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Genel Bilgiler

General Information

Einführung



Sembollerin Açıklaması

c_t: Anahtarın devreye girme zamanı katsayısı

f_s: Servis faktörü

F_{ama}: Çıkış milinde müsaade edilen eksenel yükler [kN]

F_{ame}: Giriş milinde müsaade edilen eksenel yükler [kN]

F_{qam}: Çıkış milinde izin verilen radyal yükler [N]

F_{qem}: Giriş milinde izin verilen radyal yükler [N]

F_{qa}: Çıkış miline gelen radyal yükler [N]

F_{qe}: Giriş miline gelen radyal yükler [N]

F_q: Radyal yönde çıkış miline gelen yükler [N]

F_a: Eksenel yönde çıkış miline gelen yükler [N]

i: Tahvil oranı

J_{ext}: Motor miline indirgenmiş toplam dış atalet momenti [kgm²]

M_2: Çıkış momenti [Nm]

M_a: Anma momenti [Nm]

n_1: Redüktör giriş mili devri [d/dak]

n_2: Redüktör çıkış mili devri [d/dak]

P_{eq}: Eşdeğer güç [W]

P_e: Nominal güç (Bak. Güç-Devir Tabloları) [W]

P_M: Tahrik edilecek makina için gerekli güç (Değişken yükler için eşdeğer güç alınır) [kW]

t: Zaman [s]

T_e: Eşdeğer moment [Nm]

Key of Symbols

c_t: Coefficient of switch on time.

f_s: Service factor

F_{ama}: Permissible axial loads which can be applied to output shafts [kN]

F_{ame}: Permissible axial loads which can be applied to input shafts [kN]

F_{qam}: Permissible overhung loads which can be applied to output shafts [N]

F_{qem}: Permissible overhung loads which can be applied to input shafts [N]

F_{qa}: Overhung loads applied to the output shaft [N]

F_{qe}: Overhung loads applied to the input shafts [N]

F_q: Overhung loads on output shaft [N]

F_a: Axial loads on output shaft [N]

i: Transmission ratio

J_{ext}: The total inertia of rotating parts at outside reduced at the motor shaft [kgm²]

M_2: Output torque [N]

M_a: Nominal torque [Nm]

n_1: Input speed of gearbox [rpm]

n_2: Output speed of gearbox [rpm]

P_{eq}: Equivalent power [W]

P_e: Nominal power (given on performance tables) [W]

P_M: Power consumption of the driven machine (for alternating power, refer to equivalent power) [kW]

t: Time [s]

T_e: Equivalent torque [Nm]

Erklärung der Bezeichnungen

c_t: Koeffizient der Tätigkeitszeit von Schalter

f_s: Betriebsfaktor

F_{ama}: Zulässige Axialkräfte auf Abtriebswelle [kN]

F_{ame}: Zulässige Axialkräfte auf Antriebswelle [kN]

F_{qam}: Zulässige Querkräfte auf Abtriebswelle [N]

F_{qem}: Zulässige Querkräfte auf Antriebswelle [N]

F_{qa}: Querkräfte auf Abtriebswelle [N]

F_{qe}: Querkräfte auf Antriebswelle [N]

F_q: Querkräfte auf Abtriebswelle [N]

F_a: Axialkräfte auf Abtriebswelle [N]

i: Übersetzungsverhältnis

J_{ext}: Die Gesamtträgheit der rotierende Teile von der Ausgangsseite reduziert auf Motorwelle [kgm²]

M_2: Ausgangsdrehmoment [N]

M_a: Nenndrehmoment [Nm]

n_1: Antriebsdrehzahl [U/min]

n_2: Abtriebsdrehzahl [U/min]

P_{eq}: Äquivalente Leistung [W]

P_e: Getriebe Nennleistung (siehe Leistung- Drehzahl Tabellen) [W]

P_M: Leistung benötigt an der Abtriebswelle (Zur Berechnung bei variabler Leistungen äquivalente Leistung benutzen) [kW]

t: Zeit [s]

T_e: Äquivalentes Drehmoment [Nm]



Genel Bilgiler

General Information

Einführung



Ürün Yelpazesi

Elinizdeki katalog sadece **D serisi** ürünleri içermektedir.

- M ve N Serisi

Helisel alın dişliye sahip, giriş ve çıkış milleri aynı düzlem üzerinde ve birbirine paralel uzanan, üzerlerinde bulunan ayak veya flanş ile makina-ya sabitlenen redüktörlerdir. Dolu mil çıkışlıdır.

- D Serisi

Helisel alın dişliye sahip, giriş ve çıkış milleri aynı düzlem üzerinde, birbirine paralel ve belirli bir aralıkta yerleştirilmiş, iki yan yüzde bulunan bağlantı civataları, flanş veya tork kolu ile makina-ya sabitlenen redüktörlerdir. Delik milli veya mil çıkışlı olabilir.

- E Serisi

Sonsuz vida ve çark dişlili, belirli bir aralıkta ve birbirine dik konumlandırılmış giriş ve çıkış millerine sahip, çepçevre konumlandırılmış ayak bağlantıları, flanş veya tork kolu ile makina-ya sabitlenen redüktörlerdir. Delik milli veya mil çıkışlı olabilir.

- Y Serisi

Yatık tip redüktörler, ağır şartlarda çalışmak üzere dizayn edilmiş redüktör tipleridir. Bu tiplerde redüktör ile bunu tahrik eden mekanizma arasında değişik bağlantı şekilleri mevcuttur (Mekanik ve hidrolik kaplinler, çeşitli tip kayışlar ve zincirle tahrik gibi). Delik milli veya mil çıkışlı olabilir.

- K Serisi

Helisel alın dişli ve konik dişlilerden oluşan, birbirine dik ve belirli bir aralıkta konumlandırılmış giriş ve çıkış milline sahip, çepçevre sunulan ayaklar, flanş veya tork kolu ile makina-ya sabitlenen redüktörlerdir. E serisinden farklı olarak yüksek verime sahiptirler. Delik milli veya mil çıkışlı olabilir.

- H ve B Serisi

Helisel ve/veya konik dişliye sahip ağır hizmet tipi redüktörlerdir. Giriş ve çıkış milleri birbirine paralel veya dik olabilir. Her yönden bağlantı için ayak bağlantıları bulunur. Opsiyonel olarak flanş ile de bağlanabilir. Delik milli veya mil çıkışlı olabilir.

- T Serisi

T Serisi redüktörler helisel dişli iki kademe motorsuz delik milli redüktörlerdir. T Serisi redüktörler delik milli olması ve kompakt gövde yapısı sayesinde daha küçük hacimli alanlara montajı yapılabilmektedir.

- P ve R Serisi

P ve R Serisi redüktörler planet dişli redüktörlerdir. Endüstriyel ve mobil uygulamalarda kullanılırlar. Diğer redüktör tiplerine göre daha küçük hacimde daha büyük tork iletebilirler.

- VR Serisi

VR vinç redüktörleri M1 - M8 (1Dm - 5m) yük sınıflarına uygun olarak, çift veya sabit devirli frenli motorlarla üretilebilmektedir.

Production Range

This catalogue is containing D series of gearboxes only.

- M and N Series

M and N series of YILMAZ REDÜKTÖR are helical geared. The input and output shafts are parallel to each other and on the same plane. The gearbox can be connected to the machine by using the foot or flange on the gearbox. Has solid output shaft.

- D Series

D series are helical geared gearboxes with parallel input and output shafts. The shafts have a distance in between and located on the same plane. The gearbox can be assembled to the machine by using the foot, the connection screws on the sides, flange or torque arm on the gearbox. Can have hollow or solid output shaft.

- E Series

E series gearboxes are with worm and worm-wheel. The input and output shafts are perpendicular to each other and have a distance in between. It can be assembled to the driven machine by the use of the foot, flange or torque arm on the gearbox. Can have hollow or solid output shaft.

- Y Series

Horizontal type gearboxes are designed to operate in heavy conditions. In these types there are a lot of combination forms between gearbox and driver (for example, mechanic and hydraulic couplings, various belt and chain drives etc.). Can have hollow or solid output shaft.

- K Series

These are gearboxes with helical and bevel gears. The input and output shafts are perpendicular to each other and have a distance in between. It can be assembled to the driven machine using the foot, flange or torque arm on the gearbox. They have high efficiency compared to E series. Can have hollow or solid output shaft.

- H and B Series

These gearboxes are helical or/and bevel geared industrial gearboxes. The input and output shafts can be arranged parallel or perpendicular to each other. The gearbox can be assembled by the use of the foot connections on each side. Flange connections are optional. Can have hollow or solid output shaft.

- T Series

T Series are gear units which are helical geared, two staged, hollow shaft mounted gear units and manufactured according to monoblock principal. T Series gearboxes have hollow shaft and compact housing so that T series can be mounted on smaller places.

- P and R Series

P and R Series gearboxes are planetary gearboxes. They are mostly used by industrial and mobile applications. Planetary gearboxes can transfer high torques in small volumes compared to other gearboxes.

- VR Serie

VR hoist drives are produced according to M1 - M8 (1Dm - 5m) load classification.

Produktpalette

Dieses Katalog umfasst nur die **D Serien** Getriebe.

- M und N Serie

Diese Modelle sind Stirnradgetriebe mit parallelen Antriebs- und Abtriebswelle auf einer Ebene. Die Getriebe werden mit Fuß- oder Flanschverbindung an die angetriebene Maschine angekoppelt. Hat Vollwelle am Ausgang.

- D Serie

Diese Getriebe sind Stirnradgetriebe mit paralleler Antriebs- und Abtriebswelle, die auf einer Ebene liegen und einen Abstand zueinander haben. Diese Getriebe wird seitlich mit Gewindelöchern am Maschine oder mit einer Flansch verbindet. Kann Voll- und Hohlwelle am Ausgang haben.

- E Serie

Diese Getriebe bestehen aus Schnecke und Schneckenrad. Die Antriebs- und Abtriebswellen sind senkrecht zueinander und haben einen bestimmten Abstand. Das Getriebe wird mit Fußbefestigung, Flanschverbindung oder mit Drehmomentstütze an die angetriebene Maschine montiert. Kann Voll- und Hohlwelle am Ausgang haben.

- Y Serie

Diese Getrieben sind für Einsatz unter schweren Bedingungen ausgelegt. Bei dieser Ausführung gibt es sehr viele verschiedene Verbindungsmöglichkeiten zwischen Antrieb und Getriebe (Zum Beispiel; mechanische und hydraulische Kupplungen, Riementrieb, Kettentrieb usw.). Kann Voll- und Hohlwelle am Ausgang haben.

- K Serie

Diese Getrieben bestehen aus Stirnräder und Kegelräder. Die Antrieb und Abtriebswellen sind senkrecht und haben einen Abstand zueinander. Das Getriebe wird mit Fußbefestigung, Flanschverbindung oder Drehmomentstütze an die angetriebene Maschine montiert. Der Wirkungsgrad ist wesentlich höher als E Serie. Kann Voll- und Hohlwelle am Ausgang haben.

- H und B Serie

Diese Getriebe sind geeignet für industrielle Anwendungen und haben parallelen oder senkrechten Antrieb und Abtriebswelle auf einer Ebene. Das Getriebe kann mit Füßen, die auf jede Seite der Getriebe vorhanden sind, oder optional mit Flansch an die angetriebene Maschine montiert werden. Kann Voll- und Hohlwelle am Ausgang haben.

- T Serie

TSerien Getriebe sind zwei stufige, schrägverzahnte Hohlwellenflachgetriebe in Monoblockgehäuse. Die T Serie hat eine kompakte Gehäuse und ist serienmäßig mit Abgangshohlwelle hergestellt, so dass das Getriebe minimalen Platzbedarf hat.

- P und R Serie

P und R Serie sind Planetengetriebe, die vielseitig im Industrie und bei mobiler Anwendungen einsetzbar sind, mit Planetenzahnräder. Planetengetriebe können im Vergleich zu anderen Getrieben größere Drehmomente bei kleineren Bauvolumen übertragen.

- VR Serie

VR Krane und Hebezeuge werden geeignet zur Belastungsart M1 - M8 (1Dm - 5m) hergestellt.



Genel Bilgiler General Information Einführung



M ...

13 farklı büyüklükte;
Moment aralığı: 50 - 18.000 Nm
Devir aralığı: 0,1 - 500 d/dak
13 different sizes:
Torque range: 50 - 18.000 Nm
Speed range: 0,1 - 500 rpm
13 verschiedene Baugrößen:
Drehmomentbereich: 50 - 18.000 Nm
Drehzahlbereich : 0,1 - 500 U/min



N ...

13 farklı büyüklükte;
Moment aralığı: 50 - 18.000 Nm
Devir aralığı: 0,1 - 500 d/dak
13 different sizes:
Torque range: 50 - 18.000 Nm
Speed range: 0,1 - 500 rpm
13 verschiedene Baugrößen:
Drehmomentbereich: 50 - 18.000 Nm
Drehzahlbereich : 0,1 - 500 U/min



E ...

8 farklı büyüklükte;
Moment aralığı: 5 - 1.000 Nm
Devir aralığı: 0,1 - 400 d/dak
8 different sizes:
Torque range: 5 - 1.000 Nm
Speed range: 0,1 - 400 rpm
8 verschiedene Baugrößen:
Drehmomentbereich: 5-1.000 Nm
Drehzahlbereich : 0,1-400 U/min



K ...

7 farklı büyüklükte;
Moment aralığı: 200 - 15.000 Nm
Devir aralığı: 0,1 - 400 d/dak
7 different sizes:
Torque range: 200 - 15.000 Nm
Speed range: 0,1 - 400 rpm
7 verschiedene Baugrößen:
Drehmomentbereich: 200 - 15.000 Nm
Drehzahlbereich : 0,1 - 400 U/min



D...

11 farklı büyüklükte;
Moment aralığı: 150 - 18.000 Nm
Devir aralığı: 0,1 - 350 d/dak
11 different sizes:
Torque range: 150 - 18.000 Nm
Speed range: 0,1 - 350 rpm
11 verschiedene Baugrößen:
Drehmomentbereich: 150 - 18.000 Nm
Drehzahlbereich : 0,1 - 350 U/min



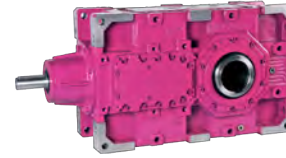
Y ...

25 farklı büyüklükte;
Moment aralığı: 1200 - 43000 Nm
Devir aralığı: 2,6 - 990 d/dak
25 different sizes:
Torque range: 1200 - 43000 Nm
Speed range: 2,6 - 990 rpm
25 verschiedene Baugrößen:
Drehmomentber. :1200-43000 Nm
Drehzahlbereich : 2,6-990 U/min



H ...

14 farklı büyüklükte;
Moment aralığı: 2.500 - 165.000 Nm
Devir aralığı: 0,1 - 250 d/dak
14 different sizes:
Torque range: 2.500 - 165.000 Nm
Speed range: 0,1 - 250 rpm
14 verschiedene Baugrößen:
Drehmomentber. :2.500 - 165.000 Nm
Drehzahlbereich : 0,1 - 250 U/min



B ...

14 farklı büyüklükte;
Moment aralığı: 5.000 - 165.000 Nm
Devir aralığı: 0,1 - 115 d/dak
14 different sizes:
Torque range: 5.000 - 165.000 Nm
Speed range: 0,1 - 115 rpm
14 verschiedene Baugrößen:
Drehmomentber. :5.000-165.000 Nm
Drehzahlbereich : 0,1-115 U/min



P ...

10 farklı büyüklükte;
Moment aralığı: 1.000 - 50.000 Nm
Tahvil oranları: 3,5 - 3000 arası
10 different sizes:
Torque range: 1.000 - 50.000 Nm
Transmission ratio: 3,5 - 3000
10 verschiedene Baugrößen:
Drehmomentber. : 1.000 - 50.000 Nm
Übersetzung: 3,5 - 3000



R ...

10 farklı büyüklükte;
Moment aralığı: 1.000 - 50.000 Nm
Tahvil oranları: 3,5 - 3000 arası
10 different sizes:
Torque range: 1.000 - 50.000 Nm
Transmission ratio: 3,5 - 3000
10 verschiedene Baugrößen:
Drehmomentber. : 1.000 - 50.000 Nm
Übersetzung: 3,5 - 3000



T ...

10 farklı büyüklükte;
Moment aralığı: 200 - 18.000 Nm
Devir aralığı: 46 - 280 d/dak
10 different sizes:
Torque range: 200-18.000 Nm
Speed range: 46-280 rpm
10 verschiedene Baugrößen:
Drehmomentber. :200-18.000 Nm
Drehzahlbereich : 46-280 U/min



VR ...

VR vinç redüktörleri
M1 - M8 ,(1Dm - 5m) yük sınıfı
ISO 4301 / 1 ,(FEM 1.001 / III)
VR Hoist Drive Units
M1 - M8 ,(1Dm - 5m) load classification
ISO 4301 / 1 ,(FEM 1.001 / III)
VR Kran und Hebezeug Getriebe
M1 - M8 ,(1Dm - 5m) Belastungsart
ISO 4301 / 1 ,(FEM 1.001 / III)



Genel Bilgiler

General Information

Einführung



D Serisi Redüktörlerin Genel Özellikleri

D Serisi redüktörler delik milli olmasından dolayı birçok uygulama alanı için montaj kolaylığı ve kompaktlık sağlamaktadır. Bu modeller flanşlı, gövde bağlantılı, delik milden askı bağlantılı veya bunların bir kombinasyonu olan montaj şekillerinde üretilmektedir.

Delik milli redüktörler sonsuz vidalı modellerde olduğu gibi modüler sistemde düşünülmüştür. Çıkış milleri ve çıkış flanşları, standart ürün üzerine sonradan ilave edilebilmektedir. Gövdenin her iki tarafından bağlanma imkanı sağlayan bağlantı delikleri mevcuttur. Delik milli redüktörlerin motor bağlantılarında da esneklik getirilmiştir. IEC B5 veya B14, standart akuple veya motorsuz mil girişli modeller mevcuttur. Diğer sonsuz ve monoblok modeller ile olan kombinasyonlarda değişiklikler minimum düzeye indirilmiştir. Yüksek mukavemet ve verimin ön plana çıktığı uygulamalar alanlarında, sonsuz vidalı redüktörlerin yerini almakta olup, radyal yükler açısından da büyük avantajlar sağlamaktadır.

YILMAZ REDÜKTÖR olarak tasarım prensibimiz;

- Yüksek teknoloji kullanmak
- Güvenilirlik,
- Yüksek güç yoğunluğu,
- Yüksek verim,
- Montaj uyumluluğu,
- Esnek çözümler

Dikkat Edilecek Hususlar !

- Bu katalogta verilen resimler görsel amaçlıdır ve şekilsel detaylar bağlayıcı değildir.

- YILMAZ REDÜKTÖR, ürünler ve kataloglar üzerinde, müşterileri bilgilendirmeksizin her türlü değişikliği yapma hakkına sahiptir.

- Ürünler teslim alındıktan sonra ürünle birlikte verilen kullanım kılavuzu okunmadan sistem devreye alınmamalıdır.

- Katalogta verilen yağ miktarları referans amaçlıdır. Gerçek yağ seviyesi için redüktör üzerinde bulunan yağ seviye tapası kullanılmalıdır. Yağ viskozitesi için, redüktör etiketine bakınız.

- Sipariş anında montaj pozisyonu bildirilmeyen redüktörler **M1** montajına uygun sevk edilir. Etiketle yazan montaj pozisyonundan farklı bağlanan redüktörler garanti kapsamından çıkar. Bu katalogta verilen redüktör ağırlıkları ortalama ağırlık değerleridir. Tahvil oranına ve üzerinde bağlı olan aksesuara göre ağırlıklar farklılık gösterebilir.

General Specifications of D Series Gearboxes

The speciality is the hollow shaft, which provides an advantage in mounting and makes the usage easier. These types are manufactured as flange mounted, foot mounted, hollow shaft mounted or combination of these mounting possibilities.

The hollow shaft gearboxes are manufactured in modular system. The output shaft and flange can be added to the standard hollow shaft gearbox without any change on the gearbox. The housing has mounting points on both sides, which allows mounting from both sides. The input side of hollow shaft gearboxes is flexible. IEC B5 or B14, standard coupled or with solid input shaft gearboxes are possible. The combination with other type gearboxes can be made with minimum change. In applications where efficiency and strength is most important hollow shaft gearboxes are preferred to worm gearboxes. Hollow shaft gearboxes have also advantages in overhung loads.

As we are YILMAZ REDÜKTÖR,our design principals are;

- Using high technology
- Reliability
- High power density
- High efficiency
- Mounting compatible
- Flexible solutions

Attention to the following points !

- Drawings are examples only and the details on the drawings or illustrations are not strictly binding.

- YILMAZ REDÜKTÖR reserve the right to make all kinds of changes in products and catalogues without any notice.

- Prior to commissioning, the operating instructions provided with the gearbox must be observed.

- Oil quantities given are guide values only. The exact quantity of oil should be checked by using the provided oil level plugs according mounting positions. For correct oil viscosity refer to the nameplate.

*- If the mounting position is not informed upon ordering, the gear unit is delivered according **M1** mounting position. A different operation than the indicated mounting position on the name plate cancels the warranty. The weights given in this catalogue are mean values. Depending on the ratio and accessories the weights can differ.*

Allgemeine Eigenschaften von D Serie Getrieben

Diese Ausführung ist sehr kompakt und leicht zum Montieren. Flansch, Fuß und Hohlwellenausführungen oder Kombinationsausführungen sind möglich. Diese Getriebe werden modular hergestellt.

Abtriebsflansch und Abtriebswelle kann man auf einen Standardausführung (Hohlwellenantrieb) ohne Änderungen montieren. Die Gehäuse haben Stellen für Fußverbindung an den beiden Seiten. Deswegen ist diese Gehäuse von beiden Seiten montierbar. Flachgetrieben haben neue Montagemöglichkeiten auch für die Antriebsseite. Standard Verbindung (IEC B14 oder B5) oder Wellenantrieb ist möglich. Kombinationen mit anderen Getriebetypen sind leicht und mit wenigen Änderung. Wenn Wirkungsgrad und Festigkeit entscheidend bei der Anwendung ist, werden nicht Schneckengetrieben sondern Flachgetrieben bevorzugt. Flachgetrieben können höhere Querkräfte als andere Getriebe tragen.

Als YILMAZ REDÜKTÖR unsere Entwurfsprinzipien sind;

- Verwenden von hohen Fertigungstechn.
- Hohe Betriebssicherheit
- Leistungsdichte
- Hoher Wirkungsgrad
- Universale Montagemöglichkeit
- Sonderlösungen

Bitte folgende Punkte beachten !

- Die Abbildungen sind beispielhaft und nicht verbindlich.

- Alle Änderungen auf dem Katalog und an der Produkte bleiben vorbehalten und können ohne Kenntnisnahme erfolgen.

- Vor Inbetriebnahme ist die mit gelieferter Betriebsanleitung zu beachten.

-Angaben über Ölmenngen sind unverbindlich. Maßgebend ist die Ölstandsschraube in der geeigneten Montageposition. Ölviskosität und Sorte muss den Angaben des Typenschildes entsprechen.

- Wenn die Bauform bei Bestellung nicht angegeben ist, erfolgt die Lieferung in der Bauform **M1**. Wenn die Getriebe anders als auf dem Typenschild benannte Bauform eingesetzt werden, verliert die Garantie ihre Gültigkeit. Die angegebenen Gewichte sind unverbindliche Mittelwerte ohne Zubehör; genauere Gewichte sind abhängig von Zubehör und Übersetzung.



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Teknik Tanımlamalar

- Çıkış Momenti (M_2): [Nm]

Motorun verdiği momentin tahvil oranı ve verimle ile çarpılarak elde edilen değerdir. Redüktörün çıkışından alınabilecek moment gösterir.

- Anma Momenti (M_a): [Nm]

Redüktörün $f_s=1$ şartı için mekanik olarak taşıdığı moment değeridir.

- Nominal Güç (P_n): [kW]

Nominal güç, redüktörün $f_s=1$ şartı için mekanik olarak taşıyabileceği güç değeridir. Redüktörlerin nominal güçleri, güç devir tablolarında verilmiştir.

- Çevrim oranı (i):

Redüktörün giriş devrinin çıkış devrine oranıdır. Yılmaz Redüktör D serisi redüktörlerde 3,5-23500 arasında değişen çevrim oranları mevcuttur.

- Eşdeğer Güç ve Moment

P_{eq} [kW], T_e [Nm]

Sabit devir altında ancak değişken yük değerlerinde çalışan redüktörlerde, sabit yük altında çalışma şartlarına eşdeğer gelen moment ve güç değerleridir. Hesaplama yöntemi sayfa 23'de verilmiştir.

- İhtiyaç güç (P_M): [kW]

Redüktörlerin kullanılacağı uygulamanın istenilen şekilde çalışabilmesi için ihtiyaç duyduğu güç değeridir.

- İhtiyaç moment (T): [Nm]

Redüktörün kullanılacağı uygulamanın çalışabilmesi için ihtiyaç duyduğu moment değeridir. Seçilen redüktör için her zaman çıkış momentini eşit yada daha düşük olmalıdır.

- Müsade Edilen Eksenel ve Radyal Yükler

F_{qem} , F_{qam} : [N]

Redüktörün giriş veya çıkış milinde müsade edilen eksenel ve radyal yüklerdir.

- Servis Faktörü (f_s):

Redüktörün çalıştığı şartlar ile uyumlu olması için gerekli olan emniyet katsayısıdır. $f_s=1$, düzgün ve sakin yüklerde, günlük sekiz saat, saatte 100 dur-kalk çalışmayı karşılar. Detaylar için redüktör seçim bölümüne bakınız.

Teknik Özellikler:

- Ses seviyesi:

Redüktörlerimizin ses seviyesi VDI 2159' da verilen redüktörler için müsade edilen ses seviyelerinin altındadır.

- Boya ve Korozyon Koruması:

Redüktörlerin standart rengi DIN1843'e göre RAL 7030 dur. İstek üzerine farklı renklerde boyanabilir. Nemli ve korozyon bölgeleri için istek üzerine farklı boya uygulanabilir.

Technical Explanations

- Output Torque (M_2): [Nm]

Multiplication of motor output torque with transmission ratio and efficiency gives the result of output torque at the output shaft of the gear unit.

- Nominal Torque (M_a): [Nm]

Nominal torque is the mechanical torque which the gearbox can resist under $f_s=1$ conditions.

- Nominal Power (P_n): [kW]

The nominal power is the power which gearbox can mechanically resist under $f_s=1$ condition. The nominal powers are given on the performance tables.

- Ratio (i):

Ratio between output shaft speed and input shaft speed. Available ratios of Yılmaz Redüktör M series are between 3,5 to 23500.

- Equivalent Power and Torque

P_{eq} : [kW], T_e [Nm]

For gearbox unit with constant speed but variable working conditions: This is the calculated power or torque which is equivalent to the values at working under constant working conditions.

- Required Power (P_M): [kW]

Required power for the applications which is able to drive the system.

- Required Torque (T): [Nm]

Required torque for applications. Required torque always must be equal or smaller than output torque for selected gearbox.

- Permissible Axial and Overhung Loads:

F_{qem} , F_{qam} [N]

Permissible axial and overhung load at the output or input shaft of gearboxes.

- Service Factor (f_s):

Service factor is a safety coefficient, which takes into account the different running conditions of the driven machine. $f_s=1$ is used for uniform loads 8 hours working per day and up to 100 cycle per hour.

Technical Specifications:

- Noise Level:

The noise level of our gearboxes is below the permitted values defined in VDI guidelines 2159 for gear units.

- Coating and Corrosion Protection:

The gearboxes are painted with RAL 7030 according DIN1843. Different colors are available upon request. Paintings for high humidity or chemically aggressive environments are available upon request.

Technische Erläuterungen

- Ausgangsmoment (M_2): [Nm]

Multiplikation von Ausgangsmoment des Motors mit Übersetzung und Division das Ergebnis mit Wirkungsgrad ergibt den Betrag von Ausgangsmoment der Getriebe.

- Nennmoment (M_a): [Nm]

Mechanisches Belastungsmoment der Getriebe unter dem Bedingung $f_s=1$.

- Nennleistung (P_n): [kW]

Die Nennleistung ist die mechanische Grenzfestigkeitsleistung für $f_s=1$. Kann von der Leistung-Drehzahltafel abgelesen werden.

- Übersetzung (i):

Wird aus dem Verhältnis von Ausgang- zu Eingangswinkelgeschwindigkeit bestimmt. Gängige Übersetzungen von Yılmaz M Serie Getriebe liegt zwischen 3,5 bis 23500.

- Äquivalente Leistung und Moment

P_{eq} : [kW], T_e [Nm]

Für mit konstanten Drehzahl aber unter veränderlichen Betriebsbedingungen arbeitende Getriebe berechnete Leistung und Moment äquivalent zu Werten beim Arbeiten unter konstanten Betriebsbedingungen.

- Notwendige Leistung (P_M): [kW]

Für das Getriebe notwendige Leistung, um Arbeiten von Getriebe bei der für das Getriebe gedachten Anwendung zu gewährleisten.

- Notwendige Moment (T): [Nm]

Notwendige Moment für Anwendungen. Für den ausgewählte Getriebe soll das notwendige Moment gleich dem Ausgangsmoment oder kleiner als diesem Moment sein.

- Zulässige Axial- oder Querkräfte:

F_{qem} , F_{qam} [N]

Bei der Anwendungen während der Betrieb zulässige axiale oder radiale Eingangs- oder Ausgangsbelastungen.

- Betriebsfaktor (f_s):

Dieser Faktor f_s ist ein Sicherheitsfaktor, damit die Getriebe unter verschiedenen Bedingungen mit genügender Sicherheit arbeitet. $f_s=1$ gilt für gleichförmig Belastung, mit 8 Betriebsstunden pro Tag und bis zum 100 Schaltungen pro Stunde.

Technische Informationen:

- Geräuschpegel:

Geräuschstärken aller Getriebe bleiben unter die zulässigen Werte, die für die Getriebe in der VDI-Richtlinie 2159 festgelegt sind.

- Lackierung und Korrosionsschutz:

Die Getriebe werden mit der Farbe RAL 7030 nach DIN1843 lackiert. Auf Wunsch sind Sonderlackierungen möglich. Alle Getriebe können auf Wunsch auch in korrosionsschutzter Ausführung für aggressive Umgebungen geliefert werden.



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- Yağlama:

D Serisi redüktörler yağlama tablolarında verilen yağlar ile doldurulmaktadır. Yağ detayları için yağlama bölümüne bakınız.

- Aksesuarlar:

D Serisi redüktörlerde aşağıdaki aksesuarlar kullanılabilir

- IEC B5/B14 Motor bağlantı flanşları
- Çıkış Bağlantı Flanşları
- Sıkma bileziği
- Geri dönüş kilidi
- Özel keçe çözümleri,
- Şeffaf yağ seviye göstergesi
- Tork kolu
- Elektromanyetik frenler

Diğer özel aksesuarlar için lütfen, YILMAZ REDÜKTÖR ile temasa geçiniz.

- Yüzey Koruması

Redüktörlerimiz aksi belirtilmedikçe boyalı olarak sevk edilmektedir. DIN EN ISO 12944-2 korozyon standardında belirtilen sınıflardan aşağıdaki tabloda belirtilen 4 kategori için yüzey koruması sağlanmaktadır. Standart boya sınıfımız C2 korozyon kategorisini karşılamaktadır. Farklı bir koruma sınıfı istenirse sipariş aşamasında belirtilmelidir.

Mil, flanş bağlantı yüzeyi gibi boyanmayan yüzeylere paslanmaya karşı koruma sağlamak için korozyon önleyici yağ sürülmektedir.

- Lubrication:

D series of gearboxes filled with oils which is indicated on lubrication tables. For lubrication details please refer to the lubrication section.

- Accessories:

The following accessories can be applied to D series gearboxes.

- IEC B5/B14 Motor connection flange
- Output flanges
- Shrink Discs
- Backstops
- Special sealing solutions.
- Transparent oil level indicator,
- Torque arm
- Electromagnetic brakes

For other accessories please contact, YILMAZ REDÜKTÖR.

- Surface Protection

Our products are all painted unless otherwise stated. 4 corrosion categories which are mentioned below can be offered according to corrosion categories of DIN EN ISO 12944-2 standard. Our standard paint meets C2 corrosion category. If different category is requested, please inform before order.

Unpainted parts such as shaft, flange connection surface are coated with anti-corrosion paint before shipment against corrosion.

- Schmierung:

D Serie Getriebe werden mit Ölen entsprechend der Schmierungstabellen, falls nicht anders vereinbart, geliefert. Für weitere Schmierungsangaben siehe Kapitel Schmierung.

- Zubehör:

Folgendes Zubehör kann für Getriebe der D Serie geliefert werden.

- IEC B5/B14 Motor Adapter,
- Abtriebsflansch,
- Schrumpfscheiben,
- Rücklaufsperrn,
- Unterschiedliche Dichtungssysteme,
- Drehmomentarm
- Elektromagnetische Bremsen

Für weiteres Zubehör kontaktieren Sie bitte mit, YILMAZ REDÜKTÖR.

- Oberflächenschutz

Getriebe von Yılmaz Redüktör werden lackiert und so geliefert falls nicht anders vereinbart ist. Die 4 untenstehenden Korrosionskategorien können nach Korrosionsschutz-Basisnorm DIN EN ISO 12944-2 angeboten werden. Unsere Standard-Lackierung erfüllt C2-Korrosionskategorie. Wenn Sie eine andere Kategorie erwünschen, informieren Sie uns bitte darüber vor der Bestellung.

Nicht lackierte Teile (z.B. Welle, Oberfläche des Anschlussflanschs) werden mit einem Schutzmittel vor dem Versand geschmiert, um vor Korrosion und Rost zu schützen.

Korozyon Kategorisi Corrosion Categories Korrosivitätskategorie	Çevre Şartları Ambient Conditions Umgebungsbedingungen	Boya Tipi Paint Type Lackierung	Boya Kalınlıkları Paint Thickness Sollschichtdicke
C2 (Standard)	İç ortam ve muhafazalı dış ortam Nem ve kirlilik oranı düşük çalışma ortamı <i>Indoor installation and outdoor installation with protection roof</i> <i>Environments with low humidity and contamination</i> Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre mit niedriger Luftfeuchtigkeit und Verunreinigung	Su Bazlı Astar <i>Water Based Primer Coat</i> Wasserbasierte Grundierung	80 µm
		Su Bazlı veya Akrilik Sonkat <i>Water Based or Acrylic Top Coat</i> Wasserbasierte oder Akril-Decklack	40 µm
C3	İç ortam ve atmosfere açık dış ortam Orta seviyede nem ve kirlilik olan çalışma ortamı <i>Indoor installation and outdoor installation subject to weathering</i> <i>Environments with mean humidity and contamination</i> Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre mit mäßiger Luftfeuchtigkeit und Verunreinigung	Epoksi Astar <i>Epoxy Primer Coat</i> Epoxy-Grundierung	80 µm
		Akrilik Sonkat <i>Acrylic Top Coat</i> Akril-Decklack	40 µm
C4	İç ortam ve atmosfere açık dış ortam Genelde yüksek nem ve kimyasal madde olan çalışma ortamı <i>Indoor installation and outdoor installation subject to weathering</i> <i>Environments with occasionally high humidity and chemical contamination</i> Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre gelegentlich mit hoher Luftfeuchtigkeit und chemischer Verunreinigung	Epoksi Astar <i>Epoxy Primer Coat</i> Epoxy-Grundierung	180 µm
		Akrilik Sonkat <i>Acrylic Top Coat</i> Akril-Decklack	40 µm
C5-I / C5-M	İç ortam ve atmosfere açık dış ortam Sürekli yüksek nem ve kimyasal madde ile temizlik yapılan çalışma ortamı <i>Indoor installation and outdoor installation subject to weathering</i> <i>Environments with permanent high humidity and chemical cleaning contamination</i> Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre mit ständiger hoher Luftfeuchtigkeit und chemischer Verunreinigung (Nassreinigung mit Säuren/Laugen und auch mit chemischen Reinigungsmitteln).	Çinko Yüklemeli Epoksi Astar <i>Epoxy Zinc Primer Coat</i> Epoxy-Zink-Grundierung	70 µm
		Epoksi Astar Miox <i>Epoxy Miox Primer Coat</i> Epoxy-Miox-Grundierung	150 µm
		Akrilik Sonkat <i>Acrylic Top Coat</i> Akril-Decklack	40 µm



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Tip Tanımlaması / Unit Designation / Typenbezeichnung

D R 4 7 4 .02 3 E90S / 4C - L02

Fren / Brake / Bremse

L-220V **Fanlı / With Fan / Mit Lüfter**

P-24V **Fanlı / With Fan / Mit Lüfter**

S-220 V **Fansız / Without Fan / Ohne Lüfter**

Z-24 V **Fansız / Without Fan / Ohne Lüfter**

01-10 Nm 10-100 Nm

02-25 Nm 20-200 Nm

04-40 Nm 30-300 Nm

05-50 Nm 40-400 Nm

Kutup sayısı / Number of poles / Anzahl der Polen

Motor Büyüklüğü / Motor Size / Motorbaugröße

DR / DV tipleri için / For DR /

DV / Types / Für die Typen DR

/ DV

E90S / 4

Kutup Sayısı / Pole Number /

Anzahl der Polen

Gövde uzunluğu / Frame Length /

Gehäuselänge des Motors

Motor büyüklüğü / Motor size /

Motorbaugröße

Motor tipi / Motor type /

Motortyp

DN tipleri için / For DN Types / Für Typen KN

A06 :63 B5 A09 : 90 B5 A13:132 B5 A25: 250 B5

B06 :63 B14 B09 : 90 B14 B13:132 B14 A28: 280 B5

A07 :71 B5 A10 :100 B5 A16:160 B5 A31: 315 B5

B07 :71 B14 B10 :100 B14 A18:180 B5

A08 :80 B5 A11 :112 B5 A20:200 B5

B08 :80 B14 B11 :112 B14 A22:225 B5

Motor Verim Sınıfı / Motor Efficiency Class / Motor-Effizienzklasse

Çıkış Mili Özelliği / Output Shaft / Eigenschaft der Ausgangswelle

00 :Standart delik milli / Hollow Shaft output / Stand. Ausführung mit Hohlwelle

01 :Mil Çıkışlı / Solid Shaft Output / Vollwelle

02 :Flanşlı ve mil çıkışlı / Solid shaft output with IEC B5 /14 Flange / Flansch und Abtriebswelle

03 :Flanşlı ve delik milli çıkışlı / Flanged and Hollow Shaft output / Mit Flansch und Hohlausgangswelle

0S :Sıkma Bilezikli / Shrink Disk Output / Schrumpfscheibe

0E :Ekstruder Çıkışlı / Extruder Output / Extruder-Ausgang

Kademe Sayısı / Stage / Anzahl der Stufen

2 Kademe / 2 Stages / 2 stufig

5 Kademe / 5 Stages / 5 stufig

3 Kademe / 3 Stages / 3 stufig

6 Kademe / 6 Stages / 6 stufig

4 Kademe / 4 Stages / 4 stufig

Revizyon Numarası / Revision Number / Änderungsnummer

Gövde Büyüklük / Housing Size / Größe der Gehäuse

0...9

Giriş Tipi / Input Type / Eingangstyp

R :Motorlu / With Motor / Mit Motor

N :Motorsuz ve IEC B5/B14 Flanş Girişli / IEC B5 / B14 Flanged without Motor / Ohne Motor und IEC B5/B14 Eingangsflansch

V :Motorlu ve IEC B5/B14 Flanş Girişli / IEC B5 / B14 Flanged with Motor / Mit Motor und IEC B5/B14 Eingangsflansch

T :Motorsuz / Without Motor / Eingang ohne Motor

Redüktör Tipi / Gearbox Type / Getriebe

D Serisi / D Serie / D Serie



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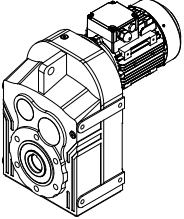
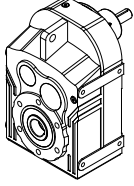
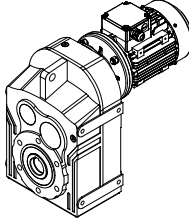
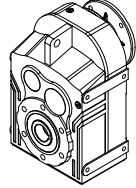
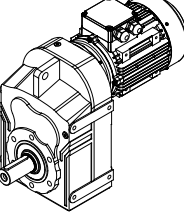
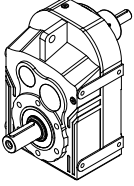
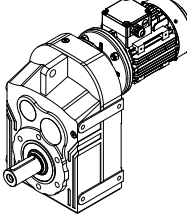
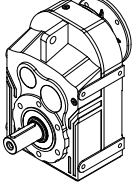
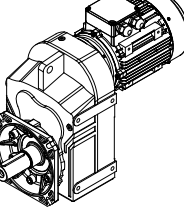
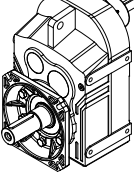
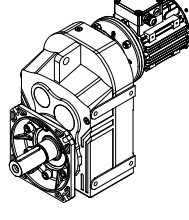
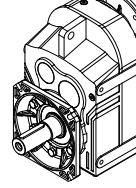
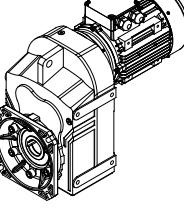
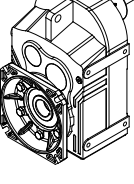
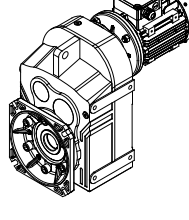
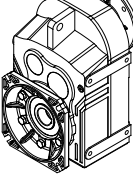
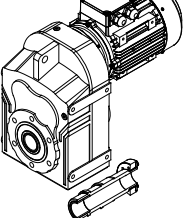
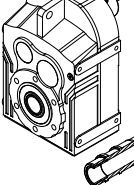
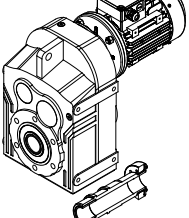
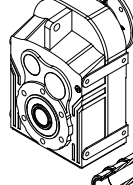
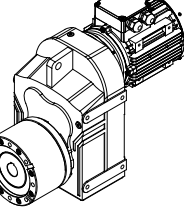
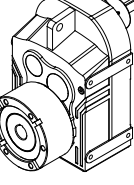
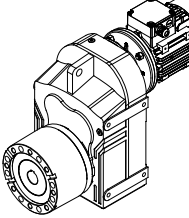
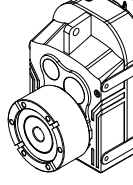
- DR..00.. **Delik milli tip helisel redüktörler, motor bağlantılı, delik milli çıkış / Hollow shaft helical geared motors , Direct coupled motor, Hollow shaft output /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit Hohlwelle.
- DR..01.. **Delik milli tip helisel redüktörler, motor bağlantılı, milli çıkış / Hollow shaft helical geared motors, Direct motor coupled, solid output shaft /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit Vollwelle.
- DR..02.. **Delik milli tip helisel redüktörler, motor bağlantılı, mil ve flanş çıkışı / Hollow shaft helical geared motors, Direct motor coupled, Solid output shaft and output flange /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit Vollwelle und Flansch.
- DR..03.. **Delik milli tip helisel redüktörler, motor bağlantılı delik milli ve flanş çıkışı / Hollow shaft helical geared motors, Direct motor coupled, Hollow output shaft and output flange /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit Hohlwelle und Flansch.
- DR..0S.. **Delik milli tip helisel motorlu redüktörler, motor bağlantılı, sıkma bilezik çıkışı / Hollow Shaft helical geared motors Direct motor coupled , Shrink disk output /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit Schrumpfscheibe
- DR..0E.. **Delik milli tip helisel motorlu redüktörler, motor bağlantılı, ekstruder çıkışı / Hollow Shaft helical geared motors Direct motor coupled , extruder output /** Flachtriebemotoren, Verbunden mit Motor, Ausgang mit extruder
- DN..00.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz , delik milli çıkış / Hollow shaft helical gearboxes, IEC B5/B14 flanged input without motor, hollow output shaft /** Flachtriebe, ohne Motor mit IEC B5/B14 Flansch , Ausgang mit Hohlwelle.
- DN..01.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz , mil çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input without motor, Solid output shaft /** Flachtriebe, ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Vollwelle.
- DN..02.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz, mil ve flanş çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input without motor, Solid output shaft and output flange /** Flachtriebe, ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Vollwelle und Flansch.
- DN..03.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz, delik milli ve flanş çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input without motor, Hollow output shaft and output flange /** Flachtriebe, ohne Motor mit IEC B5/B14, Ausgang mit Hohlwelle und Flansch.
- DN..0S.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz, sıkma bilezik çıkışı / Hollow Shaft helical geared motors IEC B5/B14 flanged without motor, Shrink disk Output /** Flachtriebemotoren, ohne Motor mit IEC B5/B14, Ausgang mit Schrumpfscheibe
- DN..0E.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motorsuz, ekstruder çıkışı / Hollow Shaft helical geared motors IEC B5/B14 flanged without motor, extruder output /** Flachtriebemotoren, ohne Motor mit IEC B5/B14, Ausgang mit extruder.
- DV..00.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı, delik milli çıkış / Hollow shaft helical gearboxes, IEC B5/B14 flanged input with direct motor coupled, hollow output shaft /** Flachtriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Hohlwelle.
- DV..01.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı, mil çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input with direct coupled motor, Solid output shaft /** Flachtriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Vollwelle.
- DV..02.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı, mil ve flanş çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input with direct coupled motor, Solid output shaft and output flange /** Flachtriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Vollwelle und Flansch.
- DV..03.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı, delik milli ve flanş çıkışı / Hollow shaft helical gearboxes, IEC B5/B14 flanged input with direct coupled motor, Hollow output shaft and output flange /** Flachtriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Hohlwelle und Flansch.
- DV..0S.. **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı , sıkma bilezik çıkışı / Hollow Shaft helical geared motors IEC B5/B14 flanged with direct coupled motor, Shrink disk Output /** Flachtriebemotoren, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Schrumpfscheibe
- DV..0E **Delik milli tip helisel redüktörler, IEC B5/B14 flanşlı motor bağlantılı , ekstruder çıkışı / Hollow Shaft helical geared motors IEC B5/B14 flanged with direct coupled motor, Extruder Output /** Flachtriebemotoren, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit extruder.
- DT..00.. **Delik milli tip helisel redüktörler, motorsuz ve mil girişli, delik milli çıkış / Hollow shaft helical geared unit, Solid shaft input without motor, Hollow output shaft /** Flachtriebe, Eingang mit Vollwelle ohne Motor, Ausgang mit Hohlwelle.
- DT..01.. **Delik milli tip helisel redüktörler, motorsuz ve mil girişli, mil çıkışı / Hollow shaft helical geared units, Solid shaft input without motor, Solid output shaft /** Flachtriebe, Eingang mit Vollwelle ohne Motor, Ausgang mit Vollwelle.
- DT..02.. **Delik milli tip helisel redüktörler, motorsuz ve mil girişli, mil ve flanş çıkışı / Hollow shaft helical gear units, Solid shaft input without motor, Solid output shaft and flange output /** Flachtriebe, Eingang mit Vollwelle ohne Motor, Ausgang mit Vollwelle und Flansch.
- DT..03.. **Delik milli tip helisel redüktörler, motorsuz ve mil girişli, delik milli ve flanş çıkışı / Hollow shaft helical gear units, solid shaft input without motor, Hollow output shaft and output flange /** Flachtriebe, Eingang mit Vollwelle ohne Motor, Ausgang mit Hohlwelle und Flansch.
- DT..0S.. **Delik milli tip helisel redüktörler, motorsuz, sıkma bilezik çıkışı / Hollow Shaft helical gear motors, Solid shaft input without motor, Shrink Disk Output /** Flachtriebe, ohne Motor, Ausgang mit Schrumpfscheibe
- DT..0E.. **Delik milli tip helisel redüktörler, motorsuz, ekstruder çıkışı / Hollow Shaft helical gear motors, Solid shaft input without motor, Extruder Output /** Flachtriebe, ohne Motor, Ausgang mit extruder.



Genel Bilgiler
General Information
Einführung



Tip Tanımlaması / Unit Designation / Typenbezeichnungen

 DR..00	 DT..00	 DV..00	 DN..00
 DR..01	 DT..01	 DV..01	 DN..01
 DR..02	 DT..02	 DV..02	 DN..02
 DR..03	 DT..03	 DV..03	 DN..03
 DR..0S	 DT..0S	 DV..0S	 DN..0S
 DR..0E	 DT..0E	 DV..0E	 DN..0E



Genel Bilgiler

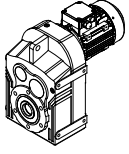
General Information

Einführung



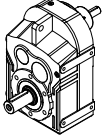
Örnek Tip Tanımlamaları

DR172.00 - 3E90S/4C - L05



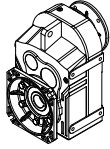
D.....: D serisi redüktör
R.....: Motor bağlantılı
1.....: Gövde büyüklük
7.....: Revizyon numarası
2.....: Kademe sayısı
00.....: Delik mil çıkışı
3.....: Verim sınıfı
E.....: Motor tipi
90S.....: Motor büyüklüğü
4C.....: Motor kutup sayısı
L05.....: Fren Tipi

DT373.01



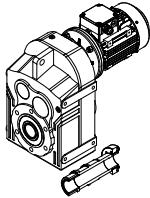
D.....: D serisi redüktör
T.....: Motorsuz giriş millî
3.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
01.....: Mil çıkışı

DN473.03 - A11



D.....: D serisi redüktör
N.....: Motorsuz ve IEC B5 giriş flanşlı
4.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
03.....: Delik millî flanş bağlantılı
A11.....: 112 tip motor, B5 bağlantı flanş

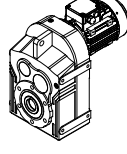
DV573.0S - 3E100L/4C



D.....: D serisi redüktör
V.....: Motorlu ve B5/B14 giriş flanşlı
5.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
0S.....: Sıkma bilezikli delik millî
3.....: Verim sınıfı
E.....: Motor tipi
100L/4.....: Motor büyüklüğü ve kutup sayısı

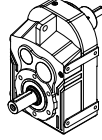
Sample Designations

DR172 - 3E90S/4C - L05



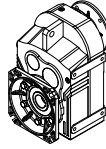
D.....: D series gearbox
R.....: With motor connection
1.....: Gear unit size
7.....: Revision number
2.....: Stage number
00.....: Hollow shaft output
3.....: Efficiency class
E.....: Motor type
90S.....: Motor frame size
4C.....: Number of poles
L05.....: Brake type

DT373.01



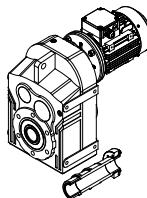
D.....: D series gearbox
T.....: Solid input shaft
3.....: Gear unit size
7.....: Revision number
3.....: Stage number
01.....: Solid output shaft

DN473.03 - A11



D.....: D series gearbox
N.....: IEC B5 flange without motor input
4.....: Gear unit size
7.....: Revision number
3.....: Stage number
03.....: Hollow shaft output with flange
A11.....: Motor type 112, B5 flange

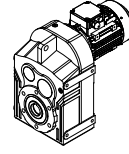
DV573.0S - 3E100L/4C



D.....: D series gearbox
V.....: With Motor, B5/B14 input flange
5.....: Gear unit size
7.....: Revision number
3.....: Stage number
0S.....: Hollow shaft output with shrink disk
3.....: Efficiency class
E.....: Motor type
100L/4.....: Motor size and number of poles

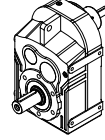
Beispiele für Typenbezeichnung

DR172 - 3E90S/4C - L05



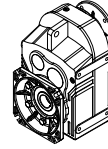
D.....: D Serie Getriebe
R.....: Motorverbindung
1.....: Größe der Gehäuse
7.....: Änderungsnummer
2.....: Stufenanzahl
00.....: Hohl Ausgangswelle
3.....: Effizienzklasse
E.....: Motortyp
90S.....: Motorbaugröße
4C.....: Anzahl der Polen
L05.....: Bremse

DT373.01



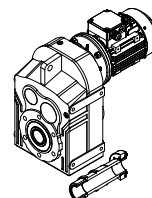
D.....: D Serie Getriebe
T.....: Vollwelleneingang ohne Motor
3.....: Größe der Gehäuse
7.....: Änderungsnummer
3.....: Stufenanzahl
01.....: Vollwelle

DN473.03 - A11



D.....: D Serie Getriebe
N.....: IEC B5 Flansch ohne Motor
4.....: Größe der Gehäuse
7.....: Änderungsnummer
3.....: Stufenanzahl
03.....: Hohlwelle mit Flanschverbindung
A11.....: Motortyp 112, B5 Motorflansch

DV573.0S - 3E100L/4C



D.....: D Serie Getriebe
V.....: Mit Motor und IEC B5/B14 Flansch
5.....: Größe der Gehäuse
7.....: Änderungsnummer
3.....: Stufenanzahl
0S.....: Hohlwelle mit Schrumpfscheibe
3.....: Effizienzklasse
E.....: Motortyp
100L/4.....: Motorbaugröße und Anzahl der Pole



Genel Bilgiler

General Information

Einführung



Motor Büyüklüğüne Göre Geometrik Mümkün Çevrim Oranları

Geometrically Possible Combinations of Ratios According to Motor Size

Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

Motor Büyüklüğü / Motor Size / Motorbaugröße

Tip Type Typ	Kademe Stages Stufen	63	71	80	90	100	112	132
DR072	2	5,77-36,86	5,77-36,86	5,77-36,86	5,77-25,01	5,77-15,97	-	-
DR073	3	35,43-180,05	35,43-180,05	35,43-44,60 ; 67,62-85,12 ; 146,60-180,05	35,43-44,60 ; 67,62-85,12	35,43-38,18 ; 67,62-72,87	-	-
DR172	2	4,86-29,67	4,86-29,67	4,86-21,79	4,86-21,79	4,86-19,04	-	-
DR173	3	27,18-142,89	27,18-142,89	27,18-103,34	27,18-103,34	27,18-91,25	-	-
DR272	2	4,98-25,78	4,98-25,78	4,98-25,78	4,98-25,78	4,98-22,67	-	-
DR273	3	25,44-137,94	25,44-137,94	25,44-137,94	25,44-137,94	25,44-120,49	-	-
DR275	5	150,45-1189,30	150,45-1189,30	150,45-1189,30	150,45-1189,30	150,45-214,95 331,04-356,74	-	-
DR276	6	1215,13-2907,19	1215,13-2907,19	1215,13-2907,19	1215,13-2907,19	-	-	-
DR282	2	5,22-6,65 9,45-29,85	5,22-6,65 9,45-29,85	5,22-6,65 9,45-29,85	5,22-6,65 9,45-29,85	3,92-24,79	3,92-18,73	3,92-14,06
DR283	3	41,23-135,52	41,23-135,52	41,23-135,52	41,23-135,52	30,28-119,16	30,28-84,12	30,28-62,55
DR285	5	127,94-936,69	127,94-936,69	127,94-936,69	127,94-936,69	127,94-137,88 196,84-298,73	-	-
DR286	6	1003,2-3800,21	1003,2-3800,21	1003,2-2692,99	1003,2-2692,99	-	-	-
DR372	2	14,74-25,42	14,74-25,42	14,74-25,42	14,74-25,42	3,65-25,42	3,65-22,46	3,65-17,65
DR373	3	32,11-171,89	32,11-171,89	32,11-171,89	32,11-171,89	23,58-151,15	23,58-106,69	23,58-79,34
DR375	5	174,88-1188,1	174,88-1188,10	174,88-1188,10	174,88-1188,10	174,88 249,67-378,91	-	-
DR376	6	1272,5-4820,21	1272,5-4820,21	1272,5-3415,8	1272,5-3415,8	-	-	-
DR472	2	-	20,74-24,54	20,74-24,54	20,74-24,54	6,71-7,54 13,35-24,54	6,71-7,54 13,35-24,54	4,48-24,54
DR473	3	-	95,87-242,68	95,87-242,68	95,87-242,68	34,28-174,97	28,45-154,63	28,45-121,49
DR474	4	219,13-584,15	219,13-584,15	219,13-584,15	219,13-584,15	219,13-316,37	219,13	-
DR475	5	648,55-1937,71	648,55-1937,71	648,55-1937,71	648,55-1937,71	648,554-1140,69	-	-
DR476	6	2381,67-6136,10	2381,67-6136,10	2381,67-6136,10	2381,67-6136,10	2381,67-3612,19	-	-
DR572	2	-	-	28,87-33,86	28,87-33,86	21,40-33,86	21,40-33,86	4,96-28,87
DR573	3	-	-	61,12 126,06-255,83	61,12 126,06-255,83	33,28-209,81	28,39-168,6	28,39-126,06
DR574	4	-	230,64-720,91	230,64-720,91	230,64-720,91	230,64-413,56	230,64-310,17	230,64
DR575	5	868,61-3432,03	868,61-3432,03	868,61-3432,03	868,61-3432,03	868,61-2078,15	868,61-1439,71	868,61-1041,5
DR576	6	3723,69-10146,8	3723,69-10146,8	3723,69-10146,8	3723,69-10146,8	3723,69-6144,09	3723,69-4255,64	-
DR672	2	-	-	-	-	26,11-23,36	26,11-23,36	6,61-7,45 11,96-26,11
DR673	3	-	-	-	-	124,53-221,47	124,53-221,47	34,02-197,01
DR674	4	-	236,65-675,51	236,65-675,51	236,65-675,51	236,65-424,33	236,65-318,25	236,65
DR675	5	747,1-3215,89	747,1-3215,89	747,1-3215,89	747,1-3215,89	747,1-2132,27	747,1-1476,89	747,1-1068,62
DR676	6	3820,66-9507,85	3820,66-9507,85	3820,66-9507,85	3820,66-9507,85	3820,66-6304,09	3820,66-4366,47	-
DR772	2	-	-	-	-	-	-	7,76-8,7 13,81-22,77
DR773	3	-	-	-	-	141,55-222,16	141,55-222,16	20,87 37,12-41,85 72,5-222,16
DR774	4	-	-	321,33-632,92	321,33-632,92	223,53-632,92	223,53-632,92	223,53-384,72
DR775	5	-	730,48-3691,20	730,48-3691,20	730,48-3691,20	730,48-3691,20	730,48-2523,53	730,48-874,52 1105,59-1323,71 1656,07-1982,78
DR776	6	-	3922,75-24963,27	3922,75-24963,27	3922,75-24963,27	3922,75-16981,28	3922,75-11986,79	3922,75-8913,25
DR872	2	-	-	-	-	-	-	-
DR873	3	-	-	-	-	-	-	61,27-128,20
DR874	4	-	-	-	-	139,7-602,03	139,7-602,03	139,7-532,59
DR875	5	-	744,27-2964,88	744,27-2964,88	744,27-2964,88	686,44-2964,88	686,44-1813,1	686,44-1424,58
DR876	6	-	3405,63-20051,26	3405,63-20051,26	3405,63-20051,26	3405,63-12200,68	3405,63-8612,25	3405,63-4005,78
DR972	2	-	-	-	-	-	-	-
DR973	3	-	-	-	-	-	-	-
DR974	4	-	-	-	-	197,95-523,19	197,95-523,19	197,95-523,19
DR975	5	-	-	938,19-2079,97	938,19-2079,97	603,97-2079,97	603,97-2079,97	474,03-2079,97
DR976	6	-	-	2909,37-20565,73	2909,37-20565,73	2909,37-11348,58	2909,37-8841,14	2909,37-5494,80



Genel Bilgiler

General Information

Einführung



Motor Büyüklüğüne Göre Geometrik Mümkün Çevrim Oranları

Geometrically Possible Combinations of Ratios According to Motor Size
Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

Motor Büyüklüğü / Motor Size / Motorbaugröße

Tip Type Typ	Kademe Stages Stufen	160	180	200	225	250	280	315
DR072	2	-	-	-	-	-	-	-
DR073	3	-	-	-	-	-	-	-
DR172	2	-	-	-	-	-	-	-
DR173	3	-	-	-	-	-	-	-
DR272	2	-	-	-	-	-	-	-
DR273	3	-	-	-	-	-	-	-
DR275	5	-	-	-	-	-	-	-
DR276	6	-	-	-	-	-	-	-
DR282	2	-	-	-	-	-	-	-
DR283	3	-	-	-	-	-	-	-
DR285	5	-	-	-	-	-	-	-
DR286	6	-	-	-	-	-	-	-
DR372	2	-	-	-	-	-	-	-
DR373	3	-	-	-	-	-	-	-
DR375	5	-	-	-	-	-	-	-
DR376	6	-	-	-	-	-	-	-
DR472	2	4,48-20,74	-	-	-	-	-	-
DR473	3	28,45-101,48	-	-	-	-	-	-
DR474	4	-	-	-	-	-	-	-
DR475	5	-	-	-	-	-	-	-
DR476	6	-	-	-	-	-	-	-
DR572	2	4,38-28,87	4,38-24,02	-	-	-	-	-
DR573	3	28,39-126,06	28,39-50,13 68,64-103,39	-	-	-	-	-
DR574	4	-	-	-	-	-	-	-
DR575	5	-	-	-	-	-	-	-
DR576	6	-	-	-	-	-	-	-
DR672	2	4,28-26,11	4,28-26,11	4,28-20,20	-	-	-	-
DR673	3	30,04-167,96	30,04-139,76	30,04-106,08	-	-	-	-
DR674	4	-	-	-	-	-	-	-
DR675	5	-	-	-	-	-	-	-
DR676	6	-	-	-	-	-	-	-
DR772	2	5,06-22,77	5,06-22,77	4,47-22,77	4,47-15,46	-	-	-
DR773	3	17,95-190,20	17,95-158,23	17,95-122,41	17,95-81,72	-	-	-
DR774	4	223,53-321,33	223,53-256,48	-	-	-	-	-
DR775	5	730,48 1105,6 1656,7	-	-	-	-	-	-
DR776	6	-	-	-	-	-	-	-
DR872	2	6,35-8,12 10,97-14,02	6,35-8,12 10,97-14,02	5,66-14,02	5,66-14,02	5,66-14,02	5,66-14,02	-
DR873	3	13,58-30,50 39,92-128,20	13,58-30,50 39,92-128,20	13,58-101,03	13,58-101,03	13,58-68,62	13,58-51,94	-
DR874	4	139,7-403,84	139,70-331,22	-	-	-	-	-
DR875	5	-	-	-	-	-	-	-
DR876	6	-	-	-	-	-	-	-
DR972	2	7,88-9,94 13,19-16,64	7,88-9,94 13,19-16,64	7,08-16,64	7,08-16,64	7,08-16,64	7,08-16,64	7,08-16,64
DR973	3	20,27-43,38 56,21-191,74	20,27-43,38 56,21-171,00	20,27-136,23	20,27-93,91	20,27-93,91	20,27-71,87	20,27-71,87
DR974	4	197,95-415,16	197,95-371,15	-	-	-	-	-
DR975	5	474,03-938,13	474,03-769,47	-	-	-	-	-
DR976	6	3079,47 4589,41	-	-	-	-	-	-



Genel Bilgiler

General Information

Einführung



Servis Faktörü

Servis faktörü (fs) redüktörün çalıştığı şartlar ile uyumlu olması için gerekli olan emniyet katsayısıdır. "fs =1" Düzgün ve sakin yüklerde, günlük sekiz saat ve saatte yüz start çalışmayı karşılar.

Aşağıdaki etkenlere bağlıdır:

- Günlük çalışma süresi
- Yük sınıfı
- Bir saatteki start sayısı
- Redüktör tahrik tipi
- Diğer gözlemler

Bu etkenleri göz önüne aldığımızda, gerekli servis faktörünü belirlemek için:

1. Makinanın günlük çalışma süresini tespit ediniz.
2. Makinanın ne türde yükler verdiğini tespit ediniz (Sayfa 17-18).

- U - Düzgün ve sabit yükler
- M - Orta darbeli yükler
- H - Ağır darbeli yükler

Yük sınıfının daha teknik seçimi için rotora indirgenmiş toplam atalet momenti formülünden faydalanabilirsiniz (Sayfa 20).

3. Saatteki start sayısını tespit ediniz.
4. İlk üç maddeye bağlı servis faktörünü aşağıdaki tablodan seçiniz.

5. fs Redüktörümüzün tahrik tipine bağlı olarak "k" katsayısı ile çarpılarak artırılır.

- k=1 :Elektrik motoru veya hidromotor
k=1.25 :İçten yanmalı çok silindirli motor
k=1.5 :İçten yanmalı tek silindirli motor

Service Factor

Service Factor (fs) is a safety coefficient, which takes into account the different running conditions of the driven machine." fs=1" is used for uniform loads 8 hours working per day and up to 100 starts per hour.

Service factor depends on:

- Running time
- Nature of load
- Frequency of starting
- Driver type
- Other considerations

For the right selection of the needed service factor for your machine;

1. Determine the running time of driven machine.
2. Select the nature of load of driven machine (Page 17-18).

- U - Uniform loads
- M - Moderate loads
- H - Heavy shock loads

For a better selection, the nature of load can be calculated from the formulas given (page 20).

3. Determine frequency of starting
4. After determining the above mentioned factors, the service factor can be easily selected from the table given below.
5. The selected service factor must be multiplied with the factor "k" according to the driver type;

- k=1 :Electric motor or Hydrolicmotor
k=1.25 :Multicylinder internal combustion engine
k=1.5 :Single cylinder internal combustion engine

Betriebsfaktor

Der Betriebsfaktor (fs) ist ein Sicherheitsfaktor für die Getriebe, damit sie unter den Betriebsbedingungen sicher arbeiten. "fs =1" steht für gleichförmige Belastung, 8 Stunden pro Tag und bis zu 100 Schaltungen pro Stunde.

Betriebsfaktor ist abhängig von:

- Betriebsdauer
- Belastungsart
- Schalthäufigkeit
- Antriebsart
- Andere Faktoren

Um die richtigen Betriebsfaktor festzulegen;

1. Betriebsdauer der angetriebenen Maschine bestimmen.
2. Belastungsart der angetriebenen Maschine auswählen.

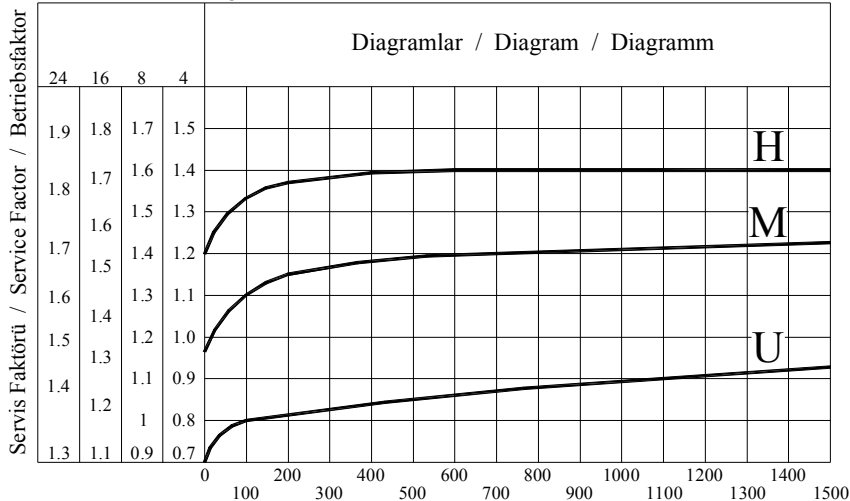
- U - Gleichförmige Belastung
- M - Ungleichförmige Belastung
- H - Stark Ungleichförmige Belastung

Um eine bessere Auswahl zu treffen, können die Belastungsarten mit den angegebenen Formeln (Seite 20) errechnet werden.

3. Schalthäufigkeit bestimmen.
4. Nach Bestimmen der oben angegebenen Werte, können die Betriebsfaktoren von der unten stehenden Tabelle entnommen werden.
5. Der ausgewählte Betriebsfaktor muß mit dem Faktor "k" abhängig von der Antriebsart multipliziert werden

- k=1 :Elektromotor oder Hydraulikmotor
k=1.25 :Vielzylindermotor
k=1.5 :Einzyldermotor

Günlük Çalışma Süresi
Operating Time hour / Day
Laufzeit Std. / Tag



Start sayısı / Saat
Cycle / Hour
Schaltungen / Std.



Genel Bilgiler

General Information

Einführung



Yük Sınıflandırması

Krenler:

- U - Kaldırma Dişlileri
- Palanga Dişlileri
- M - Bomlu Vinç Dişlileri
- Yana Döndürme Dişlileri
- H - Yürütme Dişlileri

Pompalar:

- U - Santrifuj Pompalar (ince sıvı)
- M - Santrifuj Pompalar (yarı sıvı)
- H - Basınçlı Pompalar
- Dalgıç Pompalar

Taş ve Kil İşleme Makinaları:

- H - Çekiçli Değirmenler
- Döner Fırınlar
- Dövücü Değirmenler
- Kırıcılar
- Kürel Değirmenler
- Tuğla Presi
- Tüp Değirmenler

Tekstil Makinaları:

- M - Basma ve Boyama Makinaları
- Dokuma Tezgahları
- Hallac Makinaları
- Harman Makinaları
- Taneleme (Debegat) Tekneleri

Yağ Sanayi:

- M - Besleme Pompaları
- Döner Delme Teçizatları

Yiyecek Sanayi:

- M - Kutu Bıçaklar
- Kutu Kaplama
- Mayalama Tekneleri
- H - Kenar Açma

Çamaşır Yıkama Makinaları:

- M - Döner Kurutucular
- Yıkama Makinaları

Hadde Makinaları:

- M - Hız Ayarlı Silindirler
- Sabit Silindirler
- Sarma Makaraları
- Tel Çekme
- H - Çubuk Kesme Makinaları
- Döner Tablalar (büyük)
- Kabuk Sıyırma Makinaları
- Plaka Haddeleme
- Silindir Haddeleme
- Soğuk Haddeleme

Load Classification

Cranes:

- U - Hoist Gears
- Lifting Gears
- M - Defrocking jib Gears
- Slowing Gears
- H - Travelling Gears

Pumps:

- U - Centrifugal Pumps (light liquids)
- M - Centrifugal Pumps (semi liquid)
- H - Pressure Pumps
- Plunger Pumps

Stone and Clay Working Machines:

- H - Hammer Mills
- Rotary Kilns
- Beater Mills
- Breakers
- Ball Mills
- Brick Presses
- Tüp Mills

Textile Machines:

- M - Printing and Dyeing Machines
- Looms
- Willow
- Batchers
- Tanning Vats

Oil Industry:

- M - Pipeline Pumps
- Rotary Drilling Equipment

Food Industry:

- M - Cane Knives
- Cane Crushers
- Mach Tubs
- H - Cane Mills

Laundries:

- M - Tumblers
- Washing Machines

Metal Rolling Mills:

- M - Roller Adjustment Drives
- Roller Straightened
- Winding Machines
- Wire Drawing Benches
- H - Billet Shears
- Rotary Tables (heavy)
- Descaling Machines,
- Sheet Mills
- Manipulators
- Cold Rolling Mills

Belastungsart

Krananlagen:

- U - Einziehwerke
- Hubwerke
- M - Schwenkwerke
- Wippwerke
- H - Fahrwerke

Pumpen:

- U - Kreiselpumpen (leichte Flüssigkeit)
- M - Kreiselpumpen (zähe Flüssigkeit)
- H - Prebpumpen
- Plungerpumpen

Steine und ErdenBearbeitendeMasch.

- H - Hammermühlen
- Drehofen
- Schlagmühlen
- Brecher
- Kugelmühlen
- Ziegelpressen
- Rohrmühlen

Textilmaschinen:

- M - Drukerei
- Farbereimachinen
- Aufwickler
- Webstühle
- Gerbfasser
- Reibwolfe

Erdölgewinnung:

- M - Pipeline Pumpen
- Rotative Bohranlagen

Nahrungsmittelmachinen:

- M - Rohrschneiden
- Knetmaschinen
- Maichen
- H - Rohrmühlen

Waschereimaschinen:

- M - Trommeltrockner
- Waschmaschinen

Wälzwerke:

- M - Rollenrichtmaschinen
- Walzenantriebe
- Drahtzuge
- Haspeln
- H - Blechscheren
- Rollgänge (schwer)
- Knüppelscheren
- Schöpfscheren
- Stranggubanlagen
- Kaltwälzwerke



Genel Bilgiler

General Information

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İnşaat Makinaları:

- M - Beton Mikserleri
- Ağır Yük Asansörleri

Kağıt Makinaları:

- H - Islak Presler
- Kağıt Hamur Makinaları
- Kurutma Silindirleri
- Perdahlama Silindirleri

Kauçuk Makinaları:

- M - Kalenderler
- Mikserler
H - Extruderler
- Hamur Karma
- Silindirler

Kimya Sanayi:

- M - Agidatörler (yarı sıvı)
- Kurutma Merdaneleri
- Mikserler ve Silindirleri

Konveyörler:

- M - Bant Cepeli Konveyörler
- Çelik Bantlı Konveyörler
- Dökme Yüklü Kayışlı Konv.
H - Yük Asansörleri
- Parça Yüklü Kayışlı Konv.

Building Machines:

- M - Concrete Mixers
- Hoist

Paper Machines:

- H - Wet Presses
- Pulpers
- Drying Cylinders
- Glazing Cylinders

Rubber Machinery:

- M - Calenders
- Mixers
H - Extruders
- Pug Mills
- Rolling Mills

Chemical Ind.:

- M - Aggidators (semi- liquid)
- Drying Drums.
- Mixers and Rolling Mills

Conveyors:

- M - Band Pocket Conveyors
- Steel Belt Conveyors
- Belt Conveyors
H - Hoists
- Bulk Belt Conveyors

Baumaschinen:

- M - Betonmischermaschinen
- Bauaufzüge

Papiermaschinen:

- H - Naßpressen
- Gautschen
- Trockenzyylinder
- Glattzyylinder

Kunststoffmaschinen:

- M - Kalender
- Mischer
H - Extruder
- Knetwerke
- Wälzwerke

Chemische Industrie:

- M - Rührwerke (leichte Flüssig.)
- Trockentrommeln
- Mischer und Wälzwerke

Förderanlagen:

- M - Gurtaschenbecherwerke
- Stahlbandförderer
- Gurtbandförderer (Schüttgut)
H - Schrägaufzüge
- Gurtbandförderer (Stückgut)

U	Uniform Yük Uniform Loads Gleichförmige Last	$F_i < 0,25$
M	Orta Darbeli Yük Moderate Loads Ungleichförmige Last	$F_i < 3$
H	Darbeli Yük Heavy Shock Loads Stark Ungleichförmige Last	$F_i < 10$

$$J'_{ext} = \frac{J_{ext}}{i^2}$$

$$F_i = \frac{J'_{ext}}{J_{rotor}}$$

J_{ext} : **Motor miline indirgenmiş toplam dış atalet momenti**
External moments of inertia reduced to the motor shaft
Externe massenträgheitsmomente reduziert auf motorwelle

i : **Tahvil oranı**
Transmission ratio
Übersetzung

J_{rotor} : **Motorun atalet momenti**
Moments of inertia to the motor
Massenträgheitsmoment



Genel Bilgiler

General Information

Einführung



Redüktör Dönüş Yönleri

D Serisi ürünlerimiz için kullanılan yön tanımlaması aşağıdaki gibidir. Aşağıdaki tanımlama kilitli redüktörler için de geçerlidir.

Direction of Rotation

D Series direction of rotation of Yılmaz products are defined as follows. The definitions are also valid for gear units with backstop.

Getriebedrehrichtungen

Die Drehrichtungen für D Serie Getriebe sind wie folgt definiert. Die Definition ist auch bei Getrieben mit Rücklaufsperre gültig.

	2-4-6 Kademe / 2-4-6 Stages / 2-4-6 Stufig	3-5 Kademe / 3-5 Stages / 3-5 Stufig
Saat Yönünde Clockwise im Uhrzeigersinn CW		
Saat Tersi Yönünde Counter Clockwise gegen Uhrzeigersinn CCW		

Giriş mili dönüş yönüne göre çıkış mili dönüş yönleri aşağıdaki gibidir.

Output shaft rotation directions according to the input shaft rotation directions are as follows.

Drehrichtungen der Abtriebswelle im Abhängigkeit von der Antriebswellen sind wie folgt;

2-4-6 Kademe / 2-4-6 Stages / 2-4-6 Stufig	3-5 kademe / 3-5 Stages / 3-5 Stufig



Genel Bilgiler

General Information

Einführung



Radyal Yükler

Çıkış miline gelebilecek radyal yükler yatak ömrüne göre belirlenmiş ve tablolar halinde verilmiştir. Bu tablolarda verilen F_{qam} güvenilir radyal yükü $f_s=1$ şartı ve yükün mil ortasını yüklediği durum için verilmiştir. Darbeli yüklerin olması durumunda daha önce verilmiş olan servis faktörü tablosundaki değerler dikkate alınmalıdır. Güvenilir aksiyal yük (F_{qam} veya F_{qem}) verilen güvenilir radyal yükün (F_{qama} veya F_{qema}) %25'i kadar alınır. Verilen radyal ve eksenel yükler kuvvetin en kötü açı şartında etki ettiği durum için verilmiştir. Mil ortasına gelen kuvvetin açısına göre daha yüksek radyal yükler mümkündür (Firmamıza danışınız). Bağlantı şekline göre oluşan radyal yük F_q sayfa 23 de verilen formüller yardımı ile hesaplanır.

Redüktör seçiminde ;

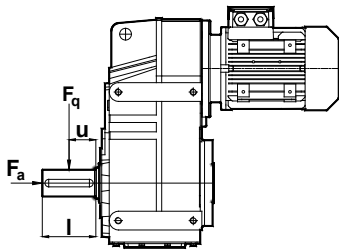
$$\begin{aligned} F_{qa} &\leq F_{qam} \\ F_{qe} &\leq F_{qem} \end{aligned}$$

şartı göz önünde tutulmalı. Eğer etkiyen radyal kuvvet milin orta noktasında değil ise verilen güvenilir değerin aşağıda verilen formül ile düzeltilmesi gerekir.

$$F_{qam}' = F_{qam} \frac{t}{y+u}$$

$$F_{qem}' = F_{qem} \frac{t}{y+u}$$

"t", "y" Değerleri aşağıda verilmiştir. "u" Değeri görüldüğü gibi kuvvetin uygulama noktasıdır.



Overhung Loads

The permissible overhung loads are calculated by considering working life and is listed on the tables. The given permissible overhung loads F_{qam} are based on $f_s=1$ and are valid for forces which are applied to the midpoint of the shaft. For shock loading applications the service factor given on the table must take into consideration. The permissible axial load (F_{qama} or F_{qema}) is %25 x (F_{qam} or F_{qem}). The listed permissible overhung loads are based on the worst loading direction. Higher overhung loads can be applied for different loading directions (Please ask if requested). The effective overhung load at the gear box shaft F_q will be determined with the given formulas on page 23.

In Selection ;

$$\begin{aligned} F_{qa} &\leq F_{qam} \\ F_{qe} &\leq F_{qem} \end{aligned}$$

these formulas must be taken into consideration. If the load is not applied at the midpoint of the shaft; the given permissible load must be corrected with the following formulas.

$$F_{qam}' = F_{qam} \frac{t}{y+u}$$

$$F_{qem}' = F_{qem} \frac{t}{y+u}$$

The values "t", "y" can be taken from the below table. The value "u" is the length of the application point as shown below.

Querkräfte

Die in den nachfolgenden Tabellen angegebenen zulässigen Radialbelastungen F_{qam} gelten bei Kraftangriff auf die Mitte Wellenendes. Den Angaben liegt der Betriebsfaktor $f_s=1$ zu Grunde. Bei stoßartigen Belastungsfällen ist auch hier der entsprechende Betriebsfaktor zu berücksichtigen. Zulässige Axialkräfte F_{qama} oder F_{qema} können ohne weitere Nachrechnung bis zu einer Höhe von ca. 25% der zulässigen Radialbelastung F_{qam} oder F_{qem} aufgenommen werden. Bei der Ermittlung der zulässige Querkräfte sind höhere Werte möglich (Bitte Rückfragen). Die auftretende Querkräfte F_q ab der Getriebewelle wird wie in der nachfolgenden Formel bestimmt.

Bei dieser Auswahl;

$$\begin{aligned} F_{qa} &\leq F_{qam} \\ F_{qe} &\leq F_{qem} \end{aligned}$$

müssen die oben angegebenen Bedingungen berücksichtigt werden. Ist der Kraftangriff nicht auf Wellenmitte, so kann die zulässige Querkräfte mit Hilfe der unten stehenden Formel auf jede beliebige Stelle umgerechnet werden.

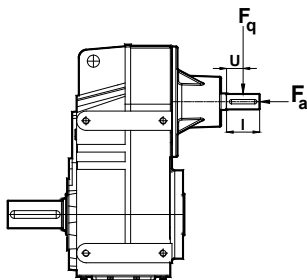
$$F_{qam}' = F_{qam} \frac{t}{y+u}$$

$$F_{qem}' = F_{qem} \frac{t}{y+u}$$

Die Werte "t" und "y" sind in den nachfolgenden Tabellen angegeben. Der Wert "u" ist die Stelle des Kraftangriffs wie auf der nächsten Seite angegeben.

DR...01											
Çıkış Milinde radyal kuvvet hesabı düzeltme katsayıları											
Overhung Load correcting values on output shaft											
Querkräfte auf Ausgangswelle Korrigierungszahlen											
Tip	DR072	DR172	DR272-3	DR282-3	DR372-3	DR472-3	DR572-3	DR672-3	DR772-3	DR872-3	DR972-3
Type	DR073	DR173	DR275-6	DR285-6	DR374-5	DR474-5	DR574-5	DR674-5	DR774-5	DR874-5	DR974-5
Typ					DR376	DR476	DR576	DR676	DR776	DR876	DR976
t	116,5	133,5	166	183	198,5	238,5	277,5	344	407,5	485	556
y	91,5	103,5	136	143	158,5	188,5	217,5	274	322,5	380	451
l	50	60	60	80	80	100	120	140	170	210	210

DT...01									
Giriş Milinde radyal kuvvet hesabı düzeltme katsayıları									
Overhung load correcting values on input shaft									
Querkräfte auf Eingangswelle korrigierungszahlen									
Tip	DT072-3	DT282-3	DT472-3	DT572-3	DT672-3	DT772-3	DT872-3	DT972-3	
Type	DT172-3	DT372-3	DT574	DT674	DT774	DT874	DT974		
Typ	DT272-3-5	DT474	DT674	DT774	DT974				
t	78	111,5	126	137	215,5	179,5	220,5	261,5	
y	58	86,5	96	102	160,5	129,5	165,5	206,5	
l	40	50	60	70	110	100	110	110	

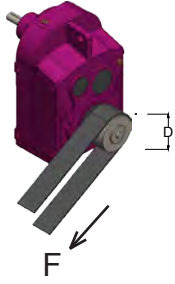




Genel Bilgiler

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Radyal Yüklerin Hesabı

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

Calc. Of Overhung Loads

Radial Load $F_q(N)$ is calculated with the following equations where required moment $M (Nm)$ and hoop or gear diameter $D (mm)$ is used.

Berechnung der Querkräfte

Der Fall der radialen Belastung $F_q(N)$ kann mit den angegebenen Gleichungen berechnet werden. Antriebsmoment $M (Nm)$ und Zahnrad- oder Riemenscheiben Durchmesser $D (mm)$.



1. Elastik Kaplin

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

1. Elastic Coupling

If Elastic Coupling is working in its reliable working area, the overhung loads can be neglected.

1. Elastische Kupplung

Wenn die elastische Kupplung in ihren zulässige Arbeits toleranz arbeitet, können die radialen Belastungen vernachlässigt werden.



2. Düz Dişli

(20° kavrama açılı)

$$F_q = \frac{2100 \times M_2}{D}$$

2. For Spur Gear

(Pressure angle 20°)

$$F_q = \frac{2100 \times M_2}{D}$$

2. Stirnradgetriebe

(Angriffswinkel=20°)

$$F_q = \frac{2100 \times M_2}{D}$$



3. Küçük Hızlarda Zincir Dişli (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$

3. For Chain Drive With Low Speed (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$

3. Kettantrieb mit niedriger Geschwindigkeit (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$



4. Triger Kayış

$$F_q = \frac{2500 \times M_2}{D}$$

4. For Triger Belt

$$F_q = \frac{2500 \times M_2}{D}$$

4. Zahnriemenantrieb

$$F_q = \frac{2500 \times M_2}{D}$$



5. V Kayış

$$F_q = \frac{5000 \times M_2}{D}$$

5. For V Belt

$$F_q = \frac{5000 \times M_2}{D}$$

5. Keilriemenantrieb

$$F_q = \frac{5000 \times M_2}{D}$$



6. Gerdirme Makaralı Kayış

$$F_q = \frac{5000 \times M_2}{D}$$

6. Flat Belt With Spanning Pulley

$$F_q = \frac{5000 \times M_2}{D}$$

6. Flachriemenantrieb mit Spannungstrommel

$$F_q = \frac{5000 \times M_2}{D}$$



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Ekstruder Tiplerde Müsade Edilebilir Eksenel Yükler

Permissible Axial Loads for Extruder Types
Zulässige Axialkräfte für Extruder Typ Getriebe

DRE272-273				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	27.0	33.3	41.0	50.5
30	23.9	29.5	36.3	44.7
40	22.0	27.0	33.3	41.0
50	20.5	25.3	31.1	38.4
65	19.0	23.4	28.8	35.5
80	17.8	22.0	27.0	33.3
100	16.7	20.5	25.3	31.1
120	15.8	19.4	23.9	29.5
140	15.1	18.6	22.9	28.2
160	14.5	17.8	22.0	27.0
180	14.0	17.2	21.2	26.1
200	13.5	16.7	20.5	25.3
220	13.2	16.2	20.0	24.6
240	12.8	15.8	19.4	23.9
260	12.5	15.4	19.0	23.4
280	12.2	15.1	18.6	22.9
300	12.0	14.8	18.2	22.4
320	11.8	14.5	17.8	22.0

DRE282-283				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	104.8	129.0	158.8	195.6
30	92.7	114.2	140.6	173.2
40	85.1	104.8	129.0	158.8
50	79.6	98.0	120.6	148.5
65	73.5	90.5	111.5	137.3
80	69.1	85.1	104.8	129.0
100	64.6	79.6	98.0	120.6
120	61.2	75.3	92.7	114.2
140	58.4	71.9	88.5	109.0
160	56.1	69.1	85.1	104.8
180	54.2	66.7	82.1	101.1
200	52.5	64.6	79.6	98.0
220	51.0	62.8	77.3	95.2
240	49.7	61.2	75.3	92.7
260	48.5	59.7	73.5	90.5
280	47.4	58.4	71.9	88.5
300	46.5	57.2	70.4	86.7
320	45.6	56.1	69.1	85.1

DRE372-373				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	104.8	129.0	158.8	195.6
30	92.7	114.2	140.6	173.2
40	85.1	104.8	129.0	158.8
50	79.6	98.0	120.6	148.5
65	73.5	90.5	111.5	137.3
80	69.1	85.1	104.8	129.0
100	64.6	79.6	98.0	120.6
120	61.2	75.3	92.7	114.2
140	58.4	71.9	88.5	109.0
160	56.1	69.1	85.1	104.8
180	54.2	66.7	82.1	101.1
200	52.5	64.6	79.6	98.0
220	51.0	62.8	77.3	95.2
240	49.7	61.2	75.3	92.7
260	48.5	59.7	73.5	90.5
280	47.4	58.4	71.9	88.5
300	46.5	57.2	70.4	86.7
320	45.6	56.1	69.1	85.1

n₂ : Çıkış Devri [d/dak] / Output Speed [rpm] / Abtriebsdrehzahl [U/min]

DRE472-473				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	134.5	165.6	203.9	251.1
30	119.0	146.6	180.5	222.3
40	109.2	134.5	165.6	203.9
50	102.1	125.7	154.8	190.7
65	94.4	116.2	143.1	176.2
80	88.7	109.2	134.5	165.6
100	82.9	102.1	125.7	154.8
120	78.5	96.7	119.0	146.6
140	75.0	92.3	113.7	140.0
160	72.0	88.7	109.2	134.5
180	69.5	85.6	105.4	129.8
200	67.3	82.9	102.1	125.7
220	65.4	80.6	99.2	122.2
240	63.8	78.5	96.7	119.0
260	62.2	76.6	94.4	116.2
280	60.9	75.0	92.3	113.7
300	59.6	73.4	90.4	111.3
320	58.5	72.0	88.7	109.2

DRE572-573				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	172.0	211.8	260.8	321.1
30	152.3	187.5	230.9	284.3
40	139.7	172.0	211.8	260.8
50	130.6	160.8	198.1	243.9
65	120.7	148.7	183.0	225.4
80	113.4	139.7	172.0	211.8
100	106.1	130.6	160.8	198.1
120	100.4	123.7	152.3	187.5
140	95.9	118.1	145.4	179.0
160	92.1	113.4	139.7	172.0
180	88.9	109.5	134.8	166.0
200	86.1	106.1	130.6	160.8
220	83.7	103.1	126.9	156.3
240	81.5	100.4	123.7	152.3
260	79.6	98.0	120.7	148.7
280	77.9	95.9	118.1	145.4
300	76.3	93.9	115.6	142.4
320	74.8	92.1	113.4	139.7

DRE672-673				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	209.5	258.0	317.7	391.2
30	185.5	228.4	281.3	346.4
40	170.1	209.5	258.0	317.7
50	159.1	195.9	241.3	297.1
65	147.1	181.1	223.0	274.6
80	138.2	170.1	209.5	258.0
100	129.2	159.1	195.9	241.3
120	122.3	150.6	185.5	228.4
140	116.8	143.8	177.1	218.1
160	112.2	138.2	170.1	209.5
180	108.3	133.4	164.2	202.2
200	104.9	129.2	159.1	195.9
220	102.0	125.6	154.6	190.4
240	99.3	122.3	150.6	185.5
260	97.0	119.4	147.1	181.1
280	94.8	116.8	143.8	177.1
300	92.9	114.4	140.9	173.5
320	91.1	112.2	138.2	170.1

n₂ : Çıkış Devri [d/dak] / Output Speed [rpm] / Abtriebsdrehzahl [U/min]



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Ekstruder Tiplerde Müsade Edilebilir Eksenal Yükler

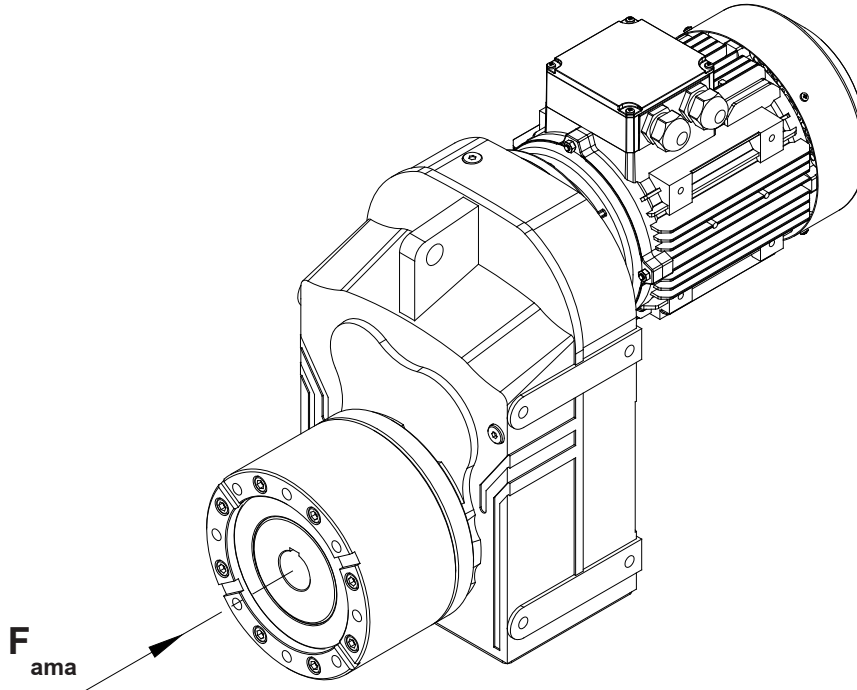
Permissible Axial Loads for Extruder Types
Zulässige Axialkräfte für Extruder Typ Getrieben

DRE772-773				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	350.2	431.3	531.1	653.9
30	310.1	381.8	470.2	579.0
40	284.4	350.2	431.3	531.1
50	266.0	327.5	403.3	496.6
65	245.8	302.7	372.8	459.0
80	231.0	284.4	350.2	431.3
100	216.0	266.0	327.5	403.3
120	204.5	251.8	310.1	381.8
140	195.2	240.4	296.0	364.5
160	187.6	231.0	284.4	350.2
180	181.0	222.9	274.5	338.0
200	175.4	216.0	266.0	327.5
220	170.5	209.9	258.5	318.3
240	166.1	204.5	251.8	310.1
260	162.1	199.6	245.8	302.7
280	158.5	195.2	240.4	296.0
300	155.3	191.2	235.5	290.0
320	152.3	187.6	231.0	284.4

DRE872-873				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	403.4	496.7	611.7	753.2
30	357.1	439.8	541.5	666.9
40	327.6	403.4	496.7	611.7
50	306.3	377.2	464.5	572.0
65	283.1	348.7	429.3	528.7
80	266.0	327.6	403.4	496.7
100	248.8	306.3	377.2	464.5
120	235.5	290.0	357.1	439.8
140	224.9	276.9	341.0	419.9
160	216.0	266.0	327.6	403.4
180	208.5	256.8	316.2	389.4
200	202.0	248.8	306.3	377.2
220	196.3	241.8	297.7	366.6
240	191.3	235.5	290.0	357.1
260	186.7	229.9	283.1	348.7
280	182.6	224.9	276.9	341.0
300	178.9	220.3	271.2	334.0
320	175.4	216.0	266.0	327.6

DRE972-973				
n ₂	F _{ama} [kN]			
	Ömür / Lifetime / Lebensdauer Lh [saat] / [hour] / [Stunde]			
	40000	20000	10000	5000
20	456.5	562.2	692.3	852.5
30	404.2	497.7	612.9	754.7
40	370.7	456.5	562.2	692.3
50	346.7	426.9	525.7	647.4
65	320.4	394.6	485.9	598.3
80	301.1	370.7	456.5	562.2
100	281.6	346.7	426.9	525.7
120	266.6	328.2	404.2	497.7
140	254.5	313.4	385.9	475.2
160	244.5	301.1	370.7	456.5
180	236.0	290.6	357.9	440.7
200	228.7	281.6	346.7	426.9
220	222.2	273.6	336.9	414.9
240	216.5	266.6	328.2	404.2
260	211.3	260.2	320.4	394.6
280	206.7	254.5	313.4	385.9
300	202.4	249.3	307.0	378.0
320	198.6	244.5	301.1	370.7

n₂ : Çıkış Devri [d/dak] / Output Speed [rpm] / Abtriebsdrehzahl [U/min]





Genel Bilgiler

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Eşdeğer Güç Hesabı

Sabit devirde, ancak değişken momentlerde (güçlerde) çalışan redüktörler için eşdeğer tork altındaki, eşdeğer güç hesaplanabilir. Bu eşdeğer güç kullanılarak bilinen sabit güçteki redüktör seçim yöntemi kullanılarak seçim yapılabilir. Burada ağırlıklı torka göre eşdeğer anma torku belirlenmektedir. Hesaplanan bu güçte çalışan redüktör, teorik olarak, değişken yüklerde çalışan redüktör ile aynı emniyet değerine ve ömre sahiptir.

Bir çevrim boyunca oluşan değişken torklar, en yüksek torktan, en düşüğe doğru yatay zaman eksenini boyunca sıralanır (bakınız alttaki şekil). Bu şekile göre eşdeğer tork şu formül ile hesaplanır;

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_n \times T_n^{6.6}}{t} \right)^{\frac{1}{6.6}}$$

Eğer T_n değerleri (en düşük tork), T_e 'nin 0,5 katının altında ise, bu tork dilimi yok sayılarak, işlem tekrarlanır;

Eğer $T_n < T_e \times 0.5$ ise

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n} \right)^{\frac{1}{6.6}}$$

Tüm T_n değerleri T_e 'nin 0,5 katının üzerinde ise, eşdeğer güç aşağıdaki gibi hesaplanır;

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

Eşdeğer gücün bulunmasından sonra eşdeğer güç değeri kullanılarak, bu katalogta verilen redüktör seçimi bölümünde anlatılan adımlar uygulanarak redüktör seçimi tamamlanır.

Equivalent Power Rating Calculation

The equivalent power by an equivalent constant torque can be calculated for gearboxes working in constant speed but variable torques (or powers). Using this equivalent power it is possible to make a gearbox selection according to the usual gearbox selection method with constant torques. The equivalent torque will be determined according to the mean of dominating torques. The gearbox working in constant equivalent torque will theoretically have the same lifetime and safety compared to the variable torque one.

To calculate the equivalent torques, the variable torques in a cycle must be sorted from the maximal to the minimal on a horizontal time line (Check the graphic below). According to the graphic below the equivalent torque can be calculated with the following formula;

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_n \times T_n^{6.6}}{t} \right)^{\frac{1}{6.6}}$$

If T_n (the lowest torque) is lower than 50 % of T_e , this torque part must be taken out of the torque graph and the calculation must be repeated;

If $T_n < T_e \times 0.5$ then

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n} \right)^{\frac{1}{6.6}}$$

If all T_n values are higher than 50% of T_e then the equivalent power can be calculated by the following formula;

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

After the equivalent power is determined the selection of gearbox is made according to the selection procedures given on the gearbox selection part in this catalogue.

Berechnung Äquivalenter Leistung

Die äquivalente Leistung bei äquivalenten Drehmoment kann für Getrieben mit konstanten Drehzahl und variablen Momente berechnet werden. Mit dieser Leistung kann das Getriebe ausgelegt werden, wie bei konstanten Leistung. Man bestimmt hiermit also die maßgebende Belastung. Das ausgelegte Getriebe erreicht theoretisch dem gleichen Lebensdauer und hat die gleiche Sicherheit.

Für die Berechnung der äquivalenten Drehmoment müssen die einzelnen Drehmomentanteile auf eine Zeitachse von größten bis zu kleinsten angeordnet werden (siehe unteres Bild). Das äquivalente Drehmoment wird nach folgender Formel berechnet;

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_n \times T_n^{6.6}}{t} \right)^{\frac{1}{6.6}}$$

Wenn T_n (niedrigstes Drehmoment) kleiner als 50% von T_e ist, muss dieser Anteil vernachlässigt werden und die Berechnung soll neu durchgeführt werden;

Wenn $T_n < T_e \times 0.5$ dann

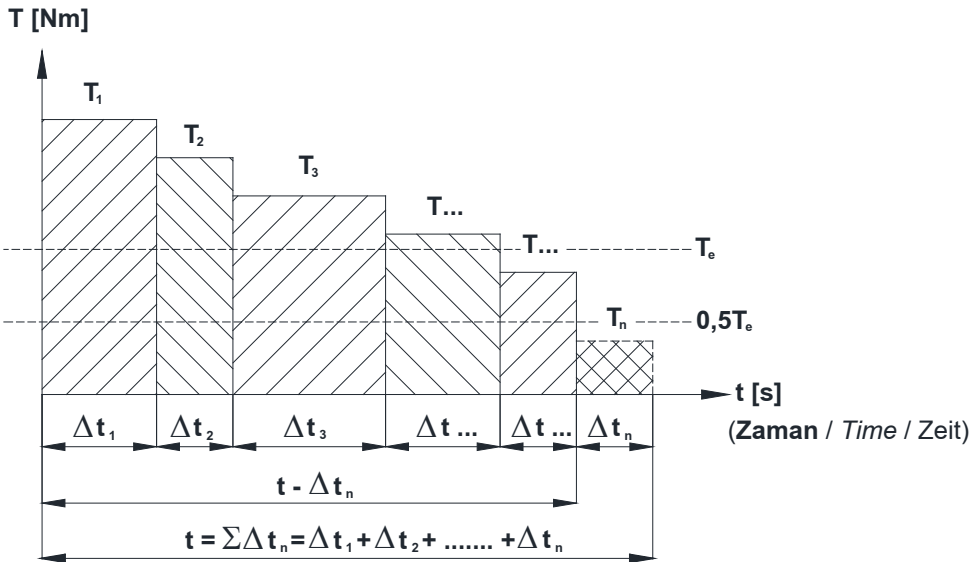
$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + \dots + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n} \right)^{\frac{1}{6.6}}$$

Wenn alle T_n Werte höher als 50% von T_e sind, dann wird die äquivalente Leistung nach folgender Formel berechnet;

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

Nach Bestimmung der äquivalenter Leistung, erfolgt die Getriebeauslegung wie bei konstanter Leistung. Die Auswahlverfahren für konstante Leistung ist in diesem Katalog angegeben.

(Moment / Torque / Moment)





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Eşdeğer Güç Hesabı Örneği

Çift yönlü çalışan ham demir haddesi için aşağıdaki çalışma koşulları belirlenmiş;

Veriler:

Toplam bir iş çevrimi: 2 dak.

1. Yük kademesi: 48 kNm, 30 sn

2. Yük Kademesi: 32 kNm, 22 sn

3. Yük Kademesi: 28 kNm, 15 sn

4. Yük Kademesi: 16 kNm, 10 sn

5. Yük Kademesi: 5 kNm, 43sn

Makina sabit devri: 50 d/dak

Redüktör seçimine esas olacak eşdeğer yük aranmaktadır.

Çözüm:

Bir çevrimin toplam zamanı;

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120 \text{ sn}$$

Eşdeğer Tork;

$$T_e = \left(\frac{30 \times 48^{6,6} + \dots + 43 \times 5^{6,6}}{120} \right)^{\frac{1}{6,6}}$$

$$= 39,2 \text{ kNm}$$

%50 eşdeğer tork;

$$0,5 \times T_e = 19,6 \text{ kNm}$$

Her bir tork dilimi bu değer üzerinde olmalı

$$T_{4,5} < 0,5 \times T_e$$

%50 torkun altındakileri çıkararak hesabı tekrarlayalım;

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67 \text{ s}$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67} \right)^{\frac{1}{6,6}}$$

$$= 42,9 \text{ kNm}$$

Moment ve devir değerlerini kullanarak eşdeğer gücümüzü hesaplayalım;

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225 \text{ kW}$$

Yukarıdaki güç ve devir değeri kullanılarak bu katalogta anlatılan seçim prosedürü ile redüktör seçimi yapılabilir.

Equivalent Power Rating Sample

The following data is given for a reversing blooming mill;

Torque steps:

Total one cycle time: 2 min.

1st torque part: 48 kNm, 30 s

2nd torque part: 32 kNm, 22 s

3th torque part: 28 kNm, 15 s

4th torque part: 16 kNm, 10 s

5th torque part: 5 kNm, 43 s

Machine constant speed: 50 rpm

The equivalent power, which is required for gear unit selection, is to determine.

Solution:

Total time in a cycle;

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120 \text{ sn}$$

Equivalent Torque;

$$T_e = \left(\frac{30 \times 48^{6,6} + \dots + 43 \times 5^{6,6}}{120} \right)^{\frac{1}{6,6}}$$

$$= 39,2 \text{ kNm}$$

50% of Equivalent torque;

$$0,5 \times T_e = 19,6 \text{ kNm}$$

Every torque part must be lower then this value;

$$T_{4,5} < 0,5 \times T_e$$

We are repeating the calculation by taking out the torque parts, which are below 50%;

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67 \text{ s}$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67} \right)^{\frac{1}{6,6}}$$

$$= 42,9 \text{ kNm}$$

By using the equivalent torque and constant speed we calculate the equivalent power;

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225 \text{ kW}$$

Now by using the above calculated equivalent power and constant speed we camake the gear-box selection with the procedures described in this catalogue.

Beispiel für Äquivalente Leistung

Die nachfolgenden Angaben sind für eine Blechreversierwalze;

Drehmoment stufen:

Gesamte Zeit für einem Arbeitszyklus: 2 min.

Drehmomentanteil 1: 48 kNm 30 s

Drehmomentanteil 2: 32 kNm 22 s

Drehmomentanteil 3: 28 kNm 15 s

Drehmomentanteil 4: 16 kNm 10 s

Drehmomentanteil 5: 5 kNm 43 s

Maschine hat konstante Drehzahl: 50 U/min

Gesucht ist die äquivalente Leistung, die für die Getriebeauslegung nötig ist.

Lösung:

Gesamte Zeit für einem Arbeitszyklus;

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120 \text{ sn}$$

Äquivalentes Drehmoment;

$$T_e = \left(\frac{30 \times 48^{6,6} + \dots + 43 \times 5^{6,6}}{120} \right)^{\frac{1}{6,6}}$$

$$= 39,2 \text{ kNm}$$

50% von äquivalenten Drehmoment;

$$0,5 \times T_e = 19,6 \text{ kNm}$$

Drehmomentanteile müssen größer als dieser Wert sein;

$$T_{4,5} < 0,5 \times T_e$$

Wir wiederholen die Berechnung nochmals ohne die kleine Drehmomentanteile;

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67 \text{ s}$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67} \right)^{\frac{1}{6,6}}$$

$$= 42,9 \text{ kNm}$$

Mit Hilfe von äquivalenten Drehmoment und konstanter Drehzahl berechnet man die äquivalente Leistung;

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225 \text{ kW}$$

Nach Bestimmung der äquivalente Leistung und konstanter Drehzahl, erfolgt die Getriebeauslegung dann wie die Getriebeauswahl gemäß dem in diesem Katalog beschriebenen Verfahren für konstante Leistung.



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Redüktör Seçimi

Bir redüktör seçiminde aşağıdaki yol izlenmelidir.

1. Çalışma şartlarına bağlı olarak servis faktörünü (fs) belirleyiniz. (Servis Faktörü Sayfa 16).

2. Makinanız için gerekli olan momenti belirleyiniz M_2 (redüktör gerekli çıkış momenti).

3. Makinanızın devrini belirleyiniz n_2 (redüktör gerekli çıkış devri).

4. Makinanızın güç ihtiyacını (Redüktör çıkış gücünü) " P_2 " hesaplayınız.

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Redüktör ile makina arasında kullanılan bağlantı elemanına göre radyal yükü hesaplayınız. (Sayfa 20). Yukarıdaki verilere uygun olarak çıkış devri, değerlerine uyan servis faktörü ve radyal yükü bulduğunuzdan daha yüksek veya eşit olan redüktörü, güç-devir seçim tablolarından seçiniz. Helisel tip redüktörlerde verim yüksek olduğundan çıkış gücü verilmemiştir. Hesapladığınız güç değerini giriş gücü olarak kabul edip seçiminizi yapınız. Tablolarda verilen M_2 çıkış momentinin hesapladığınız M_2 den büyük olmasına dikkat ediniz. Eğer seçilen redüktörünki daha ufak ise bir üst motor gücüne geçiniz.

Örnek

1. Makina Cinsi:

Lastik bantlı konveyör , dökme yük taşıyor.

2. Makina için gerekli moment:

Makina için hesaplanan moment $M_2 = 470 \text{ Nm}$.

3. Makina gerekli çıkış devri:

$n_2 = 50 \text{ dev/dak}$.

4. Günlük çalışma süresi:

16 saat.

5. Saatte start sayısı:

Saatte 1 start

6. Makina ile bağlantı şekli:

Zincir dişli (çap -130 mm)

- Yük sınıflandırma tablosundan yük sınıfı M olarak seçilir (sayfa 17-18)

- Günlük çalışma süresi 16 saat Saatte start sayısı 1 ve yük sınıfı M'ye tekabül eden servis faktörü tablosundan, servis faktörü için $fs = 1.3$ değeri bulunur.(sayfa 16)

- Makinanızın güç ihtiyacı (Redüktör Çıkış Gücü) :

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46 \text{ kW}$$

Gearbox Selection

For the correct selection of the appropriate gear units follow this steps.

1. Determine service factor (fs) on the basis of running conditions (Page 16).

2. Determine the required Torque M_2 (required output torque of gearbox) for the driven machine.

3. Determine required speed (output speed of gearbox) for the driven machine.

4. Calculate the required power for your machine(Calculate power " P_2 " required at output side of gear reducer using the formula);

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Calculate overhung load required at output shaft according to type of connection between gear unit and machine (Refer to directions and values given on page 20). After determining the above mentioned values, the gear reducer which corresponds to our requirements can be selected from the performance tables (the service factor and the permissible overhung load should be less than or equal to our requirement). For Helical gears the output power is not given on the performance tables because they have high efficiency and the output power can be taken as input power. The output torque should be checked if it meets to our requirements. If the output torque is low, search for a higher input power gearbox.

Example:

1. Machine Type:

Belt Conveyor (Bulk Load)

2. Required Torque:

Required Torque calculated for the driven machine is $M_2=470 \text{ Nm}$.

3. Required speed:

$n_2 = 50 \text{ rpm}$

4. Running time:

16 hours per day

5. Frequency of starting:

1 start per hour

6. Connection type between gear reducer

Chain drive (output dimension-130 mm)

- From the load classification table (on page 17-18), the load class M can be selected for the known application.

- The service factor can be selected as $fs = 1,3$ from the service factor table (page 16) by taking into consideration 16 hours running time, one start per hour, and load class M.

-Required power for your machine(Power at output side of gear reducer) :

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46 \text{ kW}$$

Getriebeauswahl

Für die korrekte Auswahl des Antriebes;

1. Den Betriebsfaktor(fs) in Abhängigkeit von den Betriebsbedingungen bestimmen.(Bezug auf Seite 16).

2. Die erforderte Drehmoment M_2 für die angetriebene Maschine (Abtriebsdrehmoment für die Getriebe) bestimmen.

3. Erforderte Drehzahl bestimmen (Abtriebsdrehzahl für die Getriebe).

4. Berechnen der erforderte Leistung der angetriebene Maschine (Die an der Abtriebswelle erforderte Leistung " P_2 " mit der unten angegebenen Formel).

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Die an der Getriebeabtriebswelle erforderte Querkraft in Abhängigkeit von Antriebsselement bestimmen (Bezug auf Seite 20). Nach Bestimmen der oben angegebenen Werte, die passende Getriebe kann von den angegebenen Leistungstabellen entnommen werden. Dabei soll darauf geachtet werden, dass der Betriebsfaktor und Querkraft stets unterhalb von angegebenen Werten liegt. Weil Stirnradgetrieben einen hohen Wirkungsgrad haben, sind die Abtriebsleistungen für Stirnradgetrieben nicht angegeben. Bei dieser Getrieben die erforderte Leistung kann als Antriebsleistung benutzt werden. Achten sie darauf, dass der Abtriebsmoment größer als die erforderte Drehmoment ist.

Beispiel:

1. Maschinentyp:

Gurtbandförderer (Schüttgut)

2. Erforderte Drehmoment:

Für die Maschine berechnete Drehmoment $M_2 = 470 \text{ Nm}$.

3. Erforderte Drehzahl:

$n_2 = 50 \text{ upm}$

4. Betriebsdauer:

16 stunden pro Tag

5. Schalthäufigkeit:

1 Start pro Stunde

6. Antriebsselement für verbindung

Getriebe-Maschine:Kettentrieb(Durchmesser-130 mm)

- Von den Belastungsart Tabellen(Seite 17-18) nimmt man Belastungsart M

- Für den Schaltungzahl 1 und die Laufzeit16 und für den passenden Belastungsart erhält man Betriebsfaktor $fs = 1,3$ von Tabelle auf Seite 16.

- Erforderte Leistung der angetriebe Maschine (Die an der Getriebeabtriebswelle erforderte Leistung)

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46 \text{ kW}$$



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- Zincir dişli uygulaması için (Sayfa 21) Fq değeri;

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{130} = 7592 \text{ N}$$

- Ortaya çıkan redüktör ihtiyacı

$$\begin{aligned} P_2 &\geq 2,46 \text{ kW} \\ M_2 &\geq 470 \text{ Nm} \\ fs &\geq 1,3 \\ n_2 &\geq 50 \text{ d/dak} \\ F_q &\geq 7592 \text{ N} \end{aligned}$$

Güç ve devir sayılarından,

DR373-3E100L/4D seçilir (Sayfa 73).

$$\begin{aligned} P_2 &= 3 \text{ kW} > 2,46 \text{ kW} \\ M_2 &= 517 \text{ Nm} > 470 \text{ Nm} \\ fs &= 1,3 \\ n_2 &= 53 \text{ d/dak} \end{aligned}$$

$$F_{qam} = 16884 \text{ Nm} > 7592 \text{ Nm}$$

$$i = 27,53$$

- For chain drive application the requested overhang load can be calculated from (page 21).;

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{130} = 7592 \text{ N}$$

- The required gearbox is as follows:

$$\begin{aligned} P_2 &\geq 2,46 \text{ kW} \\ M_2 &\geq 470 \text{ Nm} \\ fs &\geq 1,3 \\ n_2 &\geq 50 \text{ rpm} \\ F_q &\geq 7592 \text{ N} \end{aligned}$$

From the performance table,

DR373-3E100L/4D selected (Page 73).

$$\begin{aligned} P_2 &= 3 \text{ kW} > 2,46 \text{ kW} \\ M_2 &= 517 \text{ Nm} > 470 \text{ Nm} \\ fs &= 1,3 \\ n_2 &= 53 \text{ rpm} \end{aligned}$$

$$F_{qam} = 16884 \text{ Nm} > 7592 \text{ Nm}$$

$$i = 27,53$$

- Für Kettentrieb die erforderte Querkraft (seite 21);

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{130} = 7592 \text{ N}$$

- Von den oben angegebenen Berechnungen die erforderte Getriebe ist wie folgt;

$$\begin{aligned} P_2 &\geq 2,46 \text{ kW} \\ M_2 &\geq 470 \text{ Nm} \\ fs &\geq 1,3 \\ n_2 &\geq 50 \text{ U/min} \\ F_q &\geq 7592 \text{ N} \end{aligned}$$

Von der Leistung- DrehzahlTabelle ,

wurde **DR373-3E100L/4D** gewählt (Seite 73).

$$\begin{aligned} P_2 &= 3 \text{ kW} > 2,46 \text{ kW} \\ M_2 &= 517 \text{ Nm} > 470 \text{ Nm} \\ fs &= 1,3 \\ n_2 &= 53 \text{ U/min} \end{aligned}$$

$$F_{qam} = 16884 \text{ Nm} > 7592 \text{ Nm}$$

$$i = 27,53$$



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Redüktör Seçim Formu

Kullanıldığı Sektör.....
Kullanıldığı Yer.....
Gerekli Ortalama Devir.....d/dak

Makina ihtiyaç gücü:

-Normal..... kW
-En çok..... kW
-En az..... kW

Tahrik Şekli:

AC Motor []
AC Motor + Invertör []
DC Motor []
Hidromotor []
1-3 silindirli içten yanmalı []
2-4 silindirli içten yanmalı []

Motor Bağlantı Şekli (Elektrik Motorları):

IEC B5 Flanşlı []
NEMA Flanşlı []
B3 Ayaklı []

IEC veya NEMA flanş kodu.

Motor Gücü:

-Nominal..... kW

Motor Devri:

-Normal..... d/dak
-En çok..... d/dak
-En az..... d/dak

Motor Torku:

-Normal..... Nm
-En çok..... Nm
-En az..... Nm

Dönüş şekli:

saat yönü [] saat yönüne ters [] değişken []

Günlük çalışma süresi:

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

Saatdeki start sayısı:

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

Motor Redüktör Arası Tahvil Oranı.....

Kalkış için gerekli moment.....Nm

Saatdeki pik moment adedi:

1-5 [] 6-30 [] 31-100 [] >100 []

Bir çevrimde aktif çalışma oranı (ED):

%100 [] %80 [] %60 [] 40% [] %20 []

Deniz seviyesinden yükseklik:

<1000 [] <2000 [] <3000 []
<4000 [] <5000 []

Montaj yeri:

Küçük kapalı oda (w<1m/sn) []
Kapalı oda (w<3m/sn) []
Büyük oda ve holler (w>=3m/sn) []
Tamamen açık ortam []

Çevre Şartları:

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

Çevre Sıcaklığı:

Ortalama..... °C
En Yüksek..... °C
En Düşük..... °C

Kilit İhtiyacı:

Var [] Yok []

Redüktör Giriş Opsiyonu:

R.. [] V.. [] N.. [] T.. []

Redüktör Çıkış Opsiyonu:

00 [] 01 [] 02 [] 03 [] 0S []

Montaj Pozisyonu:

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

Giriş mili bağlantı şekli:

Elastik kaplin []
Fiçli tipi kaplin []
Rijit kaplin []
Hidrolik Kaplin []
Kayış kasnak []
Zincir dişli []
Pinyon dişli []
Bağlantı elemanı çapı.....mm
Radyal yük.....N
Radyal yük "u" mesafesi.....mm
Aksiyal yük (mile doğru +).....N

Çıkış mili bağlantı şekli:

Elastik kaplin []
Fiçli tipi kaplin []
Rijit kaplin []
Kayış kasnak []
Zincir dişli []
Pinyon dişli []
Delik milli tork kolu []
Sıkma bilezikli tork kolu []
Bağlantı elemanı çapı.....mm
Radyal yük.....N
Radyal yük "u" mesafesi.....mm
Aksiyal yük (mile doğru +).....N

Redüktör bağlantı yeri:

Gövde [] Flanş [] Tork kolu []

Çıkış Mili Özelliği:

Dolu Mil Kamalı []
Dolu Mil Kamasız []
Delik Milli Sıkma Bilezikli []
Delik Milli []
Özel Mil []

Giriş Mili Özelliği:

Kamalı []
Kamasız düz mil []
Özel Mil []

Tork kolu [] Var [] Yok

Elektrik Gerilimi:

AC-Monofaze [] AC-Trifaze [] DC []
Voltaj.....Volt
Frekans.....Hz

Koruma Sınıfı:

IP55 [] IP65 [] Exproof []
Diğer IP.....

Ekler:

Yük diyagramı []
Proje []
İstenen ana boyutlar []
Teknik veriler []

Diğer Notlar:



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Gearbox Selection Form

Field of Industry.....
 Application.....
 Required Average Speed..... rpm

Required Power on Driven Machine:

-Normal..... kW
 -Maximum..... kW
 -Minimum..... kW

Driving Machine:

AC Motor []
 AC Motor + Inverter []
 DC Motor []
 Hydraulic Motor []
 Piston Engine with 1-3 cylinder []
 Piston Engine with 4-24 cylinder []

Motor Connection Type (Electric Motors):

IEC B5 Flange []
 NEMA Flange []
 B3 Foot Mounted []

IEC or NEMA Flange Code.....

Motor Power:

-Nominal.....kW

Motor Speed:

-Normal.....rpm
 -Maximum.....rpm
 -Minimum.....rpm

Motor Torque:

-Normal.....Nm
 -Maximum.....Nm
 -Minimum.....Nm

Direction of Rotation:

cw [] ccw [] variable []

Working hours per day:

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

Startings per cycle:

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

Transmission ratio between motor and gear unit.....

Required Starting Torque.....Nm

Peak torques per hour:

1-5 [] 6-30 [] 31-100 [] >100 []

Effective working time in a cycle (ED):

%100 [] %80 [] %60 [] 40% []
 20% []

Altitude:

<1000 [] <2000 [] <3000 []
 <4000 [] <5000 []

Mounting Place:

Small closed room (w<1m/sn) []
 Closed room (w<3m/sn) []
 Big rooms and halls (w>=3m/sn) []
 Outdoor []

Ambient Conditions:

Normal [] Dusty [] Humid []
 Corrosive [] Dry []

Ambient Temperature:

Average.....°C
 Maximum.....°C
 Minimum.....°C

Backstop Required:

Yes [] No []

Gearbox input options:

R.. [] V.. [] N.. [] T.. []

Gearbox output options:

00 [] 01 [] 02 [] 03 [] 0S []

Mounting Position:

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

Input Shaft Connection Type:

Elastic Coupling []
 Barrel Type Coupling []
 Hydraulic Coupling []
 Rigid Flange Coupling []
 Pulley []
 Chain Sprocket []
 Pinion []
 Diameter of Connection element.....mm
 Radial Load.....N
 "u" Distance of Radial Load.....mm
 Axial Load (Towards Shaft +)N

Output Shaft Connection Type:

Elastic Coupling []
 Barrel Type Coupling []
 Rigid Flange Coupling []
 Pulley []
 Chain Sprocket []
 Pinion []
 Hollow Shaft with Torque Arm []
 Shrinck disc with Torque Arm []
 Diameter of Connection Element.....mm
 Radial Load.....N
 "u" Distance of Radial Load.....mm
 Axial Load (Towards Shaft)N

Gearbox assembled by:

Housing [] Flange [] Torque Arm []

Output Shaft Specification:

Solid Shaft with Keyway []
 Solid Shaft without Keyway []
 Hollow Shaft with Shrinck Disc []
 Hollow Shaft []
 Special Shaft []

Input Shaft Specification:

Solid Shaft with Keyway []
 Solid Shaft without Keyway []
 Special Shaft []

Torque arm required Yes [] No []

Electrical Supply:

AC-1 Phase [] AC-3 Phase [] DC []
 Voltage.....Volt
 Frequency..... Hz

Protection Class:

IP55 [] IP65 [] Exproof []
 Other IP.....

Attachments:

Load Diagram []
 Project []
 Required Dimensions []
 Technical Specifications []

Notes:



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Formular für Getriebeauswahl

Industriebereich.....
 Anwendung.....
 Erforderliche Drehzahl.....U/min

Erforderliche Leistung für die Maschine:

-Normal.....kW
 -Minimal.....kW
 -Maximal.....kW

Antriebsmaschine:

AC Motor []
 AC Motor mit Frequenzumrichter []
 DC Motor []
 Hydromotor []
 Kolbenmaschinen mit 1-3 Zylinder []
 Kolbenmaschinen mit 2-4 Zylinder []

Motorverbindungsart (Elektromotoren):

IEC B5 Flansch []
 NEMA Flansch []
 B3 Fussausführung []

IEC oder NEMA Flanschcode.....

Motorleistung:

-Nominal.....kW

Motordrehzahl:

-Normal.....U/min
 -MaximalU/min
 -Minimal.....U/min

Motordrehmoment:

-Normal.....Nm
 -Maximal.....Nm
 -Minimal.....Nm

Drehrichtung:

in Uhrzeigersinn [] gegen Uhrzeigersinn []
 veränderlich []

Betriebsdauer in Stunden pro Tag:

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

Anzahl der Anläufe pro Stunde:

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

Übersetzung zwischen Motor und Antriebswelle.....

Erforderliches Anlaufmoment.....Nm

Häufigkeit von Lastspitzen pro Stunde:

1-5 [] 6-30 [] 31-100 [] >100 []

Einschaltdauer je Stunde (ED):

%100 [] %80 [] %60 [] 40% [] %20 []

Höhenlage über Meeresspiegel (m):

<1000 [] <2000 [] <3000 []
 <4000 [] <5000 []

Betriebsort:

Kleine geschlossene Räume (w<1m/sn) []
 Geschlossene Räume (w<3m/sn) []
 Große Räume und Hallen (w>=3m/sn) []
 im Freien []

Umgebungsbedingungen:

Normal [] Staubig [] Feucht []
 Korrodierend [] Trocken [] Verklebend []

Umgebungstemperatur:

Mittelwert°C
 Maximal.....°C
 Minimal.....°C

Rücklaufsperre erforderlich:

Ja [] Nein []

Getriebeeingangsvarianten:

R..[] V..[] N..[] T..[]

Getriebeausgangsvarianten:

00 [] 01 [] 02 [] 03 [] 0S []

Montageposition:

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

Antriebswellenanschluss:

Elastische Kupplung []
 Trommelkupplung []
 Hydrokupplung []
 Starre Flanschkupplung []
 Keilriementrieb []
 Kettenrad []
 Ritzel []
 Durchmesser von Anschlusselement.....mm
 Querkraft.....N
 "u" Abstand von der Wellenschulter.....mm
 Axialkraft (in Richtung der Welle +)N

Abtriebswellenanschluss:

Elastische Kupplung []
 Trommelkupplung []
 Starre Flanschkupplung []
 Keilriementrieb []
 Kettenrad []
 Ritzel []
 Hohlwelle mit Drehmomentstütze []
 Schrumpfscheibe mit Drehmomentstütze []
 Durchmesser von Anschlusselement.....mm
 Querkraft.....N
 "u" Abstand von der Wellenschulter.....mm
 Axialkraft (in Richtung der Welle +)N

Montage zur Getriebegehäuse mit:

Gehäuse [] Flansch [] Drehmomentstütze []

Eigenschaften der Abtriebswelle:

Vollwelle mit Passfeder []
 Vollwelle ohne Passfeder []
 Sonderwelle []
 Hohlwelle mit Schrumpfscheibe []
 Hohlwelle []

Eigenschaften der Antriebswelle:

Vollwelle mit Paßfeder []
 Vollwelle ohne Paßfeder []
 Sonderwelle []

Drehmomentstütze erforderlich Ja [] Nein []

Spannungsversorgung:

AC-1 phasig [] AC-3 phasig [] DC []
 Spannung.....Volt
 Frequenz.....Hz

Schutzart:

IP55 [] IP65 [] Exproof []
 Andere IP.....

Anhang:

Lastdiagramm []
 Projekt []
 Erforderliche Abmessungen []
 Technische Spezifikationen []

Andere Merkmale:



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Yağlama

Redüktörlerin uzun ömürlü olması ve iyi performansla çalışabilmesi için, kullanılan yağın seçimi doğru olmalı ve belirtilen zamanlarda değişimleri yapılmalıdır.

Yağın seçiminde devir, çevre sıcaklığı, redüktör yağ sıcaklığı, çalışma koşulları ve yağ ömrü önem taşımaktadır. Redüktörler yağı doldurulmuş olarak sevkedilmektedir. Redüktörler uzun süre depolanacakları zaman veya çalışmaya başlanacağı zaman çalışma konumuna göre üstte kalan tapa sökülmesi ve redüktörün beraberinde verilen havalandırma tapası kullanılmalıdır. Bu redüktörün iç basıncından dolayı oluşacak yağ sızmalarını önleyecektir.

Redüktörlerde standart olarak kullanılan yağlar 33. sayfadaki tabloda verilmiştir. Miktarlar ve yağ tipi burada verilen değerlerden farklılık gösterilebilir. Redüktörünüzde kullanılan yağın tipi ve miktarı için lütfen etiketine bakınız. Eğer Siparişte belirtilmezse D Serisi Redüktörler M1 montaj pozisyonuna göre yağ ile doldurulur. Bu pozisyonlar dışındaki çalışma durumlarında tablolarda verilen yağ miktarlarına göre ilave veya eksiltme yapılmalıdır. Özel çalışma koşullarında firmamıza danışmanız tavsiye edilir.

Mineral yağlar her 10.000 çalışma saatinde, sentetik yağlar ise her 20.000 çalışma saatinde değiştirilmelidir. Ağır çevre koşullarında (ani ısı değişiklikleri, yüksek nemlilik v.b) yağ değiştirme periyotlarının kısaltılması tavsiye edilir. Mineral yağlar ile sentetik yağlar birbirine kesinlikle karıştırılmamalıdır. Değiştirme işlemi bir çalışma periyodunun hemen peşinden ve yağ sıcakken yapılmalıdır. Bu şekilde bir değiştirme, redüktör içindeki partiküllerin yağa karışmış olarak bulunmasından dolayı iyi bir temizleme ve yağın rahat boşalması neticesini verecektir.

Lubrication

To work in perfect condition and to have long life for the gearbox the lubricant must be chosen correctly and changed in time.

In selection of oil it is important to consider speed, ambient temperature, gear box oil temperature, working conditions and the life required from the lubricant. All units are filled with lubricant before shipping. Before the gearbox is stored for a long time or before starting up, the top plug (according to the working position) must be removed and the extra given vent plug must be replaced. This prevents excessive pressure which causes oil leakages.

The lubricant in the standard line is given for standard fillings on the table page 33. Please look at your gear units label for filled oil type and quantity. If the mounting position not indicated on order, D Series gearboxes are filled with mounting position of M1. For other mounting positions please filling oil or draining oil refer to the table given on the next pages. For special working conditions please contact us.

The mineral lubricant should be changed after every 10.000 service hours and the synthetic lubricant should be changed after every 20.000 working hours. If the operation conditions are very heavy (e.g. high temperature differences, high humidity) shorter intervals between changes are recommended. Mineral and synthetic oils must not be mixed up. By changing the lubricant complete cleaning is advised. The oil change should be done after a working period. Because oil is hot in this condition and impurities are mixed with it the changing of oil will be done in best result and the oil will drain easily.

Schmierung

Um eine lange Lebensdauer zu gewährleisten muss der Schmierstoff richtig ausgewählt werden.

Für die richtige Ölauswahl müssen Drehzahl, Umgebungstemperatur, Belastungsart und Lebensdauer des Öls berücksichtigt werden. Die mitgelieferte Entlüftungsschraube ist vor Inbetriebnahme oder längeren Lagern gegen die Einfüllschraube auszutauschen, um einen Überdruck im Getriebe und damit eine Undichtigkeit des Getriebes zu vermeiden. Getriebe und Getriebemotoren sind bei Auslieferung betriebsfertig gefüllt.

Ohne besondere Bestellangaben werden die Getriebe grundsätzlich mit den auf der Seite 33 in der grau unterlegten Spalte angegebenen Schmierstoffen gefüllt. Bitte im Getriebe verwendetes Öl und menge von dem Namenschild ablesen. Die fußbefestigten Getriebe sind befüllt für Bauform und die flanschbefestigten Getriebe für Bauform M1. Für andere Bauformen sind die auf der nächsten Seite angegebenen Füllmengen zu beachten.

Ein Schmierstoffwechsel sollte alle 10.000 Betriebsstunden durchgeführt werden. Für synthetische Produkte verdoppeln sich diese Fristen. Bei extremen Betriebsbedingungen, z.B. hohe Luftfeuchtigkeit, aggressiver Umgebung und hohen Temperaturschwankungen sind kürzere Schmierstoffintervalle vorteilhaft. Es ist empfehlenswert, dem Schmierstoffwechsel mit einer gründlichen Reinigung des Getriebes zu verbinden. Synthetische und mineralische Schmierstoffe dürfen nicht miteinander vermischt werden. Das Ablassen des Öls soll unmittelbar nach dem Stillsetzen erfolgen, solange das Öl noch warm ist. In dieser Zustand ist das Öl mit den Schmutzpartikeln vermischt, so dass eine Entfernung des Altöls eine gute Reinigung garantiert.



Genel Bilgiler General Information Einführung



M4 Montaj Pozisyonu için Genleşme Tankı / Expansion Tank for M4 Mounting Position / Ölausgleichsbehälter für M4 Bauform

Aşağıdaki teknik resimde gösterildiği gibi montaj pozisyonları **M4** (montaj pozisyonları syf.34) olan redüktörlerde düzgün bir yağlama sağlanabilmesi için yağ seviyesinin redüktörün üst dişlilerinin yağlanabileceği seviyede olması gerekmektedir. Buda düşük çevrim oranlı redüktörlerde köpürme ve genleşme nedeniyle havalandırma tapasından yağ atılmasına neden olabilmektedir.

Yılmaz redüktör ; bunun önlenmesi için çevrim oranı (i) < 20 ve D47'den daha büyük olan bütün gövdelerde **M4** montaj pozisyonunda genleşme tankı kullanılmasını kesinlikle önermektedir. Önerilen genleşme tankı ölçüleri aşağıdaki tabloda gösterilmiştir.

Çevrim oranı (i) < 20 olup giriş motor devri 1800 d/d dan büyük olan bütün redüktörlerde **M4** montaj pozisyonunda genleşme tankı kullanılması redüktör büyüklüğüne bakılmaksızın önerilmektedir.

*As you can see at the technical drawing below, for gear units with **M4** (mounting positions p. 34) mounting position, oil level is very high for proper lubrication of upper pinion gear and this leads to oil leakage from venting plug, because of foaming and expansion of oil at geared motors with ratios below 20.*

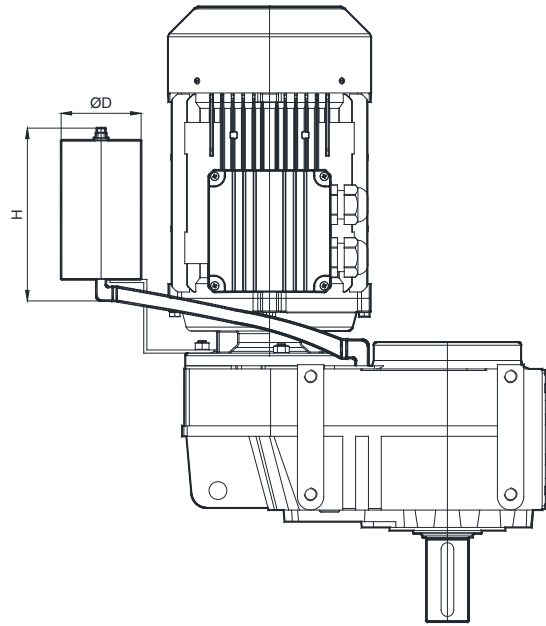
*We ; Yılmaz Redüktör, strongly recommend using expansion tank for **M4** mounting position for gear units D57, D67, D77, D87 and D97 with total ratios (i) below 20, to prevent this. You can find the recommended dimensions of expansion tanks below.*

*If your gear units total ratio (i) is below 20 and input speed is higher than 1800 rpm we recommend using of expansion tank for all gear unit sizes for **M4** mounting position.*

Wie in der folgenden technischen Zeichnung dargestellt ist, sollte der Ölstand auf der gleichen Höhe der ersten Getriebestufe sein, um eine ausreichende Schmierung des oberen Zahnrads bei der **M4** Bauform (s. Seite 34) sicher zu stellen. Aufgrund dieses hohen Ölstands bildet sich Ölschaum aus, welcher aus der Entlüftungsschraube austritt.

Um das verhindern zu müssen, empfiehlt Yılmaz Redüktör bei allen D-Serie Getrieben ab Getriebebaugröße D57 mit niedrigen Übersetzungen (i<20) einen Ölausgleichsbehälter bei der **M4** Bauform einzusetzen. Die empfohlenen Dimensionen des Ölausgleichsbehälters sind in der unteren Tabelle angegeben.

Bei Getrieben mit Übersetzungen (i<20) und bei Motor-Eingangsdrehzahlen >1800 min⁻¹ empfiehlt Yılmaz Redüktör einen Ölausgleichsbehälter unabhängig von der Getriebebaugröße einzusetzen.



Gövde Büyüklüğü Housing Size Größe der Gehäuse	Genleşme Tankı Expansion Tank Ölausgleichsbehälter	D [mm]	H [mm]	Ağırlık [kg] Weight [kg] Gewicht [kg]
D57..	G1	100	150	4
D67.. , D77..	G2	150	250	5
D87.. , D97..	G3	180	400	9










Genel Bilgiler

General Information

Einführung



Yağ Tipleri / Oil Types / Schmierstoffe

Yağ Cinsi Lubricant Art des Schmierstoffes	DIN 51517-3	Çevre Sıcaklığı [°C] Ambient Temp. [°C] Umgebungstemp. [°C]	ISO VG	Aral	Beyond Petroleum	Castrol	Klüber Lubrication	Mobil	Shell	Total
		Daldırma Yağlama Dip Lubrication Tauchschmierung								
Mineral Yağlar Mineral Oil Mineralöl	CLP	0 ... +50	680	Degol BG 680	Energol GR-XP 680	Alpha SP 680	Klüberoil GEM 1-680 N	Mobilgear XMP 680	Omala S2 GX 680	Carter EP 680
		-5 ... +45	460	Degol BG 460	Energol GR-XP 460	Alpha SP 460	Klüberoil GEM 1-460 N	Mobilgear XMP 460	Omala S2 GX 460	Carter EP 460
		-10 ... +40	320	Degol BG 320	Energol GR-XP 320	Alpha SP 320	Klüberoil GEM 1-320 N	Mobilgear XMP 320	Omala S2 GX 320	Carter EP 320
		-15 ... +30	220	Degol BG 220	Energol GR-XP 220	Alpha SP 220	Klüberoil GEM 1-220 N	Mobilgear XMP 220	Omala S2 GX 220	Carter EP 220
		-20 ... +20	150	Degol BG 150	Energol GR-XP 150	Alpha SP 150	Klüberoil GEM 1-150 N	Mobilgear XMP 150	Omala S2 GX 150	Carter EP 150
		-25... +10	100	Degol BG 100	Energol GR-XP 100	Alpha SP 100	Klüberoil GEM 1-100 N	Mobilgear XMP 100	Omala S2 GX 100	Carter EP 100
Sentetik Yağlar Synthetic Oil Synthetisches Öl	CLP PG	-10 ... +60	680	Degol GS 680	Energol SG-XP 680	-	Klübersynth GH 6 -680	Mobil Glygoyle 680	Omala S4 WE 680	Carter SY 680
		-20 ... +50	460	Degol GS 460	Energol SG-XP 460	Aphasyn PG 460	Klübersynth GH 6 -460	Mobil Glygoyle 460	Omala S4 WE 460	Carter SY 460
		-25 ... +40	320	Degol GS 320	Energol SG-XP 320	Aphasyn PG 320	Klübersynth GH 6 -320	Mobil Glygoyle 320	Omala S4 WE 320	Carter SY 320
		-30 ... +30	220	Degol GS 220	Energol SG-XP 220	Aphasyn PG 220	Klübersynth GH 6 -220	Mobil Glygoyle 30	Omala S4 WE 220	Carter SY 220
		-35 ... +20	150	Degol GS 150	Energol SG-XP 150	Aphasyn PG 150	Klübersynth GH 6 -150	Mobil Glygoyle 22	Omala S4 WE 150	Carter SY 150
		-40 ... +10	100	-	-	-	Klübersynth GH 6 -100	Mobil Glygoyle 100	-	-
	CLP HC	-10 ... +60	680	-	-	-	Klübersynth GEM 4-680 N	Mobil SHC Gear 680	Omala S4 GXV 680	Carter SH 680
		-20 ... +50	460	Degol PAS 460	Energol EP-XF 460	Alphasyn T 460	Klübersynth GEM 4-460 N	Mobil SHC Gear 460	Omala S4 GXV 460	Carter SH 460
		-25 ... +40	320	Degol PAS 320	Energol EP-XF 320	Alphasyn T 320	Klübersynth GEM 4-320 N	Mobil SHC Gear 320	Omala S4 GXV 320	Carter SH 320
		-30 ... +30	220	Degol PAS 220	Energol EP-XF 220	Alphasyn T 220	Klübersynth GEM 4-220 N	Mobil SHC Gear 220	Omala S4 GXV 220	Carter SH 220
		-35 ... +20	150	Degol PAS 150	Energol EP-XF 150	Alphasyn T 150	Klübersynth GEM 4-150 N	-	Omala S4 GXV 150	Carter SH 150
		-40 ... +10	100	-	-	-	Klübersynth GEM 4-100 N	-	Omala S4 GXV 100	-
Gıda Uyumlu Yağ Food Grade Oil Lebensmittellöl	CLP NSF H1	-15 ... +25	220	-	-	Optileb GT 220	Klüberoil 4 UH1-220 N	Mobil SHC Cibus 220	Cassida Fluid GL-220	Nevastane SL 220
Çevre Dostu Yağ Biodegradable Oil Biologisch abbaubares Öl	CLP E	-25 ... +40	320	-	-	Tribol BioTop 1418-320	Klübersynth GEM 2-320	-	-	Carter Bio 320
Mineral Gresler [-20 +130 Çalışma Sıcaklığı °C] Mineral Grease [-20 +130 Working Temperature °C] Mineral-Fett [-20 +130 Betriebstemperatur °C]				Aralub HL3	Energol LS 3	Spheerol AP3	Centoplex 2 EP	Mobilux EP 3	Gadus S2 V100 3	Multis Complex EP 2
Sentetik Gresler [-30 +130 Çalışma Sıcaklığı °C] Synthetic Grease [-30 +130 Working Temperature °C] Synthetisches Fett [-30 +130 Betriebstemperatur °C]				-	Energol SY 2202	-	Petamo GHY 133 N	Mobiltemp SHC 100	Gadus S5 V100 2	Multis Complex SHD 220



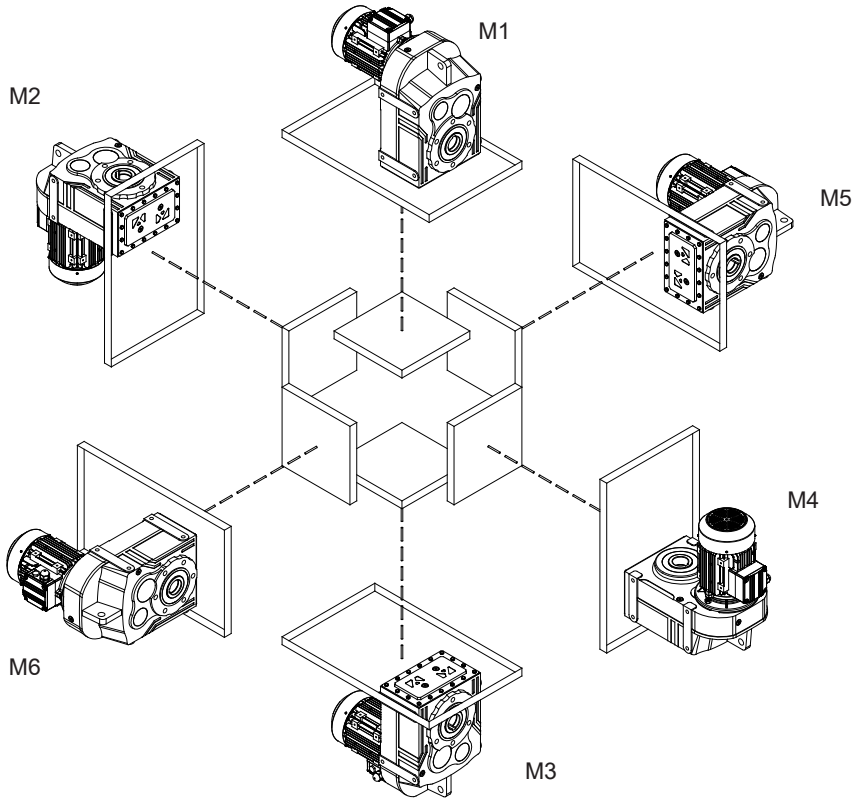
Genel Bilgiler

General Information

Einführung



Montaj Pozisyonları / Mounting Positions / Bauformen



M1....M6 'ya kadar belirtilen montaj pozisyonları redüktörün duruş yönü referans alınarak belirlenmiştir. Montaj yüzeyleri bağlayıcı değildir.

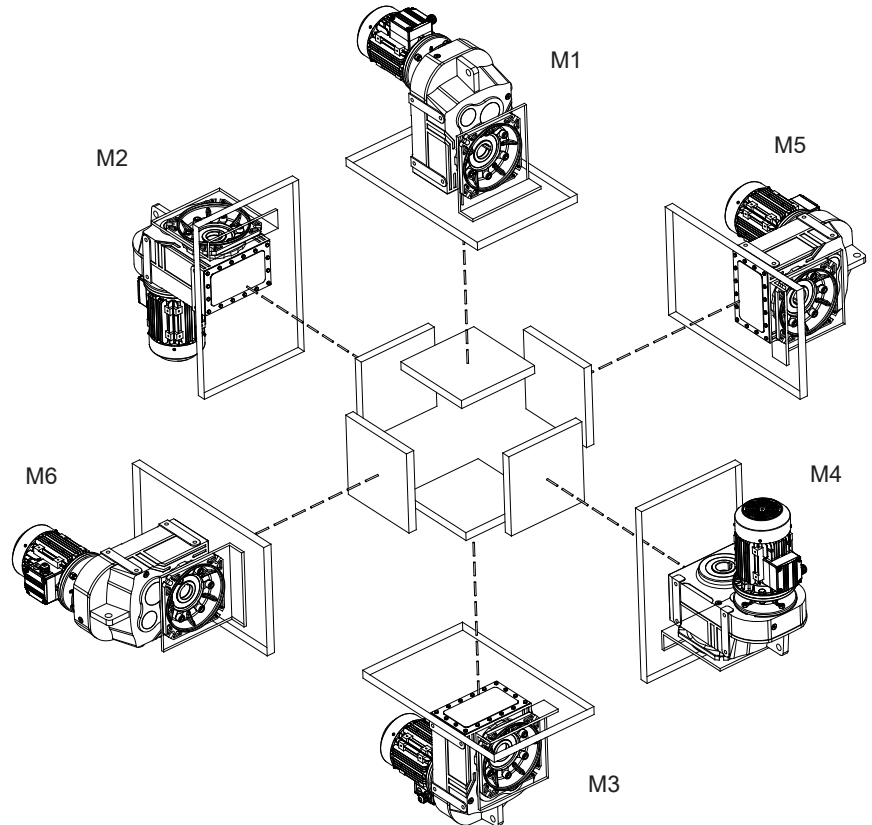
Figured mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.

Dargestellte Montagepositionen M1 bis M6 wurden nach der Stehrichtung von Getriebe bestimmt. Montageoberflächen sind unverbindlich.

M1....M6 'ya kadar belirtilen montaj pozisyonları redüktörün duruş yönü referans alınarak belirlenmiştir. Montaj yüzeyleri bağlayıcı değildir.

Figured mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.

Dargestellte Montagepositionen M1 bis M6 wurden nach der Stehrichtung von Getriebe bestimmt. Montageoberflächen sind unverbindlich.





Genel Bilgiler

General Information

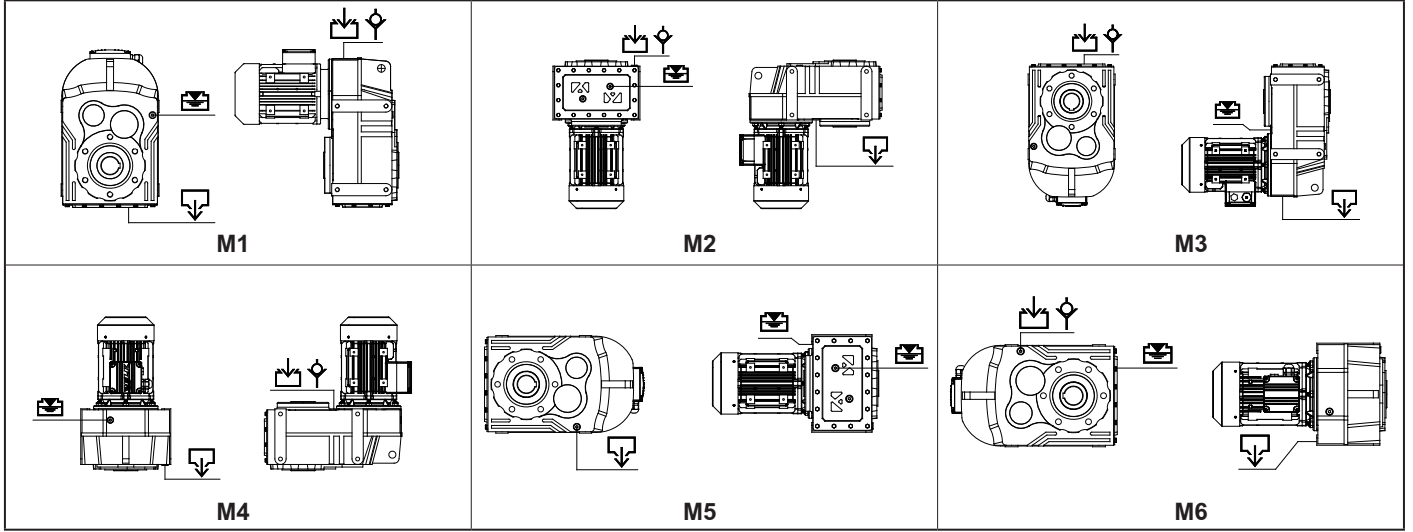
Einführung



İki Üç Kademeli Helisel Dişli Delik Milli Redüktörler Yağ Seviye Tapaları

Two -Three Stage Helical Geared Hollow shaft Gearboxes Oil Level Plugs

Zwei-Dreistufig Stirnradgetriebe mit Hohlwelle Ölverschlußschrauben



Yağ Miktarları (lt) / Oil Quantities (lt) / Ölmengen (lt)

Tip / Type / Typ	M1	M2	M3	M4	M5	M6
DR072	0.9	1.1	0.7	1.2	1.0	0.9
DR073	0.8	1.0	0.65	1.1	0.9	0.85
DR172	1.3	1.5	1.0	1.6	1.4	1.3
DR173	1.0	1.3	0.8	1.55	1.2	1.2
DR272	1.9	2.2	1.3	2.5	2.0	1.95
DR273	1.8	2.0	1.2	2.0	2.0	2.0
DR282	2.4	3.0	2.0	2.9	2.7	2.7
DR283	2.3	2.9	1.8	2.6	2.3	2.5
DR372	3.2	3.7	2.4	3.6	3.5	3.4
DR373	3.0	3.7	2.0	3.5	3.3	3.3
DR472	6.8	7.0	4.6	7.5	6.8	6.7
DR473	6.4	7.0	4.0	6.6	6.5	6.5
DR572	11.4	12.7	8.6	15	11.9	11.6
DR573	11.2	12.4	7.4	12.5	11.5	11.5
DR672	22.0	27.0	16.0	26.0	22.8	22.5
DR673	21.0	25.2	14.0	27.0	21.5	21
DR772	34.0	37.0	26.0	44.0	35.0	34.5
DR773	32.0	35.0	21.0	40.0	33.0	32.5
DR872	46.0	48.0	39.0	65.0	42.0	44.0
DR873	48.5	53.0	39.0	61.0	50.0	49.0
DR972	78.0	81.0	59.0	64.0	75.0	78.0
DR973	73.0	76.0	54.0	61.0	70.0	73.0

Semboller :

Symbols :

Symbole :



:Yağ doldurma

:Oil filling

:Öfüllung



:Yağ boşaltma

:Drain plug

:Ölauslass



:Yağ seviyesi

:Oil level

:Ölstand



:Havalandırma

:Vent Plug

:Entlüftungsschraube



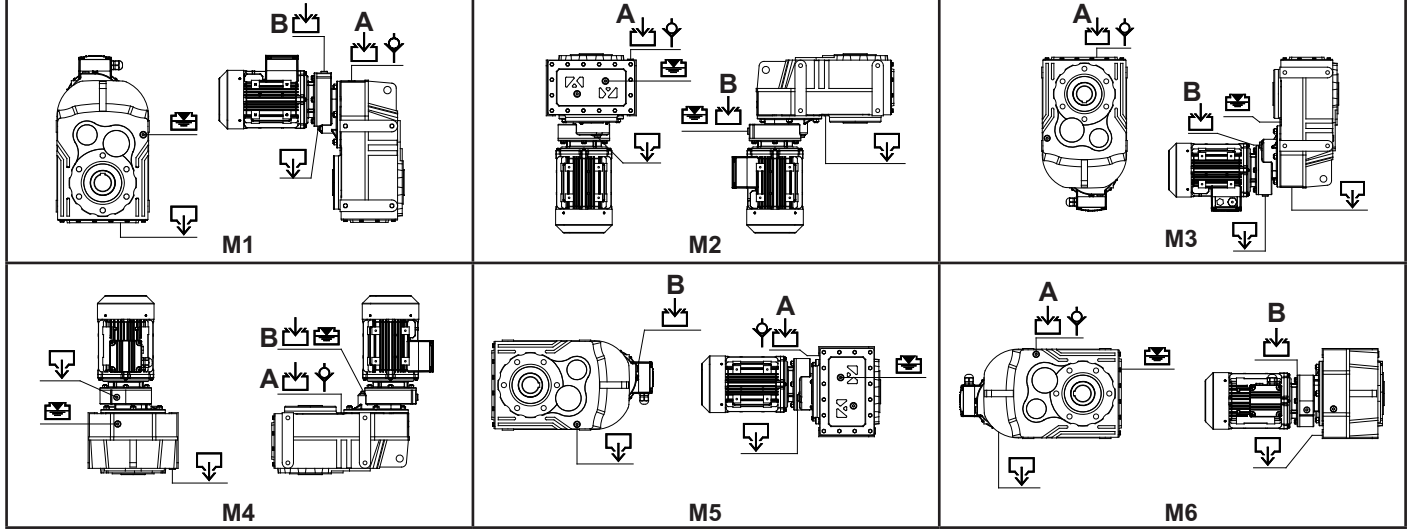
Genel Bilgiler

General Information

Einführung



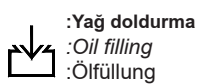
Dört Kademeli Helisel Dişli Delik Milli Redüktörler Yağ Seviye Tapaları
Four Stage Reduction Helical Hollow Shaft Gearboxes Oil Level Plugs
Vierstufig Stirnradgetriebe mit Hohlwelle Ölverschlußschrauben



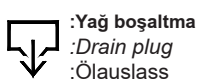
Yağ Miktarları (lt) / Oil Quantities (lt) / Ölmengen (lt)

Tip / Type / Typ	M1 A / B	M2 A / B	M3 A / B	M4 A / B	M5 A / B	M6 A / B
DR474	6.4 / 0.7	7.0 / 0.7	4.0 / 0.7	6.6 / 0.7	6.5 / 0.7	6.5 / 0.7
DR574	11.2 / 1.5	12.4 / 1.5	7.4 / 1.5	12.5 / 1.5	11.5 / 1.5	11.5 / 1.5
DR674	21.0 / 4.0	25.2 / 4.0	14.0 / 4.0	27.0 / 4.0	21.5 / 4.0	21.0 / 4.0
DR774	32.0 / 4.0	35.0 / 4.0	21.0 / 4.0	40.0 / 4.0	33.0 / 4.0	32.5 / 4.0
DR874	48.5 / 6.0	53.0 / 6.0	39.0 / 6.0	61.0 / 6.0	50.0 / 6.0	49.0 / 6.0
DR974	73.0 / 4.0	76.0 / 4.0	54.0 / 4.0	61.0 / 4.0	70.0 / 4.0	73.0 / 4.0

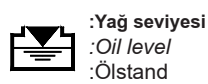
Semboller :
Symbols :
Symbole :



:Yağ doldurma
:Oil filling
:Ölfüllung



:Yağ boşaltma
:Drain plug
:Ölauslass



:Yağ seviyesi
:Oil level
:Ölstand



:Havalandırma
:Vent Plug
:Entlüftungsschraube



Genel Bilgiler

General Information

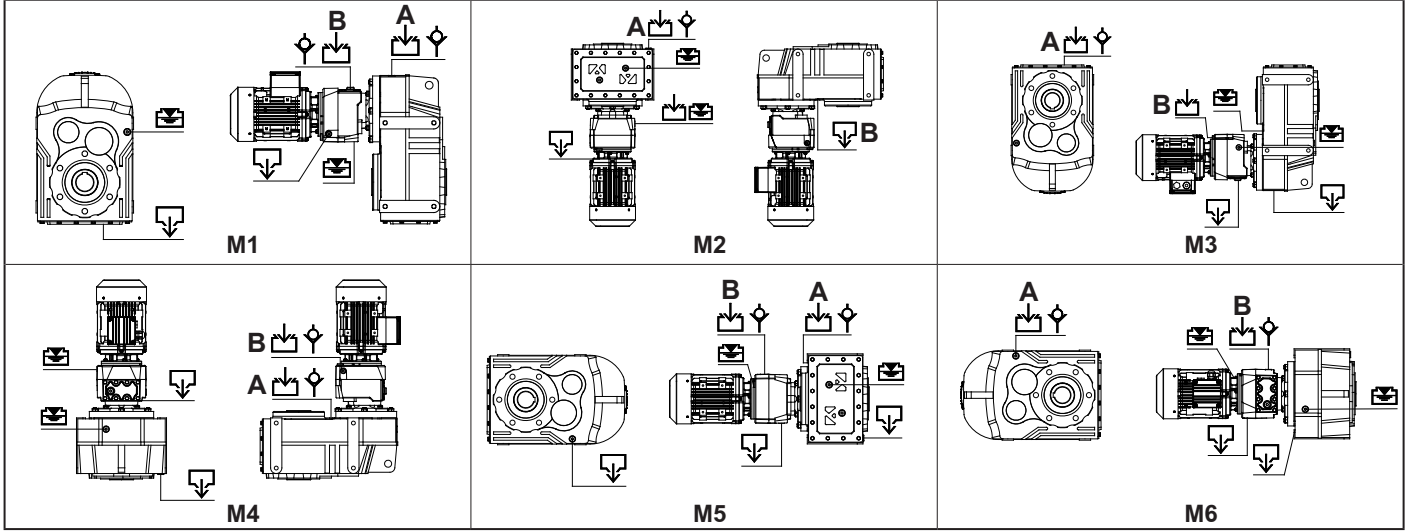
Einführung



Beş-Altı Kademeli Helisel Dişli Delik Milli Redüktörler Yağ Seviye Tapaları

Five-Six Stage Helical Geared Hollow Shaft Gearboxes Oil Level Plugs

Fünf-Sechsstufig Stirnradgetriebe mit Hohlwelle Ölverschlußschrauben



Yağ Miktarları (lt.) / Oil Quantities. (lt) / Ölmengen (lt.)

Tip / Type / Typ	M1 A / B	M2 A / B	M3 A / B	M4 A / B	M5 A / B	M6 A / B
DR275	1.8 / 0.4	2.0 / 0.6	1.2 / 0.5	2.0 / 0.6	2.0 / 0.5	2.0 / 0.5
DR276	1.8 / 0.35	2.0 / 0.5	1.2 / 0.5	2.0 / 0.55	2.0 / 0.4	2.0 / 0.4
DR285	2.3 / 0.4	2.9 / 0.6	1.8 / 0.5	2.6 / 0.6	2.3 / 0.5	2.5 / 0.5
DR286	2.3 / 0.35	2.9 / 0.5	1.8 / 0.5	2.6 / 0.5	2.3 / 0.4	2.5 / 0.4
DR375	3.0 / 0.4	3.7 / 0.6	2.0 / 0.5	3.5 / 0.6	3.3 / 0.5	3.3 / 0.5
DR376	3.0 / 0.35	3.7 / 0.5	2.0 / 0.5	3.5 / 0.5	3.3 / 0.4	3.3 / 0.4
DR475	6.4 / 0.65	7.0 / 0.95	4.0 / 0.7	6.6 / 0.95	6.5 / 0.7	6.5 / 0.7
DR476	6.4 / 0.6	7.0 / 0.8	4.0 / 0.7	6.6 / 0.8	6.5 / 0.65	6.5 / 0.65
DR575	11.2 / 1.2	12.4 / 2.1	7.4 / 2.0	12.5 / 2.1	11.5 / 1.4	11.5 / 1.4
DR576	11.2 / 1.1	12.4 / 2.0	7.4 / 1.9	12.5 / 2.0	11.5 / 1.3	11.5 / 1.3
DR675	21.0 / 1.2	25.2 / 2.1	14.0 / 2.0	27.0 / 2.1	21.5 / 1.4	21.0 / 1.4
DR676	21.0 / 1.1	25.2 / 2.0	14.0 / 1.9	27.0 / 2.0	21.5 / 1.3	21.0 / 1.3
DR775	32.0 / 2.0	35.0 / 3.4	21.0 / 3.1	40.0 / 3.4	33.0 / 2.8	32.5 / 2.8
DR776	32.0 / 1.9	35.0 / 3.3	21.0 / 3.0	40.0 / 3.3	33.0 / 2.6	32.5 / 2.6
DR875	48.5 / 2.0	53.0 / 3.4	39.0 / 3.1	61.0 / 3.4	50.0 / 2.8	49.0 / 2.8
DR876	48.5 / 1.9	53.0 / 3.3	39.0 / 3.0	61.0 / 3.3	50.0 / 2.6	49.0 / 2.6
DR975	73.0 / 4.5	76.0 / 8.0	54.0 / 7.5	61.0 / 8.0	70.0 / 5.5	73.0 / 5.5
DR976	73.0 / 4.5	76.0 / 7.6	54.0 / 7.0	61.0 / 7.6	70.0 / 5.0	73.0 / 5.0

Semboller :

Symbols :

Symbole :



:Yağ doldurma

:Oil filling

:Ölfüllung



:Yağ boşaltma

:Drain plug

:Ölauslass



:Yağ seviyesi

:Oil level

:Ölstand



:Havalandırma

:Vent Plug

:Entlüftungsschraube



Genel Bilgiler

General Information

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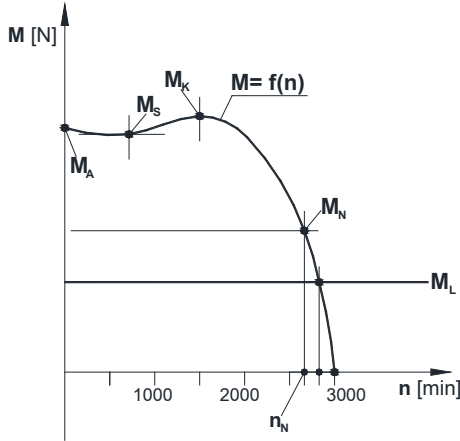


MOTORLAR

AC Motorlar

a- Genel Özellikler:

Basit konstrüksiyonlu, bakım gerektirmez, güvenilirliği yüksek ve uygun fiyatlı olmaları nedeni ile trifaze asenkron motorlar en çok kullanılan motor cinsidir. Bu motorların çalışma karakteristikleri moment-hız eğrisi ile belirlenir. Aşağıda bu karakteristik eğrisine bir örnek verilmiştir.



Motorun her start yapılmasında bu eğriye uygun hareket eder ve yük momentini M_L ile bu eğrinin çakıştığı nokta, motorun çalışma anındaki moment ve devirini verir.

Statorun manyetik alanı senkron hızla n_s döner. Kutuplar arasındaki faz kayması 3 fazlı motorlarda 120° 'dir.

$$n_s = 120 \times \frac{f}{p_s}$$

f.....: şebeke frekansı [Hz]
p_s.....: statorun kutup sayısı

Rotorun değişken manyetik alanı rotorun statorun manyetik alanının dönüşü yönünde dönmeye başlamasını sağlar. Rotor bu hareketinde statorun manyetik alanını takip eder ama hiçbir zaman yakalayamaz. Rotor statorun manyetik alanının hızından yavaş döner. Rotorun bu hızına baz hız n_N denir. Yükün azalması rotorun hızının artmasını sağlar, aynı zamanda sapma azalmış olur. Sapma aşağıdaki gibi belirlenmiştir:

$$s = \frac{n_s - n_N}{n_s} \times 100$$

Sapmanın miktarına göre motorun nominal değerlerinde şu farklılıklar olabilir.

Sapma s: $\pm 20\%$
Kalkış Akımı.....: $\pm 20\%$
Kalkış Momenti.....: $-15 / +25 \%$
Kütle Atalet Momenti.....: $\pm 10\%$
Verim (37 kW'a kadar).....: $-0,15 (1-\eta)$

MOTORS

AC Motors

a- General Specifications:

On account of its simple and maintenance free construction, good reliability and price, the three phase squirrel cage motor is one of the most frequently employed electric motors. The run up behavior of a three phase squirrel cage motor is described by the torque-speed characteristic curve. An example is shown below.

M_A : Start moment / Starting torque / Anlaufmoment

M_S : Demeraj moment / Pull-up torque / Anziehungsmoment

M_K : Frenleme moment / Pull-out torque / Bremsungsmoment

M_N : Motorun ilettiği moment / Motor rated torque / Treibmoment

M_L : Yük moment / Load torque / Lastmoment

The motor follows this torque characteristics up to its stable operating point every time, when it is switched on. Operating point is that point, where the moment speed curve intersects with load torque M_L line.

The magnetic field in the stator rotates at a synchronous speed n_s . Phase shift of each pole is 120° at 3 phase motors.

$$n_s = 120 \times \frac{f}{p_s}$$

f.....: supply frequency [Hz]
p_s.....: number of stator poles

Because of the alternating magnetic field in the rotor, the rotor starts running in the same direction of the stator flux and tries to catch up with the rotating flux. The rotor never catches up the stator field. The rotor runs slower than the speed of the stator field. This speed is called the base speed n_N .

