60	0.40	0.30	0.20	63	71								
	58.91	23.80	283	0.70	0.47	0.35	0.23		71	80*	90*						
	55.37	25.30	235	0.62	0.41	0.31	0.21	63	71								
	49.22	28.40	260	0.77	0.51	0.39	0.26		71	80	90*						
	46.16	30.30	196	0.62	0.41	0.31	0.21	63	71								
	41.04	34.10	217	0.78	0.51	0.39	0.26		71	80	90*						
	32.07	43.70	230	1.05	0.70	0.53	0.35	63	71	80	90*						
	28.35	49.40	225	1.16	0.77	0.58	0.39	63	71	80	90*						
	25.24	55.50	225	1.31	0.87	0.65	0.43	63	71	80	90*	100*	112*				
	20.61	67.90	225	1.60	1.06	0.80	0.53	63	71	80	90	100*	112*				
	17.22	81.30	224	1.91	1.27	0.95	0.63	63	71	80	90	100*	112*				
	14.09	99.40	210	2.18	1.45	1.09	0.73	63	71	80	90	100*	112*				
	11.75	119.10	204	2.55	1.69	1.27	0.85	63	71	80	90	100*	112*				
	10.34	135.40	196	2.78	1.85	1.39	0.92	63	71	80	90	100*	112*				
	9.16	152.80	189	3.02	2.01	1.51	1.00	63	71	80	90	100	112*				
	8.23	170.10	191	3.40	2.26	1.70	1.13	63	71	80	90	100*	112*				
8.18	171.10	160	2.87	1.90	1.43	0.95	63	71	80	90	100	112*					
7.25	193.10	187	3.78	2.51	1.89	1.26	63	71	80	90	100	112*					
6.42	218.10	181	4.00	2.64	2.00	1.32	63	71	80	90	100	112					
5.47	255.90	172	4.00	2.64	2.00	1.32	63	71	80	90	100	112					
4.78	292.90	128	3.93	2.61	1.96	1.30	63	71	80	90	100	112*					

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich






80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183							
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]								
								63*	71*						
PD 22/02 PM 22/02   239 + IEC - PAM   238-239	3425.64	0.41	520	0.06	0.04	0.03	0.02	63*	71*						
	2653.67	0.53	520	0.07	0.04	0.03	0.02	63*	71*						
	2130.98	0.66	520	0.08	0.05	0.04	0.02	63*	71*						
	1726.36	0.81	520	0.08	0.05	0.04	0.03	63*	71*						
	1423.90	0.98	520	0.09	0.06	0.05	0.03	63*	71*						
	1065.19	1.30	520	0.11	0.07	0.06	0.04	63*	71*	80*	90*				
	825.15	1.70	520	0.13	0.09	0.07	0.04	63*	71*	80*	90*				
	662.62	2.10	520	0.16	0.10	0.08	0.05	63*	71*	80*	90*				
	514.10	2.70	520	0.20	0.12	0.10	0.06	63	71*	80*	90*				
	424.03	3.30	520	0.22	0.14	0.11	0.07	63	71*	80*	90*				
	356.48	3.90	520	0.25	0.17	0.13	0.08	63	71*	80*	90*				
	288.06	4.90	520	0.30	0.20	0.15	0.10	63	71*	80*	90*				
	216.66	6.50	520	0.39	0.26	0.20	0.13	63	71	80*	90*				
	175.52	8.00	520	0.47	0.31	0.24	0.16	63	71	80*	90*				
	PD 23 PM 23   198 + IEC - PAM   198-199	762.96	1.80	438	0.08	0.06	0.04	0.03	63*	71*					
622.96		2.20	521	0.12	0.08	0.06	0.04	63*	71*						
482.49		2.90	521	0.16	0.11	0.08	0.05	63*	71*						
390.87		3.60	521	0.20	0.13	0.10	0.06	63	71*						
330.43		4.20	563	0.25	0.17	0.12	0.08	63	71*						
276.32		5.10	553	0.29	0.19	0.15	0.10	63	71*						
235.73		5.90	473	0.29	0.20	0.15	0.10	63	71*						
185.19		7.60	521	0.41	0.27	0.21	0.14	63	71	80*	90*				
150.03		9.30	521	0.51	0.34	0.25	0.17	63	71	80*	90*				
131.68		10.60	521	0.58	0.39	0.29	0.19	63	71	80*	90*				
116.40		12.00	521	0.66	0.44	0.33	0.22	63	71	80*	90*				
98.40		14.20	563	0.75	0.50	0.38	0.25	63	71	80	90*				
82.29		17.00	561	0.75	0.50	0.38	0.25	63	71	80	90*				

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich










80* IEC - PAM bağlantısı yapılacaktır P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183										
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]											
								71	80*	90*	100*	112*						
PD 22	127.46	11.00	380	0.44	0.29	0.22	0.15	71	80*									
PM 22	104.07	13.50	397	0.56	0.37	0.28	0.19	71	80*									
	100.98	13.90	440	0.64	0.42	0.32	0.21	71	80*	90*								
W 	82.45	17.00	477	0.85	0.56	0.42	0.28	71	80	90*								
 198	69.70	20.10	443	0.93	0.62	0.47	0.31	71	80	90*								
+	53.98	25.90	506	1.37	0.91	0.69	0.46		80	90*								
IEC - PAM 	51.73	27.10	521	1.48	0.98	0.74	0.49		80	90*	100*	112*						
 198-199	45.14	31.00	450	1.46	0.97	0.73	0.49		80	90*								
	43.73	32.00	563	1.89	1.25	0.94	0.63		80	90	100*	112*						
	37.18	37.70	460	1.81	1.20	0.91	0.60	71	80									
	36.57	38.30	501	2.01	1.33	1.00	0.67		80	90	100*	112*						
	31.20	44.90	445	2.09	1.39	1.05	0.69		80	90	100*	112*						
	29.64	47.20	500	2.47	1.64	1.24	0.82	71	80	90	100*	112*						
	26.81	52.20	439	2.40	1.59	1.20	0.80	71	80	90	100*	112*						
	24.98	56.00	490	2.88	1.91	1.44	0.96	71	80	90	100*	112*						
	23.99	58.40	435	2.66	1.77	1.33	0.88	71	80	90	100*	112*						
	21.89	64.00	480	3.21	2.14	1.61	1.07	71	80	90	100	112*						
	18.51	75.60	486	3.85	2.56	1.92	1.28	71	80	90	100	112*						
	16.56	84.50	471	4.00	2.64	2.00	1.32	71	80	90	100	112						
	13.20	106.10	405	4.00	2.64	2.00	1.32	71	80	90	100	112						
	11.81	118.50	384	4.00	2.64	2.00	1.32	71	80	90	100	112						
	10.16	137.80	356	4.00	2.64	2.00	1.32	71	80	90	100	112						
	9.00	155.60	335	4.00	2.64	2.00	1.32	71	80	90	100	112						
	8.36	167.50	256	4.00	2.64	2.00	1.32	71	80	90	100	112						
	7.48	187.20	243	4.00	2.64	2.00	1.32	71	80	90	100	112						
	6.43	217.70	226	4.00	2.64	2.00	1.32	71	80	90	100	112						
	5.70	245.60	212	4.00	2.64	2.00	1.32	71	80	90	100	112						
	4.51	310.40	186	4.00	2.64	2.00	1.32			90	100	112						

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich




80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
										63*	71*						
PD 32/12 PM 32/12   + IEC - PAM  	3434.69	0.41	900	0.08	0.05	0.04	0.03	63*	71*								
	2794.50	0.50	900	0.09	0.06	0.04	0.03	63*	71*								
	2246.56	0.62	900	0.10	0.06	0.05	0.03	63*	71*								
	1696.40	0.83	900	0.12	0.08	0.06	0.04	63*	71*	80*	90*						
	1335.13	1.00	900	0.14	0.09	0.07	0.05	63*	71*	80*	90*	100*	112*				
	1068.11	1.30	900	0.16	0.11	0.08	0.05	63*	71*	80*	90*	100*	112*				
	851.83	1.60	900	0.19	0.13	0.10	0.06	63	71*	80*	90*	100*	112*				
	684.80	2.00	900	0.23	0.15	0.12	0.08	63	71*	80*	90*	100*	112*				
	521.00	2.70	900	0.29	0.19	0.15	0.10	63	71*	80*	90*	100*	112*				
	461.30	3.00	900	0.33	0.21	0.16	0.11	63	71*	80*	90*	100*	112*				
	358.19	3.90	900	0.41	0.27	0.20	0.13	63	71	80*	90*	100*	112*				
	270.47	5.20	900	0.53	0.35	0.26	0.17	63	71	80*	90*	100*	112*				
	217.44	6.40	900	0.65	0.43	0.32	0.21	63	71	80*	90*	100*	112*				
	179.71	7.80	900	0.77	0.51	0.39	0.26	63	71	80	90*	100*	112*				
	141.42	9.90	900	0.93	0.62	0.47	0.31	63	71	80	90*	100*	112*				
	114.01	12.30	900	1.16	0.77	0.58	0.38	63	71	80	90*	100*	112*				
	87.71	16.00	900	1.50	1.00	0.75	0.50	63	71	80	90	100*	112*				
PD 33 PM 33   + IEC - PAM  	1022.54	1.40	787	0.11	0.07	0.06	0.04	63*	71*								
	918.90	1.50	822	0.13	0.09	0.07	0.04	63*	71*								
	808.52	1.70	1039	0.19	0.13	0.09	0.06	63	71*								
	726.57	1.90	944	0.19	0.13	0.10	0.06	63	71*								
	584.11	2.40	1000	0.25	0.17	0.13	0.08	63	71*								
	482.75	2.90	866	0.26	0.17	0.13	0.09	63	71*								
	408.42	3.40	796	0.29	0.19	0.14	0.09	63	71*								
	287.08	4.90	938	0.48	0.32	0.24	0.16	63	71	80*	90*						
	230.79	6.10	1000	0.64	0.42	0.32	0.21	63	71	80*	90*						
	190.74	7.30	866	0.67	0.44	0.33	0.22	63	71	80*	90*						
	161.38	8.70	788	0.72	0.48	0.36	0.24	63	71	80*	90*						
	127.01	11.00	774	0.89	0.59	0.45	0.30	63	71	80	90*	100*	112*				
	103.92	13.50	735	1.04	0.69	0.52	0.34	63	71	80	90*	100*	112*				
	89.45	16.20	621	1.05	0.68	0.53	0.34	63	71	80	90*	100*	112*				

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich








80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
								71	80	90*						
PD 32	112.23	12.50	770	1.01	0.67	0.50	0.33	71	80	90*						
PM 32	100.85	13.90	807	1.17	0.78	0.59	0.39	71	80	90*						
W  202	88.74	15.80	945	1.56	1.04	0.78	0.52		80	90						
	79.75	17.60	850	1.56	1.04	0.78	0.52		80	90						
+	70.52	19.90	564	1.17	0.78	0.59	0.39	71	80	90*						
	65.91	21.20	758	1.69	1.12	0.84	0.56		80	90						
IEC - PAM  202-203	64.11	21.80	1015	2.32	1.54	1.16	0.77		80	90	100*	112*				
	55.76	25.10	642	1.69	1.12	0.84	0.56		80	90						
	52.98	26.40	845	2.34	1.55	1.17	0.78		80	90	100*	112*				
	48.00	29.20	552	1.69	1.12	0.84	0.56		80	90						
	44.83	31.20	737	2.41	1.60	1.21	0.80		80	90	100*	112*				
	42.05	33.30	929	3.24	2.15	1.62	1.08	71	80	90	100	112*				
	38.59	36.30	634	2.41	1.60	1.20	0.80		80	90	100*	112*				
	37.79	37.00	835	3.24	2.15	1.62	1.08	71	80	90	100	112*				
	31.90	43.90	877	4.03	2.68	2.02	1.34	71	80	90	100	112				
	28.67	48.80	870	4.45	2.96	2.22	1.48	71	80	90	100	112				
	25.86	54.10	846	4.80	3.19	2.40	1.59	71	80	90	100	112				
	23.69	59.10	805	4.98	3.31	2.49	1.65	71	80	90	100	112				
	22.42	62.40	800	5.23	3.42	2.62	1.74	71	80	90	100	112	132*			
	21.37	65.50	722	4.95	3.29	2.48	1.65	71	80	90	100	112				
	20.15	69.50	822	5.98	3.97	2.99	1.99	71	80	90	100	112	132*			
	16.65	84.10	841	7.40	4.92	3.70	2.46	71	80	90	100	112	132*			
	14.09	99.40	857	8.92	5.92	4.46	2.96	71	80	90	100	112	132*			
	11.35	123.30	821	9.20	6.07	4.60	3.04			90	100	112	132			
	9.77	143.30	839	9.20	6.07	4.60	3.04			90	100	112	132			
	8.29	168.90	676	9.20	6.07	4.60	3.04	71	80	90	100	112	132			
	6.68	209.60	607	9.20	6.07	4.60	3.04			90	100	112	132			
	5.66	247.30	555	9.20	6.07	4.60	3.04			90	100	112	132			
	4.48	312.50	461	9.20	6.07	4.60	3.04			90	100	112	132			

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich




80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W				IEC - PAM									
				P _{1max} - f _B ≥ 1				f _B ⇒  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
PD 42/12 PM 42/12  W  239 + IEC - PAM  238-239	2783.90	0.50	1800	0.13	0.09	0.07	0.04	63*	71*								
	2249.64	0.62	1800	0.16	0.10	0.08	0.05	63*	71*								
	1830.33	0.76	1800	0.18	0.12	0.09	0.06	63	71*								
	1343.79	1.00	1800	0.24	0.16	0.12	0.08	63	71*								
	1111.10	1.30	1800	0.28	0.18	0.14	0.09	63	71*	80*	90*						
	874.48	1.60	1800	0.34	0.23	0.17	0.11	63	71*	80*	90*	100*	112*				
	699.58	2.00	1800	0.42	0.28	0.21	0.14	63	71	80*	90*	100*	112*				
	557.93	2.50	1800	0.51	0.34	0.26	0.17	63	71	80*	90*	100*	112*				
	409.62	3.40	1800	0.68	0.45	0.34	0.23	63	71	80*	90*	100*	112*				
	341.25	4.10	1800	0.77	0.51	0.39	0.26	63	71	80	90*	100*	112*				
	302.14	4.60	1800	0.87	0.58	0.44	0.29	63	71	80	90*	100*	112*				
	234.61	6.00	1800	1.12	0.75	0.56	0.37	63	71	80	90*	100*	112*				
	177.15	7.90	1800	1.49	0.99	0.74	0.49	63	71	80	90*	100*	112*				
	152.50	9.20	1800	1.73	1.15	0.87	0.57	63	71	80	90	100*	112*				
	127.43	11.00	1800	2.07	1.38	1.04	0.69	63	71	80	90	100*	112*				
	PD 43 PM 43  W  206 + IEC - PAM  206-207	1585.08	0.88	1420	0.13	0.09	0.07	0.04	71*	80*	90*						
1129.42		1.20	1600	0.21	0.14	0.10	0.07	71*	80*	90*							
1097.89		1.30	1088	0.15	0.10	0.07	0.05	71*	80*	90*							
782.28		1.80	1476	0.28	0.18	0.14	0.09	71*	80*	90*							
653.66		2.10	1233	0.28	0.18	0.14	0.09	71*	80*	90*							
605.88		2.30	1475	0.36	0.24	0.18	0.12		80*	90*							
532.76		2.60	2000	0.55	0.37	0.28	0.18	71	80*	90*							
445.16		3.10	1666	0.55	0.36	0.27	0.18	71	80*	90*							
412.63		3.40	1990	0.71	0.47	0.35	0.23		80*	90*							
391.14		3.60	2000	0.75	0.50	0.37	0.25	71	80	90*							
344.78		4.10	1662	0.71	0.47	0.35	0.23		80*	90*							
326.83		4.30	1890	0.85	0.56	0.42	0.28	71	80	90*							
302.94		4.60	2077	1.01	0.67	0.50	0.33		80	90*							
272.49		5.10	1572	0.85	0.56	0.42	0.28	71	80	90*							
253.13		5.50	1961	1.14	0.75	0.57	0.38		80	90*							
211.05		6.60	1635	1.14	0.75	0.57	0.38		80	90*							
191.52		7.30	1990	1.52	1.01	0.76	0.51	71	80	90	100*	112*					
160.03		8.70	1657	1.52	1.01	0.76	0.50	71	80	90	100*	112*					
140.61		10.00	2000	2.09	1.39	1.04	0.69	71	80	90	100*	112*					
118.53	11.80	2000	2.47	1.64	1.24	0.82	71	80	90	100*	112*						
103.86	13.50	2000	2.82	1.88	1.41	0.94	71	80	90	100*	112*						
86.78	16.10	1980	3.00	1.98	1.50	0.99	71	80	90	100	112*						

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich










80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
								90*									
PD 42	155.40	9.00	1275	1.20	0.80	0.60	0.40	90*									
PM 42	110.73	12.60	1600	2.12	1.41	1.06	0.70	90	100*	112*							
W  206	90.52	15.50	1600	2.59	1.72	1.30	0.86	90	100*	112*							
	75.41	18.60	1589	3.09	2.05	1.54	1.03		100	112*	132*						
+	61.64	22.70	1794	4.27	2.83	2.13	1.42		100	112	132*						
	52.23	26.80	1818	5.10	3.39	2.55	1.69		100	112	132*						
IEC - PAM  206-207	45.06	31.10	1594	5.19	3.44	2.59	1.72	90	100	112	132*						
	43.64	32.10	1600	5.37	3.57	2.69	1.79		100	112	132*						
	40.79	34.30	1556	5.59	3.71	2.80	1.86	90	100	112	132*						
	38.35	36.50	2000	7.65	5.08	3.82	2.54				132*						
	36.84	38.00	1400	5.57	3.70	2.79	1.85	90	100	112	132*						
	36.39	38.50	1375	5.54	3.68	2.77	1.84		100	112	132*						
	32.31	43.30	1620	7.35	4.88	3.68	2.44	90	100	112	132*	160*					
	32.04	43.70	1785	8.17	5.43	4.08	2.71				132*						
	26.72	52.40	1600	8.78	5.83	4.39	2.92				132*						
	26.41	53.00	1787	9.92	6.59	4.96	3.29	90	100	112	132	160*					
	26.25	53.30	1608	8.98	5.97	4.49	2.98	90	100	112	132*	160*					
	22.38	62.60	1699	11.13	7.39	5.56	3.70	90	100	112	132	160*					
	21.46	65.20	1686	11.52	7.65	5.76	3.83	90	100	112	132	160*					
	18.18	77.00	1800	14.51	9.64	7.26	4.82	90	100	112	132	160*					
	15.19	92.20	1800	15.00	9.90	7.50	4.95	90	100	112	132	160					
	12.67	110.50	1750	15.00	9.90	7.50	4.95	90	100	112	132	160					
	10.83	129.30	1700	15.00	9.90	7.50	4.95	90	100	112	132	160					
	9.23	151.70	1634	15.00	9.90	7.50	4.95	90	100	112	132	160					
	8.33	168.10	1272	15.00	9.90	7.50	4.95	90	100	112	132	160					
	7.13	196.40	1202	15.00	9.90	7.50	4.95	90	100	112	132	160					
	6.07	230.60	1200	15.00	9.90	7.50	4.95	90	100	112	132	160					
	5.44	257.40	1035	15.00	9.90	7.50	4.95				132	160					
	5.00	280.00	1035	15.00	9.90	7.50	4.95				132	160					
	4.69	298.50	1035	15.00	9.90	7.50	4.95				132	160					

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich











80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
								63	71*								
PD 52/12 PM 52/12   239 + IEC - PAM   238-239	2769.78	0.51	3000	0.20	0.13	0.10	0.07	63	71*								
	2215.83	0.63	3000	0.24	0.16	0.12	0.08	63	71*								
	1802.82	0.78	3000	0.28	0.19	0.14	0.09	63	71*								
	1333.49	1.00	3000	0.37	0.24	0.18	0.12		71*	80*	90*						
	1094.40	1.30	3000	0.44	0.29	0.22	0.15	63	71	80*	90*						
	861.34	1.60	3000	0.55	0.36	0.28	0.18	63	71	80*	90*	100*	112*				
	689.07	2.00	3000	0.68	0.45	0.34	0.22	63	71	80*	90*	100*	112*				
	549.54	2.50	3000	0.80	0.53	0.40	0.27	63	71	80	90*	100*	112*				
	448.15	3.10	3000	0.98	0.65	0.49	0.33	63	71	80	90*	100*	112*				
	338.40	4.10	3000	1.30	0.86	0.65	0.43	63	71	80	90*	100*	112*				
	272.80	5.10	3000	1.61	1.07	0.81	0.54	63	71	80	90	100*	112*				
	232.65	6.00	3000	1.89	1.26	0.95	0.63	63	71	80	90	100*	112*				
	174.49	8.00	3000	2.52	1.67	1.26	0.84	63	71	80	90	100*	112*				
142.31	9.80	3000	3.00	1.98	1.50	0.99	63	71	80	90	100	112*					
PD 53 PM 53   210 + IEC - PAM   210-211	1367.36	1.00	2700	0.29	0.19	0.14	0.10		80*	90*							
	936.55	1.50	2700	0.42	0.28	0.21	0.14		80*	90*							
	699.67	2.00	3200	0.67	0.45	0.34	0.22		80*	90*							
	570.63	2.50	2800	0.72	0.48	0.36	0.24		80*	90*							
	524.75	2.70	3200	0.89	0.59	0.45	0.30		80	90*							
	427.97	3.30	3200	1.10	0.73	0.55	0.36		80	90*							
	361.64	3.90	2800	1.14	0.75	0.57	0.38		80	90*							
	331.54	4.20	3200	1.41	0.94	0.71	0.47	71	80	90*	100*	112*					
	270.40	5.20	2700	1.46	0.97	0.73	0.49	71	80	90*	100*	112*					
	248.66	5.60	3200	1.89	1.25	0.94	0.63	71	80	90	100*	112*					
	202.80	6.90	3200	2.31	1.54	1.16	0.77	71	80	90	100*	112*					
	171.36	8.20	2800	2.40	1.59	1.20	0.80	71	80	90	100*	112*					
	153.85	9.10	3200	3.05	2.03	1.52	1.01	71	80	90	100	112*					
138.78	10.10	3200	3.38	2.25	1.69	1.12	71	80	90	100	112*						
117.27	11.90	2750	3.44	2.28	1.72	1.14	71	80	90	100	112*						
91.51	15.30	2900	4.65	3.09	2.32	1.54	71	80	90	100	112						
82.55	17.00	2795	4.96	3.30	2.48	1.65	71	80	90	100	112						

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich














80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
PD 52	134.05	10.40	2654	2.90	1.93	1.45	0.96	90	100*	112*						
	PM 52	100.15	14.00	2241	3.28	2.18	1.64	1.09	90	100	112*					
 W	91.82	15.20	2759	4.40	2.93	2.20	1.46		100	112	132*					
	 210	81.68	17.10	1828	3.28	2.18	1.64	1.09	90	100	112*					
+	68.60	20.40	2970	6.35	4.22	3.17	2.11		100	112	132*					
	IEC - PAM	55.55	25.20	2500	6.60	4.38	3.30	2.19	90	100	112	132*				
 W	51.45	27.20	3235	9.22	6.12	4.61	3.06				132*					
	 210-211	47.27	29.60	2400	7.44	4.94	3.72	2.47	100	112	132*					
+	41.96	33.40	3200	11.18	7.43	5.59	3.71				132					
	40.79	34.30	2500	8.98	5.97	4.49	2.98	90	100	112	132*	160*				
 W	35.45	39.50	2700	11.17	7.42	5.58	3.71				132					
	33.41	41.90	2300	10.09	6.70	5.05	3.35	90	100	112	132	160*	180*			
+	30.47	45.90	2900	13.95	9.27	6.98	4.63	90	100	112	132	160*	180*			
	24.96	56.10	2900	17.03	11.31	8.52	5.66	90	100	112	132	160	180*			
 W	20.36	68.80	3100	22.00	14.52	11.00	7.26	90	100	112	132	160	180			
	18.86	74.20	2600	20.21	13.42	10.10	6.71	90	100	112	132	160	180*			
+	17.61	79.50	2750	22.00	14.52	11.00	7.26	90	100	112	132	160	180			
	15.38	91.00	2600	22.00	14.52	11.00	7.26	90	100	112	132	160	180			
 W	13.00	107.70	2629	22.00	14.52	11.00	7.26	90	100	112	132	160	180			
	10.73	130.50	2500	22.00	14.52	11.00	7.26		100	112	132	160	180			
+	9.47	147.80	2300	22.00	14.52	11.00	7.26		100	112	132	160	180			
	8.69	161.10	2360	22.00	14.52	11.00	7.26	90	100	112	132	160	180			
 W	7.17	195.30	2161	22.00	14.52	11.00	7.26		100	112	132	160	180			
	6.33	221.20	2114	22.00	14.52	11.00	7.26		100	112	132	160	180			
+	5.70	245.60	1800	22.00	14.52	11.00	7.26					160	180			
	5.35	261.70	1750	22.00	14.52	11.00	7.26					160	180			
 W	5.02	278.90	1700	22.00	14.52	11.00	7.26					160	180			
	4.32	324.10	1550	22.00	14.52	11.00	7.26					160	180			

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich




80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
								71*	80*							
PD 63/22 PM 63/22   241 + IEC - PAM   240-241	4160.29	0.34	4780	0.21	0.14	0.10	0.07	71*	80*							
	3456.44	0.41	5400	0.27	0.18	0.13	0.09	71*	80*	90*						
	2738.15	0.51	4780	0.30	0.20	0.15	0.10	71*	80*	90*						
	2209.62	0.63	5400	0.40	0.26	0.20	0.13		80*	90*						
	1859.06	0.75	5400	0.47	0.31	0.23	0.15		80*	90*						
	1260.77	1.10	5400	0.67	0.44	0.33	0.22	71	80*	90*	100*	112*				
	1104.71	1.30	5400	0.76	0.50	0.38	0.25	71	80	90*	100*	112*				
	821.10	1.70	5400	0.96	0.64	0.48	0.32	71	80	90*	100*	112*				
	637.34	2.20	5400	1.24	0.83	0.62	0.41	71	80	90*	100*	112*				
	570.21	2.50	5400	1.39	0.92	0.69	0.46	71	80	90*	100*	112*				
	434.44	3.20	5400	1.82	1.21	0.91	0.61	71	80	90	100*	112*				
	349.07	4.00	5400	2.27	1.51	1.13	0.75	71	80	90	100*	112*				
	300.12	4.70	5400	2.64	1.75	1.32	0.88	71	80	90	100*	112*				
PD 63/32 PM 63/32   241 + IEC - PAM   240-241	223.50	6.30	4780	3.14	2.08	1.57	1.04	90	100	112*	132*					
	191.13	7.30	4780	3.67	2.44	1.83	1.22	90	100	112*	132*					
	158.90	8.80	4780	4.41	2.93	2.20	1.46	90	100	112	132*					
PD 63 PM 63   214 + IEC - PAM   214-215	552.15	2.50	5170	1.37	0.91	0.69	0.46	90*								
	445.80	3.10	4170	1.37	0.91	0.69	0.46	90*								
	393.43	3.60	5880	2.19	1.46	1.10	0.73	90	100*	112*						
	317.64	4.40	5640	2.60	1.73	1.30	0.86	90	100*	112*						
	267.94	5.20	5880	3.22	2.14	1.61	1.07		100	112*	132*					
	251.63	5.60	4480	2.61	1.73	1.30	0.87	90	100*	112*						
	225.83	6.20	4020	2.61	1.73	1.30	0.87	90	100*	112*						
	212.26	6.60	4670	3.23	2.14	1.61	1.07		100	112*	132*					
	171.37	8.20	5570	4.76	3.17	2.38	1.58		100	112	132*					
	160.11	8.70	5770	5.28	3.51	2.64	1.75	90	100	112	132*					
	126.84	11.00	4580	5.29	3.52	2.65	1.76	90	100	112	132*					
	114.79	12.20	5880	7.51	4.99	3.75	2.49	90	100	112	132*	160*				
	92.68	15.10	6000	9.49	6.30	4.75	3.15	90	100	112	132	160*				
	75.30	18.60	6000	11.68	7.76	5.84	3.88	90	100	112	132	160*				
	73.42	19.10	5570	11.10	7.39	5.56	3.69	90	100	112	132	160*				
	59.65	23.50	5500	13.52	8.98	6.76	4.49	90	100	112	132	160*				
	51.01	27.40	5080	14.60	9.70	7.30	4.85	90	100	112	132	160*				
	42.41	33.00	4550	15.73	10.45	7.86	5.22	90	100	112	132	160				
	36.27	38.60	4550	18.39	12.22	9.20	6.11	90	100	112	132	160				
	30.90	45.30	4550	21.59	14.34	10.79	7.17	90	100	112	132	160	180			
28.66	48.80	4600	22.00	14.52	11.00	7.26	90	100	112	132	160	180				
24.42	57.30	4690	22.00	14.52	11.00	7.26	90	100	112	132	160	180				

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich











80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
PD 62	80.26	17.40	4131	7.55	5.01	3.77	2.51	100	112	132*						
	PM 62	65.45	21.40	3369	7.55	5.01	3.77	2.51	100	112	132*					
W  214	61.05	22.90	4535	10.89	7.23	5.44	3.62			132	160*	180*				
	49.79	28.10	4040	11.89	7.90	5.95	3.95			132	160*	180*				
+	39.44	35.50	3200	11.89	7.90	5.95	3.95			132	160*	180*				
	29.89	46.80	4537	22.25	14.78	11.13	7.39	100	112	132	160	180				
IEC - PAM  214-215	26.02	53.80	4533	25.54	16.97	12.77	8.48	100	112	132	160	180				
	22.91	61.10	4535	29.02	19.28	14.51	9.64	100	112	132	160	180	200*	225*		
	18.68	74.90	4427	34.74	23.08	17.37	11.54	100	112	132	160	180	200	225*		
	14.80	94.60	4475	44.33	29.44	22.16	14.72	100	112	132	160	180	200	225*		
	12.34	113.50	4389	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225		
	10.64	131.60	2026	27.91	18.54	13.96	9.27	100	112	132	160	180				
	10.62	131.80	4314	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225		
	9.37	149.40	2754	43.09	28.62	21.54	14.31	100	112	132	160	180	200	225*		
	7.81	179.30	2682	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225		
	6.73	208.00	2990	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225		
	5.99	233.70	2392	45.00	29.70	22.50	14.85					180	200	225		
	5.78	242.20	2334	45.00	29.70	22.50	14.85			132	160	180	200	225		
	5.49	255.00	2291	45.00	29.70	22.50	14.85			132	160	180	200	225		
	4.90	285.70	2156	45.00	29.70	22.50	14.85			132	160	180	200	225		
	4.38	319.60	2034	45.00	29.70	22.50	14.85					180	200	225		

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich




80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183										
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]											
												71*	80*	90*				
PD 73/22 PM 73/22  W  241 + IEC - PAM  240-241	5651.03	0.25	7080	0.22	0.15	0.11	0.07	71*	80*	90*								
	4889.70	0.29	7080	0.25	0.17	0.13	0.08	71*	80*	90*								
	3612.58	0.39	7080	0.33	0.22	0.16	0.11		80*	90*								
	2629.95	0.53	7080	0.43	0.29	0.22	0.14		80*	90*								
	2061.26	0.68	7080	0.54	0.36	0.27	0.18	71	80*	90*	100*	112*						
	1806.13	0.78	7080	0.61	0.41	0.31	0.20	71	80*	90*	100*	112*						
	1342.44	1.00	7080	0.77	0.51	0.39	0.26	71	80	90*	100*	112*						
	1042.00	1.30	7080	1.00	0.66	0.50	0.33	71	80	90*	100*	112*						
	932.25	1.50	7080	1.11	0.74	0.56	0.37	71	80	90*	100*	112*						
	710.29	2.00	7080	1.46	0.97	0.73	0.49	71	80	90*	100*	112*						
	570.70	2.50	7080	1.82	1.21	0.91	0.60	71	80	90	100*	112*						
	434.82	3.20	7080	2.39	1.59	1.19	0.79	71	80	90	100*	112*						
376.24	3.70	7080	2.76	1.83	1.38	0.92	71	80	90	100*	112*							
PD 73/32 PM 73/32  W  241 + IEC - PAM  240-241	295.06	4.70	7060	3.51	2.33	1.75	1.17	90	100	112*	132*							
	223.01	6.30	7060	4.64	3.08	2.32	1.54	90	100	112	132*							
PD 73 PM 73  W  218 + IEC - PAM  218-219	338.37	4.10	7540	3.27	2.17	1.63	1.08	100	112*	132*								
	273.32	5.10	7540	4.04	2.69	2.02	1.34	100	112	132*								
	216.45	6.50	8300	5.62	3.73	2.81	1.87	100	112	132*								
	204.72	6.80	7540	5.40	3.59	2.70	1.79	100	112	132*								
	162.12	8.60	6270	5.67	3.77	2.83	1.88	100	112	132*								
	150.32	9.30	7540	7.35	4.88	3.68	2.44	100	112	132*								
	123.12	11.40	7540	8.98	5.96	4.49	2.98	100	112	132*	160*	180*						
	106.53	13.10	7540	10.38	6.89	5.19	3.45	100	112	132	160*	180*						
	93.05	15.00	7540	11.88	7.89	5.94	3.95	100	112	132	160*	180*	200*	225*				
	78.75	17.80	7420	13.81	9.18	6.91	4.59	100	112	132	160*	180*						
	68.14	20.50	7200	15.49	10.29	7.75	5.14	100	112	132	160	180*						
	59.52	23.50	7060	17.39	11.55	8.69	5.78	100	112	132	160	180*	200*	225*				
	53.42	26.20	7080	19.43	12.91	9.71	6.45	100	112	132	160	180*						
	46.66	30.00	7080	22.24	14.78	11.12	7.39	100	112	132	160	180	200*	225*				
	36.95	37.90	6620	26.26	17.45	13.13	8.72	100	112	132	160	180	200*	225*				
	30.49	45.90	6620	31.83	21.14	15.91	10.57	100	112	132	160	180	200	225*				
	26.92	52.00	6620	36.05	23.95	18.03	11.97	100	112	132	160	180	200	225*				
23.47	59.70	6610	41.29	27.43	20.64	13.71	100	112	132	160	180	200	225*					

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich








80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183							
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]								
								132	160*	180*					
PD 72	69.80	20.10	5804	12.19	8.10	6.09	4.05	132	160*	180*					
PM 72	56.90	24.60	5534	14.26	9.47	7.13	4.74	132	160*	180*					
	45.66	30.70	5809	18.65	12.39	9.33	6.19		160	180*	200*				
W  218	45.06	31.10	4382	14.26	9.47	7.13	4.74	132	160*	180*					
	37.22	37.60	6473	25.49	16.94	12.75	8.47		160	180	200*				
+	34.69	40.40	5804	24.53	16.29	12.26	8.15	132	160	180					
	26.89	52.10	5807	31.66	21.03	15.83	10.52	132	160	180	200	225*			
IEC - PAM  218-219	22.90	61.10	5802	37.14	24.67	18.57	12.34	132	160	180	200	225*			
	19.96	70.10	5810	42.67	28.35	21.34	14.17	132	160	180	200	225*			
	16.27	86.00	6469	45.00	29.70	22.50	14.85	132	160	180	200	225			
	12.89	108.60	5864	45.00	29.70	22.50	14.85	132	160	180	200	225			
	11.18	125.20	6221	45.00	29.70	22.50	14.85	132	160	180	200	225			
	9.91	141.30	4273	45.00	29.70	22.50	14.85	132	160	180	200	225			
	9.46	148.00	6263	45.00	29.70	22.50	14.85	132	160	180	200	225			
	8.64	162.00	4222	45.00	29.70	22.50	14.85	132	160	180	200	225			
	7.50	186.70	4507	45.00	29.70	22.50	14.85	132	160	180	200	225			
	6.34	220.80	4450	45.00	29.70	22.50	14.85	132	160	180	200	225			
	5.96	234.90	4322	45.00	29.70	22.50	14.85					225			
	5.30	264.20	4065	45.00	29.70	22.50	14.85	132	160	180	200	225			
	5.03	278.30	3929	45.00	29.70	22.50	14.85					225			
	4.26	328.60	3619	45.00	29.70	22.50	14.85	132	160	180	200	225			

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich









80* IEC - PAM bağlantısı yapılacaktır P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183											
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]												
												71*	80*	90*					
PD 83/32 PM 83/32  241 + IEC - PAM  240-241	6601.35	0.21	12100	0.31	0.20	0.15	0.10	71*	80*	90*									
	5504.36	0.25	12100	0.36	0.24	0.18	0.12	71*	80*	90*									
	4202.93	0.33	12100	0.46	0.31	0.23	0.15		80*	90*									
	3519.07	0.40	12100	0.54	0.36	0.27	0.18		80*	90*									
	2996.11	0.47	12100	0.63	0.42	0.32	0.21		80*	90*									
	2408.64	0.58	12100	0.78	0.51	0.39	0.26		80	90*	100*	112*							
	1692.65	0.83	12100	1.05	0.70	0.52	0.35	71	80	90*	100*	112*							
	1362.94	1.00	12100	1.30	0.86	0.65	0.43	71	80	90*	100*	112*							
	1061.83	1.30	12100	1.67	1.11	0.84	0.55	71	80	90	100*	112*	132*						
	889.06	1.60	12100	2.00	1.33	1.00	0.66	71	80	90	100*	112*	132*						
	716.55	2.00	12100	2.48	1.64	1.24	0.82			90	100*	112*	132*						
	610.07	2.30	12100	2.91	1.93	1.45	0.97			90	100*	112*	132*						
	PD 83/42 PM 83/42  243 + IEC - PAM  242-243	550.29	2.50	12100	3.22	2.14	1.61	1.07	90	100	112*	132*	160*						
468.82		3.00	12100	3.78	2.51	1.89	1.26	90	100	112*	132*	160*							
346.82		4.00	12100	5.11	3.40	2.56	1.70	90	100	112	132*	160*							
295.48		4.70	12100	6.00	3.99	3.00	1.99	90	100	112	132*	160*							
223.71		6.30	12100	7.93	5.27	3.96	2.63	90	100	112	132*	160*							
186.54		7.50	12100	9.20	6.07	4.60	3.04	90	100	112	132	160*							
PD 83 PM 83  222 + IEC - PAM  222-223	386.39	3.60	12700	4.82	3.20	2.41	1.60	100	112	132*									
	318.11	4.40	13000	5.99	3.98	3.00	1.99	100	112	132*									
	293.92	4.80	12700	6.33	4.21	3.17	2.10			132*	160*	180*							
	241.98	5.80	13100	7.94	5.27	3.97	2.64			132*	160*	180*							
	200.83	7.00	10800	7.88	5.24	3.94	2.62	100	112	132*									
	185.56	7.50	12680	10.02	6.65	5.01	3.33			132	160*	180*							
	152.77	9.20	13200	12.67	8.41	6.33	4.21			132	160*	180*							
	143.91	9.70	12500	12.73	8.46	6.37	4.23	100	112	132	160*	180*							
	125.27	11.20	12190	14.27	9.48	7.13	4.74	100	112	132	160*	180*							
	118.48	11.80	12450	15.40	10.23	7.70	5.12	100	112	132	160	180*							
	103.13	13.60	12100	17.20	11.43	8.60	5.71	100	112	132	160	180*							
	90.79	15.40	12100	19.54	12.98	9.77	6.49	100	112	132	160	180*	200*	225*					
	75.70	18.50	12100	23.43	15.57	11.72	7.78	100	112	132	160	180	200*	225*					
	65.16	21.50	11300	25.42	16.89	12.71	8.44	100	112	132	160	180	200*	225*					
	57.32	24.40	12100	30.95	20.56	15.47	10.28	100	112	132	160	180	200	225*					
	47.79	29.30	12100	37.12	24.66	18.56	12.33	100	112	132	160	180	200	225*					
	43.52	32.20	10600	35.71	23.72	17.85	11.86	100	112	132	160	180	200	225*					
35.83	39.10	12080	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225						
30.84	45.40	12090	45.00	29.70	22.50	14.85	100	112	132	160	180	200	225						

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich


















80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
PD 82	72.17	19.40	7875	16.00	10.63	8.00	5.31	132	160	180*							
	PM 82	59.41	23.60	6483	16.00	10.63	8.00	5.31	132	160	180*						
W 	47.51	29.50	10613	32.75	21.75	16.37	10.88		160	180	200						
	39.18	35.70	10615	39.72	26.38	19.86	13.19				200	225*					
+	39.12	35.80	9342	35.01	23.26	17.50	11.63		160	180	200						
	32.25	43.40	10346	47.03	31.24	23.51	15.62				200	225					
IEC - PAM 	28.35	49.40	9998	51.70	34.34	25.85	17.17	132	160	180	200	225					
	24.51	57.10	10603	63.42	42.13	31.71	21.06	132	160	180	200	225	250				
W 	21.14	66.20	10618	73.63	48.91	36.82	24.46	132	160	180	200	225	250	280*			
	17.41	80.40	9697	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
IEC - PAM 	15.19	92.20	9480	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
	12.99	107.80	10294	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
W 	10.88	128.70	10290	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
	9.67	144.80	6521	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
IEC - PAM 	8.27	169.30	7296	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
	6.93	202.00	6786	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			
W 	4.52	309.70	4890	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*			











IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich

80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
												100*	112*	132*		
PD 93/42 PM 93/42   243 + IEC - PAM   242-243	4158.29	0.34	24000	0.85	0.56	0.42	0.28		100*	112*	132*					
	2433.68	0.58	24000	1.45	0.96	0.72	0.48	90*	100*	112*						
	2202.85	0.64	24000	1.60	1.06	0.80	0.53	90	100*	112*						
	1744.83	0.80	24000	2.02	1.34	1.01	0.67	90	100*	112*	132*	160*				
	1417.68	0.99	24000	2.48	1.65	1.24	0.82	90	100*	112*	132*	160*				
	1177.36	1.20	24000	2.99	1.99	1.49	0.99	90	100	112*	132*	160*				
	885.67	1.60	24000	3.97	2.64	1.99	1.32	90	100	112	132*	160*				
	715.36	2.00	24000	4.92	3.27	2.46	1.63	90	100	112	132*	160*				
	618.83	2.30	24000	5.69	3.78	2.84	1.89	90	100	112	132*	160*				
	450.86	3.10	24000	7.80	5.18	3.90	2.59	90	100	112	132*	160*				
PD 93/52 PM 93/52   243 + IEC - PAM   242-243	410.49	3.40	24000	8.57	5.69	4.29	2.85	100	112	132*	160*	180*				
	294.19	4.80	24000	11.96	7.94	5.98	3.97	100	112	132	160*	180*				
	233.30	6.00	24000	15.08	10.02	7.54	5.01				160	180*				
	200.50	7.00	24000	17.55	11.66	8.77	5.83				160	180*				
PD 93 PM 93   226 + IEC - PAM   226-227	352.16	4.00	25400	10.57	7.02	5.29	3.51	132	160*	180*						
	290.94	4.80	24000	12.09	8.03	6.05	4.02	132	160*	180*						
	204.66	6.80	22000	15.76	10.47	7.88	5.23	132	160	180*						
	175.03	8.00	25400	21.27	14.13	10.64	7.07	132	160	180*						
	144.60	9.70	24000	24.33	16.16	12.17	8.08	132	160	180						
	135.66	10.30	25400	27.45	18.23	13.72	9.12	132	160	180	200*	225*				
	115.51	12.10	25400	32.24	21.41	16.12	10.71	132	160	180	200	225*	250*			
	100.70	13.90	25400	36.98	24.56	18.49	12.28	132	160	180	200	225*	250*	280*		
	83.19	16.80	24000	42.29	28.09	21.15	14.05	132	160	180	200	225*	250*	280*		
	72.17	19.40	24000	48.75	32.38	24.38	16.19	132	160	180	200	225	250*	280*		
	65.13	21.50	24260	54.61	36.27	27.30	18.14	132	160	180	200	225				
	55.46	25.20	24000	63.44	42.14	31.72	21.07	132	160	180	200	225	250			
	48.35	29.00	24000	72.77	48.34	36.38	24.17	132	160	180	200	225	250	280*		
	41.94	33.40	24000	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*		
	35.49	39.40	24000	75.00	49.50	37.50	24.75	132	160	180	200	225	250	280*		
PD 92 PM 92   226 + IEC - PAM   226-227	34.36	40.70	16250	69.33	46.06	34.67	23.03	180	200	225	250					
	30.79	45.50	17930	85.37	56.71	42.68	28.35	180	200	225	250	280*				
	26.85	52.10	17200	93.91	62.38	46.95	31.19	180	200	225	250	280	315*			
	23.17	60.40	16426	103.93	69.04	51.96	34.52	180	200	225	250	280	315*			
	20.09	69.70	15926	116.21	77.20	58.11	38.60	180	200	225	250	280	315*			
	17.34	80.70	15492	130.97	87.00	65.49	43.50	180	200	225	250	280	315*			
	14.69	95.30	14715	146.85	97.55	73.42	48.77	180	200	225	250	280	315*			
	12.04	116.30	13808	160.00	105.60	80.00	52.80	180	200	225	250	280	315*			
	10.21	137.10	10792	154.95	102.93	77.48	51.47	180	200	225	250	280	315*			
	8.65	161.80	11160	160.00	105.60	80.00	52.80	180	200	225	250	280	315*			
	7.09	197.50	10116	160.00	105.60	80.00	52.80	180	200	225	250	280	315*			
	5.78	242.20	8825	160.00	105.60	80.00	52.80	180	200	255	250	280	315*			
	5.36	261.20	8336	160.00	105.60	80.00	52.80				250	280	315*			














- IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung
- 63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich
- 80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
										90*	100*	112*	132*	160*	180*	
PD 103/52 PM 103/52  W  243 + IEC - PAM  242-243	4677.24	0.30	35000	1.10	0.73	0.55	0.36	90*	100*	112*						
	3520.13	0.40	35000	1.46	0.97	0.73	0.48		100*	112*	132*					
	2796.57	0.50	35000	1.83	1.22	0.92	0.61		100*	112*	132*					
	2402.69	0.58	35000	2.14	1.42	1.07	0.71				132*					
	1887.83	0.74	35000	2.72	1.81	1.36	0.90				132*					
	1416.90	0.99	35000	3.62	2.41	1.81	1.20	90	100	112*	132*	160*	180*			
	1165.61	1.20	35000	4.40	2.92	2.20	1.46	90	100	112	132*	160*	180*			
	915.84	1.50	35000	5.60	3.72	2.80	1.86	90	100	112	132*	160*	180*			
	692.20	2.00	35000	7.41	4.92	3.71	2.46	90	100	112	132*	160*	180*			
	578.09	2.40	35000	8.88	5.90	4.44	2.95	90	100	112	132*	160*	180*			
	476.93	2.90	35000	10.76	7.15	5.38	3.57		100	112	132	160*	180*			
	366.18	3.80	35000	14.01	9.31	7.01	4.65	90	100	112	132	160*	180*			
	302.10	4.60	35000	16.98	11.28	8.49	5.64		100	112	132	160	180*			
PD 103 PM 103  W  230 + IEC - PAM  230-231	357.40	3.90	35460	14.54	9.66	7.27	4.83	160	180*							
	332.64	4.20	37000	16.31	10.83	8.15	5.42	160	180*							
	282.85	4.90	33000	17.10	11.36	8.55	5.68	160	180*							
	263.25	5.30	33000	18.38	12.21	9.19	6.10	160	180*							
	180.68	7.70	35000	28.40	18.86	14.20	9.43	160	180							
	168.16	8.30	35000	30.51	20.27	15.26	10.13	160	180							
	140.41	10.00	35480	37.04	24.61	18.52	12.30	160	180	200	225*					
	104.71	13.40	35300	49.42	32.83	24.71	16.41	160	180	200	225	250*	280*			
	91.35	15.30	35380	56.78	37.72	28.39	18.86	160	180	200	225	250	280*	315*		
	72.71	19.30	37200	75.00	49.82	37.50	24.91	160	180	200	225	250	280*	315*		
	65.44	21.40	35100	78.63	52.23	39.32	26.12	160	180	200	225	250	280*	315*		
	56.76	24.70	35000	90.40	60.05	45.20	30.02	160	180	200	225	250	280	315*		
	47.95	29.20	35000	107.01	71.08	53.50	35.54	160	180	200	225	250	280	315*		
	41.00	34.10	35000	125.14	83.13	62.57	41.57	160	180	200	225	250	280	315*		
	34.35	40.80	35000	149.37	99.22	74.69	49.61	160	180	200	225	250	280	315*		
	29.79	47.00	35000	160.00	105.60	80.00	52.80	160	180	200	225	250	280	315*		
	27.18	51.50	33000	160.00	105.60	80.00	52.80	160	180	200	225	250	280	315*		
23.58	59.40	33000	160.00	105.60	80.00	52.80	160	180	200	225	250	280	315*			
21.00	66.70	33000	160.00	105.60	80.00	52.80	160	180	200	225	250	280	315*			
PD 102 PM 102  W  230 + IEC - PAM  230-231	18.24	76.80	32000	200.00	132.00	100.00	66.00	250	280	315						
	15.19	92.20	32000	200.00	132.00	100.00	66.00	250	280	315						
	13.50	103.70	32000	200.00	132.00	100.00	66.00	250	280	315						
	11.63	120.40	32000	200.00	132.00	100.00	66.00	250	280	315						
	10.42	134.40	32000	200.00	132.00	100.00	66.00	250	280	315						
	9.20	152.20	30000	200.00	132.00	100.00	66.00	250	280	315						
	8.24	169.90	30000	200.00	132.00	100.00	66.00	250	280	315						
	7.58	184.70	19000	200.00	132.00	100.00	66.00	250	280	315						
	6.74	207.70	19000	200.00	132.00	100.00	66.00	250	280	315						
	5.80	241.40	19000	200.00	132.00	100.00	66.00	250	280	315						
5.20	269.20	19000	200.00	132.00	100.00	66.00	250	280	315							

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich






80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇔  77 - 183									
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]										
PD 113/52 PM 113/52   + IEC - PAM  	4001.34	0.35	60000	2.20	1.46	1.10	0.73	90	100*	112*							
	3722.96	0.38	60000	2.36	1.57	1.18	0.78	90	100*	112*	132*	160*	180*				
	3062.69	0.46	60000	2.87	1.91	1.44	0.95	90	100*	112*	132*	160*	180*				
	2328.41	0.60	60000	3.78	2.51	1.89	1.25	90	100	112*	132*	160*	180*				
	1829.47	0.77	60000	4.81	3.19	2.40	1.60	90	100	112	132*	160*	180*				
	1382.74	1.00	60000	6.36	4.23	3.18	2.11	90	100	112	132*	160*	180*				
	1154.79	1.20	60000	7.62	5.06	3.81	2.53	90	100	112	132*	160*	180*				
	962.15	1.50	60000	9.14	6.07	4.57	3.04	90	100	112	132	160*	180*				
	731.47	1.90	60000	12.02	7.99	6.01	3.99	90	100	112	132	160*	180*				
	603.47	2.30	60000	14.58	9.68	7.29	4.84		100	112	132	160*	180*				
	479.85	2.90	60000	18.33	12.18	9.17	6.09					160	180*				
	363.21	3.90	50000	20.18	13.41	10.09	6.70					160	180*				
312.23	4.50	50000	22.00	14.52	11.00	7.26					160	180					
PD 113 PM 113   + IEC - PAM  	224.76	6.20	69000	45.00	29.90	22.50	14.95	160	180								
	171.96	8.10	69000	58.82	39.08	29.41	19.54	160	180	200	225	250	280*				
	152.87	9.20	69000	66.17	43.95	33.08	21.98	160	180	200	225	250	280*	315*			
	130.73	10.70	69000	77.37	51.40	38.69	25.70	160	180	200	225	250	280*	315*			
	112.38	12.50	69000	90.01	59.79	45.00	29.90	160	180	200	225	250	280*	315*			
	92.07	15.20	65400	104.13	69.17	52.07	34.59	160	180	200	225	250	280	315*			
	77.01	18.20	62150	118.31	78.59	59.15	39.30	160	180	200	225	250	280	315*			
	63.44	22.10	60000	138.65	92.10	69.32	46.05	160	180	200	225	250	280	315*			
	54.26	25.80	60000	162.10	107.68	81.05	53.84	160	180	200	225	250	280	315*			
	46.64	30.00	60000	188.59	125.28	94.29	62.64	160	180	200	225	250	280	315*			
	38.21	36.60	60000	200.00	132.00	100.00	66.00	160	180	200	225	250	280	315			
	31.96	43.80	60000	200.00	132.00	100.00	66.00	160	180	200	225	250	280	315			
PD 112 PM 112   + IEC - PAM  	34.85	40.20	42000	176.67	117.36	88.34	58.68	250	280	315*							
	29.92	46.80	42000	200.00	132.00	100.00	66.00	250	280	315							
	25.47	55.00	42000	200.00	132.00	100.00	66.00	250	280	315							
	21.42	65.40	42000	200.00	132.00	100.00	66.00	250	280	315							
	18.27	76.60	42000	200.00	132.00	100.00	66.00	250	280	315							
	16.33	85.70	42000	200.00	132.00	100.00	66.00	250	280	315							
	14.04	99.70	26600	200.00	132.00	100.00	66.00	250	280	315							
	11.96	117.10	26300	200.00	132.00	100.00	66.00	250	280	315							
	10.05	139.30	26000	200.00	132.00	100.00	66.00	250	280	315							
	8.58	163.20	24800	200.00	132.00	100.00	66.00	250	280	315							
	7.67	182.50	24000	200.00	132.00	100.00	66.00	250	280	315							

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich

80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.

Tip Type Typ	i _{ges}	4-pol. 50 Hz 1400 rpm n ₂ [min ⁻¹]	M _{amax} f _B =1 4 - pol. [Nm]	W P _{1max} - f _B ≥ 1				IEC - PAM f _B ⇒  77 - 183								
				4 - pol. 1400rpm [kW]	6 - pol. 930rpm [kW]	8 - pol. 700rpm [kW]	12 - pol. 465rpm [kW]									
PD 123	201.75	6.90	90000	65.40	43.44	32.70	21.72	160	180	200	225					
PM 123	154.35	9.10	90000	85.48	56.78	42.74	28.39	160	180	200	225	250	280*			
W 	137.22	10.20	90000	96.15	63.87	48.08	31.94	160	180	200	225	250	280	315*		
 +	117.35	11.90	90000	112.43	74.69	56.22	37.34	160	180	200	225	250	280	315*		
IEC - PAM	100.88	13.90	90000	130.79	86.88	65.39	43.44	160	180	200	225	250	280	315*		
	82.65	16.90	90000	159.60	106.04	79.80	53.02	160	180	200	225	250	280	315*		
	69.12	20.30	90000	190.88	126.80	95.44	63.40	160	180	200	225	250	280	315*		

IEC - PAM bağlantısı yoktur / No IEC - PAM assembling on empty fields / Keine IEC - PAM-Verbindung

63 IEC - PAM bağlantısı yapılır / IEC - PAM assembling available on numbered fields / IEC - PAM-Verbindung möglich

80* IEC - PAM bağlantısı yapılacaksa P_{1max} değerleri aşılmamalıdır - Do not exceed the P_{1max} values indicated on fields with asterisk / Bei IEC - PAM-Verbindungen, sollten die P_{1max}-Werte nicht überschritten werden.



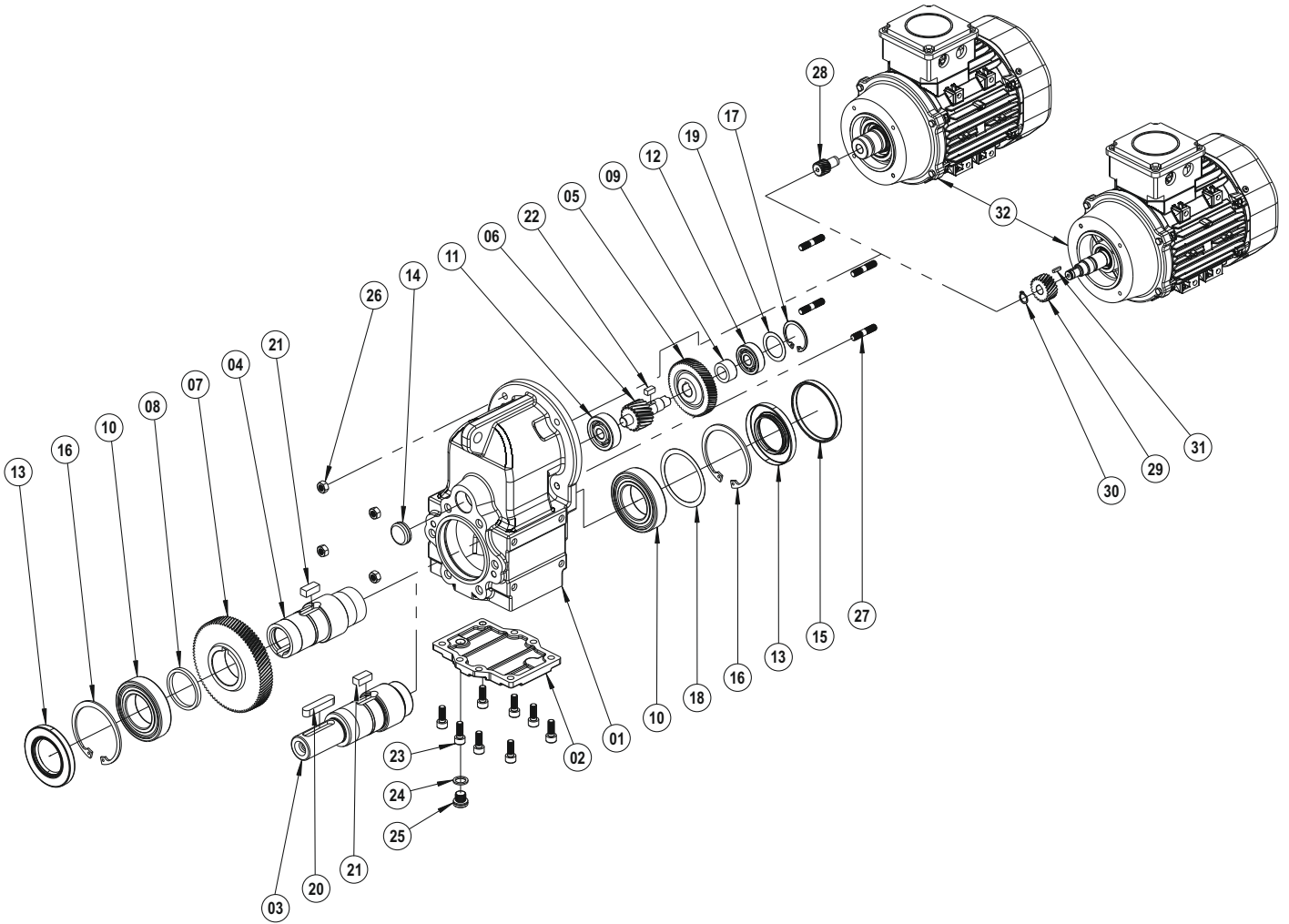
A series of horizontal dotted lines spanning the width of the page, providing a guide for writing.

PD / PM A02

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



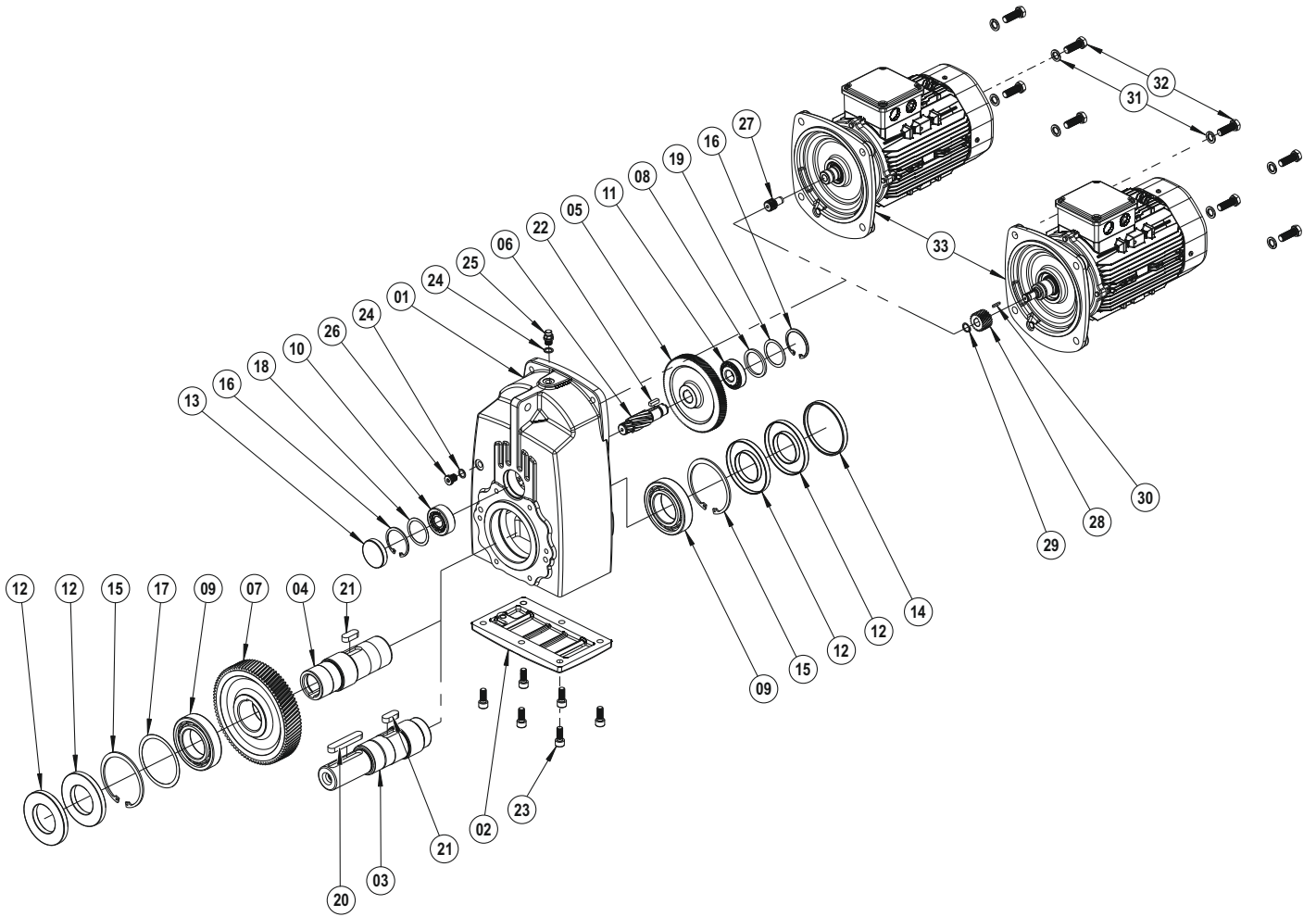
01	Gövde	17	Segman (DIN 472)	01	Gear Case	17	Circlip (DIN 472)	01	Gehäuse	17	Sicherungsring (DIN 472)
02	Kapak	18	Layner (DIN 988)	02	Cover	18	Shim (DIN 988)	02	Abdeckung	18	Passscheibe (DIN 988)
03	Çıkış Mili	19	Layner (DIN 988)	03	Output Solid Shaft	19	Shim (DIN 988)	03	Abtriebswelle	19	Passscheibe (DIN 988)
04	Çıkış Şaftı	20	Kama (DIN 6885)	04	Hollow Shaft	20	Key (DIN 6885)	04	Hohlwelle	20	Passfeder (DIN 6885)
05	Z2 Dişlisi	21	Kama (DIN 6885)	05	Driving Gear	21	Key (DIN 6885)	05	Antriebsrad	21	Passfeder (DIN 6885)
06	Z3 Dişlisi	22	Kama (DIN 6885)	06	Pinion Shaft	22	Key (DIN 6885)	06	Ritzelwelle	22	Passfeder (DIN 6885)
07	Z4 Dişlisi	23	Cıvata (DIN 912)	07	Driven Gear	23	Bolt (DIN 912)	07	Abtriebsrad	23	Verschrauben (DIN 912)
08	Rondela	24	Rondela (DIN 7603)	08	Washer	24	Washer (DIN 7603)	08	Distanzscheibe	24	Distanzscheibe (DIN 7603)
09	Burç	25	Yağ Tapası (DIN 908)	09	Spacer	25	Oil Plug (DIN 908)	09	Distanzbuchse	25	Ölstöpsel (DIN 908)
10	Rulman	26	Somun (DIN 934)	10	Bearing	26	Nut (DIN 934)	10	Kugellager	26	Schraubenmutter (DIN 934)
11	Rulman	27	Saplama (DIN 939)	11	Bearing	27	Stud Bolt (DIN 939)	11	Kugellager	27	Bolzen (DIN 939)
12	Rulman	28	Z1 Dişlisi	12	Bearing	28	Driving Pinion	12	Kugellager	28	Antriebsritzel
13	Yağ Keçesi	29	Z1 Dişlisi (Kamalı)	13	Oil Seal	29	Driving Pinion (With Key)	13	Öldichtung	29	Antriebsritzel (mit Passfeder)
14	Yağ Kapağı	30	Segman (DIN 471)	14	Oil Cover	30	Circlip (DIN 471)	14	Ölabdeckung	30	Sicherungsring (DIN 471)
15	Yağ Kapağı	31	Kama (DIN 6885)	15	Oil Cover	31	Key (DIN 6885)	15	Ölabdeckung	31	Passfeder (DIN 6885)
16	Segman (DIN 472)	32	Motor	16	Circlip (DIN 472)	32	Motor	16	Sicherungsring (DIN 472)	32	Motor

PD / PM 12 ... 52

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



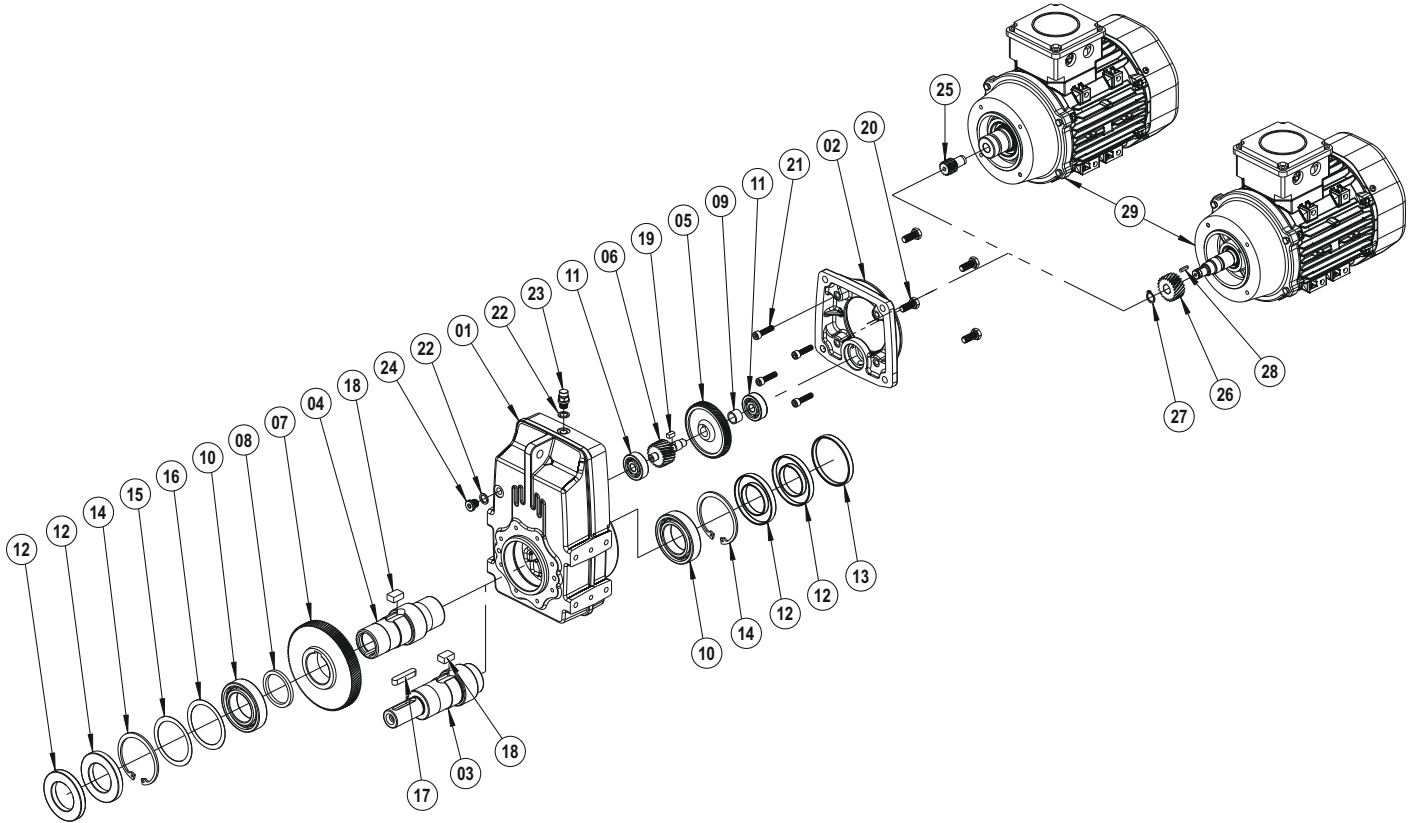
01	Gövde	18	Layner (DIN 988)	01	Gehäuse	18	Passscheibe (DIN 988)
02	Kapak	19	Layner (DIN 988)	02	Abdeckung	19	Passscheibe (DIN 988)
03	Çıkış Mili	20	Kama (DIN 6885)	03	Abtriebswelle	20	Passfeder (DIN 6885)
04	Çıkış Şaftı	21	Kama (DIN 6885)	04	Hohlwelle	21	Passfeder (DIN 6885)
05	Z2 Dişlisi	22	Kama (DIN 6885)	05	Antriebsrad	22	Passfeder (DIN 6885)
06	Z3 Dişlisi	23	Cıvata (DIN 912)	06	Ritzelwelle	23	Verschrauben (DIN 912)
07	Z4 Dişlisi	24	Rondela (DIN 7603)	07	Abtriebsrad	24	Distanzscheibe (DIN 7603)
08	Rondela	25	Havalandırma Tapası	08	Distanzscheibe	25	Entlüftungsstopfen
09	Rulman	26	Yağ Tapası (DIN 908)	09	Kugellager	26	Ölstöpsel (DIN 908)
10	Rulman	27	Z1 Dişlisi	10	Kugellager	27	Antriebsritzel
11	Rulman	28	Z1 Dişlisi (Kamalı)	11	Kugellager	28	Antriebsritzel (mit Passfeder)
12	Yağ Keçesi	29	Segman (DIN 471)	12	Öldichtung	29	Sicherungsring (DIN 471)
13	Yağ Kapağı	30	Kama (DIN 6885)	13	Ölabdeckung	30	Passfeder (DIN 6885)
14	Yağ Kapağı	31	Rondela (DIN 127)	14	Ölabdeckung	31	Distanzscheibe (DIN 127)
15	Segman (DIN 472)	32	Cıvata (DIN 933)	15	Sicherungsring (DIN 472)	32	Verschrauben (DIN 933)
16	Segman (DIN 472)	33	Motor	16	Sicherungsring (DIN 472)	33	Motor
17	Layner (DIN 988)			17	Passscheibe (DIN 988)		

PD / PM B02

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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- 01 Gövde
- 02 Ara Bağlantı Flanşı
- 03 Çıkış Mili
- 04 Çıkış Şaftı
- 05 Z2 Dişlisi
- 06 Z3 Dişlisi
- 07 Z4 Dişlisi
- 08 Rondela
- 09 Burç
- 10 Rulman
- 11 Rulman
- 12 Yağ Keçesi
- 13 Yağ Kapağı
- 14 Segman (DIN 472)
- 15 Layner (DIN 988)
- 16 Layner (DIN 988)
- 17 Kama (DIN 6885)
- 18 Kama (DIN 6885)
- 19 Kama (DIN 6885)
- 20 Cıvata (DIN 933)
- 21 Cıvata (DIN 912)
- 22 Rondela (DIN 7603)
- 23 Havalandırma Tapası
- 24 Yağ Tapası (DIN 908)
- 25 Z1 Dişlisi
- 26 Z1 Dişlisi (Kamalı)
- 27 Segman (DIN 471)
- 28 Kama (DIN 6885)
- 29 Motor

- 01 Gear Case
- 02 Intermediate Flange
- 03 Output Solid Shaft
- 04 Hollow Shaft
- 05 Driving Gear
- 06 Pinion Shaft
- 07 Driven Gear
- 08 Washer
- 09 Spacer
- 10 Bearing
- 11 Bearing
- 12 Oil Seal
- 13 Oil Cover
- 14 Circlip (DIN 472)
- 15 Shim (DIN 988)
- 16 Shim (DIN 988)
- 17 Key (DIN 6885)
- 18 Key (DIN 6885)
- 19 Key (DIN 6885)
- 20 Bolt (DIN 933)
- 21 Bolt (DIN 912)
- 22 Washer (DIN 7603)
- 23 Vent Plug
- 24 Oil Plug (DIN 908)
- 25 Driving Pinion
- 26 Driving Pinion (With Key)
- 27 Circlip (DIN 471)
- 28 Key (DIN 6885)
- 29 Motor

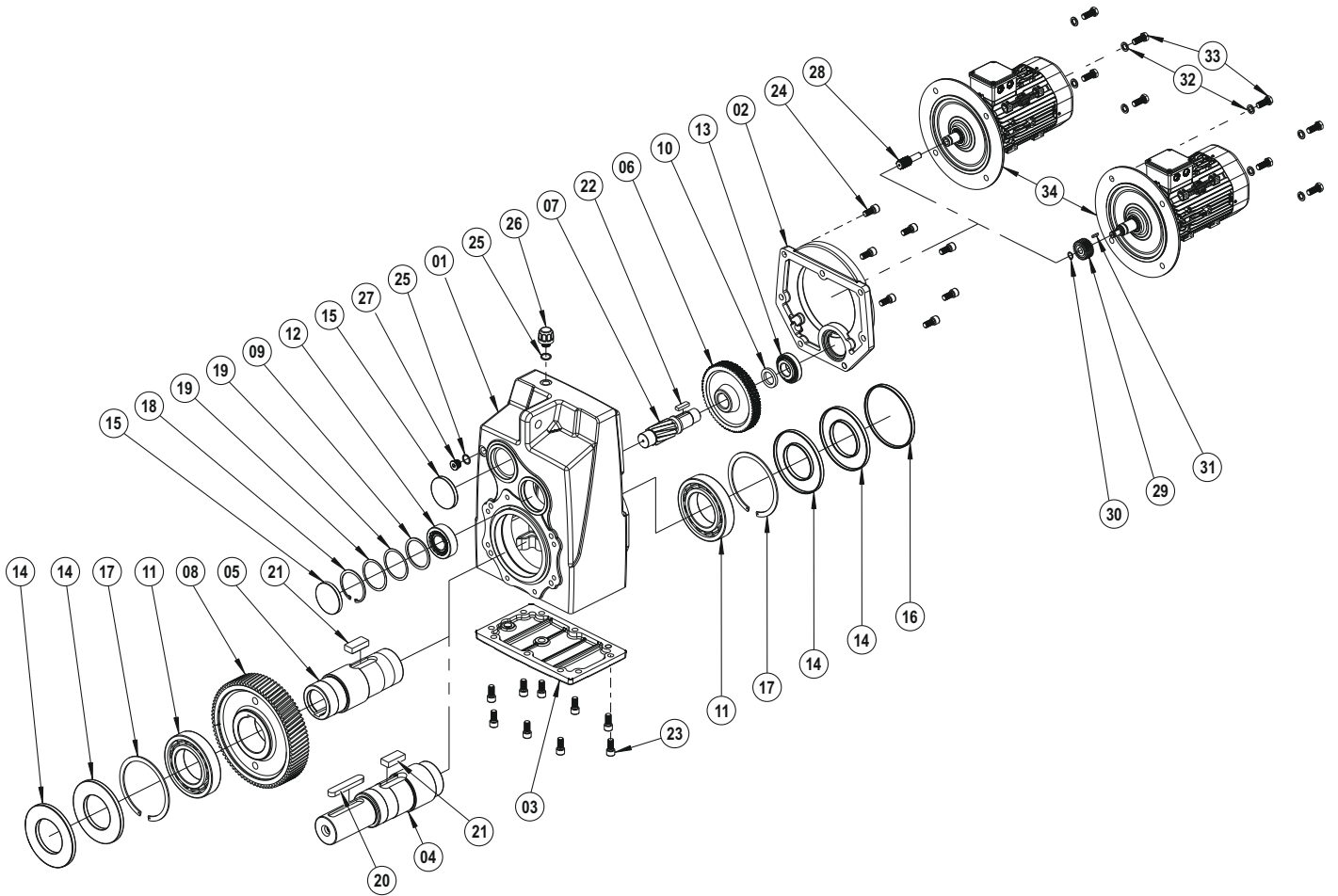
- 01 Gehäuse
- 02 Zwischenflansch
- 03 Abtriebswelle
- 04 Hohlwelle
- 05 Antriebsrad
- 06 Ritzelwelle
- 07 Abtriebsrad
- 08 Distanzscheibe
- 09 Distanzbuchse
- 10 Kugellager
- 11 Kugellager
- 12 Öldichtung
- 13 Ölbedeckung
- 14 Sicherungsring (DIN 472)
- 15 Passscheibe (DIN 988)
- 16 Passscheibe (DIN 988)
- 17 Passfeder (DIN 6885)
- 18 Passfeder (DIN 6885)
- 19 Passfeder (DIN 6885)
- 20 Verschrauben (DIN 933)
- 21 Verschrauben (DIN 912)
- 22 Distanzscheibe (DIN 7603)
- 23 Entlüftungstopfen
- 24 Ölstöpsel (DIN 908)
- 25 Antriebsritzel
- 26 Antriebsritzel (mit Passfeder)
- 27 Sicherungsring (DIN 472)
- 28 Passfeder (DIN 6885)
- 29 Motor

PD / PM 62 ... 112

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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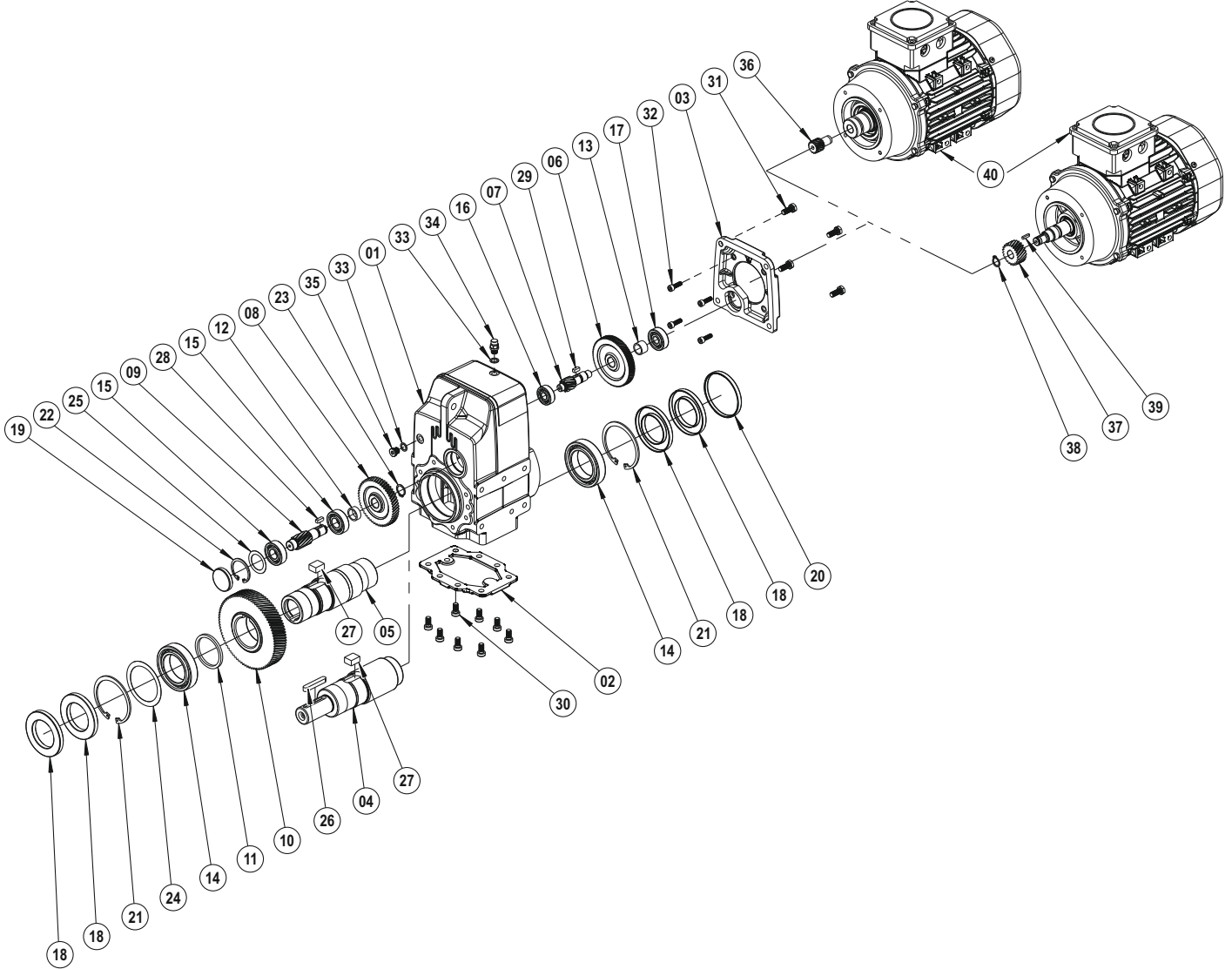
01	Gövde	18	Segman (DIN 472)	01	Gear Case	18	Circlip (DIN 472)	01	Gehäuse	18	Sicherungsring (DIN 472)
02	Ara Bağlantı Flanşı	19	Layner (DIN 988)	02	Intermediate Flange	19	Shim (DIN 988)	02	Zwischenflansch	19	Passscheibe (DIN 988)
03	Kapak	20	Kama (DIN 6885)	03	Cover	20	Key (DIN 6885)	03	Abdeckung	20	Passfeder (DIN 6885)
04	Çıkış Mili	21	Kama (DIN 6885)	04	Output Solid Shaft	21	Key (DIN 6885)	04	Abtriebswelle	21	Passfeder (DIN 6885)
05	Çıkış Şaftı	22	Kama (DIN 6885)	05	Hollow Shaft	22	Key (DIN 6885)	05	Hohlwelle	22	Passfeder (DIN 6885)
06	Z2 Dişlisi	23	Cıvata (DIN 912)	06	Driving Gear	23	Bolt (DIN 912)	06	Antriebsrad	23	Verschrauben (DIN 912)
07	Z3 Dişlisi	24	Cıvata (DIN 912)	07	Pinion Shaft	24	Bolt (DIN 912)	07	Ritzelwelle	24	Verschrauben (DIN 912)
08	Z4 Dişlisi	25	Rondela (DIN 7603)	08	Driven Gear	25	Washer (DIN 7603)	08	Abtriebsrad	25	Distanzscheibe (DIN 7603)
09	Rondela	26	Havalandırma Tapası	09	Washer	26	Vent Plug	09	Distanzscheibe	26	Entlüftungsstopfen
10	Burç	27	Yağ Tapası (DIN 908)	10	Spacer	27	Oil Plug (DIN 908)	10	Distanzbuchse	27	Ölstöpsel (DIN 908)
11	Rulman	28	Z1 Dişlisi	11	Bearing	28	Driving Pinion	11	Kugellager	28	Antriebsritzel
12	Rulman	29	Z1 Dişlisi (Kamalı)	12	Bearing	29	Driving Pinion (With Key)	12	Kugellager	29	Antriebsritzel (mit Passfeder)
13	Rulman	30	Segman (DIN 471)	13	Bearing	30	Circlip (DIN 471)	13	Kugellager	30	Sicherungsring (DIN 471)
14	Yağ Keçesi	31	Kama (DIN 6885)	14	Oil Seal	31	Key (DIN 6885)	14	Öldichtung	31	Passfeder (DIN 6885)
15	Yağ Kapağı	32	Rondela (DIN 127)	15	Oil Cover	32	Washer (DIN 127)	15	Ölabdeckung	32	Distanzscheibe (DIN 127)
16	Yağ Kapağı	33	Cıvata (DIN 933)	16	Oil Cover	33	Bolt (DIN 933)	16	Ölabdeckung	33	Verschrauben (DIN 933)
17	Segman (DIN 472)	34	Motor	17	Circlip (DIN 472)	34	Motor	17	Sicherungsring (DIN 472)	34	Motor