A decrease in load will cause the rotor to speed up or decrease slip. The slip is defined as follows:

$$s = \frac{n_s - n_N}{n_s} \times 100$$

According to the slip, the nominal values of the electric motor can alter as follows:

Slip s: $\pm 20\%$
Starting current: $\pm 20\%$
Starting torque: $-15 / +25 \%$
Moment of inertia.....: $\pm 10\%$
Efficiency (up to 37 kW).....: $-0,15 (1-\eta)$

MOTOREN

Drehstrommotoren:

a- Allgemeine Eigenschaften

Wegen die wartungsarme und leichte Konstruktion, hohe Sicherheit bei Nutzung und günstige Preise werden die asynchrone Drehstrommotoren am meisten benutzt. Motoranlaufverhalten wird mit Moment-Drehzahl-Kurve charakterisiert. Ein Beispiel ist unten angegeben.

Der Drehstrommotor läuft diese Kurve bei jeder Anlauf, bis dem stabilen Betriebspunkt erreicht wird. Betriebspunkt ist der Zustand, bei dem die Moment-Drehzahl-Kurve sich mit der Linie von erforderlichen Moment M_L schneidet.

Magnetisches Feld von Stator dreht sich mit synchroner Geschwindigkeit n_s . Phasenverschiebung von den Polen ist 120° bei 3phasigen Drehstrommotoren.

$$n_s = 120 \times \frac{f}{p_s}$$

f.....: Frequenz der Spannung [Hz]
p_s.....: Anzahl der Polen von Stator

Durch das magnetische Wechselfeld in den Rotor, beginnt der Rotor sich in der gleichen Richtung des Statorflusses zu drehen und versucht diese Bewegung aufzuholen. Der Rotor kann den Statorfeld nie aufholen. Die Rotorgeschwindigkeit nennt man Basisgeschwindigkeit n_N . Eine Abnahme der Belastung bewirkt, dass der Rotor sich beschleunigt und der Schlupf sich verringert. Der Schlupf wird wie folgt definiert:

$$s = \frac{n_s - n_N}{n_s} \times 100$$

Für die nominale Werte der Drehstrommotoren sind folgende Abweichungen zulässig:

Schlupf s: $\pm 20\%$
Anzugsstrom: $\pm 20\%$
Anzugsmoment: $-15 / +25 \%$
Massentägheitsmoment: $\pm 10\%$
Wirkungsgrad (bis 37 kW).....: $-0,15 (1-\eta)$



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b- Çalışma Türleri

Katalogta verilen tüm redüktörlerin motorları S1 çalışma türüne uygun verilmektedir. Diğer çalışma türleri aşağıdaki tabloda gösterilmiştir.

b-Modes of Operation

All motors of the catalogue have been laid out for duty S1 (continuous operation). Other duty types are given on the following table.

b-Betriebsarten

Die im Katalog angeführten Motoren sind für Betriebsart S1 (Dauerbetrieb) ausgelegt. Andere Betriebsarten sind unten angegeben.

Çalışma Türü Operation Betriebsarten	Açıklama Explanation Erläuterung	Yük Grafiği Load Graphic Lastverläufe
S1	Sabit yükte sürekli çalışma <i>Continuous operation under constant load</i> Dauerbetrieb mit konstanter Belastung	
S2	Sabit yükte kısa süreli çalışma <i>Short-time duty under constant load</i> Kurzbetrieb mit konstanter Belastung	
S3	Yolvermede sıcaklık artımı olmadan periyodik çalışma <i>Periodic duty without influence of start-up on temperature</i> Aussetzbetrieb ohne Einfluß des Anlaufes auf die Temperatur	
S4	Yolvermede sıcaklık artımı olan periyodik çalışma <i>Periodic duty with influence of start up on temperature</i> Aussetzbetrieb mit Einfluß des Anlaufes auf die Temperatur	
S5	Yolvermede ve frenlemede sıcaklık artımlı periyodik çalışma <i>Periodic duty with influence of startup and braking on temp.</i> Aussetzbetrieb mit Einfluß des Anlaufes / Bremsung auf die Temp.	
S6	Sürekli orta darbeleri çalışma <i>Continuous operation with intermittent loading</i> Durchlaufbetrieb mit Ausetzungsbelastung	
S7	Elektriksel frenlemeli sürekli orta darbeleri çalışma <i>Continuous operation with intermittent loading and braking</i> Ununterbrochener Betrieb mit Anlauf und Bremsung	
S8	Devir ve yük değişimli sürekli çalışma <i>Continuous operation duty type with related load-speed changes</i> Ununterbrochener periodischer Betrieb mit Drehzahländerung	



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c- Koruma Sınıfı:

Yılmaz Redüktörde standart olarak IP54 (IEC 34-5) koruma sınıfı motorlar kullanılmaktadır. Diğer koruma sınıfları istendiğinde firmamıza danışınız.

d- İzolasyon Sınıfı:

Yılmaz Redüktörde kullanılan standart izolasyon sınıfı F (IEC 317-8) dir. İstek üzerine H sınıfı yapılabilmektedir.

e- Verim Sınıfları:

Üç fazlı az gerilim asenkron motorların verim sınıfı ölçümü IEC 60034-2-1:2007 normu ile belirlenmiştir. Yeni IE verim sınıfı 0,75 kW'tan 375 kW'a kadar güç aralığında çalışan AC motorlar için geçerlidir. EFF verim sınıfından farklı olarak IE verim sınıfı 6 kutup sayılı motorlar içinde kullanılabilir. Aşağıda verim sınıfları sıralanmıştır. Bölgeler dışında verim sınıfı zorunlulukları ülkelere göre farklılık gösterebilir. Lütfen firmamıza danışınız. Başka ürünlere entegre olmuş ve bu nedenle motorun veriminin bağımsız belirlenemediği sistemlerde (redüktör pompa gibi) verim sınıflandırması geçerli değildir.

c- Protection Class:

Yılmaz Redüktör uses IP54 (IEC 34-5) protection class electric motors for standard products. If different kind of protection class is requested please contact us.

d- Insulation Class:

Yılmaz Redüktör uses F (IEC 317-8) insulation class electric motors for standard products. H insulation class is available upon request.

e- Efficiency Classes:

The method for measuring the efficiency of low voltage three-phase asynchronous motors was revised with the new IEC 60034-2-1:2007 standard. The new IE classes is valid for AC Motors in power range from 0,75 to 375 kW. Unlike the EFF classes IE classes can be used for 6-pole AC motors. Below is the table of efficiency classes. The instructions for efficiency classes can differ from country to country. Please contact with us for more information. For the motors, which are fully integrated into a product (for example gear, pump) so their energy efficiency can not be recognized independently, the requirements of efficiency are not valid in Europe.

c- Schutzarten:

Yılmaz Redüktör Getriebemotoren werden serienmäßig mit Schutzart IP54 (IEC34-5) ausgeführt. Für andere Schutzarten bitte rückfragen.

d- Isolationsklasse:

Yılmaz Redüktör Getriebemotoren werden serienmäßig in Wärmeklasse F (IEC317-8) ausgeführt. H Wärmeklasse ist möglich auf Kundenwunsch.

e- Energieeffizienzklassen:

Die Methode für Messung die Effizienz von drei phasigen gering Spannung Asynchronmotoren hat neu mit IEC 60034-2-1:2007 Norm festgestellt. Die neue IE-Klassen gelten für alle Drehstrommotoren im Leistungsbereich von 0,75 bis 375 kW. Anders als EFF-Klassen die IE-Klassen können auch für 6-polige Drehstrommotoren verwendet werden. Unten steht die Tabelle der Effizienzklassen. Die Richtlinien für Effizienzklassen können sich je nach dem Land unterscheiden. Bitte mit unserem Firma Kontakt aufnehmen. Für die Motoren, die vollständig in ein Produkt (zum Beispiel Getriebe, Pumpe) eingebaut sind und deren Energieeffizienz nicht unabhängig von diesem Produkt erfasst werden kann, gelten in Europa die Anforderungen der Effizienzklassen nicht.

Verim Sınıfları Efficiency Classes Energieeffizienzklassen			4 Kutuplu Motor Verim Değeri Hesabı Calculating Efficiency Values of Motors with 4 Poles Berechnung der Wirkungsgrade von Elektromotoren mit 4 Polen	
IE1	EFF 2	Standart Verim Standart Efficiency Standarte Energieeffizienz	A=0,5234 B=-5,0499 C=17,4180 D=74,3171	$\eta_{Mn} = A \times [\log_{10}(P_L)] + B \times [\log_{10}(P_L)]^2 + C \times \log_{10}(P_L) + D$ <p>P_L :Anma Yüğü [kW] / Nominal Load [kW] / Nennlast [kW]</p> <p>η_{Mn} :Nominal verim / Nominal Efficiency [kW] / Sollwirkungsgrad</p>
IE2	EFF 1	Yüksek Verim High Efficiency Hohe Energieeffizienz	A=0,0278 B=-1,9247 C=10,4395 D=80,9761	
IE3	-	Premium Verim Premium Efficiency Premium Energieeffizienz	A=0,0773 B=-1,8951 C=9,2984 D=83,7025	
IE4	-	Süper Premium Verim Super Premium Efficiency Super Premium Energieeffizienz	-	

4 Kutuplu Motor Verim Değeri Efficiency Values of Motor with 4 poles Sollwirkungsgrad des Motors mit 4 Polen	Anma Yüğü [kW] Nominal Load [kW] Nennlast [kW]	Verim Sınıfı / Efficiency Class / Energieeffizienzklasse		
		IE1	IE2	IE3
	0,75	72,1 %	79,6 %	82,5 %
	1,5	77,2 %	82,8 %	85,3 %
	3	81,5 %	85,5 %	87,7 %
	7,5	86 %	88,7 %	90,4 %
	15	88,7 %	90,6 %	92,1 %
	22	89,9 %	91,6 %	93 %
	37	91,2 %	92,7 %	93,9 %
	45	91,7 %	93,1 %	94,2 %
	75	92,7 %	94 %	95 %
	90	93 %	94,2 %	95,2 %
	330	94 %	95,1 %	96 %

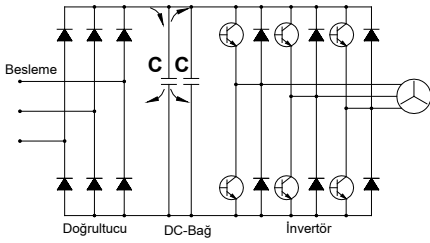


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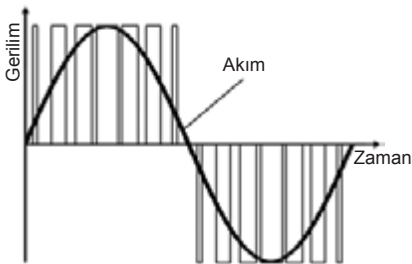


f- AC Frekans İnvörtörler

Doğru Akımı (DC), alternatif akıma (AC) çeviren elektronik çeviricilere invörtör denilmektedir. AC motorlar için elektronik hız kontrol cihazları genellikle AC giriş akımını doğrultucu diyotlarla DC akıma çevirir ve daha sonra çevirici diyotlar vasıtası ile bu akımı tekrar AC akıma çevirir. Doğrultucu diyotlar ile çevirici diyotlar arasındaki bağlantı DC-bağ olarak tanımlanmaktadır. DC kontrol cihazının (genellikle invörtör olarak isimlendirilir) elektriksel blok şeması aşağıda verilmiştir.

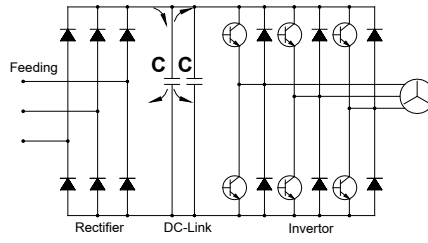


Tam dalga doğrultucuları besleyen üç faz besleme akımı DC-bağ kapasitörlerine iletilir. Kapasitörler voltajdaki dalgalanmaları azaltır ve kısa süreli ağıdaki akım kesintilerinde enerji sağlar. Kapasitörlerdeki voltaj kontrolsüzdür ve gelen AC akımın pik akım değerlerine bağlıdır. DC akım tekrar AC akıma, Puls genişliği modülasyonu (PWM) kullanılarak çevrilir. İstenen dalga formu, sabit bir frekansta (Puls frekansında), çıkış transistörlerinin (İzole edilmiş geçit Bipolar transistörleri; IGBT 'ler) açılıp kapatılması ile oluşturulur. IGBT'lerin açma kapama zamanlarının değişimi ile istenen akım oluşturulabilir. Çıkış voltajı bir seri kare dalga pulslardır ve motor sargılarının indüktansı ile sinusoidal bir motor akımı oluşur. Puls genişliği modülasyonu aşağıda gösterilmiştir.

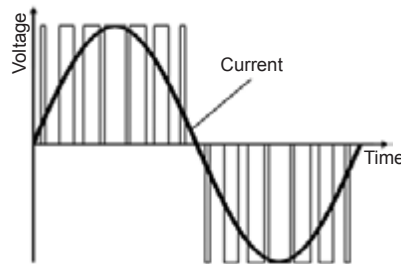


f- AC Frequency Inverters

An electronic converter is a device which converts Direct Current (DC) to Alternating Current (AC) is known as an inverter. Electronic speed controllers for AC motors usually convert the AC supply to DC using a rectifier, and then convert it back to a variable frequency, variable voltage AC supply using an inverter bridge. The connection between the rectifier and inverter is called the DC link. The block diagram of a speed controller (often called an inverter) is shown below.

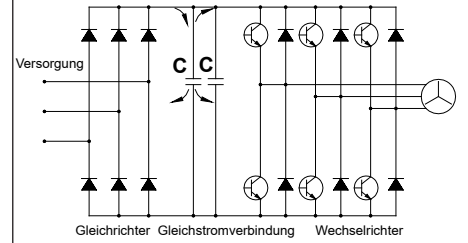


The three phase supply is fed into a full wave rectifier which supplies the DC link capacitors. The capacitors reduce the voltage ripple (especially on single supplies) and supply energy for short mains breaks. The voltage on the capacitors is uncontrolled and depends on the peak AC supply voltage. The DC voltage is converted back to AC using Pulse Width Modulation (PWM). The desired waveform is built up by switching the output transistors (Insulated Gate Bipolar Transistors; IGBTs) on and off at a fixed frequency (the switching frequency). By varying the on and off time of the IGBTs the desired current can be generated. The output voltage is still a series of square wave pulses and the inductance of the motor windings results in a sinusoidal motor current. Pulse Width Modulation is shown in the figure below.

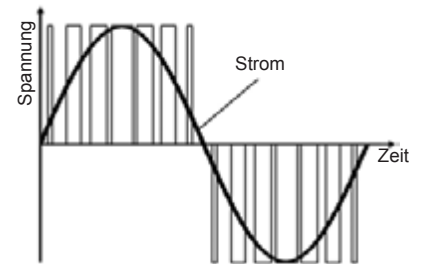


f- AC Frequenz Umrichter

Ein elektronischer Wandler, der den Gleichstrom (DC) in Wechselstrom (AC) umwandelt, wird als Umrichter bezeichnet. Ein Frequenzumrichter benutzt einen ungesteuerten Eingangsgleichrichter, um die Netzspannung in Gleichspannung umzuwandeln. Diese wird dann in den Zwischenkreiskondensatoren gespeichert. An diesem Gleichspannungszwischenkreis ist ein Wechselrichter angeschlossen. Dieser Wechselrichter erzeugt am Ausgang eine variable Frequenz und eine variable Spannung. Der Anschluss zwischen dem Gleichrichter und dem Wechselrichter nennt man Gleichstromverbindung. Das Blockschaltbild von diesem System wurde unten dargestellt:



Auch bei drephasiger Versorgung wird die gleichrichtete Netzspannung den Zwischenkreiskondensatoren zugeführt. Die Kondensatoren reduzieren die Oberwelligkeit der Spannung (was besonders bei einphasiger Versorgung entscheidend ist) und liefern Energie, die kurze Unterbrechungen der Netzstromversorgung ermöglicht. Die Spannung der Kondensatoren ist vom Spitzenwert der Wechselspannung abhängig. Die Gleichspannung wird im Wechselrichter durch Pulsweitenmodulation (PWM) in Wechselspannung umgewandelt. Die gewünschte Wellenform wird durch Ein- und Ausschalten der Ausgangstransistoren (IGBT's Isolierte Gate Bipolar Transistoren) mit einer festen Frequenz (der Pulsfrequenz) erzeugt. Der gewünschte Strom kann durch die Variation der Ein- und Ausschaltzeit der Ausgangstransistoren generiert werden. Die Ausgangsspannung ist dadurch eine Reihe von Spannungsimpulsen, die in Verbindung mit der Induktivität der Motorspulen zu einem sinusförmigen Motorstrom führt. Die Pulsweitenmodulation wird wie folgt dargestellt





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DC MOTORLAR

a- Genel Özellikler

DC motorlar, elektronik parçalardaki gelişmeler nedeni ile yeni uygulama alanları bulmuştur. Daha önce çok pahalı olan ve ekonomik olmayan kontrol sistemlerinin yerini ucuz ve kompakt güç kontrol üniteleri almıştır. Yol vermenin kontrol altına alınabildiği, tork ve akım izlenebilirliği, aşırı yüklenmeye karşı elektronik koruma sağlanabilmesi ve daha birçok pahalı olmayan uygulamalar DC motorlarını cazip kılmaya başlamıştır.

b- DC Motorların Çalışma İlkeleri

DC motorlar için DC çıkış veren bir doğrultucuya ihtiyaç vardır. Motor armatür sargıları, alan sargıları, komutasyon sargıları ve kompanse sargılar olmak üzere rotorda ve statorda bulunan sargılardan oluşur. Rotora voltaj ve akım karbon fırçalar ve komutator sargılarıyla ulaştırılır. Bu karbon fırçalar aşındığından DC motorlar belirli periyotlarla bakıma alınmalıdır. İyi kontrol edilebilir özelliklerinden dolayı DC motorlar otomasyon teknolojisinde sıkça kullanılmaktadır.

c- DC Motor Çeşitleri

Temel olarak Şönt (Shunt) ve seri sargılı DC motorlar bulunmaktadır. Bu sargıların çeşidine göre moment eğrisi değişmektedir.

d- DC Motorlarda Hız Kontrolü

Bu motorlarda devir değişimi DC voltajın değiştirilmesi ile yapılır. Şönt sarımlı DC motorların sıfır yük ile maximum yük arasındaki davranışı AC motorlara benzer. Devir artan yükte beraber düşer. Bu devir farkı ufak güçlü motorlarda büyük, büyük güçlü motorlarda ise ufaktır. Fakat bu hız farkı DC doğrultucu cihazda armatür voltajı ($I \times R$) ile oynanarak kompanse edilebilir. Hassas hız kontrol gereksinimi olduğunda, tako jeneratörler kullanılabilir. DC motorların gücü aşağıdaki formülden hesaplanır;

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g : Giriş gücü W
 P_c : Çıkış gücü W
U : Armatür gerilimi V
I : Armatür akımı A
 η : Motor verimi

DC MOTORS

a- General Specifications of DC Motors

DC drive systems have found new possible applications with the development of the electronic components sector. What was previously extremely expensive and in some cases not economically feasible is nowadays realized by miniaturised power converter technology. Additional functions such as guided startup after a predetermined time, torque and current monitoring with electronic protection against overloading, and many inexpensive special applications have made DC drive systems more attractive.

b- Operating principles of the DC Motors

The DC motor requires, a converter with DC output. The motor includes windings, such as armature, field, commutation and compensation windings, which are arranged in the stator as well as on rotor. Voltage and current are supplied to the rotor via the carbon brushes and the commutator. The carbon brushes are wearing parts therefore a DC motor requires maintenance at service intervals. While its good control properties, the DC motor is an essential item in automation technology.

c- Types of DC Motors

Depending on the wiring of the exciting winding or field winding, two basically different variants are regards torque speed characteristics may be distinguished.

d- Speed Control of DC motors

In DC motors the speed is adjusted by altering the DC voltage. DC shunt wounded motors behave similar to three phase induction motors between no load operation and maximum load. The speed drops with increasing loading of the motor. This difference is greater in small motors and smaller in larger motors. The speed difference can be compensated in the DC converter device by adjusting ($I \times R$). If great control accuracy is required, a speed control with measurement of the actual values by a tachogenerator can be used. The power of DC motor;

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g : Input Power W
 P_c : Output Power W
U : Armature Voltage V
I : Armature Current A
 η : Motor efficiency

DC MOTOREN

a- Eigenschaften von DC Motoren

Mit den Entwicklungen bei elektronischen Komponenten haben DC Motoren neue Anwendungsbereiche gefunden. Regelungssysteme, die früher sehr teuer und im manchen Anwendungsfällen ungünstig waren, sind jetzt kompakt und günstig. Bei den DC Motoren ist kontrolliertes Anlauf, Moment- und Stromüberwachung mit Überlastschutz möglich. Es gibt viele günstige Sonderanwendungen für diese Motoren. Wegen oben genannten Eigenschaften werden die DC Motoren immer mehr bei unterschiedlichen Anwendungen benutzt.

b- Funktionsprinzip der DC Motoren

Bei DC Motoren ist eine Kommutatorwicklung im Rotor angeordnet, während der magnetische Fluss vom Stator erzeugt wird. Dies kann wiederum mittels einer Erregerwicklung oder durch Permanentmagnete geschehen. Wie bei der Synchronmaschine wird durch das Erregerfeld in der Ankerwicklung eine Wechsellspannung, die bei der Gleichstrommaschine jedoch durch den mechanischen Kommutator und die darauf schleifenden Bürsten in eine Gleichspannung umgeformt wird, induziert.

c- Arten von DC Motoren

Es gibt zwei verschiedene Wicklungen, nämlich Shunt- und Serial-Wicklung. Das Drehmoment-Drehzahl-Verhältnis ist für beide Wicklungen unterschiedlich.

d- Drehzahl Kontrolle für DC Motoren

Drehzahl von DC Motoren kann man mit Steuerung der DC Spannung ändern. DC Motoren mit Shunt Wicklungen ist ähnlich zu drei phasen AC Motoren zwischen maximalen Last und ohne Last. Drehzahl wird mit der Last reduziert. Mit kleineren Motoren wird dieser Differenz höher mit größeren Motoren kleiner. Der Drehzahlunterschied kann geregelt werden mit ($I \times R$) Veränderung. Wenn eine genaue Kontrolle gebraucht, soll ein Tachogenerator benutzt werden. Leistung des DC Motors;

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g : Eingangsleistung W
 P_c : Ausgangsleistung W
U : Ankerspannung V
I : Ankerstrom A
 η : Wirkungsgrad des Motors



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Elektromanyetik Frenler

Bu tip frenlerin iki sürtünme yüzeyi vardır. Fren torku, voltaj uygulanmadığı zaman yayların kuvveti ile oluşturulur. Fren elektromanyetik alanın oluşumu ile serbest kalır. Bobinin beslenmesi ile mıknatıslanan balata baskı pulu, elektromıknatısa doğru çekilir. Bu hareket yayları baskı altına alır ve rotor mili üzerine takılan çoklu kama üzerinde aksiyal yönde serbest hareket edebilen balata serbest kalır. Akım kesildiğinde yayların baskısıyla, balata baskı pulu fren balatasına doğru itilir ve bu hareket rotoru frenler.

Fren Çeşitleri

a) Soğutmasız tip frenler

Motor fanı çıkarılıp motor kapağı arkasına akup-
le edilerek kullanılan frenler; genellikle sıkça
açılıp kapanmayan ve kısa zaman aralıklarında
çalışan sistemlerde tercih edilir.

b) Soğutmalı tip frenler

Motor fanı çıkarılıp motor kapağı arkasına
akuple edilen ve motorun mili uzatılarak fren
ve motorun arkasına alınan fan sayesinde da-
imi bir hava sirkülasyonu sağlanarak kullanılan
frenlerdir. Genellikle uzun süreli çalışan ve
kapalı mekanlarda kullanılan sistemlerde tercih
edilirler.

c) Manuel kol sistemli frenler

Çalışma sistemi olarak her iki fren tipinde de
kullanılabilir (soğutmalı veya soğutmasız).
Özel durumlarda (elektrik kesilmesi; mekanik
problemler) üzerinde bulunan bir kol vasıtası
ile sistemi yay baskısından kurtararak serbest
kalmasını sağlayan frenlerdir. Genellikle ma-
nuel olarak sistemin açılması gereken yerlerde
(otomatik giriş kapıları, dış cepe boyama asan-
sörleri v.b.) tercih edilir.

Fren çalışma voltajları

Elektromanyetik frenler 230V AC veya 400V AC
beslemeli olarak sipariş edilebilir. Frenler DC
fren olmaları nedeni ile besleme ile fren bobini
arasında fren tipine bağlı olarak, yarım dalga,
tam dalga doğrultucular veya trafolar kullanılır.
Özel olarak belirtilmedikçe 230V beslemeli ve
yarım dalga doğrultuculu frenler kullanılmak-
tadır. Özel durumlar için YILMAZ Redüktöre
danışınız.

a) 230V AC ile beslenen frenler

Motor klemens kutusundan alınan 230V'luk AC
besleme fren tipine bağlı olarak yarım dalga
veya tam dalga doğrultucu ile fren bobininin
voltajına düşürülür. Fren bobin DC voltajı etiketi
üzerinde belirtilmiştir.

b) 400V AC ile beslenen DC frenler

Motor klemens kutusundan alınan 400V'luk AC
besleme, yarım dalga doğrultucu ile fren bobini-
nin voltajına düşürülür. Fren bobininin DC voltajı
etiket üzerinde belirtilmiştir.

c) 24V DC Frenler

Kullanılan fren momentinin büyüklüğüne göre
besleme transformatörü seçilir. Şebekeden
veya motorun klemens kutusundan alınan bes-
leme voltajı transformatörde 29 V'a çevrilen ge-
rilim tam dalga doğrultuculardan geçerek 24V
DC'ye çevrilir ve fren bobini beslenir.

Electromagnetic Brakes

This type of brakes has two friction surfaces. Brake torque is generated by springs when no voltage is applied. The brake is electromagnetically released. On exciting the electromagnet means of the current, the armature plate is pulled towards the electromagnet itself, thrust loading the pressure spring and enabling the friction disc which is axially movable on the key, to turn freely. When current fails, the pressured springs drive the armature plate towards the disc, thus braking the motor shaft.

Brake Types

a) Brakes without cooling

This type of brakes are assembled on the back cover of the electric motor. There is no fan on the backside. This brake type is mostly preferred in short working times and short working cycles.

b) Fan cooled brakes

This type of brakes are assembled on the back cover of electric motor by removing the electric motor fan. A fan is coupled to the backside of the brake by extending the rotor shaft of the electric motor. Fan cooled brakes are preferred in long working times and closed places without airflow.

c) Brakes with hand release

This brakes can be released by help of an arm. It can be applied to both of the above mentioned brakes and used in special cases (fail of electric current, mechanical problems etc.) These brakes are mostly preferred if operation (re-lasing) without a current is needed (automatic controlled doors, gates, building wall painting elevators etc.).

Working Voltages

Electromagnetic brakes can be ordered with 230V AC or 400V AC supply voltage. The coil of brakes needs DC voltage and therefore depending on brake type a half wave, a full wave rectifier or transformer should be used between supply and coil voltage. As standard the brakes will be delivered with 230V supply voltage and half wave rectifier, if there is no special request. For special cases please contact YILMAZ Redüktör.

a) Brakes with 230V supply voltage

230V AC supply voltage from the motor terminal box will be reduced to the coil voltage depending on the brake type with half-wave or full-wave rectifier. DC brake coil voltage is indicated on the label.

b) Brakes with 400V supply voltage

400V AC supply voltage from the motor terminal box will be reduced to the coil voltage with half-wave rectifier. DC brake coil voltage indicated on the label.

c) 24V DC Brakes

The transformer's size is selected according to value of brake torque. The current is taken from the electric motor terminal box or from the electric panel and is transformed to 29V DC current. This current is transferred to 24V DC current with full-wave rectifier and supplies brake coil.

Elektromagnetische Bremsen

Die Bremse hat zwei Reibflächen und arbeitet nach dem Ruhestromprinzip. Im stromlosen Zustand wird das Bremsmoment durch den Druck der Feder erzeugt, während die Bremse beim Betrieb elektromagnetisch losgelassen wird. Durch die Erregung der Elektromagneten wird die Ankerscheibe zu den Elektromagneten gezogen und die Feder zusammengedrückt. Dadurch kann sich die Bremscheibe, die axial beweglich auf dem Mitnehmer angeordnet ist, frei drehen. Wird der Strom unterbrochen, drücken die Feder die Ankerscheibe gegen die Bremscheibe und halten die Motorwelle an.

Bremsearten:

a) Bremsen ohne Kühlung

Diese Bremsen sind für Kurzlaufzeiten geeig-
net. Die Lüfterhaube und Lüfter des Motors ist
ausgebaut und die Bremse ist an dem Ende der
Motorwelle befestigt.

b) Bremsen mit Kühlung

Diese Bremsen sind für lange Laufzeiten und
kleine, abgedeckte Räume geeignet. Durch
die Verlängerung der Motorwelle wurde Lüfter
hinter dem Bremse und dem Motor verbunden.
Somit wurde eine konstante Lüftung ermöglicht.

c) Bremsen mit Hebelarm

Diese Bremsenart kann mit oder ohne Kühlung
verwendet werden. Diese Bremsen sind bei
der speziellen Fälle, wie keine Spannung an
der Leitung, mechanische Probleme usw., an-
wendbar. Die Bremse wird mit einem Hebelarm
manuell betätigt. Diese Bremsen werden am
meisten an den Stellen, wo die Lüftung ohne
Spannung erfolgen soll, benutzt (automatische
Türe, Wandaufzüge).

Betriebsspannungen

Elektromagnetische Bremsen können mit 230V
AC oder 400V AC Versorgungsspannung be-
stellt werden. Die Wicklungen der Bremsen
brauchen Gleichspannung und deswegen
abhängig von Bremsenart zwischen Versor-
gungsspannung und Wicklungsspannung soll
Halbwellen-, Vollweggleichrichter oder Trans-
formator verwendet werden. Als Standard die
Bremsen werden mit 230V Versorgungsspan-
nung und Halbwellengleichrichter geliefert.

a) Bremsen mit 230V Versorgungsspannung

230V AC Versorgungsspannung von Klemmen-
kasten wird auf die Wicklungsspannung abhän-
gig von der Bremsentyp mit Halbwellen-oder
Vollweggleichrichter reduziert. Wicklungsspan-
nung ist auf dem Etikett angegeben.

b) Bremsen mit 400V Versorgungsspannung

400V AC Versorgungsspannung von Klemmen-
kasten wird auf die Wicklungsspannung mit
Halbwellengleichrichter reduziert. Wicklungs-
spannung ist auf dem Etikett angegeben.

c) 24V DC Bremsen

Die Spannung wird von den Klemmkasten des
Motors oder Elektrikschrank entnommen. Diese
Spannung wird zuerst mittels Transformator zu
24 V reduziert. Danach wird diese Spannung
mit Hilfe von Gleichrichter zu Gleichstromspan-
nung umgewandelt. Die Größe des Transfor-
mators ist abhängig von der Größe des Brems-
moments.



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d) Şok ikazlı trafolar

Büyük güçteki ve momentteki frenlerin manyetik doyuma ulaşmaları uzun zaman alır. Şok ikazlı trafolar frenin yay baskısını yenmede gecikmesini engellemek için kullanılır ve zaman rölesi yardımı ile çok kısa bir süre normal besleme voltajının iki katı ile (48V DC) beslenip sistemin ani açılmasını sağlar. Bu sayede gecikmeli açılmada ortaya çıkacak sürtünmeyi engellemeye yarayan bir trafo şeklidir.

Fren bağlantı şekli

a) Gecikmeli frenleme

Genellikle sistemin yavaş ve kaydırılarak durması gereken yerlerde tercih edilen bağlantı şeklidir. Vinç yürütme motorlarındaki sarsıntıyı önlemek için gecikmeli bağlantı şekli kullanılır. Frenler fabrika çıkışında gecikmeli bağlantıya uygun ayarlanır.

b) Ani frenleme

Genellikle sistemin enerjisi kesildiği anda ani olarak durdurulması gereken sistemlerde kullanılan bağlantı şeklidir. Vinç kaldırma sistemleri, asansör motorlarında kullanılan bağlantı şeklidir.

d) Shock voltage supply transformer

Brakes which consist of high power and torques take long time to get in electromagnetic field. Shock voltage supply transformers with time relay are aiming to overcome spring pressure delaying for brakes. Also this transformers provide to open system suddenly by feeding double(48V DC) voltage in a short time and preventing to frictional loses occurring in delayed opening.

Connection Types

a) Delayed Braking

Generally this type of connection uses in slow and sliding brake intended systems. Delayed connection type using to prevent shock loadings in crane driving systems. Brakes are setting up to delayed connection if any other types are not specified by customer

b) Sudden Braking

This type of connections are mostly used in systems when short braking times are needed. The braking torque will be produced as soon as the current fails. These brakes are mostly used in hoisting of lifting units and elevators.

d) Trafos mit Schock-Spannung

Diese Transformatoren werden bei großen Bremsen mit hohen Momenten verwendet. Da die große Bremsen eine lange Zeit braucht, um die erforderliche magnetische Feld zu erzeugen, wird an der Bremse kurz 48V Gleichstromspannung angelegt, um die Zeit zur Bildung von magnetischem Feld zu kürzen. Dies ermöglicht kürzere Reibungszeiten beim Start.

Schaltungsarten:

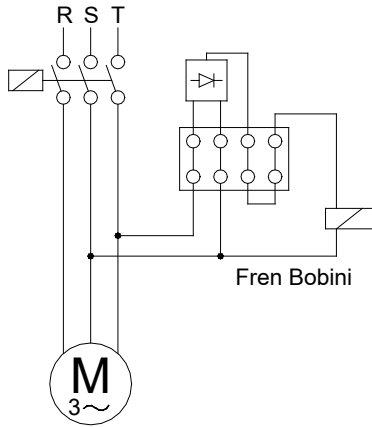
a) Verspätetes Bremsen

Diese Schaltung wird benutzt, wenn ein langsames und gleitendes Bremsen erforderlich ist. Am meisten wird es bei Fahrtriebmotoren von Aufzügen verwendet. Wenn keine Angabe bei der Bestellung gegeben wird, werden die Bremsen mit verspäteter Schaltung geliefert.

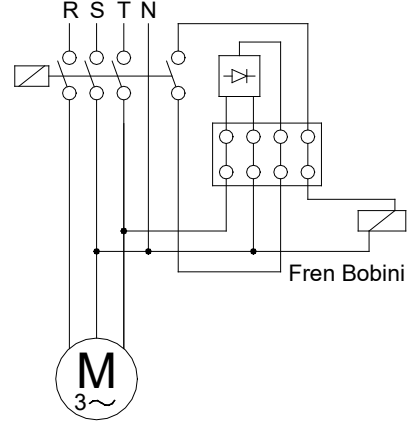
b) Schnelles Bremsen:

Allgemein verwendet man diese Schaltung bei Bedarf an plötzlichen Bremsen in dem Augenblick, in dem das System keine Energie mehr erhält. Diese Schaltungsart wird meist bei Kräne und Motoren von Aufzüge verwendet.

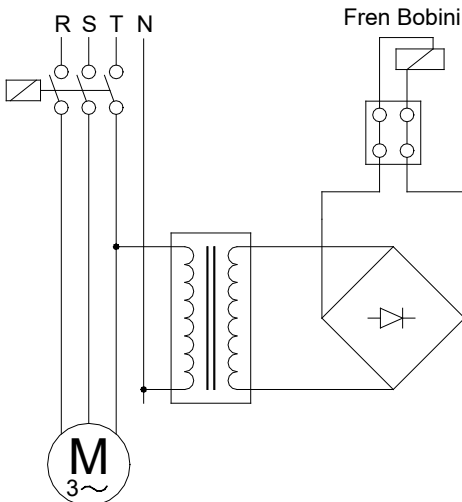
Geçikmeli Frenleme / Delayed Running Brake / Verspätete Bremsung
(230 V)



Ani Frenleme / Sudden Brake / Plötzliche Bremsung
(230 V)



Geçikmeli Frenleme / Delayed Running Brake / Verspätete Bremsung
(24 V)



Ani Frenleme / Sudden Brake / Plötzliche Bremsung
(24 V)



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Fren Seçimi:

Doğru bir fren seçimi için aşağıdaki parametreler bilinmelidir.

- I_{tot} [kg.m²] : Motor miline indirgenmiş toplam atalet momenti
- n_0 [d/dak] : Maksimum motor devir sayısı
- t_f [s] : İstenilen en uzun frenleme zamanı
- c_t : Anahtarın devreye girme zamanı katsayısı (ortalama 0,995).
- M_L [Nm] : Sistemin statik tork ihtiyacı.
- C_s : Emniyet katsayısı ($C_s \geq 2$ olmalı)

Gerekli fren momenti aşağıdaki şekilde hesaplanır:

a) M_L Statik yük torku, motor dönüş yönünde (motorun dönüşüne yardımcı olarak, yükün indirilmesi veya hızlandırıcı sabit yük momenti hali):

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b) M_L Statik yük torku, motor aksi dönüş yönünde (motorun dönüşüne engel olarak, yükün yukarı kaldırılması veya frenleyici sabit yük/direnç momenti hali):

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} - M_L$$

Yukarıda bulunan sonuç C_s katsayısı ile çarpılarak ($C_s \geq 2$), fren momenti seçilir;

$$M_f = M_{fc} \times C_s$$

Yaklaşım Yolu ile Fren Seçimi:

Eğer yalnızca motorun gücü ve en yüksek devri biliniyor ise :

W [Watt]: Motorun nominal gücü

$$M_f = \frac{W}{\frac{2\pi \times n_0}{60}} \times C_s \quad (C_s \geq 2)$$

Brake Selection:

To select a brake correctly the following data are necessary;

- I_{tot} [kg . m²] : The total inertia of rotating parts reduced at the motor shaft
- n_0 [rpm] : Maximum motor speed.
- t_f [s] : The maximum admitted time of the braking.
- c_t : Coefficient of switch on time (average 0,995).
- M_L [Nm] : Required static torque of system.
- C_s : Safety coefficient ($C_s \geq 2$)

The necessary braking torque calculates below;

a) The static load torque M_L , same direction of motor rotation (Descent of a load or steady resisting torque which favours the rotation of the motor)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b) The static load torque M_L , opposes the rotation of the motor (Lifting of a load or steady resisting torque which opposes the rotation of the motor)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} - M_L$$

The necessary braking torque will result from the following equation using C_s ($C_s \geq 2$);

$$M_f = M_{fc} \times C_s$$

Approximated Brake Selection

Its only the motor power and its maximum speed are known:

W [Watt]: Motor Nominal Power

$$M_f = \frac{W}{\frac{2\pi \times n_0}{60}} \times C_s \quad (C_s \geq 2)$$

Bremswahl:

Um die richtige Bremse auszuwählen, braucht man unten aufgelistete Variablen;

- I_{tot} [kg . m²] : Die Gesamtträgheit der rotierenden Teile (siehe Anwendungsbeispiele)
- n_0 [U/min] : Die höchste Drehzahl des Motors
- t_f [s] : Die längste zulässige Bremszeit
- c_t : Reduktionskoeffizient der Tätigkeitszeit (gemittelt 0,995).
- M_L [Nm] : Vom system benötigtes, statisches Drehmoment.
- C_s : Sicherheitskoeffizient ($C_s \geq 2$)

Die benötigte Bremskraft wird wie folgt berechnet:

a) konstantes Belastungsmoment M_L , das die Motordrehung fördert (konstante Erhöhung der Motorgeschwindigkeit oder Herunterlassen der Last)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b) konstantes Belastungsmoment M_L , das sich entgegen der Motordrehung widersetzt (konstante Verminderung der Motorgeschwindigkeit oder Aufheben der Last)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} - M_L$$

Wenn die Bremskraft mit dem Sicherheitskoeffizient C_s ($C_s \geq 2$) multipliziert wird, erhält man die erforderliche Bremskraft;

$$M_f = M_{fc} \times C_s$$

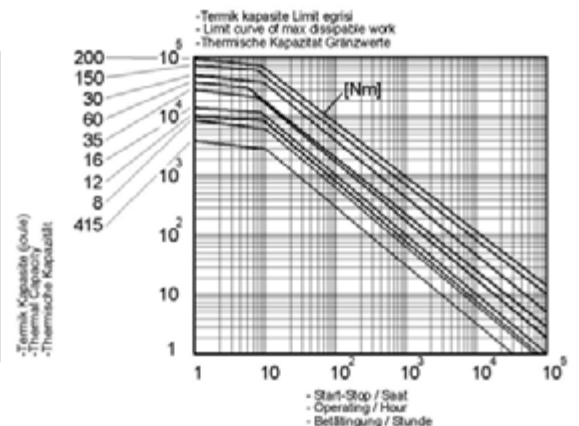
Abschätzung zur Bremswahl

Wenn man nur die Motorleistung und die höchste Drehzahl kennt, kann die Bremskraft mit der folgenden Formel annähernd berechnet werden:
W [Watt] : Nennleistung des Motors

$$M_f = \frac{W}{\frac{2\pi \times n_0}{60}} \times C_s \quad (C_s \geq 2)$$

Standart Frenler / Standard Brakes / Standart Bremsen

Fren statik momenti [Nm] Brake Static Torque [Nm] Statische Bremskraft [Nm]	4,5	8	12	16	35	60	80	150	200
Fren Dinamik Momenti [Nm] Brake Dynamic Torque [Nm] Dynamische Bremskraft [Nm]	3,6	6,4	9,6	12,8	28	48	64	120	160
Maksimum Motor Hızı [d/dak] Maximum Motor Speed [rpm] Maximale Motordrehzahl [U/min]	3000	3000	3000	3000	3000	3000	3000	1500	1500
Giriş Gücü [W] Input Power [W] Antriebsleistung [W]	15	20	25	30	45	50	55	60	65





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Frenin Termik Kapasitesi

Yukarıdaki seçime ek olarak frenin termik kapasitesinin kontrol edilmesi gerekir. L (joule) olarak gerekli soğutma işi aşağıdaki formüller ile hesaplanır ve "Termik kapasite limit eğrisi" kullanılarak eğrinin altında kalıp kalmadığı kontrol edilir.

a) M_L Statik yük torku motor dönüş yönünde (motorun dönüşüne yardımcı olarak, yükün indirilmesi hali)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L} \right)$$

b) M_L Statik yük torku motor aksi dönüş yönünde (motorun dönüşüne engel olarak, yükün kaldırılması hali):

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) M_L Statik yük torku sabit, motor yönünde veya aksi yönde (kaldırma ve indirme harici hızlandırıcı veya frenleyici sabit bir yük momenti hali).

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Fren Hava Boşluğunun Ayarı:

Frenden sürekli aynı performansın alınabilmesi için, fren balatasının aşınmasına bağlı olarak, fren hava boşluğu belirli zaman aralıklarında yeniden ayarlanmalıdır. Fren hava boşluğu ayar zaman aralığı ve ayarın yapılması için firmamıza danışınız.

Fren Seçim Örneği:

İstenilen en uzun frenleme zamanı: 0,5 sn.
Motor devri: 1400 d/dak
Motora indirgenmiş toplam atalet momenti: 0,08 kgm²

Gerekli çalışma momenti: 50 Nm

Yük Durumu: Yük motor dönüş yönü ile aynı (Vinçten yük indirilmesi: Saatte dur-kalk sayısı:30)

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

Standart frenler tablosundan 150 Nm lik fren seçilebilir.

Gerekli termik kapasite:

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50} \right)$$

=1302,0 < 18000 Joule (150 Nm eğrisinden)
150 Nm lik fren uygun görülüyor.

The Thermal Capacity of Brake

The thermal capacity of the brake must also be checked after the above mentioned calculations. The heat dissipation energy L (joule) can be calculated from the following equation and must be checked if the result is under the limit curve shown on "Limit curve of may dissipable work".

a) The static load torque M_L , favours the rotation of the motor (Descent of a load which favours the rotation of the motor)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L} \right)$$

b) The static load torque M_L , opposes the rotation of the motor (Lifting of a load which opposes the rotation of the motor)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) The static load torque M_L , is constant and opposes or favours the rotation of the motor (except lifting of a load)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Adjustment of the air-gap:

In order to obtain the same performance from the brake during its lifetime, the air-gap of the brake must be re-adjusted after a limited time of operation. For the air-gap and the time interval of the adjustment please contact us.

Selection Example:

The maximum admitted time for braking 0,5 s
Motor speed: 1400 rpm
Total inertia reduced at motor shaft: 0,08 kgm²

Required operating torque: 50 Nm

Nature of load: Load direction is same as motor direction (Unloading process: Start-stop time per hour :30)

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

From the brake selection table a standard brake of 150 Nm is selected.

Necessary thermal capacity

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50} \right)$$

=1302,0 < 18000 Joule (from 150 Nm curve)
The selected brake with 150 Nm is suitable.

Thermische Kapazität der Bremsen

Nach den oben genannten Berechnungen muss die Thermische Kapazität überprüft werden. Die Wärme, d.h. die gebrauchte Energie L, werden mit den folgenden Formeln berechnet. Die gerechnete Kapazitätswerte sollen unter dem Grenzkurve "Thermische Kapazität Grenzwerte" der gewählten Bremse liegen.

a) Konstantes Belastungsmoment M_L , das die Motordrehung fördert (Herunterlassen der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L} \right)$$

b) Konstantes Belastungsmoment M_L , das sich entgegen der Motordrehung widersetzt (Aufheben der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) Konstantes Belastungsmoment M_L , das sich gegen der Motorbewegung widersetzt oder die Motorrotation fördert (Konstante Verminderung oder Erhöhung der Motorgeschwindigkeit, kein Herunterlassen oder Aufheben der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Einstellung des Luftspaltes:

Um eine immer konstant bleibende Bremsfähigkeit zu erhalten, muss das Luftspalt nach einer bestimmten Arbeitszeit neu eingestellt werden. Für die Bestimmung des Luftspaltes und die Einstellzeiten bitten wir Sie um Rückfrage.

Beispiel für eine Auswahl:

Die höchste zulässige Bremszeit: 0,5 s
Motordrehzahl: 1400 U/min
Gesamtträgheit der rotierenden Teile: 0,08 kgm²

Das auf das System wirkende Drehmoment: 50 Nm

Belastungsart: Drehmoment, das die Motorrotation fördert (Herunterlassen der Last)
Betätigungen pro Stunde:30

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

Eine Bremse von 150 Nm kann man auswählen.

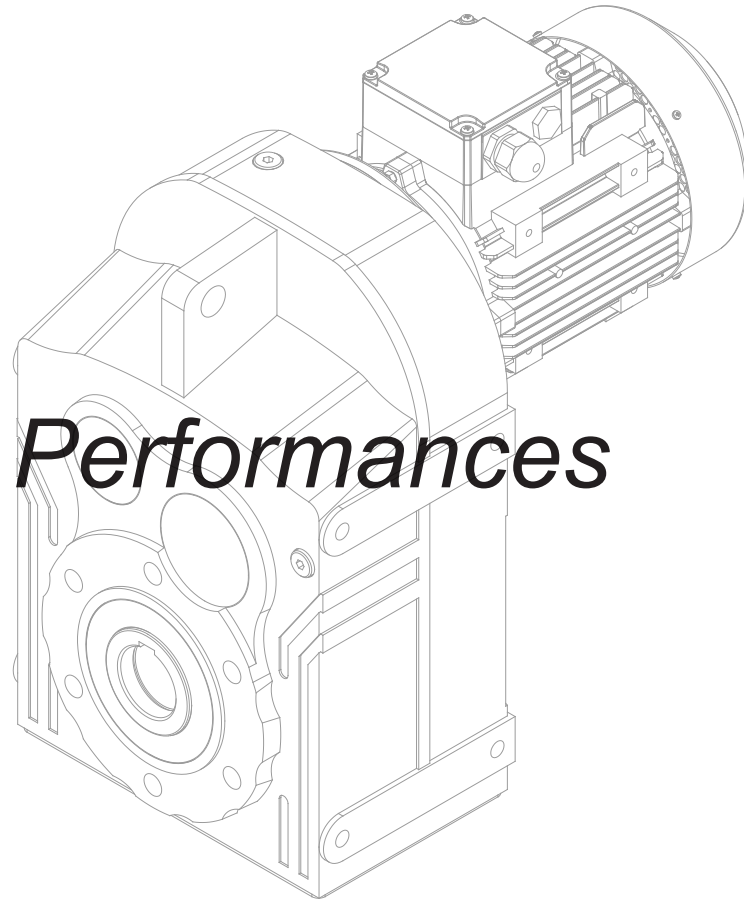
Die thermische Kapazität:

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50} \right)$$

=1302,0 < 18000 Joule (von 150 Nm Kurve) Die ausgewählte 150 Nm Bremse ist ausreichend.



Güç ve Devir Tabloları



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Güç	Çıkış Devri	Çıkış Momenti	Çevrim Oranı	Güv. Rad. Yük Çıkış	Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,12 0,16	0,16	5541	8471,90	4977	0,8	DR676-G63/4a	0,41	283	126	IE1
	0,19	4711	7216,80	24512	0,9					
	0,22	4123	6304,09	31273	1,0					
	0,23	3870	5912,93	33651	1,1					
	0,27	3293	5027,18	38311	1,3					
	0,31	2866	4366,47	41267	1,5					
	0,36	2512	3820,66	43388	1,7					
	0,42	2152	3215,89	45372	2,0					
	0,48	1919	2865,49	46557	2,2					
	0,56	1631	2440,98	47918	2,6					
0,64	1427	2132,27	48824	3,0						
	0,68	1340	1999,96	49198	3,2					
	0,24	3780	5762,85	-	0,8	DR576-G63/4a	0,41	165	120	IE1
	0,28	3216	4899,59	18917	0,9					
	0,32	2799	4255,64	24674	1,1					
0,40	2297	3432,03	29798	1,3	DR575-G63/4a	0,41	162	120	IE1	
	0,47	1943	2900,65	32737						1,5
	0,57	1593	2379,02	35176						1,9
	0,66	1394	2078,15	36430						2,2
	0,70	1308	1949,20	36939						2,3
	0,82	1113	1657,21	38040						2,7
	0,95	968	1439,41	38802						3,1
	0,48	1874	2851,73	11587						0,8
0,57	1568	2381,67	16679	1,0						
0,70	1301	1937,71	19839	1,2	DR475-G63/4a	0,41	119	114	IE1	
	0,84	1087	1618,43	21861						1,4
	0,89	1028	1529,03	22342						1,5
	0,91	1002	1492,69	22590						1,5
	1,2	767	1140,69	24345						2,0
	1,3	717	1065,48	24683						2,2
	1,5	607	900,55	25389						2,6
	1,8	508	752,10	25976						3,1
	2,1	439	648,55	26362						3,5
	0,83	1074	1639,97	6508						0,8
0,90		972	1484,14	9186	0,8					
1,1		832	1272,49	11780	1,0					
1,1	793	1188,10	12374	1,0	DR375-G63/4a	0,41	78	108	IE1	
	1,3	706	1053,09	13565						1,2
	1,5	624	930,99	14557						1,3
	1,7	526	783,07	15569						1,6
	2,1	447	665,75	16295						1,8
	2,4	384	570,43	16832						2,1
	2,6	347	516,22	17118						2,4
	3,1	297	442,60	17490						2,8
	3,6	255	378,91	17787						3,2
	1,5	627	936,69	8724						1,0
1,6		558	830,25	10016	1,1					
1,9		494	733,99	11030	1,2					
2,2		416	617,37	12085	1,4					
2,6		354	524,87	12804	1,7					



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienzklasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
0,12 0,16	3,0	303	449,72	13332	2,0	DR285-G63/4a	0,41	35	104	IE1
	3,4	275	406,99	13611	2,2					
	3,9	235	348,95	13972	2,6					
	4,6	202	298,73	14257	3,0					
	1,7	552	823,76	10203	0,8	DR275-G63/4a	0,41	30	100	IE1
	1,9	483	720,79	11435	0,9					
	2,3	400	596,04	12678	1,1					
	2,7	334	497,10	13501	1,3					
	3,3	280	416,71	14094	1,6					
	3,8	240	356,74	14491	1,9					
	4,1	223	331,04	14652	2,0					
	5,4	169	251,08	15123	2,7					
	6,4	145	214,95	15315	3,1					
	6,6	140	207,93	15352	3,2					
	7,5	123	181,94	15485	3,7					
9,1	102	150,45	15925	4,0						
9,9	107	137,94	15782	4,0	DR273-G63/4a	0,41	25	98	IE1	
11	93	120,49	16179	4,0						
9,6	110	142,89	6977	1,8	DR173-G63/4a	0,41	20	96	IE1	
11	93	120,64	7187	2,1						
13	80	103,34	7338	2,5						
15	71	91,25	7438	2,8						
16	66	85,23	7486	3,0						
19	56	72,04	7588	3,6						
23	47	60,16	7794	4,0						
7,6	139	180,05	4731	1,1						DR073-G63/4a
9,3	113	146,60	4540	1,3						
10	103	133,46	4448	1,5						
11	93	120,11	4344	1,6						
14	78	100,43	4163	1,9						
16	66	85,12	3994	2,3						
19	57	72,87	3836	2,7						
20	52	67,62	3760	2,9						
22	49	62,94	3688	3,1						
26	41	52,62	3511	3,7						
31	35	44,60	3350	4,0						
36	30	38,18	3204	4,0						
39	28	35,43	3134	4,0						
37	29	36,86	3171	4,0	DR072-G63/4a	0,41	14	94	IE1	
44	24	30,71	3005	4,0						
49	22	27,64	2912	4,0						
55	20	25,01	2826	4,0						
65	17	21,12	2684	4,0						
75	14	18,09	2559	4,0						
85	13	15,97	2463	4,0						
91	12	14,92	2411	4,0						
108	10	12,61	2287	4,0						
130	8,3	10,53	2161	4,0						
156	6,9	8,76	2034	4,0						
167	6,4	8,18	1990	4,0						
197	5,4	6,91	1886	4,0						
236	4,5	5,77	1781	4,0						
0,18 0,25	0,09	14882	9820,98	65042	0,9	DR876-3E71M/6C	0,55	482	138	IE3
	0,11	13071	8612,25	76314	1,0	DR876-2E71M/6B	0,60	481		IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienz-kategorie
P _g [kW]	n _z [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
0,18 0,25	0,12	11573	7613,73	84108	1,1	DR876-3E71M/6C	0,55	482	138	IE3
	0,14	10187	6697,26	90324	1,3	DR876-2E71M/6B	0,60	481		IE2
	0,16	9041	5940,18	94908	1,4					
	0,18	8078	5304,23	98429	1,6					
	0,20	7256	4762,49	101216	1,8					
	0,23	6116	4005,78	104787	2,1					
	0,27	5209	3405,63	107242	2,5					
	0,31	4673	2990,66	108721	2,8	DR875-3E71M/6C	0,55	507	138	IE3
	0,35	4196	2683,53	109985	3,1	DR875-2E71M/6B	0,60	506		IE2
	0,39	3678	2356,74	111300	3,5					
	0,14	9379	6492,84	43918	0,9	DR776-3E71M/6C	0,55	317	132	IE3
	0,16	8969	5875,88	47757	0,9	DR776-2E71M/6B	0,60	316		IE2
	0,18	7718	5058,99	57458	1,0					
	0,21	6625	4334,63	64282	1,2					
	0,25	5759	3691,20	68895	1,4	DR775-3E71M/6C	0,55	307	132	IE3
	0,28	5156	3302,14	71781	1,6	DR775-2E71M/6B	0,60	306		IE2
	0,33	4450	2855,58	74860	1,8					
	0,37	3939	2523,53	76914	2,0					
	0,41	3525	2257,90	78476	2,3					
	0,47	3101	1982,78	79874	2,6					
	0,56	2596	1656,07	81594	3,1					
	0,62	2360	1507,38	82358	3,4					
	0,70	2076	1323,71	83245	3,9					
	0,27	5311	5027,18	13734	0,8	DR676-G63/4b	0,60	283	126	IE1
	0,31	4622	4366,47	25702	0,9					
	0,35	4051	3820,66	31971	1,1					
	0,42	3470	3215,89	36975	1,2	DR675-G63/4b	0,60	225	126	IE1
	0,47	3094	2865,49	39716	1,4					
	0,55	2631	2440,98	42685	1,6					
	0,63	2302	2132,27	44625	1,9					
	0,67	2161	1999,96	45309	2,0					
	0,79	1839	1700,37	46946	2,3					
	0,91	1600	1476,89	48062	2,7					
	1,0	1402	1292,28	48933	3,1					
	1,3	1162	1068,62	49932	3,7					
	1,5	971	891,23	52171	4,0					
	1,8	816	747,10	54578	4,0					
	0,39	3705	3432,03	6392	0,8	DR575-G63/4b	0,60	164	120	IE1
	0,46	3134	2900,65	20225	1,0					
	0,56	2569	2379,02	27195	1,2					
	0,64	2248	2078,15	30229	1,3					
	0,69	2110	1949,20	31392	1,4					
	0,81	1795	1657,21	33794	1,7					
	0,93	1562	1439,41	35377	1,9					
	1,1	1369	1259,48	36555	2,2					
	1,3	1157	720,91	37796	2,6	DR574-3E71M/6C	0,55	161	118	IE3
	1,5	980	609,29	38690	3,1	DR574-2E71M/6B	0,60	160		IE2
	1,9	803	499,72	39581	3,7					
	0,69	2098	1937,71	4420	0,7	DR475-G63/4b	0,60	119	114	IE1
	0,83	1754	1618,43	13875	0,9					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,18 0,25	0,88	1658	1529,03	15413	0,9	DR475-G63/4b	0,60	119	114	IE1
	0,90	1616	1492,69	16026	1,0					
	1,2	1238	1140,69	20473	1,3					
	1,3	1157	1065,48	21241	1,3					
	1,6	939	584,15	23051	1,7	DR474-3E71M/6C	0,55	116	114	IE3
	1,8	840	522,66	23833	1,8	DR474-2E71M/6B	0,60	115		IE2
	2,0	738	458,98	24543	2,1					
	2,3	652	584,15	25109	2,4	DR474-G63/4b	0,60	122	114	IE1
	2,6	583	522,66	25535	2,7					
	2,9	513	458,98	25950	3,0					
	1,3	1138	1053,09	3774	0,7	DR375-G63/4b	0,60	78	108	IE1
	1,4	1007	930,99	8386	0,8					
1,7	848	783,07	11523	1,0						
2,0	722	665,75	13362	1,1						
2,3	619	570,43	14600	1,3						
2,6	560	516,22	15225	1,5						
3,0	480	442,60	16023	1,7						
3,5	411	378,91	16603	2,0						
3,8	382	351,62	16843	2,1						
4,0	362	333,87	17000	2,3						
4,3	337	309,82	17199	2,4						
5,4	295	171,89	17481	2,8	DR373-3E71M/6C	0,55	72	106	IE3	
6,2	260	151,15	17734	3,2	DR373-2E71M/6B	0,60	71		IE2	
7,6	209	121,67	18075	3,9						
1,8	796	733,99	3280	0,8	DR285-G63/4b	0,60	38	104	IE1	
2,2	670	617,37	7760	0,9						
2,6	570	524,87	9801	1,1						
3,0	489	449,72	11096	1,2						
3,3	443	406,99	11733	1,4						
3,8	379	348,95	12517	1,6						
4,5	325	298,73	13117	1,8						
4,8	302	277,21	13335	2,0						
5,1	287	263,22	13476	2,1						
5,5	266	244,26	13689	2,3						
6,3	232	212,12	14001	2,6						
6,9	233	135,52	13986	2,6	DR283-3E71M/6C	0,55	35	102	IE3	
7,8	205	119,16	14207	2,9	DR283-2E71M/6B	0,60	34		IE2	
8,3	193	112,15	14307	3,1						
9,7	165	95,92	14534	3,6						
2,7	539	497,10	10461	0,8	DR275-G63/4b	0,60	30	100	IE1	
3,2	452	416,71	11931	1,0						
3,8	388	356,74	12837	1,2						
4,0	360	331,04	13188	1,2						
5,3	273	251,08	14169	1,6						
6,7	237	137,94	14523	1,9	DR273-3E71M/6C	0,55	27	98	IE3	
7,7	207	120,49	14777	2,2	DR273-2E71M/6B	0,60	26		IE2	
8,2	195	113,02	14891	2,3						
9,7	165	96,09	15140	2,7						
9,7	164	137,94	15165	2,7	DR273-G63/4b	0,60	22	98	IE1	
11	143	120,49	15329	3,1						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,18 0,25	11	135	113,02	15380	3,3	DR273-G63/4b	0,60	22	98	IE1
	13	114	96,09	15547	3,9					
	16	100	83,46	15996	4,0					
	18	87	73,03	16343	4,0					
	6,5	245	142,89	4391	0,8	DR173-3E71M/6C	0,55	23	96	IE3
	7,7	207	120,64	5351	1,0	DR173-2E71M/6B	0,60	22		IE2
	9,0	178	103,34	5941	1,1					
	9,4	170	142,89	6085	1,2	DR173-G63/4b	0,60	20	96	IE1
	11	143	120,64	6512	1,4					
	13	123	103,34	6809	1,6					
	15	109	91,25	6997	1,8					
	16	102	85,23	7087	2,0					
	19	86	72,04	7263	2,3					
	22	72	60,16	7426	2,8					
	26	62	51,88	7526	3,2					
28	57	47,81	7571	3,5						
30	53	44,66	7604	3,7						
35	45	37,75	7860	4,0						
43	38	31,52	8138	4,0						
7,4	213	180,05	4208	0,7	DR073-G63/4b	0,60	15	94	IE1	
9,1	174	146,60	4126	0,9						
10	159	133,46	4076	0,9						
11	143	120,11	4013	1,1						
13	119	100,43	3893	1,3						
16	101	85,12	3771	1,5						
18	87	72,87	3649	1,7						
20	81	67,62	3589	1,9						
21	75	62,94	3530	2,0						
25	63	52,62	3383	2,4						
30	53	44,60	3245	2,8						
35	46	38,18	3116	3,3						
38	42	35,43	3054	3,5						
36	45	36,86	3087	3,4	DR072-G63/4b	0,60	14	94	IE1	
44	37	30,71	2938	4,0						
48	34	27,64	2853	4,0						
54	30	25,01	2773	4,0						
63	26	21,12	2642	4,0						
74	22	18,09	2525	4,0						
84	19	15,97	2434	4,0						
90	18	14,92	2385	4,0						
106	15	12,61	2267	4,0						
127	13	10,53	2145	4,0						
153	11	8,76	2020	4,0						
164	9,9	8,18	1978	4,0						
194	8,4	6,91	1877	4,0						
232	7,0	5,77	1775	4,0						
268	6,0	10,53	1700	4,0	DR072-G63/2a	0,50	16	94	IE1	
322	5,0	8,76	1600	4,0						
345	4,6	8,18	1565	4,0						
408	3,9	6,91	1484	4,0						
488	3,2	5,77	1400	4,0						
0,25 0,34	0,15	13678	9820,98	72993	1,0	DR876-3E71M/4C	0,67	517	138	IE3
	0,17	12013	8612,25	81952	1,1	DR876-2E71M/4B	0,71	516		IE2
	0,19	10636	7613,73	88397	1,2					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,25 0,34	0,21	9363	6697,26	93668	1,4	DR876-3E71M/4C	0,67	517	138	IE3
	0,24	8310	5940,18	97608	1,6	DR876-2E71M/4B	0,71	516		IE2
	0,27	7424	5304,23	100662	1,8					
	0,30	6669	4762,49	102950	1,9					
	0,36	5621	4005,78	106124	2,3					
	0,42	4788	3405,63	108461	2,7					
0,48 0,53 0,61	0,48	4295	2990,66	109770	3,0	DR875-3E71M/4C	0,67	507	138	IE3
	0,53	3856	2683,53	110891	3,4	DR875-2E71M/4B	0,71	506		IE2
	0,61	3381	2356,74	112120	3,8					
0,24 0,28 0,33 0,37	0,24	8243	5875,88	53790	1,0	DR776-3E71M/4C	0,67	317	132	IE3
	0,28	7094	5058,99	61512	1,1	DR776-2E71M/4B	0,71	316		IE2
	0,33	6089	4334,63	67209	1,3					
	0,37	5516	3922,75	69974	1,5					
0,39 0,43 0,50 0,57 0,64 0,72 0,87 0,95	0,39	5293	3691,20	71146	1,5	DR775-3E71M/4C	0,67	307	132	IE3
	0,43	4738	3302,14	73639	1,7	DR775-2E71M/4B	0,71	306		IE2
	0,50	4090	2855,58	76208	2,0					
	0,57	3620	2523,53	78031	2,2					
	0,64	3240	2257,90	79424	2,5					
	0,72	2850	1982,78	80780	2,8					
	0,87	2386	1656,07	82304	3,4					
	0,95	2169	1507,38	82984	3,7					
0,38	0,38	5365	3820,66	12259	0,8	DR676-3E71M/4C	0,67	286	126	IE3
						DR676-2E71M/4B	0,71	285		IE2
0,45 0,50 0,59 0,67 0,72 0,84 0,97 1,1	0,45	4596	3215,89	26001	0,9	DR675-3E71M/4C	0,67	228	126	IE3
	0,50	4098	2865,49	31548	1,0	DR675-2E71M/4B	0,71	227		IE2
	0,59	3484	2440,98	36869	1,2					
	0,67	3049	2132,27	40028	1,4					
	0,72	2862	1999,96	41201	1,5					
	0,84	2435	1700,37	43830	1,8					
	0,97	2119	1476,89	45468	2,0					
	1,1	1857	1292,28	46795	2,3					
	1,4	1539	675,51	48262	2,8	DR674-3E71M/6D	0,77	222	124	IE3
	1,5	1372	601,90	48998	3,1	DR674-2E71M/6C	0,78	221		IE2
1,8	1167	512,73	49860	3,7						
0,60 0,69 0,74 0,87 1,0 1,1	0,60	3402	2379,02	15470	0,9	DR575-3E71M/4C	0,67	166	120	IE3
	0,69	2977	2078,15	22379	1,0	DR575-2E71M/4B	0,71	165		IE2
	0,74	2794	1949,20	24736	1,1					
	0,87	2377	1657,21	29070	1,3					
	1,0	2068	1439,41	31731	1,5					
1,1	1813	1259,48	33669	1,7						
1,3 1,5 1,9	1,3	1641	720,91	34856	1,8	DR574-3E71M/6D	0,77	162	118	IE3
	1,5	1389	609,29	36458	2,2	DR574-2E71M/6C	0,78	161		IE2
	1,9	1139	499,72	37896	2,6					
2,0 2,4	2,0	1064	720,91	38264	2,8	DR574-3E71M/4C	0,67	161	118	IE3
	2,4	900	609,29	39116	3,3	DR574-2E71M/4B	0,71	160		IE2
1,3 1,3	1,3	1639	1140,69	15667	0,9	DR475-3E71M/4C	0,67	123	114	IE3
	1,3	1532	1065,48	17184	1,0	DR475-2E71M/4B	0,71	122		IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,25 0,34	1,6	1332	584,15	19550	1,2	DR474-3E71M/6D	0,77	118	112	IE3
	1,8	1191	522,66	20924	1,3	DR474-2E71M/6C	0,78	117		IE2
	2,0	1047	458,98	22211	1,5					
	2,5	863	584,15	23664	1,8	DR474-3E71M/4C	0,67	118	112	IE3
	2,7	772	522,66	24276	2,0	DR474-2E71M/4B	0,71	117		IE2
	3,1	679	458,98	24906	2,3					
	3,8	582	242,68	25504	2,7	DR473-3E71M/6D	0,77	112	110	IE3
	4,3	515	215,03	25901	3,0	DR473-2E71M/6C	0,78	111		IE2
	5,3	420	174,97	26439	3,7					
	2,2	956	665,75	9491	0,9	DR375-3E71M/4C	0,67	82	108	IE3
	2,5	819	570,43	12007	1,0	DR375-2E71M/4B	0,71	81		IE2
	2,8	742	516,22	13095	1,1					
	3,2	635	442,60	14416	1,3					
	3,8	545	378,91	15380	1,5					
	4,1	506	351,62	15758	1,6					
	4,3	480	333,87	16001	1,7					
	4,6	446	309,82	16280	1,8					
	5,4	411	171,89	16604	2,0	DR373-3E71M/6D	0,77	72	106	IE3
	6,2	362	151,15	17004	2,3	DR373-2E71M/6C	0,78	71		IE2
	7,4	301	121,67	17463	2,7					
	8,3	266	171,89	17696	3,1	DR373-3E71M/4C	0,67	71	106	IE3
	9,5	234	151,15	17915	3,5	DR373-2E71M/4B	0,71	70		IE2
	2,7	755	524,87	5217	0,8	DR285-3E71M/4C	0,67	42	104	IE3
	3,2	648	449,72	8258	0,9	DR285-3E71M/4B	0,71	41		IE2
	3,5	586	406,99	9531	1,0					
	4,1	502	348,95	10907	1,2					
	4,8	431	298,73	11868	1,4					
	5,2	400	277,21	12270	1,5					
	5,5	379	263,22	12513	1,6					
	5,9	352	244,26	12816	1,7					
	6,8	307	212,12	13274	2,0					
	6,9	325	135,52	13110	1,8	DR283-3E71M/6D	0,77	37	102	IE3
	7,8	286	119,16	13501	2,1	DR283-2E71M/6C	0,78	36		IE2
	8,3	269	112,15	13660	2,2					
	9,7	230	95,92	14013	2,6					
	11	210	135,52	14171	2,9	DR283-3E71M/4C	0,67	36	102	IE3
	12	185	119,16	14380	3,2	DR283-2E71M/4B	0,71	35		IE2
	13	174	112,15	14477	3,4					
	4,0	513	356,74	10925	0,9	DR275-3E71M/4C	0,67	33	100	IE3
	4,3	477	331,04	11541	0,9	DR275-2E71M/4B	0,71	32		IE2
	5,7	361	251,08	13172	1,2					
	6,7	330	137,94	13548	1,4	DR273-3E71M/6D	0,77	27	98	IE3
	7,7	289	120,49	14006	1,6	DR273-2E71M/6C	0,78	26		IE2
	8,2	271	113,02	14191	1,7					
	9,7	230	96,09	14587	2,0					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
0,25 0,34	10	214	137,94	14725	2,1	DR273-3E71M/4C	0,67	26	98	IE3
	11	187	120,49	14963	2,4	DR273-2E71M/4B	0,71	25		IE2
	12	175	113,02	15061	2,6					
	14	149	96,09	15284	3,0					
	17	130	83,46	15434	3,5					
	19	114	73,03	15554	4,0					
	23	94	60,39	16165	4,0					
	10	221	142,89	5043	0,9	DR173-3E71M/4C	0,67	23	96	IE3
	12	187	120,64	5768	1,1	DR173-2E71M/4B	0,71	22		IE2
	14	160	103,34	6246	1,2					
	16	142	91,25	6541	1,4					
	17	132	85,23	6668	1,5					
	20	112	72,04	6948	1,8					
	24	94	60,16	7183	2,1					
	28	81	51,88	7327	2,5					
	30	74	47,81	7393	2,7					
	32	70	44,66	7440	2,9					
	38	59	37,75	7559	3,4					
	46	49	31,52	7675	4,0					
	11	206	133,46	3594	0,7	DR073-3E71M/4C	0,67	17	94	IE3
	12	186	120,11	3575	0,8	DR073-2E71M/4B	0,71	16		IE2
	14	156	100,43	3519	1,0					
	17	132	85,12	3446	1,1					
20	113	72,87	3364	1,3						
21	105	67,62	3321	1,4						
23	98	62,94	3277	1,5						
27	82	52,62	3163	1,8						
32	69	44,60	3051	2,2						
38	59	38,18	2943	2,5						
41	55	35,43	2890	2,7						
39	58	36,86	2918	2,6	DR072-3E71M/4C	0,67	16	94	IE3	
47	48	30,71	2790	3,1	DR072-2E71M/4B	0,71	15		IE2	
52	44	27,64	2715	3,4						
57	39	25,01	2645	3,8						
68	33	21,12	2527	4,0						
79	29	18,09	2421	4,0						
90	25	15,97	2337	4,0						
96	24	14,92	2292	4,0						
114	20	12,61	2183	4,0						
136	17	10,53	2070	4,0						
164	14	8,76	1950	4,0						
175	13	8,18	1910	4,0						
208	11	6,91	1816	4,0						
249	9,1	5,77	1718	4,0						
270	8,3	10,53	1681	4,0	DR072-G63/2b	0,67	17	94	IE1	
324	6,9	8,76	1582	4,0						
347	6,5	8,18	1549	4,0						
411	5,4	6,91	1469	4,0						
492	4,5	5,77	1388	4,0						
0,37 0,50	0,13	23148	7017,74	183787	0,8	DR976-3E80M/6B	1,03	804	144	IE3
	0,17	18163	5494,80	199937	1,0	DR976-2E80M/6A	1,08	803		IE2
	0,20	15205	4589,41	208242	1,2					
	0,25	12240	3686,99	215571	1,5					
	0,30	10248	3079,47	219985	1,8					
	0,32	9690	2909,37	221154	1,9					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Sınıfı*
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul. Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,37 0,50	0,45	7066	2079,97	226259	2,5	DR975-3E80M/6B	1,03	792	144	IE3
	0,50	6348	1867,46	227547	2,8	DR975-2E80M/6A	1,08	791		IE2
	0,58	5408	1591,90	229169	3,3					
	0,66	4771	1403,36	230224	3,8					
	0,19	16228	7613,73	54505	0,8	DR876-3E71M/4D	0,97	517	138	IE3
	0,21	14285	6697,26	69094	0,9	DR876-2E71M/4C	1,00	516		IE2
	0,24	12678	5940,18	78510	1,0					
	0,27	11327	5304,23	85270	1,1					
	0,30	10175	4762,49	90375	1,3					
	0,36	8576	4005,78	96644	1,5					
	0,42	7305	3405,63	101056	1,8					
	0,48	6553	2990,66	103314	2,0	DR875-3E71M/4D	0,97	507	138	IE3
	0,53	5884	2683,53	105351	2,2	DR875-2E71M/4C	1,00	506		IE2
	0,61	5158	2356,74	107441	2,5					
	0,70	4495	2051,67	109244	2,9					
	0,79	3979	1813,10	110582	3,3					
	0,88	3561	1622,25	111624	3,7					
	0,33	9290	4334,63	44601	0,9	DR776-3E71M/4D	0,97	317	132	IE3
	0,37	8416	3922,75	52417	1,0	DR776-2E71M/4C	1,00	316		IE2
	0,39	8076	3691,20	55068	1,0	DR775-3E71M/4D	0,97	307	132	IE3
	0,72	4349	1982,78	75155	1,8	DR775-2E71M/4C	1,00	306		IE2
	0,87	3641	1656,07	77955	2,2					
	0,95	3309	1507,38	79175	2,4					
	1,1	2911	1323,71	80572	2,7					
	1,3	2438	1105,59	82139	3,3					
	0,59	5316	2440,98	13612	0,8	DR675-3E71M/4D	0,97	228	126	IE3
	0,67	4652	2132,27	25280	0,9	DR675-2E71M/4C	1,00	227		IE2
	0,72	4367	1999,96	28653	1,0					
	0,84	3715	1700,37	35001	1,2					
	0,97	3232	1476,89	38750	1,3					
	1,1	2833	1292,28	41394	1,5					
	1,4	2347	675,51	44307	1,8	DR674-3E80M/6B	1,03	225	124	IE3
	1,5	2094	601,90	45615	2,1	DR674-2E80M/6A	1,08	224		IE2
	1,8	1781	512,73	47176	2,4					
	2,1	1521	675,51	48366	2,8	DR674-3E71M/4D	0,97	222	124	IE3
	2,4	1357	601,90	49086	3,2	DR674-2E71M/4C	1,00	221		IE2
	2,8	1154	512,73	49931	3,7					
	0,87	3627	1657,21	9632	0,8	DR575-3E71M/4D	0,97	166	120	IE3
	1,0	3156	1439,41	19861	1,0	DR575-2E71M/4C	1,00	165		IE2
	1,1	2766	1259,48	25078	1,1					
	1,3	2504	720,91	27850	1,2	DR574-3E80M/6B	1,03	162	118	IE3
	1,5	2119	609,29	31317	1,4	DR574-2E80M/6A	1,08	161		IE2
	1,9	1738	499,72	34195	1,7					
	2,0	1623	720,91	34978	1,8	DR574-3E71M/4D	0,97	161	118	IE3
	2,4	1374	609,29	36494	2,2	DR574-2E71M/4C	1,00	160		IE2
	2,9	1127	499,72	37923	2,7					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
0,37 0,50	3,6	906	255,83	39089	3,3	DR573-3E80M/6B DR573-2E80M/6A	1,03 1,08	156 155	116	IE3 IE2
	1,8 2,0	1818 1598	522,66 458,98	12659 16315	0,9 1,0	DR474-3E80M/6B DR474-2E80M/6A	1,03 1,08	121 120	112	IE3 IE2
	2,5 2,7 3,1	1317 1178 1036	584,15 522,66 458,98	19670 21049 22310	1,2 1,3 1,5	DR474-3E71M/4D DR474-2E71M/4C	0,97 1,00	118 117	112	IE3 IE2
	3,8 4,3 5,3	860 762 621	242,68 215,03 174,97	23651 24354 25280	1,8 2,0 2,5	DR473-3E80M/6B DR473-2E80M/6A	1,03 1,08	113 112	110	IE3 IE2
	5,9 6,7	559 495	242,68 215,03	25654 26027	2,8 3,1	DR473-3E71M/4D DR473-2E71M/4C	0,97 1,00	110 109	110	IE3 IE2
	3,2 3,8 4,1 4,3 4,6	969 831 772 732 680	442,60 378,91 351,62 333,87 309,82	9249 11814 12674 13220 13882	0,8 1,0 1,1 1,1 1,2	DR375-3E71M/4D DR375-2E71M/4C	0,97 1,00	82 81	108	IE3 IE2
	5,4 6,2 7,6	608 535 431	171,89 151,15 121,67	14717 15455 16416	1,3 1,5 1,9	DR373-3E80M/6B DR373-2E80M/6A	1,03 1,08	75 74	106	IE3 IE2
	8,3 9,5 11 13	395 348 280 246	171,89 151,15 121,67 106,69	16714 17094 17598 17836	2,1 2,4 2,9 3,3	DR373-3E71M/4D DR373-2E71M/4C	0,97 1,00	72 71	106	IE3 IE2
	4,1 4,8 5,2 5,5 5,9	766 657 610 579 538	348,95 298,73 277,21 263,22 244,26	4790 8036 9060 9669 10350	0,8 0,9 1,0 1,0 1,1	DR285-3E71M/4D DR285-2E71M/4C	0,97 1,00	42 41	104	IE3 IE2
	6,9 7,8 8,3 9,7	480 423 398 341	135,52 119,16 112,15 95,92	11219 11988 12292 12924	1,2 1,4 1,5 1,8	DR283-3E80M/6B DR283-2E80M/6A	1,03 1,08	37 36	102	IE3 IE2
	11 12 13 15 17 19	312 275 259 221 194 172	135,52 119,16 112,15 95,92 84,12 74,36	13217 13588 13740 14076 14305 14496	1,9 2,2 2,3 2,7 3,1 3,5	DR283-3E71M/4D DR283-2E71M/4C	0,97 1,00	35 34	102	IE3 IE2
	6,7 7,7 8,2 9,7	488 427 400 340	137,94 120,49 113,02 96,09	11361 12304 12669 13404	0,9 1,1 1,1 1,3	DR273-3E80M/6B DR273-2E80M/6A	1,03 1,08	30 29	98	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,37 0,50	10	317	137,94	13694	1,4	DR273-3E71M/4D	0,97	27	98	IE3
	11	277	120,49	14103	1,6	DR273-2E71M/4C	1,00	26		IE2
	12	260	113,02	14278	1,7					
	14	221	96,09	14655	2,0					
	17	192	83,46	14915	2,3					
	19	169	73,03	15118	2,7					
	23	140	60,39	15359	3,2					
	28	117	50,36	15532	3,9					
	34	98	42,22	16051	4,0					
	39	84	36,38	16431	4,0					
	14	238	103,34	4596	0,8	DR173-3E71M/4D	0,97	23	96	IE3
	16	210	91,25	5288	1,0	DR173-2E71M/4C	1,00	22		IE2
	17	196	85,23	5576	1,0					
	20	166	72,04	6147	1,2					
	24	139	60,16	6581	1,4					
	28	120	51,88	6850	1,7					
	30	110	47,81	6972	1,8					
	32	103	44,66	7061	1,9					
	38	87	37,75	7256	2,3					
	46	73	31,52	7408	2,7					
	48	70	29,67	7441	2,9	DR172-3E71M/4D	0,97	21	96	IE3
	57	59	25,24	7523	3,4	DR172-2E71M/4C	1,00	20		IE2
	66	51	21,79	7217	3,9					
	75	45	19,04	6941	4,0					
	17	196	85,12	2958	0,8	DR073-3E71M/4D	0,97	16	94	IE3
	20	168	72,87	2953	0,9	DR073-2E71M/4C	1,00	15		IE2
	21	156	67,62	2941	1,0					
	23	145	62,94	2926	1,0					
	27	121	52,62	2873	1,2					
	32	103	44,60	2809	1,5					
	38	88	38,18	2738	1,7					
	41	82	35,43	2701	1,8					
	39	86	36,86	2720	1,7	DR072-3E71M/4D	0,97	15	94	IE3
	47	72	30,71	2626	2,1	DR072-2E71M/4C	1,00	14		IE2
	52	65	27,64	2569	2,3					
	57	59	25,01	2513	2,6					
	68	50	21,12	2417	3,0					
	79	43	18,09	2327	3,5					
	90	38	15,97	2255	4,0					
	96	35	14,92	2215	4,0					
	114	30	12,61	2118	4,0					
	136	25	10,53	2016	4,0					
	164	21	8,76	1901	4,0					
	175	19	8,18	1865	4,0					
	208	16	6,91	1777	4,0					
	249	14	5,77	1686	4,0					
	269	12	10,53	1656	4,0	DR072-3E71M/2B	0,86	17	94	IE3
	323	10	8,76	1559	4,0	DR072-2E71M/2A	0,90	16		IE2
	346	10	8,18	1528	4,0					
	409	8,2	6,91	1452	4,0					
0,55 0,75	0,21	22069	7017,74	187652	0,8	DR976-3E80M/4C	1,34	804	144	IE3
	0,26	17317	5494,80	202689	1,0	DR976-2E80M/4B	1,45	803		IE2
	0,32	14496	4589,41	210277	1,2					
	0,39	11669	3686,99	216743	1,5					

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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,55 0,75	0,47	9771	3079,47	220885	1,8	DR976-3E80M/4C	1,34	804	144	IE3
	0,50	9238	2909,37	221983	1,9	DR976-2E80M/4B	1,45	803		IE2
	0,70	6736	2079,97	226794	2,7	DR975-3E80M/4C	1,34	792	144	IE3
	0,78	6052	1867,46	228013	3,0	DR975-2E80M/4B	1,45	791		IE2
	0,91	5156	1591,90	229547	3,5					
	0,30	14969	4762,49	64430	0,9	DR876-3E80M/4C	1,34	520	138	IE3
	0,36	12616	4005,78	78918	1,0	DR876-2E80M/4B	1,45	519		IE2
	0,43	10746	3405,63	87913	1,2					
	0,48	9640	2964,88	92569	1,3	DR875-3E80M/4C	1,34	510	138	IE3
	0,54	8656	2659,99	96350	1,5	DR875-2E80M/4B	1,45	509		IE2
	0,62	7588	2356,74	100112	1,7					
	0,71	6613	2051,67	103271	2,0					
	0,80	5854	1813,10	105562	2,2					
	0,89	5239	1622,25	107165	2,5					
	1,0	4609	1424,58	108901	2,8					
	1,2	3859	1189,85	110853	3,4					
	1,4	3397	1046,63	111995	3,8					
	0,51	9181	2855,58	45826	0,9	DR775-3E80M/4C	1,34	310	132	IE3
	0,57	8126	2523,53	54478	1,0	DR775-2E80M/4B	1,45	309		IE2
	0,64	7272	2257,90	60514	1,1					
	0,73	6397	1982,78	65553	1,3					
	0,88	5356	1656,07	70852	1,5					
	0,96	4868	1507,38	73071	1,6					
	1,1	4283	1323,71	75549	1,9					
1,3	3586	1105,59	78253	2,2						
	1,5	3262	632,92	79426	2,5	DR774-3E80M/6C	1,47	303	130	IE3
	1,7	2921	566,21	80608	2,7	DR774-2E80M/6B	1,50	302		IE2
	1,9	2523	489,64	81922	3,2					
	0,98	4755	1476,89	23887	0,9	DR675-3E80M/4C	1,34	331	126	IE3
	1,1	4168	1292,28	30820	1,0	DR675-2E80M/4B	1,45	330		IE2
	1,4	3471	675,51	36972	1,2	DR674-3E80M/6C	1,47	225	124	IE3
	1,6	3096	601,90	39707	1,4	DR674-2E80M/6B	1,50	224		IE2
	1,8	2633	512,73	42671	1,6					
	2,1	2238	675,51	44914	1,9	DR674-3E80M/4C	1,34	225	124	IE3
	2,4	1996	601,90	46171	2,2	DR674-2E80M/4B	1,45	224		IE2
	2,8	1698	512,73	47611	2,5					
	3,4	1409	424,33	48840	3,1					
	4,0	1206	362,91	49703	3,6					
	1,5	3134	609,29	20249	1,0	DR574-3E80M/6C	1,47	162	118	IE3
	1,9	2570	499,72	27186	1,2	DR574-2E80M/6B	1,50	161		IE2
	2,0	2388	720,91	29025	1,3	DR574-3E80M/4C	1,34	163	118	IE3
	2,4	2021	609,29	32110	1,5	DR574-2E80M/4B	1,45	162		IE2
	2,9	1657	499,72	34749	1,8					

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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Sınıfı*
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul. Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,55 0,75	3,7	1342	255,83	36738	2,2	DR573-3E80M/6C	1,47	156	116	IE3
	4,5	1103	209,81	38094	2,7	DR573-2E80M/6B	1,50	155		IE2
	5,7	867	255,83	39263	3,5	DR573-3E80M/4C	1,34	155	116	IE3
						DR573-2E80M/4B	1,45	154		IE2
	2,5	1937	584,15	10111	0,8	DR474-3E80M/4C	1,34	121	112	IE3
	2,8	1733	522,66	14215	0,9	DR474-2E80M/4B	1,45	120		IE2
	3,2	1523	458,98	17235	1,0					
	3,9	1275	242,68	20103	1,2	DR473-3E80M/6C	1,47	113	110	IE3
	4,3	1129	215,03	21494	1,4	DR473-2E80M/6B	1,50	112		IE2
	5,3	921	174,97	23231	1,7					
	6,0	823	242,68	23953	1,9	DR473-3E80M/4C	1,34	112	110	IE3
	6,7	729	215,03	24603	2,1	DR473-2E80M/4B	1,45	111		IE2
	8,3	595	174,97	25426	2,6					
	10	471	138,35	26158	3,3					
	4,7	1001	309,82	8517	0,8	DR375-3E80M/4C	1,34	85	108	IE3
						DR375-2E80M/4B	1,45	84		IE2
	5,4	901	171,89	10607	0,9	DR373-3E80M/6C	1,47	77	106	IE3
	6,2	793	151,15	12370	1,0	DR373-2E80M/6B	1,50	76		IE2
	7,7	639	121,67	14372	1,3					
	8,4	582	171,89	14998	1,4	DR373-3E80M/4C	1,34	76	106	IE3
	9,6	512	151,15	15698	1,6	DR373-2E80M/4B	1,45	75		IE2
	12	413	121,67	16592	2,0					
	14	362	106,69	17001	2,3					
	15	321	94,32	17295	2,6					
	18	270	79,34	17664	3,0					
	21	230	67,45	17940	3,6					
	6,9	712	135,52	6656	0,8	DR283-3E80M/6C	1,47	74	102	IE3
	7,8	627	119,16	8728	1,0	DR283-2E80M/6B	1,50	73		IE2
	8,3	590	112,15	9443	1,0					
	9,7	505	95,92	10864	1,2					
	11	460	135,52	11506	1,3	DR283-3E80M/4C	1,34	38	102	IE3
	12	405	119,16	12212	1,5	DR283-2E80M/4B	1,45	37		IE2
	13	381	112,15	12492	1,6					
	15	326	95,92	13098	1,8					
	17	286	84,12	13498	2,1					
	19	253	74,36	13807	2,4					
	23	213	62,55	14139	2,8					
	27	182	53,18	14404	3,3					
	10	467	137,94	11699	1,0	DR273-3E80M/4C	1,34	32	98	IE3
	12	408	120,49	12560	1,1	DR273-2E80M/4B	1,45	31		IE2
	12	383	113,02	12896	1,2					
	15	326	96,09	13595	1,4					
	17	283	83,46	14060	1,6					
	19	248	73,03	14415	1,8					
	24	206	60,39	14793	2,2					
	28	172	50,36	15088	2,6					

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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienz-klasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
0,55 0,75	34	144	42,22	15312	3,1	DR273-3E80M/4C	1,34	32	98	IE3
	39	124	36,38	15466	3,6	DR273-2E80M/4B	1,45	31		IE2
	47	104	30,34	15864	4,0					
	56	89	25,78	16303	4,0	DR272-3E80M/4C DR272-2E80M/4B	1,34 1,45	29 28	98	IE3 IE2
	20	244	72,04	4406	0,8	DR173-3E80M/4C	1,34	26	96	IE3
	24	204	60,16	5414	1,0	DR173-2E80M/4B	1,45	25		IE2
	28	176	51,88	5961	1,1					
	30	163	47,81	6193	1,2					
	32	152	44,66	6378	1,3					
	38	129	37,75	6721	1,6					
46	107	31,52	7010	1,9						
53	93	27,18	7182	2,2						
0,75	67	75	21,79	6944	2,7	DR172-3E80M/4C	1,34	23	96	IE3
	76	66	19,04	6702	3,0	DR172-2E80M/4B	1,45	22		IE2
	81	62	17,86	6588	3,2					
	96	53	15,18	6302	3,8					
	110	46	13,19	6058	4,0					
	28	179	52,62	2417	0,8	DR073-3E80M/4C	1,34	17	94	IE3
	33	152	44,60	2427	1,0	DR073-2E80M/4B	1,45	16		IE2
	38	130	38,18	2414	1,2					
	41	121	35,43	2402	1,2					
	0,75	39	127	36,86	2409	1,2	DR072-3E80M/4C	1,34	16	94
52		96	27,64	2339	1,6	DR072-2E80M/4B	1,45	15		IE2
58		86	25,01	2306	1,7					
69		73	21,12	2242	2,1					
80		63	18,09	2178	2,4					
91		55	15,97	2123	2,7					
97		52	14,92	2092	2,9					
115		44	12,61	2014	3,4					
138		37	10,53	1929	4,0					
166		30	8,76	1821	4,0					
177	28	8,18	1790	4,0						
210	24	6,91	1714	4,0						
251	20	5,77	1633	4,0						
0,75 1,0	269	19	10,53	1615	4,0	DR072-3E71M/2C	1,19	17	94	IE3
	323	16	8,76	1522	4,0	DR072-2E71M/2B	1,25	16		IE2
	346	15	8,18	1493	4,0					
	409	12	6,91	1422	4,0					
	490	10	5,77	1349	4,0					
	0,32	19768	4589,41	195316	0,9	DR976-3E80M/4D	1,77	805	144	IE3
	0,39	15913	3686,99	206283	1,1	DR976-2E80M/4C	1,89	803		IE2
	0,47	13324	3079,47	212951	1,4					
	0,50	12597	2909,37	214691	1,4					
	0,70	9186	2079,97	222154	2,0	DR975-3E80M/4D	1,77	793	144	IE3
0,78	8253	1867,46	224002	2,2	DR975-2E80M/4C	1,89	791		IE2	
0,91	7031	1591,90	226303	2,6						
1,0	6203	1403,36	227786	2,9						
1,2	5507	1244,98	228987	3,3						
1,3	4914	1110,06	229979	3,7						

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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per. O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,75 1,0	0,43	14654	3405,63	66595	0,9	DR876-3E80M/4D DR876-2E80M/4C	1,77 1,89	521 519	138	IE3 IE2
	0,48	13146	2964,88	75941	1,0	DR875-3E80M/4D	1,77	511	138	IE3
	0,54	11804	2659,99	82989	1,1	DR875-2E80M/4C	1,89	509		IE2
	0,62	10348	2356,74	89644	1,3					
	0,71	9018	2051,67	94998	1,4					
	0,80	7982	1813,10	98730	1,6					
	0,89	7144	1622,25	101421	1,8					
	1,0	6284	1424,58	104147	2,1					
	1,2	5262	1189,85	107152	2,5					
	1,4	4633	1046,63	108879	2,8					
1,6	4113	928,31	110242	3,2						
1,7	3675	828,93	111344	3,5						
0,64	0,64	9917	2257,90	38132	0,8	DR775-3E80M/4D	1,77	311	132	IE3
	0,73	8724	1982,78	49865	0,9	DR775-2E80M/4C	1,89	309		IE2
	0,88	7303	1656,07	60205	1,1					
	0,96	6639	1507,38	64203	1,2					
	1,1	5840	1323,71	68487	1,4					
1,3	4890	1105,59	72910	1,6						
1,5	1,5	4401	632,92	74126	1,7	DR774-3E90S/6B	1,96	305	130	IE3
	1,7	3941	566,21	76103	1,9	DR774-2E90S/6A	2,00	303		IE2
	1,9	3404	489,64	78248	2,2					
2,3	2,3	2868	632,92	80719	2,8	DR774-3E80M/4D	1,77	301	130	IE3
	2,6	2569	566,21	81717	3,1	DR774-2E80M/4C	1,89	299		IE2
	3,0	2218	489,64	82832	3,6					
1,4	1,4	4683	675,51	24804	0,9	DR674-3E90S/6B	1,96	227	124	IE3
	1,6	4177	601,90	30824	1,0	DR674-2E90S/6A	2,00	225		IE2
	1,8	3553	512,73	36327	1,2					
2,1	2,1	3052	675,51	40007	1,4	DR674-3E80M/4D	1,77	226	124	IE3
	2,4	2722	601,90	42135	1,6	DR674-2E80M/4C	1,89	224		IE2
	2,8	2316	512,73	44462	1,9					
	3,4	1921	424,33	46477	2,2					
	4,0	1645	362,91	47806	2,6					
	4,6	1445	318,25	48705	3,0					
5,2	1279	281,35	49415	3,4						
1,9	1,9	3468	499,72	13905	0,9	DR574-3E90S/6B DR574-2E90S/6A	1,96	167 165	118	IE3 IE2
	2,0	3256	720,91	18226	0,9	DR574-3E80M/4D	1,77	165	118	IE3
	2,4	2755	609,29	25206	1,1	DR574-2E80M/4C	1,89	163		IE2
2,9	2260	499,72	30126	1,3						
3,7	3,7	1810	255,83	33689	1,7	DR573-3E90S/6B	1,96	161	116	IE3
	4,5	1487	209,81	35805	2,0	DR573-2E90S/6A	2,00	159		IE2
	4,9	1365	192,62	36560	2,2					
5,7	5,7	1184	255,83	37604	2,5	DR573-3E80M/4D	1,77	157	116	IE3
	6,9	973	209,81	38745	3,1	DR573-2E80M/4C	1,89	155		IE2
	7,5	893	192,62	39153	3,4					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,75 1,0	3,9	1719	242,68	14462	0,9	DR473-3E90S/6B	1,96	118	110	IE3
	4,4	1523	215,03	17279	1,0	DR473-2E90S/6A	2,00	116		IE2
	5,4	1241	174,97	20440	1,2					
	6,0	1124	242,68	21541	1,4	DR473-3E80M/4D	1,77	114	110	IE3
	6,7	996	215,03	22636	1,6	DR473-2E80M/4C	1,89	112		IE2
	8,3	812	174,97	23993	1,9					
	9,4	718	154,63	24643	2,2					
	10	643	138,35	25137	2,4					
	12	565	121,49	25618	2,7					
	14	473	101,48	26156	3,3					
	15	447	95,87	26301	3,5					
	7,8	861	121,67	11337	1,0	DR373-3E90S/6B	1,96	80	106	IE3
						DR373-2E90S/6A	2,00	78		IE2
	8,4	795	171,89	12348	1,0	DR373-3E80M/4D	1,77	76	106	IE3
	9,6	700	151,15	13643	1,2	DR373-2E80M/4C	1,89	74		IE2
	12	564	121,67	15190	1,5					
	14	495	106,69	15858	1,7					
	15	438	94,32	16351	1,9					
	18	369	79,34	16930	2,2					
	21	314	67,45	17353	2,6					
	25	269	57,79	17676	3,0					
28	244	52,30	17851	3,4						
	11	628	135,52	8696	1,0	DR283-3E80M/4D	1,77	38	102	IE3
	12	553	119,16	10102	1,1	DR283-2E80M/4C	1,89	36		IE2
	13	521	112,15	10623	1,2					
	15	445	95,92	11700	1,3					
	17	391	84,12	12378	1,5					
	19	346	74,36	12886	1,7					
	23	291	62,55	13428	2,1					
	27	248	53,18	13839	2,4					
	32	213	45,56	14151	2,8					
	35	193	41,23	14319	3,1					
	12	523	113,02	10747	0,9	DR273-3E80M/4D	1,77	31	98	IE3
	15	445	96,09	12036	1,0	DR273-2E80M/4C	1,89	29		IE2
	17	387	83,46	12847	1,2					
	19	339	73,03	13443	1,3					
	24	281	60,39	14068	1,6					
	28	234	50,36	14532	1,9					
	34	197	42,22	14878	2,3					
	39	170	36,38	15110	2,7					
47	142	30,34	15335	3,2						
	56	122	25,78	15487	3,7	DR272-3E80M/4D	1,77	29	98	IE3
	64	107	22,67	15748	4,0	DR272-2E80M/4C	1,89	27		IE2
	68	101	21,33	15954	4,0					
	79	86	18,25	16375	4,0					
	32	208	44,66	5325	1,0	DR173-3E80M/4D	1,77	27	96	IE3
	38	176	37,75	5978	1,1	DR173-2E80M/4C	1,89	25		IE2
	46	147	31,52	6460	1,4					
	53	127	27,18	6752	1,6					

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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
0,75 1,0	67	103	21,79	6659	1,9	DR172-3E80M/4D	1,77	25	96	IE3
	76	90	19,04	6454	2,2	DR172-2E80M/4C	1,89	23		IE2
	81	85	17,86	6356	2,4					
	96	72	15,18	6106	2,8					
	110	63	13,19	5889	3,2					
	126	55	11,54	5685	3,7					
	152	45	9,54	5398	4,0					
	33	207	44.60	1982	0.7	DR073-3E80M/4D	1,77	18	94	IE3
	38	178	38.18	2041	0.8	DR073-2E80M/4C	1,89	17		IE2
	41	165	35.43	2059	0.9					
	39	173	36.86	2050	0.9	DR072-3E80M/4D	1,77	16	94	IE3
	47	145	30.71	2077	1.0	DR072-2E80M/4C	1,89	15		IE2
	52	130	27.64	2078	1.1					
	58	118	25.01	2072	1.3					
	69	100	21.12	2048	1.5					
	80	86	18.09	2014	1.8					
	91	76	15.97	1979	2.0					
	97	71	14.92	1959	2.1					
	115	60	12.61	1903	2.5					
	138	50	10.53	1837	3.0					
	166	42	8.76	1736	3.6					
	177	39	8.18	1711	3.9					
	210	33	6.91	1648	4.0					
	251	27	5.77	1578	4.0					
	273	25	10.53	1562	4.0	DR072-3E80M/2B	1,59	17	94	IE3
	329	21	8.76	1474	4.0	DR072-2E80M/2A	1,67	16		IE2
	352	19	8.18	1447	4.0					
	417	16	6.91	1383	4.0					
499	14	5.77	1315	4.0						
1,1 1,5	0,50	18476	2909,37	199202	1,0	DR976-3E90S/4C	2,46	798	144	IE3
						DR976-2E90S/4B	2,60	796		IE2
	0,70	13473	2079,97	212586	1,3	DR975-3E90S/4C	2,46	798	144	IE3
	0,78	12105	1867,46	215840	1,5	DR975-2E90S/4B	2,60	796		IE2
	0,91	10312	1591,90	219817	1,7					
	1,0	9098	1403,36	222332	2,0					
	1,2	8077	1244,98	224341	2,2					
	1,3	7207	1110,06	225980	2,5					
	1,5	6106	938,19	227956	2,9					
	0,62	15177	2356,74	62792	0,9	DR875-3E90S/4C	2,46	516	138	IE3
	0,71	13226	2051,67	75488	1,0	DR875-2E90S/4B	2,60	514		IE2
	0,80	11707	1813,10	83461	1,1					
	0,89	10478	1622,25	89087	1,2					
	1,0	9217	1424,58	94234	1,4					
	1,2	7717	1189,85	99676	1,7					
	1,4	6795	1046,63	102551	1,9					
	1,6	6032	928,31	104912	2,2					
	1,7	5391	828,93	106787	2,4					
	1,9	4844	744,27	108310	2,7					
	0,96	9737	1507,38	40181	0,8	DR775-3E90S/4C	2,46	316	132	IE3
	1,1	8566	1323,71	51201	0,9	DR775-2E90S/4B	2,60	314		IE2
	1,3	7172	1105,59	61029	1,1					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*	
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class	
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse	
1,1 1,5	1,5	6489	632,92	65039	1,2	DR774-3E90L/6C	2,75	304	130	IE3	
	1,7	5811	566,21	68629	1,4	DR774-2E90L/6B	2,90	301		IE2	
	1,9	5019	489,64	72400	1,6						
	2,3	4207	632,92	75738	1,9	DR774-3E90S/4C	2,46	306	130	IE3	
	2,6	3767	566,21	77474	2,1	DR774-2E90S/4B	2,60	304		IE2	
	3,0	3254	489,64	79376	2,5						
	3,3	2912	438,10	80570	2,7						
	3,8	2562	384,72	81739	3,1						
	4,5	2145	321,33	83060	3,7						
	2,1	4476	675,51	27375	1,0	DR674-3E90S/4C	2,46	331	124	IE3	
	2,4	3992	601,90	32594	1,1	DR674-3E90S/4B	2,60	329		IE2	
	2,8	3396	512,73	37544	1,3						
	3,4	2818	424,33	41537	1,5						
	4,0	2412	362,91	43892	1,8						
	4,6	2119	318,25	45466	2,0						
	5,2	1877	281,35	46699	2,3						
	6,1	1582	236,65	48093	2,7						
	2,9	3315	499,72	17181	0,9	DR574-3E90S/4C DR574-2E90S/4B	2,46 2,60	167 165	118	IE3 IE2	
	3,7	2673	255,83	26097	1,1	DR573-3E90L/6C	2,75	162	116	IE3	
	4,5	2197	209,81	30672	1,4	DR573-2E90L/6B	2,90	159		IE2	
	4,9	2016	192,62	32145	1,5						
	5,7	1737	255,83	34201	1,7	DR573-3E90S/4C	2,46	162	116	IE3	
	6,9	1428	209,81	36162	2,1	DR573-2E90S/4B	2,60	160		IE2	
	7,5	1310	192,62	36873	2,3						
	8,6	1149	168,60	37801	2,6						
	9,7	1017	149,15	38512	2,9						
	12	861	126,06	39313	3,5						
	5,4	1833	174,97	12410	0,8	DR473-3E90L/6C DR473-2E90L/6B	2,75 2,90	118 115	110	IE3 IE2	
	6,0	1650	242,68	15508	0,9	DR473-3E90S/4C	2,46	119	110	IE3	
	6,7	1462	215,03	18039	1,1	DR473-2E90S/4B	2,60	117		IE2	
	8,3	1192	174,97	20919	1,3						
	9,4	1054	154,63	22151	1,5						
	10	943	138,35	23015	1,6						
	12	829	121,49	23909	1,9						
	14	694	101,48	24807	2,2						
	15	656	95,87	25054	2,4						
		19	531	154,63	25810	2,9	DR473-3E80M/2C	2,26	114	110	IE3
		21	475	138,35	26408	3,2	DR473-2E80M/2B	2,36	112		IE2
	10	1027	151,15	7865	0,8	DR373-3E90S/4C	2,46	81	106	IE3	
	12	827	121,67	11884	1,0	DR373-2E90S/4B	2,60	79		IE2	
	14	726	106,69	13303	1,1						
	15	643	94,32	14330	1,3						
	18	541	79,34	15416	1,5						
	21	461	67,45	16176	1,8						
	25	395	57,79	16714	2,1						
	28	358	52,30	17016	2,3						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per. O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
1,1 1,5	35	284	41,42	17814	2,8	DR373-3E90S/4C	2,46	81	106	IE3
	41	244	35,49	18333	3,1	DR373-2E90S/4B	2,60	79		IE2
	45	221	32,11	18617	3,3					
	13	764	112,15	4872	0,8	DR283-3E90S/4C	2,46	43	102	IE3
	15	654	95,92	8124	0,9	DR283-2E90S/4B	2,60	41		IE2
	17	574	84,12	9765	1,0					
	19	508	74,36	10819	1,2					
	23	428	62,55	11927	1,4					
	27	364	53,18	12672	1,6					
	32	312	45,56	13217	1,9					
	35	283	41,23	13511	2,1					
	49	207	29,85	14199	2,9	DR282-3E90S/4C	2,46	40	102	IE3
	58	172	24,79	14484	3,5	DR282-2E90S/4B	2,60	38		IE2
	17	568	83,46	9899	0,8	DR273-3E90S/4C	2,46	36	98	IE3
	19	498	73,03	11201	0,9	DR273-2E90S/4B	2,60	34		IE2
	24	412	60,39	12511	1,1					
	28	344	50,36	13374	1,3					
	34	289	42,22	13983	1,6					
	39	249	36,38	14391	1,8					
	47	208	30,34	14778	2,2					
	56	179	25,78	15033	2,5	DR272-3E90S/4C	2,46	34	98	IE3
	64	157	22,67	15210	2,9	DR272-2E90S/4B	2,60	32		IE2
	68	148	21,33	15284	3,0					
	79	127	18,25	15450	3,6					
	90	111	16,00	15586	4,0					
	102	98	14,14	15069	4,0					
	121	83	11,90	14365	4,0					
	46	215	31,52	5167	0,9	DR173-3E90S/4C	2,46	32	96	IE3
	53	186	27,18	5772	1,1	DR173-2E90S/4B	2,60	30		IE2
	67	151	21,79	6143	1,3	DR172-3E90S/4C	2,46	29	96	IE3
	76	132	19,04	6008	1,5	DR172-2E90S/4B	2,60	27		IE2
	81	124	17,86	5939	1,6					
	96	106	15,18	5755	1,9					
	110	92	13,19	5587	2,2					
	126	80	11,54	5422	2,5					
	152	67	9,54	5182	3,0					
	187	54	7,74	4858	3,3					
	216	47	6,72	4688	3,6					
	247	41	5,88	4527	3,9					
	298	34	4,86	4300	4,0					
	58	173	25,01	1638	0,9	DR072-3E90S/4C	2,46	25	94	IE3
	69	146	21,12	1689	1,0	DR072-2E90S/4B	2,60	24		IE2
	80	126	18,09	1712	1,2					
	91	111	15,97	1716	1,4					
	97	104	14,92	1715	1,4					
	115	88	12,61	1699	1,7					
	138	73	10,53	1670	2,0					
	166	61	8,76	1582	2,5					
	177	57	8,18	1568	2,6					
	210	48	6,91	1529	3,1					
	251	40	5,77	1480	3,7					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
1,1 1,5	273 329 352 417 499	37 31 29 24 20	10.53 8.76 8.18 6.91 5.77	1481 1400 1378 1325 1267	4.0 4.0 4.0 4.0 4.0	DR072-3E80M/2C DR072-2E80M/2B	2,26 2,36	26 25	94	IE3 IE2
1,5 2,0	0,70 0,78 0,91 1,0 1,2 1,3 1,5	18372 16506 14061 12406 11014 9827 8326	2079,97 1867,46 1591,90 1403,36 1244,98 1110,06 938,19	199607 204963 211126 215140 218297 220838 223860	1,0 1,1 1,3 1,5 1,6 1,8 2,2	DR975-3E90L/4D DR975-2E90L/4C	3,30 3,40	800 799	144	IE3 IE2
	1,8 2,3 2,6	7228 5744 5144	523,19 415,16 371,15	225963 228600 229612	2,5 3,1 3,5	DR974-3E100L/6B DR974-2E100L/6A	3,50 3,72	797 794	142	IE3 IE2
	0,80 0,89 1,0 1,2 1,4	15964 14288 12569 10523 9266	1813,10 1622,25 1424,58 1189,85 1046,63	56766 69092 79094 88889 94046	0,8 0,9 1,0 1,2 1,4	DR875-3E90L/4D DR875-2E90L/4C	3,30 3,40	518 517	138	IE3 IE2
	1,6 1,8 2,0 2,3 2,9 3,3 3,7	8363 7411 6657 5639 4630 4061 3593	607,27 537,22 482,05 407,42 334,15 293,46 259,15	97254 100572 103075 106098 108908 110391 111563	1,6 1,8 2,0 2,3 2,8 3,2 3,6	DR874-3E100L/6B DR874-2E100L/6A	3,50 3,72	515 512	136	IE3 IE2
	1,5 1,7 2,0	8710 7800 6736	632,92 566,21 489,64	50148 56906 63642	0,9 1,0 1,2	DR774-3E100L/6B DR774-2E100L/6A	3,50 3,72	314 311	130	IE3 IE2
	2,3 2,6 3,0 3,3 3,8	5737 5137 4437 3971 3493	632,92 566,21 489,64 438,10 384,72	69006 71865 74917 76683 78505	1,4 1,6 1,8 2,0 2,3	DR774-3E90L/4D DR774-2E90L/4C	3,30 3,40	305 304	130	IE3 IE2
	4,3 5,0 6,0	3124 2678 2228	222,16 190,20 158,23	79856 81373 82813	2,6 3,0 3,6	DR773-3E100L/6B DR773-2E100L/6A	3,50 3,72	294 291	128	IE3 IE2
	2,8 3,4 4,0	4631 3843 3289	512,73 424,33 362,91	25407 33994 38339	0,9 1,1 1,3	DR674-3E90L/4D DR674-2E90L/4C	3,30 3,40	233 232	124	IE3 IE2
	4,3 4,8 5,7 6,8 7,7 7,7	3111 2771 2365 1969 1756 1756	221,47 197,01 167,96 139,76 124,53 124,53	39600 41834 44147 46253 47295 47295	1,4 1,6 1,8 2,2 2,4 2,4	DR673-3E100L/6B DR673-2E100L/6A	3,50 3,72	232 231	122	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Sınıfı*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
1,5 2,0	4,6	2948	209,81	22865	1,0	DR573-3E100L/6B DR573-2E100L/6A	3,50 3,72	171 168	116	IE3 IE2
	5,7 6,9 7,5 8,6 9,7 12	2371 1949 1789 1568 1389 1175	255,83 209,81 192,62 168,60 149,15 126,06	29124 32665 33841 35330 36403 37652	1,3 1,5 1,7 1,9 2,2 2,6	DR573-3E90L/4D DR573-2E90L/4C	3,30 3,40	163 162	116	IE3 IE2
	14 15	973 893	209,81 192,62	38746 39154	3,1 3,4	DR573-3E90S/2B DR573-2E90S/2A	2,97 3,19	161 159	116	IE3 IE2
	6,7 8,3 9,4 10 12 14 15	1995 1627 1439 1288 1132 947 895	215,03 174,97 154,63 138,35 121,49 101,48 95,87	8539 15860 18308 19974 21470 22984 23411	0,8 1,0 1,1 1,2 1,4 1,6 1,7	DR473-3E90L/4D DR473-2E90L/4C	3,30 3,40	119 118	110	IE3 IE2
	19 21 24	718 643 565	154,63 138,35 121,49	24649 25448 26250	2,2 2,3 2,5	DR473-3E90S/2B DR473-2E90S/2A	2,97 3,19	117 115	110	IE3 IE2
	14 15 18 21 25 28 35 41 45	991 877 739 629 540 489 388 333 301	106,69 94,32 79,34 67,45 57,79 52,30 41,42 35,49 32,11	8750 11036 13135 14486 15433 15922 17054 17753 18127	0,8 0,9 1,1 1,3 1,5 1,7 2,0 2,2 2,4	DR373-3E90L/4D DR373-2E90L/4C	3,30 3,40	83 82	106	IE3 IE2
	57 65	241 213	25,42 22,46	17870 18054	3,4 3,8	DR373-3E90L/4D DR373-2E90L/4C	3,30 3,40	77 76	106	IE3 IE2
	19 23 27 32 35	693 584 497 426 386	74,36 62,55 53,18 45,56 41,23	7173 9579 10980 11945 12434	0,9 1,0 1,2 1,4 1,6	DR283-3E90L/4D DR283-2E90L/4C	3,30 3,40	45 44	102	IE3 IE2
	49 58 68 77	283 235 202 178	29,85 24,79 21,28 18,73	13513 13955 14243 14519	2,1 2,6 3,0 3,3	DR283-3E90L/4D DR283-2E90L/4C	3,30 3,40	42 41	102	IE3 IE2
	24 28 34 39 47	562 470 394 340 284	60,39 50,36 42,22 36,38 30,34	10018 11658 12752 13428 14035	0,8 1,0 1,1 1,3 1,6	DR273-3E90L/4D DR273-2E90L/4C	3,30 3,40	38 37	98	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienzklasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
1,5 2,0	56	244	25,78	14440	1,8	DR272-3E90L/4D	3,30	36	98	IE3
	64	215	22,67	14715	2,1	DR272-2E90L/4C	3,40	35		IE2
	68	202	21,33	14829	2,2					
	79	173	18,25	15081	2,6					
	90	152	16,00	15254	3,0					
	102	134	14,14	14870	3,3					
	121	113	11,90	14198	4,0					
	143	96	10,11	13587	4,0					
	67	207	21,79	5372	1,0	DR172-3E90L/4D	3,30	31	96	IE3
	76	181	19,04	5477	1,1	DR172-2E90L/4C	3,40	30		IE2
81	169	17,86	5444	1,2						
96	144	15,18	5340	1,4						
110	125	13,19	5230	1,6						
126	110	11,54	5113	1,8						
152	91	9,54	4929	2,2						
187	74	7,74	4631	2,4						
216	64	6,72	4492	2,7						
247	56	5,88	4357	2,9						
298	46	4,86	4161	3,1						
69	200	21,12	1248	0,8	DR072-3E90L/4D	3,30	26	94	IE3	
80	172	18,09	1343	0,9	DR072-2E90L/4C	3,40	25		IE2	
91	152	15,97	1397	1,0						
97	142	14,92	1419	1,1						
115	120	12,61	1455	1,3						
138	100	10,53	1469	1,5						
166	83	8,76	1398	1,8						
177	78	8,18	1397	1,9						
210	66	6,91	1386	2,3						
251	55	5,77	1363	2,7						
275	50	10,53	1385	3,0	DR072-3E90S/2B	2,97	27	94	IE3	
331	42	8,76	1311	3,6	DR072-2E90S/2A	3,19	26		IE2	
355	39	8,18	1296	3,9						
419	33	6,91	1256	4,0						
502	27	5,77	1210	4,0						
2,2 3,0	0,91	20623	1591,90	192317	0,9	DR975-3E100L/4C	4,65	805	144	IE3
	1,0	18196	1403,36	200150	1,0	DR975-2E100L/4B	4,85	803		IE2
	1,2	16154	1244,98	205776	1,1					
	1,3	14413	1110,06	210362	1,2					
	1,5	12211	938,19	215691	1,5					
	1,7	11244	864,41	217874	1,6					
	1,8	10492	523,19	219470	1,7	DR974-3E112M/6B	4,95	801	142	IE3
	2,3	8338	415,16	223866	2,2	DR974-2E112M/6A	5,32	798		IE2
	2,6	7467	371,15	225522	2,4					
	2,8	6982	523,19	226435	2,6	DR974-3E100L/4C	4,65	799	142	IE3
3,5	5549	415,16	228949	3,2	DR974-2E100L/4B	4,85	797		IE2	
3,9	4969	371,15	229915	3,6						
1,2	15434	1189,85	61236	0,8	DR875-3E100L/4C	4,65	825	138	IE3	
1,4	13590	1046,63	73373	1,0	DR875-2E100L/4B	4,85	823		IE2	
1,6	12139	607,27	81321	1,1	DR874-3E112M/6B	4,95	521	136	IE3	
1,8	10757	537,22	87867	1,2	DR874-2E112M/6A	5,32	518		IE2	

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
2,2 3,0	2,0	9662	482,05	92483	1,3	DR874-3E112M/6B	4,95	521	136	IE3
	2,4	8184	407,42	97896	1,6	DR874-2E112M/6A	5,32	518		IE2
	2,4	8079	607,27	98328	1,6	DR874-3E100L/4C	4,65	520	136	IE3
	2,7	7159	537,22	101567	1,8	DR874-2E100L/4B	4,85	518		IE2
	3,0	6430	482,05	103767	2,0					
	3,6	5447	407,42	106680	2,4					
	4,3	4472	334,15	109347	2,9					
	4,9	3923	293,46	110787	3,3					
	5,6	3470	259,15	111876	3,7					
	2,3	8414	632,92	52382	1,0	DR774-3E100L/4C	4,65	312	130	IE3
	2,6	7535	566,21	58704	1,1	DR774-2E100L/4B	4,85	310		IE2
	3,0	6507	489,64	64817	1,2					
	3,3	5824	438,10	68465	1,4					
	3,8	5124	384,72	71927	1,6					
	4,3	4540	222,16	74383	1,8	DR773-3E112M/6B	4,95	298	128	IE3
	5,1	3892	190,20	77017	2,1	DR773-2E112M/6A	5,32	295		IE2
	6,1	3239	158,23	79451	2,5					
	6,5	3030	222,16	80200	2,6	DR773-3E100L/4C	4,65	298	128	IE3
	7,6	2598	190,20	81650	3,1	DR773-2E100L/4B	4,85	296		IE2
	9,2	2162	158,23	83029	3,7					
	4,4	4522	221,47	26935	1,0	DR673-3E112M/6B	4,95	236	122	IE3
	4,9	4027	197,01	32204	1,1	DR673-2E112M/6A	5,32	233		IE2
	5,7	3438	167,96	37227	1,3					
	6,5	3018	221,47	40162	1,4	DR673-3E100L/4C	4,65	236	122	IE3
	7,4	2688	197,01	42343	1,6	DR673-2E100L/4B	4,85	234		IE2
	8,6	2295	167,96	44618	1,9					
	10	1910	139,76	46564	2,3					
	12	1704	124,53	47556	2,5					
	5,7	3446	168,60	14530	0,9	DR573-3E112M/6B	4,95	175	116	IE3
	6,5	3052	149,15	21427	1,0	DR573-2E112M/6A	5,32	172		IE2
	6,9	2859	209,81	23940	1,0	DR573-3E100L/4C	4,65	175	116	IE3
	7,5	2625	192,62	26616	1,1	DR573-2E100L/4B	4,85	173		IE2
	8,6	2300	168,60	29696	1,3					
	9,7	2038	149,15	31920	1,5					
	12	1725	126,06	34288	1,7					
	14	1415	103,39	36314	2,1					
	16	1251	91,30	37243	2,4					
	18	1113	81,15	38016	2,7					
	21	943	68,64	38915	3,2					
	24	841	61,12	39427	3,6					
		10	1889	138,35	11205	0,8	DR473-3E100L/4C	4,65	124	110
12		1661	121,49	15352	0,9	DR473-2E100L/4B	4,85	122		IE2
14		1390	101,48	18876	1,1					
15		1314	95,87	19655	1,2					
18		1110	81,00	21633	1,4					
21		969	70,59	23211	1,5					
23		850	61,85	24515	1,7					
27	747	54,35	25371	1,9						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienz-klasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
2,2 3,0	31	652	47,37	26277	2,1	DR473-3E100L/4C	4,65	124	110	IE3
	35	572	41,50	27013	2,3	DR473-2E100L/4B	4,85	122		IE2
	42	473	34,28	27850	2,6					
	21	923	67,45	10194	0,9	DR373-3E100L/4C	4,65	88	106	IE3
	25	792	57,79	12393	1,0	DR373-2E100L/4B	4,85	86		IE2
	28	717	52,30	13389	1,1					
	35	569	41,42	15466	1,4					
	41	488	35,49	16597	1,5					
	45	442	32,11	17144	1,6					
	53	379	27,53	17886	1,8					
	57	354	25,42	17057	2,3	DR372-3E100L/4C	4,65	82	106	IE3
	65	313	22,46	17367	2,6	DR372-2E100L/4B	4,85	80		IE2
	72	280	20,10	17606	2,9					
	82	246	17,65	17841	3,3					
	27	729	53,18	6107	0,8	DR283-3E100L/4C	4,65	50	102	IE3
	32	626	45,56	8745	1,0	DR283-2E100L/4B	4,85	48		IE2
	35	567	41,23	9864	1,1					
	41	486	35,35	11121	1,2					
	48	417	30,28	12173	1,4					
	58	345	24,79	12895	1,7	DR282-3E100L/4C	4,65	47	102	IE3
	68	296	21,28	13389	2,0	DR282-2E100L/4B	4,85	45		IE2
	77	261	18,73	13820	2,3					
	87	232	16,62	14290	2,4					
	103	196	14,06	14870	2,7					
	121	168	12,03	15297	2,9					
	140	145	10,38	15617	3,2					
	153	132	9,45	15800	3,3					
	177	115	8,19	15645	3,6					
	34	578	42,22	9662	0,8	DR273-3E100L/4C	4,65	43	98	IE3
	39	499	36,38	11181	0,9	DR273-2E100L/4B	4,85	41		IE2
	47	417	30,34	12427	1,1					
	57	350	25,44	13425	1,3					
	64	315	22,67	13703	1,4	DR272-3E100L/4C	4,65	41	98	IE3
	68	297	21,33	13906	1,5	DR272-2E100L/4B	4,85	39		IE2
	79	254	18,25	14351	1,8					
	90	223	16,00	14648	2,0					
	102	197	14,14	14519	2,3					
	121	166	11,90	13904	2,7					
	143	141	10,11	13337	3,0					
	167	121	8,67	12809	3,3					
	212	96	6,84	11975	3,3					
	249	82	5,82	11465	3,6					
	291	70	4,98	10993	3,9					
	81	249	17,86	4278	0,8	DR172-3E100L/4C	4,65	36	96	IE3
	96	212	15,18	4576	0,9	DR172-2E100L/4B	4,85	34		IE2
	110	184	13,19	4576	1,1					
	126	161	11,54	4548	1,2					
	152	133	9,54	4470	1,5					
	187	108	7,74	4218	1,7					
	216	94	6,72	4138	1,8					
	247	82	5,88	4050	1,9					
	298	68	4,86	3911	2,1					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per. O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
2,2 3,0	375	54	7,74	3728	2,7	DR172-3E90L/2C	4,25	29	96	IE3
	431	47	6,72	3610	2,9	DR172-2E90L/2B	4,48	27		IE2
	493	41	5,88	3497	3,2					
	596	34	4,86	3335	3,4					
	91	223	15,97	784	0,7	DR072-3E100L/4C	4,65	25	94	IE3
	97	208	14,92	855	0,7	DR072-2E100L/4B	4,85	24		IE2
	115	176	12,61	993	0,9					
	138	147	10,53	1094	1,0					
	166	122	8,76	1050	1,2					
	177	114	8,18	1075	1,3					
	210	97	6,91	1121	1,6					
	251	81	5,77	1147	1,9					
3,0 4,0	275	74	10,53	1212	2,0	DR072-3E90L/2C	4,25	26	94	IE3
	331	61	8,76	1152	2,5	DR072-2E90L/2B	4,48	25		IE2
	355	57	8,18	1148	2,6					
	419	48	6,91	1133	3,1					
	502	40	5,77	1109	3,7					
	1,2	22028	1244,98	187523	0,8	DR975-3E100L/4D	6,26	806	144	IE3
	1,3	19655	1110,06	195673	0,9	DR975-2E100L/4C	6,42	803		IE2
	1,5	16652	938,19	204401	1,1					
	1,7	15333	864,41	207981	1,2					
	1,9	14233	523,19	210931	1,3	DR974-3E132S/6B	6,55	819	142	IE3
	2,3	11311	415,16	217867	1,6	DR974-2E132S/6A	6,85	814		IE2
	2,6	10130	371,15	220349	1,8					
	2,8	9521	523,19	221538	1,9	DR974-3E100L/4D	6,26	801	142	IE3
	3,5	7567	415,16	225359	2,4	DR974-2E100L/4C	6,42	798		IE2
	3,9	6776	371,15	226807	2,7					
	4,4	6091	333,23	228020	3,0					
	5,1	5192	284,06	229548	3,5					
	1,6	16451	928,31	52631	0,8	DR875-3E100L/4D	6,26	526	138	IE3
	1,7	14701	828,93	66292	0,9	DR875-2E100L/4C	6,42	523		IE2
	1,9	13210	744,27	75580	1,0					
	2,4	11016	607,27	86527	1,2	DR874-3E100L/4D	6,26	516	136	IE3
	2,7	9762	537,22	91940	1,3	DR874-2E100L/4C	6,42	513		IE2
	3,0	8768	482,05	95901	1,5					
	3,6	7427	407,42	100563	1,8					
4,3	6098	334,15	104776	2,1						
4,9	5350	293,46	106956	2,4						
5,6	4732	259,15	108655	2,7						
6,4	4127	225,61	110243	3,2						
2,6	10274	566,21	33564	0,8	DR774-3E100L/4D	6,26	313	130	IE3	
3,0	8873	489,64	48595	0,9	DR774-2E100L/4C	6,42	310		IE2	
3,3	7942	438,10	55907	1,0						
3,8	6987	384,72	62014	1,1						
4,4	6153	222,16	66852	1,3	DR773-3E132S/6B	6,55	318	128	IE3	
5,1	5275	190,20	71217	1,5	DR773-2E132S/6A	6,85	313		IE2	
6,1	4390	158,23	75104	1,8						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienzklasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
3,0 4,0	6,5	4135	222,16	76089	1,9	DR773-3E100L/4D	6,26	319	128	IE3
	7,6	3545	190,20	78360	2,3	DR773-2E100L/4C	6,42	316		IE2
	9,2	2950	158,23	80474	2,7					
	10	2642	141,55	81498	3,0					
	5,8	4660	167,96	25164	0,9	DR673-3E132S/6B DR673-2E132S/6A	6,55 6,85	254 249	122	IE3 IE2
	6,5	4118	221,47	31316	1,0	DR673-3E100L/4D	6,26	236	122	IE3
	7,4	3668	197,01	35396	1,2	DR673-2E100L/4C	6,42	233		IE2
	8,6	3131	167,96	39385	1,4					
	10	2607	139,76	42832	1,6					
	12	2325	124,53	44444	1,8					
	14	1928	69,18	46507	2,2	DR673-3E132S/6B	6,55	254	122	IE3
	16	1697	60,82	47615	2,5	DR673-2E132S/6A	6,80	249		IE2
	16	1655	59,34	47810	2,6					
	19	1425	51,01	48832	3,0					
	22	1238	44,27	49622	3,5					
	25	1084	38,70	50245	4,0					
	7,5	3581	192,62	11083	0,8	DR573-3E100L/4D	6,26	176	116	IE3
	8,6	3139	168,60	20186	1,0	DR573-2E100L/4C	6,42	173		IE2
	9,7	2780	149,15	24889	1,1					
	12	2353	126,06	29214	1,3					
	14	1931	103,39	32746	1,6					
	16	1708	91,30	34348	1,8					
	18	1519	81,15	35651	2,0					
	21	1287	68,64	37037	2,3					
	24	1147	61,12	37830	2,6					
	29	942	50,13	38922	3,2					
	33	833	44,27	39467	3,6					
	14	1896	101,48	11053	0,8	DR473-3E100L/4D	6,26	124	110	IE3
	15	1792	95,87	13215	0,9	DR473-2E100L/4C	6,42	121		IE2
	18	1515	81,00	17384	1,0					
	21	1322	70,59	20090	1,1					
	23	1159	61,85	22159	1,2					
	27	1020	54,35	23542	1,4					
	31	890	47,37	24882	1,5					
	35	781	41,50	25887	1,7					
	42	646	34,28	27043	1,9					
	59	468	24,54	26195	3,3	DR472-3E100L/4D	6,26	119	110	IE3
	70	396	20,74	26586	3,9	DR472-2E100L/4C	6,42	116		IE2
	28	978	52,30	9067	0,8	DR373-3E100L/4D	6,26	89	106	IE3
	35	777	41,42	13097	1,0	DR373-2E100L/4C	6,42	86		IE2
	41	666	35,49	14874	1,1					
	45	604	32,11	15762	1,2					
	53	517	27,53	16884	1,3					
	57	483	25,42	15976	1,7	DR372-3E100L/4D	6,26	83	106	IE3
	65	427	22,46	16456	1,9	DR372-2E100L/4C	6,42	80		IE2
	72	382	20,10	16831	2,1					
	82	336	17,65	17195	2,4					
	98	281	14,74	17599	2,9					
	107	259	13,60	17753	3,2					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
3,0 4,0	123	224	11,77	17289	3,5	DR372-3E100L/4D DR372-2E100L/4C	6,26 6,42	83 80	106	IE3 IE2
	41 48	663 568	35,35 30,28	7964 10008	0,9 1,0	DR283-3E100L/4D DR283-2E100L/4C	6,26 6,42	51 48	102	IE3 IE2
	58 68 77 87 103 121 140 153 177 205 218 253 278 321 370	471 404 356 316 268 230 198 181 156 136 127 110 100 87 75	24,79 21,28 18,73 16,62 14,06 12,03 10,38 9,45 8,19 7,09 6,65 5,74 5,22 4,52 3,92	11328 12200 12877 13534 14319 14882 15296 15527 15438 14856 14541 13977 13623 13099 12587	1,3 1,5 1,7 1,8 2,0 2,1 2,3 2,4 2,6 2,8 2,7 2,9 3,0 3,2 3,5	DR282-3E100L/4D DR282-2E100L/4C	6,26 6,42	47 44	102	IE3 IE2
	47 57	568 477	30,34 25,44	9874 11697	0,8 0,9	DR273-3E100L/4D DR273-2E100L/4C	6,26 6,42	43 40	98	IE3 IE2
	64 68 79 90 102 121 143 167 212 249 291	430 405 347 304 269 227 193 166 131 111 95	22,67 21,33 18,25 16,00 14,14 11,90 10,11 8,67 6,84 5,82 4,98	12231 12585 13341 13837 14112 13563 13049 12563 11762 11284 10839	1,0 1,1 1,3 1,5 1,7 2,0 2,2 2,4 2,4 2,7 2,9	DR272-3E100L/4D DR272-2E100L/4C	6,26 6,42	41 38	98	IE3 IE2
	336 426 501 584	82 65 55 47	8,67 6,84 5,82 4,98	10475 9787 9361 8969	3,9 4,0 4,0 4,0	DR272-3E100L/2C DR272-2E100L/2B	5,58 5,80	41 38	98	IE3 IE2
	110 126 152 187 216 247 298	251 220 182 148 128 112 93	13,19 11,54 9,54 7,74 6,72 5,88 4,86	3782 3865 3919 3720 3712 3683 3613	0,8 0,9 1,1 1,2 1,3 1,4 1,6	DR172-3E100L/4D DR172-2E100L/4C	6,26 6,42	36 33	96	IE3 IE2
	377 434 496 599	73 64 56 46	7,74 6,72 5,88 4,86	3492 3407 3320 3189	2,0 2,1 2,3 2,5	DR172-3E100L/2C DR172-2E100L/2B	5,58 5,80	38 35	96	IE3 IE2
	138 166 177	201 167 156	10,53 8,76 8,18	570 552 676	0,7 0,9 1,0	DR072-3E100L/4D DR072-2E100L/4C	6,26 6,42	33 32	94	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



D Serisi Motorlu Güç Devir Sayfaları

D Series Geared Motors Performance Tables

D Serien Getriebemotoren Leistung und Drehzahlübersicht



Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
3,0 4,0	210	132	6.91	791	1.1	DR072-3E100L/4D	6,26	32	94	IE3
	251	110	5.77	880	1.4	DR072-2E100L/4C	6,42	31		IE2
	277	100	10.53	1005	1.5	DR072-3E100L/2C	5,58	33	94	IE3
	333	83	8.76	960	1.8	DR072-2E100L/2B	5,80	32		IE2
	356	78	8.18	970	1.9					
	422	66	6.91	985	2.3					
	505	55	5.77	988	2.7					
4,0 5,5	1,9	18977	523,19	197747	0,9	DR974-3E132M/6C	8,52	823	142	IE3
	2,3	15082	415,16	208766	1,2	DR974-2E132M/6B	8,80	818		IE2
	2,6	13506	371,15	212724	1,3					
	2,8	12608	523,19	214667	1,4	DR974-3E112M/4D	8,05	813	142	IE3
	3,5	10020	415,16	220435	1,8	DR974-2E112M/4C	8,20	811		IE2
	3,9	8973	371,15	222584	2,0					
	4,4	8065	333,23	224365	2,2					
	5,1	6875	284,06	226587	2,6					
	5,8	6069	250,41	228022	3,0					
	6,6	5390	222,15	229185	3,3					
	7,4	4811	197,95	228968	3,7					
	2,4	14588	607,27	67056	0,9	DR874-3E112M/4D	8,05	524	136	IE3
	2,7	12927	537,22	77163	1,0	DR874-2E112M/4C	8,20	522		IE2
	3,0	11611	482,05	83925	1,1					
	3,6	9835	407,42	91781	1,3					
	4,4	8075	334,15	98437	1,6					
	5,0	7084	293,46	101618	1,8					
	5,6	6267	259,15	104202	2,1					
	6,5	5465	225,61	106576	2,4					
	7,6	4757	128,20	108689	2,7	DR873-3E132M/6C	8,52	527	134	IE3
	8,4	4273	115,03	109905	3,0	DR873-2E132M/6B	8,80	522		IE2
	9,6	3749	101,03	111224	3,5					
	11	3269	87,95	112387	4,0					
	4,4	8212	222,16	53965	1,0	DR773-3E132M/6C	8,52	322	128	IE3
	5,1	7040	190,20	61827	1,1	DR773-2E132M/6B	8,80	317		IE2
	6,1	5859	158,23	68379	1,4					
	11	3038	81,72	80178	2,6					
	13	2698	72,50	81433	3,0					
	6,6	5477	222,16	70275	1,5	DR773-3E112M/4D	8,05	308	128	IE3
	7,7	4696	190,20	73725	1,7	DR773-2E112M/4C	8,20	306		IE2
	9,2	3908	158,23	76929	2,0					
	10	3500	141,55	78480	2,3					
	7,4	4858	197,01	22387	0,9	DR673-3E112M/4D	8,05	237	122	IE3
	8,7	4148	167,96	31041	1,0	DR673-2E112M/4C	8,20	235		IE2
	10	3453	139,76	37109	1,2					
	12	3080	124,53	39813	1,4					
	14	2573	69,18	43022	1,7	DR673-3E132M/6C	8,52	258	122	IE3
	16	2209	59,34	45068	1,9	DR673-2E132M/6B	8,80	253		IE2
	19	1902	51,01	46637	2,3					
	22	1653	44,27	47819	2,6					
	25	1447	38,70	48713	3,0					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
4,0 5,5	29	1273	34,02	49524	3,4	DR673-3E132M/6C DR673-2E132M/6B	8,52 8,80	258 253	122	IE3 IE2
	12 14 16 18 21 24 29 33 37	3118 2558 2262 2013 1705 1520 1248 1103 982	126,06 103,39 91,30 81,15 68,64 61,12 50,13 44,27 39,35	20356 27305 30108 32171 34424 35646 37240 38051 39156	1,0 1,2 1,3 1,5 1,8 2,0 2,4 2,7 3,0	DR573-3E112M/4D DR573-2E112M/4C	8,05 8,20	184 182	116	IE3 IE2
	43 51	854 729	33,86 28,87	39349 40365	3,5 4,0	DR572-3E112M/4D DR572-2E112M/4C	8,05 8,20	177 175	116	IE3 IE2
	21 24 27 31 35 43 51	1751 1536 1351 1179 1034 856 711	70,59 61,85 54,35 47,37 41,50 34,28 28,45	14702 18463 20737 22775 24299 25898 27101	0,9 0,9 1,0 1,1 1,2 1,4 1,6	DR473-3E112M/4D DR473-2E112M/4C	8,05 8,20	132 130	110	IE3 IE2
	59 70 76 86	619 524 483 430	24,54 20,74 19,11 17,01	25285 25860 25979 25208	2,5 3,0 3,2 3,6	DR472-3E112M/4D DR472-2E112M/4C	8,05 8,20	126 124	110	IE3 IE2
	45 53 62	800 685 588	32,11 27,53 23,58	13644 15376 16591	0,9 1,0 1,1	DR373-3E112M/4D DR373-2E112M/4C	8,05 8,20	94 92	106	IE3 IE2
	65 73 83 99 107 124 142 163 197 218 252 289 330	566 507 445 373 343 297 260 228 188 169 147 128 112	22,46 20,10 17,65 14,74 13,60 11,77 10,25 8,98 7,42 6,69 5,79 5,05 4,42	15164 15754 16309 16900 17131 16942 16368 15825 15055 14518 13979 13478 13007	1,4 1,6 1,8 2,2 2,4 2,7 2,9 3,1 3,4 3,1 3,4 3,6 3,9	DR372-3E112M/4D DR372-2E112M/4C	8,05 8,20	88 86	106	IE3 IE2
	78 88 104 121 141 155 178 206 220 255 280 323	472 419 355 304 263 239 207 180 169 146 133 115	18,73 16,62 14,06 12,03 10,38 9,45 8,19 7,09 6,65 5,74 5,22 4,52	11476 12456 13556 14300 14851 15153 15151 14605 14285 13753 13418 12919	1,2 1,3 1,5 1,6 1,7 1,8 2,0 2,1 2,0 2,2 2,3 2,4	DR282-3E112M/4D DR282-2E112M/4C	8,05 8,20	54 52	102	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.	
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class	
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse	
4,0 5,5	373	99	3,92	12429	2,6	DR282-3E112M/4D DR282-2E112M/4C	8,05 8,20	54 52	102	IE3 IE2	
	411 439 508 559 645 745	90 84 73 66 57 50	7,09 6,65 5,74 5,22 4,52 3,92	12145 11892 11421 11125 10690 10266	3,4 3,3 3,5 3,7 3,9 4,0	DR282-3E112M/2C DR282-2E112M/2A	7,28 7,50	50 46	102	IE3 IE2	
	91 103 123 144 168 213 251 293	403 357 300 256 219 173 147 126	16,00 14,14 11,90 10,11 8,67 6,84 5,82 4,98	12632 13230 13113 12665 12233 11474 11038 10627	1,1 1,3 1,5 1,7 1,8 1,8 2,0 2,2	DR272-3E112M/4D DR272-2E112M/4C	8,05 8,20	48 46	98	IE3 IE2	
	336 426 501 585	110 87 74 63	8,67 6,84 5,82 4,98	10323 9655 9250 8874	2,9 3,0 3,3 3,5	DR272-3E112M/2C DR272-2E112M/2A	7,28 7,50	46 42	98	IE3 IE2	
	5,5 7,5	2,6	18571	371,15	199011	1,0	DR974-3E132M/6D DR974-2E132M/6C	11,55 12,00	828 823	142	IE3 IE2
		2,8 3,5 3,9 4,4 5,1 5,8 6,6 7,4	17336 13777 12338 11090 9453 8344 7412 6616	523,19 415,16 371,15 333,23 284,06 250,41 222,15 197,95	202633 211954 215398 218216 221678 223881 225649 225999	1,0 1,3 1,5 1,6 1,9 2,2 2,4 2,7	DR974-3E132S/4C DR974-2E132S/4B	10,65 11,05	833 827	142	IE3 IE2
		4,4 5,0 5,6 6,5	11104 9740 8617 7514	334,15 293,46 259,15 225,61	86126 92028 96551 100247	1,2 1,3 1,5 1,7	DR874-3E132S/4C DR874-2E132S/4B	10,65 11,05	544 538	136	IE3 IE2
		7,6 8,4 9,6 11	6545 5880 5160 4499	128,20 115,03 101,03 87,95	103371 105394 107474 109257	2,0 2,2 2,5 2,9	DR873-3E132M/6D DR873-2E132M/6C	11,55 12,00	530 525	134	IE3 IE2
		11 13 14	4365 3921 3441	128,20 115,03 101,03	109629 110765 111948	3,0 3,3 3,8	DR873-3E132S/4C DR873-2E132S/4B	10,65 11,05	531 525	134	IE3 IE2
		5,1 6,1	9687 8062	190,20 158,23	40559 55041	0,8 1,0	DR773-3E132M/6D DR773-2E132M/6C	11,55 12,00	327 322	128	IE3 IE2
		6,6 7,7 9,2	7531 6457 5375	222,16 190,20 158,23	58725 65096 70674	1,1 1,2 1,5	DR773-3E132S/4C DR773-2E132S/4B	10,65 11,05	347 341	128	IE3 IE2

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
5,5 7,5	10	4813	141,55	73313	1,7	DR773-3E132S/4C	10,65	347	128	IE3
	12	4159	122,41	76114	1,9	DR773-2E132S/4B	11,05	341		IE2
	14	3607	105,99	78129	2,2					
	16	3159	92,70	79752	2,5					
	18	2788	81,72	81023	2,9					
	20	2476	72,50	82044	3,2					
	10	4749	139,76	23996	0,9	DR673-3E132S/4C	10,65	257	122	IE3
	12	4236	124,53	30119	1,0	DR673-2E132S/4B	11,05	251		IE2
	14	3606	106,08	35903	1,2					
	16	3105	91,19	39572	1,4					
	18	2698	79,14	42224	1,6					
	21	2362	69,18	44240	1,8					
	24	2079	60,82	45753	2,1					
	25	2027	59,34	46036	2,1					
	29	1746	51,01	47360	2,5					
	33	1517	44,27	48408	2,8					
	38	1328	38,70	49229	3,2					
	43	1169	34,02	49888	3,7					
	14	3518	103,39	12812	0,9	DR573-3E132S/4C	10,65	204	116	IE3
	16	3111	91,30	20634	1,0	DR573-2E132S/4B	11,05	198		IE2
18	2768	81,15	25032	1,1						
21	2345	68,64	29293	1,3						
24	2090	61,12	31495	1,4						
29	1716	50,13	34309	1,7						
33	1517	44,27	35664	2,0						
37	1350	39,35	37191	2,2						
44	1144	33,28	39159	2,4						
51	1002	28,87	38609	3,0	DR572-3E132S/4C	10,65	197	116	IE3	
61	834	24,02	39459	3,6	DR572-2E132S/4B	11,05	191		IE2	
68	744	21,40	40014	4,0						
80	633	18,23	41802	4,0						
31	1621	47,37	18519	0,8	DR473-3E132S/4C	10,65	152	110	IE3	
35	1422	41,50	21196	0,9	DR473-2E132S/4B	11,05	146		IE2	
43	1177	34,28	23827	1,0						
51	978	28,45	25684	1,2						
59	852	24,54	23708	1,8	DR472-3E132S/4C	10,65	146	110	IE3	
70	721	20,74	24642	2,1	DR472-2E132S/4B	11,05	140		IE2	
76	664	19,11	25018	2,3						
86	592	17,01	24671	2,6						
97	523	15,02	23926	3,0						
109	465	13,35	23227	3,3						
118	431	12,40	22793	3,6						
139	365	10,48	21821	4,0						
164	311	8,93	20915	4,0						
194	263	7,54	19872	4,0						
218	234	6,71	19256	4,0						
234	217	6,23	18877	4,0						
277	184	5,26	18032	4,0						
326	157	4,48	17252	4,0						
390	130	7,54	16406	4,0	DR472-3E132S/2B	9,90	137	110	IE3	
439	116	6,71	15872	4,0	DR472-2E132S/2A	10,20	133		IE2	
473	107	6,23	15545	4,0						
560	91	5,26	14821	4,0						
657	77	4,48	14156	4,0						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
5,5 7,5	83	612	17,65	14646	1,3	DR372-3E132S/4C	10,65	114	106	IE3
	99	512	14,74	15682	1,6	DR372-2E132S/4B	11,05	108		IE2
	107	472	13,60	16049	1,7					
	124	409	11,77	16463	1,9					
	142	357	10,25	15952	2,1					
	163	313	8,98	15462	2,2					
	197	259	7,42	14757	2,5					
	218	233	6,69	14199	2,3					
	252	202	5,79	13704	2,5					
	289	176	5,05	13239	2,6					
330	155	4,42	12798	2,8						
400	128	3,65	12175	3,1						
440 508 583 666 806	115	6,69	11868	3,7	DR372-3E132S/2B	9,90	105	106	IE3	
	100	5,79	11417	4,0	DR372-2E132S/2A	10,20	101		IE2	
	87	5,05	10998	4,0						
	76	4,42	10607	4,0						
	63	3,65	10059	4,0						
104 121 141 155 178 206 220 255 280 323 373	489	14,06	12123	1,1	DR282-3E132S/4C	10,65	74	102	IE3	
	419	12,03	13280	1,2	DR282-2E132S/4B	11,05	68		IE2	
	362	10,38	14091	1,3						
	329	9,45	14509	1,3						
	285	8,19	14758	1,4						
	247	7,09	14266	1,5						
	232	6,65	13937	1,5						
	200	5,74	13454	1,6						
	182	5,22	13146	1,6						
	158	4,52	12684	1,8						
	137	3,92	12226	1,9						
	415 443 513 564 651 752	122	7,09	11945	2,5	DR282-3E132S/2B	9,90	65	102	IE3
115		6,65	11689	2,4	DR282-2E132S/2A	10,20	61		IE2	
99		5,74	11242	2,6						
90		5,22	10961	2,7						
78		4,52	10544	2,9						
68		3,92	10137	3,1						
7,5 10	3,5	18723	415,16	198352	1,0	DR974-3E132M/4D	14,40	832	142	IE3
	3,9	16768	371,15	204044	1,1	DR974-2E132M/4C	15,00	827		IE2
	4,4	15071	333,23	208956	1,2					
5,1 5,7 6,3 7,1 8,1 9,2 10 12 13	13330	191,74	213157	1,4	DR973-3E160M/6D	15,00	850	140	IE3	
	11902	171,00	216210	1,5	DR973-2E160M/6B	15,00	850		IE2	
	10721	153,87	218856	1,7						
	9484	136,23	221480	1,9						
	8307	119,15	216491	2,2						
	7353	105,33	209704	2,4						
	6563	93,91	203492	2,7						
	5899	84,31	197762	3,1						
	5030	71,87	189465	3,6						
5,0 5,7 6,5	13237	293,46	75425	1,0	DR874-3E132M/4D	14,40	541	136	IE3	
	11710	259,15	83251	1,1	DR874-2E132M/4C	15,00	536		IE2	
	10211	225,61	90070	1,3						
7,6 8,4 9,6	8928	128,20	95338	1,5	DR873-3E160M/6	15,00	569	134	IE3	
	8020	115,03	98632	1,6	DR873-2E160M/6	15,00	569		IE2	
	7038	101,03	101926	1,8						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
7,5 10	11	5934	128,20	105268	2,2	DR873-3E132M/4D	14,40	533	134	IE3
	13	5330	115,03	107010	2,4	DR873-2E132M/4C	15,00	528		IE2
	15	4678	101,03	108802	2,8					
	17	4079	87,95	110365	3,2					
	19	3593	77,36	111578	3,6					
	7,7	8778	190,20	49412	0,9	DR773-3E132M/4D	14,40	353	128	IE3
	9,3	7306	158,23	60185	1,1	DR773-2E132M/4C	15,00	348		IE2
	10	6543	141,55	64613	1,2					
	12	5654	122,41	69316	1,4					
	14	4903	105,99	72842	1,6					
16	4294	92,70	75467	1,9						
18	3790	81,72	77436	2,1						
20	3366	72,50	79012	2,4						
	23	2938	41,85	80447	2,7	DR773-3E160M/6D	15,00	406	128	IE3
	26	2609	37,12	81553	3,1	DR773-2E160M/6B	15,00	406		IE2
	29	2329	33,10	81723	3,4					
	30	2244	31,92	80959	3,6					
	35	1947	27,65	77981	4,0					
	14	4902	106,08	21751	0,9	DR673-3E132M/4D	14,40	263	122	IE3
	16	4221	91,19	30278	1,0	DR673-2E132M/4C	15,00	258		IE2
	19	3668	79,14	35393	1,2					
	21	3211	69,18	38825	1,3					
	24	2826	60,82	41425	1,5					
	25	2756	59,34	41865	1,6					
	29	2373	51,01	44128	1,8					
	33	2063	44,27	45805	2,1					
	38	1806	38,70	47074	2,4					
	43	1590	34,02	48083	2,7					
	56	1233	26,11	49626	3,5	DR672-3E132M/4D	14,40	253	122	IE3
	63	1104	23,36	50149	3,9	DR672-2E132M/4C	15,00	248		IE2
	21	3188	68,64	19385	0,9	DR573-3E132M/4D	14,40	210	116	IE3
	24	2842	61,12	24157	1,1	DR573-2E132M/4C	15,00	205		IE2
	29	2333	50,13	29405	1,3					
	33	2063	44,27	31718	1,5					
	37	1836	39,35	34098	1,6					
	44	1555	33,28	36956	1,8					
	51	1363	28,87	36623	2,2	DR572-3E132M/4D	14,40	203	116	IE3
	61	1134	24,02	37901	2,6	DR572-2E132M/4C	15,00	198		IE2
	68	1012	21,40	38560	3,0					
	80	861	18,23	39327	3,5					
	93	741	15,67	39562	4,0					
	108	644	13,60	38083	4,0					
	51	1330	28,45	23277	0,8	DR473-3E132M/4D	14,40	158	110	IE3
						DR473-2E132M/4C	15,00	153		IE2
	60	1158	24,54	21194	1,3	DR472-3E132M/4D	14,40	148	110	IE3
	71	980	20,74	22734	1,6	DR472-2E132M/4C	15,00	143		IE2
	77	903	19,11	23345	1,7					
	86	804	17,01	23926	1,9					
	98	711	15,02	23269	2,2					
	110	633	13,35	22643	2,4					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienz-klasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
7,5 10	118	587	12,40	22251	2,6	DR472-3E132M/4D	14,40	148	110	IE3
	140	496	10,48	21361	3,1	DR472-2E132M/4C	15,00	143		IE2
	164	423	8,93	20523	3,4					
	194	358	7,54	19493	3,3					
	218	318	6,71	18919	3,5					
	235	295	6,23	18563	3,6					
	278	250	5,26	17766	4,0					
	327	213	4,48	17024	4,0					
	390	178	7,54	16229	4,0	DR472-3E132S/2C	13,20	143	110	IE3
	439	158	6,71	15715	4,0	DR472-2E132S/2B	13,60	136		IE2
473	147	6,23	15399	4,0						
560	124	5,26	14698	4,0						
657	106	4,48	14052	4,0						
83	833	17,65	11769	1,0	DR372-3E132M/4D	14,40	120	106	IE3	
	99	697	14,74	13652	1,2	DR372-2E132M/4C	15,00	115		IE2
	108	642	13,60	14312	1,3					
	125	556	11,77	15496	1,4					
	143	485	10,25	15378	1,5					
	163	426	8,98	14959	1,6					
	197	352	7,42	14342	1,8					
	219	317	6,69	13757	1,7					
	253	275	5,79	13322	1,8					
	290	240	5,05	12906	1,9					
	331	210	4,42	12507	2,1					
	401	174	3,65	11933	2,2					
	440	158	6,69	11658	2,7	DR372-3E132S/2C	13,20	112	106	IE3
508		137	5,79	11236	3,0	DR372-2E132S/2B	13,60	105		IE2
583		119	5,05	10841	3,2					
666		104	4,42	10470	3,4					
806		86	3,65	9946	3,7					
122	569	12,03	11516	0,9	DR282-3E132M/4D	14,40	82	102	IE3	
	141	492	10,38	12805	0,9	DR282-2E132M/4C	15,00	77		IE2
	155	448	9,45	13469	1,0					
	179	388	8,19	14216	1,1					
	207	336	7,09	13798	1,1					
	220	315	6,65	13456	1,1					
	255	272	5,74	13040	1,2					
	281	248	5,22	12769	1,2					
	324	215	4,52	12358	1,3					
	374	186	3,92	11944	1,4					
415	167	7,09	11722	1,9	DR282-3E132S/2C	13,20	72	102	IE3	
	443	157	6,65	11460	1,8	DR282-2E132S/2B	13,60	65		IE2
	513	136	5,74	11045	1,9					
	564	123	5,22	10782	2,0					
	651	107	4,52	10390	2,1					
	752	93	3,92	10003	2,3					
11 15	5,1	19562	191,74	195964	0,9	DR973-3E160L/6D	21,50	865	140	IE3
	5,7	17467	171,00	201979	1,0	DR973-2E160L/6B	22,00	865		IE2
	6,3	15733	153,87	206831	1,1					
	7,1	13918	136,23	211539	1,3					
	7,7	12950	191,74	213002	1,4	DR973-3E160M/4C	21,00	846	140	IE3
8,6	11564	171,00	207413	1,6	DR973-2E160M/4B	21,00	856		IE2	

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
11 15	9,6	10417	153,87	202265	1,7	DR973-3E160M/4C	21,00	846	140	IE3
	12	8073	119,15	189920	2,2	DR973-2E160M/4B	21,00	856		IE2
	14	7146	105,33	184068	2,5					
	16	6379	93,91	178699	2,8					
	17	5733	84,31	173736	3,1					
	20	4889	71,87	166537	3,7					
	7,6	13102	128,20	76189	1,0	DR873-3E160L/6D	21,50	568	134	IE3
	8,4	11769	115,03	83159	1,1	DR873-2E160L/6B	22,00	568		IE2
	9,6	10328	101,03	89728	1,3					
	11	8675	128,20	96275	1,5	DR873-3E160M/4C	21,00	549	134	IE3
	13	7793	115,03	99413	1,7	DR873-2E160M/4B	21,00	559		IE2
	15	6839	101,03	102535	1,9					
	17	5964	87,95	105238	2,2					
	19	5253	77,36	107277	2,5					
	21	4665	68,62	108878	2,8					
	24	4171	61,27	110166	3,1					
	27	3749	55,01	111226	3,5					
	28	3537	51,94	111744	3,7					
	10	9566	141,55	42043	0,8	DR773-3E160M/4C	21,00	386	128	IE3
	12	8267	122,41	53529	1,0	DR773-2E160M/4B	21,00	396		IE2
14	7169	105,99	61044	1,1						
16	6279	92,70	66194	1,3						
18	5542	81,72	69958	1,4						
20	4922	72,50	72832	1,6						
24	4233	62,33	75673	1,9						
27	3672	53,99	78025	2,2						
31	3200	46,99	78160	2,5						
35	2856	41,85	76007	2,8						
40	2537	37,12	73800	3,2						
44	2265	33,10	71706	3,5						
46	2182	31,92	71048	3,7						
21	4694	69,18	24752	0,9	DR673-3E160M/4C	21,00	296	122	IE3	
24	4132	60,82	31197	1,0	DR673-2E160M/4B	21,00	306		IE2	
25	4030	59,34	32186	1,1						
29	3470	51,01	36977	1,2						
33	3016	44,27	40245	1,4						
38	2640	38,70	42628	1,6						
43	2324	34,02	44445	1,9						
49	2055	30,04	45809	2,1						
56	1803	26,11	47106	2,4	DR672-3E160M/4C	21,00	286	122	IE3	
63	1615	23,36	47994	2,7	DR672-2E160M/4B	21,00	296		IE2	
73	1395	20,20	48964	3,1						
84	1210	17,49	49740	3,6						
29	3410	50,13	15331	0,9	DR573-3E160M/4C	21,00	246	116	IE3	
33	3016	44,27	21948	1,0	DR573-2E160M/4B	21,00	256		IE2	
37	2684	39,35	26941	1,1						
44	2274	33,28	32079	1,2						
52	1943	28,39	35497	1,3						
61	1659	24,02	34737	1,8	DR572-3E160M/4C	21,00	236	116	IE3	
69	1480	21,40	35901	2,0	DR572-2E160M/4B	21,00	246		IE2	
81	1259	18,23	37194	2,4						
94	1084	15,67	38196	2,8						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
11 15	108	942	13,60	37285	3,0	DR572-3E160M/4C	21,00	236	116	IE3
	124	824	11,89	36017	3,3	DR572-2E160M/4B	21,00	246		IE2
	141	725	10,45	34824	3,5					
	170	599	8,65	32868	3,4					
	198	516	7,43	31579	3,7					
	228	448	6,45	30400	4,0					
	261	392	5,64	29310	4,0					
	297	345	4,96	28292	4,0					
	336	305	4,38	27334	4,0					
	71	1433	20,74	18374	1,1	DR472-3E160M/4C	21,00	191	110	IE3
	77	1320	19,11	19638	1,2	DR472-2E160M/4B	21,00	201		IE2
	86	1176	17,01	21064	1,3					
	98	1040	15,02	22118	1,5					
	110	925	13,35	21624	1,7					
	119	858	12,40	21306	1,8					
	140	726	10,48	20565	2,1					
	165	619	8,93	19846	2,3					
	195	524	7,54	18836	2,3					
	219	466	6,71	18336	2,4					
	236	432	6,23	18022	2,5					
279	365	5,26	17309	2,7						
328	312	4,48	16634	2,9						
15 20	6,3	21348	153,87	190136	0,8	DR973-3E180L/6E	29,00	935	140	IE3
	7,2	18885	136,23	198061	1,0	DR973-2E180L/6D	29,00	915		IE2
	7,7	17662	191,74	201861	1,0	DR973-3E160L/4D	29,00	861	140	IE3
	8,6	15771	171,00	200345	1,1	DR973-2E160L/4C	29,30	858		IE2
	9,6	14207	153,87	195935	1,3					
	11	12569	136,23	190782	1,4					
	12	11010	119,15	185067	1,6					
	14	9746	105,33	179796	1,8					
	16	8700	93,91	174905	2,1					
	17	7820	84,31	170340	2,3					
	20	6668	71,87	163654	2,7					
	23	5886	63,36	158457	3,1					
	26	5228	56,21	153599	3,4					
	11	11832	128,20	83040	1,1	DR873-3E160L/4D	29,00	565	134	IE3
	13	10629	115,03	88576	1,2	DR873-2E160L/4C	29,30	563		IE2
	15	9328	101,03	93920	1,4					
	17	8134	87,95	98325	1,6					
	19	7165	77,36	101590	1,8					
	21	6363	68,62	104135	2,0					
	24	5689	61,27	106096	2,3					
27	5113	55,01	107712	2,5						
28	4825	51,94	108496	2,7						
32	4224	45,41	110068	3,1						
37	3718	39,92	111333	3,5						
14	9778	105,99	39792	0,8	DR773-3E160L/4D	29,00	401	128	IE3	
16	8563	92,70	51192	0,9	DR773-2E160L/4C	29,30	398		IE2	
18	7559	81,72	58545	1,1						
20	6713	72,50	63899	1,2						
23	5992	64,64	67809	1,3						
24	5773	62,33	68915	1,4						
27	5008	53,99	72524	1,6						
31	4364	46,99	75276	1,8						
35	3896	41,85	73747	2,1						
40	3461	37,12	71803	2,3						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per. O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.	
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class	
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse	
15 20	44	3089	33,10	69933	2,6	DR773-3E160L/4D	29,00	401	128	IE3	
	46	2977	31,92	69340	2,7	DR773-2E160L/4C	29,30	398		IE2	
	53	2582	27,65	67002	3,1						
	61	2250	24,06	64756	3,6						
	29	4733	51,01	24222	0,9	DR673-3E160L/4D	29,00	311	122	IE3	
	33	4114	44,27	31358	1,0	DR673-2E160L/4C	29,30	308		IE2	
	38	3601	38,70	36035	1,2						
	43	3170	34,02	39262	1,4						
	49	2802	30,04	41693	1,5						
	56	2460	26,11	43734	1,7	DR672-3E160L/4D	29,00	301	122	IE3	
	63	2203	23,36	45142	2,0	DR672-2E160L/4C	29,30	308		IE2	
	73	1903	20,20	46607	2,3						
	84	1650	17,49	47858	2,6						
	96	1445	15,30	48770	3,0						
	109	1275	13,48	49694	3,3						
123	1132	11,96	51109	3,6							
138	1010	10,67	50313	3,8							
143	973	10,29	49831	3,9							
44 52	3102	33,28	23943	0,9	DR573-3E160L/4D	29,00	261	116	IE3		
	2650	28,39	30286	1,0	DR573-2E160L/4C	29,30	258		IE2		
	61	2263	24,02	30168	1,3	DR572-3E160L/4D	29,00	251	116	IE3	
	69	2018	21,40	32180	1,5	DR572-2E160L/4C	29,30	248		IE2	
	81	1718	18,23	34376	1,7						
	94	1479	15,67	35938	2,0						
	108	1285	13,60	36402	2,2						
	124	1124	11,89	35248	2,4						
	141	990	10,45	34151	2,6						
	170	818	8,65	32221	2,5						
	198	704	7,43	31024	2,7						
	228	611	6,45	29920	2,9						
	261	535	5,64	28892	3,1						
	297	471	4,96	27926	3,3						
	336	416	4,38	27011	3,5						
98 110 119 140 165 195 219 236 279 328	1418	15,02	18551	1,1	DR472-3E160L/4D	29,00	215	110	IE3		
	1262	13,35	20278	1,2	DR472-2E160L/4C	29,30	212		IE2		
	1170	12,40	20222	1,3							
	990	10,48	19657	1,6							
	844	8,93	19078	1,7							
	714	7,54	18089	1,7							
	635	6,71	17676	1,8							
	589	6,23	17411	1,8							
	499	5,26	16796	2,0							
	425	4,48	16201	2,2							
	18,5 25	8,6	19387	171,00	193925	0,9	DR973-3E180M/4C	34,50	901	140	IE3
		9,6	17464	153,87	190175	1,0	DR973-2E180M/4B	34,50	901		IE2
		11	15450	136,23	185696	1,2					
		12	13534	119,15	180628	1,3					
		14	11980	105,33	175876	1,5					
16		10694	93,91	171410	1,7						
17		9613	84,31	167201	1,9						
21		8197	71,87	160973	2,2						
23		7236	63,36	156087	2,5						
26		6427	56,21	151490	2,8						
34		4972	43,38	141753	3,6						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
18,5 25	12	14544	128,20	67406	0,9	DR873-3E180M/4C	34,50	605	134	IE3
	13	13066	115,03	76391	1,0	DR873-2E180M/4B	34,50	605		IE2
	15	11467	101,03	84605	1,1					
	17	9999	87,95	91103	1,3					
	19	8808	77,36	95782	1,5					
	21	7822	68,62	99313	1,7					
	24	6993	61,27	101922	1,9					
	27	6286	55,01	104319	2,1					
	28	5931	51,94	105467	2,2					
	32	5192	45,41	107447	2,5					
	37	4570	39,92	109130	2,8					
	48	3498	30,50	110047	3,7					
	18	9291	81,72	44784	0,9	DR773-3E180M/4C	34,50	441	128	IE3
	20	8252	72,50	53639	1,0	DR773-2E180M/4B	34,50	441		IE2
	24	7097	62,33	61486	1,1					
	27	6156	53,99	66847	1,3					
	31	5365	46,99	70804	1,5					
	35	4789	41,85	71691	1,7					
	40	4254	37,12	69983	1,9					
	45	3798	33,10	68311	2,1					
	46	3659	31,92	67776	2,2					
	53	3174	27,65	65647	2,5					
	61	2766	24,06	63576	2,9					
		65	2638	22,77	62824	3,0	DR772-3E180M/4C	34,50		426
74		2299	19,82	60757	3,5	DR772-2E180M/4B	34,50	426	IE2	
85		2025	17,44	58860	4,0					
	33	5057	44,27	19234	0,9	DR673-3E180M/4C	34,50	351	122	IE3
	38	4427	38,70	28011	1,0	DR673-2E180M/4B	34,50	351		IE2
	43	3897	34,02	33413	1,1					
	49	3445	30,04	37171	1,2					
	56	3024	26,11	40194	1,4	DR672-3E180M/4C	34,50	341	122	IE3
	63	2708	23,36	42220	1,6	DR672-2E180M/4B	34,50	341		IE2
	73	2339	20,20	44361	1,8					
	84	2029	17,49	46006	2,1					
	96	1776	15,30	47287	2,4					
	109	1568	13,48	48429	2,7					
	123	1392	11,96	50093	2,9					
	138	1242	10,67	49662	3,1					
	143	1197	10,29	49202	3,2					
	166	1038	8,91	47408	3,4					
	190	904	7,75	45708	3,7					
	198	868	7,45	45019	3,3					
223	771	6,61	43618	3,5						
250	688	5,89	42302	3,7						
260	663	5,68	41890	3,8						
	61	2781	24,02	24887	1,1	DR572-3E180M/4C	34,50	291	116	IE3
	69	2481	21,40	28081	1,2	DR572-2E180M/4B	34,50	291		IE2
	81	2112	18,23	31380	1,4					
	94	1818	15,67	33631	1,7					
	108	1580	13,60	35594	1,8					
	124	1382	11,89	34541	2,0					
	141	1216	10,45	33528	2,1					
	171	1005	8,65	31623	2,0					
	198	865	7,43	30509	2,2					
	229	752	6,45	29472	2,4					
	262	658	5,64	28498	2,5					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.	
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class	
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse	
18,5 25	298	579	4,96	27578	2,7	DR572-3E180M/4C	34,50	291	116	IE3	
	337	511	4,38	26703	2,9	DR572-2E180M/4B	34,50	291		IE2	
22 30	11	18374	136,23	180681	1,0	DR973-3E180L/4D	42,50	904	140	IE3	
	12	16096	119,15	176275	1,1	DR973-2E180L/4C	42,50	904		IE2	
	14	14248	105,33	172053	1,3						
	16	12719	93,91	168021	1,4						
	17	11432	84,31	164173	1,6						
	21	9748	71,87	158409	1,8						
	23	8605	63,36	153837	2,1						
	26	7643	56,21	149503	2,4						
	34	5913	43,38	140230	3,0						
	39	5220	38,24	135800	3,4						
	43	4637	33,93	131656	3,9						
		15	13637	101,03	73103	1,0	DR873-3E180L/4D	42,50	608	134	IE3
		17	11891	87,95	82552	1,1	DR873-2E180L/4C	42,50	608		IE2
		19	10475	77,36	89089	1,2					
21		9303	68,62	93895	1,4						
24		8317	61,27	97578	1,6						
27		7476	55,01	100487	1,7						
28		7054	51,94	101711	1,8						
32		6175	45,41	104682	2,1						
37		5435	39,92	106765	2,4						
48		4161	30,50	108822	3,1						
55		3642	26,66	105180	3,6						
63		3206	23,44	101746	4,0						
		24	8440	62,33	52195	0,9	DR773-3E180L/4D	42,50	444	128	IE3
		27	7322	53,99	60083	1,1	DR773-2E180L/4C	42,50	444		IE2
	31	6380	46,99	65641	1,3						
	35	5696	41,85	69203	1,4						
	40	5060	37,12	68194	1,6						
	45	4517	33,10	66726	1,8						
	46	4352	31,92	66250	1,8						
	53	3775	27,65	64334	2,1						
	61	3290	24,06	62440	2,4						
	65	3137	22,77	61763	2,6	DR772-3E180L/4D	42,50	429	128	IE3	
	74	2735	19,82	59838	2,9	DR772-2E180L/4C	42,50	429		IE2	
	85	2409	17,44	58055	3,3						
	95	2139	15,46	56394	3,6						
	107	1911	13,81	54839	3,8						
	43	4635	34,02	25522	0,9	DR673-3E180L/4D	42,50	354	122	IE3	
	49	4097	30,04	31539	1,0	DR673-2E180L/4C	42,50	354		IE2	
	56	3596	26,11	35981	1,2	DR672-3E180L/4D	42,50	344	122	IE3	
	63	3220	23,36	38832	1,3	DR672-2E180L/4C	42,50	344		IE2	
	73	2782	20,20	41759	1,5						
	84	2413	17,49	43953	1,8						
	96	2113	15,30	45575	2,0						
	109	1865	13,48	47008	2,3						
	123	1656	11,96	49004	2,4						
	138	1478	10,67	49051	2,6						
	143	1423	10,29	48614	2,7						
	166	1234	8,91	46901	2,9						
	190	1075	7,75	45268	3,1						
	198	1033	7,45	44556	2,8						
	223	917	6,61	43208	3,0						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
22 30	250	818	5,89	41937	3,2	DR672-3E180L/4D	42,50	344	122	IE3
	260	788	5,68	41539	3,2	DR672-2E180L/4C	42,50	344		IE2
	300	684	4,92	39988	3,5					
	344	595	4,28	38523	3,7					
	61	3308	24,02	17297	0,9	DR572-3E180L/4D	42,50	294	116	IE3
	69	2951	21,40	22821	1,0	DR572-2E180L/4C	42,50	294		IE2
	81	2511	18,23	27782	1,2					
	94	2162	15,67	30962	1,4					
	108	1879	13,60	34121	1,5					
	124	1644	11,89	33856	1,6					
	141	1447	10,45	32929	1,8					
	171	1195	8,65	31046	1,7					
	198	1029	7,43	30016	1,8					
	229	894	6,45	29046	2,0					
	262	783	5,64	28128	2,1					
	298	689	4,96	27254	2,3					
	337	608	4,38	26417	2,4					
	30 40	16	17345	93,91	160126	1,0	DR973-3G200L/4	55,00	930	140
17		15590	84,31	157128	1,2	DR973-2G200L/4	55,00	917		IE2
21		13294	71,87	152454	1,4					
23		11735	63,36	148619	1,5					
26		10424	56,21	144897	1,7					
29		9305	50,12	141287	1,9					
34		8064	43,38	136711	2,2					
39		7119	38,24	132711	2,5					
43		6323	33,93	128926	2,8					
57		4831	25,92	119680	3,7					
21		12687	68,62	78462	1,0	DR873-3G200L/4	55,00	634	134	IE3
24		11342	61,27	85191	1,1	DR873-2G200L/4	55,00	621		IE2
27		10195	55,01	90282	1,3					
28		9619	51,94	92646	1,4					
32		8421	45,41	97201	1,5					
37		7413	39,92	100697	1,8					
42		6552	35,24	103433	2,0					
48		5674	30,50	105990	2,3					
55		4968	26,66	102716	2,6					
63		4373	23,44	99587	3,0					
83		3297	17,67	92088	3,3					
95		2886	15,45	89035	3,7					
109		2541	13,58	86150	4,0					
35		7768	41,85	57128	1,0	DR773-3G200L/4	55,00	470	128	IE3
40	6900	37,12	62675	1,2	DR773-2G200L/4	55,00	457		IE2	
45	6160	33,10	63030	1,3						
46	5935	31,92	62694	1,3						
53	5149	27,65	61279	1,6						
61	4487	24,06	59800	1,8						
65	4278	22,77	59298	1,9	DR772-3G200L/4	55,00	455	128	IE3	
74	3730	19,82	57706	2,1	DR772-2G200L/4	55,00	442		IE2	
85	3285	17,44	56190	2,4						
95	2917	15,46	54749	2,6						
107	2607	13,81	53376	2,8						
119	2343	12,40	52064	3,0						
126	2210	11,71	51365	3,1						
144	1934	10,23	49733	3,3						
164	1702	9,00	48181	3,6						
170	1645	8,70	47306	3,2						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per. O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per. O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
30 40	190	1470	7,76	46012	3,4	DR772-3G200L/4	55,00	455	128	IE3
	212	1321	6,97	44792	3,6	DR772-2G200L/4	55,00	442		IE2
	224	1246	6,58	44147	3,7					
	256	1091	5,75	42653	4,0					
	292	960	5,06	41246	4,0					
	330	848	4,47	39911	4,0					
	73	3795	20,20	34319	1,1	DR672-3G200L/4	55,00	370	122	IE3
	84	3290	17,49	38327	1,3	DR672-2G200L/4	55,00	357		IE2
	96	2881	15,30	41129	1,5					
	109	2543	13,48	43495	1,7					
	123	2258	11,96	46209	1,8					
	138	2015	10,67	47639	1,9					
	143	1941	10,29	47254	2,0					
	166	1684	8,91	45729	2,1					
	190	1467	7,75	44252	2,3					
	198	1409	7,45	43485	2,0					
	223	1251	6,61	42262	2,2					
	250	1117	5,89	41097	2,3					
	260	1076	5,68	40729	2,4					
	300	933	4,92	39289	2,5					
344	812	4,28	37917	2,7						
37 50	21	16397	71,87	147136	1,1	DR973-3G225S/4	67,00	1020	140	IE3
	23	14474	63,36	143967	1,2	DR973-2G225S/4	67,00	1004		IE2
	26	12857	56,21	140798	1,4					
	29	11477	50,12	137653	1,6					
	34	9946	43,38	133587	1,8					
	39	8780	38,24	129972	2,1					
	43	7799	33,93	126508	2,3					
	57	5959	25,92	117636	3,0					
	65	5261	22,85	114147	3,3					
	73	4673	20,27	110852	3,6					
	27	12575	55,01	79060	1,0	DR873-3G225S/4	67,00	723	134	IE3
	28	11865	51,94	82684	1,1	DR873-2G225S/4	67,00	707		IE2
	32	10387	45,41	89469	1,3					
	37	9143	39,92	94513	1,4					
	42	8082	35,24	98411	1,6					
	48	6999	30,50	101903	1,9					
	55	6127	26,66	100531	2,1					
	63	5394	23,44	97677	2,4					
	83	4067	17,67	90478	2,7					
	95	3560	15,45	87634	3,0					
109	3134	13,58	84923	3,2						
105	3265	14,02	86316	3,4	DR872-3G225S/4	67,00	705	134	IE3	
119	2881	12,36	83594	3,7	DR872-2G225S/4	67,00	689		IE2	
135	2558	10,97	81048	4,0						
151	2283	9,78	78649	4,0						
45	7597	33,10	58284	1,1	DR773-3G225S/4	67,00	555	128	IE3	
46	7320	31,92	59505	1,1	DR773-2G225S/4	67,00	539		IE2	
53	6351	27,65	58545	1,3						
61	5534	24,06	57443	1,4						
71	4800	20,87	54829	1,2						
79	4285	18,61	53888	1,3						
82	4128	17,95	53573	1,3						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor* Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienzklasse
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]		
37 50	95	3598	15,46	53286	2,1	DR772-3G225S/4	67,00	548	128	IE3
	107	3216	13,81	52076	2,3	DR772-2G225S/4	67,00	532		IE2
	119	2890	12,40	50903	2,4					
	126	2726	11,71	50272	2,5					
	144	2386	10,23	48782	2,7					
	164	2099	9,00	47349	2,9					
	170	2029	8,70	46387	2,6					
	190	1814	7,76	45195	2,8					
	212	1630	6,97	44061	2,9					
	224	1537	6,58	43458	3,0					
	256	1345	5,75	42053	3,2					
	292	1184	5,06	40720	3,4					
	330	1046	4,47	39449	3,6					
45 60	23	17605	63,36	138551	1,0	DR973-3G225M/4	80,00	1050	140	IE3
	26	15638	56,21	136032	1,2	DR973-2G225M/4	80,00	1050		IE2
	29	13959	50,12	133434	1,3					
	34	12097	43,38	129965	1,5					
	39	10680	38,24	126800	1,7					
	43	9487	33,93	123710	1,9					
	57	7248	25,92	115272	2,5					
	65	6399	22,85	112074	2,7					
	73	5684	20,27	109022	3,0					
	89	4713	16,64	104840	3,8	DR972-3G225M/4 DR972-2G225M/4	80,00 80,00	1031 1031	140	IE3 IE2
	32	12633	45,41	78748	1,0	DR873-3G225M/4	80,00	751	134	IE3
	37	11121	39,92	86217	1,2	DR873-2G225M/4	80,00	751		IE2
	42	9830	35,24	91795	1,3					
48	8512	30,50	96872	1,5						
55	7453	26,66	98003	1,7						
63	6560	23,44	95467	2,0						
83	4946	17,67	88617	2,2						
95	4331	15,45	86016	2,4						
109	3812	13,58	83508	2,7						
105	3971	14,02	85020	2,8	DR872-3G225M/4	80,00	735	134	IE3	
119	3504	12,36	82456	3,0	DR872-2G225M/4	80,00	735		IE2	
135	3112	10,97	80041	3,3						
151	2777	9,78	77754	3,5						
169	2488	8,75	75576	3,7						
182	2307	8,12	73621	3,4						
206	2036	7,16	71268	3,7						
232	1808	6,35	69071	3,9						
260	1613	5,66	67004	4,0						
53	7724	27,65	55351	1,0	DR773-3G225M/4	80,00	586	128	IE3	
61	6732	24,06	54694	1,2	DR773-2G225M/4	80,00	586		IE2	
71	5838	20,87	52130	1,0						
79	5212	18,61	51504	1,1						
82	5022	17,95	51281	1,1						
95	4376	15,46	51587	1,8	DR772-3G225M/4	80,00	578	128	IE3	
107	3911	13,81	50569	1,9	DR772-2G225M/4	80,00	578		IE2	
119	3515	12,40	49558	2,0						
126	3316	11,71	49005	2,1						
144	2902	10,23	47682	2,2						
164	2554	9,00	46388	2,4						
170	2468	8,70	45324	2,1						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz-klasse
45 60	190	2206	7,76	44251	2,3	DR772-3G225M/4	80,00	578	128	IE3
	212	1983	6,97	43217	2,4	DR772-2G225M/4	80,00	578		IE2
	224	1870	6,58	42663	2,5					
	256	1637	5,75	41361	2,7					
	292	1440	5,06	40115	2,8					
	330	1272	4,47	38916	3,0					
55 75	30	17004	50,12	128000	1,1	DR973-3G250M/4	96,00	1135	140	IE3
	34	14736	43,38	125293	1,2	DR973-2G250M/4	96,00	1135		IE2
	39	13009	38,24	122701	1,4					
	44	11556	33,93	120086	1,6					
	57	8829	25,92	112199	2,0					
	65	7795	22,85	109372	2,2					
	73	6924	20,27	106629	2,4					
	89	5742	16,64	103071	3,1	DR972-3G250M/4	96,00	1116	140	IE3
	100	5100	14,77	100154	3,5	DR972-2G250M/4	96,00	1116		IE2
	112	4560	13,19	97419	3,9					
	125	4100	11,85	94841	4,0					
	42	11974	35,24	82139	1,1	DR873-3G250M/4	96,00	836	134	IE3
	49	10369	30,50	89541	1,3	DR873-2G250M/4	96,00	836		IE2
	56	9078	26,66	94741	1,4					
	63	7992	23,44	92610	1,6					
	84	6025	17,67	86202	1,8					
	96	5275	15,45	83909	2,0					
	109	4644	13,58	81659	2,2					
106	4837	14,02	83320	2,3	DR872-3G250M/4	96,00	820	134	IE3	
120	4269	12,36	80956	2,5	DR872-2G250M/4	96,00	820		IE2	
135	3791	10,97	78708	2,7						
151	3383	9,78	76563	2,8						
169	3031	8,75	74507	3,0						
182	2811	8,12	72511	2,8						
207	2481	7,16	70287	3,0						
233	2203	6,35	68197	3,2						
261	1965	5,66	66221	3,4						
75 97	39	17681	38,24	114422	1,0	DR973-3G280S/4	133,00	1295	140	IE3
	44	15706	33,93	112795	1,1	DR973-2G280S/4	133,00	1295		IE2
	57	12000	25,92	106031	1,5					
	65	10595	22,85	103969	1,6					
	73	9411	20,27	101861	1,8					
	89	7804	16,64	99589	2,3	DR972-3G280S/4	133,00	1170	140	IE3
	101	6932	14,77	97071	2,6	DR972-2G280S/4	133,00	1170		IE2
	113	6198	13,19	94669	2,9					
	125	5573	11,85	92373	3,2					
	149	4677	9,94	87788	3,2					
	168	4154	8,82	85342	3,4					
	188	3714	7,88	83043	3,6					
	210	3339	7,08	80872	3,9					
	56	12339	26,66	80292	1,1	DR873-3G280S/4	133,00	996	134	IE3
	63	10862	23,44	86865	1,2	DR873-2G280S/4	133,00	996		IE2
	84	8190	17,67	81356	1,3					
	96	7170	15,45	79700	1,5					
	109	6312	13,58	77978	1,6					

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



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Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış Per.O. Loads (Output)	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	Motor Verim Snf.*	
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class	
Leistung	Abtriebswelle Drehzahlen	Abtriebswelle Drehmomente	Übersetzung	Zul.Querkräfte (Abtrieb)	Betriebsfaktor	Typ	Nennstrom	Gewicht	Maße Seite	Motor Effizienzklasse	
P _g [kW] P _g [HP]	n ₂ [r.p.m]	M ₂ [Nm]	i	F _{qam} [N]	f _s		[A]	[kg]			
75 97	106	6575	14,02	79954	1,7	DR872-3G280S/4	133,00	967	134	IE3	
	120	5803	12,36	77998	1,8	DR872-2G280S/4	133,00	967		IE2	
	135	5153	10,97	76090	2,0						
	152	4598	9,78	74232	2,1						
	170	4120	8,75	72422	2,2						
	183	3821	8,12	70338	2,1						
	207	3372	7,16	68373	2,2						
	234	2994	6,35	66500	2,4						
	262	2672	5,66	64709	2,5						
90 117	57	14401	25,92	101336	1,2	DR973-3G280M/4	158,00	1355	140	IE3	
	65	12714	22,85	99874	1,4	DR973-2G280M/4	158,00	1355		IE2	
	73	11294	20,27	98262	1,5						
	89	9365	16,64	96996	1,9	DR972-3G280M/4	158,00	1230	140	IE3	
	101	8319	14,77	94785	2,2	DR972-2G280M/4	158,00	1230		IE2	
	113	7439	13,19	92638	2,4						
	125	6688	11,85	90558	2,7						
	149	5612	9,94	86096	2,7						
	168	4985	8,82	83848	2,8						
	188	4457	7,88	81715	3,0						
	210	4007	7,08	79684	3,2						
	96	8605	15,45	76513	1,2	DR873-3G280M/4	158,00	1056	134	IE3	
	109	7575	13,58	75203	1,3	DR873-2G280M/4	158,00	1056		IE2	
	106	7891	14,02	77431	1,4	DR872-3G280M/4	158,00	1027	134	IE3	
	120	6964	12,36	75790	1,5	DR872-2G280M/4	158,00	1027		IE2	
	135	6184	10,97	74144	1,6						
	152	5518	9,78	72507	1,7						
	170	4944	8,75	70885	1,8						
	183	4585	8,12	68728	1,7						
	207	4047	7,16	66962	1,8						
	234	3593	6,35	65255	2,0						
262	3206	5,66	63604	2,1							
110 150	57	17577	25,92	94903	1,0	DR973-3G315S/4	194,00	1551	140	IE3	
	65	15518	22,85	94271	1,1	DR973-2G315S/4	194,00	1474		IE2	
	73	13786	20,27	93342	1,2						
	89	11431	16,64	93460	1,6	DR972-3G315S/4	194,00	1426	140	IE3	
	101	10154	14,77	91668	1,8	DR972-2G315S/4	194,00	1349		IE2	
	113	9079	13,19	89869	2,0						
	125	8163	11,85	88082	2,2						
	150	6850	9,94	83786	2,2						
	169	6085	8,82	81809	2,3						
	189	5441	7,88	79900	2,5						
	210	4891	7,08	78059	2,6						
	132 180	65	18623	22,85	87944	0,9	DR973-3G315M/4a	230,00	1572	140	IE3
		73	16543	20,27	87804	1,0	DR973-2G315M/4a	230,00	1551		IE2
		89	13718	16,64	89520	1,3	DR972-3G315M/4a	230,00	1447	140	IE3
		101	12185	14,77	88203	1,5	DR972-2G315M/4a	230,00	1426		IE2
		113	10896	13,19	86799	1,7					
		125	9796	11,85	85343	1,8					
		150	8221	9,94	81230	1,8					
169		7302	8,82	79558	1,9						

*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



D Serisi Motorlu Güç Devir Sayfaları

D Series Geared Motors Performance Tables

D Serien Getriebemotoren Leistung und Drehzahlübersicht



Güç	IE3 Çıkış Devri	IE3 Çıkış Momenti	Çevrim Oranı	IE3 Güv. Rad. Yük Çıkış	IE3 Servis Faktörü	Tipi	Anma Akımı	Ağırlık	Ölçü Sayfası	* Motor Verim Snf.
Power	Output Speeds	Output Torque	Ratio	Per.O. Loads (Output)	Service Factors	Type	Rated Current	Weight	Dim. Page	Motor Eff. Class
Leistung P _g [kW] P _g [HP]	Abtriebswelle Drehzahlen n ₂ [r.p.m]	Abtriebswelle Drehmomente M ₂ [Nm]	Übersetzung i	Zul.Querkräfte (Abtrieb) F _{qam} [N]	Betriebsfaktor f _s	Typ	Nennstrom [A]	Gewicht ~ [kg]	Maße Seite	Motor Effizienz- klasse
132	189	6529	7,88	77903	2,1	DR972-3G315M/4a	230,00	1447	140	IE3
180	210	5870	7,08	76276	2,2	DR972-2G315M/4a	230,00	1426		IE2
160	89	16617	16,64	84381	1,1	DR972-3G315M/4b	275,00	1495	140	IE3
220	101	14761	14,77	83692	1,2	DR972-2G315M/4b	275,00	1450		IE2
	113	13199	13,19	82805	1,4					
	126	11866	11,85	81785	1,5					
	150	9959	9,94	77906	1,5					
	169	8846	8,82	76634	1,6					
	189	7910	7,88	75310	1,7					
	210	7111	7,08	73962	1,8					

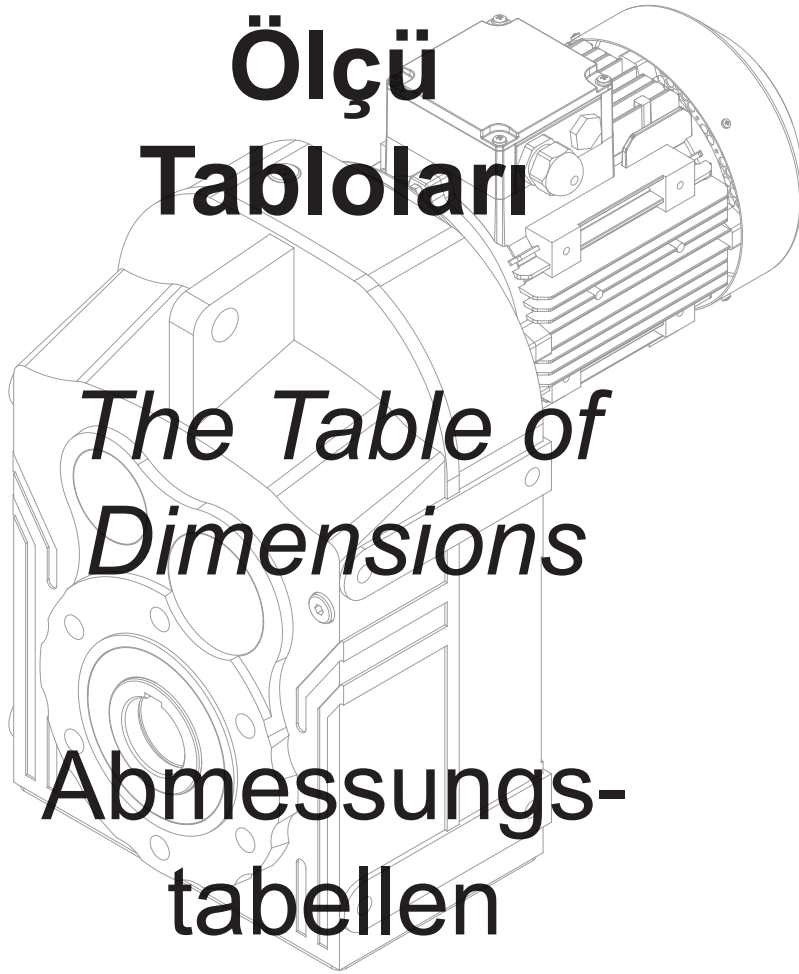
*: IE2 ve IE3 motorlu redüktör fiyatları farklıdır. / Geared motor prices are different for IE2 and IE3 motors. / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Ölçü Tabloları

*The Table of
Dimensions*

Abmessungs-
tabellen





Ölçü Sayfaları

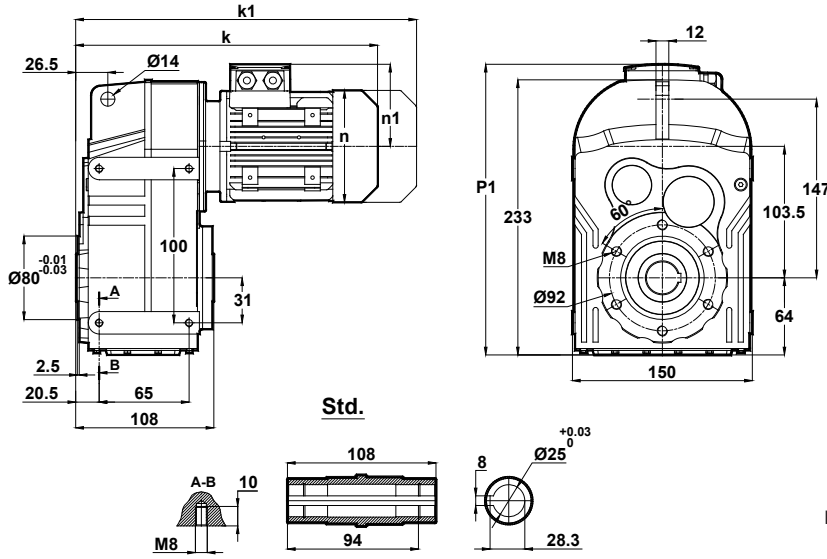
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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

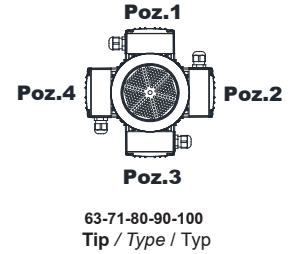
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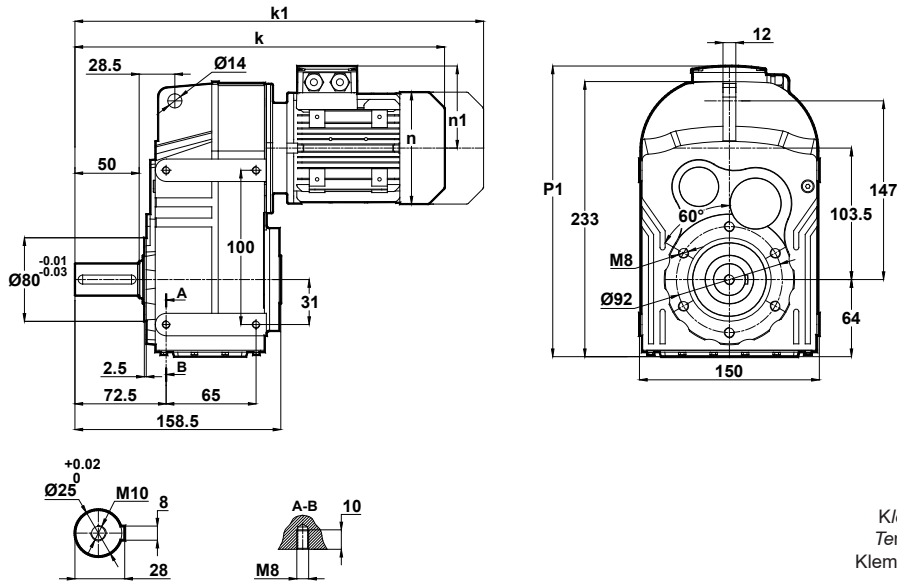
Std.

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	298.5	328	362	401	401	449
k1	359.5	419	455	504.5	504.5	557.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336

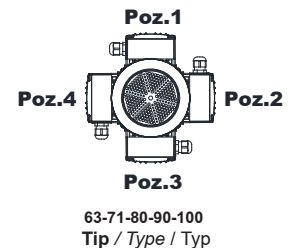


DR072.01
DR073.01

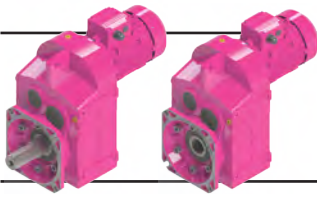


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	350.5	380	414	453	453	501
k1	411.5	471	507	556.5	556.5	609.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

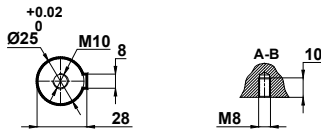
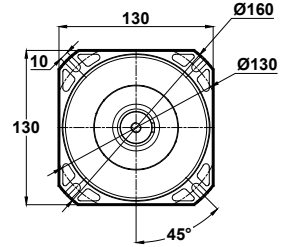
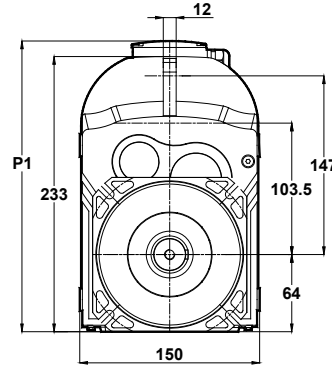
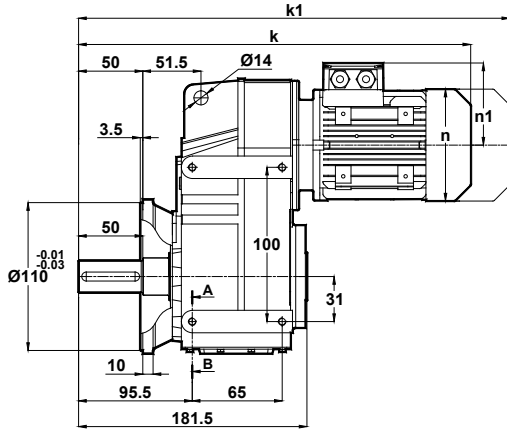


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

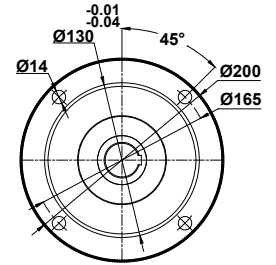
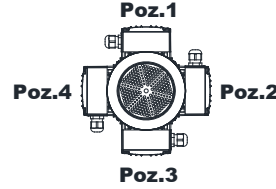
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Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

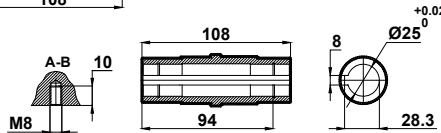
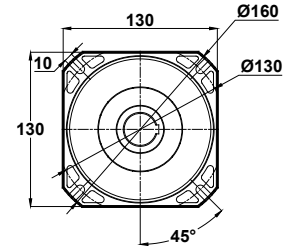
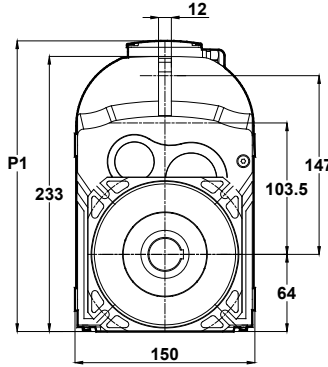
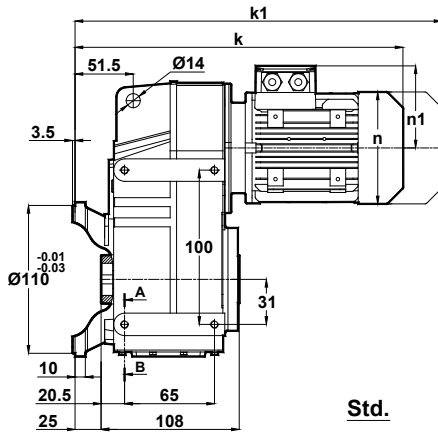
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80	90S	90L	100L
k	373.5	403	437	476	476	534
k1	434.5	494	530	579.5	579.5	632.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



63-71-80-90-100
Tip / Type / Typ

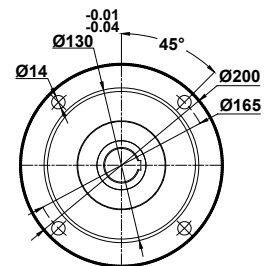
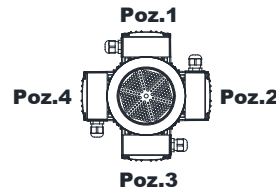
DR072.03
DR073.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80	90S	90L	100L
k	323.5	353	387	426	426	474
k1	384.5	444	480	529.5	529.5	582.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

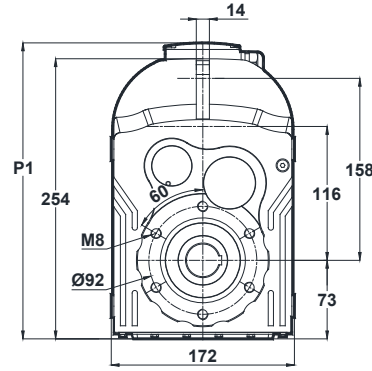
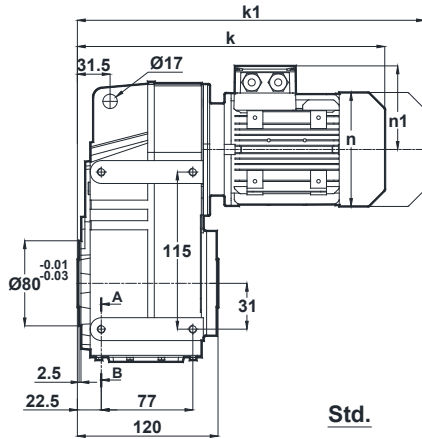
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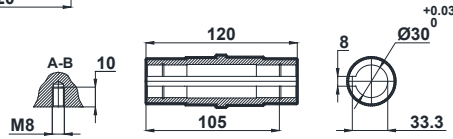


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR172.00
DR173.00

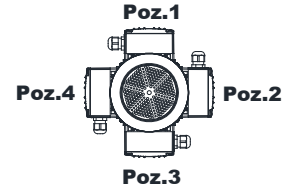


Std.



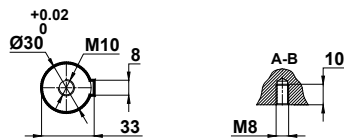
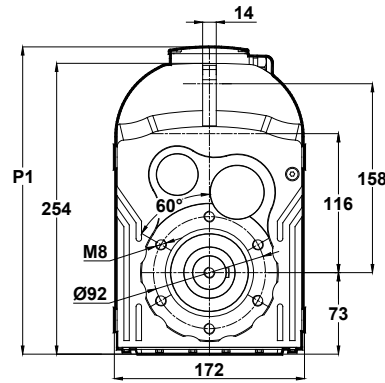
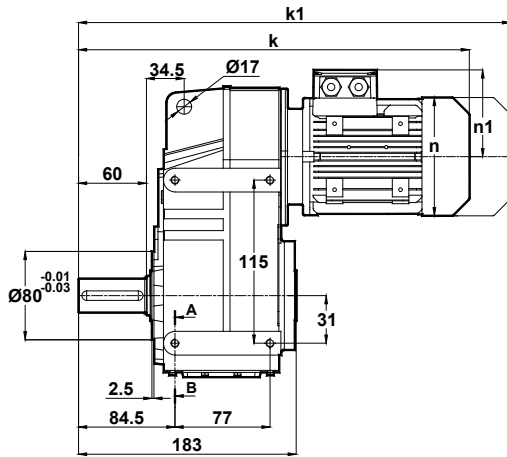
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	308	337	371	410	410	458
k1	369	428	464	514.5	514.5	577.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



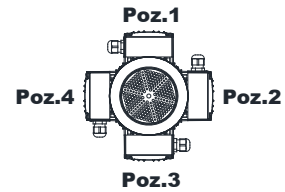
63-71-80-90-100
Tip / Type / Typ

DR172.01
DR173.01



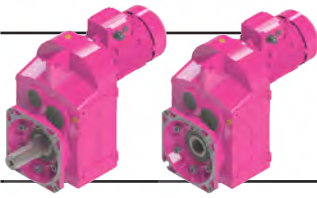
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	371	400	434	473	473	521
k1	432	491	527	577.5	577.5	640.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

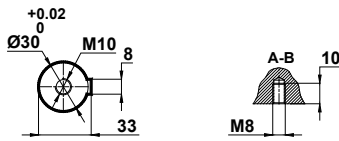
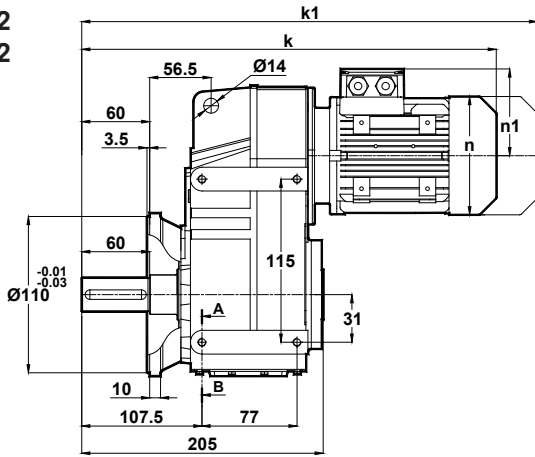


Ölçü Sayfaları Dimension Pages Abmessungsseiten

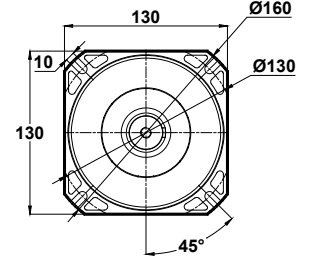
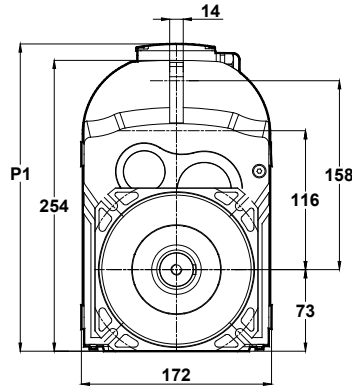


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR172.02
DR173.02

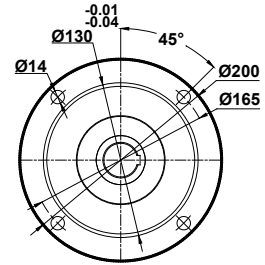
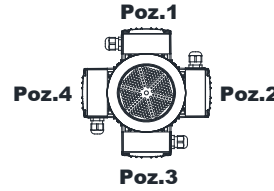


	63	71	80	90S	90L	100L
k	393	422	456	495	495	543
k1	454	513	549	599.5	599.5	662.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



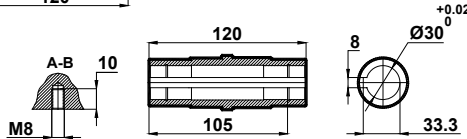
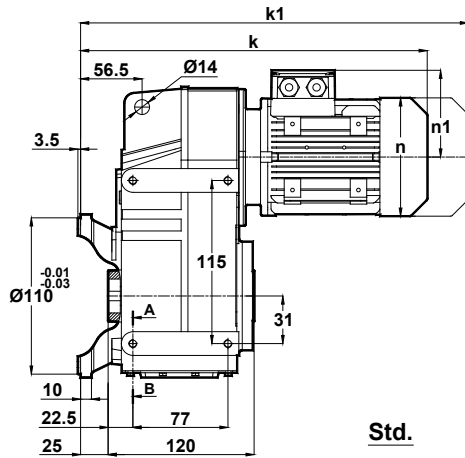
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

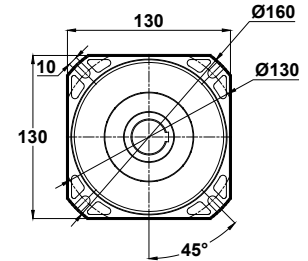
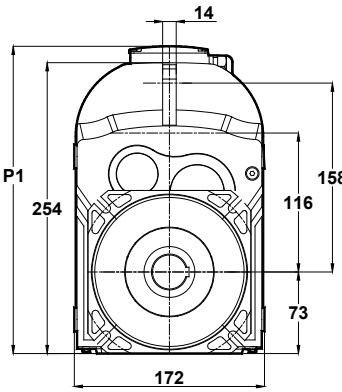


63-71-80-90-100
Tip / Type / Typ

DR172.03
DR173.03



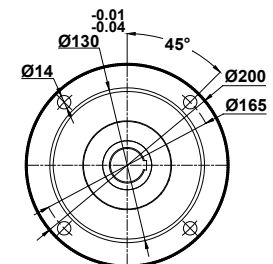
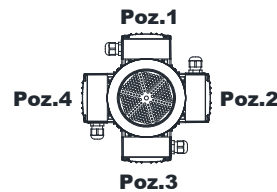
	63	71	80	90S	90L	100L
k	333	362	396	435	435	483
k1	394	453	489	539.5	539.5	602.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	286	301	310	321	321	336



Std.

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

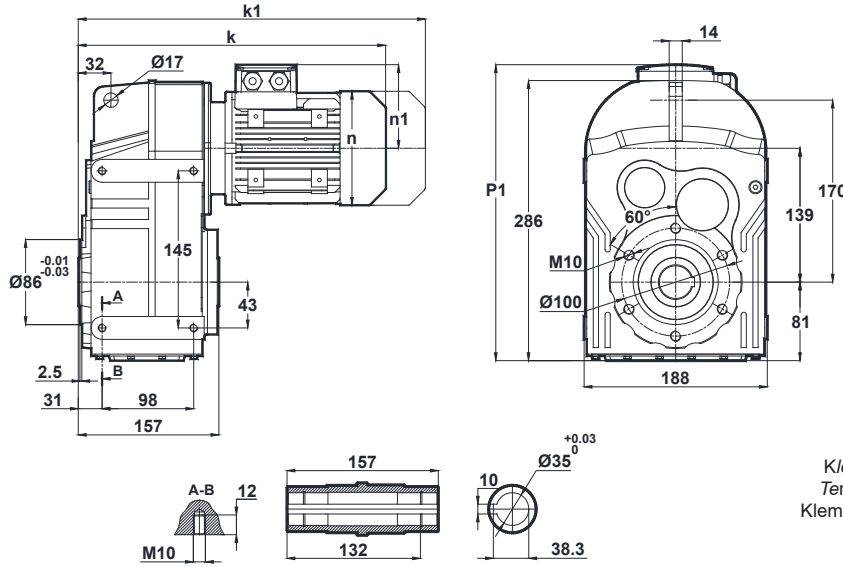
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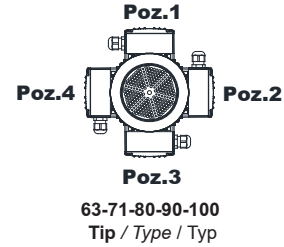
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR272.00
DR273.00

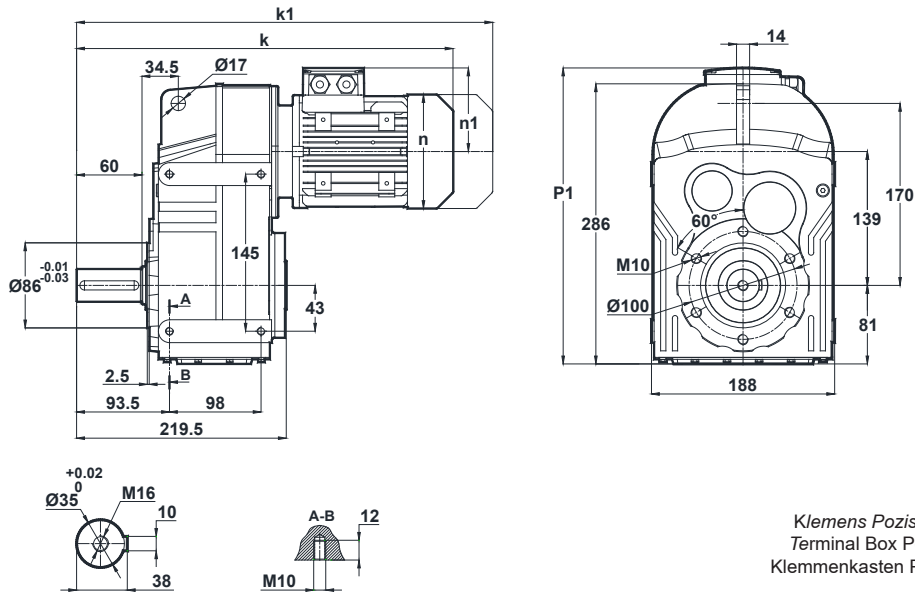


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	338	367	401	440	440	488
k1	399	458	494	544.5	544.5	607.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	317	332	341	352	352	367

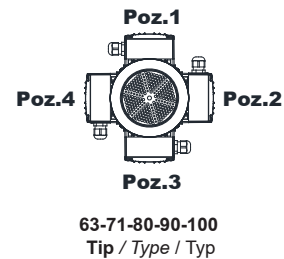


DR272.01
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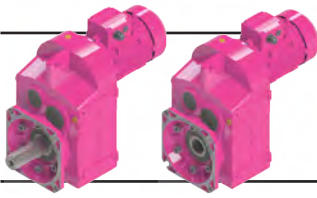


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80	90S	90L	100L
k	400	429	463	502	502	550
k1	461	520	556	606.5	606.5	669.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	317	332	341	352	352	367



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

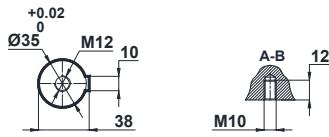
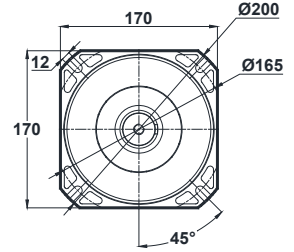
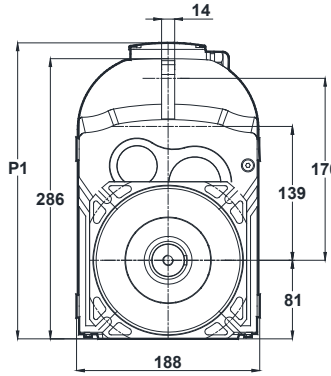
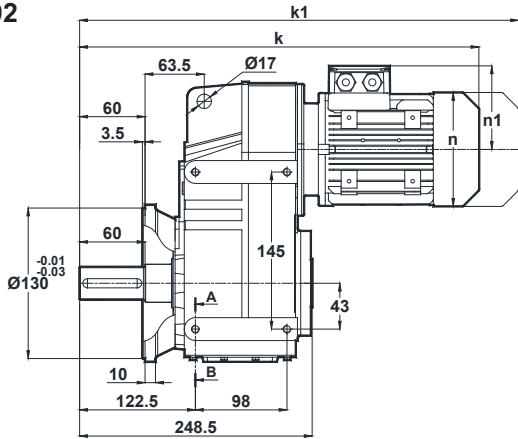
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

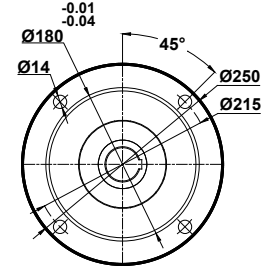
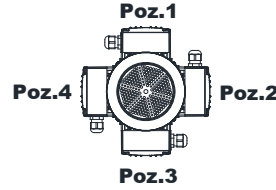
DR272.02
DR273.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

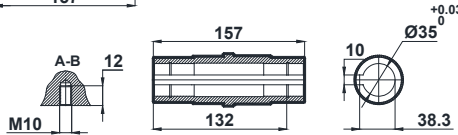
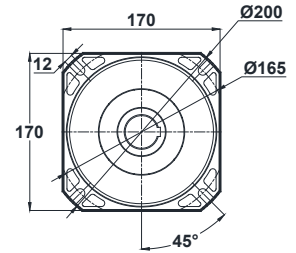
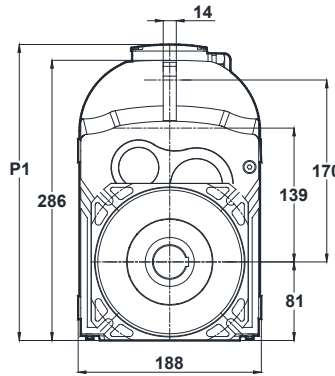
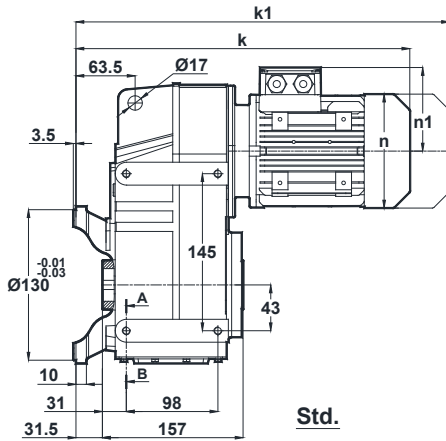
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80	90S	90L	100L
k	429	458	492	531	531	579
k1	490	549	585	635.5	635.5	698.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	317	332	341	352	352	367



63-71-80-90-100
Tip / Type / Typ

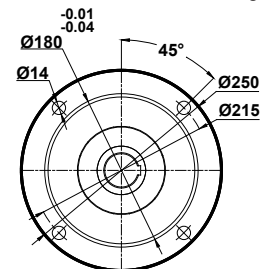
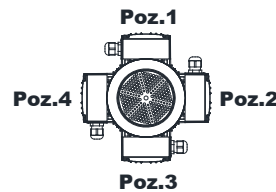
DR272.03
DR273.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80	90S	90L	100L
k	369	398	432	471	471	737
k1	430	489	525	575.5	575.5	856.5
n	121	137	155	176	176	193
n1	97	112	121	132	132	147
p1	317	332	341	352	352	367



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

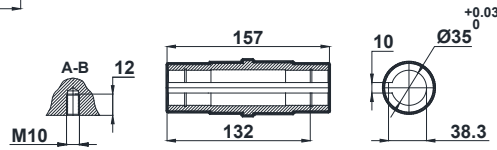
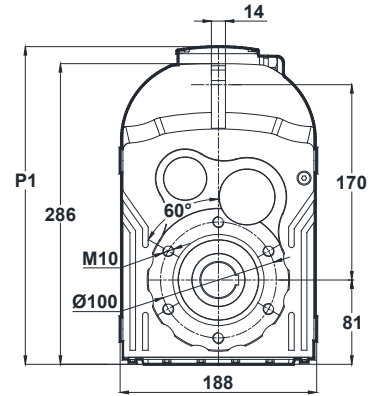
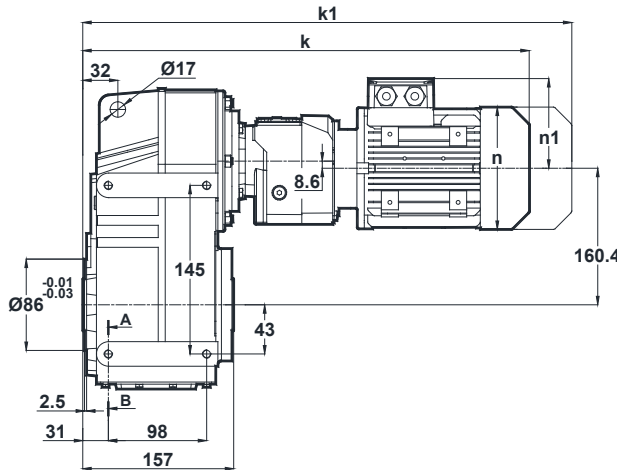


Ölçü Sayfaları Dimension Pages Abmessungsseiten



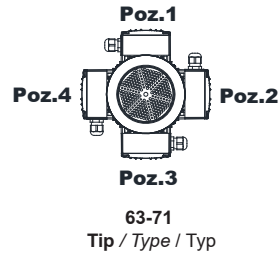
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR275.00
DR276.00

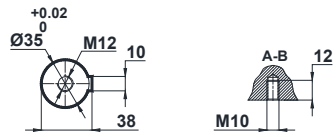
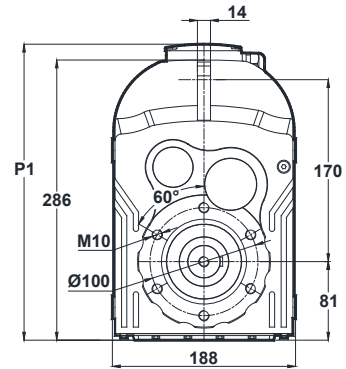
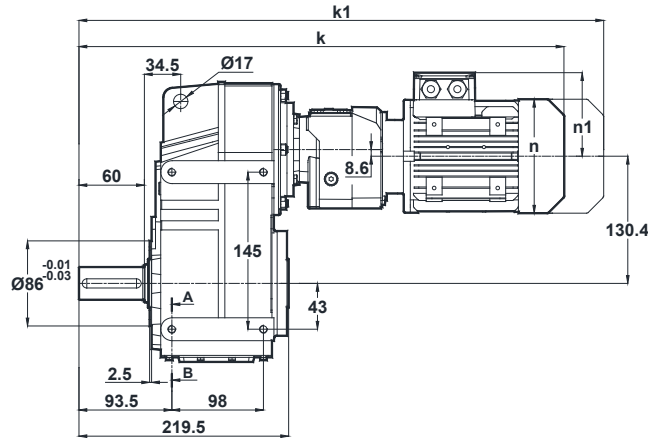


	63	71
k	484	513
k1	545	604
n	121	137
n1	97	112
p1	309	324

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

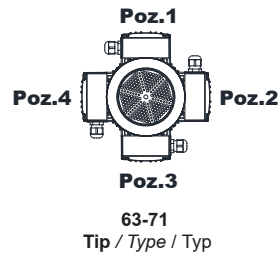


DR275.01
DR276.01

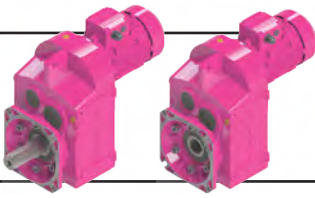


	63	71
k	546	575
k1	607	666
n	121	137
n1	97	112
p1	309	324

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

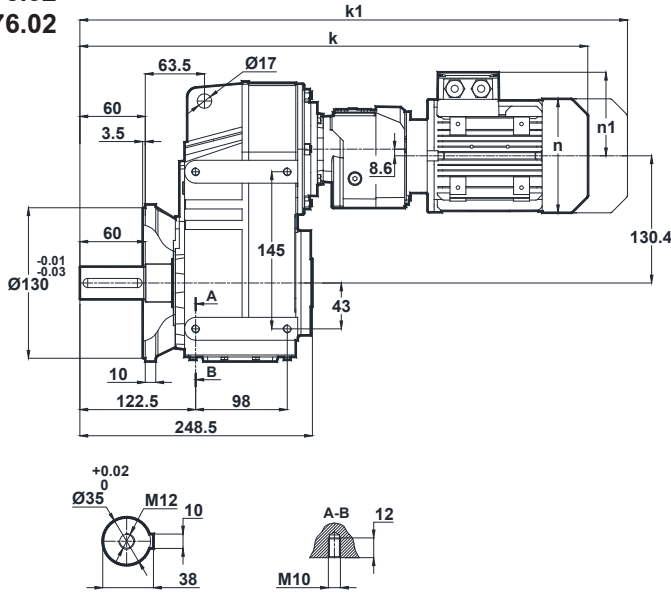


Ölçü Sayfaları Dimension Pages Abmessungenseiten

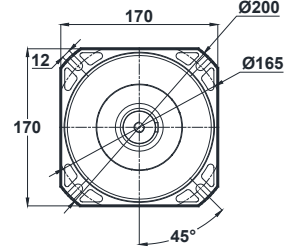
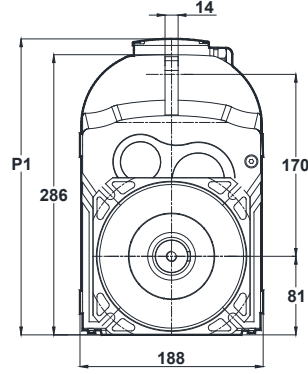


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR275.02
DR276.02

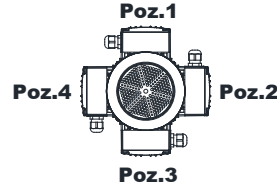


	63	71
k	575	604
k1	636	695
n	121	137
n1	97	112
p1	309	324

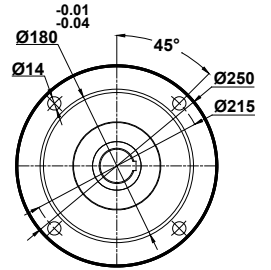


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

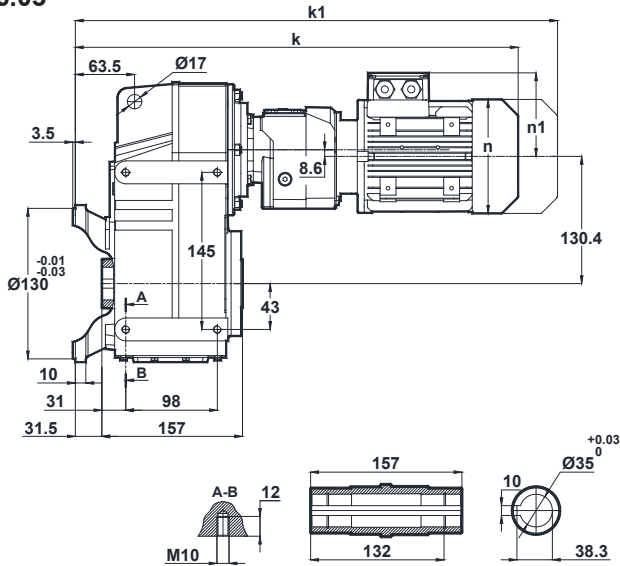
Optional Flange Dimensions
Auswählbare Flanschabmessungen



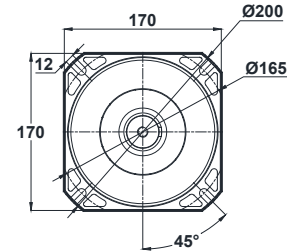
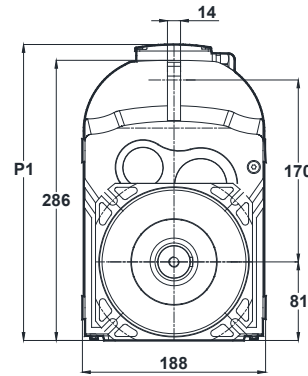
63-71
Tip / Type / Typ



DR275.03
DR276.03

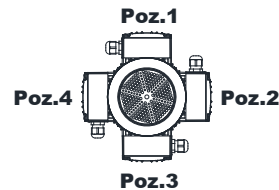


	63	71
k	515	544
k1	576	635
n	121	137
n1	97	112
p1	309	324

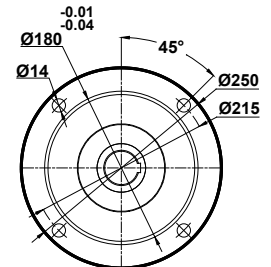


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71
Tip / Type / Typ



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

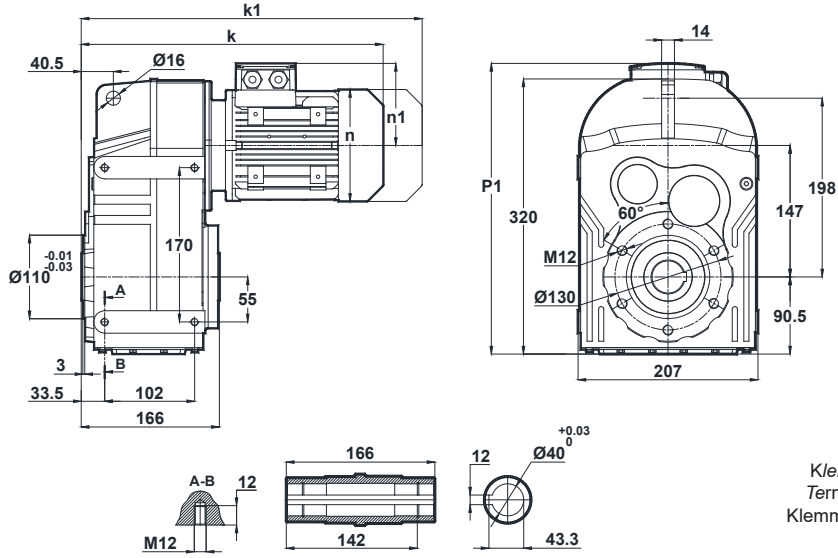


Ölçü Sayfaları Dimension Pages Abmessungsseiten



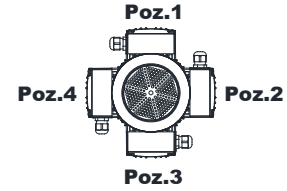
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR282.00
DR283.00



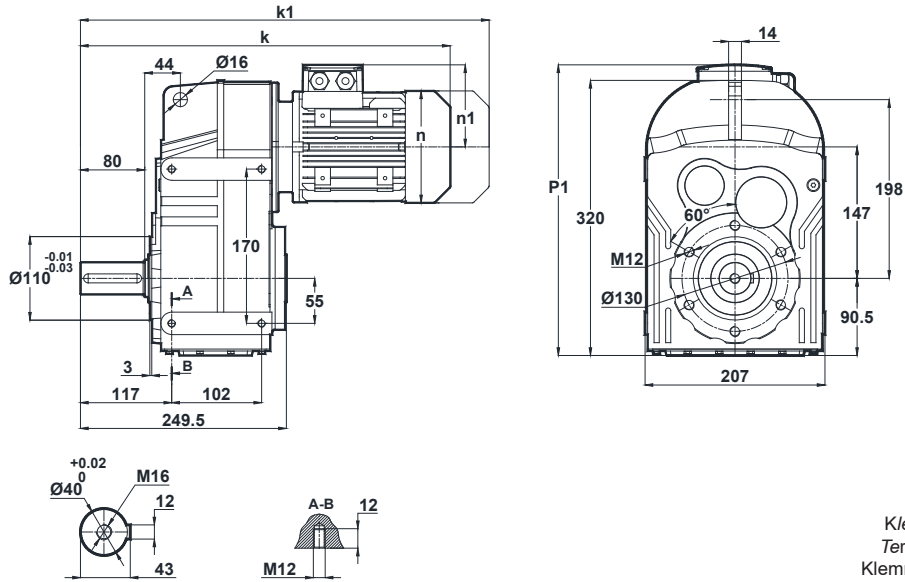
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M
k	370	404	443	443	491	515	598	598
k1	461	497	547.5	547.5	610.5	619.5	728	728
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	349	358	369	369	384	395	417	417



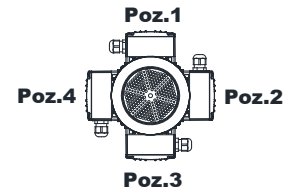
71-80-90-100-112-132
Tip / Type / Typ

DR282.01
DR283.01



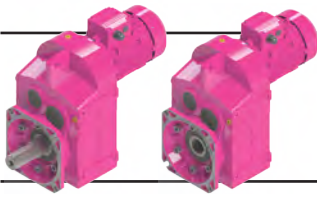
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M
k	454	488	527	527	575	599	682	682
k1	545	581	631.5	631.5	694.5	703.5	812	812
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	349	358	369	369	384	395	417	417



71-80-90-100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

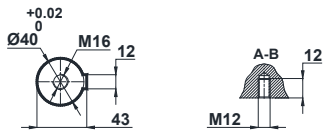
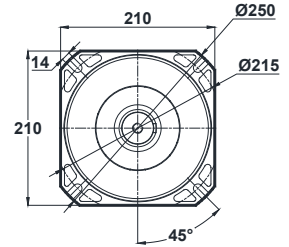
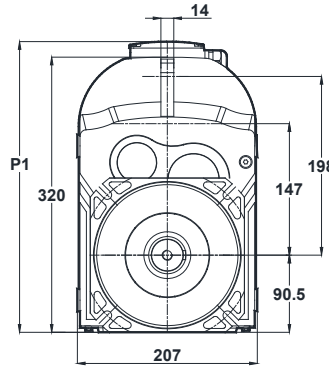
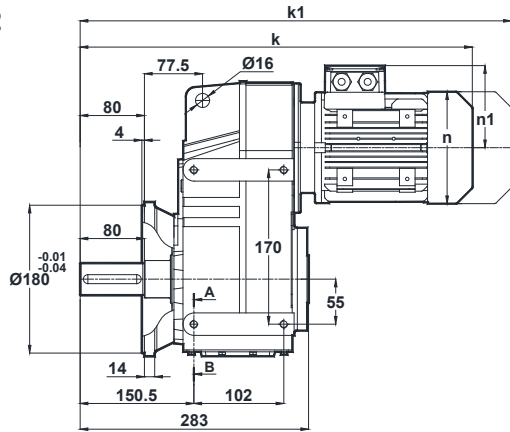
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

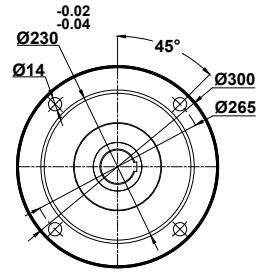
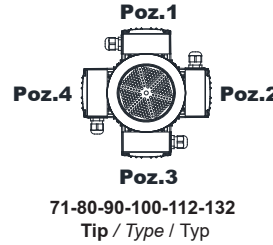
DR282.02
DR283.02



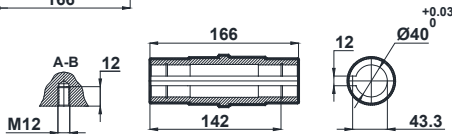
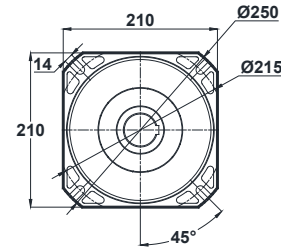
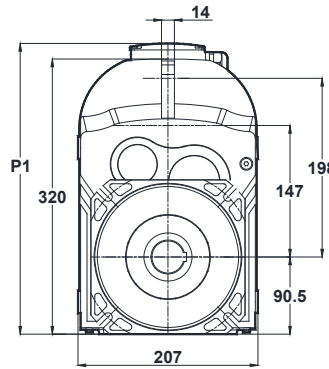
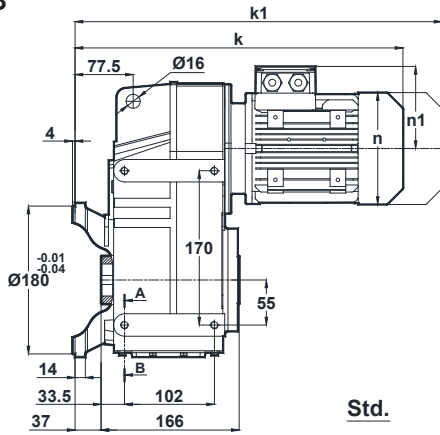
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M
k	487	521	560	560	608	632	715	715
k1	578	614	664.5	664.5	727.5	736.5	845	845
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	349	358	369	369	384	395	417	417



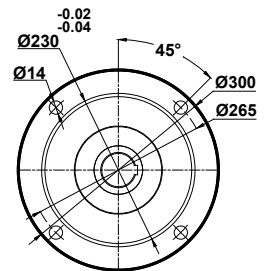
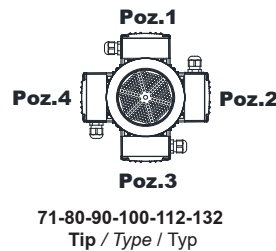
DR282.03
DR283.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M
k	407	441	480	480	528	552	635	635
k1	498	534	584.5	584.5	647.5	656.5	765	765
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	349	358	369	369	384	395	417	417



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

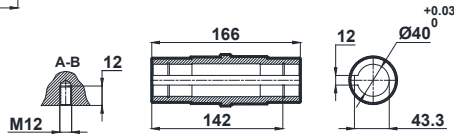
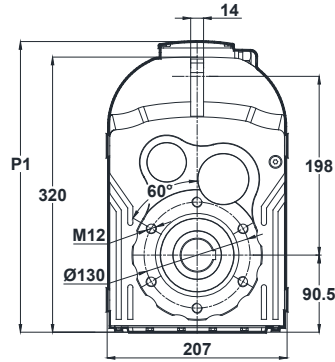
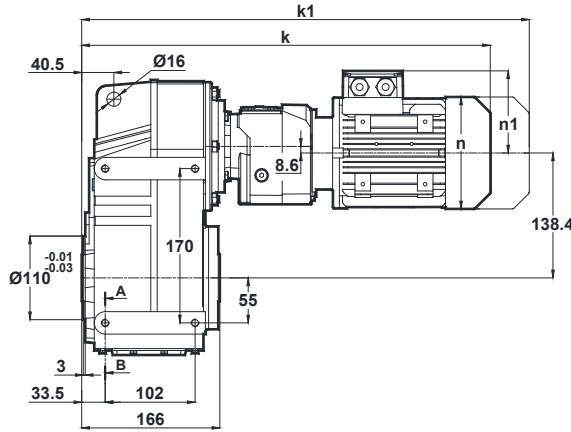
Dimension Pages

Abmessungsseiten



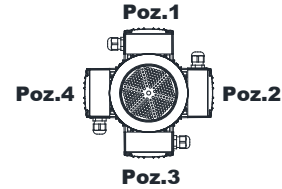
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR285.00
DR286.00



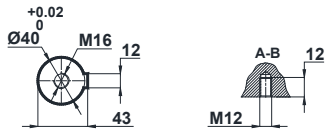
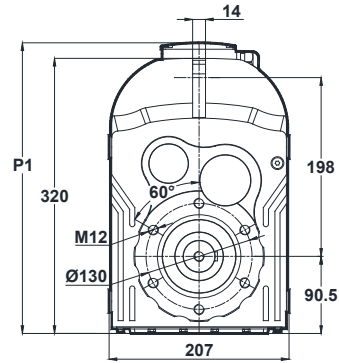
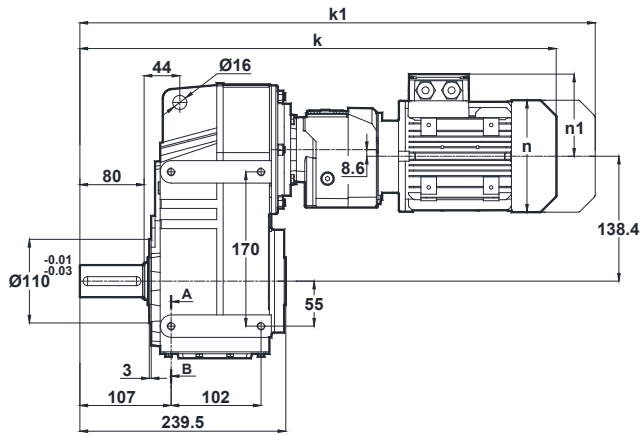
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	492	521
k1	553	612
n	121	137
n1	97	112
p1	326	341



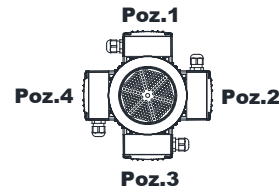
63-71
Tip / Type / Typ

DR285.01
DR286.01



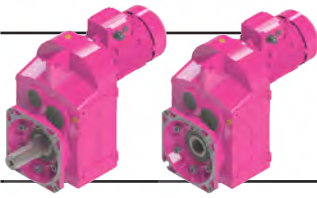
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	576	605
k1	637	696
n	121	137
n1	97	112
p1	326	341



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

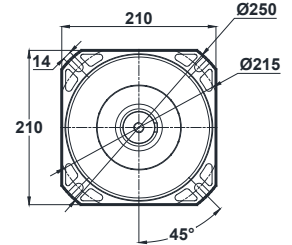
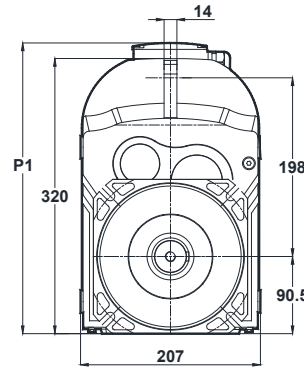
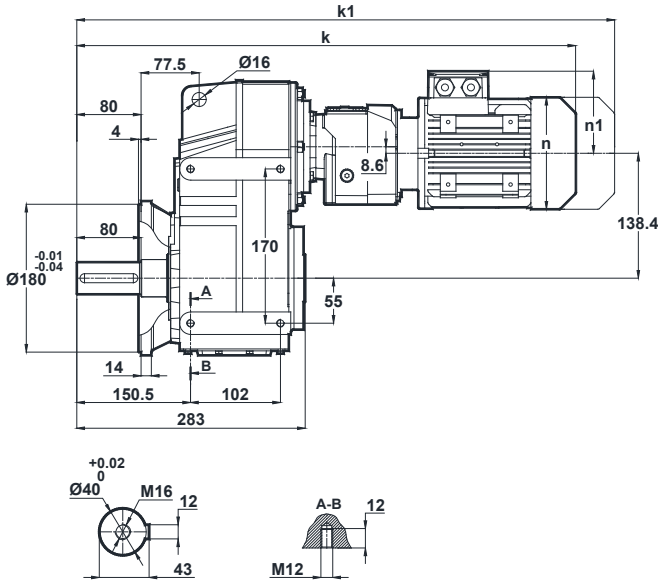
Dimension Pages

Abmessungsseiten



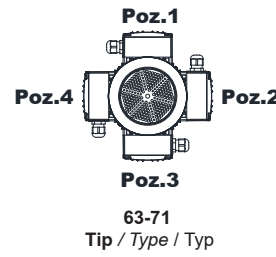
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR285.02
DR286.02

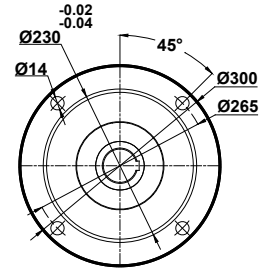


	63	71
k	609	638
k1	670	729
n	121	137
n1	97	112
p1	326	341

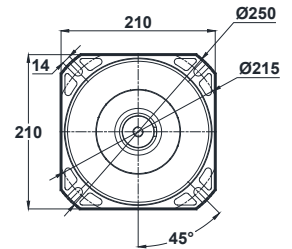
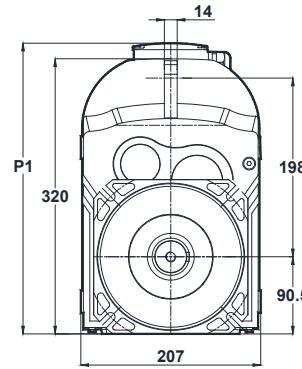
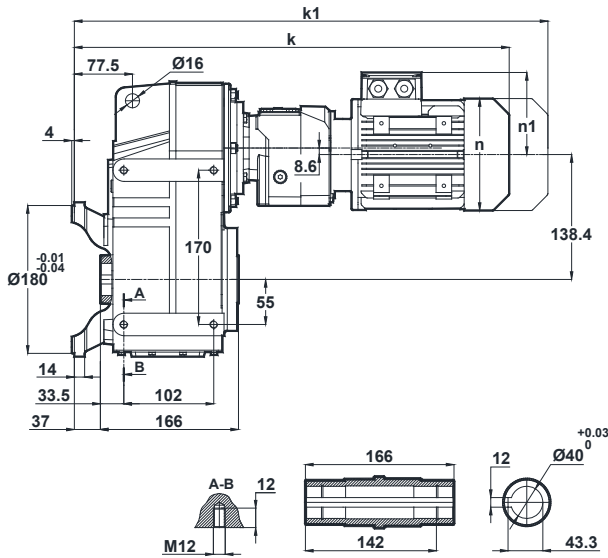
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



Optional Flange Dimensions
Auswählbare Flanschabmessungen

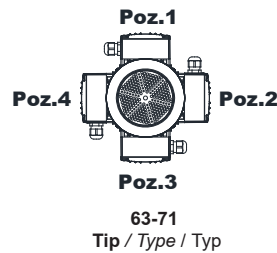


DR285.03
DR286.03

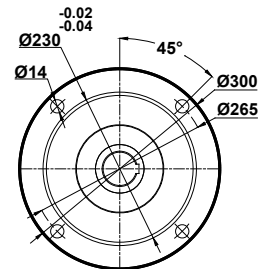


	63	71
k	529	558
k1	590	649
n	121	137
n1	97	112
p1	326	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

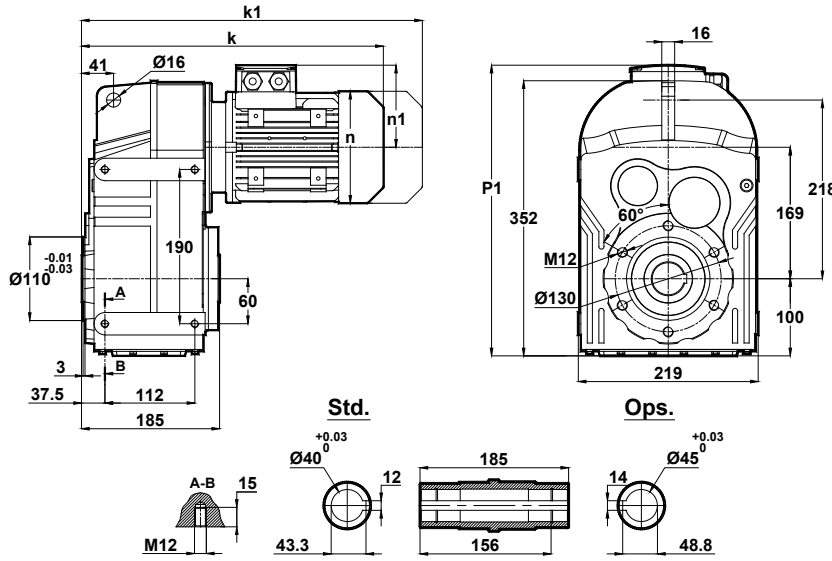
Dimension Pages

Abmessungsseiten



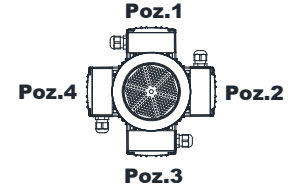
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR372.00
DR373.00



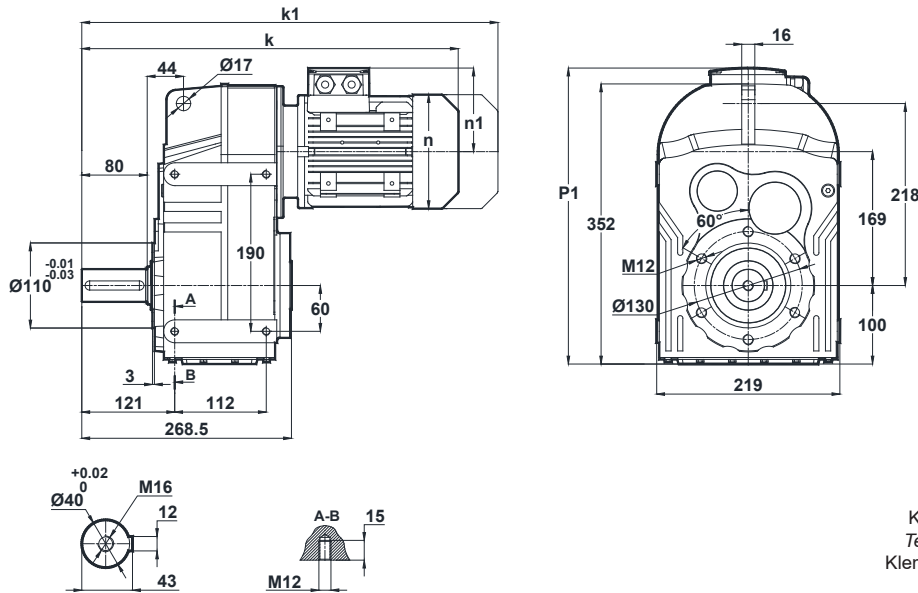
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M
k	381	415	454	454	502	526	609	609
k1	472	508	558.5	558.5	621.5	630.5	739	739
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	381	390	401	401	416	427	448	448



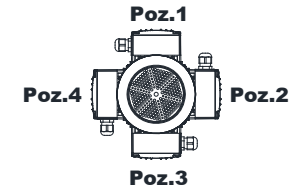
71-80-90-100-112-132
Tip / Type / Typ

DR372.01
DR373.01



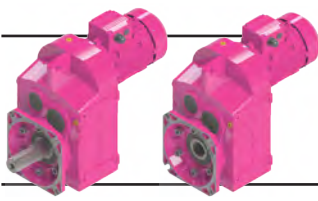
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M
k	464	498	537	537	585	609	692	692
k1	555	591	641.5	641.5	704.5	713.5	822	822
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	381	390	401	401	416	427	448	448



71-80-90-100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

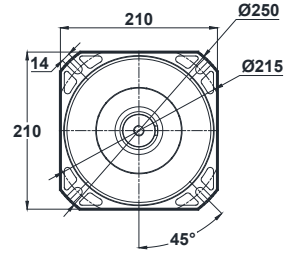
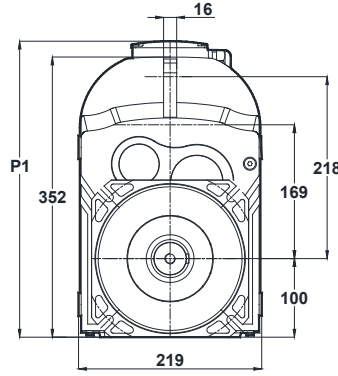
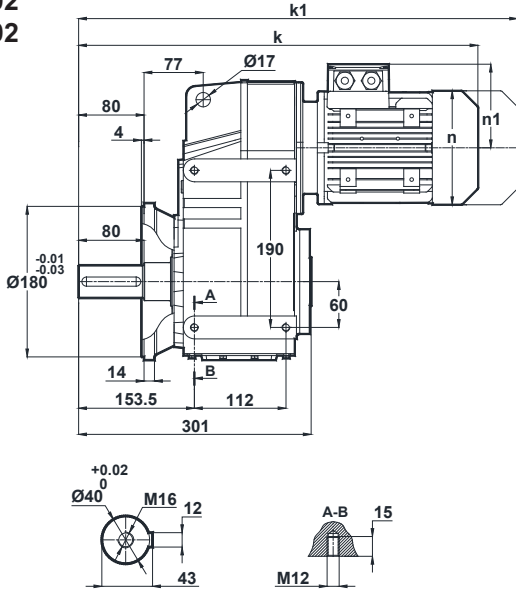


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

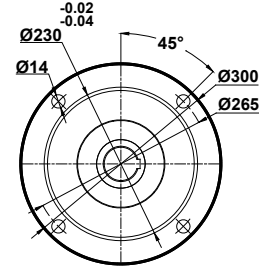
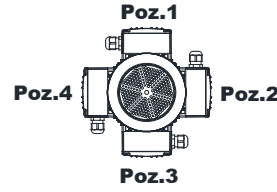
DR372.02
DR373.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

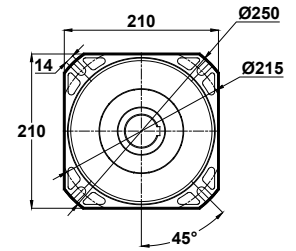
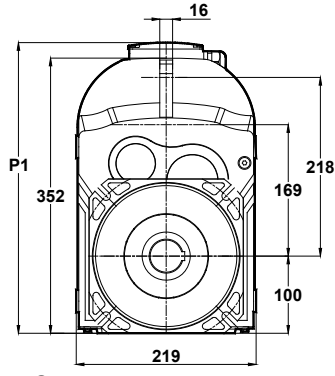
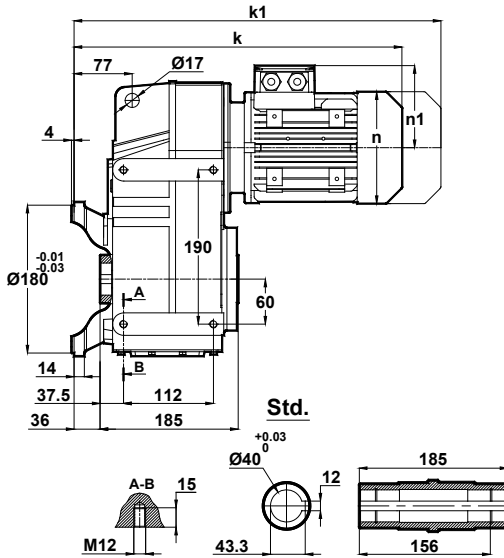
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M
k	497	531	570	570	618	642	725	725
k1	568	624	674.5	674.5	737.5	746.5	855	855
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	381	390	401	401	416	427	448	448



71-80-90-100-112-132
Tip / Type / Typ

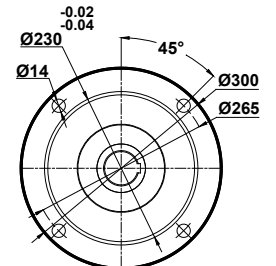
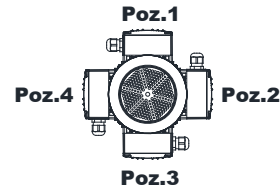
DR372.03
DR373.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M
k	417	451	490	490	538	562	645	645
k1	508	544	594.5	594.5	657.5	666.5	775	775
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
p1	381	390	401	401	416	427	448	448



71-80-90-100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

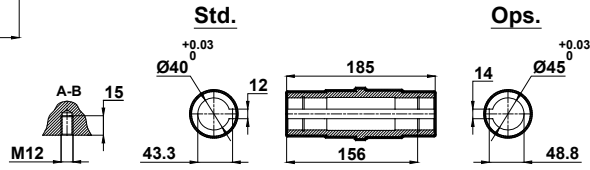
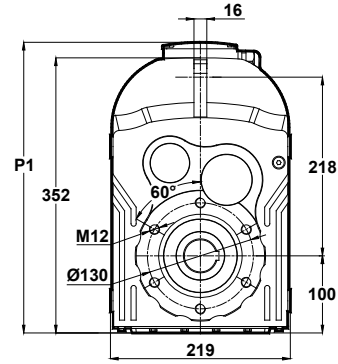
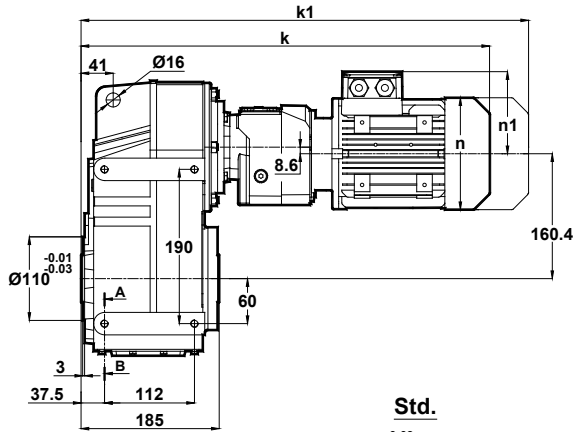


Ölçü Sayfaları Dimension Pages Abmessungsseiten



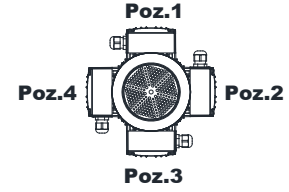
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR375.00
DR376.00



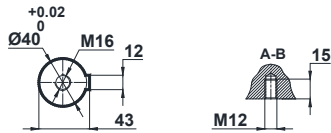
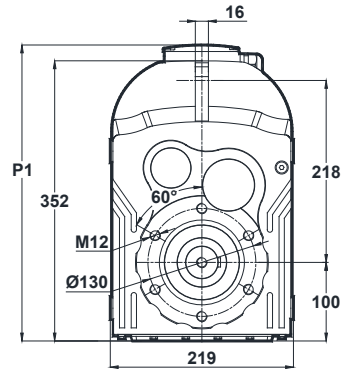
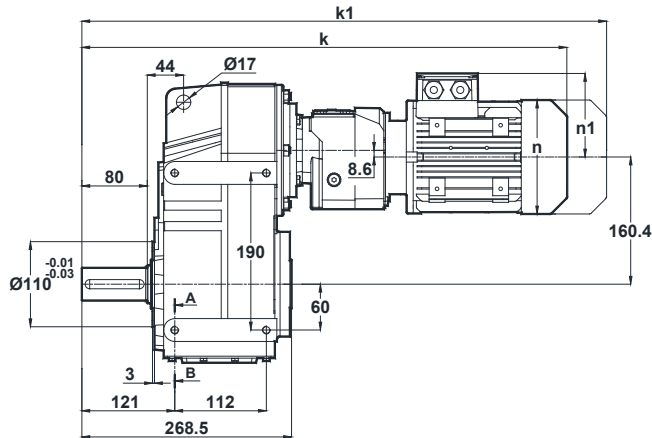
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80
k	503	532	566
k1	564	623	659
n	121	137	155
n1	97	112	121
p1	358	373	382



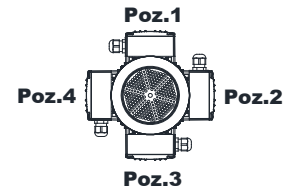
63-71-80
Tip / Type / Typ

DR375.01
DR376.01



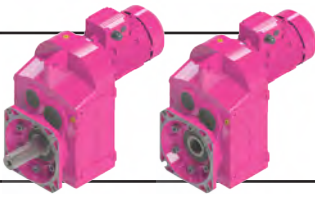
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80
k	586	615	649
k1	647	706	742
n	121	137	155
n1	97	112	121
p1	358	373	382



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

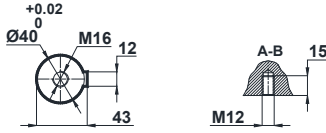
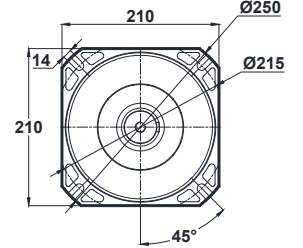
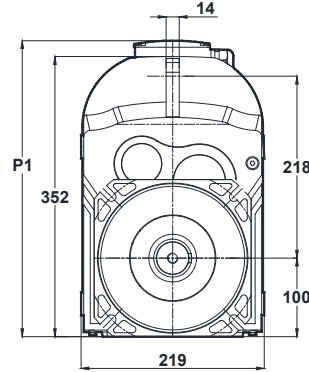
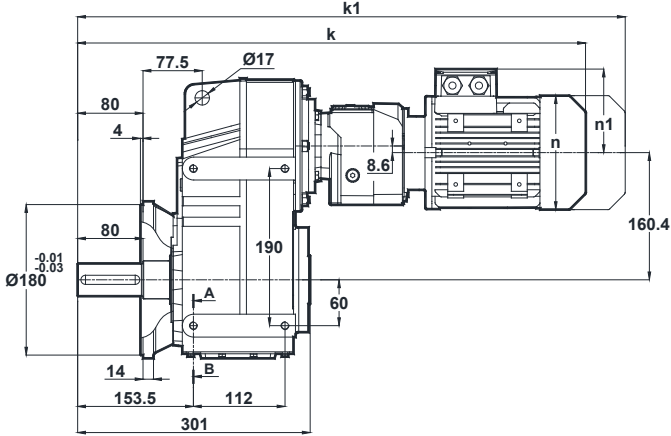


Ölçü Sayfaları Dimension Pages Abmessungenseiten



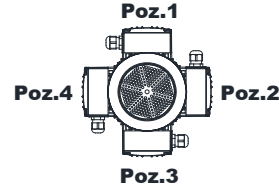
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR375.02
DR376.02



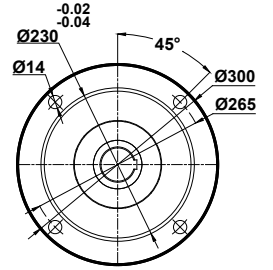
	63	71	80
k	619	648	682
k1	680	739	775
n	121	137	155
n1	97	112	121
p1	358	373	382

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

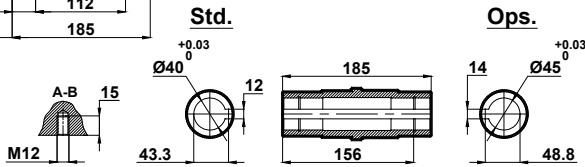
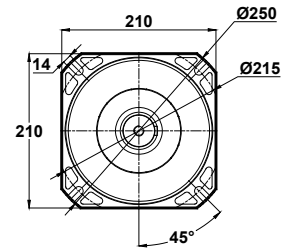
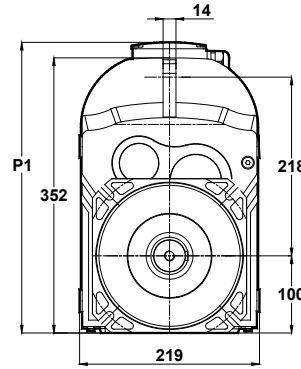
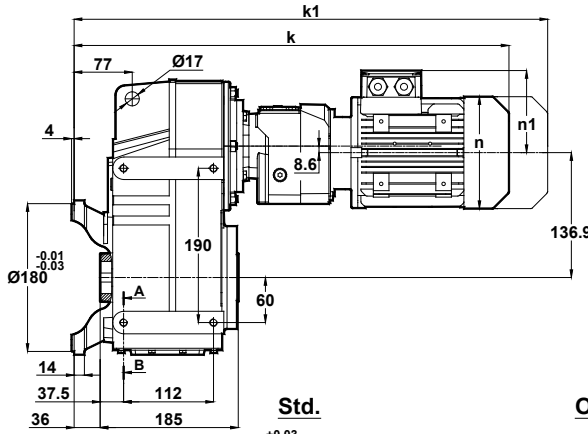


63-71-80
Tip / Type / Typ

Optional Flange Dimensions
Auswählbare Flanschabmessungen

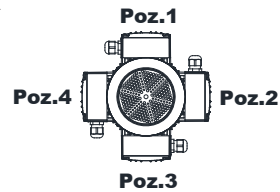


DR375.03
DR376.03



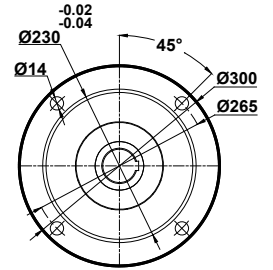
	63	71	80
k	539	568	602
k1	600	659	695
n	121	137	155
n1	97	112	121
p1	358	373	382

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / Type / Typ

Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

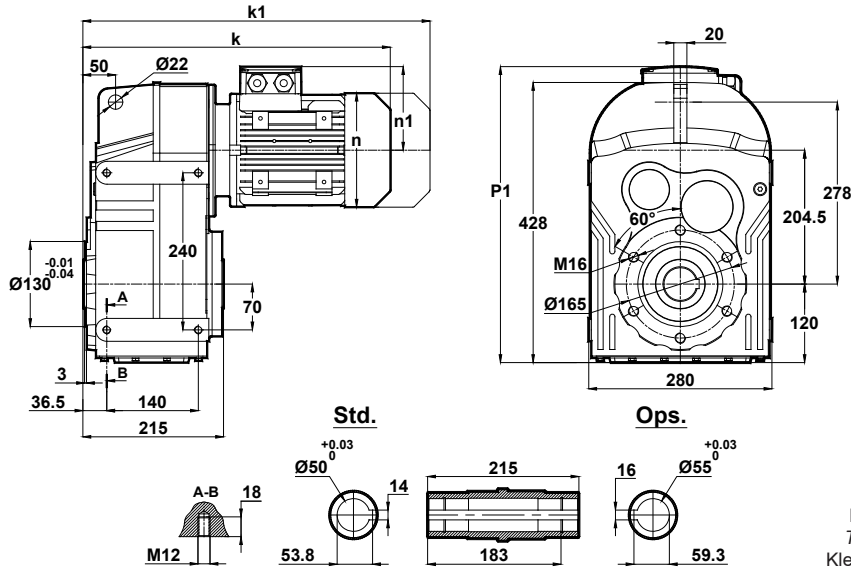
Dimension Pages

Abmessungsseiten



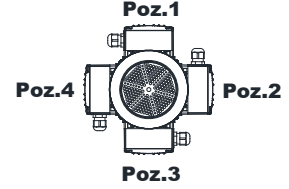
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR472.00
DR473.00



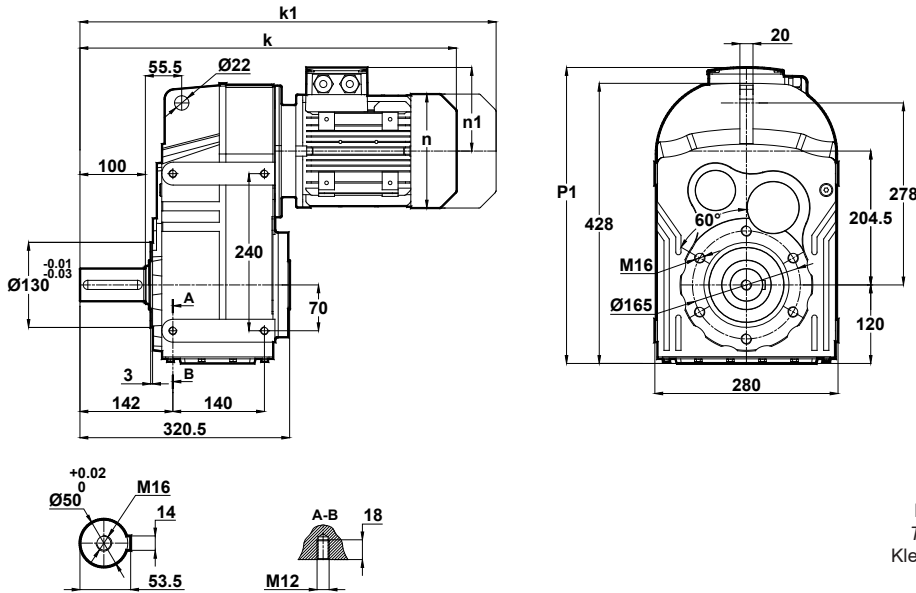
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	405	439	478	478	526	550	637	637	733	733
k1	496	532	582.5	582.5	645.5	645.5	767	767	913	913
n	137	155	176	176	193	215	257	257	315	315
n1	112	121	132	132	147	158	179	179	219	219
p1	437	446	457	457	472	483	504	504	544	544



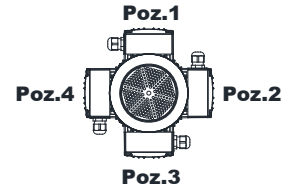
71-80-90-100-112-132-160
Tip / Type / Typ

DR472.01
DR473.01



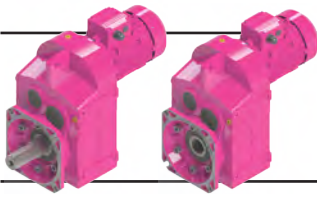
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	510	544	583	583	631	655	742	742	838	838
k1	601	637	687.5	687.5	750.5	759.5	872	872	1018	1018
n	137	155	176	176	193	215	257	257	315	315
n1	112	121	132	132	147	158	179	179	219	219
p1	437	446	457	457	472	483	504	504	544	544



71-80-90-100-112-132-160
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

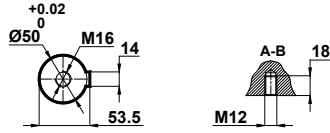
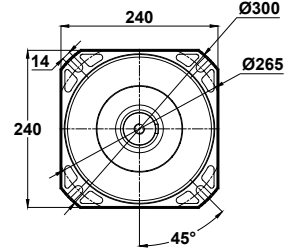
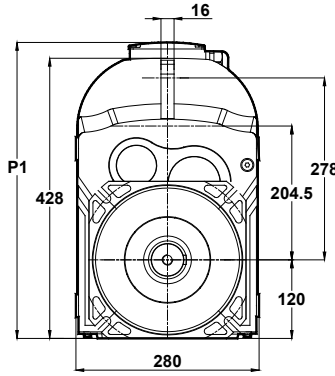
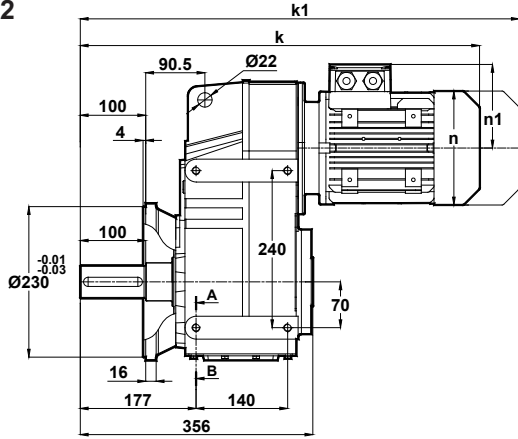
Dimension Pages

Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

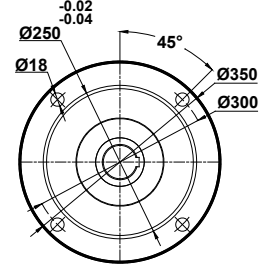
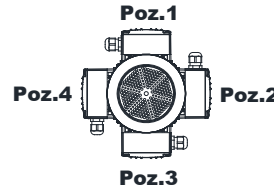
DR472.02
DR473.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

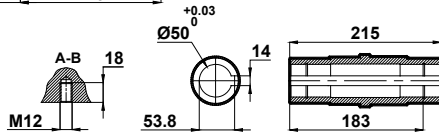
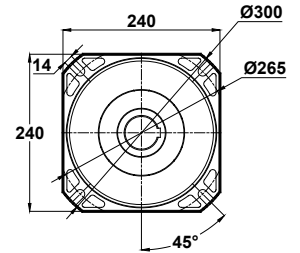
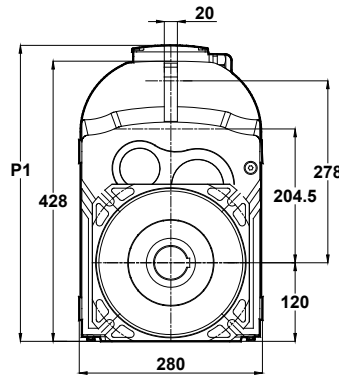
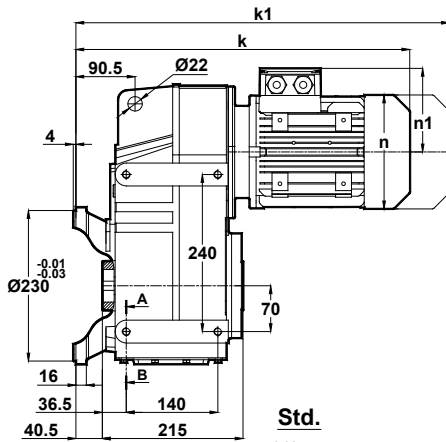
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	545	579	618	618	666	690	777	777	873	873
k1	636	672	722.5	722.5	785.5	794.5	907	907	1053	1053
n	137	155	176	176	193	215	257	257	315	315
n1	112	121	132	132	147	158	179	179	219	219
p1	437	446	457	457	472	483	504	504	544	544



71-80-90-100-112-132-160
Tip / Type / Typ

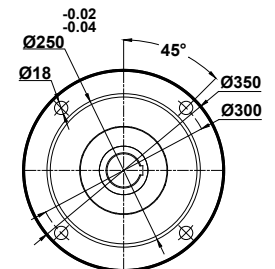
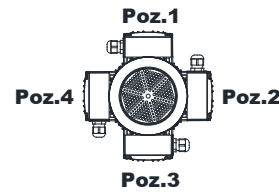
DR472.03
DR473.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	445	479	518	518	566	590	677	677	773	773
k1	536	572	622.5	622.5	685.5	694.5	807	807	953	953
n	137	155	176	176	193	215	257	257	315	315
n1	112	121	132	132	147	158	179	179	219	219
p1	437	446	457	457	472	483	504	504	544	544



71-80-90-100-112-132-160
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

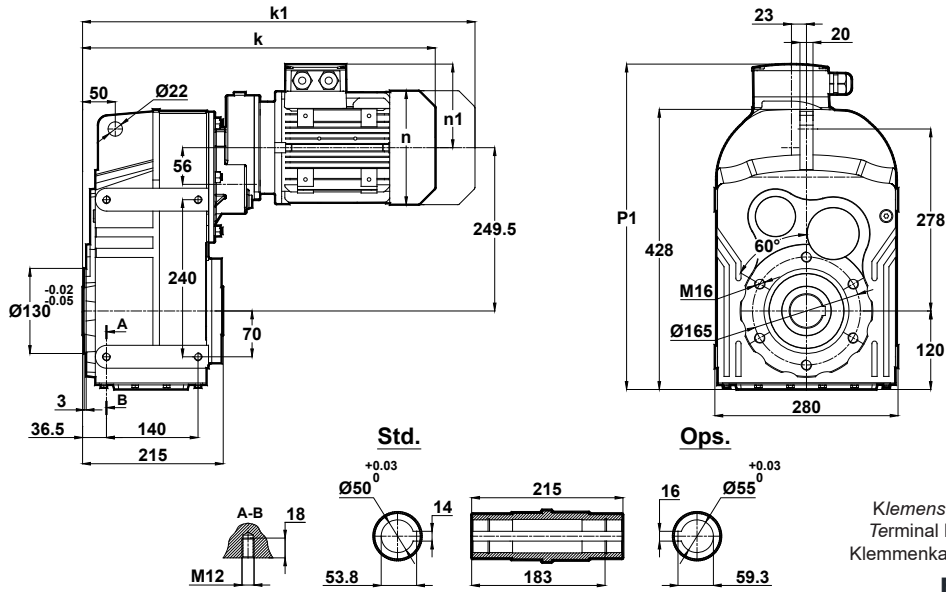
Dimension Pages

Abmessungsseiten

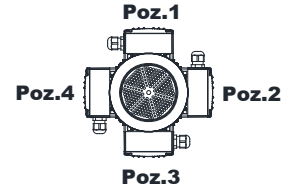


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR474.00

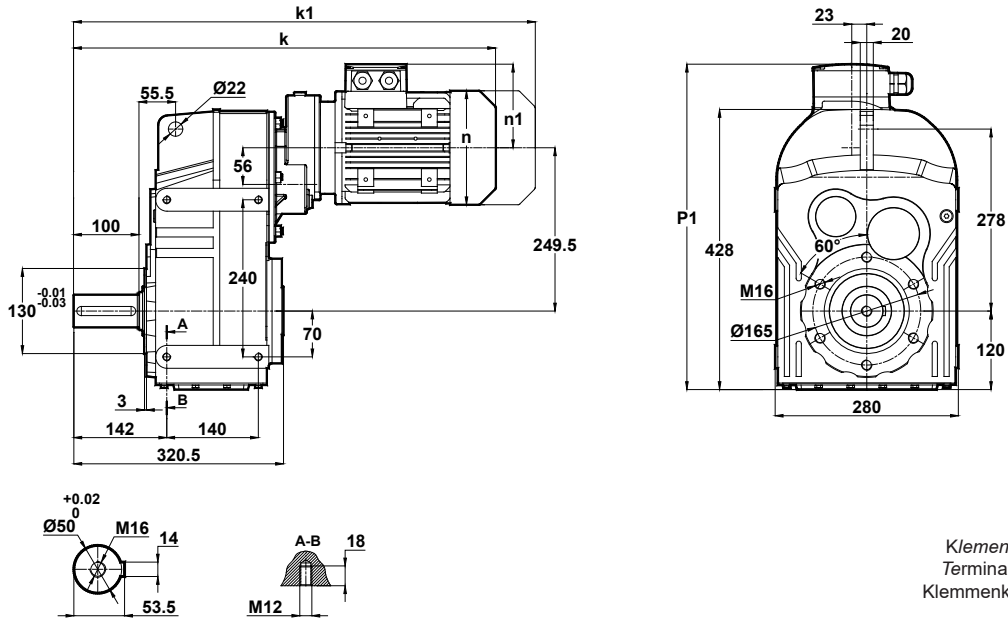


	63	71	80
k	456	484	518
k1	517	575	611
n	121	137	155
n1	97	112	121
p1	467	482	491

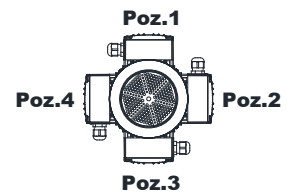


63-71-80
Tip / Type / Typ

DR474.01

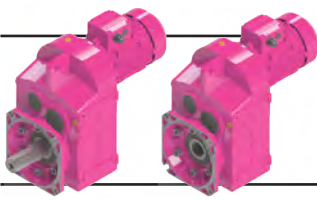


	63	71	80
k	561	589	623
k1	622	680	716
n	121	137	155
n1	97	112	121
p1	467	482	491



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

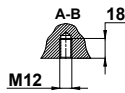
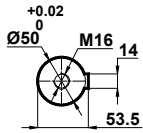
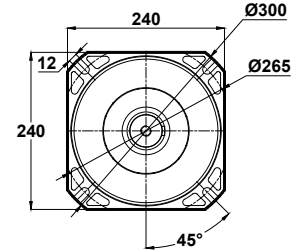
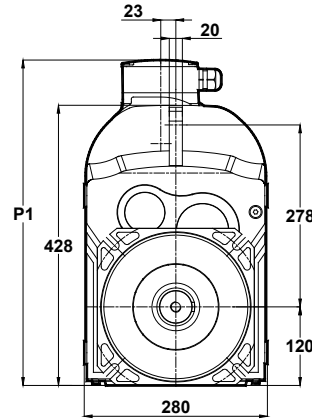
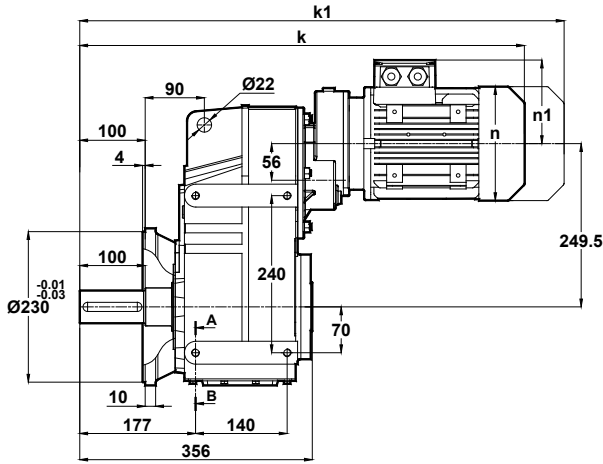
Dimension Pages

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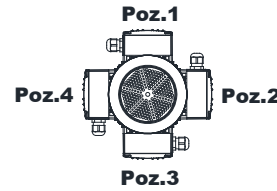
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR474.02



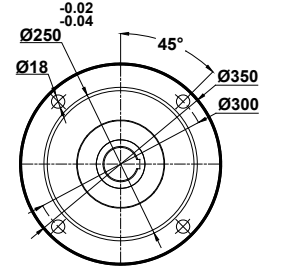
	63	71	80
k	596	624	658
k1	657	715	751
n	121	137	155
n1	97	112	121
p1	467	482	491

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

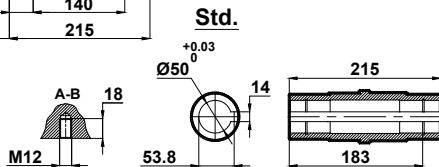
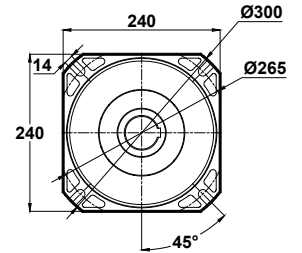
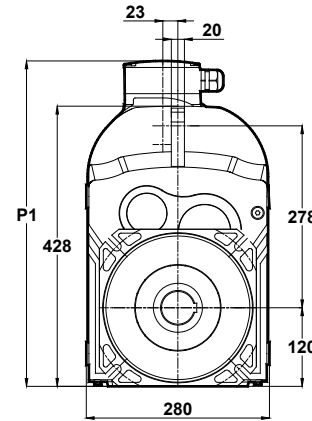
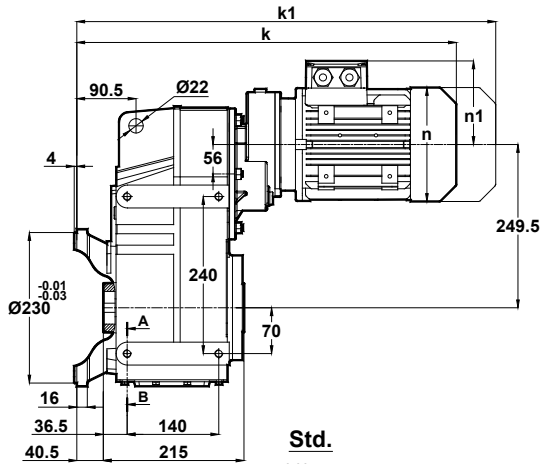


63-71-80
Tip / Type / Typ

Optional Flange Dimensions
Auswählbare Flanschabmessungen

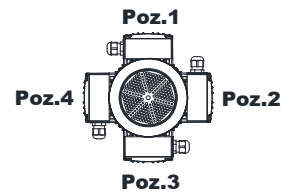


DR474.03



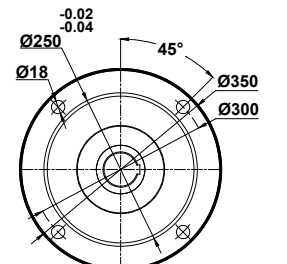
	63	71	80
k	496	524	558
k1	557	615	651
n	121	137	155
n1	97	112	121
p1	467	482	491

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / Type / Typ

Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

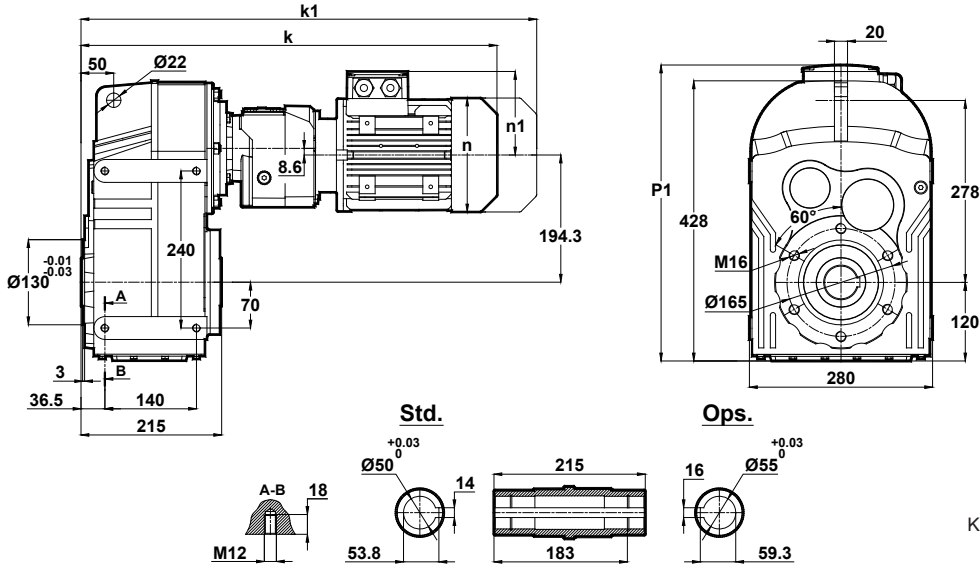
Dimension Pages

Abmessungsseiten



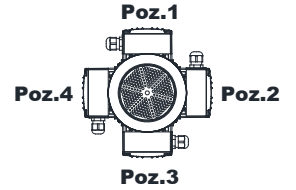
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR475.00
DR476.00



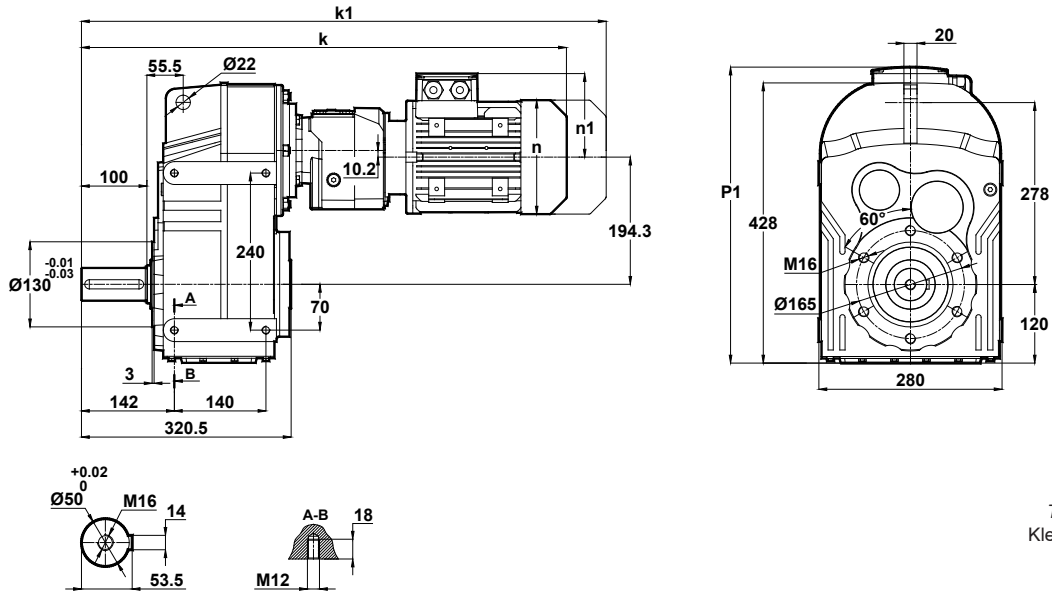
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	558	585
k1	618	676
n	121	137
n1	97	112
p1	-	-



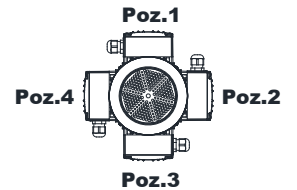
63-71
Tip / Type / Typ

DR475.01
DR476.01



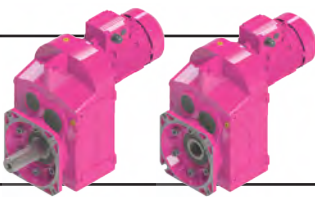
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	663	690
k1	724	781
n	121	137
n1	97	112
p1	-	-



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

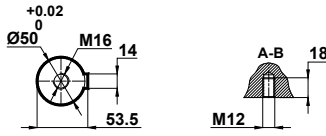
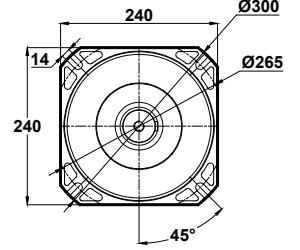
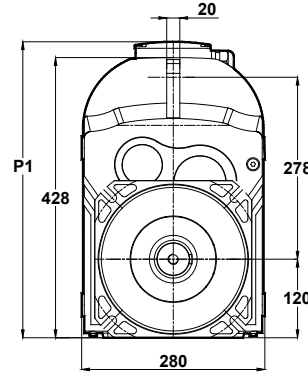
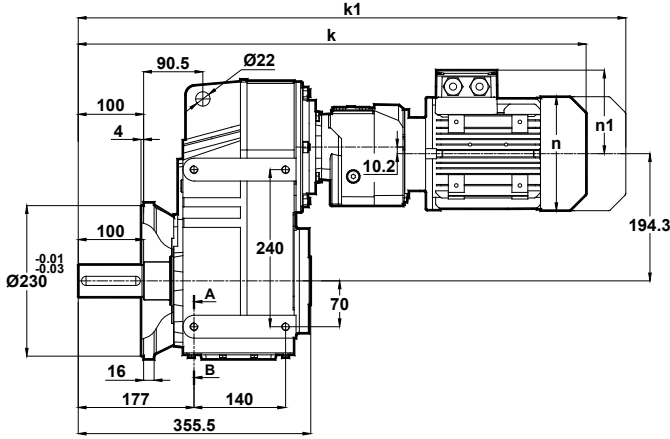
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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

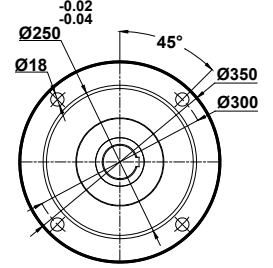
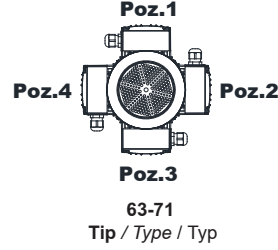
DR475.02
DR476.02



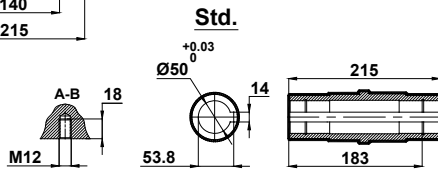
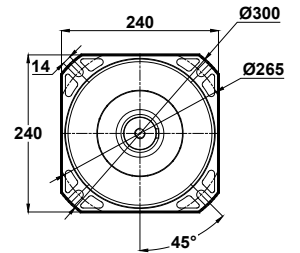
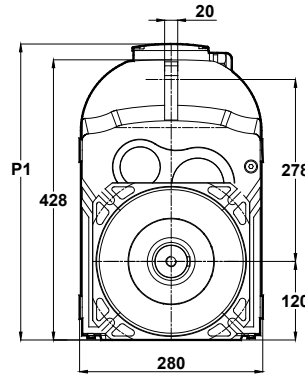
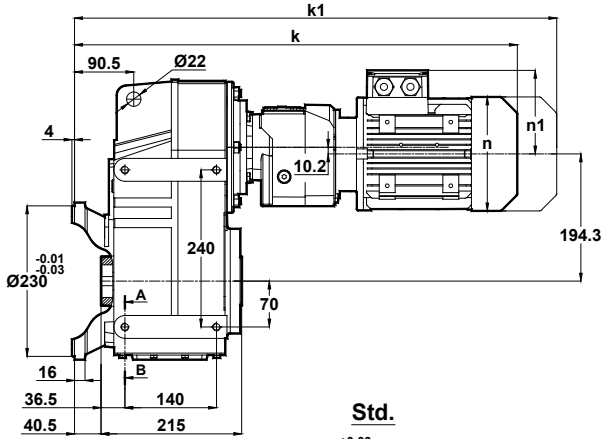
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71
k	698	725
k1	759	816
n	121	137
n1	97	112
p1	-	-



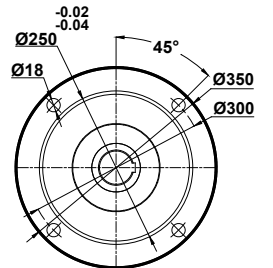
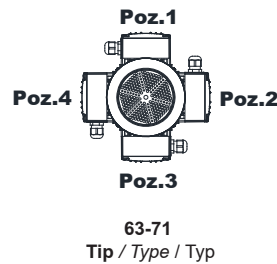
DR475.03
DR476.03



Ops.
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71
k	598	625
k1	659	716
n	121	137
n1	97	112
p1	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

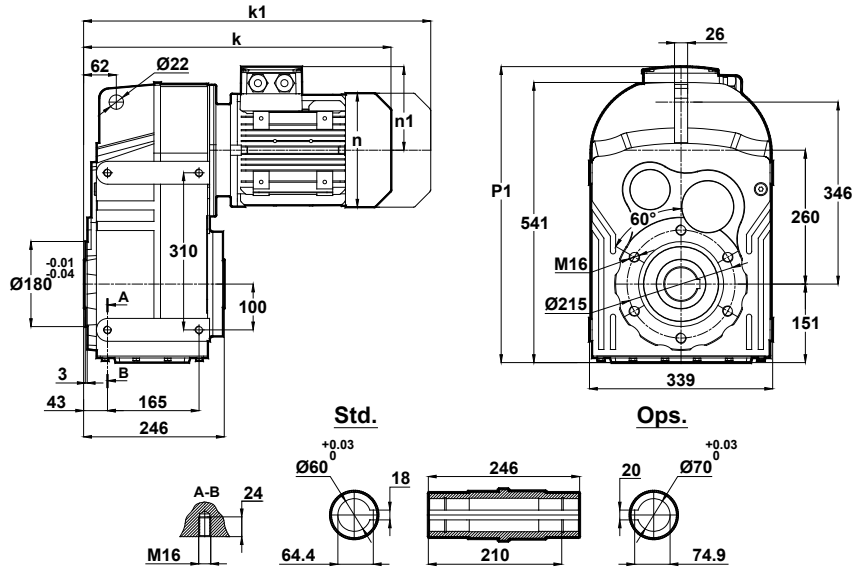
Dimension Pages

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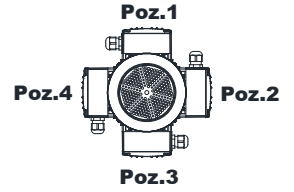
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR572.00
DR573.00



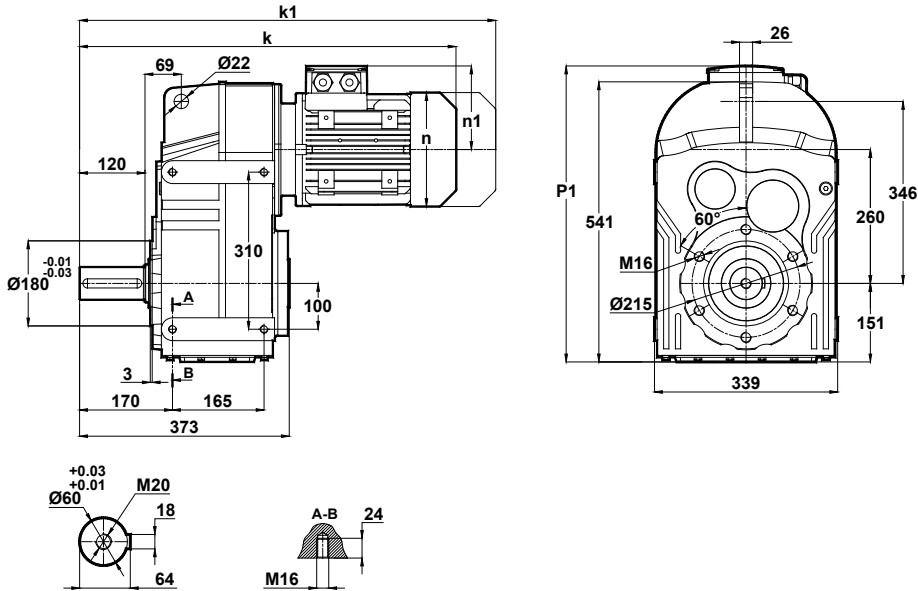
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	461	500	500	544	569	654	654	750	750	821	821
k1	554	604.5	604.5	663.5	673.5	784	784	930	930	991.5	991.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
p1	-	543	543	558	569	590	590	636	636	655	655

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



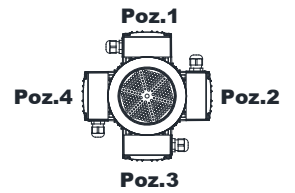
80-90-100-112-132-160-180
Tip / Type / Typ

DR572.01
DR573.01



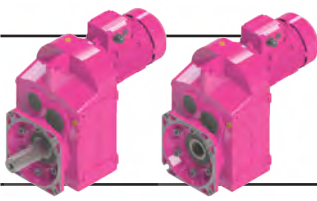
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	588	627	627	671	696	781	781	877	877	948	948
k1	681	731.5	731.5	790.5	800.5	911	911	1057	1057	1118.5	1118.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
p1	-	543	543	558	569	590	590	636	636	655	655

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

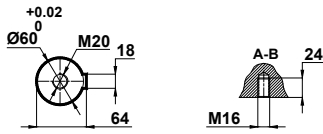
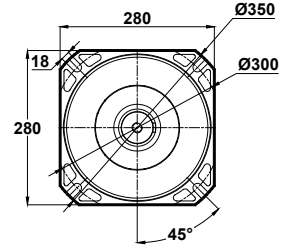
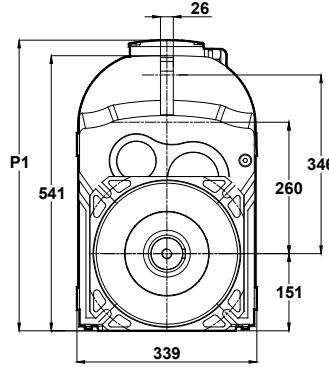
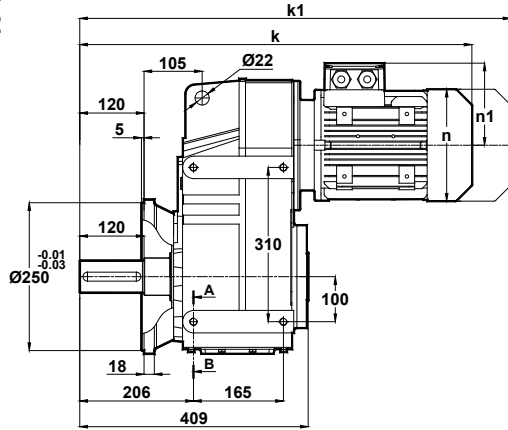
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

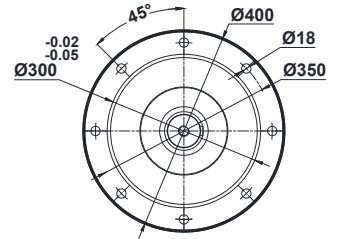
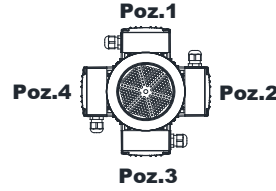
DR572.02
DR573.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

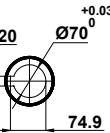
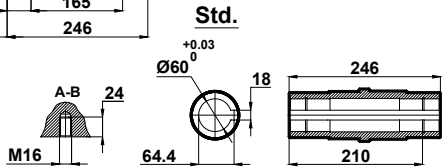
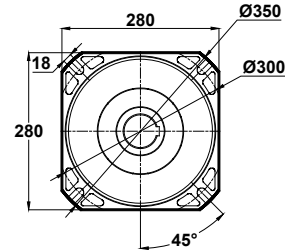
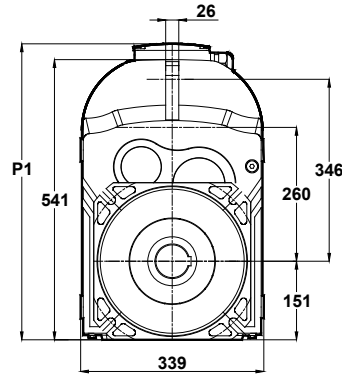
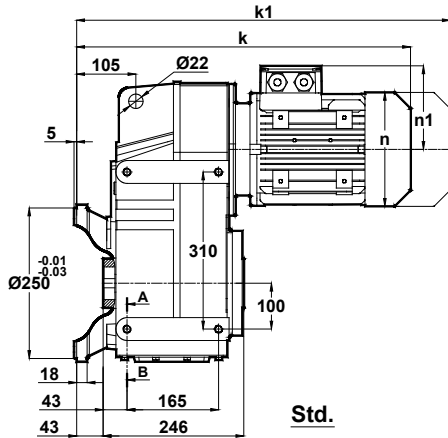
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	624	663	663	707	732	817	817	913	913	984	984
k1	717	767.5	767.5	826.5	836.5	947	947	1093	1093	1154.5	1154.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
p1	-	543	543	558	569	590	590	636	636	655	655



80-90-100-112-132-160-180
Tip / Type / Typ

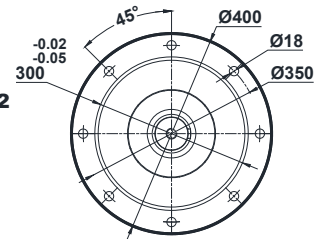
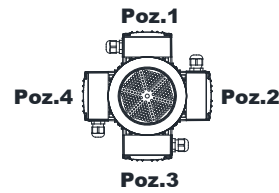
DR572.03
DR573.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	504	543	543	587	612	697	697	793	793	864	864
k1	597	647.5	647.5	706.5	716.5	827	827	973	973	1034.5	1034.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
p1	-	543	543	558	569	590	590	636	636	655	655



80-90-100-112-132-160-180
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

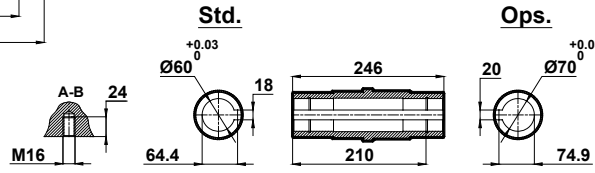
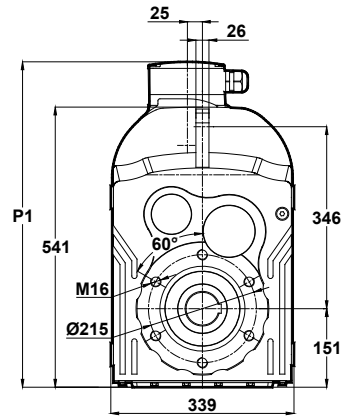
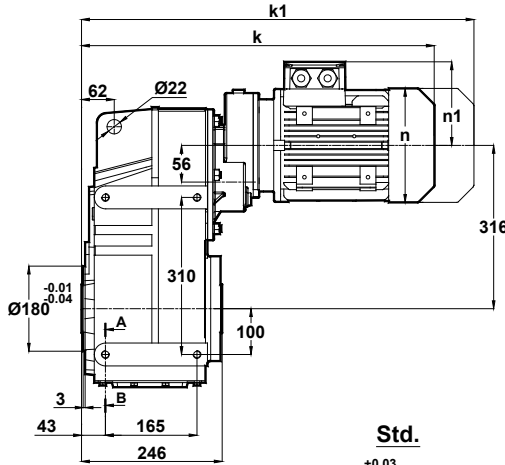
Dimension Pages

Abmessungsseiten



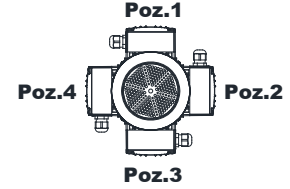
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR574.00



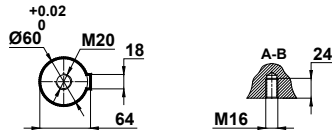
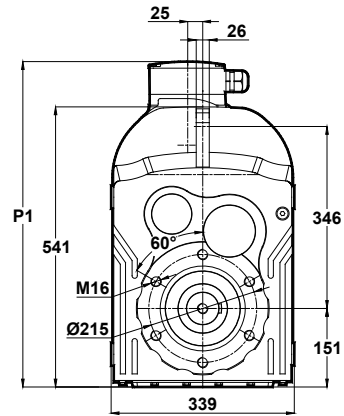
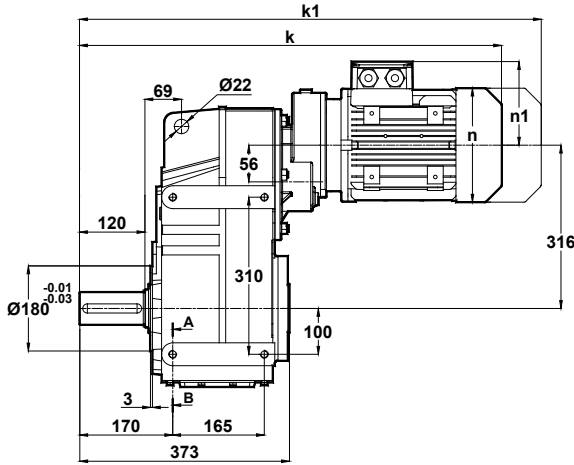
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	520	554	593	593
k1	611	647	697.5	697.5
n	137	155	176	176
n1	112	121	132	132
p1	579	588	599	599



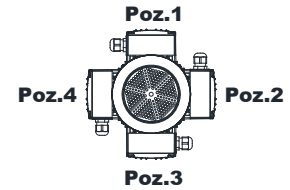
71-80-90
Tip / Type / Typ

DR574.01



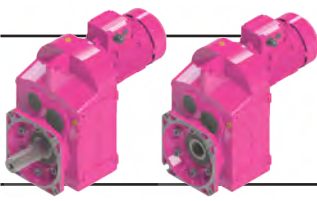
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	647	681	720	720
k1	738	774	824.5	824.5
n	137	155	176	176
n1	112	121	132	132
p1	579	588	599	599



71-80-90
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

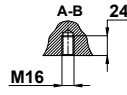
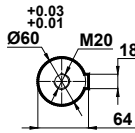
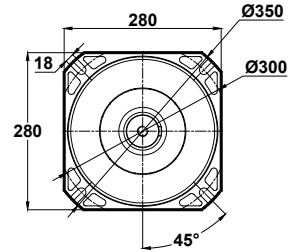
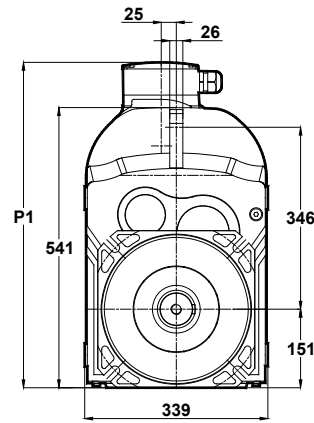
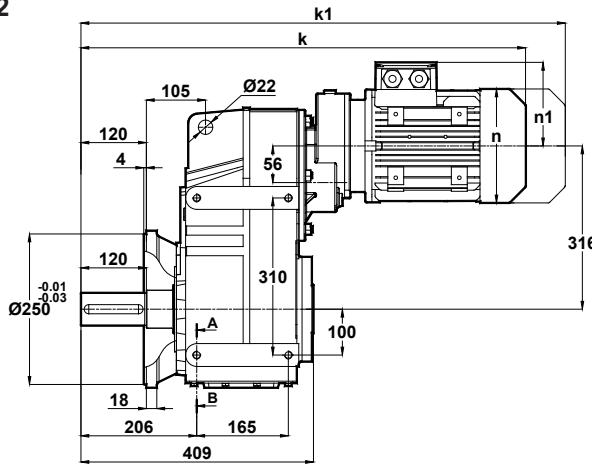
Dimension Pages

Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

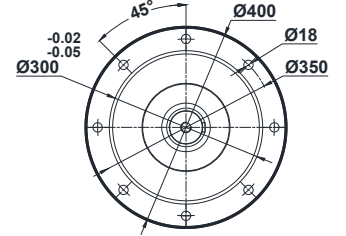
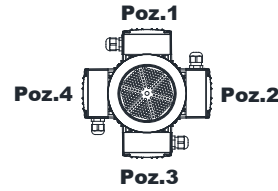
DR574.02



	71	80	90S	90L
k	683	717	756	756
k1	774	810	860.5	860.5
n	137	155	176	176
n1	112	121	132	132
p1	579	588	599	599

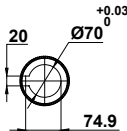
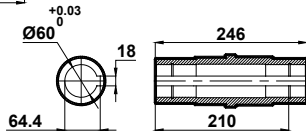
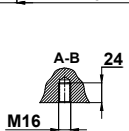
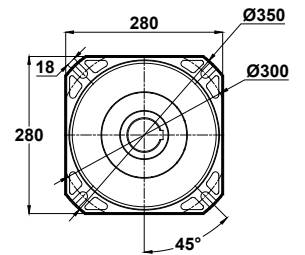
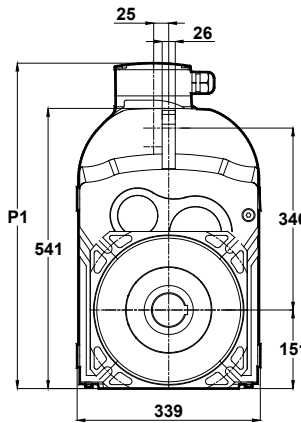
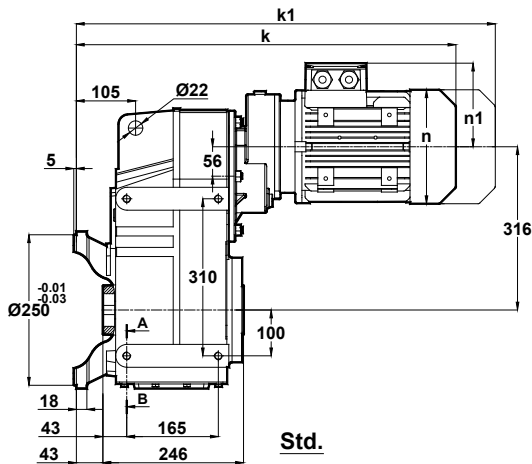
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



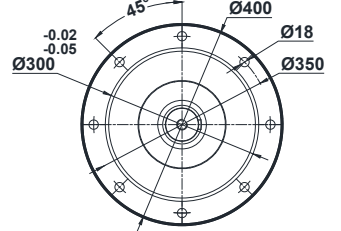
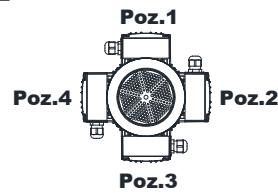
71-80-90
Tip / Type / Typ

DR574.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



71-80-90
Tip / Type / Typ

	71	80	90S	90L
k	563	597	636	636
k1	654	690	740.5	740.5
n	137	155	176	176
n1	112	121	132	132
p1	579	588	599	599

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

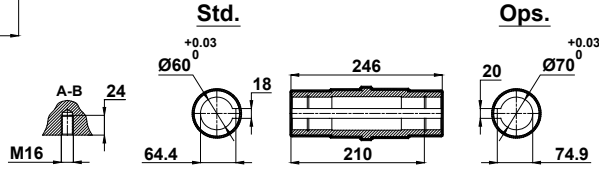
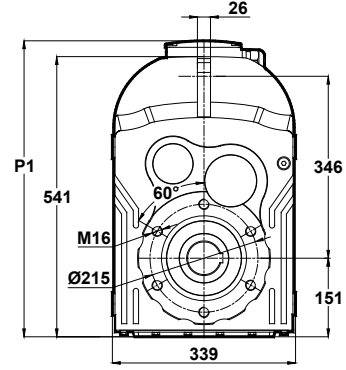
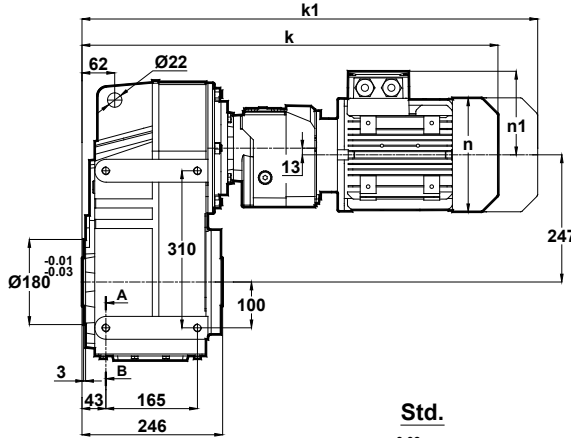
Dimension Pages

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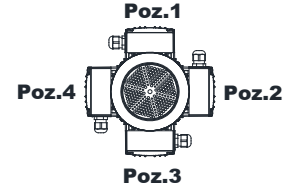
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR575.00
DR576.00



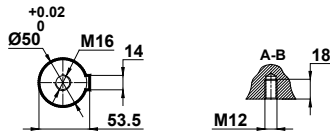
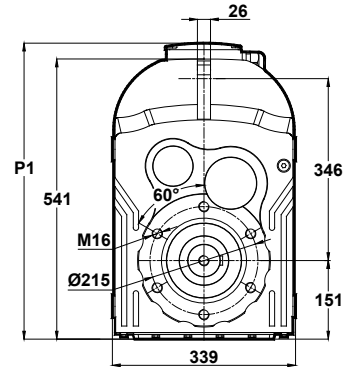
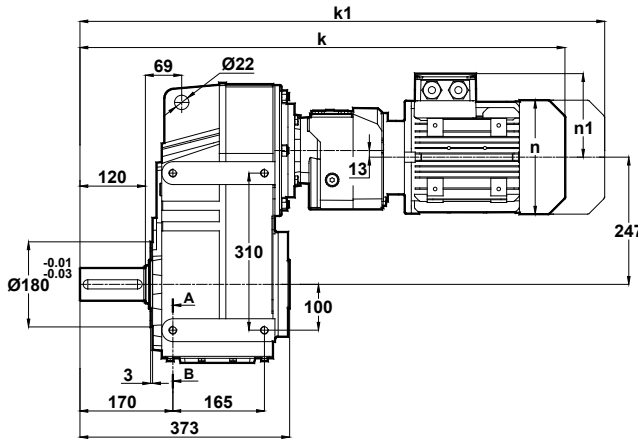
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	622	650
k1	683	741
n	121	137
n1	97	112
p1	-	-



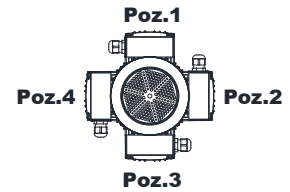
63-71
Tip / Type / Typ

DR575.01
DR576.01



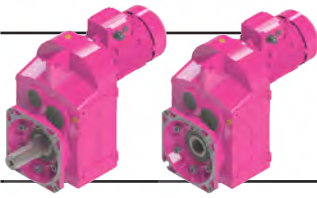
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71
k	749	777
k1	810	868
n	121	137
n1	97	112
p1	-	-



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

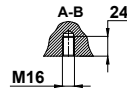
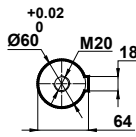
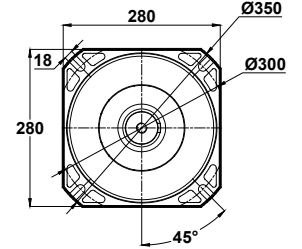
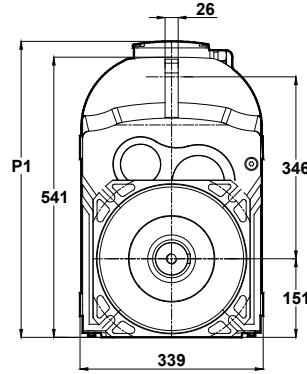
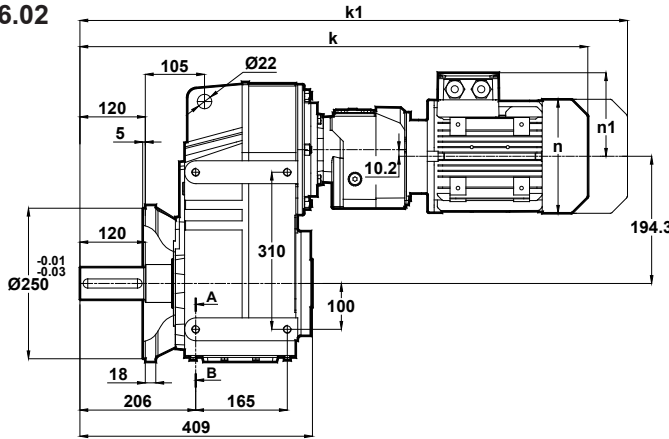
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

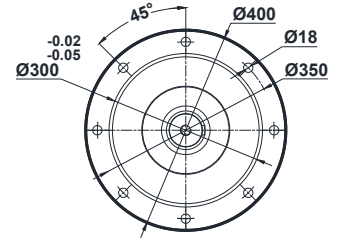
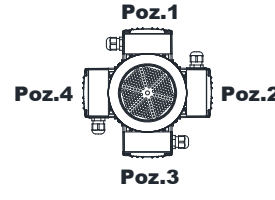
DR575.02
DR576.02



	63	71
k	785	813
k1	846	904
n	121	137
n1	97	112
p1	-	-

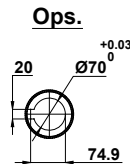
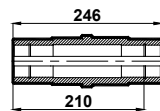
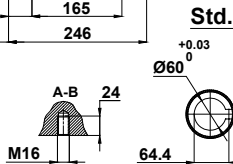
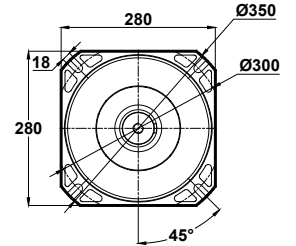
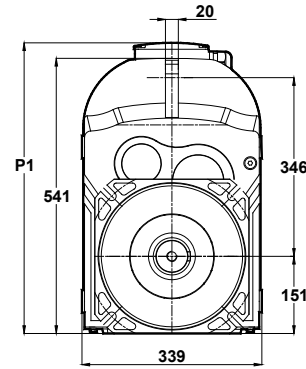
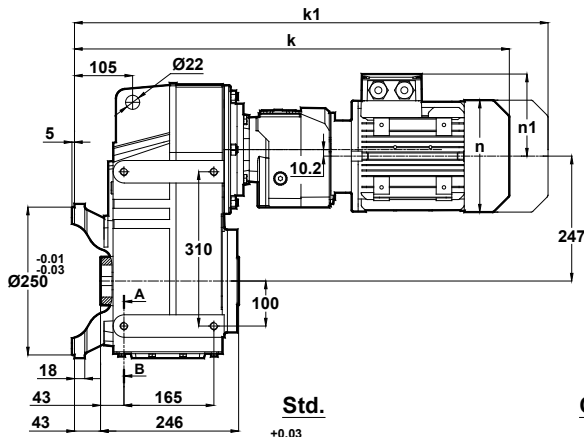
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71
Tip / Type / Typ

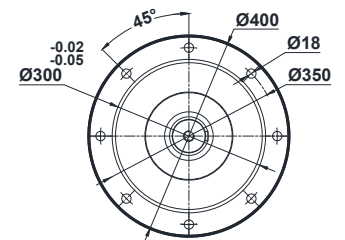
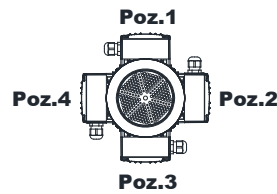
DR575.03
DR576.03



	63	71
k	665	693
k1	726	784
n	121	137
n1	97	112
p1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

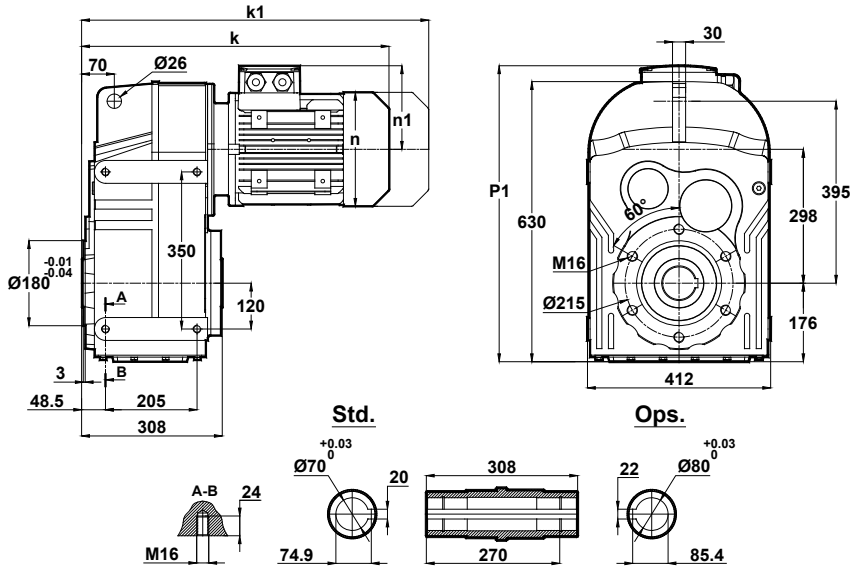
Dimension Pages

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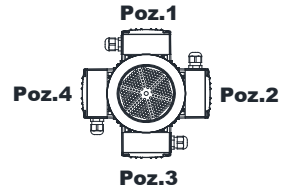
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR672.00
DR673.00



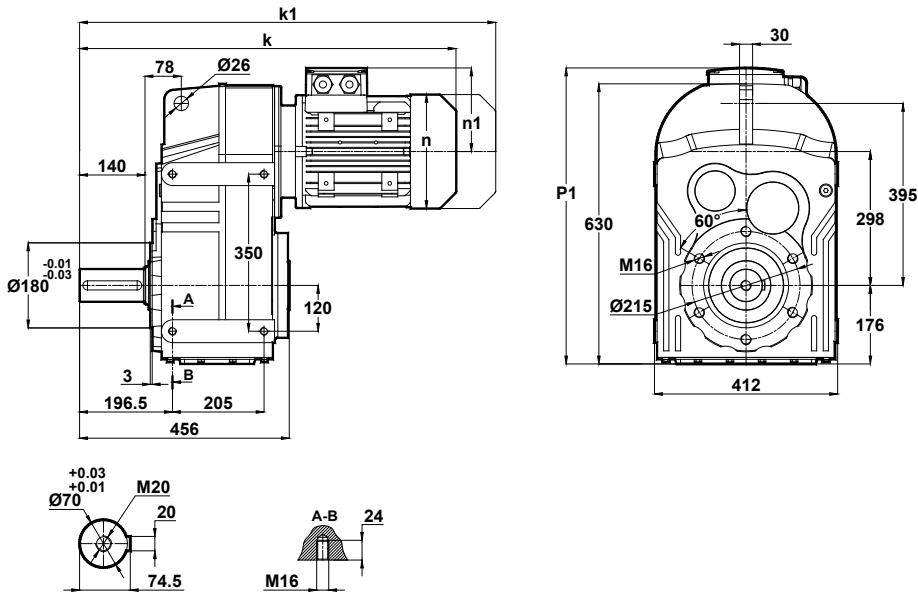
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	593	617	704	704	800	800	871	871	913
k1	712.5	721.5	834	834	980	980	1041.5	1041.5	1099.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
p1	-	632	653	653	699	699	718	718	749

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



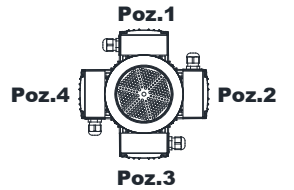
100-112-132-160-180-200
Tip / Type / Typ

DR672.01
DR673.01



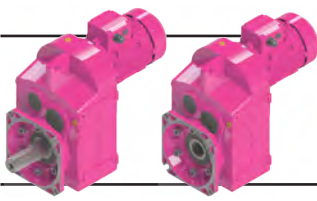
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	741	765	852	852	948	948	1019	1019	1061
k1	860.5	869.5	982	982	1128	1128	1189.5	1189.5	1247.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
p1	-	632	653	653	699	699	718	718	749

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

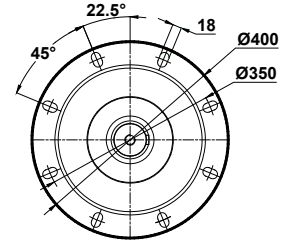
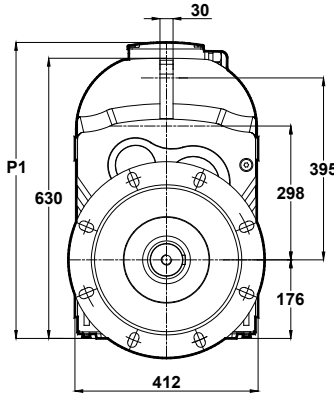
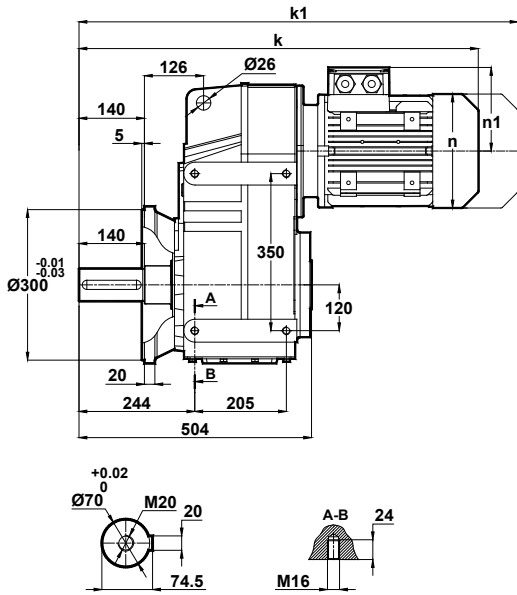


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

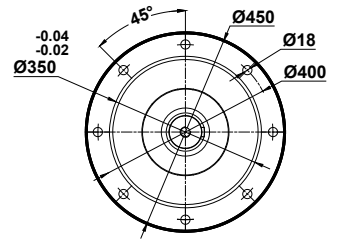
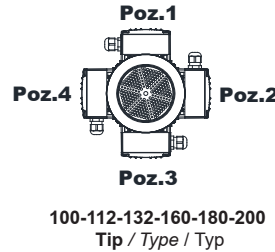
DR672.02
DR673.02



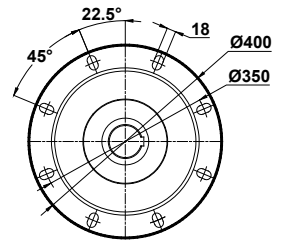
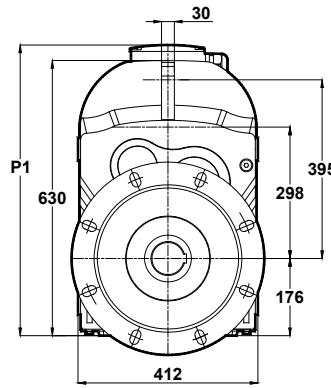
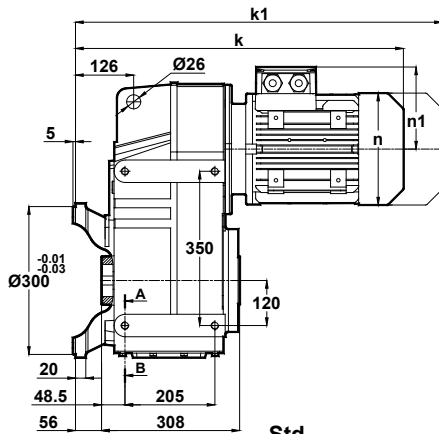
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	789	813	900	900	996	996	1067	1067	1109
k1	908.5	917.5	1030	1030	1176	1176	1237.5	1237.5	1295.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
p1	-	632	653	653	699	699	718	718	749

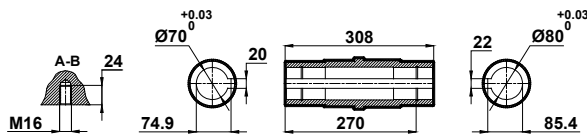


DR672.03
DR673.03



Std.

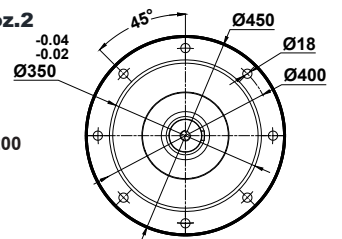
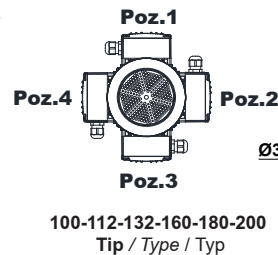
Ops.