PD / PM C13

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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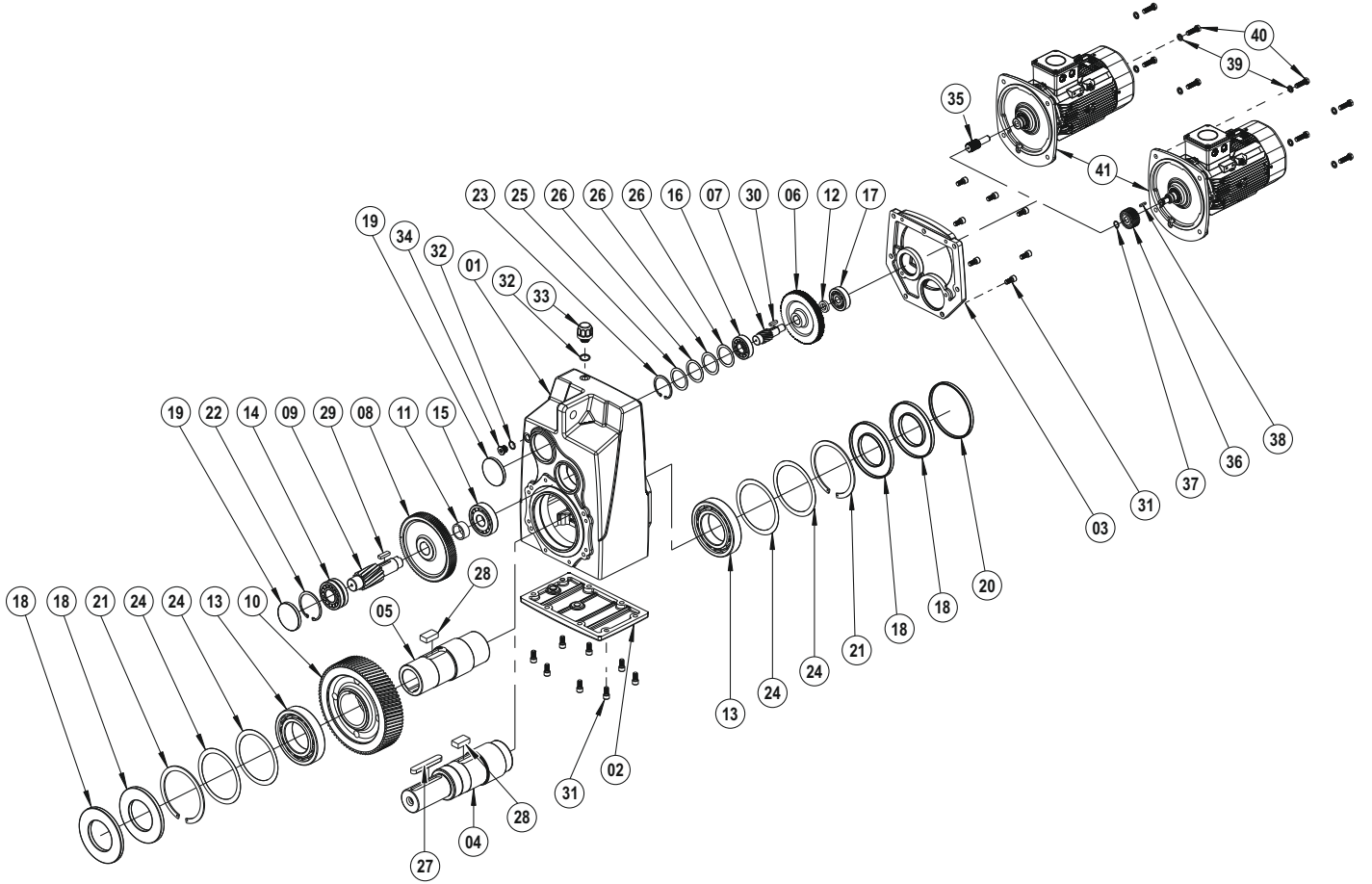
01	Gövde	21	Segman (DIN 472)	01	Gear Case	21	Circlip (DIN 472)	01	Gehäuse	21	Sicherungsring (DIN 472)
02	Kapak	22	Segman (DIN 472)	02	Cover	22	Circlip (DIN 472)	02	Abdeckung	22	Sicherungsring (DIN 472)
03	Ara Bağlantı Flanşı	23	Segman (DIN 471)	03	Intermediate Flange	23	Circlip (DIN 471)	03	Zwischenflansch	23	Sicherungsring (DIN 471)
04	Çıkış Mili	24	Layner (DIN 988)	04	Output Solid Shaft	24	Shim (DIN 988)	04	Abtriebswelle	24	Passscheibe (DIN 988)
05	Çıkış Şaftı	25	Layner (DIN 988)	05	Hollow Shaft	25	Shim (DIN 988)	05	Hohlwelle	25	Passscheibe (DIN 988)
06	Z2 Dişlisi	26	Kama (DIN 6885)	06	Driving Gear	26	Key (DIN 6885)	06	Antriebsrad	26	Passfeder (DIN 6885)
07	Z3 Dişlisi	27	Kama (DIN 6885)	07	Pinion Shaft	27	Key (DIN 6885)	07	Ritzelwelle	27	Passfeder (DIN 6885)
08	Z4 Dişlisi	28	Kama (DIN 6885)	08	Driven Gear	28	Key (DIN 6885)	08	Abtriebsrad	28	Passfeder (DIN 6885)
09	Z5 Dişlisi	29	Kama (DIN 6885)	09	Pinion Shaft	29	Key (DIN 6885)	09	Ritzelwelle	29	Passfeder (DIN 6885)
10	Z6 Dişlisi	30	Cıvata (DIN 912)	10	Driven Gear	30	Bolt (DIN 912)	10	Abtriebsrad	30	Verschrauben (DIN 912)
11	Rondela	31	Cıvata (DIN 933)	11	Washer	31	Bolt (DIN 933)	11	Distanzscheibe	31	Verschrauben (DIN 933)
12	Burç	32	Cıvata (DIN 912)	12	Spacer	32	Bolt (DIN 912)	12	Distanzbuchse	32	Verschrauben (DIN 912)
13	Burç	33	Rondela (DIN 7603)	13	Spacer	33	Washer (DIN 7603)	13	Distanzbuchse	33	Distanzscheibe (DIN 7603)
14	Rulman	34	Havalandırma Tapası	14	Bearing	34	Vent Plug	14	Kugellager	34	Entlüftungsstopfen
15	Rulman	35	Yağ Tapası (DIN 908)	15	Bearing	35	Oil Plug (DIN 908)	15	Kugellager	35	Ölstopfel (DIN 908)
16	Rulman	36	Z1 Dişlisi	16	Bearing	36	Driving Pinion	16	Kugellager	36	Antriebsritzel
17	Rulman	37	Z1 Dişlisi (Kamalı)	17	Bearing	37	Driving Pinion (With Key)	17	Kugellager	37	Antriebsritzel (mit Passfeder)
18	Yağ Keçesi	38	Segman (DIN 471)	18	Oil Seal	38	Circlip (DIN 471)	18	Öldichtung	38	Sicherungsring (DIN 471)
19	Yağ Kapağı	39	Kama (DIN 6885)	19	Oil Cover	39	Key (DIN 6885)	19	Ölabdeckung	39	Passfeder (DIN 6885)
20	Yağ Kapağı	40	Motor	20	Oil Cover	40	Motor	20	Ölabdeckung	40	Motor

PD / PM 63 ... 123

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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01 Gövde	22 Segman (DIN 472)	01 Gear Case	22 Circlip (DIN 472)	01 Gehäuse	22 Sicherungsring (DIN 472)
02 Kapak	23 Segman (DIN 472)	02 Cover	23 Circlip (DIN 472)	02 Abdeckung	23 Sicherungsring (DIN 472)
03 Ara Bağlantı Flanşı	24 Layner (DIN 988)	03 Intermediate Flange	24 Shim (DIN 988)	03 Zwischenflansch	24 Passscheibe (DIN 988)
04 Çıkış Mili	25 Layner (DIN 988)	04 Output Solid Shaft	25 Shim (DIN 988)	04 Abtriebswelle	25 Passscheibe (DIN 988)
05 Çıkış Şaftı	26 Layner (DIN 988)	05 Hollow Shaft	26 Shim (DIN 988)	05 Hohlwelle	26 Passscheibe (DIN 988)
06 Z2 Dişlisi	27 Kama (DIN 6885)	06 Driving Gear	27 Key (DIN 6885)	06 Antriebsrad	27 Passfeder (DIN 6885)
07 Z3 Dişlisi	28 Kama (DIN 6885)	07 Pinion Shaft	28 Key (DIN 6885)	07 Ritzelwelle	28 Passfeder (DIN 6885)
08 Z4 Dişlisi	29 Kama (DIN 6885)	08 Driven Gear	29 Key (DIN 6885)	08 Abtriebsrad	29 Passfeder (DIN 6885)
09 Z5 Dişlisi	30 Kama (DIN 6885)	09 Pinion Shaft	30 Key (DIN 6885)	09 Ritzelwelle	29 Passfeder (DIN 6885)
10 Z6 Dişlisi	31 Cıvata (DIN 912)	10 Driven Gear	31 Bolt (DIN 912)	10 Abtriebsrad	31 Verschrauben (DIN 912)
11 Burç	32 Rondela (DIN 7603)	11 Spacer	32 Washer (DIN 7603)	11 Distanzbuchse	32 Distanzscheibe (DIN 7603)
12 Burç	33 Havalandırma Tapası	12 Spacer	33 Vent Plug	12 Distanzbuchse	33 Entlüftungstopfen
13 Rulman	34 Yağ Tapası (DIN 908)	13 Bearing	34 Oil Plug (DIN 908)	13 Kugellager	34 Ölstopfel (DIN 908)
14 Rulman	35 Z1 Dişlisi	14 Bearing	35 Driving Pinion	14 Kugellager	35 Antriebsritzel
15 Rulman	36 Z1 Dişlisi (Kamalı)	15 Bearing	36 Driving Pinion (With Key)	15 Kugellager	36 Antriebsritzel (mit Passfeder)
16 Rulman	37 Segman (DIN 471)	16 Bearing	37 Circlip (DIN 471)	16 Kugellager	37 Sicherungsring (DIN 471)
17 Rulman	38 Kama (DIN 6885)	17 Bearing	38 Key (DIN 6885)	17 Kugellager	38 Passfeder (DIN 6885)
18 Yağ Keçesi	39 Rondela (DIN 127)	18 Oil Seal	39 Washer (DIN 127)	18 Öldichtung	39 Distanzscheibe (DIN 127)
19 Yağ Kapağı	40 Cıvata (DIN 933)	19 Oil Cover	40 Bolt (DIN 933)	19 Ölabdeckung	40 Verschrauben (DIN 933)
20 Yağ Kapağı	41 Motor	20 Oil Cover	41 Motor	20 Ölabdeckung	41 Motor
21 Segman (DIN 472)		21 Circlip (DIN 472)		21 Sicherungsring (DIN 472)	

TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

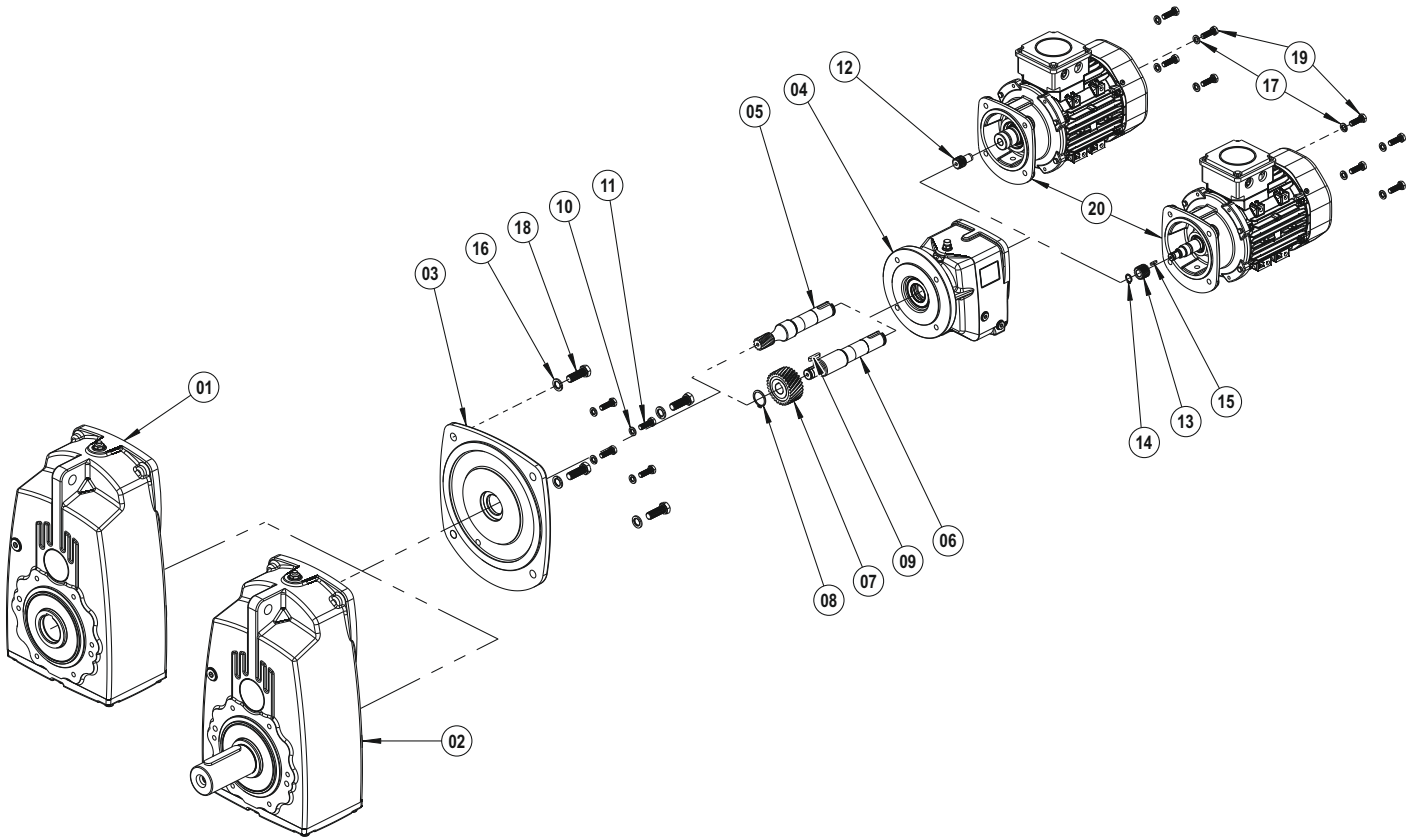
ALLGEMEINE STUCKLISTE

PD / PM 12/02 ... 103/52

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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- 01 PD Kit
- 02 PM Kit
- 03 Ara Bağlantı Flanşı
- 04 PF Kit
- 05 Ara Mil (Dişlili)
- 06 Ara Mil (Kamalı)
- 07 Ara Dişli (Kamalı)
- 08 Segman (DIN 471)
- 09 Kama (DIN 6885)
- 10 Rondela (DIN 127)
- 11 Cıvata (DIN 933)
- 12 Z1 Dişlisi
- 13 Z1 Dişlisi (Kamalı)
- 14 Segman (DIN 471)
- 15 Kama (DIN 6885)
- 16 Rondela (DIN 127)
- 17 Rondela (DIN 127)
- 18 Cıvata (DIN 933)
- 19 Cıvata (DIN 933)
- 20 Motor

- 01 PD Kit
- 02 PM Kit
- 03 Intermediate Flange
- 04 PF Kit
- 05 Intermediate Shaft (With Gear)
- 06 Intermediate Shaft (With Key)
- 07 Intermediate Gear (With Key)
- 08 Circlip (DIN 471)
- 09 Key (DIN 6885)
- 10 Washer (DIN 127)
- 11 Bolt (DIN 933)
- 12 Driving Pinion
- 13 Driving Pinion (With Key)
- 14 Circlip (DIN 471)
- 15 Key (DIN 6885)
- 16 Washer (DIN 127)
- 17 Washer (DIN 127)
- 18 Bolt (DIN 933)
- 19 Bolt (DIN 933)
- 20 Motor

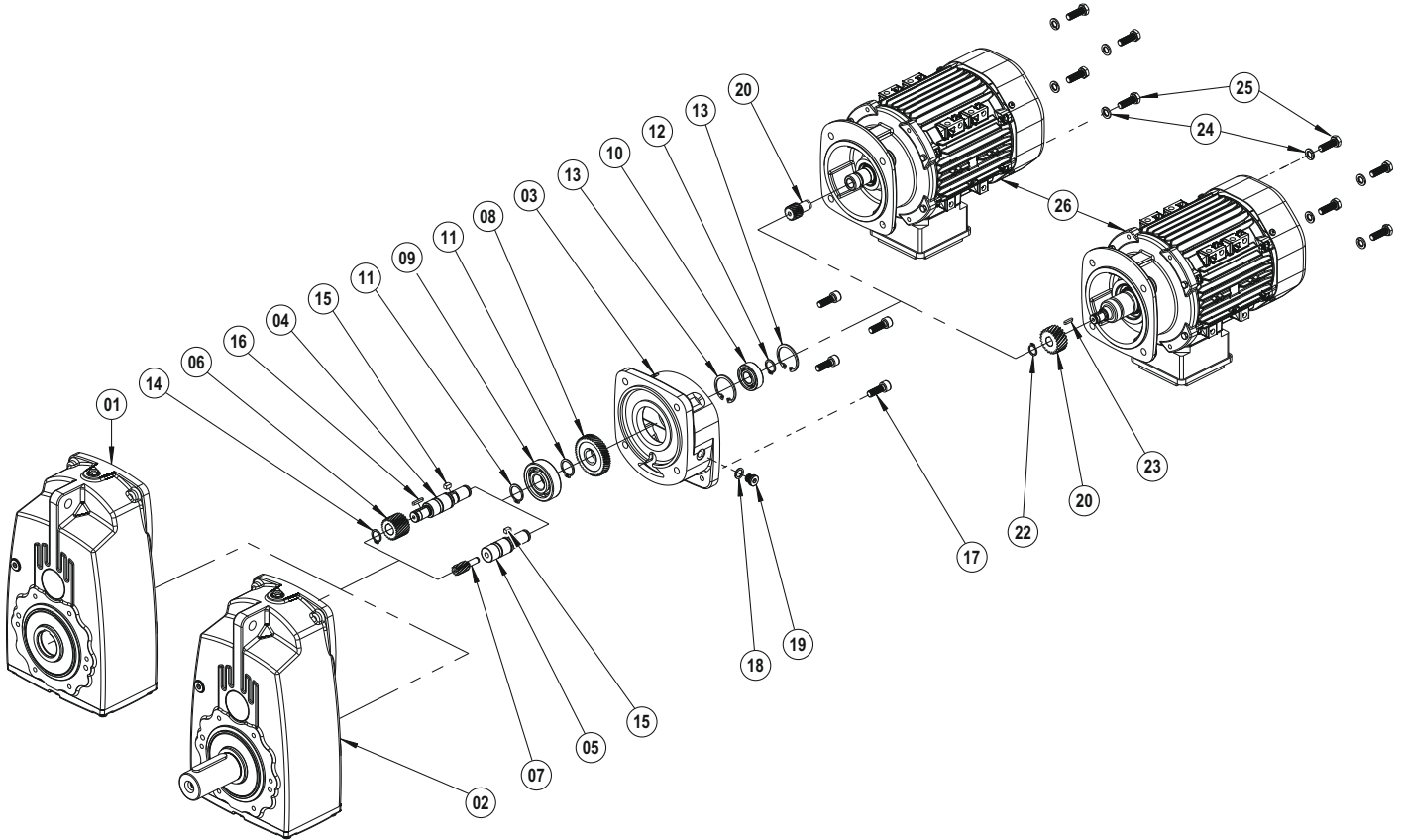
- 01 PD Bausatz
- 02 PM Bausatz
- 03 Zwischenflansch
- 04 PF Bausatz
- 05 Übertragungswelle (mit Zahnrad)
- 06 Übertragungswelle (mit Passfeder)
- 07 Übertragungswelle (mit Passfeder)
- 08 Sicherungsring (DIN 471)
- 09 Passfeder (DIN 6885)
- 10 Distanzscheibe (DIN 127)
- 11 Verschrauben (DIN 933)
- 12 Antriebsritzel
- 13 Antriebsritzel (mit Passfeder)
- 14 Sicherungsring (DIN 471)
- 15 Passfeder (DIN 6885)
- 16 Distanzscheibe (DIN 127)
- 17 Distanzscheibe (DIN 127)
- 18 Verschrauben (DIN 933)
- 19 Verschrauben (DIN 933)
- 20 Motor

PD / PM 13 ... 53 İndirgeyici Gövde / Reduction Gear Case / Anbauehäuse

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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- 01 PD Kit
- 02 PM Kit
- 03 İndirgeyici Gövde
- 04 Ara Mil (Kamalı)
- 05 Ara Mil
- 06 Ara Dişli (Kamalı)
- 07 Ara Dişli
- 08 Z2 Dişlisi
- 09 Rulman
- 10 Rulman
- 11 Segman (DIN 471)
- 12 Segman (DIN 471)
- 13 Segman (DIN 472)
- 14 Segman (DIN 471)
- 15 Kama (DIN 6885)
- 16 Kama (DIN 6885)
- 17 Cıvata (DIN 912)
- 18 Rondela (DIN 7603)
- 19 Yağ Tapası (DIN 908)
- 20 Z1 Dişlisi (Kamalı)
- 21 Z1 Dişlisi
- 22 Segman (DIN 471)
- 23 Kama (DIN 6885)
- 24 Rondela (DIN 127)
- 25 Cıvata (DIN 933)
- 26 Motor

- 01 PD Kit
- 02 PM Kit
- 03 Reduction Gear Case
- 04 Intermediate Shaft (With Key)
- 05 Intermediate Shaft
- 06 Intermediate Gear (With Key)
- 07 Intermediate Gear
- 08 Driving Gear
- 09 Bearing
- 10 Bearing
- 11 Circlip (DIN 471)
- 12 Circlip (DIN 471)
- 13 Circlip (DIN 472)
- 14 Circlip (DIN 471)
- 15 Key (DIN 6885)
- 16 Key (DIN 6885)
- 17 Bolt (DIN 912)
- 18 Washer (DIN 7603)
- 19 Oil Plug (DIN 908)
- 20 Driving Pinion (With Key)
- 21 Driving Pinion
- 22 Circlip (DIN 471)
- 23 Key (DIN 6885)
- 24 Washer (DIN 127)
- 25 Bolt (DIN 933)
- 26 Motor

- 01 PD Bausatz
- 02 PM Bausatz
- 03 Anbauehäuse
- 04 Übertragungswelle (mit Passfeder)
- 05 Übertragungswelle
- 06 Zwischengetriebe (mit Passfeder)
- 07 Zwischengetriebe
- 08 Antriebsrad
- 09 Kugellager
- 10 Kugellager
- 11 Sicherungsring (DIN 471)
- 12 Sicherungsring (DIN 471)
- 13 Sicherungsring (DIN 472)
- 14 Sicherungsring (DIN 471)
- 15 Passfeder (DIN 6885)
- 16 Passfeder (DIN 6885)
- 17 Verschrauben (DIN 912)
- 18 Distanzscheibe (DIN 7603)
- 19 Ölstöpsel (DIN 908)
- 20 Antriebsritzel (mit Passfeder)
- 21 Antriebsritzel
- 22 Sicherungsring (DIN 471)
- 23 Passfeder (DIN 6885)
- 24 Distanzscheibe (DIN 7603)
- 25 Verschrauben (DIN 933)
- 26 Motor

TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

ALLGEMEINE STUCKLISTE

PD / PM A02

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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**Çektirme (Ç)
Koruma Kapağı (KK)**

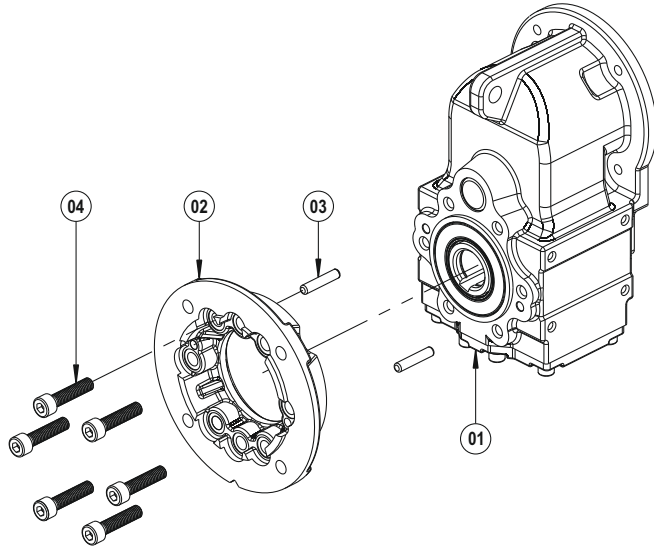
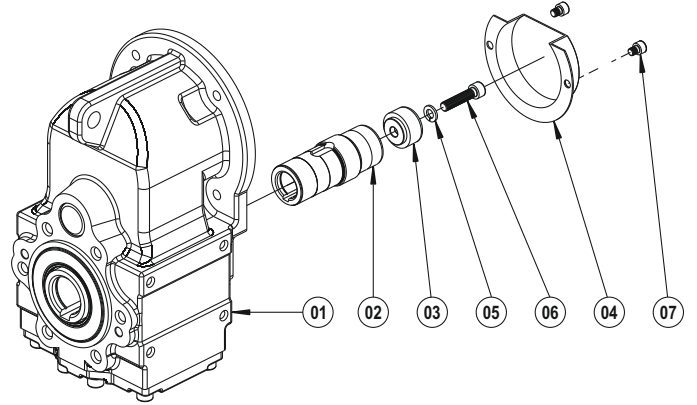
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Rondela (DIN 127)
- 06 Cıvata (DIN 912)
- 07 Cıvata (DIN 912)

**Puller (Ç)
Protection Cover (KK)**

- PD Kit
- Hollow Shaft
- Puller Washer
- Protection Cover
- Washer (DIN 127)
- Bolt (DIN 912)
- Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzkappe (KK)**

- PD Bausatz
- Hohlwelle
- Abziehscheibe
- Schutzhülle
- Distanzscheibe (DIN 127)
- Verschrauben (DIN 912)
- Verschrauben (DIN 912)



B5 Çıkış Flanşı

- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Pim
- 04 Cıvata (DIN 912)

B5 Output Flange

- PD Kit
- B5 Output Flange
- Pin
- Bolt (DIN 912)

B5 Abtriebsflansch

- PD Bausatz
- B5 Abtriebsflansch
- Bolzen
- Verschrauben (DIN 912)

Lastik Takoz (LT)

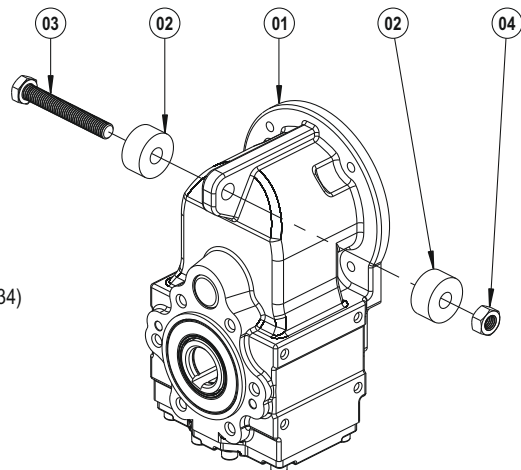
- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- PD Kit
- Rubber Buffer
- Bolt (DIN 933)
- Nut (DIN 934)

Gummipuffer (LT)

- PD Bausatz
- Gummipuffer
- Verschrauben (DIN 933)
- Schraubenmutter (DIN 934)



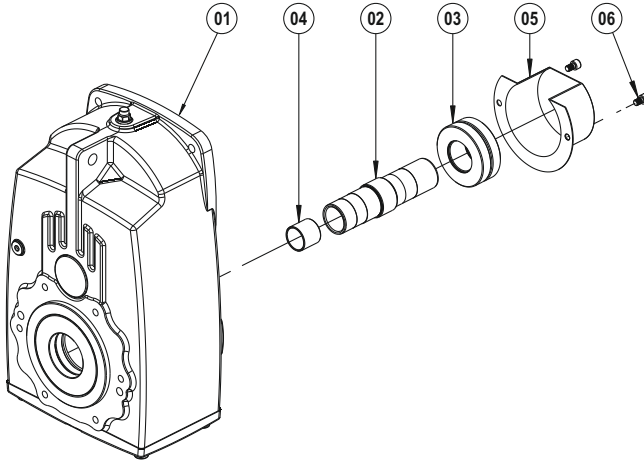
PD / PM 12 ... 52

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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**Konik Sıkırma (KS)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

**Shrink Disk (KS)
Protection Cover (KK)**

- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

**Schrumpfscheibe (KS)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibendeckel
- 06 Verschrauben (DIN 912)

**Çektirme (Ç)
Koruma Kapağı (KK)**

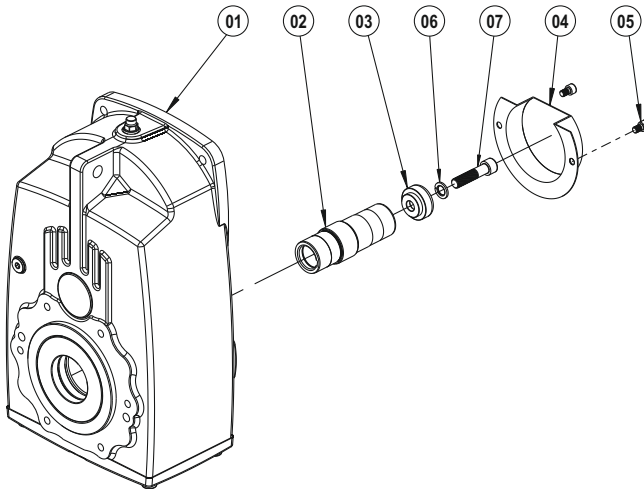
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)

**Puller (Ç)
Protection Cover (KK)**

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)



TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

ALLGEMEINE STUCKLISTE

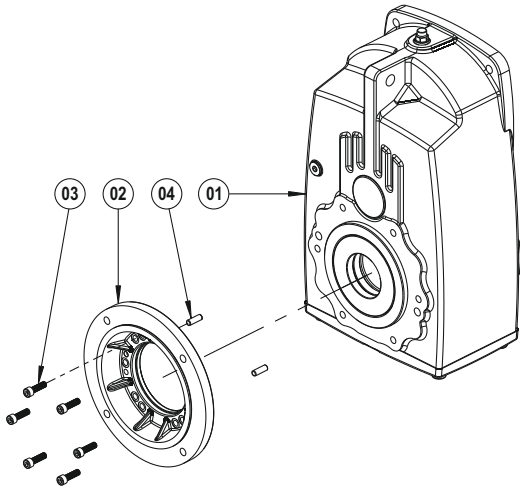
PD / PM 12 ... 52

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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B5 Çıkış Flanşı

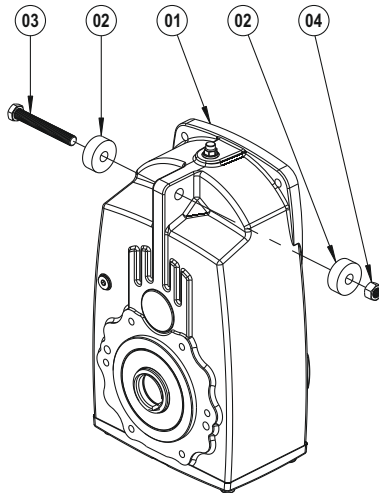
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen



Lastik Takoz (LT)

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

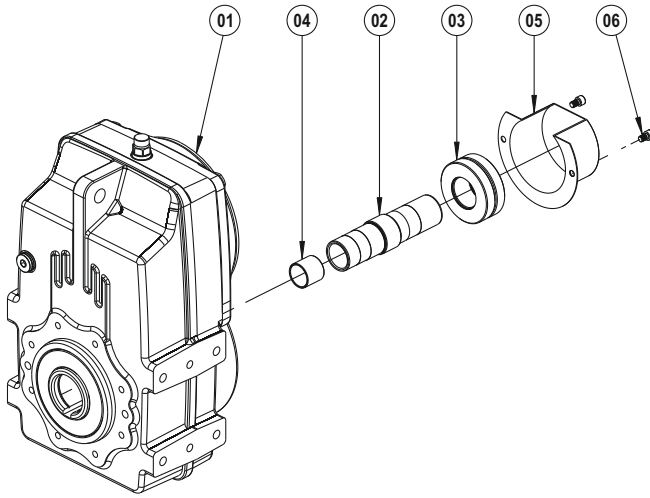
PD / PM B02

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

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**Konik Sıkırma (KS)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

**Shrink Disk (KS)
Protection Cover (KK)**

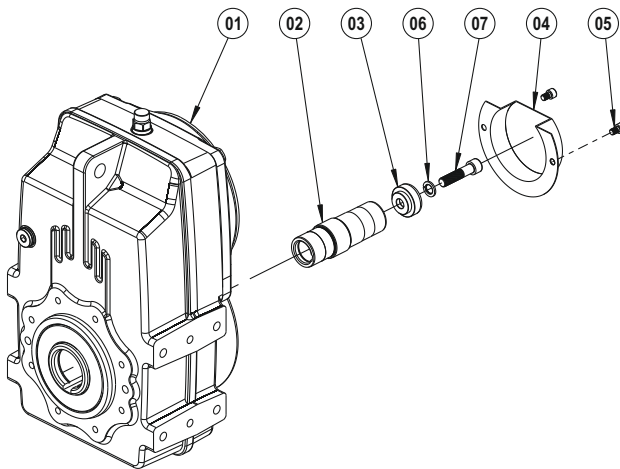
- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

**Schrumpfscheibe (KS)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibedeckel
- 06 Verschrauben (DIN 912)

**Çektirme (Ç)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)


**Puller (Ç)
Protection Cover (KK)**

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)

TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

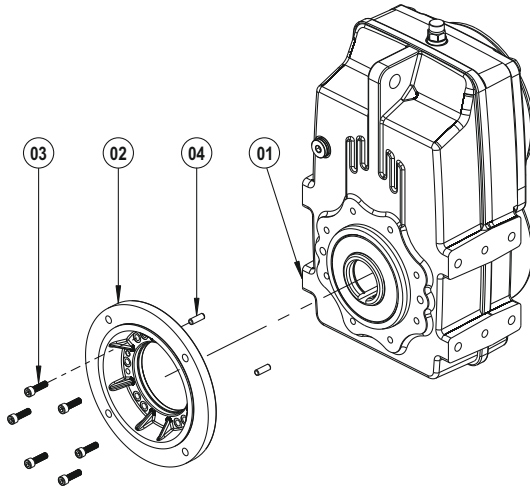
ALLGEMEINE STUCKLISTE

PD / PM B02**Aksesuarlar / Accessories / Zubehör**

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.

**B5 Çıkış Flanşı**

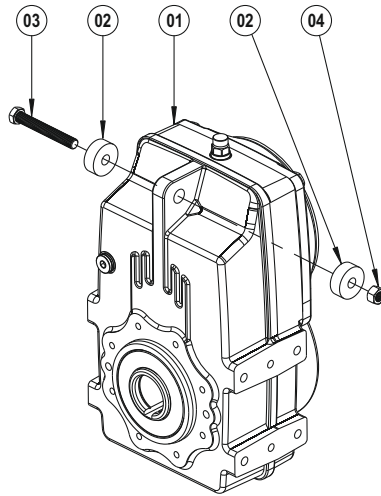
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen

**Lastik Takoz (LT)**

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

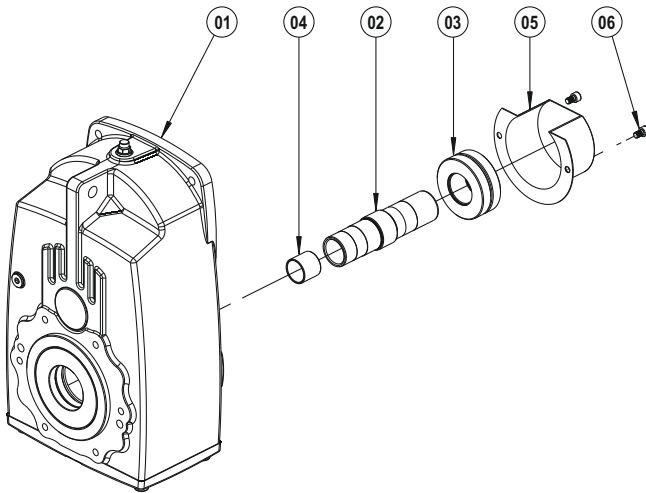
- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

PD / PM 62 ... 112
Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.


**Konik Sıkırma (KS)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

**Shrink Disk (KS)
Protection Cover (KK)**

- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

**Schrumpfscheibe (KS)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibedeckel
- 06 Verschrauben (DIN 912)

**Çektirme (Ç)
Koruma Kapağı (KK)**

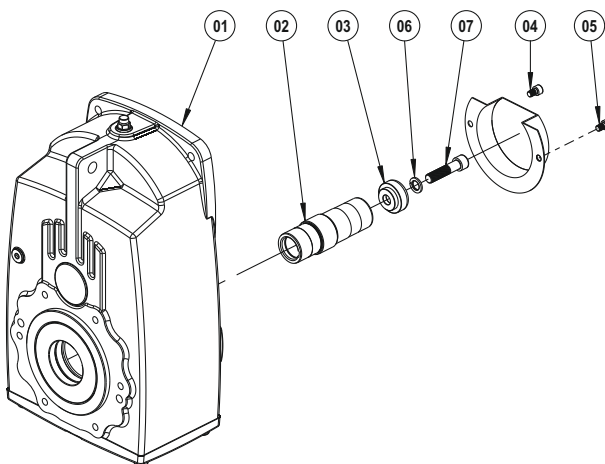
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)

**Puller (Ç)
Protection Cover (KK)**

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)



TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

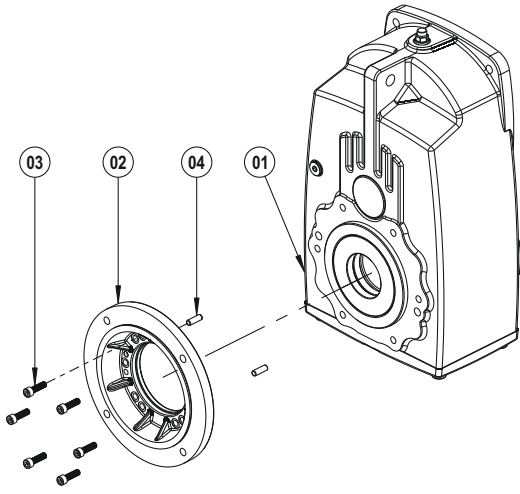
ALLGEMEINE STUCKLISTE

PD / PM 62 ... 112**Aksesuarlar / Accessories / Zubehör**

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.

**B5 Çıkış Flanşı**

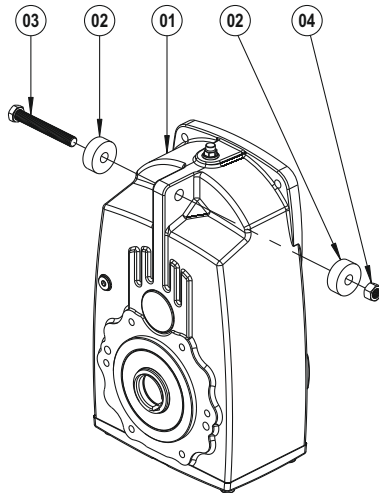
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen

**Lastik Takoz (LT)**

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

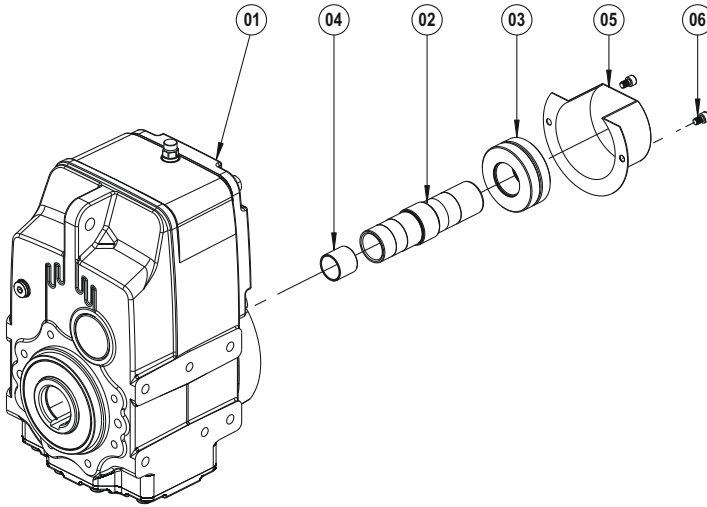
PD / PM C13

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.


**Konik Sıkırma (KS)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

**Shrink Disk (KS)
Protection Cover (KK)**

- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

**Schrumpfscheibe (KS)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibedeckel
- 06 Verschrauben (DIN 912)

**Çektirme (Ç)
Koruma Kapağı (KK)**

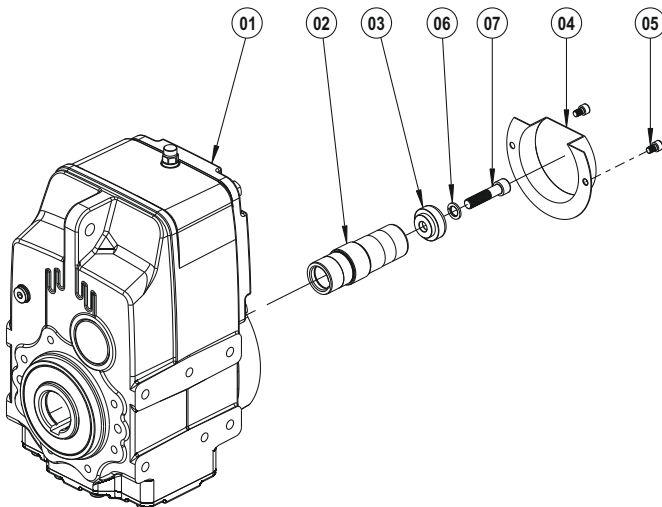
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)

**Puller (Ç)
Protection Cover (KK)**

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)



TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

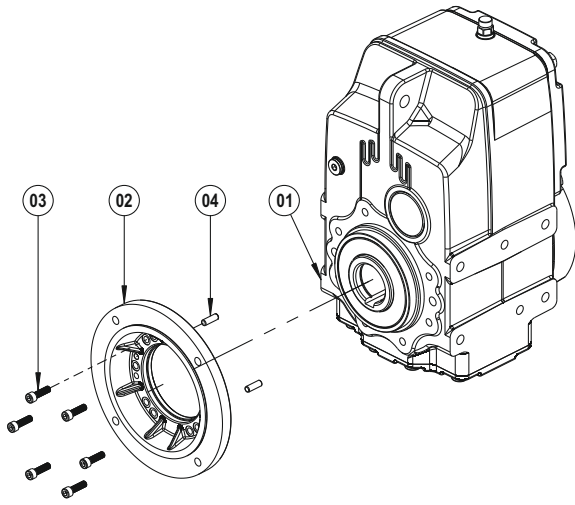
ALLGEMEINE STUCKLISTE

PD / PM C13**Aksesuarlar / Accessories / Zubehör**

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.

**B5 Çıkış Flanşı**

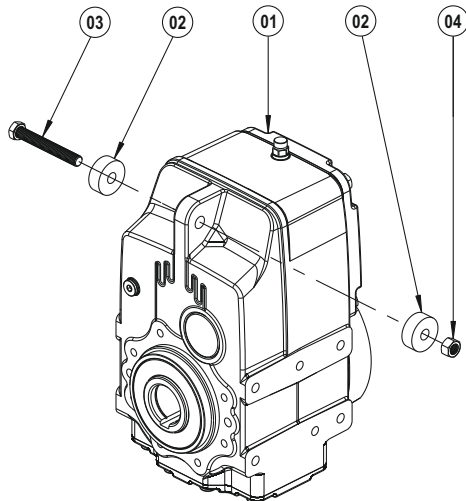
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen

**Lastik Takoz (LT)**

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

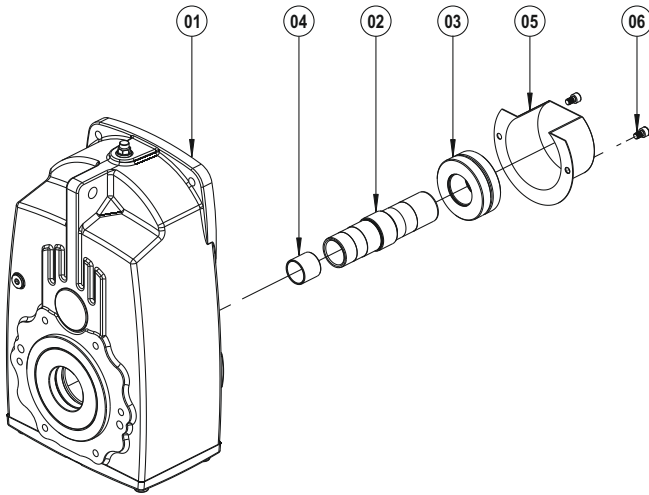
PD / PM 63 ... 123

Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.


**Konik Sıkırma (KS)
Koruma Kapağı (KK)**

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

**Shrink Disk (KS)
Protection Cover (KK)**

- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

**Schrumpfscheibe (KS)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibedeckel
- 06 Verschrauben (DIN 912)

**Çektirme (Ç)
Koruma Kapağı (KK)**

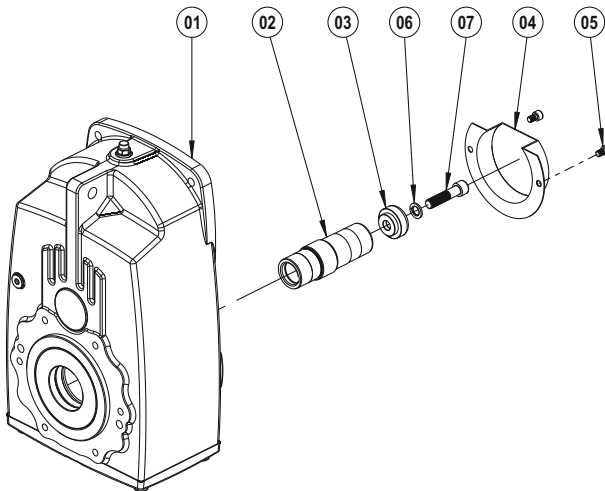
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)

**Puller (Ç)
Protection Cover (KK)**

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

**Befestigungsbausatz (Ç)
Schutzhülle (KK)**

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)



TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

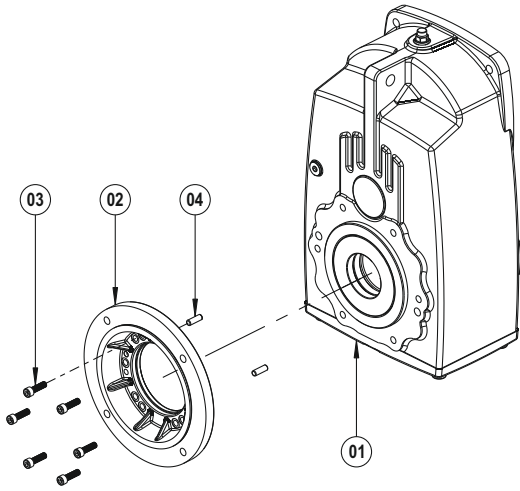
ALLGEMEINE STUCKLISTE

PD / PM 63 ... 123**Aksesuarlar / Accessories / Zubehör**

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

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**B5 Çıkış Flanşı**

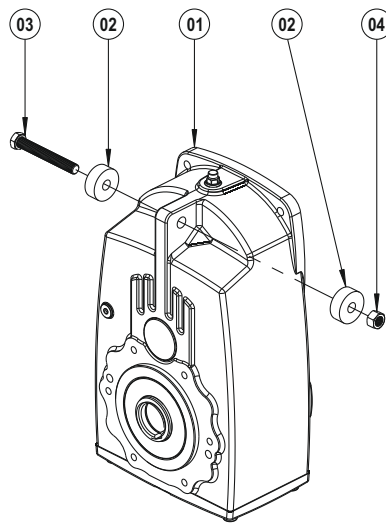
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen

**Lastik Takoz (LT)**

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

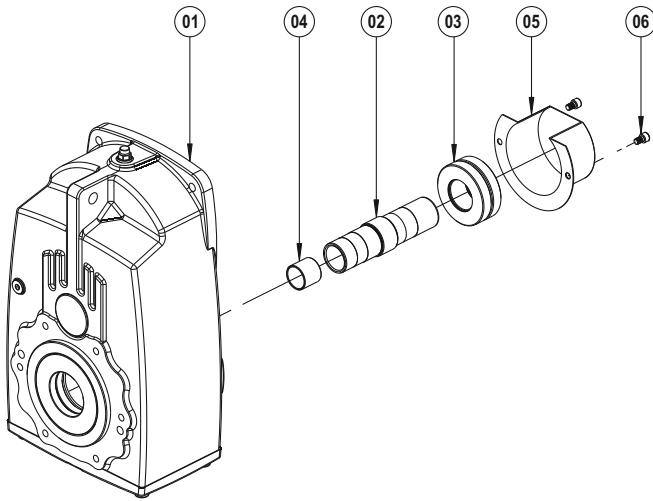
- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

PD / PM 12/02 ... 103/52
Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.


Konik Sıkırma (KS)
Koruma Kapağı (KK)

- 01 PD Kit
- 02 Konik Sıkırma Şaftı
- 03 Konik Sıkırma
- 04 Konik Sıkırma Burcu
- 05 Konik Sıkırma Koruma Kapağı
- 06 Cıvata (DIN 912)

Shrink Disk (KS)
Protection Cover (KK)

- 01 PD Kit
- 02 Shrink Disk Hollow Shaft
- 03 Shrink Disk
- 04 Shrink Disk Bushing
- 05 Shrink Disk Cover
- 06 Bolt (DIN 912)

Schrumpfscheibe (KS)
Schutzhülle (KK)

- 01 PD Bausatz
- 02 Schrumpfscheibe Hohlwelle
- 03 Schrumpfscheibe
- 04 Schrumpfscheibenbuchse
- 05 Schrumpfscheibedeckel
- 06 Verschrauben (DIN 912)

Çektirme (Ç)
Koruma Kapağı (KK)

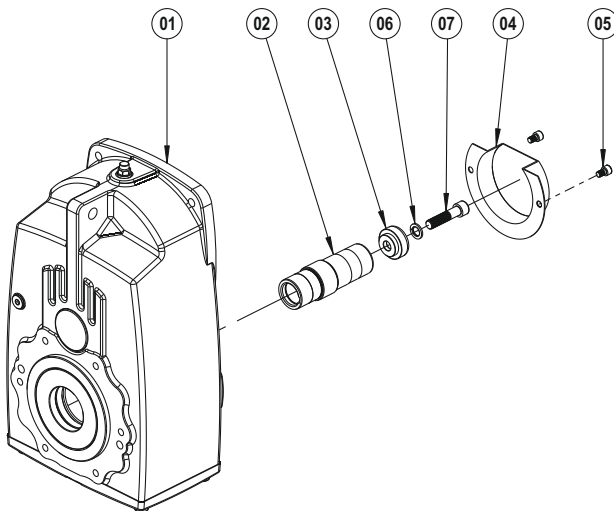
- 01 PD Kit
- 02 Çıkış Şaftı
- 03 Çektirme Rondelası
- 04 Şaft Koruma Kapağı
- 05 Cıvata (DIN 912)
- 06 Rondela (DIN 127)
- 07 Cıvata (DIN 912)

Puller (Ç)
Protection Cover (KK)

- 01 PD Kit
- 02 Hollow Shaft
- 03 Puller Washer
- 04 Protection Cover
- 05 Bolt (DIN 912)
- 06 Washer (DIN 127)
- 07 Bolt (DIN 912)

Befestigungsbausatz (Ç)
Schutzhülle (KK)

- 01 PD Bausatz
- 02 Hohlwelle
- 03 Abziehscheibe
- 04 Schutzhülle
- 05 Verschrauben (DIN 912)
- 06 Distanzscheibe (DIN 127)
- 07 Verschrauben (DIN 912)



TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

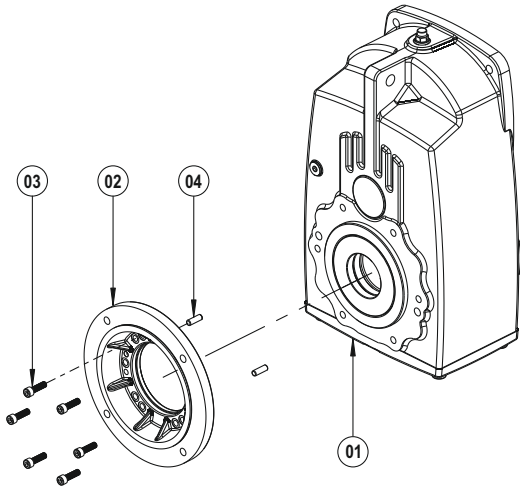
ALLGEMEINE STUCKLISTE

PD / PM 12/02 ... 103/52
Aksesuarlar / Accessories / Zubehör

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

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**B5 Çıkış Flanşı**

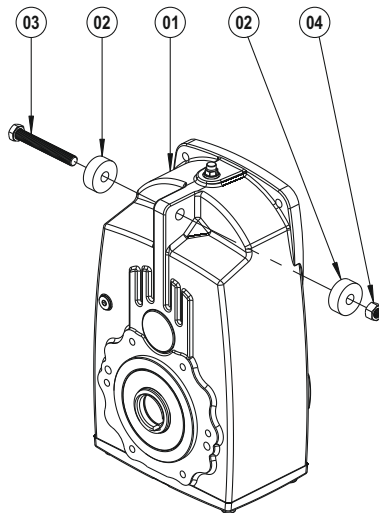
- 01 PD Kit
- 02 B5 Çıkış Flanşı
- 03 Cıvata (DIN 933)
- 04 Pim

B5 Output Flange

- 01 PD Kit
- 02 B5 Output Flange
- 03 Bolt (DIN 933)
- 04 Pin

B5 Abtriebsflansch

- 01 PD Bausatz
- 02 B5 Abtriebsflansch
- 03 Verschrauben (DIN 933)
- 04 Bolzen

**Lastik Takoz (LT)**

- 01 PD Kit
- 02 Lastik Takoz
- 03 Cıvata (DIN 933)
- 04 Somun (DIN 934)

Rubber Buffer (LT)

- 01 PD Kit
- 02 Rubber Buffer
- 03 Bolt (DIN 933)
- 04 Nut (DIN 934)

Gummipuffer (LT)

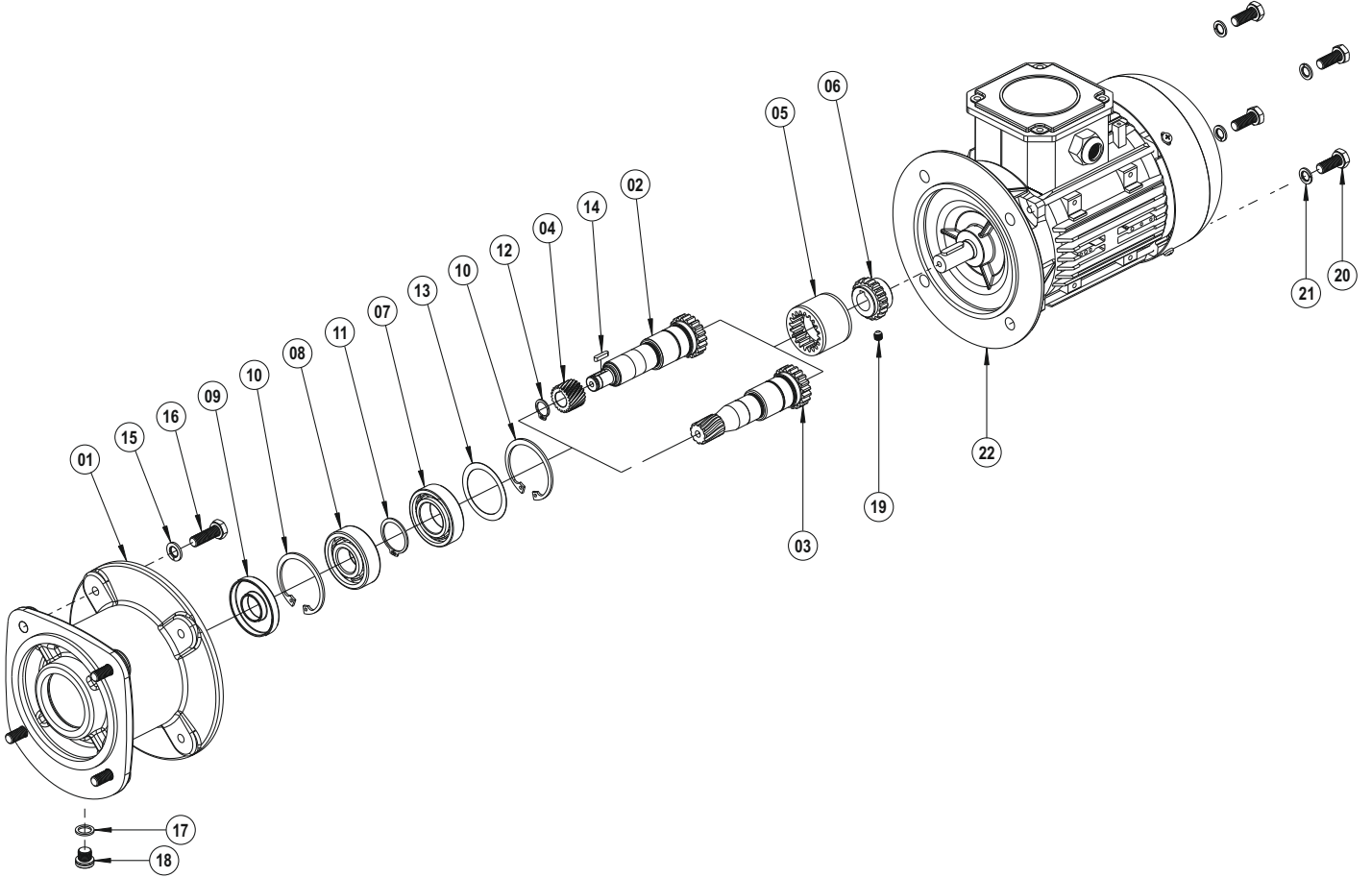
- 01 PD Bausatz
- 02 Gummipuffer
- 03 Verschrauben (DIN 933)
- 04 Schraubenmutter (DIN 934)

IEC 63 ... 112

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 IEC Mili (Kamalı)
- 03 IEC Mili (Dişlilili)
- 04 Z1 Dişlisi (Kamalı)
- 05 Plastik Kaplin
- 06 Metal Kaplin
- 07 Rulman
- 08 Rulman
- 09 Yağ Keçesi
- 10 Segman (DIN 472)
- 11 Segman (DIN 471)
- 12 Segman (DIN 471)
- 13 Layner (DIN 988)
- 14 Kama (DIN 6885)
- 15 Rondela (DIN 127)
- 16 Cıvata (DIN 933)
- 17 Rondela (DIN 7603)
- 18 Yağ Tapası (DIN 908)
- 19 Cıvata (DIN 916)
- 20 Cıvata (DIN 933)
- 21 Rondela (DIN 127)
- 22 Motor

- 01 Gear Case
- 02 IEC Shaft (With Key)
- 03 IEC Shaft (With Gear)
- 04 Driving Pinion (With Key)
- 05 Plastic Coupling
- 06 Metal Coupling
- 07 Bearing
- 08 Bearing
- 09 Oil Seal
- 10 Circlip (DIN 472)
- 11 Circlip (DIN 471)
- 12 Circlip (DIN 471)
- 13 Shim (DIN 988)
- 14 Key (DIN 6885)
- 15 Washer (DIN 127)
- 16 Bolt (DIN 933)
- 17 Washer (DIN 7603)
- 18 Oil Plug (DIN 908)
- 19 Bolt (DIN 916)
- 20 Bolt (DIN 933)
- 21 Washer (DIN 127)
- 22 Motor

- 01 Gehäuse
- 02 IEC Welle (mit Passfeder)
- 03 IEC Welle (mit Zahnrad)
- 04 Antriebsritzel (Mit Passfeder)
- 05 Kupplung (Plastik)
- 06 Kupplung (Metall)
- 07 Kugellager
- 08 Kugellager
- 09 Öldichtung
- 10 Sicherungsring (DIN 472)
- 11 Sicherungsring (DIN 471)
- 12 Sicherungsring (DIN 471)
- 13 Passscheibe (DIN 988)
- 14 Passfeder (DIN 6885)
- 15 Distanzscheibe (DIN 127)
- 16 Verschrauben (DIN 933)
- 17 Distanzscheibe (DIN 7603)
- 18 Ölstöpsel (DIN 908)
- 19 Verschrauben (DIN 916)
- 20 Verschrauben (DIN 933)
- 21 Distanzscheibe (DIN 127)
- 22 Motor

TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

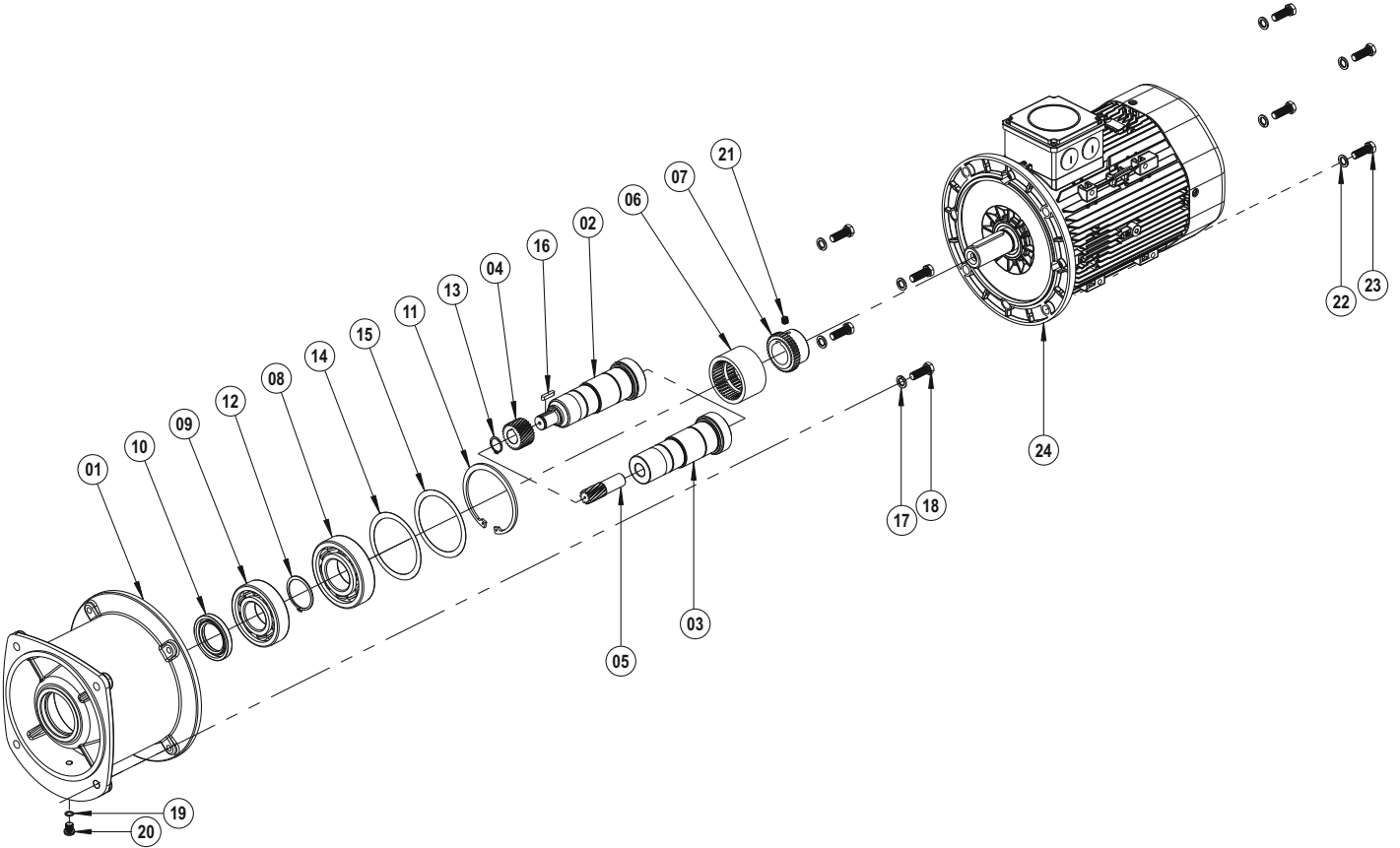
ALLGEMEINE STUCKLISTE

IEC 132 ... 180

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 IEC Mili (Kamalı)
- 03 IEC Mili
- 04 Z1 Dişlisi (Kamalı)
- 05 Z1 Dişlisi
- 06 Plastik Kaplin
- 07 Metal Kaplin
- 08 Rulman
- 09 Rulman
- 10 Yağ Keçesi
- 11 Segman (DIN 472)
- 12 Segman (DIN 471)
- 13 Segman (DIN 471)
- 14 Layner (DIN 988)
- 15 Layner (DIN 988)
- 16 Kama (DIN 6885)
- 17 Rondela (DIN 127)
- 18 Cıvata (DIN 933)
- 19 Rondela (DIN 7603)
- 20 Yağ Tapası (DIN 908)
- 21 Cıvata (DIN 916)
- 22 Rondela (DIN 127)
- 23 Cıvata (DIN 933)
- 24 Motor

- 01 Gear Case
- 02 IEC Shaft (With Key)
- 03 IEC Shaft
- 04 Driving Pinion (With Key)
- 05 Driving Pinion
- 06 Plastic Coupling
- 07 Metal Coupling
- 08 Bearing
- 09 Bearing
- 10 Oil Seal
- 11 Circlip (DIN 472)
- 12 Circlip (DIN 471)
- 13 Circlip (DIN 471)
- 14 Shim (DIN 988)
- 15 Shim (DIN 988)
- 16 Key (DIN 6885)
- 17 Washer (DIN 127)
- 18 Bolt (DIN 933)
- 19 Washer (DIN 7603)
- 20 Oil Plug (DIN 908)
- 21 Bolt (DIN 916)
- 22 Washer (DIN 127)
- 23 Bolt (DIN 933)
- 24 Motor

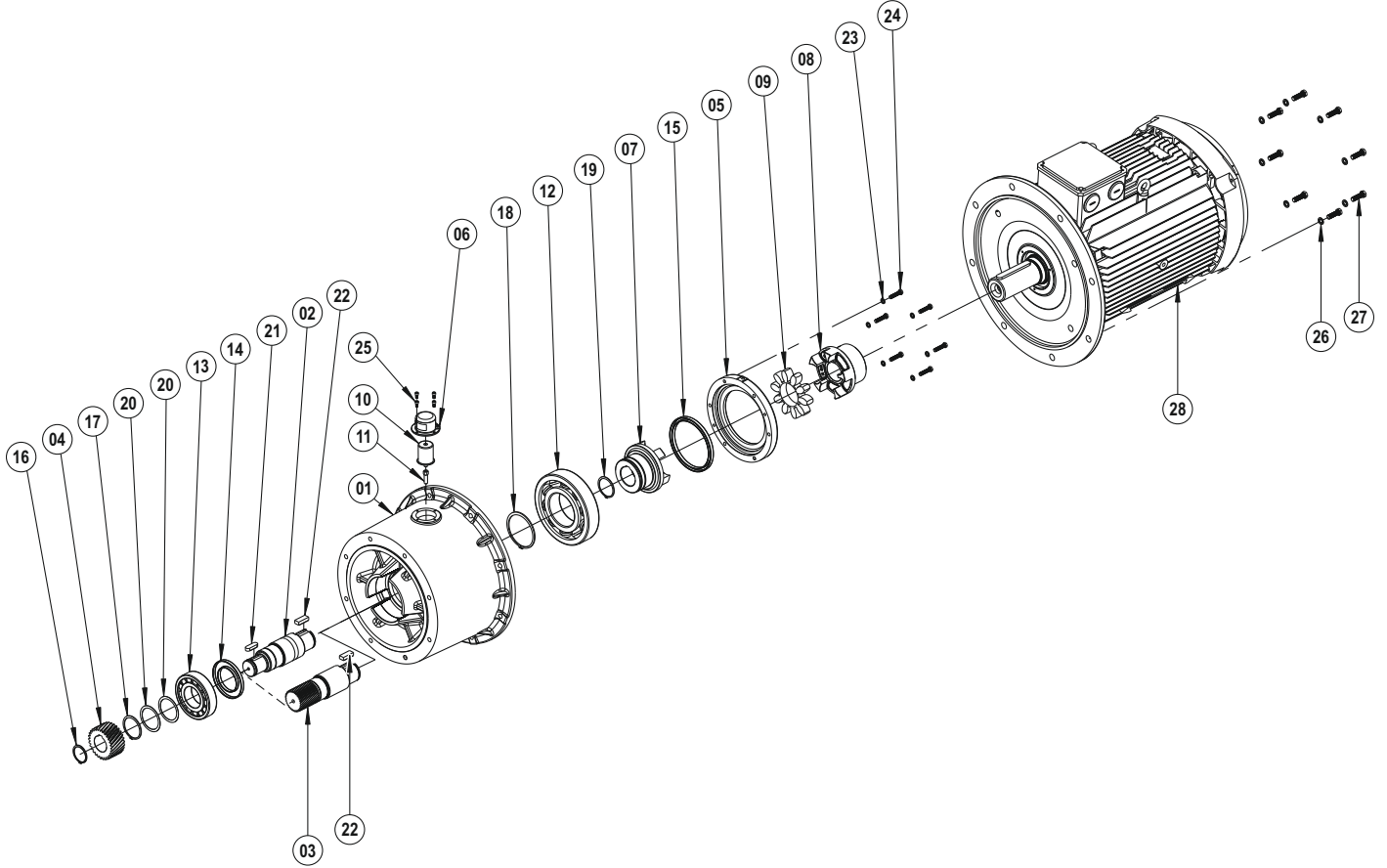
- 01 Gehäuse
- 02 IEC Welle (mit Passfeder)
- 03 IEC Welle
- 04 Antriebsritzel (Mit Passfeder)
- 05 Antriebsritzel
- 06 Kupplung (Plastik)
- 07 Kupplung (Metall)
- 08 Kugellager
- 09 Kugellager
- 10 Öldichtung
- 11 Sicherungsring (DIN 472)
- 12 Sicherungsring (DIN 471)
- 13 Sicherungsring (DIN 471)
- 14 Passscheibe (DIN 988)
- 15 Passscheibe (DIN 988)
- 16 Passfeder (DIN 6885)
- 17 Distanzscheibe (DIN 127)
- 18 Verschrauben (DIN 933)
- 19 Distanzscheibe (DIN 7603)
- 20 Ölstopfel (DIN 908)
- 21 Verschrauben (DIN 933)
- 22 Distanzscheibe (DIN 127)
- 23 Verschrauben (DIN 933)
- 24 Motor

IEC 160 ... 315

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 IEC Mili (Kamalı)
- 03 IEC Mili (Dişli)
- 04 Z1 Dişlisi (Kamalı)
- 05 Rulman Flanşı
- 06 Yağlama Kapağı
- 07 Kaplin (Redüktör Tarafı)
- 08 Kaplin (Motor Tarafı)
- 09 Spider
- 10 Otomatik Yağlayıcı Tüpü
- 11 Otomatik Yağlayıcı Adaptörü
- 12 Rulman
- 13 Rulman
- 14 Yağ Keçesi
- 15 Yağ Keçesi
- 16 Segman (DIN 471)
- 17 Segman (DIN 471)
- 18 Segman (DIN 471)
- 19 Segman (DIN 471)
- 20 Layner (DIN 988)
- 21 Kama (DIN 6885)
- 22 Kama (DIN 6885)
- 23 Rondela (DIN 127)
- 24 Cıvata (DIN 933)
- 25 Cıvata (DIN 912)
- 26 Rondela (DIN 127)
- 27 Cıvata (DIN 933)
- 28 Motor

- 01 Gear Case
- 02 IEC Shaft (With Key)
- 03 IEC Shaft (With Gear)
- 04 Driving Pinion (With Key)
- 05 Bearing Flange
- 06 Lubrication Cover
- 07 Coupling (Gearbox Side)
- 08 Coupling (Motor Side)
- 09 Spider
- 10 Automatic Lubricator
- 11 Automatic Lubricator Adapter
- 12 Bearing
- 13 Bearing
- 14 Oil Seal
- 15 Oil Seal
- 16 Circlip (DIN 471)
- 17 Circlip (DIN 471)
- 18 Circlip (DIN 471)
- 19 Circlip (DIN 471)
- 20 Shim (DIN 988)
- 21 Key (DIN 6885)
- 22 Key (DIN 6885)
- 23 Washer (DIN 127)
- 24 Bolt (DIN 933)
- 25 Bolt (DIN 912)
- 26 Washer (DIN 127)
- 27 Bolt (DIN 933)
- 28 Motor

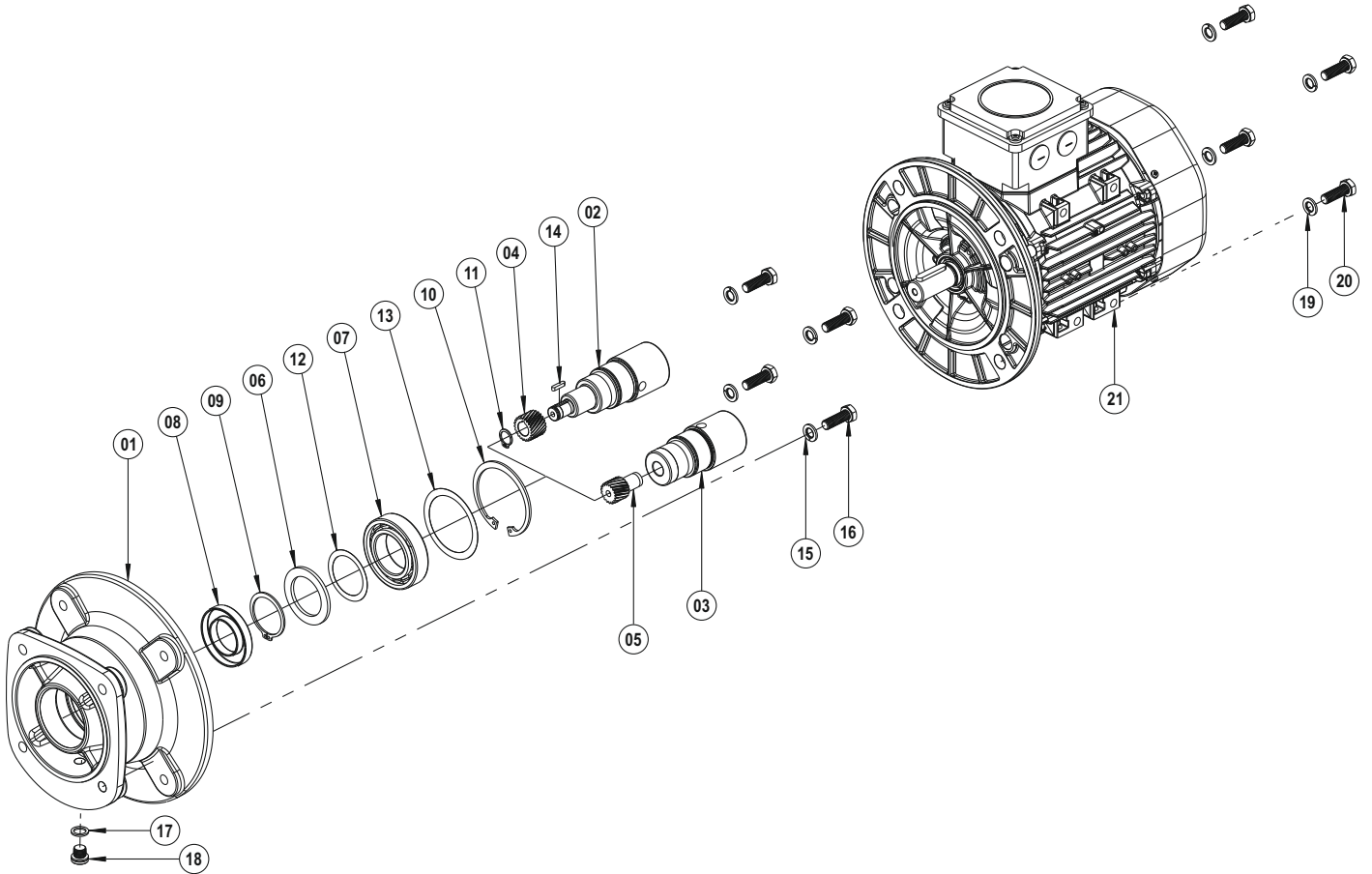
- 01 Gehäuse
- 02 IEC Welle (mit Passfeder)
- 03 IEC Welle (mit Zahnrad)
- 04 Antriebsritzel (Mit Passfeder)
- 05 Kugellagerflansch
- 06 Schmierdeckel
- 07 Kupplung (Getriebeseite)
- 08 Kupplung (Motorseite)
- 09 Spider
- 10 Automatischer Schmierstoffgeber
- 11 Automatischer Schmierstoffgeber Verlängerung
- 12 Kugellager
- 13 Kugellager
- 14 Öldichtung
- 15 Öldichtung
- 16 Sicherungsring (DIN 471)
- 17 Sicherungsring (DIN 471)
- 18 Sicherungsring (DIN 471)
- 19 Sicherungsring (DIN 471)
- 20 Passscheibe (DIN 988)
- 21 Passfeder (DIN 6885)
- 22 Passfeder (DIN 6885)
- 23 Distanzscheibe (DIN 127)
- 24 Verschrauben (DIN 933)
- 25 Verschrauben (DIN 912)
- 26 Distanzscheibe (DIN 127)
- 27 Verschrauben (DIN 912)
- 28 Motor

PAM B5 / 63 ... 315

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 PAM Mili (Kamalı)
- 03 PAM Mili
- 04 Z1 Dişlisi (Kamalı)
- 05 Z1 Dişlisi
- 06 Rondela
- 07 Rulman
- 08 Yağ Keçesi
- 09 Segman (DIN 471)
- 10 Segman (DIN 472)
- 11 Segman (DIN 471)
- 12 Layner (DIN 988)
- 13 Layner (DIN 988)
- 14 Kama (DIN 6885)
- 15 Rondela (DIN 127)
- 16 Cıvata (DIN 933)
- 17 Rondela (DIN 7603)
- 18 Yağ Tıpası (DIN 908)
- 19 Rondela (DIN 127)
- 20 Cıvata (DIN 933)
- 21 Motor

- 01 Gear Case
- 02 PAM Shaft (With Key)
- 03 PAM Shaft
- 04 Driving Pinion (With Key)
- 05 Driving Pinion
- 06 Washer
- 07 Bearing
- 08 Oil Seal
- 09 Circlip (DIN 471)
- 10 Circlip (DIN 472)
- 11 Circlip (DIN 471)
- 12 Shim (DIN 988)
- 13 Shim (DIN 988)
- 14 Key (DIN 6885)
- 15 Washer (DIN 127)
- 16 Bolt (DIN 933)
- 17 Washer (DIN 7603)
- 18 Oil Plug (DIN 908)
- 19 Washer (DIN 127)
- 20 Bolt (DIN 933)
- 21 Motor

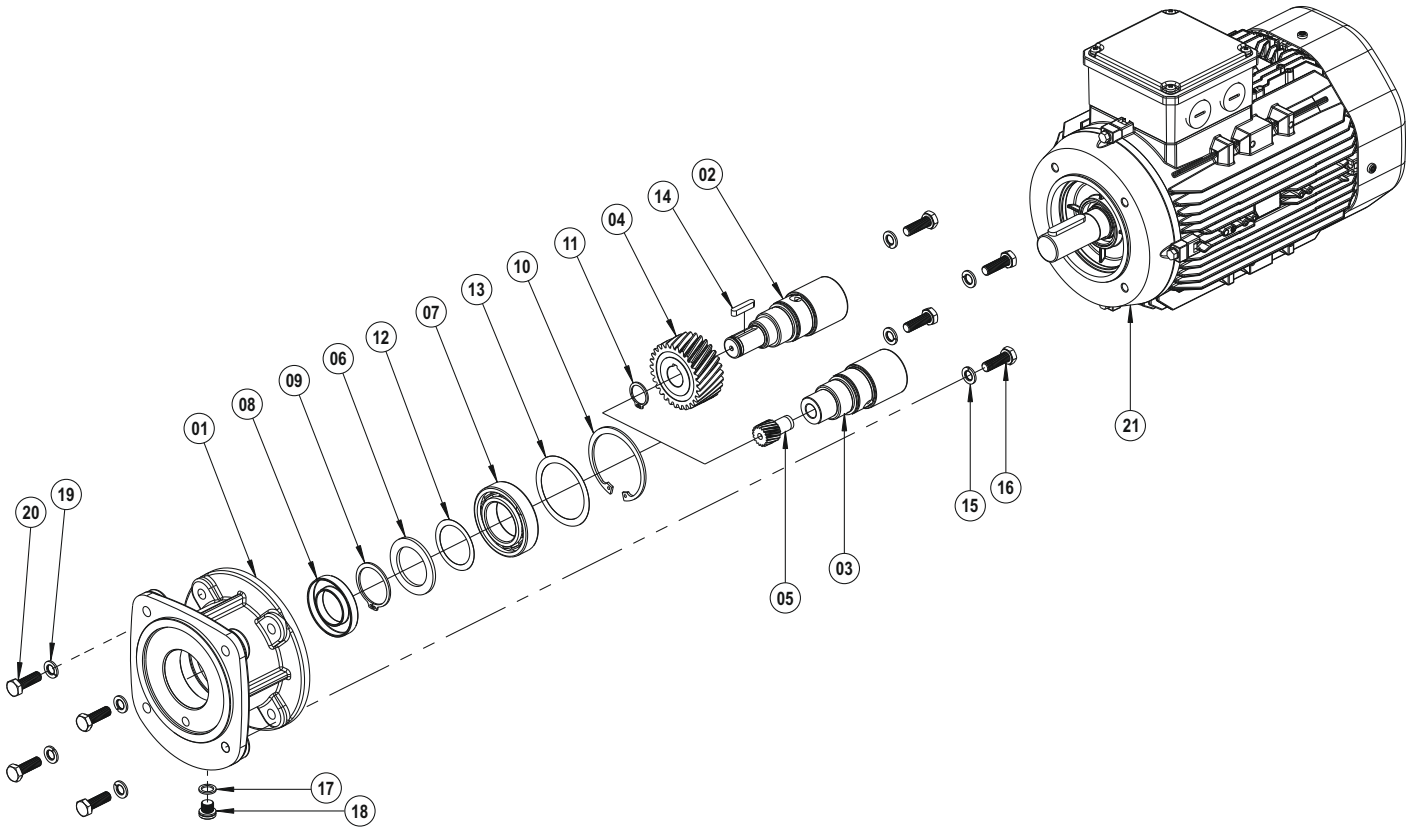
- 01 Gehäuse
- 02 PAM Welle (mit Passfeder)
- 03 PAM Welle
- 04 Antriebsritzel (Mit Passfeder)
- 05 Antriebsritzel
- 06 Distanzscheibe
- 07 Kugellager
- 08 Öldichtung
- 09 Sicherungsring (DIN 471)
- 10 Sicherungsring (DIN 472)
- 11 Sicherungsring (DIN 471)
- 12 Passscheibe (DIN 988)
- 13 Passscheibe (DIN 988)
- 14 Passfeder (DIN 6885)
- 15 Distanzscheibe (DIN 127)
- 16 Verschrauben (DIN 933)
- 17 Distanzscheibe (DIN 7603)
- 18 Ölstöpsel (DIN 908)
- 19 Distanzscheibe (DIN 127)
- 20 Verschrauben (DIN 933)
- 21 Motor

PAM B14 / 63 ... 132

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 PAM Mili (Kamalı)
- 03 PAM Mili
- 04 Z1 Dişlisi (Kamalı)
- 05 Z1 Dişlisi
- 06 Rondela
- 07 Rulman
- 08 Yağ Keçesi
- 09 Segman (DIN 471)
- 10 Segman (DIN 472)
- 11 Segman (DIN 471)
- 12 Layner (DIN 988)
- 13 Layner (DIN 988)
- 14 Kama (DIN 6885)
- 15 Rondela (DIN 127)
- 16 Cıvata (DIN 933)
- 17 Rondela (DIN 7603)
- 18 Yağ Tıpası (DIN 908)
- 19 Rondela (DIN 127)
- 20 Cıvata (DIN 933)
- 21 Motor

- 01 Gear Case
- 02 PAM Shaft (With Key)
- 03 PAM Shaft
- 04 Driving Pinion (With Key)
- 05 Driving Pinion
- 06 Washer
- 07 Bearing
- 08 Oil Seal
- 09 Circlip (DIN 471)
- 10 Circlip (DIN 472)
- 11 Circlip (DIN 471)
- 12 Shim (DIN 988)
- 13 Shim (DIN 988)
- 14 Key (DIN 6885)
- 15 Washer (DIN 127)
- 16 Bolt (DIN 933)
- 17 Washer (DIN 7603)
- 18 Oil Plug (DIN 908)
- 19 Washer (DIN 127)
- 20 Bolt (DIN 933)
- 21 Motor

- 01 Gehäuse
- 02 PAM Welle (mit Passfeder)
- 03 PAM Welle
- 04 Antriebsritzel (Mit Passfeder)
- 05 Antriebsritzel
- 06 Distanzscheibe
- 07 Kugellager
- 08 Öldichtung
- 09 Sicherungsring (DIN 471)
- 10 Sicherungsring (DIN 472)
- 11 Sicherungsring (DIN 471)
- 12 Passscheibe (DIN 988)
- 13 Passscheibe (DIN 988)
- 14 Passfeder (DIN 6885)
- 15 Distanzscheibe (DIN 127)
- 16 Verschrauben (DIN 933)
- 17 Distanzscheibe (DIN 7603)
- 18 Ölstöpsel (DIN 908)
- 19 Distanzscheibe (DIN 127)
- 20 Verschrauben (DIN 933)
- 21 Motor

TR

GENEL PARÇA LİSTESİ

EN

GENERAL PART LIST

DE

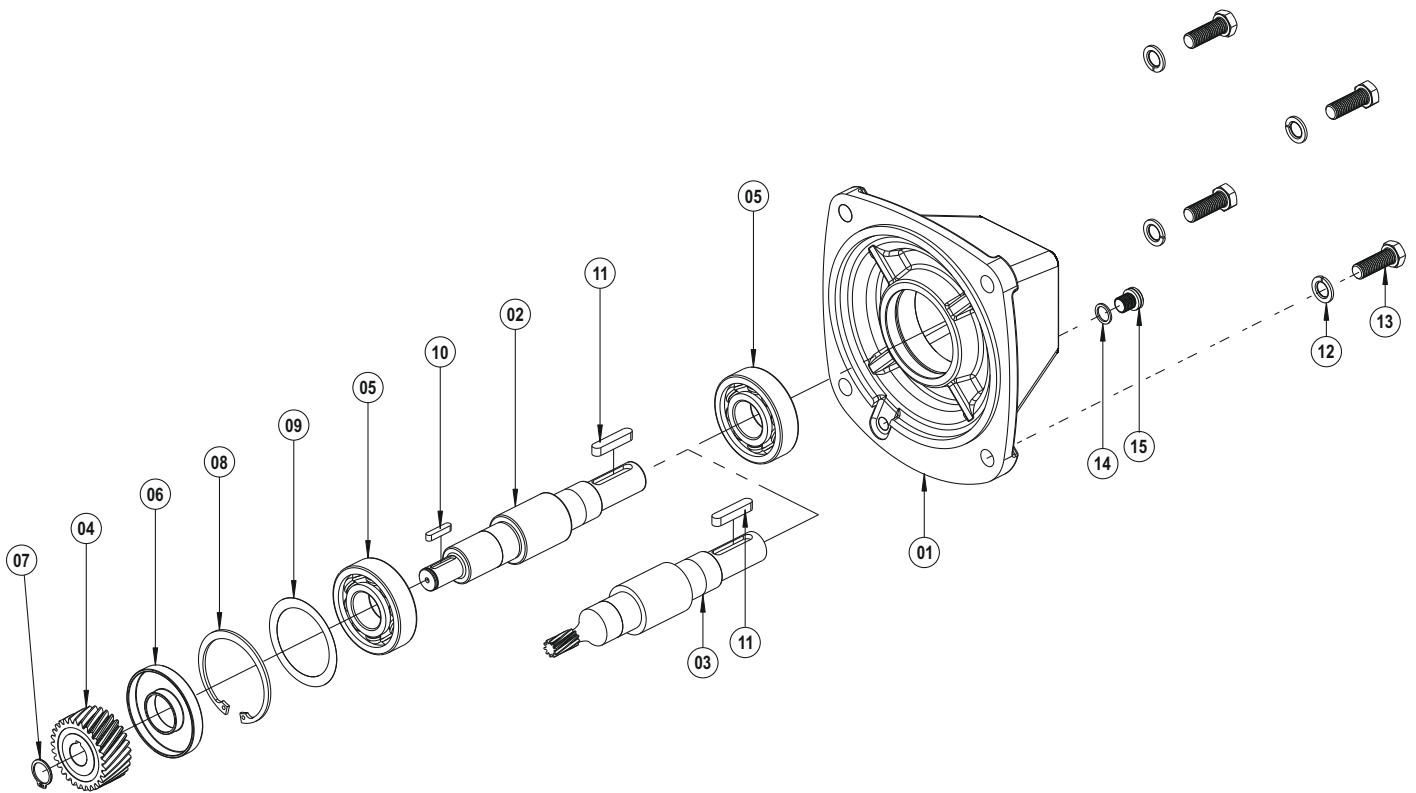
ALLGEMEINE STUCKLISTE

W 122 - 172 - 213

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 W Mili (Kamalı)
- 03 W Mili (Dişli)
- 04 Z1 Dişlisi (Kamalı)
- 05 Rulman
- 06 Yağ Keçesi
- 07 Segman (DIN 471)
- 08 Segman (DIN 472)
- 09 Layner (DIN 988)
- 10 Kama (DIN 6885)
- 11 Kama (DIN 6885)
- 12 Rondela (DIN 127)
- 13 Cıvata (DIN 933)
- 14 Rondela (DIN 7603)
- 15 Yağ Tapası (DIN 908)

- 01 Gear Case
- 02 W Shaft (With Key)
- 03 W Shaft (With Gear)
- 04 Driving Pinion (With Key)
- 05 Bearing
- 06 Oil Seal
- 07 Circlip (DIN 471)
- 08 Circlip (DIN 472)
- 09 Shim (DIN 988)
- 10 Key (DIN 6885)
- 11 Key (DIN 6885)
- 12 Washer (DIN 127)
- 13 Bolt (DIN 933)
- 14 Washer (DIN 7603)
- 15 Oil Plug (DIN 908)