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	649	673	760	760	856	856	927	927	969
k1	768.5	777.5	890	890	1036	1036	1097.5	1097.5	1155.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
p1	-	632	653	653	699	699	718	718	749



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

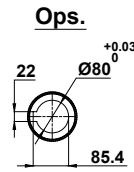
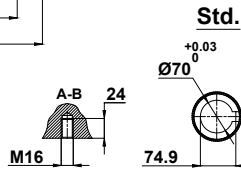
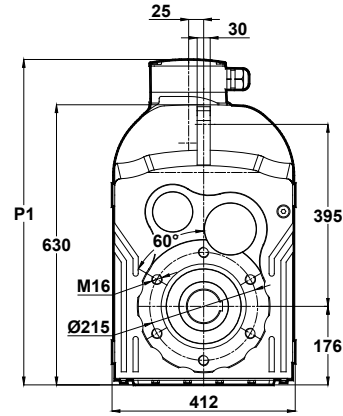
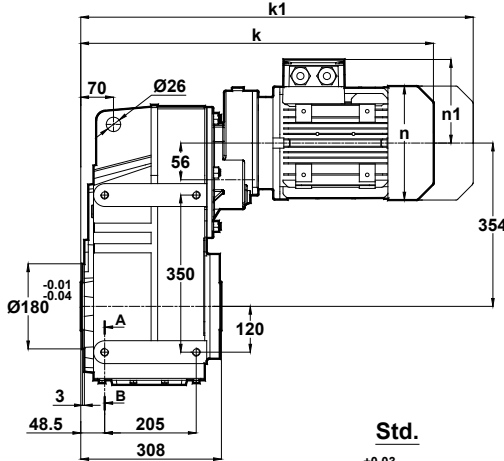
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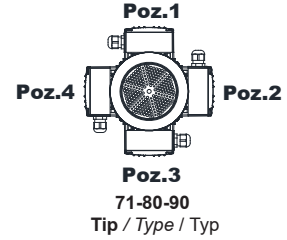
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR674.00

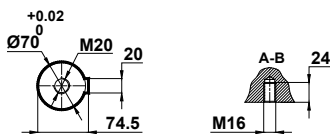
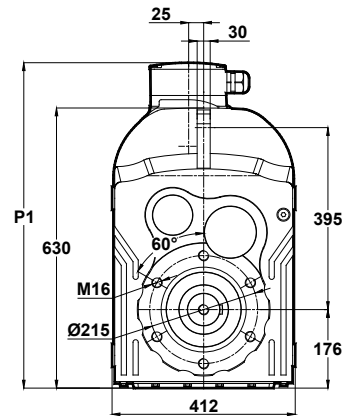
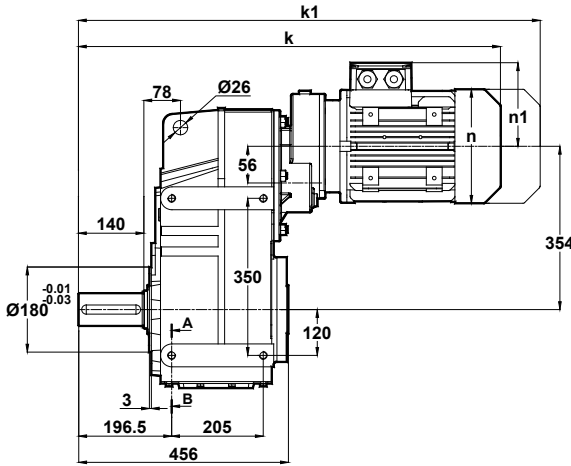


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	573	607	646	646
k1	664	700	750.5	750.5
n	137	155	176	176
n1	112	121	132	132
p1	642	651	662	662

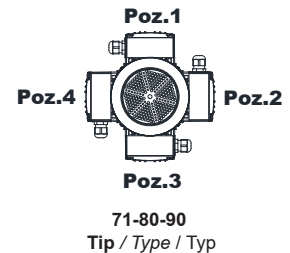


DR674.01

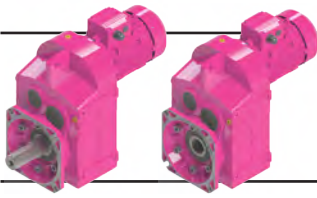


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	721	755	794	794
k1	812	848	898.5	898.5
n	137	155	176	176
n1	112	121	132	132
p1	642	651	662	662



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

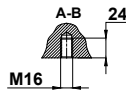
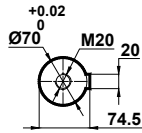
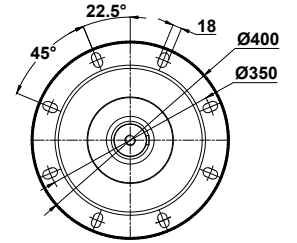
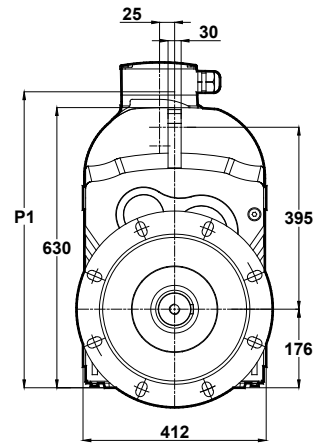
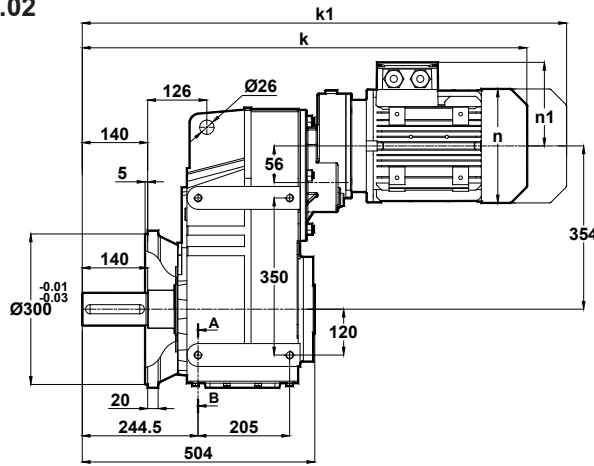
Dimension Pages

Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

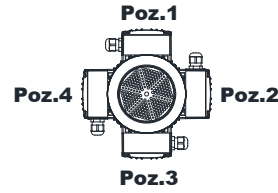
DR674.02



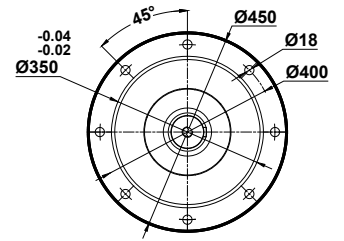
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

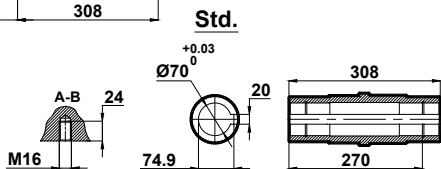
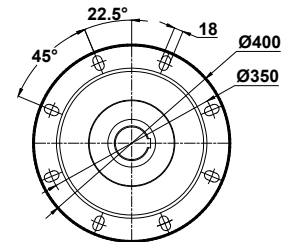
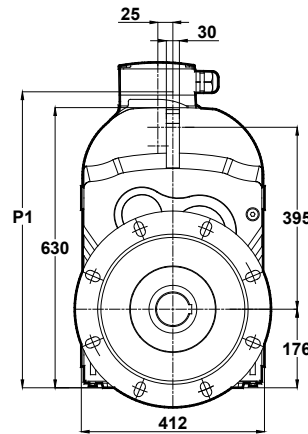
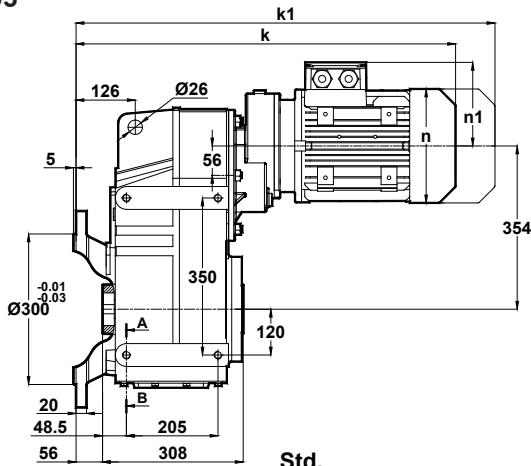
	71	80	90S	90L
k	769	803	842	842
k1	860	896	946.5	946.5
n	137	155	176	176
n1	112	121	132	132
p1	642	651	662	662



71-80-90
Tip / Type / Typ



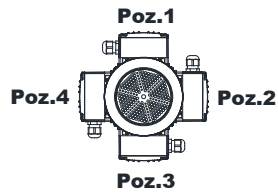
DR674.03



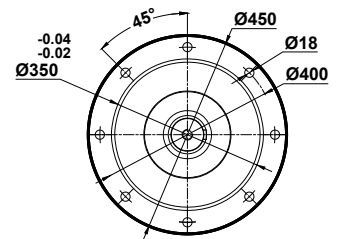
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71	80	90S	90L
k	629	663	702	702
k1	720	756	806.5	806.5
n	137	155	176	176
n1	112	121	132	132
p1	642	651	662	662



71-80-90
Tip / Type / Typ



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

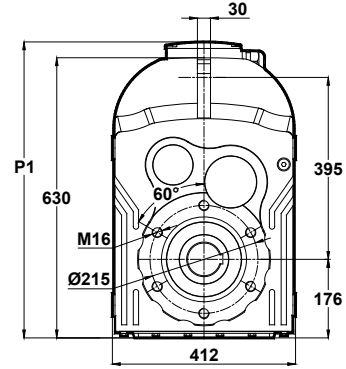
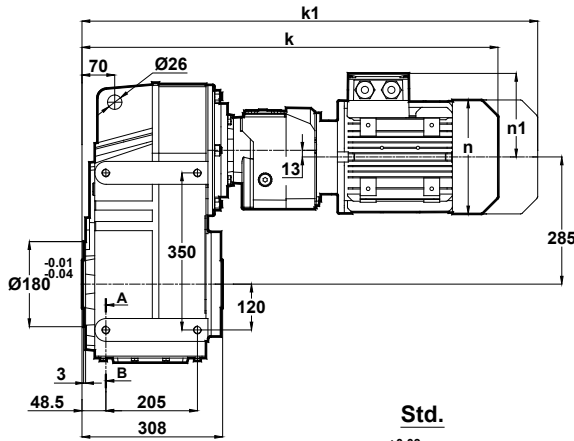


Ölçü Sayfaları Dimension Pages Abmessungsseiten

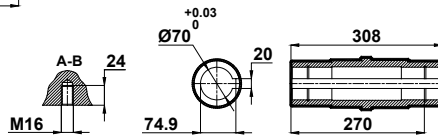


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

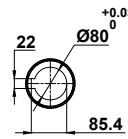
DR675.00
DR676.00



Std.

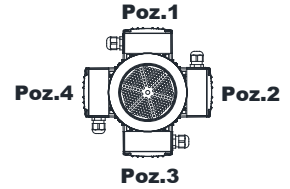


Ops.



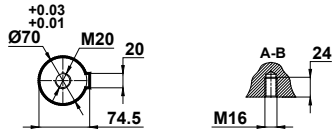
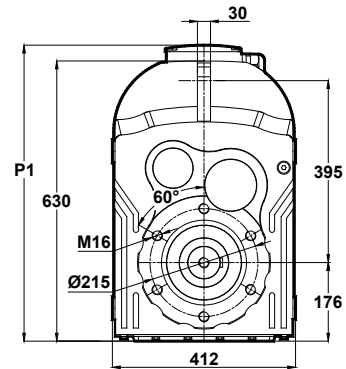
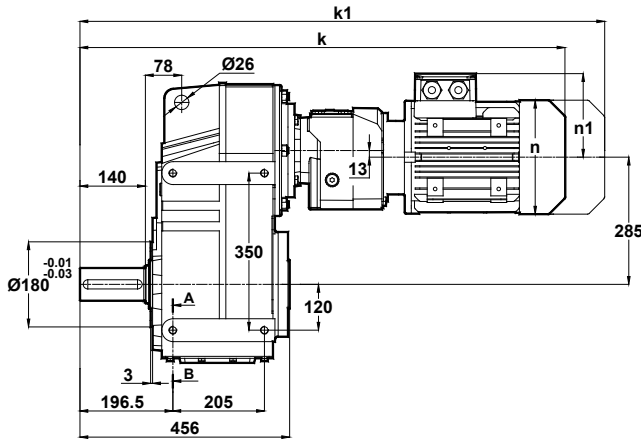
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80
k	677	705	739
k1	738	796	832
n	121	137	155
n1	97	112	121
p1	-	-	-



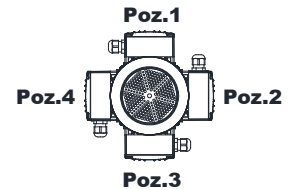
63-71-80
Tip / Type / Typ

DR675.01
DR676.01



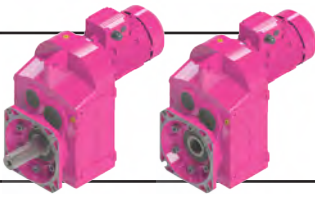
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63	71	80
k	825	853	887
k1	886	944	980
n	121	137	155
n1	97	112	121
p1	-	-	-



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

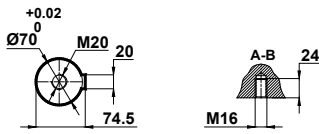
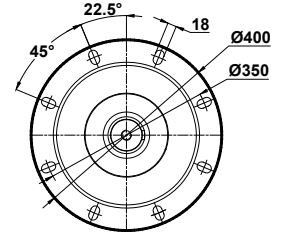
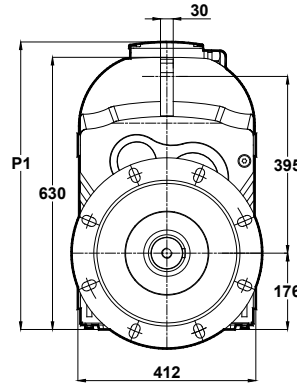
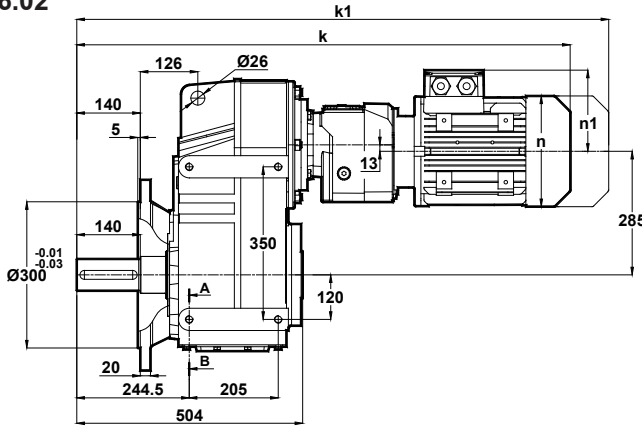


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

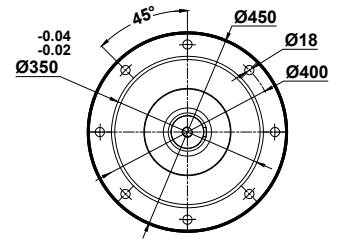
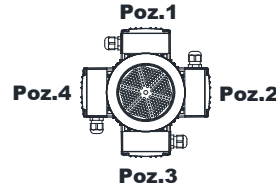
DR675.02
DR676.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

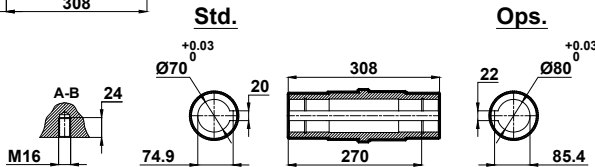
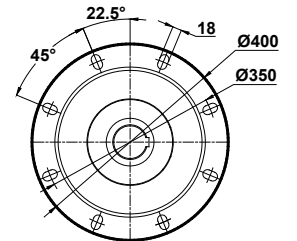
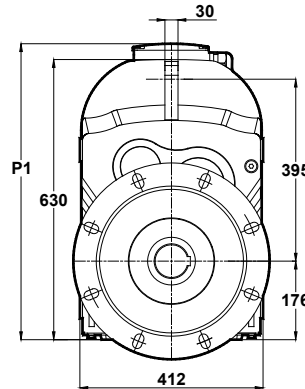
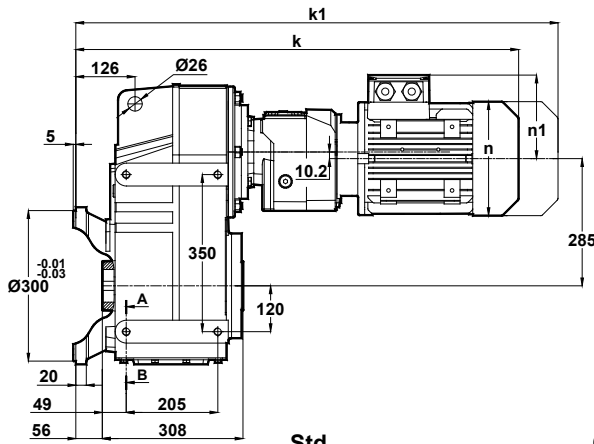
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80
k	873	901	935
k1	934	992	1028
n	121	137	155
n1	97	112	121
p1	-	-	-



63-71-80
Tip / Type / Typ

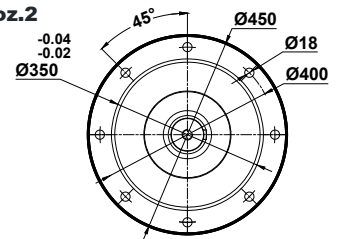
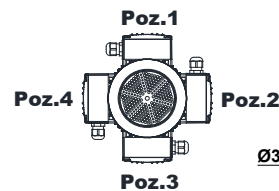
DR675.03
DR676.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63	71	80
k	733	761	795
k1	794	852	888
n	121	137	155
n1	97	112	121
p1	-	-	-



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

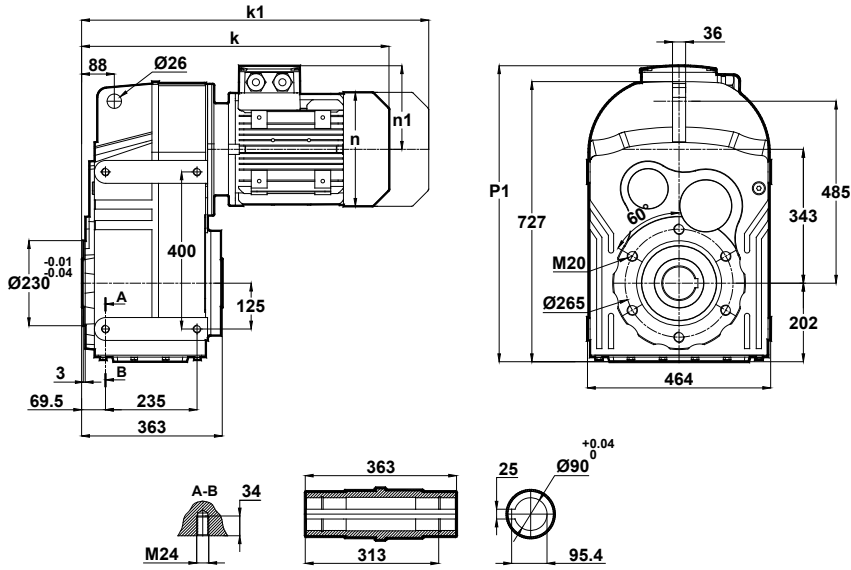
Dimension Pages

Abmessungsseiten



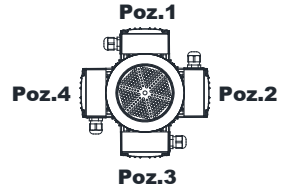
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR772.00
DR773.00



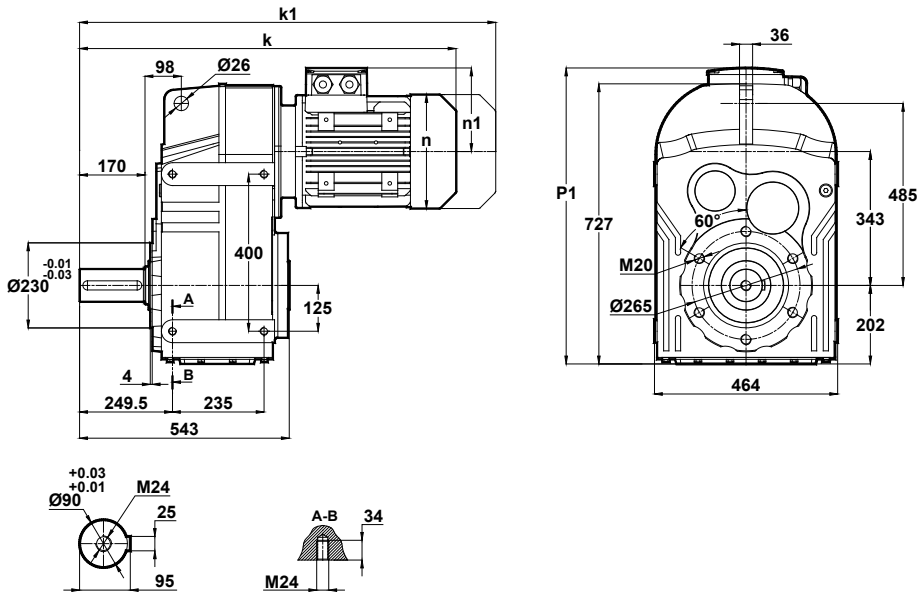
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	585	655	742	742	838	838	909	909	951	977	1002
k1	704.5	759.5	872	872	1018	1018	1079.5	1079.5	1137.5	1142	1167
n	193	215	257	257	315	315	347	347	390	434	434
n1	147	158	179	179	219	219	234	234	275	285	285
p1	-	-	724	724	770	770	789	789	820	830	830



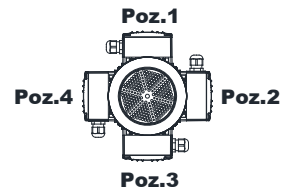
100-112-132-160-180-200-225
Tip / Type / Typ

DR772.01
DR773.01



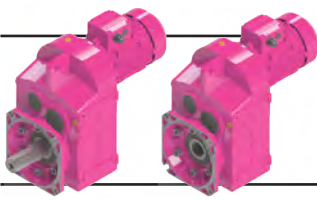
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	733	835	922	922	1018	1018	1089	1089	1131	1157	1182
k1	852.5	939.5	1052	1052	1198	1198	1259.5	1259.5	1317.5	1322	1347
n	193	215	257	257	315	315	347	347	390	434	434
n1	147	158	179	179	219	219	234	234	275	285	285
p1	-	-	724	724	770	770	789	789	820	830	830



100-112-132-160-180-200-225
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

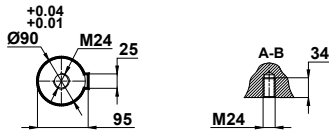
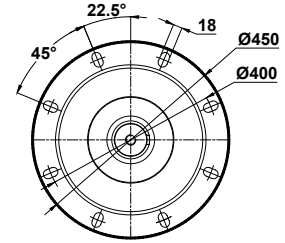
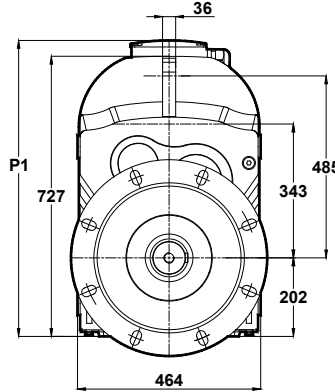
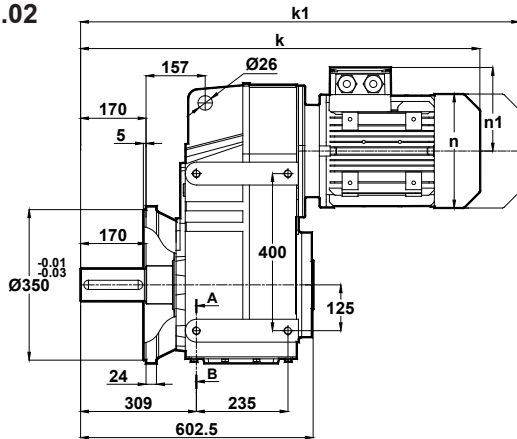


Ölçü Sayfaları Dimension Pages Abmessungsseiten

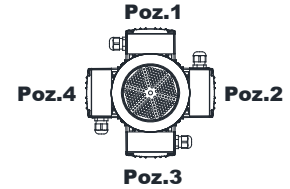


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR772.02
DR773.02



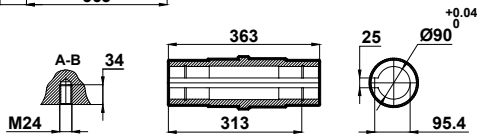
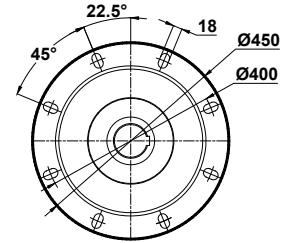
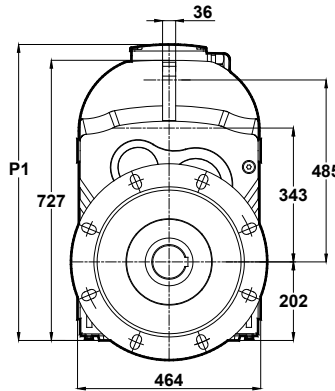
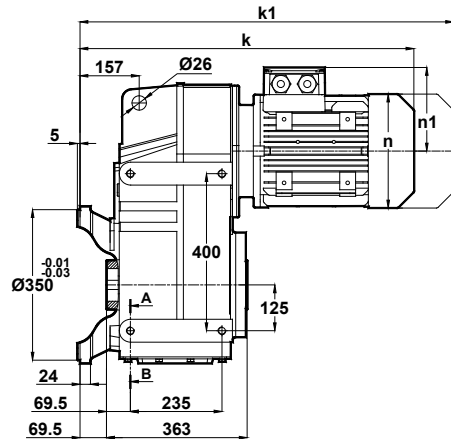
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



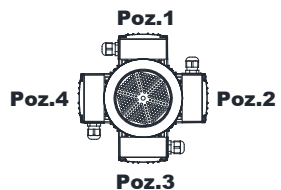
100-112-132-160-180-200-225
Tip / Type / Typ

	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	781	895	982	982	1078	1078	1149	1149	1191	1217	1242
k1	900.5	999.5	1112	1112	1258	1258	1319.5	1319.5	1377.5	1382	1407
n	193	215	257	257	315	315	347	347	390	434	434
n1	147	158	179	179	219	219	234	234	275	285	285
p1	-	-	724	724	770	770	789	789	820	830	830

DR772.03
DR773.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225
Tip / Type / Typ

	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	641	725	812	812	908	908	979	979	1021	1047	1072
k1	760.5	829.5	942	942	1088	1088	1149.5	1149.5	1207.5	1212	1237
n	193	215	257	257	315	315	347	347	390	434	434
n1	147	158	179	179	219	219	234	234	275	285	285
p1	-	-	724	724	770	770	789	789	820	830	830

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

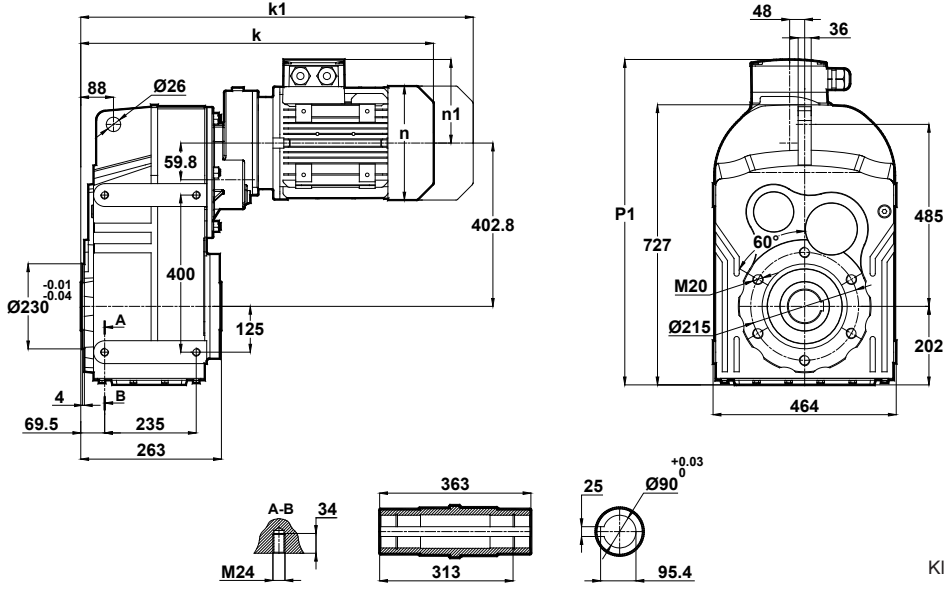


Ölçü Sayfaları Dimension Pages Abmessungsseiten



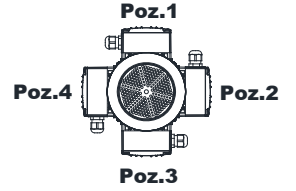
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR774.00



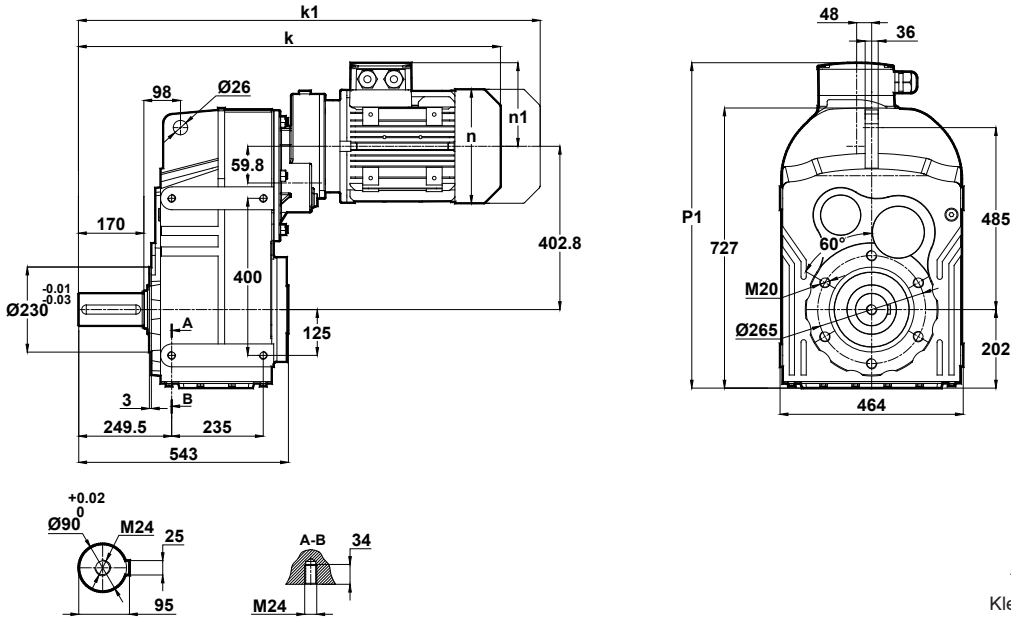
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80	90S	90L	100L
k	664	703	703	747
k1	757	807.5	807.5	866.5
n	155	176	176	193
n1	121	132	132	147
p1	-	737	737	752



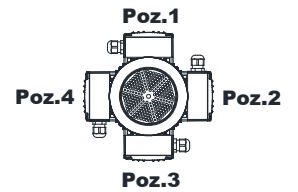
80-90-100
Tip / Type / Typ

DR774.01



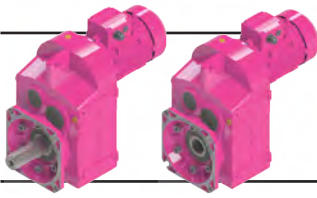
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80	90S	90L	100L
k	844	883	883	927
k1	937	987.5	987.5	1046.5
n	155	176	176	193
n1	121	132	132	147
p1	-	737	737	752



80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

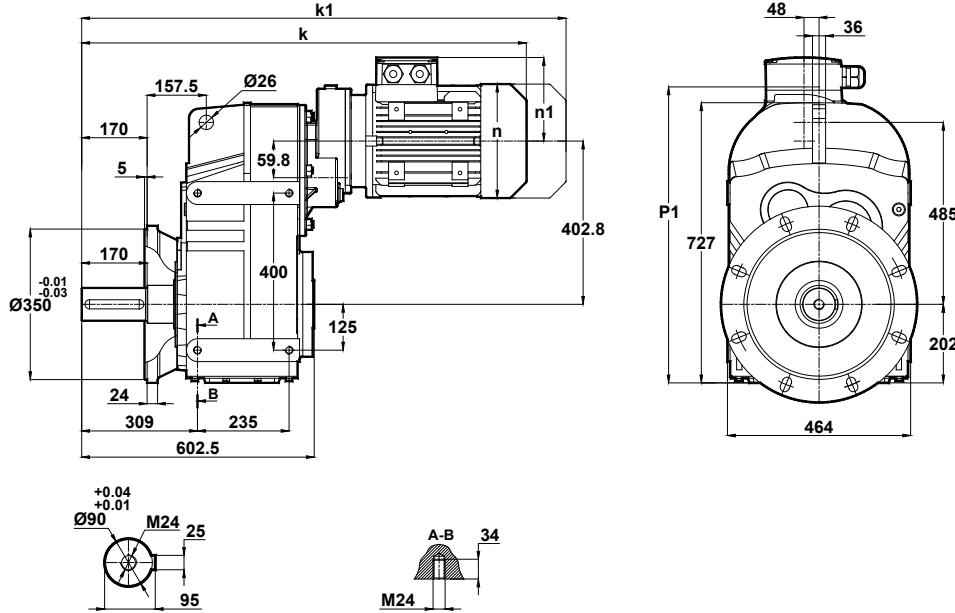


Ölçü Sayfaları Dimension Pages Abmessungsseiten

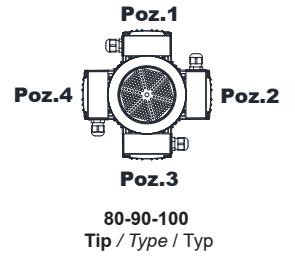


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR774.02

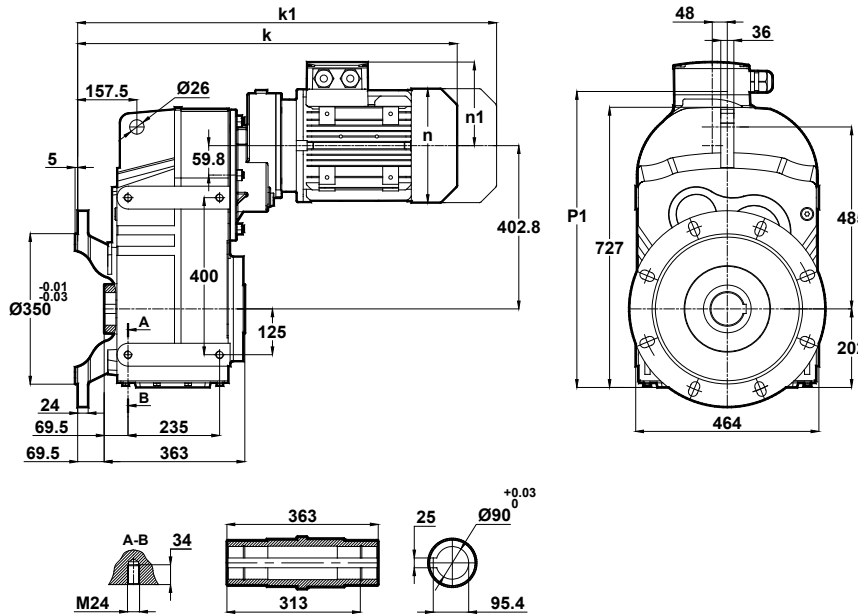


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

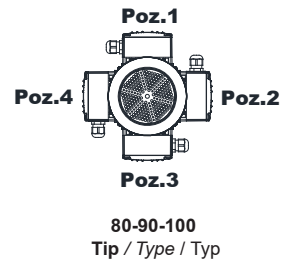


	80	90S	90L	100L
k	904	943	943	987
k1	997	1047.5	1047.5	1106.5
n	155	176	176	193
n1	121	132	132	147
p1	-	737	737	752

DR774.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



	80	90S	90L	100L
k	734	773	773	817
k1	827	877.5	877.5	936.5
n	155	176	176	193
n1	121	132	132	147
p1	-	737	737	752

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

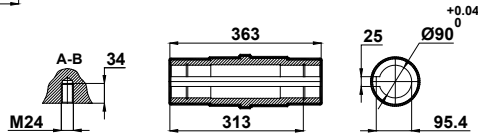
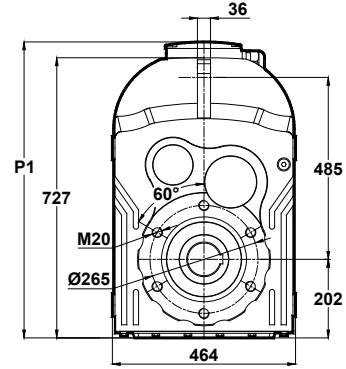
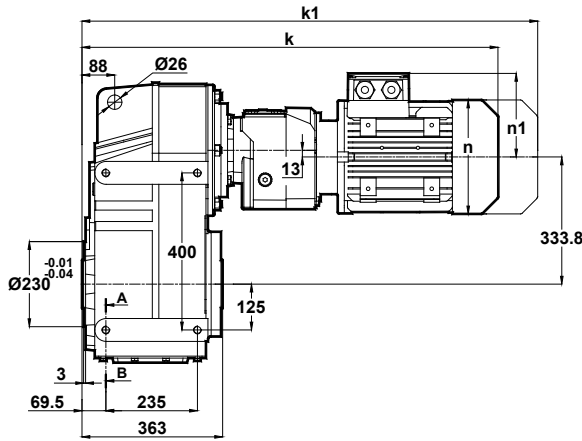


Ölçü Sayfaları Dimension Pages Abmessungsseiten



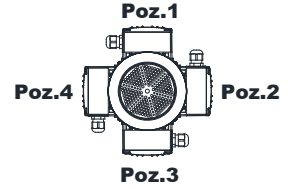
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR775.00
DR776.00



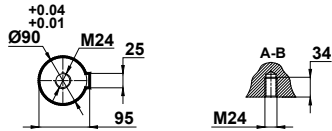
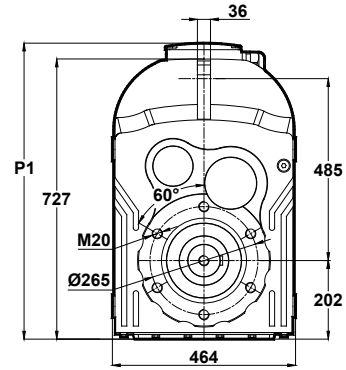
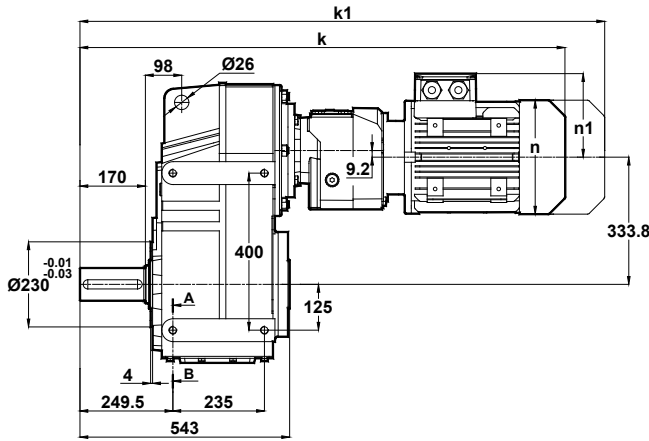
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	775	809	848	848
k1	866	902	952.5	952.5
n	137	155	176	176
n1	112	121	132	132
p1	-	-	-	-



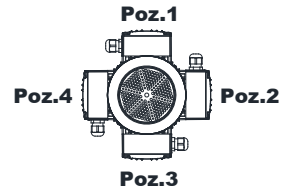
71-80-90
Tip / Type / Typ

DR775.01
DR776.01



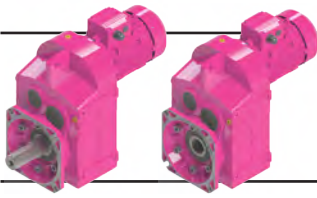
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L
k	955	989	1028	1028
k1	1046	1082	1132.5	1132.5
n	137	155	176	176
n1	112	121	132	132
p1	-	-	-	-



71-80-90
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

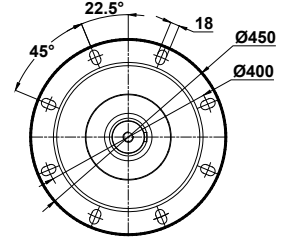
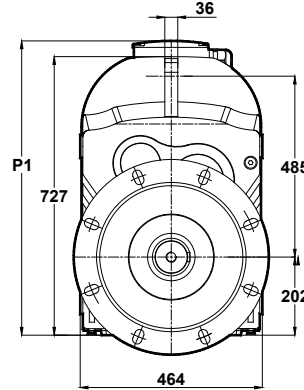
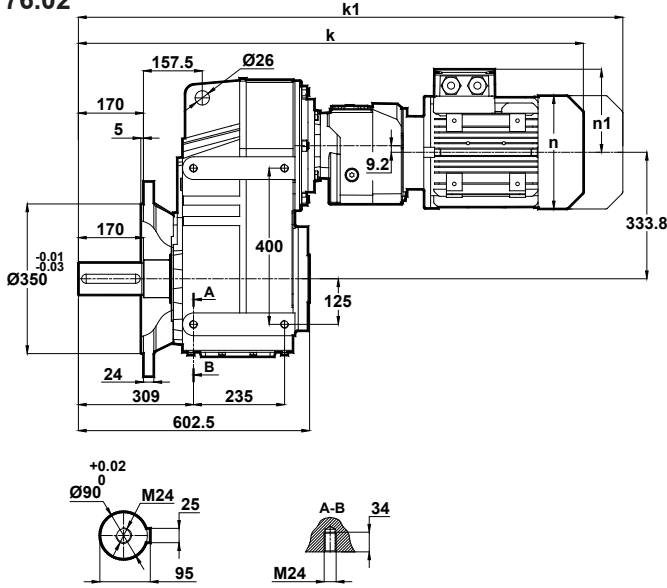
Dimension Pages

Abmessungsseiten

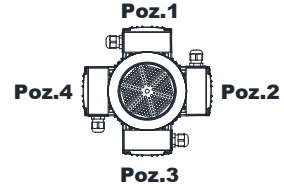


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR775.02
DR776.02



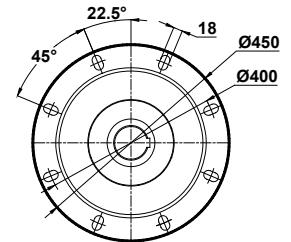
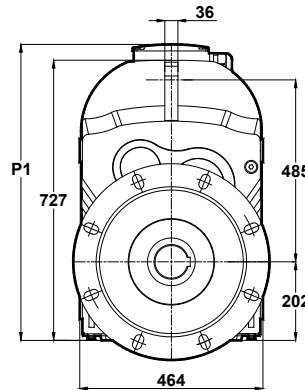
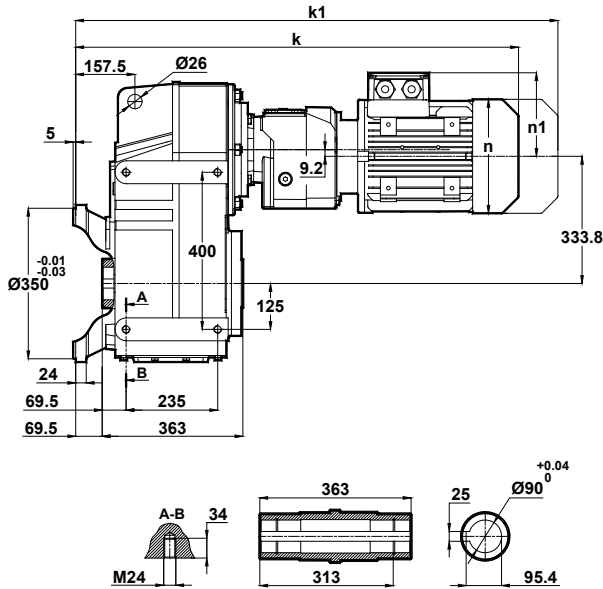
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



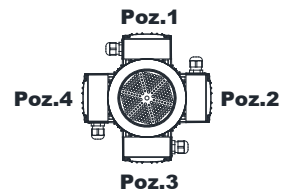
71-80-90
Tip / Type / Typ

	71	80	90S	90L
k	1015	1049	1088	1088
k1	1106	1142	1192.5	1192.5
n	137	155	176	176
n1	112	121	132	132
p1	-	-	-	-

DR775.03
DR776.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / Type / Typ

	71	80	90S	90L
k	845	879	918	918
k1	936	972	1022.5	1022.5
n	137	155	176	176
n1	112	121	132	132
p1	-	-	-	-

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

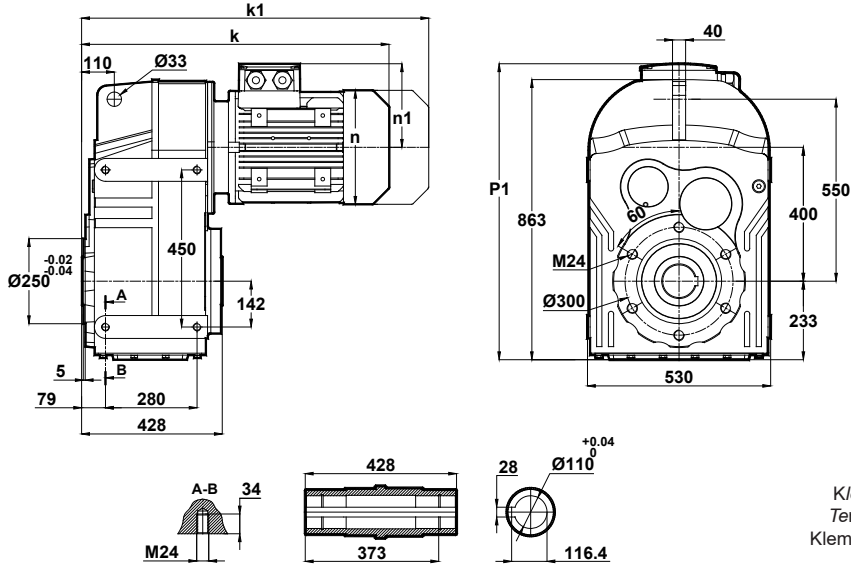


Ölçü Sayfaları Dimension Pages Abmessungenseiten

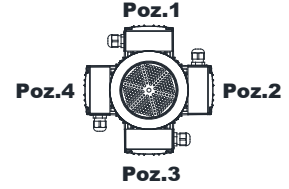


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR872.00
DR873.00



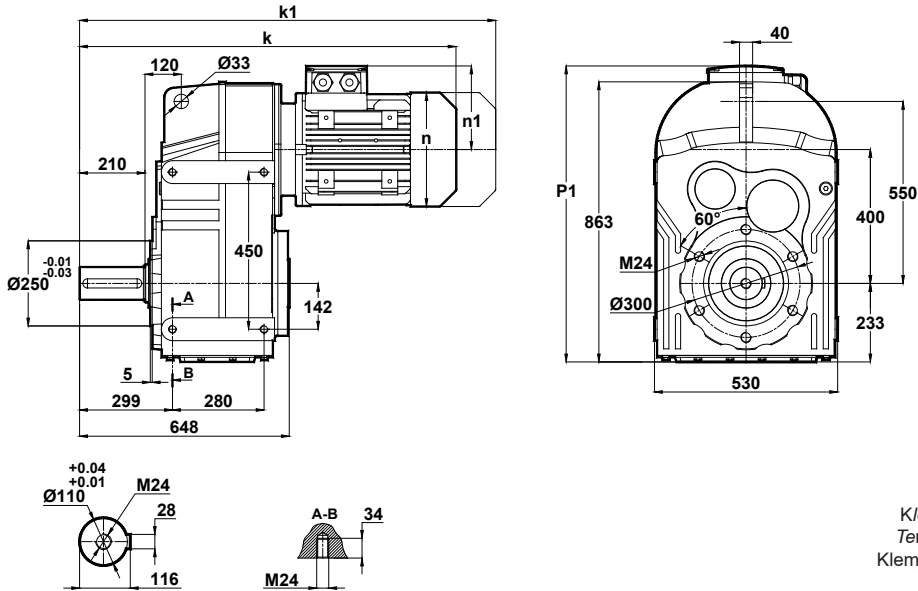
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



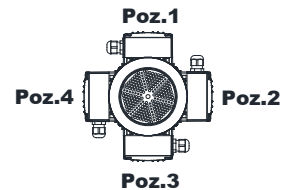
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	809	809	885	885	956	956	998	1027	1052	1155	1216	1216
k1	939	939	1065	1065	1126.5	1126.5	1184.5	1192	1217	1325.5	1389	1395
n	257	257	315	315	347	347	390	434	434	480	544	544
n1	179	179	219	219	234	234	275	285	285	322	350	350
p1	-	-	-	-	877	877	908	918	918	955	983	983

132-160-180-200-225-250-280
Tip / Type / Typ

DR872.01
DR873.01



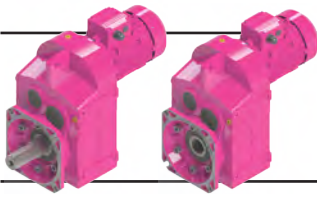
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1029	1029	1105	1105	1176	1176	1218	1247	1272	1375	1436	1436
k1	1159	1159	1285	1285	1346.5	1346.5	1404.5	1412	1437	1545.5	1609	1615
n	257	257	315	315	347	347	390	434	434	480	544	544
n1	179	179	219	219	234	234	275	285	285	322	350	350
p1	-	-	-	-	877	877	908	918	918	955	983	983

132-160-180-200-225-250-280
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

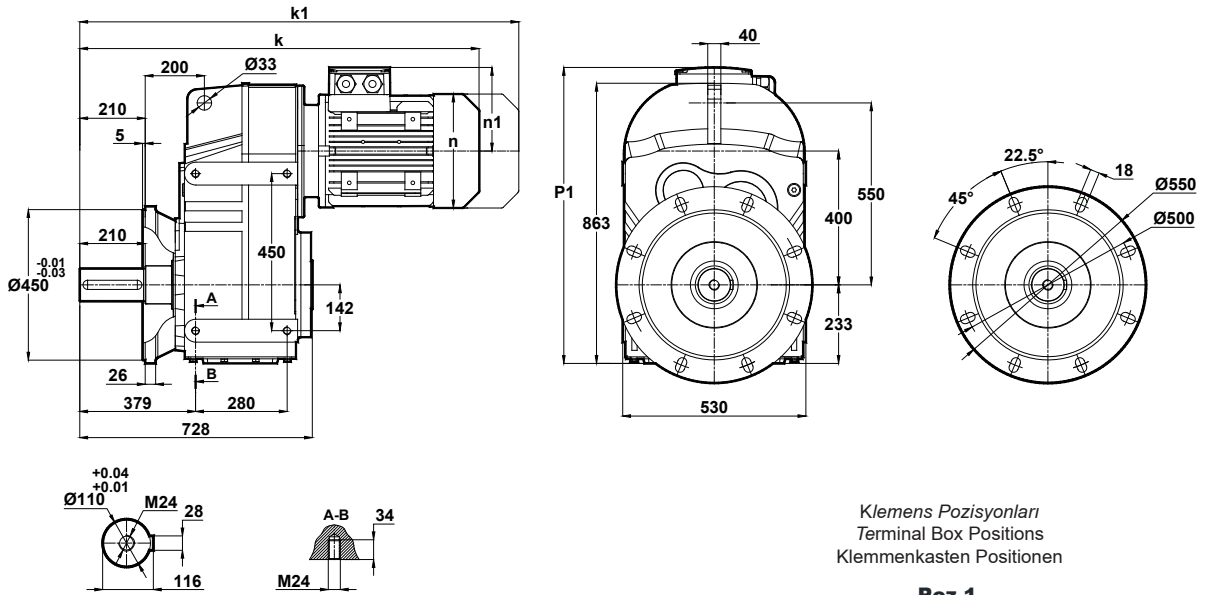
Dimension Pages

Abmessungsseiten

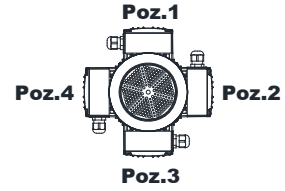


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR872.02
DR873.02



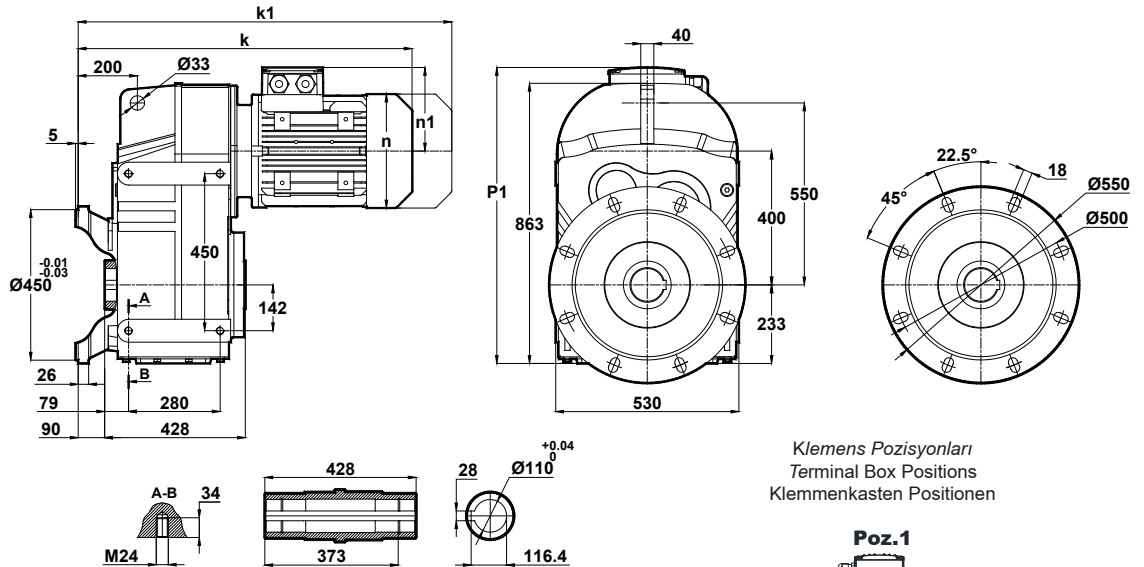
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



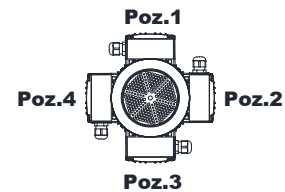
132-160-180-200-225-250-280
Tip / Type / Typ

	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1109	1109	1185	1185	1256	1256	1298	1327	1352	1455	1516	1516
k1	1239	1239	1365	1365	1426.5	1426.5	1484.5	1492	1517	1625.5	1689	1695
n	257	257	315	315	347	347	390	434	434	480	544	544
n1	179	179	219	219	234	234	275	285	285	322	350	350
p1	-	-	-	-	877	877	908	918	918	955	983	983

DR872.03
DR873.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



132-160-180-200-225-250-280
Tip / Type / Typ

	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	899	899	975	975	1046	1046	1088	1117	1142	1245	1306	1306
k1	1029	1029	1155	1155	1216.5	1216.5	1274.5	1282	1307	1415.5	1479	1479
n	257	257	315	315	347	347	390	434	434	480	544	544
n1	179	179	219	219	234	234	275	285	285	322	350	350
p1	-	-	-	-	877	877	908	918	918	955	983	983

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

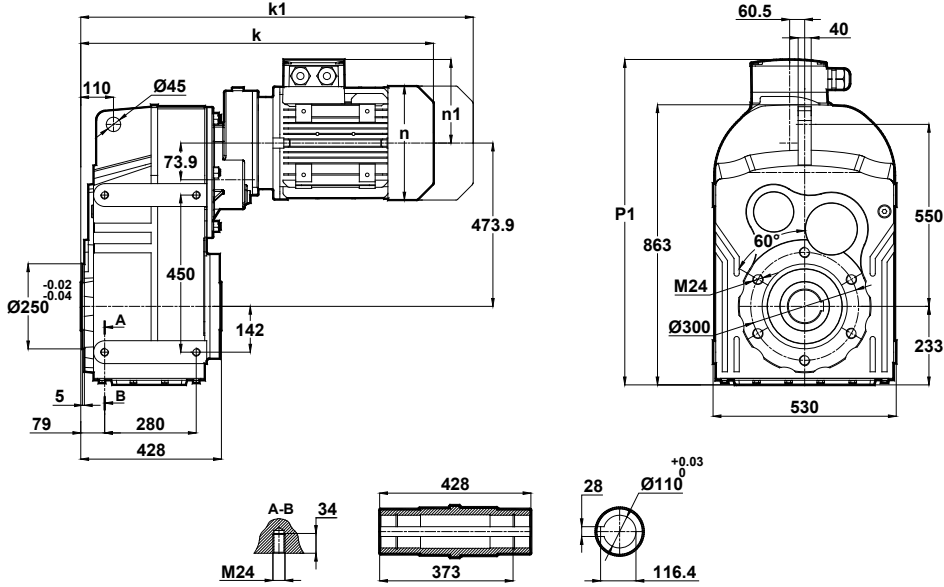
Dimension Pages

Abmessungsseiten



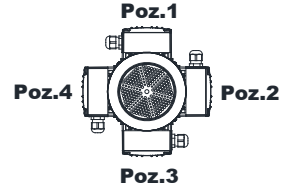
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR874.00



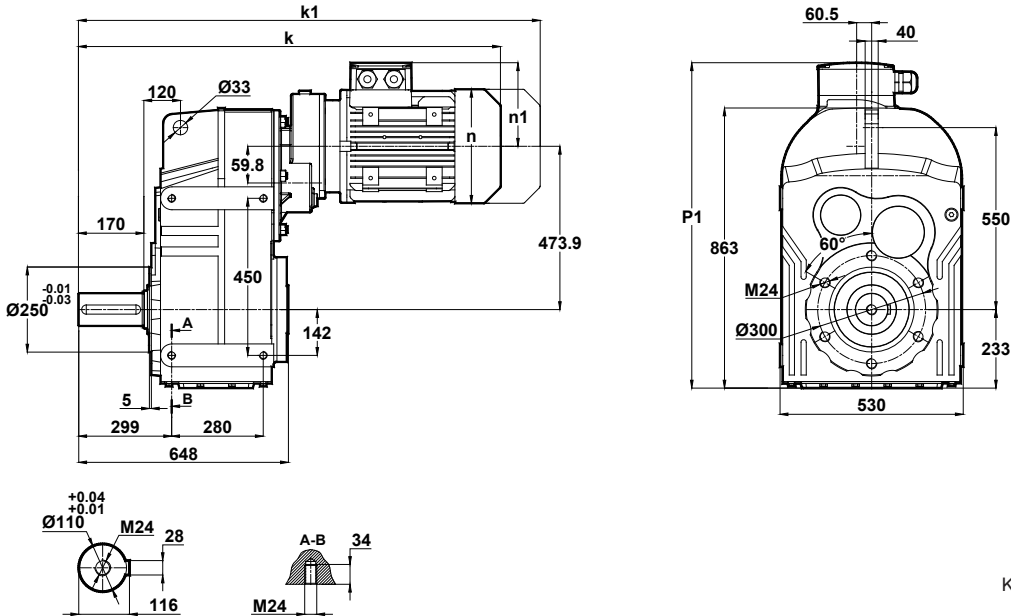
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	820	844	931	931
k1	939.5	948.5	1061	1061
n	193	215	257	257
n1	147	158	179	179
p1	-	-	886	886



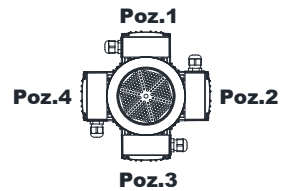
100-112-132
Tip / Type / Typ

DR874.01



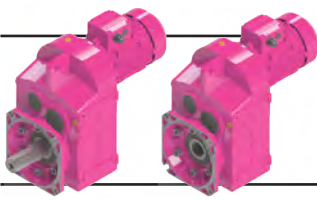
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	1040	1064	1151	1151
k1	1159.5	1168.5	1281	1281
n	193	215	257	257
n1	147	158	179	179
p1	-	-	886	886



100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

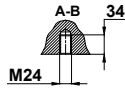
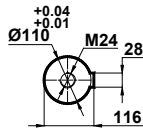
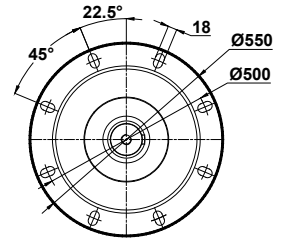
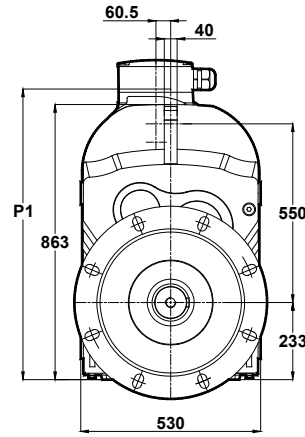
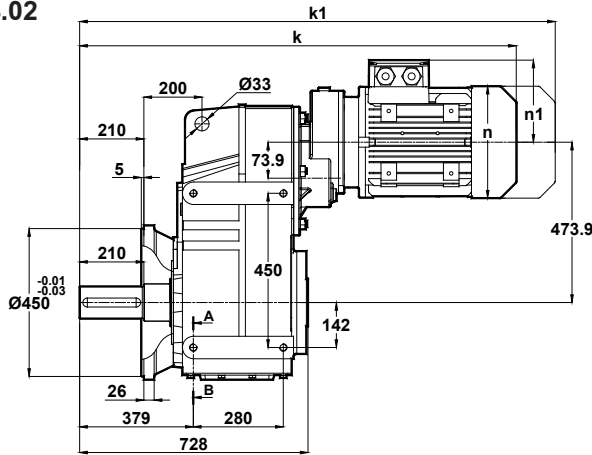
Dimension Pages

Abmessungsseiten



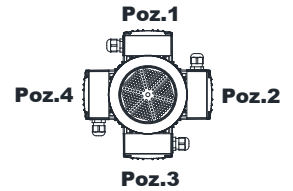
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR874.02



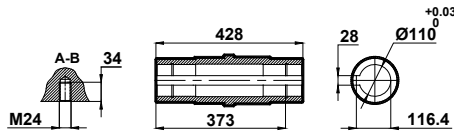
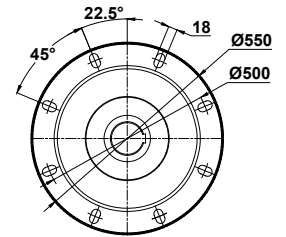
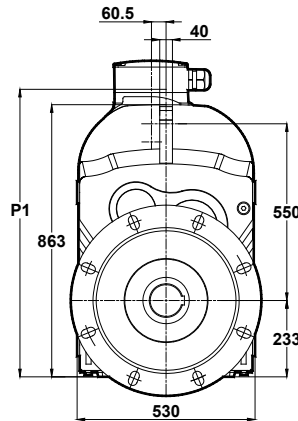
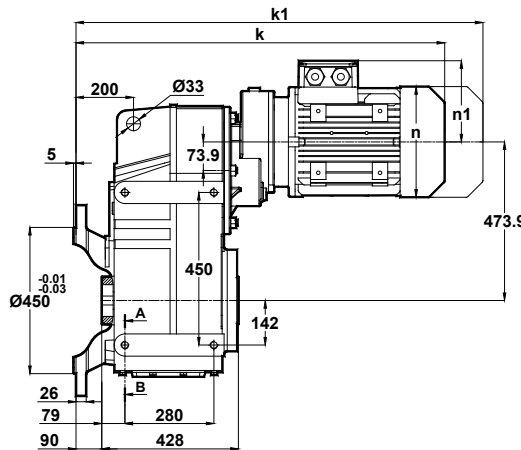
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	1120	1144	1231	1231
k1	1239.5	1248.5	1361	1361
n	193	215	257	257
n1	147	158	179	179
p1	-	-	886	886



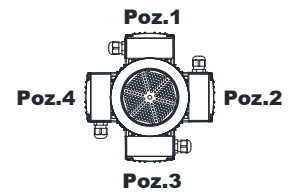
100-112-132
Tip / Type / Typ

DR874.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	910	934	1021	1021
k1	1029.5	1038.5	1151	1151
n	193	215	257	257
n1	147	158	179	179
p1	-	-	886	886



100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

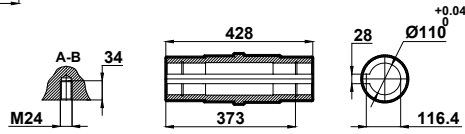
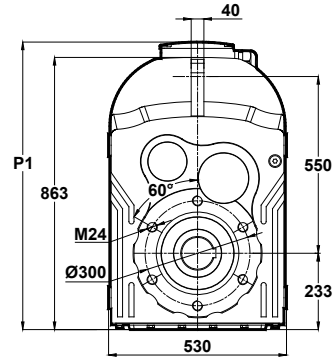
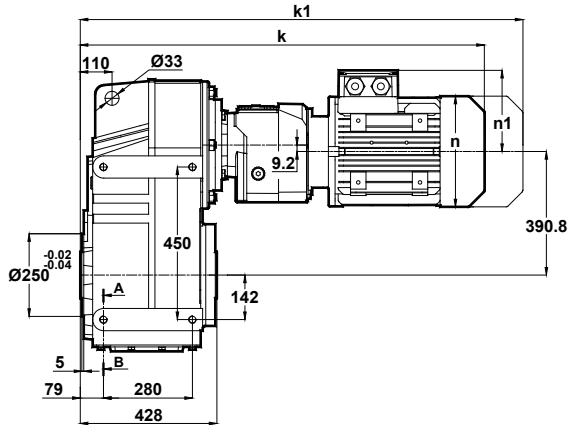
Dimension Pages

Abmessungsseiten



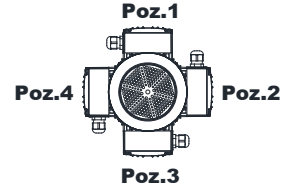
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR875.00
DR876.00



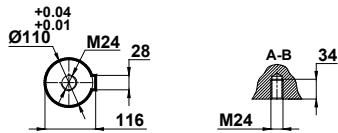
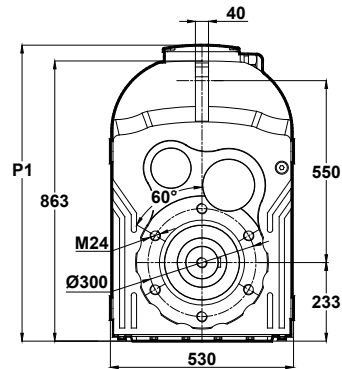
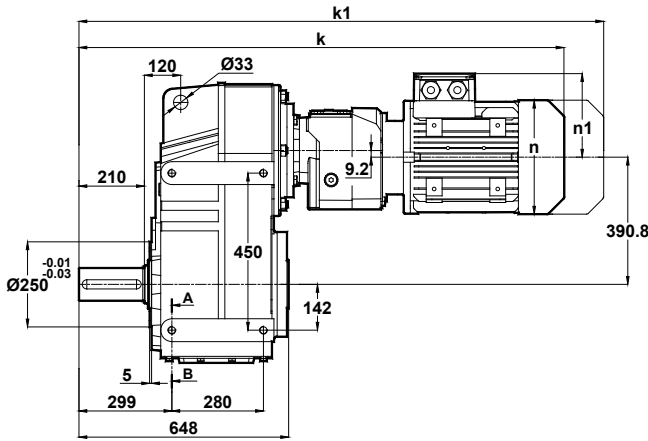
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L
k	838	872	911	911	958
k1	929	965	1015.5	1015.5	1077.5
n	137	155	176	176	193
n1	112	121	132	132	147
p1	736	745	756	756	771



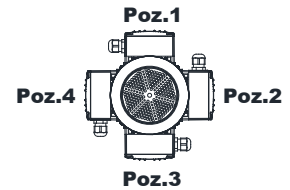
71-80-90-100
Tip / Type / Typ

DR875.01
DR876.01



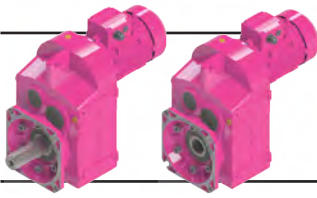
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71	80	90S	90L	100L
k	1058	1092	1131	1131	1178
k1	1149	1185	1235.5	1235.5	1297.5
n	137	155	176	176	193
n1	112	121	132	132	147
p1	736	745	756	756	771



71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

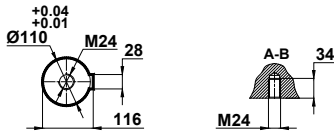
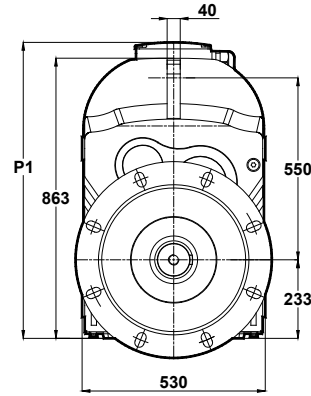
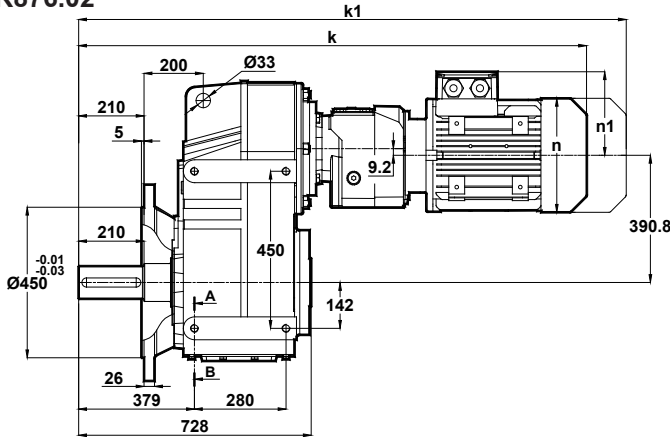
Dimension Pages

Abmessungsseiten



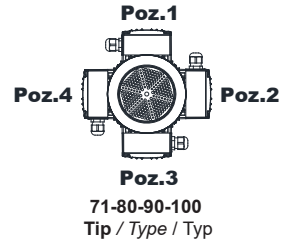
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR875.02
DR876.02

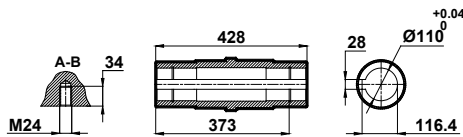
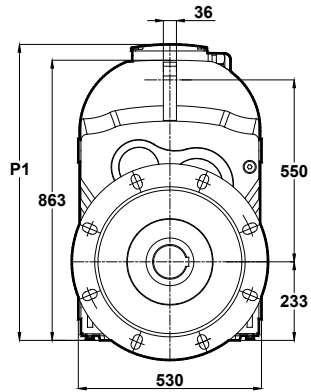
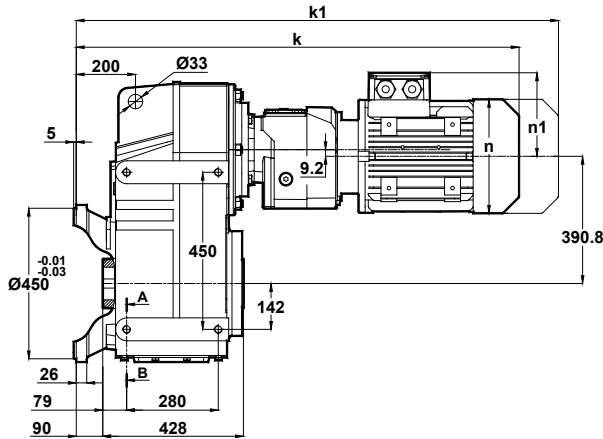


	71	80	90S	90L	100L
k	1138	1172	1211	1211	1258
k1	1229	1265	1315.5	1315.5	1377.5
n	137	155	176	176	193
n1	112	121	132	132	147
p1	736	745	756	756	771

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

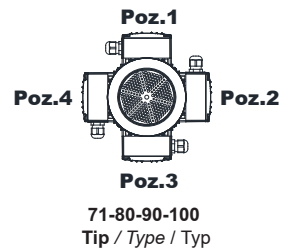


DR875.03
DR876.03



	71	80	90S	90L	100L
k	928	962	1001	1001	1048
k1	1019	1055	1105.5	1105.5	1167.5
n	137	155	176	176	193
n1	112	121	132	132	147
p1	736	745	756	756	771

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

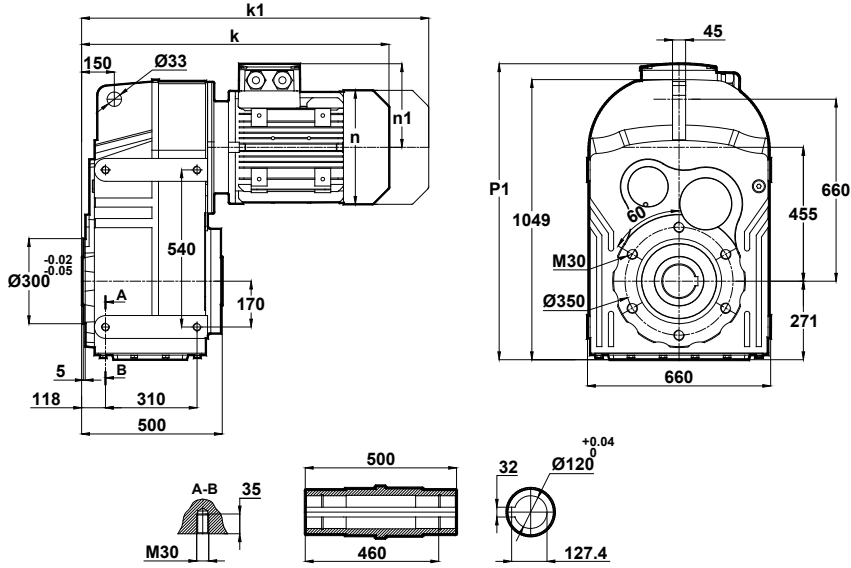
Dimension Pages

Abmessungsseiten



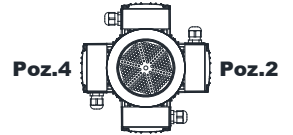
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR972.00
DR973.00



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Poz.1

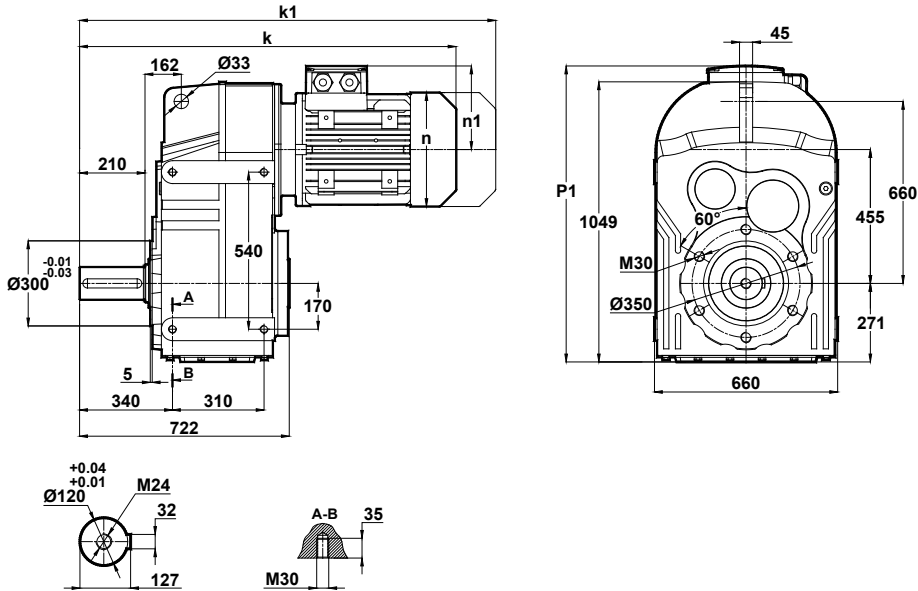


Poz.3

160-180-200-225-250-280-315
Tip / Type / Typ

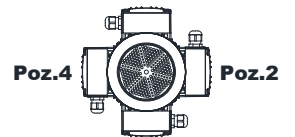
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	952	952	1023	1023	1065	1081	1106	1209	1270	1270	1425	1425
k1	1132	1132	1193.5	1193.5	1251.5	1246	1271	1379.5	1443	1449	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236

DR972.01
DR973.01



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Poz.1

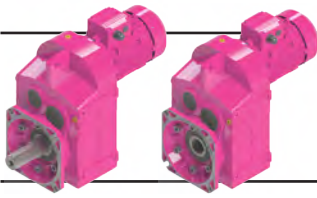


Poz.3

160-180-200-225-250-280-315
Tip / Type / Typ

	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	1174	1174	1245	1245	1287	1303	1328	1431	1492	1492	1647	1647
k1	1354	1354	1415.5	1415.5	1473.5	1468	1493	1601.5	1665	1498	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

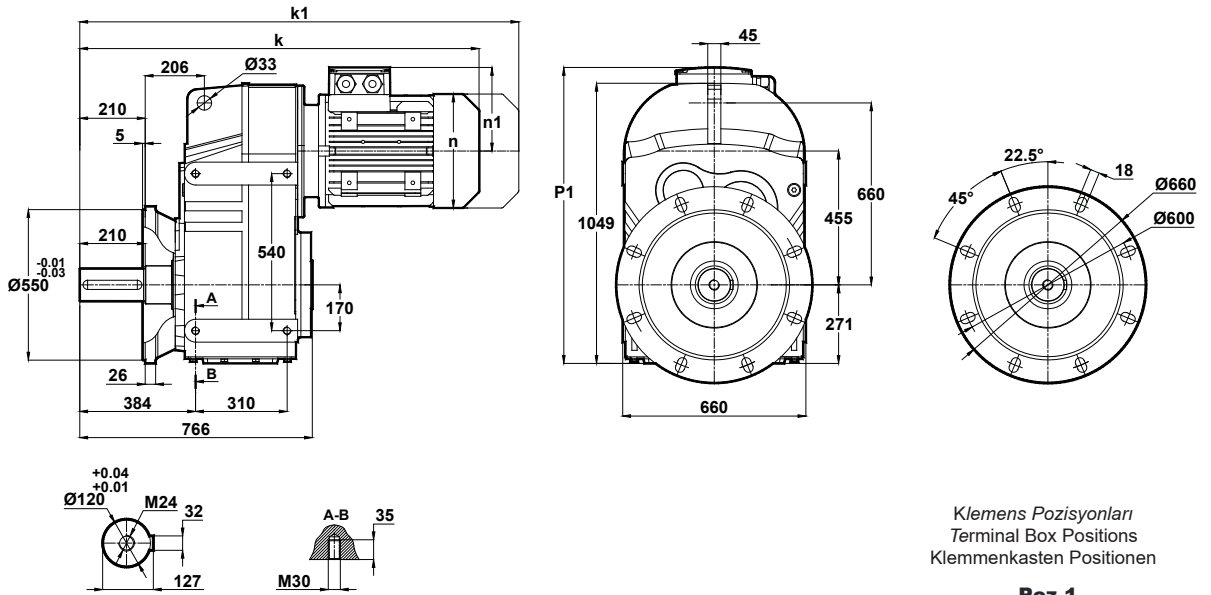
Dimension Pages

Abmessungsseiten

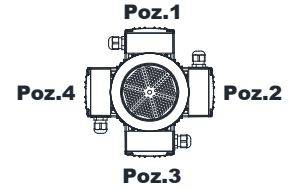


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR972.02
DR973.02



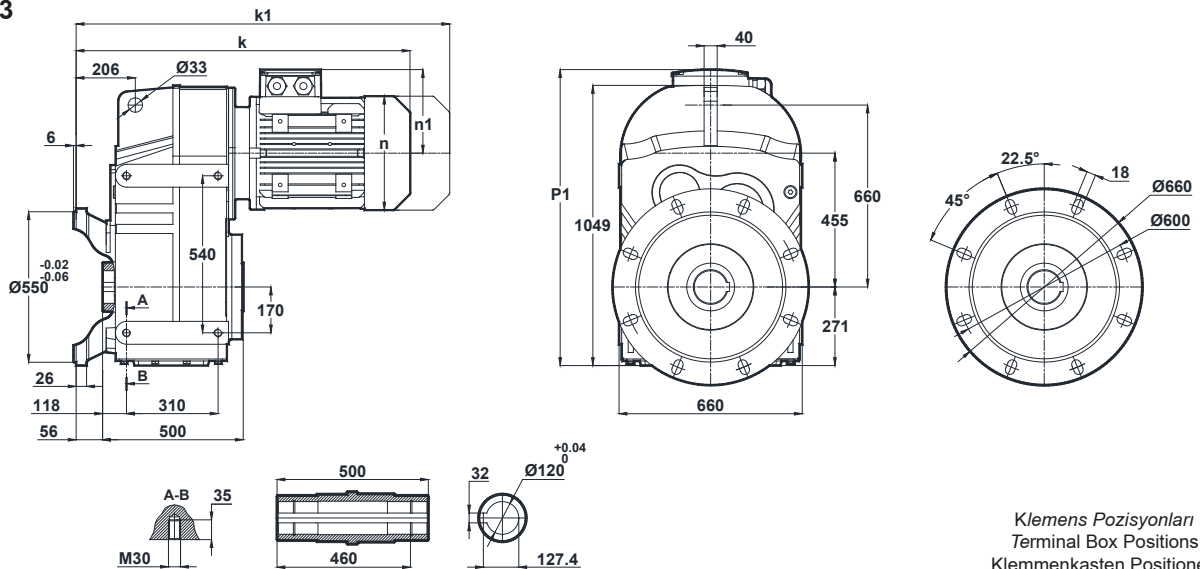
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



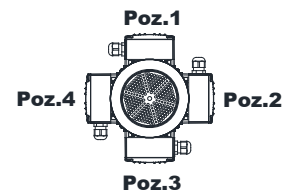
160-180-200-225-250-280-315
Tip / Type / Typ

	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	1218	1218	1289	1289	1331	1347	1372	1475	1536	1536	1691	1691
k1	1398	1398	1459.5	1459.5	1517.5	1512	1537	1645.5	1709	1715	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236

DR972.03
DR973.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



160-180-200-225-250-280-315
Tip / Type / Typ

	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	1008	1008	1079	1079	1121	1137	1162	1265	1326	1326	1481	1481
k1	1188	1188	1249.5	1249.5	1307.5	1302	1327	1435.5	1499	1505	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

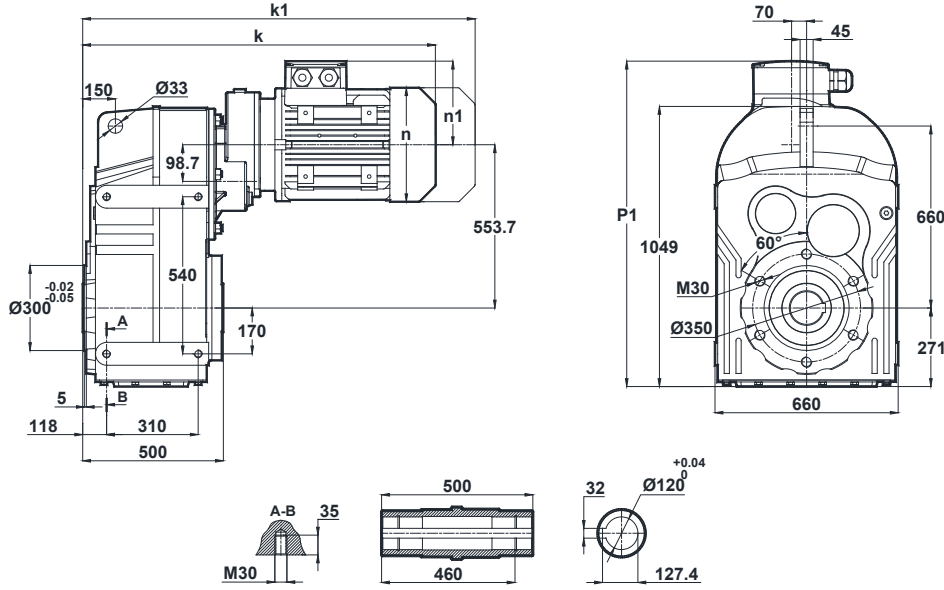


Ölçü Sayfaları Dimension Pages Abmessungsseiten



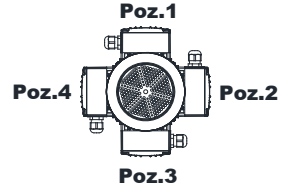
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR974.00



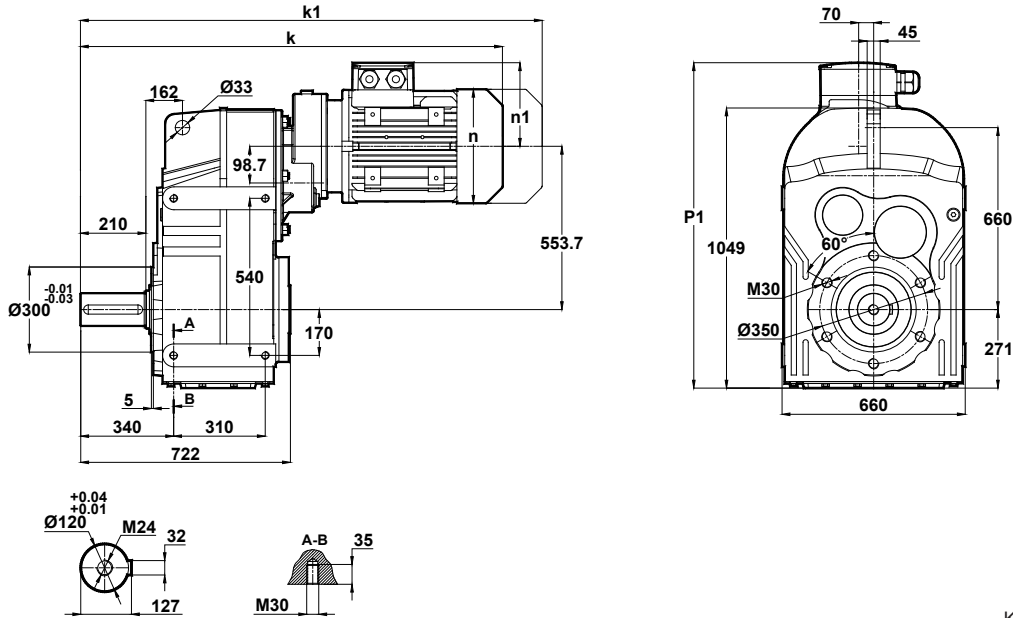
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	921	945	1032	1032
k1	1040.5	1049.5	1162	1162
n	193	215	257	257
n1	147	158	179	179
p1	-	-	-	-



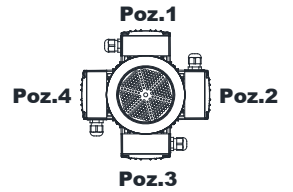
100-112-132
Tip / Type / Typ

DR974.01



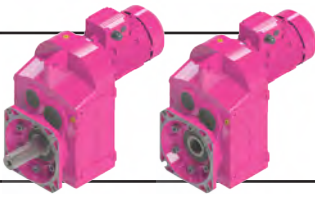
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L	112M	132S	132M
k	1143	1167	1254	1254
k1	1262.5	1271.5	1384	1384
n	193	215	257	257
n1	147	158	179	179
p1	-	-	-	-



100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

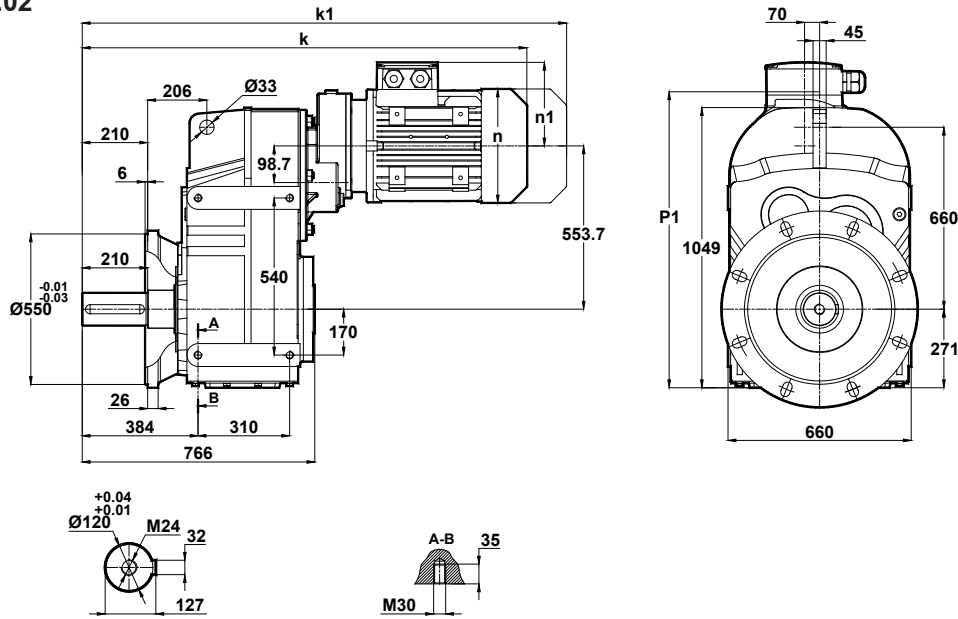


Ölçü Sayfaları Dimension Pages Abmessungsseiten

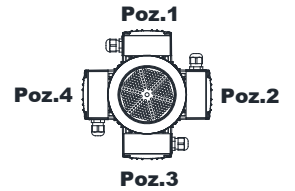


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR974.02



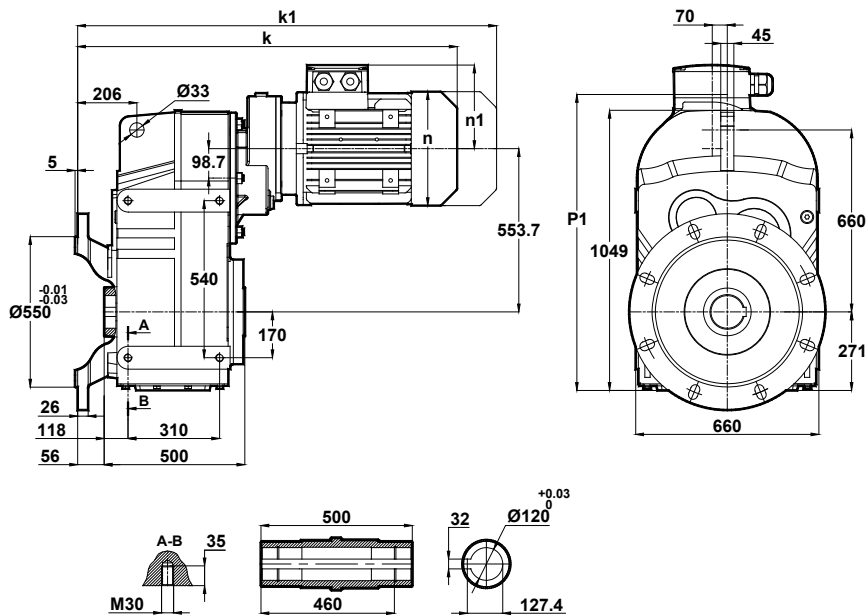
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



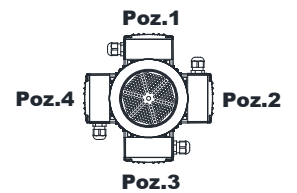
100-112-132
Tip / Type / Typ

	100L	112M	132S	132M
k	1187	1211	1298	1298
k1	1306.5	1315.5	1428	1428
n	193	215	257	257
n1	147	158	179	179
p1	-	-	-	-

DR974.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132
Tip / Type / Typ

	100L	112M	132S	132M
k	977	1001	1088	1088
k1	1096.5	1105.5	1218	1218
n	193	215	257	257
n1	147	158	179	179
p1	-	-	-	-

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

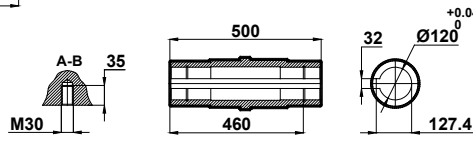
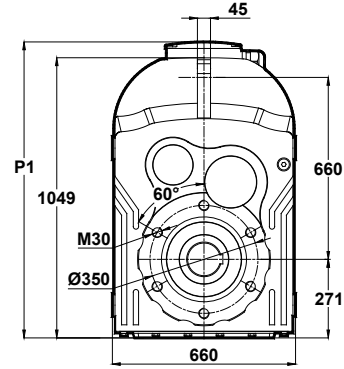
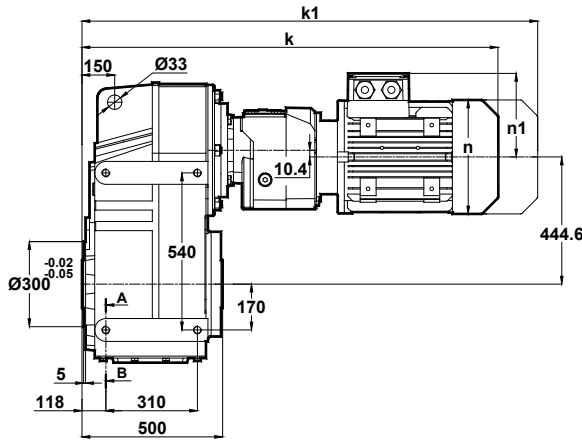


Ölçü Sayfaları Dimension Pages Abmessungsseiten



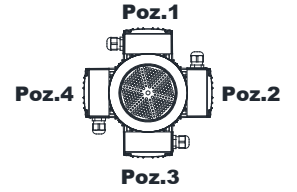
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR975.00
DR976.00



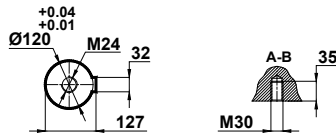
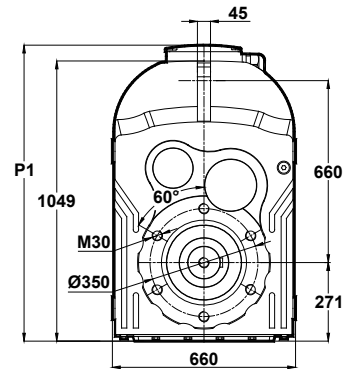
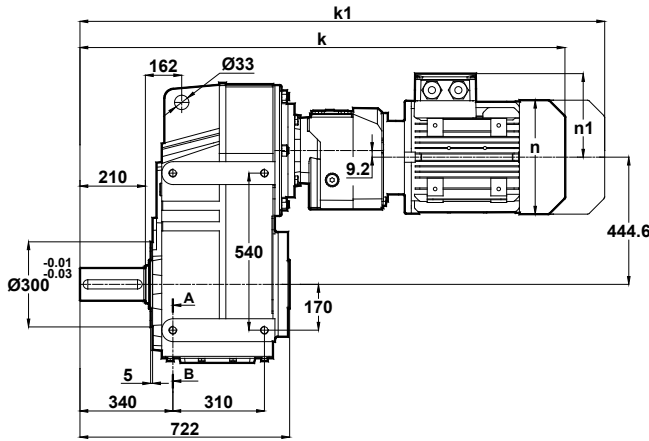
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80	90S	90L	100L
k	1000	1039	1039	1083
k1	1093	1143.5	1143.5	1202.5
n	155	176	176	193
n1	121	132	132	147
p1	-	-	-	-



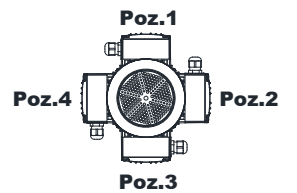
80-90-100
Tip / Type / Typ

DR975.01
DR976.01



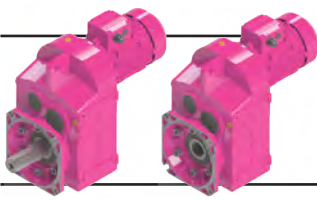
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80	90S	90L	100L
k	1222	1261	1261	1305
k1	1315	1365.5	1365.5	1424.5
n	155	176	176	193
n1	121	132	132	147
p1	-	-	-	-



80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

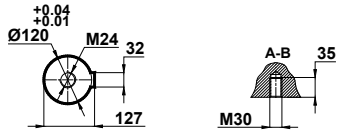
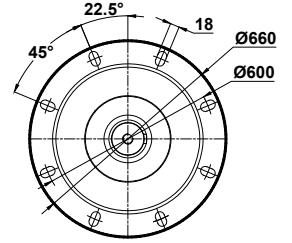
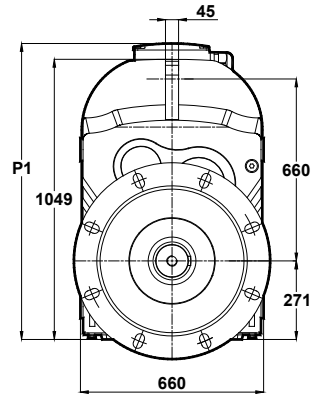
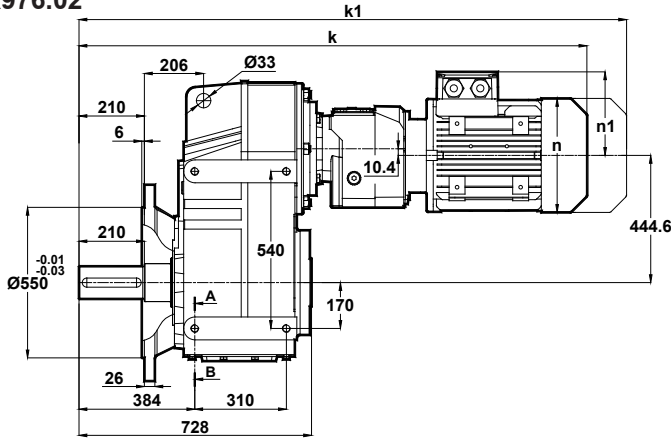


Ölçü Sayfaları Dimension Pages Abmessungsseiten



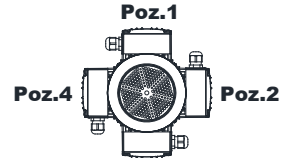
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR975.02
DR976.02



	80	90S	90L	100L
k	1266	1305	1305	1349
k1	1359	1409.5	1409.5	1468.5
n	155	176	176	193
n1	121	132	132	147
p1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

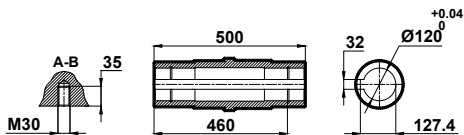
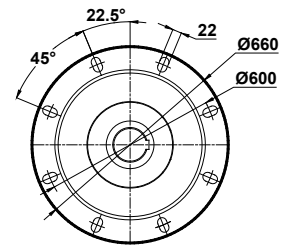
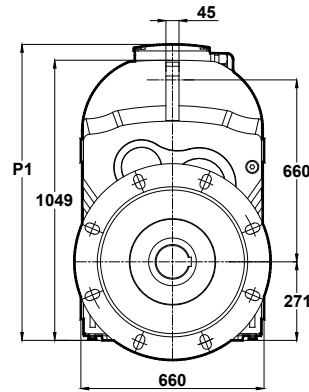
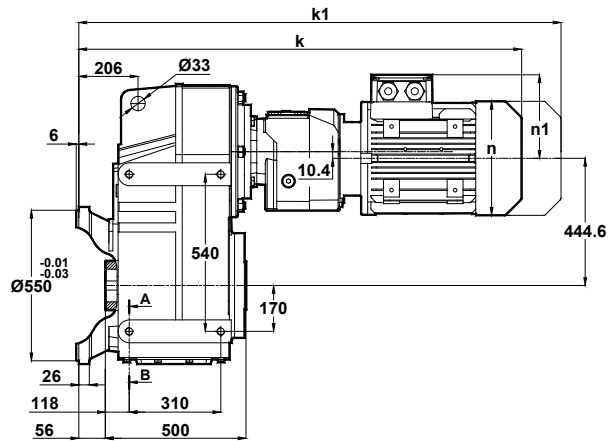


Poz.1

80-90-100

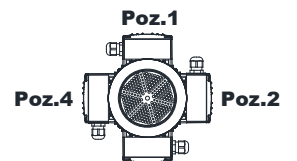
Tip / Type / Typ

DR975.03
DR976.03



	80	90S	90L	100L
k	1056	1095	1095	1139
k1	1149	1199.5	1199.5	1258.5
n	155	176	176	193
n1	121	132	132	147
p1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



Poz.1

80-90-100

Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

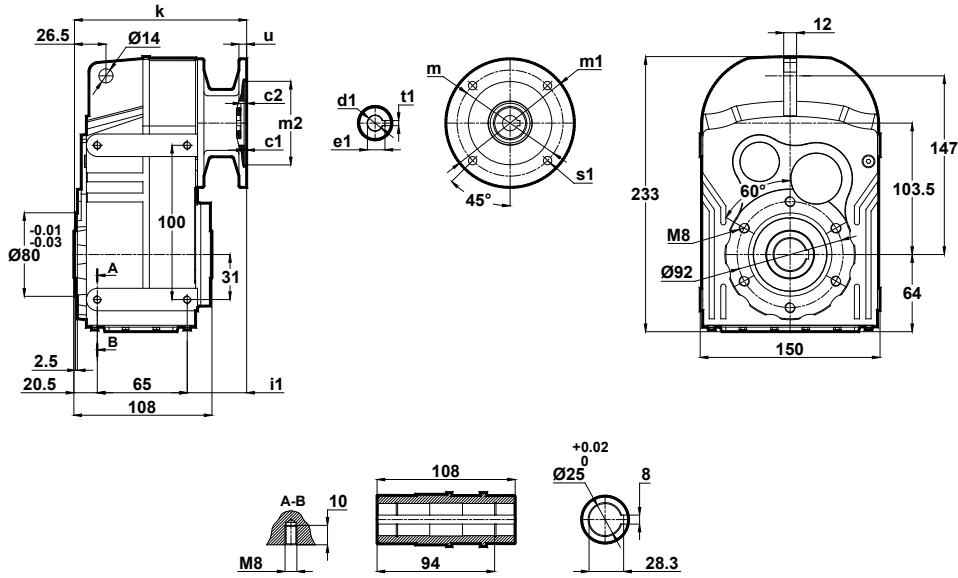
Dimension Pages

Abmessungsseiten



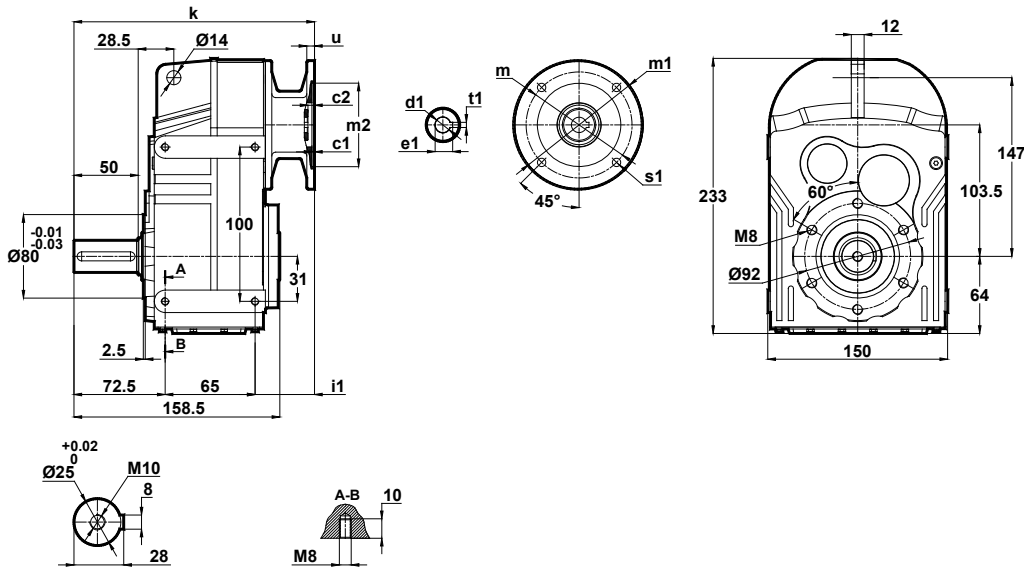
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN072.00
DN073.00

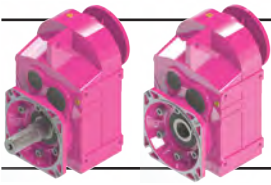


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	55	10	145	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	146.5	14	5	16.3
71/B14	3	4.5	7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	161.5	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	161.5	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	5	15	215	250	180	82	12	172.5	28	8	31.3
100/B14		5.5	9	130	160	110						

DN072.01
DN073.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	55	10	197	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	198.5	14	5	16.3
71/B14	3	4.5	7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	213.5	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	213.5	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	5	15	215	250	180	82	12	224.5	28	8	31.3
100/B14		5.5	9	130	160	110						

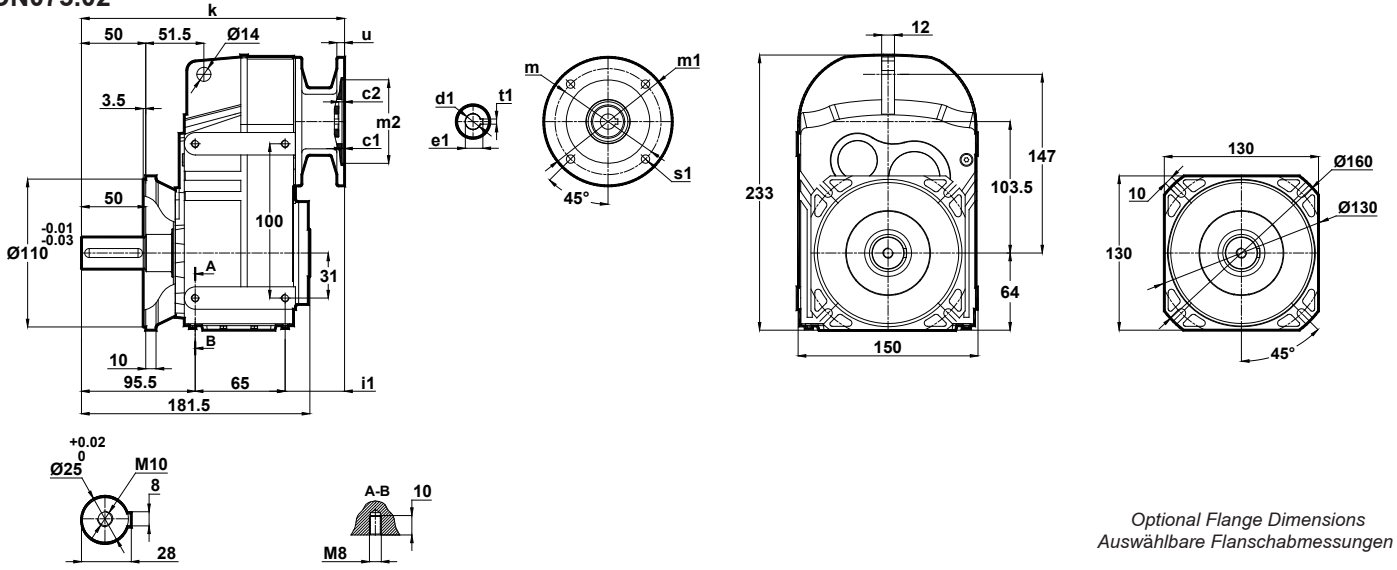


Ölçü Sayfaları Dimension Pages Abmessungsseiten



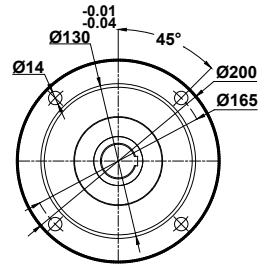
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN072.02
DN073.02

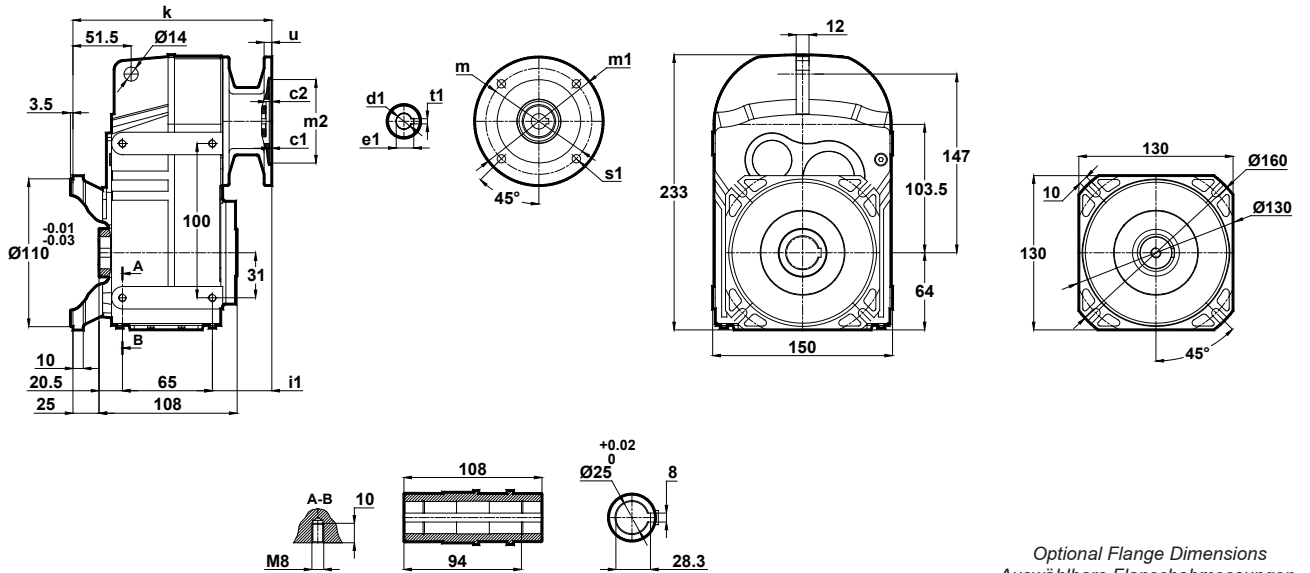


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	220	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	220	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	221.5	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	221.5	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	236.5	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	236.5	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	236.5	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	236.5	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	247.5	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	247.5	28	8	31.3

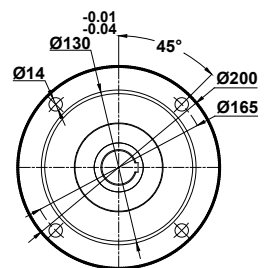


DN072.03
DN073.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	170	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	170	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	171.5	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	171.5	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	186.5	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	186.5	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	186.5	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	186.5	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	197.5	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	197.5	28	8	31.3





Ölçü Sayfaları

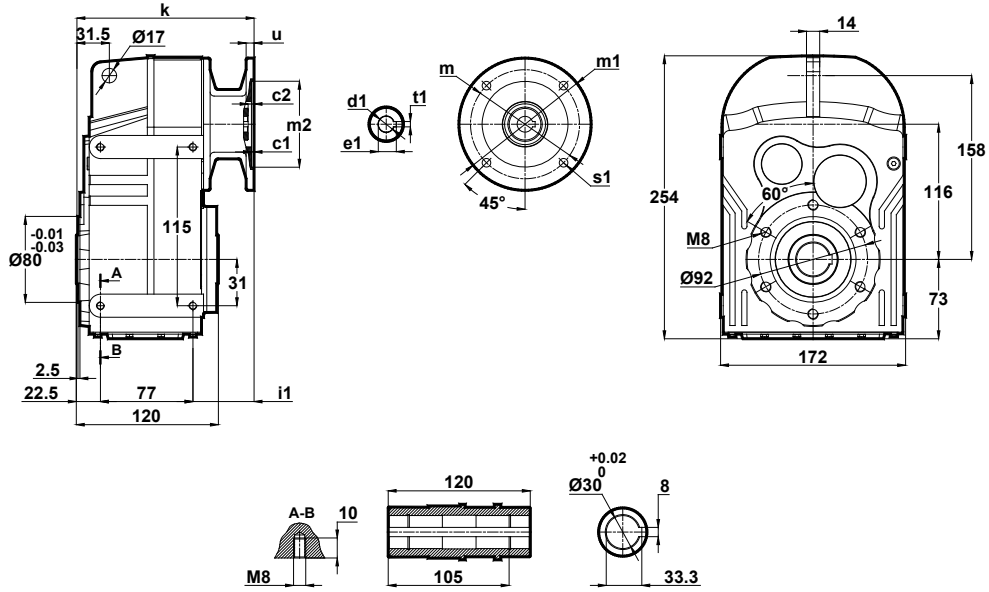
Dimension Pages

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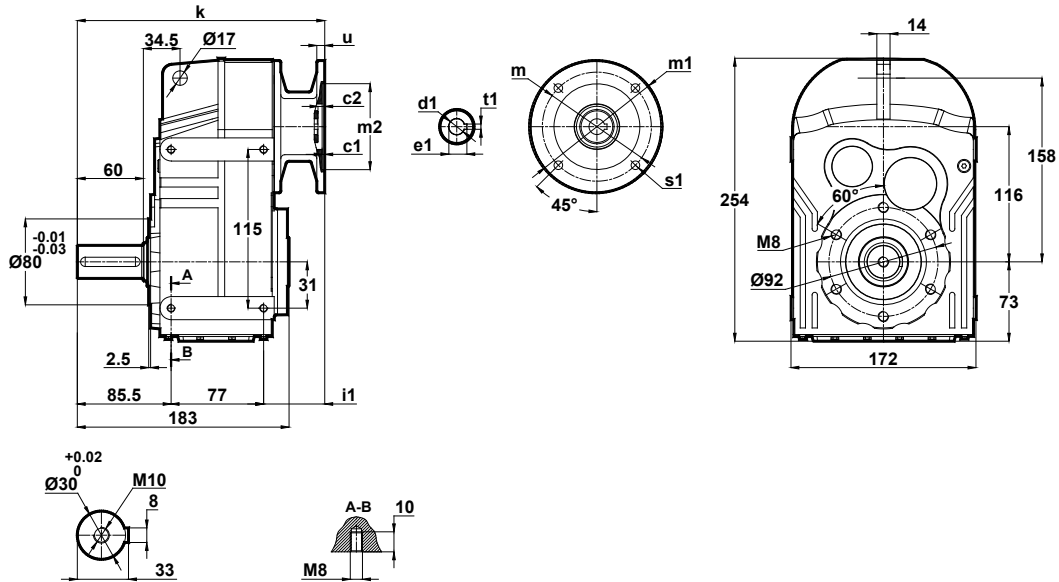
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN172.00
DN173.00

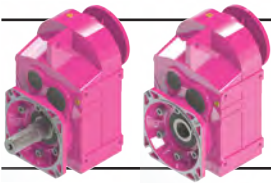


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	55	10	154	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	156	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	156	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	171	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	171	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	171	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	171	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	182	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	182	28	8	31.3

DN172.01
DN173.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	55	10	217	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	219	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	219	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	234	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	234	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	234	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	234	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	245	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	245	28	8	31.3

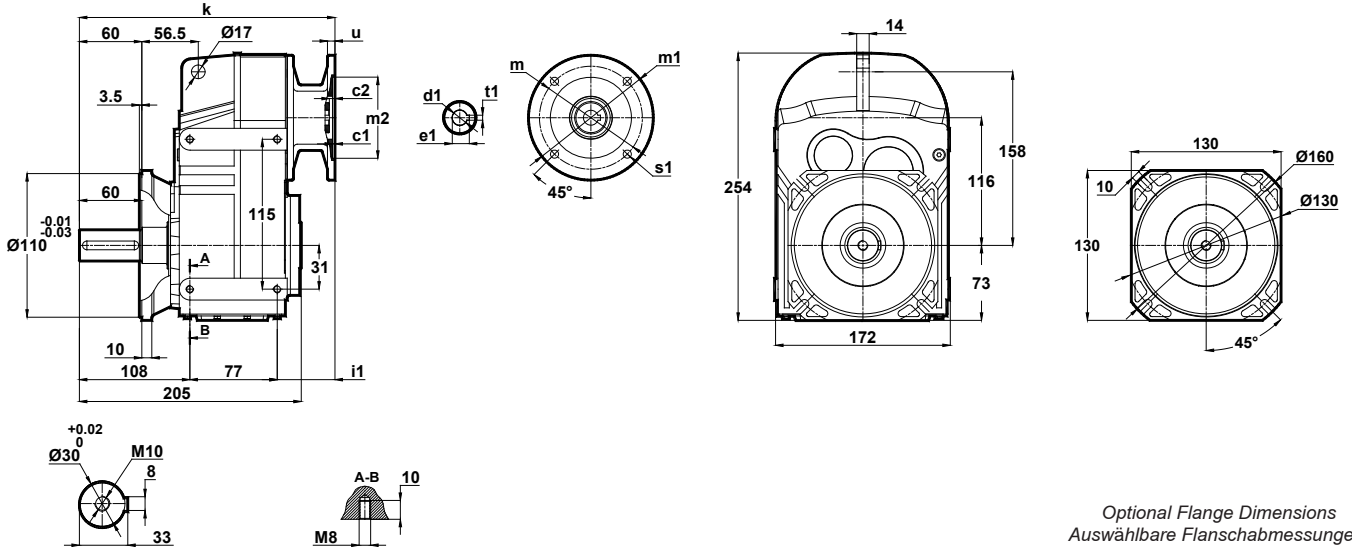


Ölçü Sayfaları Dimension Pages Abmessungenseiten

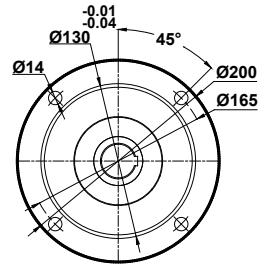


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN172.02
DN173.02

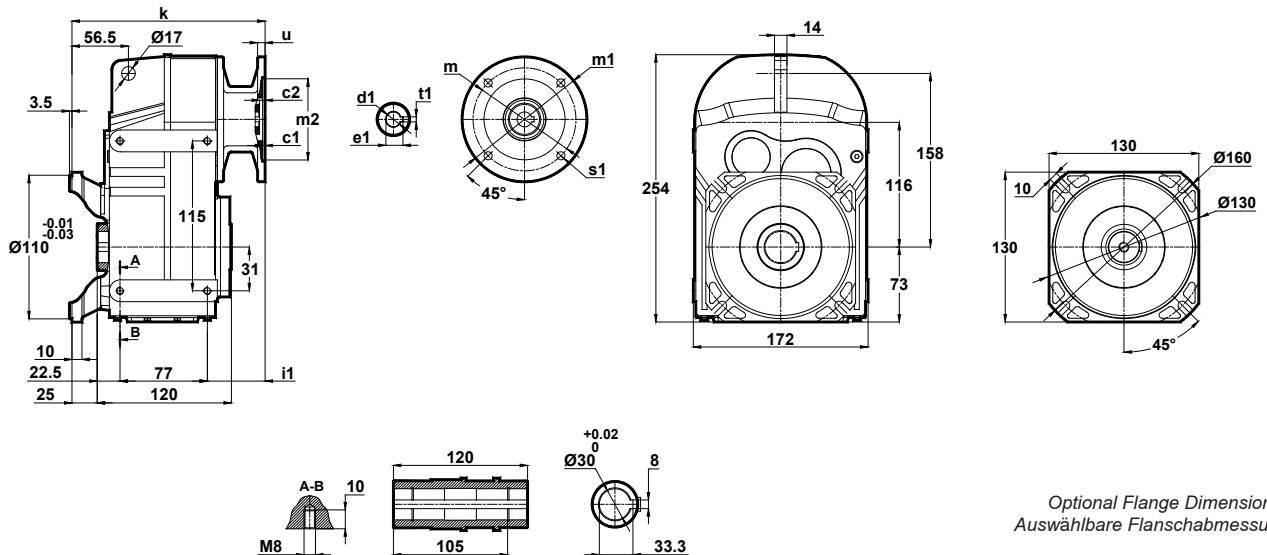


Optional Flange Dimensions
Auswählbare Flanschabmessungen

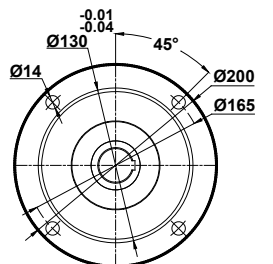


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	239	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	239	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	241	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	241	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	256	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	256	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	256	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	256	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	267	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	267	28	8	31.3

DN172.03
DN173.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	179	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	179	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	181	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	181	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	196	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	196	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	196	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	196	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	207	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	207	28	8	31.3



Ölçü Sayfaları

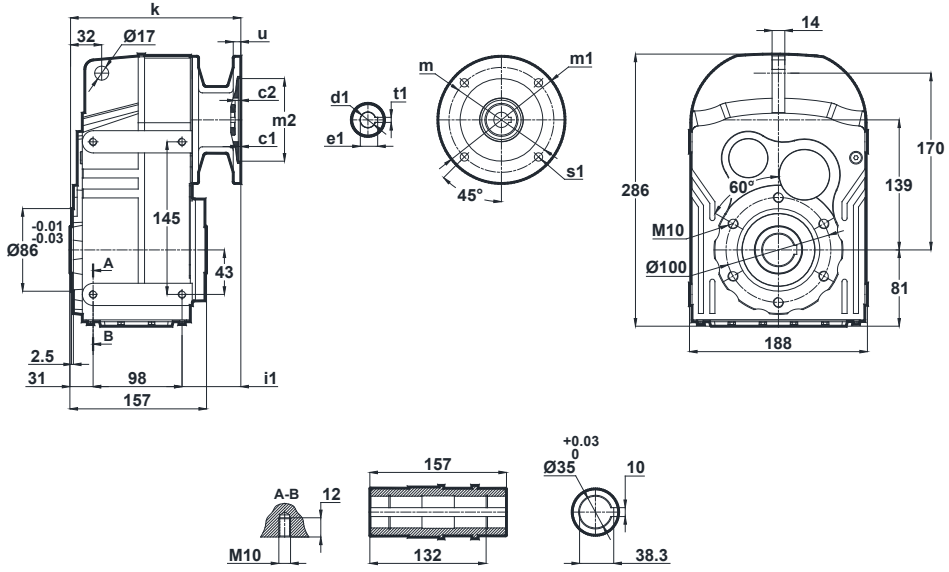
Dimension Pages

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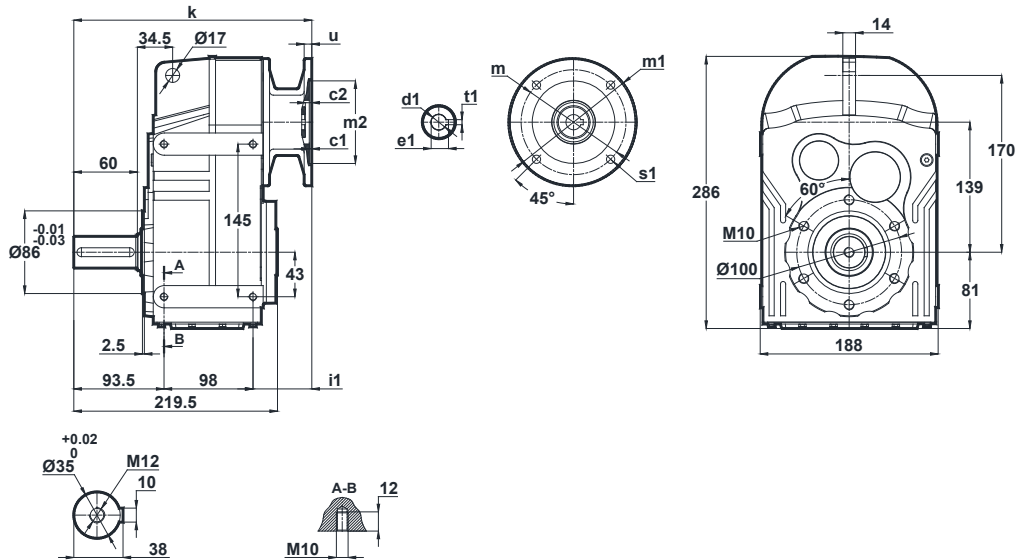
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN272.00
DN273.00

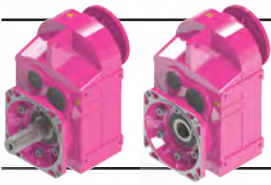


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	184	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	184	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	186	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	186	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	201	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	201	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	201	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	201	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	212	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	212	28	8	31.3

DN272.01
DN273.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	246	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	246	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	248	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	248	14	5	16.3
80/B5	4	5	12	165	200	130	71	12	263	19	6	21.8
80/B14	4	5	7	100	120	80	71	12	263	19	6	21.8
90/B5	4	5	12	165	200	130	71	12	263	24	8	27.3
90/B14	4	5	9	115	140	95	71	12	263	24	8	27.3
100/B5	4	5	15	215	250	180	82	12	273	28	8	31.3
100/B14	4	5.5	9	130	160	110	82	12	273	28	8	31.3

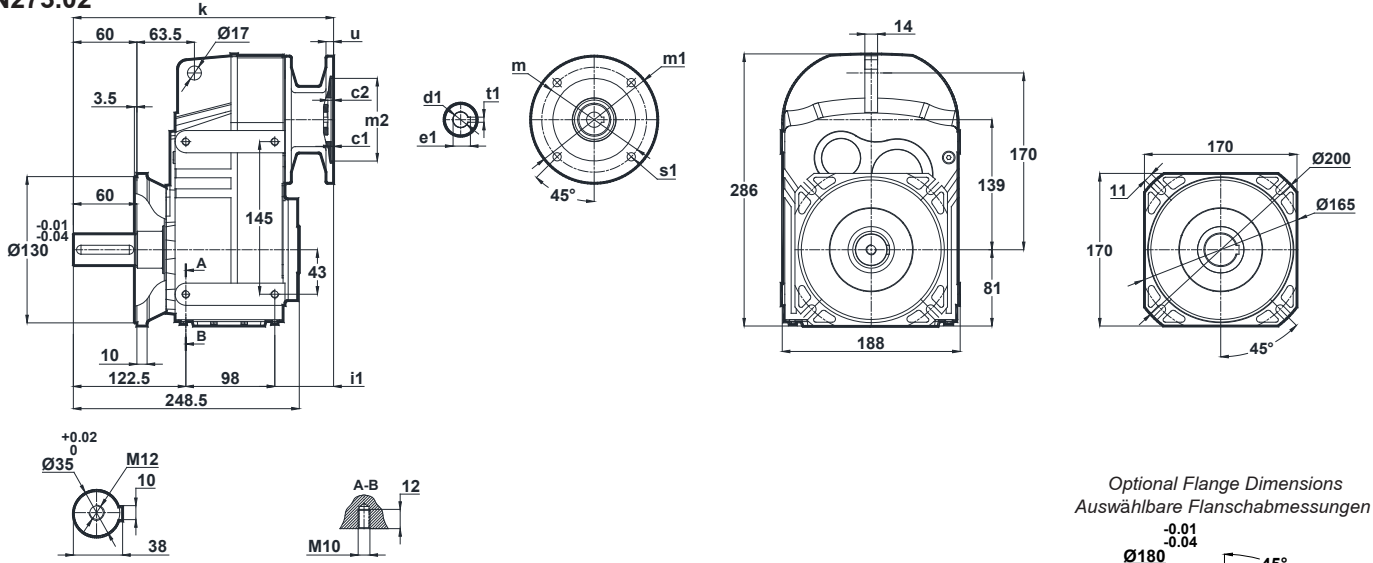


Ölçü Sayfaları Dimension Pages Abmessungenseiten

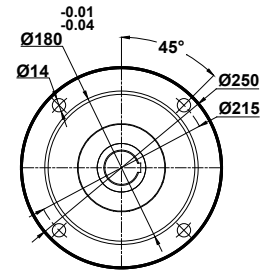


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN272.02
DN273.02

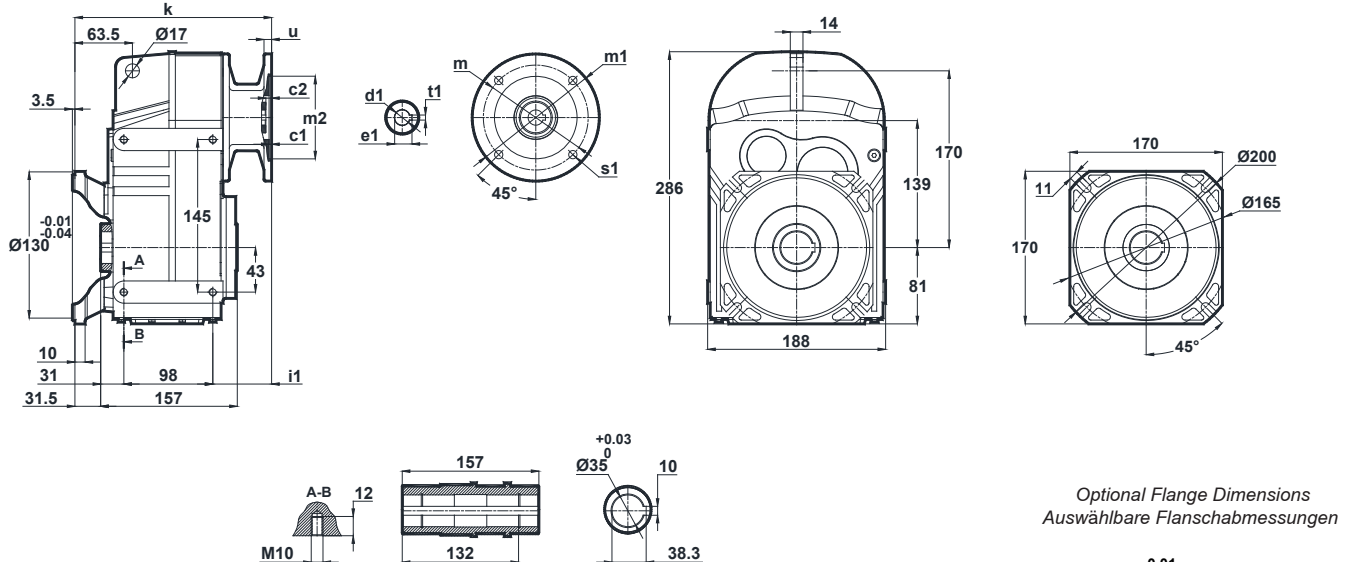


Optional Flange Dimensions
Auswählbare Flanschabmessungen

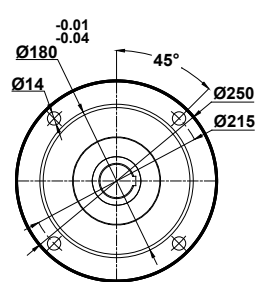


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	275	11	4	12.8
63/B14	2.5	5	5.5	75	90	60						
71/B5	4	5	11	130	160	110	56	12	277	14	5	16.3
71/B14	3	4.5	7	85	105	70						
80/B5	4	5	12	165	200	130	71	12	292	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	292	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	5	15	215	250	180	82	12	303	28	8	31.3
100/B14		5.5	9	130	160	110						

DN272.03
DN273.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	215	11	4	12.8
63/B14	2.5	5	5.5	75	90	60						
71/B5	4	5	11	130	160	110	56	12	217	14	5	16.3
71/B14	3	4.5	7	85	105	70						
80/B5	4	5	12	165	200	130	71	12	232	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	232	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	5	15	215	250	180	82	12	243	28	8	31.3
100/B14		5.5	9	130	160	110						



Ölçü Sayfaları

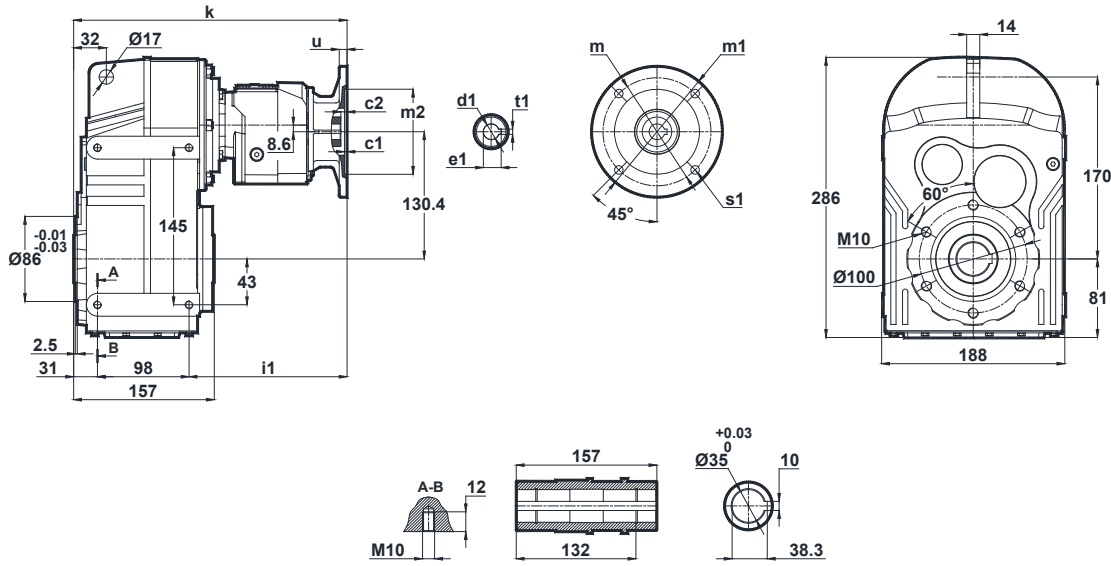
Dimension Pages

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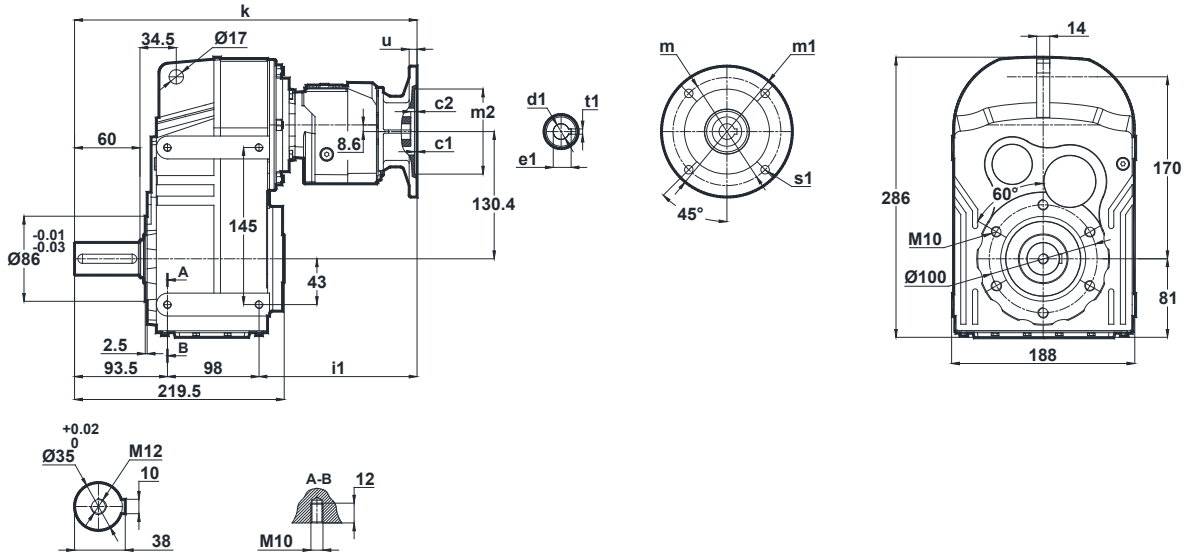
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN275.00
DN276.00

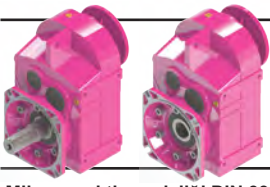


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	333	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	333	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	335	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	335	14	5	16.3

DN275.01
DN276.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	395	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	395	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	397	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	397	14	5	16.3

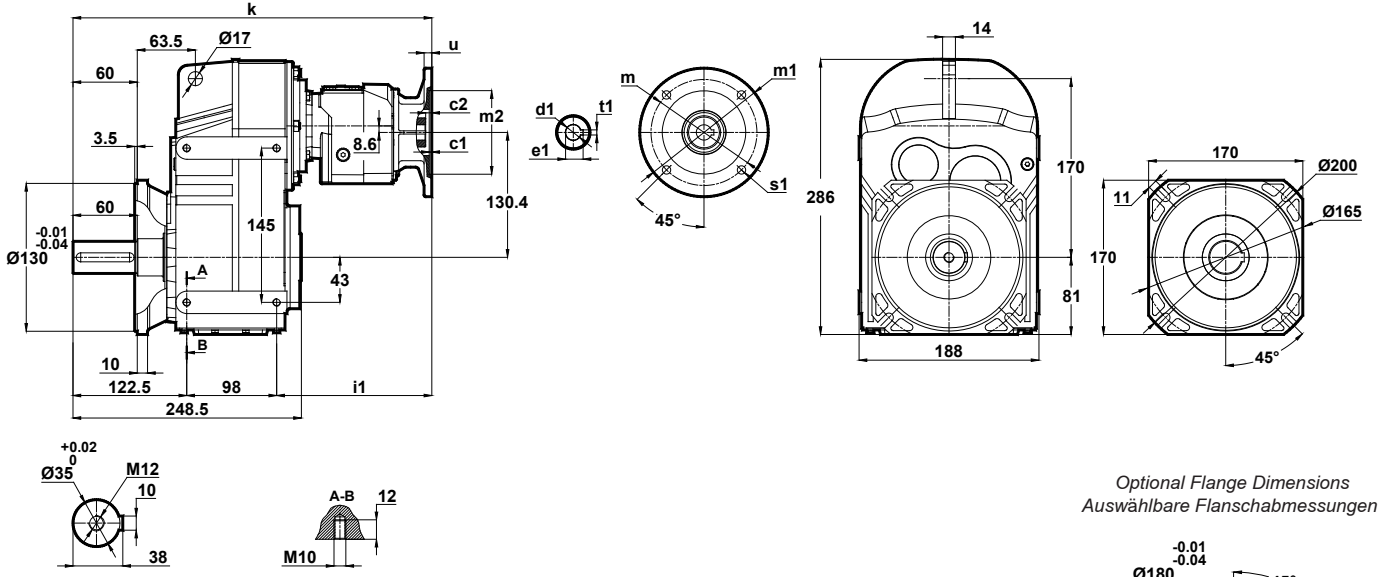


Ölçü Sayfaları Dimension Pages Abmessungsseiten

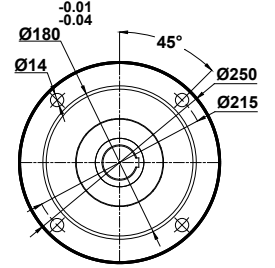


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN275.02
DN276.02

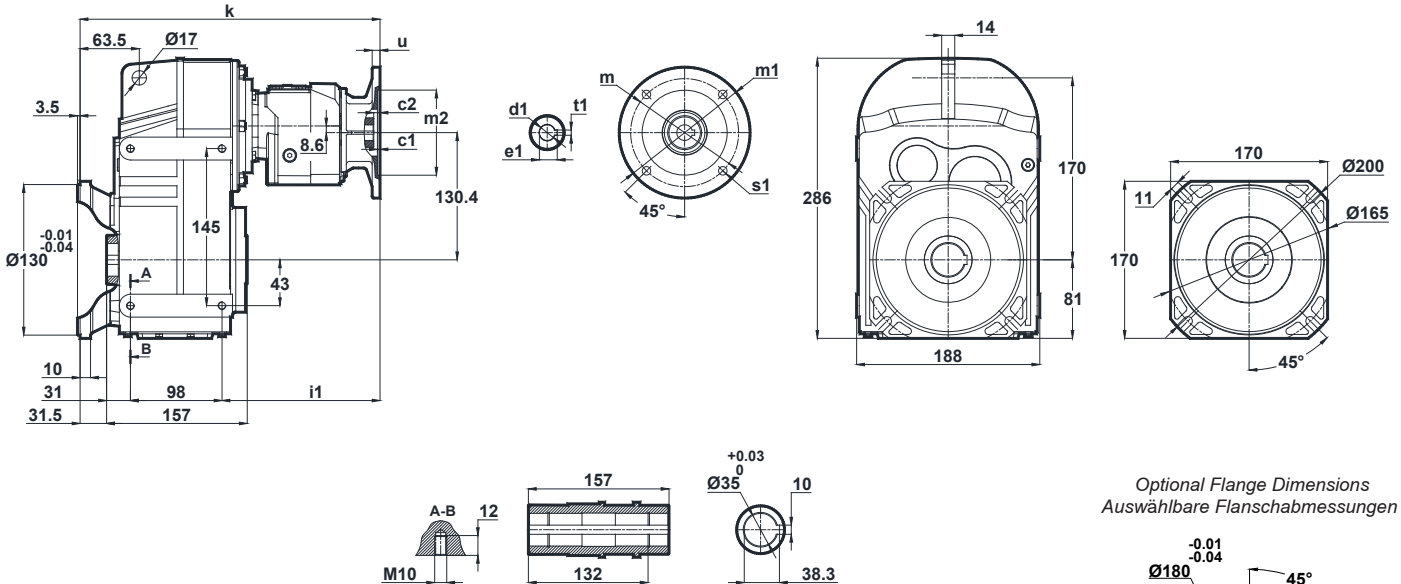


Optional Flange Dimensions
Auswählbare Flanschabmessungen

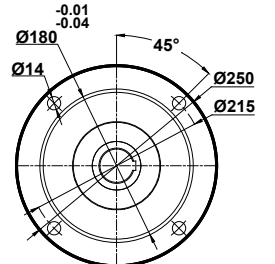


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	424	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	424	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	426	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	426	14	5	16.3

DN275.03
DN276.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	55	10	364	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	55	10	364	11	4	12.8
71/B5	4	5	11	130	160	110	56	12	366	14	5	16.3
71/B14	3	4.5	7	85	105	70	56	10	366	14	5	16.3



Ölçü Sayfaları

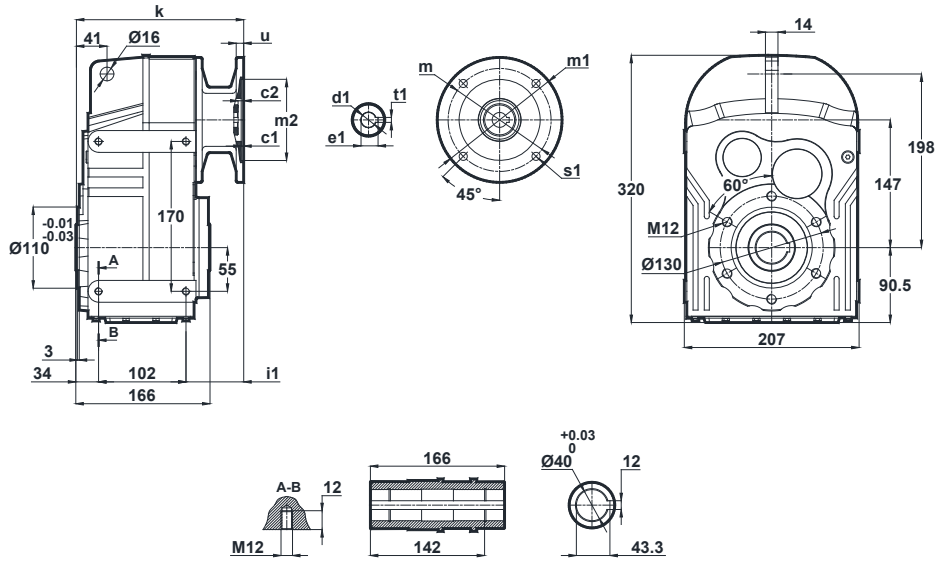
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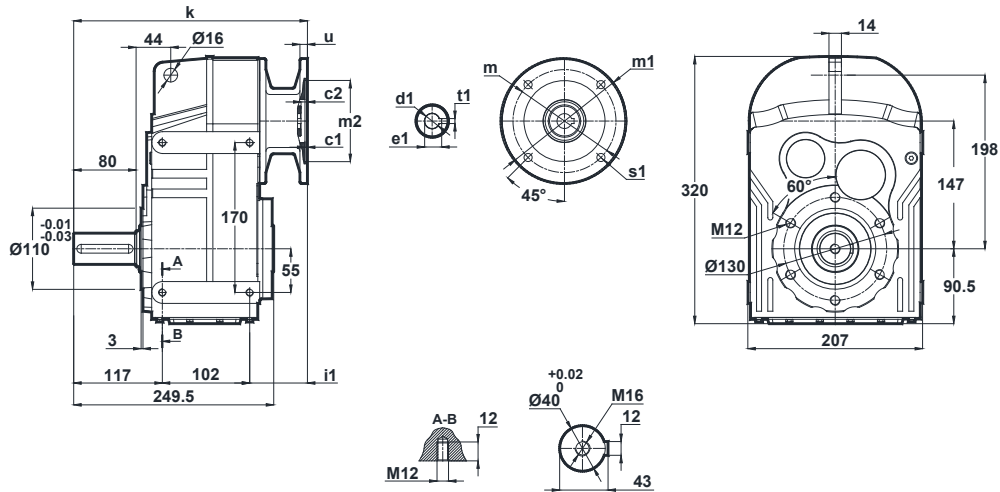
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN282.00
DN283.00

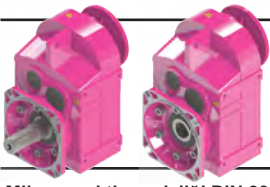


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	87	12	223	11	4	12.8
71/B5	4	9	11	130	160	110	87	12	223	11	4	12.8
71/B14	3	8.5	7	85	105	70	58	10	194	14	5	16.3
80/B5	4	5	12	165	200	130	87	12	223	19	6	21.8
80/B14	4	5	7	100	120	80	87	12	223	19	6	21.8
90/B5	4	5	12	165	200	130	87	12	223	24	8	27.3
90/B14	4	5	9	115	140	95	87	12	223	24	8	27.3
100/B5	4	6	15	215	250	180	80	12	216	28	8	31.3
100/B14	4	5.5	9	130	160	110	80	12	216	28	8	31.3
112/B5	4	6	15	215	250	180	80	12	216	28	8	31.3
112/B14	4	5.5	9	130	160	110	80	12	216	28	8	31.3
132/B5	4.5	7	15	265	300	230	127	15	259	38	10	41.3
132/B14	4.5	9	11	165	200	130	127	15	259	38	10	41.3

DN282.01
DN283.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	87	12	307	11	4	12.8
71/B5	4	9	11	130	160	110	87	12	307	11	4	12.8
71/B14	3	8.5	7	85	105	70	58	10	278	14	5	16.3
80/B5	4	5	12	165	200	130	87	12	307	19	6	21.8
80/B14	4	5	7	100	120	80	87	12	307	19	6	21.8
90/B5	4	5	12	165	200	130	87	12	307	24	8	27.3
90/B14	4	5	9	115	140	95	87	12	307	24	8	27.3
100/B5	4	6	15	215	250	180	80	12	300	28	8	31.3
100/B14	4	5.5	9	130	160	110	80	12	300	28	8	31.3
112/B5	4	6	15	215	250	180	80	12	300	28	8	31.3
112/B14	4	5.5	9	130	160	110	80	12	300	28	8	31.3
132/B5	4.5	7	15	265	300	230	127	15	343	38	10	41.3
132/B14	4.5	9	11	165	200	130	127	15	343	38	10	41.3

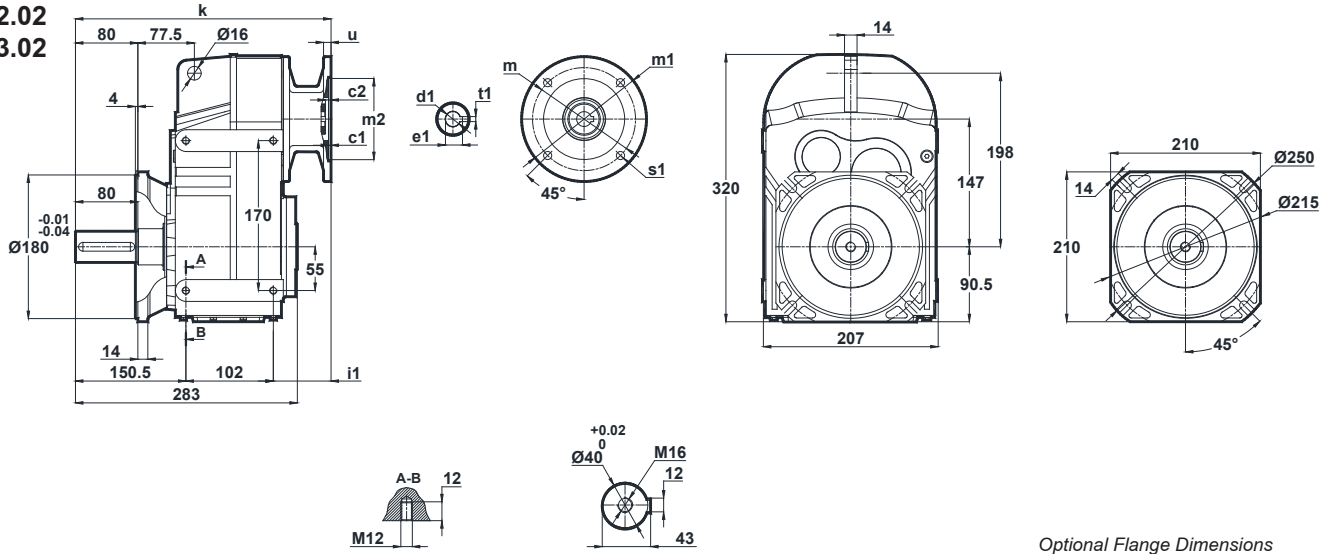


Ölçü Sayfaları Dimension Pages Abmessungenseiten

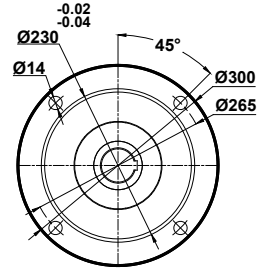


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN282.02
DN283.02

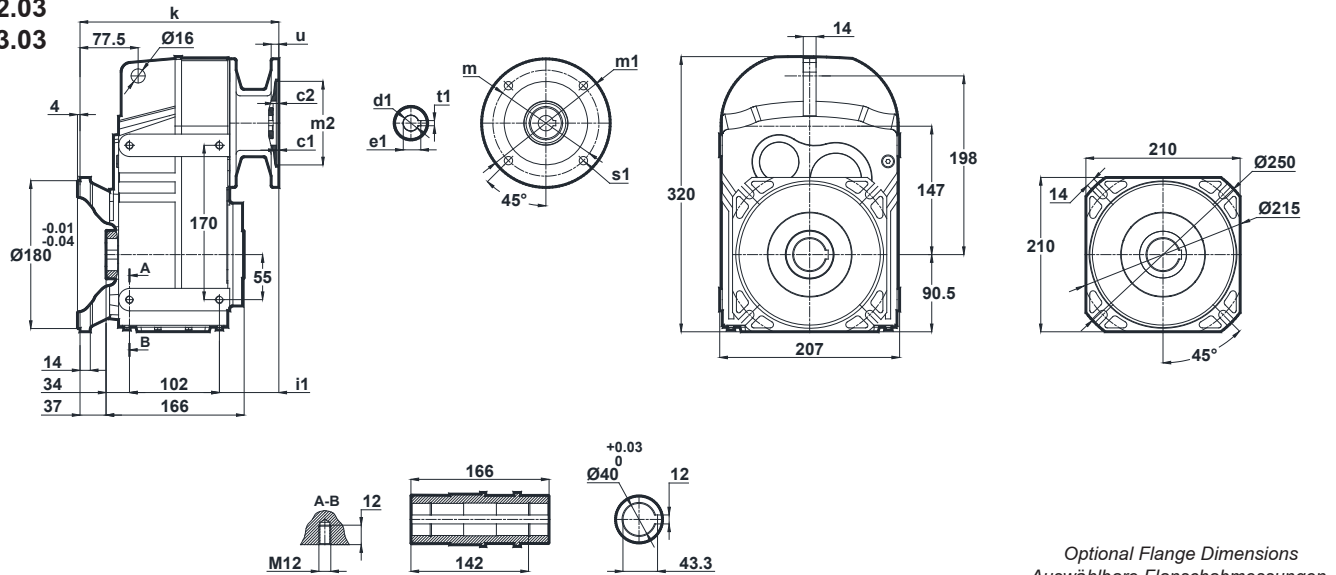


Optional Flange Dimensions
Auswählbare Flanschabmessungen

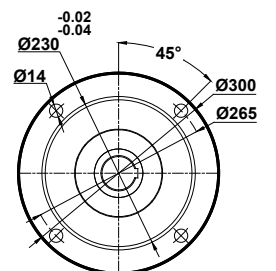


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	87	12	340	11	4	12.8
71/B5	4	9	11	130	160	110	58	12	311	14	5	16.3
71/B14	3	8.5	7	85	105	70	58	10	311	14	5	16.3
80/B5	4	5	12	165	200	130	87	12	340	19	6	21.8
80/B14	4	5	7	100	120	80	87	12	340	24	8	27.3
90/B5	4	5	12	165	200	130	87	12	340	24	8	27.3
90/B14	4	5	9	115	140	95	87	12	340	24	8	27.3
100/B5	4	6	15	215	250	180	80	12	333	28	8	31.3
100/B14	4	5.5	9	130	160	110	80	12	333	28	8	31.3
112/B5	4	6	15	215	250	180	80	12	333	28	8	31.3
112/B14	4	5.5	9	130	160	110	80	12	333	28	8	31.3
132/B5	4.5	7	15	265	300	230	127	15	376	38	10	41.3
132/B14	4.5	9	11	165	200	130	127	15	376	38	10	41.3

DN282.03
DN283.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	87	12	260	11	4	12.8
71/B5	4	9	11	130	160	110	58	12	231	14	5	16.3
71/B14	3	8.5	7	85	105	70	58	10	231	14	5	16.3
80/B5	4	5	12	165	200	130	87	12	260	19	6	21.8
80/B14	4	5	7	100	120	80	87	12	260	24	8	27.3
90/B5	4	5	12	165	200	130	87	12	260	24	8	27.3
90/B14	4	5	9	115	140	95	87	12	260	24	8	27.3
100/B5	4	6	15	215	250	180	80	12	253	28	8	31.3
100/B14	4	5.5	9	130	160	110	80	12	253	28	8	31.3
112/B5	4	6	15	215	250	180	80	12	253	28	8	31.3
112/B14	4	5.5	9	130	160	110	80	12	253	28	8	31.3
132/B5	4.5	7	15	265	300	230	127	15	296	38	10	41.3
132/B14	4.5	9	11	165	200	130	127	15	296	38	10	41.3



Ölçü Sayfaları

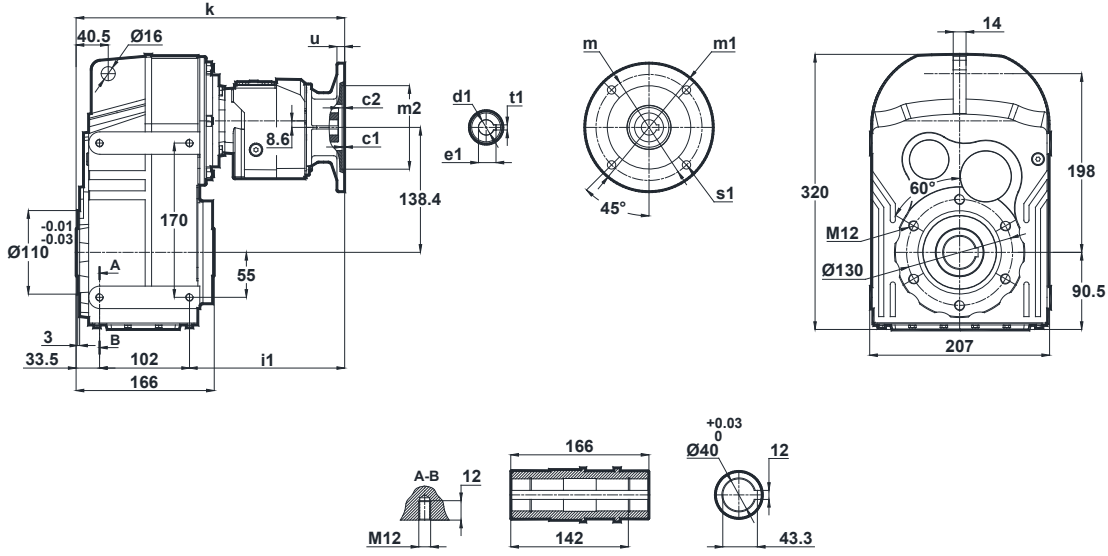
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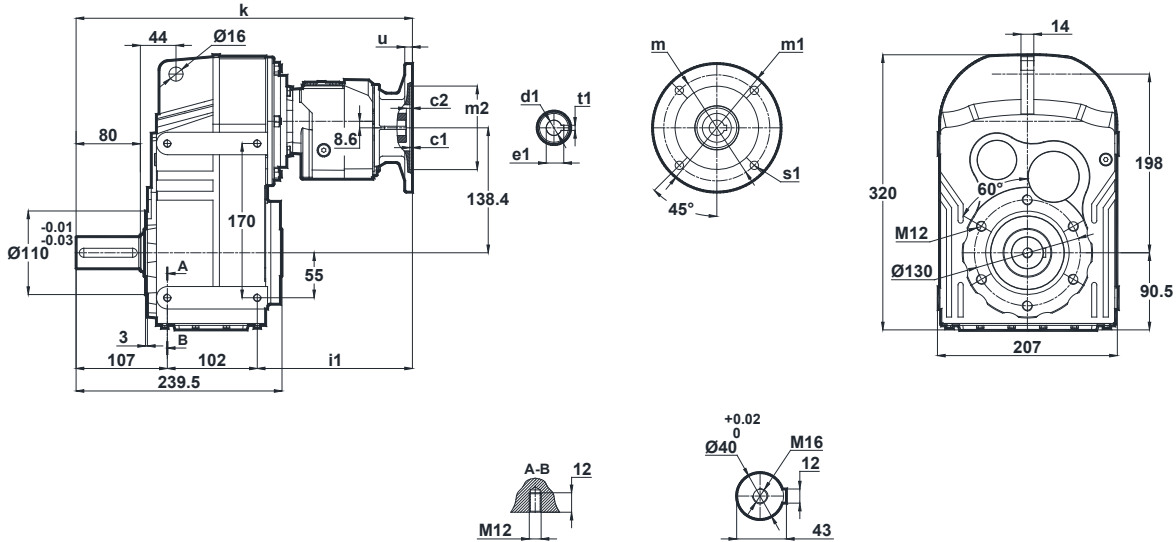
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN285.00
DN286.00

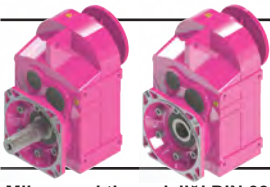


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	203	10	338	11	4	12.8
71/B5	4	5	11	130	160	110						
71/B14	3	4.5	7	85	105	70	204	10	340	14	5	16.3

DN285.01
DN286.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95						
63/B14	2.5	5	5.5	75	90	60	203	10	422	11	4	12.8
71/B5	4	5	11	130	160	110						
71/B14	3	4.5	7	85	105	70	204	10	424	14	5	16.3

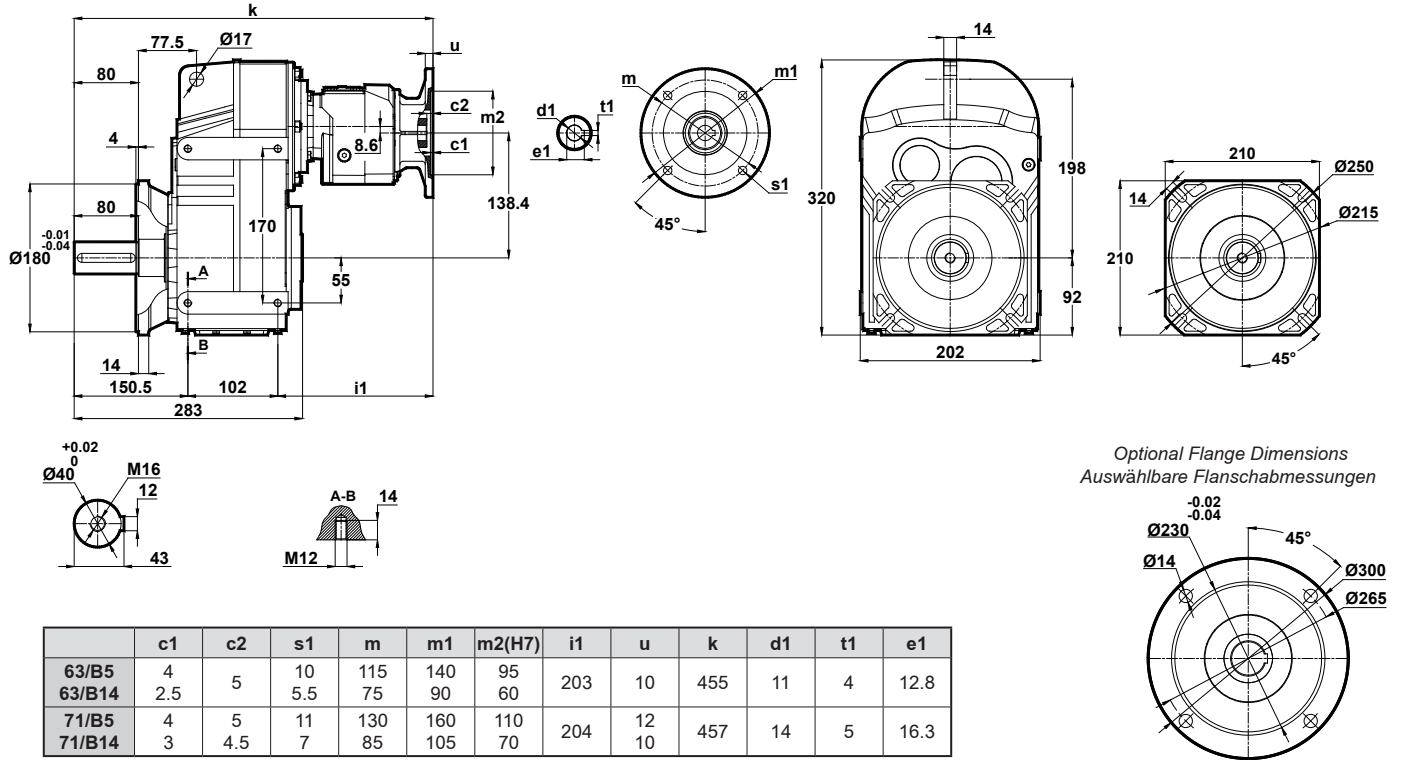


Ölçü Sayfaları Dimension Pages Abmessungenseiten

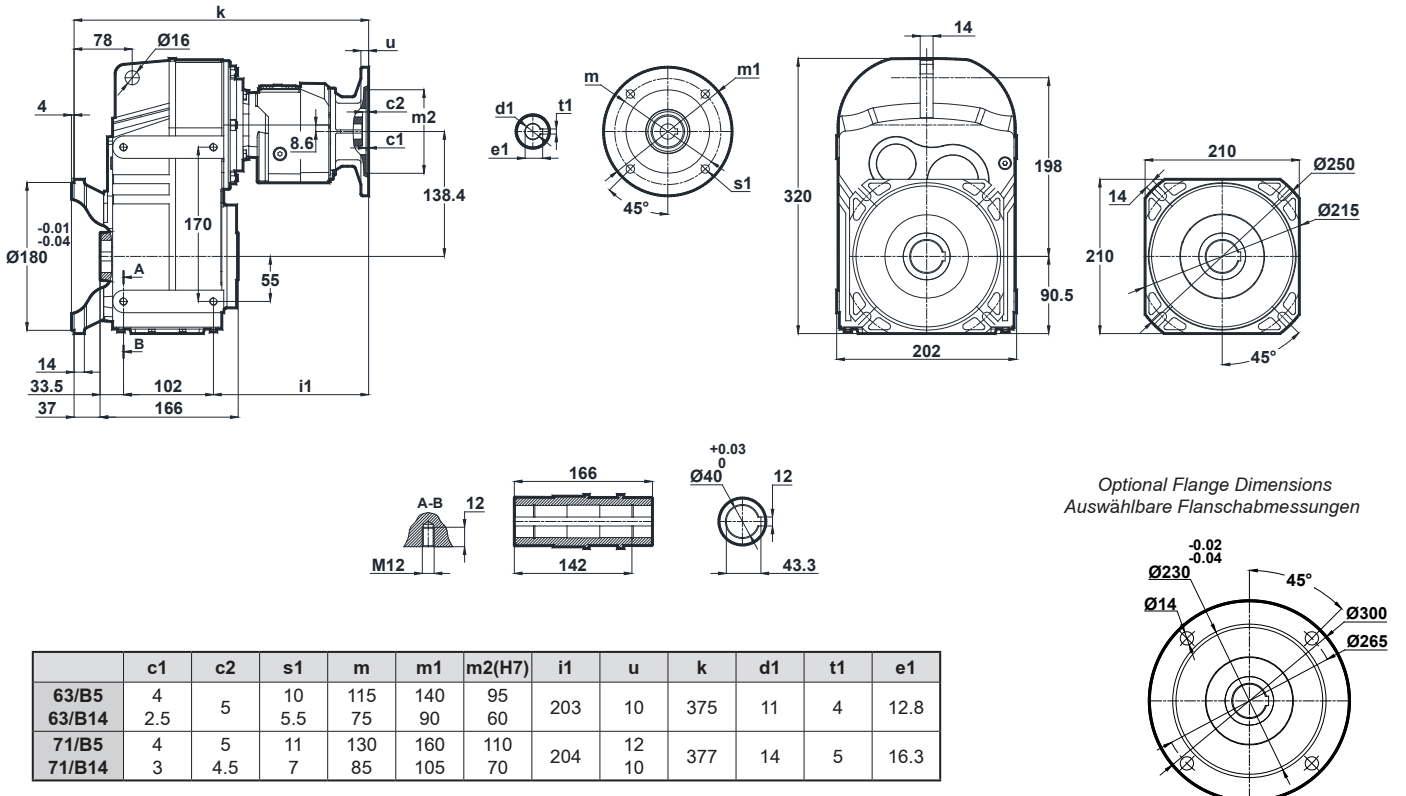


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN285.02
DN286.02



DN285.03
DN286.03





Ölçü Sayfaları

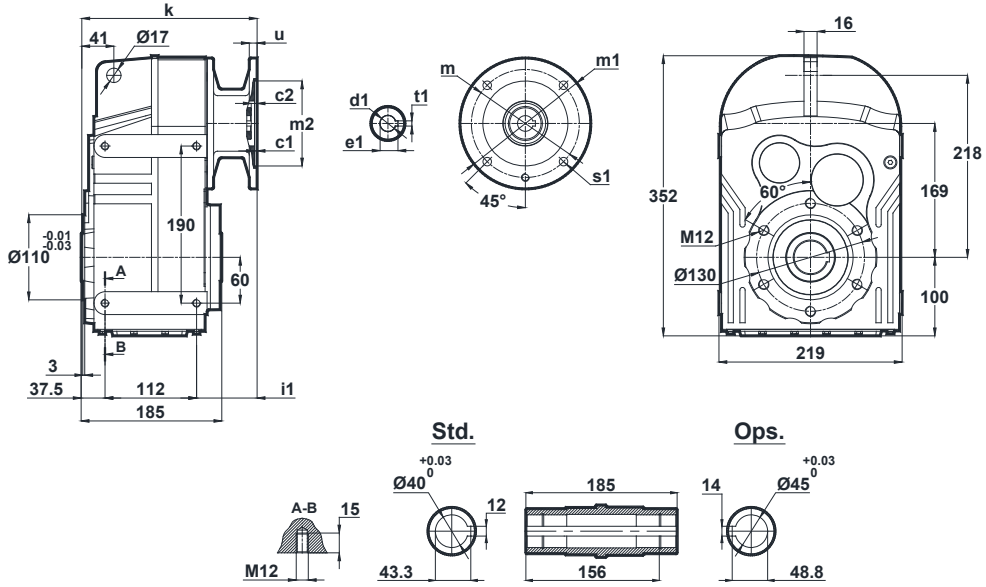
Dimension Pages

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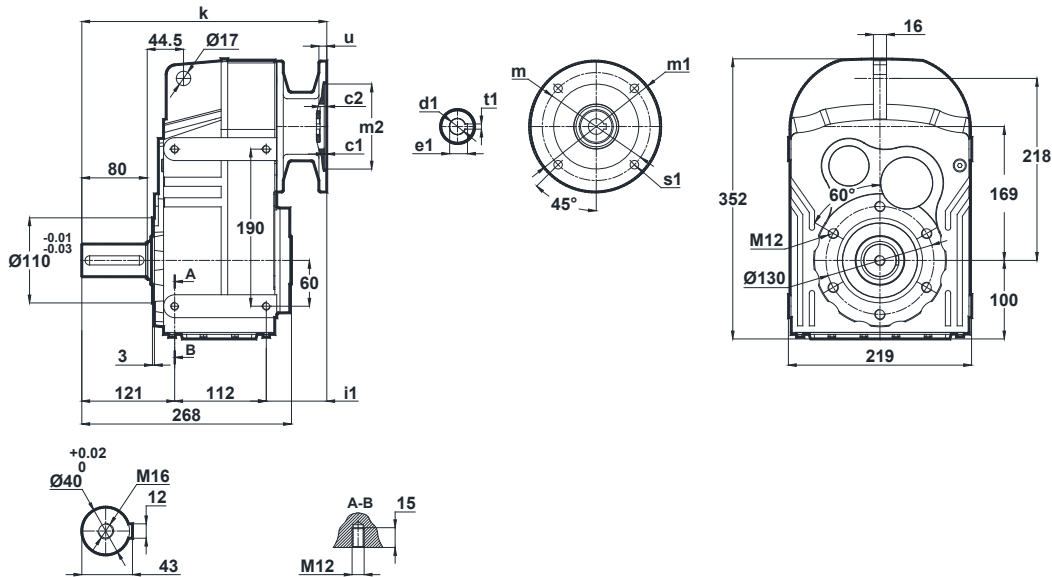
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN372.00
DN373.00