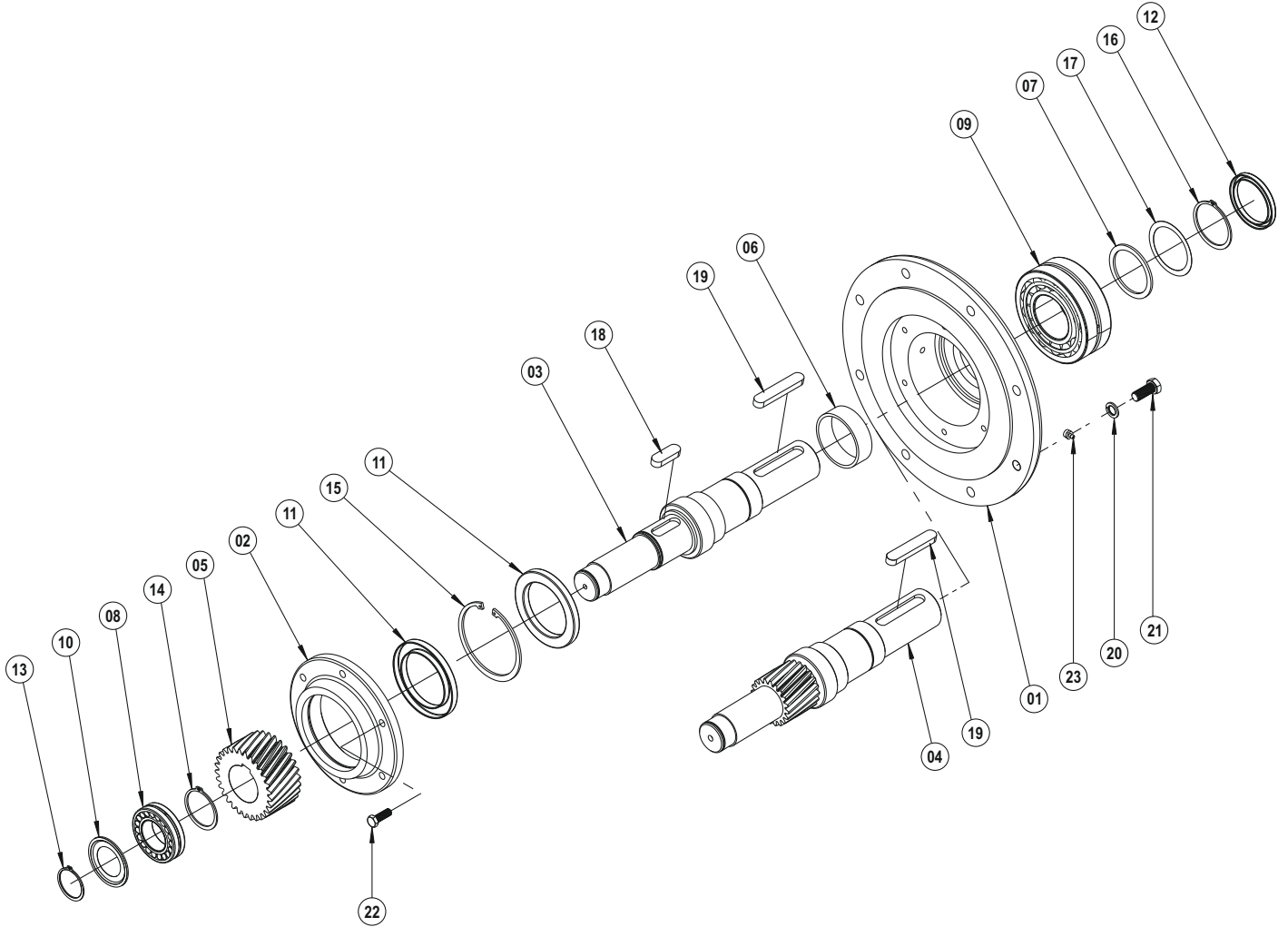
- 01 Gehäuse
- 02 W Welle (mit Passfeder)
- 03 W Welle (mit Zahnrad)
- 04 Antriebsritzel (Mit Passfeder)
- 05 Kugellager
- 06 Öldichtung
- 07 Sicherungsring (DIN 471)
- 08 Sicherungsring (DIN 472)
- 09 Passscheibe (DIN 988)
- 10 Passfeder (DIN 6885)
- 11 Passfeder (DIN 6885)
- 12 Distanzscheibe (DIN 127)
- 13 Verschrauben (DIN 933)
- 14 Distanzscheibe (DIN 7603)
- 15 Ölstöpsel (DIN 908)

W 253

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 Rulman Kapağı
- 03 W Mili (Kamalı)
- 04 W Mili (Dişlili)
- 05 Z1 Dişlisi (Kamalı)
- 06 Burç
- 07 Rondela
- 08 Rulman
- 09 Rulman
- 10 Nilos-Ring
- 11 Yağ Keçesi
- 12 Yağ Keçesi
- 13 Segman (DIN 471)
- 14 Segman (DIN 471)
- 15 Segman (DIN 472)
- 16 Segman (DIN 471)
- 17 Layner (DIN 988)
- 18 Kama (DIN 6885)
- 19 Kama (DIN 6885)
- 20 Rondela (DIN 127)
- 21 Cıvata (DIN 933)
- 22 Cıvata (DIN 933)
- 23 Gresörlük

- 01 Gear Case
- 02 Bearing Cover
- 03 W Shaft (With Key)
- 04 W Shaft (With Gear)
- 05 Driving Pinion (With Key)
- 06 Spacer
- 07 Washer
- 08 Bearing
- 09 Bearing
- 10 Nilos-Ring
- 11 Oil Seal
- 12 Oil Seal
- 13 Circlip (DIN 471)
- 14 Circlip (DIN 471)
- 15 Circlip (DIN 472)
- 16 Circlip (DIN 471)
- 17 Shim (DIN 988)
- 18 Key (DIN 6885)
- 19 Key (DIN 6885)
- 20 Washer (DIN 127)
- 21 Bolt (DIN 933)
- 22 Bolt (DIN 933)
- 23 Grease Nipple

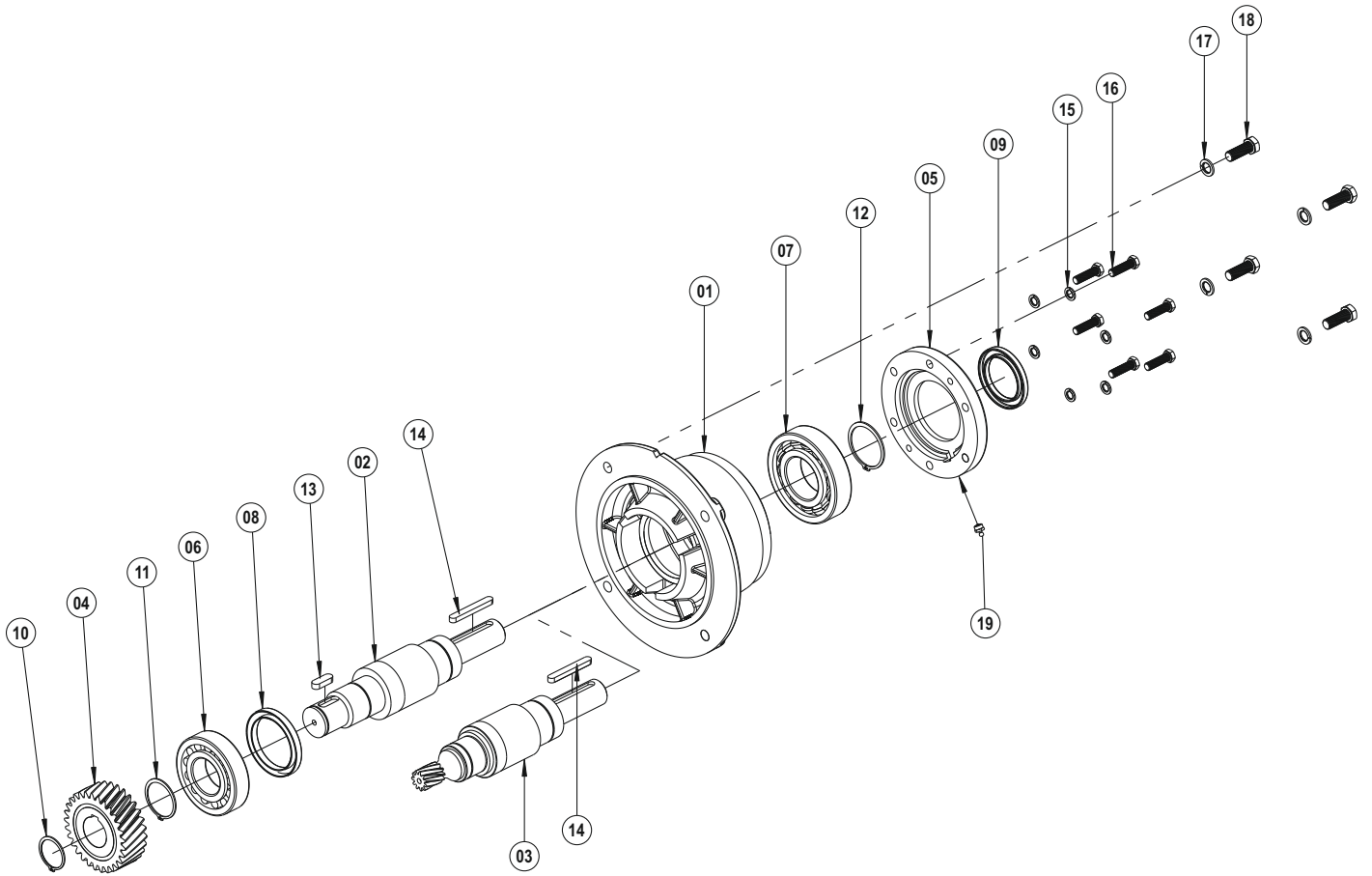
- 01 Gehäuse
- 02 Lagerdeckel
- 03 W Welle (mit Passfeder)
- 04 W Welle (mit Zahnrad)
- 05 Antriebsritzel (mit Passfeder)
- 06 Distanzbuchse
- 07 Distanzscheibe
- 08 Kugellager
- 09 Kugellager
- 10 Nilos-Ring
- 11 Öldichtung
- 12 Öldichtung
- 13 Sicherungsring (DIN 471)
- 14 Sicherungsring (DIN 471)
- 15 Sicherungsring (DIN 472)
- 16 Sicherungsring (DIN 471)
- 17 Passscheibe (DIN 988)
- 18 Passfeder (DIN 6885)
- 19 Passfeder (DIN 6885)
- 20 Distanzscheibe (DIN 127)
- 21 Verschrauben (DIN 933)
- 22 Verschrauben (DIN 933)
- 23 Schmiernippel

W 288

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 W Mili (Kamalı)
- 03 W Mili (Dişli)
- 04 Z1 Dişlisi (Kamalı)
- 05 Rulman Flanşı
- 06 Rulman
- 07 Rulman
- 08 Yağ Keçesi
- 09 Yağ Keçesi
- 10 Segman (DIN 471)
- 11 Segman (DIN 471)
- 12 Segman (DIN 471)
- 13 Kama (DIN 6885)
- 14 Kama (DIN 6885)
- 15 Rondela (DIN 127)
- 16 Cıvata (DIN 933)
- 17 Rondela (DIN 127)
- 18 Cıvata (DIN 933)
- 19 Gresörlük

- 01 Gear Case
- 02 W Shaft (With Key)
- 03 W Shaft (With Gear)
- 04 Driving Pinion (With Key)
- 05 Bearing Flange
- 06 Bearing
- 07 Bearing
- 08 Oil Seal
- 09 Oil Seal
- 10 Circlip (DIN 471)
- 11 Circlip (DIN 471)
- 12 Circlip (DIN 471)
- 13 Key (DIN 6885)
- 14 Key (DIN 6885)
- 15 Washer (DIN 127)
- 16 Bolt (DIN 933)
- 17 Washer (DIN 127)
- 18 Bolt (DIN 933)
- 19 Grease Nipple

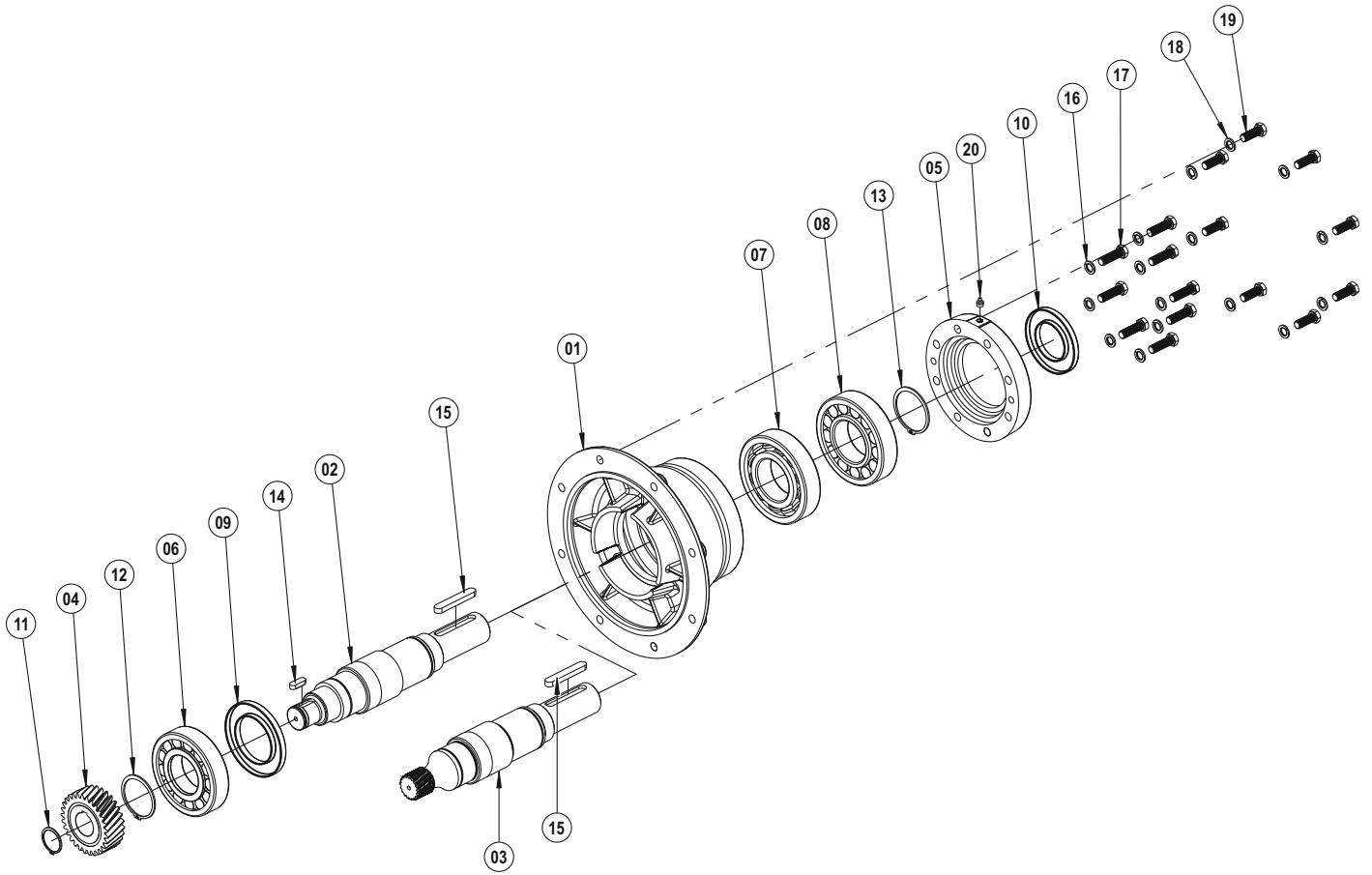
- 01 Gehäuse
- 02 W Welle (mit Passfeder)
- 03 W Welle (mit Zahnrad)
- 04 Antriebsritzel (Mit Passfeder)
- 05 Kugellagerflansch
- 06 Kugellager
- 07 Kugellager
- 08 Öldichtung
- 09 Öldichtung
- 10 Sicherungsring (DIN 471)
- 11 Sicherungsring (DIN 471)
- 12 Sicherungsring (DIN 471)
- 13 Passfeder (DIN 6885)
- 14 Passfeder (DIN 6885)
- 15 Distanzscheibe (DIN 127)
- 16 Verschrauben (DIN 933)
- 17 Distanzscheibe (DIN 127)
- 18 Verschrauben (DIN 933)
- 19 Schmiernippel

W 397

Patlatma resmi gövde boyutu ve motor büyüklüğüne göre değişiklik gösterebilir, ayrıntılı patlatma resmi için firmamız ile iletişime geçiniz.

The exploded image may vary depending on the body and motor size, please contact us for the detailed exploded image.

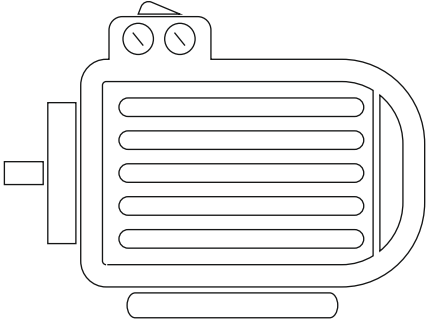
Die Explosionszeichnung kann je nach Gehäusegröße und Motorgröße variieren. Für die detaillierte Explosionszeichnung wenden Sie sich bitte an unser Unternehmen.



- 01 Gövde
- 02 W Mili (Kamalı)
- 03 W Mili (Dişli)
- 04 Z1 Dişlisi (Kamalı)
- 05 Rulman Flanşı
- 06 Rulman
- 07 Rulman
- 08 Rulman
- 09 Yağ Keçesi
- 10 Yağ Keçesi
- 11 Segman (DIN 471)
- 12 Segman (DIN 471)
- 13 Segman (DIN 471)
- 14 Kama (DIN 6885)
- 15 Kama (DIN 6885)
- 16 Rondela (DIN 127)
- 17 Cıvata (DIN 933)
- 18 Rondela (DIN 127)
- 19 Cıvata (DIN 933)
- 20 Gresörlük

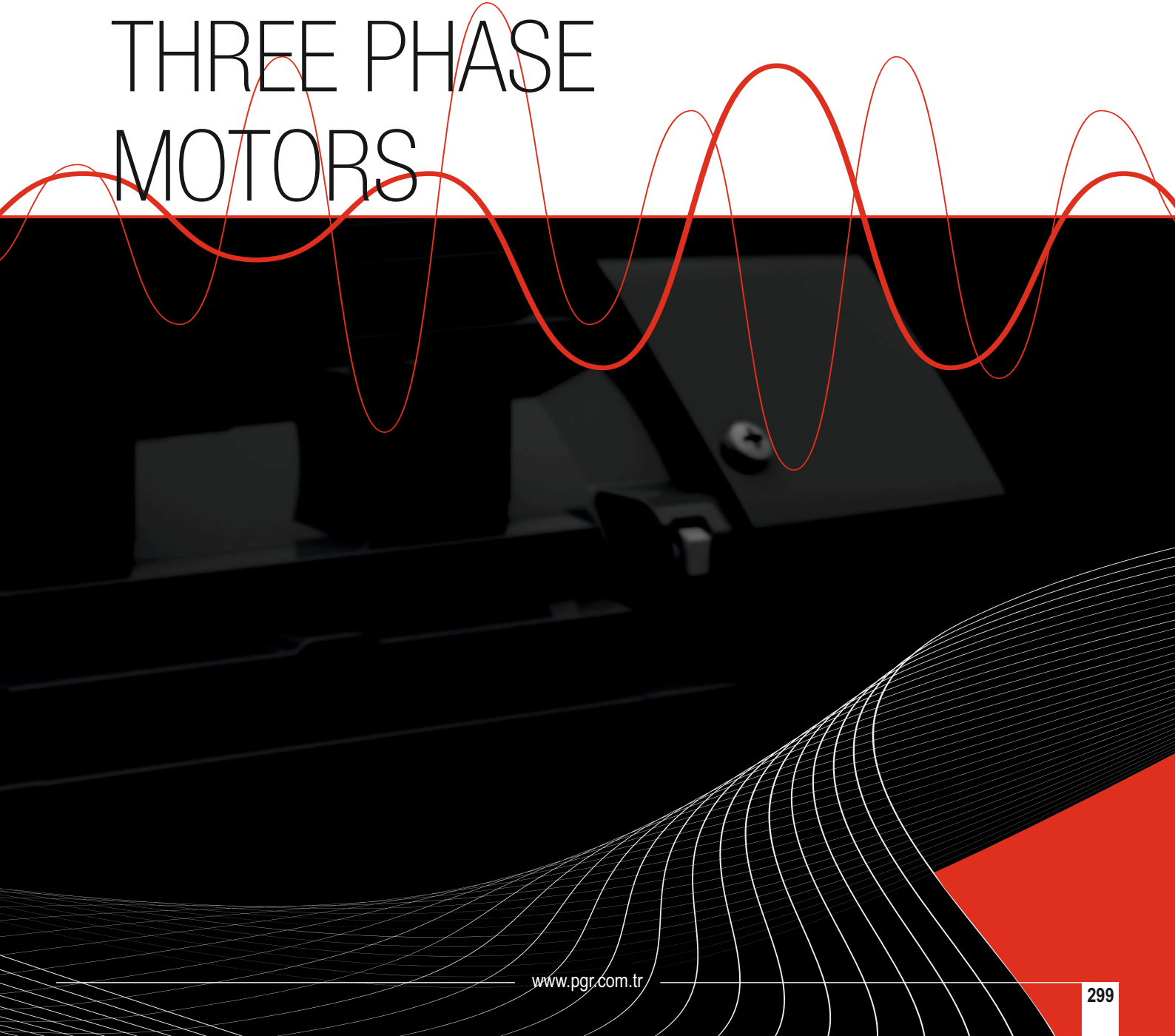
- 01 Gear Case
- 02 W Shaft (With Key)
- 03 W Shaft (With Gear)
- 04 Driving Pinion (With Key)
- 05 Bearing Flange
- 06 Bearing
- 07 Bearing
- 08 Bearing
- 09 Oil Seal
- 10 Oil Seal
- 11 Circlip (DIN 471)
- 12 Circlip (DIN 471)
- 13 Circlip (DIN 471)
- 14 Key (DIN 6885)
- 15 Key (DIN 6885)
- 16 Washer (DIN 127)
- 17 Bolt (DIN 933)
- 18 Washer (DIN 127)
- 19 Bolt (DIN 933)
- 20 Grease Nipple

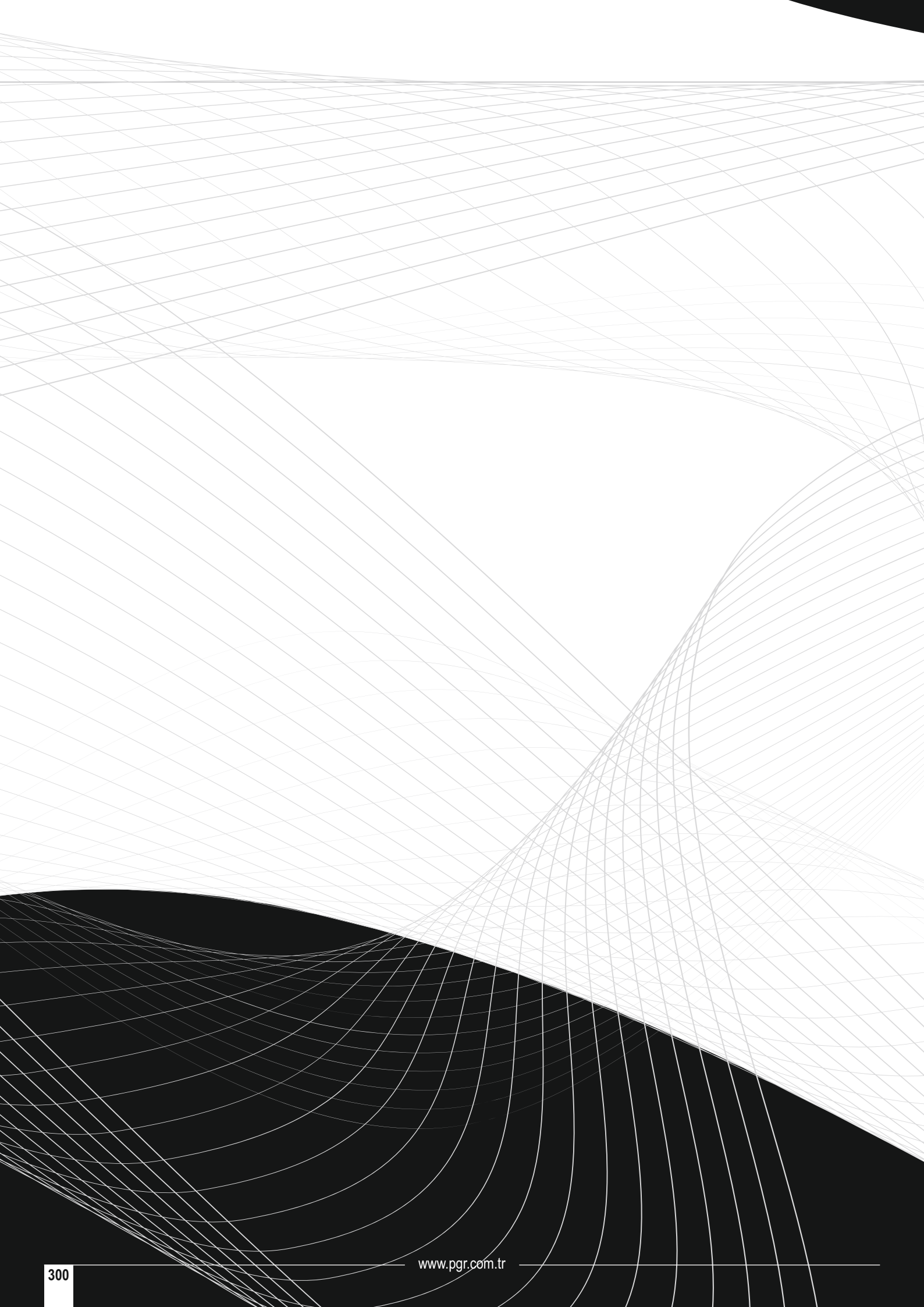
- 01 Gehäuse
- 02 W Welle (mit Passfeder)
- 03 W Welle (mit Zahnrad)
- 04 Antriebsritzel (Mit Passfeder)
- 05 Kugellagerflansch
- 06 Kugellager
- 07 Kugellager
- 08 Kugellager
- 09 Öldichtung
- 10 Öldichtung
- 11 Sicherungsring (DIN 471)
- 12 Sicherungsring (DIN 471)
- 13 Sicherungsring (DIN 471)
- 14 Passfeder (DIN 6885)
- 15 Passfeder (DIN 6885)
- 16 Distanzscheibe (DIN 127)
- 17 Verschrauben (DIN 933)
- 18 Distanzscheibe (DIN 127)
- 19 Verschrauben (DIN 933)
- 20 Schmiernippel



ÜÇ FAZLI MOTORLAR

THREE PHASE
MOTORS





IE3

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

MOTOR TİPİ MOTOR TYPE	GÖVDE TIPI HOUSING TYPE	NOMINAL RATED VALUES					KALKIŞTAKİ DEĞERLER STARTING VALUES					Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J kgm ²	Ağırlık Weight (B3) kg	Ses Basınç Seviyesi Sound Pressure Level dBA**
		GÜÇ POWER		DEVİR SPEED rpm	AKIM CURRENT A	MOMENT TORQUE Nm	AKIM CURRENT I_A / I_N		MOMENT TORQUE M_A / M_N		η%		4/4	3/4	2/4				
		kW	HP				λ	Δ	λ	Δ									
2 kutup 3000 d/dak / 2 pole 3000 rpm																			
230/400V	Q3H80M2C	Aluminium	0,75	1,0	2890	1,6	2,5	8,3	-	3,7	-	4,2	80,7	79,8	76,1	0,85	0,0014	13	57
	Q3H80M2D	Aluminium	1,1	1,5	2890	2,3	3,6	9,1	-	3,9	-	4,3	82,7	82,2	79,3	0,85	0,0017	13	57
	Q3H90L2C	Aluminium	1,5	2,0	2910	3,3	4,9	10,9	-	5,2	-	5,4	84,2	83,3	80,5	0,80	0,0023	16	62
	Q3H90L2D	Aluminium	2,2	3,0	2917	4,3	7,2	9,2	-	3,1	-	4,9	85,9	86,4	85,2	0,87	0,0028	19	62
	Q3H100L2D	Aluminium	3,0	4,0	2890	5,9	9,9	8,1	-	3,2	-	3,5	87,1	88,1	87,7	0,85	0,0031	25	66
400/690V	Q3H112M2C	Aluminium	4,0	5,5	2936	7,5	13,0	3,6	10,9	1,6	4,8	5,7	88,1	88,1	85,8	0,85	0,0064	29	68
	Q3H132S2C	Aluminium	5,5	7,5	2918	10,5	18,0	3,6	10,7	1,2	3,7	5,1	89,2	89,0	87,2	0,86	0,0077	37	69
	Q3H132S2D	Aluminium	7,5	10,0	2918	13,9	24,5	3,6	10,8	1,4	4,3	5,4	90,1	90,3	89,1	0,88	0,0093	43	69
	Q3H160M2C	Aluminium	11,0	15,0	2925	20,7	36,0	3,5	10,5	1,3	3,9	5,2	91,2	91,4	90,6	0,85	0,0352	65	70
	Q3H160M2DE	Aluminium	15,0	20,0	2930	27,9	48,9	3,5	10,5	1,2	3,7	5,2	91,9	91,3	89,8	0,84	0,0402	79	71
	Q3H160L2C	Aluminium	18,5	25,0	2960	32,8	59,9	3,6	10,8	1,1	3,4	4,8	92,4	92,5	91,6	0,89	0,0481	96	70
	Q3H180M2A	Aluminium	22,0	30,0	2961	39,1	70,7	3,5	10,5	1,1	3,2	5,2	92,7	92,5	91,3	0,87	0,0587	114	77
	Q3H200L2C	Aluminium	30,0	40,0	2955	50,3	97,0	3,5	10,5	1,0	3,0	4,5	93,3	93,2	92,2	0,92	0,1028	153	78
	Q3H200L2D	Aluminium	37,0	50,0	2960	61,9	119,4	3,3	9,9	1,0	2,9	4,4	93,7	94,4	94,0	0,92	0,1138	166	78
	Q3E225M2B	Aluminium	45,0	60,0	2965	77,1	144,9	2,8	8,6	0,9	2,4	3,8	94,0	93,7	92,2	0,85	0,2350	249	80
	Q3E250M2A	Aluminium	55,0	75,0	2970	92,1	176,7	2,7	8	0,8	2,5	3,1	94,3	94,1	92,9	0,92	0,50903	279	81
	Q3EP250M2C	Cast Iron	55,0	75,0	2982	93,8	176,1	2,3	7,0	0,9	2,7	3,4	94,3	94,0	92,6	0,90	0,4870	488	81
	Q3EP280M2C	Cast Iron	75,0	100,0	2975	124,9	240,7	2,8	8,4	0,7	2,2	4,4	94,7	94,2	93,1	0,92	0,5400	585	82
	Q3EP280M2D	Cast Iron	90,0	125,0	2975	150,7	288,9	2,8	8,6	0,8	2,4	5,4	95,0	94,7	93,7	0,93	0,6450	596	82
	Q3EP315S2C	Cast Iron	110,0	127,0	2,983	187	358	2,4	7,2	0,6	1,7	2,6	95,2	95,2	94,0	0,89	2,19900	963	83
	Q3EP315M2B	Cast Iron	132,0	152,0	2,983	224	418	2,5	7,5	0,6	1,8	2,6	95,4	95,4	94,4	0,89	2,37790	1.007	83
	Q3EP315L2A	Cast Iron	160,0	184,0	2,983	271	513	2,5	7,5	0,6	1,8	2,6	95,6	95,6	94,4	0,89	2,62170	1.065	83
	Q3EP315L2C	Cast Iron	200,0	230,0	2,983	339	641	2,5	7,5	0,6	1,9	2,6	95,8	95,8	94,9	0,89	2,90860	1.180	83
	Q3EP355M2C	Cast Iron	250,0	280,0	2,983	419	800	2,4	7,3	0,6	1,7	2,5	95,8	95,8	94,7	0,90	3,81300	1.612	91
	Q3EP355L2B	Cast Iron	315,0	353,0	2,984	527	1.008	2,4	7,3	0,6	1,8	2,5	95,8	95,7	94,4	0,90	4,52000	1.771	91
Q3EP355L2C	Cast Iron	355,0	398,0	2,981	594	1.137	2,6	7,9	0,7	2,2	2,5	95,8	95,8	95,0	0,90	5,58000	2.002	91	
4 kutup 1500 d/dak / 4 pole 1500 rpm																			
230/400V	Q3H80M4D	Aluminium	0,75	1,0	1445	1,7	5,0	6,7	-	2,8	-	3,4	82,5	83,2	80,6	0,77	0,00261	13	52
	Q3H90L4C	Aluminium	1,1	1,5	1447	2,6	7,3	7,2	-	3,1	-	3,7	82,7	82,4	89,5	0,74	0,00328	15	54
	Q3H90L4D	Aluminium	1,5	2,0	1449	3,5	9,9	8,1	-	3,6	-	4,2	85,3	85,0	82,1	0,76	0,00526	20	53
	Q3H100L4C	Aluminium	2,2	3,0	1443	4,9	14,6	9,5	-	5,0	-	5,5	86,7	84,3	80,6	0,75	0,00690	25	55
	Q3H100L4D	Aluminium	3,0	4,0	1446	6,2	19,9	8,4	-	3,3	-	3,8	87,7	88,0	87,0	0,81	0,01059	31	56
400/690V	Q3H112M4D	Aluminium	4,0	5,5	1452	8,2	26,5	3,0	9,1	1,1	3,3	4,1	88,6	88,8	87,3	0,80	0,01383	32	54
	Q3H132S4B	Aluminium	5,5	7,5	1467	10,6	35,8	2,8	8,5	0,7	2,0	3,8	89,6	89,1	87,6	0,84	0,03560	53	60
	Q3H132M4D	Aluminium	7,5	10,0	1467	15,2	48,8	2,7	8,2	0,8	2,3	3,8	90,4	90,7	89,6	0,80	0,04030	58	60
	Q3H160M4C	Aluminium	11,0	15,0	1470	21,0	71,3	2,7	8,0	0,7	2,1	3,8	91,4	91,5	90,4	0,83	0,05940	84	63
	Q3H160L4B	Aluminium	15,0	20,0	1477	30,9	97,1	2,6	7,8	0,9	2,8	3,3	92,1	92,0	90,8	0,76	0,09005	101	62
	Q3H180M4B	Aluminium	18,5	25,0	1474	39,5	119,9	2,5	7,4	0,8	2,3	3,5	92,6	91,9	91,2	0,74	0,11398	118	67
	Q3H180L4B	Aluminium	22,0	30,0	1485	41,6	141,7	3,1	9,2	0,9	2,8	3,6	93,0	93,1	92,3	0,83	0,18660	158	68
	Q3H200L4D	Aluminium	30,0	40,0	1475	54,8	195,5	2,7	8,0	0,8	2,5	3,1	93,6	94,6	94,8	0,85	0,22166	194	68
	Q3E225M4B	Aluminium	37,0	50,0	1485	68,6	237,9	2,9	8,8	1,0	3,1	3,7	93,9	93,8	92,6	0,84	0,36400	280	71
	Q3E225M4C	Aluminium	45,0	60,0	1485	83,1	289,4	3,0	9,2	1,0	3,1	3,7	94,2	94,0	93,3	0,83	0,43500	276	71
	Q3E250M4B	Cast Iron	55,0	75,0	1487	106,9	353,2	3,0	9,2	1,0	3,1	3,7	94,6	94,4	93,5	0,79	0,90782	506	72
	Q3EP280M4C	Cast Iron	75,0	100,0	1485	138,9	482,3	2,6	7,8	1,0	3,0	3,2	95,0	94,8	94,0	0,82	1,06100	638	73
	Q3EP280M4D	Cast Iron	90,0	125,0	1485	163,5	578,7	2,6	7,9	1,0	3,0	3,2	95,2	95,0	93,9	0,86	1,14760	653	73
	Q3EP315S4C	Cast Iron	110,0	127,0	1,489	194	705	2,5	7,5	0,7	2,0	2,5	95,4	95,4	94,7	0,86	3,46500	867	70
	Q3EP315M4B	Cast Iron	132,0	152,0	1,489	232	846	2,5	7,6	0,7	2,1	2,5	95,6	95,6	95,0	0,86	3,96600	993	70
	Q3EP315L4A	Cast Iron	160,0	184,0	1,489	274	1.026	2,5	7,6	0,7	2,2	2,5	95,8	95,8	95,4	0,88	4,88320	1.165	70
	Q3EP315L4C	Cast Iron	200,0	230,0	1,489	346	1.282	2,7	8,2	0,7	2,2	2,5	96,0	96,0	95,5	0,87	5,23440	1.223	70
	Q3EP355M4C	Cast Iron	250,0	280,0	1,491	422	1.601	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	9,30600	1.692	82
	Q3EP355L4B	Cast Iron	315,0	353,0	1,491	532	2.017	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	10,06700	1.879	82
	Q3EP355L4C	Cast Iron	355,0	398,0	1,491	600	2.273	2,5	7,5	0,7	2,0	2,3	96,0	96,0	95,5	0,89	11,90000	1.953	82

* IEC 60034-2-1'e göre / According to IEC 60034-2-1

** Ses Basınç Seviyeleri motordan 1m uzaktan ölçülmüştür. / The sound pressure measurements are taken 1m away from the motor

*** Tolerans +3 dBA / Tolerance +3 dBA

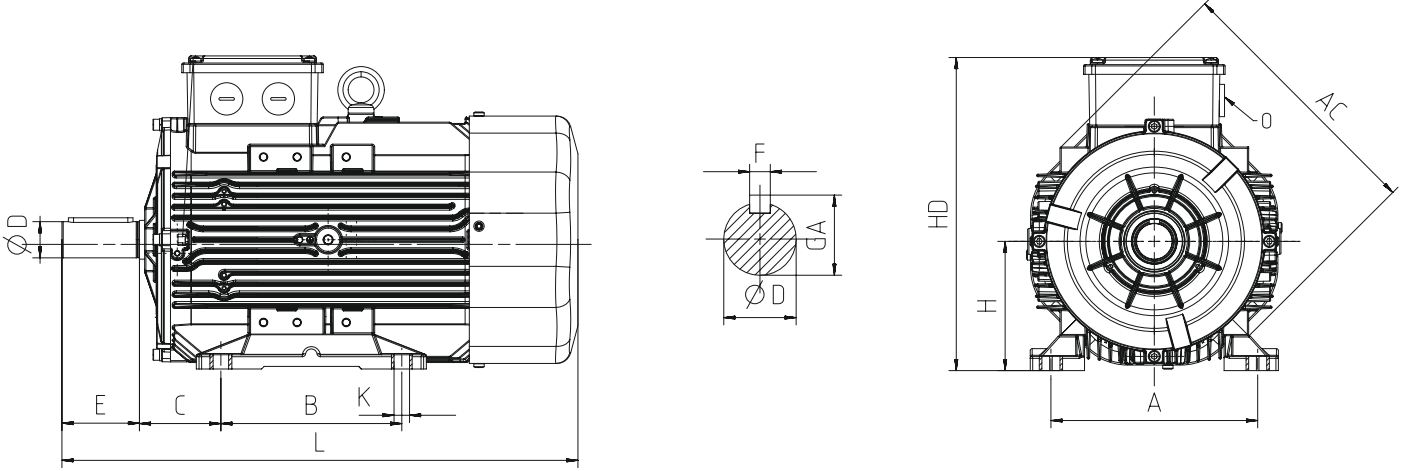
MOTOR TİPİ MOTOR TYPE	GÖVDE TİPİ HOUSING TYPE	NOMİNAL RATED VALUES						KALKIŞTAKİ DEĞERLER STARTING VALUES				Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J	Ağırlık Weight (B3)	Ses Basınç Seviyesi Sound Pressure Level dBA **
		GÜÇ POWER		DEVİR SPEED	AKIM CURRENT	MOMENT TORQUE	AKIM CURRENT		MOMENT TORQUE		η%								
		kW	HP				rpm	A	Nm	I_A / I_N	$I_Δ / I_N$		M_A / M_N	$M_Δ / M_N$	4/4				
6 kutup 1000 d/dak / 6 pole 1000 rpm																			
230/400V	Q3H90L6C	Aluminium	0,75	1,0	950	2,1	7,6	4,9	-	2,5	-	3,0	78,9	78,4	74,9	0,67	0,00460	18	53
	Q3H90L6D	Aluminium	1,1	1,5	950	3,0	11,1	4,5	-	2,6	-	2,9	81,0	80,6	78,3	0,67	0,00528	20	53
	Q3H100L6D	Aluminium	1,5	2,0	960	4,1	14,9	4,8	-	2,6	-	3,0	82,5	81,7	78,2	0,65	0,01059	26	55
	Q3H112M6D	Aluminium	2,2	3,0	957	5,2	22,0	4,9	-	2,7	-	3,0	84,3	84,6	83,7	0,71	0,01383	32	57
400/690V	Q3H132S6A	Aluminium	3,0	4,0	978	7,3	29,3	1,9	5,7	0,6	2,0	2,5	85,6	85,2	82,8	0,68	0,03560	53	61
	Q3H132M6A	Aluminium	4,0	5,5	975	9,1	39,2	2,0	6,0	0,7	2,2	2,6	86,8	85,7	82,8	0,72	0,04030	58	60
	Q3H132M6B	Aluminium	5,5	7,5	971	12,0	54,1	2,1	6,3	0,7	2,1	2,6	88,0	87,6	85,3	0,75	0,05940	82	60
	Q3H160M6C	Aluminium	7,5	10,0	976	16,5	73,4	2,0	6,0	0,7	2,2	3,0	89,1	89,0	88,0	0,73	0,07540	88	62
	Q3H160L6D	Aluminium	11,0	15,0	974	24,2	107,8	2,1	6,3	0,7	2,2	3,0	90,3	90,1	89,3	0,73	0,09000	101	62
	Q3H180L6B	Aluminium	15,0	20,0	980	32,2	146,2	2,2	6,6	0,7	2,1	2,9	91,2	90,9	88,7	0,75	0,18660	155	68
	Q3H200L6C	Aluminium	18,5	25,0	981	40,3	180,1	2,3	6,9	0,6	1,9	2,7	91,7	91,6	91,3	0,72	0,23286	194	69
	Q3H200L6D	Aluminium	22,0	30,0	982	50,5	213,9	2,9	5,0	0,6	1,9	2,2	92,2	92,2	91,6	0,69	0,22166	193	69
	Q3E225M6C	Aluminium	30,0	40,0	975	59,1	293,8	1,9	6,1	0,6	1,8	2,5	92,9	92,8	91,8	0,80	0,52900	238	71

* IEC 60034-2-1'e göre / According to IEC 60034-2-1

** Ses Basınç Seviyeleri motordan 1m uzaklıktan ölçülmüştür. / The sound pressure measurements are taken 1m away from the motor

*** Tolerans +3 dBA / Tolerance +3 dBA

BOYUTLAR - B3 / DIMENSION - B3



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side
0,75	2	Q3H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
0,75	4	Q3H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
0,75	6	Q3H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
1,1	2	Q3H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
1,1	4	Q3H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
1,1	6	Q3H90L6D	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
1,5	2	Q3H90L2C	Aluminium	158	303	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
1,5	4	Q3H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
1,5	6	Q3H100L6D	Aluminium	191	400	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7
2,2	2	Q3H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
2,2	4	Q3H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
2,2	6	Q3H112M6D	Aluminium	210	396	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
3	2	Q3H100L2D	Aluminium	172	349	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
3	4	Q3H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7
3	6	Q3H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
4	2	Q3H112M2C	Aluminium	191	400	1xM25	140	190	112	254	12	70	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
4	4	Q3H112M4D	Aluminium	210	396	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
4	6	Q3H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
5,5	2	Q3H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	89	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7
5,5	4	Q3H132S4B	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
5,5	6	Q3H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
7,5	2	Q3H132S2D	Aluminium	210	448	1xM25	140-178	216	132	283	12	89	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7
7,5	4	Q3H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
7,5	6	Q3H160M6C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
11	2	Q3H160M2C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
11	4	Q3H160M4C	Aluminium	260	578	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
11	6	Q3H160L6D	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
15	2	Q3H160M2DE	Aluminium	260	580	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
15	4	Q3H160L4B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
15	6	Q3H180L6B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10

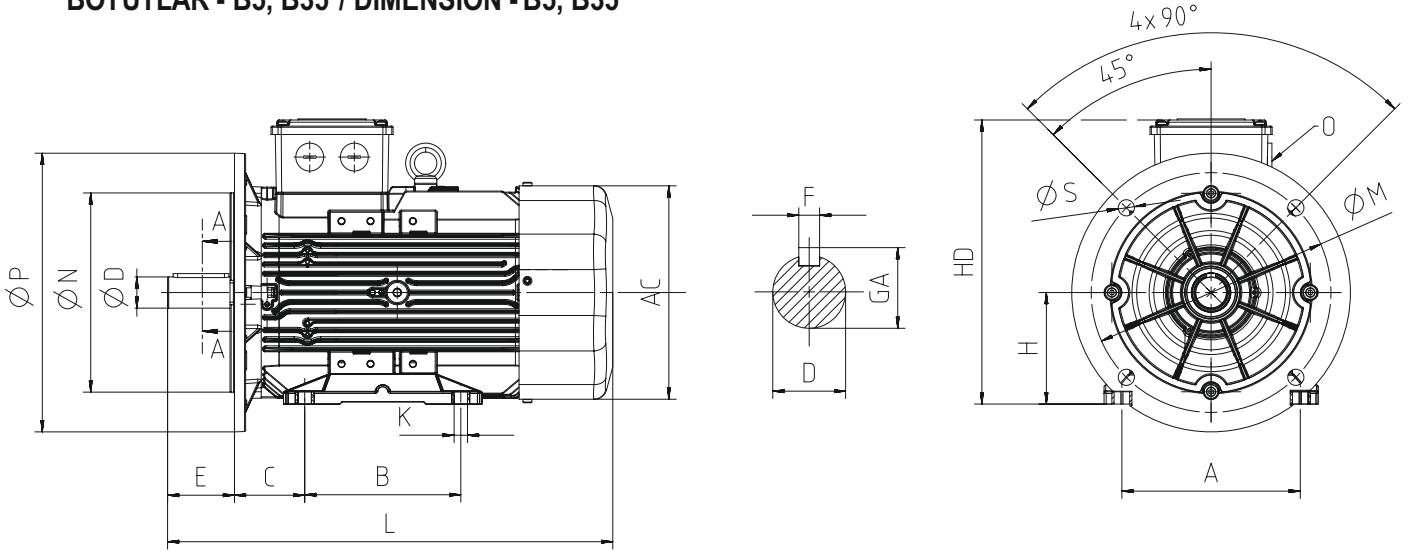
(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors						Mil Shaft				Rulman Bearing		Keçe Seal	
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksi Non drive Side
18,5	2	Q3H160L2C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
18,5	4	Q3H180M4B	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	121	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10
18,5	6	Q3H200L6C	Aluminium	349	750	1xM50	305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
22	2	Q3H180M2B	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	121	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10
22	4	Q3H180L4B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
22	6	Q3H200L6D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	2	Q3H200L2C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	4	Q3H200L4D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	6	Q3E225M6C	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
37	2	Q3H200L2D	Aluminium	349	706	1xM50	305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
37	4	Q3E225M4B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
45	2	Q3E225M2B	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	149	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13
45	4	Q3E225M4C	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
55	2	Q3E250M2A	Aluminium	527	886	2xM50	349	406	250	615	24	149	60	140	64,0	18	6315-ZZ	6313-ZZ	75*112*12	65*100*13
55	2	Q3EP250M2C	Cast Iron	489	893	1xM50	349	406	250	616	24	149	60	140	69,0	18	6316	6316	80*100*10	80*100*10
55	4	Q3E250M4B	Cast Iron	489	893	1xM50	349	406	250	616	24	149	65	140	69,0	18	6316	6316	80*100*10	80*100*10
75	2	Q3EP280M2C	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	65	140	69,0	18	6316	6316	80*100*10	80*100*10
75	4	Q3EP280M4C	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	75	140	79,5	20	6316	6316	80*100*10	80*100*10
90	2	Q3EP280M2D	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	65	140	69,0	18	6316	6316	80*100*10	80*100*10
90	4	Q3EP280M4D	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	75	140	79,5	20	6316	6316	80*100*10	80*100*10
110	2	Q3EP315S2C	Cast Iron	652	1176	2xM63	406	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
110	4	Q3EP315S4C	Cast Iron	652	1206	2xM63	406	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
132	2	Q3EP315M2B	Cast Iron	652	1176	2xM63	457	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
132	4	Q3EP315M4B	Cast Iron	652	1206	2xM63	457	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
160	2	Q3EP315L2A	Cast Iron	652	1287	2xM63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
160	4	Q3EP315L4A	Cast Iron	652	1317	2xM63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
200	2	Q3EP315L2C	Cast Iron	652	1287	2xM63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
200	4	Q3EP315L4C	Cast Iron	652	1317	2xM63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
250	2	Q3EP355M2C	Cast Iron	762	1512	4xM63	560	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
250	4	Q3EP355M4C	Cast Iron	762	1542	4xM63	560	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
315	2	Q3EP355L2B	Cast Iron	762	1512	4xM63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
315	4	Q3EP355L4B	Cast Iron	762	1542	4xM63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
355	2	Q3EP355L2C	Cast Iron	762	1512	4xM63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
355	4	Q3EP355L4C	Cast Iron	762	1542	4xM63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885

BOYUTLAR - B5, B35 / DIMENSION - B5, B35



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)						
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
0,75	2	Q3H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
0,75	4	Q3H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
0,75	6	Q3H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
1,1	2	Q3H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
1,1	4	Q3H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
1,1	6	Q3H90L6D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
1,5	2	Q3H90L2C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
1,5	4	Q3H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
1,5	6	Q3H100L6D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
2,2	2	Q3H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
2,2	4	Q3H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
2,2	6	Q3H112M6D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
3	2	Q3H100L2D	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
3	4	Q3H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
3	6	Q3H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
4	2	Q3H112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
4	4	Q3H112M4D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
4	6	Q3H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
5,5	2	Q3H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	300	230	265	-	14,5
5,5	4	Q3H132S4B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
5,5	6	Q3H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
7,5	2	Q3H132S2D	Aluminium	210	448	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	300	230	265	-	14,5
7,5	4	Q3H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
7,5	6	Q3H160M6C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
11	2	Q3H160M2C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
11	4	Q3H160M4C	Aluminium	260	580	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
11	6	Q3H160L6D	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
15	2	Q3H160M2DE	Aluminium	260	580	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
15	4	Q3H160L4B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
15	6	Q3H180L6B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

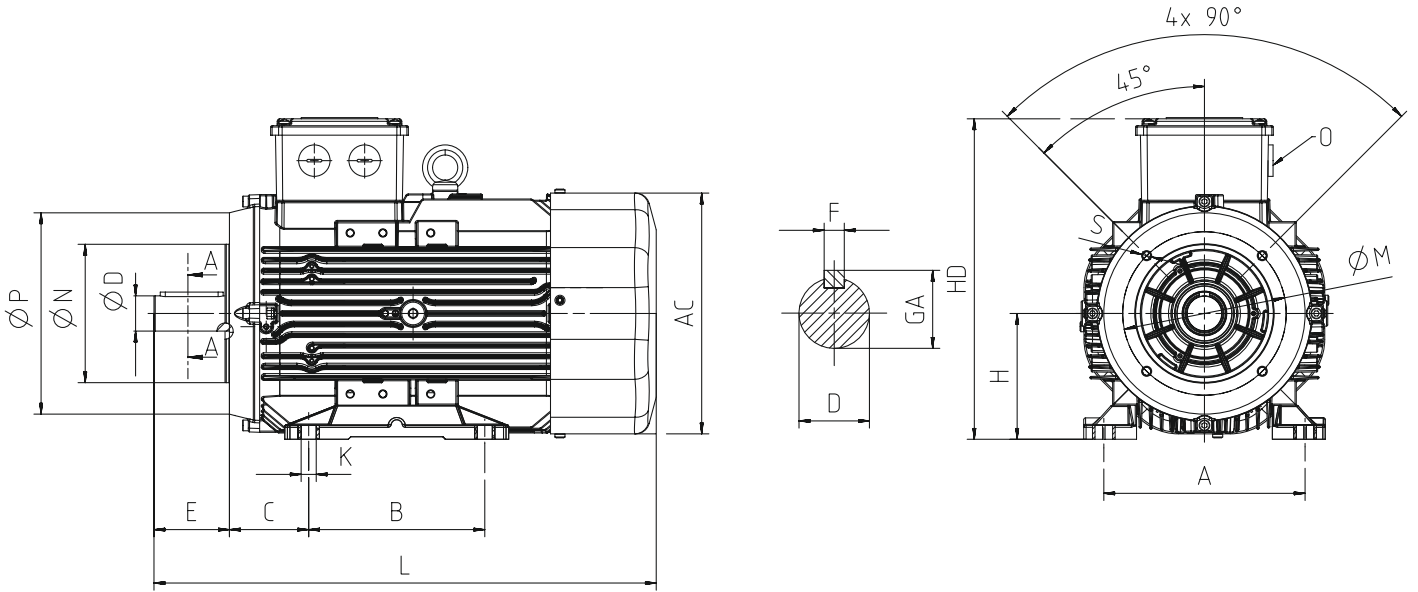
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)				
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksisi Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksisi Non drive Side	P	N ⁽³⁾	M	R	S
18,5	4	Q3H180M4B	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10	350	250	300	-	18,5
18,5	6	Q3H200L6C	Aluminium	349	750	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
22	2	Q3H180M2A	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10	350	250	300	-	18,5
22	4	Q3H180L4B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
22	6	Q3H200L6D	Aluminium	349	759	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	2	Q3H200L2C	Aluminium	349	706	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	4	Q3H200L4D	Aluminium	349	759	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	6	Q3E225M6C	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
37	2	Q3H200L2D	Aluminium	349	706	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
37	4	Q3E225M4B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
45	2	Q3E225M2B	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
45	4	Q3E225M4C	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
55	2	Q3E250M2A	Aluminium	527	886	2*M50	349	406	250	615	24	60	140	64,0	18	6315-ZZ	6313-ZZ	75*112*12	65*100*13	550	450	500	-	18,5
55	2	Q3EP250M2C	Cast Iron	489	893	1xM50	349	406	250	616	24	60	140	69,0	18	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
55	4	Q3E250M4B	Cast Iron	489	893	1xM50	349	406	250	616	24	65	140	69,0	18	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
75	2	Q3EP280M2C	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	65	140	69,0	18	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
75	4	Q3EP280M4C	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	75	140	79,5	20	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
90	2	Q3EP280M2D	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	65	140	69,0	18	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
90	4	Q3EP280M4D	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	75	140	79,5	20	6316	6316	80*100*10	80*100*10	550	450	500	-	18,5
110	2	Q3EP315S2C	Cast Iron	652	1176	2*M63	406	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
110	4	Q3EP315S4C	Cast Iron	652	1206	2*M63	406	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
132	2	Q3EP315M2B	Cast Iron	652	1176	2*M63	457	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
132	4	Q3EP315M4B	Cast Iron	652	1206	2*M63	457	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
160	2	Q3EP315L2A	Cast Iron	652	1287	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
160	4	Q3EP315L4A	Cast Iron	652	1317	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
200	2	Q3EP315L2C	Cast Iron	652	1287	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
200	4	Q3EP315L4C	Cast Iron	652	1317	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
250	2	Q3EP355M2C	Cast Iron	762	1512	4*M63	560	610	355	997	28	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
250	4	Q3EP355M4C	Cast Iron	762	1542	4*M63	560	610	355	997	28	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
315	2	Q3EP355L2B	Cast Iron	762	1512	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
315	4	Q3EP355L4B	Cast Iron	762	1542	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
355	2	Q3EP355L2C	Cast Iron	762	1512	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
355	4	Q3EP355L4C	Cast Iron	762	1542	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14a, B34a / DIMENSION - B14a, B34a



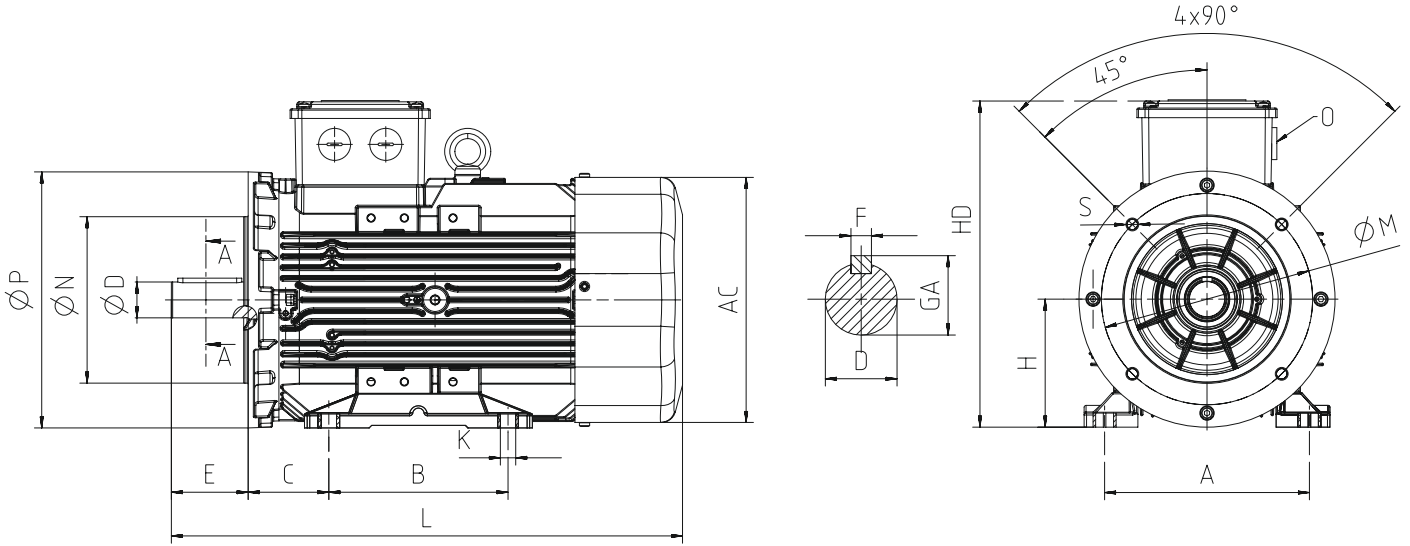
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors				Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FC) (B14a) Flange (FC) (B14a)							
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
0,75	2	Q3H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
0,75	4	Q3H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
0,75	6	Q3H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
1,1	2	Q3H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
1,1	4	Q3H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
1,1	6	Q3H90L6D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
1,5	2	Q3H90L2C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
1,5	4	Q3H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
1,5	6	Q3H100L6D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
2,2	2	Q3H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
2,2	4	Q3H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
2,2	6	Q3H112M6D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
3	2	Q3H100L2D	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
3	4	Q3H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
3	6	Q3H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
4	2	Q3H112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
4	4	Q3H112M4D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
4	6	Q3H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
5,5	2	Q3H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	200	130	165	-	M10
5,5	4	Q3H132S4B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
5,5	6	Q3H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
7,5	2	Q3H132S2D	Aluminium	210	448	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	200	130	165	-	M10
7,5	4	Q3H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14b, B34b / DIMENSION - B14b, B34b



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FB) (B14b) Flange (FB) (B14b)						
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksli Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksli Non drive Side	P	N ⁽³⁾	M	R	S
0,75	2	Q3H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
0,75	4	Q3H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
0,75	6	Q3H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
1,1	2	Q3H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
1,1	4	Q3H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
1,1	6	Q3H90L6D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
1,5	2	Q3H90L2C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
1,5	4	Q3H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
1,5	6	Q3H100L6D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	130	-	M10
2,2	2	Q3H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	260	110	130	-	M8
2,2	4	Q3H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
2,2	6	Q3H112M6D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
3	2	Q3H100L2D	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
3	4	Q3H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	165	-	M10
3	6	Q3H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
4	2	Q3H112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
4	4	Q3H112M4D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
4	6	Q3H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
5,5	2	Q3H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	250	180	215	-	M12
5,5	4	Q3H132S4B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
5,5	6	Q3H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
7,5	2	Q3H132S2D	Aluminium	210	448	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	250	180	215	-	M12
7,5	4	Q3H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885
(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

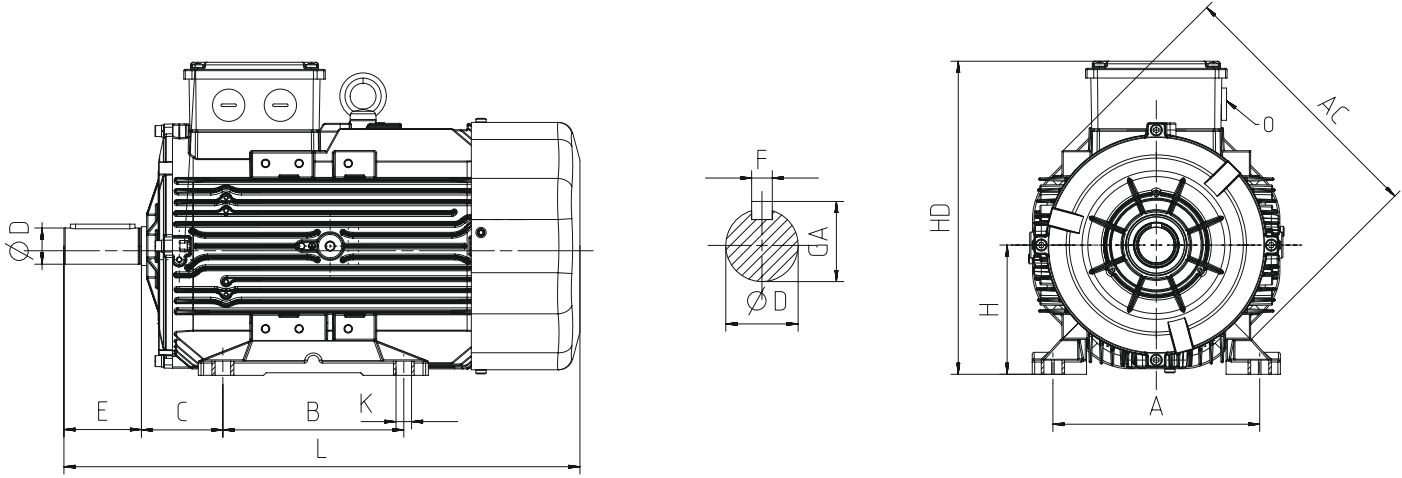
MOTOR TİPİ MOTOR TYPE	GÖVDE TİPİ HOUSING TYPE	NOMINAL RATED VALUES					KALKIŞTAKİ DEĞERLER STARTING VALUES					Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J	Ağırlık Weight (B3)	Ses Basınç Seviyesi Sound Pressure Level dB**
		GÜÇ POWER		DEVİR SPEED	AKIM CURRENT	MOMENT TORQUE	AKIM CURRENT		MOMENT TORQUE		η%								
		kW	HP				rpm	A	Nm	I_A / I_N	$I_Δ / I_N$		M_A / M_N	$M_Δ / M_N$	4/4				
2 kutup 3000 d/dak / 2 pole 3000 rpm																			
230/400V	Q3H80M2DE	Aluminium	1,5	2,0	2905	3,2	4,9	10,9	-	5	-	5,4	84,2	83,3	80,5	0,80	0,00224	15	59
	Q3H90L2E	Aluminium	3,0	4,0	2890	5,8	9,9	8,1	-	3	-	3,5	87,1	88,1	87,7	0,86	0,00318	19	63
400/690V	Q3H100L2DE	Aluminium	4,0	5,5	2936	8,0	13,0	3,6	10,9	1,6	4,8	5,7	88,1	88,1	85,8	0,82	0,00611	29	66
	Q3H112M2D	Aluminium	5,5	7,5	2920	10,5	18,1	3,5	10,5	1,2	3,7	5,1	89,2	89,0	87,2	0,86	0,00741	32	68
	Q3H112M2DE	Aluminium	7,5	10,0	2918	13,6	24,5	3,6	10,7	1,4	4,3	5,4	90,1	90,3	89,1	0,88	0,00921	42	69
	Q3H132M2A	Aluminium	11,0	15,0	2925	20,7	36,0	3,5	10,5	1,3	3,9	5,2	91,2	91,4	90,6	0,85	0,03489	61	69
	Q3H132M2B	Aluminium	15,0	20,0	2935	27,6	48,8	3,5	10,4	1,2	3,7	5,2	91,9	91,3	89,8	0,86	0,00402	77	71
	Q3H160L2D	Aluminium	22,0	30,0	2961	39,1	71,0	3,5	10,6	1,2	3,6	5,1	92,7	92,4	91,3	0,87	0,05539	114	70
	Q3H180M2B	Aluminium	30,0	40,0	2957	50,1	96,9	3,2	9,6	1,0	2,9	3,9	93,3	93,2	92,6	0,93	0,10277	148	77
Q3H200L2DE	Aluminium	45,0	60,0	2964	75,2	145,0	3,6	10,7	1,0	3,0	2,7	94,0	93,3	92,8	0,92	0,14769	199	78	
4 kutup 1500 d/dak / 4 pole 1500 rpm																			
230/400V	Q3H80M4DE	Aluminium	1,1	1,5	1448	2,6	7,3	7,2	-	3,1	-	3,7	82,7	82,4	89,5	0,75	0,00306	14	48
	Q3H90L4DE	Aluminium	2,2	3,0	1453	5,4	14,4	9,5	-	5,0	-	5,5	86,7	84,3	80,6	0,68	0,00690	25	54
400/690V	Q3H100L4E	Aluminium	4,0	5,5	1445	8,8	26,4	8,6	-	3,5	-	4,2	88,6	87,1	85,6	0,75	0,01124	35	56
	Q3H112M4E	Aluminium	5,5	7,5	1443	11,25	36,4	2,8	8,3	1,0	3,1	3,8	89,6	89,2	88,3	0,80	0,01526	40	57
	Q3H132M4E	Aluminium	11,0	15,0	1470	19,2	71,3	2,7	8,0	0,7	2,1	3,8	91,4	91,5	90,4	0,90	0,05940	82	63
	Q3H160L4C	Aluminium	18,5	25,0	1474	39,5	119,9	2,5	7,4	0,8	2,3	3,5	92,6	91,9	91,2	0,74	0,10511	114	58
	Q3H180L4C	Aluminium	30,0	40,0	1475	54,8	194,2	2,5	7,6	0,8	2,3	2,8	93,6	93,2	92,3	0,85	0,22165	187	69

* IEC 60034-2-1'e göre / According to IEC 60034-2-1

** Ses Basınç Seviyeleri motordan 1m uzaklıktan ölçülmüştür. / The sound pressure measurements are taken 1m away from the motor

*** Tolerans +3 dBA / Tolerance +3 dBA

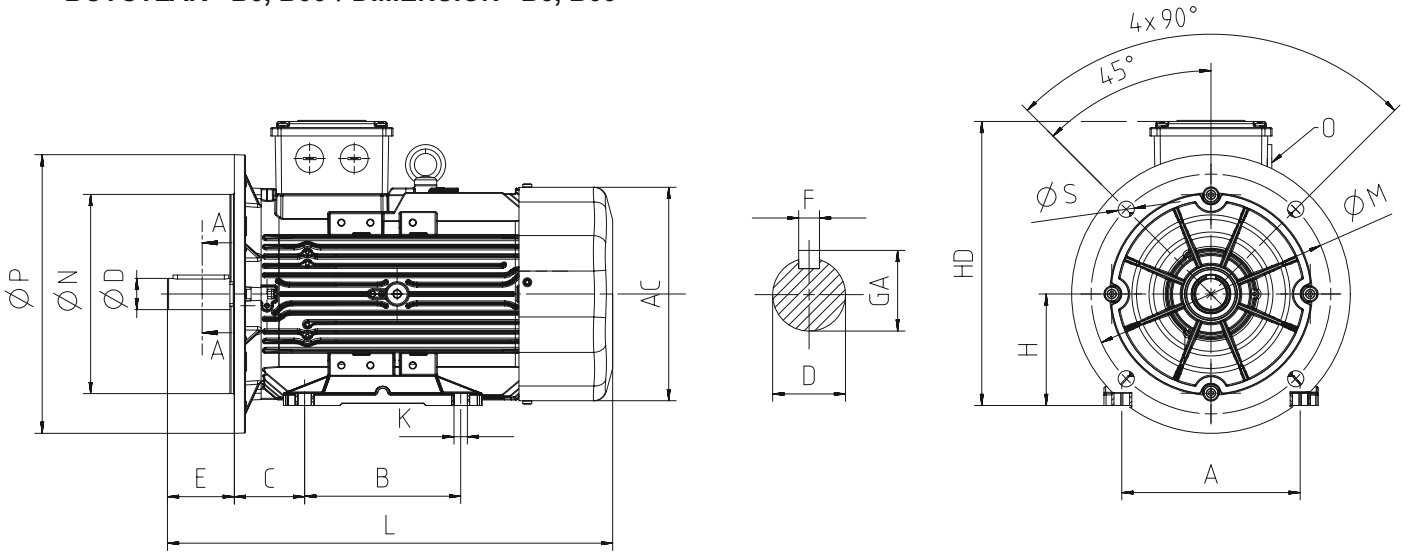
BOYUTLAR - B3 / DIMENSION - B3



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksi Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksi Non drive Side
1,1	4	Q3H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
1,5	2	Q3H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
2,2	4	Q3H90L4DE	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
3,0	2	Q3H90L2E	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
4,0	2	Q3H100L2DE	Aluminium	191	400	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7
4,0	4	Q3H100L4E	Aluminium	191	422	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7
5,5	2	Q3H112M2D	Aluminium	210	396	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
5,5	4	Q3H112M4E	Aluminium	210	421	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
7,5	2	Q3H112M2DE	Aluminium	210	421	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
11,0	2	Q3H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
11,0	4	Q3H132M4E	Aluminium	260	520	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6309-ZZ	6209-ZZ	40*62*10	40*62*10
15,0	2	Q3H132M2B	Aluminium	260	520	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
18,5	4	Q3H160L4C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
30,0	4	Q3H180L4C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
22,0	2	Q3H160L2D	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
30,0	2	Q3H180M2B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
45,0	2	Q3H200L2DE	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885

BOYUTLAR - B5, B35 / DIMENSION - B5, B35



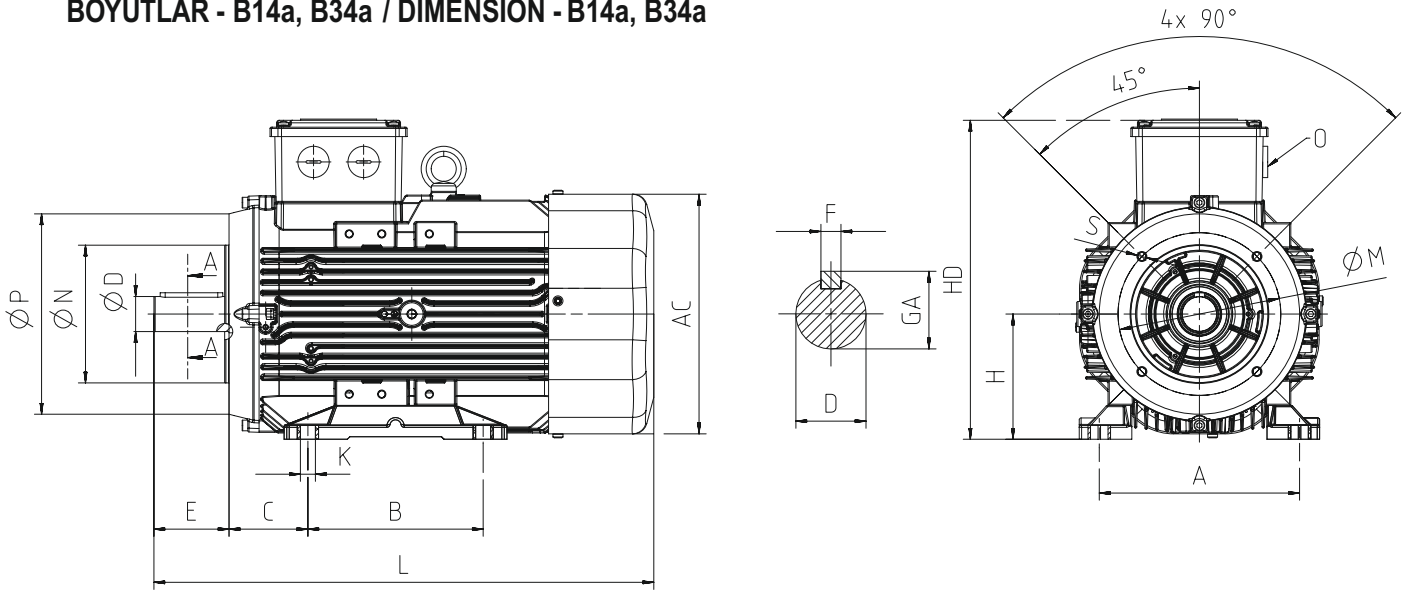
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)				
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q3H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
1,5	2	Q3H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
2,2	4	Q3H90L4DE	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
3	2	Q3H90L2E	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
4	2	Q3H100L2DE	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
4	4	Q3H100L4E	Aluminium	191	422	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
5,5	2	Q3H112M2D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
5,5	4	Q3H112M4E	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
7,5	2	Q3H112M2DE	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
11	2	Q3H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
11	4	Q3H132M4E	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6309-ZZ	6209-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
15	2	Q3H132M2B	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
18,5	4	Q3H160L4C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
30	4	Q3H180L4C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
22	2	Q3H160L2D	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
30	2	Q3H180M2B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
45	2	Q3H200L2DE	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14a, B34a / DIMENSION - B14a, B34a



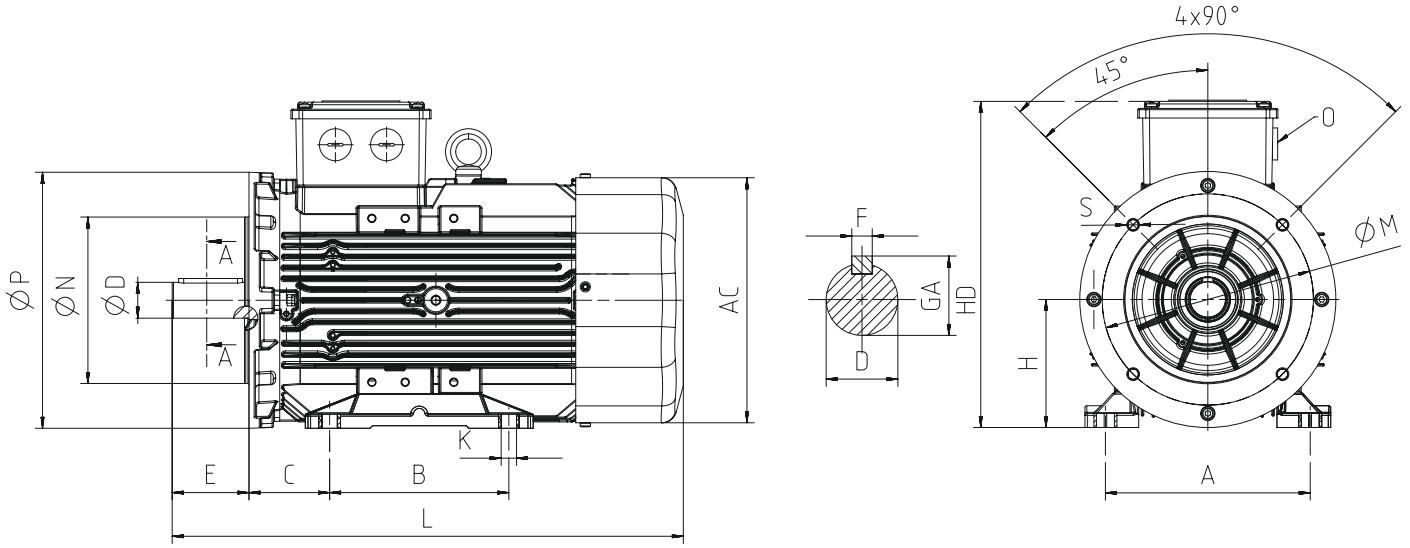
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft			Rulman Bearing		Keçe Seal		Flanş (FC) (B14a) Flange (FC) (B14a)					
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksis Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksis Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q3H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
1,5	2	Q3H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
2,2	4	Q3H90L4DE	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
3	2	Q3H90L2E	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
4	2	Q3H100L2DE	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
4	4	Q3H100L4E	Aluminium	191	422	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
5,5	2	Q3H112M2D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
5,5	4	Q3H112M4E	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
7,5	2	Q3H112M2DE	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
11	2	Q3H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
11	4	Q3H132M4E	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
15	2	Q3H132M2B	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14b, B34b / DIMENSION - B14b, B34b



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft			Rulman Bearing		Keçe Seal		Flanş (FB) (B14b) Flange (FB) (B14b)					
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q3H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
1,5	2	Q3H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
2,2	4	Q3H90L4DE	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
3	2	Q3H90L2E	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
4	2	Q3H100L2DE	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	165	-	M10
4	4	Q3H100L4E	Aluminium	191	422	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	165	-	M10
5,5	2	Q3H112M2D	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
5,5	4	Q3H112M4E	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
7,5	2	Q3H112M2DE	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
11	2	Q3H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
11	4	Q3H132M4E	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
15	2	Q3H132M2B	Aluminium	260	520	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

IE2

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

MOTOR TİPİ MOTOR TYPE	GÖVDE TIPI HOUSING TYPE	NOMINAL RATED VALUES						KALKIŞTAKİ DEĞERLER STARTING VALUES				Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J	Ağırlık Weight (B3)	Ses Basınç Seviyesi Sound Pressure Level dBA**
		GÜÇ POWER		DEVİR SPEED	AKIM CURRENT	MOMENT TORQUE	AKIM CURRENT		MOMENT TORQUE		η%								
		kW	HP				rpm	A	Nm	I_A / I_N	$I_Δ / I_N$		M_A / M_N	$M_Δ / M_N$	4/4				
2 kutup 3000 d/dak / 2 pole 3000 rpm																			
230/400V	Q2E63M2A	Aluminium	0,18	1/4	2810	0,4	0,6	4,7	-	2,1	-	2,3	59,1	63,8	58,5	0,85	0,00022	5	52
	Q2E63M2B	Aluminium	0,25	1/3	2820	0,6	0,8	5,6	-	2,7	-	2,7	64,7	66,2	63,5	0,84	0,00025	6	52
	Q2E71M2A	Aluminium	0,37	1/2	2850	0,8	1,2	8,1	-	4,0	-	4,2	69,5	69,6	67,3	0,80	0,00067	8	54
	Q2E71M2B	Aluminium	0,55	3/4	2880	1,2	1,8	8,2	-	4,1	-	4,3	74,1	74,3	74,2	0,82	0,00086	10	54
	Q2H80M2B	Aluminium	0,75	1,0	2850	1,7	2,5	6,4	-	2,8	-	3,3	77,4	77,6	74,4	0,82	0,00111	9	58
	Q2H80M2C	Aluminium	1,1	1,5	2860	2,5	3,7	6,7	-	2,8	-	3,3	79,6	79,8	77,0	0,81	0,00140	11	58
	Q2H90L2B	Aluminium	1,5	2,0	2875	3,8	5,0	8,0	-	3,9	-	4,4	81,3	80,4	76,6	0,74	0,00176	13	62
	Q2H90L2D	Aluminium	2,2	3,0	2870	4,7	7,3	9,1	-	3,9	-	4,4	83,2	82,8	81,3	0,83	0,00231	16	62
	Q2H100L2C	Aluminium	3,0	4,0	2887	6,3	9,9	7,3	-	2,4	-	2,9	84,6	85,4	84,2	0,83	0,00266	19	66
400/690V	Q2H112M2B	Aluminium	4,0	5,5	2900	8,0	13,2	3,1	9,3	1,1	3,2	4,0	85,8	86,1	84,5	0,85	0,00487	24	68
	Q2H132S2B	Aluminium	5,5	7,5	2915	10,6	18,0	3,5	10,6	1,5	4,4	5,3	87,0	87,1	84,9	0,86	0,00703	34	69
	Q2H132S2C	Aluminium	7,5	10,0	2900	14,6	24,7	3,5	10,6	1,3	3,8	4,6	88,1	88,6	87,6	0,85	0,00772	37	69
	Q2H160M2B	Aluminium	11,0	15,0	2923	21,2	35,9	3,1	9,2	1,1	3,3	4,8	89,4	89,9	88,4	0,83	0,03517	65	70
	Q2H160M2C	Aluminium	15,0	20,0	2915	30,0	49,2	3,2	9,6	1,3	3,9	5,1	90,3	90,6	89,6	0,80	0,04015	67	70
	Q2H160M2D	Aluminium	18,5	25,0	2930	30,8	60,3	2,7	8,0	0,6	1,9	3,6	90,9	91,7	91,1	0,95	0,04613	79	70
	Q2H180M2A	Aluminium	22,0	30,0	2955	40,9	71,2	3,5	10,6	1,2	3,6	5,2	91,3	92,0	90,7	0,84	0,05141	100	77
	Q2H200L2B	Aluminium	30,0	40,0	2955	51,5	97,1	2,8	8,5	0,8	2,4	3,6	92,0	92,5	91,8	0,91	0,08644	175	78
	Q2H200L2C	Aluminium	37,0	50,0	2965	66,2	119,6	3,4	10,1	1,0	3,1	4,5	92,5	92,5	91,2	0,87	0,10277	175	78
	Q2E225M2B	Aluminium	45,0	60,0	2960	82,1	145,2	2,9	8,7	0,8	2,4	2,9	92,9	92,6	91,1	0,85	0,23500	235	81
	Q2E250M2A	Cast Iron	55,0	75,0	2976	92,7	177,0	2,8	8,4	0,8	2,5	3,4	93,2	93,0	91,6	0,91	0,48700	486	82
	Q2EP280M2B	Cast Iron	75,0	100,0	2975	127,9	240,8	3,5	10,6	0,9	2,7	5,1	93,8	93,7	92,5	0,92	0,54000	576	84
	Q2EP280M2C	Cast Iron	90,0	125,0	2980	149,0	288,6	2,4	7,1	1,0	3,0	3,0	94,1	93,9	92,9	0,91	0,64500	585	84
	Q2EP315S2C	Cast Iron	110,0	127	2,975	185	353	2,6	7,8	0,7	2,2	2,4	94,3	94,3	93,1	0,91	1,43600	920	87
	Q2EP315M2C	Cast Iron	132,0	152	2,975	221	423	2,6	7,8	0,8	2,3	2,4	94,6	94,6	93,4	0,91	1,72300	970	87
	Q2EP315L2C	Cast Iron	160,0	184	2,975	268	513	2,5	7,5	0,8	2,3	2,4	94,8	94,8	93,6	0,91	1,95300	1170	87
	Q2EP315L2D	Cast Iron	200,0	230	2,975	334	643	2,7	8	0,8	2,4	2,6	95	95	93,8	0,91	2,52700	1200	87
	Q2EP355M2C	Cast Iron	250,0	280	2,985	422	799	2,3	7	0,7	2	2,4	95	95	93,8	0,90	3,92000	1690	87
Q2EP355L2C	Cast Iron	315,0	353,0	2,985	532	1.007	2,5	7,4	0,7	2,0	2,3	95,0	95,0	93,8	0,90	4,17000	1.870	87	
Q2EP355L2D	Cast Iron	355,0	398,0	2985	599	1.135	2,5	7,5	0,6	1,8	2,1	95,0	95,0	93,8	0,90	4,44000	1953	87	

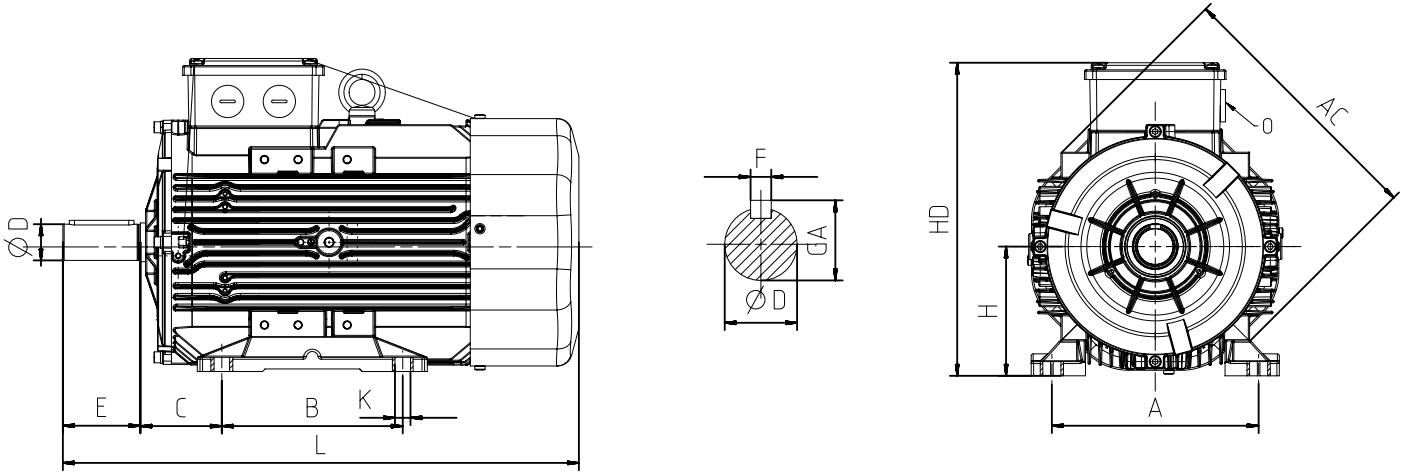
* IEC 60034-2-1'e göre / According to IEC 60034-2-1

** Ses Basınç Seviyeleri motordan 1m uzaklıktan ölçülmüştür. / The sound pressure measurements are taken 1m away from the motor