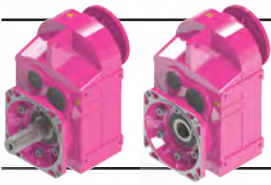


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	84	12	205	14	5	16.3
71/B14	3	8.5	7	85	105	70	84	10	10	14	5	16.3
80/B5	4	5	12	165	200	130	84	12	234	19	6	21.8
80/B14	4	5	7	100	120	80	84	12	10	19	6	21.8
90/B5	4	5	12	165	200	130	84	12	234	24	8	27.3
90/B14	4	5	9	115	140	95	84	12	10	24	8	27.3
100/B5	4	6	15	215	250	180	77	12	227	28	8	31.3
100/B14	4	5.5	9	130	160	110	77	12	10	28	8	31.3
112/B5	4	6	15	215	250	180	77	12	227	28	8	31.3
112/B14	4	5.5	9	130	160	110	77	12	10	28	8	31.3
132/B5	4.5	7	15	265	300	230	124	15	270	38	10	41.3
132/B14	4.5	9	11	165	200	130	124	15	10	38	10	41.3

DN372.01
DN373.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	84	12	288	14	5	16.3
71/B14	3	8.5	7	85	105	70	84	10	10	14	5	16.3
80/B5	4	5	12	165	200	130	84	12	317	19	6	21.8
80/B14	4	5	7	100	120	80	84	12	10	19	6	21.8
90/B5	4	5	12	165	200	130	84	12	317	24	8	27.3
90/B14	4	5	9	115	140	95	84	12	10	24	8	27.3
100/B5	4	6	15	215	250	180	77	12	310	28	8	31.3
100/B14	4	5.5	9	130	160	110	77	12	10	28	8	31.3
112/B5	4	6	15	215	250	180	77	12	310	28	8	31.3
112/B14	4	5.5	9	130	160	110	77	12	10	28	8	31.3
132/B5	4.5	7	15	265	300	230	124	15	353	38	10	41.3
132/B14	4.5	9	11	165	200	130	124	15	10	38	10	41.3

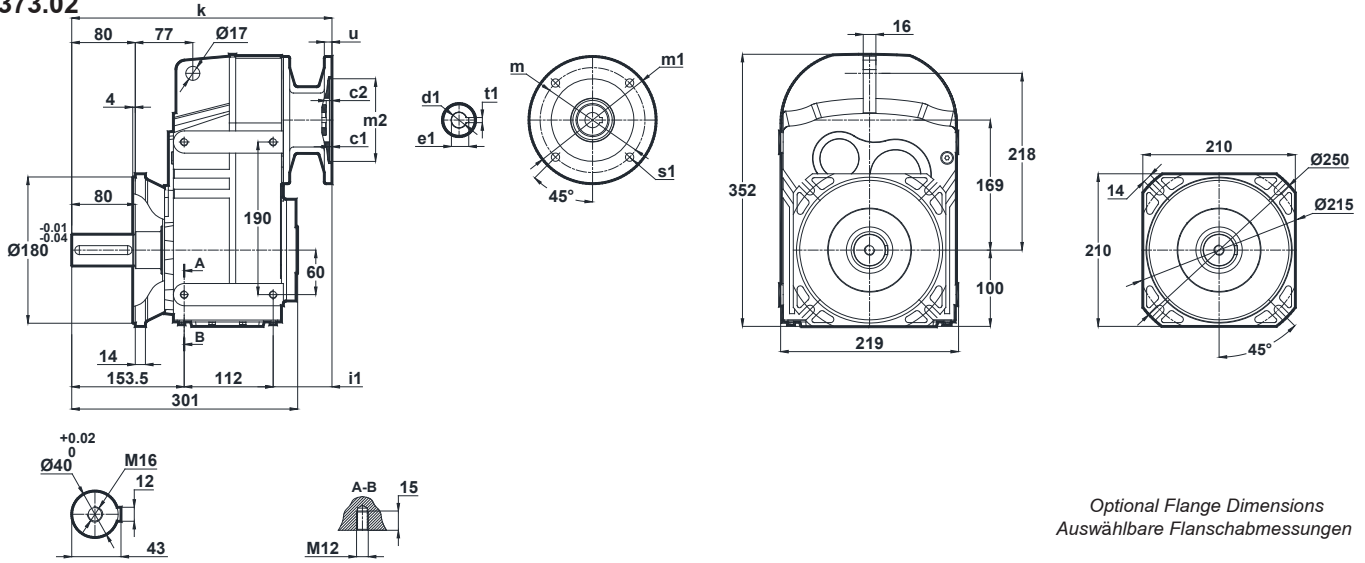


Ölçü Sayfaları Dimension Pages Abmessungenseiten



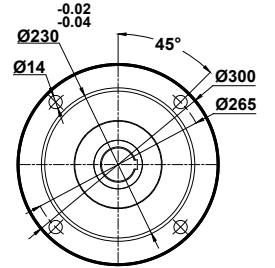
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN372.02
DN373.02

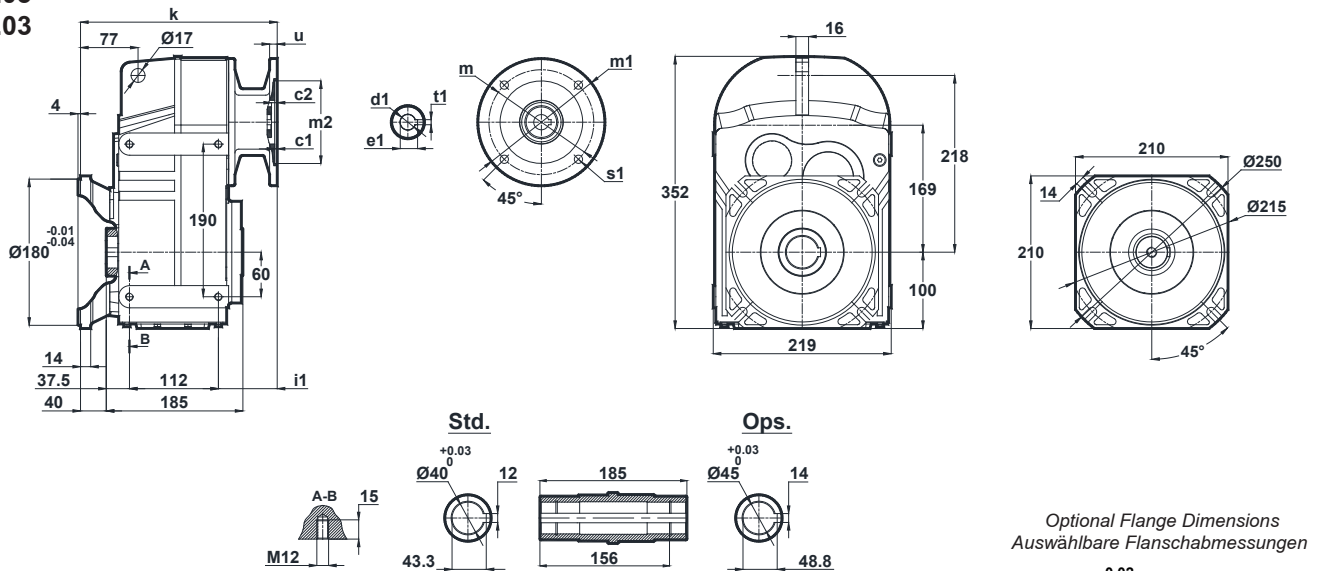


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	84	12	311	14	5	16.3
71/B14	3	8.5	7	85	105	70	84	10				
80/B5	4	5	12	165	200	130	84	12	340	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	84	12	340	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	6	15	215	250	180	77	12	333	28	8	31.3
100/B14		5.5	9	130	160	110						
112/B5	4	6	15	215	250	180	77	12	333	28	8	31.3
112/B14		5.5	9	130	160	110						
132/B5	4.5	7	15	265	300	230	124	15	376	38	10	41.3

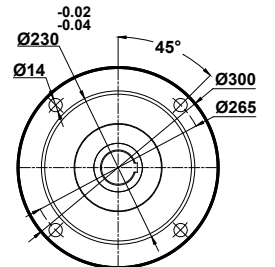


DN372.03
DN373.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	84	12	231	14	5	16.3
71/B14	3	8.5	7	85	105	70	84	10				
80/B5	4	5	12	165	200	130	84	12	260	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	84	12	260	24	8	27.3
90/B14			9	115	140	95						
100/B5	4	6	15	215	250	180	77	12	253	28	8	31.3
100/B14		5.5	9	130	160	110						
112/B5	4	6	15	215	250	180	77	12	253	28	8	31.3
112/B14		5.5	9	130	160	110						
132/B5	4.5	7	15	265	300	230	124	15	296	38	10	41.3





Ölçü Sayfaları

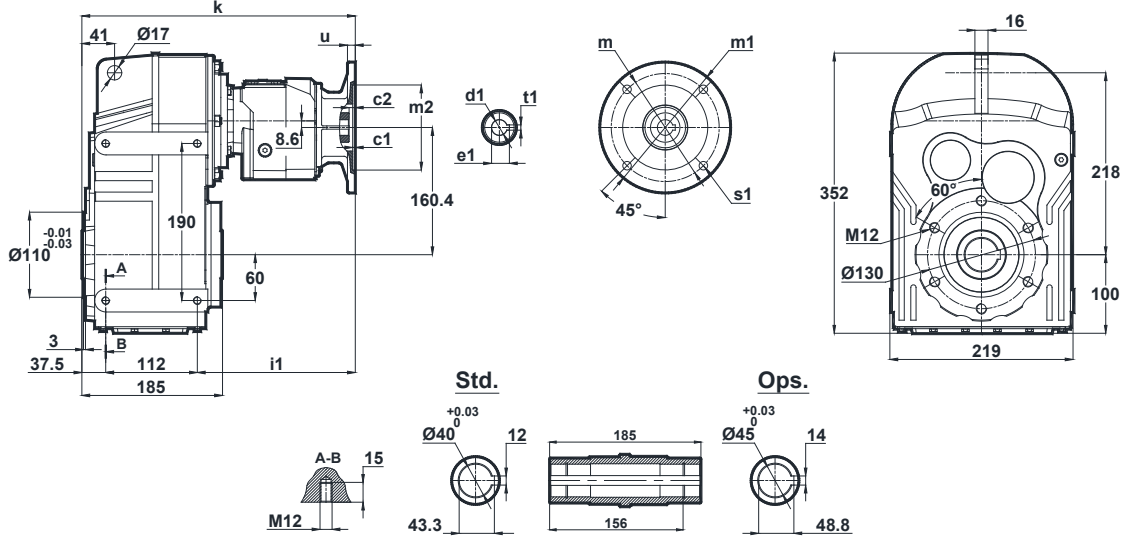
Dimension Pages

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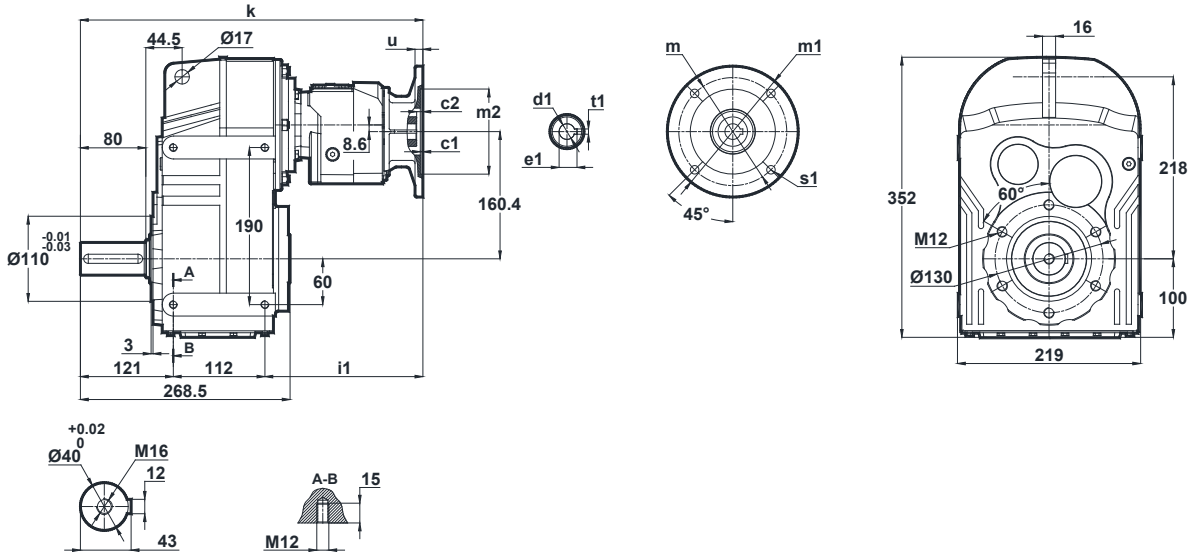
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN375.00
DN376.00

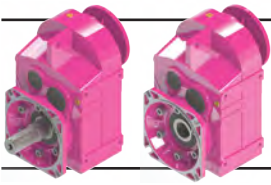


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	199	10	349	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	199	10	349	11	4	12.8
71/B5	4	5	11	130	160	110	201	12	351	14	5	16.3
71/B14	3	4.5	7	85	105	70	201	10	351	14	5	16.3
80/B5	4	5	12	165	200	130	216	12	366	19	6	21.8
80/B14	4	5	7	100	120	80	216	12	366	19	6	21.8

DN375.01
DN376.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	199	10	432	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	199	10	432	11	4	12.8
71/B5	4	5	11	130	160	110	201	12	434	14	5	16.3
71/B14	3	4.5	7	85	105	70	201	10	434	14	5	16.3
80/B5	4	5	12	165	200	130	216	12	449	19	6	21.8
80/B14	4	5	7	100	120	80	216	12	449	19	6	21.8

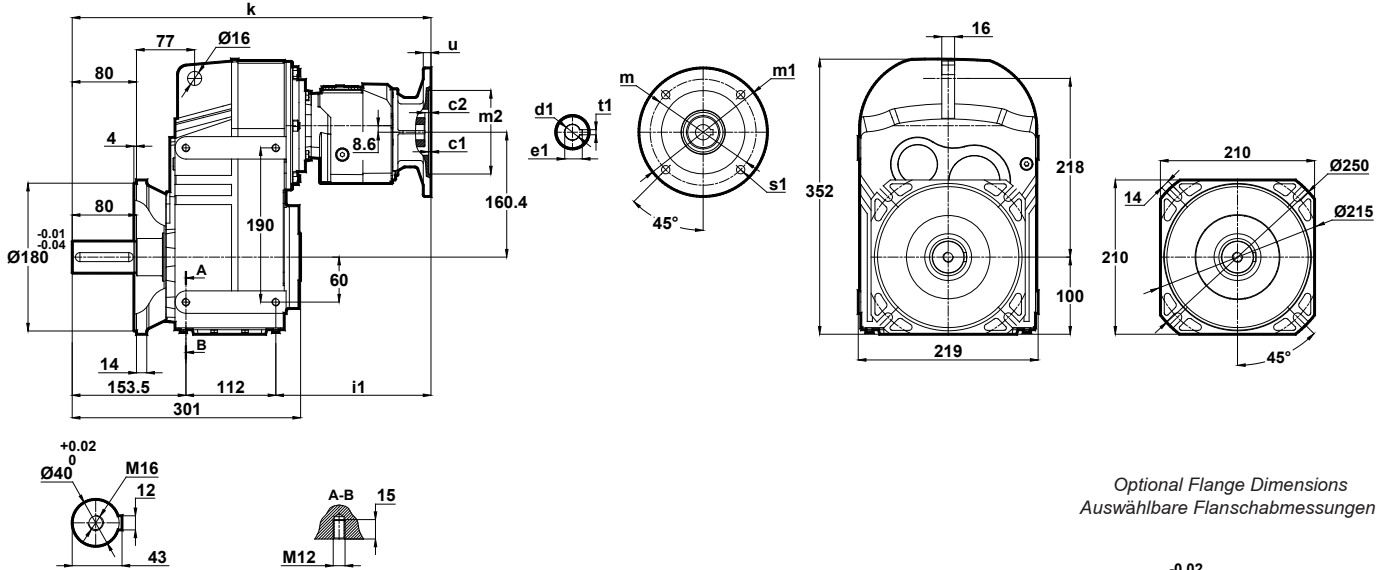


Ölçü Sayfaları Dimension Pages Abmessungsseiten



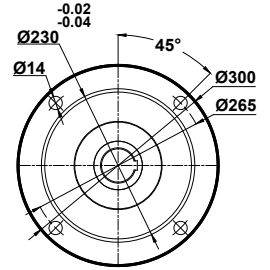
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN375.02
DN376.02

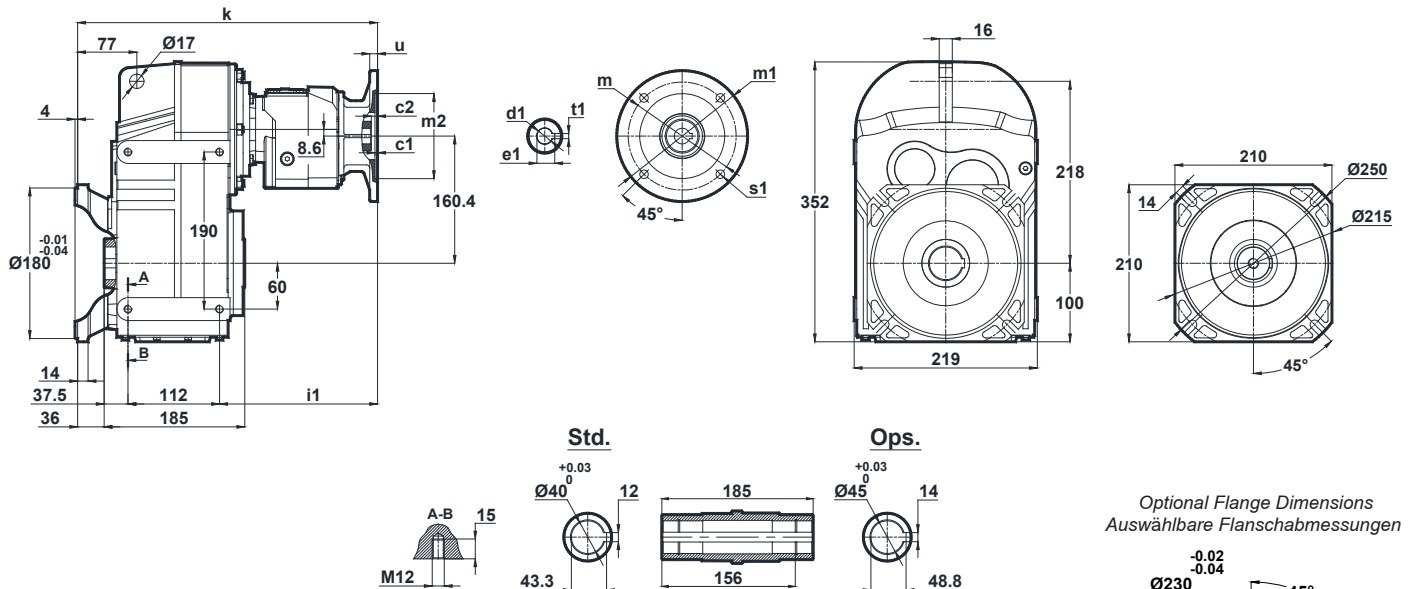


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	199	10	465	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	199	10	465	11	4	12.8
71/B5	4	5	11	130	160	110	201	12	467	14	5	16.3
71/B14	3	4.5	7	85	105	70	201	10	467	14	5	16.3
80/B5	4	5	12	165	200	130	216	12	482	19	6	21.8
80/B14	4	5	7	100	120	80	216	12	482	19	6	21.8

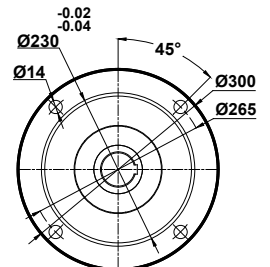


DN375.03
DN376.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	199	10	385	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	199	10	385	11	4	12.8
71/B5	4	5	11	130	160	110	201	12	387	14	5	16.3
71/B14	3	4.5	7	85	105	70	201	10	387	14	5	16.3
80/B5	4	5	12	165	200	130	216	12	402	19	6	21.8
80/B14	4	5	7	100	120	80	216	12	402	19	6	21.8





Ölçü Sayfaları

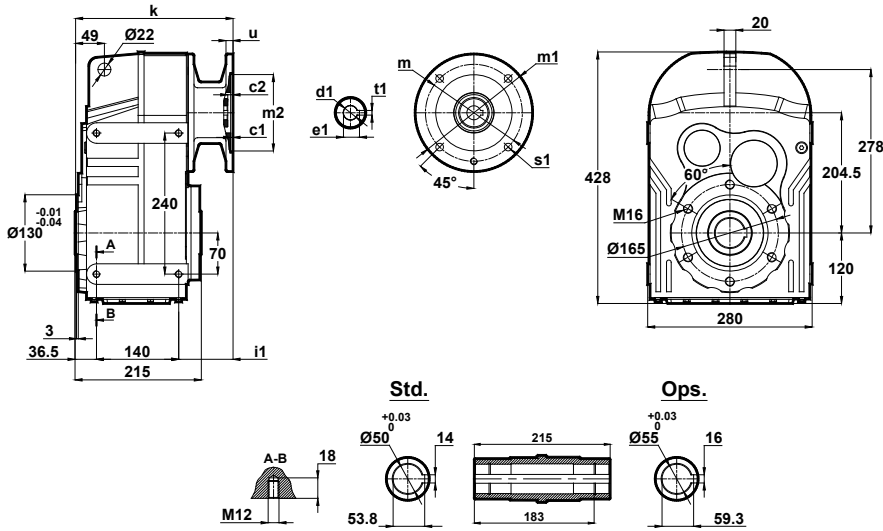
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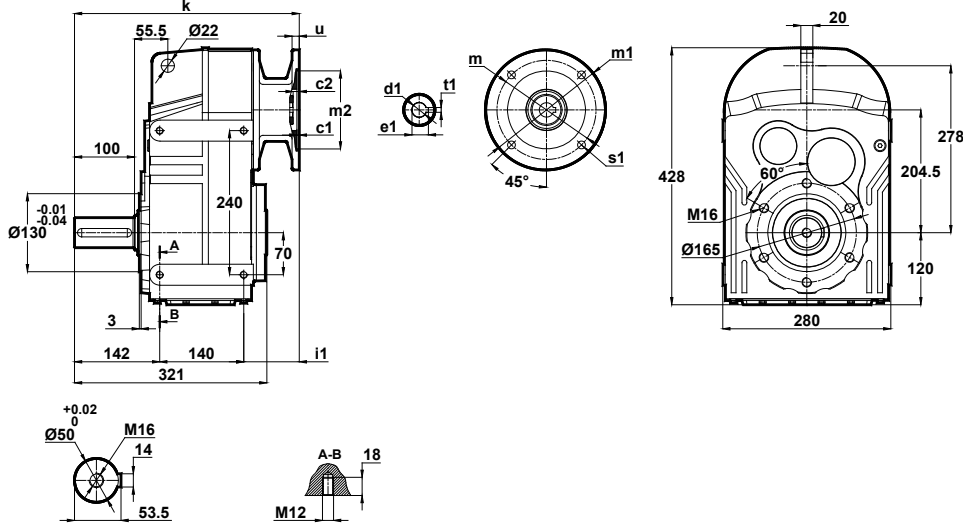
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN472.00
DN473.00

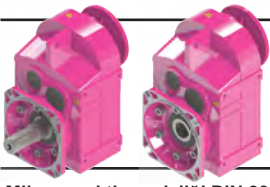


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	260	14	5	16.3
80/B5	4	9	12	165	200	130	83	12	260	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	83	12	260	24	8	27.3
90/B14			9	115	140	95						
100/B5	5	9	15	215	250	180	100	15	277	28	8	31.3
100/B14	4	9	9	130	160	110						
112/B5	5	9	15	215	250	180	100	15	277	28	8	31.3
112/B14	4	9	9	130	160	110						
132/B5	5	7	15	265	300	230	120	15	297	38	10	41.3
132/B14	4.5	7	11	165	200	130						
160/B5	5.5	10	19	300	350	250	199	20	376	42	12	45.3

DN472.01
DN473.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	365	14	5	16.3
80/B5	4	9	12	165	200	130	83	12	365	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	83	12	365	24	8	27.3
90/B14			9	115	140	95						
100/B5	5	9	15	215	250	180	100	15	382	28	8	31.3
100/B14	4	9	9	130	160	110						
112/B5	5	9	15	215	250	180	100	15	382	28	8	31.3
112/B14	4	9	9	130	160	110						
132/B5	5	7	15	265	300	230	120	15	402	38	10	41.3
132/B14	4.5	7	11	165	200	130						
160/B5	5.5	10	19	300	350	250	199	20	481	42	12	45.3

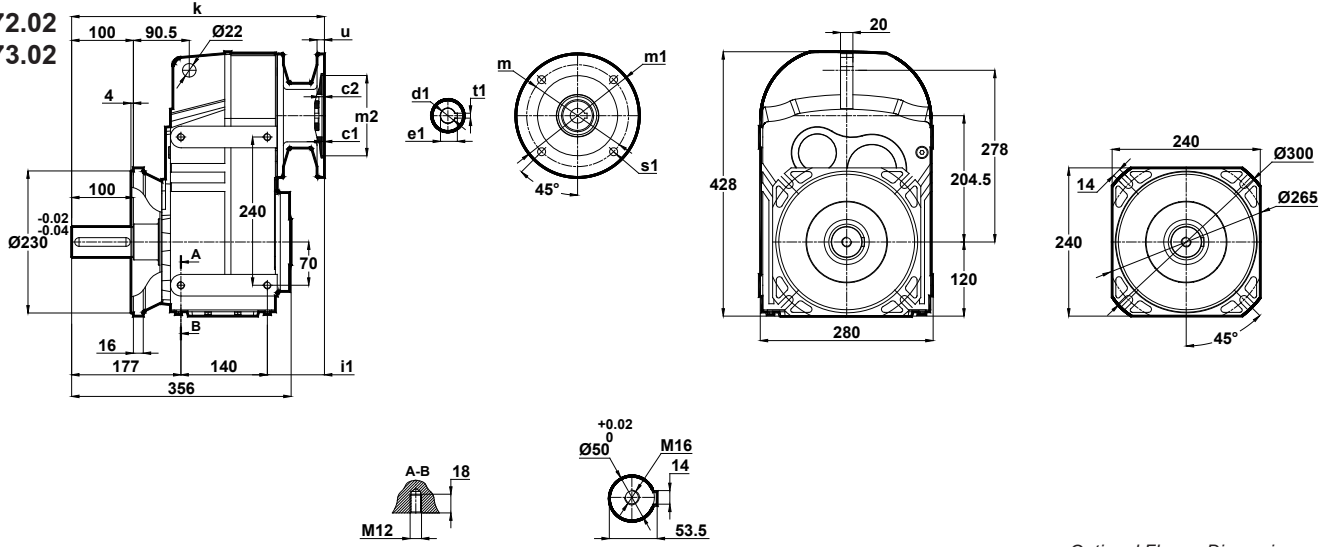


Ölçü Sayfaları Dimension Pages Abmessungsseiten



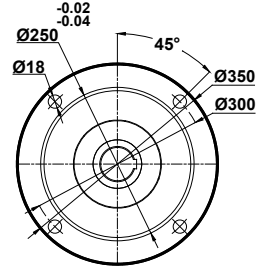
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN472.02
DN473.02

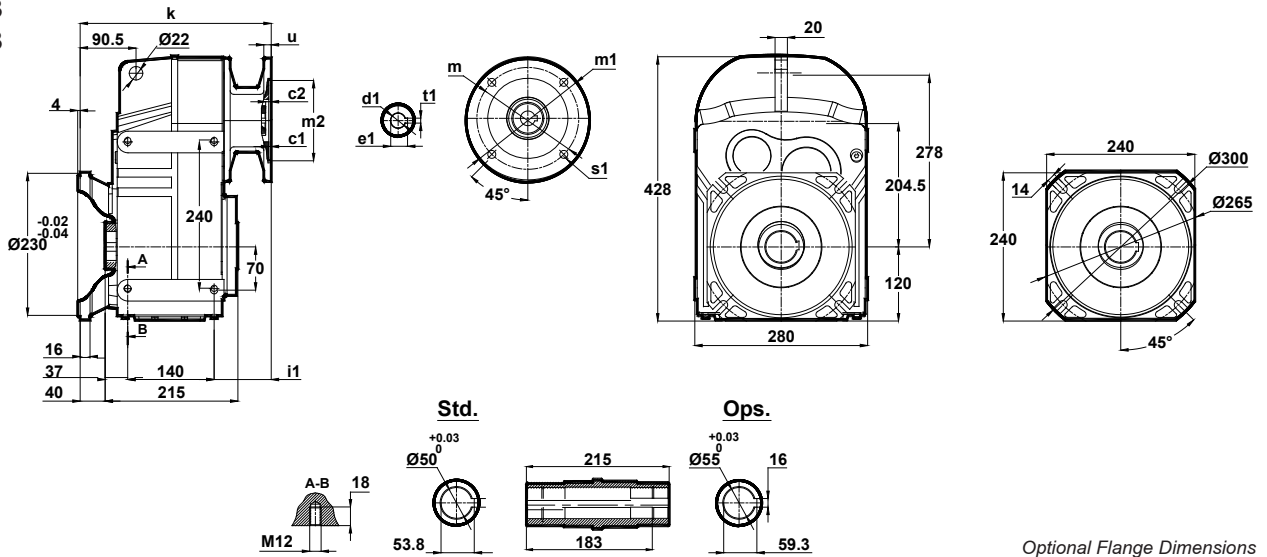


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	400	14	5	16.3
80/B5	4	9	12	165	200	130	83	12	400	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	83	12	400	24	8	27.3
90/B14			9	115	140	95						
100/B5	5	9	15	215	250	180	100	15	417	28	8	31.3
100/B14	4	9	9	130	160	110						
112/B5	5	9	15	215	250	180	100	15	417	28	8	31.3
112/B14	4	9	9	130	160	110						
132/B5	5	7	15	265	300	230	120	15	437	38	10	41.3
132/B14	4.5		11	165	200	130						
160/B5	5.5	10	19	300	350	250	199	20	516	42	12	45.3

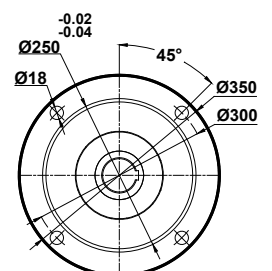
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DN472.03
DN473.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	300	14	5	16.3
80/B5	4	9	12	165	200	130	83	12	300	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	83	12	300	24	8	27.3
90/B14			9	115	140	95						
100/B5	5	9	15	215	250	180	100	15	317	28	8	31.3
100/B14	4	9	9	130	160	110						
112/B5	5	9	15	215	250	180	100	15	317	28	8	31.3
112/B14	4	9	9	130	160	110						
132/B5	5	7	15	265	300	230	120	15	337	38	10	41.3
132/B14	4.5		11	165	200	130						
160/B5	5.5	10	19	300	350	250	199	20	416	42	12	45.3



Ölçü Sayfaları

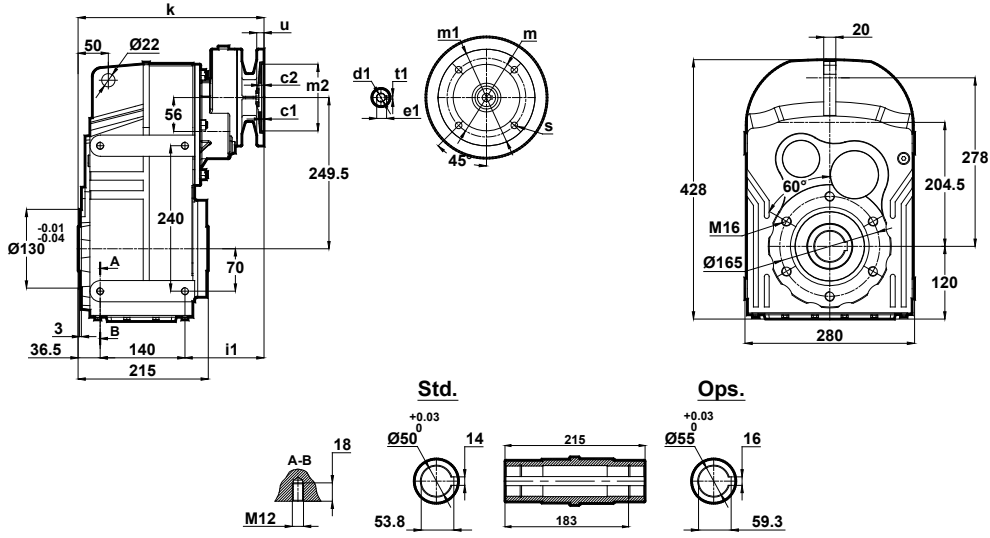
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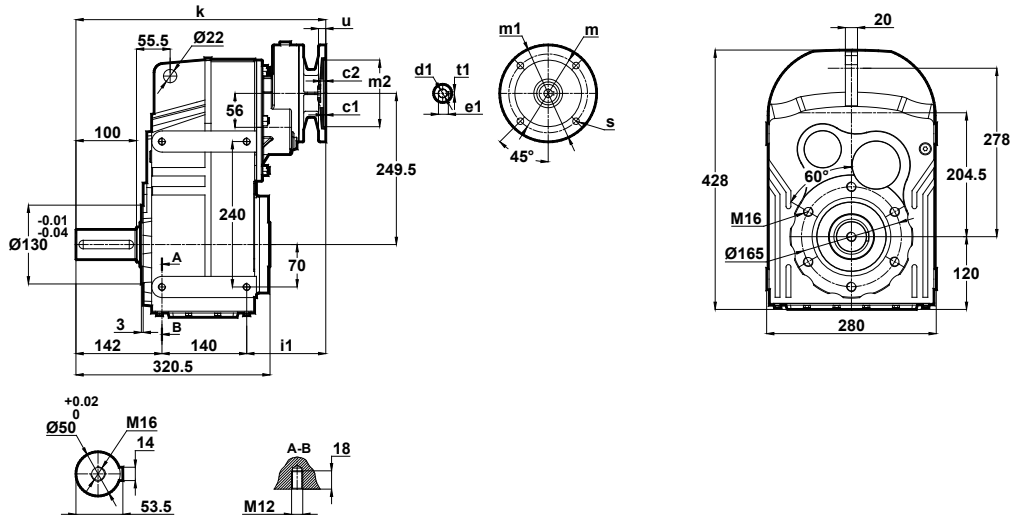
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN474.00

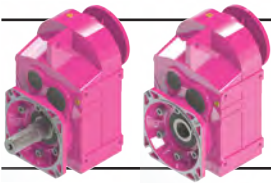


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	160	12	337	11	4	12.8
71/B5	4	9	11	130	160	110	131	12	308	14	5	16.3
71/B14	3	8.5	7	85	105	70	10	10	308	14	5	16.3
80/B5	4	5	12	165	200	130	166	12	343	19	6	21.8
80/B14	4	5	7	100	120	80	166	12	343	19	6	21.8

DN474.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	160	12	442	11	4	12.8
71/B5	4	9	11	130	160	110	131	12	413	14	5	16.3
71/B14	3	8.5	7	85	105	70	10	10	413	14	5	16.3
80/B5	4	5	12	165	200	130	166	12	448	19	6	21.8
80/B14	4	5	7	100	120	80	166	12	448	19	6	21.8

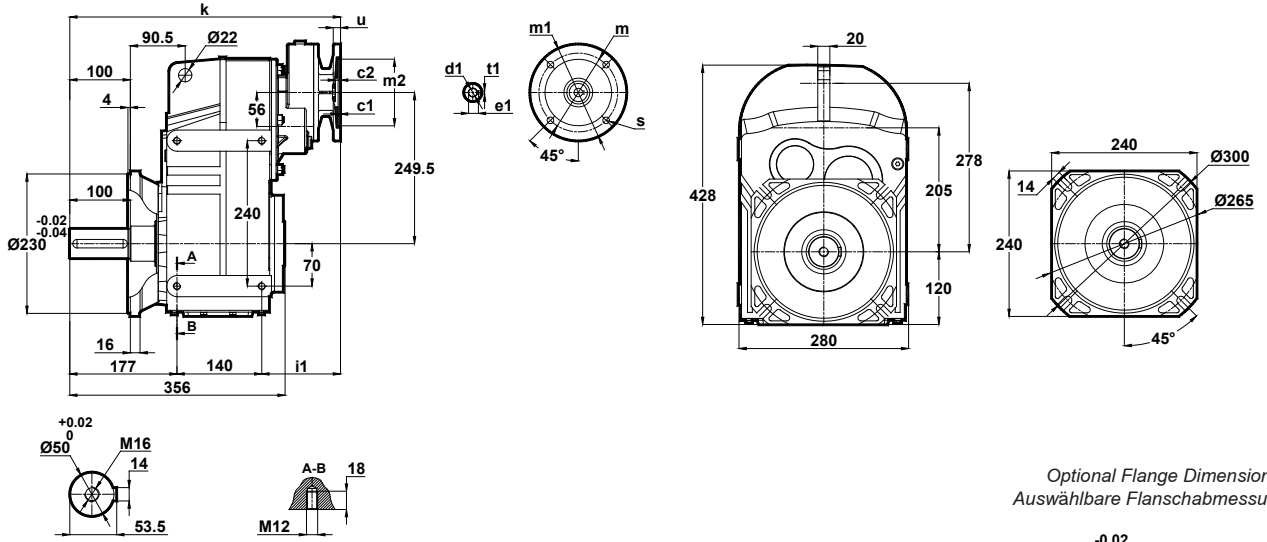


Ölçü Sayfaları Dimension Pages Abmessungsseiten



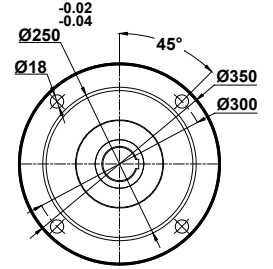
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN474.02

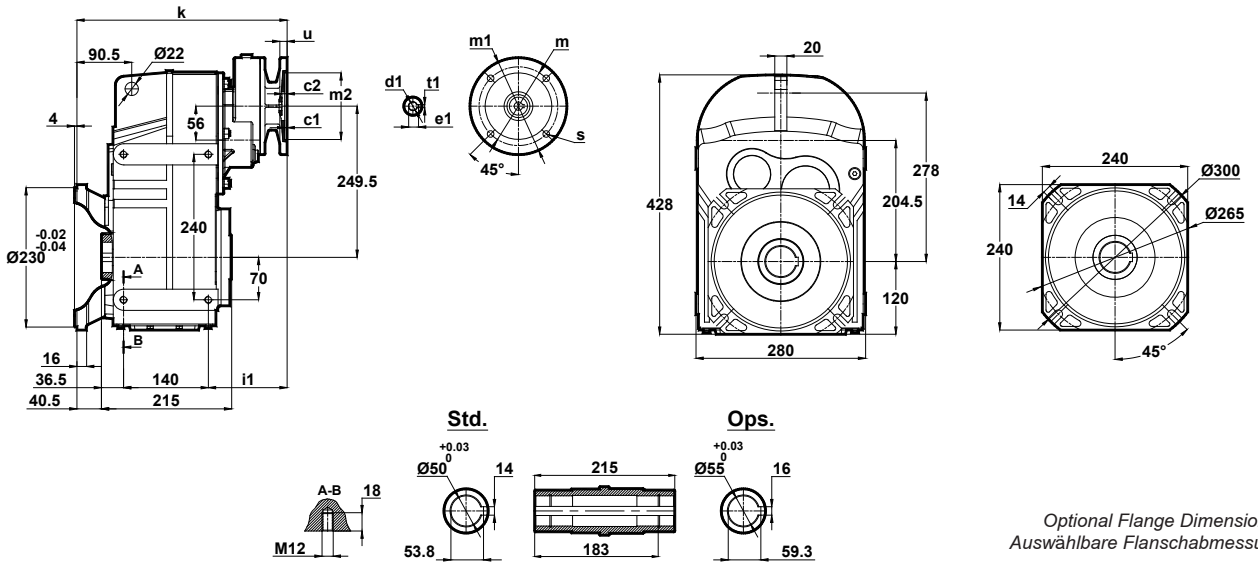


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	160	12	477	11	4	12.8
71/B5	4	9	11	130	160	110	131	12	448	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				
80/B5	4	5	12	165	200	130	166	12	483	19	6	21.8
80/B14	4	5	7	100	120	80						

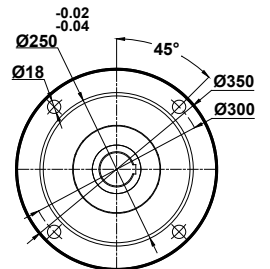


DN474.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	160	12	377	11	4	12.8
71/B5	4	9	11	130	160	110	131	12	348	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				
80/B5	4	5	12	165	200	130	166	12	383	19	6	21.8
80/B14	4	5	7	100	120	80						





Ölçü Sayfaları

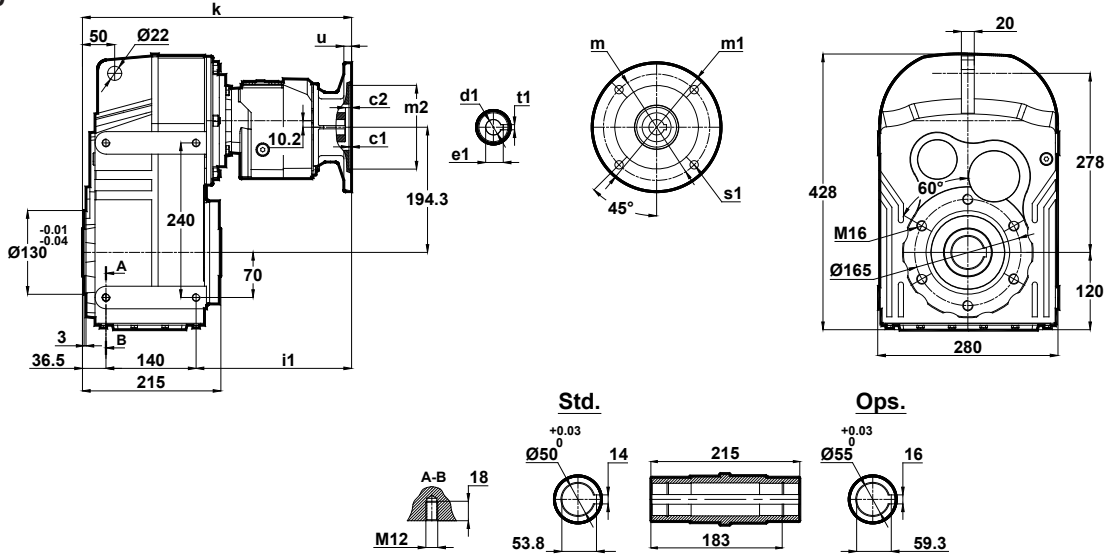
Dimension Pages

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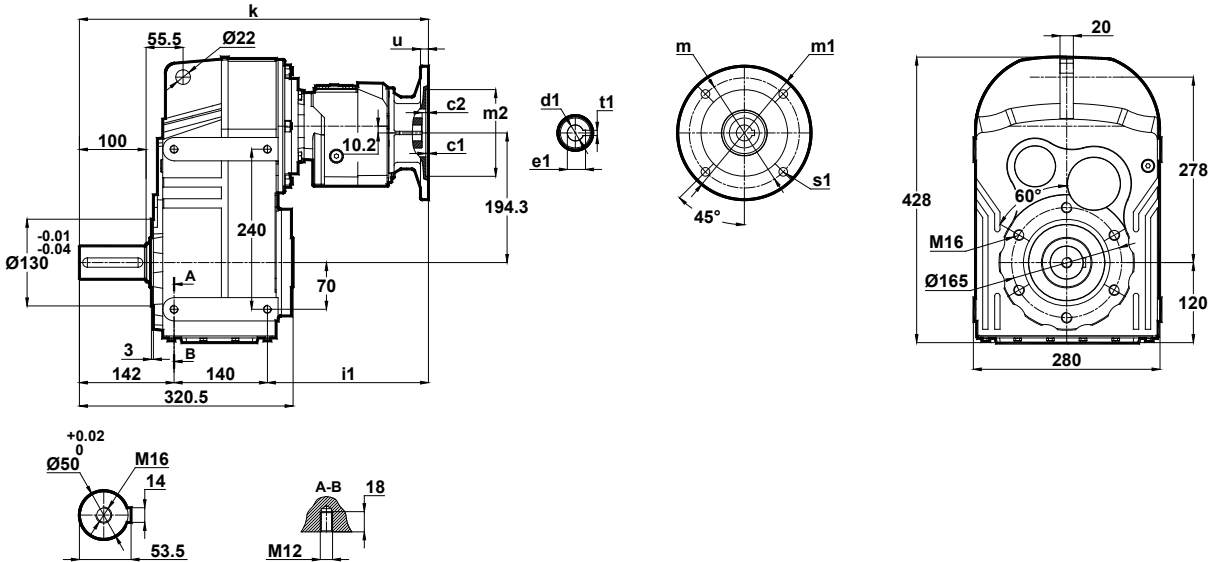
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN475.00
DN476.00

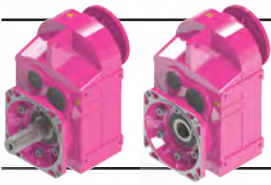


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	226	10	402	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	226	10	402	11	4	12.8
71/B5	4	5	11	130	160	110	241	12	404	14	5	16.3
71/B14	3	4.5	7	85	105	70	241	10	404	14	5	16.3

DN475.01
DN476.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	10	115	140	95	226	10	507	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	226	10	507	11	4	12.8
71/B5	4	5	11	130	160	110	241	12	509	14	5	16.3
71/B14	3	4.5	7	85	105	70	241	10	509	14	5	16.3

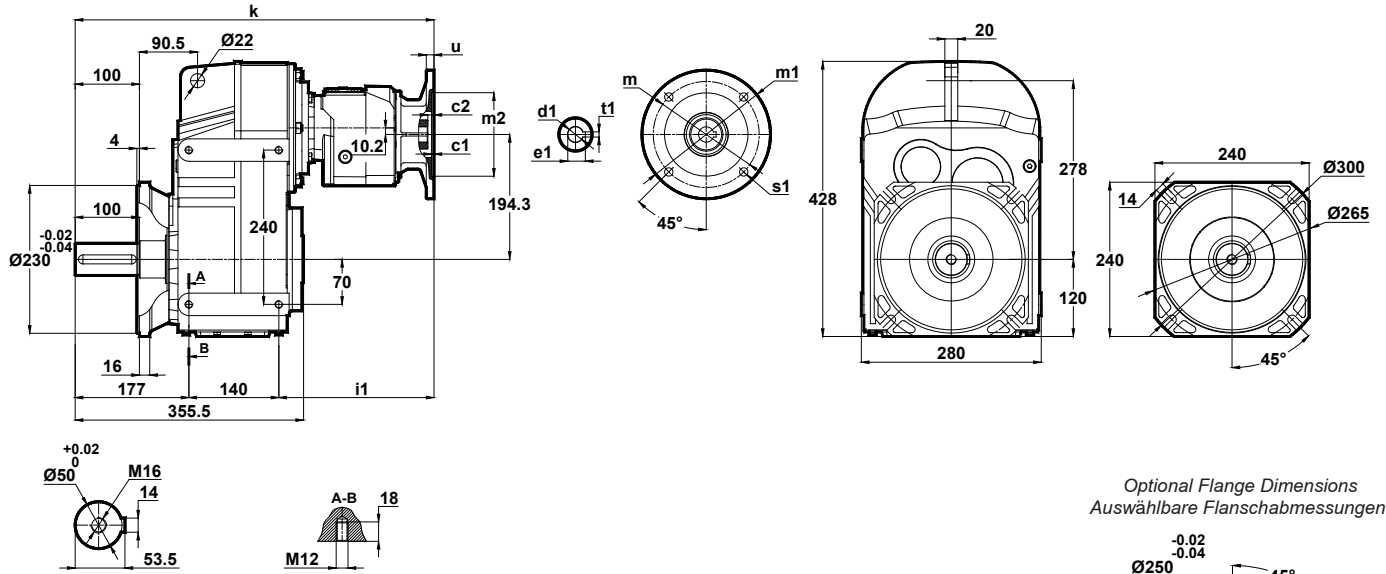


Ölçü Sayfaları Dimension Pages Abmessungenseiten

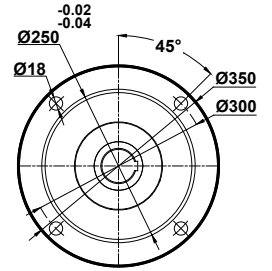


Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN475.02
DN476.02

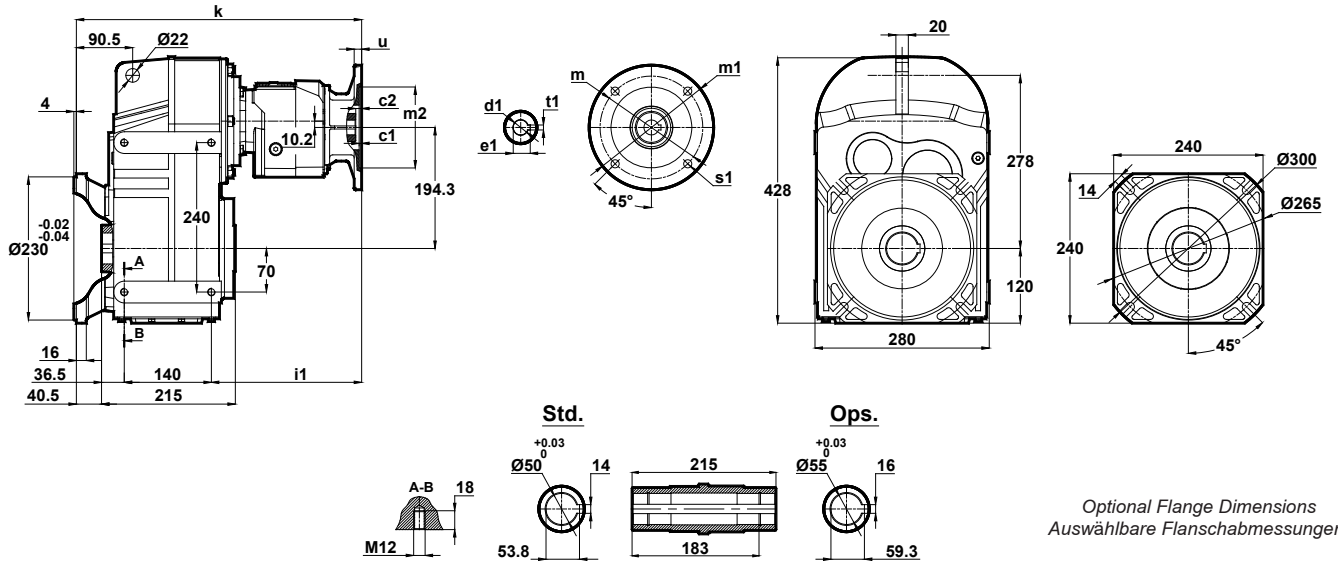


Optional Flange Dimensions
Auswählbare Flanschabmessungen

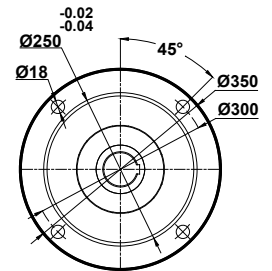


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95	226	10	542	11	4	12.8
63/B14	2.5	5	5.5	75	90	60						
71/B5	4	5	11	130	160	110	241	12	544	14	5	16.3
71/B14	3	4.5	7	85	105	70						

DN475.03
DN476.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4		10	115	140	95	226	10	442	11	4	12.8
63/B14	2.5	5	5.5	75	90	60						
71/B5	4	5	11	130	160	110	241	12	444	14	5	16.3
71/B14	3	4.5	7	85	105	70						



Ölçü Sayfaları

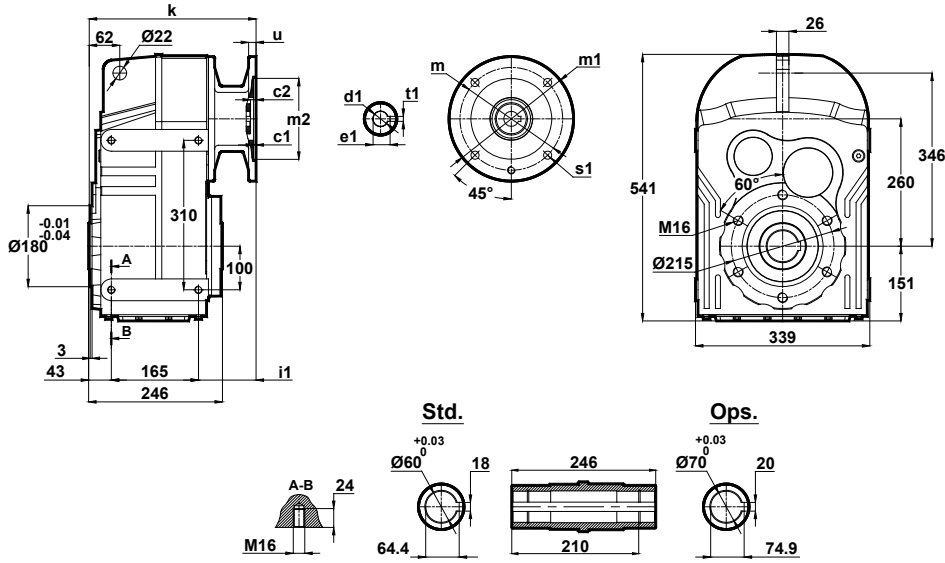
Dimension Pages

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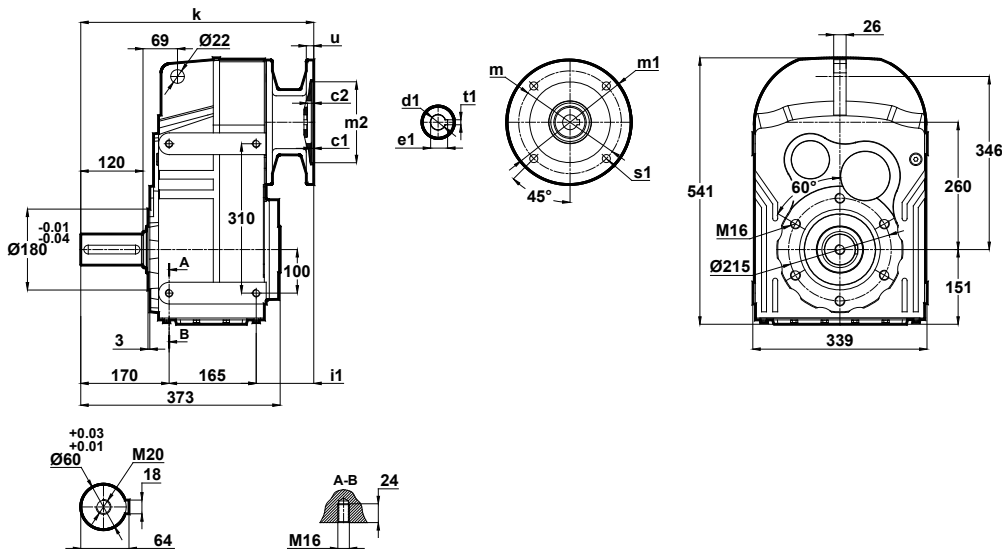
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN572.00
DN573.00

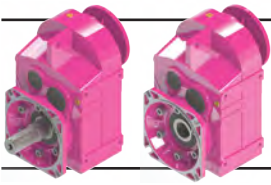


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	68	12	277	19	6	21.8
90/B5	4	5	12	165	200	130	68	12	277	24	8	27.3
90/B14	4	5	9	115	140	95	68	12	277	24	8	27.3
100/B5	5	9	15	215	250	180	87	15	295	28	8	31.3
100/B14	4	9	9	130	160	110	87	15	295	28	8	31.3
112/B5	5	9	15	215	250	180	87	15	295	28	8	31.3
112/B14	4	9	9	130	160	110	87	15	295	28	8	31.3
132/B5	5	6	15	265	300	230	105	15	314	38	10	41.3
132/B14	4.5	6	11	165	200	130	105	15	314	38	10	41.3
160/B5	5.5	10	19	300	350	250	185	20	393	42	12	45.3
180/B5	6	10	19	300	350	250	185	20	393	48	14	51.8

DN572.01
DN573.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	68	12	404	19	6	21.8
90/B5	4	5	12	165	200	130	68	12	404	24	8	27.3
90/B14	4	5	9	115	140	95	68	12	404	24	8	27.3
100/B5	5	9	15	215	250	180	87	15	422	28	8	31.3
100/B14	4	9	9	130	160	110	87	15	422	28	8	31.3
112/B5	5	9	15	215	250	180	87	15	422	28	8	31.3
112/B14	4	9	9	130	160	110	87	15	422	28	8	31.3
132/B5	5	6	15	265	300	230	105	15	441	38	10	41.3
132/B14	4.5	6	11	165	200	130	105	15	441	38	10	41.3
160/B5	5.5	10	19	300	350	250	185	20	520	42	12	45.3
180/B5	6	10	19	300	350	250	185	20	520	48	14	51.8

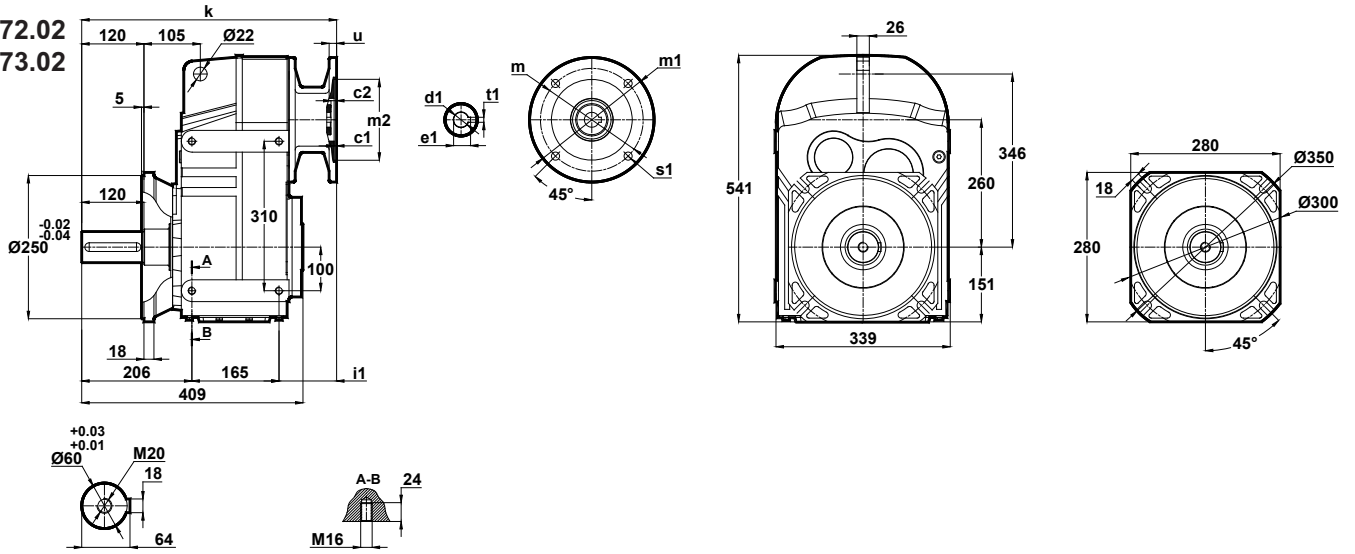


Ölçü Sayfaları Dimension Pages Abmessungsseiten

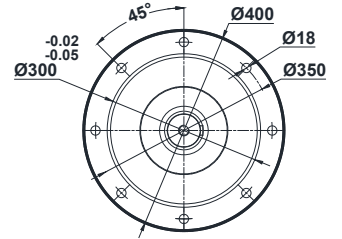


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN572.02
DN573.02

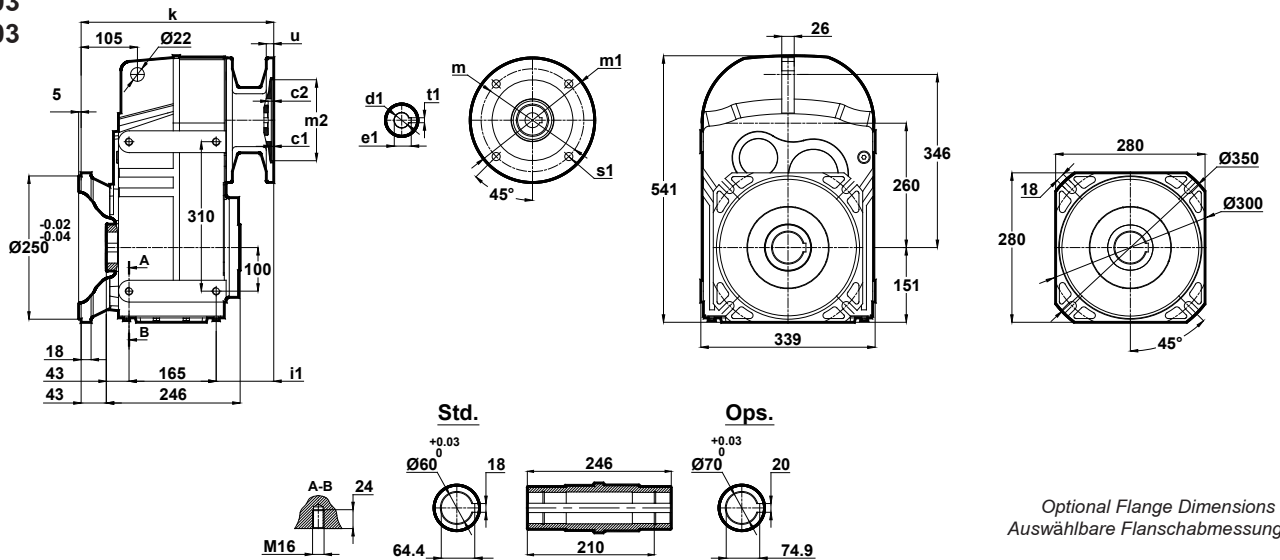


Optional Flange Dimensions
Auswählbare Flanschabmessungen

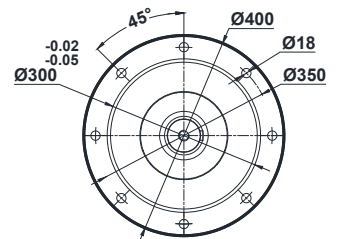


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	68	12	440	19	6	21.8
90/B5	4	5	12	165	200	130	68	12	440	24	8	27.3
90/B14	4	5	9	115	140	95	68	12	440	24	8	27.3
100/B5	5	9	15	215	250	180	87	15	458	28	8	31.3
100/B14	4	9	9	130	160	110	87	15	458	28	8	31.3
112/B5	5	9	15	215	250	180	87	15	458	28	8	31.3
112/B14	4	9	9	130	160	110	87	15	458	28	8	31.3
132/B5	5	6	15	265	300	230	105	15	477	38	10	41.3
132/B14	4.5	6	11	165	200	130	105	15	477	38	10	41.3
160/B5	5.5	10	19	300	350	250	185	20	556	42	12	45.3
180/B5	6	10	19	300	350	250	185	20	556	48	14	51.8

DN572.03
DN573.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	68	12	320	19	6	21.8
90/B5	4	5	12	165	200	130	68	12	320	24	8	27.3
90/B14	4	5	9	115	140	95	68	12	320	24	8	27.3
100/B5	5	9	15	215	250	180	87	15	338	28	8	31.3
100/B14	4	9	9	130	160	110	87	15	338	28	8	31.3
112/B5	5	9	15	215	250	180	87	15	338	28	8	31.3
112/B14	4	9	9	130	160	110	87	15	338	28	8	31.3
132/B5	5	6	15	265	300	230	105	15	357	38	10	41.3
132/B14	4.5	6	11	165	200	130	105	15	357	38	10	41.3
160/B5	5.5	10	19	300	350	250	185	20	436	42	12	45.3
180/B5	6	10	19	300	350	250	185	20	436	48	14	51.8



Ölçü Sayfaları

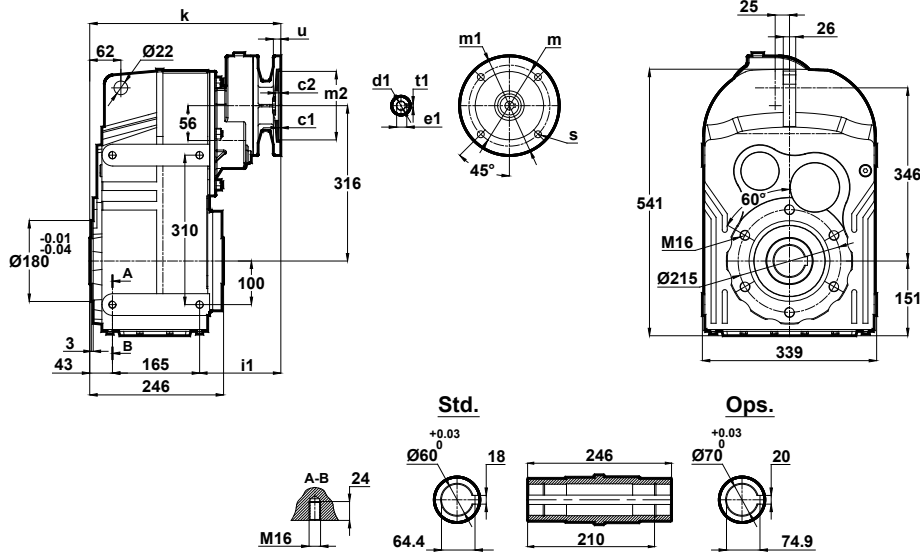
Dimension Pages

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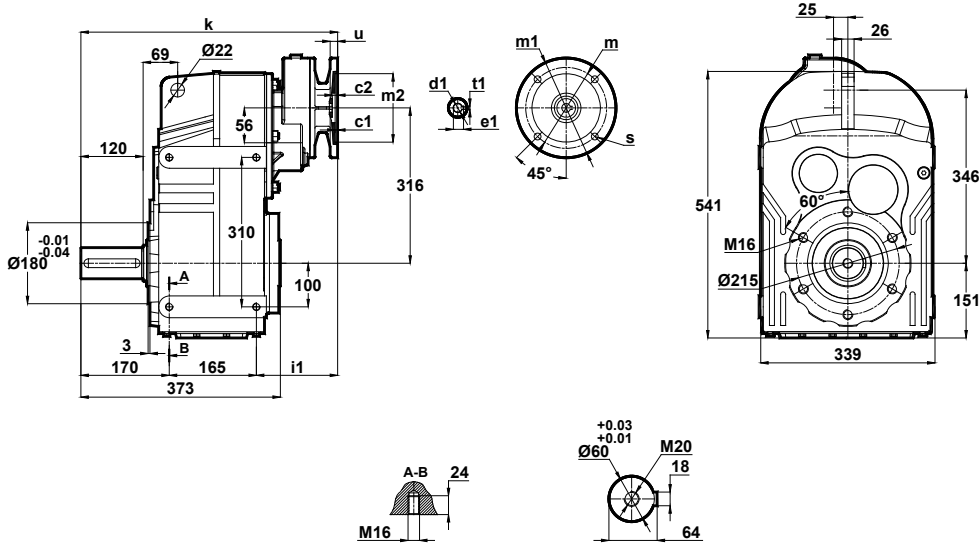
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN574.00

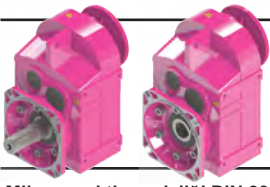


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	375	14	5	16.3
80/B5	4	9	12	165	200	130	166	12	375	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	166	12	375	24	8	27.3
90/B14			9	115	140	95						

DN574.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	502	14	5	16.3
80/B5	4	9	12	165	200	130	166	12	502	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	9	12	165	200	130	166	12	502	24	8	27.3
90/B14			9	115	140	95						

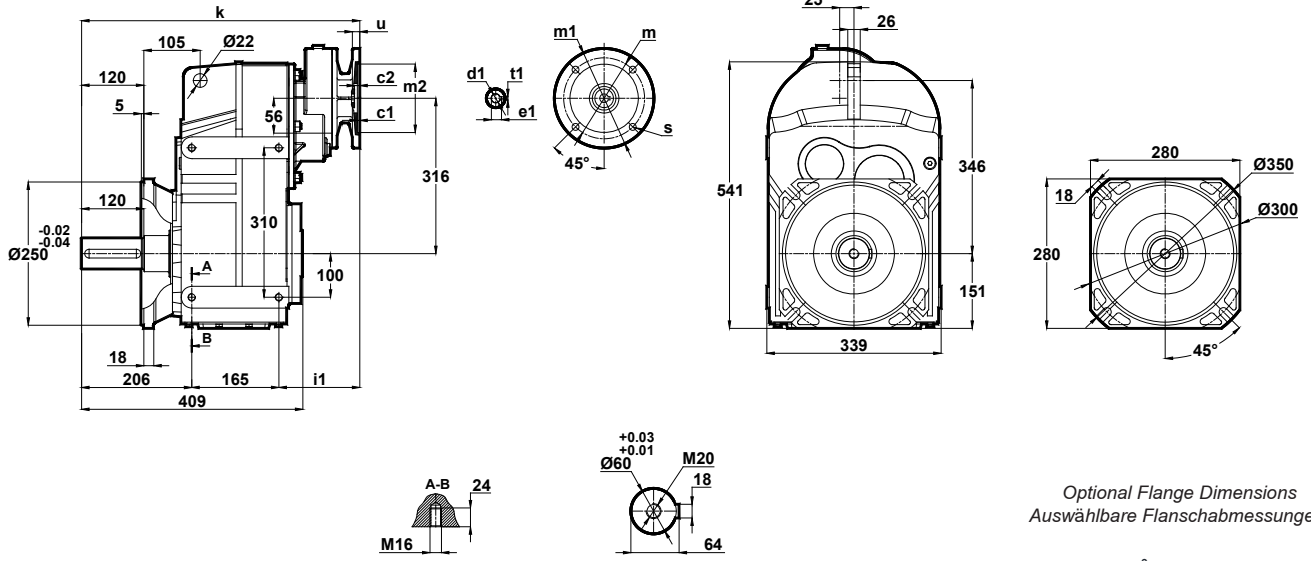


Ölçü Sayfaları Dimension Pages Abmessungsseiten

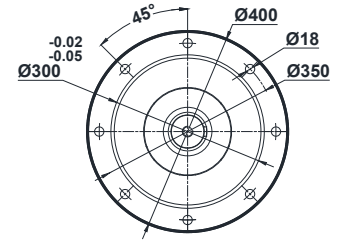


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN574.02

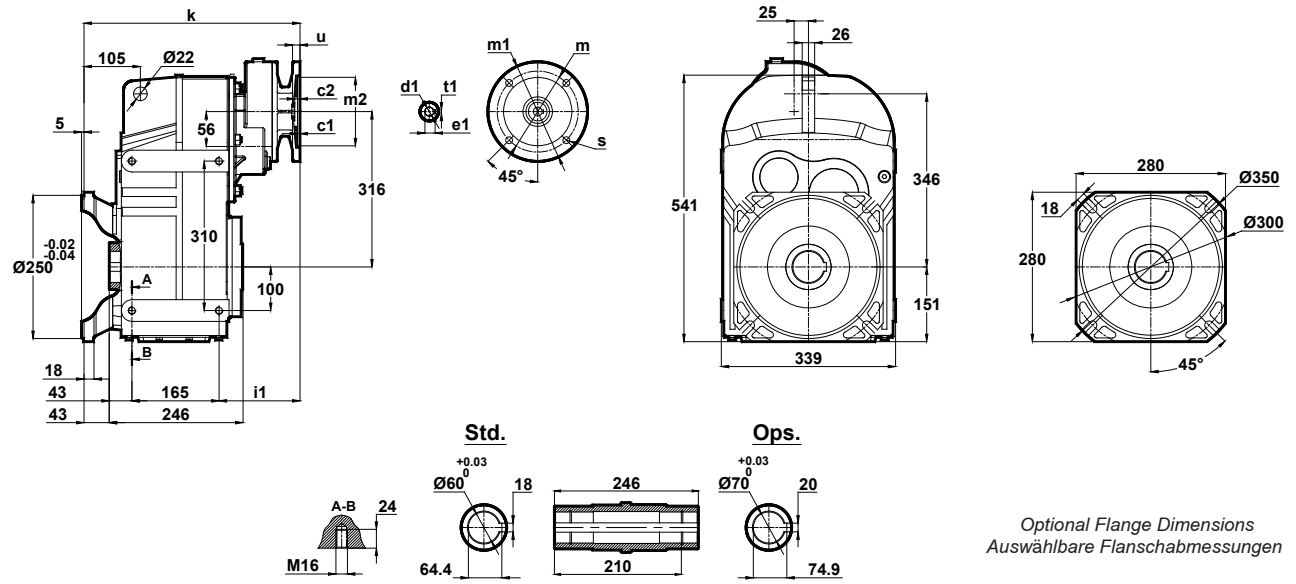


Optional Flange Dimensions
Auswählbare Flanschabmessungen

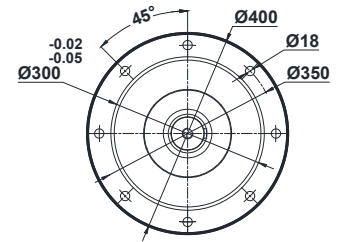


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	538	14	5	16.3
80/B5	4	9	12	165	200	130	166	12	538	19	6	21.8
80/B14	4	9	7	100	120	80	166	12	538	19	6	21.8
90/B5	4	9	12	165	200	130	166	12	538	24	8	27.3
90/B14	4	9	9	115	140	95	166	12	538	24	8	27.3

DN574.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	418	14	5	16.3
80/B5	4	9	12	165	200	130	166	12	418	19	6	21.8
80/B14	4	9	7	100	120	80	166	12	418	19	6	21.8
90/B5	4	9	12	165	200	130	166	12	418	24	8	27.3
90/B14	4	9	9	115	140	95	166	12	418	24	8	27.3



Ölçü Sayfaları

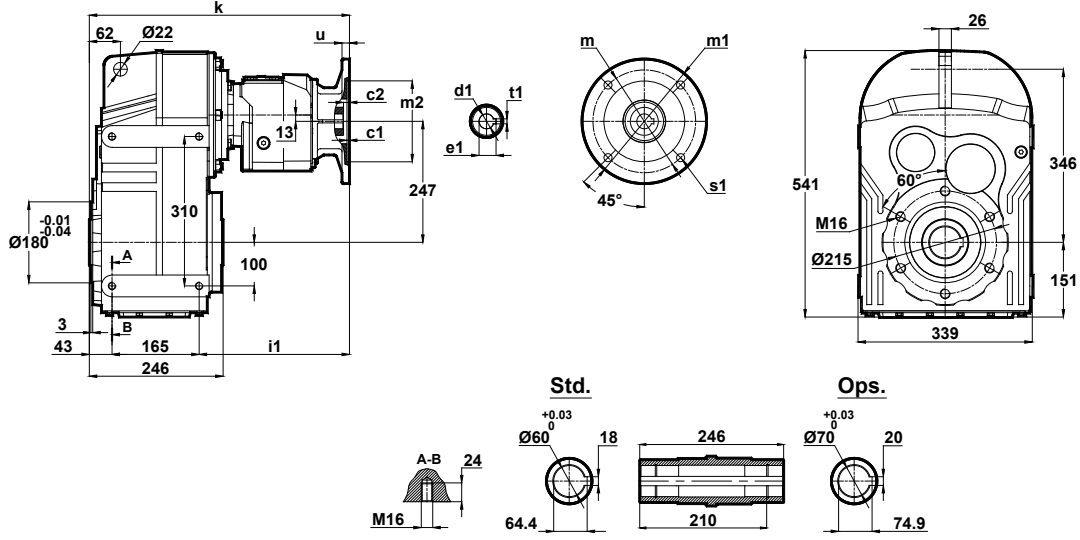
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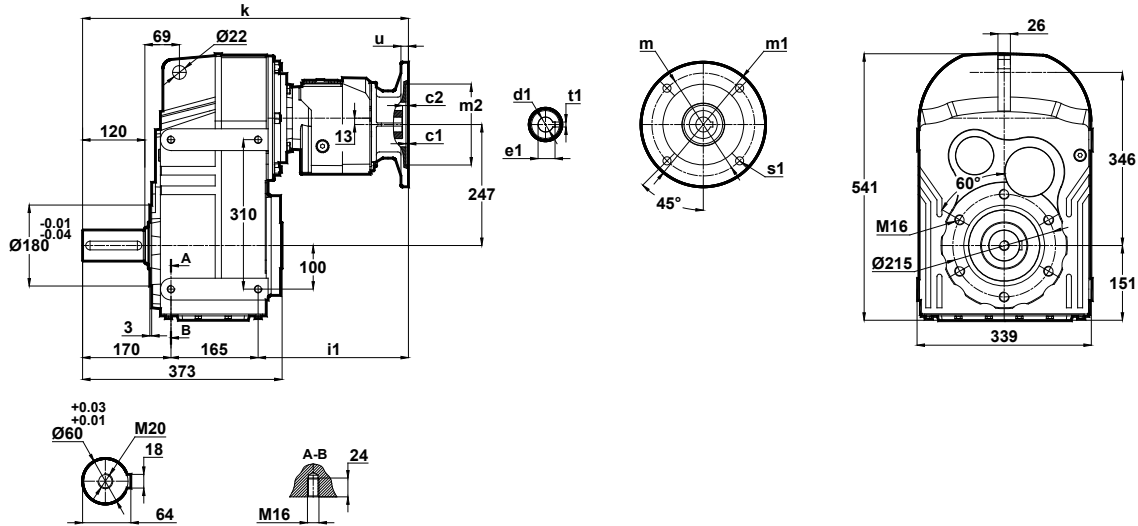
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN575.00
DN576.00

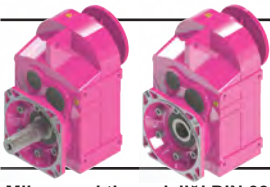


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	294	12	503	11	4	12.8
71/B5	4	9	11	130	160	110	265	12	474	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				

DN575.01
DN576.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	294	12	630	11	4	12.8
71/B5	4	9	11	130	160	110	265	12	601	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				

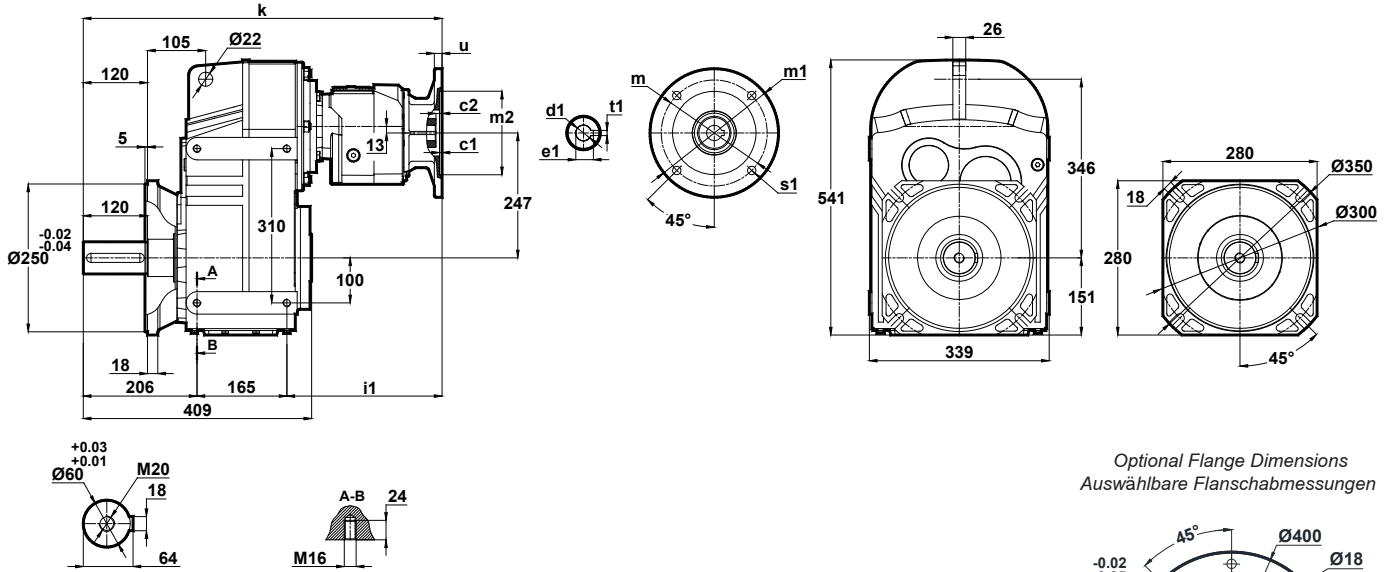


Ölçü Sayfaları Dimension Pages Abmessungenseiten

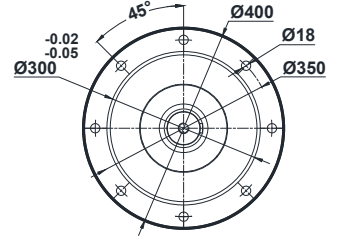


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN575.02
DN576.02

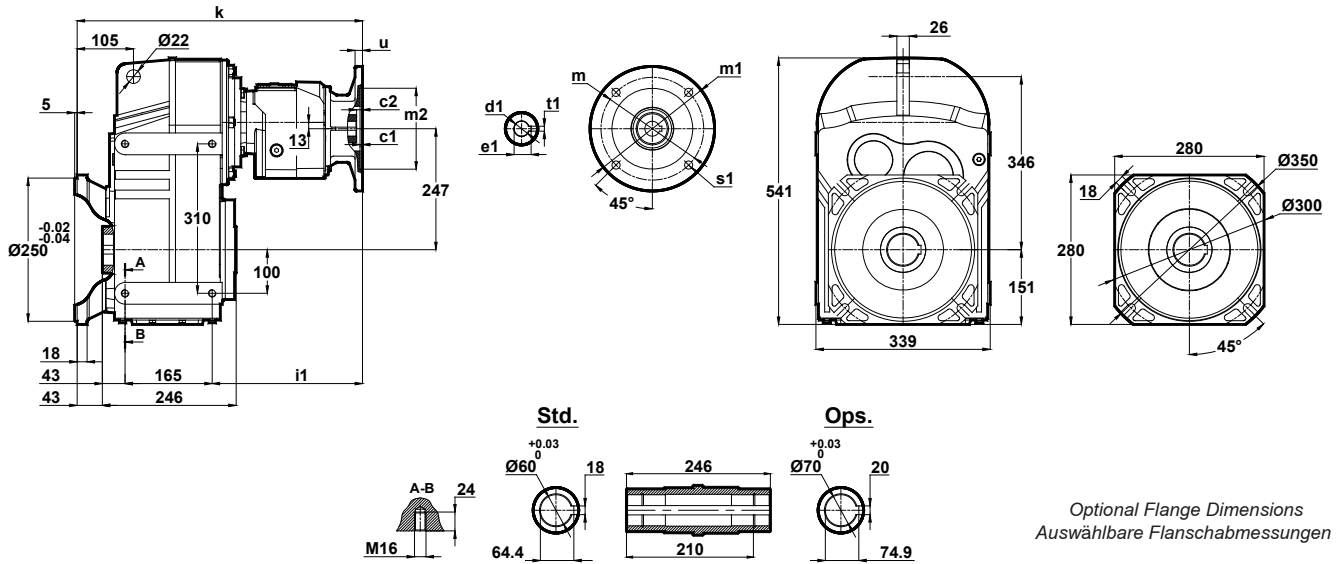


Optional Flange Dimensions
Auswählbare Flanschabmessungen

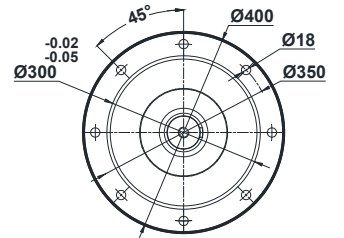


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	294	12	666	11	4	12.8
71/B5	4	9	11	130	160	110	265	12	637	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				

DN575.03
DN576.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	294	12	546	11	4	12.8
71/B5	4	9	11	130	160	110	265	12	517	14	5	16.3
71/B14	3	8.5	7	85	105	70		10				



Ölçü Sayfaları

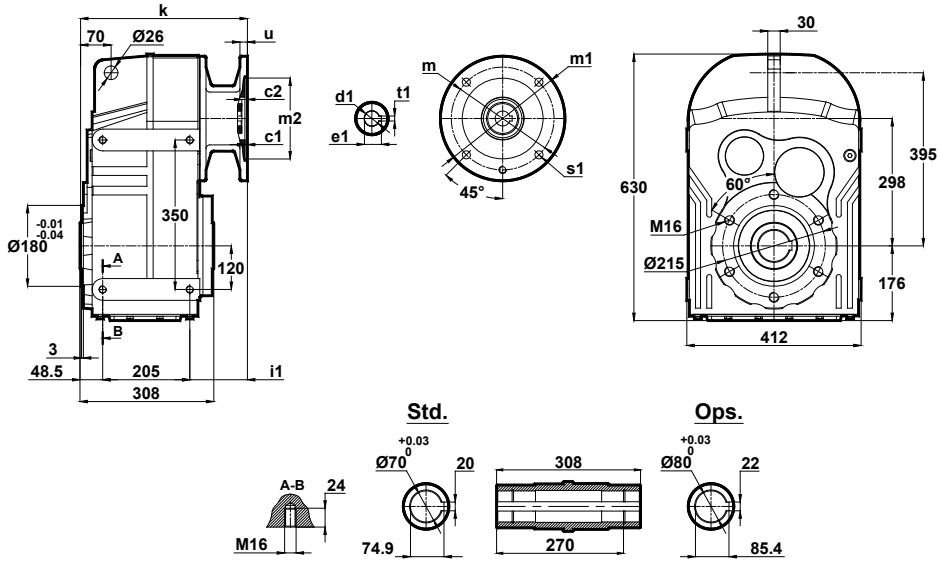
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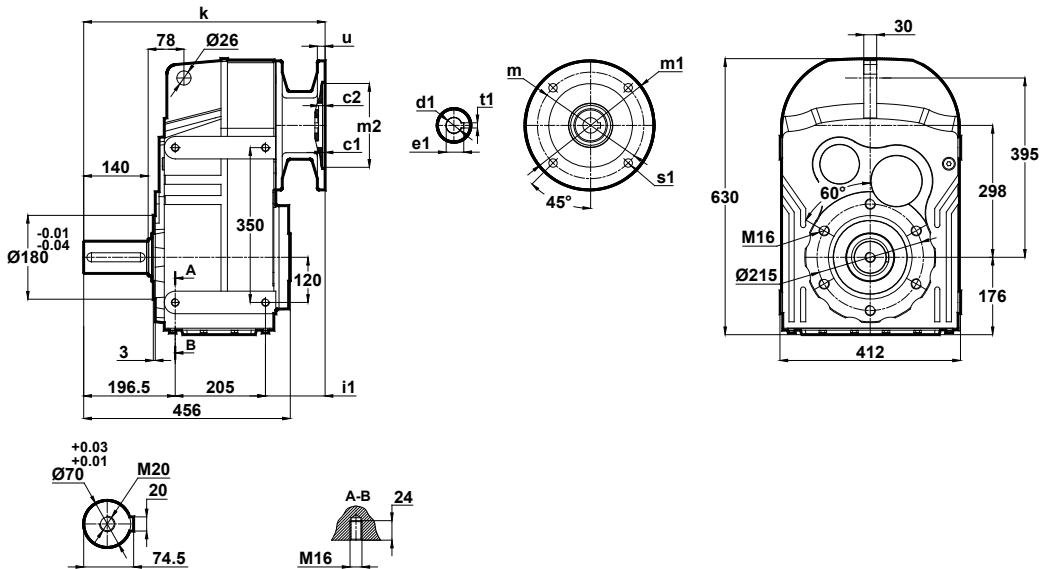
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN672.00
DN673.00

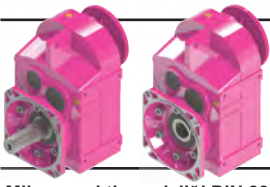


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	94	15	348	28	8	31.3
112/B5	5	20	15	215	250	180	94	15	348	28	8	31.3
132/B5	5	9	15	265	300	230	115	15	369	38	10	41.3
132/B14	4.5		11	165	200	130						
160/B5	5.5	10	19	300	350	250	191	18	444	42	12	45.3
180/B5	6	10	19	300	350	250	191	18	444	48	14	51.8
200/B5	6	10	19	350	400	300	211	22	464	55	16	59.3

DN672.01
DN673.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	94	15	496	28	8	31.3
112/B5	5	20	15	215	250	180	94	15	496	28	8	31.3
132/B5	5	9	15	265	300	230	115	15	517	38	10	41.3
132/B14	4.5		11	165	200	130						
160/B5	5.5	10	19	300	350	250	191	18	592	42	12	45.3
180/B5	6	10	19	300	350	250	191	18	592	48	14	51.8
200/B5	6	10	19	350	400	300	211	22	612	55	16	59.3

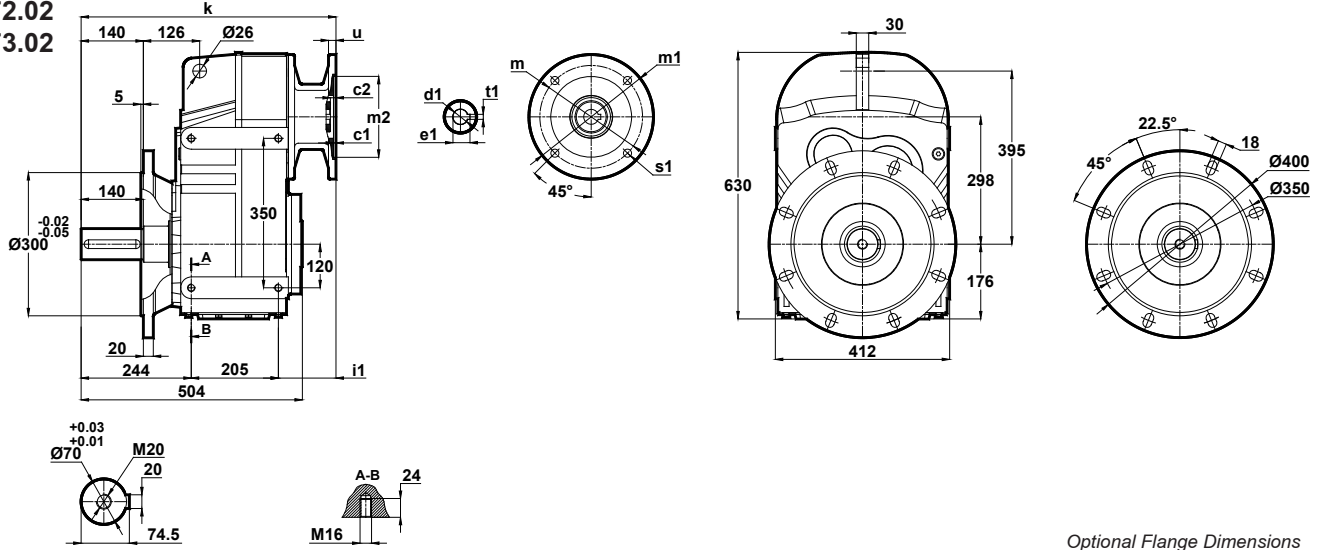


Ölçü Sayfaları Dimension Pages Abmessungenseiten



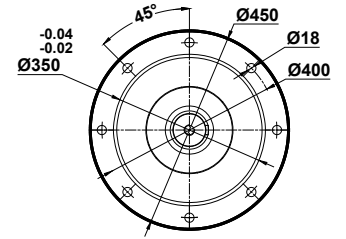
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN672.02
DN673.02

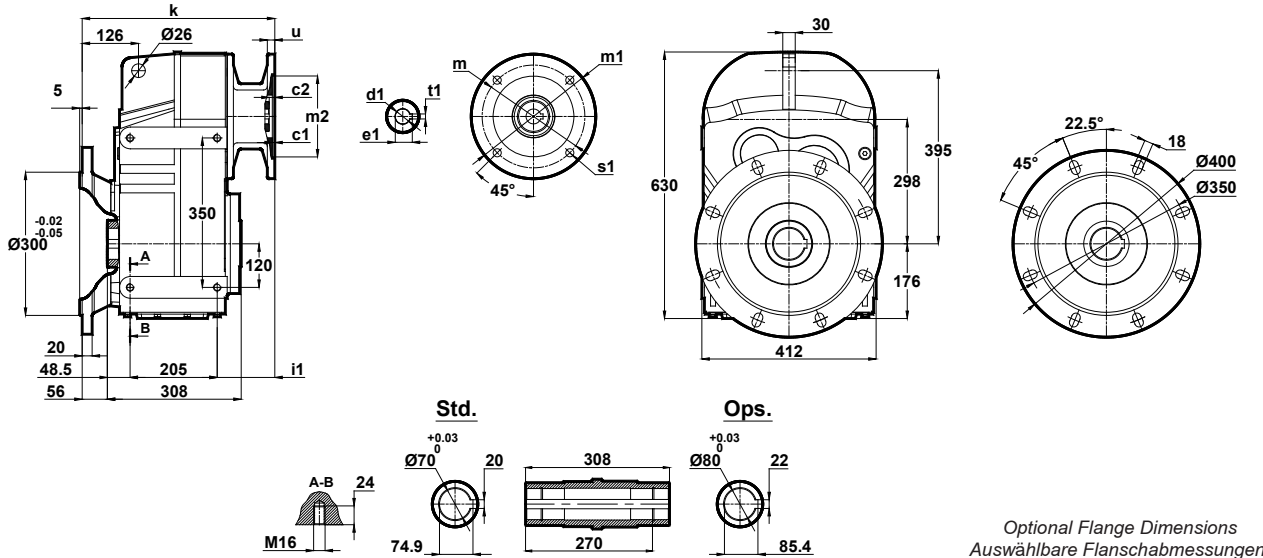


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	94	15	544	28	8	31.3
112/B5	5	20	15	215	250	180	94	15	544	28	8	31.3
132/B5	5	9	15	265	300	230	115	15	565	38	10	41.3
132/B14	4.5	9	11	165	200	130	115	15	565	38	10	41.3
160/B5	5.5	10	19	300	350	250	191	18	640	42	12	45.3
180/B5	6	10	19	300	350	250	191	18	640	48	14	51.8
200/B5	6	10	19	350	400	300	211	22	660	55	16	59.3

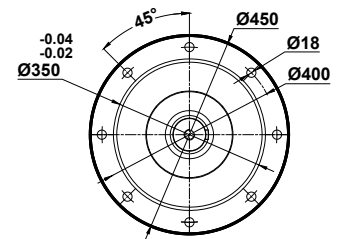


DN672.03
DN673.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	94	15	404	28	8	31.3
112/B5	5	20	15	215	250	180	94	15	404	28	8	31.3
132/B5	5	9	15	265	300	230	115	15	425	38	10	41.3
132/B14	4.5	9	11	165	200	130	115	15	425	38	10	41.3
160/B5	5.5	10	19	300	350	250	191	18	500	42	12	45.3
180/B5	6	10	19	300	350	250	191	18	500	48	14	51.8
200/B5	6	10	19	350	400	300	211	22	520	55	16	59.3





Ölçü Sayfaları

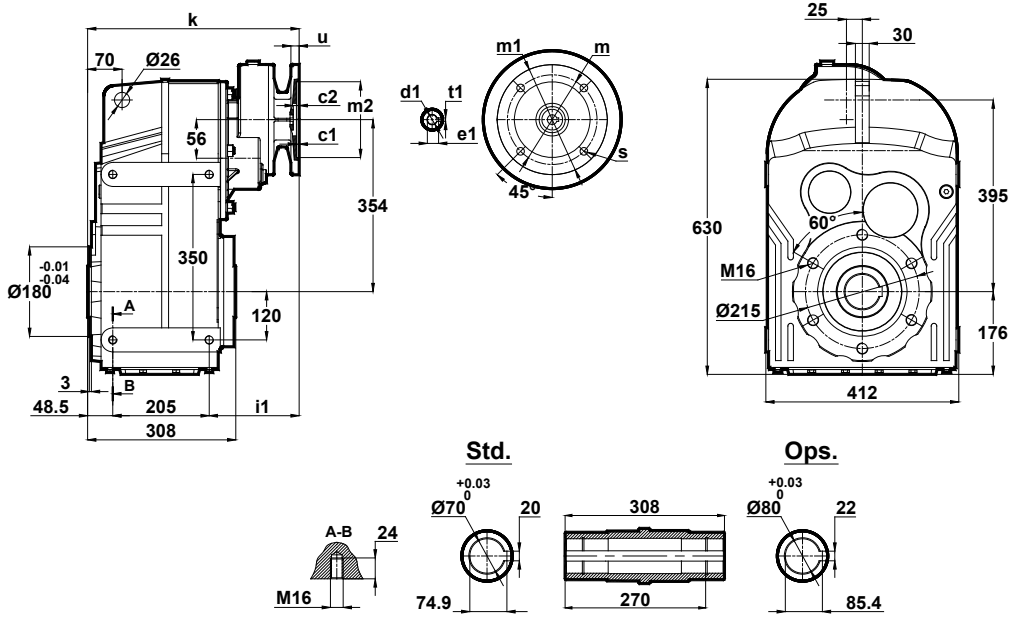
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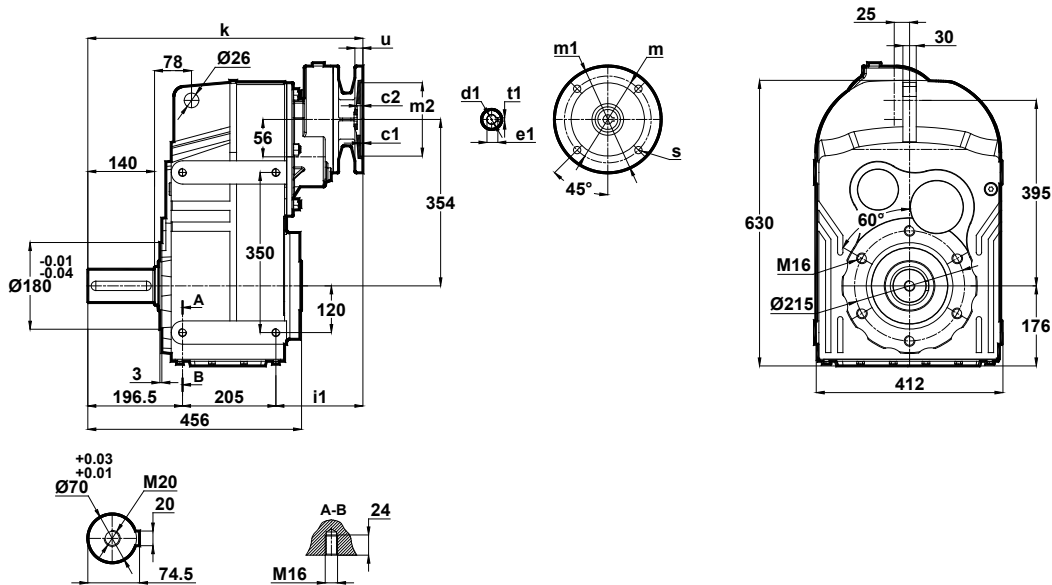
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN674.00

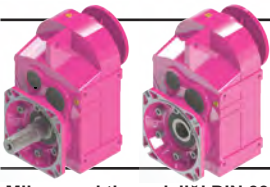


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	428	14	5	16.3
80/B5	4	9	12	165	200	130	174	12	428	19	6	21.8
80/B14	4	9	7	100	120	80	174	12	428	19	6	21.8
90/B5	4	9	12	165	200	130	174	12	428	24	8	27.3
90/B14	4	9	9	115	140	95	174	12	428	24	8	27.3

DN674.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	576	14	5	16.3
80/B5	4	9	12	165	200	130	174	12	576	19	6	21.8
80/B14	4	9	7	100	120	80	174	12	576	19	6	21.8
90/B5	4	9	12	165	200	130	174	12	576	24	8	27.3
90/B14	4	9	9	115	140	95	174	12	576	24	8	27.3

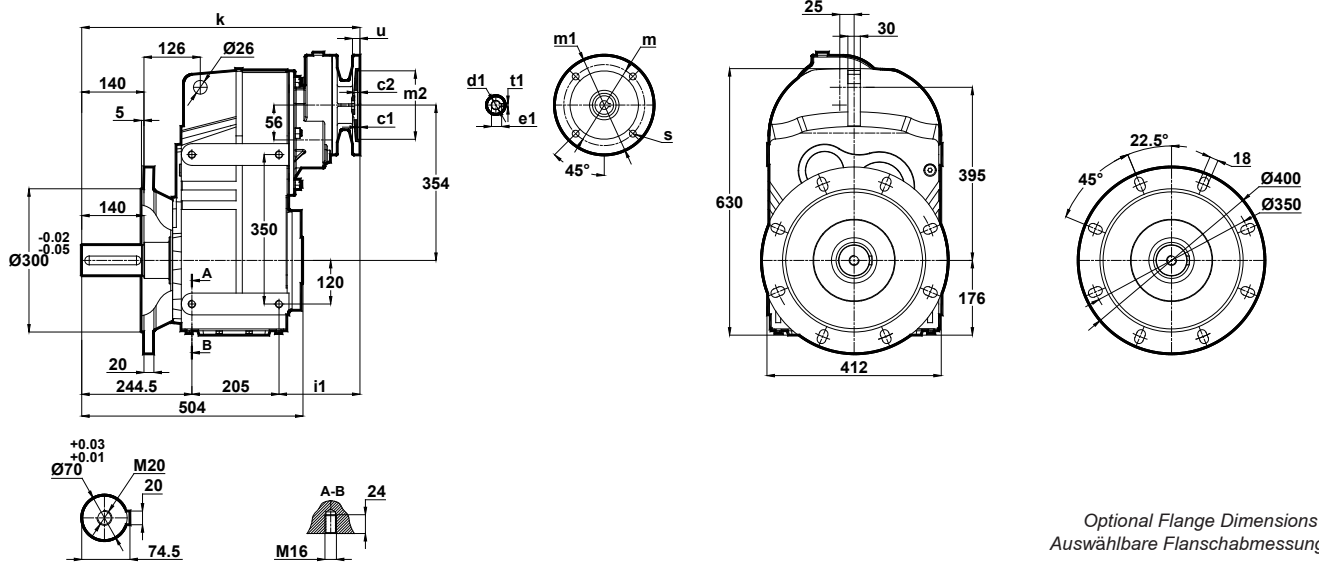


Ölçü Sayfaları Dimension Pages Abmessungenseiten

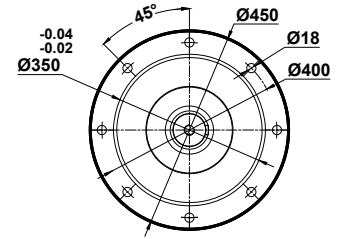


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

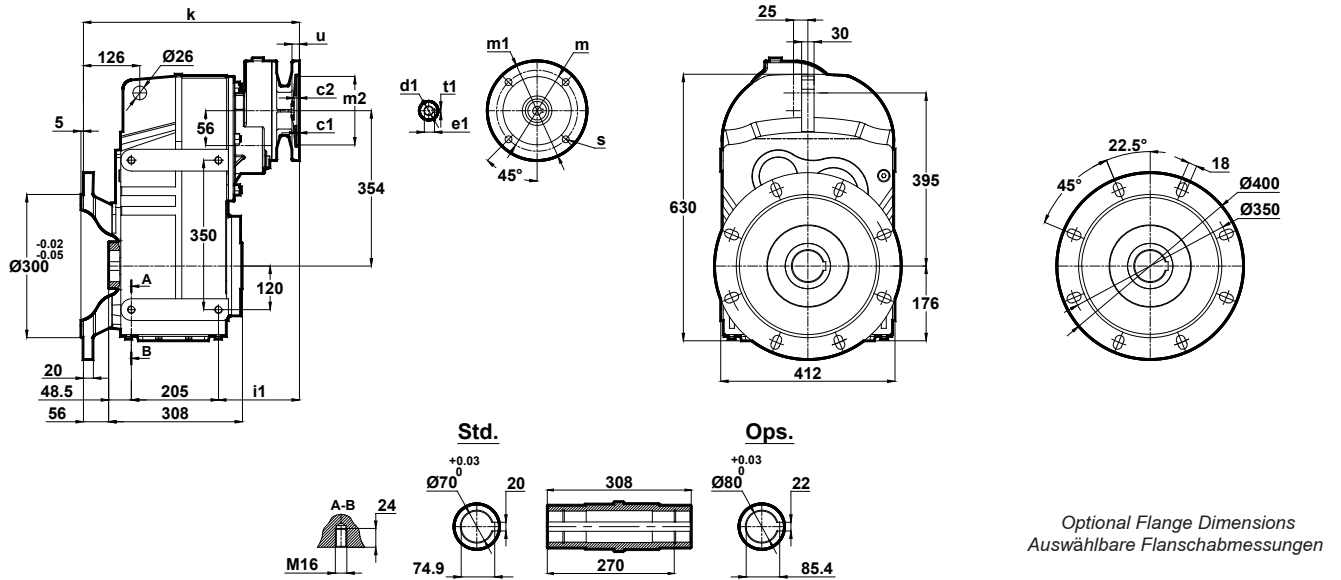
DN674.02



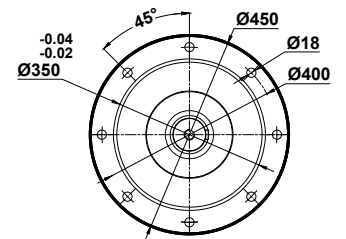
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	624	14	5	16.3
80/B5	4	9	12	165	200	130	174	12	624	19	6	21.8
80/B14	4	9	7	100	120	80	174	12	624	19	6	21.8
90/B5	4	9	12	165	200	130	174	12	624	24	8	27.3
90/B14	4	9	9	115	140	95	174	12	624	24	8	26.3



DN674.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	484	14	5	16.3
80/B5	4	9	12	165	200	130	174	12	484	19	6	21.8
80/B14	4	9	7	100	120	80	174	12	484	19	6	21.8
90/B5	4	9	12	165	200	130	174	12	484	24	8	27.3
90/B14	4	9	9	115	140	95	174	12	484	24	8	26.3



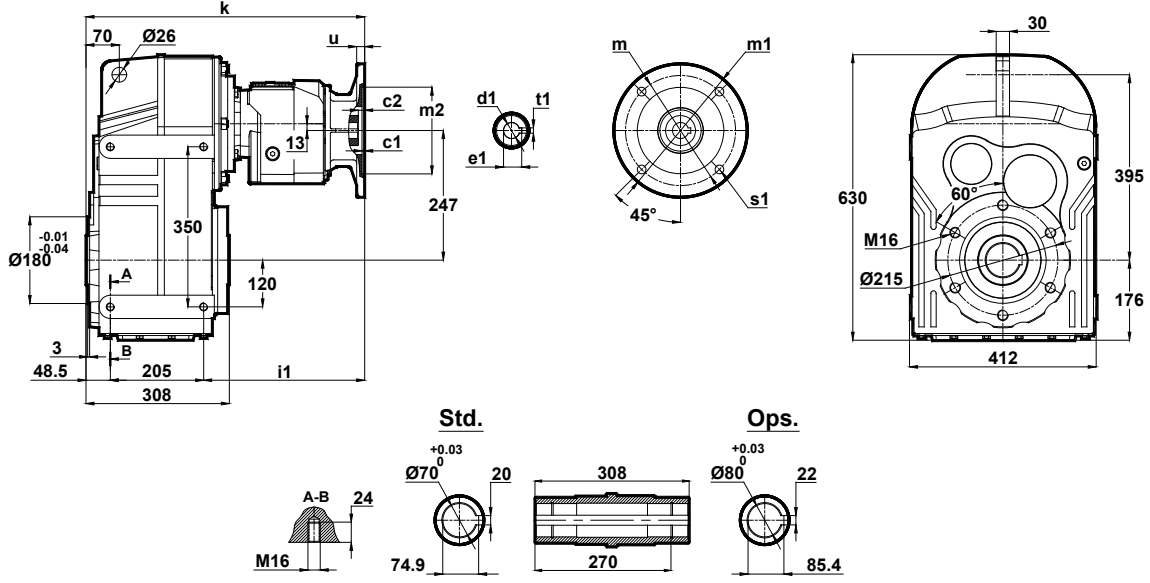


Ölçü Sayfaları Dimension Pages Abmessungenseiten



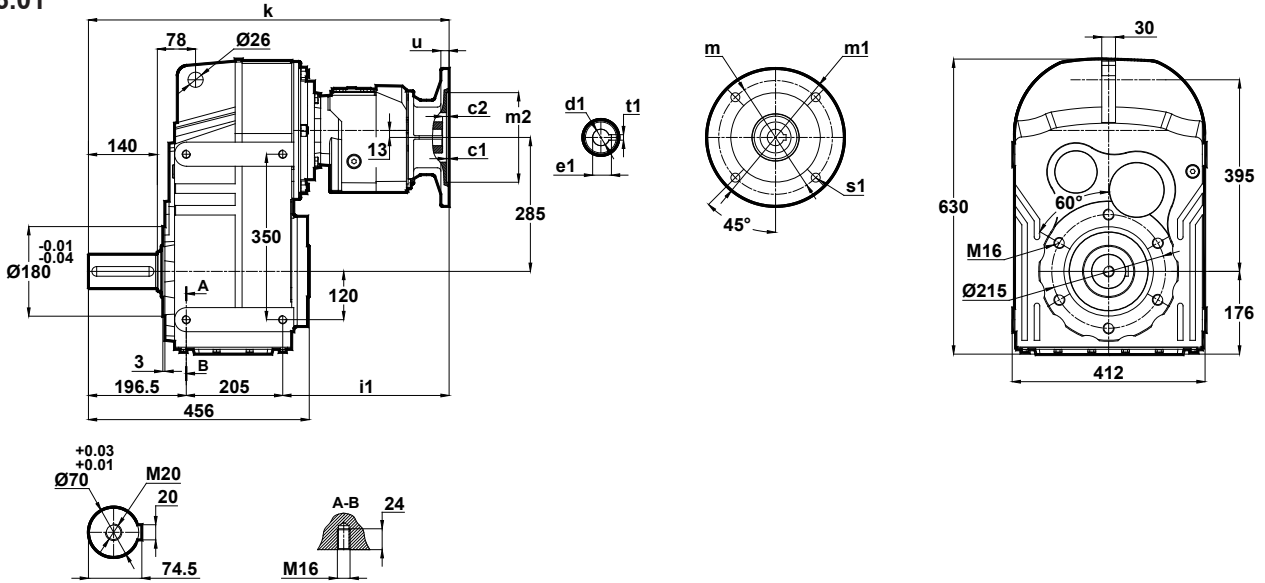
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN675.00
DN676.00

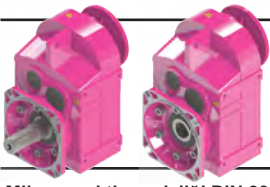


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	304	12	558	11	4	12.8
71/B5	4	9	11	130	160	110	275	12	529	14	5	16.3
71/B14	3	8.5	7	85	105	70	275	10	529	14	5	16.3
80/B5	4	5	12	165	200	130	304	12	558	19	6	21.8
80/B14	4	5	7	100	120	80	304	12	558	19	6	21.8

DN675.01
DN676.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	304	12	706	11	4	12.8
71/B5	4	9	11	130	160	110	275	12	677	14	5	16.3
71/B14	3	8.5	7	85	105	70	275	10	677	14	5	16.3
80/B5	4	5	12	165	200	130	304	12	706	19	6	21.8
80/B14	4	5	7	100	120	80	304	12	706	19	6	21.8

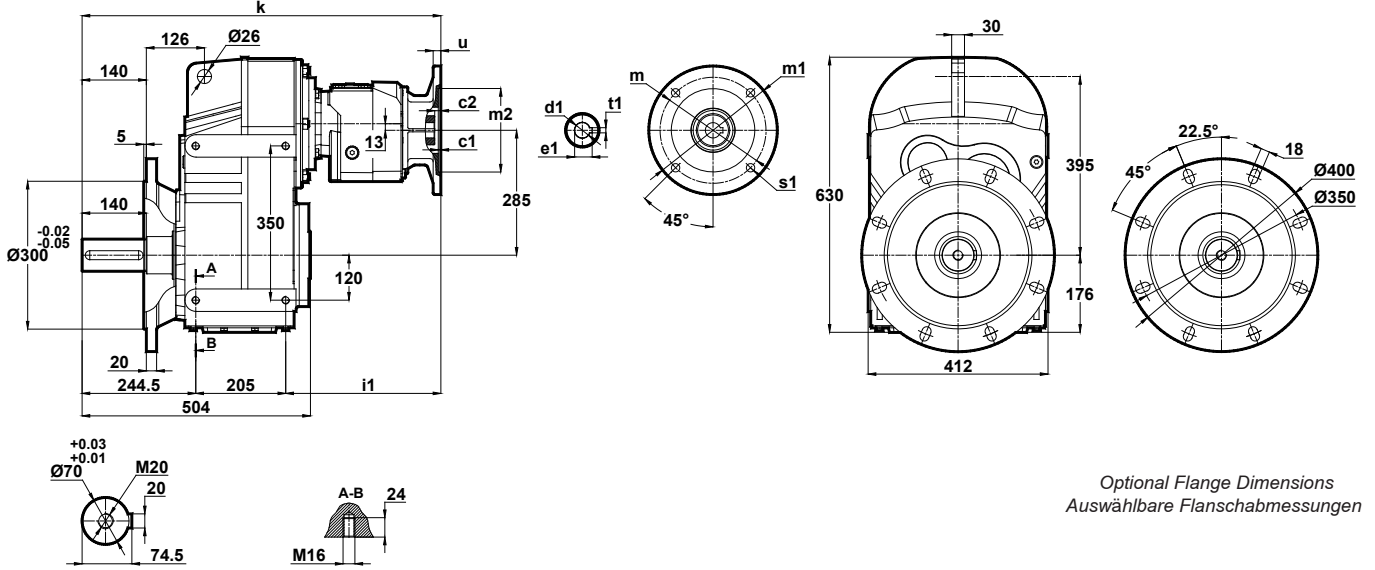


Ölçü Sayfaları Dimension Pages Abmessungenseiten



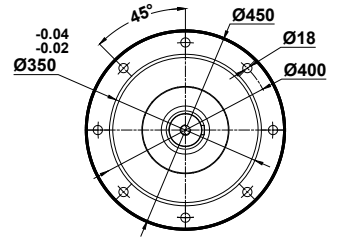
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN675.02
DN676.02

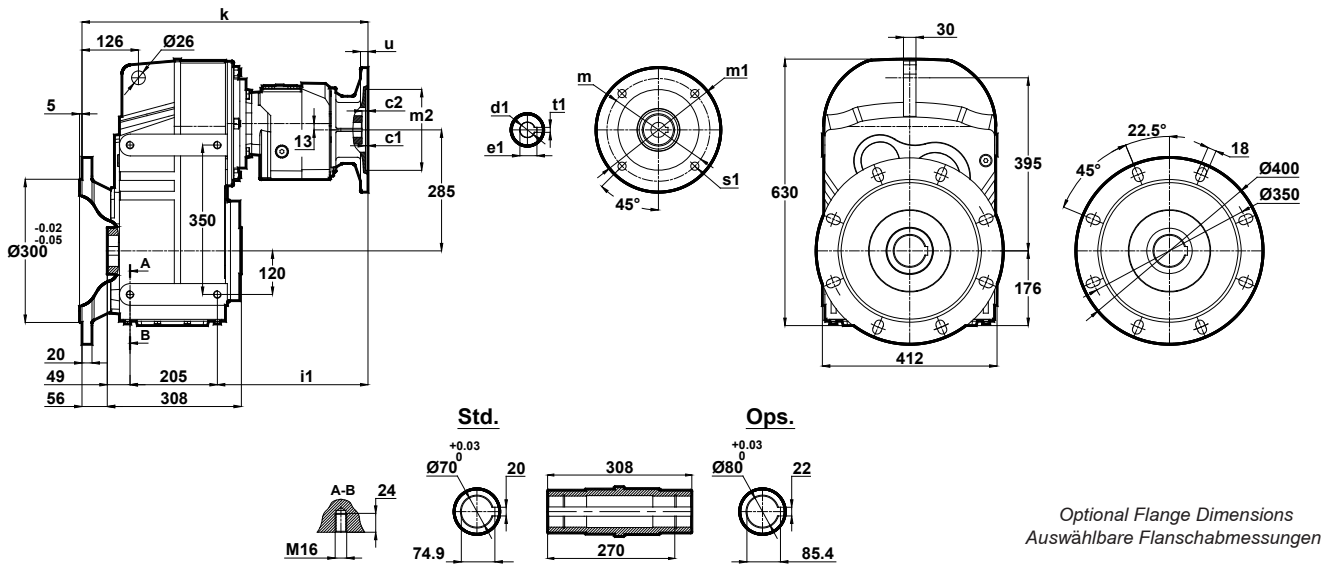


Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	304	12	754	11	4	12.8
71/B5	4	9	11	130	160	110	275	12	725	14	5	16.3
71/B14	3	8.5	7	85	105	70	275	10	725	14	5	16.3
80/B5	4	5	12	165	200	130	304	12	754	19	6	21.8
80/B14	4	5	7	100	120	80	304	12	754	19	6	21.8

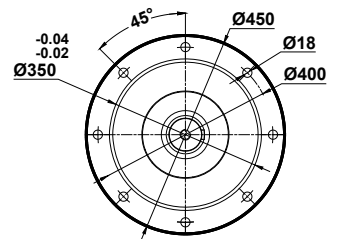


DN675.03
DN676.03



Optional Flange Dimensions
Auswählbare Flanschabmessungen

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	8	9	115	140	95	304	12	614	11	4	12.8
71/B5	4	9	11	130	160	110	275	12	585	14	5	16.3
71/B14	3	8.5	7	85	105	70	275	10	585	14	5	16.3
80/B5	4	5	12	165	200	130	304	12	614	19	6	21.8
80/B14	4	5	7	100	120	80	304	12	614	19	6	21.8





Ölçü Sayfaları

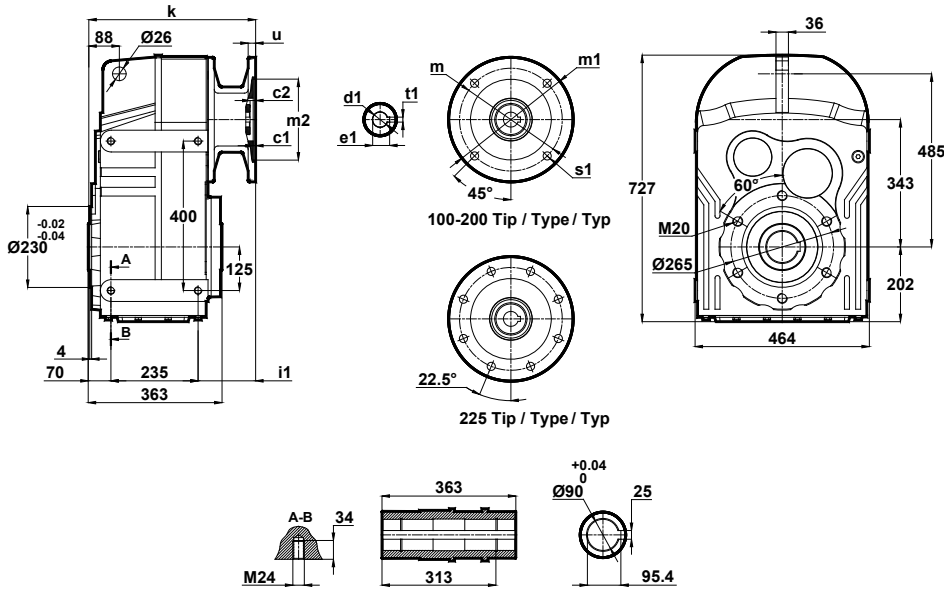
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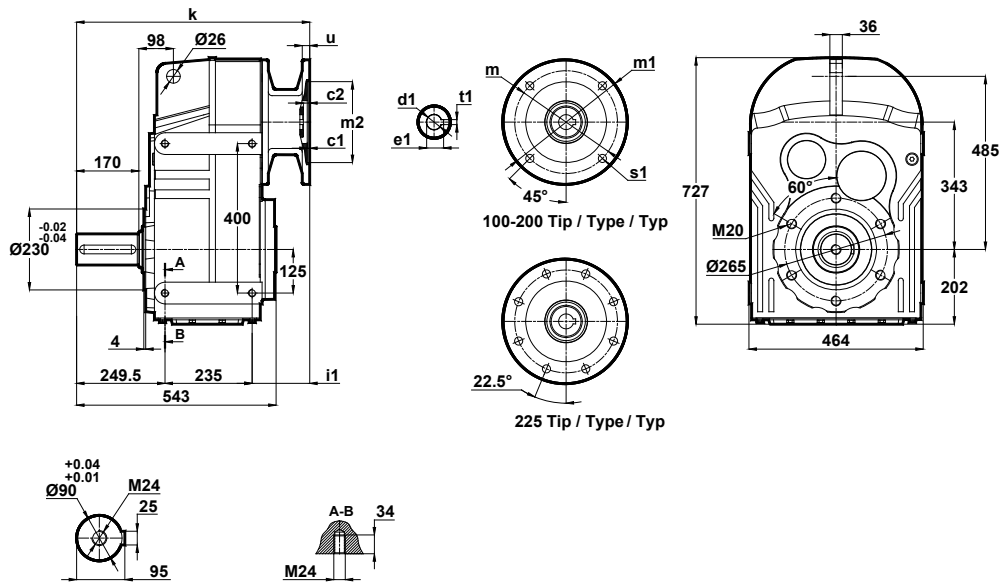
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN772.00
DN773.00

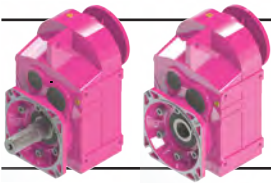


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	85	15	390	28	8	31.3
112/B5	5	15	15	215	250	180	85	15	390	28	8	31.3
132/B5	5	9	15	265	300	230	100	15	405	38	10	41.3
132/B14	4.5	9	15	165	200	130	100	15	405	38	10	41.3
160/B5	5.5	10	19	300	350	250	175	20	480	42	12	45.3
180/B5	6	10	19	300	350	250	175	20	480	48	14	51.8
200/B5	6	10	19	350	400	300	196	22	500	55	16	59.3
225/B5	5.5	10	19	400	450	350	249	24	553	60	18	64.4

DN772.01
DN773.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	85	15	570	28	8	31.3
112/B5	5	15	15	215	250	180	85	15	570	28	8	31.3
132/B5	5	9	15	265	300	230	100	15	585	38	10	41.3
132/B14	4.5	9	15	165	200	130	100	15	585	38	10	41.3
160/B5	5.5	10	19	300	350	250	175	20	660	42	12	45.3
180/B5	6	10	19	300	350	250	175	20	660	48	14	51.8
200/B5	6	10	19	350	400	300	196	22	680	55	16	59.3
225/B5	5.5	10	19	400	450	350	249	24	733	60	18	64.4

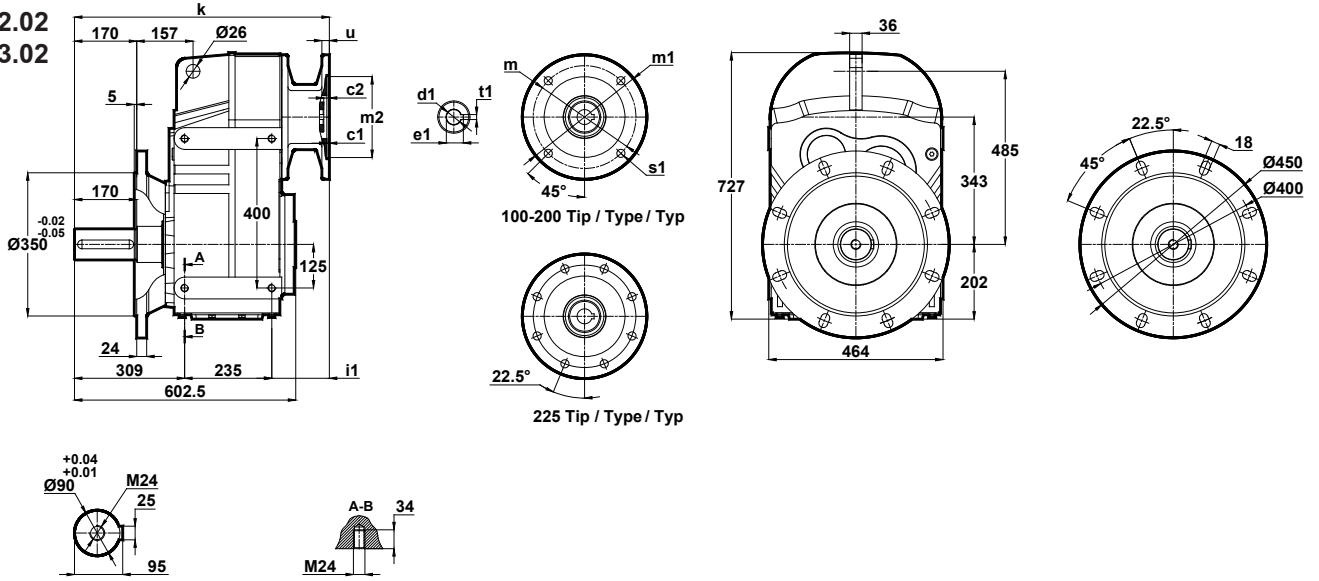


Ölçü Sayfaları Dimension Pages Abmessungenseiten



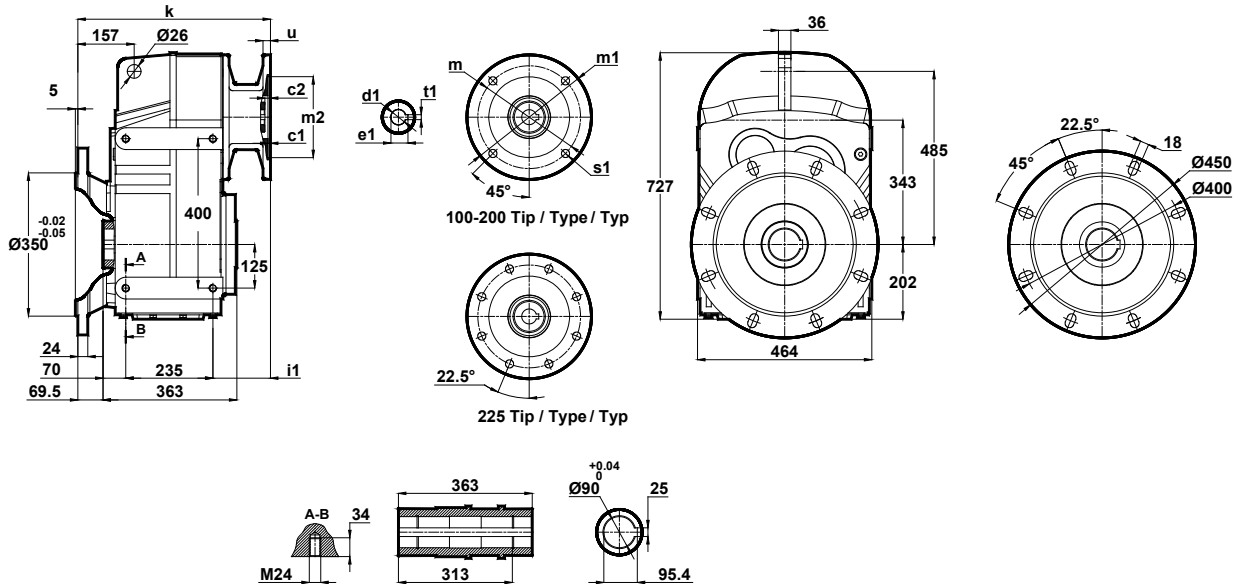
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN772.02
DN773.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	85	15	630	28	8	31.3
112/B5	5	15	15	215	250	180	85	15	630	28	8	31.3
132/B5	5	9	15	265	300	230	100	15	645	38	10	41.3
132/B14	4.5			165	200	130						
160/B5	5.5	10	19	300	350	250	175	20	720	42	12	45.3
180/B5	6	10	19	300	350	250	175	20	720	48	14	51.8
200/B5	6	10	19	350	400	300	196	22	740	55	16	59.3
225/B5	5.5	10	19	400	450	350	249	24	793	60	18	64.4

DN772.03
DN773.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	85	15	460	28	8	31.3
112/B5	5	15	15	215	250	180	85	15	460	28	8	31.3
132/B5	5	9	15	265	300	230	100	15	475	38	10	41.3
132/B14	4.5			165	200	130						
160/B5	5.5	10	19	300	350	250	175	20	550	42	12	45.3
180/B5	6	10	19	300	350	250	175	20	550	48	14	51.8
200/B5	6	10	19	350	400	300	196	22	570	55	16	59.3
225/B5	5.5	10	19	400	450	350	249	24	623	60	18	64.4



Ölçü Sayfaları

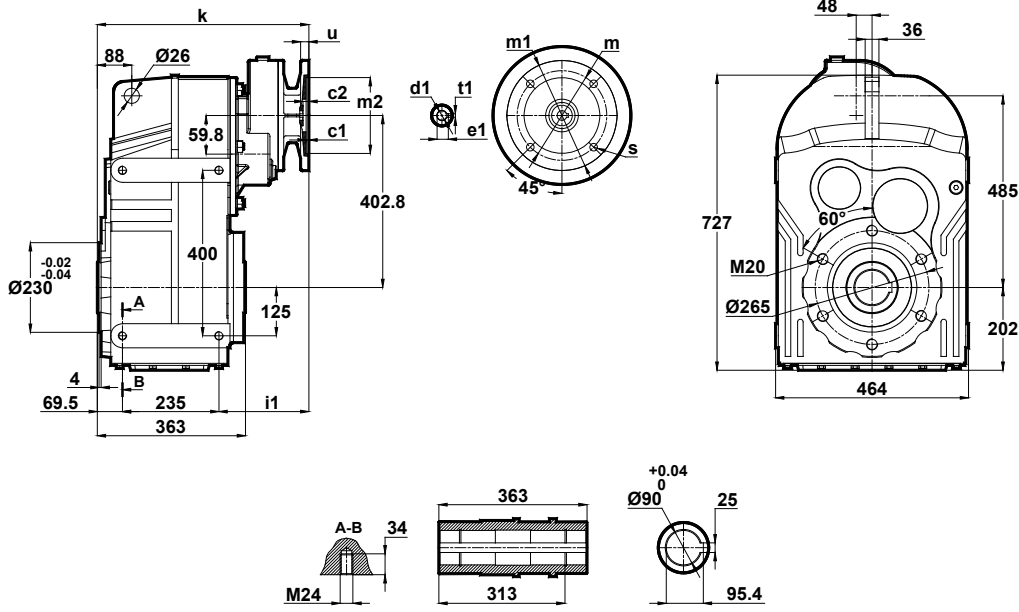
Dimension Pages

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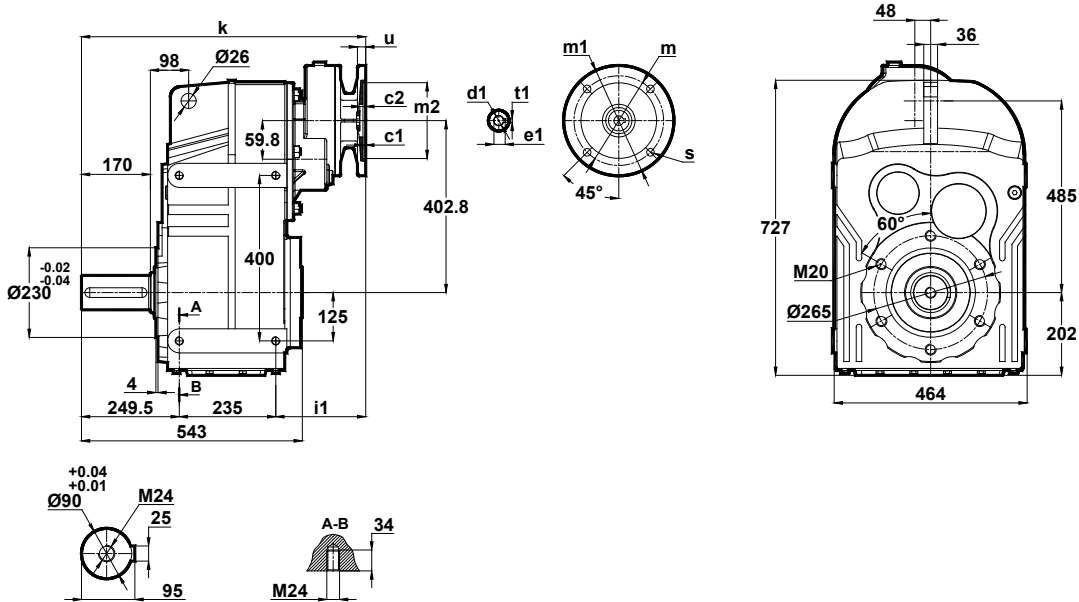
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN774.00

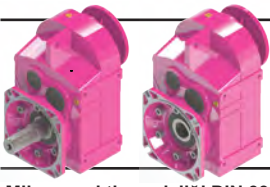


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	175	12	480	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	175	12	480	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	194	15	498	28	8	31.3

DN774.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	175	12	660	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	175	12	660	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	194	15	678	28	8	31.3

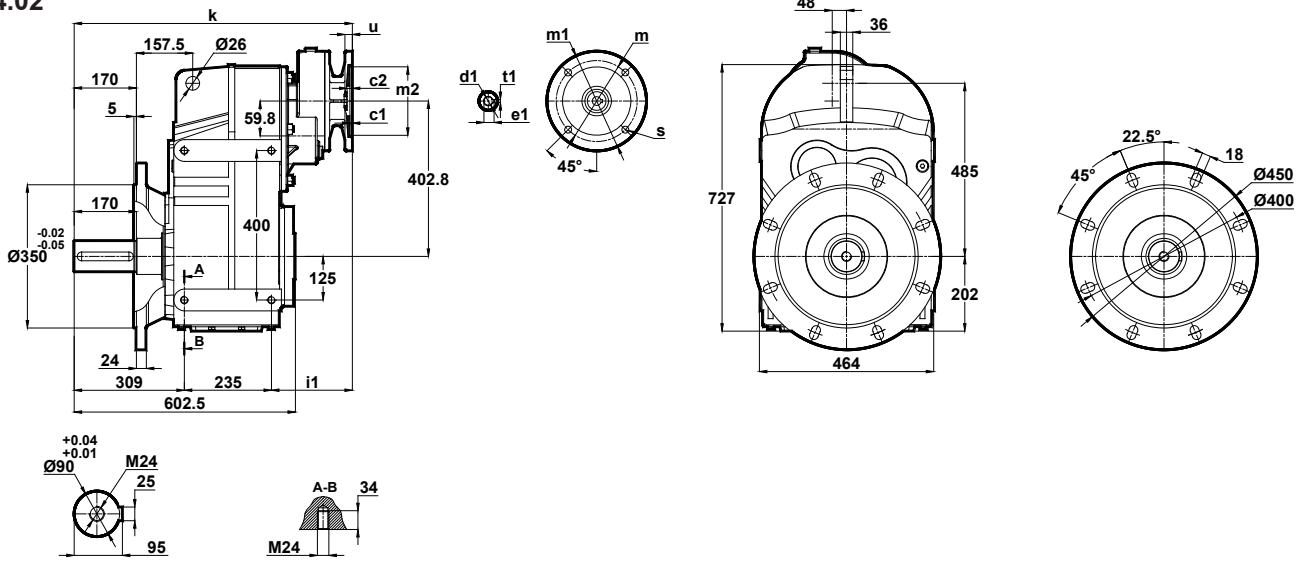


Ölçü Sayfaları Dimension Pages Abmessungenseiten



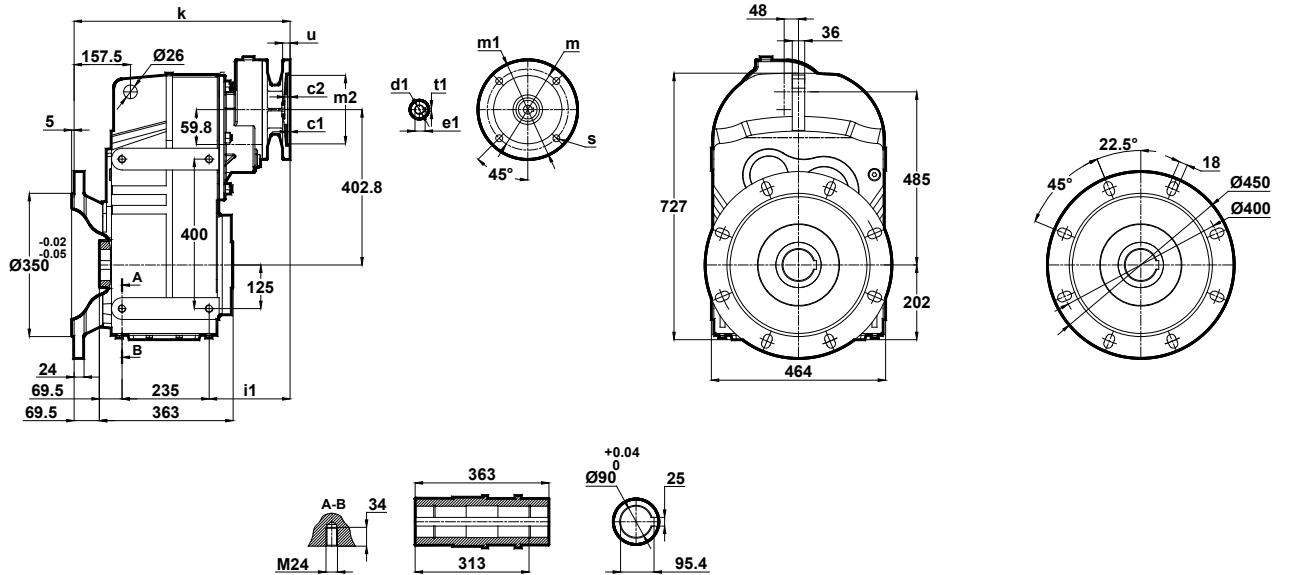
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN774.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	175	12	720	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	175	12	720	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	194	15	738	28	8	31.3

DN774.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	175	12	550	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	175	12	550	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	194	15	568	28	8	31.3



Ölçü Sayfaları

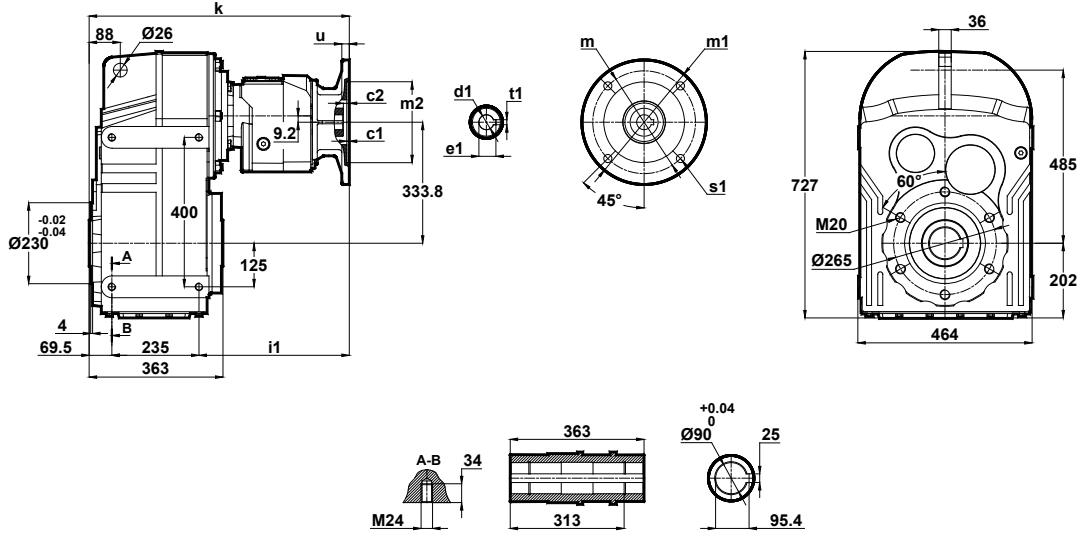
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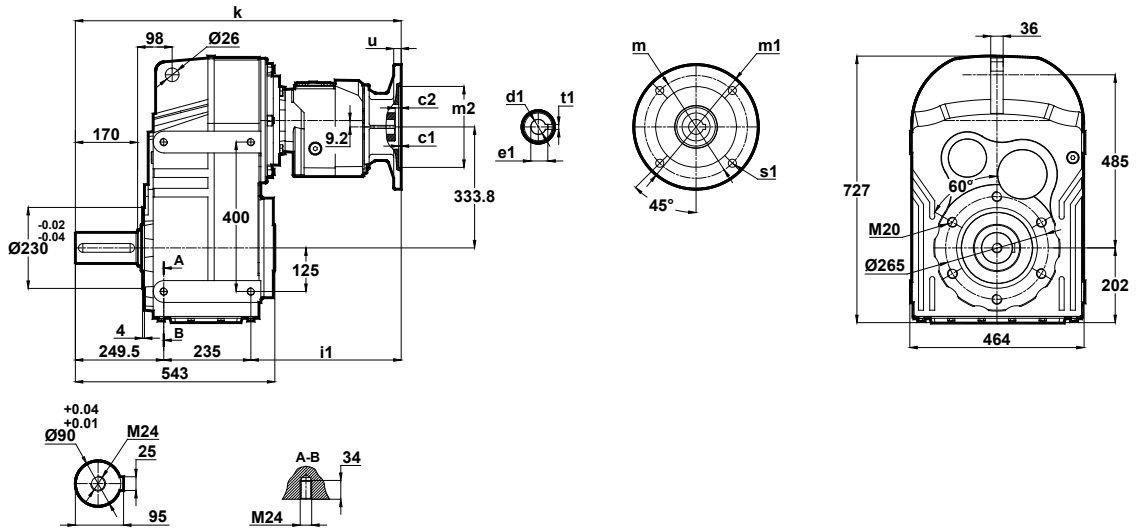
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN775.00
DN776.00

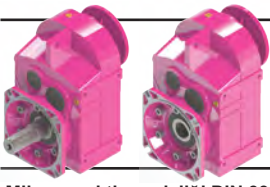


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	630	14	5	16.3
80/B5	4	9	12	165	200	130	326	12	630	19	6	21.8
80/B14	4	9	7	100	120	80	326	12	630	19	6	21.8
90/B5	4	9	12	165	200	130	326	12	630	24	8	27.3
90/B14	4	9	9	115	140	95	326	12	630	24	8	27.3

DN775.01
DN776.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	810	14	5	16.3
80/B5	4	9	12	165	200	130	326	12	810	19	6	21.8
80/B14	4	9	7	100	120	80	326	12	810	19	6	21.8
90/B5	4	9	12	165	200	130	326	12	810	24	8	27.3
90/B14	4	9	9	115	140	95	326	12	810	24	8	27.3

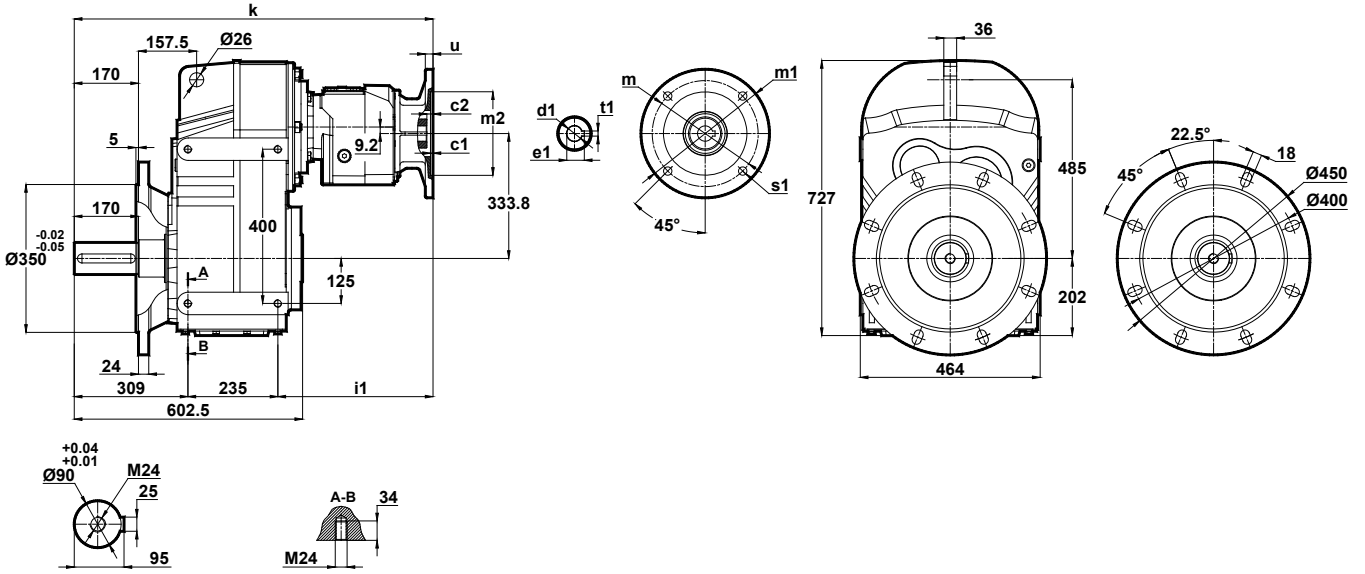


Ölçü Sayfaları Dimension Pages Abmessungenseiten



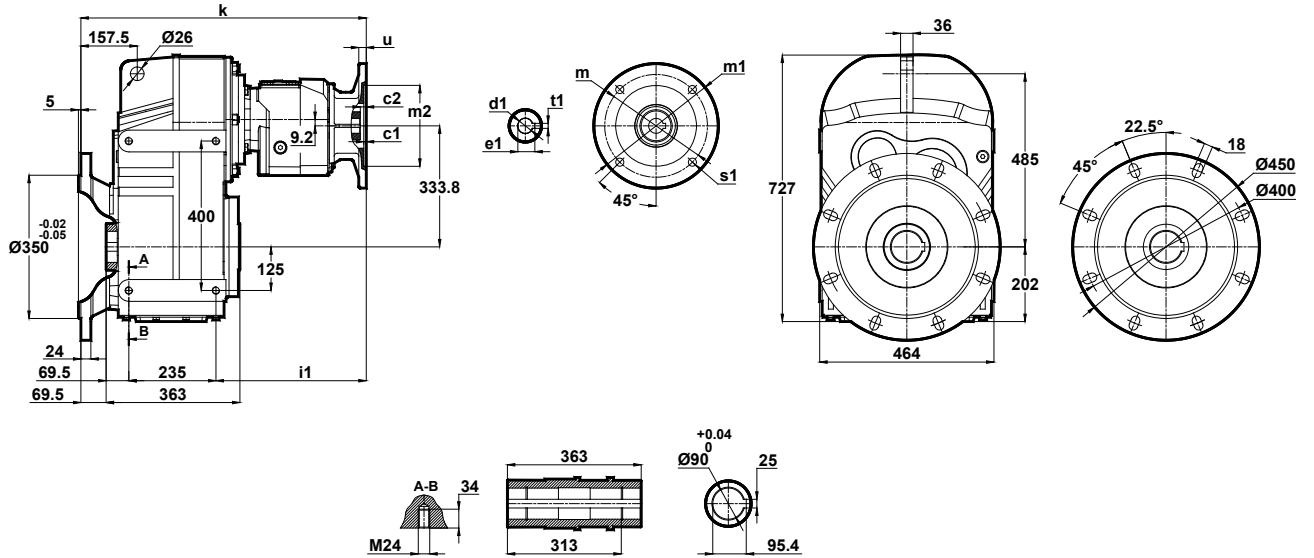
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN775.02
DN776.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	870	14	5	16.3
80/B5 80/B14	4	9	7	100	120	80	326	12	870	19	6	21.8
90/B5 90/B14	4	9	9	115	140	95	326	12	870	24	8	27.3

DN775.03
DN776.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	700	14	5	16.3
80/B5 80/B14	4	9	7	100	120	80	326	12	700	19	6	21.8
90/B5 90/B14	4	9	9	115	140	95	326	12	700	24	8	27.3

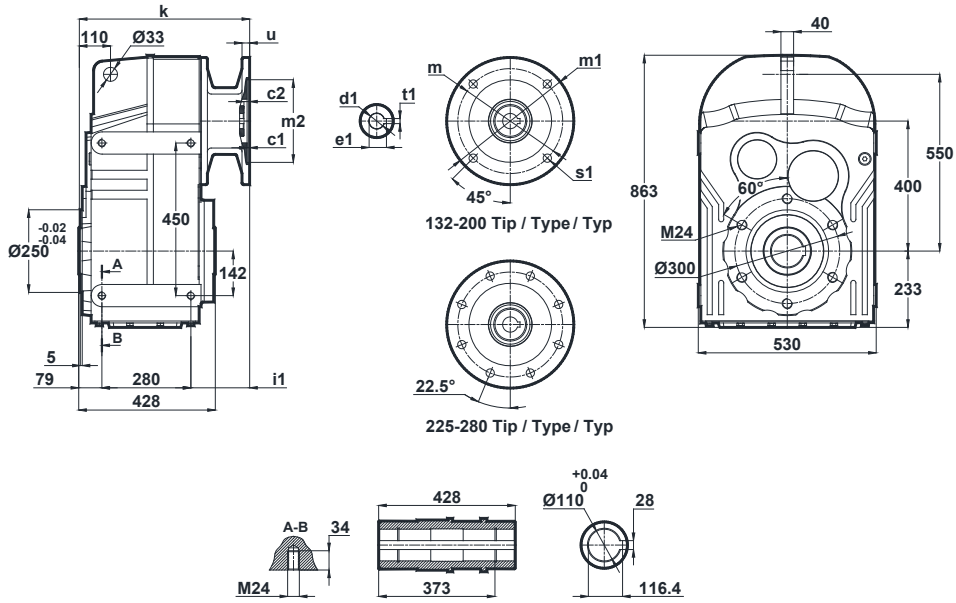


Ölçü Sayfaları Dimension Pages Abmessungsseiten



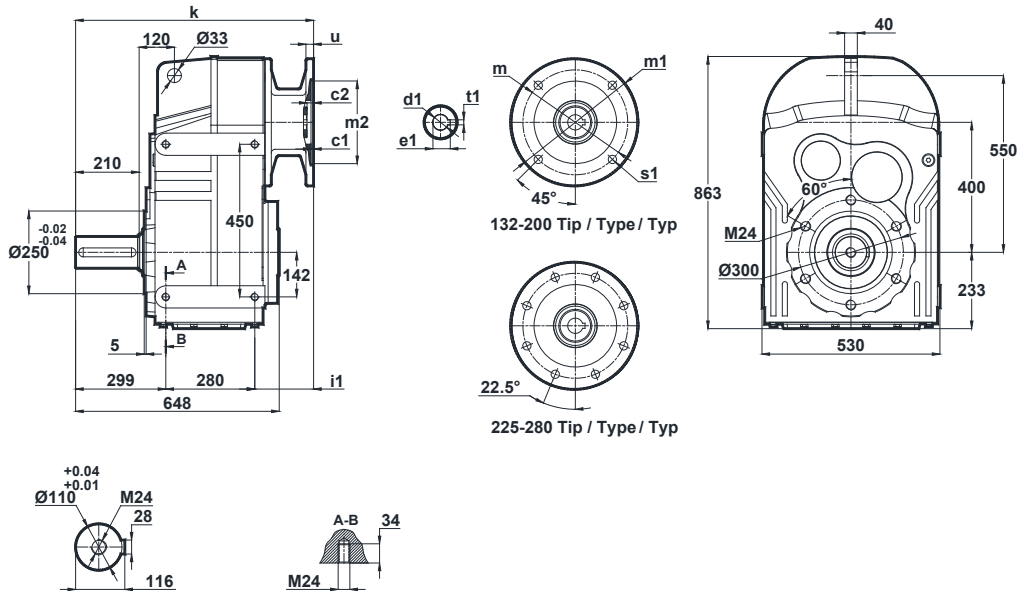
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN872.00
DN873.00

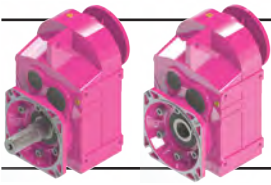


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	5	14	15	265	300	230	98	15	457	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	20	602	42	12	45.3
180/B5	6	10	19	300	350	250	243	20	602	48	14	51.8
200/B5	6	10	19	350	400	300	243	22	602	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	602	60	18	64.4
250/B5	6	10	19	500	550	450	243	24	602	65	18	69.4
280/B5	6	10	19	500	550	450	243	24	602	75	20	79.4

DN872.01
DN873.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	5	14	15	265	300	230	98	15	677	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	20	822	42	12	45.3
180/B5	6	10	19	300	350	250	243	20	822	48	14	51.8
200/B5	6	10	19	350	400	300	243	22	822	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	822	60	18	64.4
250/B5	6	10	19	500	550	450	243	24	822	65	18	69.4
280/B5	6	10	19	500	550	450	243	24	822	75	20	79.4



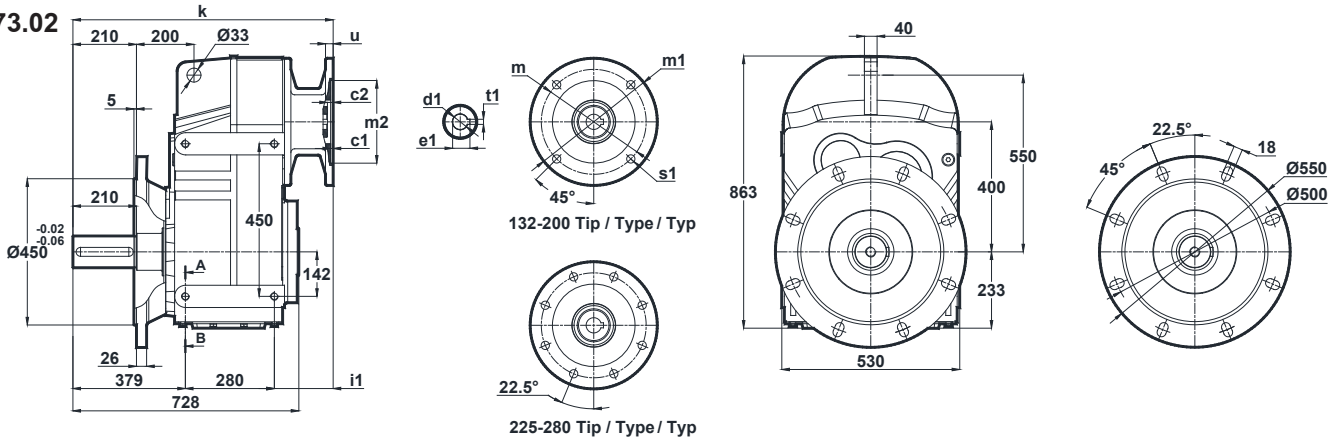
Ölçü Sayfaları Dimension Pages Abmessungenseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN872.02

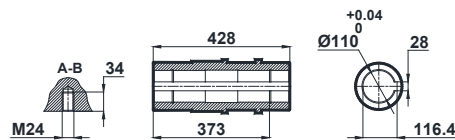
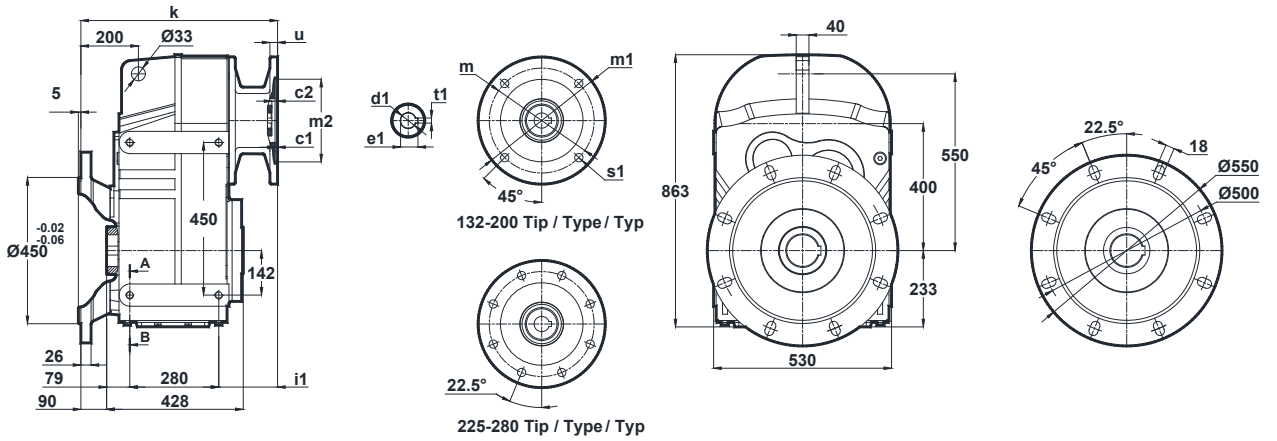
DN873.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	5	14	15	265	300	230	98	15	757	15	10	41.3
160/B5	5.5	10	19	300	350	250	243	20	902	42	12	45.3
180/B5	6	10	19	300	350	250	243	20	902	48	14	51.8
200/B5	6	10	19	350	400	300	243	22	902	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	902	60	18	64.4
250/B5	6	10	19	500	550	450	243	24	902	65	18	69.4
280/B5	6	10	19	500	550	450	243	24	902	75	20	79.4

DN872.03

DN873.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	5	14	15	265	300	230	98	15	547	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	20	692	42	12	45.3
180/B5	6	10	19	300	350	250	243	20	692	48	14	51.8
200/B5	6	10	19	350	400	300	243	22	692	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	692	60	18	64.4
250/B5	6	10	19	500	550	450	243	24	692	65	18	69.4
280/B5	6	10	19	500	550	450	243	24	692	75	20	79.4



Ölçü Sayfaları

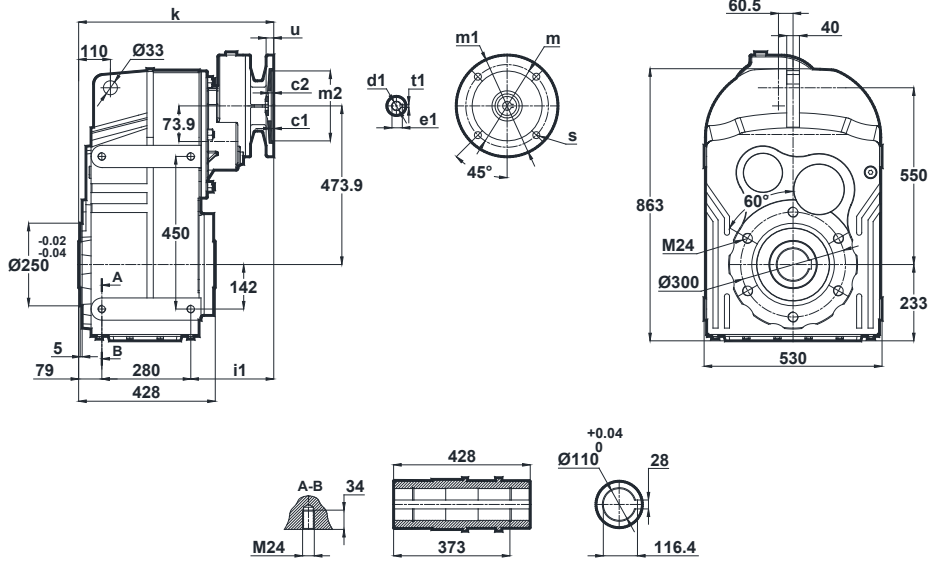
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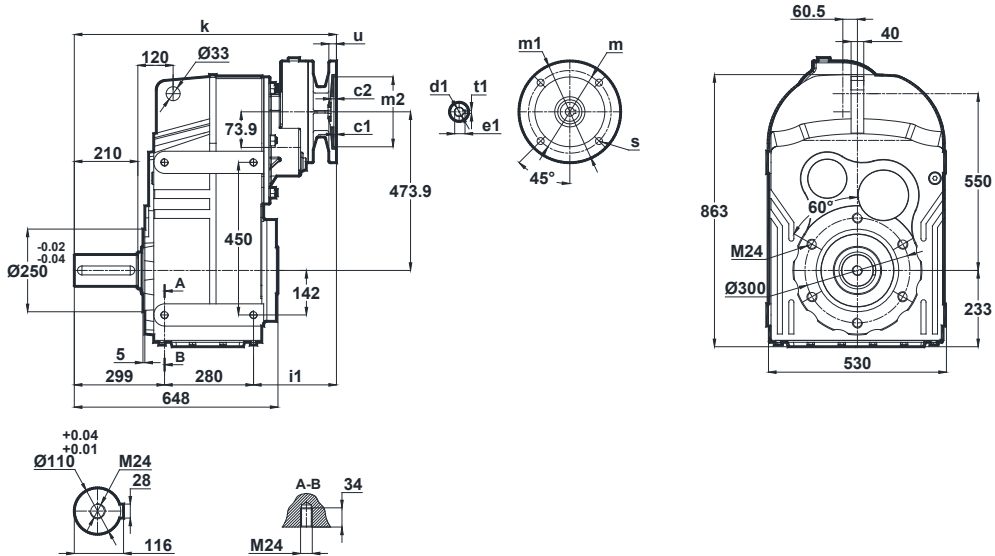
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN874.00