*** Tolerans +3 dBA / Tolerance +3 dBA

MOTOR TİPİ MOTOR TYPE	GÖVDE TIPI HOUSING TYPE	NOMİNAL RATED VALUES					KALKIŞTAKİ DEĞERLER STARTING VALUES				Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J kgm ²	Ağırlık Weight (B3) kg	Ses Basınç Seviyesi Sound Pressure Level dBA **	
		GÜÇ POWER		DEVİR SPEED rpm	AKIM CURRENT A	MOMENT TORQUE Nm	AKIM CURRENT I _A / I _N		MOMENT TORQUE M _A / M _N			η%							
		kW	HP				λ	Δ	λ	Δ		4/4	3/4	2/4					
4 kutup 1500 d/dak / 4 pole 1500 rpm																			
230/400V	Q2E63M4A	Aluminium	0,12	1/6	1420	0,5	0,9	3,4	-	2,2	-	3,2	64,0	54,1	44,9	0,56	0,00022	5	41
	Q2E63M4B	Aluminium	0,18	1/4	1400	0,6	1,2	3,7	-	2,7	-	3,0	68,0	60,0	51,3	0,66	0,00026	6	41
	Q2E71M4A	Aluminium	0,25	1/3	1415	0,6	1,7	4,6	-	2,6	-	3,8	68,5	68,8	66,9	0,70	0,00095	9	45
	Q2E71M4B	Aluminium	0,37	1/2	1425	1,1	2,5	4,6	-	2,6	-	3,8	72,7	73,1	72,0	0,71	0,00095	9	45
	Q2H80M4B	Aluminium	0,55	3/4	1435	1,3	3,6	6,4	-	2,3	-	3,2	77,1	78,8	75,4	0,76	0,00175	10	49
	Q2H80M4C	Aluminium	0,75	1,0	1440	1,8	5,0	5,5	-	2,1	-	2,6	79,6	80,0	77,7	0,76	0,00216	11	49
	Q2H90L4C	Aluminium	1,10	1,5	1430	2,5	7,4	5,7	-	2,2	-	2,6	81,4	82,4	81,6	0,80	0,00267	13	54
	Q2H90L4C	Aluminium	1,50	2,0	1427	3,3	10,0	6,4	-	2,5	-	3,1	82,8	84,2	83,7	0,79	0,00328	15	54
	Q2H100L4B	Aluminium	2,20	3,0	1437	5,3	14,6	7,6	-	3,6	-	4,2	84,3	84,1	81,5	0,72	0,00521	21	55
	Q2H100L4C	Aluminium	3,00	4,0	1440	7,4	20,0	6,5	-	3,3	-	3,7	85,5	85,3	83,0	0,70	0,00694	25	55
400/690V	Q2H112M4C	Aluminium	4,00	5,5	1440	8,7	26,6	2,7	8,0	1,1	3,2	3,8	86,6	85,7	83,5	0,78	0,01085	31	58
	Q2H132S4A	Aluminium	5,50	7,5	1445	11,5	35,5	2,7	8,0	1,0	3,0	3,8	87,7	88,3	87,3	0,79	0,01414	38	59
	Q2H132M4C	Aluminium	7,50	10,0	1460	15,0	49,1	2,4	7,1	0,5	1,5	0,6	88,7	89,4	88,7	0,82	0,03560	54	62
	Q2H160M4C	Aluminium	11,00	15,0	1468	21,6	71,5	2,6	7,9	0,7	2,1	3,6	89,8	91,1	90,3	0,81	0,05468	79	63
	Q2H160L4B	Aluminium	15,00	20,0	1462	29,8	98,0	2,6	7,8	0,6	1,8	3,4	90,6	91,4	90,9	0,80	0,05940	83	63
	Q2H180M4A	Aluminium	18,50	25,0	1470	36,0	120,2	2,3	6,8	0,7	2,2	2,9	91,2	92,0	91,6	0,81	0,10513	110	67
	Q2H180M4B	Aluminium	22,00	30,0	1462	41,8	143,8	1,8	5,5	0,6	1,9	2,8	91,6	92,9	93,3	0,84	0,11398	118	67
	Q2H200L4C	Aluminium	30,00	40,0	1475	55,3	194,6	2,7	8,2	0,9	2,7	3,5	92,0	91,9	91,4	0,85	0,18660	195	70
	Q2E225M4A	Aluminium	37,00	50,0	1480	68,3	238,8	3,0	9,1	1,2	3,6	4,0	92,7	92,6	91,3	0,84	0,36420	263	71
	Q2E225M4B	Aluminium	45,00	60,0	1480	81,5	290,5	3,1	9,4	1,2	3,7	3,0	93,1	93,0	91,9	0,85	0,43500	280	71
	Q2E250M4A	Cast Iron	55,00	75,0	1486	104,8	353,5	2,4	7,2	0,8	2,3	3,0	93,5	93,7	93,3	0,81	0,36400	506	72
	Q2EP280M4B	Cast Iron	75,00	100,0	1485	134,2	485,7	2,6	7,8	1,0	2,9	3,4	94,0	93,9	93,2	0,86	1,06100	624	73
	Q2EP280M4C	Cast Iron	90,00	125,0	1486	163,5	584,2	2,6	7,8	1,0	2,9	3,3	94,2	94,6	94,2	0,85	1,14800	638	73
	Q2EP315S4C	Cast Iron	110,0	127,0	1480	191	709	2,4	7,2	0,7	2,2	2,5	94,5	94,5	93,9	0,88	3,03500	925	70
	Q2EP315M4C	Cast Iron	132,0	152,0	1480	229	851	2,3	7,0	0,7	2,1	2,4	94,7	94,7	94,1	0,88	3,41500	1.010	70
	Q2EP315L4C	Cast Iron	160,0	184,0	1480	273	1.032	2,5	7,5	0,7	2,2	2,5	94,9	94,9	94,3	0,89	4,11900	1.080	76
	Q2EP315L4D	Cast Iron	200,0	230,0	1480	341	1.290	2,5	7,5	0,8	2,3	2,5	95,1	95,1	94,5	0,89	5,20300	1.200	76
	Q2EP355M4C	Cast Iron	250,0	280,0	1485	426	1.607	2,6	7,9	0,8	2,3	2,5	95,1	95,1	94,5	0,89	8,79000	1.720	76
Q2EP355L4C	Cast Iron	315,0	353,0	1485	531	2.025	2,5	7,4	0,7	2,0	2,3	95,1	95,1	94,5	0,90	10,13300	1.920	87	
Q2EP355L4D	Cast Iron	355,0	398,0	1485	603	2.283	2,9	8,8	0,6	1,8	2,0	95,1	95,1	94,5	0,89	10,67800	1.953	87	
6 kutup 1000 d/dak / 6 pole 1000 rpm																			
230/400V	Q2H90S6B	Aluminium	0,75	1,0	943	1,8	7,7	4,6	-	2,1	-	2,7	75,9	75,1	71,4	0,69	0,00383	16	53
	Q2H90L6C	Aluminium	1,10	1,5	938	3,0	11,2	2,8	-	2,4	-	2,8	78,1	78,0	75,1	0,69	0,00464	18	53
	Q2H100L6C	Aluminium	1,50	2,0	955	4,0	15,2	3,3	-	2,6	-	3,2	79,8	79,3	76,3	0,67	0,00871	26	56
	Q2H112M6C	Aluminium	2,20	3,0	942	5,4	22,4	5,2	-	2,0	-	2,6	81,8	81,5	79,5	0,72	0,00936	31	58
400/690V	Q2H132S6A	Aluminium	3,00	4,0	965	14,1	29,8	1,8	5,4	1,1	3,2	3,3	83,3	82,3	79,4	0,64	0,02950	47	62
	Q2H132M6A	Aluminium	4,00	5,5	970	10,4	39,8	1,9	5,8	0,7	2,2	2,6	84,6	83,5	80,7	0,65	0,03560	53	61
	Q2H132M6B	Aluminium	5,50	7,5	960	12,8	54,7	1,7	5,2	0,9	2,6	2,9	86,1	85,7	83,9	0,72	0,06420	67	60
	Q2H160M6B	Aluminium	7,50	10,0	970	18,9	74,6	2,1	6,2	1,2	3,6	3,8	87,2	84,3	81,7	0,66	0,07540	88	63
	Q2H160L6B	Aluminium	11,00	15,0	970	25,5	109,4	1,7	5,2	1,0	3,0	3,1	88,7	88,5	86,3	0,71	0,07040	99	63
	Q2H180L6A	Aluminium	15,00	20,0	970	31,5	146,9	1,8	5,1	0,6	1,8	2,0	89,7	89,5	87,30,0	0,76	0,16677	115	69
	Q2H200L6B	Aluminium	18,50	25,0	981	41,6	179,8	2,0	5,9	0,7	2,1	2,6	90,4	90,5	89,6	0,70	0,18660	160	70
	Q2H200L6C	Aluminium	22,00	30,0	982	48,8	214,5	1,8	5,6	0,8	2,3	2,4	90,9	91,0	90,3	0,72	0,20643	171	70
Q2E225M6B	Aluminium	30,00	40,0	975	57,0	287,6	1,9	5,7	0,6	1,7	2,5	91,7	91,6	90,7	0,83	0,49334	234	66	

BOYUTLAR - B3 / DIMENSION - B3



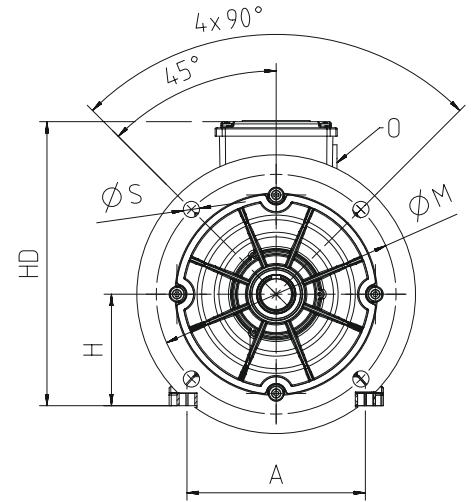
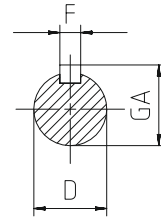
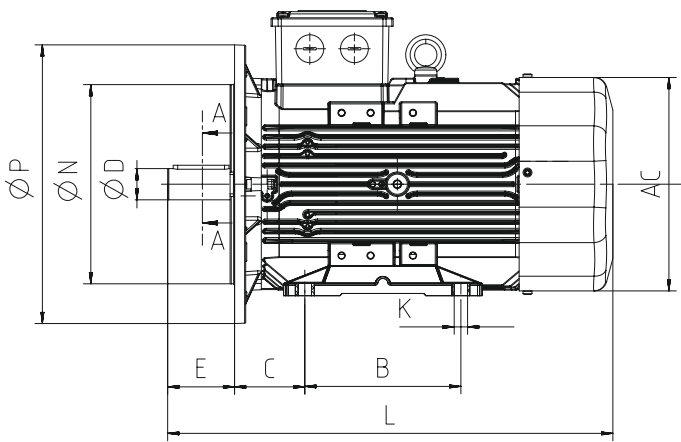
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side
0,12	4	Q2E63M4A	Aluminium	123	220	1xM20	80	100	63	162	7	40	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7
0,18	2	Q2E63M2A	Aluminium	123	220	1xM20	80	100	63	162	7	40	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7
0,18	4	Q2E63M4B	Aluminium	123	220	1xM20	80	100	63	162	7	40	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7
0,25	2	Q2E63M2B	Aluminium	123	220	1xM20	80	100	63	162	7	40	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7
0,25	4	Q2E71M4A	Aluminium	138	253	1xM20	90	112	71	190	7	45	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5
0,37	2	Q2E71M2A	Aluminium	138	253	1xM20	90	112	71	190	7	45	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5
0,37	4	Q2E71M4B	Aluminium	138	253	1xM20	90	112	71	190	7	45	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5
0,55	2	Q2E71M2B	Aluminium	138	253	1xM20	90	112	71	190	7	45	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5
0,55	4	Q2H80M4B	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
0,75	2	Q2H80M2B	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
0,75	4	Q2H80M4C	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
0,75	6	Q2H90S6B	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
1,1	2	Q2H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
1,1	4	Q2H90L4C	Aluminium	158	278	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
1,1	6	Q2H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
1,5	2	Q2H90L2B	Aluminium	158	278	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
1,5	4	Q2H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
1,5	6	Q2H100L6C	Aluminium	191	400	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7
2,2	2	Q2H90L2D	Aluminium	158	303	1xM25	100-125	140	90	213	10	56	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7
2,2	4	Q2H100L4B	Aluminium	172	349	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
2,2	6	Q2H112M6C	Aluminium	210	396	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
3	2	Q2H100L2C	Aluminium	172	349	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
3	4	Q2H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
3	6	Q2H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
4	2	Q2H112M2B	Aluminium	191	399	1xM25	140	190	112	254	12	70	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
4	4	Q2H112M4C	Aluminium	191	399	1xM25	140	190	112	254	12	70	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
4	6	Q2H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
5,5	2	Q2H132S2B	Aluminium	210	422	1xM25	140-178	216	132	283	12	89	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7
5,5	4	Q2H132S4A	Aluminium	210	422	1xM25	140-178	216	132	283	12	89	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7
5,5	6	Q2H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885

Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors						Mil Shaft				Rulman Bearing		Keçe Seal	
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksli Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksli Non drive Side
7,5	2	Q2H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	89	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7
7,5	4	Q2H132M4C	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
7,5	6	Q2H160M6B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
11	2	Q2H160M2B	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
11	4	Q2H160M4C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
11	6	Q2H160L6B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
15	2	Q2H160M2C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
15	4	Q2H160L4B	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
15	6	Q2H180L6A	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
18,5	2	Q2H160M2D	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	108	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10
18,5	4	Q2H180M4A	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	121	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10
18,5	6	Q2H200L6B	Aluminium	349	706	1xM50	305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
22	2	Q2H180M2A	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	121	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10
22	4	Q2H180M4B	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	121	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10
22	6	Q2H200L6C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	2	Q2H200L2B	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	4	Q2H200L4C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
30	6	Q2E225M6B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
37	2	Q2H200L2C	Aluminium	349	706	1xM50	305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
37	4	Q2E225M4A	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
45	2	Q2E225M2B	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	149	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13
45	4	Q2E225M4B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	149	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13
55	2	Q2E250M2A	Aluminium	527	886	2*M50	349	406	250	615	24	149	60	140	64,0	18	6315-ZZ	6313-ZZ	75*112*12	65*100*13
55	2	Q2E250M2A	Cast Iron	489	893	1xM50	349	406	250	616	24	149	60	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
55	4	Q2E250M4A	Cast Iron	489	893	1xM50	349	406	250	616	24	149	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
75	2	Q2EP280M2B	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
75	4	Q2EP280M4B	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10
90	2	Q2EP280M2C	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
90	4	Q2EP280M4C	Cast Iron	489	1025	1xM50	419	457	280	647	24	190	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10
110	2	Q2EP315S2C	Cast Iron	630	1180	2*M63	406	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
110	4	Q2EP315S4C	Cast Iron	630	1210	2*M63	406	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
132	2	Q2EP315M2C	Cast Iron	630	1290	2*M63	457	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
132	4	Q2EP315M4C	Cast Iron	630	1320	2*M63	457	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
160	2	Q2EP315L2C	Cast Iron	630	1290	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
160	4	Q2EP315L4C	Cast Iron	630	1320	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
200	2	Q2EP315L2D	Cast Iron	630	1290	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
200	4	Q2EP315L4D	Cast Iron	630	1320	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
250	2	Q2EP355M2C	Cast Iron	710	1486	4*M63	560	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
250	4	Q2EP355M4C	Cast Iron	710	1517	4*M63	560	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
315	2	Q2EP355L2C	Cast Iron	710	1486	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
315	4	Q2EP355L4C	Cast Iron	710	1517	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
355	2	Q2EP355L2D	Cast Iron	710	1486	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
355	4	Q2EP355L4D	Cast Iron	710	1517	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885

BOYUTLAR - B5, B35 / DIMENSION - B5, B35



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayıklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)				
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
0,12	4	Q2E63M4A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	140	95	115	-	10
0,18	2	Q2E63M2A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	140	95	115	-	10
0,18	4	Q2E63M4B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	140	95	115	-	10
0,25	2	Q2E63M2B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	140	95	115	-	10
0,25	4	Q2E71M4A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	160	110	130	-	10
0,37	2	Q2E71M2A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	160	110	130	-	10
0,37	4	Q2E71M4B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	160	110	130	-	10
0,55	2	Q2E71M2B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	160	110	130	-	10
0,55	4	Q2H80M4B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
0,75	2	Q2H80M2B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
0,75	4	Q2H80M4C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
0,75	6	Q2H90S6B	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
1,1	2	Q2H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12
1,1	4	Q2H90L4C	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
1,1	6	Q2H90L6B	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12
1,5	2	Q2H90L2B	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
1,5	4	Q2H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
1,5	6	Q2H100L6C	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
2,2	2	Q2H90L2D	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	200	130	165	-	12
2,2	4	Q2H100L4B	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
2,2	6	Q2H112M6C	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
3	2	Q2H100L2C	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
3	4	Q2H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
3	6	Q2H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
4	2	Q2H112M2B	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
4	4	Q2H112M4C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
4	6	Q2H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
5,5	2	Q2H132S2B	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	300	230	265	-	14,5
5,5	4	Q2H132S4A	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	300	230	265	-	14,5
5,5	6	Q2H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5

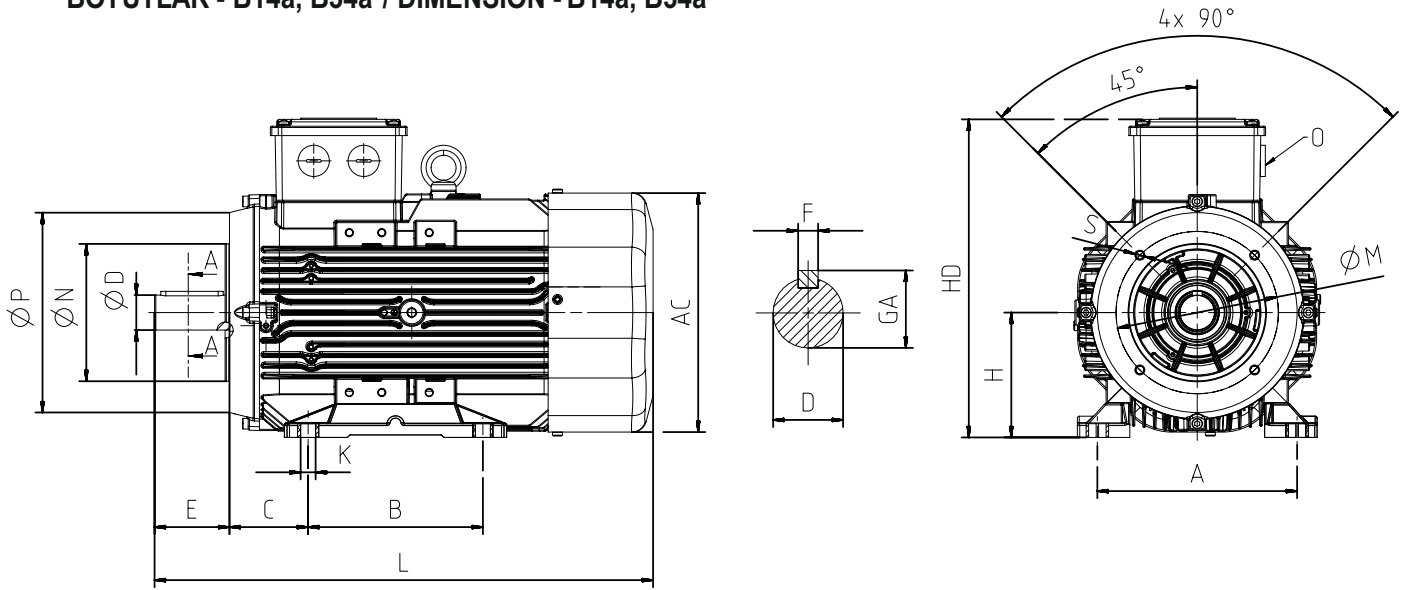
(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft			Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)					
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
7,5	2	Q2H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	300	230	265	-	14,5
7,5	4	Q2H132M4C	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
7,5	6	Q2H160M6B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
11	2	Q2H160M2B	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
11	4	Q2H160M4C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
11	6	Q2H160L6B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
15	2	Q2H160M2C	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
15	4	Q2H160L4B	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
15	6	Q2H180L6A	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
18,5	2	Q2H160M2D	Aluminium	260	520	1xM32	210-254	254	160	351	14,5	42	110	45,0	12	6309-ZZ	6208-ZZ	45*72*10	40*62*10	350	250	300	-	18,5
18,5	4	Q2H180M4A	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10	350	250	300	-	18,5
18,5	6	Q2H200L6B	Aluminium	349	706	1xM50	305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
22	2	Q2H180M2A	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10	350	250	300	-	18,5
22	4	Q2H180M4B	Aluminium	305	596	1xM32	241-279	279	180	398	14,5	48	110	51,5	14	6310-ZZ	6209-ZZ	50*80*10	45*72*10	350	250	300	-	18,5
22	6	Q2H200L6C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	2	Q2H200L2B	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	4	Q2H200L4C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
30	6	Q2E225M6B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
37	2	Q2H200L2C	Aluminium	349	706	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
37	4	Q2E225M4A	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
45	2	Q2E225M2B	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
45	4	Q2E225M4B	Aluminium	456	765	1xM50	286-311	356	225	485	18,5	60	140	64,0	18	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
55	2	Q2E250M2A	Aluminium	527	886	2*M50	349	406	250	615	24	60	140	18	64	6315-ZZ	6313-ZZ	75*112*12	65*100*13	550	450	500	-	18,5
55	2	Q2E250M2A	Cast Iron	489	893	1xM50	349	406	250	616	24	60	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
55	4	Q2E250M4A	Cast Iron	489	893	1xM50	349	406	250	616	24	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
75	2	Q2EP280M2B	Cast Iron	489	1025	1xM50	419	457	280	647	24	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
75	4	Q2EP280M4B	Cast Iron	489	1025	1xM50	419	457	280	647	24	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
90	2	Q2EP280M2C	Cast Iron	489	1025	1xM50	419	457	280	647	24	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
90	4	Q2EP280M4C	Cast Iron	489	1025	1xM50	419	457	280	647	24	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
110	2	Q2EP315S2C	Cast Iron	630	1180	2*M63	406	508	315	845	28	216	65	140	69	6317	6317	85*105*5.5	85*105*5.5	660	550	600	-	24
110	4	Q2EP315S4C	Cast Iron	630	1210	2*M63	406	508	315	845	28	216	80	170	85	6319	6319	95*115*5.5	95*115*5.5	660	550	600	-	24
132	2	Q2EP315M2C	Cast Iron	630	1290	2*M63	457	508	315	845	28	216	65	140	69	6317	6317	85*105*5.5	85*105*5.5	660	550	600	-	24
132	4	Q2EP315M4C	Cast Iron	630	1320	2*M63	457	508	315	845	28	216	80	170	85	6319	6319	95*115*5.5	95*115*5.5	660	550	600	-	24
160	2	Q2EP315L2C	Cast Iron	630	1290	2*M63	508	508	315	845	28	216	65	140	69	6317	6317	85*105*5.5	85*105*5.5	660	550	600	-	24
160	4	Q2EP315L4C	Cast Iron	630	1320	2*M63	508	508	315	845	28	216	80	170	85	6319	6319	95*115*5.5	95*115*5.5	660	550	600	-	24
200	2	Q2EP315L2D	Cast Iron	630	1290	2*M63	508	508	315	845	28	216	65	140	69	6317	6317	85*105*5.5	85*105*5.5	660	550	600	-	24
200	4	Q2EP315L4D	Cast Iron	630	1320	2*M63	508	508	315	845	28	216	80	170	85	6319	6319	95*115*5.5	95*115*5.5	660	550	600	-	24
250	2	Q2EP355M2C	Cast Iron	710	1486	4*M63	560	610	355	956	28	254	75	140	80	6317	6317	85*105*5.5	85*105*5.5	800	680	740	-	24
250	4	Q2EP355M4C	Cast Iron	710	1517	4*M63	560	610	355	956	28	254	95	170	100	6322	6322	110*130*5.5	110*130*5.5	800	680	740	-	24
315	2	Q2EP355L2C	Cast Iron	710	1486	4*M63	630	610	355	956	28	254	75	140	80	6317	6317	85*105*5.5	85*105*5.5	800	680	740	-	24
315	4	Q2EP355L4C	Cast Iron	710	1517	4*M63	630	610	355	956	28	254	95	170	100	6322	6322	110*130*5.5	110*130*5.5	800	680	740	-	24
355	2	Q2EP355L2D	Cast Iron	710	1486	4*M63	630	610	355	956	28	254	75	140	80	6317	6317	85*105*5.5	85*105*5.5	800	680	740	-	24
355	4	Q2EP355L4D	Cast Iron	710	1517	4*M63	630	610	355	956	28	254	95	170	100	6322	6322	110*130*5.5	110*130*5.5	800	680	740	-	24

BOYUTLAR - B14a, B34a / DIMENSION - B14a, B34a



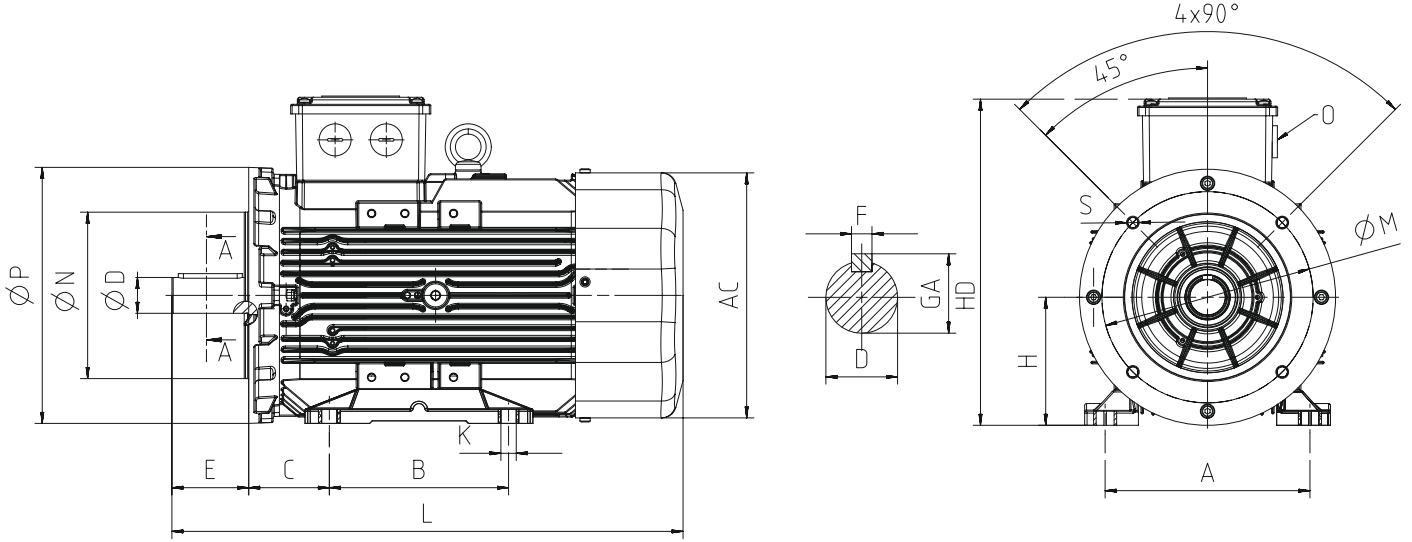
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors				Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FC) (B14a) Flange (FC) (B14a)							
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
0,12	4	Q2E63M4A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	90	60	75	-	M5
0,18	2	Q2E63M2A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	90	60	75	-	M5
0,18	4	Q2E63M4B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	90	60	75	-	M5
0,25	2	Q2E63M2B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	90	60	75	-	M5
0,25	4	Q2E71M4A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	105	70	85	-	M6
0,37	2	Q2E71M2A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	105	70	85	-	M6
0,37	4	Q2E71M4B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	105	70	85	-	M6
0,55	2	Q2E71M2B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	105	70	85	-	M6
0,55	4	Q2H80M4B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
0,75	2	Q2H80M2B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
0,75	4	Q2H80M4C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
0,75	6	Q2H90S6B	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
1,1	2	Q2H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
1,1	4	Q2H90L4C	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
1,1	6	Q2H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
1,5	2	Q2H90L2C	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
1,5	4	Q2H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
1,5	6	Q2H100L6C	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
2,2	2	Q2H90L2D	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	140	95	115	-	M8
2,2	4	Q2H100L4B	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
2,2	6	Q2H112M6C	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
3	2	Q2H100L2C	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
3	4	Q2H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
3	6	Q2H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
4	2	Q2H112M2B	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
4	4	Q2H112M4C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
4	6	Q2H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
5,5	2	Q2H132S2B	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	200	130	165	-	M10
5,5	4	Q2H132S4A	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	200	130	165	-	M10
5,5	6	Q2H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
7,5	2	Q2H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	200	130	165	-	M10
7,5	4	Q2H132M4C	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14b, B34b / DIMENSION - B14b, B34b



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FB) (B14b) Flange (FB) (B14b)						
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
0,12	4	Q2E63M4A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	120	80	100	-	M6
0,18	2	Q2E63M2A	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	120	80	100	-	M6
0,18	4	Q2E63M4B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	120	80	100	-	M6
0,25	2	Q2E63M2B	Aluminium	123	220	1xM20	80	100	63	162	7	11	23	12,5	4	6201-ZZ	6201-ZZ	12*22*7	12*22*7	120	80	100	-	M6
0,25	4	Q2E71M4A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	140	95	115	-	M8
0,37	2	Q2E71M2A	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	140	95	115	-	M8
0,37	4	Q2E71M4B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	140	95	115	-	M8
0,55	2	Q2E71M2B	Aluminium	138	253	1xM20	90	112	71	190	7	14	30	16,0	5	6202-ZZ	6202-ZZ	15*24*5	15*24*5	140	95	115	-	M8
0,55	4	Q2H80M4B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
0,75	2	Q2H80M2B	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
0,75	4	Q2H80M4C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
0,75	6	Q2H90S6B	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
1,1	2	Q2H80M2C	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
1,1	4	Q2H90L4C	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
1,1	6	Q2H90L6C	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
1,5	2	Q2H90L2B	Aluminium	158	278	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
1,5	4	Q2H90L4C	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
1,5	6	Q2H100L6C	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	165	-	M10
2,2	2	Q2H90L2D	Aluminium	158	303	1xM25	100-125	140	90	213	10	24	50	27,0	8	6305-ZZ	6204-ZZ	25*40*7	20*30*7	160	110	130	-	M8
2,2	4	Q2H100L4B	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
2,2	6	Q2H112M6C	Aluminium	210	396	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
3	2	Q2H100L2C	Aluminium	172	349	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
3	4	Q2H100L4C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
3	6	Q2H132S6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
4	2	Q2H112M2B	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
4	4	Q2H112M4C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
4	6	Q2H132M6A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
5,5	2	Q2H132S2B	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	250	180	215	-	M12
5,5	4	Q2H132S4A	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	250	180	215	-	M12
5,5	6	Q2H132M6B	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
7,5	2	Q2H132S2C	Aluminium	210	422	1xM25	140-178	216	132	283	12	38	80	41,0	10	6208-ZZ	6206-ZZ	40*62*10	30*47*7	250	180	215	-	M12
7,5	4	Q2H132M4C	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

ELEKTRİKSEL ÖZELLİKLER - 50 Hz / ELECTRICAL CHARACTERISTICS AT 50 Hz

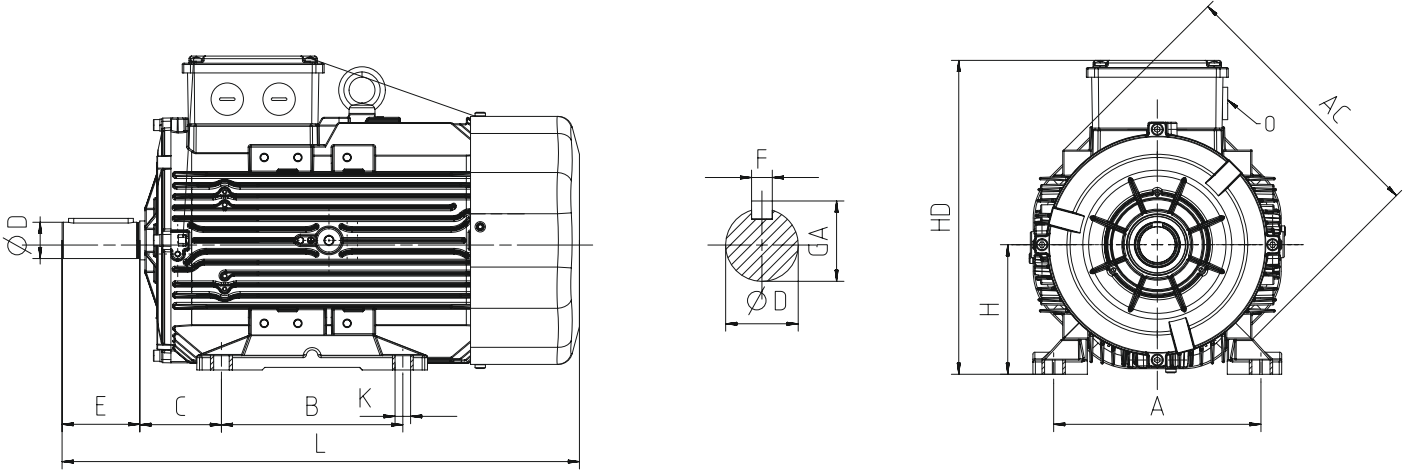
MOTOR TİPİ MOTOR TYPE	GÖVDE TIPI HOUSING TYPE	NOMINAL RATED VALUES						KALKIŞTAKİ DEĞERLER STARTING VALUES				Devrilme Momenti Oranı Breakdown Torque Ratio Mk/ Mn	VERİM* EFFICIENCY*			Cos φ	J kgm ²	Ağırlık Weight (B3) kg	Ses Basınç Seviyesi Sound Pressure Level dBA **
		GÜÇ POWER		DEVİR SPEED rpm	AKIM CURRENT A	MOMENT TORQUE Nm	AKIM CURRENT I_A / I_N		MOMENT TORQUE M_A / M_N		η%								
		kW	HP				λ	Δ	λ	Δ	4/4		3/4	2/4					
2 kutup 3000 d/dak / 2 pole 3000 rpm																			
230/400V	Q2H80M2D	Aluminium	1,5	2,0	2875	3,8	5,0	8,0	-	3,9	-	4,4	81,3	80,4	76,6	0,74	0,00169	12	58
	Q2H80M2DE	Aluminium	2,2	3,0	2870	4,7	7,3	9,1	-	3,9	-	4,4	83,2	82,8	81,3	0,83	0,00224	16	59
	Q2H90L2D	Aluminium	3,0	4,0	2887	6,3	9,9	7,3	-	2,4	-	2,9	84,6	85,4	84,2	0,83	0,00283	19	61
400/690V	Q2HS100L2C	Aluminium	4,0	5,5	2913	8,2	13,2	3,6	10,8	1,4	4,2	4,8	85,8	87,0	86,1	0,82	0,00381	24	66
	Q2HS112M2C	Aluminium	5,5	7,5	2910	10,6	18,1	3,6	10,9	1,3	3,8	4,5	87,0	87,5	86,2	0,86	0,00637	29	68
	Q2HS112M2D	Aluminium	7,5	10,0	2895	14,1	24,8	3,4	10,3	1,3	3,9	4,6	88,1	89,0	88,7	0,88	0,00751	30	68
	Q2H132M2A	Aluminium	11,0	15,0	2923	21,3	35,9	3,1	9,2	1,1	3,3	4,8	89,4	89,9	88,4	0,83	0,03489	57	69
	Q2H132M2B	Aluminium	15,0	20,0	2915	30,0	49,2	3,2	9,6	1,3	3,9	5,1	90,3	90,6	89,6	0,80	0,03490	65	69
	Q2H132M2C	Aluminium	18,5	25,0	2930	30,8	60,3	2,7	8,0	0,6	1,9	3,6	90,9	91,7	91,1	0,95	0,04685	77	70
	Q2H160L2C	Aluminium	22,0	30,0	2955	40,9	71,2	3,5	10,4	1,2	3,6	5,2	91,3	92,0	90,7	0,84	0,04808	96	71
	Q2H180M2B	Aluminium	30,0	37,0	2955	51,5	97,1	2,8	8,5	0,8	2,4	3,6	92,0	92,5	91,8	0,91	0,08643	128	77
	Q2H180M2C	Aluminium	37,0	50,0	2965	66,2	119,6	3,4	10,1	1,0	3,1	4,5	92,5	92,5	91,2	0,87	0,10277	145	77
	Q2H200L2D	Aluminium	45,0	60,0	2960	76,0	145,1	3,3	9,8	0,9	2,8	5,3	92,9	93,4	92,7	0,92	0,11910	166	78
	Q2E225M2C	Aluminium	55,0	75,0	2970	96,6	176,9	3,5	10,6	1,0	3,0	7,1	93,2	93,7	92,4	0,88	0,29500	244	80
	Q2EP250M2C	Cast Iron	75,0	100,0	2975	127,9	240,8	3,5	10,6	0,9	2,7	6,8	93,8	93,7	92,5	0,92	0,54000	565	81
Q2EP280M2D	Cast Iron	110,0	150,0	2980	192,0	352,4	2,6	7,7	1,0	2,9	3,4	94,1	93,9	92,9	0,88	0,70200	640	82	
4 kutup 1500 d/dak / 4 pole 1500 rpm																			
230/400V	Q2H80M4D	Aluminium	1,1	1,5	1430	2,5	7,4	5,7	-	2,2	-	2,6	81,4	82,4	81,6	0,80	0,00260	12	48
	Q2H80M4DE	Aluminium	1,5	2,0	1427	3,3	10,0	6,4	-	2,5	-	3,1	82,8	84,2	83,7	0,79	0,00306	14	48
	Q2H90L4D	Aluminium	2,2	3,0	1437	5,3	14,6	7,6	-	3,6	-	4,2	84,3	84,1	81,5	0,72	0,00526	18	52
	Q2H90L4DE	Aluminium	3,0	4,0	1440	7,4	20,0	6,5	-	3,3	-	3,7	85,5	85,3	83,0	0,70	0,00690	25	53
	Q2H100L4D	Aluminium	4,0	5,5	1440	8,7	26,6	2,7	8,0	1,1	3,2	3,8	86,6	85,7	83,5	0,78	0,01058	31	57
	Q2H112M4D	Aluminium	5,5	7,5	1445	11,6	35,5	2,7	8,0	1,0	3,0	3,8	87,7	88,3	87,3	0,79	0,01382	38	58
400/690V	Q2H132M4D	Aluminium	11,0	15,0	1468	21,6	71,5	2,6	7,9	0,7	2,1	3,6	89,8	91,1	90,3	0,81	0,05440	76	61
	Q2H132M4E	Aluminium	15,0	20,0	1462	29,8	98,0	2,6	7,8	0,6	1,8	3,4	90,6	91,4	90,9	0,80	0,05940	81	63
	Q2H160L4B	Aluminium	18,5	25,0	1470	36,0	120,2	2,3	6,8	0,7	2,2	2,9	91,2	92,0	91,6	0,81	0,09005	101	57
	Q2H160L4C	Aluminium	22,0	30,0	1462	41,8	143,8	1,8	5,5	0,6	1,9	2,8	91,6	92,9	93,3	0,84	0,11068	115	58
	Q2H180L4C	Aluminium	30,0	40,0	1475	55,3	194,6	2,7	8,2	0,9	2,7	3,5	92,0	91,9	91,4	0,85	0,14694	143	70
	Q2H200L4D	Aluminium	37,0	50,0	1476	72,5	240,8	2,8	8,3	0,9	2,8	3,7	92,7	93,2	92,8	0,79	0,26440	177	71
	Q2EP250M4E	Cast Iron	75,0	100,0	1485	134,2	485,7	2,6	7,8	1,0	2,9	3,4	94,0	93,9	93,2	0,86	1,06110	610	72
Q2EP280M4E	Cast Iron	110,0	150,0	1485	200,3	714,0	2,6	7,9	1,0	2,9	3,4	94,5	94,3	93,1	0,84	1,25200	688	73	

* IEC 60034-2-1'e göre / According to IEC 60034-2-1

** Ses Basınç Seviyeleri motordan 1m uzaklıktan ölçülmüştür. / The sound pressure measurements are taken 1m away from the motor

*** Tolerans +3 dBA / Tolerance +3 dBA

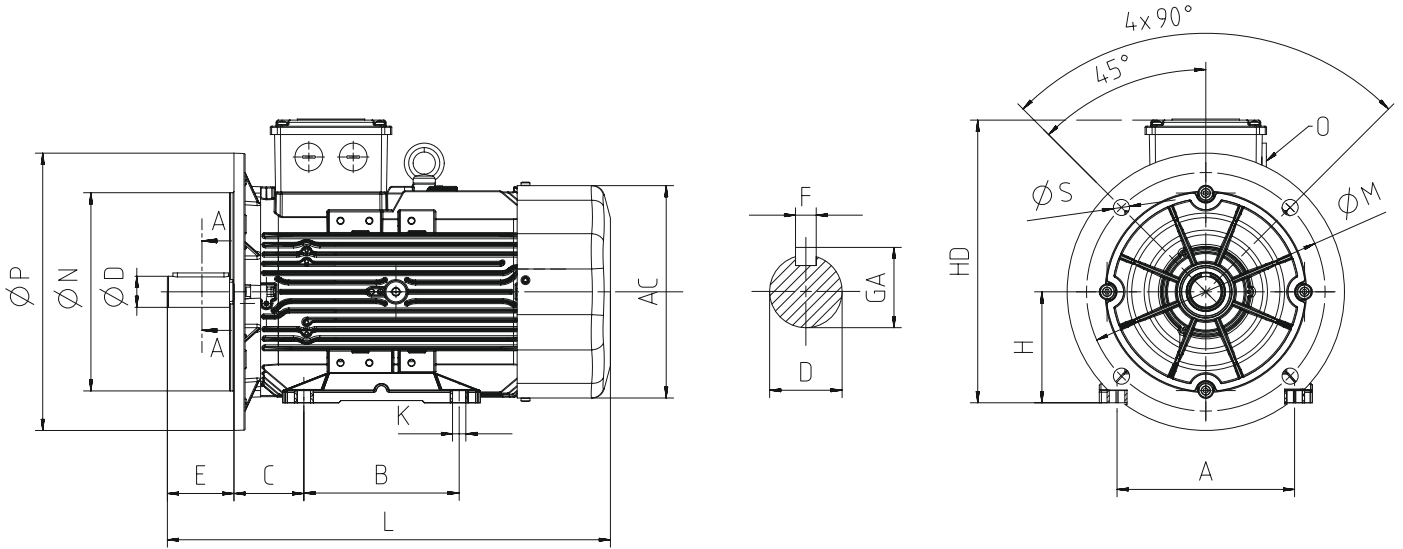
BOYUTLAR - B3 / DIMENSION - B3



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft				Rulman Bearing		Keçe Seal		
				AC	L	O	B	A	H	HD	K	C	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non Drive Side
1,1	4	Q2H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
1,5	2	Q2H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
1,5	4	Q2H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
2,2	2	Q2H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	50	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7
2,2	4	Q2H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
3,0	2	Q2H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
3,0	4	Q2H90L4DE	Aluminium	172	379	1xM25	100-125	140	90	223	10	56	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7
4,0	2	Q2HS100L2C	Aluminium	172	384	1xM25	140	160	100	233	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
4,0	4	Q2H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	63	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
5,5	2	Q2HS112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	70	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
5,5	4	Q2H112M4D	Aluminium	210	421	1xM25	140	190	112	265	12	70	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7
7,5	2	Q2HS112M2D	Aluminium	191	421	1xM25	140	190	112	254	12	70	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7
11,0	2	Q2H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
11,0	4	Q2H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
15,0	2	Q2H132M2B	Aluminium	260	481	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
15,0	4	Q2H132M4E	Aluminium	260	539	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
18,5	2	Q2H132M2C	Aluminium	260	539	1xM32	140-178	216	132	312	12	89	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10
18,5	4	Q2H160L4B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
22,0	2	Q2H160L2C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
22,0	4	Q2H160L4C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	108	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10
30,0	2	Q2H180M2B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
30,0	4	Q2H180L4C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
37,0	2	Q2H180M2C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	121	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10
37,0	4	Q2H200L4D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
45,0	2	Q2H200L2D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	133	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10
55,0	2	Q2E225M2C	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	149	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13
75,0	2	Q2EP250M2C	Cast Iron	489	893	1xM50	311-349	406	250	616	30	149	60	140	64,0	18	6316-Z	6316-Z	80*100*10	80*100*10
75,0	4	Q2EP250M4E	Cast Iron	489	893	1xM50	311-349	406	250	616	30	149	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
110,0	2	Q2EP280M2D	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	190	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10
110,0	4	Q2EP280M4E	Cast Iron	489	1025	1xM50	368-419	457	280	647	24	130	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm
(2) DIN 6885'e göre / According to DIN 6885