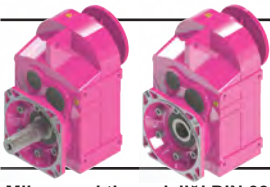


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	215	15	575	28	8	31.3
112/B5	5	20	15	215	250	180	215	15	575	28	8	31.3
132/B5	5	9	15	265	300	230	236	15	596	38	10	41.3
132/B14	4.5		11	165	200	130						

DN874.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	215	15	795	28	8	31.3
112/B5	5	20	15	215	250	180	215	15	795	28	8	31.3
132/B5	5	9	15	265	300	230	236	15	816	38	10	41.3
132/B14	4.5		11	165	200	130						

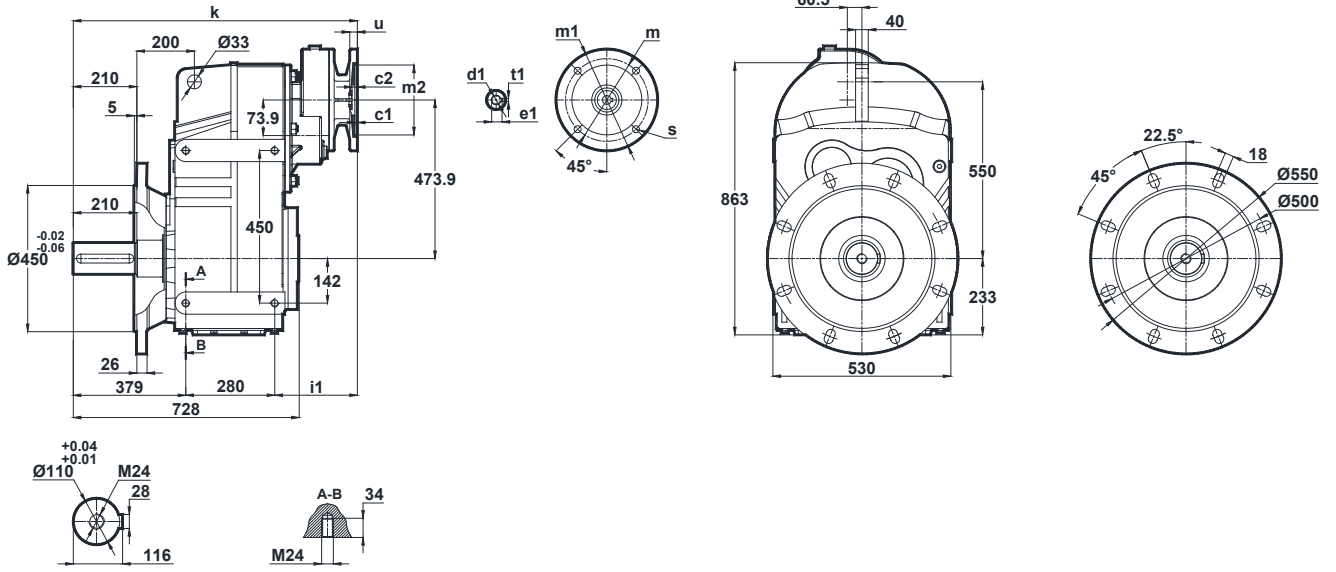


Ölçü Sayfaları Dimension Pages Abmessungenseiten



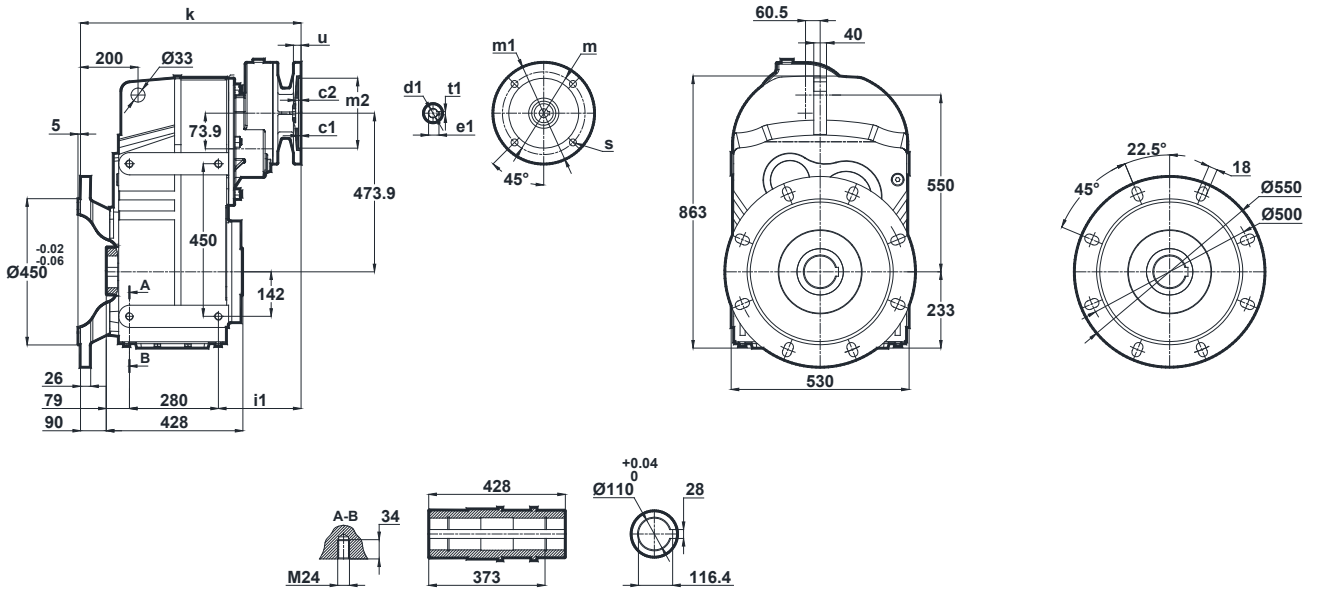
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN874.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	215	15	875	28	8	31.3
112/B5	5	20	15	215	250	180	215	15	875	28	8	31.3
132/B5	5	9	15	265	300	230	236	15	896	38	10	41.3
132/B14	4.5		11	165	200	130						

DN874.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	20	15	215	250	180	215	15	665	28	8	31.3
112/B5	5	20	15	215	250	180	215	15	665	28	8	31.3
132/B5	5	9	15	265	300	230	236	15	686	38	10	41.3
132/B14	4.5		11	165	200	130						



Ölçü Sayfaları

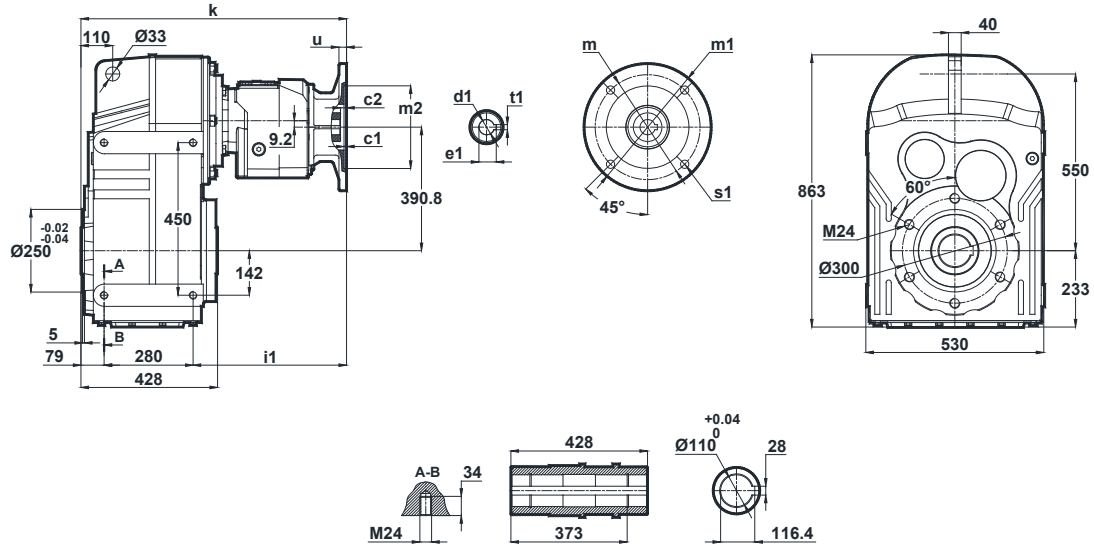
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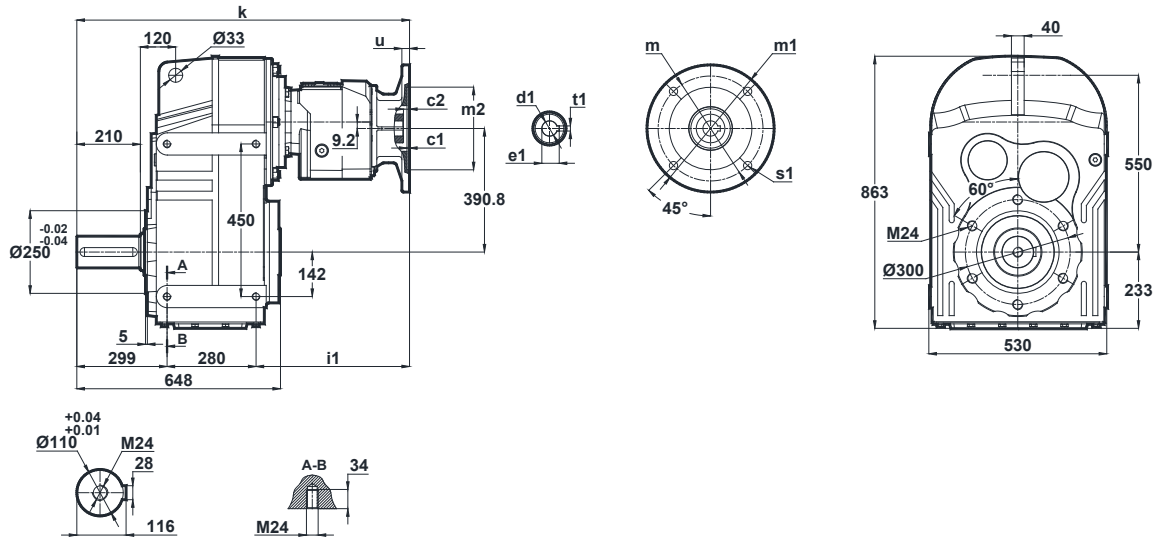
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN875.00
DN876.00

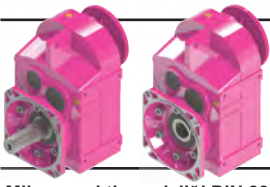


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	693	14	5	16.3
80/B5	4	9	12	165	200	130	333	12	693	19	6	21.8
80/B14	4	9	7	100	120	80	333	12	693	19	6	21.8
90/B5	4	9	12	165	200	130	333	12	693	24	8	27.3
90/B14	4	9	9	115	140	95	333	12	693	24	8	27.3
100/B5	5	9	15	215	250	180	350	15	710	28	8	31.3
100/B14	4	9	9	130	160	110	350	15	710	28	8	31.3

DN875.01
DN876.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	913	14	5	16.3
80/B5	4	9	12	165	200	130	333	12	913	19	6	21.8
80/B14	4	9	7	100	120	80	333	12	913	19	6	21.8
90/B5	4	9	12	165	200	130	333	12	913	24	8	27.3
90/B14	4	9	9	115	140	95	333	12	913	24	8	27.3
100/B5	5	9	15	215	250	180	350	15	930	28	8	31.3
100/B14	4	9	9	130	160	110	350	15	930	28	8	31.3

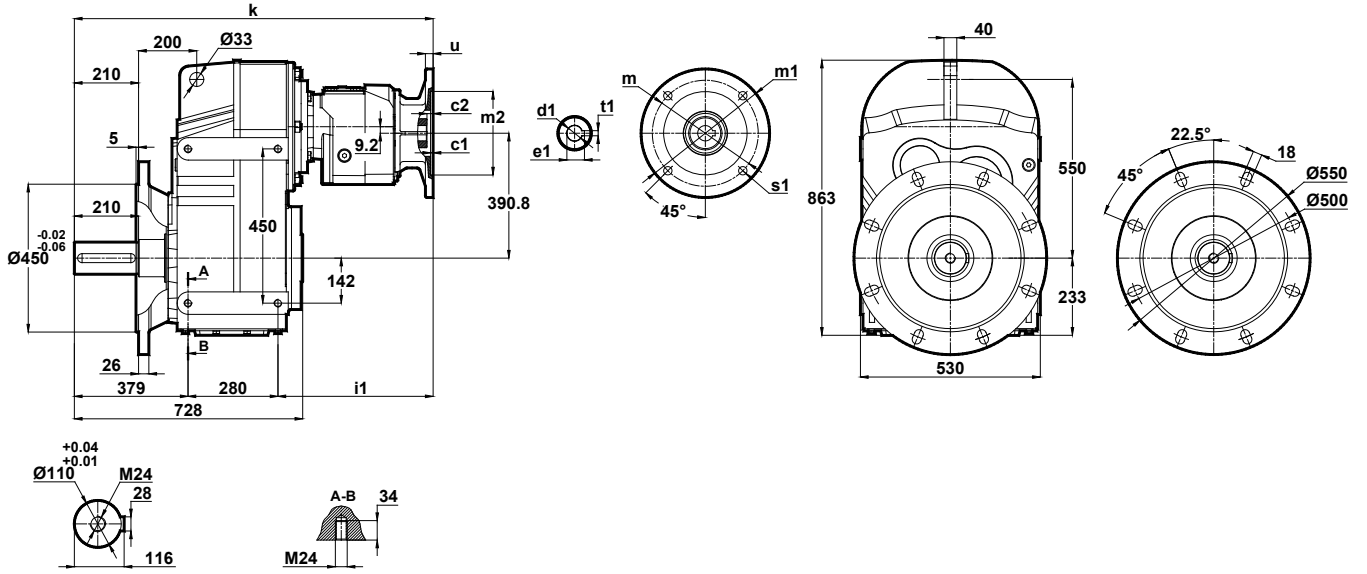


Ölçü Sayfaları Dimension Pages Abmessungenseiten



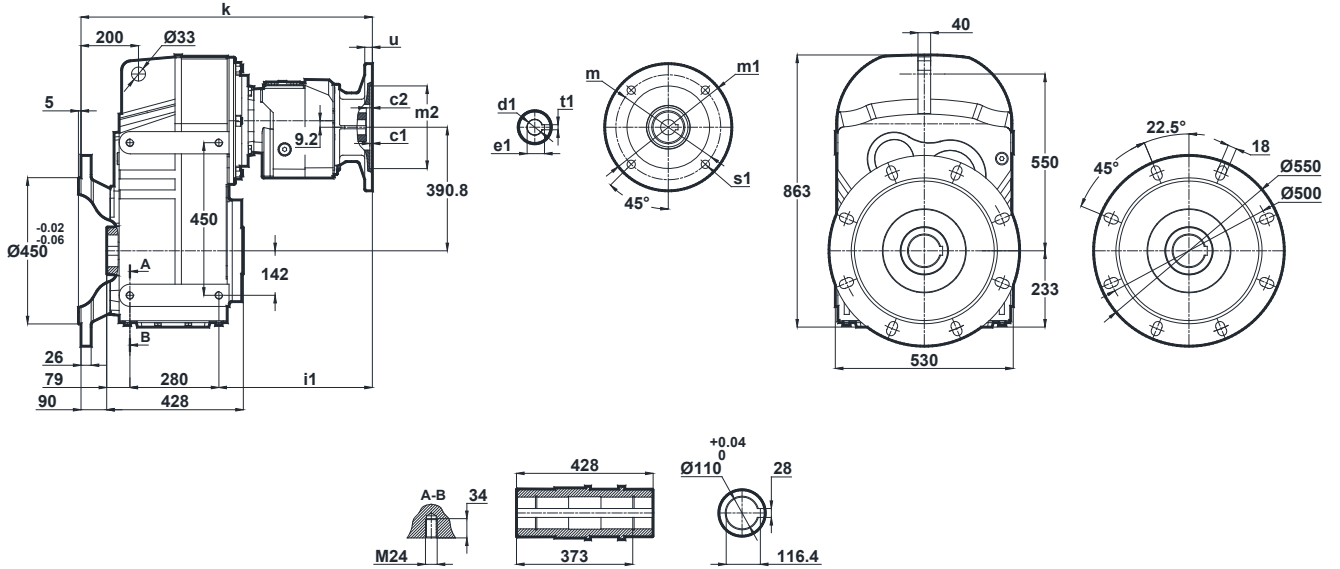
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN875.02
DN876.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	993	14	5	16.3
80/B5 80/B14	4	9	12 7	165 100	200 120	130 80	333	12	993	19	6	21.8
90/B5 90/B14	4	9	12 9	165 115	200 140	130 95	333	12	993	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	350	15	1010	28	8	31.3

DN875.03
DN876.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	783	14	5	16.3
80/B5 80/B14	4	9	12 7	165 100	200 120	130 80	333	12	783	19	6	21.8
90/B5 90/B14	4	9	12 9	165 115	200 140	130 95	333	12	783	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	350	15	800	28	8	31.3



Ölçü Sayfaları

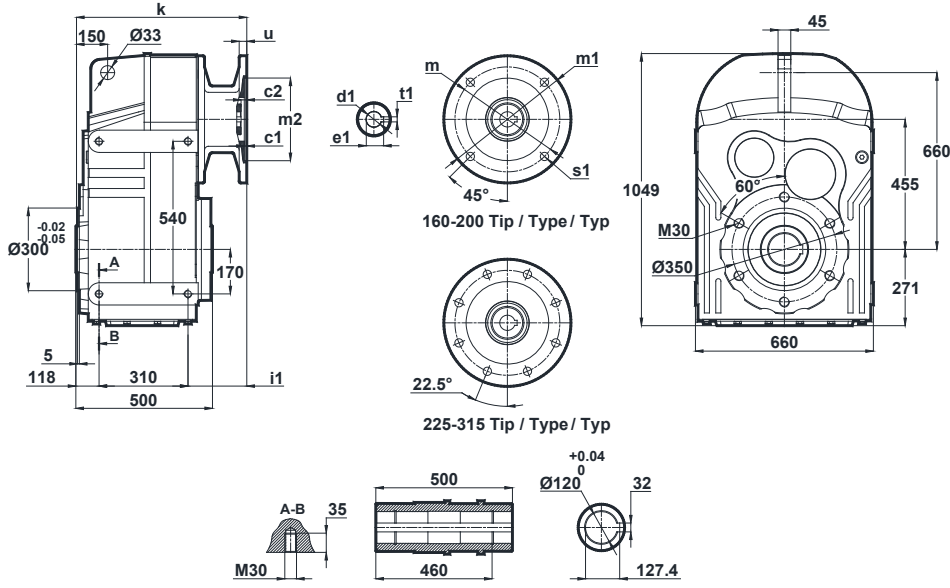
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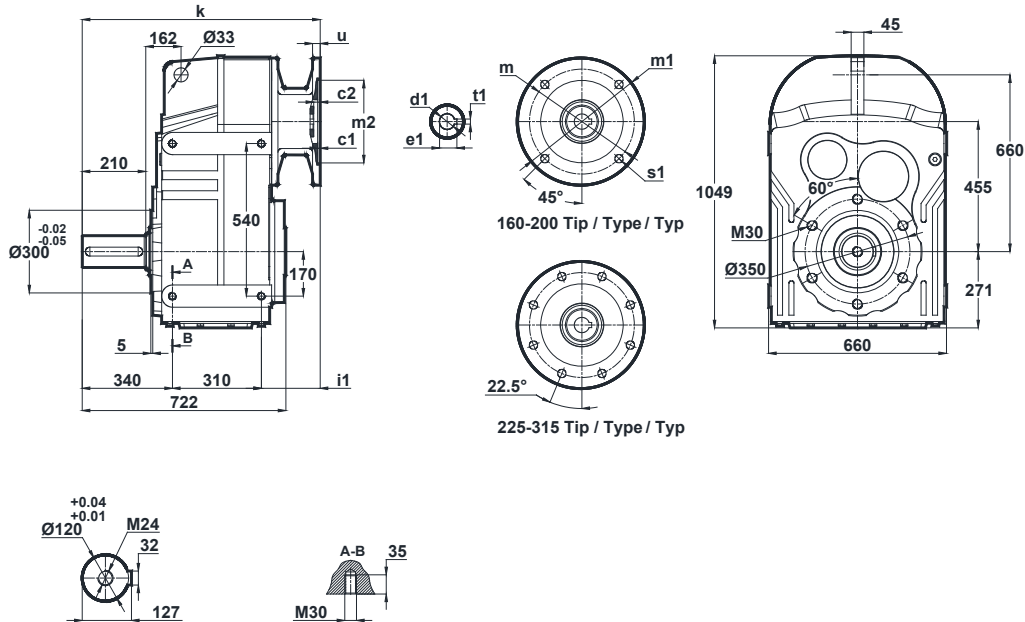
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN972.00
DN973.00

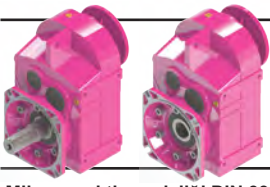


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
160/B5	5.5	10	19	300	350	250	163	20	591	42	12	45.3
180/B5	5.5	10	19	300	350	250	163	20	591	48	14	51.8
200/B5	5.5	10	19	350	400	300	187	22	615	55	16	59.3
225/B5	5.5	10	19	400	450	350	229	24	657	60	18	64.4
250/B5	5.5	10	19	500	550	450	281	24	709	65	18	69.4
280/B5	5.5	10	19	500	550	450	281	24	709	75	20	79.4
315/B5	6.5	15	24	660	600	550	331	24	759	85	22	90.4

DN972.01
DN973.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
160/B5	5.5	10	19	300	350	250	163	20	813	42	12	45.3
180/B5	5.5	10	19	300	350	250	163	20	813	48	14	51.8
200/B5	5.5	10	19	350	400	300	187	22	837	55	16	59.3
225/B5	5.5	10	19	400	450	350	229	24	879	60	18	64.4
250/B5	5.5	10	19	500	550	450	281	24	931	65	18	69.4
280/B5	5.5	10	19	500	550	450	281	24	931	75	20	79.4
315/B5	6.5	15	24	660	600	550	331	24	981	85	22	90.4

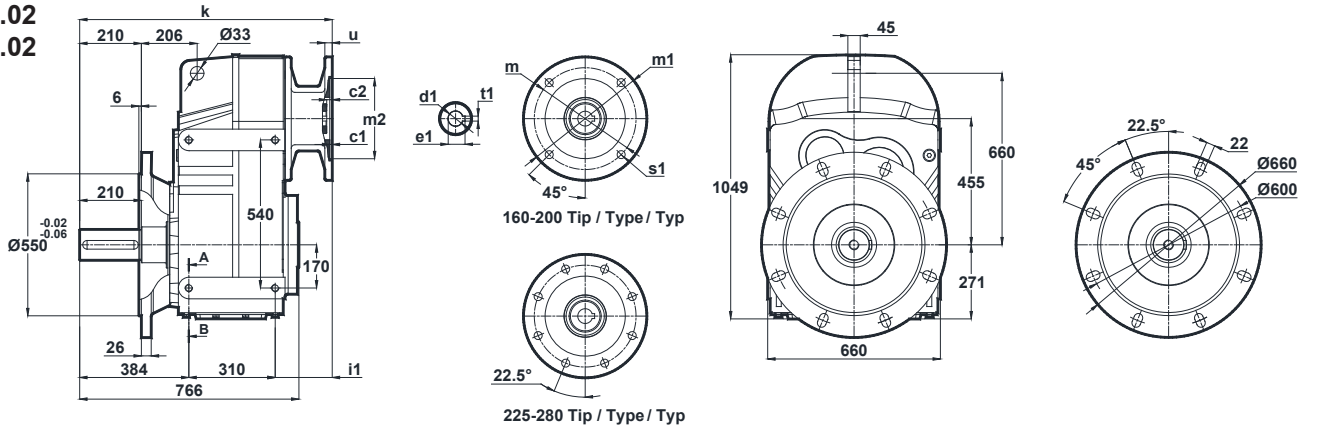


Ölçü Sayfaları Dimension Pages Abmessungsseiten



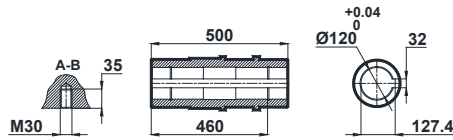
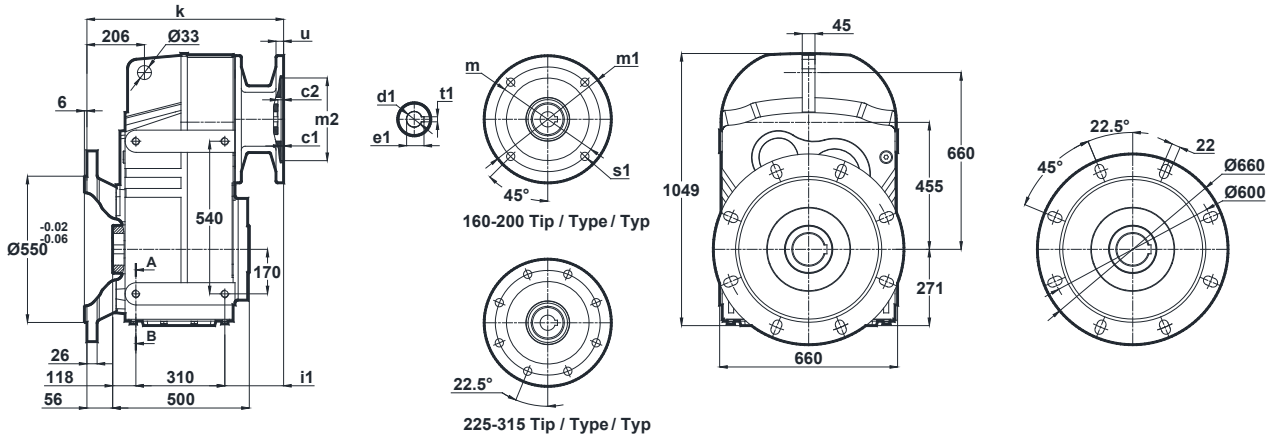
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN972.02
DN973.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
160/B5	5.5	10	19	300	350	250	163	20	857	42	12	45.3
180/B5	5.5	10	19	300	350	250	163	20	857	48	14	51.8
200/B5	5.5	10	19	350	400	300	187	22	881	55	16	59.3
225/B5	5.5	10	19	400	450	350	229	24	923	60	18	64.4
250/B5	5.5	10	19	500	550	450	281	24	975	65	18	69.4
280/B5	5.5	10	19	500	550	450	281	24	975	75	20	79.4
315/B5	6.5	15	24	660	600	550	331	24	1025	85	22	90.4

DN972.03
DN973.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
160/B5	5.5	10	19	300	350	250	163	20	647	42	12	45.3
180/B5	5.5	10	19	300	350	250	163	20	647	48	14	51.8
200/B5	5.5	10	19	350	400	300	187	22	671	55	16	59.3
225/B5	5.5	10	19	400	450	350	229	24	713	60	18	64.4
250/B5	5.5	10	19	500	550	450	281	24	765	65	18	69.4
280/B5	5.5	10	19	500	550	450	281	24	765	75	20	79.4
315/B5	6.5	15	24	660	600	550	331	24	815	85	22	90.4



Ölçü Sayfaları

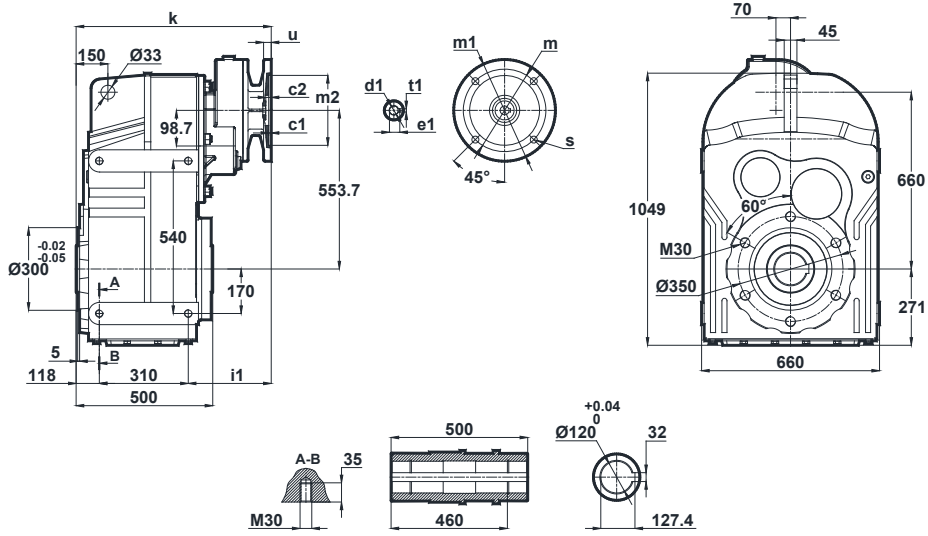
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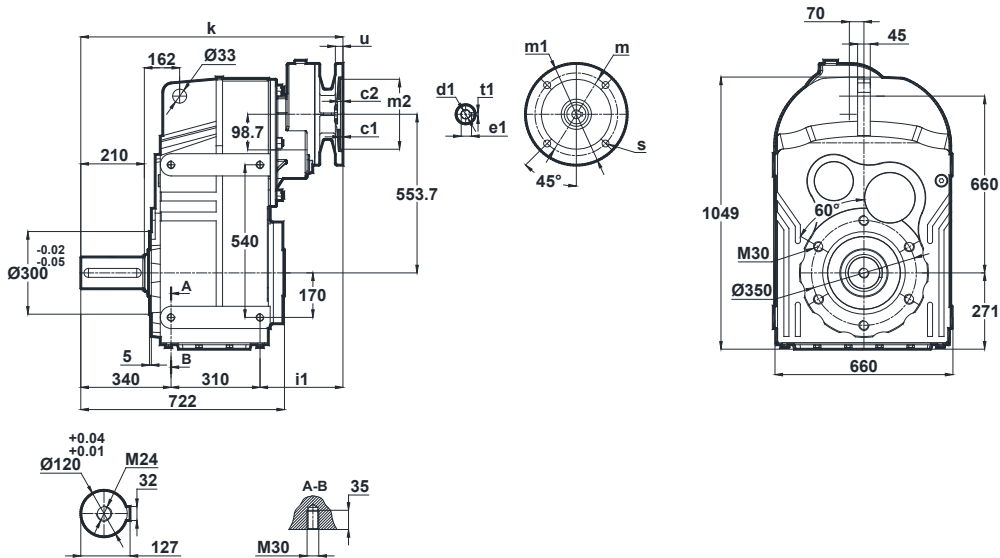
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN974.00

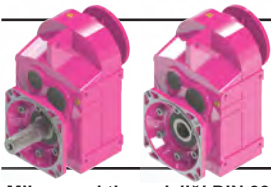


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	252	15	571	28	8	31.3
112/B5	5	15	15	215	250	180	252	15	680	28	8	31.3
132/B5 132/B14	4.5	9	15	265 165	300 200	230 130	267	15	695	38	10	41.3

DN974.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	252	15	791	28	8	31.3
112/B5	5	15	15	215	250	180	252	15	902	28	8	31.3
132/B5 132/B14	4.5	9	15	265 165	300 200	230 130	267	15	917	38	10	41.3

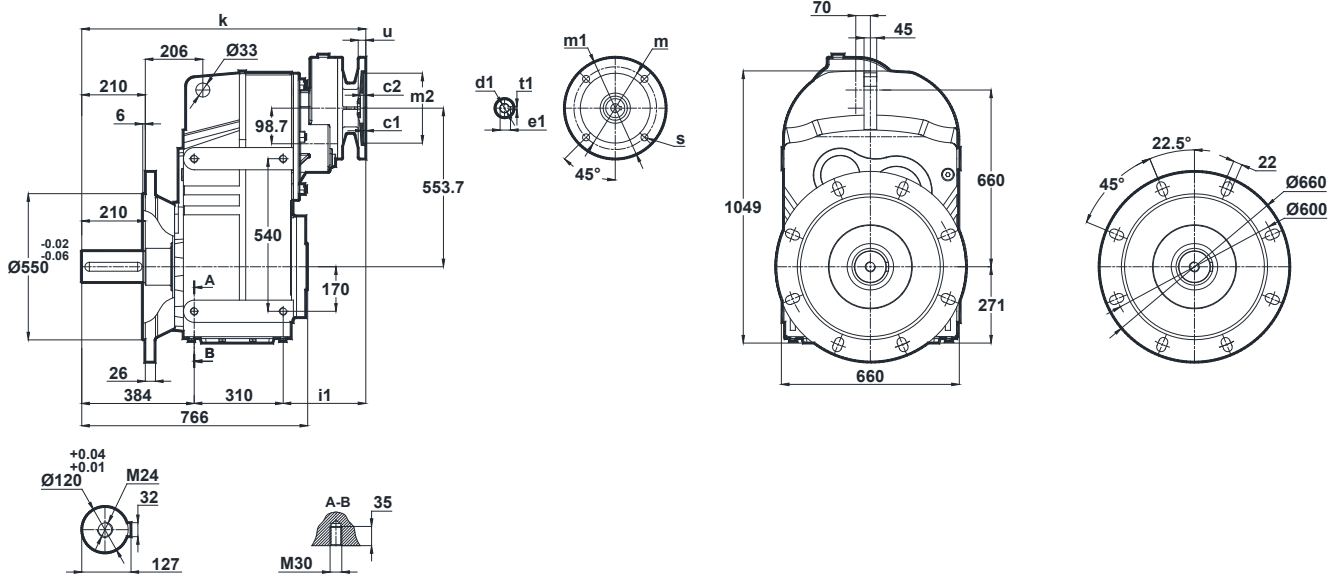


Ölçü Sayfaları Dimension Pages Abmessungenseiten



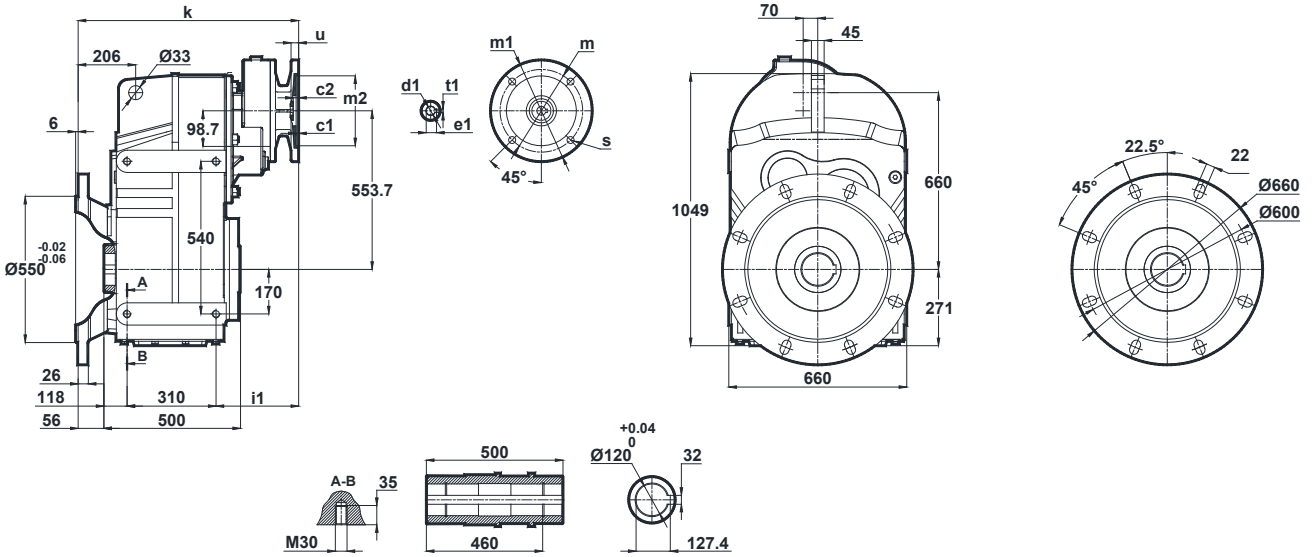
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN974.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	252	15	871	28	8	31.3
112/B5	5	15	15	215	250	180	252	15	946	28	8	31.3
132/B5 132/B14	4.5	9	15	265 165	300 200	230 130	267	15	961	38	10	41.3

DN974.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100/B5	5	15	15	215	250	180	252	15	661	28	8	31.3
112/B5	5	15	15	215	250	180	252	15	736	28	8	31.3
132/B5 132/B14	4.5	9	15	265 165	300 200	230 130	267	15	751	38	10	41.3



Ölçü Sayfaları

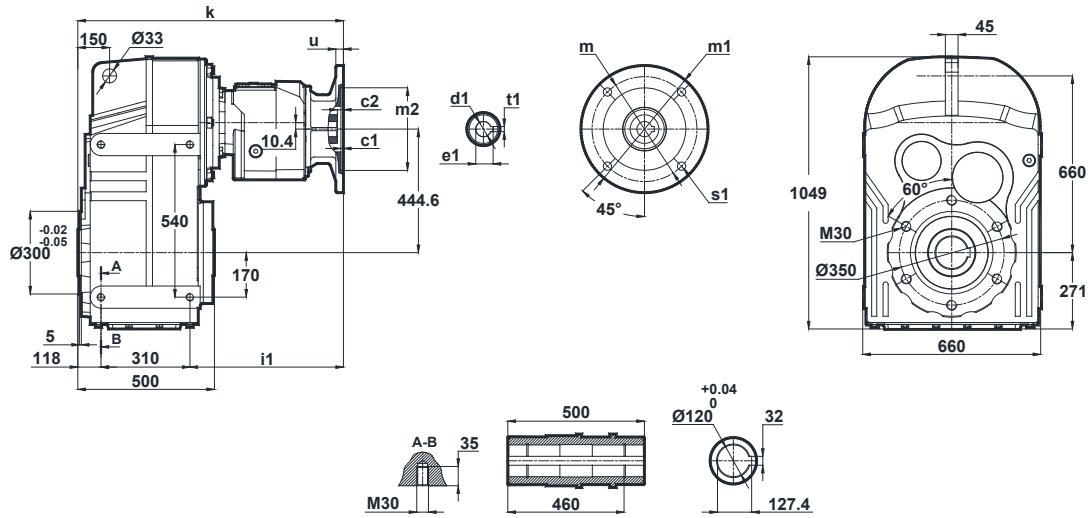
Dimension Pages

Abmessungsseiten



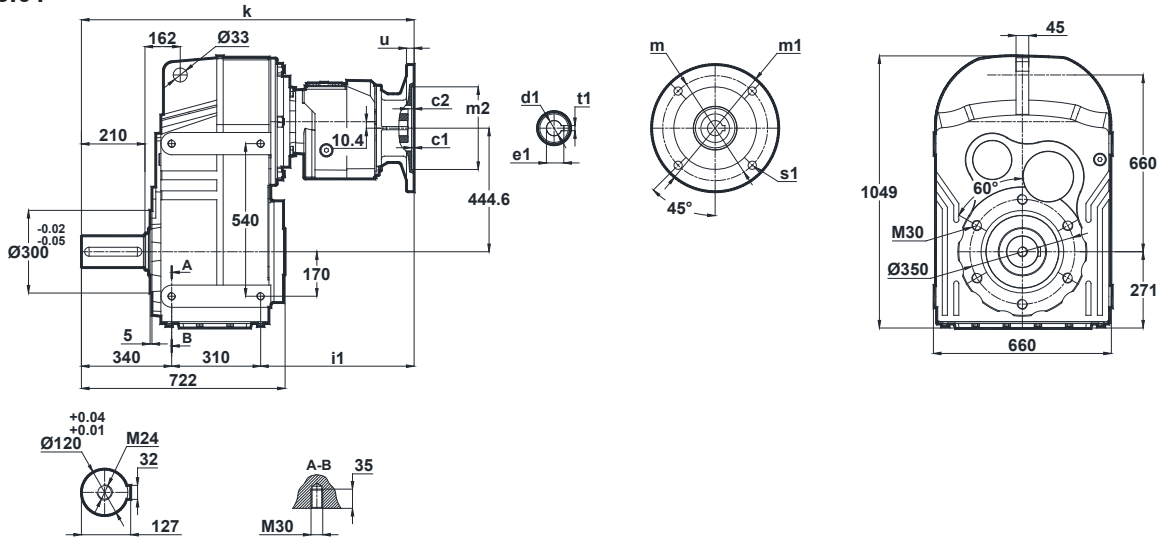
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN975.00
DN976.00

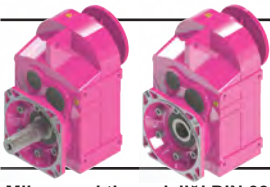


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	162	200	130	388	12	816	19	6	21.8
90/B5	4	5	12	165	200	130	388	12	816	24	8	27.3
90/B14	4	5	9	115	140	95	388	12	816	24	8	27.3
100/B5	5	9	15	215	250	180	406	15	834	28	8	31.3
100/B14	4	9	9	130	160	110	406	15	834	28	8	31.3

DN975.01
DN976.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	162	200	130	388	12	1038	19	6	21.8
90/B5	4	5	12	165	200	130	388	12	1038	24	8	27.3
90/B14	4	5	9	115	140	95	388	12	1038	24	8	27.3
100/B5	5	9	15	215	250	180	406	15	1056	28	8	31.3
100/B14	4	9	9	130	160	110	406	15	1056	28	8	31.3

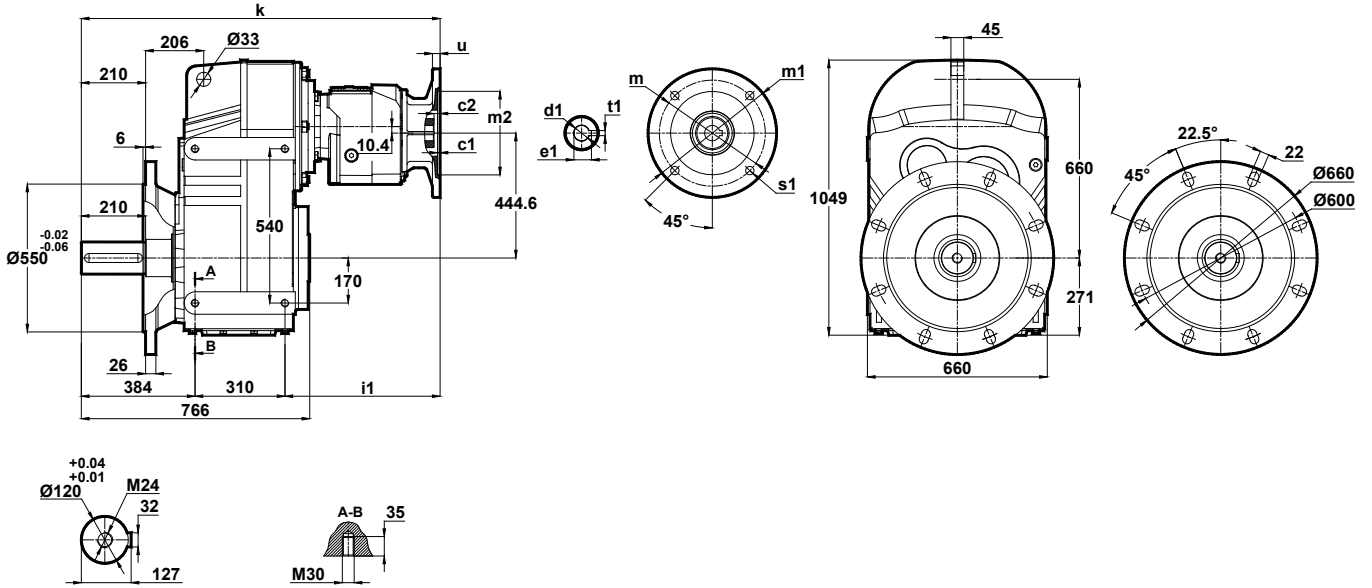


Ölçü Sayfaları Dimension Pages Abmessungenseiten



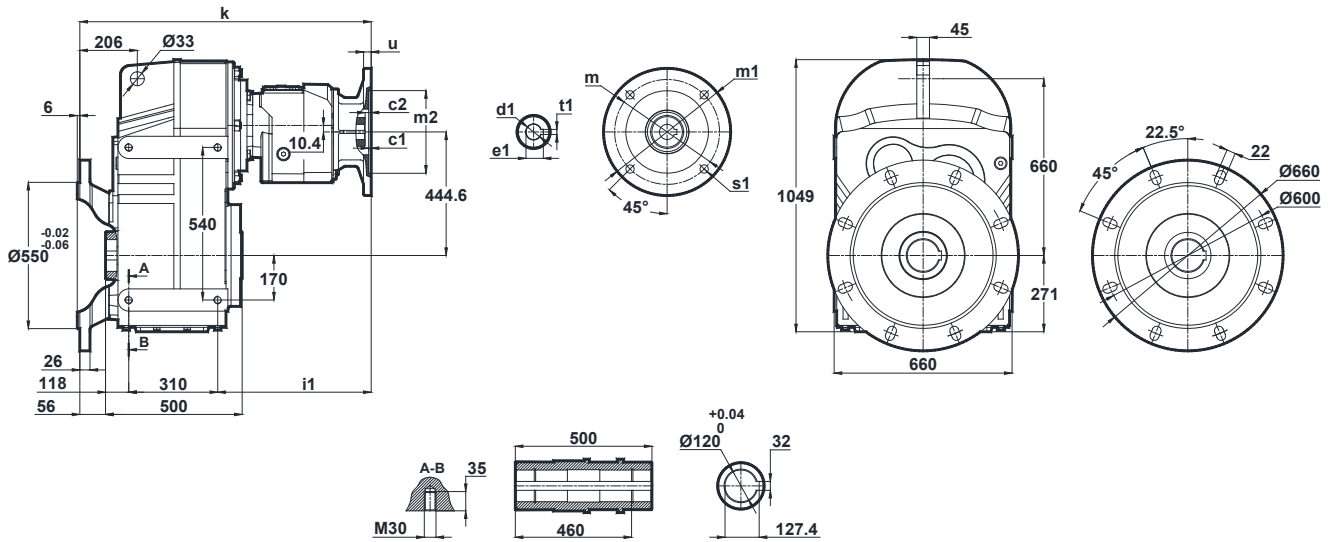
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN975.02
DN976.02

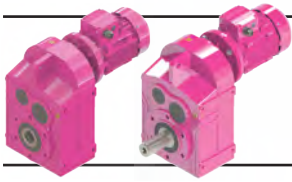


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	162	200	130	388	12	1082	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	388	12	1082	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	406	15	1100	28	8	31.3

DN975.03
DN976.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	162	200	130	388	12	872	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	388	12	872	24	8	27.3
100/B5 100/B14	5 4	9	15 9	215 130	250 160	180 110	406	15	890	28	8	31.3



Ölçü Sayfaları

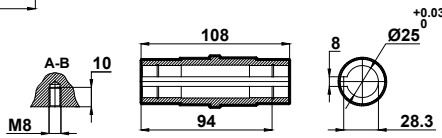
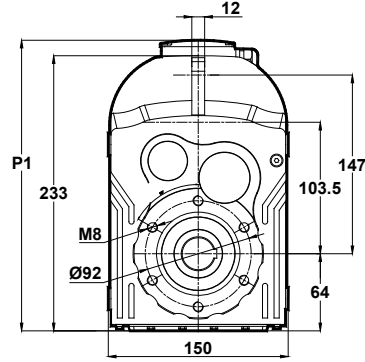
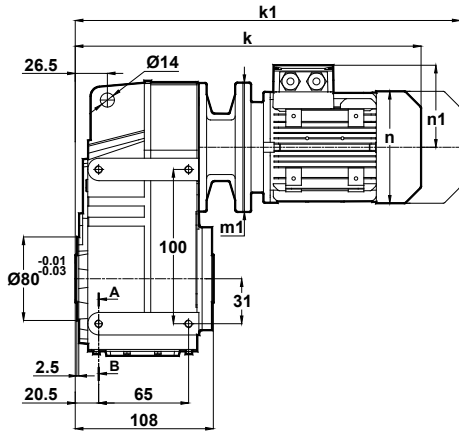
Dimension Pages

Abmessungsseiten



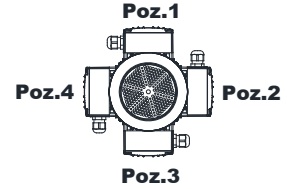
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DV072.00
DV073.00



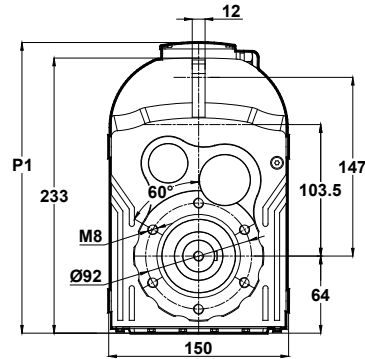
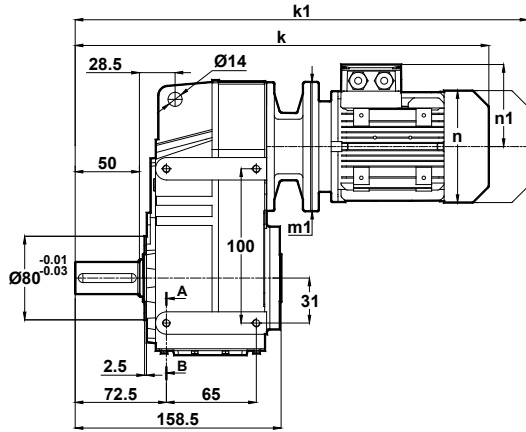
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	338	357.5	395.5	436.5	436.5	483
k1	399	448.5	488.5	540	540	591.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	264.5	279.5	288.5	299.5	299.5	314.5



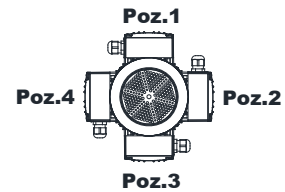
63-71-80-90-100
Tip / Type / Typ

DV072.01
DV073.01



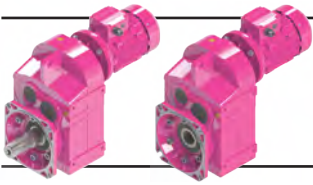
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	390	409.5	447.5	488.5	488.5	535
k1	451	500.5	540.5	592	592	643.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	264.5	279.5	288.5	299.5	299.5	314.5



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

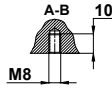
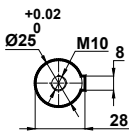
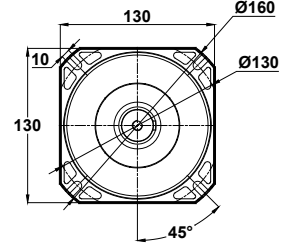
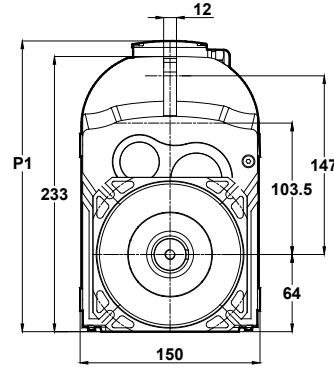
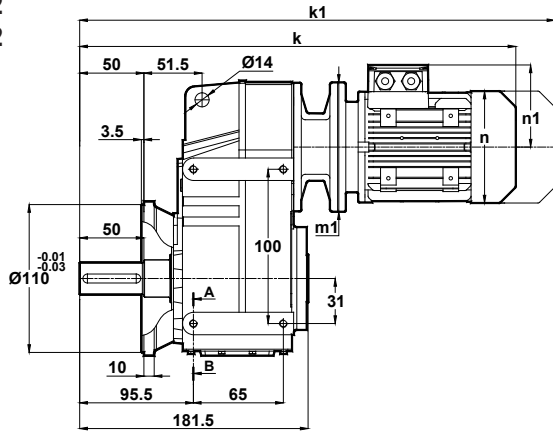
Dimension Pages

Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

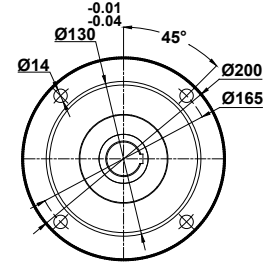
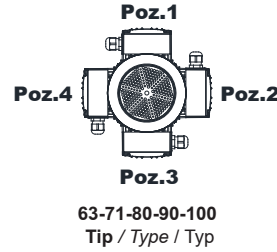
DV072.02
DV073.02



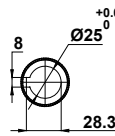
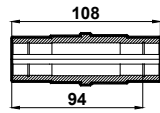
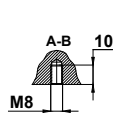
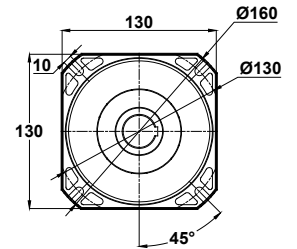
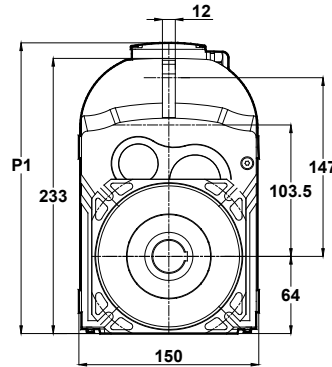
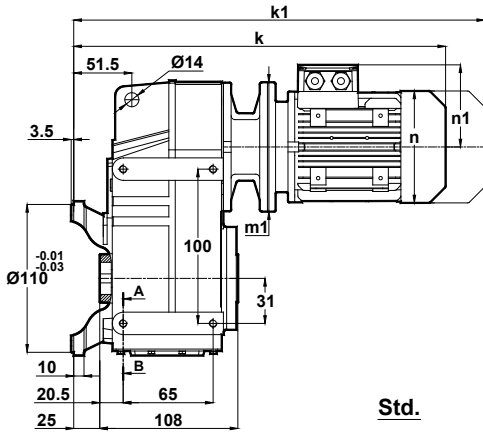
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	413	432.5	470.5	511.5	511.5	558
k1	474	523.5	563.5	615	615	666.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	264.5	279.5	288.5	299.5	299.5	314.5



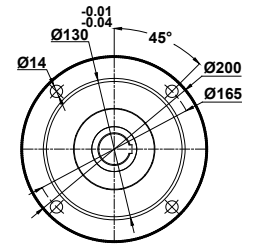
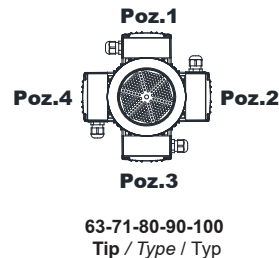
DV072.03
DV073.03



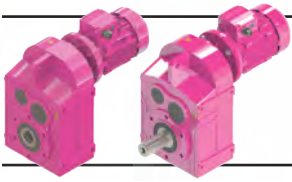
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	363	382.5	420.5	461.5	461.5	508
k1	424	473.5	513.5	565	565	616.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	264.5	279.5	288.5	299.5	299.5	314.5



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

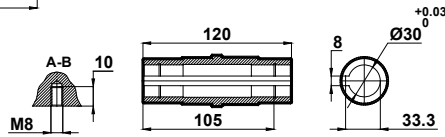
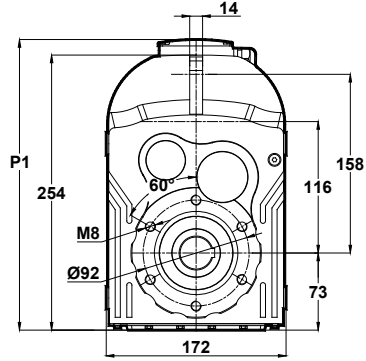
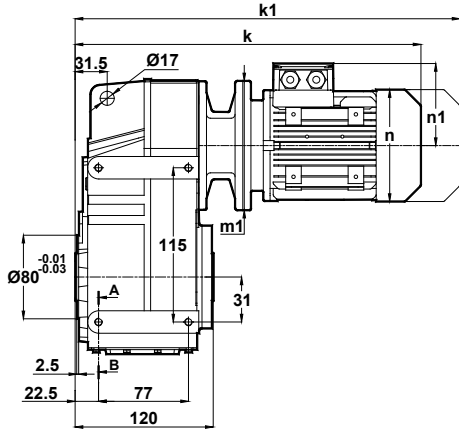
Dimension Pages

Abmessungsseiten



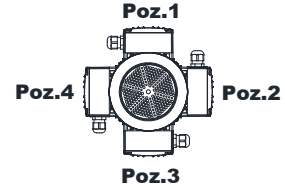
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV172.00
DV173.00



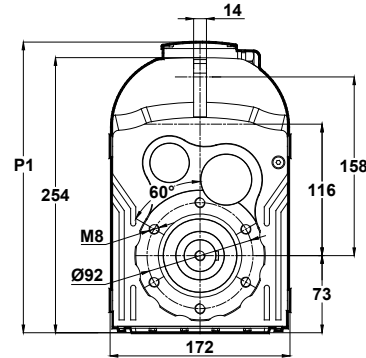
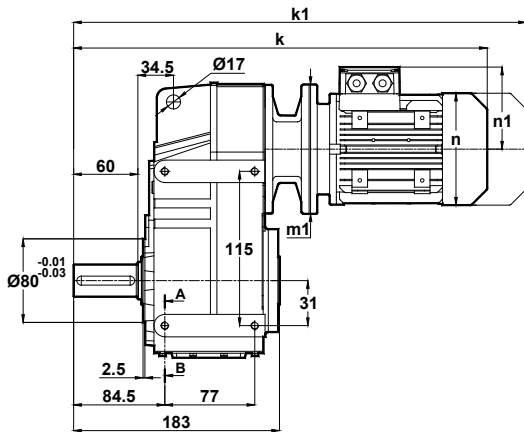
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	347	367	405	446	446	492
k1	408	458	498	550.5	550.5	611.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	286	301	310	321	321	336



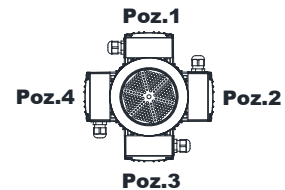
63-71-80-90-100
Tip / Type / Typ

DV172.01
DV173.01



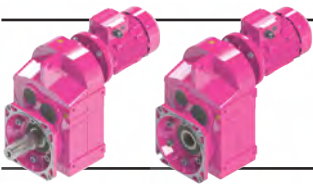
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	410	430	468	509	509	555
k1	471	521	561	613.5	613.5	674.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	286	301	310	321	321	336



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

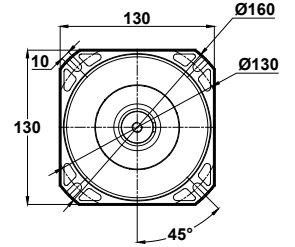
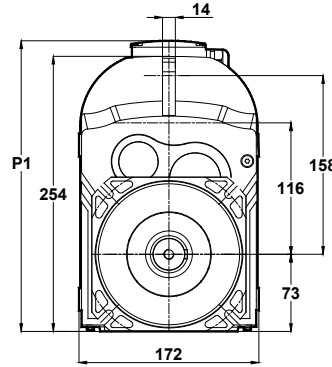
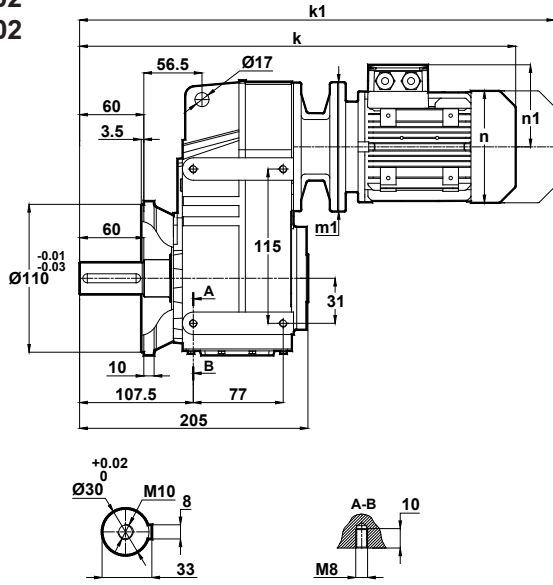
Dimension Pages

Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

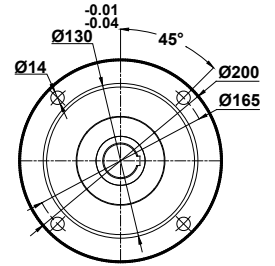
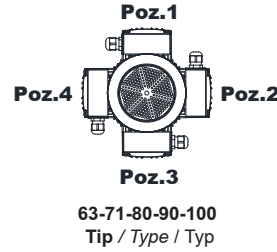
DV172.02
DV173.02



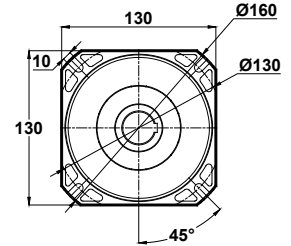
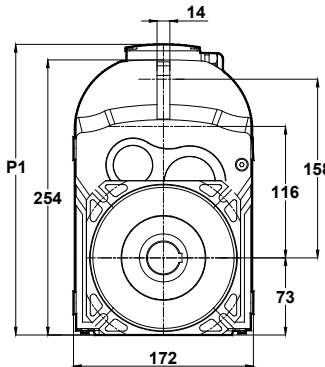
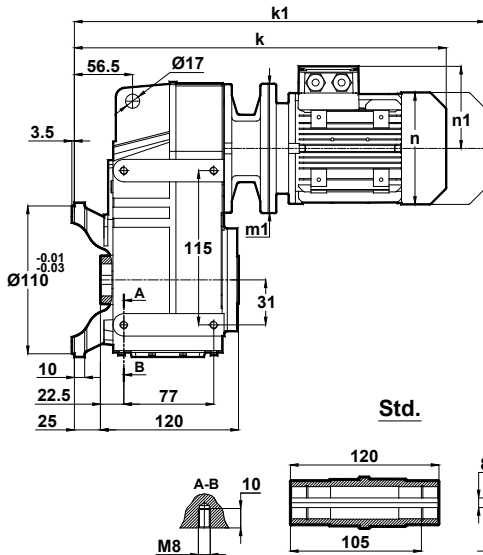
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	432	452	490	531	531	577
k1	493	543	583	635.5	635.5	696.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	286	301	310	321	321	336



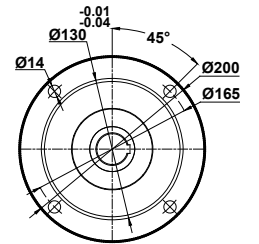
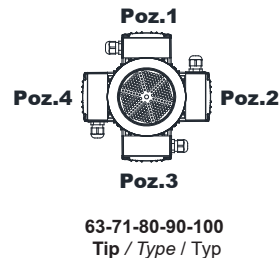
DV172.03
DV173.03



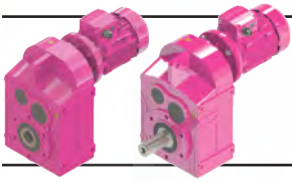
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	372	392	430	471	471	517
k1	433	483	523	575.5	575.5	636.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	286	301	310	321	321	336



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

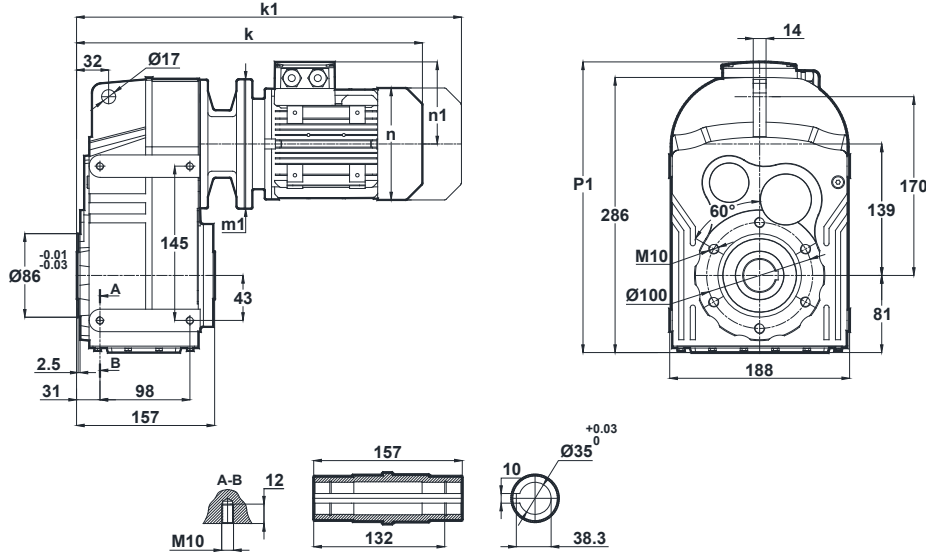
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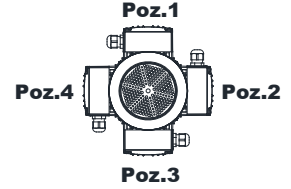
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV272.00
DV273.00



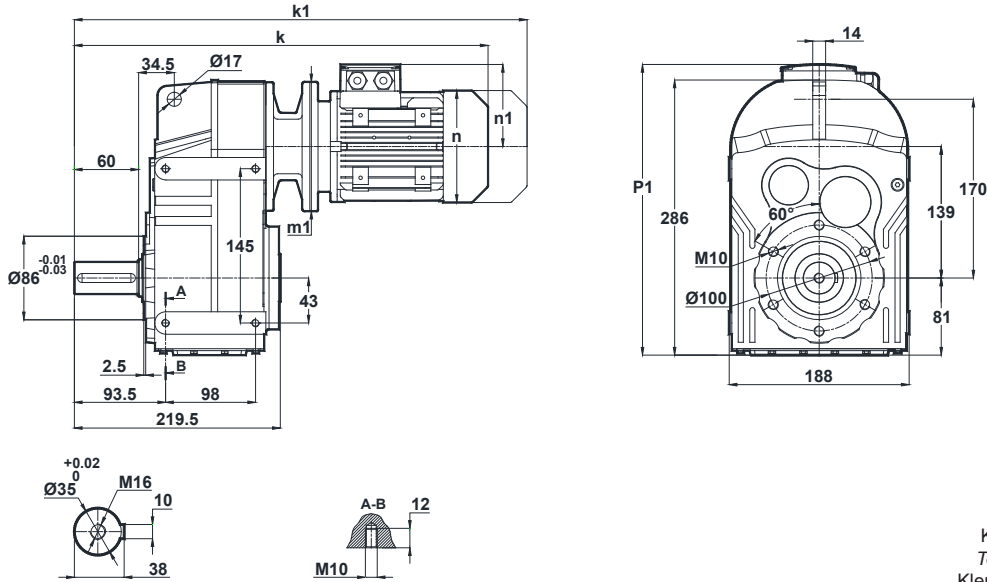
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	377	397	435	476	476	522
k1	438	488	528	580.5	580.5	641.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	317	332	341	352	352	367



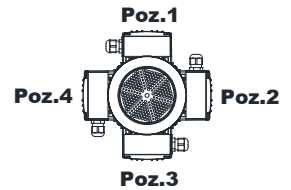
63-71-80-90-100
Tip / Type / Typ

DV272.01
DV273.01



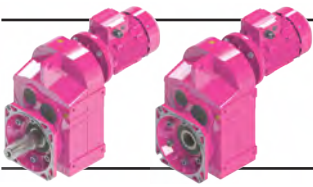
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	439	459	497	538	538	584
k1	500	550	590	642.5	642.5	703.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	317	332	341	352	352	367



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

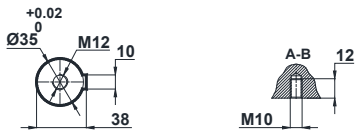
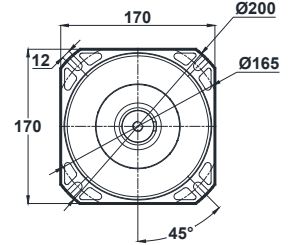
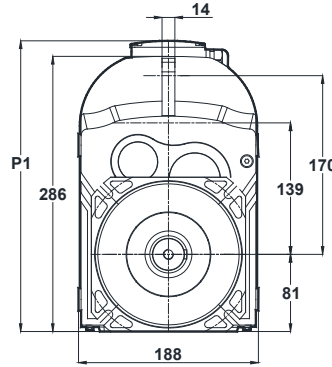
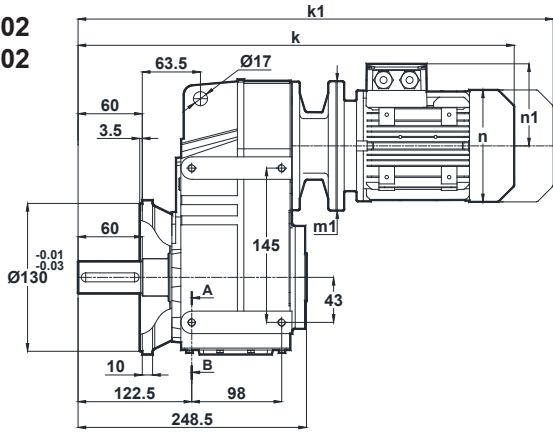
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

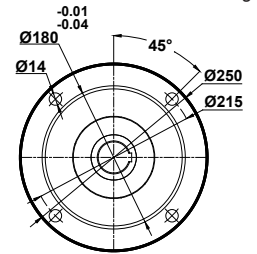
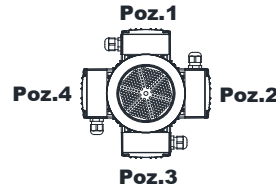
DV272.02
DV273.02



	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	468	487.5	526	567	567	613
k1	529	578.5	619	671.5	671.5	732.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	317	332	341	352	352	367

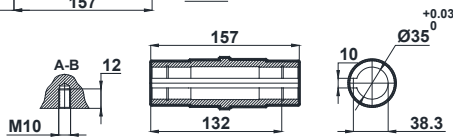
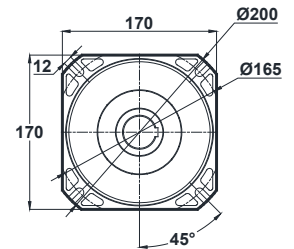
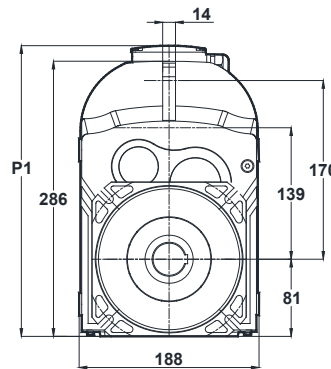
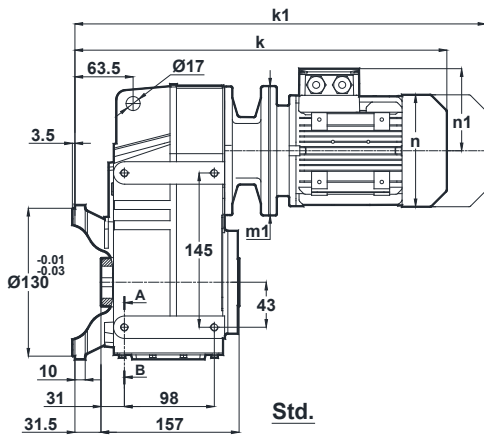
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71-80-90-100
Tip / Type / Typ

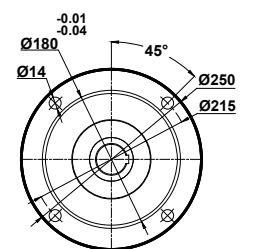
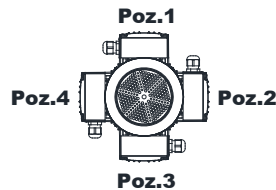
DV272.03
DV273.03



	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	408	428	466	507	507	553
k1	469	519	559	611.5	611.5	672.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
p1	317	332	341	352	352	367

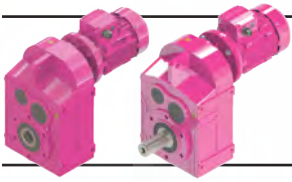
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

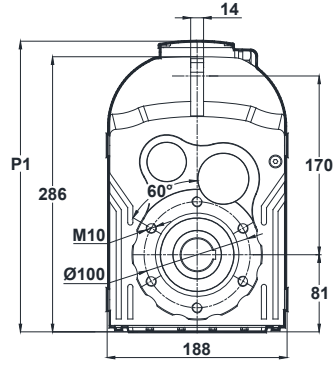
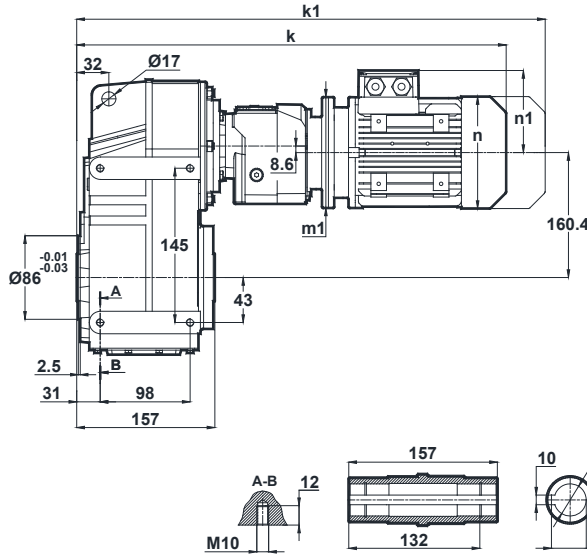
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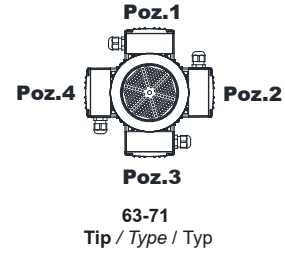
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV275.00
DV276.00

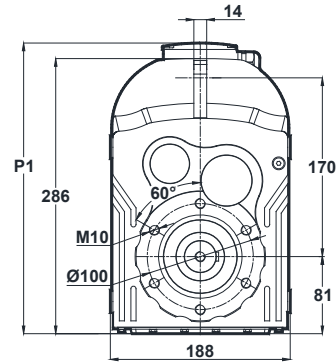
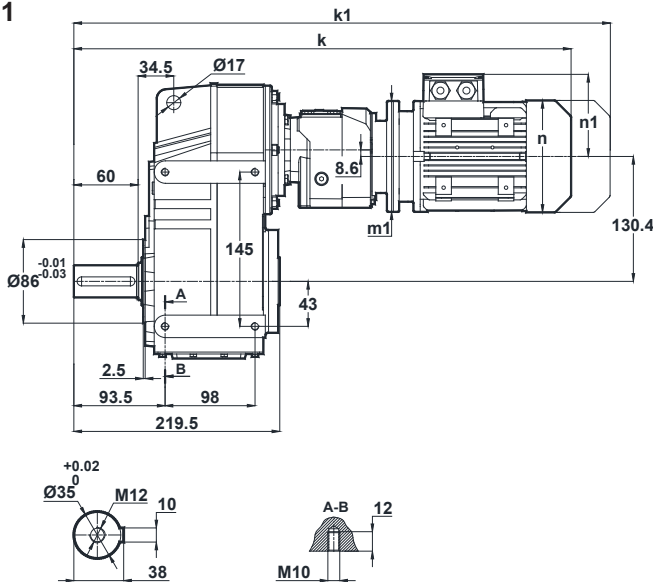


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14
k	526	546
k1	587	637
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	309	324

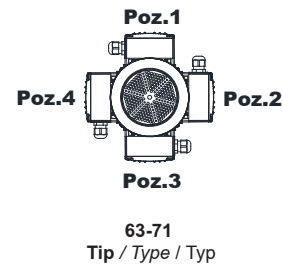


DV275.01
DV276.01

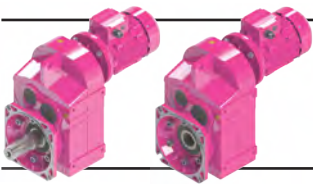


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14
k	588	608
k1	649	699
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	309	324



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

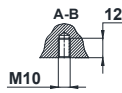
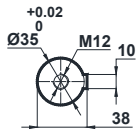
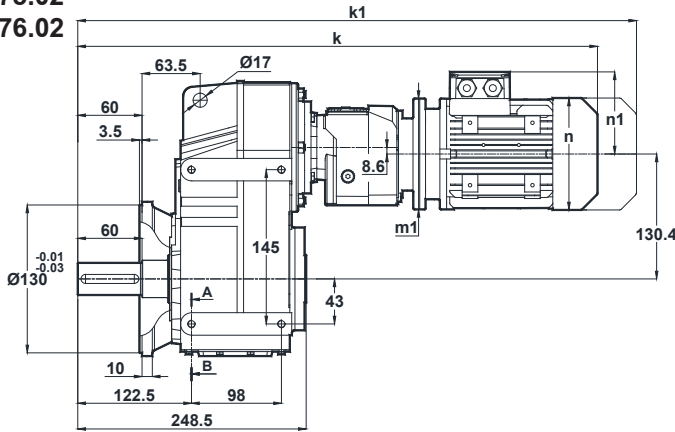


Ölçü Sayfaları Dimension Pages Abmessungsseiten

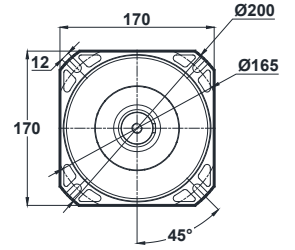
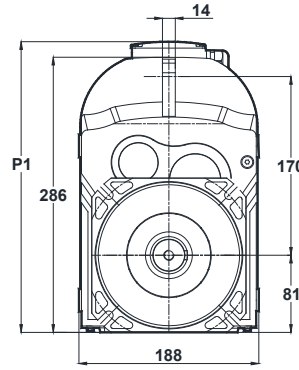


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV275.02
DV276.02

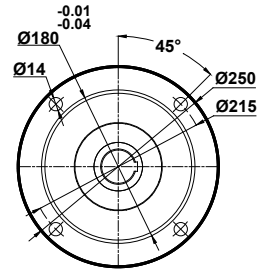
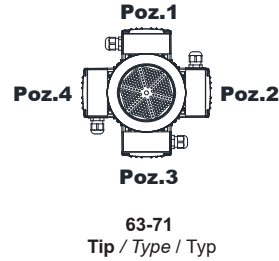


	63/B5 63/B14	71/B5 71/B14
k	617	637
k1	678	728
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	309	324

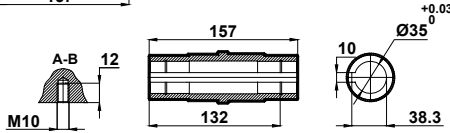
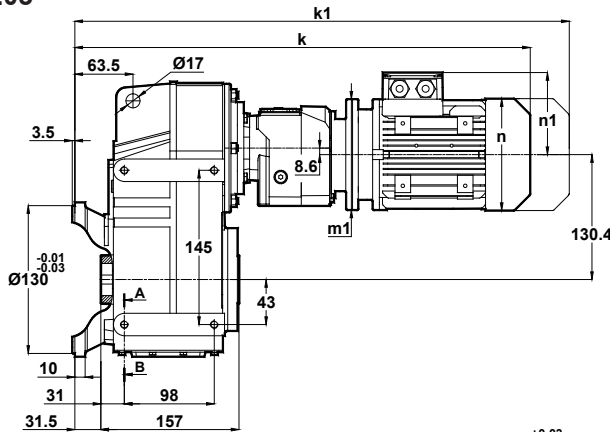


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

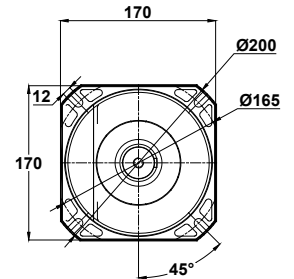
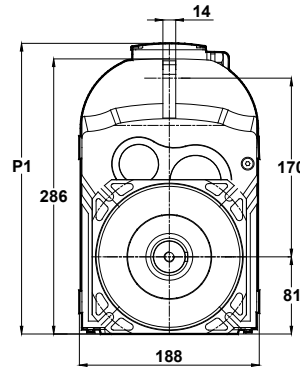
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DV275.03
DV276.03

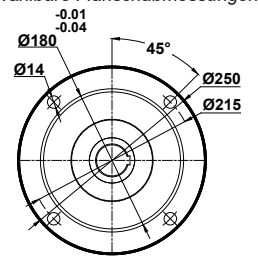
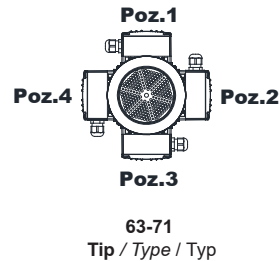


	63/B5 63/B14	71/B5 71/B14
k	557	577
k1	618	668
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	309	324

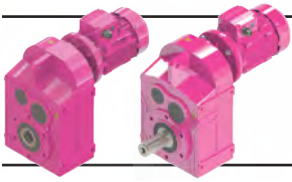


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

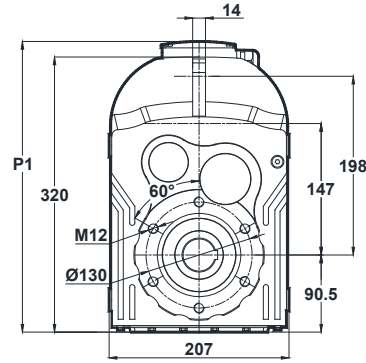
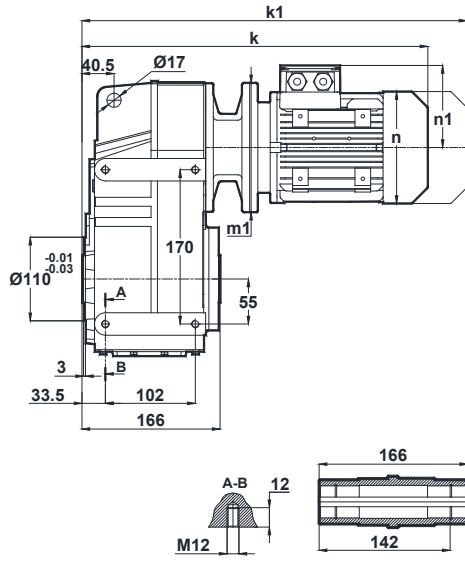
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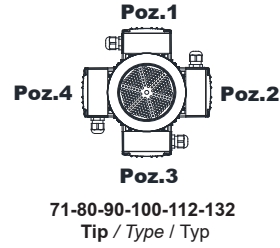


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV282.00
DV283.00

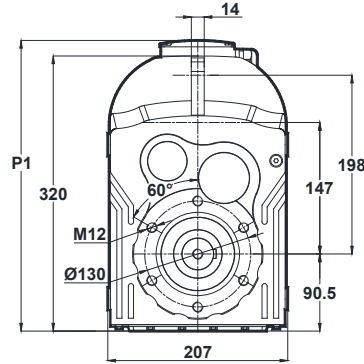
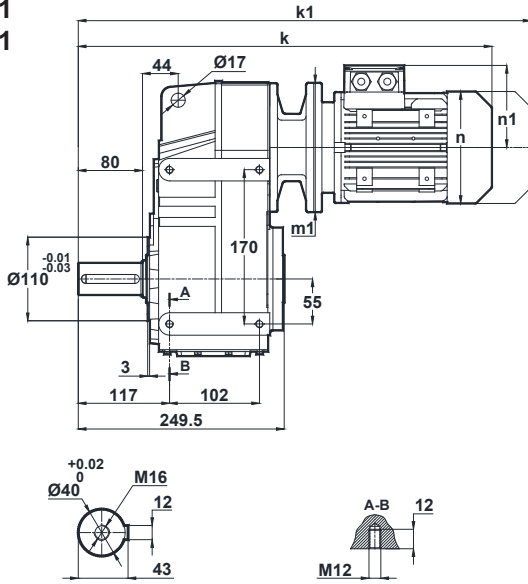


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

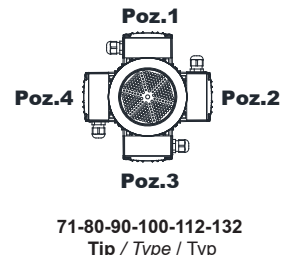


	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	405	457	498	498	526	547	674	674
k1	496	550	602.5	602.5	645.5	651.5	804	804
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	349	358	369	369	384	395	417	417

DV282.01
DV283.01

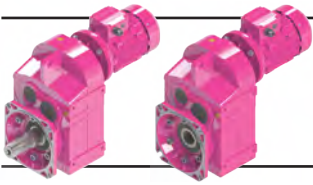


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	489	541	582	582	610	631	758	758
k1	580	634	686.5	686.5	729.5	735.5	888	888
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	349	358	369	369	384	395	417	417

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

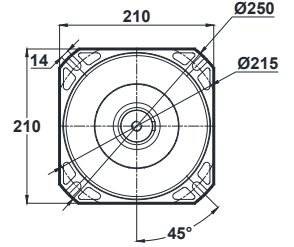
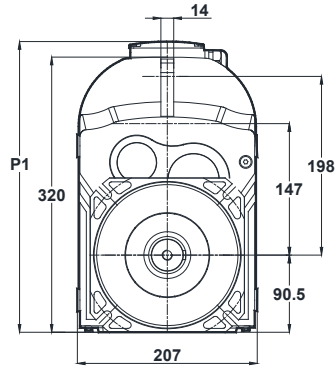
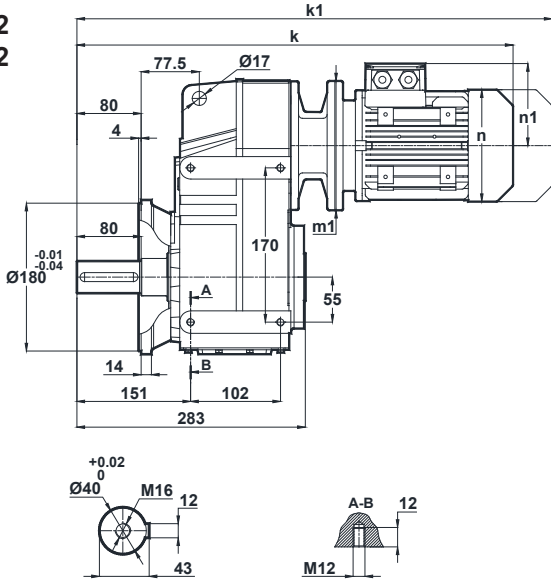
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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

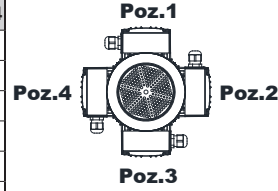
DV282.02
DV283.02



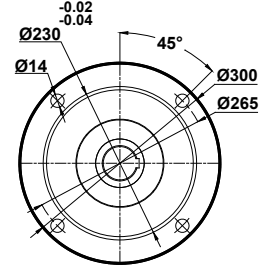
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	522	574	615	615	643	664	791	791
k1	613	667	719.5	719.5	762.5	768.5	921	921
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	349	358	369	369	384	395	417	417

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

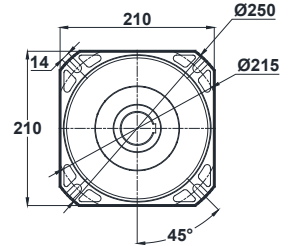
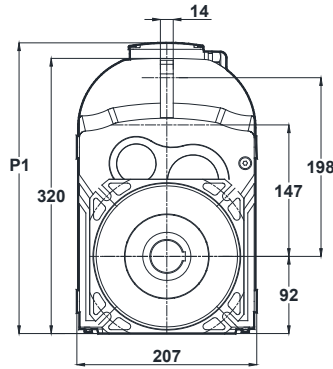
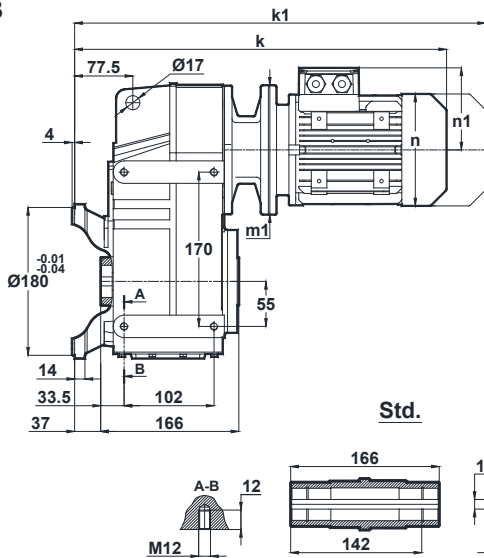
Optional Flange Dimensions
Auswählbare Flanschabmessungen



71-80-90-100-112-132
Tip / Type / Typ



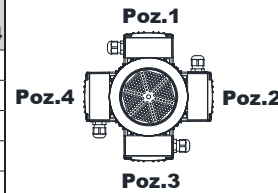
DV282.03
DV283.03



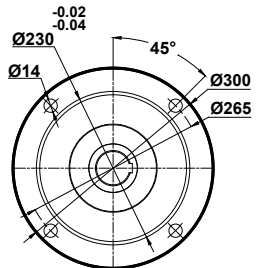
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	442	494	535	535	563	584	711	711
k1	533	587	639.5	639.5	682.5	688.5	841	841
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	349	358	369	369	384	395	417	417

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

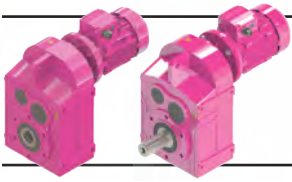
Optional Flange Dimensions
Auswählbare Flanschabmessungen



71-80-90-100-112-132
Tip / Type / Typ



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

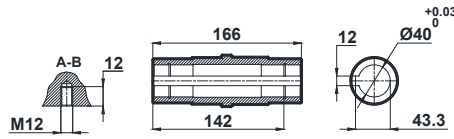
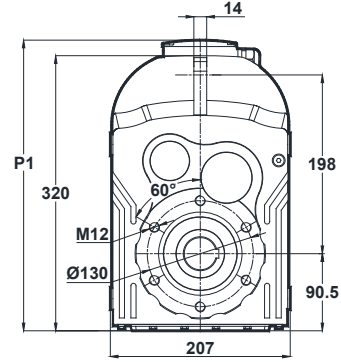
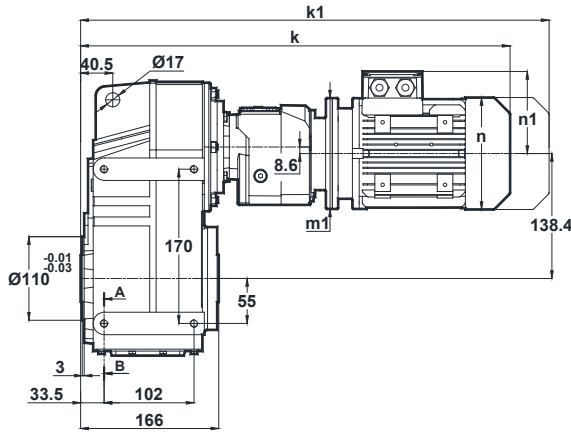


Ölçü Sayfaları Dimension Pages Abmessungsseiten



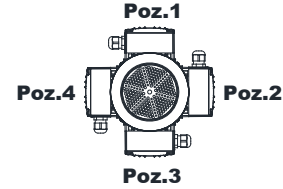
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV285.00
DV286.00



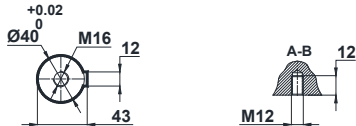
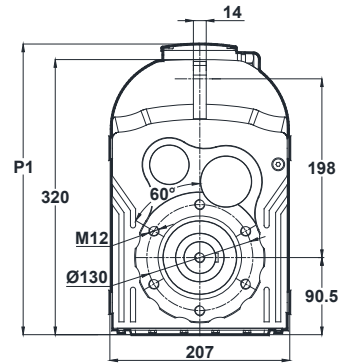
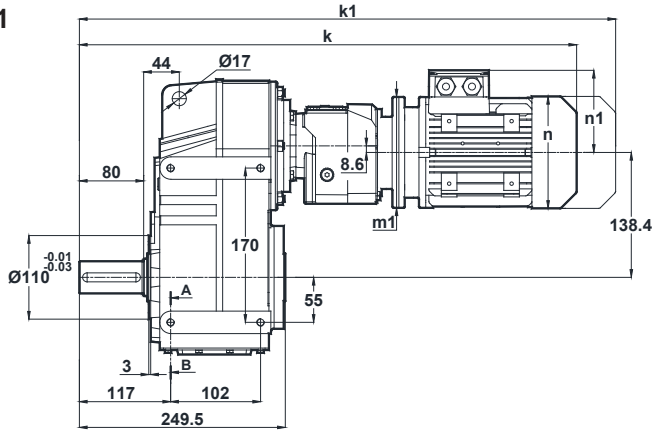
	63/B5 63/B14	71/B5 71/B14
k	531	551
k1	592	642
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	326	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



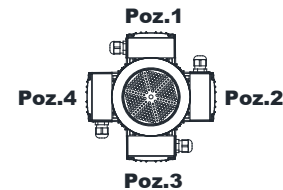
63-71
Tip / Type / Typ

DV285.01
DV286.01



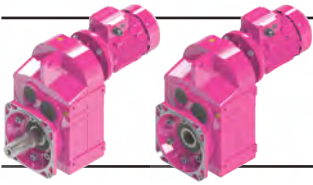
	63/B5 63/B14	71/B5 71/B14
k	615	635
k1	676	726
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	326	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

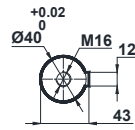
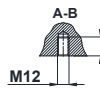
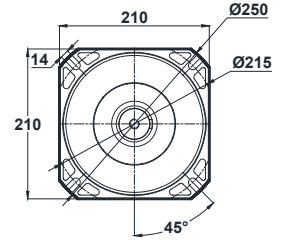
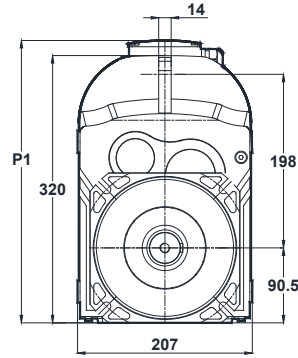
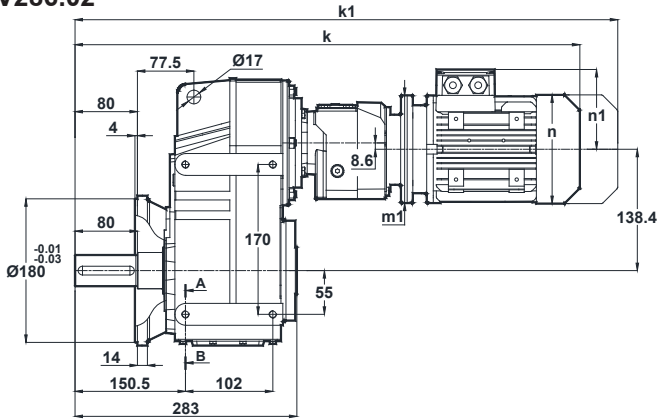


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

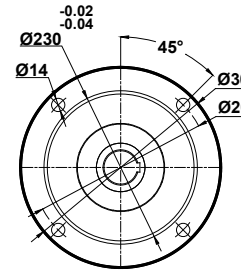
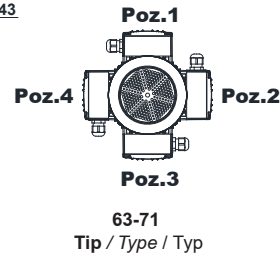
DV285.02
DV286.02



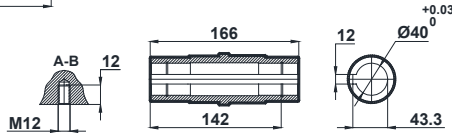
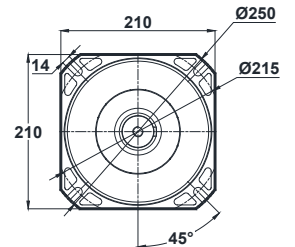
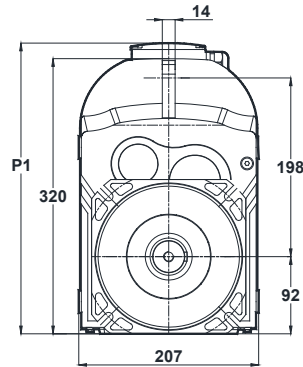
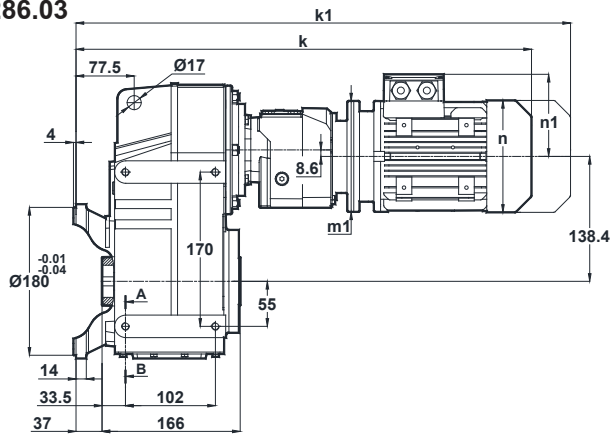
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14
k	648	668
k1	709	759
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	326	341



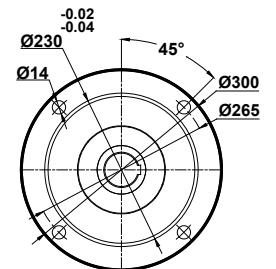
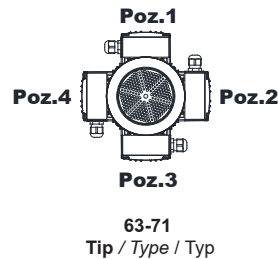
DV285.03
DV286.03



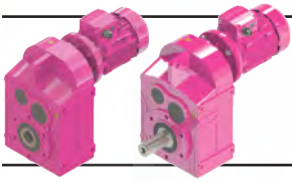
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14
k	568	588
k1	629	679
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	326	341



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

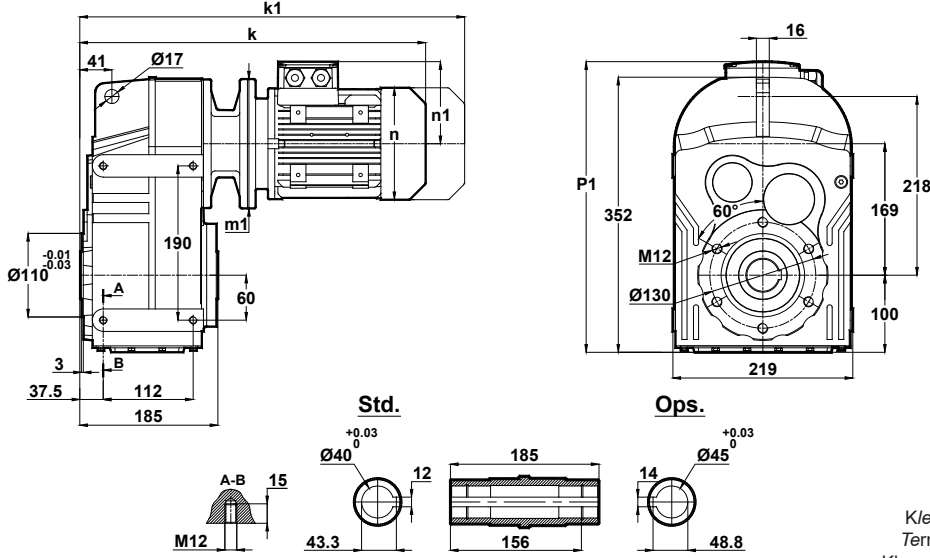
Dimension Pages

Abmessungsseiten



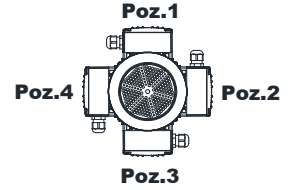
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV372.00
DV373.00



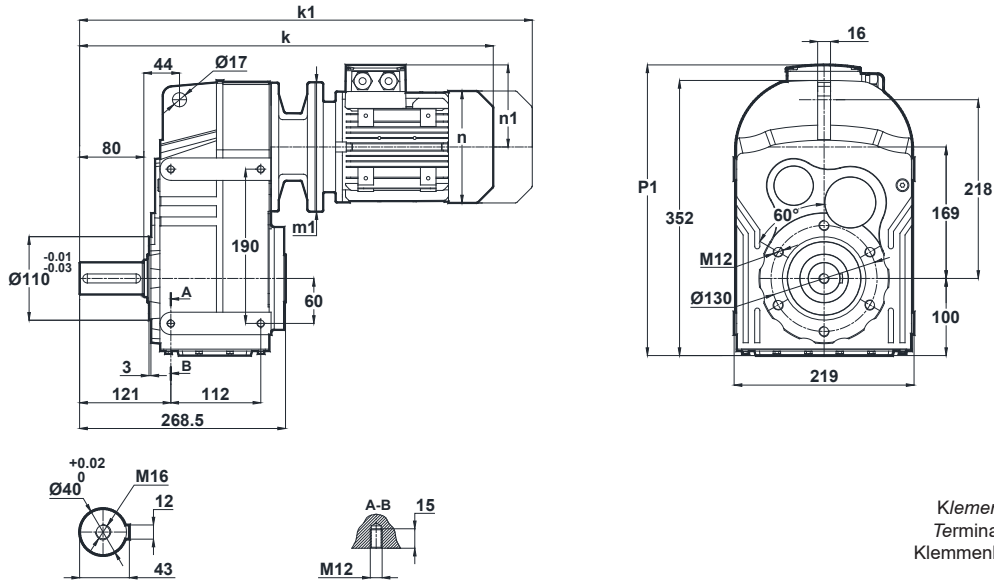
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	416	468	509	509	537	558	685	685
k1	507	561	613.5	613.5	656.5	662.5	815	815
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	381	390	401	401	416	427	448	448



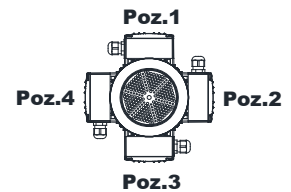
71-80-90-100-112-132
Tip / Type / Typ

DV372.01
DV373.01



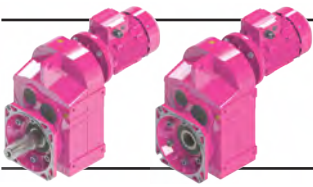
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	499	551	592	592	620	641	768	768
k1	590	644	696.5	696.5	739.5	745.5	898	898
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	381	390	401	401	416	427	448	448



71-80-90-100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

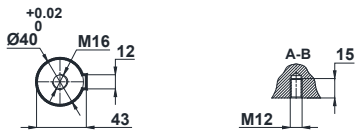
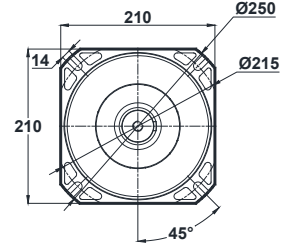
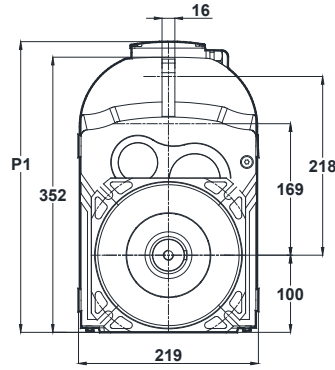
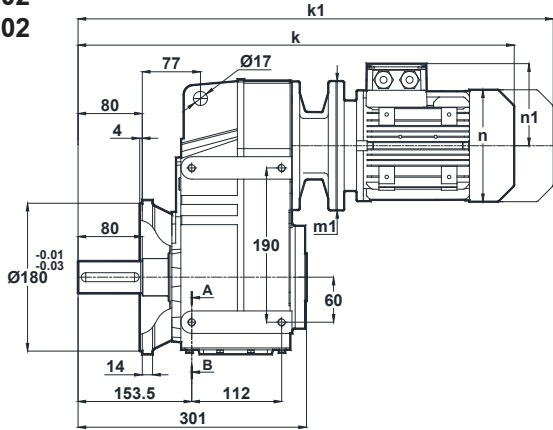


Ölçü Sayfaları Dimension Pages Abmessungenseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

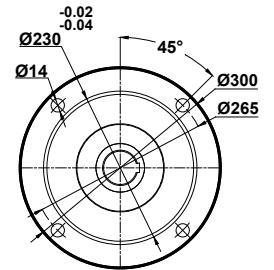
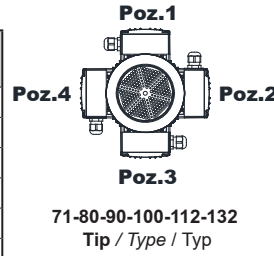
DV372.02
DV373.02



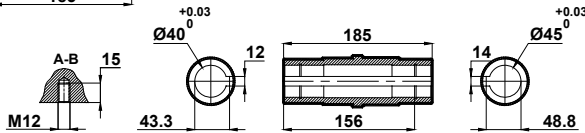
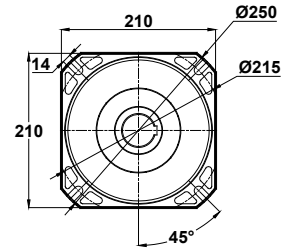
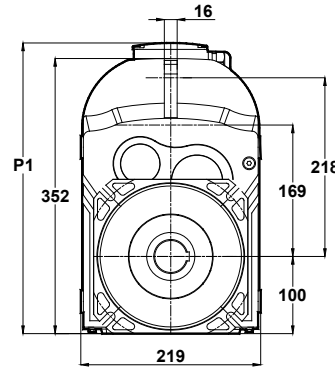
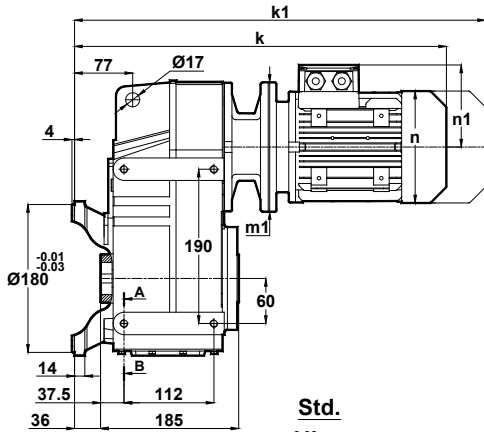
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	532	584	625	625	653	674	801	801
k1	623	677	729.5	729.5	772.5	778.5	931	931
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	381	390	401	401	416	427	448	448



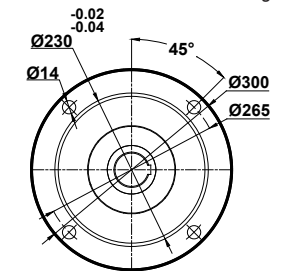
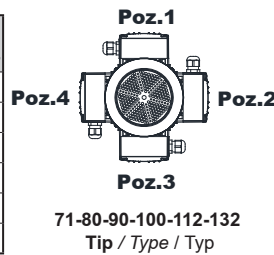
DV372.03
DV373.03



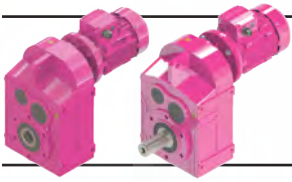
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	452	504	545	545	573	594	721	721
k1	543	597	649.5	649.5	692.5	698.5	851	851
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
p1	381	390	401	401	416	427	448	448



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

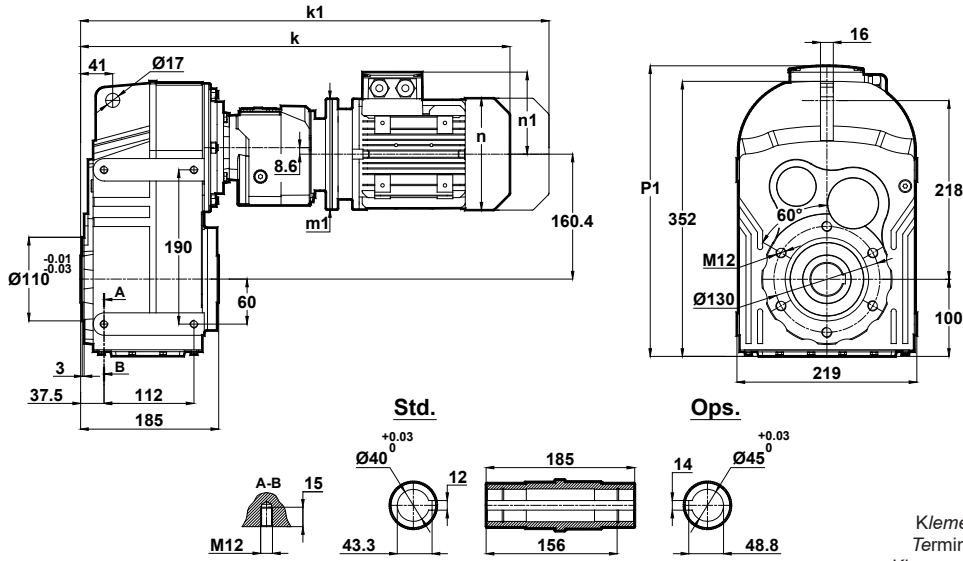


Ölçü Sayfaları Dimension Pages Abmessungsseiten



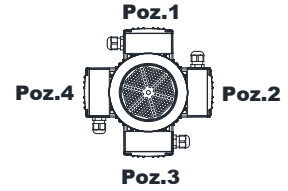
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV375.00
DV376.00



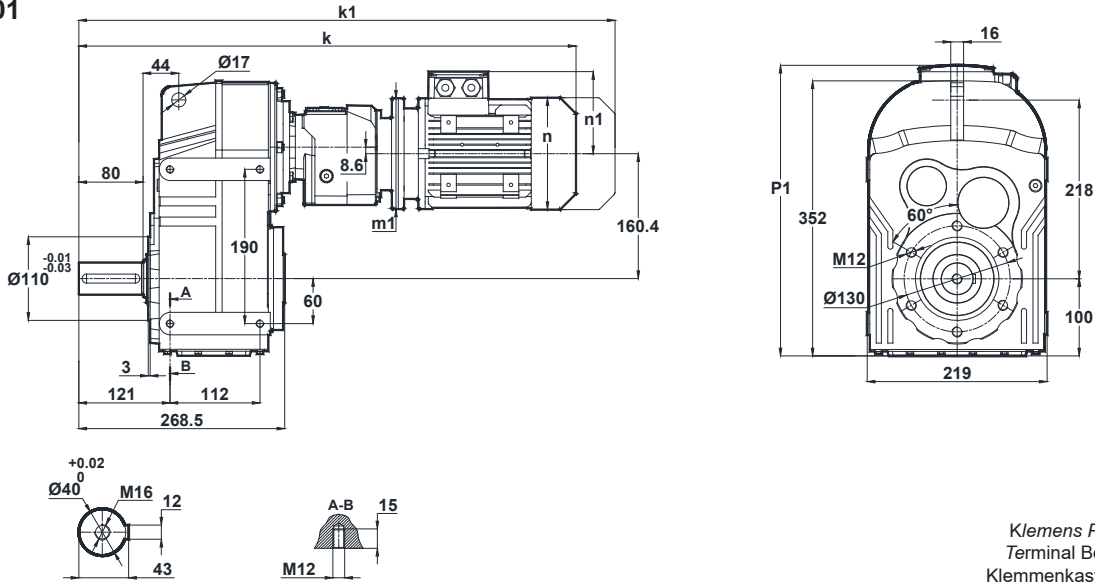
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	542	562	600
k1	603	653	693
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	90	105	120
p1	358	373	382



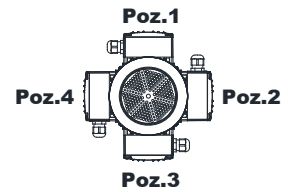
63-71-80
Tip / Type / Typ

DV375.01
DV376.01



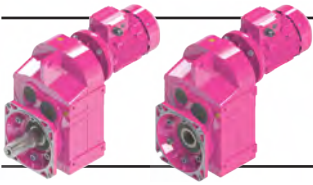
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	625	645	683
k1	686	736	776
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	90	105	120
p1	358	373	382



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

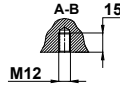
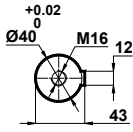
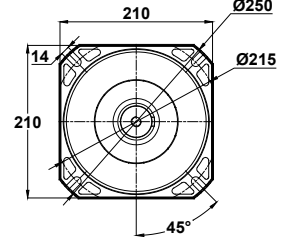
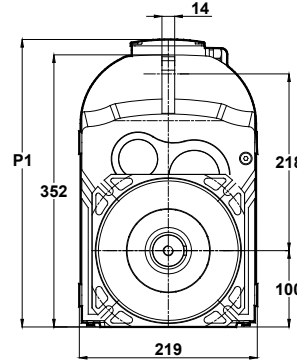
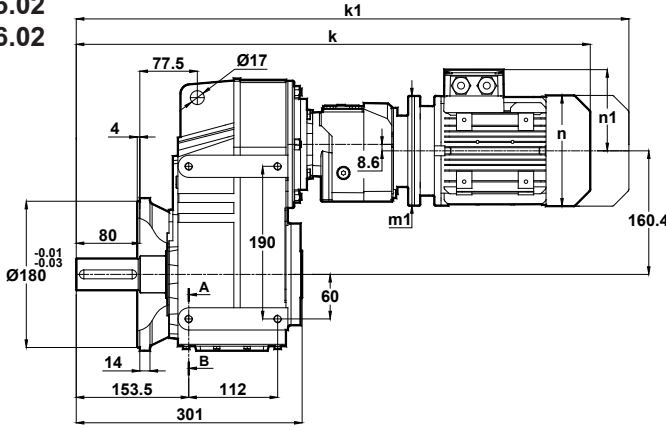


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

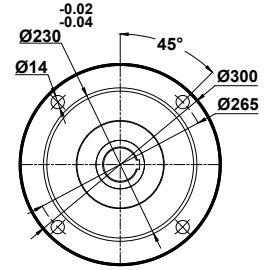
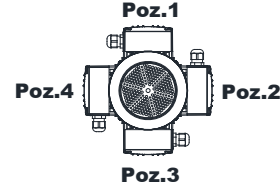
DV375.02
DV376.02



	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	658	678	716
k1	719	769	809
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	90	105	120
p1	358	373	382

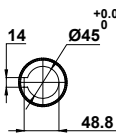
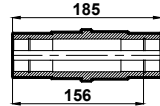
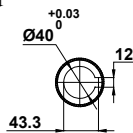
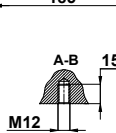
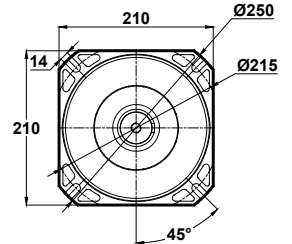
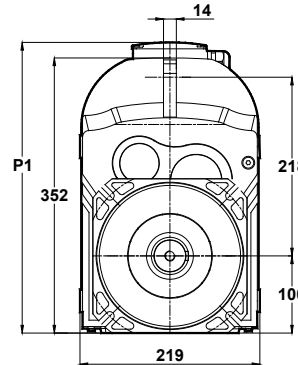
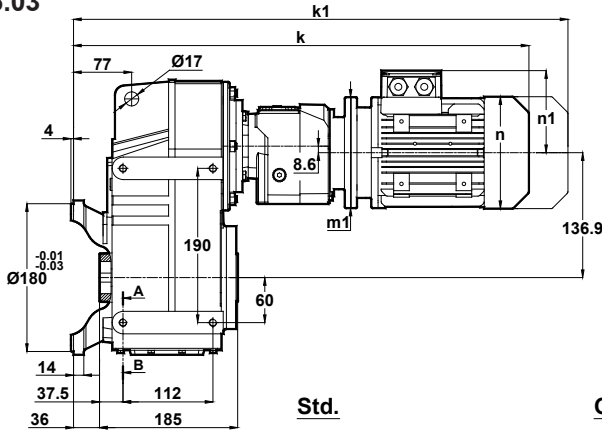
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71-80
Tip / Type / Typ

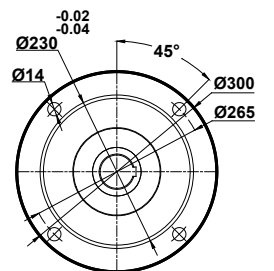
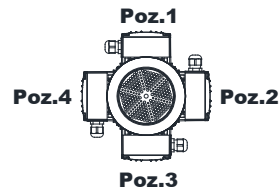
DV375.03
DV376.03



	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	578	598	636
k1	639	689	729
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	90	105	120
p1	358	373	382

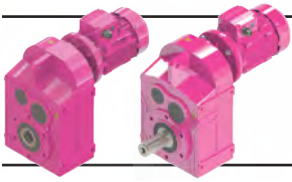
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

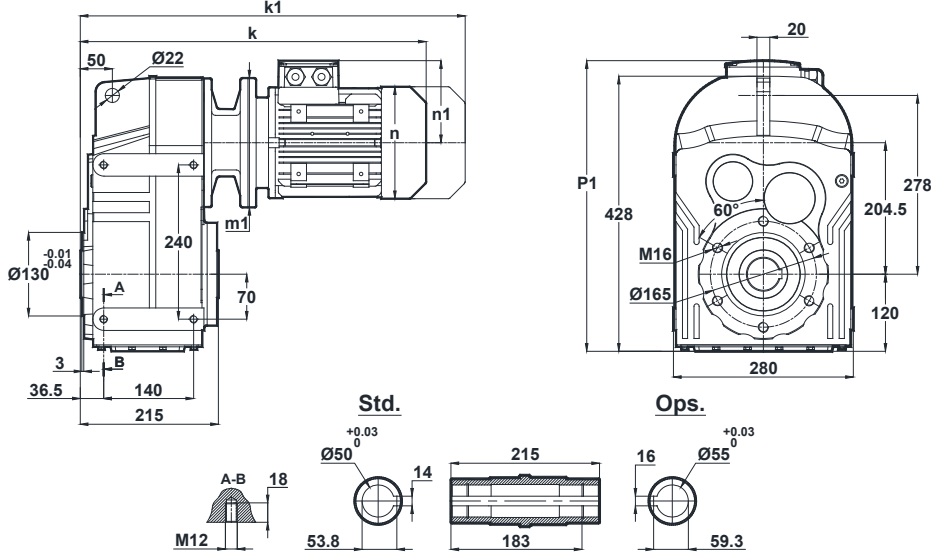
Dimension Pages

Abmessungsseiten



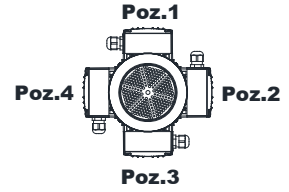
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV472.00
DV473.00



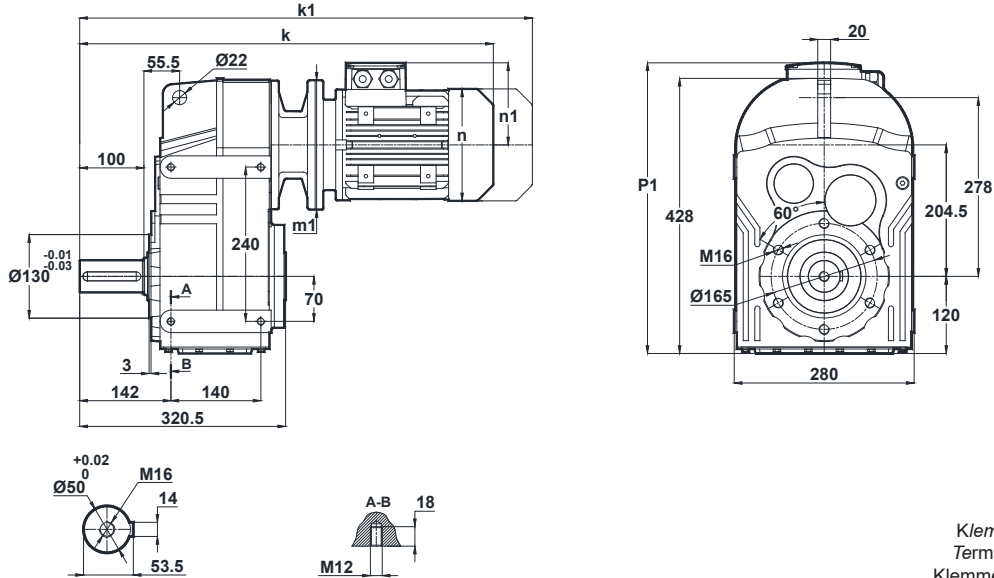
Klemens Pozisyonları
Klemens
Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	471	494	535	535	587	608	712	712	871	871
k1	562	587	639.5	639.5	706.5	712.5	842	842	1051	1051
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
p1	437	446	457	457	472	483	504	504	544	544



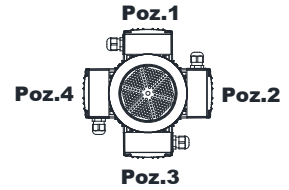
71-80-90-100-112-132-160
Tip / Type / Typ

DV472.01
DV473.01



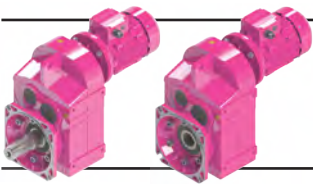
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	576	599	640	640	692	713	817	817	976	976
k1	667	692	744.5	744.5	811.5	817.5	947	947	1156	1156
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
p1	437	446	457	457	472	483	504	504	544	544



71-80-90-100-112-132-160
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

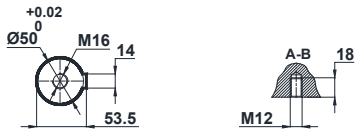
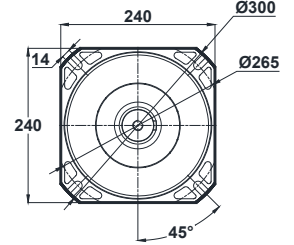
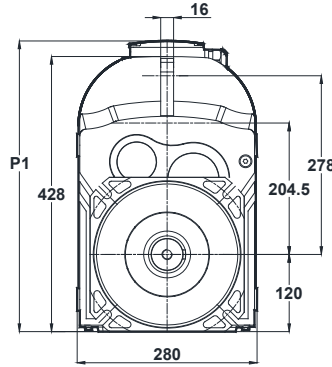
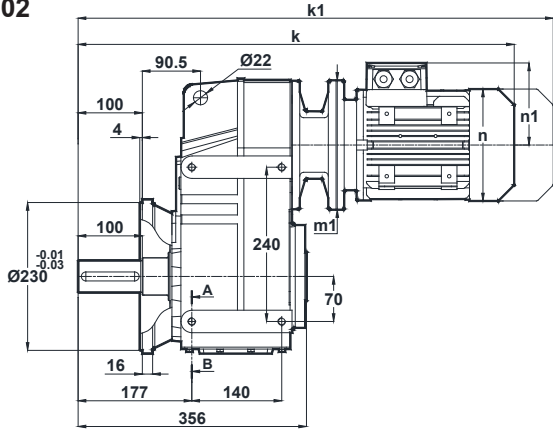


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

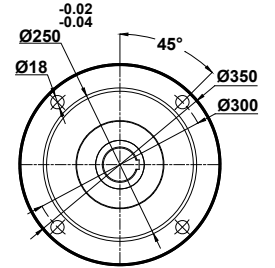
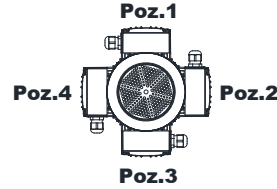
DV472.02
DV473.02



	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	611	634	675	675	727	748	852	852	1011	1011
k1	702	727	779.5	779.5	846.5	852.5	982	982	1191	1191
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
p1	437	446	457	457	472	483	504	504	544	544

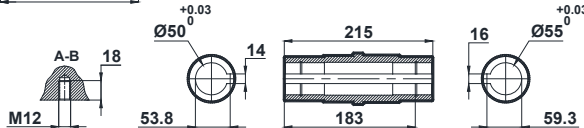
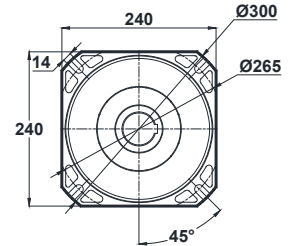
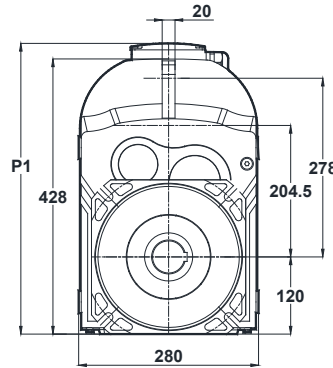
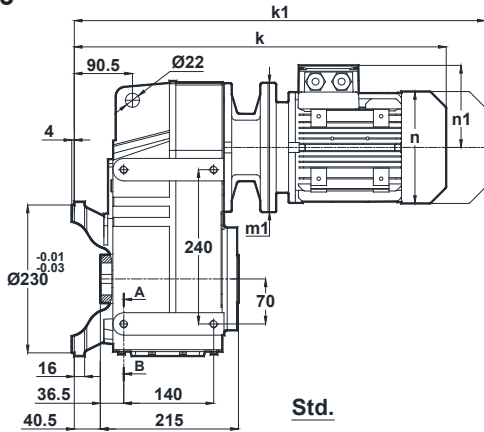
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



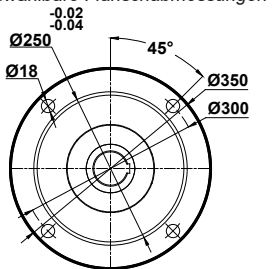
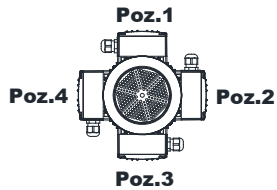
71-80-90-100-112-132-160
Tip / Type / Typ

DV472.03
DV473.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

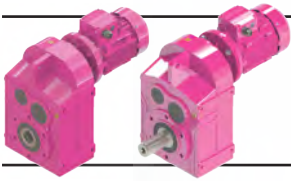
Optional Flange Dimensions
Auswählbare Flanschabmessungen



71-80-90-100-112-132-160
Tip / Type / Typ

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	511	534	575	575	627	648	752	752	911	911
k1	602	627	679.5	679.5	746.5	752.5	882	882	1091	1091
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
p1	437	446	457	457	472	483	504	504	544	544

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

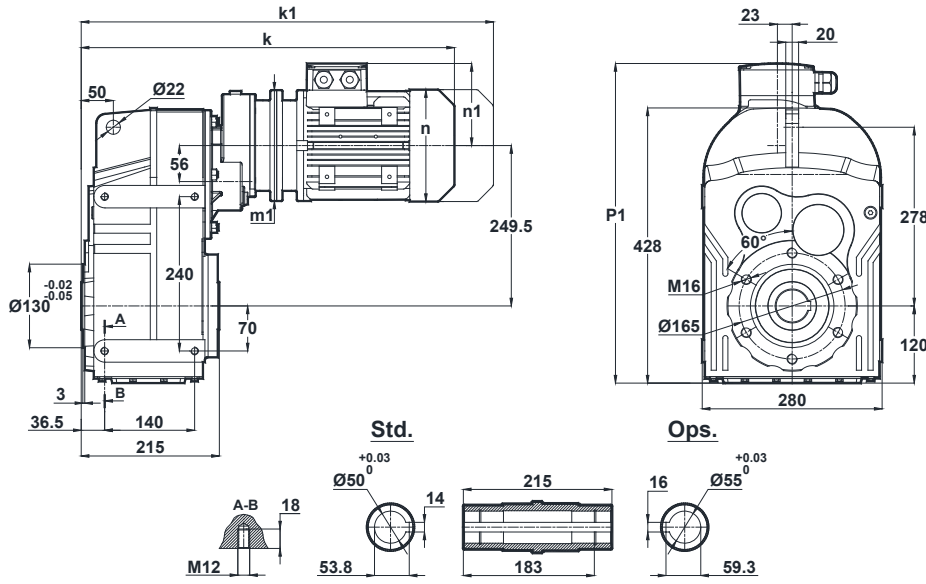
Dimension Pages

Abmessungsseiten



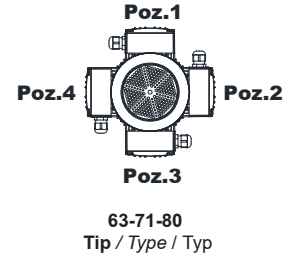
Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV474.00

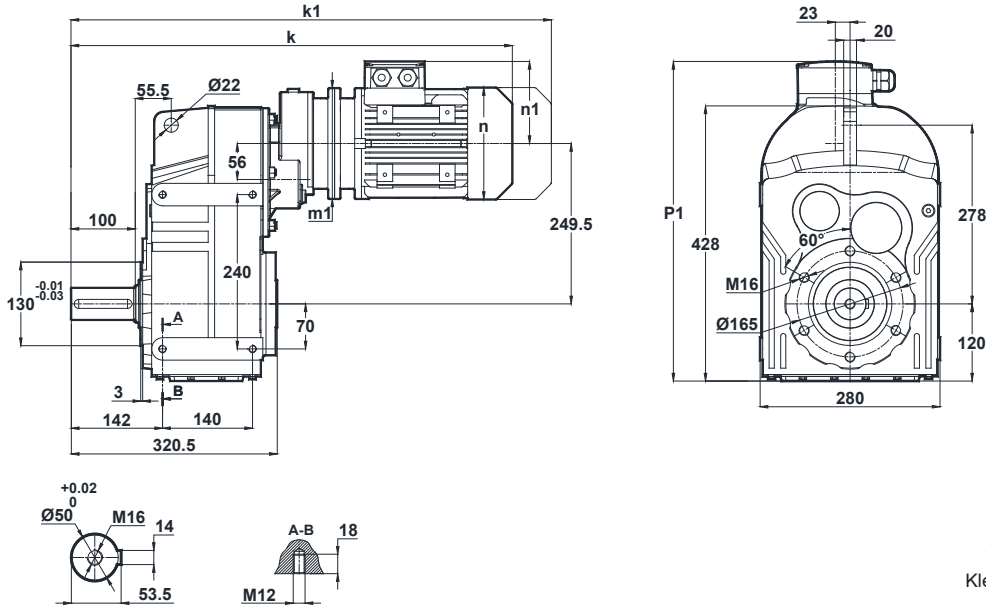


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	530	519	577
k1	591	610	670
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	467	482	491

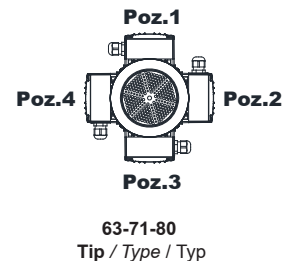


DV474.01

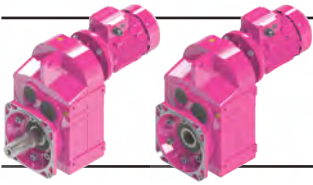


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	898	624	682
k1	959	715	775
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	467	482	491



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

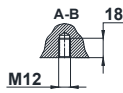
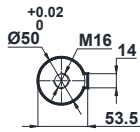
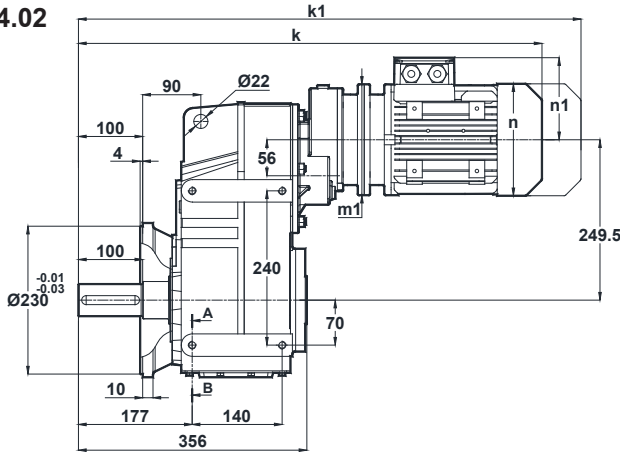


Ölçü Sayfaları Dimension Pages Abmessungsseiten

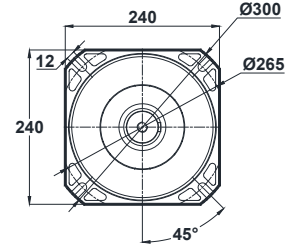
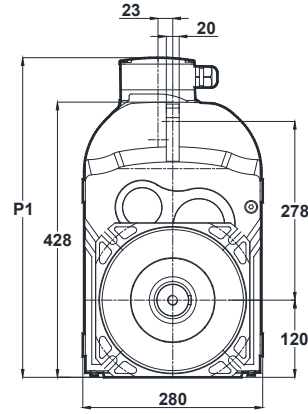


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV474.02

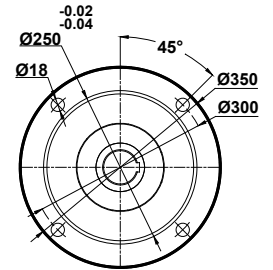
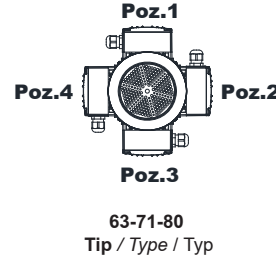


	63/B5	71/B5 71/B14	80/B5 80/B14
k	670	659	717
k1	731	750	810
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	467	482	491

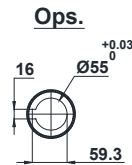
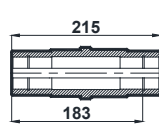
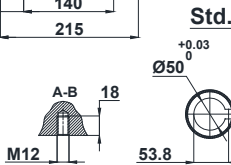
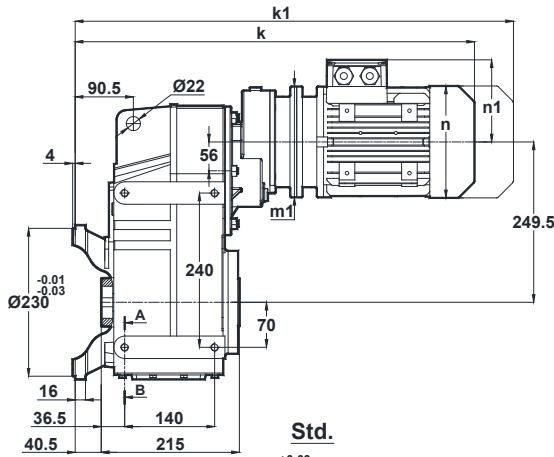


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

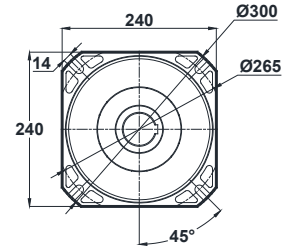
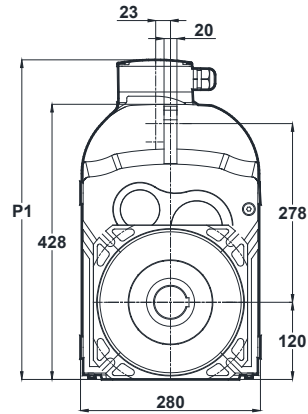
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DV474.03

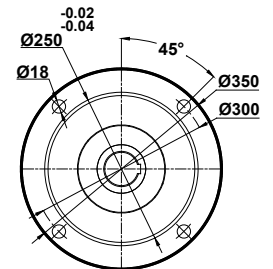
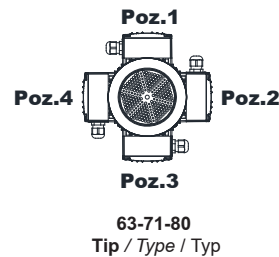


	63/B5	71/B5 71/B14	80/B5 80/B14
k	833	559	617
k1	894	650	710
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	467	482	491

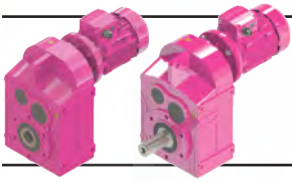


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

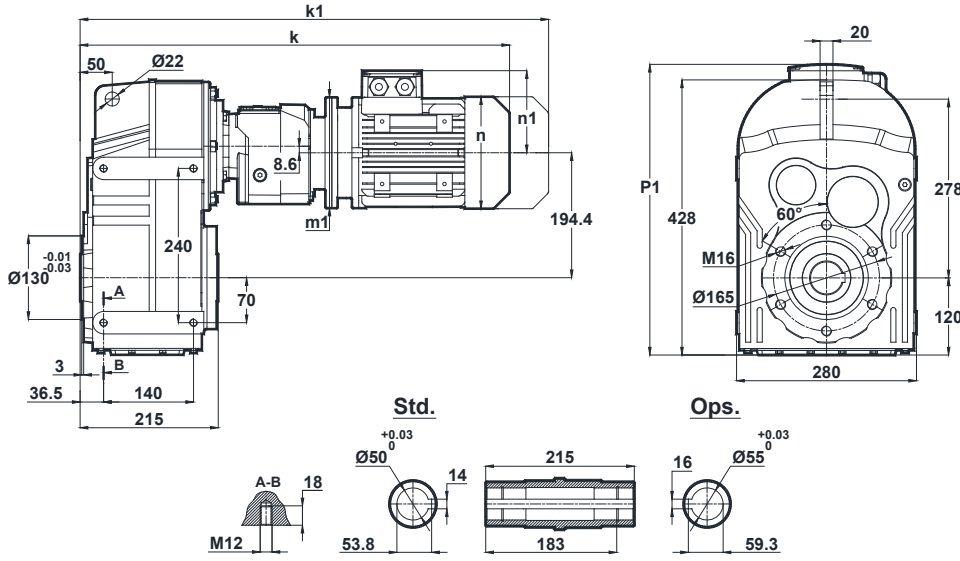
Dimension Pages

Abmessungsseiten



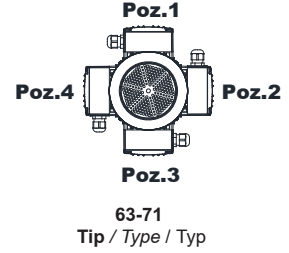
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV475.00
DV476.00

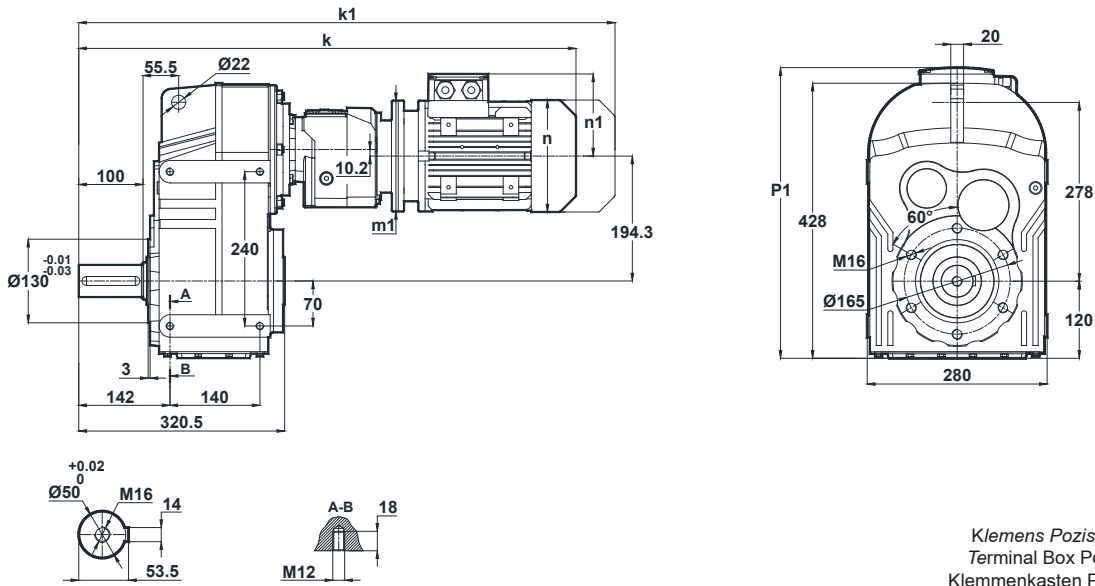


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14
k	595	614
k1	656	705
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	-	-

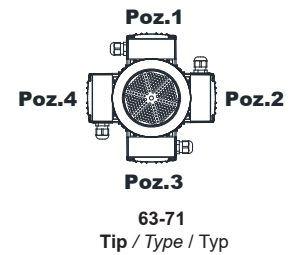


DV475.01
DV476.01

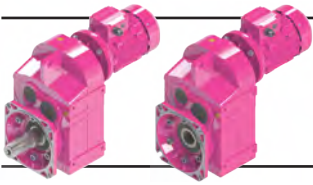


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5 63/B14	71/B5 71/B14
k	700	719
k1	761	810
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

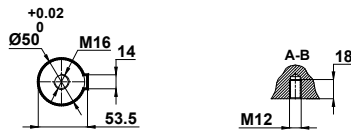
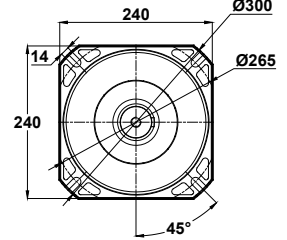
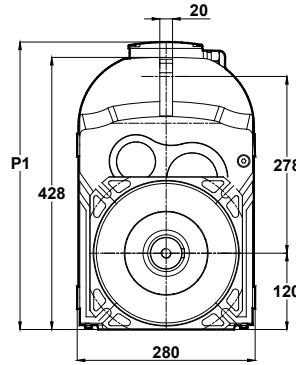
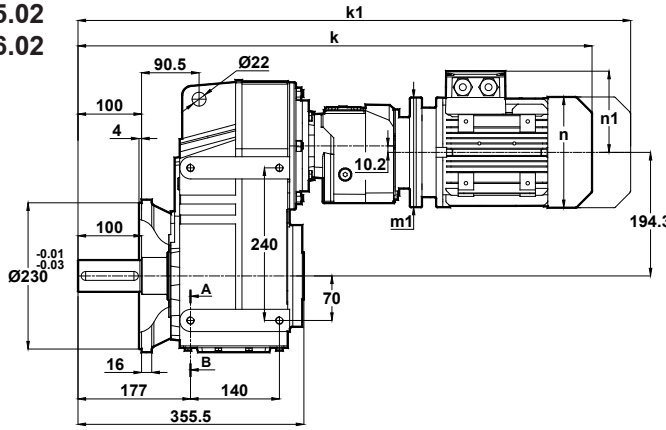


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

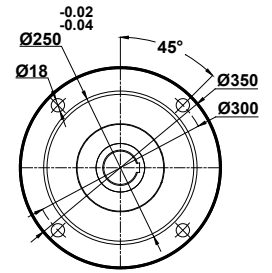
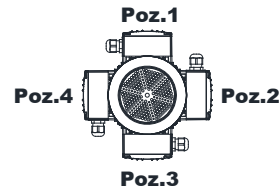
DV475.02
DV476.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

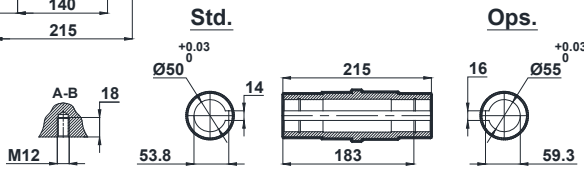
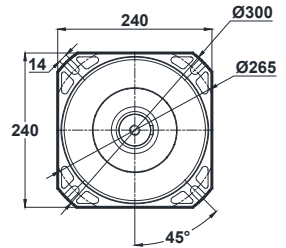
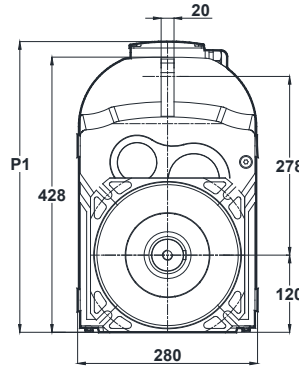
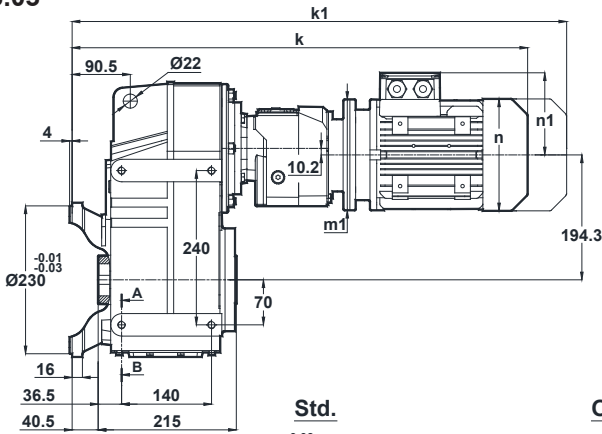
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14
k	735	754
k1	796	845
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	-	-



63-71
Tip / Type / Typ

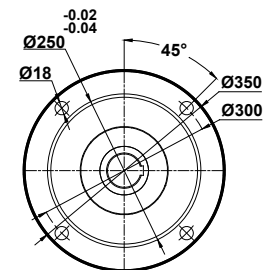
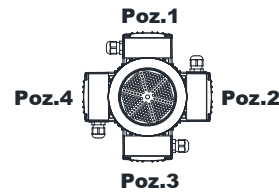
DV475.03
DV476.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

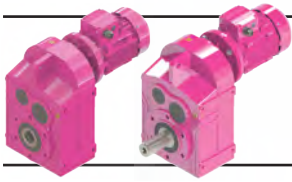
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5 63/B14	71/B5 71/B14
k	635	654
k1	696	745
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105
p1	-	-



63-71
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

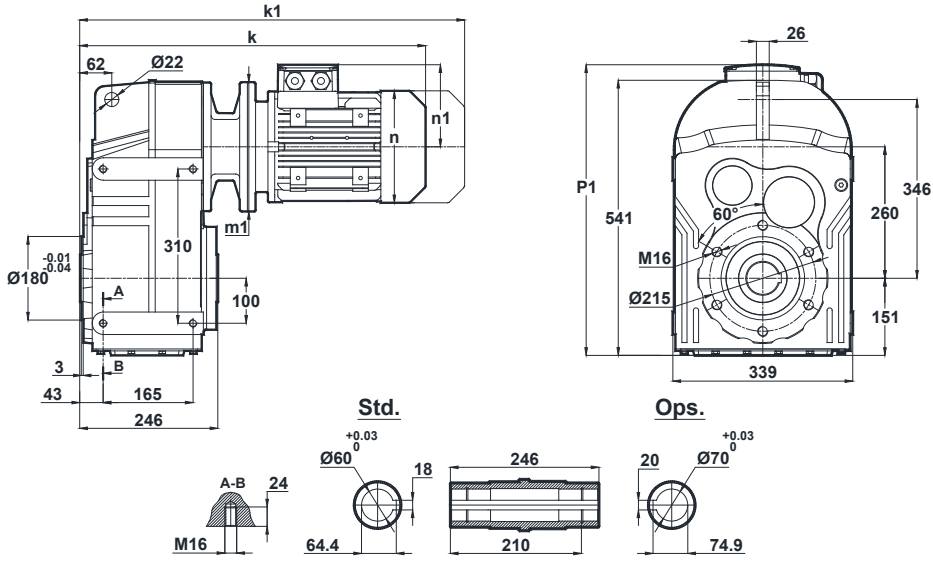
Dimension Pages

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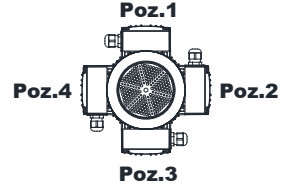
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV572.00
DV573.00



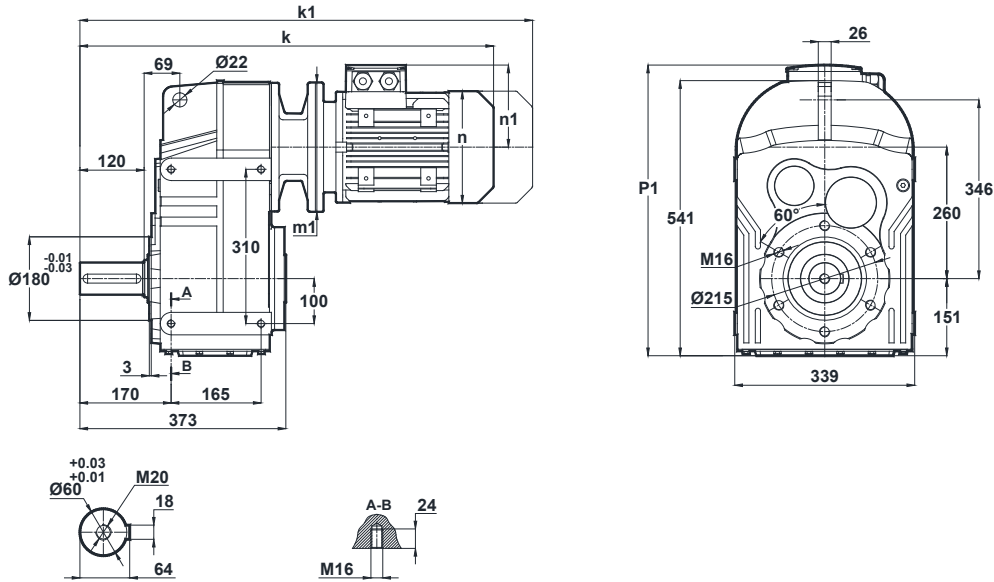
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	511	552	552	606	626	729	729	888	888	977	977
k1	604	656.5	656.5	725.5	730.5	859	859	1068	1068	1084.5	1084.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
p1	-	543	543	558	569	590	590	636	636	655	655



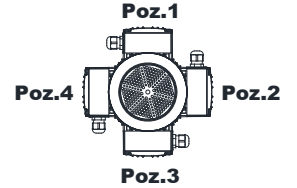
80-90-100-112-132-160-180
Tip / Type / Typ

DV572.01
DV573.01



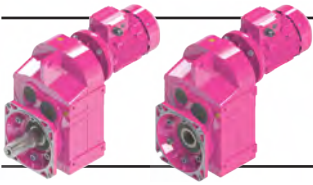
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	638	679	679	733	753	856	856	1015	1015	1104	1104
k1	731	783.5	783.5	852.5	857.5	986	986	1195	1195	1274.5	1274.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
p1	-	543	543	558	569	590	590	636	636	655	655



80-90-100-112-132-160-180
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

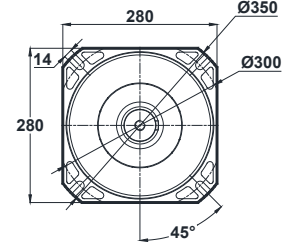
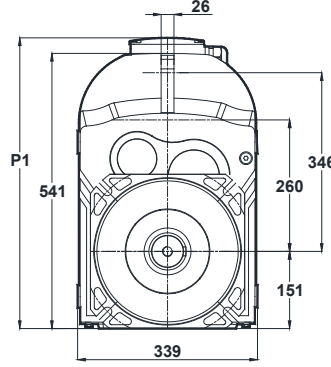
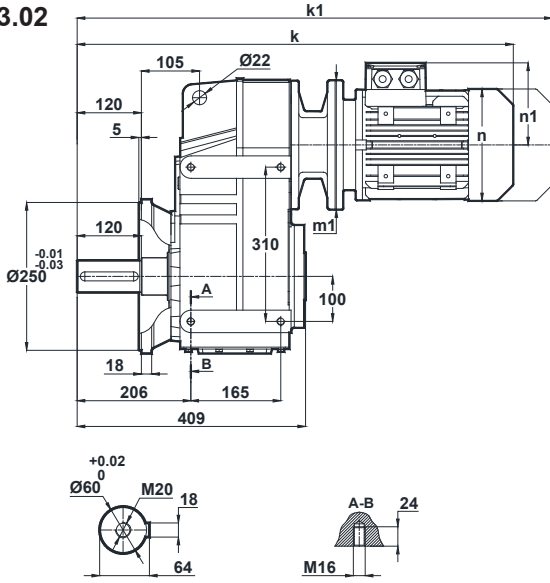


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

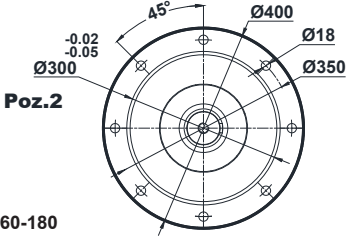
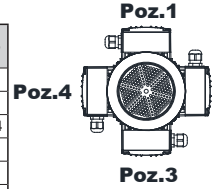
DV572.02
DV573.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

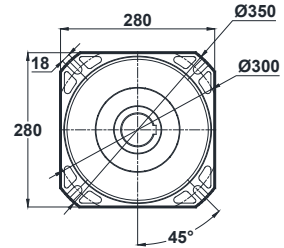
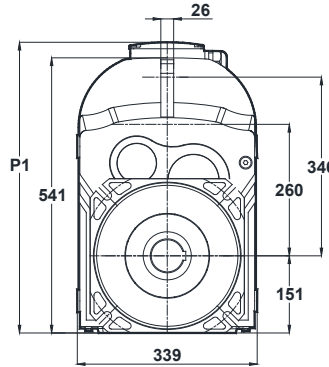
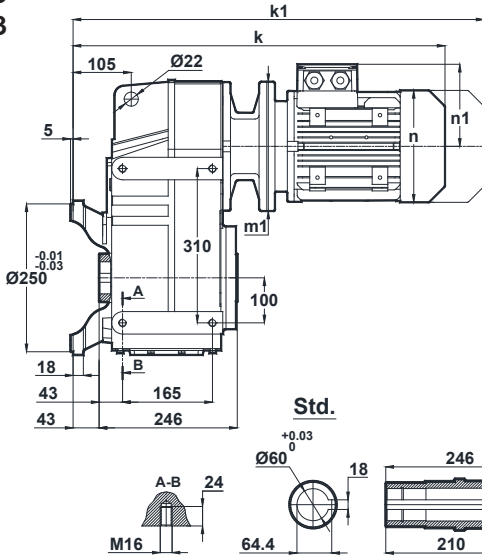
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	674	715	715	769	789	892	892	1051	1051	1140	1140
k1	767	819.5	819.5	888.5	893.5	1022	1022	1231	1231	1310.5	1310.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
p1	-	543	543	558	569	590	590	636	636	655	655



80-90-100-112-132-160-180
Tip / Type / Typ

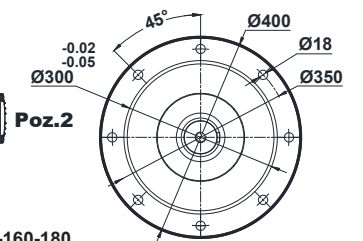
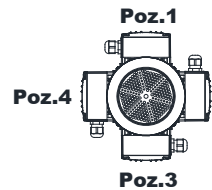
DV572.03
DV573.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

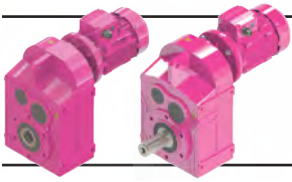
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	554	595	595	649	669	772	772	931	931	1020	1020
k1	647	699.5	699.5	768.5	773.5	902	902	1111	1111	1190.5	1190.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
p1	-	543	543	558	569	590	590	636	636	655	655



80-90-100-112-132-160-180
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

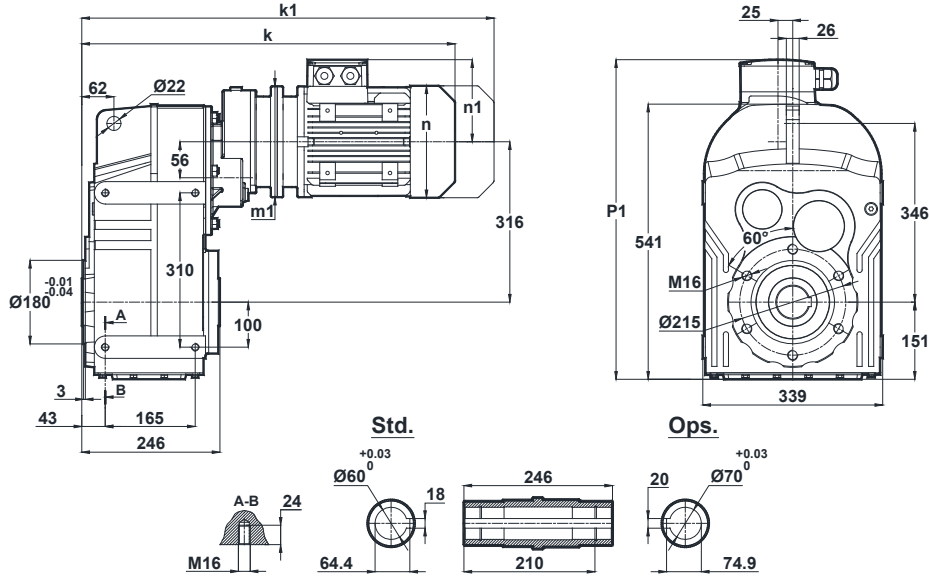
Dimension Pages

Abmessungsseiten



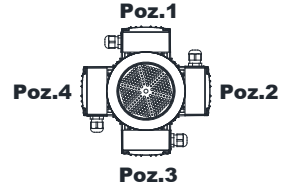
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV574.00



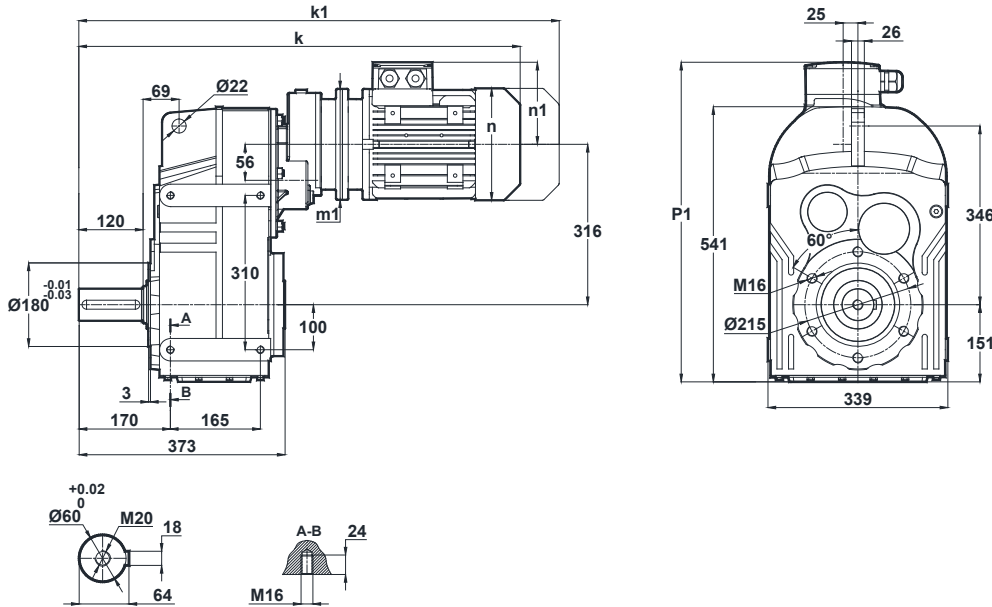
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	586	609	650	650
k1	677	702	754.5	754.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	579	588	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



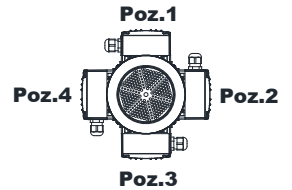
71-80-90
Tip / Type / Typ

DV574.01



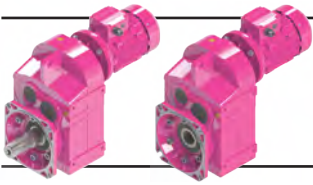
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	713	736	777	777
k1	804	829	881.5	881.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	579	588	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

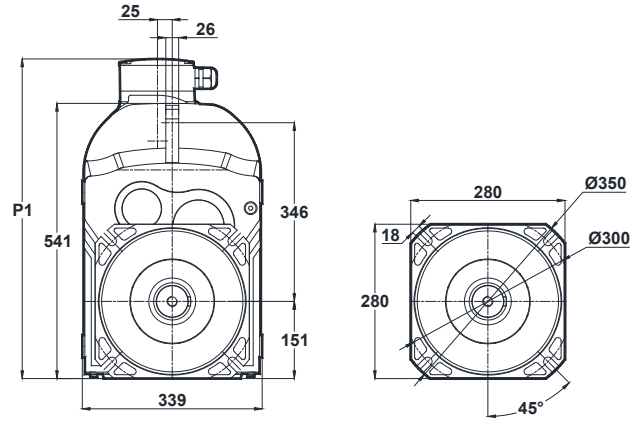
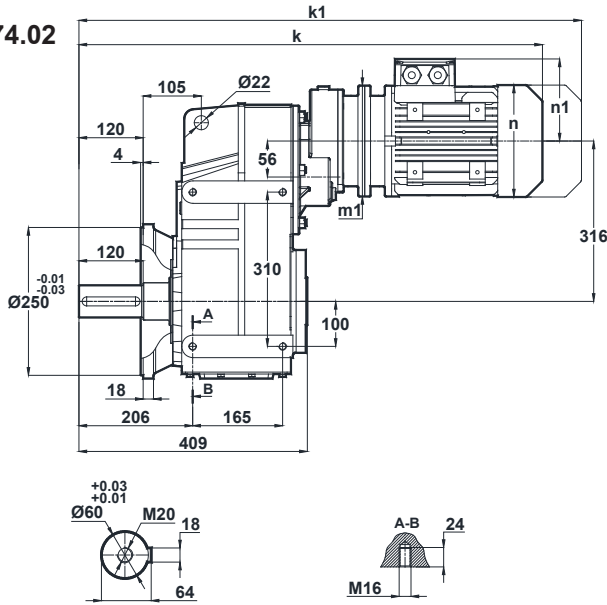


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

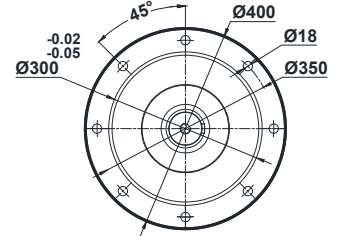
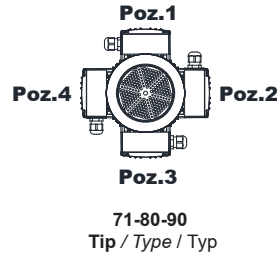
DV574.02



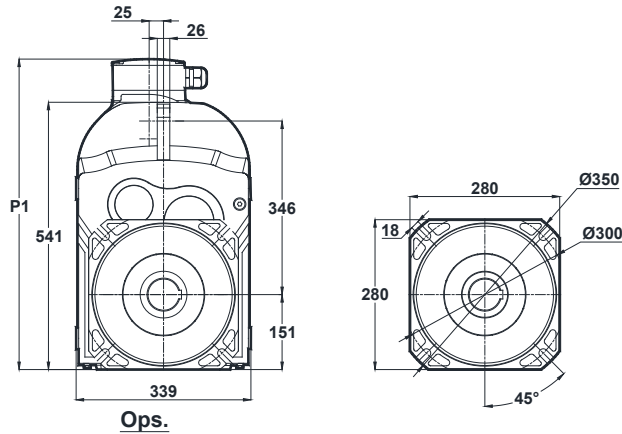
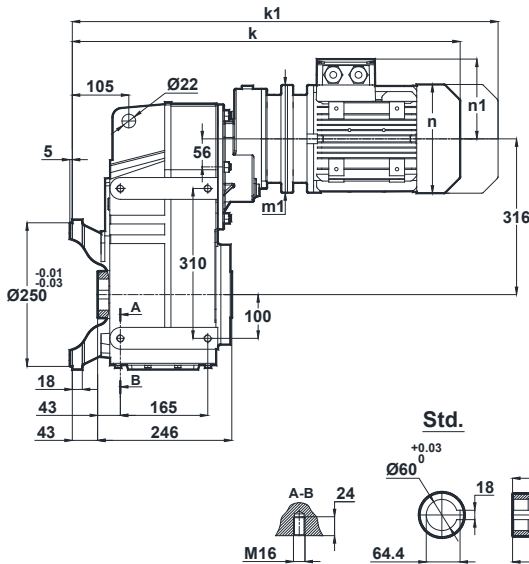
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	749	772	813	813
k1	840	865	917.5	917.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	579	588	599	599