BOYUTLAR - B5, B35 / DIMENSION - B5, B35



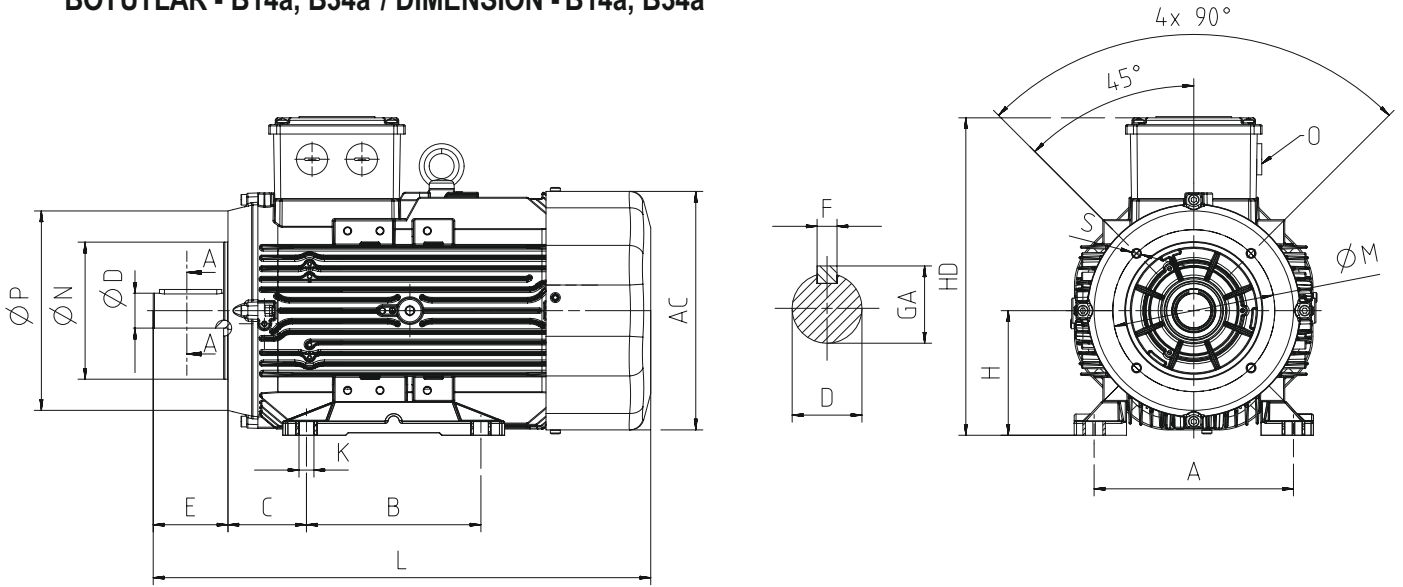
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft			Rulman Bearing		Keçe Seal		Flanş (FA) (B5) Flange (FA) (B5)					
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	Kasnak Taraflı Drive Side	Kasnak Taraflı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q2H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10,0	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12,0
1,5	2	Q2H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10,0	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12,0
1,5	4	Q2H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10,0	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12,0
2,2	2	Q2H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10,0	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	200	130	165	-	12,0
2,2	4	Q2H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10,0	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12,0
3,0	2	Q2H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10,0	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12,0
3,0	4	Q2H90L4DE	Aluminium	172	379	1xM25	100-125	140	90	223	10,0	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	200	130	165	-	12,0
4,0	2	Q2HS100L2C	Aluminium	172	384	1xM25	140	160	100	233	12,0	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
4,0	4	Q2H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12,0	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
5,5	2	Q2HS112M2C	Aluminium	191	399	1xM25	140	190	112	254	12,0	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
5,5	4	Q2H112M4D	Aluminium	210	421	1xM25	140	190	112	265	12,0	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	250	180	215	-	14,5
7,5	2	Q2HS112M2D	Aluminium	191	421	1xM25	140	190	112	254	12,0	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	250	180	215	-	14,5
11,0	2	Q2H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12,0	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
11,0	4	Q2H132M4D	Aluminium	260	481	1xM32	140-178	216	132	312	12,0	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
15,0	2	Q2H132M2B	Aluminium	260	481	1xM32	140-178	216	132	312	12,0	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
15,0	4	Q2H132M4E	Aluminium	260	539	1xM32	140-178	216	132	312	12,0	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
18,5	2	Q2H132M2C	Aluminium	260	539	1xM32	140-178	216	132	312	12,0	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	300	230	265	-	14,5
18,5	4	Q2H160L4B	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
22,0	2	Q2H160L2C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
22,0	4	Q2H160L4C	Aluminium	305	591	1xM32	210-254	254	160	368	14,5	42	110	45,0	12	6309-ZZ	6209-ZZ	45*72*10	45*72*10	350	250	300	-	18,5
30,0	2	Q2H180M2B	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
30,0	4	Q2H180L4C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
37,0	2	Q2H180M2C	Aluminium	349	696	1xM40	241-279	279	180	437	14,5	48	110	51,5	14	6310-ZZ	6310-ZZ	50*80*10	50*80*10	350	250	300	-	18,5
37,0	4	Q2H200L4D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
45,0	2	Q2H200L2D	Aluminium	349	759	1xM50	267-305	318	200	455	18,5	55	110	59,0	16	6312-ZZ	6310-ZZ	60*90*10	60*90*10	400	300	350	-	18,5
55,0	2	Q2E225M2C	Aluminium	456	735	1xM50	286-311	356	225	485	18,5	55	110	59,0	16	6313-ZZ	6313-ZZ	65*100*13	65*100*13	450	350	400	-	18,5
75,0	2	Q2EP250M2C	Cast Iron	489	893	1xM50	349	406	250	616	24,0	60	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
75,0	4	Q2EP250M4E	Cast Iron	489	893	1xM50	349	406	250	616	24,0	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
110,0	2	Q2EP280M2D	Cast Iron	489	1025	1xM50	419	457	280	647	24,0	65	140	69,0	18	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5
110,0	4	Q2EP280M4E	Cast Iron	489	1025	1xM50	419	457	280	647	24,0	75	140	79,5	20	6316-Z	6316-Z	80*100*10	80*100*10	550	450	500	-	18,5

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14a, B34a / DIMENSION - B14a, B34a



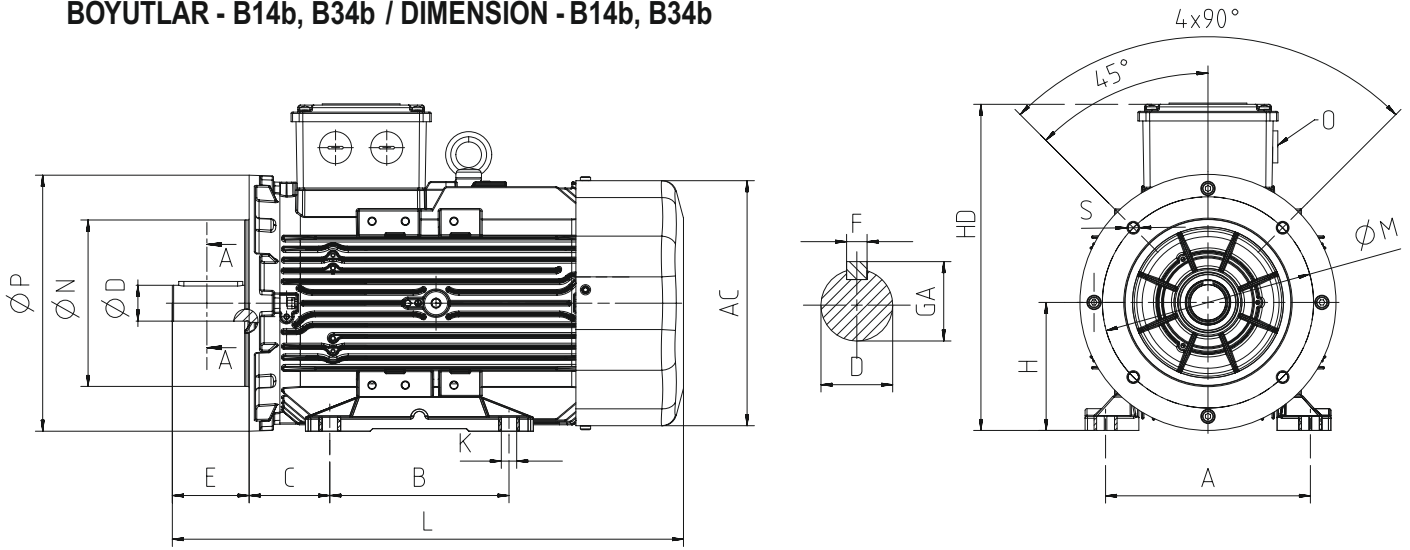
Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft		Rulman Bearing		Keçe Seal		Flanş (FC) (B14a) Flange (FC) (B14a)						
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q2H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
1,5	2	Q2H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
1,5	4	Q2H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
2,2	2	Q2H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	120	80	100	-	M6
2,2	4	Q2H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
3,0	2	Q2H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
3,0	4	Q2H90L4DE	Aluminium	172	379	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	140	95	115	-	M8
4,0	2	Q2HS100L2C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
4,0	4	Q2H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	160	110	130	-	M8
5,5	2	Q2HS112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
5,5	4	Q2H112M4D	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	160	110	130	-	M8
7,5	2	Q2HS112M2D	Aluminium	191	421	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	160	110	130	-	M8
11,0	2	Q2H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
11,0	4	Q2H132M4D	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
15,0	2	Q2H132M2B	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
15,0	4	Q2H132M4E	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10
18,5	2	Q2H132M2C	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	200	130	165	-	M10

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

BOYUTLAR - B14b, B34b / DIMENSION - B14b, B34b



Güç Power (kW)	Kutup sayısı Number of Poles	Motor Tipi Motor Type	Gövde Tipi Housing Type	Ana Boyutlar Main Dimensions			Ayaklı Motorlar Foot Mounted Motors					Mil Shaft			Rulman Bearing		Keçe Seal		Flanş (FB) (B14b) Flange (FB) (B14b)					
				AC	L	O	B	A	H	HD	K	D ⁽¹⁾	E	GA	F ⁽²⁾	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	Kasnak Tarafı Drive Side	Kasnak Tarafı Aksı Non drive Side	P	N ⁽³⁾	M	R	S
1,1	4	Q2H80M4D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
1,5	2	Q2H80M2D	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
1,5	4	Q2H80M4DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
2,2	2	Q2H80M2DE	Aluminium	158	268	1xM20	100	125	80	216	10	19	40	21,5	6	6204-ZZ	6204-ZZ	20*30*7	20*30*7	160	110	130	-	M8
2,2	4	Q2H90L4D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
3,0	2	Q2H90L2D	Aluminium	172	344	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
3,0	4	Q2H90L4DE	Aluminium	172	379	1xM25	100-125	140	90	223	10	24	50	27,0	8	6305-ZZ	6205-ZZ	25*40*7	25*40*7	160	110	130	-	M8
4,0	2	Q2HS100L2C	Aluminium	172	384	1xM25	140	160	100	233	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
4,0	4	Q2H100L4D	Aluminium	191	400	1xM25	140	160	100	243	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	30*47*7	200	130	165	-	M10
5,5	2	Q2HS112M2C	Aluminium	191	399	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
5,5	4	Q2H112M4D	Aluminium	210	421	1xM25	140	190	112	265	12	28	60	31,0	8	6306-ZZ	6206-ZZ	30*47*7	30*47*7	200	130	165	-	M10
7,5	2	Q2HS112M2D	Aluminium	191	421	1xM25	140	190	112	254	12	28	60	31,0	8	6306-ZZ	6205-ZZ	30*47*7	25*40*7	200	130	165	-	M10
11,0	2	Q2H132M2A	Aluminium	260	481	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
11,0	4	Q2H132M4D	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
15,0	2	Q2H132M2B	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
15,0	4	Q2H132M4E	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12
18,5	2	Q2H132M2C	Aluminium	260	539	1xM32	140-178	216	132	312	12	38	80	41,0	10	6208-ZZ	6208-ZZ	40*62*10	40*62*10	250	180	215	-	M12

(1) Toleranslar 28 mm'ye kadar DIN EN 50347 "j6", 28 mm ve üzeri "k6" / Tolerance DIN EN 50347 "j6" up to 28mm, "k6" above 28mm

(2) DIN 6885'e göre / According to DIN 6885

(3) Tolerans DIN EN 50347 "j6" / Tolerance DIN EN 50347 "j6"

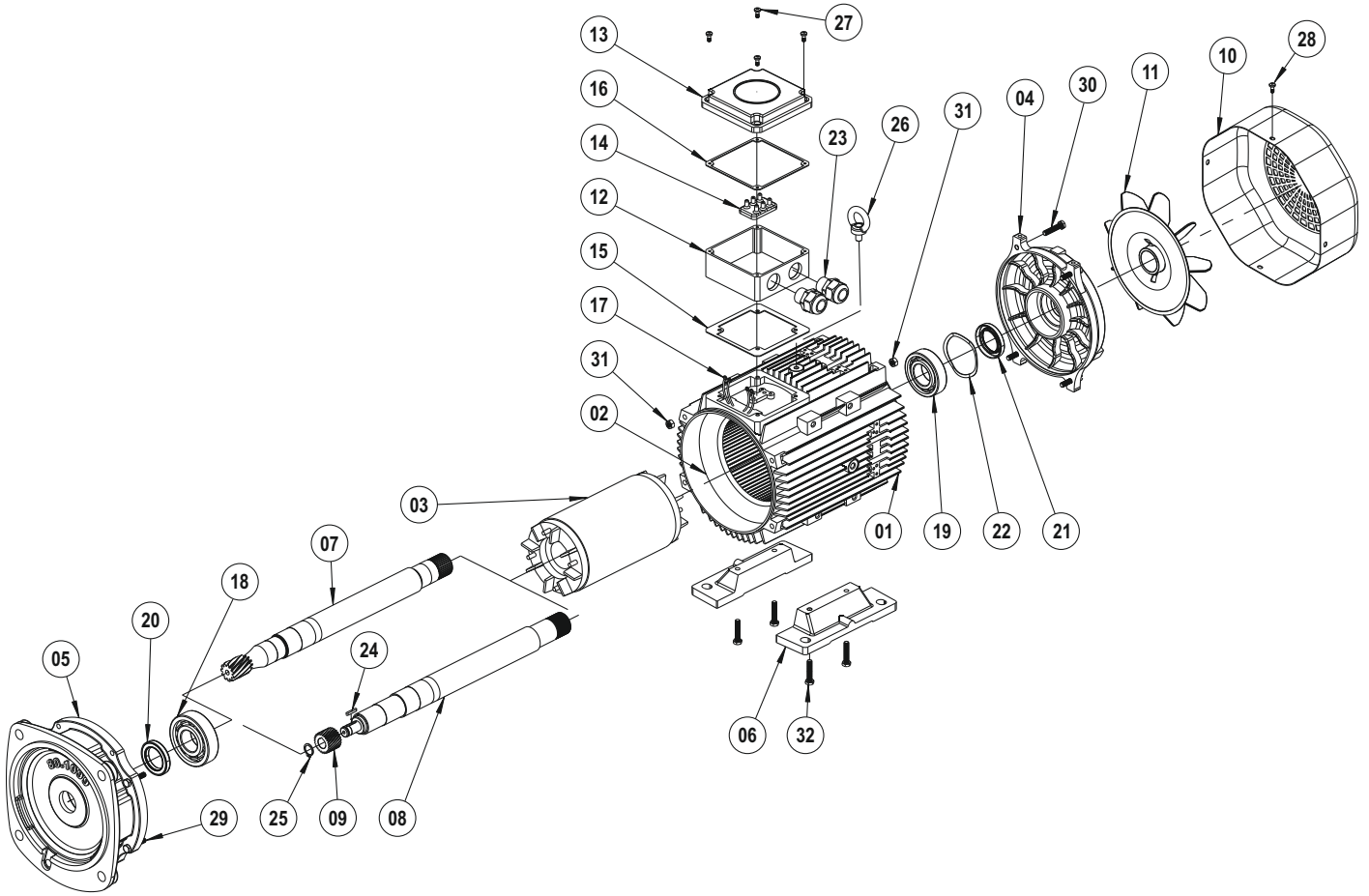


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TR MOTOR PARÇA LİSTESİ

EN MOTOR PART LIST

DE ERSATZTEILLISTE FÜR MOTOR



- 01 Gövde
- 02 Sargılı Stator
- 03 Rotor
- 04 Motor Arka Kapağı
- 05 PGR Motor Bağlantı Flanşı
- 06 Ayak
- 07 Motor Mili (Yekpare)
- 08 Motor Mili (Çakma)
- 09 Z1 Dişlisi
- 10 Fan Kapağı
- 11 Fan
- 12 Terminal Kutusu
- 13 Terminal Kutu Kapağı
- 14 Klemens Plakası
- 15 Terminal Contası Alt
- 16 Terminal Contası Üst
- 17 Kablo Grubu
- 18 Ön Rulman
- 19 Arka Rulman
- 20 Keçe (Ön)
- 21 Keçe (Arka)
- 22 Rulman Gergi Yayı
- 23 Rakor
- 24 Kama
- 25 Segman
- 26 Mapa
- 27 Yıldız Başlı Cıvata
- 28 Yıldız Başlı Cıvata
- 29 Cıvata DIN 933
- 30 Cıvata DIN 933
- 31 Somun
- 32 Cıvata DIN 933

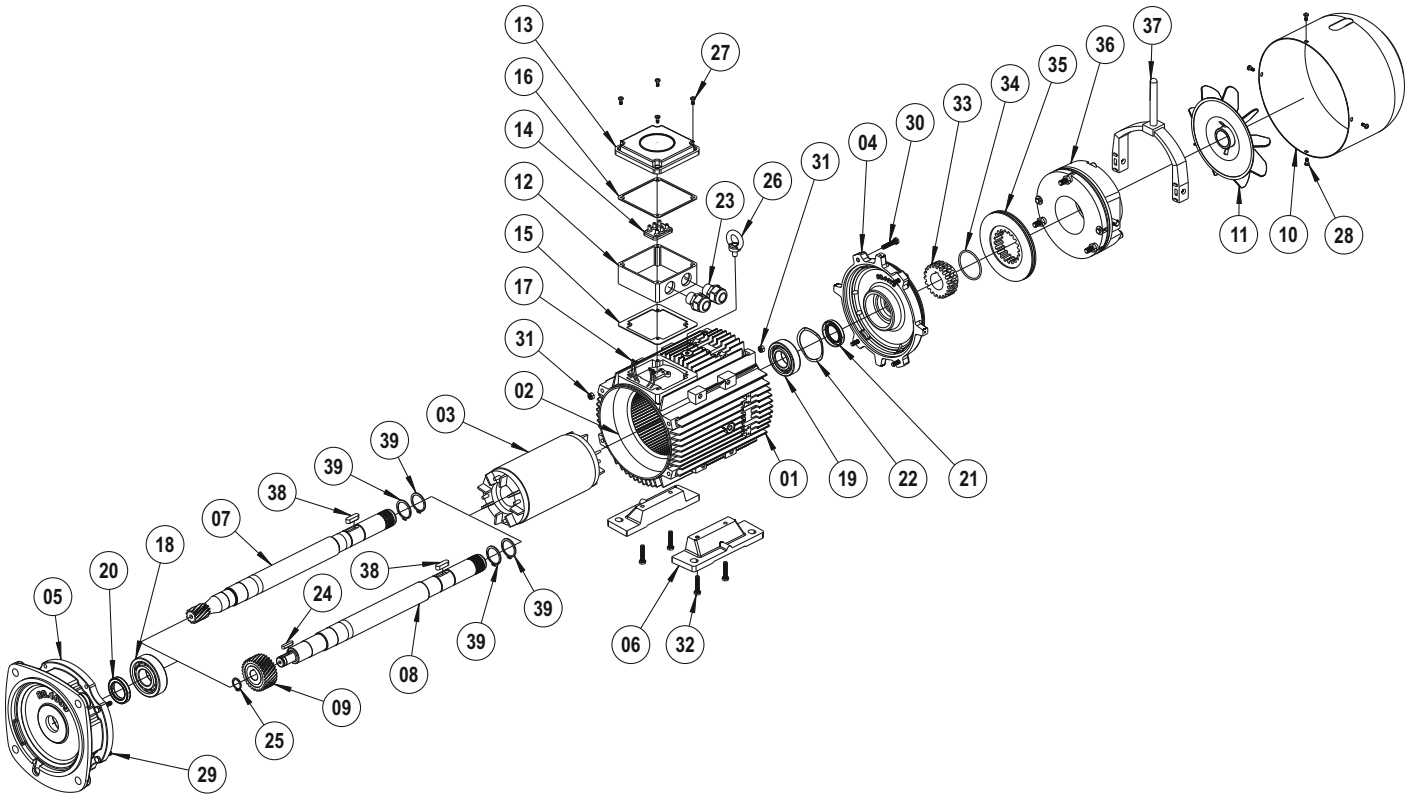
- 01 Housing
- 02 Wound Stator
- 03 Rotor
- 04 Nondrive - Endshield
- 05 Motor Connection Flange
- 06 Foot
- 07 Drive Shaft (Gearcut)
- 08 Drive Shaft (Plain)
- 09 Z1 Gear
- 10 Fan Cover
- 11 Fan
- 12 Terminal Box
- 13 Terminal Box Cover
- 14 Terminal Plate
- 15 Terminal Gasket Down
- 16 Terminal Gasket Up
- 17 Lead Cables
- 18 Ball Bearing (Drive-Side)
- 19 Ball Bearing (Non-Drive-Side)
- 20 Seal Ring (Front)
- 21 Seal Ring (Back)
- 22 Bearing Shim
- 23 Conduit
- 24 Key
- 25 Circlip DIN 471
- 26 Eye Bolt
- 27 Pan Head Secrews
- 28 Pan Head Secrews
- 29 Bolt
- 30 Bolt
- 31 Nut
- 32 Bolt

- 01 Gehäuse
- 02 gewickelter Stator
- 03 Rotor
- 04 B-Lagerschild
- 05 Motor-Anschlussflansch
- 06 Fuß
- 07 Antriebswelle (verzahnt)
- 08 Antriebswelle (glatt)
- 09 Antriebsritzel
- 10 Lüfterhaube
- 11 Lüfter
- 12 Klemmkasten
- 13 Klemmkastendeckel
- 14 Anschlussplatte
- 15 Klemmkastendichtung unten
- 16 Klemmkastendichtung oben
- 17 Kabelbaum
- 18 Kugellager (Antriebsseite)
- 19 Kugellager (Nicht-Antriebsseite)
- 20 Dichtungsring (Vorne)
- 21 Dichtungsring (Hinten)
- 22 Stützscheibe
- 23 Gewindemuffe
- 24 Passfeder
- 25 Sicherungsring DIN 471
- 26 Augenschraube
- 27 Kreuzschlitzschraube
- 28 Kreuzschlitzschraube
- 29 Schraube DIN 933
- 30 Schraube DIN 933
- 31 Schraubenmutter
- 32 Schraube DIN 933

TR FRENLİ MOTOR PARÇA LİSTESİ

EN BRAKE MOTOR PART LIST

DE ERSATZTEILLISTE FÜR MOTOR MIT BREMSE



- 01 Gövde
- 02 Sargılı Stator
- 03 Rotor
- 04 Fren Flanşı
- 05 PGR Motor Bağlantı Flanşı
- 06 Ayak
- 07 Motor Mili (Yekpare)
- 08 Motor Mili (Çakma)
- 09 Z1 Dişlisi
- 10 Fan Kapağı
- 11 Fan
- 12 Terminal Kutusu
- 13 Terminal Kutu Kapağı
- 14 Klemens Plakası
- 15 Terminal Contası Alt
- 16 Terminal Contası Üst
- 17 Kablo Grubu
- 18 Ön Rulman
- 19 Arka Rulman
- 20 Keçe (Ön)
- 21 Keçe (Arka)
- 22 Rulman Gergi Yayı
- 23 Rakor
- 24 Kama
- 25 Segman
- 26 Mapa
- 27 Yıldız Başlı Cıvata
- 28 Yıldız Başlı Cıvata
- 29 Cıvata DIN 933
- 30 Cıvata DIN 933
- 31 Somun
- 32 Cıvata DIN 933
- 33 Fren Kaplini
- 34 O-Ring
- 35 Fren Balatası
- 36 Fren
- 37 Manuel Kolu
- 38 Kama
- 39 Segman DIN 471

- 01 Housing
- 02 Wound Stator
- 03 Rotor
- 04 Brake Connection Flange
- 05 Motor Connection Flange
- 06 Foot
- 07 Drive Shaft (Gearcut)
- 08 Drive Shaft (Plain)
- 09 Z1 Gear
- 10 Fan Cover
- 11 Fan
- 12 Terminal Box
- 13 Terminal Box Cover
- 14 Terminal Plate
- 15 Terminal Gasket Down
- 16 Terminal Gasket Up
- 17 Lead Cables
- 18 Ball Bearing (Drive-Side)
- 19 Ball Bearing (Non-Drive-Side)
- 20 Seal Ring (Front)
- 21 Seal Ring (Back)
- 22 Bearing Shim
- 23 Conduit
- 24 Key
- 25 Circlip DIN 471
- 26 Eye Bolt
- 27 Pan Head Screws
- 28 Pan Head Screws
- 29 Bolt
- 30 Bolt
- 31 Nut
- 32 Bolt
- 33 Coupling
- 34 O-Ring
- 35 Brake Lining
- 36 Brake
- 37 Hand Release
- 38 Key
- 39 Circlip DIN 471

- 01 Gehäuse
- 02 gewickelter Stator
- 03 Rotor
- 04 Bremsflansch
- 05 Motor-Anschlussflansch
- 06 Fuß
- 07 Antriebswelle (verzahnt)
- 08 Antriebswelle (glatt)
- 09 Antriebsritzel
- 10 Lüfterhaube
- 11 Lüfter
- 12 Klemmkasten
- 13 Klemmkastendeckel
- 14 Anschlussplatte
- 15 Klemmkastendichtung unten
- 16 Klemmkastendichtung oben
- 17 Kabelbaum
- 18 Kugellager (Antriebsseite)
- 19 Kugellager (Nicht-Antriebsseite)
- 20 Dichtungsring (Vorne)
- 21 Dichtungsring (Hinten)
- 22 Stützscheibe
- 23 Gewindemuffe
- 24 Passfeder
- 25 Sicherungsring DIN 471
- 26 Augenschraube
- 27 Kreuzschlitzschraube
- 28 Kreuzschlitzschraube
- 29 Schraube DIN 933
- 30 Schraube DIN 933
- 31 Schraubenmutter
- 32 Schraube DIN 933
- 33 Kupplung
- 34 O-Ring
- 35 Bremsbelag
- 36 Bremse
- 37 Handauslöser
- 38 Passfeder
- 39 Sicherungsring DIN 471

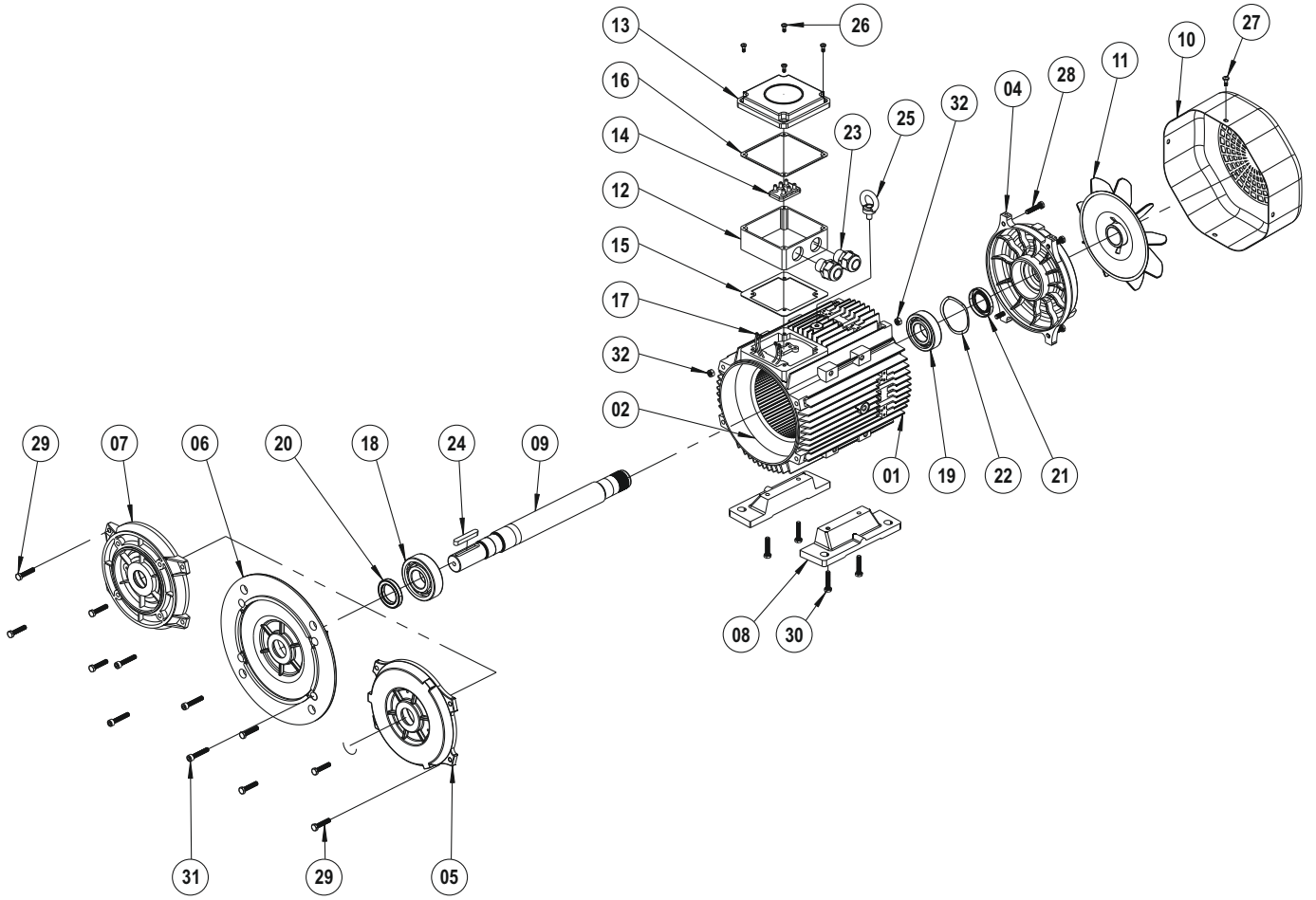
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B3-B5-B14 FLANŞLI MOTOR
PARÇA LİSTESİ

EN

B3-B5-B14 FLANGE MOTOR PART LIST

DE

ERSATZTEILLISTE FÜR MOTOR
MIT B3-B5-B14-FLANSCH

- 01 Gövde
- 02 Sargılı Stator
- 03 Rotor
- 04 Motor Arka Kapağı
- 05 B3 Motor Bağlantı Flanşı
- 06 B5 Motor Bağlantı Flanşı
- 07 B14 Motor Bağlantı Flanşı
- 08 Ayak
- 09 Motor Mili (Standart)
- 10 Fan Kapağı
- 11 Fan
- 12 Terminal Kutusu
- 13 Terminal Kutu Kapağı
- 14 Klemens Plakası
- 15 Terminal Contası Alt
- 16 Terminal Contası Üst
- 17 Kablo Grubu
- 18 Ön Rulman
- 19 Arka Rulman
- 20 Keçe (Ön)
- 21 Keçe (Arka)
- 22 Rulman Gergi Yay
- 23 Rakor
- 24 Kama
- 25 Mapa
- 26 Yıldız Başlı Cıvata
- 27 Yıldız Başlı Cıvata
- 28 Cıvata DIN 933
- 29 Cıvata DIN 933
- 30 Cıvata DIN 933
- 31 Cıvata DIN 912
- 32 Somun

- 01 Housing
- 02 Wound Stator
- 03 Rotor
- 04 Nondrive - Endshield
- 05 Flange
- 06 Flange
- 07 Flange
- 08 Foot
- 09 Drive Shaft (standard)
- 10 Fan Cover
- 11 Fan
- 12 Terminal Box
- 13 Terminal Box Cover
- 14 Terminal Plate
- 15 Terminal Gasket Down
- 16 Terminal Gasket Up
- 17 Lead Cables
- 18 Ball Bearing (Drive-Side)
- 19 Ball Bearing (Non-Drive-Side)
- 20 Seal Ring (Front)
- 21 Seal Ring (Back)
- 22 Bearing Shim
- 23 Conduit
- 24 Key
- 25 Eye Bolt
- 26 Pan Head Screws
- 27 Pan Head Screws
- 28 Bolt
- 29 Bolt
- 30 Bolt
- 31 Bolt
- 32 Nut

- 01 Gehäuse
- 02 gewickelter Stator
- 03 Rotor
- 04 B-Lagerschild
- 05 B3 Flansch
- 06 B5 Flansch
- 07 B14 Flansch
- 08 Fuß
- 09 Antriebswelle (standart)
- 10 Lüfterhaube
- 11 Lüfter
- 12 Klemmkasten
- 13 Klemmkastendeckel
- 14 Anschlussplatte
- 15 Klemmkastendichtung unten
- 16 Klemmkastendichtung oben
- 17 Kabelbaum
- 18 Kugellager (Antriebsseite)
- 19 Kugellager (Nicht-Antriebsseite)
- 20 Dichtungsring (Vorne)
- 21 Dichtungsring (Hinten)
- 22 Stützscheibe
- 23 Gewindemuffe
- 24 Passfeder
- 25 Augenschraube
- 26 Kreuzschlitzschraube
- 27 Kreuzschlitzschraube
- 28 Schraube DIN 933
- 29 Schraube DIN 933
- 30 Schraube DIN 933
- 31 Schraube DIN 912
- 32 Schraubenmutter

TR

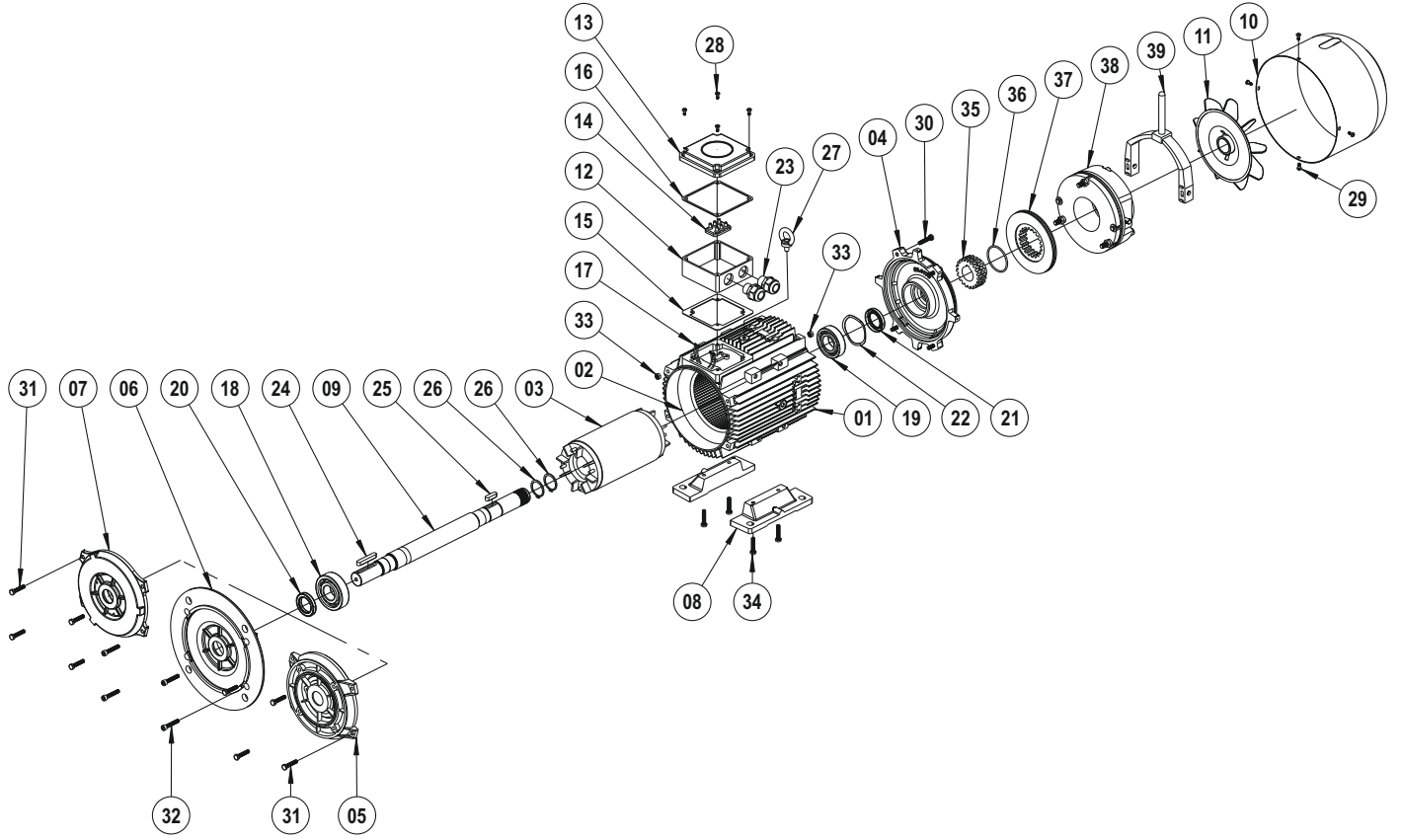
FRENLİ B3-B5-B14 FLANŞLI
MOTOR PARÇA LİSTESİ

EN

BRAKE B3-B5-B14 FLANGE
MOTOR PART LIST

DE

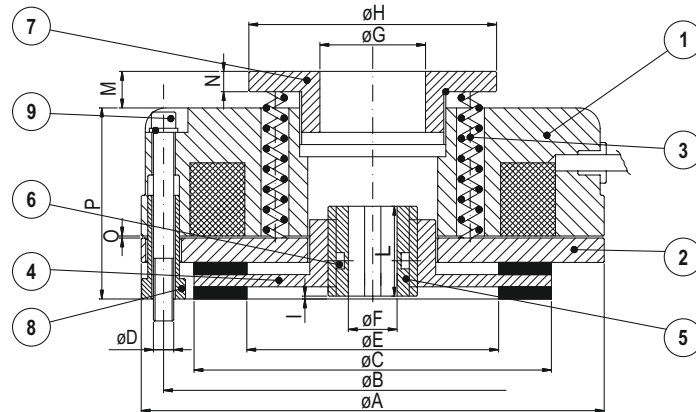
ERSATZTEILLISTE FÜR MOTOR MIT
BREMSE UND B3-B5-B14-FLANSCH



- 01 Gövde
- 02 Sargılı Stator
- 03 Rotor
- 04 Fren Flanşı
- 05 B3 Motor Bağlantı Flanşı
- 06 B5 Motor Bağlantı Flanşı
- 07 B14 Motor Bağlantı Flanşı
- 08 Ayak
- 09 Motor Mili (Standart)
- 10 Fan Kapağı
- 11 Fan
- 12 Terminal Kutusu
- 13 Terminal Kutu Kapağı
- 14 Klemens Plakası
- 15 Terminal Contası Alt
- 16 Terminal Contası Üst
- 17 Kablo Grubu
- 18 Ön Rulman
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- 21 Keçe (Arka)
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- 32 Cıvata DIN 912
- 33 Somun
- 34 Cıvata DIN 933
- 35 Fren Kaplini
- 36 O-Ring
- 37 Fren Balatası
- 38 Fren
- 39 Manuel Kolu

- 01 Housing
- 02 Wound Stator
- 03 Rotor
- 04 Brake Connection Flange
- 05 B3 Flange
- 06 Flange
- 07 Flange
- 08 Foot
- 09 Drive Shaft (standard)
- 10 Fan Cover
- 11 Fan
- 12 Terminal Box
- 13 Terminal Box Cover
- 14 Terminal Plate
- 15 Terminal Gasket Down
- 16 Terminal Gasket Up
- 17 Lead Cables
- 18 Bal Bearing (Drive-Side)
- 19 Bal Bearing (Non-Drive-Side)
- 20 Seal Ring (Front)
- 21 Seal Ring (Back)
- 22 Bearing Shim
- 23 Conduit
- 24 Key
- 25 Key
- 26 Circlip DIN 471
- 27 Eye Bolt
- 28 Pan Head Screws
- 29 Pan Head Screws
- 30 Bolt
- 31 Bolt
- 32 Bolt
- 33 Nut
- 34 Bolt
- 35 Brake Coupling
- 36 O-Ring
- 37 Brake Lining
- 38 Brake
- 39 Hand Release

- 01 Gehäuse
- 02 gewickelter Stator
- 03 Rotor
- 04 Bremsflansch
- 05 B3 Flansch
- 06 B5 Flansch
- 07 B14 Flansch
- 08 Fuß
- 09 Antriebswelle (standart)
- 10 Lüfterhaube
- 11 Lüfter
- 12 Klemmkasten
- 13 Klemmkastendeckel
- 14 Anschlussplatte
- 15 Klemmkastendichtung unten
- 16 Klemmkastendichtung oben
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- 24 Passfeder
- 25 Passfeder
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- 28 Kreuzschlitzschraube
- 29 Kreuzschlitzschraube
- 30 Schraube DIN 933
- 31 Schraube DIN 933
- 32 Schraube DIN 912
- 33 Schraubenmutter
- 34 Schraube DIN 933
- 35 Kupplung
- 36 O-Ring
- 37 Bremsbelag
- 38 Bremse
- 39 Handauslöser

TR FREN PARÇA LİSTESİ **EN BRAKE PART LIST** **DE BREMSE-TEILELISTE**


- 1 Elektromagnat
- 2 Endüvi plakası
- 3 Tork yayı
- 4 Disk
- 5 Kamalı burç
- 6 O-ring
- 7 Ayar halkası
- 8 Ayar somunu
- 9 Bağlantı civataları

- 1 Electromagnet
- 2 Armature plate
- 3 Torque springs
- 4 Disc
- 5 Splined hub
- 6 O-ring
- 7 Adjuster rings
- 8 Adjuster nuts
- 9 Fixing screws

- 1 Elektromagnet
- 2 Ankerplatte
- 3 Bremsfeder
- 4 Scheibe
- 5 Nabe
- 6 O-Ring
- 7 Einstellring
- 8 Einstellschraube
- 9 Feststellschraube

Tip / Type / Typ Fren Modeli / Brake Model / Bremsmodell	K1	K2	K3	K4	K5	K6	K7	K7/D	K8	K8/D	K9	K9/D	K9/T
Statik Fren Momenti / Static Braking Torque / Statisches Bremsmoment (Nm)	5	12	16	20	40	60	90	180	200	400	300	600	900
Motorun Max. Hızı / Max Speed of the motor / Höchstgeschwindigkeit des Motors (rpm)	3000	3000	3000	3000	3000	3000	3000	3000	1500	1500	1500	1500	1500
Giriş Gücü / Input Power / Eingangsleistung (W)	15	20	25	30	45	50	55	55	60	60	65	65	65
Max. Ses / Max noisiness / Maximale lautheit (≤dB-A)	68	69	68	69	70	70	70	70	70	69	69	69	70
Ağırlık / Weight / Gewicht (Kg.)	1,1	1,85	2,55	2,84	4,8	7	12	15	14,3	18	23	28	34
A	84	104	114	124	148	159	189	189	218	218	248	248	248
B	72	90	103	112	132	145	170	170	196	196	230	230	230
C	61	77	88	98	119	128	151	151	176	176	204	204	204
D	3xM4	3xM5	3xM5	3xM6	3xM6	3xM8	3xM8	3xM8	6xM10	6xM10	6xM10	6xM10	9xM10
Delik toleransı K3'e kadar H7, diğerleri + 0,01/-0,01 Tolerance hole till size K3 H7, others + 0,01/-0,01 Bohrungstoleranz bis Grösse K3 H7, andere + 0,01/-0,01	E	35	44	62	69	79	80	90	103	103	132	132	132
F	10-11 12	11-14 15	11-15	14-25	24-25 28	25-30 34	25-30 34	25 H40 34 H60	24-34	34 H60 48	44-45 48	44-45 48	44-45 48-50
G	20	26	26	42	60	60	60	60	60	60	60	60	60
H	50	61	61	79	104	104	104	104	104	104	104	104	104
I	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
L	18	20	20	20	25	30	30	60	40	60	40	60	80
M (max)	9	9	9	9,5	18	16	14	14	18	18	18	18	18
N	4	4	4	5,5	8	8	8	8	8	8	8	8	8
O	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4+0,5
P	38,5	41,5	47	46,5	64	69,5	79	101,5	78	98	80	105	130

Not : Fren çalıştırılmadan önce statik fren momentini tabloda verilen değerlere göre ± % 20 değişiklik gösterebilir.

Note : The brake before running in, the static braking torque value could change by +20% from the reported value.

Notizen : Bevor die Bremse eingefahren ist, kann das statische Bremsmoment um etwa ± 20 % vom Tabellenwert abweichen.



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A large area of the page is filled with horizontal dotted lines, providing a template for writing or drawing.



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