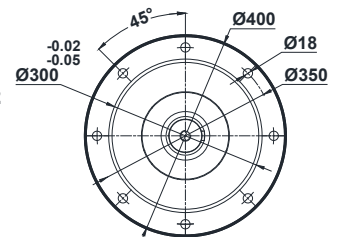
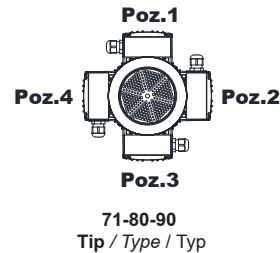
DV574.03



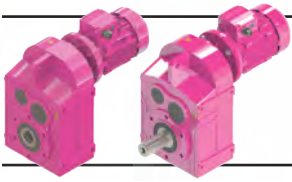
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	629	652	693	693
k1	720	745	797.5	797.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	579	588	599	599



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

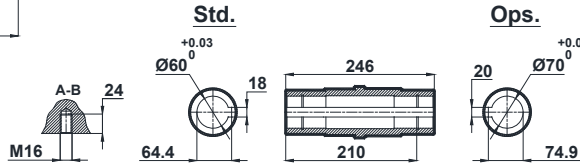
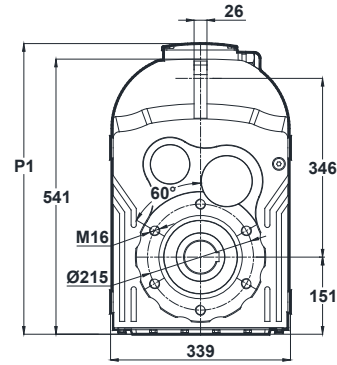
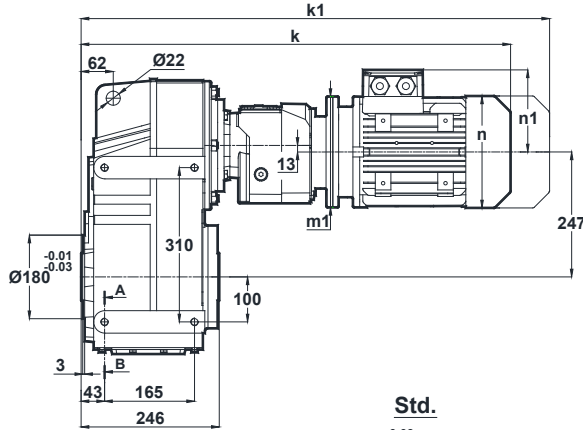
Dimension Pages

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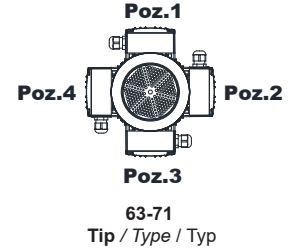
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV575.00
DV576.00

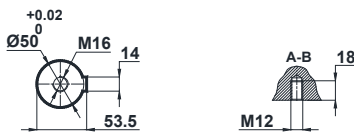
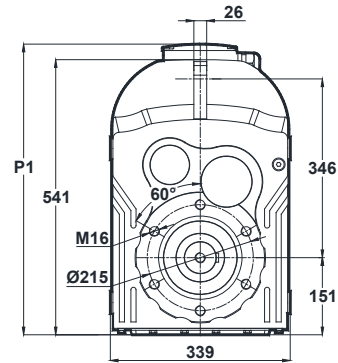
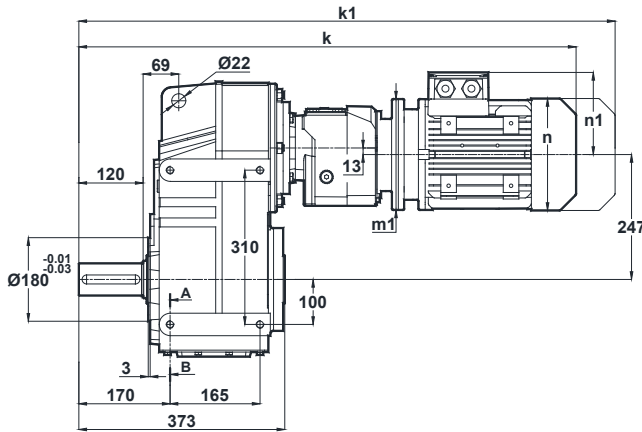


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14
k	696	685
k1	757	776
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105
p1	-	-

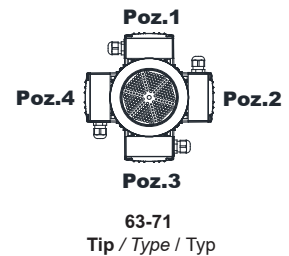


DV575.01
DV576.01

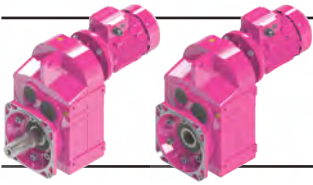


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14
k	823	812
k1	884	903
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105
p1	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

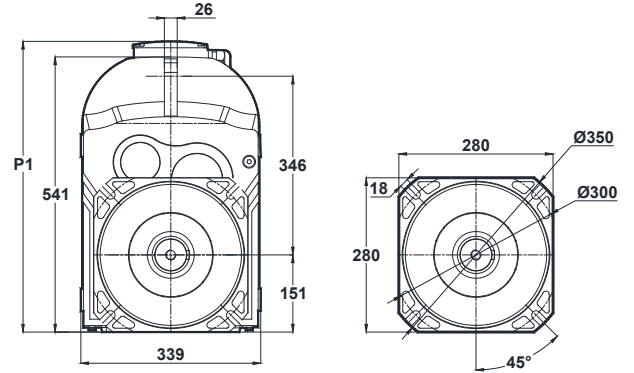
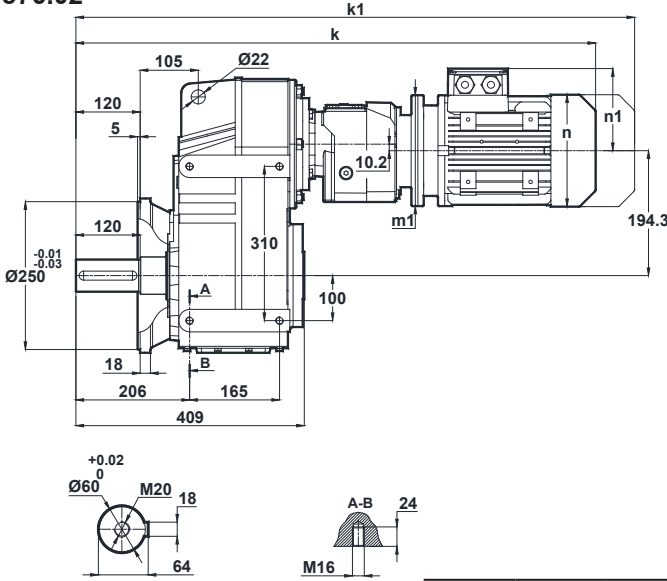


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

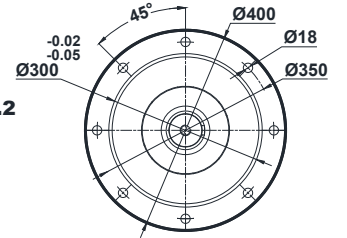
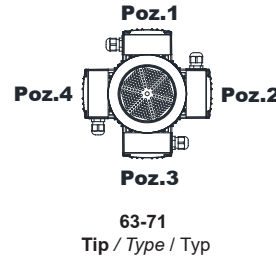
DV575.02
DV576.02



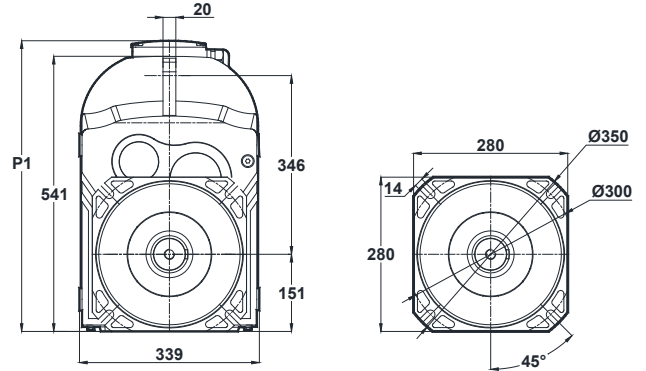
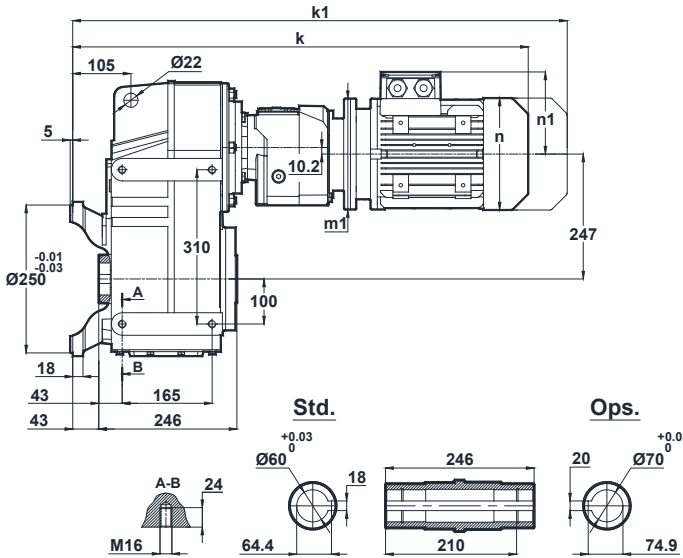
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5	71/B5 71/B14
k	859	848
k1	920	939
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105
p1	-	-



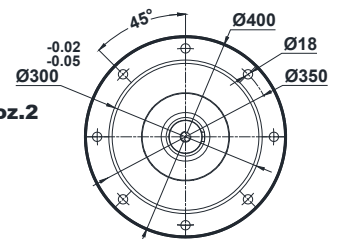
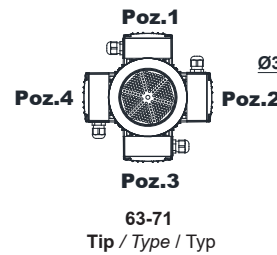
DV575.03
DV576.03



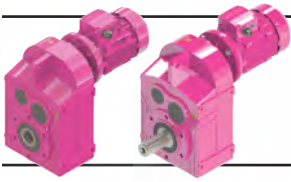
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5	71/B5 71/B14
k	739	728
k1	800	819
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105
p1	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

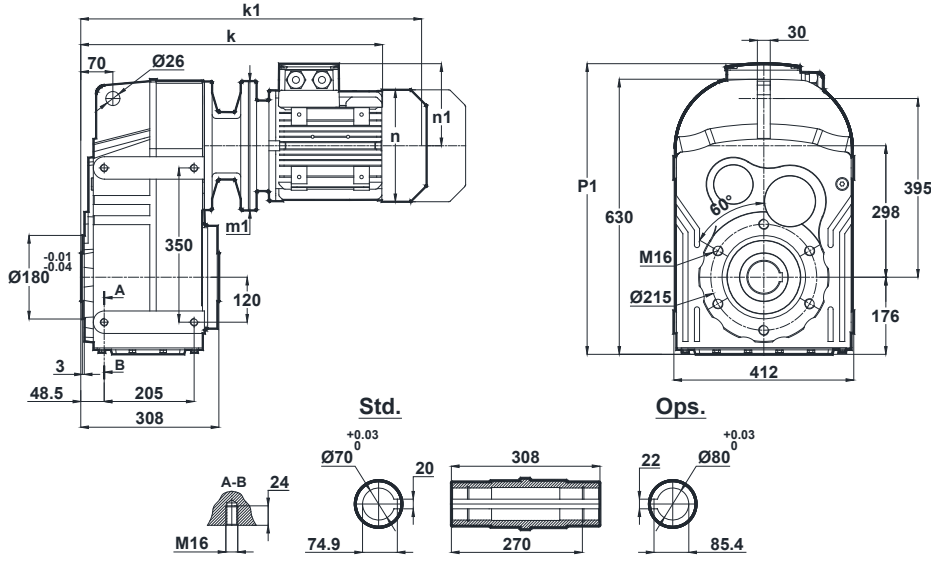


Ölçü Sayfaları Dimension Pages Abmessungsseiten



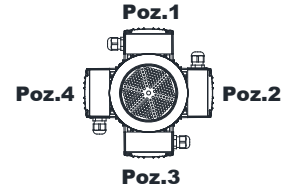
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV672.00
DV673.00



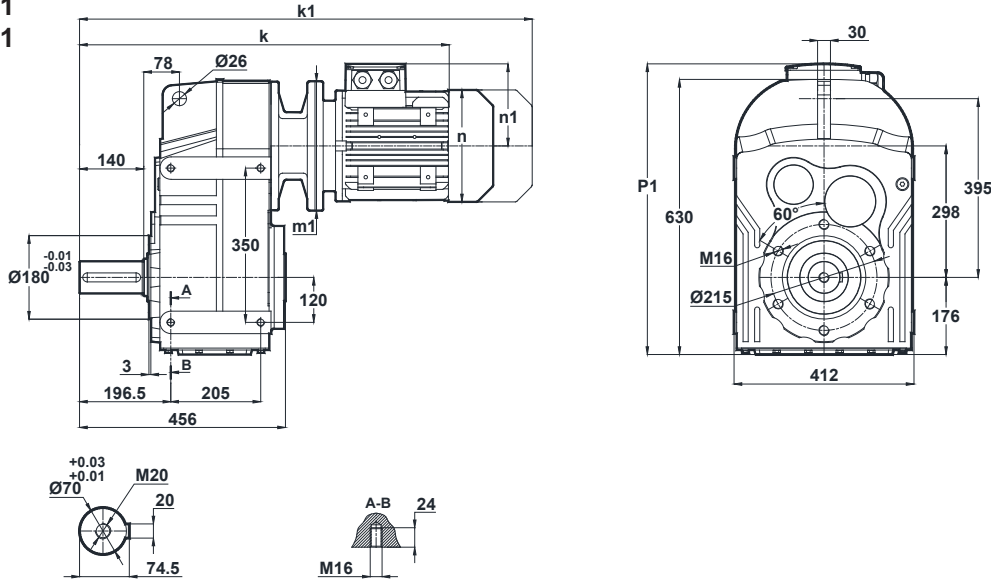
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	658	679	784	784	939	939	1028	1028	1086
k1	777.5	783.5	914	914	1119	1119	1198.5	1198.5	1272.5
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
p1	-	632	653	653	699	699	718	718	749

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



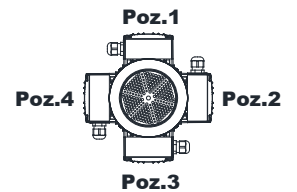
100-112-132-160-180-200
Tip / Type / Typ

DV672.01
DV673.01



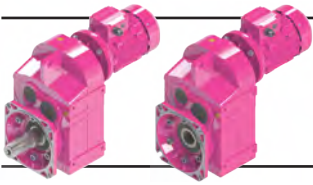
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	806	827	932	932	1087	1087	1176	1176	1234
k1	925.5	931.5	1062	1062	1267	1267	1346.5	1346.5	1420.5
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
p1	-	632	653	653	699	699	718	718	749

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

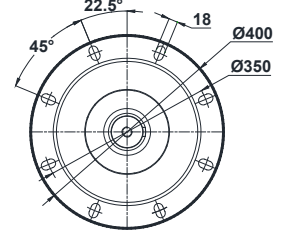
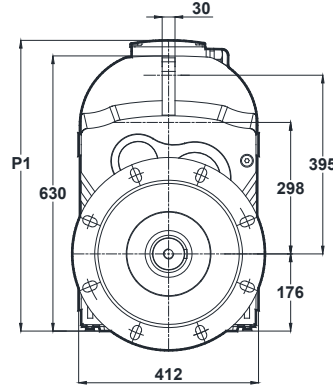
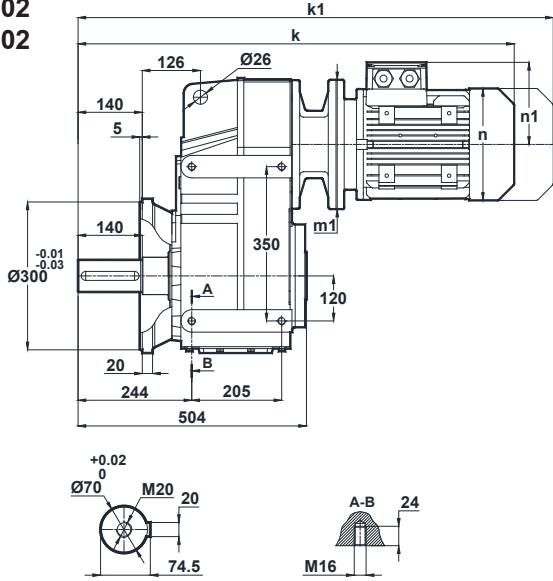


Ölçü Sayfaları Dimension Pages Abmessungenseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

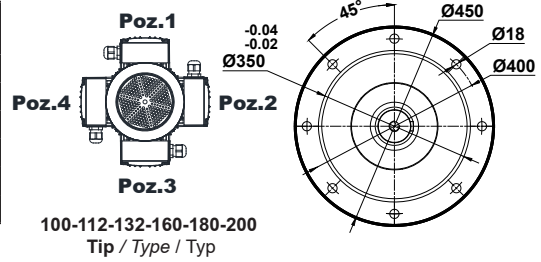
DV672.02
DV673.02



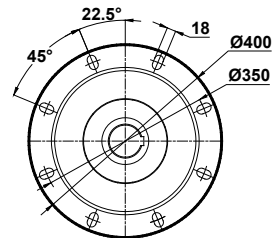
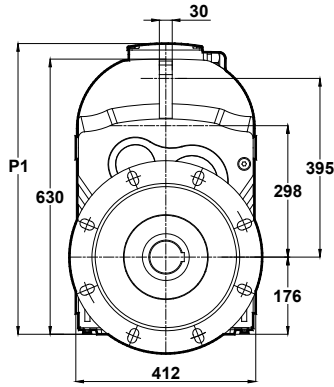
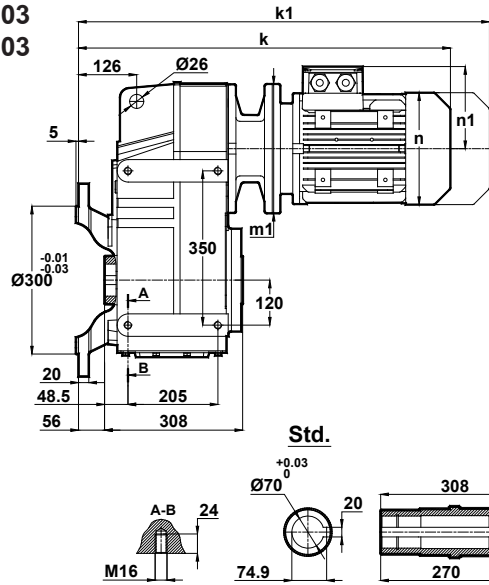
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	854	875	980	980	1135	1135	1224	1224	1282
k1	973.5	979.5	1110	1110	1315	1315	1394.5	1394.5	1468.5
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
p1	-	632	653	653	699	699	718	718	749



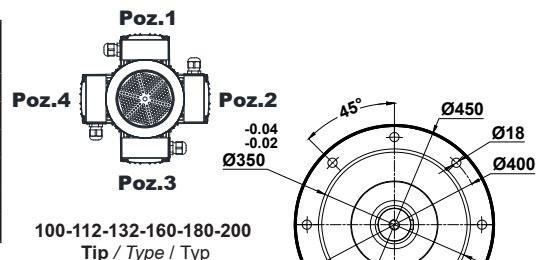
DV672.03
DV673.03



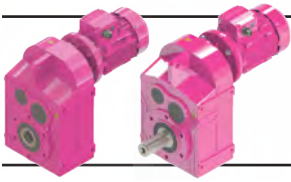
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	714	735	840	840	995	995	1084	1084	1142
k1	833.5	839.5	970	970	1175	1175	1254.5	1254.5	1328.5
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
p1	-	632	653	653	699	699	718	718	749



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

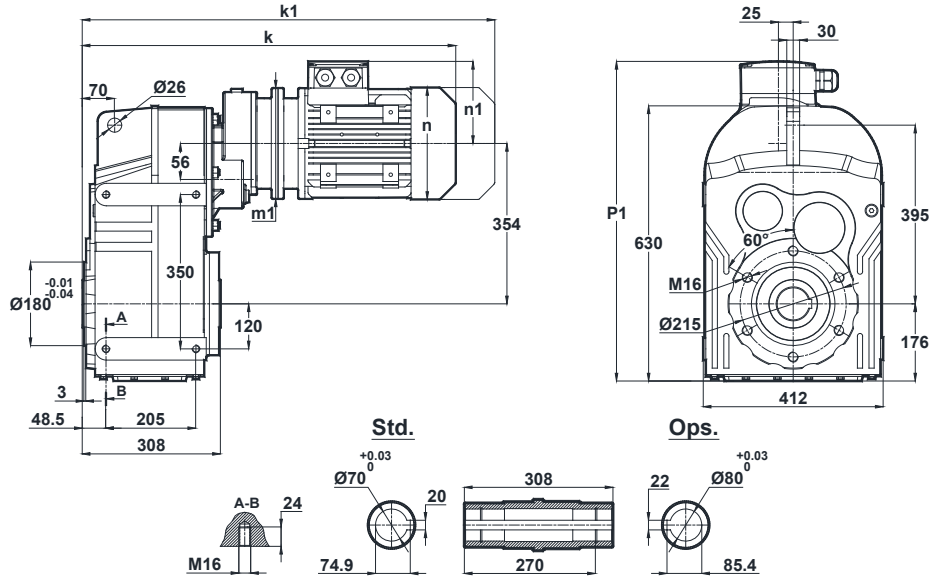
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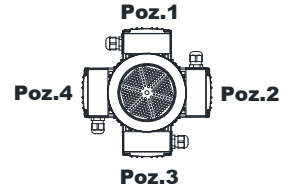
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV674.00



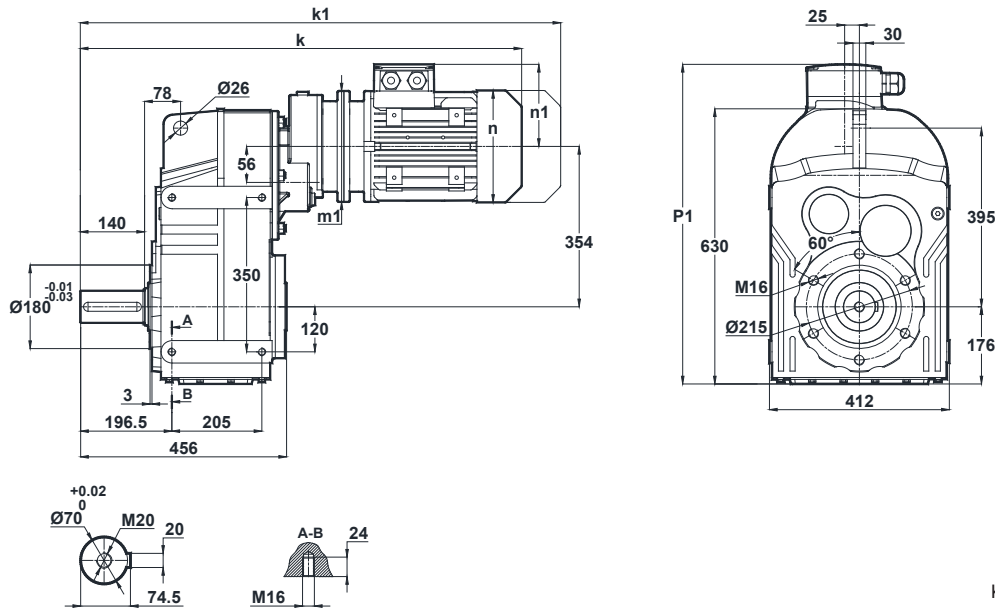
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	639	662	703	703
k1	730	755	807.5	807.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	642	651	662	662



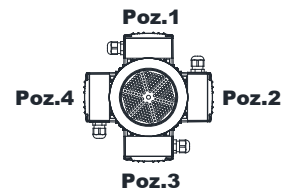
71-80-90
Tip / Type / Typ

DV674.01



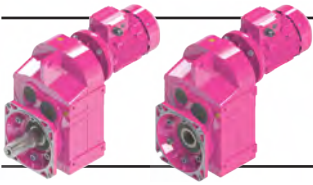
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	787	810	851	851
k1	878	903	955.5	955.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	642	651	662	662



71-80-90
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

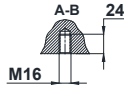
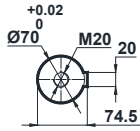
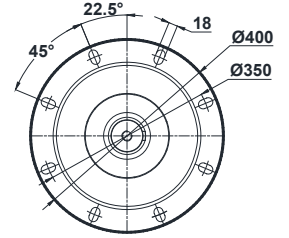
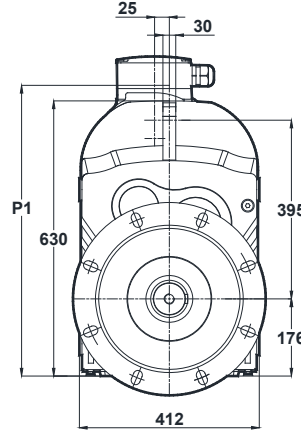
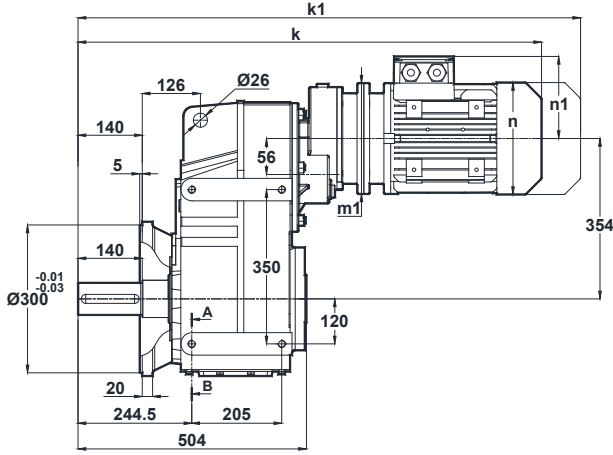
Dimension Pages

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Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

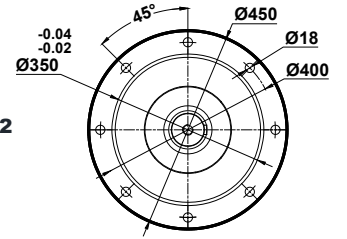
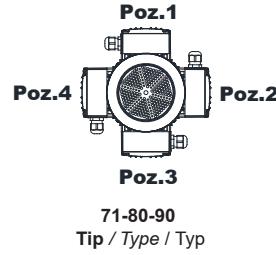
DV674.02



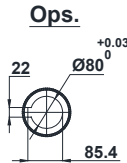
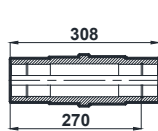
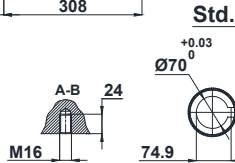
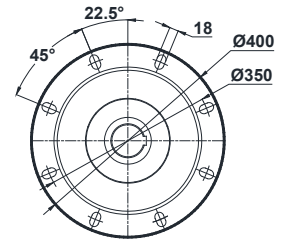
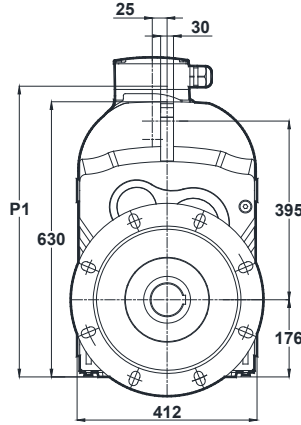
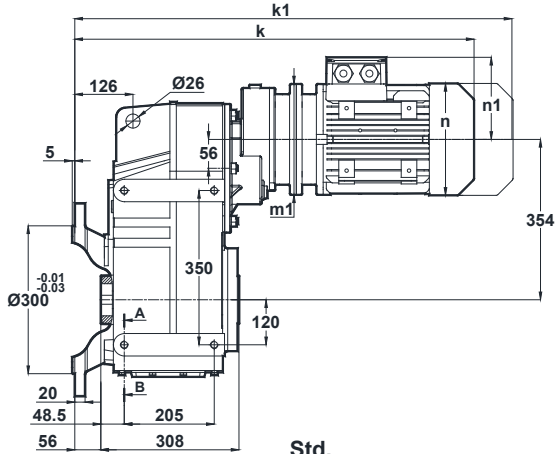
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	835	858	899	899
k1	926	951	1003.5	1003.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	642	651	662	662

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



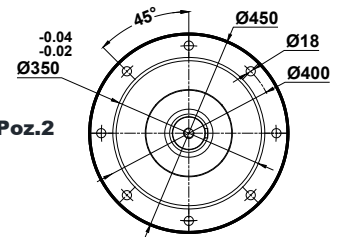
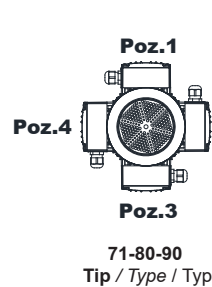
DV674.03



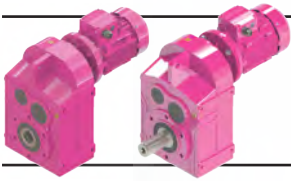
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	695	718	759	759
k1	786	811	863.5	863.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	642	651	662	662

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

Optional Flange Dimensions
Auswählbare Flanschabmessungen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

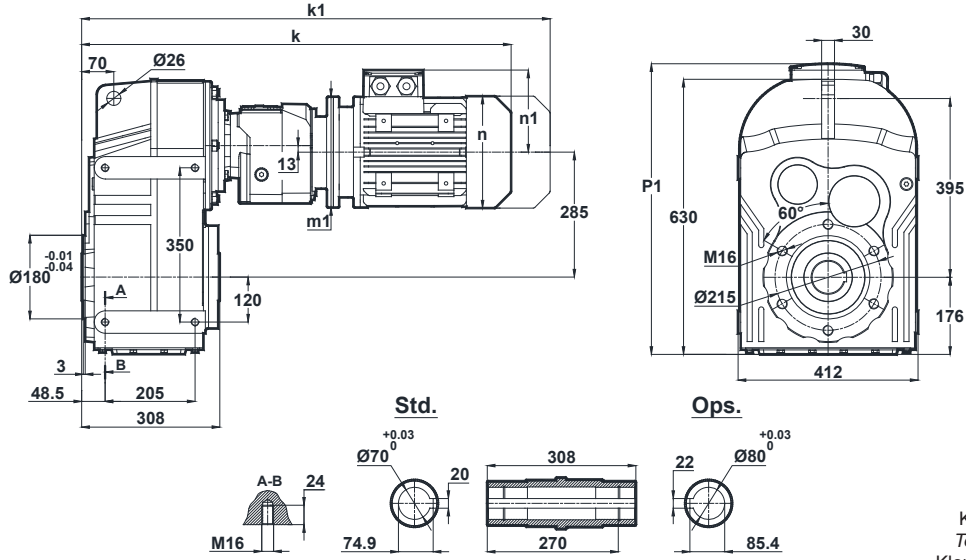
Dimension Pages

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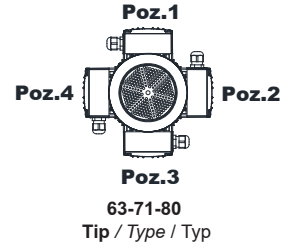
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV675.00
DV676.00

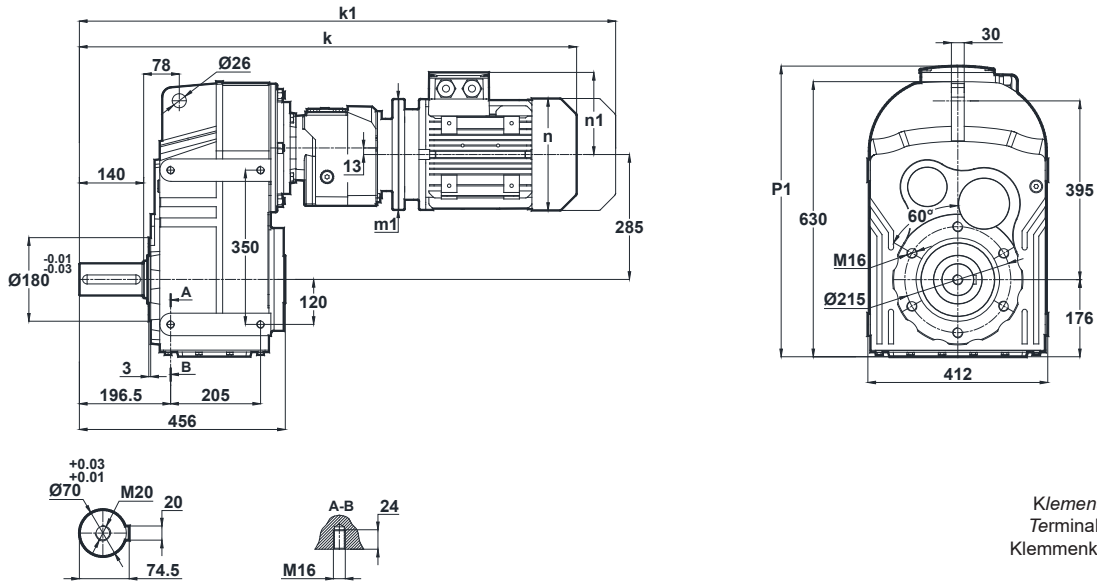


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	751	740	792
k1	812	831	885
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	-	-	-

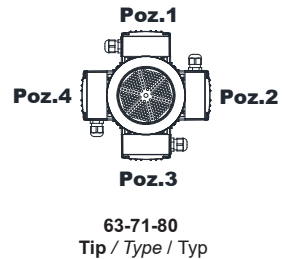


DV675.01
DV676.01

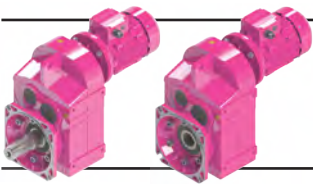


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	899	888	940
k1	960	979	1033
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	-	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

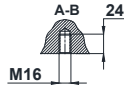
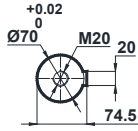
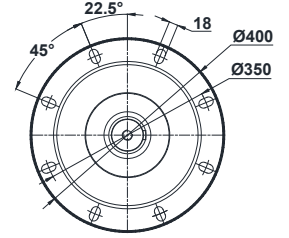
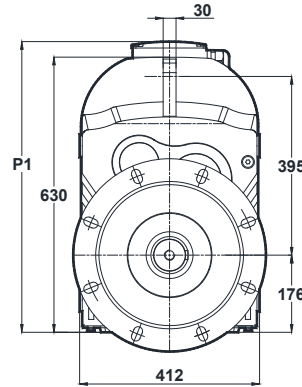
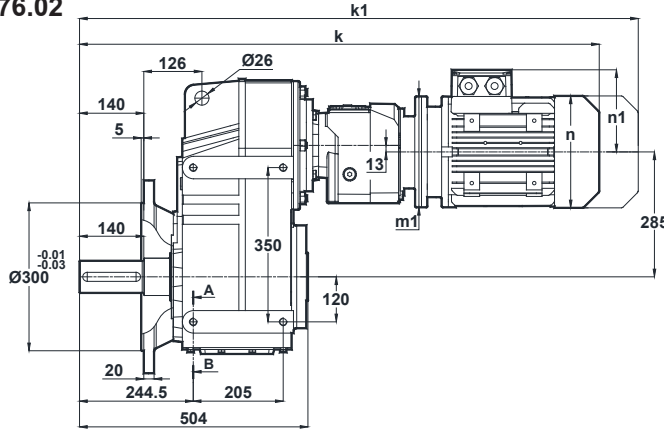


Ölçü Sayfaları Dimension Pages Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

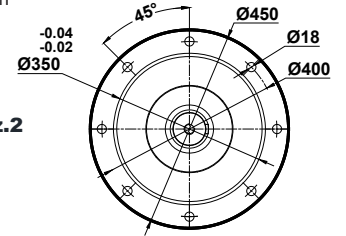
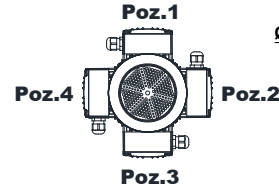
DV675.02
DV676.02



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

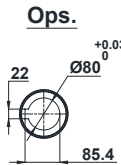
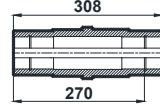
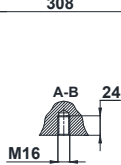
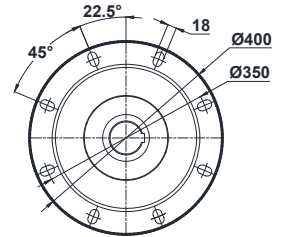
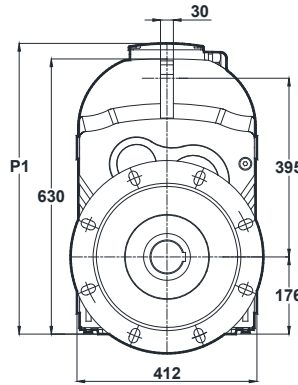
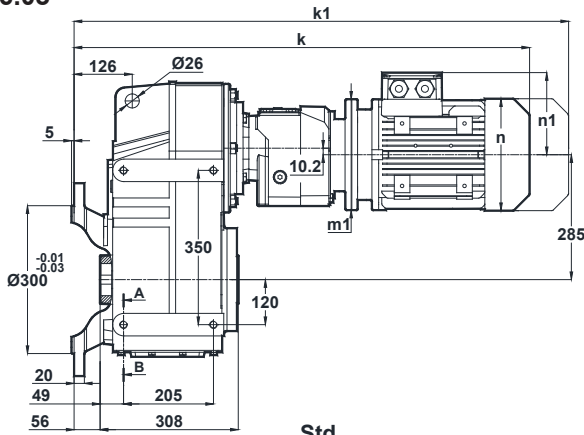
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	947	936	988
k1	1008	1027	1081
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	-	-	-



63-71-80
Tip / Type / Typ

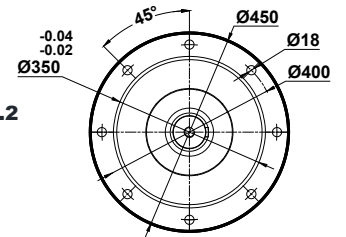
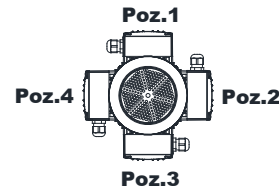
DV675.03
DV676.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

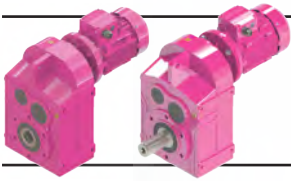
Optional Flange Dimensions
Auswählbare Flanschabmessungen

	63/B5	71/B5 71/B14	80/B5 80/B14
k	807	796	848
k1	868	887	941
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120
p1	-	-	-



63-71-80
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

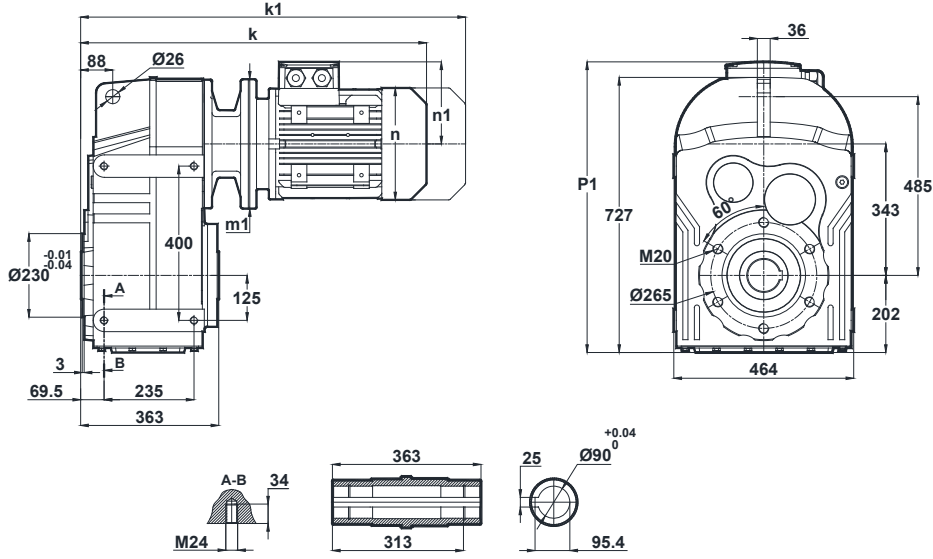
Dimension Pages

Abmessungsseiten

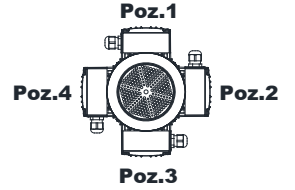


Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV772.00
DV773.00



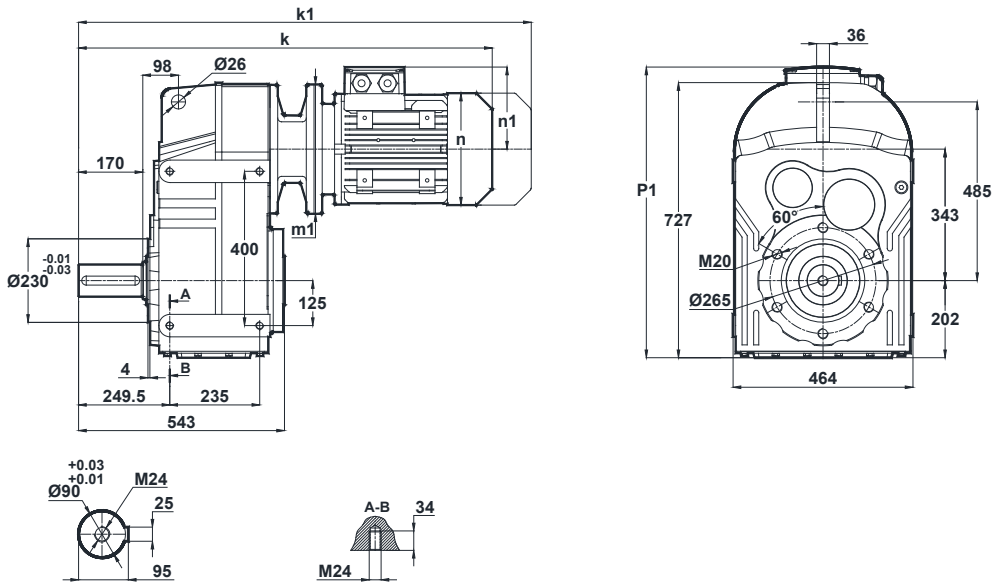
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



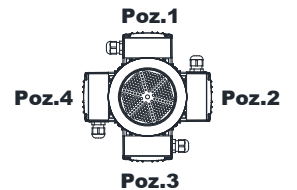
100-112-132-160-180-200-225
Tip / Type / Typ

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	700	721	820	820	974	974	1064	1064	1122	1208	1233
k1	819.5	825.5	950	950	1154	1154	1234.5	1234.5	1308.5	1373	1398
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
p1	-	-	724	724	770	770	789	789	822	830	830

DV772.01
DV773.01



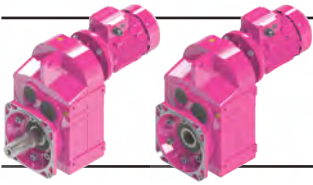
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225
Tip / Type / Typ

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	880	901	1000	1000	1154	1154	1244	1244	1302	1388	1413
k1	999.5	1005.5	1130	1130	1334	1334	1414.5	1414.5	1488.5	1553	1578
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
p1	-	-	724	724	770	770	789	789	822	830	830

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

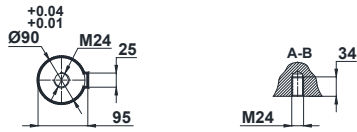
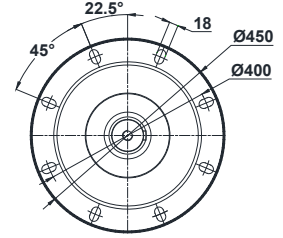
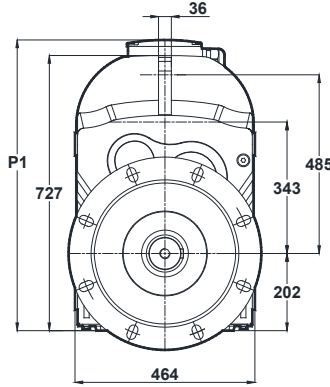
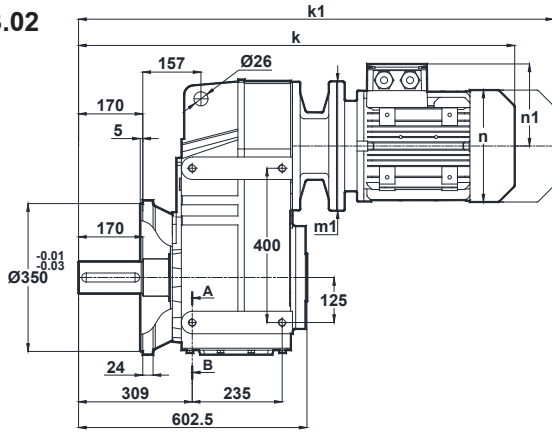
Dimension Pages

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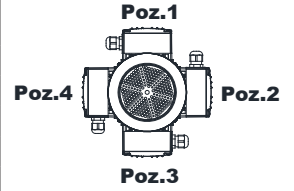
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV772.02
DV773.02



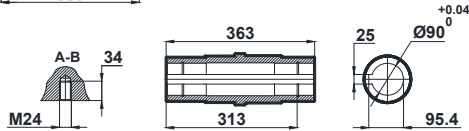
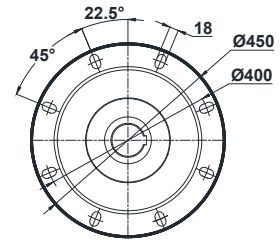
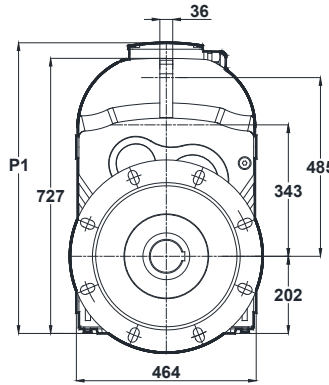
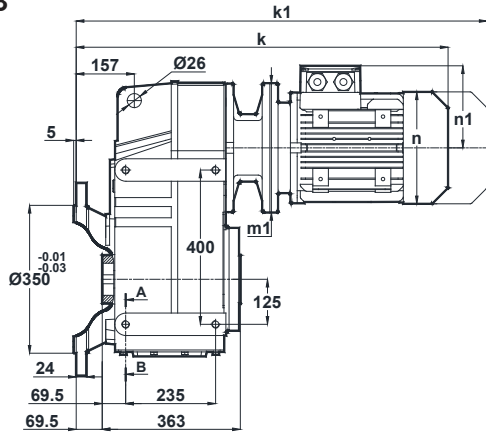
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	940	961	1060	1060	1214	1214	1304	1304	1362	1448	1473
k1	1059.5	1065.5	1190	1190	1394	1394	1474.5	1474.5	1548.5	1613	1638
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
p1	-	-	724	724	770	770	789	789	822	830	830



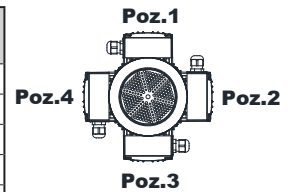
100-112-132-160-180-200-225
Tip / Type / Typ

DV772.03
DV773.03



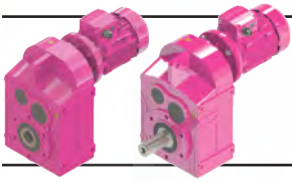
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	770	791	890	890	1044	1044	1134	1134	1192	1278	1303
k1	889.5	895.5	1020	1020	1224	1224	1304.5	1304.5	1378.5	1443	1468
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
p1	-	-	724	724	770	770	789	789	822	830	830



100-112-132-160-180-200-225
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

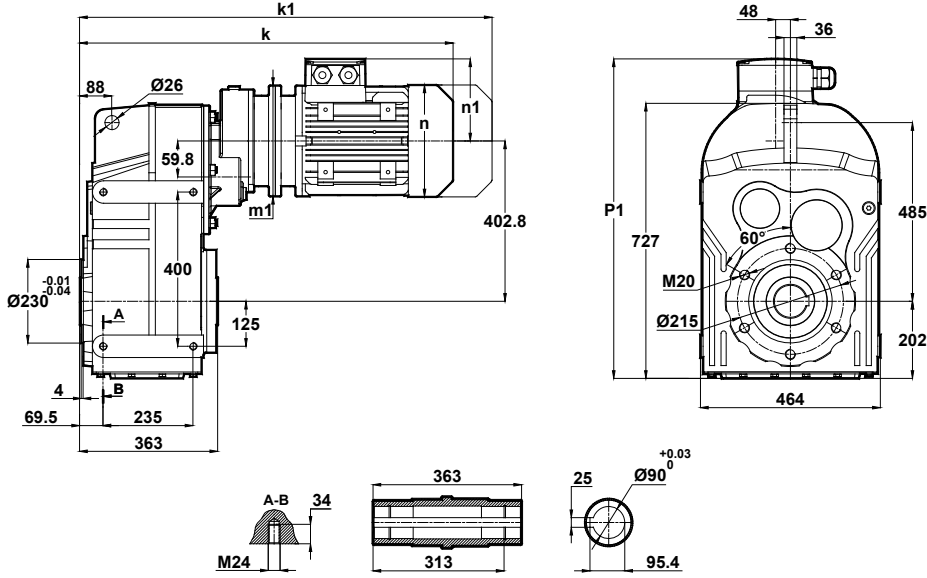
Dimension Pages

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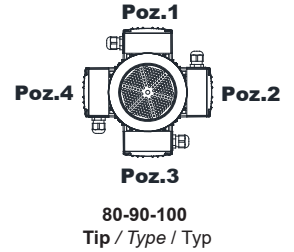
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV774.00

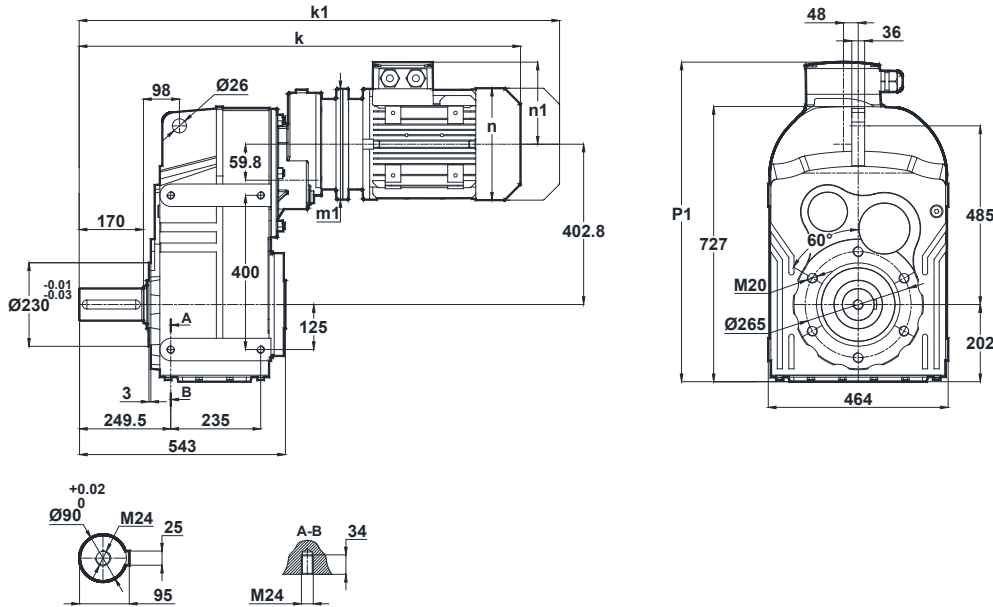


	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	714	755	755	809
k1	807	859.5	859.5	928.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	737	737	752

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

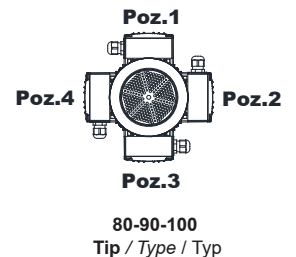


DV774.01

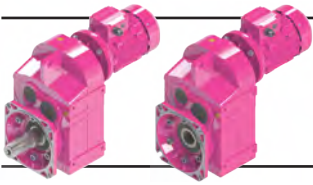


	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	894	935	935	989
k1	987	1039.5	1039.5	1108.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	737	737	752

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

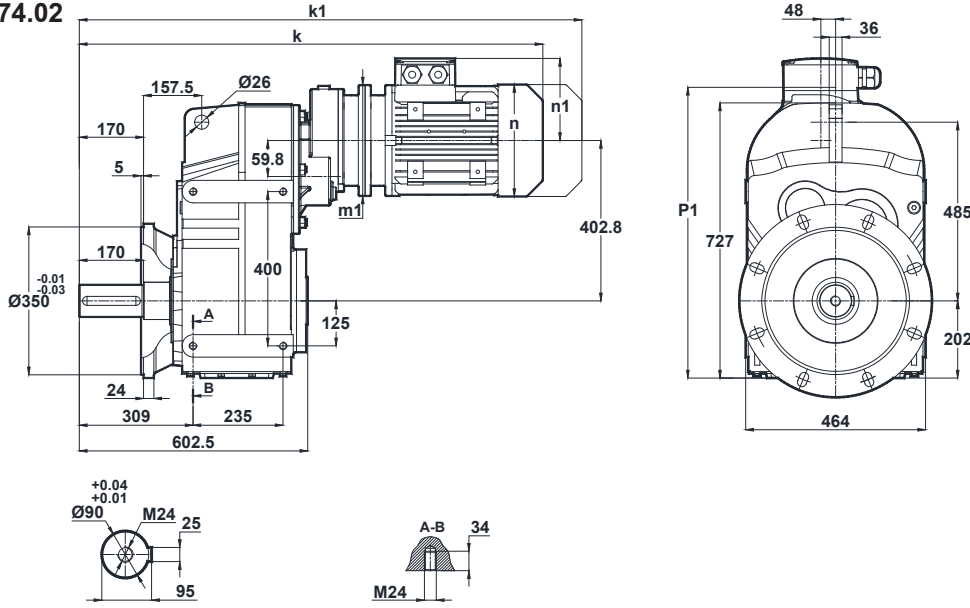


Ölçü Sayfaları Dimension Pages Abmessungsseiten



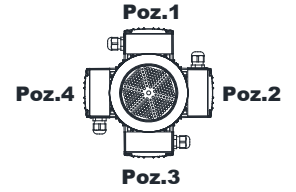
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV774.02



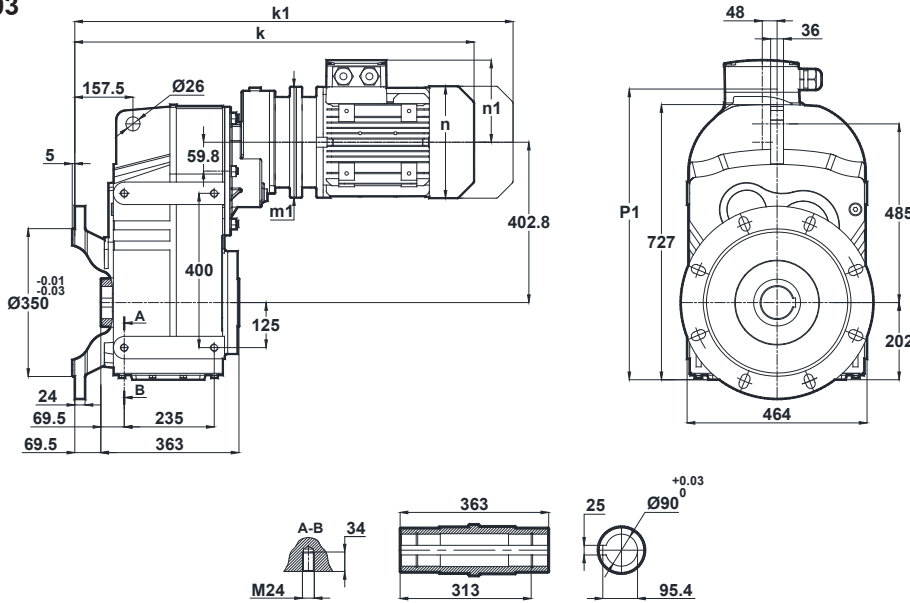
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	954	995	995	1049
k1	1047	1099.5	1099.5	1168.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	737	737	752

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



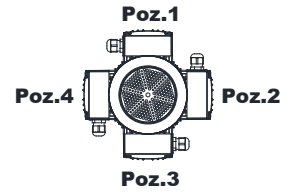
80-90-100
Tip / Type / Typ

DV774.03



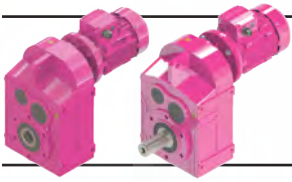
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	784	825	825	879
k1	877	929.5	929.5	998.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	737	737	752

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

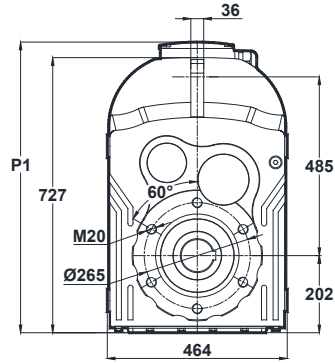
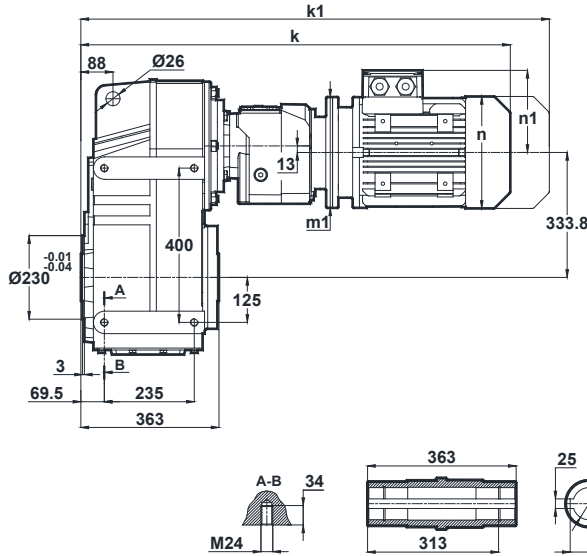
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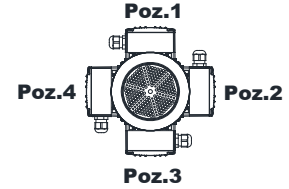
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV775.00
DV776.00



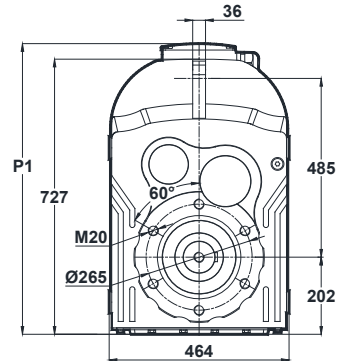
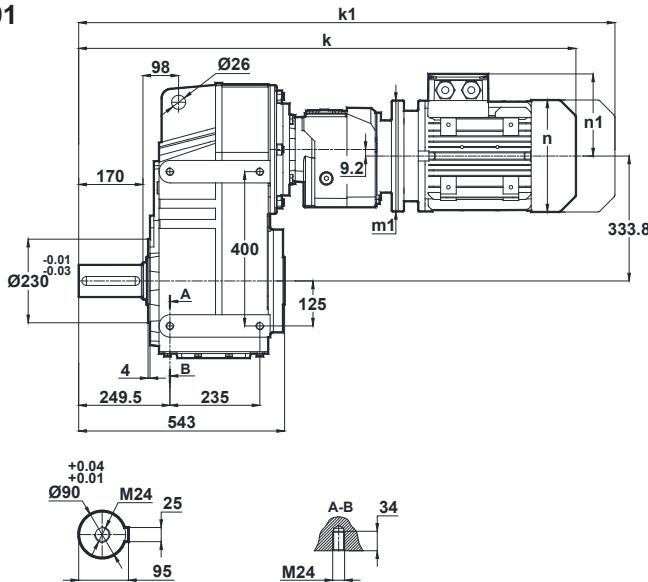
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	841	864	905	905
k1	932	957	1009.5	1009.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	-	-	-	-



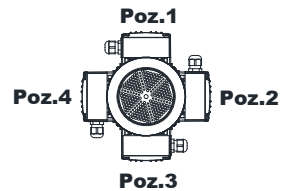
71-80-90
Tip / Type / Typ

DV775.01
DV776.01



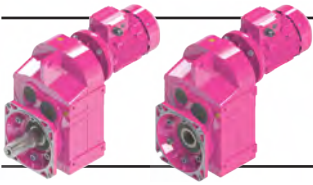
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1021	1044	1085	1085
k1	1112	1137	1189.5	1189.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	-	-	-	-



71-80-90
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

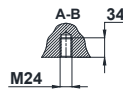
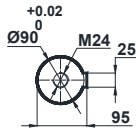
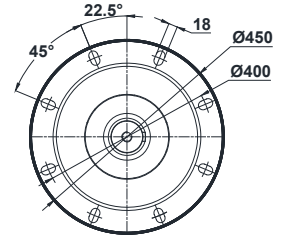
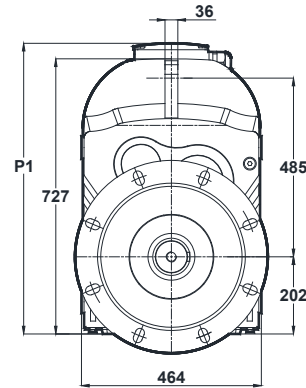
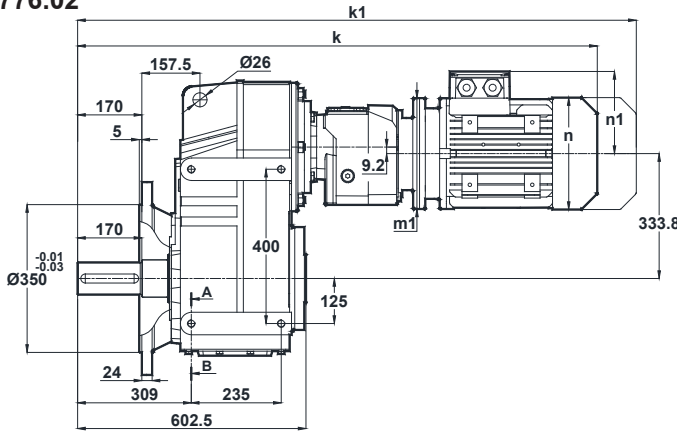
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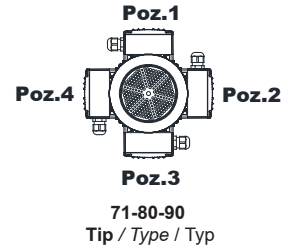
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV775.02
DV776.02

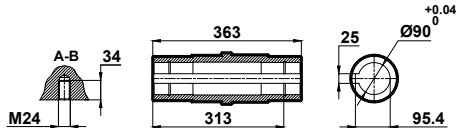
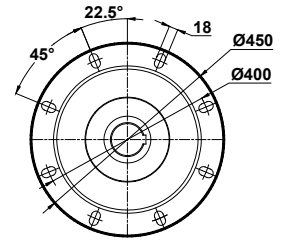
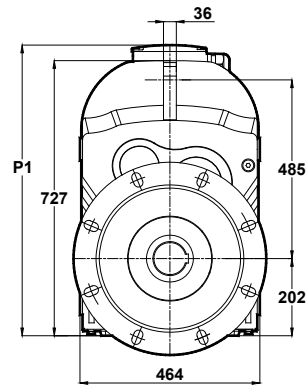
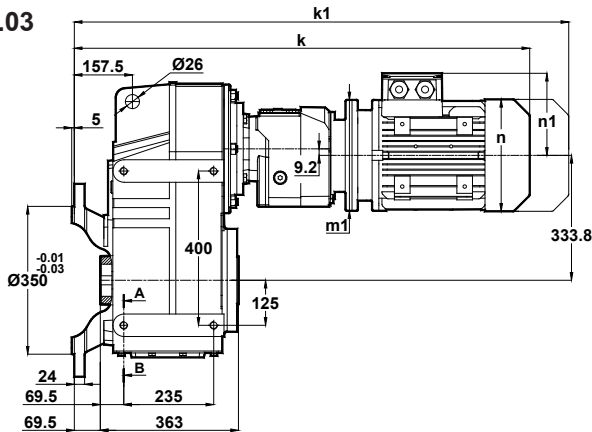


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1081	1104	1145	1145
k1	1172	1197	1249.5	1249.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	-	-	-	-

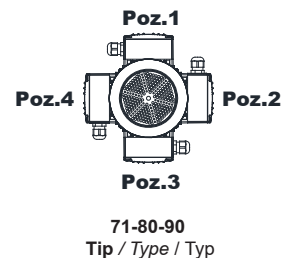


DV775.03
DV776.03

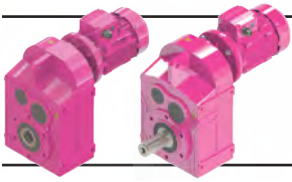


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	911	934	975	975
k1	1002	1027	1079.5	1079.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
p1	-	-	-	-



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

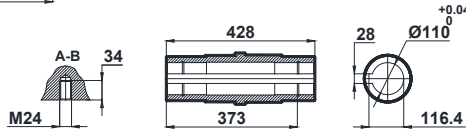
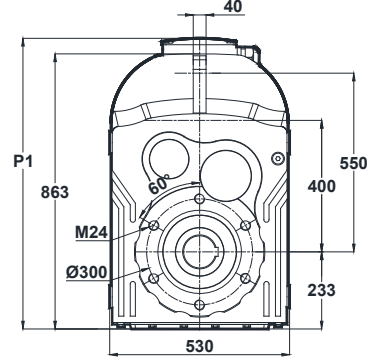
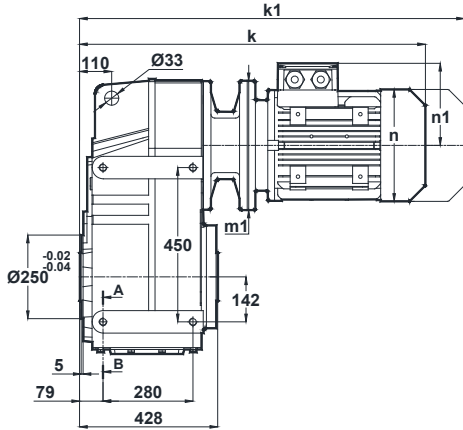


Ölçü Sayfaları Dimension Pages Abmessungsseiten



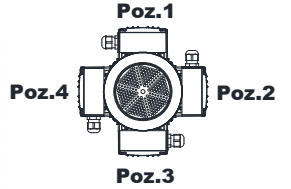
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV872.00
DV873.00



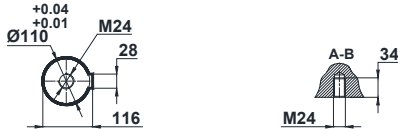
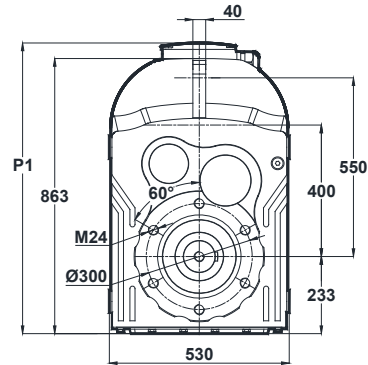
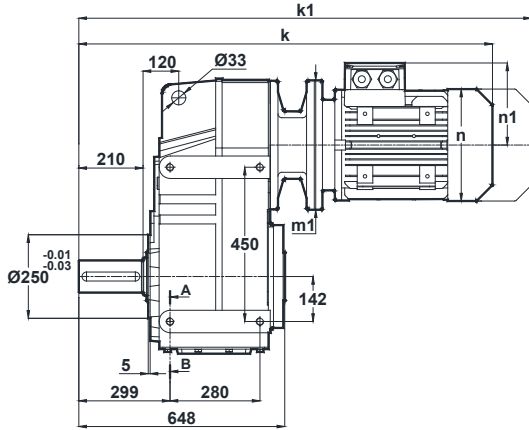
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	872	872	1097	1097	1186	1186	1224	1257	1282	1358	1420	1420
k1	1002	1002	1277	1277	1356.5	1356.5	1410.5	1422	1447	1528.5	1593	1599
n / n1	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
p1	-	-	-	-	877	877	908	918	918	955	983	983



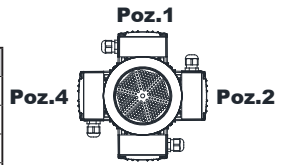
132-160-180-200-225-250-280
Tip / Type / Typ

DV872.01
DV873.01



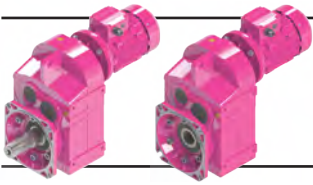
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	1092	1092	1317	1317	1406	1406	1444	1477	1502	1578	1640	1640
k1	1222	1222	1497	1497	1576.5	1576.5	1630.5	1642	1667	1748.5	1813	1819
n / n1	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
p1	-	-	-	-	877	877	908	918	918	955	983	983



132-160-180-200-225-250-280
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

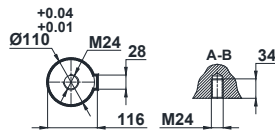
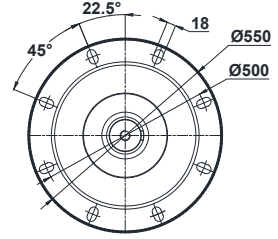
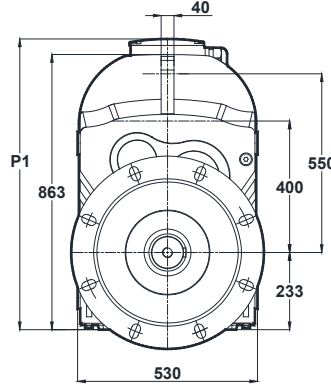
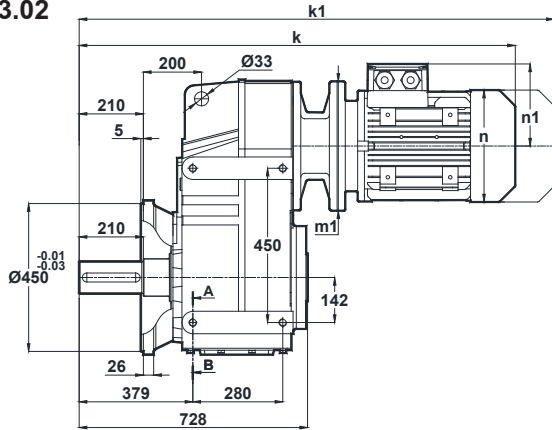
Dimension Pages

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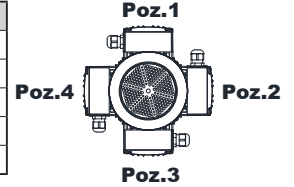
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV872.02
DV873.02



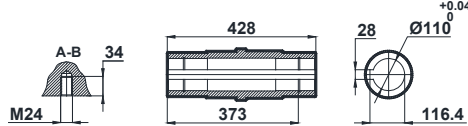
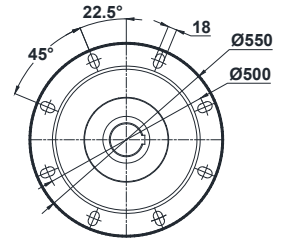
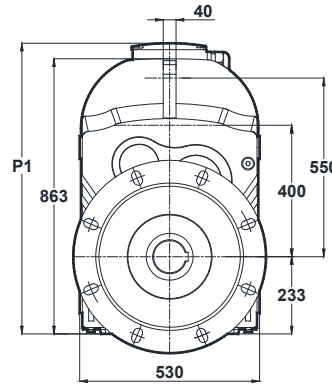
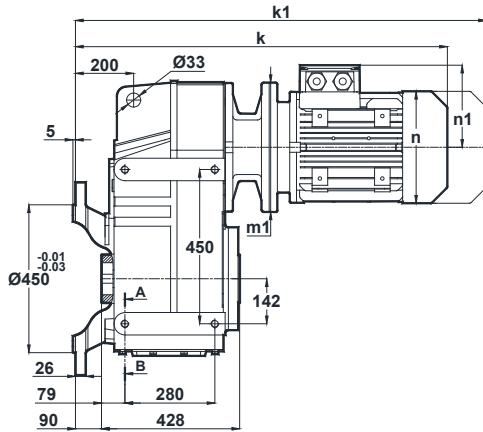
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	1172	1172	1397	1397	1486	1486	1524	1557	1582	1658	1720	1720
k1	1302	1302	1577	1577	1656.5	1656.5	1710.5	1722	1747	1828.5	1893	1899
n / n1	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
p1	-	-	-	-	877	877	908	918	918	955	983	983



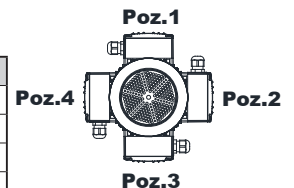
132-160-180-200-225-250-280
Tip / Type / Typ

DV872.03
DV873.03



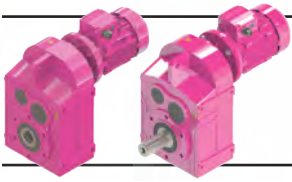
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	962	962	1187	1187	1276	1276	1314	1347	1372	1448	1510	1510
k1	1092	1092	1367	1367	1446.5	1446.5	1500.5	1512	1537	1618.5	1683	1689
n / n1	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
p1	-	-	-	-	877	877	908	918	918	955	983	983



132-160-180-200-225-250-280
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

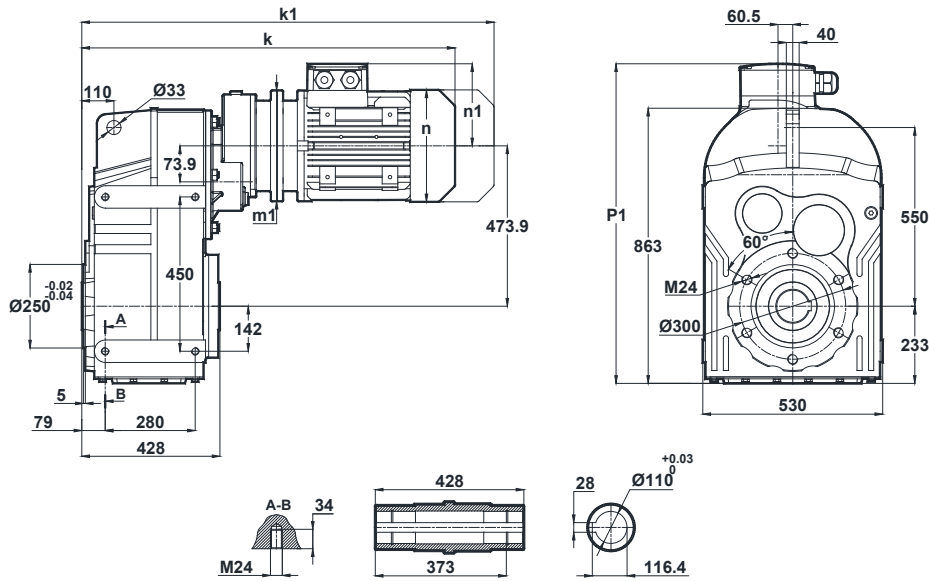


Ölçü Sayfaları Dimension Pages Abmessungsseiten



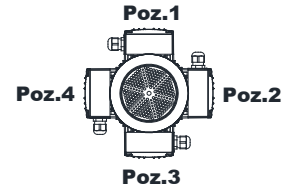
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV874.00



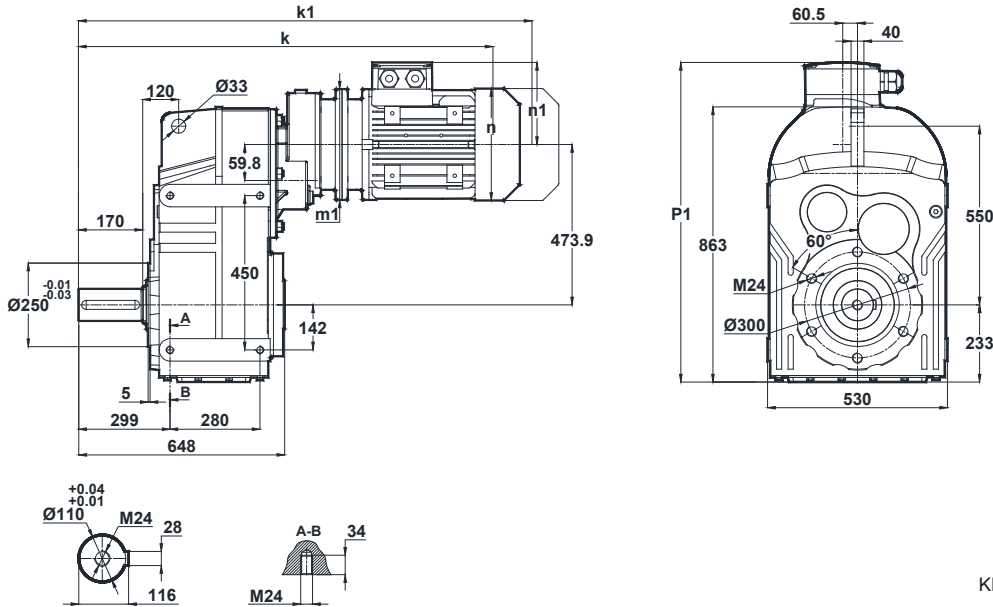
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	885	906	1011	1011
k1	1004.5	1010.5	1141	1141
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	886	886



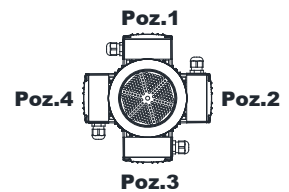
100-112-132
Tip / Type / Typ

DV874.01



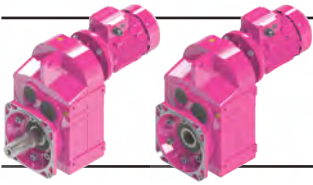
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1105	1126	1231	1231
k1	1224.5	1230.5	1361	1361
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	886	886



100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

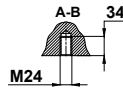
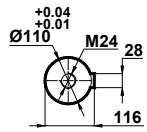
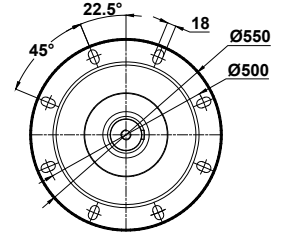
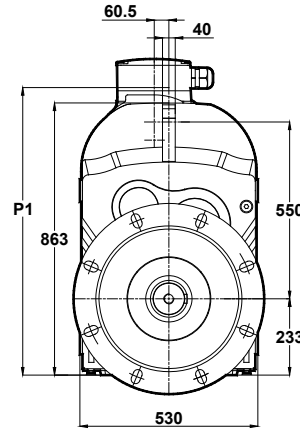
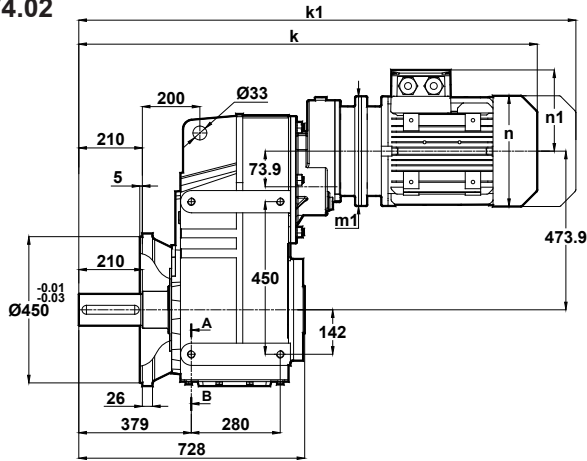


Ölçü Sayfaları Dimension Pages Abmessungsseiten



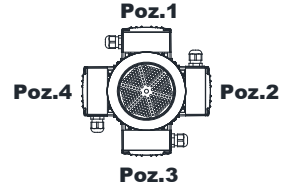
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV874.02



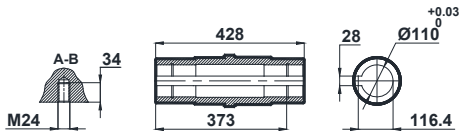
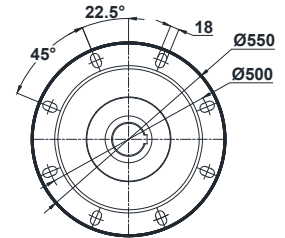
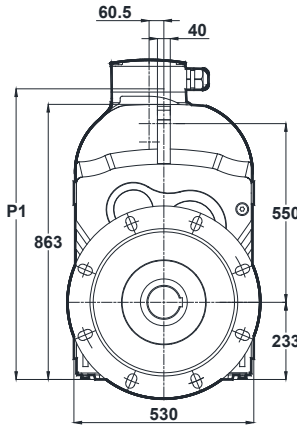
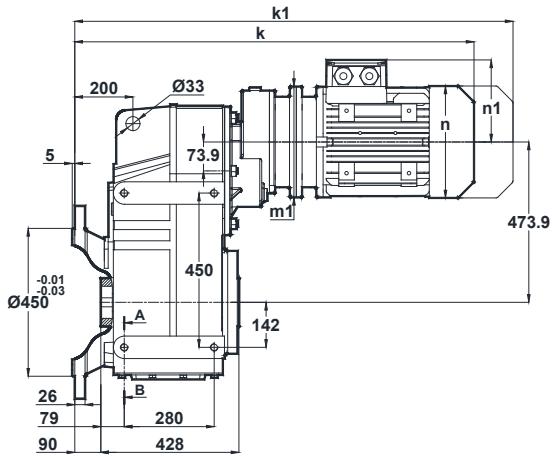
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1185	1206	1311	1311
k1	1304.5	1310.5	1441	1441
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	886	886

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



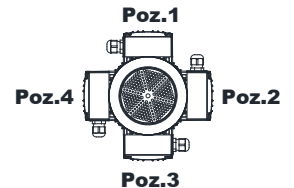
100-112-132
Tip / Type / Typ

DV874.03



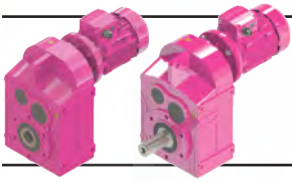
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	975	996	1101	1101
k1	1094.5	1100.5	1231	1231
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	886	886

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

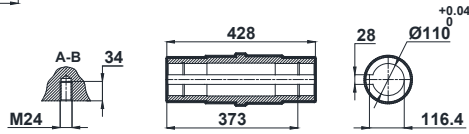
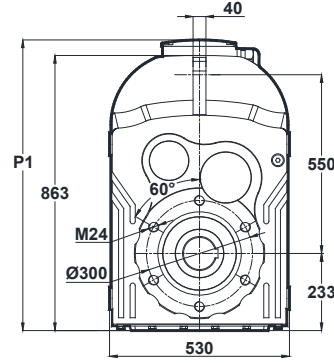
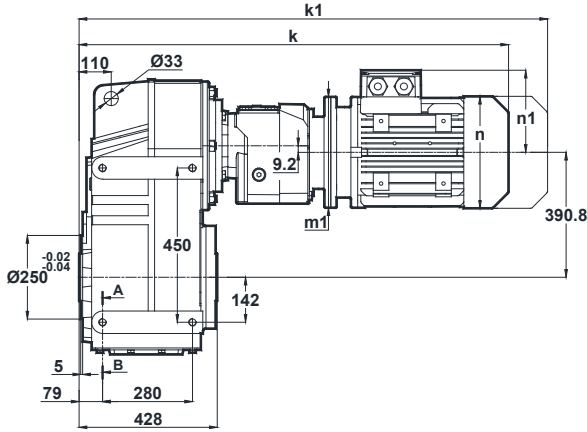
Dimension Pages

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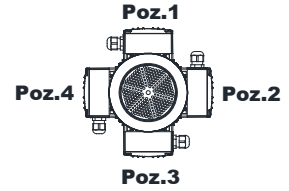
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV875.00
DV876.00



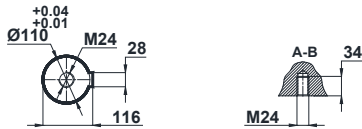
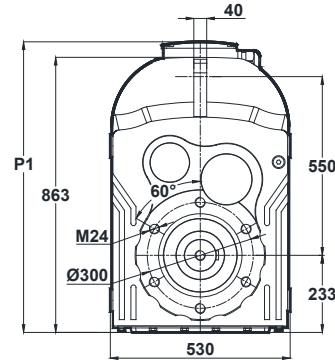
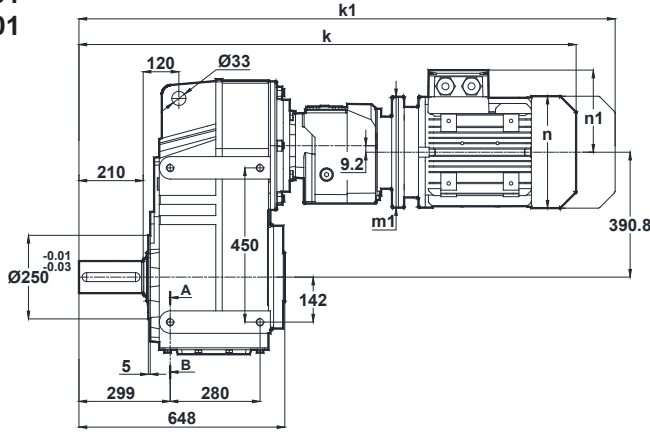
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	904	927	968	968	1020
k1	995	1020	1072.5	1072.5	1139.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 193
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
p1	736	745	756	756	771



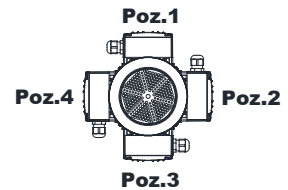
71-80-90-100
Tip / Type / Typ

DV875.01
DV876.01



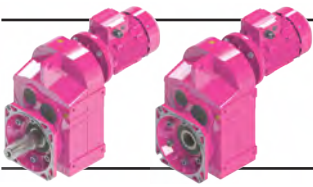
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1124	1147	1188	1188	1240
k1	1215	1240	1292.5	1292.5	1359.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 193
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
p1	736	745	756	756	771



71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.

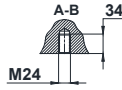
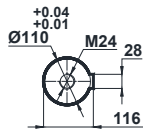
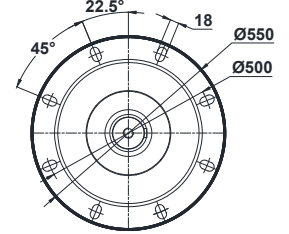
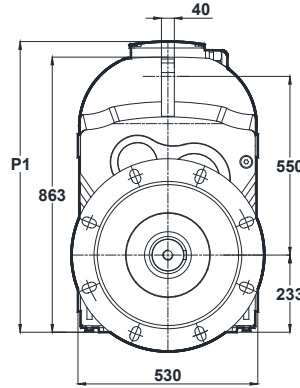
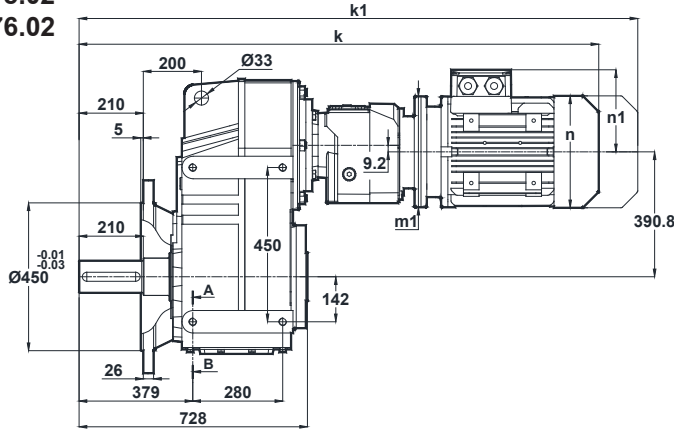


Ölçü Sayfaları Dimension Pages Abmessungsseiten



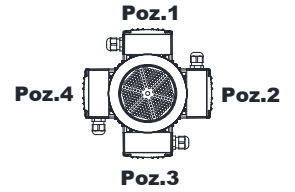
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV875.02
DV876.02



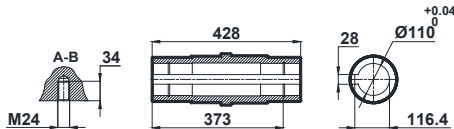
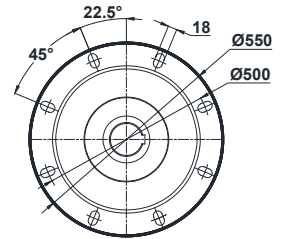
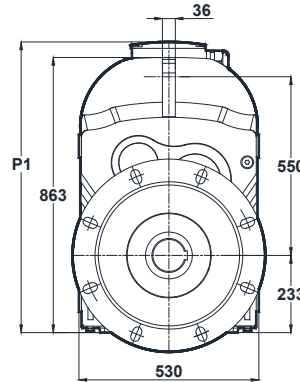
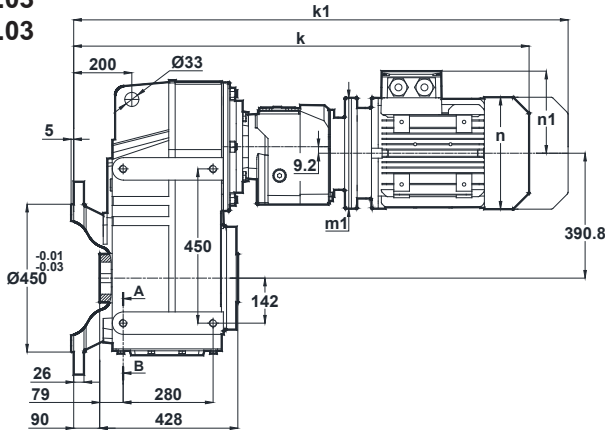
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1204	1227	1268	1268	1320
k1	1295	1320	1372.5	1372.5	1439.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 193
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
p1	736	745	756	756	771

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



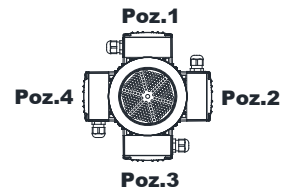
71-80-90-100
Tip / Type / Typ

DV875.03
DV876.03



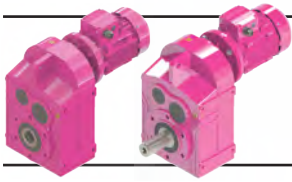
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	994	1017	1058	1058	1110
k1	1085	1110	1162.5	1162.5	1229.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 193
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
p1	736	745	756	756	771

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

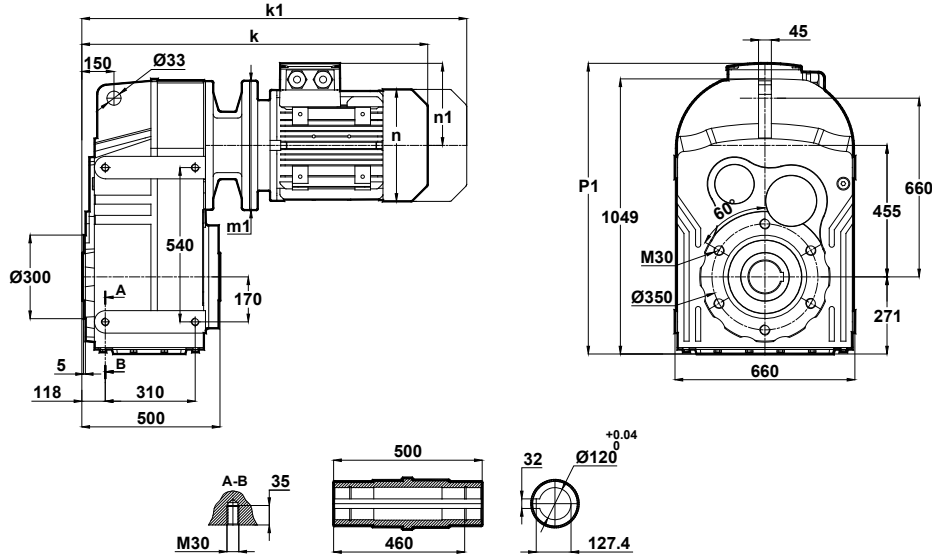
Dimension Pages

Abmessungsseiten



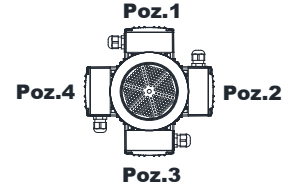
Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV972.00
DV973.00



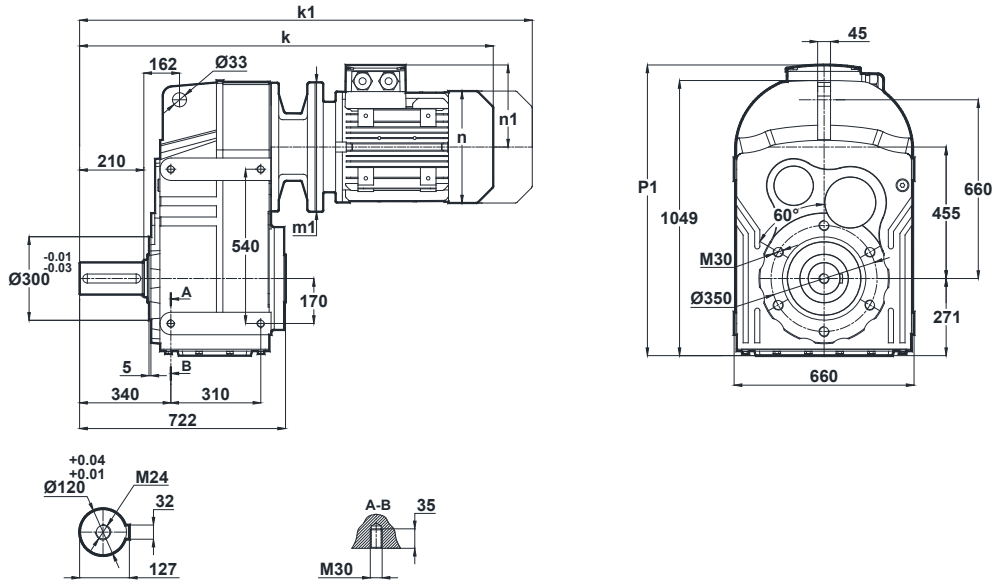
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5
k	1086	1086	1175	1175	1237	1312	1337	1465	1527	1527	1739	1739
k1	1246	1246	1345.5	1345.5	1423.5	1477	1502	1635.5	1700	1706	-	-
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236



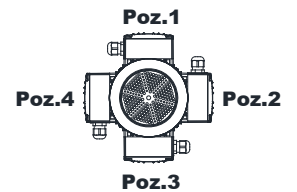
160-180-200-225-250-280-315
Tip / Type / Typ

DV972.01
DV973.01



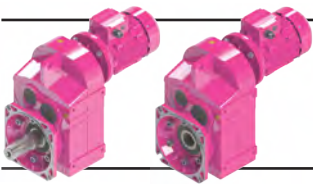
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5
k	1308	1308	1397	1397	1459	1534	1559	1687	1749	1749	1961	1961
k1	1488	1488	1567.5	1567.5	1645.5	1699	1724	1857.5	1922	1928	-	-
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236



160-180-200-225-250-280-315
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

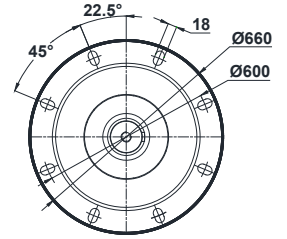
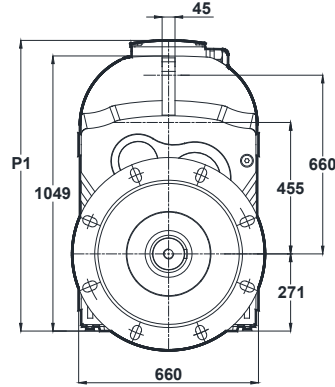
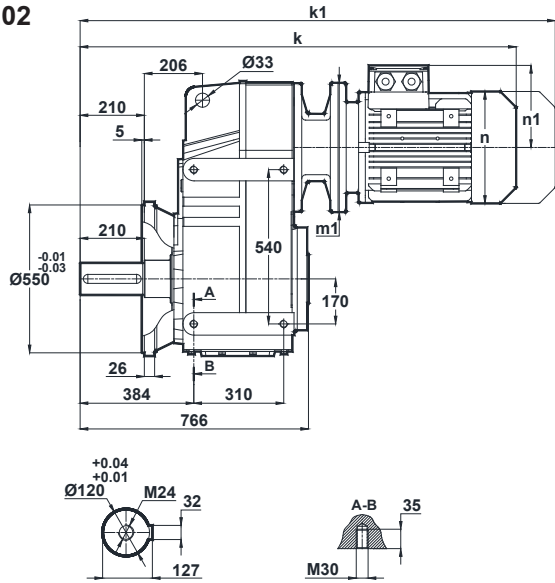
Dimension Pages

Abmessungsseiten



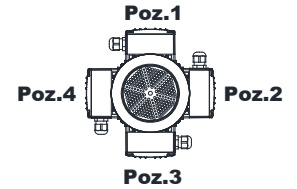
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV972.02
DV973.02



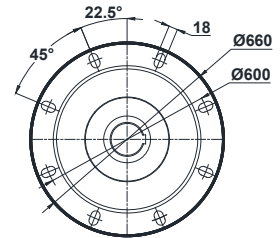
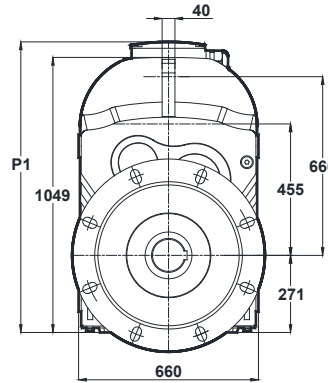
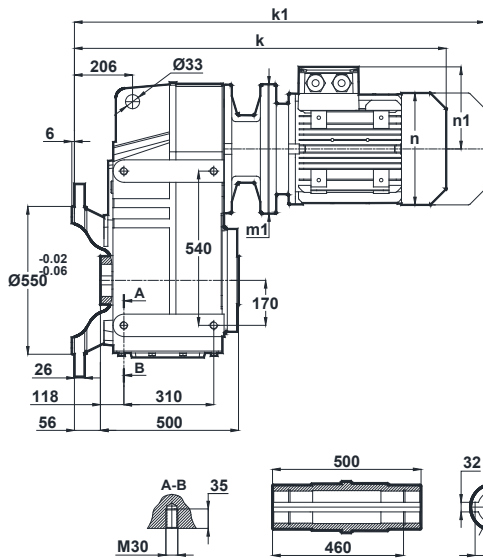
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5
k	1352	1352	1441	1441	1503	1578	1603	1731	1793	1793	2005	2005
k1	1532	1532	1611.5	1611.5	1689.5	1743	1768	1901.5	1966	1972	-	-
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236



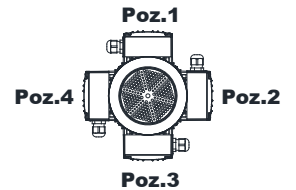
160-180-200-225-250-280-315
Tip / Type / Typ

DV972.03
DV973.03



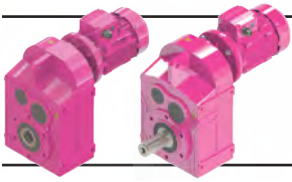
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5
k	1142	1142	1231	1231	1293	1368	1393	1521	1583	1583	1795	1795
k1	1322	1322	1401.5	1401.5	1479.5	1533	1533	1686	1756	1762	-	-
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
p1	-	-	-	-	-	-	-	-	1076	1076	1236	1236



160-180-200-225-250-280-315
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

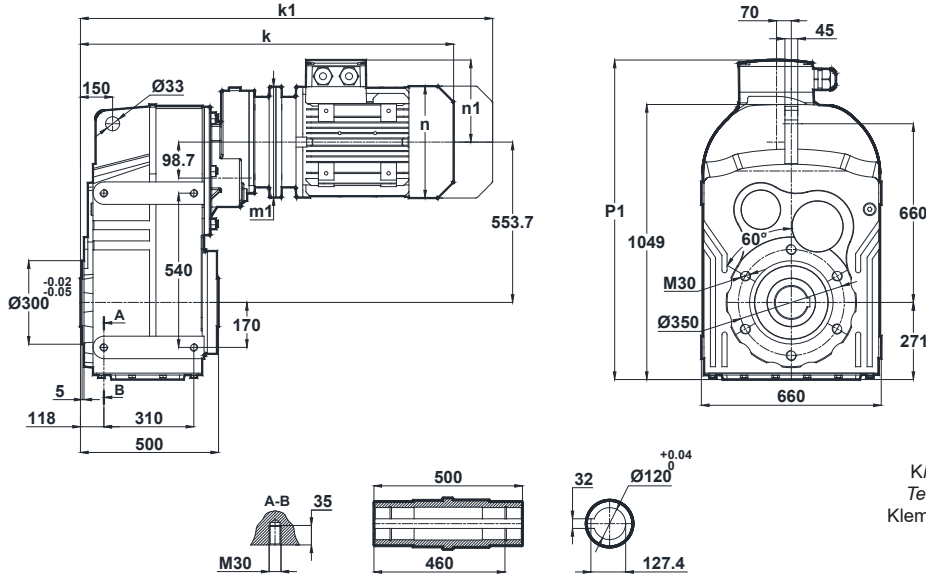
Dimension Pages

Abmessungsseiten

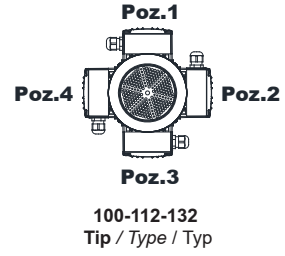


Mil ucu çekirtme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV974.00

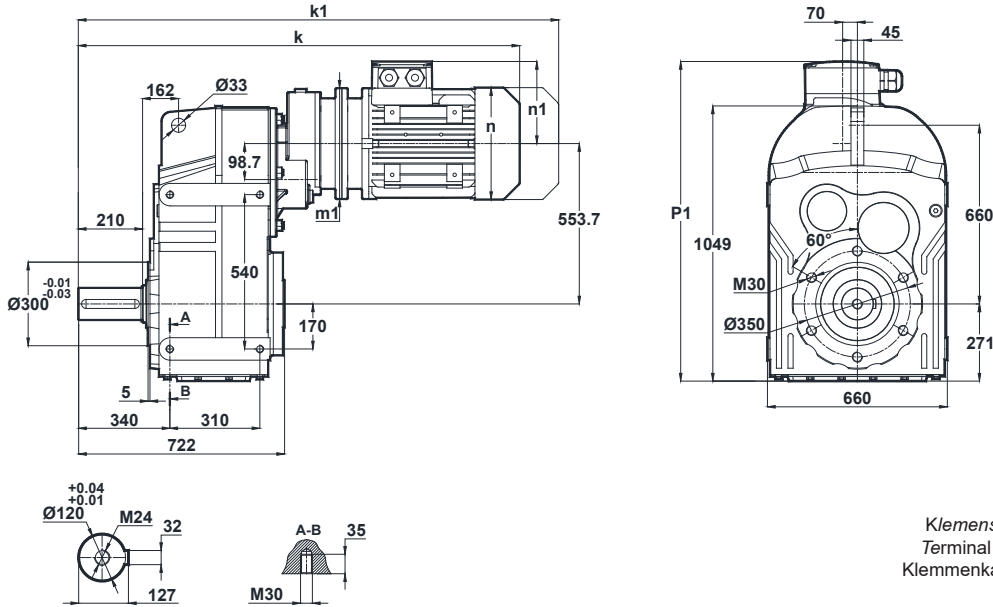


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

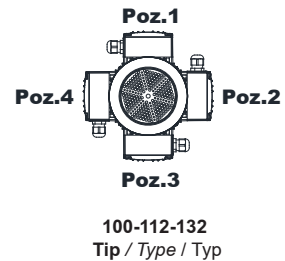


	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	990	1011	1110	1110
k1	1109.5	1115.5	1240	1240
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	-	-

DV974.01

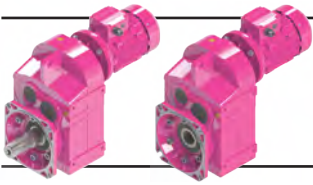


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1212	1233	1332	1332
k1	1331.5	1337.5	1462	1462
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	-	-

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

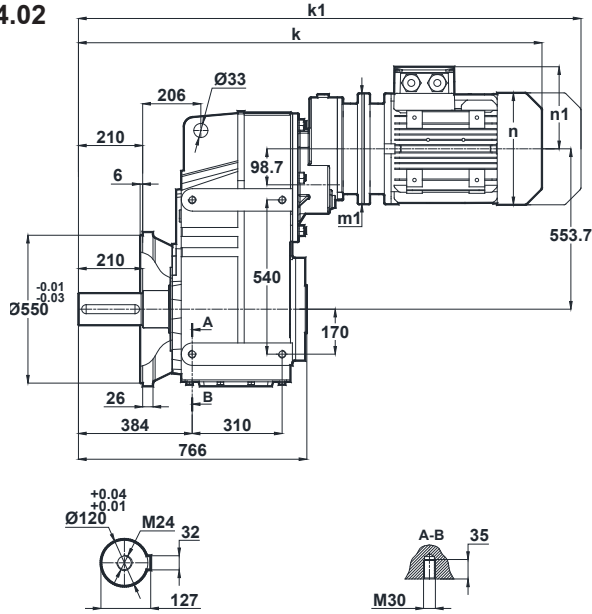
Dimension Pages

Abmessungsseiten



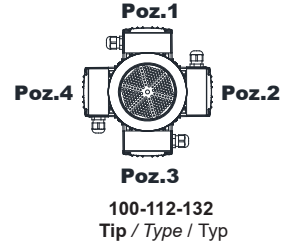
Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV974.02

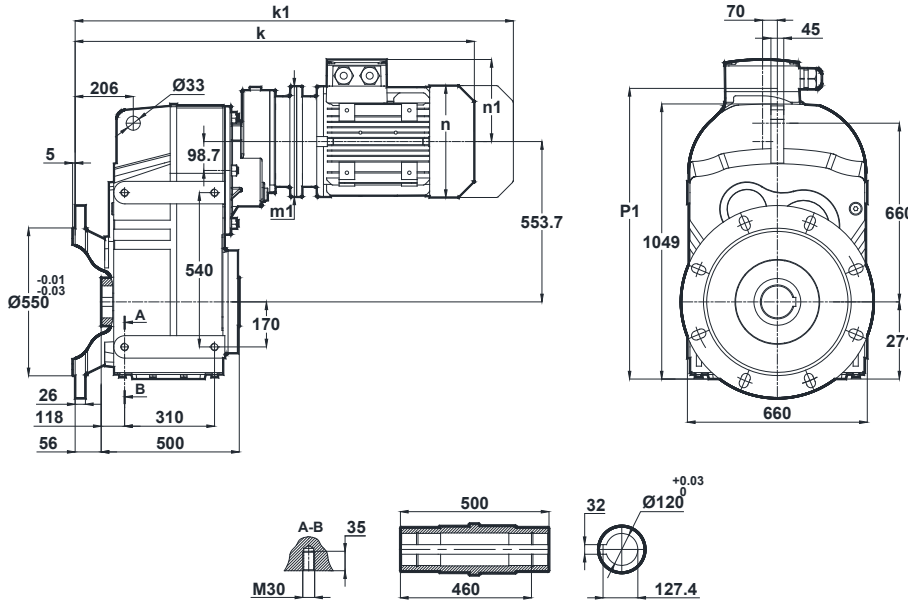


	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1256	1277	1376	1376
k1	1375.5	1381.5	1506	1506
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

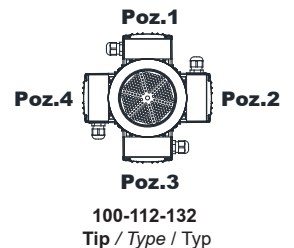


DV974.03

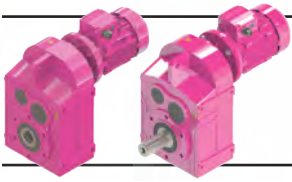


	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1046	1067	1166	1166
k1	1165.5	1171.5	1296	1296
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
p1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

Dimension Pages

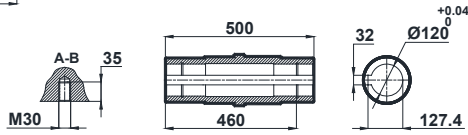
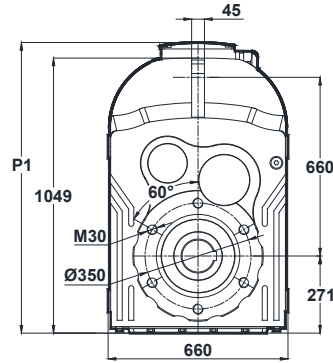
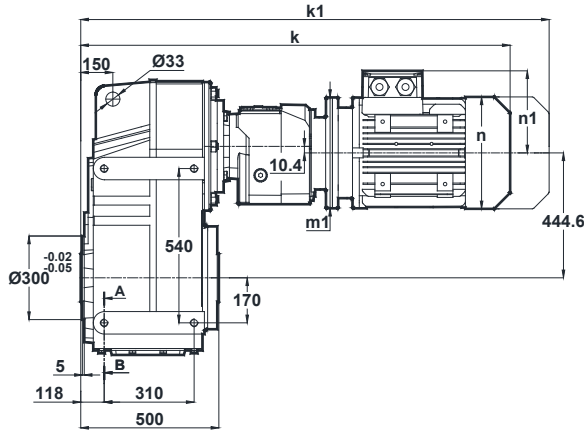
Abmessungsseiten



Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

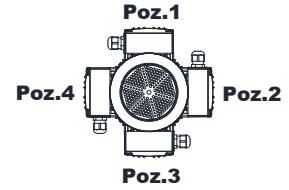
DV975.00

DV976.00



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

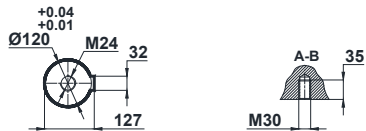
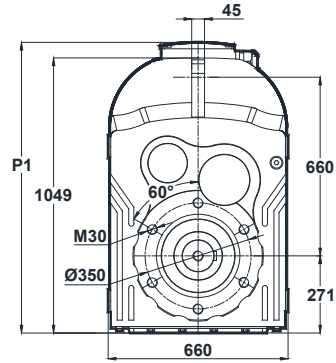
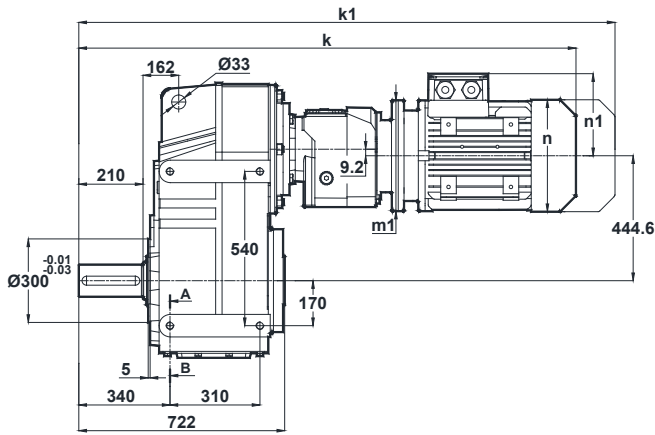
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1050	1091	1091	1145
k1	1143	1195.5	1195.5	1264.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	-	-	-



80-90-100
Tip / Type / Typ

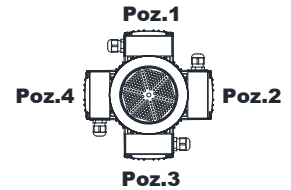
DV975.01

DV976.01



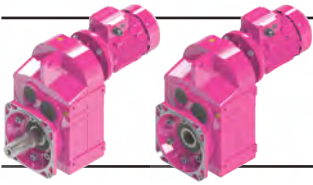
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1272	1313	1313	1367
k1	1365	1417.5	1417.5	1486.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	-	-	-



80-90-100
Tip / Type / Typ

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları

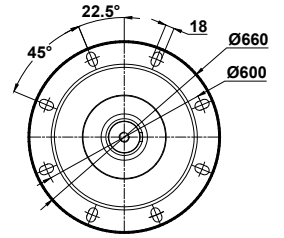
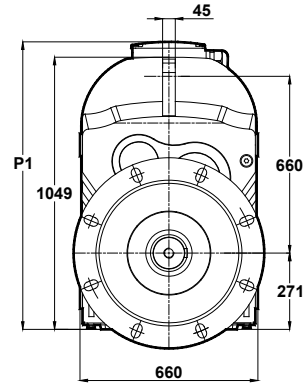
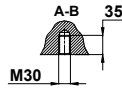
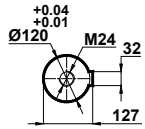
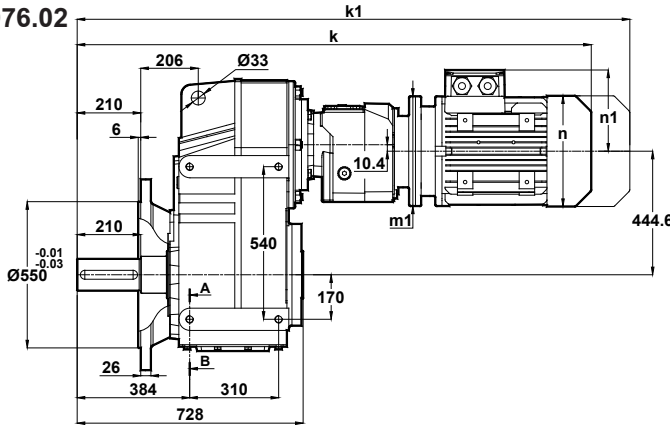
Dimension Pages

Abmessungsseiten

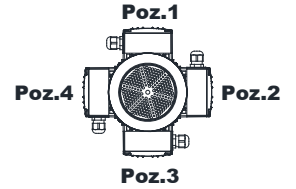


Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV975.02
DV976.02



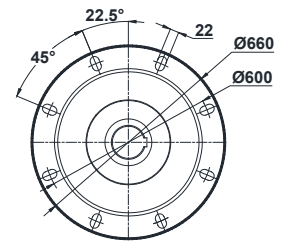
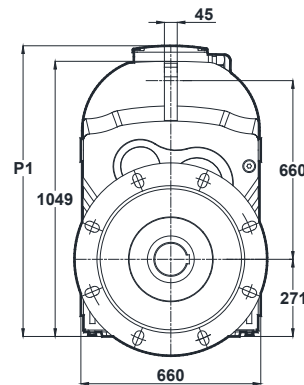
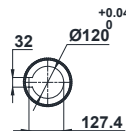
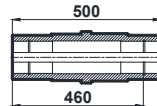
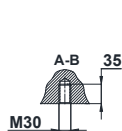
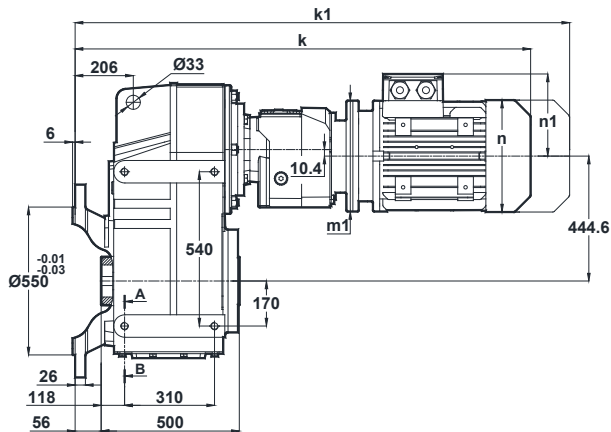
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



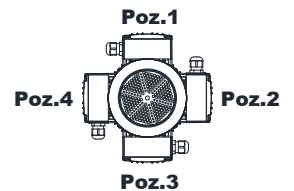
80-90-100
Tip / Type / Typ

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1316	1357	1357	1411
k1	1409	1461.5	1461.5	1530.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	-	-	-

DV975.03
DV976.03



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



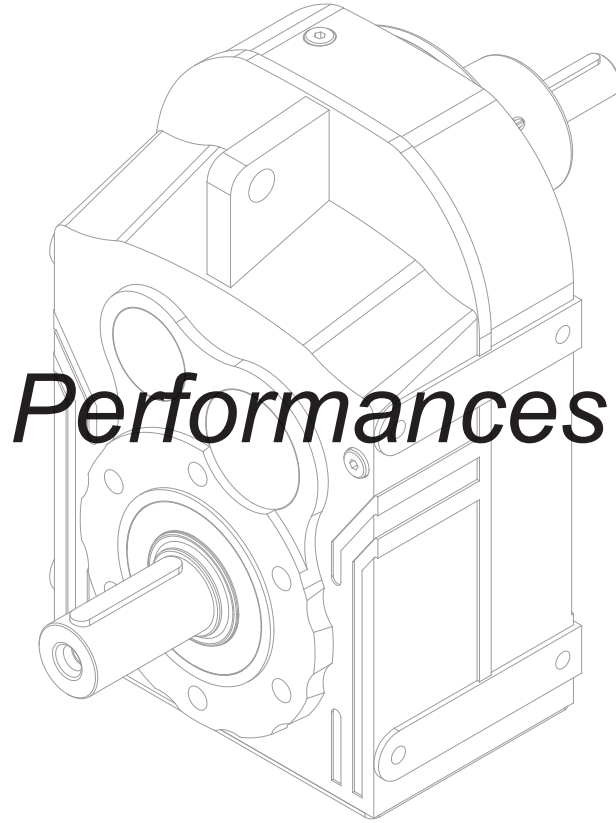
80-90-100
Tip / Type / Typ

	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1106	1147	1147	1201
k1	1199	1251.5	1251.5	1320.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
p1	-	-	-	-

"k1" ölçüsü frenli redüktörlere aittir.
Dimensions "k1" is for motors with brake.
Maße "k1" ist für Bremsenmotoren.



Güç ve Devir Tabloları



Leistung und Drehzahlübersicht



D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)								
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
150	5.77	251	DT072	8.1	4.1	2.7	2.1	1.3	1.0	115	-	8	264
150	6.91	210		6.8	3.4	2.2	1.7	1.1	0.86	312	-	-	-
150	8.18	177		5.8	2.9	1.9	1.5	0.95	0.72	415	-	-	-
150	8.76	166		5.4	2.7	1.8	1.4	0.89	0.68	461	-	-	-
150	10.53	138		4.5	2.3	1.5	1.1	0.74	0.56	739	-	-	-
150	12.61	115		3.7	1.9	1.2	0.95	0.62	0.47	873	-	-	-
150	14.92	97		3.2	1.6	1.05	0.80	0.53	0.40	1006	-	-	-
150	15.97	91		3.0	1.5	0.98	0.75	0.49	0.37	1062	-	-	-
150	18.09	80		2.6	1.3	0.9	0.66	0.43	0.33	1168	-	-	-
150	21.12	69		2.3	1.1	0.7	0.57	0.37	0.28	1306	-	-	-
150	25.01	58		1.9	0.96	0.6	0.48	0.32	0.27	1465	-	-	-
150	27.64	52		1.7	0.87	0.57	0.44	0.29	0.24	1563	-	-	-
150	30.71	47		1.6	0.78	0.51	0.39	0.26	0.22	1670	-	-	-
150	36.86	39	1.3	0.65	0.43	0.33	0.24	0.18	1865	-	-	-	
150	35.43	41	DT073	1.4	0.69	0.45	0.35	0.25	0.19	1821	604	9	264
150	38.18	38		1.3	0.64	0.42	0.32	0.23	0.18	1904	609	-	-
150	44.60	33		1.1	0.55	0.36	0.28	0.20	0.15	2081	623	-	-
150	52.62	28		0.93	0.47	0.31	0.26	0.17	0.13	2280	635	-	-
150	62.94	23		0.78	0.39	0.26	0.22	0.14	0.11	2508	647	-	-
150	67.62	21		0.72	0.36	0.27	0.20	0.13	0.10	2604	732	-	-
150	72.87	20		0.67	0.34	0.25	0.19	0.12	0.09	2706	736	-	-
150	85.12	17		0.58	0.29	0.21	0.16	0.11	0.08	2925	743	-	-
150	100.43	14		0.50	0.28	0.18	0.14	0.09	0.07	3173	749	-	-
150	120.11	12		0.42	0.23	0.15	0.12	0.08	0.06	3456	755	-	-
150	133.46	11		0.38	0.21	0.14	0.11	0.07	0.05	3630	763	-	-
150	146.60	10		0.35	0.19	0.13	0.10	0.06	0.05	3791	764	-	-
150	180.05	8.1		0.28	0.16	0.10	0.08	0.05	0.04	4162	767	-	-
145	4,86	298	DT172	7,4	4,7	3,5	2,8	2,1	1,6	2352	-	13	266
160	5,88	247		6,9	4,3	3,2	2,6	1,8	1,3	2418	-	-	-
170	6,72	216		6,3	4,0	3,0	2,4	1,5	1,2	2484	-	-	-
180	7,74	187		5,9	3,7	2,7	2,0	1,3	1,0	2575	-	-	-
200	9,54	152		6,1	3,3	2,2	1,7	1,1	0,83	2964	-	-	-
200	11,54	126		5,4	2,7	1,8	1,4	0,90	0,68	3346	-	-	-
200	13,19	110		4,8	2,4	1,6	1,2	0,79	0,60	3630	-	-	-
200	15,18	96		4,2	2,1	1,4	1,0	0,69	0,52	3943	-	-	-
200	17,86	81		3,5	1,8	1,2	0,89	0,59	0,44	4322	-	-	-
200	19,04	76		3,3	1,7	1,1	0,84	0,55	0,42	4477	-	-	-
200	21,79	67		2,9	1,5	0,96	0,73	0,48	0,36	4816	-	-	-
200	25,24	57		2,5	1,3	0,83	0,63	0,42	0,32	5202	-	-	-
200	29,67	49		2,1	1,1	0,71	0,54	0,35	0,27	5500	-	-	-
200	27,18	53	DT173	2,2	1,2	0,78	0,60	0,39	0,30	5404	509	14	266
200	31,52	46		2,0	1,0	0,67	0,52	0,34	0,26	5500	531	-	-
200	37,75	38		1,7	0,86	0,57	0,43	0,28	0,24	5500	559	-	-
200	44,66	32		1,4	0,73	0,48	0,37	0,27	0,20	5500	575	-	-
200	47,81	30		1,4	0,68	0,45	0,34	0,25	0,19	5500	581	-	-
200	51,88	28		1,2	0,63	0,41	0,32	0,23	0,17	5500	679	-	-
200	60,16	24		1,1	0,54	0,36	0,27	0,20	0,15	5500	690	-	-
200	72,04	20		0,90	0,46	0,30	0,25	0,17	0,13	5500	705	-	-
200	85,23	17		0,77	0,39	0,25	0,22	0,14	0,11	5500	713	-	-
200	91,25	16		0,72	0,36	0,26	0,20	0,13	0,10	5500	716	-	-
200	103,34	14		0,64	0,32	0,23	0,18	0,12	0,09	5500	720	-	-
200	120,64	12		0,55	0,28	0,20	0,15	0,10	0,08	5500	725	-	-
200	142,89	10		0,47	0,26	0,17	0,13	0,09	0,07	5500	730	-	-
275	4,98	291	DT272	14	8,6	6,4	5,2	4,0	3,3	9105	-	21	268
295	5,82	249		13	8,0	6,0	4,8	3,7	3,0	9478	-	-	-
320	6,84	212		12	7,3	5,5	4,4	3,4	2,6	9865	-	-	-
395	8,67	167		12	7,2	5,4	4,1	2,7	2,0	10462	-	-	-
425	10,11	143		11	6,6	4,6	3,5	2,3	1,8	10872	-	-	-



D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı <i>Ratio</i> Übersetzung i	Çıkış Devri <i>Output Speeds</i> Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipi <i>Type</i> Typ	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için) <i>Pe= Nominal Power [kW] (For Service Factor fs=1,0)</i> Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0)						Güv. Rad.Yük Çıkış <i>Per.O.Loads (Output)</i>	Güv.Rad.Yük Giriş <i>Per.O.Loads (Input)</i>	Ağırlık <i>Weight</i> Gewicht [kg]	Ölçü Sayfası <i>Dim. Page</i> Maße Seite
				Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]									
				n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360				
450	11,90	122	DT272	10	6,0	3,9	3,0	2,0	1,5	11385	-	21	268
450	14,14	103		8,9	5,0	3,3	2,5	1,7	1,3	12000	-		
450	16,00	91		8,4	4,4	2,9	2,2	1,5	1,1	12000	-		
450	18,25	79		7,7	3,9	2,6	2,0	1,3	0,98	12000	-		
450	21,33	68		6,6	3,3	2,2	1,7	1,1	0,83	12000	-		
450	22,67	64		6,3	3,1	2,1	1,6	1,0	0,79	12000	-		
450	25,78	56		5,5	2,8	1,8	1,4	0,91	0,69	12000	-		
440	25,44	57	DT273	4,4	2,8	1,9	1,4	0,94	0,71	12350	189	22	268
450	30,34	48		3,9	2,4	1,6	1,2	0,79	0,60	12000	342		
450	36,38	40		3,5	2,0	1,3	1,0	0,66	0,50	12000	525		
450	42,22	34		3,0	1,7	1,1	0,86	0,57	0,43	12000	804		
450	50,36	29		2,7	1,4	0,95	0,72	0,48	0,36	12000	833		
450	60,39	24		2,4	1,2	0,79	0,61	0,40	0,30	12000	857		
450	73,03	20		2,0	1,0	0,66	0,50	0,33	0,25	12000	879		
450	83,46	17		1,7	0,88	0,58	0,44	0,29	0,24	12000	892		
450	96,09	15		1,5	0,76	0,50	0,38	0,25	0,21	12000	903		
450	113,02	13		1,3	0,65	0,43	0,33	0,24	0,18	12000	914		
450	120,49	12		1,2	0,61	0,40	0,31	0,22	0,17	12000	918		
450	137,94	11		1,1	0,54	0,35	0,27	0,20	0,15	12000	926		
450	150,45	9,6	DT275	1,0	0,51	0,33	0,25	0,18	0,14	12000	686	27	270
450	181,94	8,0		0,84	0,42	0,28	0,23	0,15	0,12	12000	718		
450	207,93	7,0		0,74	0,37	0,27	0,20	0,13	0,10	12000	737		
450	214,95	6,7		0,71	0,36	0,26	0,20	0,13	0,10	12000	735		
450	251,08	5,8		0,61	0,31	0,22	0,17	0,11	0,08	12000	742		
450	331,04	4,4		0,51	0,26	0,19	0,14	0,09	0,07	12000	789		
450	356,74	4,1		0,48	0,24	0,17	0,13	0,09	0,07	12000	788		
450	416,71	3,5		0,41	0,20	0,15	0,11	0,07	0,06	12000	793		
450	497,10	2,9		0,34	0,17	0,13	0,10	0,06	0,05	12000	805		
450	596,04	2,4		0,29	0,14	0,10	0,08	0,05	0,04	12000	816		
450	720,79	2,0		0,26	0,12	0,09	0,07	0,04	0,03	12000	825		
450	823,76	1,8		0,23	0,10	0,08	0,06	0,04	0,03	12000	831		
450	948,41	1,5		0,20	0,09	0,07	0,05	0,03	0,02	12000	836		
450	1115,51	1,3		0,17	0,08	0,06	0,04	0,03	0,02	12000	841		
450	1189,30	1,2		0,16	0,07	0,05	0,04	0,03	0,02	12000	843		
450	1215,13	1,2	DT276	0,16	0,07	0,05	0,04	0,03	0,02	12000	843	29	270
450	1456,98	1,0		0,13	0,06	0,04	0,03	0,02	0,02	12000	848		
450	1761,93	0,82		0,11	0,05	0,04	0,03	0,02	0,01	12000	851		
450	2013,64	0,72		0,10	0,04	0,03	0,02	0,02	0,01	12000	854		
450	2318,33	0,63		0,08	0,04	0,03	0,02	0,01	0,01	12000	856		
450	2726,80	0,53		0,07	0,03	0,02	0,02	0,01	0,01	12000	858		
450	2907,19	0,50		0,07	0,03	0,02	0,02	0,01	0,01	12000	858		
260	3,92	370	DT282	17	10	7,7	6,2	4,8	3,9	11041	-	31	272
280	4,52	321		16	9,7	7,3	5,8	4,5	3,6	11465	-		
300	5,22	278		15	9,0	6,8	5,5	4,2	3,4	11910	-		
315	5,74	253		14	8,6	6,5	5,2	4,0	3,3	12204	-		
340	6,65	218		13	8,0	6,0	4,9	3,7	3,0	12674	-		
380	7,09	205		14	8,4	6,3	5,1	3,9	3,2	12921	-		
410	8,19	177		13	7,9	5,9	4,8	3,6	2,9	13401	-		
440	9,45	153		12	7,3	5,5	4,4	3,3	2,5	13665	-		
460	10,38	140		11	7,0	5,2	4,2	3,0	2,3	13274	-		
490	12,03	121		10	6,4	4,8	3,9	2,6	2,0	12625	-		
525	14,06	103		10	5,9	4,4	3,4	2,2	1,7	11765	-		
565	16,62	87		8,7	5,4	3,7	2,9	1,9	1,4	10610	-		
590	18,73	77		8,1	5,0	3,3	2,5	1,7	1,3	9780	-		
600	21,28	68		7,5	4,5	2,9	2,2	1,5	1,1	9200	-		
600	24,79	58		6,8	3,8	2,5	1,9	1,3	0,96	9200	-		
600	29,85	49		6,0	3,2	2,1	1,6	1,1	0,80	9200	-		



D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti Nominal Torques Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı Ratio Übersetzung i	Çıkış Devri Output Speeds Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipi Type Typ	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için) Pe= Nominal Power [kW] (For Service Factor fs=1,0) Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0)						Güv. Rad.Yük Çıkış Per.O.Loads (Output) Zul.Querkräfte (Abtrieb) Fqam [N] (n1=1450rpm)	Güv.Rad.Yük Giriş Per.O.Loads (Input) Zul.Querkräfte (Antrieb) Fqem [N] (n1=1450rpm)	Ağırlık Weight Gewicht [kg]	Ölçü Sayfası Dim. Page Maße Seite
				Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]									
				n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360				
590	30,28	48	DT283	4,9	3,1	2,1	1,6	1,1	0,80	9780	1309	32	272
600	35,35	41		4,5	2,7	1,8	1,4	0,90	0,69	9200	1340		
600	41,23	35		4,0	2,3	1,5	1,2	0,77	0,59	9200	1379		
600	45,56	32		3,8	2,1	1,4	1,1	0,70	0,53	9200	1398		
600	53,18	27		3,4	1,8	1,2	0,92	0,60	0,46	9200	1424		
600	62,55	23		3,1	1,6	1,0	0,78	0,51	0,39	9200	1447		
600	74,36	19		2,6	1,3	0,86	0,66	0,43	0,33	9200	1468		
600	84,12	17		2,3	1,2	0,76	0,58	0,38	0,29	9200	1481		
600	95,92	15		2,0	1,0	0,67	0,51	0,34	0,26	9200	1492		
600	112,15	13		1,7	0,87	0,57	0,44	0,29	0,24	9200	1505		
600	119,16	12		1,6	0,82	0,54	0,41	0,27	0,23	9200	1509		
600	135,52	11		1,4	0,73	0,48	0,37	0,27	0,20	9200	1517		
600	127,94	11	DT285	1,6	0,79	0,52	0,39	0,26	0,22	9200	582	35	274
600	137,88	11		1,5	0,73	0,48	0,37	0,27	0,20	9200	590		
600	161,05	9,0		1,3	0,63	0,41	0,31	0,23	0,17	9200	606		
600	196,84	7,4		1,0	0,52	0,34	0,26	0,19	0,14	9200	683		
600	212,12	6,8		0,96	0,48	0,31	0,27	0,17	0,13	9200	688		
600	244,26	5,9		0,83	0,42	0,27	0,23	0,15	0,12	9200	719		
600	263,22	5,5		0,77	0,39	0,25	0,22	0,14	0,11	9200	723		
600	277,21	5,2		0,73	0,37	0,27	0,20	0,13	0,10	9200	737		
600	298,73	4,9		0,68	0,34	0,25	0,19	0,12	0,09	9200	741		
600	348,95	4,2		0,59	0,29	0,21	0,16	0,11	0,08	9200	748		
600	406,99	3,6		0,50	0,25	0,18	0,14	0,09	0,07	9200	765		
600	449,72	3,2		0,50	0,25	0,18	0,14	0,09	0,07	9200	775		
600	524,87	2,8		0,43	0,22	0,16	0,12	0,08	0,06	9200	788		
600	617,37	2,3		0,37	0,18	0,13	0,10	0,07	0,05	9200	801		
600	733,99	2,0		0,31	0,15	0,11	0,09	0,06	0,04	9200	812		
600	830,25	1,7		0,27	0,14	0,10	0,08	0,05	0,04	9200	818		
600	936,69	1,5		0,27	0,12	0,09	0,07	0,04	0,03	9200	824		
600	1003,22	1,4	DT286	0,26	0,12	0,08	0,06	0,04	0,03	9200	827	36	274
600	1170,08	1,2		0,22	0,10	0,07	0,06	0,04	0,03	9200	833		
600	1292,94	1,1		0,20	0,09	0,07	0,05	0,03	0,02	9200	837		
600	1509,00	0,96		0,17	0,08	0,06	0,04	0,03	0,02	9200	841		
600	1774,93	0,82		0,15	0,07	0,05	0,04	0,02	0,02	9200	845		
600	2110,22	0,69		0,12	0,06	0,04	0,03	0,02	0,02	9200	849		
600	2386,97	0,61		0,11	0,05	0,04	0,03	0,02	0,01	9200	852		
600	2692,99	0,54		0,10	0,04	0,03	0,02	0,02	0,01	9200	854		
600	3368,37	0,43		0,08	0,03	0,03	0,02	0,01	0,01	9200	853		
600	3800,21	0,38		0,07	0,03	0,02	0,02	0,01	0,01	9200	855		
390	3,65	397	DT372	-	17	12	10	7,8	6,3	10152	-	65	276
435	4,42	328		25	15	11	9,3	7,1	5,8	10601	-		
465	5,05	287		23	14	10	8,7	6,7	5,4	10944	-		
495	5,79	250		22	13	10	8,2	6,2	5,1	11333	-		
530	6,69	217		20	12	9,3	7,5	5,8	4,7	11745	-		
640	7,42	195		-	14	10	8,2	5,7	4,3	12029	-		
700	8,98	161		20	12	9,2	7,2	4,7	3,6	12606	-		
745	10,25	141		19	11	8,3	6,3	4,1	3,1	13016	-		
795	11,77	123		17	11	7,2	5,5	3,6	2,7	12881	-		
820	13,60	107		16	9,5	6,2	4,8	3,1	2,4	11800	-		
820	14,74	98		15	8,8	5,8	4,4	2,9	2,2	11800	-		
820	17,65	82		14	7,3	4,8	3,7	2,4	1,8	11800	-		
820	20,10	72		13	6,4	4,2	3,2	2,1	1,6	11800	-		
820	22,46	65		11	5,8	3,8	2,9	1,9	1,4	11800	-		
820	25,42	57		10	5,1	3,4	2,6	1,7	1,3	11800	-		
645	23,58	61	DT373	6,8	4,4	3,3	2,8	1,8	1,4	16231	1104	67	276
680	27,53	53		6,2	3,9	3,0	2,4	1,6	1,2	15571	1123		
720	32,11	45		5,6	3,6	2,7	2,1	1,4	1,0	14739	1142		
745	35,49	41		5,3	3,4	2,4	1,9	1,2	0,93	14167	1149		



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D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı <i>Ratio</i> Übersetzung i	Çıkış Devri <i>Output Speeds</i> Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipi <i>Type</i> Typ	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için) <i>Pe= Nominal Power [kW] (For Service Factor fs=1,0)</i> Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0)						Güv. Rad.Yük Çıkış <i>Per.O.Loads (Output)</i> Zul.Querkräfte (Abtrieb) Fqam [N] (n1=1450rpm)	Güv.Rad.Yük Giriş <i>Per.O.Loads (Input)</i> Zul.Querkräfte (Antrieb) Fqem [N] (n1=1450rpm)	Ağırlık <i>Weight</i> Gewicht [kg]	Ölçü Sayfası <i>Dim. Page</i> Maße Seite
				Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]									
				n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360				
785	41,42	35	DT373	4,8	3,0	2,1	1,6	1,0	0,80	13155	1157	67	276
820	52,30	28		4,0	2,5	1,7	1,3	0,83	0,63	11800	1343		
820	57,79	25		3,7	2,3	1,5	1,1	0,76	0,57	11800	1364		
820	67,45	21		3,4	2,0	1,3	1,0	0,65	0,49	11800	1392		
820	79,34	18		3,1	1,7	1,1	0,84	0,55	0,42	11800	1417		
820	94,32	15		2,7	1,4	0,93	0,71	0,47	0,35	11800	1440		
820	106,69	14		2,5	1,2	0,82	0,63	0,41	0,31	11800	1453		
820	121,67	12		2,2	1,1	0,72	0,55	0,36	0,28	11800	1466		
820	151,15	9,6		1,8	0,89	0,58	0,45	0,29	0,25	11800	1484		
820	171,89	8,4		1,6	0,78	0,51	0,39	0,26	0,22	11800	1492		
820	174,88	8,3	DT375	1,6	0,79	0,52	0,40	0,26	0,22	11800	569	75	278
820	204,28	7,1		1,4	0,68	0,45	0,34	0,25	0,19	11800	585		
820	249,67	5,8		1,1	0,56	0,37	0,28	0,20	0,15	11800	668		
820	269,05	5,4		1,0	0,52	0,34	0,26	0,19	0,14	11800	674		
820	309,82	4,7		0,90	0,45	0,30	0,25	0,16	0,12	11800	707		
820	333,87	4,3		0,84	0,42	0,27	0,23	0,15	0,12	11800	712		
820	351,62	4,1		0,79	0,40	0,26	0,22	0,14	0,11	11800	726		
820	378,91	3,8		0,74	0,37	0,27	0,20	0,13	0,10	11800	731		
820	442,60	3,3		0,63	0,32	0,23	0,18	0,12	0,09	11800	738		
820	516,22	2,8		0,54	0,27	0,20	0,15	0,10	0,07	11800	757		
820	570,43	2,5		0,54	0,27	0,20	0,15	0,10	0,08	11800	768		
820	665,75	2,2		0,47	0,23	0,17	0,13	0,09	0,06	11800	782		
820	783,07	1,9		0,40	0,20	0,14	0,11	0,07	0,05	11800	795		
820	930,99	1,6		0,33	0,17	0,12	0,09	0,06	0,05	11800	807		
820	1053,09	1,4		0,30	0,15	0,11	0,08	0,05	0,04	11800	814		
820	1188,10	1,2		0,26	0,13	0,10	0,07	0,05	0,04	11800	821		
820	1272,49	1,1	DT376	0,25	0,13	0,09	0,07	0,05	0,03	11800	824	76	278
820	1484,14	0,98		0,24	0,11	0,08	0,06	0,04	0,03	11800	830		
820	1639,97	0,88		0,22	0,10	0,07	0,05	0,04	0,03	11800	834		
820	1914,03	0,76		0,19	0,08	0,06	0,05	0,03	0,02	11800	839		
820	2251,32	0,64		0,16	0,07	0,05	0,04	0,03	0,02	11800	844		
820	2676,61	0,54		0,13	0,06	0,04	0,03	0,02	0,02	11800	848		
820	3027,64	0,48		0,12	0,05	0,04	0,03	0,02	0,01	11800	850		
820	3415,80	0,42		0,10	0,05	0,03	0,03	0,02	0,01	11800	852		
820	4272,46	0,34		0,08	0,04	0,03	0,02	0,01	0,01	11800	852		
820	4820,21	0,30		0,07	0,03	0,02	0,02	0,01	0,01	11800	854		
915	4,48	324	DT472	-	32	24	19	15	12	12929	-	103	280
990	5,26	276		-	29	22	17	13	11	13406	-		
1070	6,23	233		44	27	20	16	12	9,8	13945	-		
1130	6,71	216		43	26	20	16	11	9,1	14063	-		
1190	7,54	192		40	25	19	15	10	8,1	14464	-		
1445	8,93	162		-	25	18	14	9,0	6,8	15180	-		
1550	10,48	138		-	23	15	12	7,7	5,8	15771	-		
1550	12,40	117		34	20	13	10	6,5	4,9	16967	-		
1550	13,35	109		33	18	12	9,1	6,0	4,6	17000	-		
1550	15,02	97		31	16	11	8,1	5,3	4,1	17000	-		
1550	17,01	85		29	14	9,4	7,2	4,7	3,6	17000	-		
1550	19,11	76		25	13	8,4	6,4	4,2	3,2	17000	-		
1550	20,74	70		23	12	7,7	5,9	3,9	2,9	17000	-		
1550	24,54	59		20	10	6,5	5,0	3,3	2,5	17000	-		
1130	28,45	51	DT473	-	6,2	4,7	3,8	2,8	2,1	24931	1446	104	280
1210	34,28	42		-	5,5	4,2	3,4	2,3	1,8	23821	1467		
1290	41,50	35		7,8	4,9	3,7	3,0	1,9	1,5	22575	1486		
1350	47,37	31		7,1	4,5	3,4	2,6	1,7	1,3	21538	1494		
1410	54,35	27		6,5	4,1	3,0	2,3	1,5	1,1	20396	1502		
1440	61,85	23		5,8	3,7	2,6	2,0	1,3	0,99	19781	1671		
1500	70,59	21		5,3	3,4	2,3	1,7	1,1	0,87	18448	1679		
1550	81,00	18		4,9	3,0	2,0	1,5	1,0	0,76	17000	1691		



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D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)						Per.O.Loads (Output)		
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Antrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
1550	95,87	15	DT473	4,4	2,6	1,7	1,3	0,84	0,64	17000	1724	104	280
1550	101,48	14		4,2	2,4	1,6	1,2	0,80	0,61	17000	1733		
1550	121,49	12		3,8	2,0	1,3	1,0	0,67	0,51	17000	1759		
1550	138,35	10		3,4	1,8	1,2	0,90	0,59	0,45	17000	1775		
1550	154,63	9,4		3,2	1,6	1,1	0,80	0,53	0,40	17000	1790		
1550	174,97	8,3		2,8	1,4	0,93	0,71	0,47	0,36	17000	1801		
1550	215,03	6,7		2,3	1,2	0,76	0,58	0,38	0,29	17000	1817		
1550	242,68	6,0		2,1	1,0	0,68	0,52	0,34	0,26	17000	1824		
1550	219,13	6,6	DT474	2,3	1,2	0,76	0,58	0,38	0,29	17000	1506	114	282
1550	252,29	5,7		2,0	1,0	0,66	0,51	0,33	0,25	17000	1521		
1550	296,74	4,9		1,7	0,86	0,56	0,43	0,28	0,24	17000	1534		
1550	316,37	4,6		1,6	0,81	0,53	0,40	0,26	0,22	17000	1539		
1550	362,17	4,0		1,4	0,71	0,46	0,35	0,26	0,20	17000	1549		
1550	383,35	3,8		1,3	0,67	0,44	0,33	0,24	0,18	17000	1564		
1550	458,98	3,2		1,1	0,56	0,37	0,28	0,20	0,15	17000	1606		
1550	522,66	2,8		0,98	0,49	0,32	0,27	0,18	0,14	17000	1633		
1550	584,15	2,5		0,88	0,44	0,29	0,24	0,16	0,12	17000	1653		
1550	648,55	2,2	DT475	0,81	0,41	0,27	0,23	0,15	0,11	17000	760	116	284
1550	752,10	1,9		0,70	0,35	0,25	0,19	0,13	0,10	17000	767		
1550	900,55	1,6		0,59	0,29	0,21	0,16	0,11	0,08	17000	775		
1550	1065,48	1,4		0,55	0,28	0,20	0,15	0,10	0,08	17000	780		
1550	1140,69	1,3		0,51	0,26	0,19	0,14	0,09	0,07	17000	782		
1550	1492,69	1,0		0,39	0,20	0,14	0,11	0,07	0,05	17000	796		
1550	1529,03	0,95		0,38	0,19	0,14	0,11	0,07	0,05	17000	798		
1550	1618,43	0,90		0,36	0,18	0,13	0,10	0,07	0,05	17000	802		
1550	1937,71	0,75		0,30	0,15	0,11	0,08	0,06	0,04	17000	813		
1550	2381,67	0,61	DT476	0,25	0,13	0,09	0,07	0,05	0,03	17000	837	118	284
1550	2851,73	0,51		0,23	0,11	0,08	0,06	0,04	0,03	17000	840		
1550	3374,03	0,43		0,20	0,09	0,06	0,05	0,03	0,02	17000	841		
1550	3612,19	0,40		0,19	0,08	0,06	0,05	0,03	0,02	17000	842		
1550	4726,85	0,31		0,14	0,06	0,05	0,04	0,02	0,02	17000	846		
1550	4841,94	0,30		0,14	0,06	0,05	0,03	0,02	0,02	17000	847		
1550	5125,04	0,28		0,13	0,06	0,04	0,03	0,02	0,02	17000	848		
1550	6136,10	0,24		0,11	0,05	0,04	0,03	0,02	0,01	17000	852		
1470	4,38	331	DT572	-	52	39	32	24	20	22142	-	150	286
1570	4,96	292		-	49	37	30	23	19	22799	-		
1670	5,64	257		-	46	35	28	21	17	23536	-		
1780	6,45	225		-	43	32	26	20	16	24330	-		
1900	7,43	195		-	40	30	24	18	15	25207	-		
2030	8,65	168		60	37	28	22	17	14	26199	-		
2560	10,45	139		-	38	29	23	15	11	27328	-		
2710	11,89	122		-	36	26	20	13	9,9	28223	-		
2870	13,60	107		-	33	23	17	11	8,7	25802	-		
3000	15,67	93		-	30	20	15	9,9	7,5	22500	-		
3000	18,23	80		45	26	17	13	8,5	6,5	22500	-		
3000	21,40	68		41	22	14	11	7,3	5,5	22500	-		
3000	24,02	60		38	20	13	10	6,5	4,9	22500	-		
3000	28,87	50		33	16	11	8,2	5,4	4,1	22500	-		
3000	33,86	43		28	14	9,2	7,0	4,6	3,5	22500	-		
2600	28,39	51	DT573	-	14	10	8,3	5,5	4,1	31019	-	153	286
2750	33,28	44		-	13	9,3	7,1	4,7	3,5	28304	-		
2910	39,35	37		18	12	7,9	6,0	4,0	3,0	24887	-		
3000	44,27	33		17	11	7,0	5,4	3,5	2,7	22500	-		
3000	50,13	29		16	9,4	6,2	4,7	3,1	2,4	22500	-		
3000	61,12	24		14	7,7	5,1	3,9	2,6	1,9	22500	-		
3000	68,64	21		-	6,9	4,5	3,4	2,3	1,7	22500	1566		



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D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)								
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
3000	81,15	18	DT573	11	5,8	3,8	2,9	1,9	1,5	22500	1630	153	286
3000	91,30	16		10	5,2	3,4	2,6	1,7	1,3	22500	1669		
3000	103,39	14		9,1	4,6	3,0	2,3	1,5	1,1	22500	1705		
3000	126,06	12		7,5	3,8	2,5	1,9	1,2	0,94	22500	1752		
3000	149,15	9,7		6,4	3,2	2,1	1,6	1,1	0,80	22500	1786		
3000	168,60	8,6		5,6	2,8	1,9	1,4	0,93	0,71	22500	1807		
3000	192,62	7,5		5,0	2,5	1,6	1,2	0,82	0,62	22500	1827		
3000	209,81	6,9		4,5	2,3	1,5	1,1	0,75	0,57	22500	1840		
3000	255,83	5,7		3,7	1,9	1,2	0,95	0,62	0,47	22500	1862		
3000	230,64	6,3	DT574	4,3	2,1	1,4	1,0	0,70	0,53	22500	1796	163	288
3000	274,21	5,3		3,6	1,8	1,2	0,90	0,59	0,45	22500	1821		
3000	310,17	4,7		3,2	1,6	1,0	0,80	0,52	0,40	22500	1836		
3000	353,70	4,1		2,8	1,4	0,92	0,70	0,46	0,35	22500	1851		
3000	413,56	3,5		2,4	1,2	0,79	0,60	0,39	0,30	22500	1865		
3000	499,72	2,9		2,0	1,0	0,65	0,50	0,33	0,27	22500	1881		
3000	609,29	2,4		1,6	0,82	0,53	0,41	0,27	0,23	22500	1944		
3000	720,91	2,0		1,4	0,69	0,45	0,35	0,25	0,19	22500	1989		
3000	868,61	1,7		DT575	1,2	0,59	0,38	0,29	0,21	0,16	22500		
3000	1041,50	1,4	0,98		0,49	0,32	0,27	0,18	0,13	22500	1716		
3000	1259,48	1,2	0,81		0,41	0,27	0,23	0,15	0,11	22500	1724		
3000	1439,41	1,0	0,71		0,36	0,26	0,20	0,13	0,10	22500	1728		
3000	1657,21	0,87	0,62		0,31	0,23	0,17	0,11	0,09	22500	1733		
3000	1949,20	0,74	0,53		0,26	0,19	0,15	0,10	0,07	22500	1737		
3000	2078,15	0,70	0,55		0,27	0,20	0,15	0,10	0,08	22500	1738		
3000	2379,02	0,61	0,48		0,24	0,17	0,13	0,09	0,07	22500	1741		
3000	2900,65	0,50	0,39		0,20	0,14	0,11	0,07	0,05	22500	1756		
3000	3432,03	0,42	0,33	0,17	0,12	0,09	0,06	0,05	22500	1766			
3000	3723,69	0,39	DT576	0,31	0,16	0,11	0,09	0,06	0,04	22500	1788	167	290
3000	4255,64	0,34		0,27	0,14	0,10	0,08	0,05	0,04	22500	1790		
3000	4899,59	0,30		0,26	0,12	0,09	0,07	0,04	0,03	22500	1791		
3000	5762,85	0,25		0,22	0,10	0,07	0,06	0,04	0,03	22500	1793		
3000	6144,09	0,24		0,21	0,09	0,07	0,05	0,03	0,03	22500	1793		
3000	7033,63	0,21		0,18	0,08	0,06	0,05	0,03	0,02	22500	1794		
3000	8575,84	0,17		0,15	0,07	0,05	0,04	0,02	0,02	22500	1799		
3000	10146,88	0,14		0,13	0,06	0,04	0,03	0,02	0,02	22500	1803		
2200	4,28	339		DT672	-	80	60	48	37	30	31593		
2370	4,92	295	-		75	56	45	35	28	32632	-		
2550	5,68	255	-		70	52	42	32	26	33765	-		
2580	5,89	246	-		68	51	41	31	26	34127	-		
2730	6,61	219	-		64	48	39	30	24	35083	-		
2880	7,45	195	-		60	45	37	28	23	36165	-		
3300	7,75	187	-		66	50	40	29	22	36215	-		
3540	8,91	163	-		62	46	38	25	19	37392	-		
3790	10,29	141	-		58	43	33	22	16	38694	-		
3830	10,67	136	-		56	41	32	21	16	38291	-		
4030	11,96	121	-		53	37	28	19	14	35135	-		
4250	13,48	108	-		49	33	25	16	13	31078	-		
4300	15,30	95	-		44	29	22	15	11	29600	-		
4300	17,49	83	-		39	25	19	13	9,7	29600	-		
4300	20,20	72	63		33	22	17	11	8,4	29600	-		
4300	23,36	62	57		29	19	15	9,5	7,2	29600	-		
4300	26,11	56	52	26	17	13	8,5	6,5	29600	-			
4300	30,04	48	DT673	-	22	15	11	7,4	5,6	29600	370	204	292
4300	34,02	43		-	20	13	10	6,5	5,0	29600	849		
4300	38,70	37		-	17	11	8,7	5,7	4,4	29600	1284		
4300	44,27	33		-	15	10	7,7	5,0	3,8	29600	1681		



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D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)						Per.O.Loads (Output)		
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
4300	51,01	28	DT673	-	13	8,7	6,7	4,4	3,3	29600	2043	204	292
4300	59,34	24		23	11	7,5	5,7	3,8	2,9	29600	2374		
4300	60,82	24		-	11	7,3	5,6	3,7	2,8	29600	3134		
4300	69,18	21		-	9,8	6,4	4,9	3,2	2,4	29600	3197		
4300	79,14	18		-	8,5	5,6	4,3	2,8	2,1	29600	3254		
4300	91,19	16		-	7,4	4,9	3,7	2,5	1,9	29600	3305		
4300	106,08	14		13	6,4	4,2	3,2	2,1	1,6	29600	3353		
4300	124,53	12		11	5,5	3,6	2,7	1,8	1,4	29600	3414		
4300	139,76	10		9,7	4,9	3,2	2,4	1,6	1,2	29600	3440		
4300	167,96	8,6		8,1	4,1	2,7	2,0	1,3	1,0	29600	3473		
4300	197,01	7,4		6,9	3,5	2,3	1,7	1,1	0,87	29600	3499		
4300	221,47	6,5		6,2	3,1	2,0	1,6	1,0	0,77	29600	3515		
4300	236,65	6,1	DT674	6,0	3,0	2,0	1,5	0,98	0,74	29600	1622	214	294
4300	281,35	5,2		5,0	2,5	1,7	1,3	0,83	0,63	29600	1657		
4300	318,25	4,6		4,5	2,2	1,5	1,1	0,73	0,55	29600	1679		
4300	362,91	4,0		3,9	2,0	1,3	1,0	0,64	0,49	29600	1699		
4300	424,33	3,4		3,4	1,7	1,1	0,84	0,55	0,42	29600	1720		
4300	512,73	2,8		2,8	1,4	0,91	0,70	0,46	0,35	29600	1741		
4300	601,90	2,4		2,4	1,2	0,78	0,59	0,39	0,29	29600	1814		
4300	675,51	2,1		2,1	1,1	0,69	0,53	0,35	0,26	29600	1859		
4300	747,10	1,9	DT675	1,9	0,97	0,64	0,49	0,32	0,27	29600	1647	216	296
4300	891,23	1,6		1,6	0,82	0,54	0,41	0,27	0,23	29600	1662		
4300	1068,62	1,4		1,4	0,68	0,45	0,34	0,25	0,19	29600	1674		
4300	1292,28	1,1		1,1	0,57	0,37	0,28	0,21	0,16	29600	1685		
4300	1476,89	0,98		0,99	0,50	0,33	0,28	0,18	0,14	29600	1692		
4300	1700,37	0,85		0,87	0,43	0,28	0,24	0,16	0,12	29600	1698		
4300	1999,96	0,73		0,74	0,37	0,27	0,20	0,13	0,10	29600	1703		
4300	2132,27	0,68		0,69	0,35	0,25	0,19	0,13	0,10	29600	1705		
4300	2440,98	0,59		0,60	0,30	0,22	0,17	0,11	0,08	29600	1709		
4300	2865,49	0,51		0,51	0,26	0,19	0,14	0,09	0,07	29600	1726		
4300	3215,89	0,45		0,51	0,25	0,19	0,14	0,09	0,07	29600	1736		
4300	3820,66	0,38	DT676	0,44	0,22	0,16	0,12	0,08	0,06	29600	1775	218	296
4300	4366,47	0,33		0,38	0,19	0,14	0,11	0,07	0,05	29600	1777		
4300	5027,18	0,29		0,33	0,17	0,12	0,09	0,06	0,05	29600	1780		
4300	5912,93	0,25		0,28	0,14	0,10	0,08	0,05	0,04	29600	1781		
4300	6304,09	0,23		0,27	0,13	0,10	0,07	0,05	0,04	29600	1782		
4300	7216,80	0,20		0,26	0,12	0,08	0,06	0,04	0,03	29600	1783		
4300	8471,90	0,17		0,22	0,10	0,07	0,05	0,04	0,03	29600	1789		
4300	9507,85	0,15		0,20	0,09	0,06	0,05	0,03	0,02	29600	1793		
3800	4,47	325	DT772	-	132	100	80	61	50	30034	-	275	298
4080	5,06	287		-	125	94	76	58	47	30748	-		
4350	5,75	252		-	118	88	71	54	44	31612	-		
4630	6,58	220		-	110	82	66	51	41	32592	-		
4770	6,97	208		-	107	80	64	49	40	32969	-		
5010	7,76	187		-	101	75	61	46	37	33787	-		
5260	8,70	167		-	94	71	57	44	36	34710	-		
6050	9,00	161		-	105	79	63	46	35	34844	-		
6420	10,23	142		-	98	73	59	40	31	35845	-		
6820	11,71	124		-	91	68	54	35	27	36936	-		
7000	12,40	117		-	88	66	51	33	25	37404	-		
7330	13,81	105		-	83	60	46	30	23	38349	-		
7680	15,46	94		-	78	53	41	27	20	39400	-		
8000	17,44	83		-	72	47	36	24	18	40735	-		
8000	19,82	73		-	63	42	32	21	16	43221	-		
8000	22,77	64		100	55	36	28	18	14	46018	-		
5560	17,95	81	DT773	-	48	36	29	22	17	46247	-	276	298



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Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)								
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Weight	Dim. Page
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	Gewicht	Maße Seite
											[kg]		
5620	18,61	78	DT773	-	47	35	28	22	17	46758	-	276	298
5820	20,87	69		-	43	33	26	20	15	48384	-		
8000	24,06	60		-	52	34	26	17	13	47165	-		
8000	27,65	52		-	45	30	23	15	11	50137	-		
8000	31,92	45		-	39	26	20	13	9,8	53342	-		
8000	33,10	44		-	38	25	19	12	9,5	54175	-		
8000	37,12	39		-	34	22	17	11	8,4	55500	-		
8000	41,85	35		-	30	20	15	9,9	7,5	55500	-		
8000	46,99	31		-	27	17	13	8,8	6,7	55500	2038		
8000	53,99	27		-	23	15	12	7,6	5,8	55500	2582		
8000	62,33	23		-	20	13	10	6,6	5,0	55500	3029		
8000	64,64	22		-	19	13	10	6,4	4,8	55500	3039		
8000	72,50	20		-	17	11	8,7	5,7	4,3	55500	3122		
8000	81,72	18		-	15	10	7,7	5,1	3,8	55500	3199		
8000	92,70	16		-	14	8,9	6,8	4,5	3,4	55500	3270		
8000	105,99	14		-	12	7,8	6,0	3,9	3,0	55500	3335		
8000	122,41	12		21	10	6,8	5,2	3,4	2,6	55500	3396		
8000	141,55	10		18	8,9	5,9	4,5	2,9	2,2	55500	3469		
8000	158,23	9,2		16	8,0	5,2	4,0	2,6	2,0	55500	3504		
8000	190,20	7,6		13	6,6	4,4	3,3	2,2	1,7	55500	3555		
8000	222,16	6,5		11	5,7	3,7	2,9	1,9	1,4	55500	3590		
8000	223,53	6,5	DT774	12	5,9	3,9	2,9	1,9	1,5	55500	1646	288	300
8000	256,48	5,7		10	5,1	3,4	2,6	1,7	1,3	55500	1697		
8000	296,36	4,9		8,9	4,5	2,9	2,2	1,5	1,1	55500	1743		
8000	321,33	4,5		8,2	4,1	2,7	2,1	1,3	1,0	55500	1769		
8000	384,72	3,8		6,9	3,4	2,3	1,7	1,1	0,85	55500	1814		
8000	438,10	3,3		6,0	3,0	2,0	1,5	0,99	0,75	55500	1842		
8000	489,64	3,0		5,4	2,7	1,8	1,4	0,89	0,67	55500	1867		
8000	566,21	2,6		4,7	2,3	1,5	1,2	0,77	0,58	55500	1966		
8000	632,92	2,3		4,2	2,1	1,4	1,0	0,69	0,52	55500	2033		
8000	730,48	2,0	DT775	3,7	1,9	1,2	0,93	0,61	0,46	55500	1898	291	302
8000	874,59	1,7		3,1	1,6	1,0	0,78	0,51	0,39	55500	1916		
8000	995,95	1,5		2,7	1,4	0,90	0,68	0,45	0,34	55500	1928		
8000	1105,59	1,3		2,5	1,2	0,80	0,61	0,40	0,30	55500	2011		
8000	1323,71	1,1		2,1	1,0	0,67	0,51	0,34	0,26	55500	2024		
8000	1507,38	0,96		1,8	0,90	0,59	0,45	0,30	0,25	55500	2031		
8000	1656,07	0,88		1,6	0,82	0,54	0,41	0,27	0,23	55500	2085		
8000	1982,78	0,73		1,4	0,69	0,45	0,34	0,25	0,19	55500	2093		
8000	2257,90	0,64		1,2	0,61	0,40	0,30	0,22	0,17	55500	2098		
8000	2523,53	0,57		1,1	0,54	0,35	0,27	0,20	0,15	55500	2103		
8000	2855,58	0,51		0,96	0,48	0,31	0,27	0,17	0,13	55500	2106		
8000	3302,14	0,44		0,83	0,41	0,27	0,23	0,15	0,11	55500	2123		
8000	3691,20	0,39		0,74	0,37	0,27	0,21	0,13	0,10	55500	2135		
8000	3922,75	0,37	DT776	0,71	0,36	0,26	0,20	0,13	0,10	55500	2179	293	302
8000	4334,63	0,33		0,64	0,32	0,23	0,18	0,12	0,09	55500	2181		
8000	5058,99	0,29		0,55	0,28	0,20	0,15	0,10	0,08	55500	2184		
8000	5875,88	0,25		0,53	0,26	0,19	0,15	0,10	0,07	55500	2197		
8000	6492,84	0,22		0,48	0,24	0,17	0,13	0,09	0,07	55500	2198		
8000	7577,86	0,19		0,41	0,21	0,15	0,11	0,07	0,06	55500	2200		
8000	8913,25	0,16		0,35	0,17	0,13	0,10	0,06	0,05	55500	2202		
8000	10597,02	0,14		0,29	0,15	0,11	0,08	0,05	0,04	55500	2204		
8000	11986,79	0,12		0,26	0,13	0,10	0,07	0,05	0,04	55500	2205		
8000	13669,15	0,11		0,25	0,11	0,08	0,06	0,04	0,03	55500	2206		
8000	16981,28	0,09		0,21	0,09	0,07	0,05	0,03	0,03	55500	2207		
8000	19312,05	0,08		0,18	0,08	0,06	0,05	0,03	0,02	55500	2208		
8000	22332,10	0,06		0,16	0,07	0,05	0,04	0,03	0,02	55500	2211		
8000	24963,27	0,06		0,14	0,06	0,05	0,03	0,02	0,02	55500	2214		
6660	5,66	256	DT872	-	183	137	110	84	69	24062	-	390	304



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D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)						Per.O.Loads (Output)		
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
7040	6,35	228	DT872	-	172	129	104	80	65	28406	-	390	304
7440	7,16	202		-	162	121	98	75	61	33157	-		
7870	8,12	179		-	151	113	91	70	57	38380	-		
9130	8,75	166		-	162	122	98	75	58	41694	-		
9610	9,78	148		-	153	115	93	68	52	46426	-		
10120	10,97	132		-	144	108	87	61	46	51518	-		
10660	12,36	117		-	135	101	81	54	41	57074	-		
11250	14,02	103		-	125	94	73	48	36	63142	-		
10150	13,58	107	DT873	-	116	87	70	49	37	60141	-	394	304
10550	15,45	94		-	106	80	64	43	33	66375	-		
11000	17,67	82		-	97	73	58	38	29	69064	-		
13000	23,44	62		-	86	57	43	29	22	76000	-		
13000	26,66	54		-	76	50	38	25	19	76000	-		
13000	30,50	48		-	67	44	33	22	17	76000	-		
13000	35,24	41		-	57	38	29	19	14	76000	-		
13000	39,92	36		-	51	33	26	17	13	76000	1134		
13000	45,41	32		-	45	29	22	15	11	76000	1938		
13000	51,94	28		-	39	26	20	13	9,8	76000	2678		
13000	55,01	26		-	37	24	19	12	9,3	76000	3038		
13000	61,27	24		-	33	22	17	11	8,3	76000	3530		
13000	68,62	21		-	30	19	15	9,8	7,4	76000	3992		
13000	77,36	19		-	26	17	13	8,7	6,6	76000	4424		
13000	87,95	16		-	23	15	12	7,7	5,8	76000	4829		
13000	101,03	14		40	20	13	10	6,7	5,1	76000	5085		
13000	115,03	13		35	18	12	8,9	5,9	4,5	76000	5167		
13000	128,20	11		32	16	10	8,0	5,3	4,0	76000	5218		
13000	139,70	10	DT874	30	15	9,9	7,6	5,0	3,8	76000	167	404	306
13000	156,45	9,3		27	14	8,9	6,8	4,4	3,4	76000	1166		
13000	176,39	8,2		24	12	7,9	6,0	3,9	3,0	76000	2108		
13000	200,52	7,2		21	11	7,0	5,3	3,5	2,6	76000	2670		
13000	225,61	6,4		19	9,5	6,2	4,7	3,1	2,3	76000	2730		
13000	259,15	5,6		16	8,2	5,4	4,1	2,7	2,0	76000	2911		
13000	293,46	4,9		15	7,3	4,8	3,6	2,4	1,8	76000	2960		
13000	334,15	4,3		13	6,4	4,2	3,2	2,1	1,6	76000	3102		
13000	407,42	3,6		11	5,3	3,4	2,6	1,7	1,3	76000	3157		
13000	482,05	3,0		8,9	4,4	2,9	2,2	1,5	1,1	76000	3198		
13000	537,22	2,7		8,0	4,0	2,6	2,0	1,3	0,99	76000	3293		
13000	607,27	2,4		7,1	3,5	2,3	1,8	1,2	0,88	76000	3316		
13000	686,44	2,1	DT875	6,4	3,2	2,1	1,6	1,0	0,80	76000	1682	407	308
13000	744,27	1,9		5,9	3,0	1,9	1,5	0,97	0,73	76000	1699		
13000	828,93	1,7		5,3	2,7	1,7	1,3	0,87	0,66	76000	1753		
13000	928,31	1,6		4,7	2,4	1,6	1,2	0,78	0,59	76000	1804		
13000	1046,63	1,4		4,2	2,1	1,4	1,1	0,69	0,52	76000	1853		
13000	1189,85	1,2		3,7	1,9	1,2	0,93	0,61	0,46	76000	1899		
13000	1424,58	1,0		3,1	1,6	1,0	0,78	0,51	0,39	76000	1917		
13000	1622,25	0,89		2,7	1,4	0,89	0,68	0,45	0,34	76000	1928		
13000	1813,10	0,80		2,4	1,2	0,80	0,61	0,40	0,30	76000	1939		
13000	2051,67	0,71		2,2	1,1	0,71	0,54	0,35	0,27	76000	1947		
13000	2356,74	0,62		1,9	0,94	0,62	0,47	0,31	0,26	76000	1984		
13000	2683,53	0,54		1,7	0,83	0,54	0,41	0,27	0,23	76000	2014		
13000	2990,66	0,48		1,5	0,74	0,49	0,37	0,27	0,20	76000	2037		
13000	3405,63	0,43	DT876	1,3	0,67	0,44	0,33	0,24	0,18	76000	2117	409	308
13000	4005,78	0,36		1,1	0,57	0,37	0,28	0,21	0,16	76000	2123		
13000	4762,49	0,30		0,96	0,48	0,31	0,27	0,17	0,13	76000	2130		
13000	5304,23	0,27		0,86	0,43	0,28	0,24	0,16	0,12	76000	2140		
13000	5940,18	0,24		0,77	0,38	0,25	0,21	0,14	0,11	76000	2150		
13000	6697,26	0,22		0,68	0,34	0,25	0,19	0,12	0,09	76000	2159		
13000	7613,73	0,19		0,60	0,30	0,22	0,17	0,11	0,08	76000	2168		



D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı	Çıkış Devri	Tipi	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)						Güv. Rad.Yük Çıkış	Güv.Rad.Yük Giriş	Ağırlık	Ölçü Sayfası
	Ratio	Output Speeds		Type	Pe= Nominal Power [kW] (For Service Factor fs=1,0)								
	Übersetzung	Abtriebs-drehzahlen	Typ	Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]						Zul.Querkräfte (Abtrieb)	Zul.Querkräfte (Antrieb)	Gewicht	Maße Seite
	i	n2 [r.p.m] (n1=1450rpm)		n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Fqam [N] (n1=1450rpm)	Fqem [N] (n1=1450rpm)	[kg]	
13000	8612,25	0,17	DT876	0,53	0,27	0,19	0,15	0,10	0,07	76000	2171	409	308
13000	9820,98	0,15		0,52	0,26	0,19	0,14	0,09	0,07	76000	2173		
13000	12200,68	0,12		0,42	0,21	0,15	0,12	0,08	0,06	76000	2176		
13000	13875,29	0,10		0,37	0,18	0,13	0,10	0,07	0,05	76000	2178		
13000	15938,44	0,09		0,32	0,16	0,12	0,09	0,06	0,04	76000	2185		
13000	18148,47	0,08		0,28	0,14	0,10	0,08	0,05	0,04	76000	2190		
13000	20225,62	0,07		0,25	0,13	0,09	0,07	0,05	0,03	76000	2195		
12860	7,08	205	DT972	-	282	211	171	130	99	56290	-	570	310
13490	7,88	184		-	266	199	161	117	89	57625	-		
14170	8,82	164		-	250	187	151	105	80	59086	-		
14900	9,94	146		-	233	175	141	93	71	60730	-		
17920	11,85	122		-	236	156	119	78	59	63010	-		
18000	13,19	110		-	213	140	107	70	53	66171	-		
18000	14,77	98		-	190	125	96	63	48	69795	-		
18000	16,64	87		-	169	111	85	56	42	73773	-		
16800	20,27	72	DT973	-	129	91	69	46	35	79179	19858	575	310
17400	22,85	63		-	118	81	62	40	31	82111	19950		
18000	25,92	56		-	108	71	54	36	27	85446	20039		
18000	33,93	43		-	83	54	42	27	21	100000	22918		
18000	38,24	38		-	73	48	37	24	18	100000	23163		
18000	43,38	33		-	65	43	33	21	16	100000	23390		
18000	50,12	29		-	56	37	28	18	14	100000	24913		
18000	56,21	26		-	50	33	25	16	13	100000	25074		
18000	63,36	23		-	44	29	22	15	11	100000	25222		
18000	71,87	20		-	39	26	20	13	9,8	100000	25359		
18000	84,31	17		-	33	22	17	11	8,4	100000	25531		
18000	93,91	15		-	30	20	15	9,9	7,5	100000	25619		
18000	105,33	14		-	27	18	13	8,8	6,7	100000	25702		
18000	119,15	12		-	24	16	12	7,8	5,9	100000	25781		
18000	136,23	11		41	21	14	10	6,9	5,2	100000	25856		
18000	153,87	9,4		37	18	12	9,2	6,1	4,6	100000	25922		
18000	171,00	8,5		33	17	11	8,3	5,5	4,2	100000	25968		
18000	191,74	7,6		29	15	9,7	7,4	4,9	3,7	100000	26012		
18000	197,95	7,3	DT974	30	15	9,7	7,4	4,9	3,7	100000	1505	587	312
18000	222,15	6,5		27	13	8,7	6,6	4,3	3,3	100000	1770		
18000	250,41	5,8		24	12	7,7	5,9	3,9	2,9	100000	2850		
18000	284,06	5,1		21	10	6,8	5,2	3,4	2,6	100000	3264		
18000	333,23	4,4		18	8,9	5,8	4,4	2,9	2,2	100000	3501		
18000	371,15	3,9		16	8,0	5,2	4,0	2,6	2,0	100000	3640		
18000	415,16	3,5		14	7,1	4,7	3,6	2,3	1,8	100000	3663		
18000	523,19	2,8		11	5,7	3,7	2,8	1,9	1,4	100000	3727		
18000	474,03	3,1	DT975	13	6,4	4,2	3,2	2,1	1,6	100000	1415	592	314
18000	560,97	2,6		11	5,4	3,5	2,7	1,8	1,3	100000	1471		
18000	603,97	2,4		10	5,0	3,3	2,5	1,6	1,2	100000	1514		
18000	679,53	2,1		8,9	4,5	2,9	2,2	1,5	1,1	100000	1545		
18000	769,47	1,9		7,9	3,9	2,6	2,0	1,3	0,98	100000	1573		
18000	864,41	1,7		7,0	3,5	2,3	1,8	1,2	0,87	100000	1590		
18000	938,19	1,5		6,5	3,2	2,1	1,6	1,1	0,81	100000	1610		
18000	1110,06	1,3		5,5	2,7	1,8	1,4	0,90	0,68	100000	1638		
18000	1244,98	1,2		4,9	2,5	1,6	1,2	0,80	0,61	100000	1704		
18000	1403,36	1,0		4,4	2,2	1,4	1,1	0,71	0,54	100000	1766		
18000	1591,90	0,91		3,8	1,9	1,3	0,96	0,63	0,48	100000	1823		
18000	1867,46	0,78		3,3	1,6	1,1	0,82	0,54	0,41	100000	1887		
18000	2079,97	0,70		2,9	1,5	0,96	0,73	0,48	0,36	100000	1924		
18000	2909,37	0,50	DT976	2,1	1,1	0,70	0,54	0,35	0,27	100000	2052	595	314
18000	3079,47	0,47		2,0	1,0	0,66	0,51	0,33	0,25	100000	2056		



D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

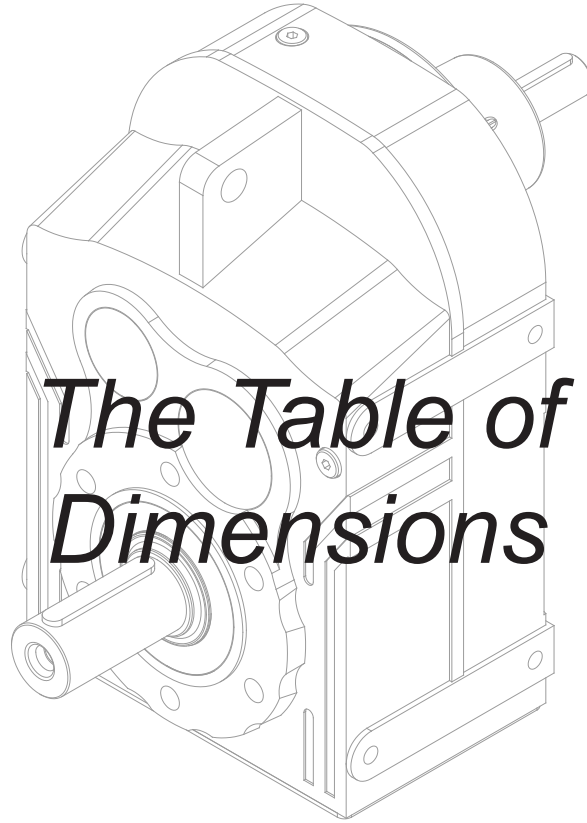
D Serien Getriebe Leistung und Drehzahlübersicht



Anma Momenti <i>Nominal Torques</i> Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Çevrim Oranı <i>Ratio</i> Übersetzung i	Çıkış Devri <i>Output Speeds</i> Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipi <i>Type</i> Typ	Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için) <i>Pe= Nominal Power [kW] (For Service Factor fs=1,0)</i> Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0)						Güv. Rad.Yük Çıkış <i>Per.O.Loads (Output)</i>	Güv.Rad.Yük Giriş <i>Per.O.Loads (Input)</i>	Ağırlık <i>Weight</i> Gewicht [kg]	Ölçü Sayfası <i>Dim. Page</i> Maße Seite
				Giriş devri[d/d] / Input speed[rpm] / Antriebsdrehzahl[upm]									
				n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360				
18000	3686,99	0,39	DT976	1,7	0,85	0,56	0,42	0,28	0,23	100000	2066	595	314
18000	4589,41	0,32		1,4	0,68	0,45	0,34	0,25	0,19	100000	2120		
18000	5494,80	0,26		1,1	0,57	0,37	0,29	0,21	0,16	100000	2127		
18000	7017,74	0,21		0,90	0,45	0,29	0,25	0,16	0,12	100000	2144		
18000	8841,14	0,16		0,71	0,36	0,26	0,20	0,13	0,10	100000	2159		
18000	11348,58	0,13		0,56	0,28	0,20	0,15	0,10	0,08	100000	2173		
18000	16360,74	0,09		0,43	0,21	0,16	0,12	0,08	0,06	100000	2187		
18000	20565,73	0,07		0,34	0,17	0,12	0,09	0,06	0,05	100000	2195		

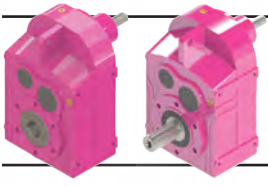


Ölçü Tabloları



*The Table of
Dimensions*

Abmessungs-
tabellen



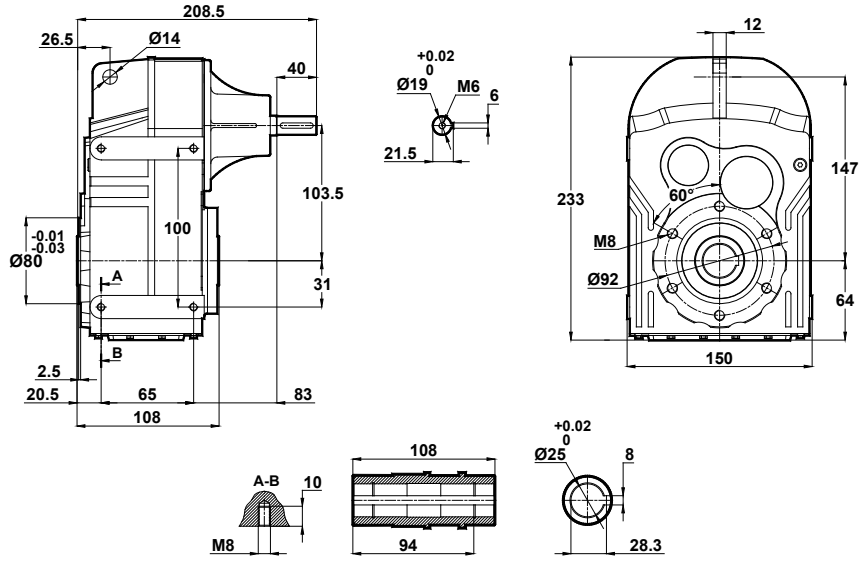
Ölçü Sayfaları

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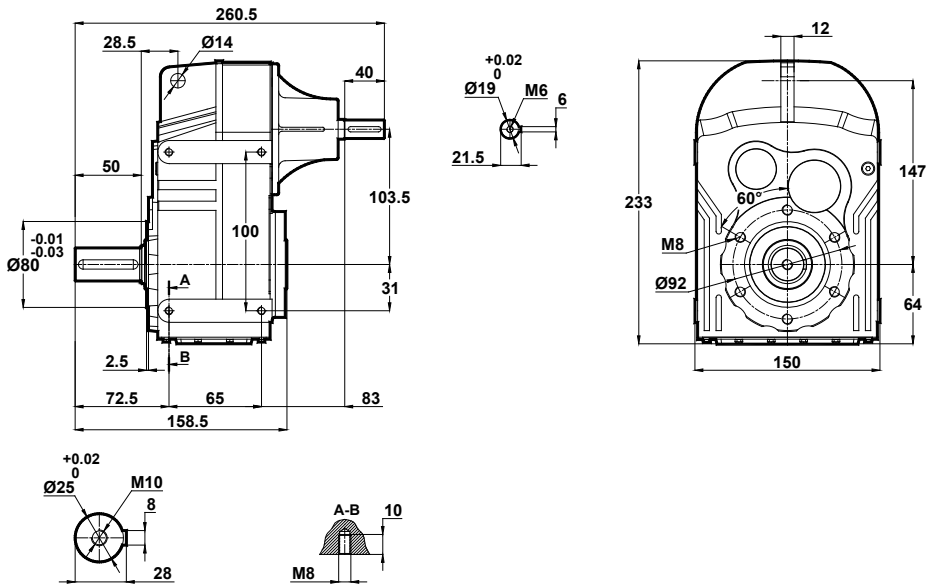
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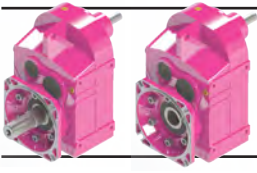
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DT073.00



DT072.01
DT073.01



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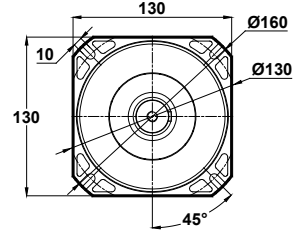
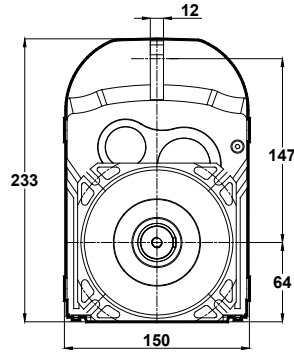
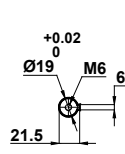
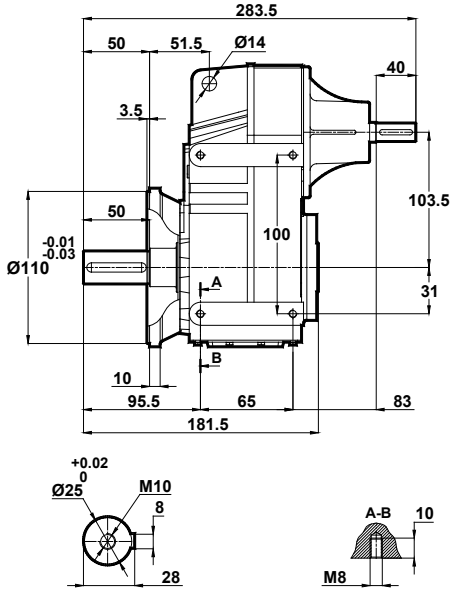
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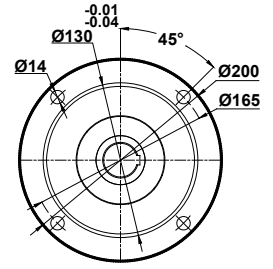
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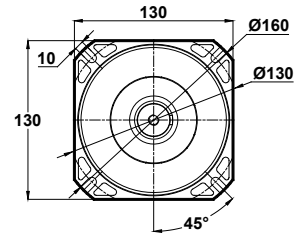
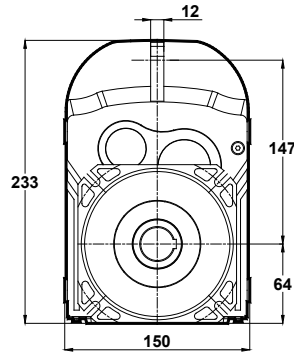
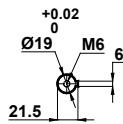
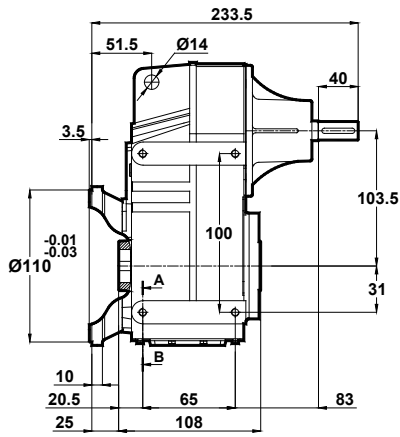
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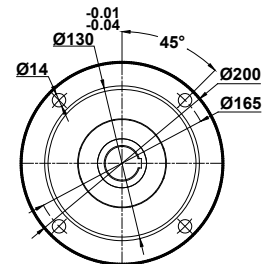
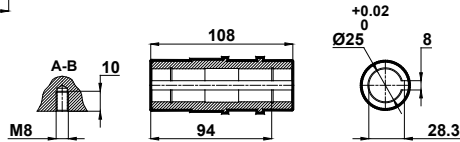
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT072.03
DT073.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



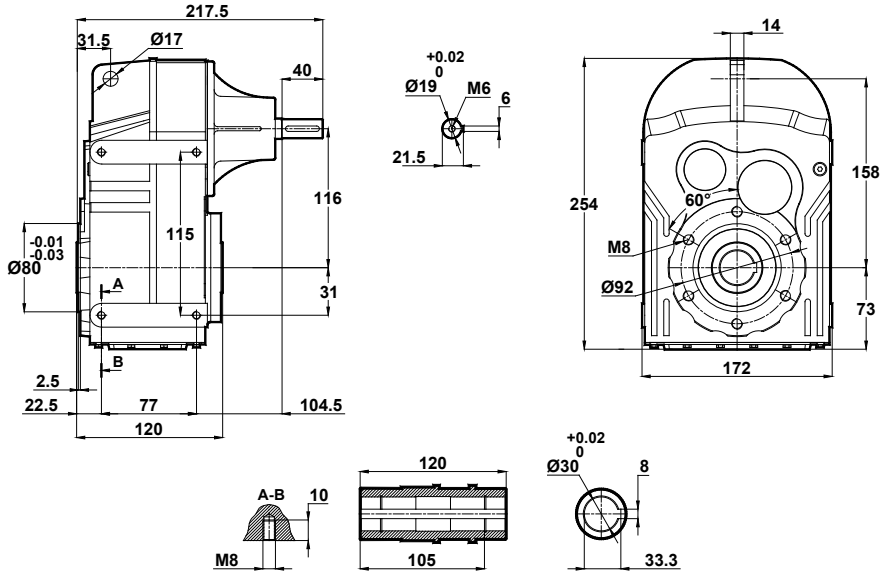
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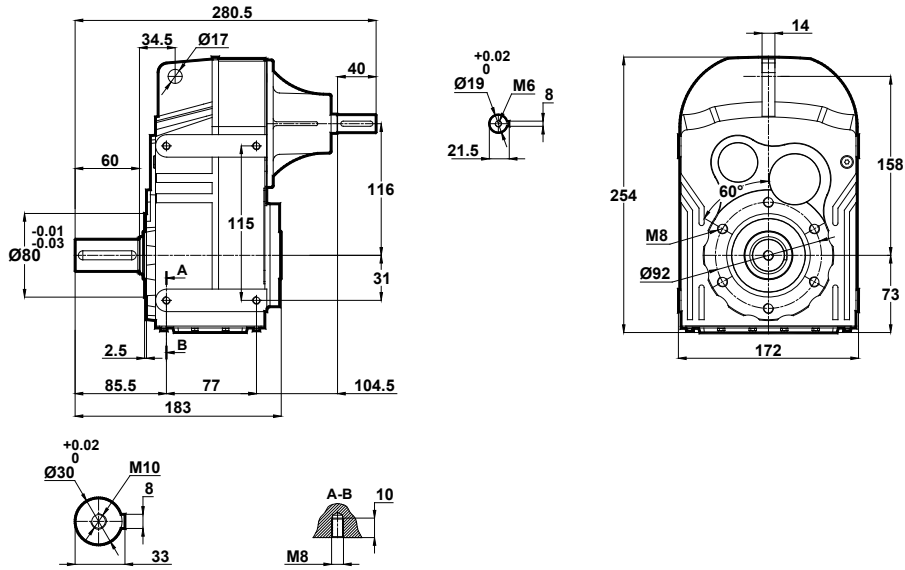
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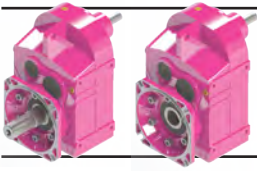
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DT173.00



DT172.01
DT173.01



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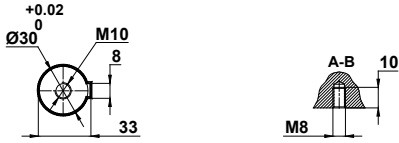
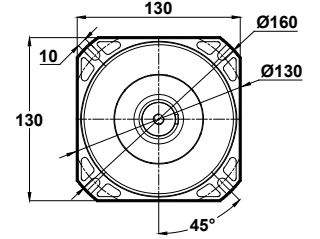
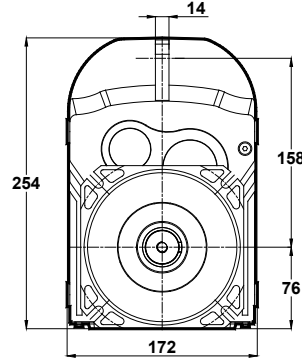
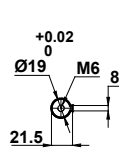
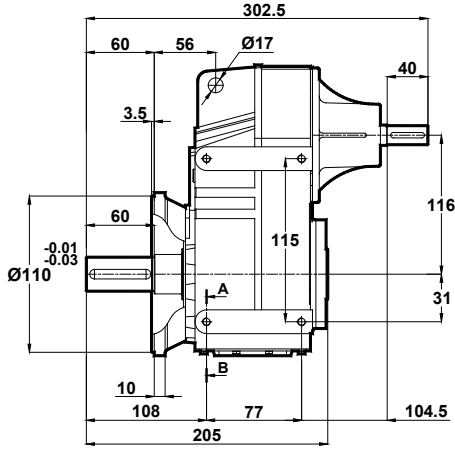
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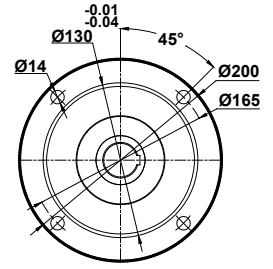
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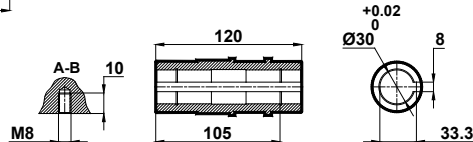
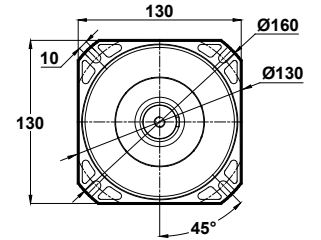
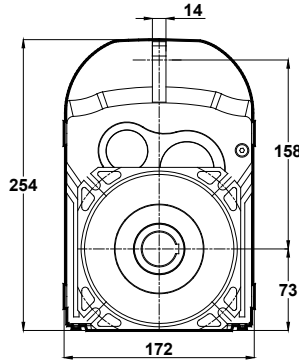
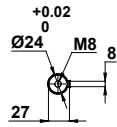
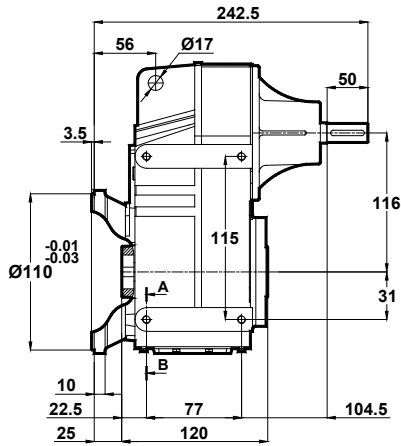
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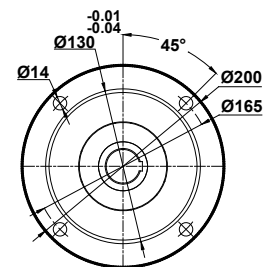
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT172.03
DT173.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



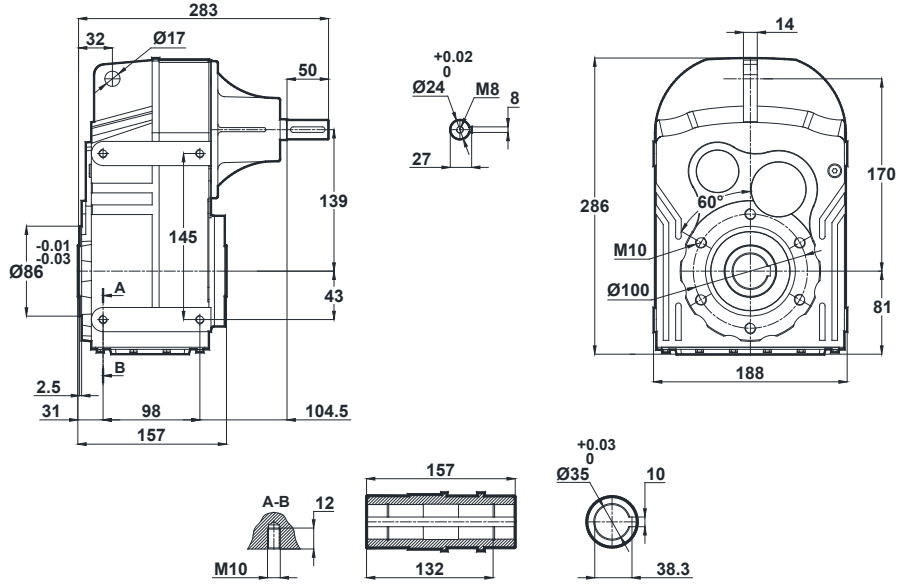
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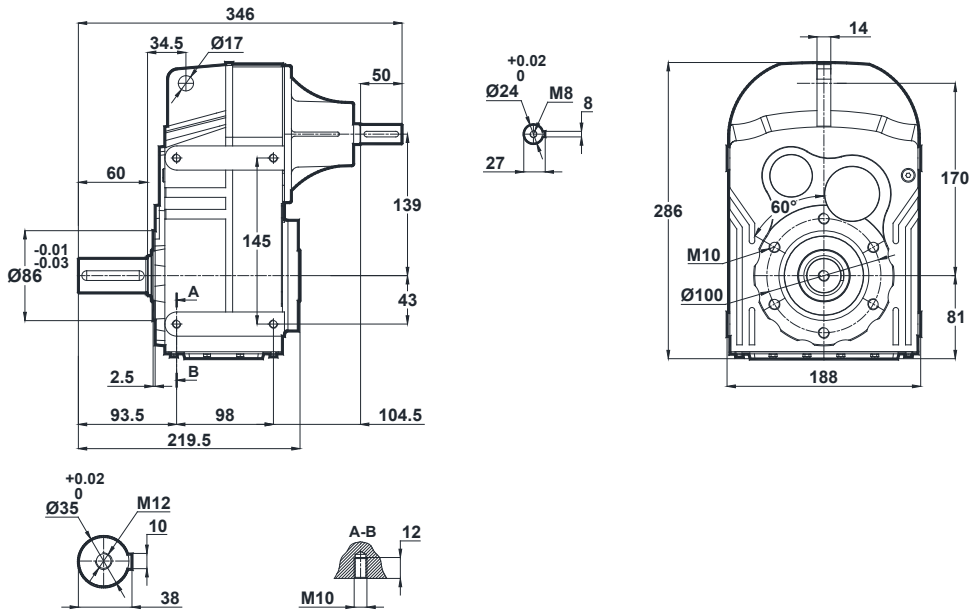
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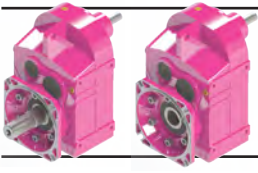
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DT273.00



DT272.01
DT273.01



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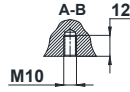
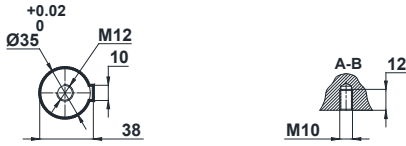
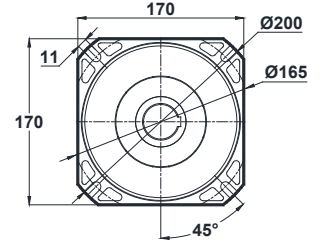
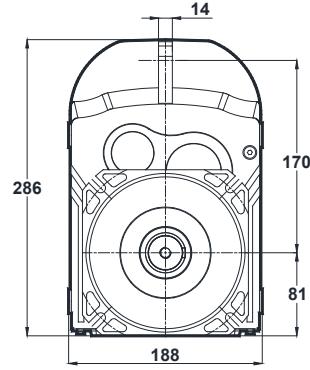
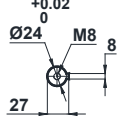
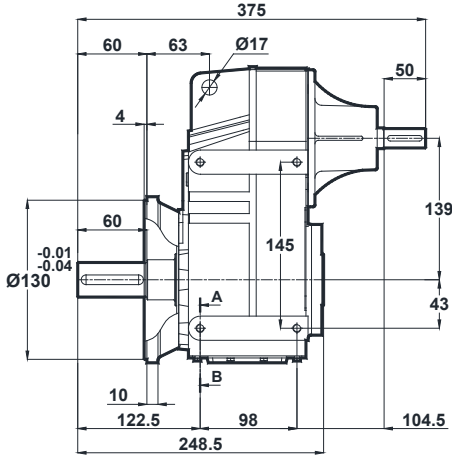
Ölçü Sayfaları

Dimension Pages

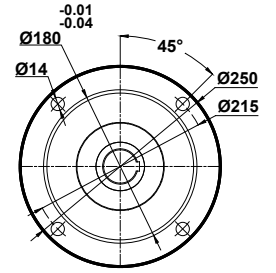
Abmessungsseiten



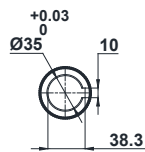
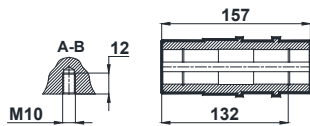
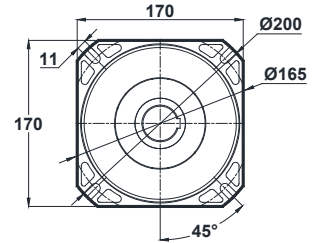
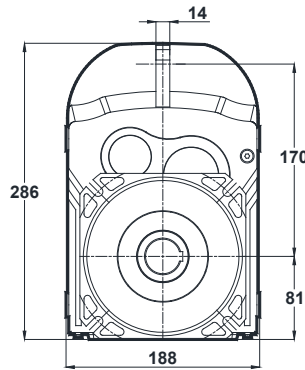
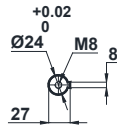
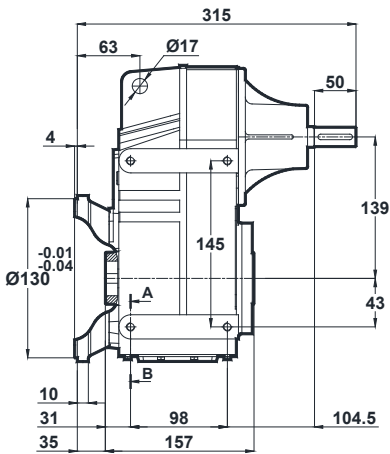
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DT273.02



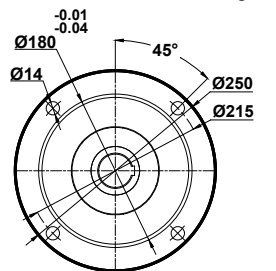
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



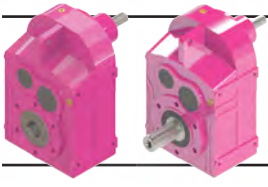
DT272.03
DT273.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



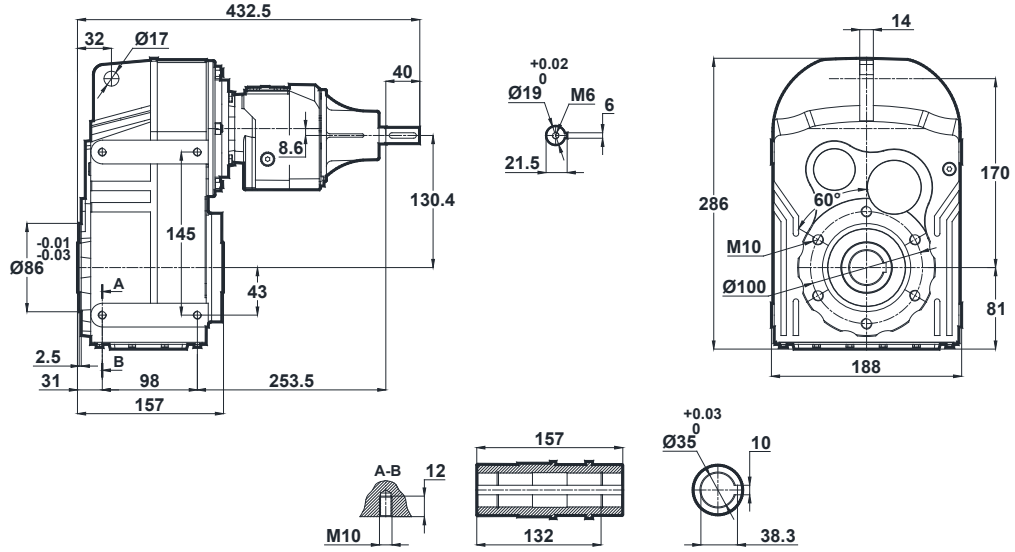
Ölçü Sayfaları

Dimension Pages

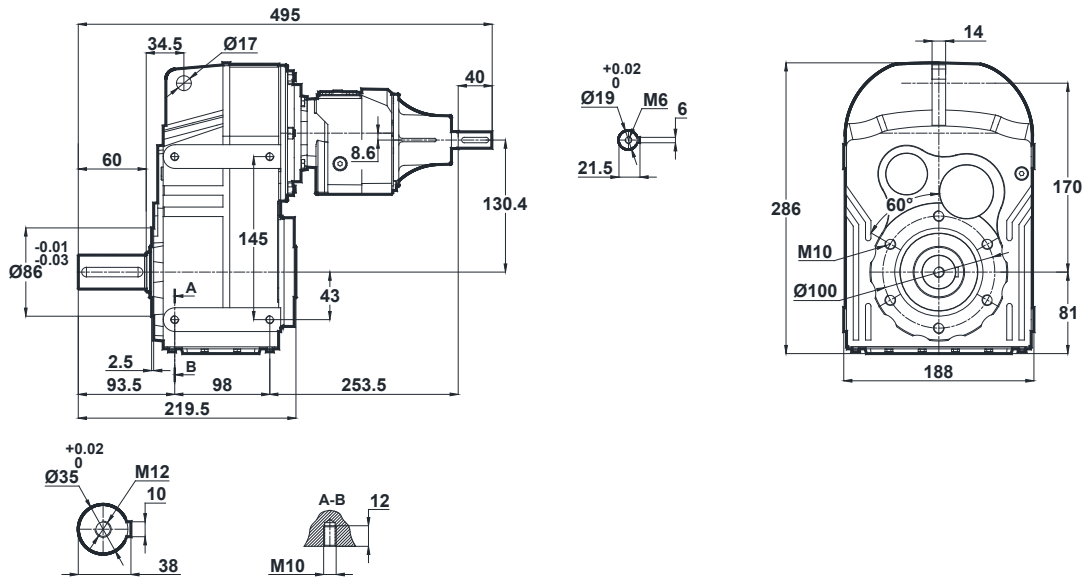
Abmessungsseiten



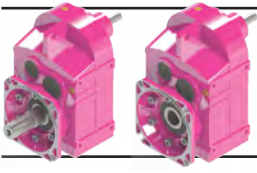
DT275.00
DT276.00



DT275.01
DT276.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



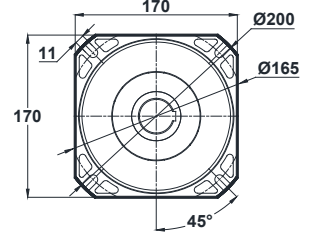
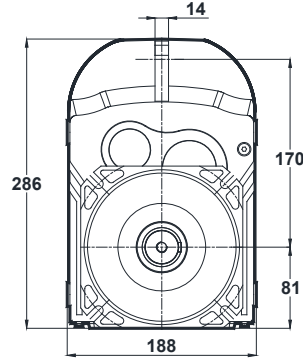
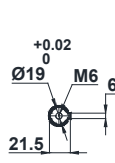
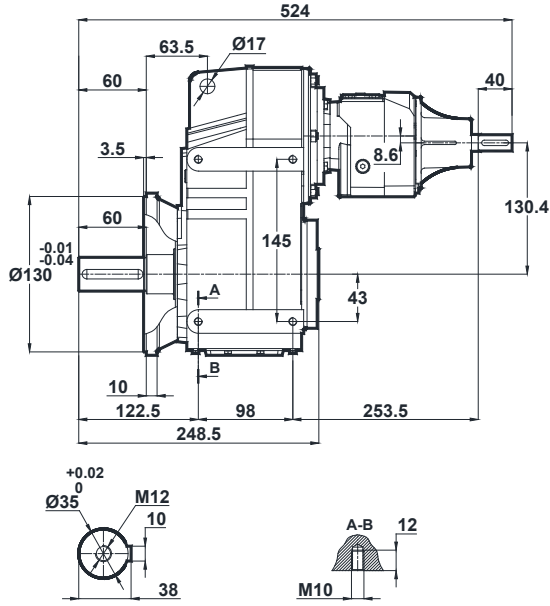
Ölçü Sayfaları

Dimension Pages

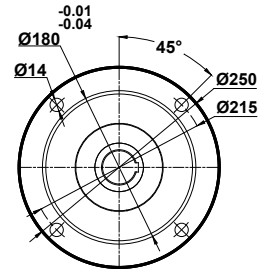
Abmessungsseiten



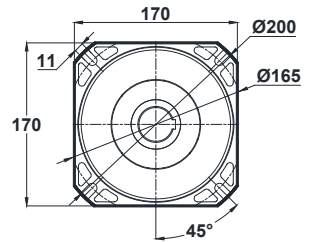
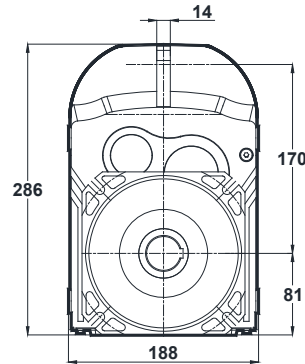
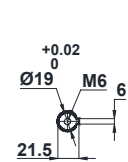
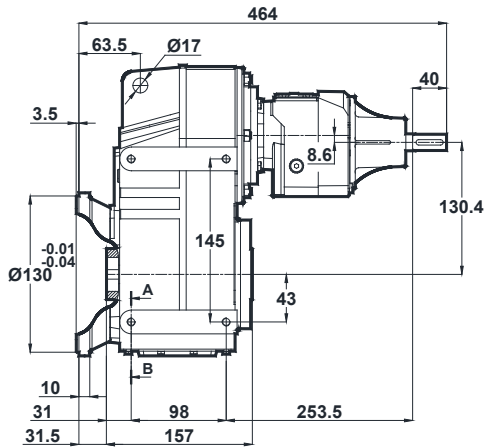
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DT276.02



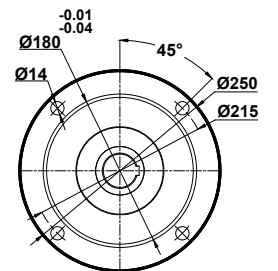
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



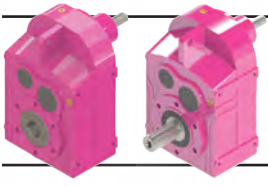
DT275.03
DT276.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



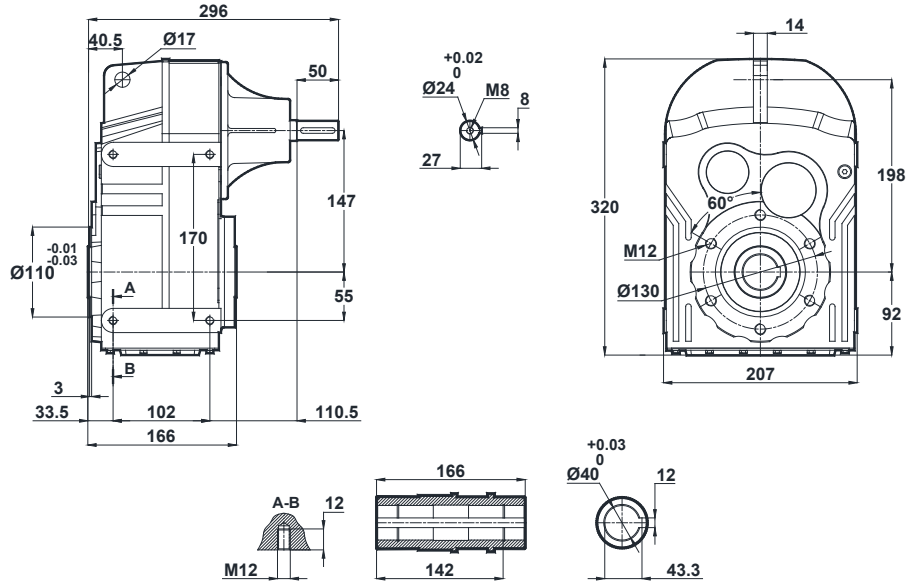
Ölçü Sayfaları

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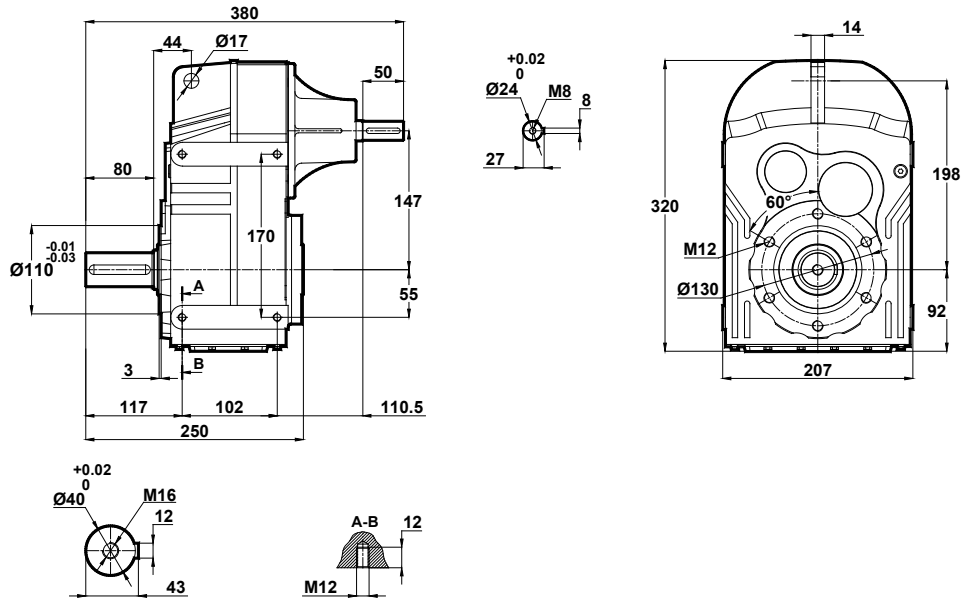
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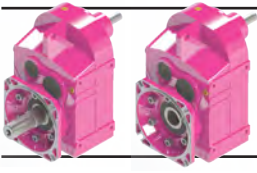
DT282.00
DT283.00



DT282.01
DT283.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



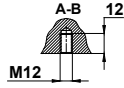
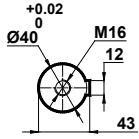
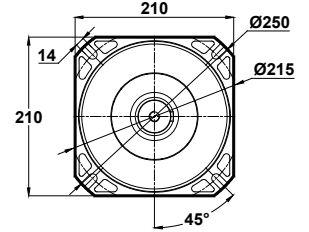
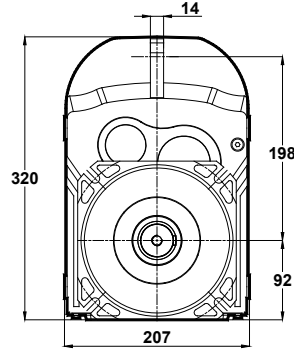
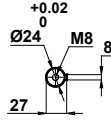
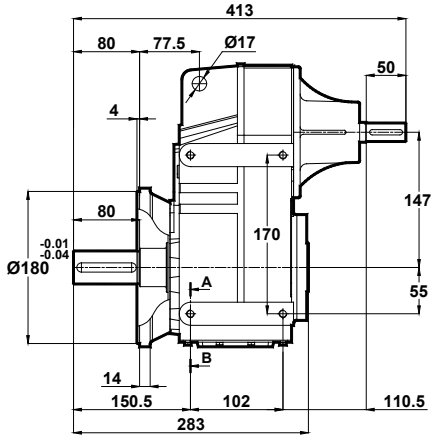
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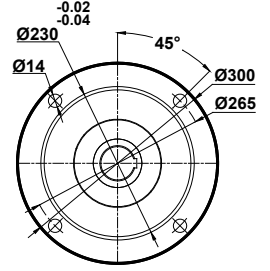
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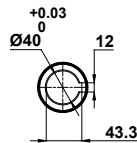
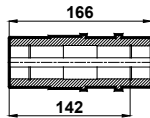
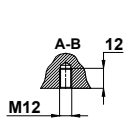
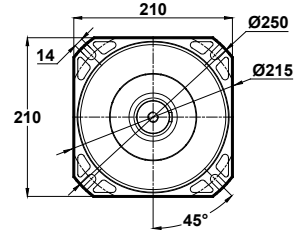
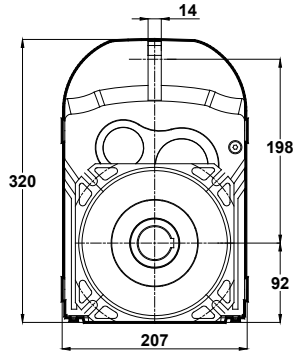
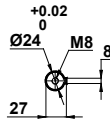
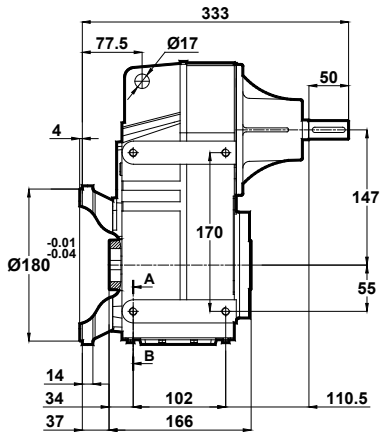
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DT283.02



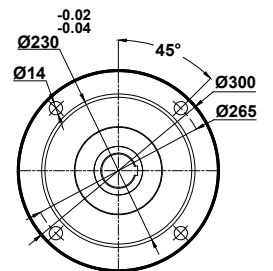
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT282.03
DT283.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



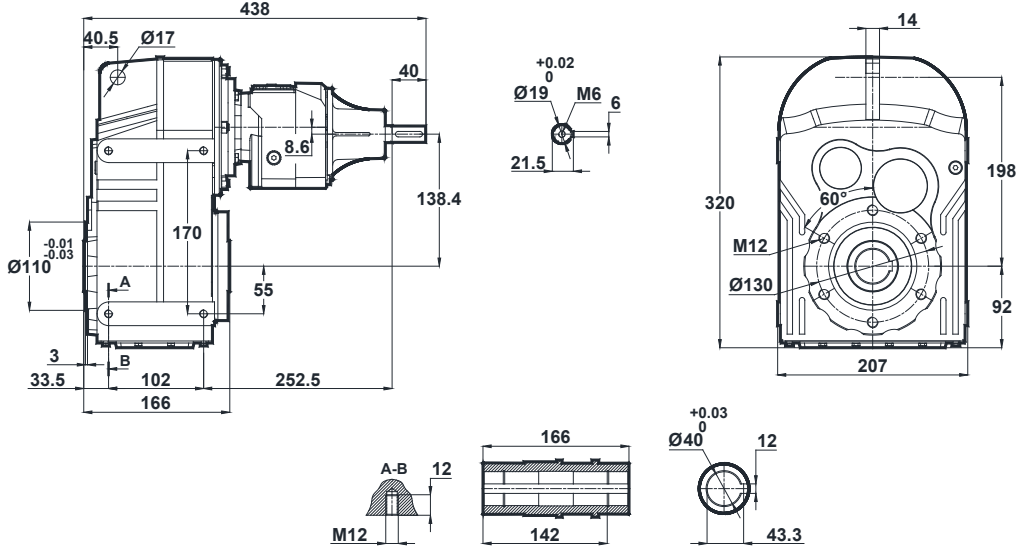
Ölçü Sayfaları

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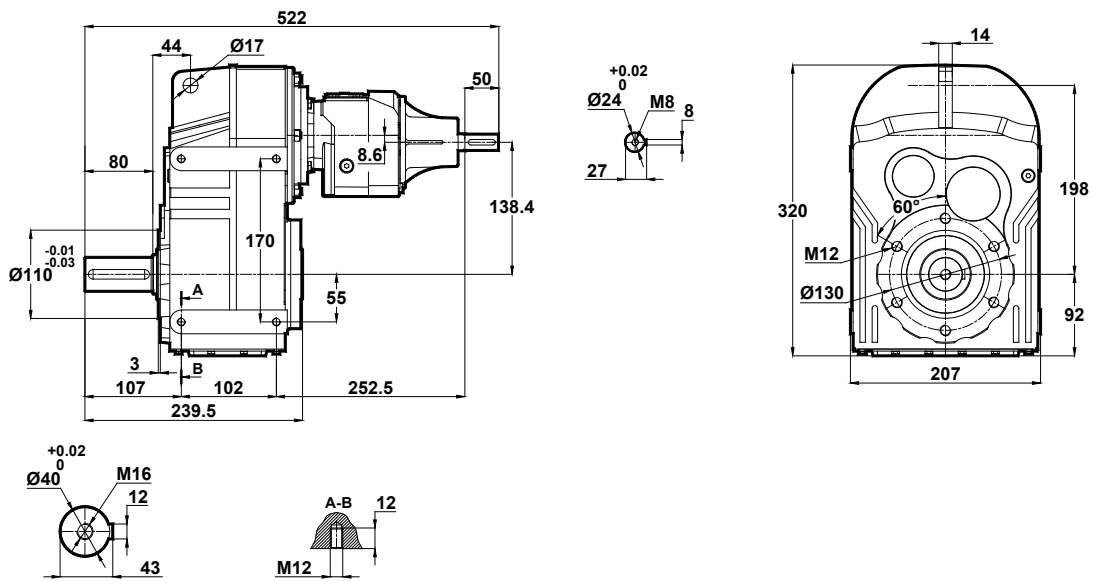
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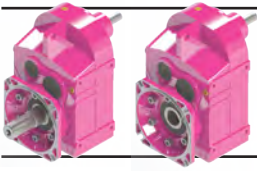
DT285.00
DT286.00



DT285.01
DT286.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



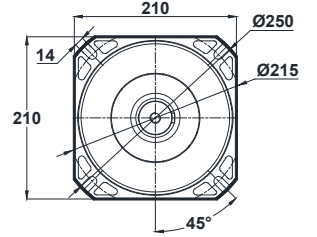
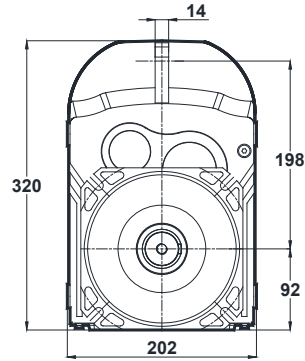
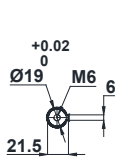
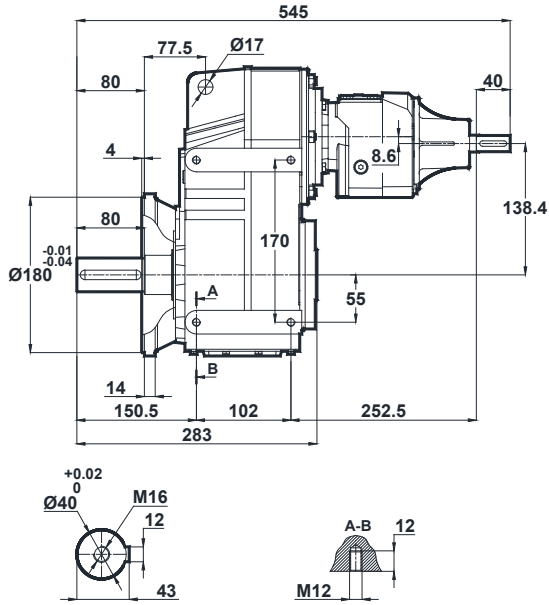
Ölçü Sayfaları

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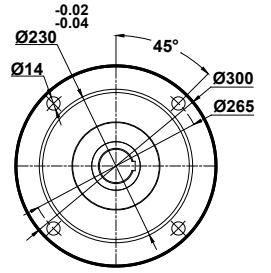
Abmessungsseiten



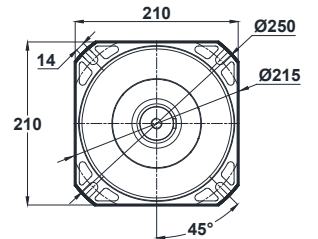
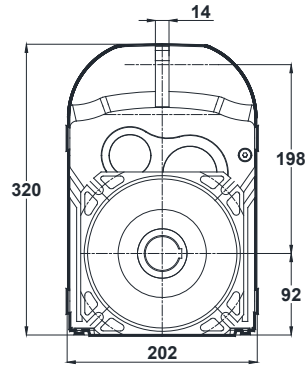
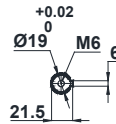
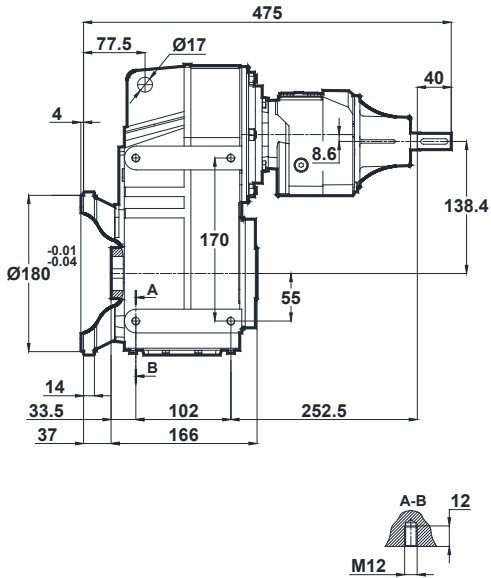
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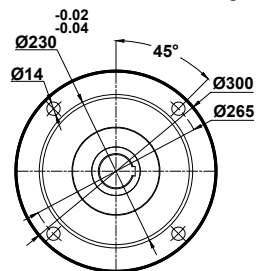
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT285.03
DT286.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



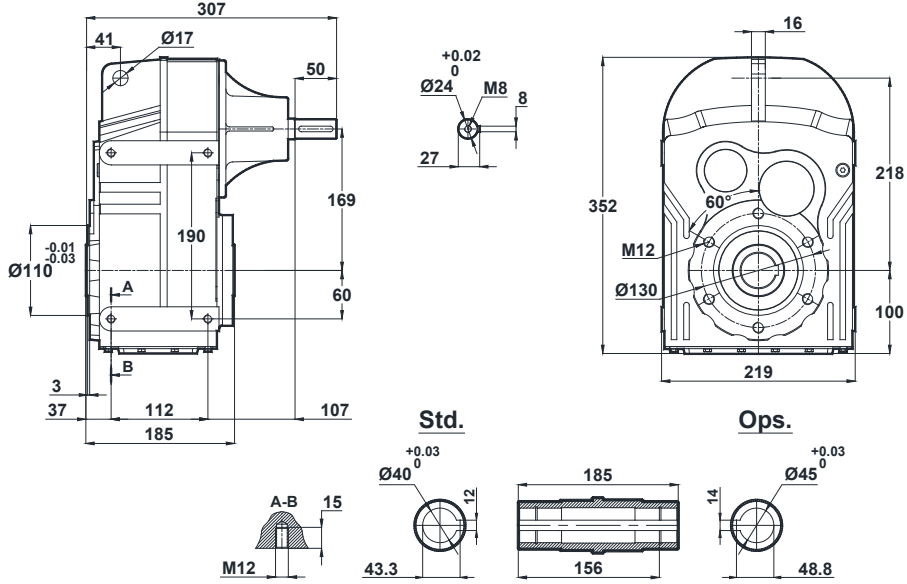
Ölçü Sayfaları

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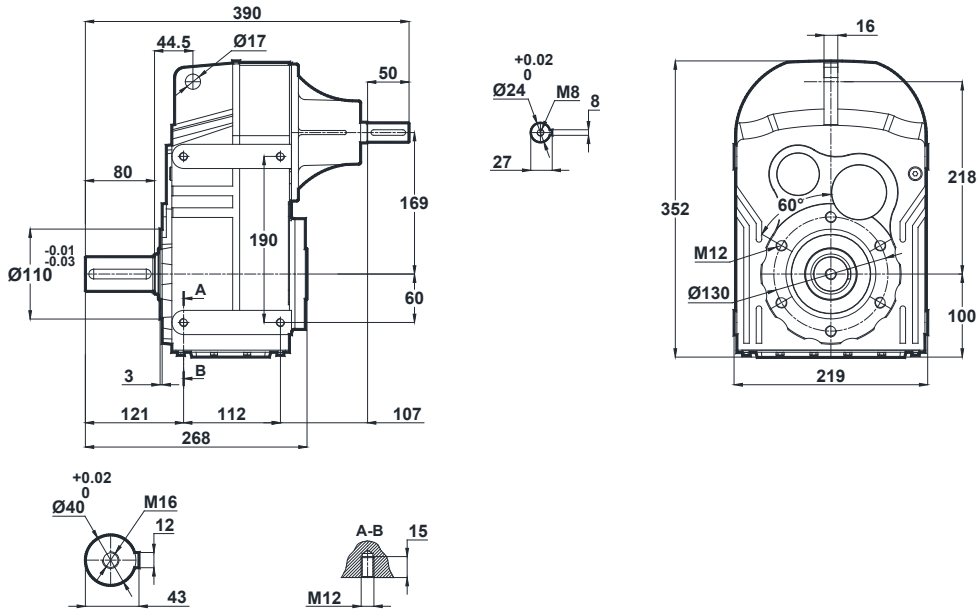
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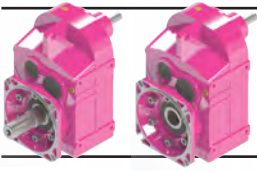
DT372.00
DT373.00



DT372.01
DT373.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



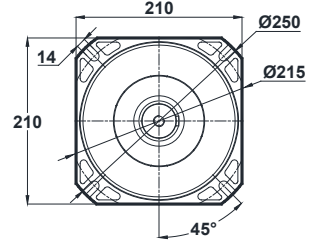
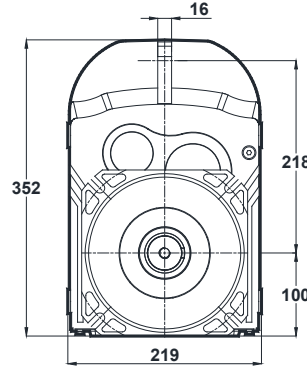
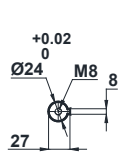
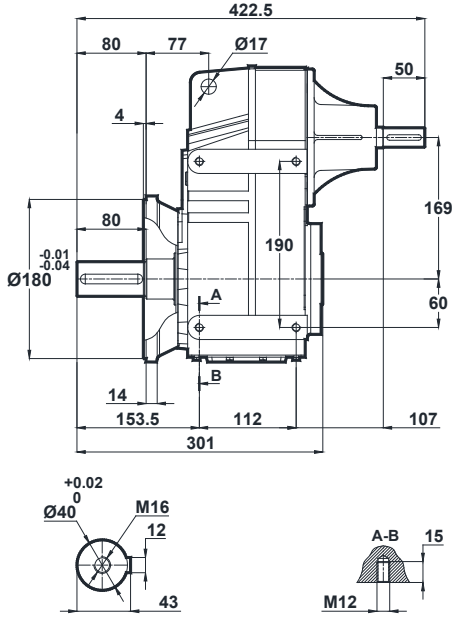
Ölçü Sayfaları

Dimension Pages

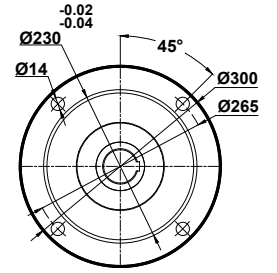
Abmessungsseiten



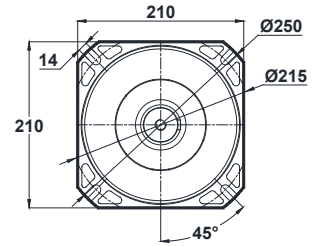
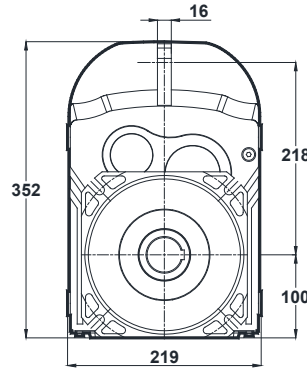
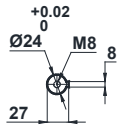
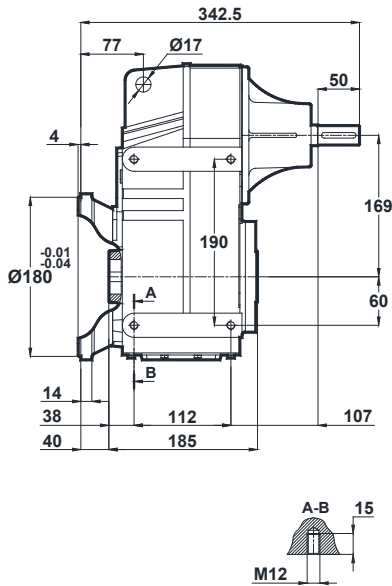
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DT373.02



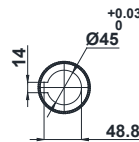
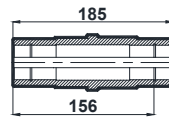
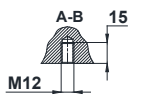
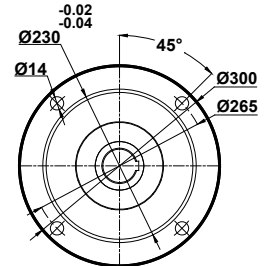
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



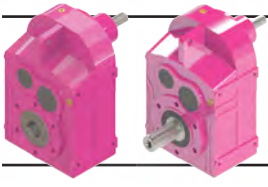
DT372.03
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Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



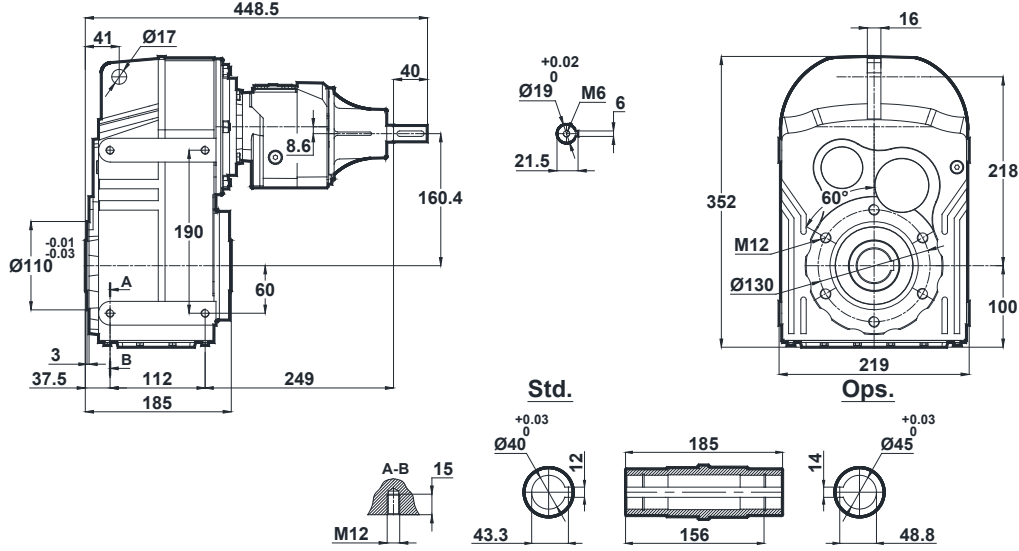
Ölçü Sayfaları

Dimension Pages

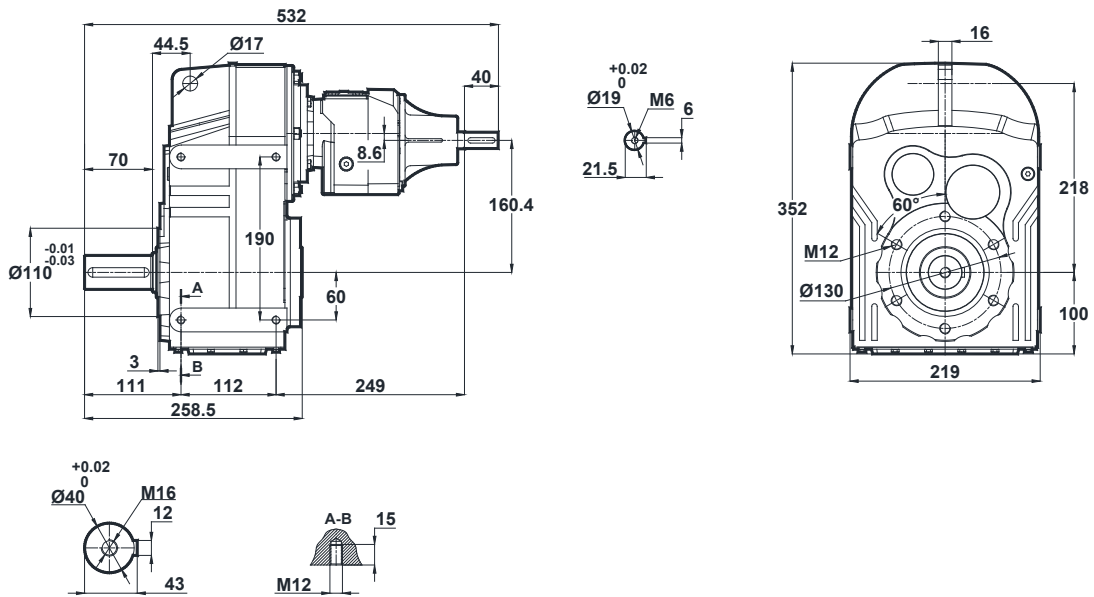
Abmessungsseiten



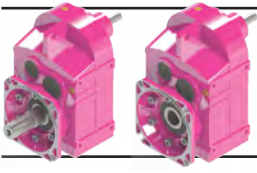
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DT376.00



DT375.01
DT376.01



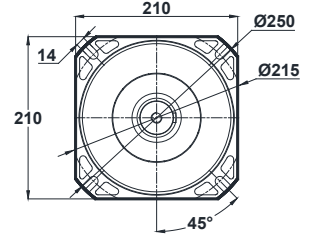
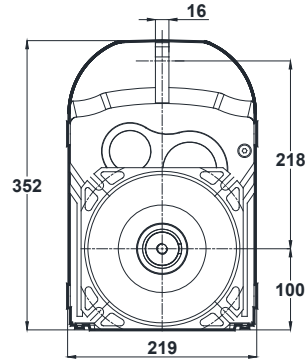
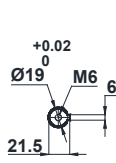
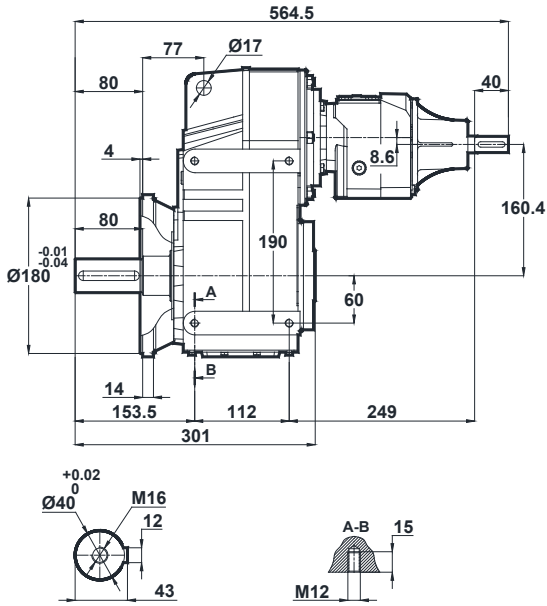
-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



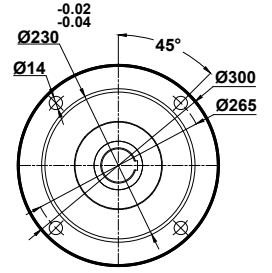
Ölçü Sayfaları Dimension Pages Abmessungsseiten



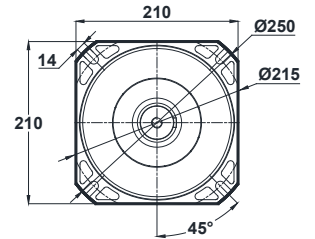
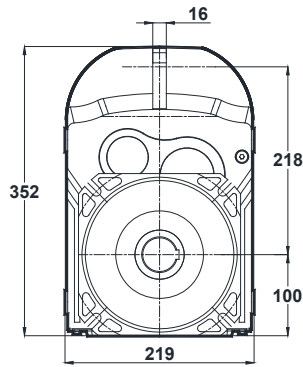
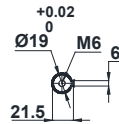
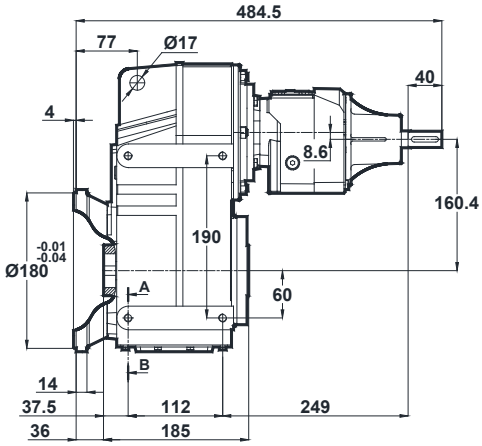
DT375.02
DT376.02



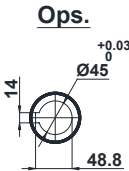
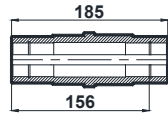
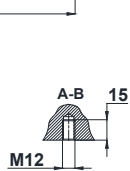
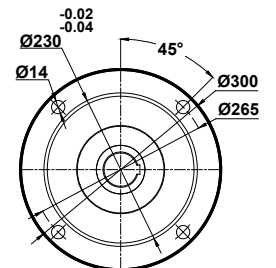
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



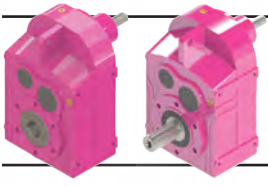
DT375.03
DT376.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



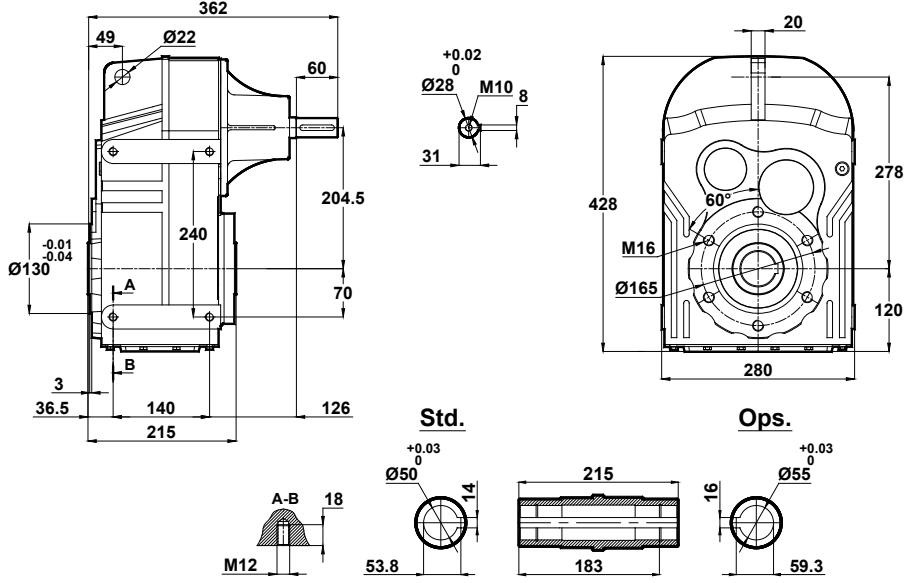
Ölçü Sayfaları

Dimension Pages

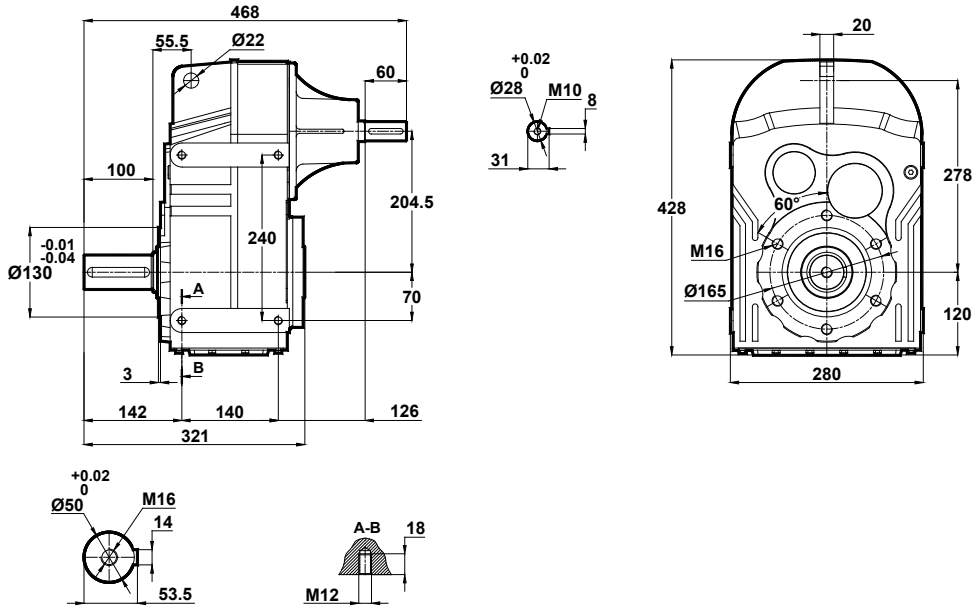
Abmessungsseiten



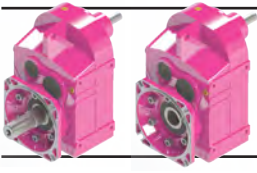
DT472.00
DT473.00



DT472.01
DT473.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



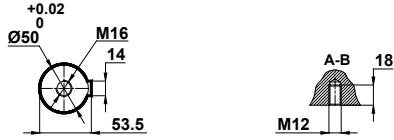
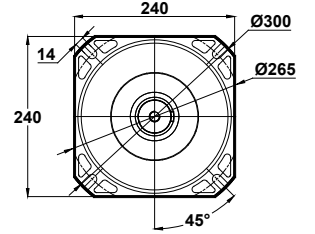
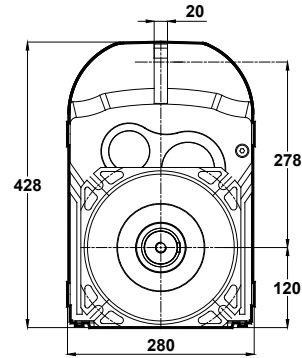
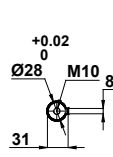
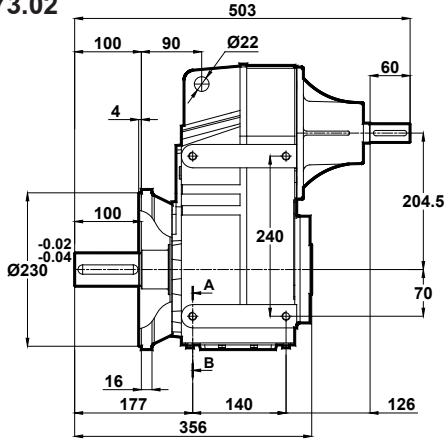
Ölçü Sayfaları

Dimension Pages

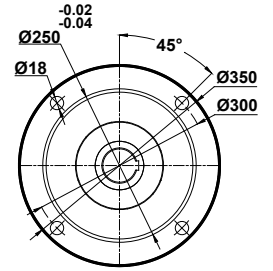
Abmessungsseiten



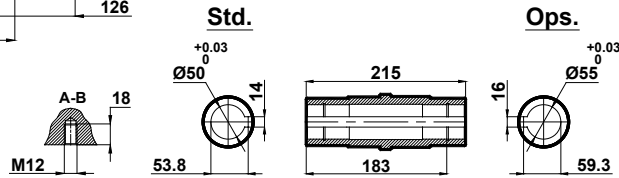
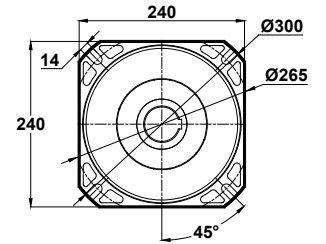
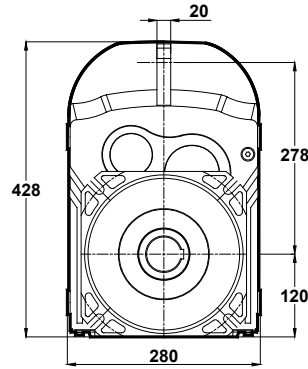
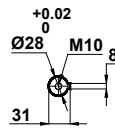
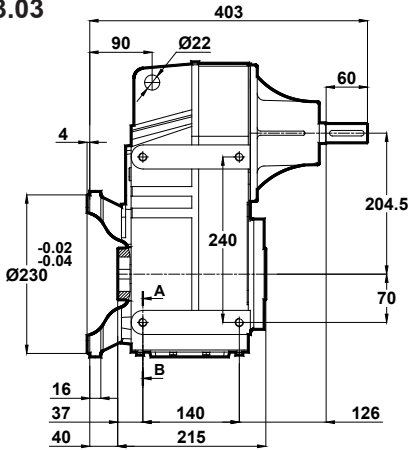
DT472.02
DT473.02



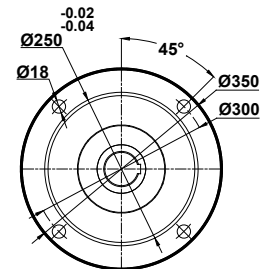
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT472.03
DT473.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



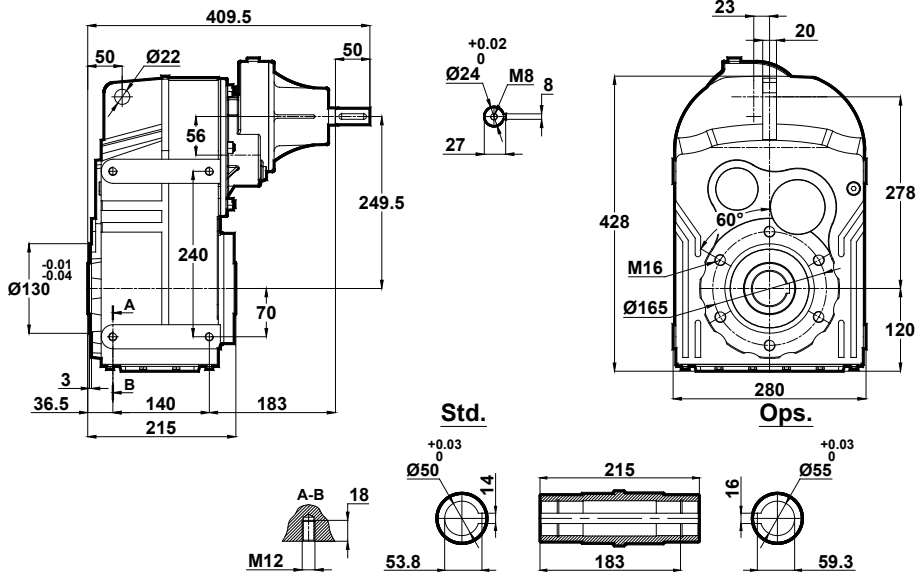
Ölçü Sayfaları

Dimension Pages

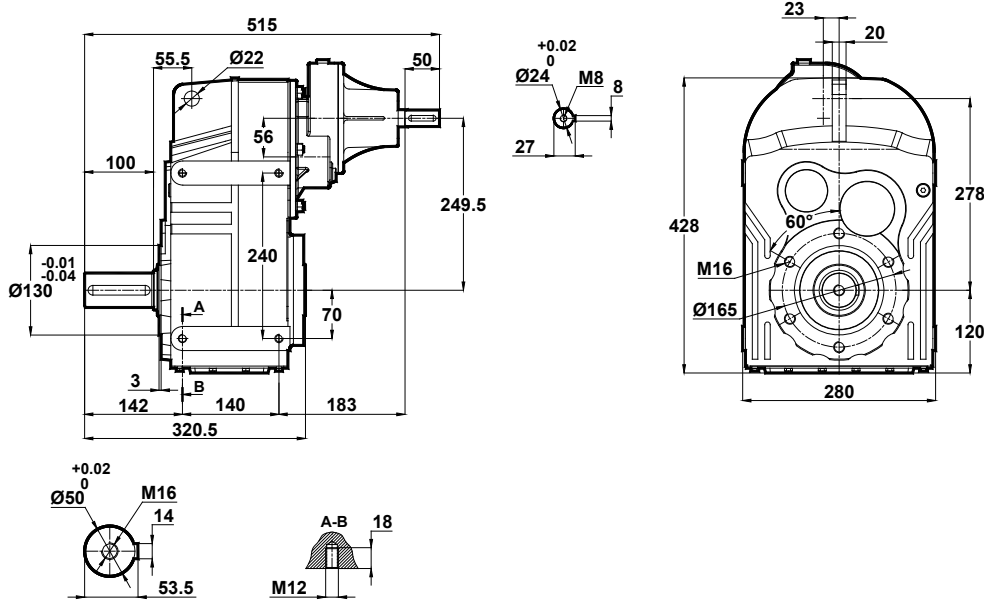
Abmessungsseiten



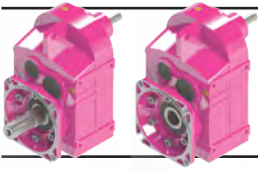
DT474.00



DT474.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



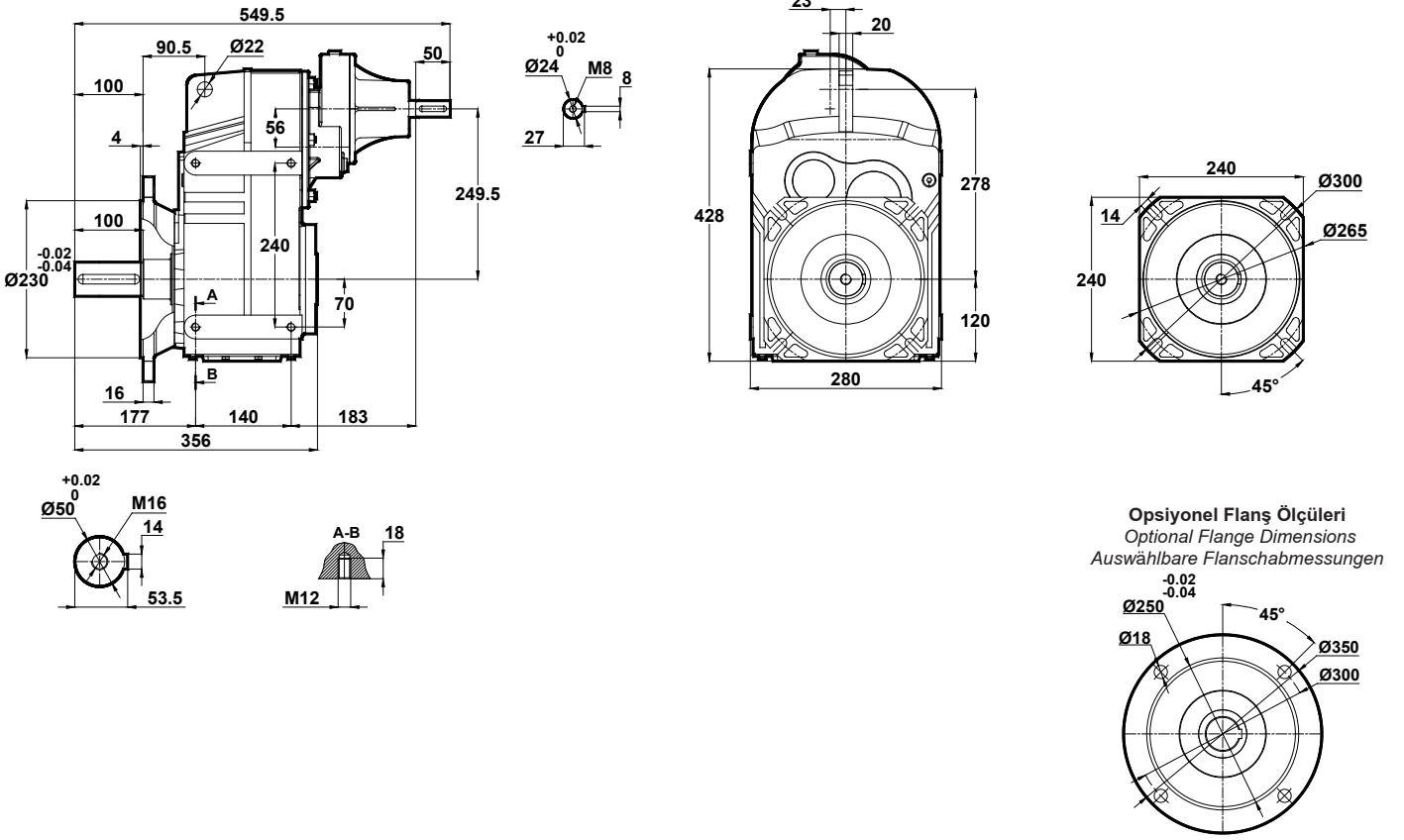
Ölçü Sayfaları

Dimension Pages

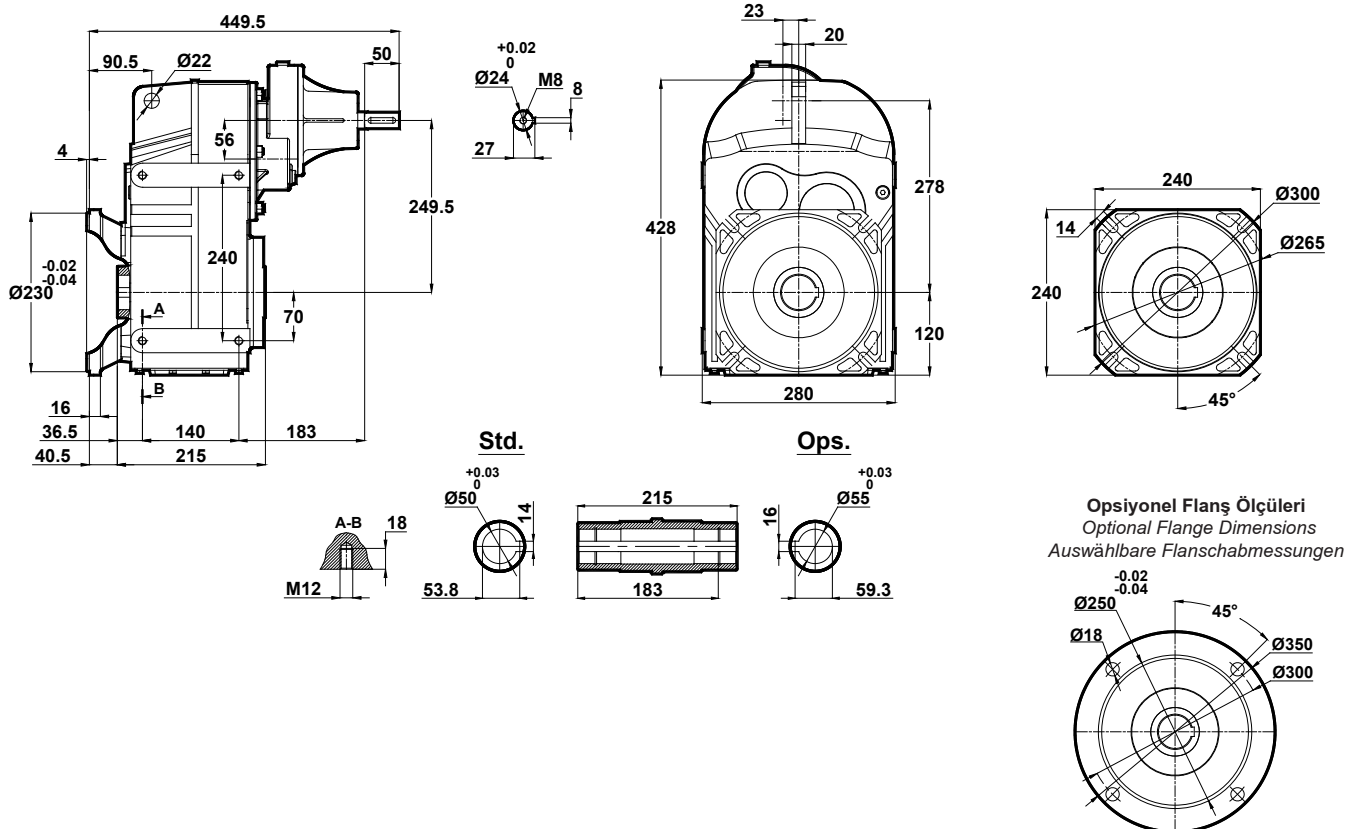
Abmessungsseiten



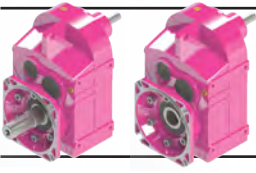
DT474.02



DT474.03



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



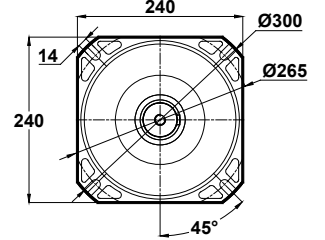
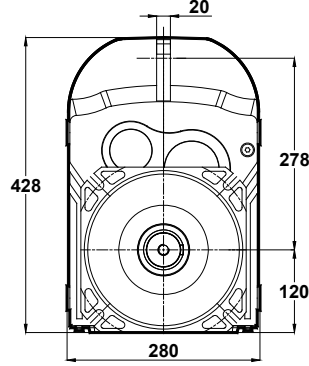
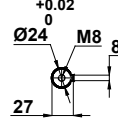
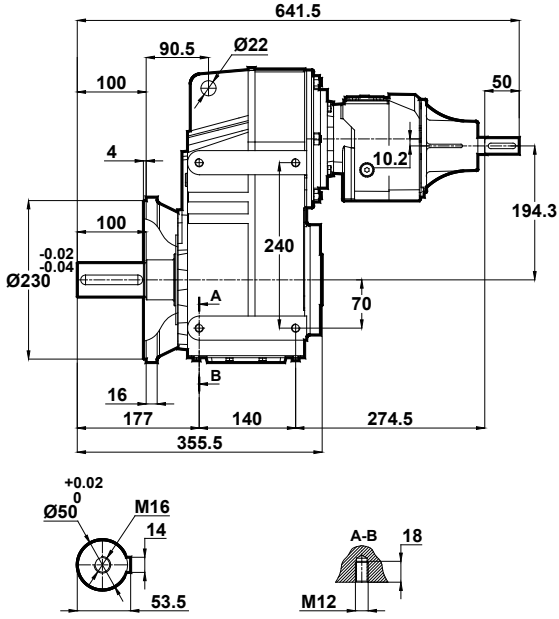
Ölçü Sayfaları

Dimension Pages

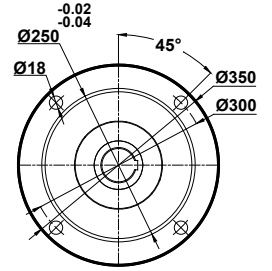
Abmessungsseiten



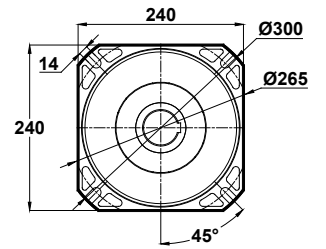
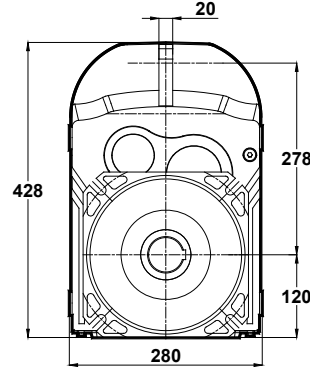
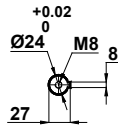
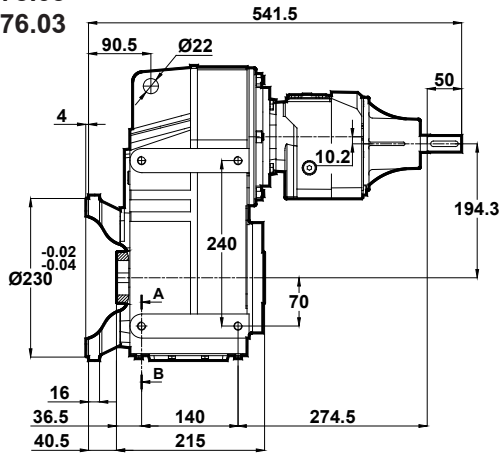
DT475.02
DT476.02



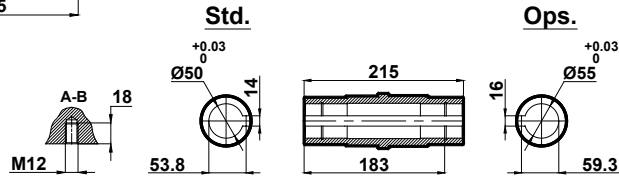
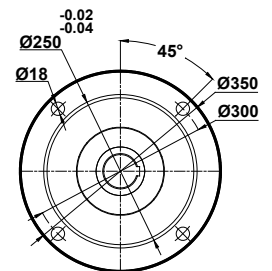
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



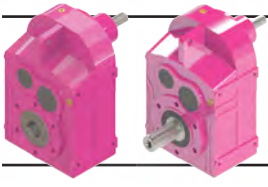
DT475.03
DT476.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



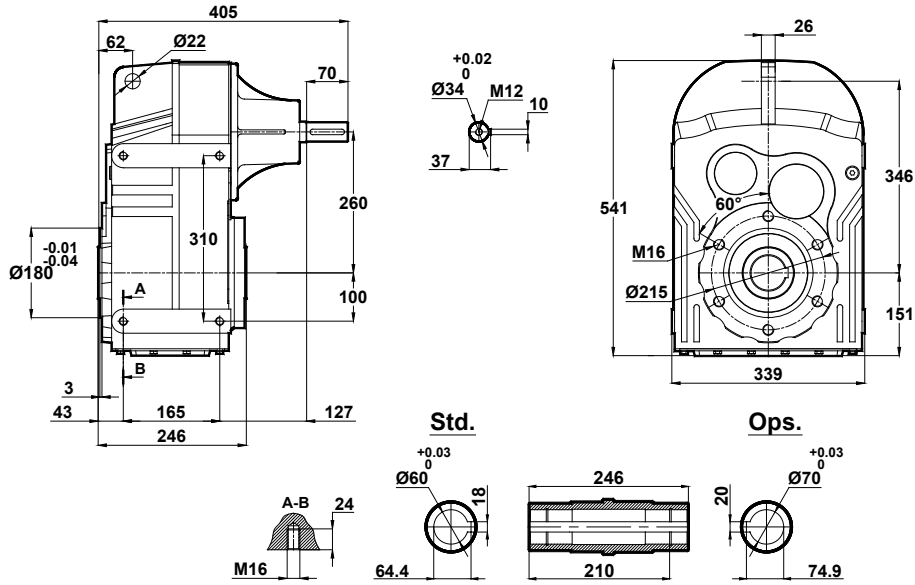
Ölçü Sayfaları

Dimension Pages

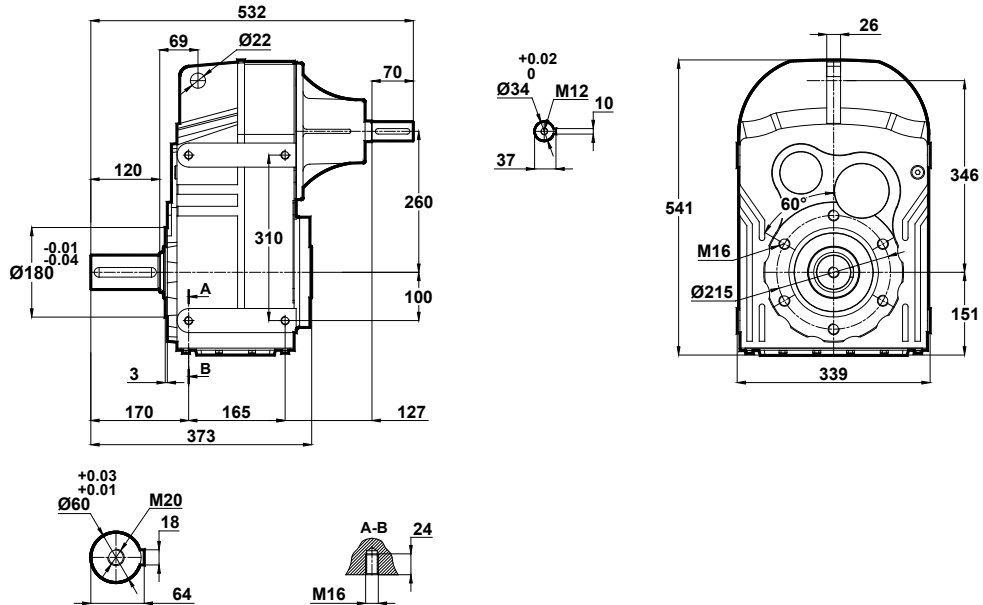
Abmessungsseiten



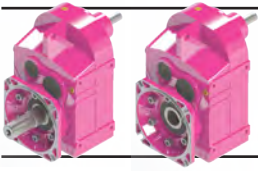
DT572.00
DT573.00



DT572.01
DT573.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



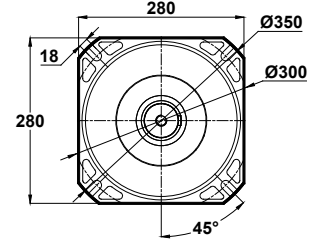
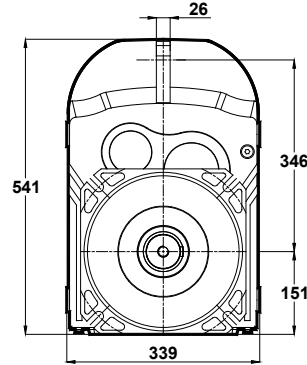
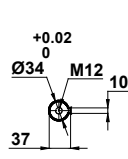
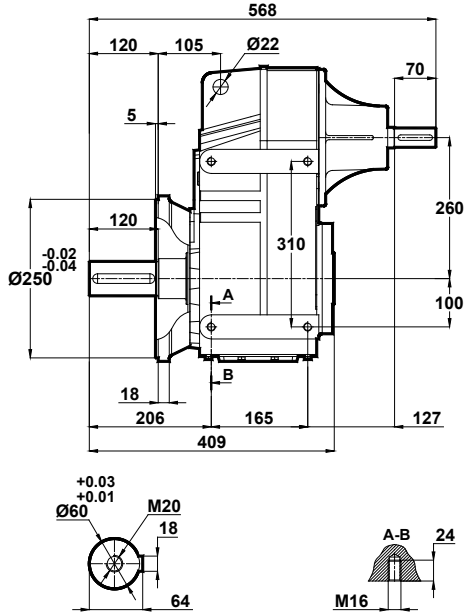
Ölçü Sayfaları

Dimension Pages

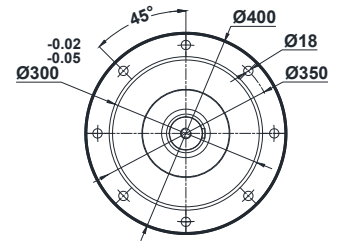
Abmessungsseiten



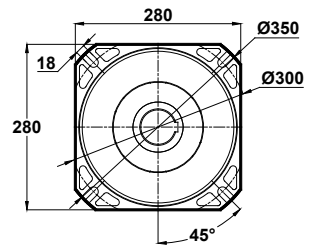
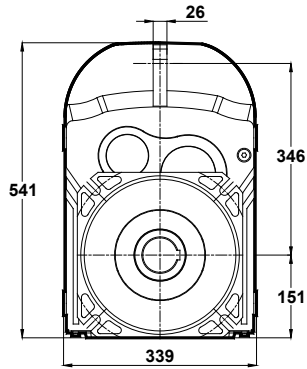
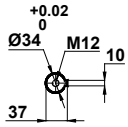
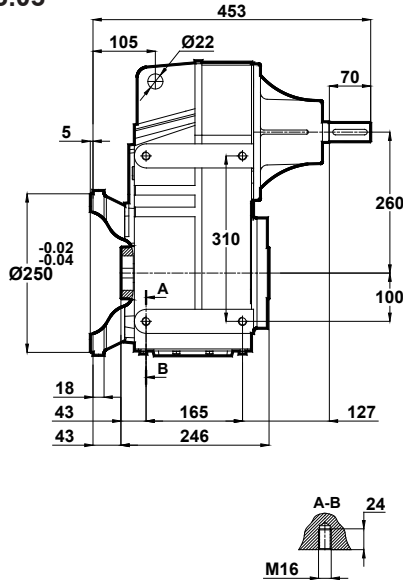
DT572.02
DT573.02



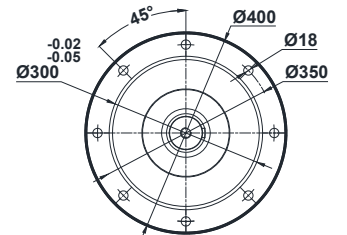
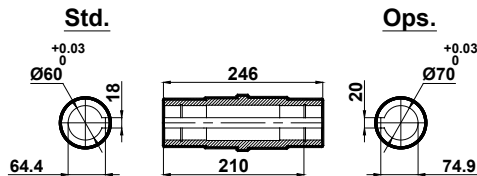
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



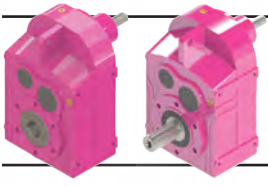
DT572.03
DT573.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



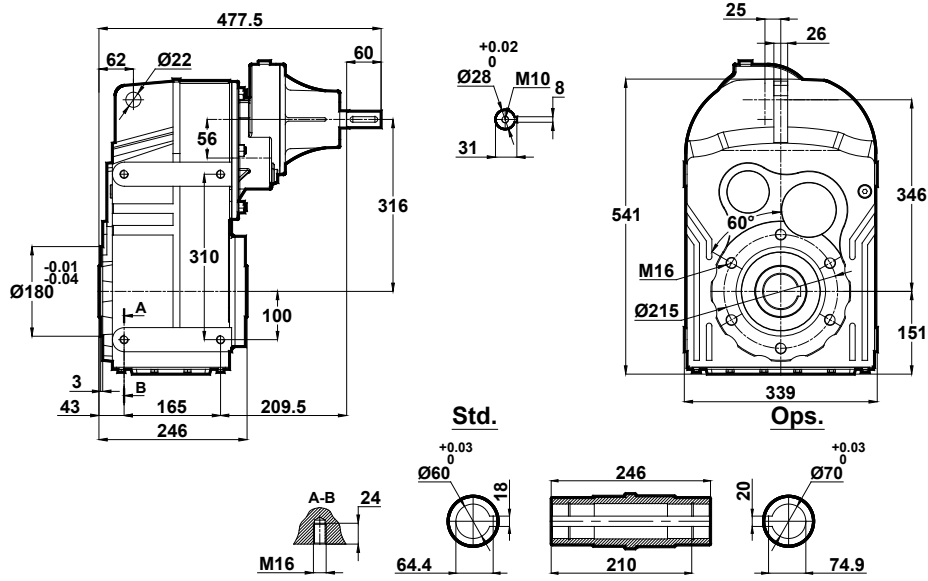
Ölçü Sayfaları

Dimension Pages

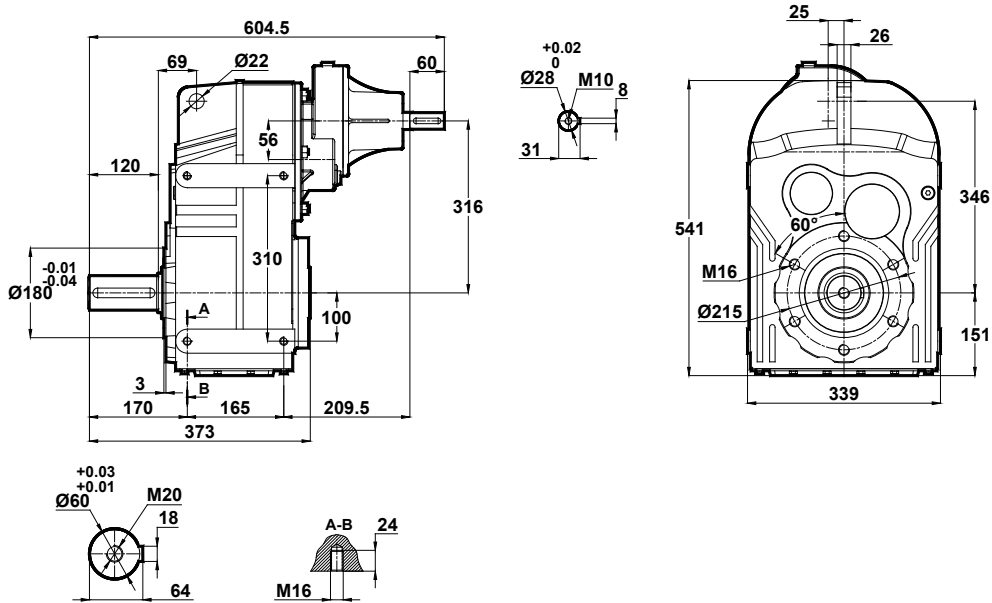
Abmessungsseiten



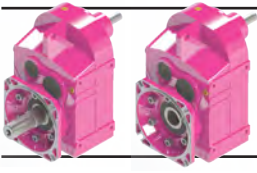
DT574.00



DT574.01



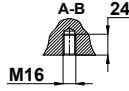
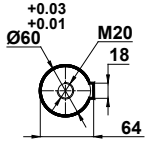
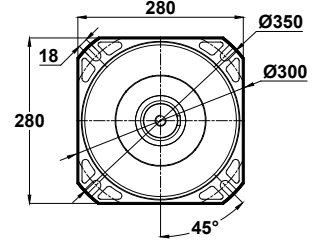
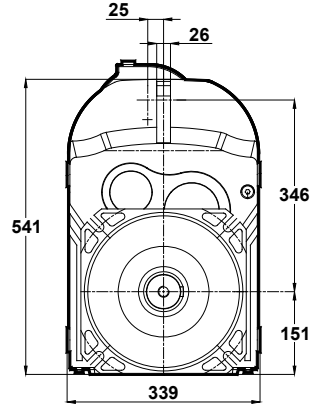
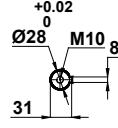
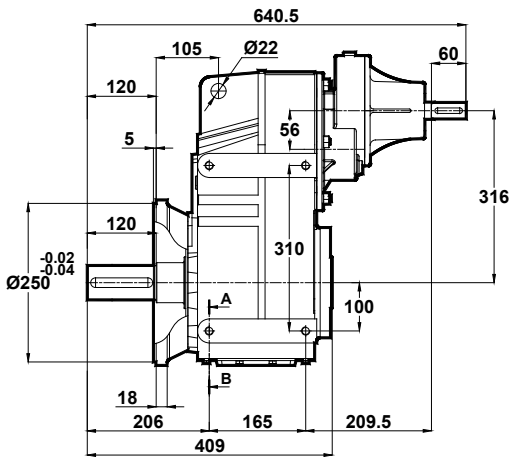
-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



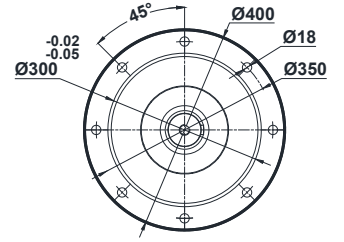
Ölçü Sayfaları Dimension Pages Abmessungenseiten



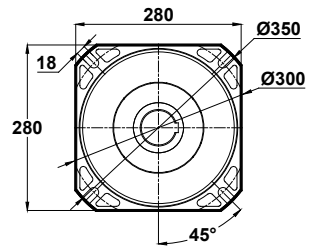
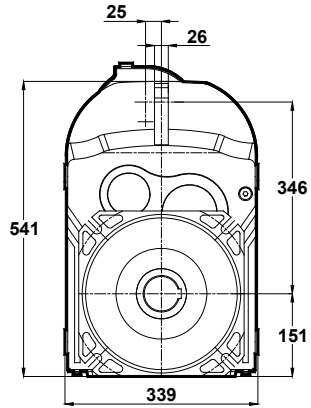
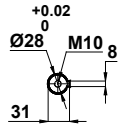
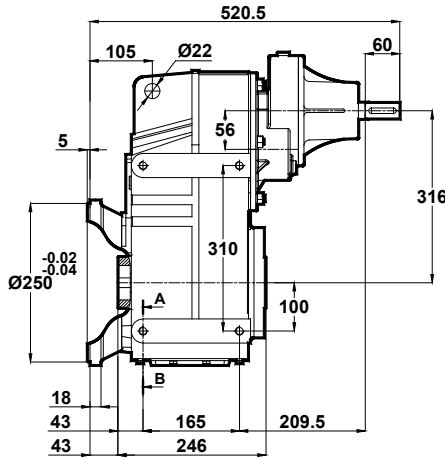
DT574.02



Opsiyonel Flanş Ölçüleri Optional Flange Dimensions Auswählbare Flanschabmessungen

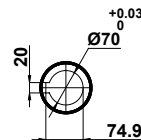
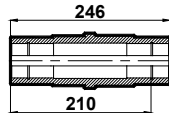
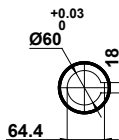
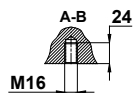


DT574.03

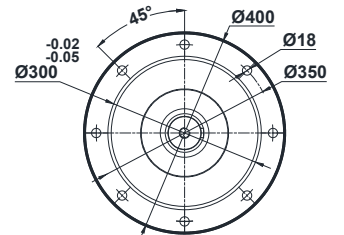


Std.

Ops.



Opsiyonel Flanş Ölçüleri Optional Flange Dimensions Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



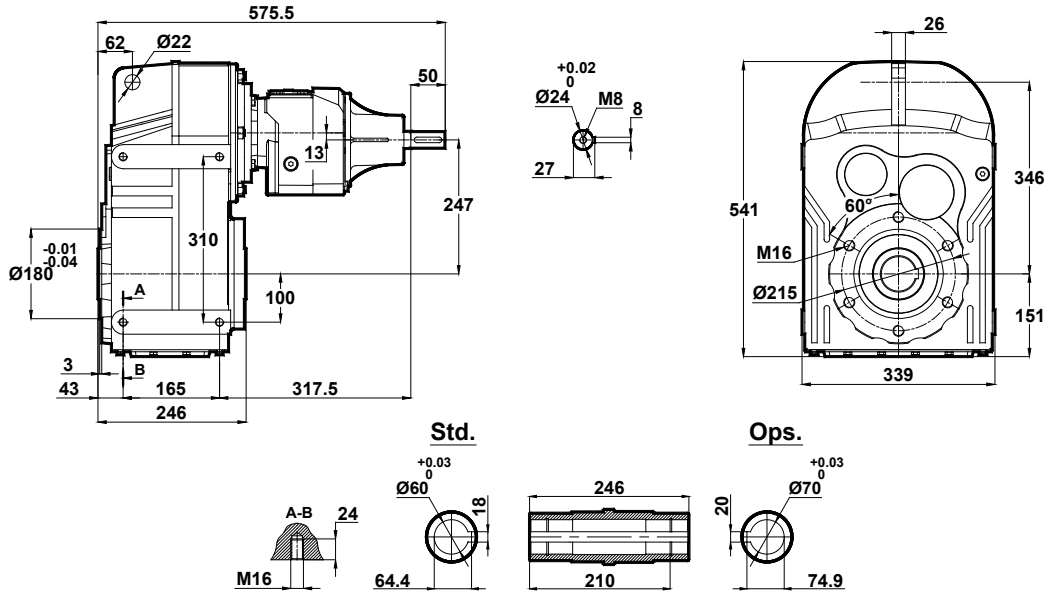
Ölçü Sayfaları

Dimension Pages

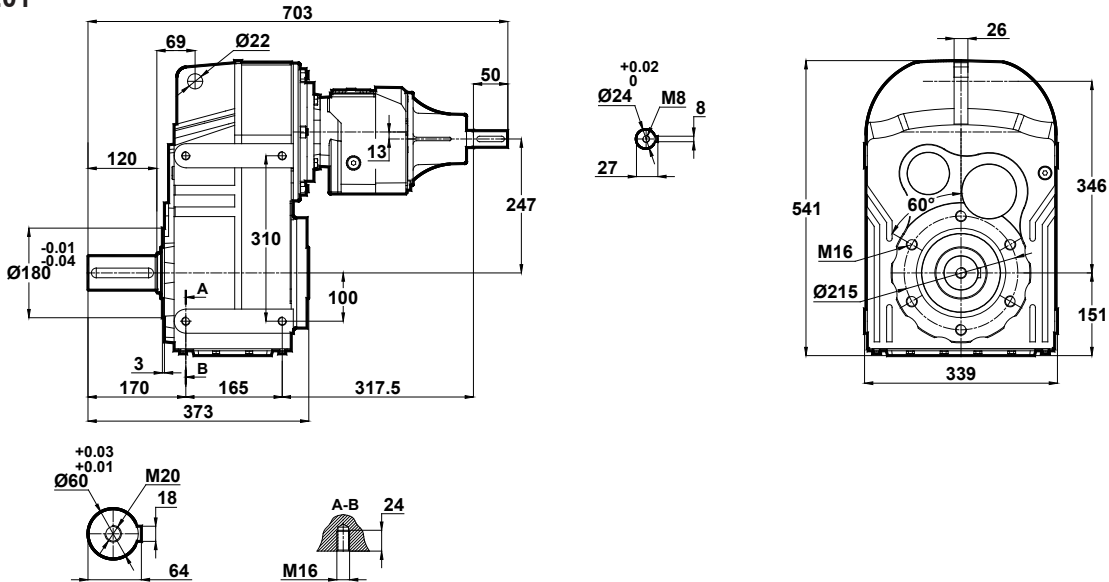
Abmessungsseiten



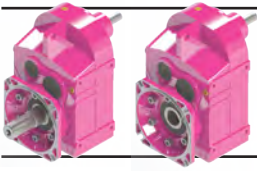
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DT576.00



DT575.01
DT576.01



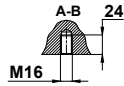
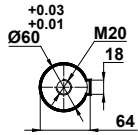
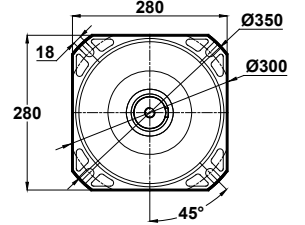
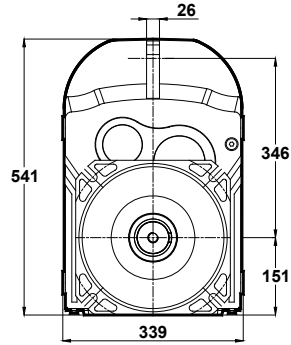
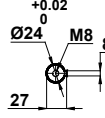
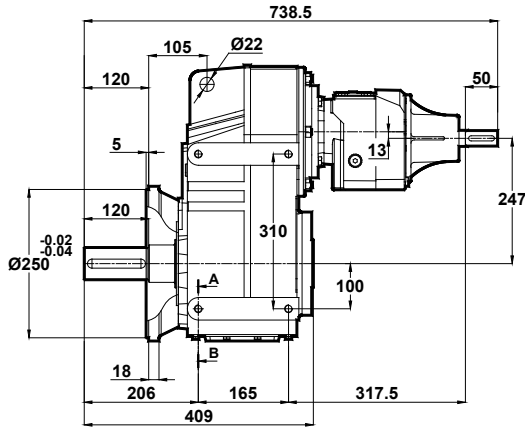
-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



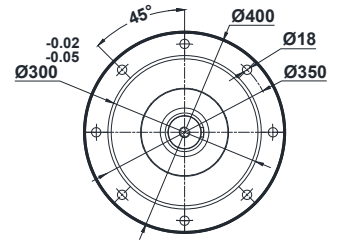
Ölçü Sayfaları Dimension Pages Abmessungsseiten



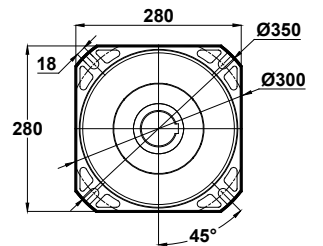
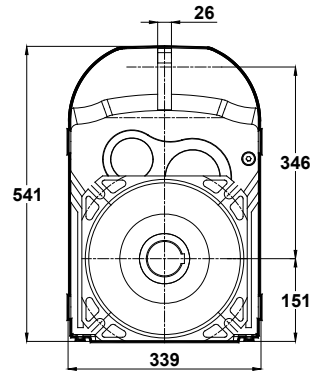
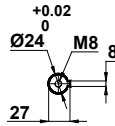
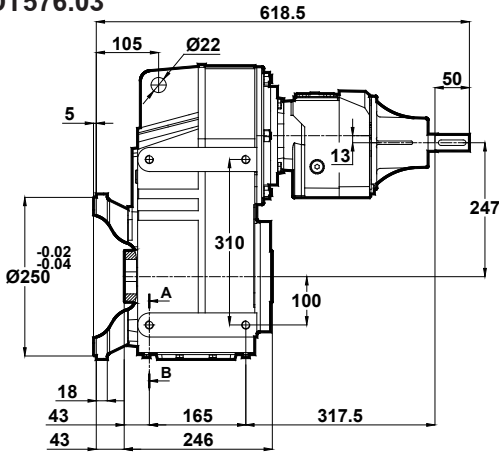
DT575.02
DT576.02



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

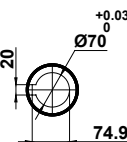
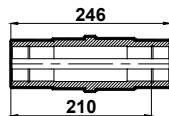
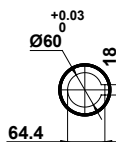
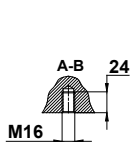


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DT576.03

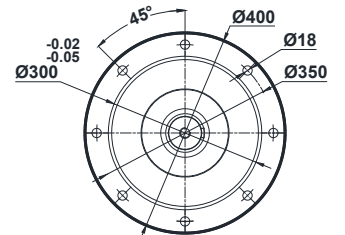


Std.

Ops.



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



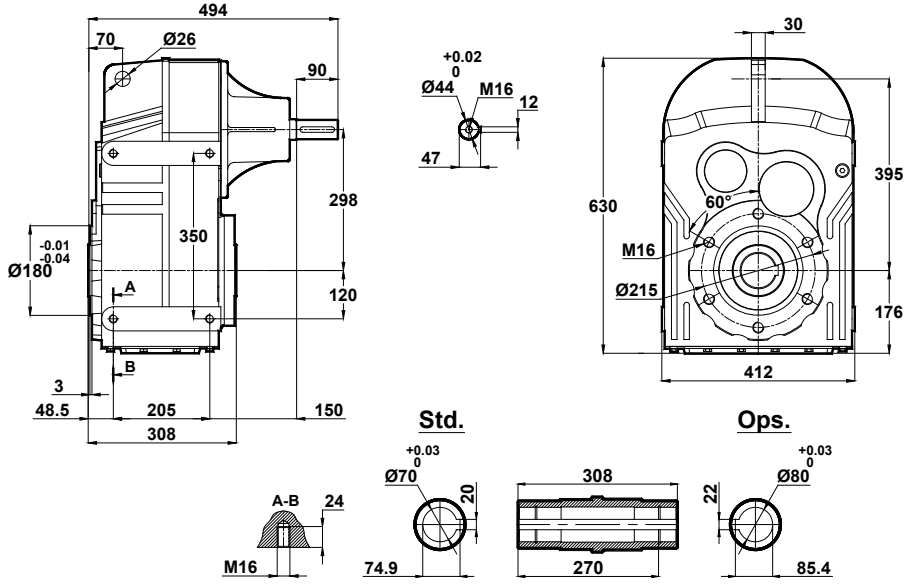
Ölçü Sayfaları

Dimension Pages

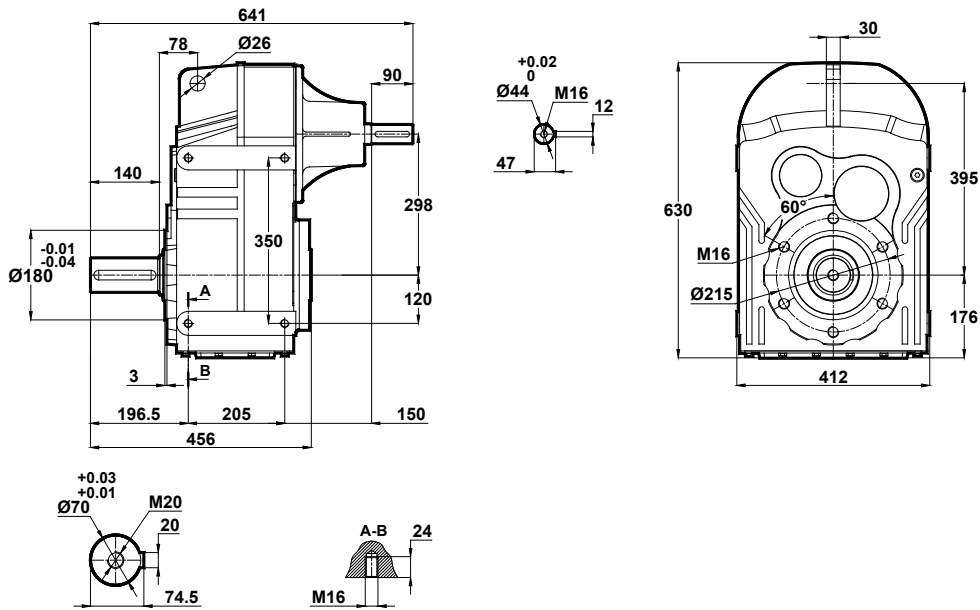
Abmessungsseiten



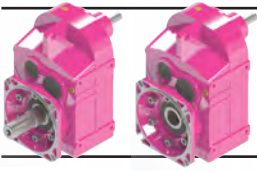
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DT673.00



DT672.01
DT673.01



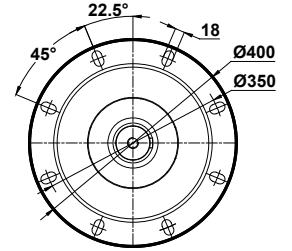
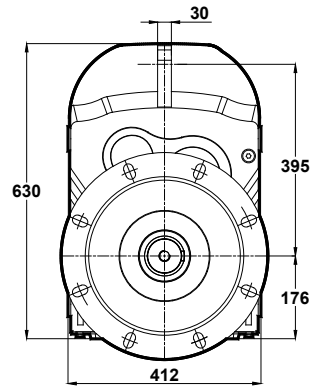
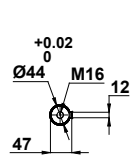
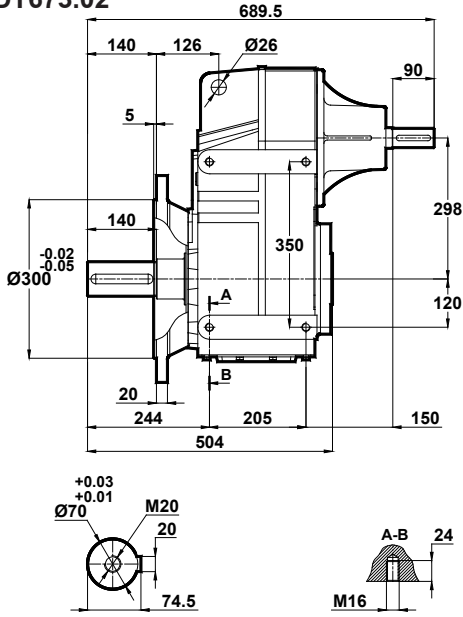
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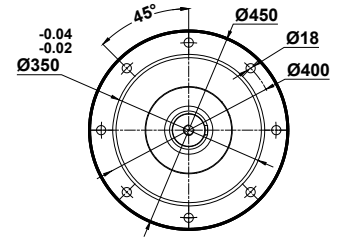
Ölçü Sayfaları Dimension Pages Abmessungsseiten



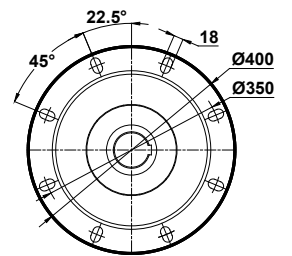
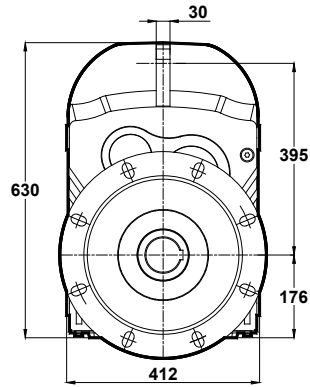
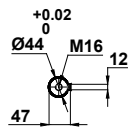
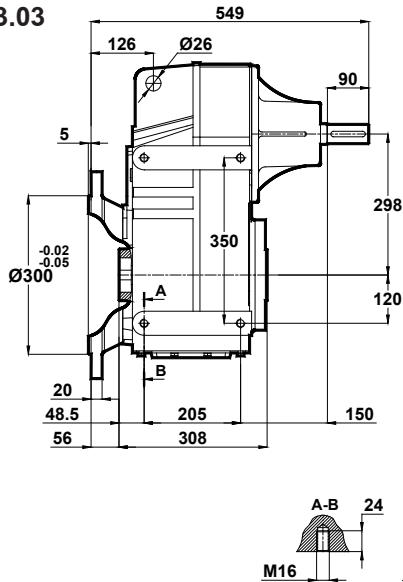
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DT673.02



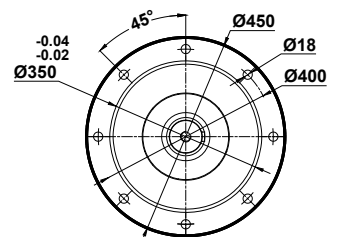
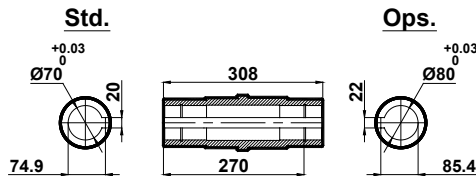
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



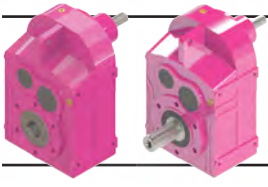
DT672.03
DT673.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



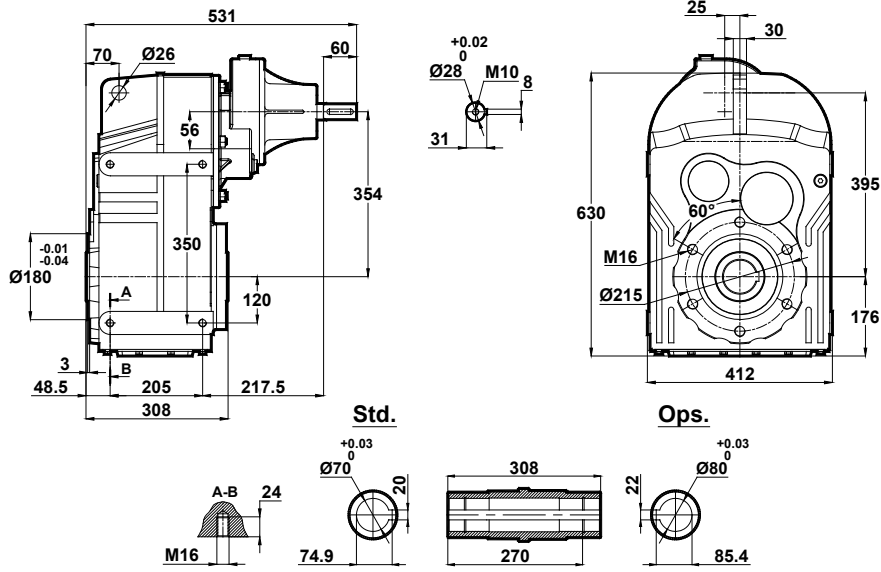
Ölçü Sayfaları

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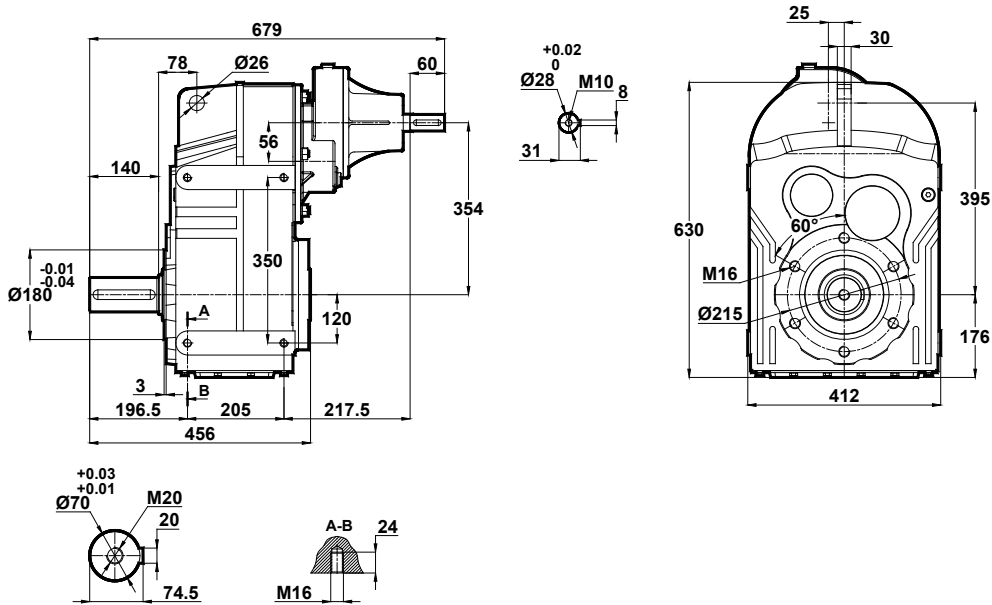
Abmessungsseiten



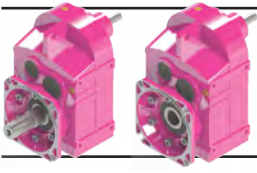
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DT674.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



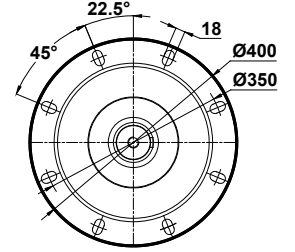
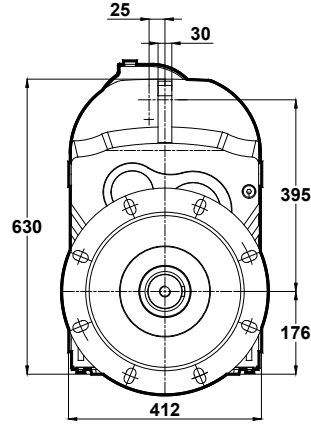
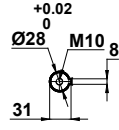
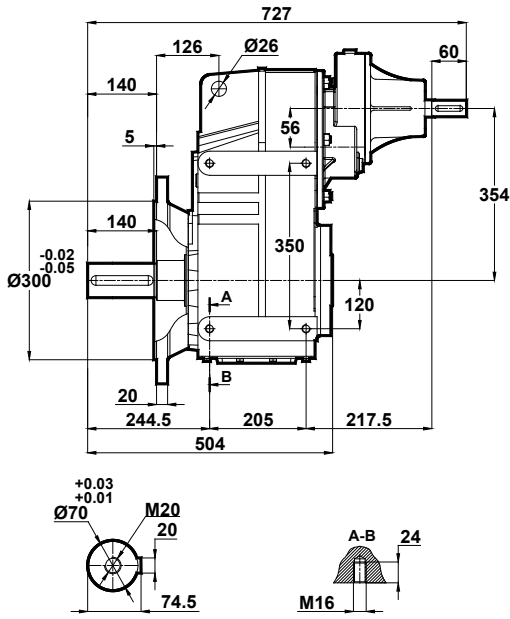
Ölçü Sayfaları

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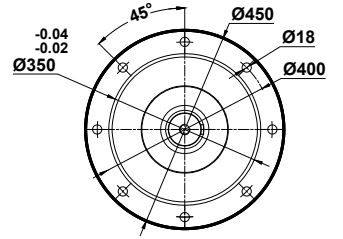
Abmessungsseiten



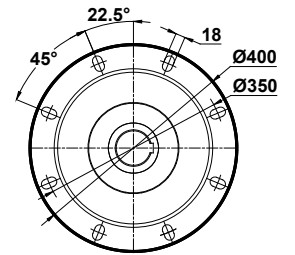
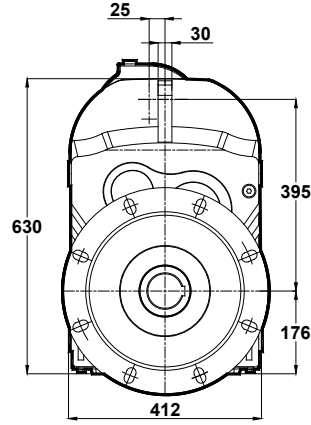
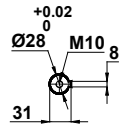
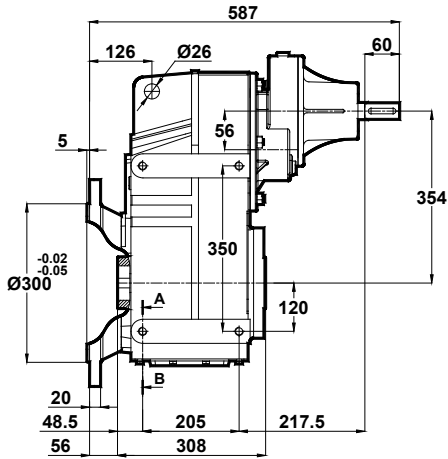
DT674.02



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

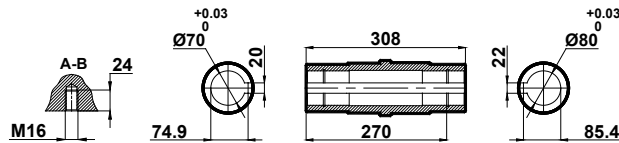


DT674.03

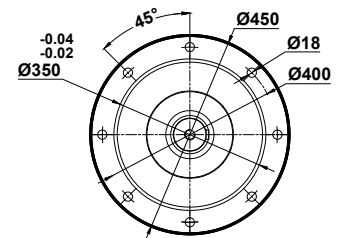


Std.

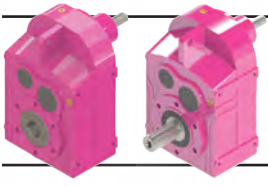
Ops.



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



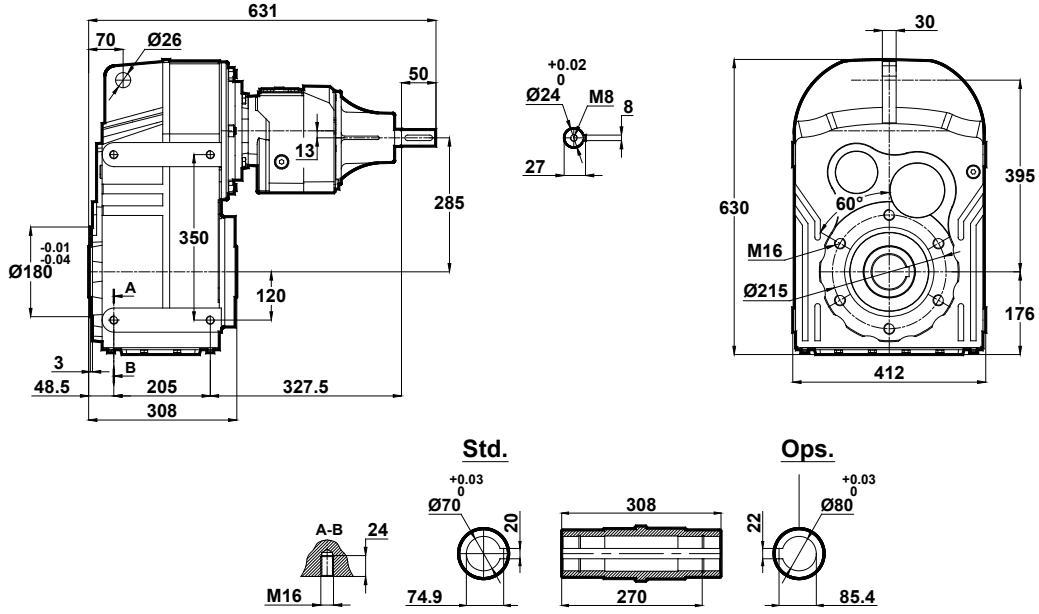
Ölçü Sayfaları

Dimension Pages

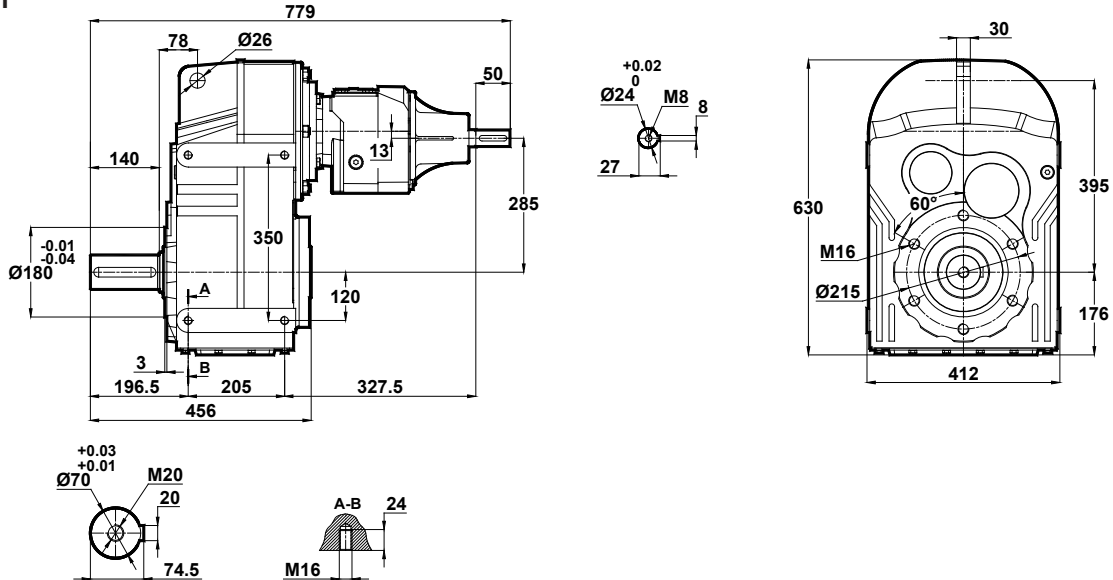
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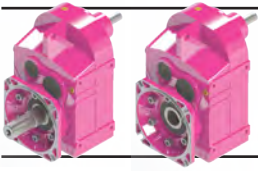
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DT676.00



DT675.01
DT676.01



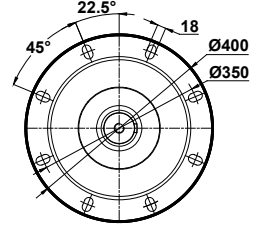
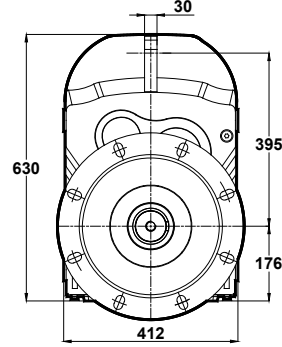
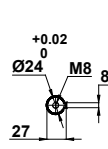
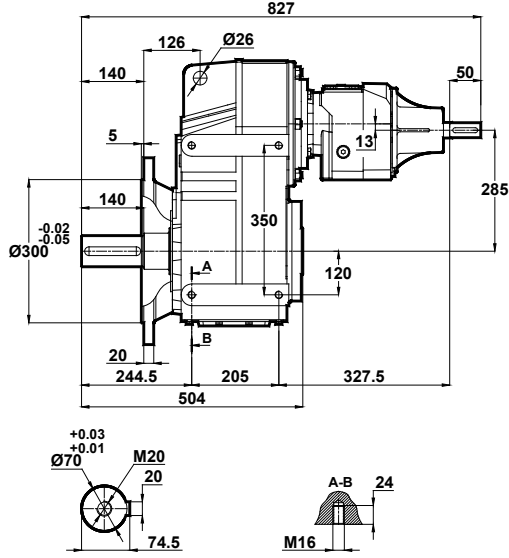
-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



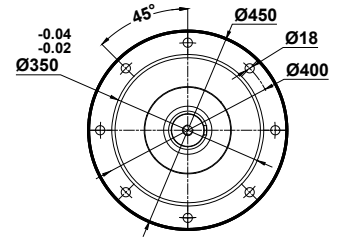
Ölçü Sayfaları Dimension Pages Abmessungenseiten



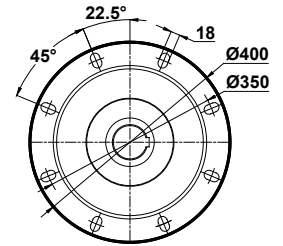
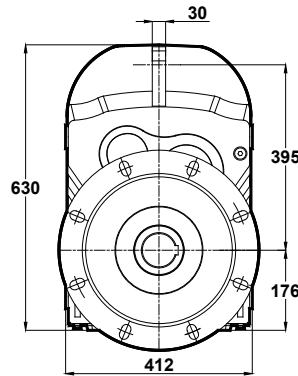
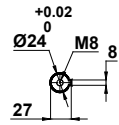
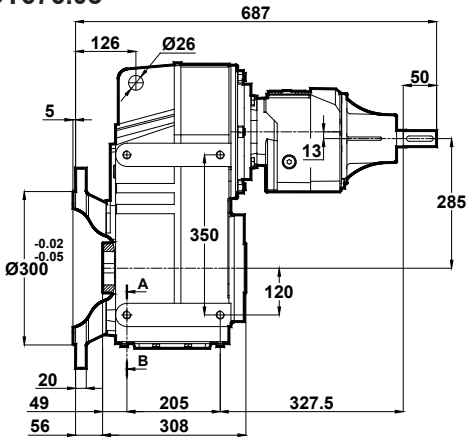
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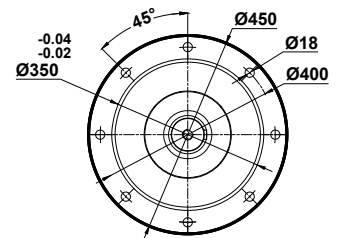
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT675.03
DT676.03



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



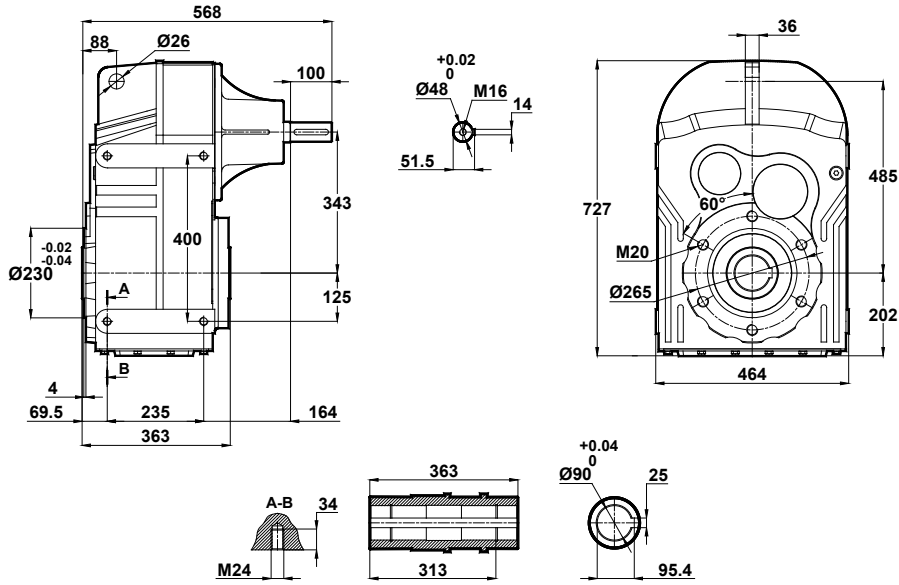
Ölçü Sayfaları

Dimension Pages

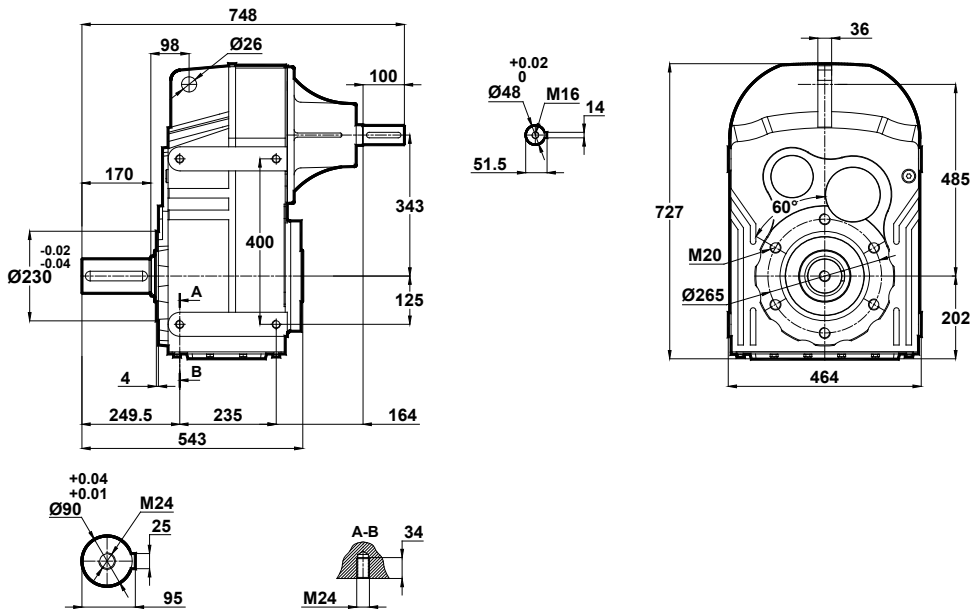
Abmessungsseiten



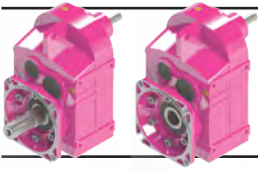
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DT773.00



DT772.01
DT773.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



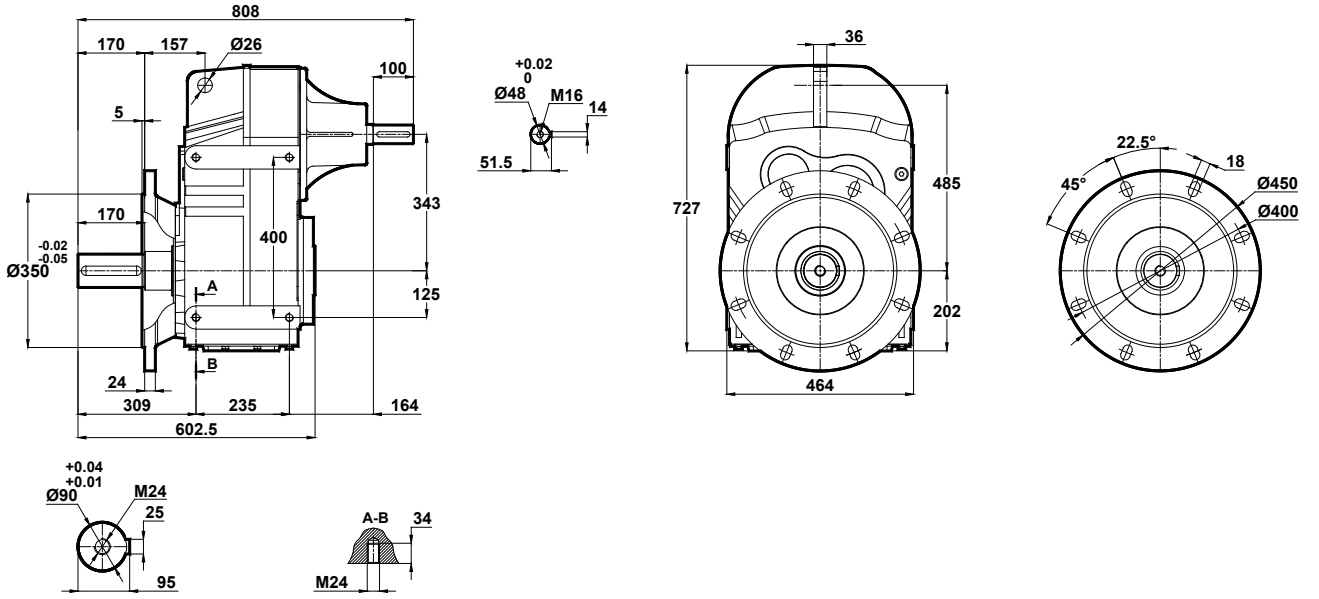
Ölçü Sayfaları

Dimension Pages

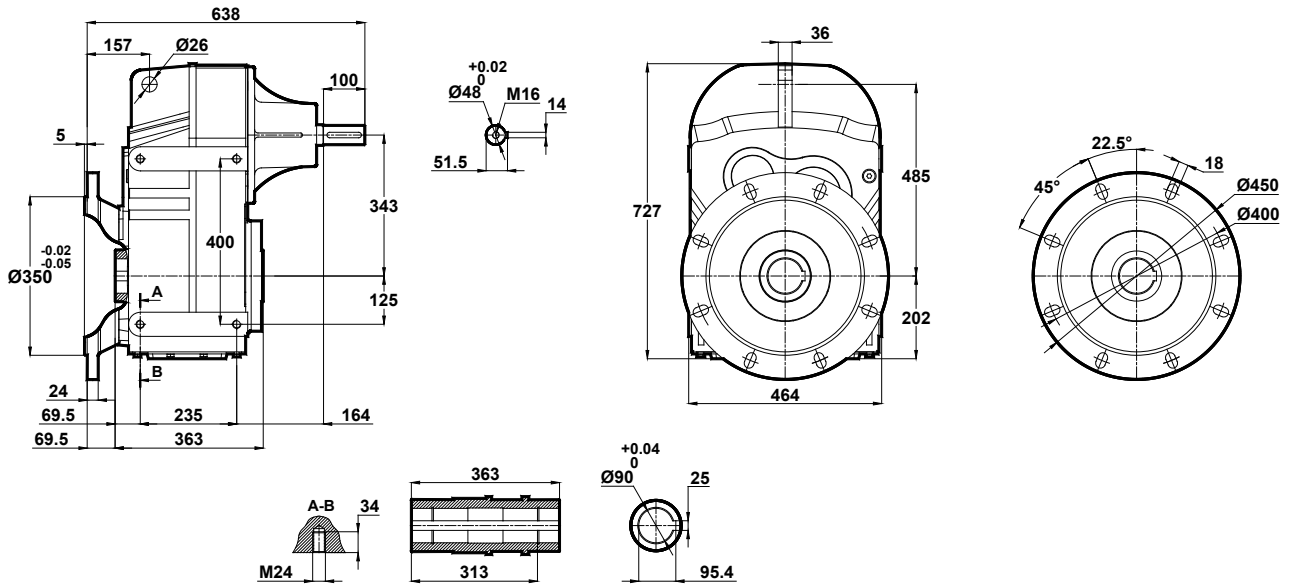
Abmessungsseiten



DT772.02
DT773.02



DT772.03
DT773.03



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



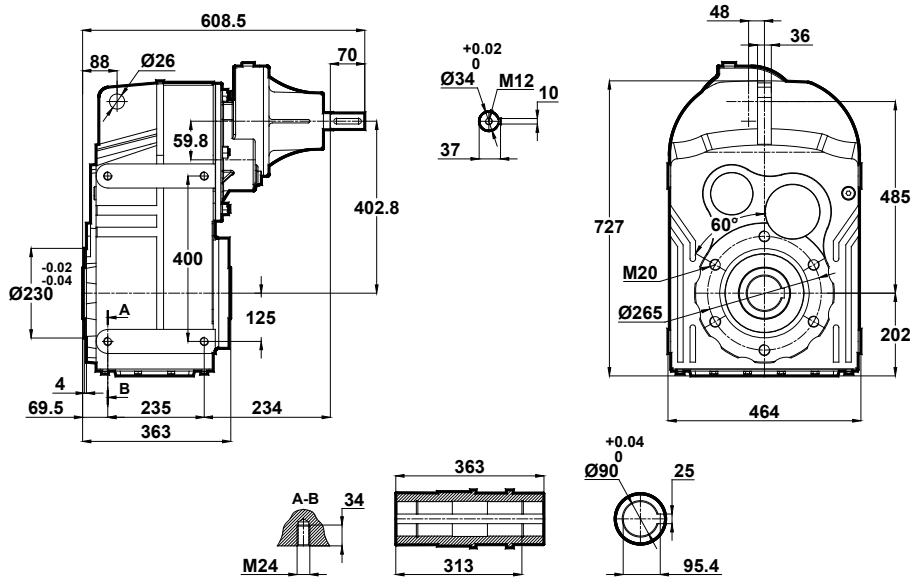
Ölçü Sayfaları

Dimension Pages

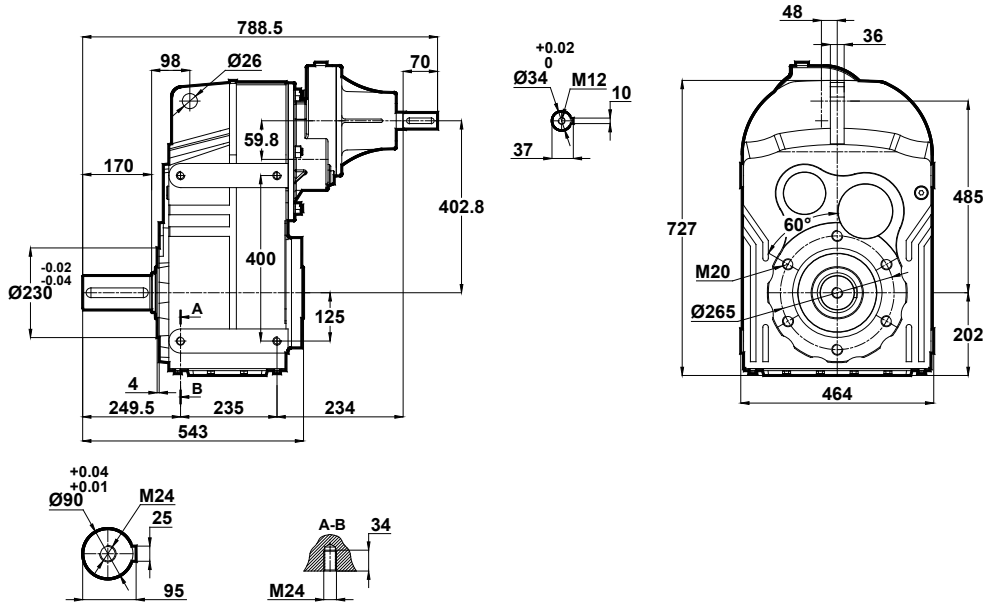
Abmessungsseiten



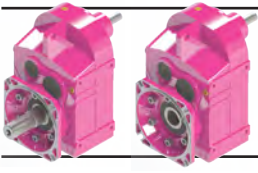
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DT774.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



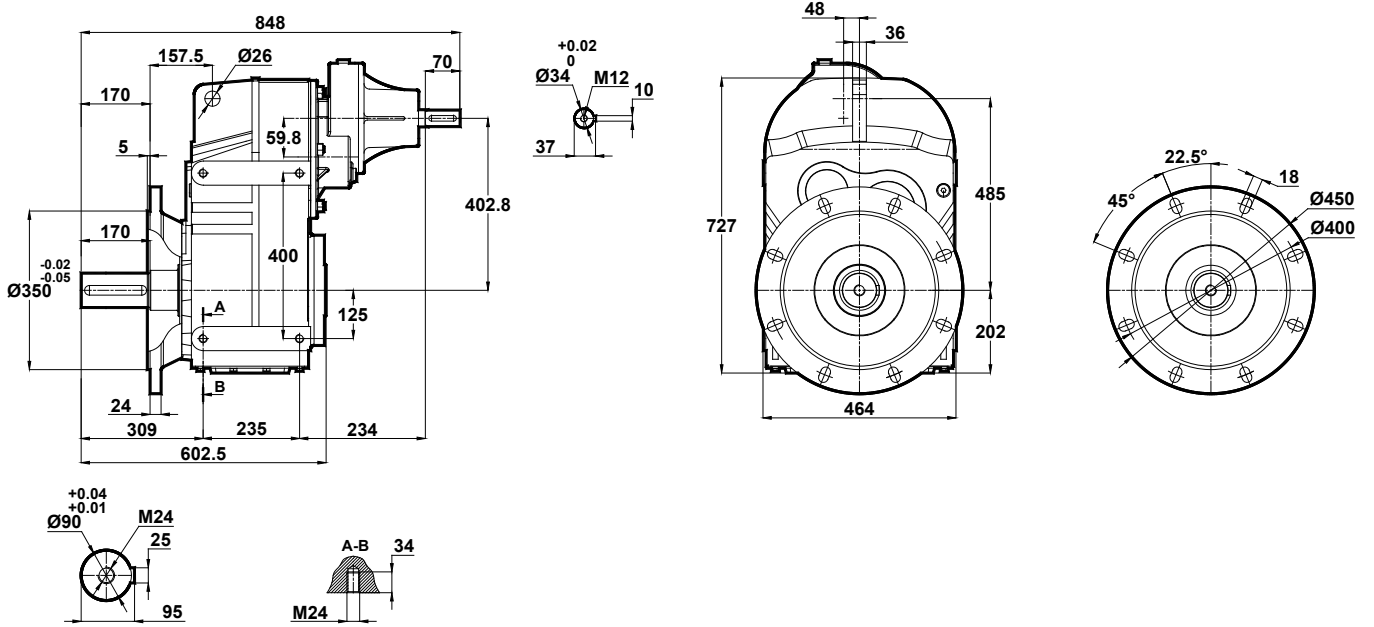
Ölçü Sayfaları

Dimension Pages

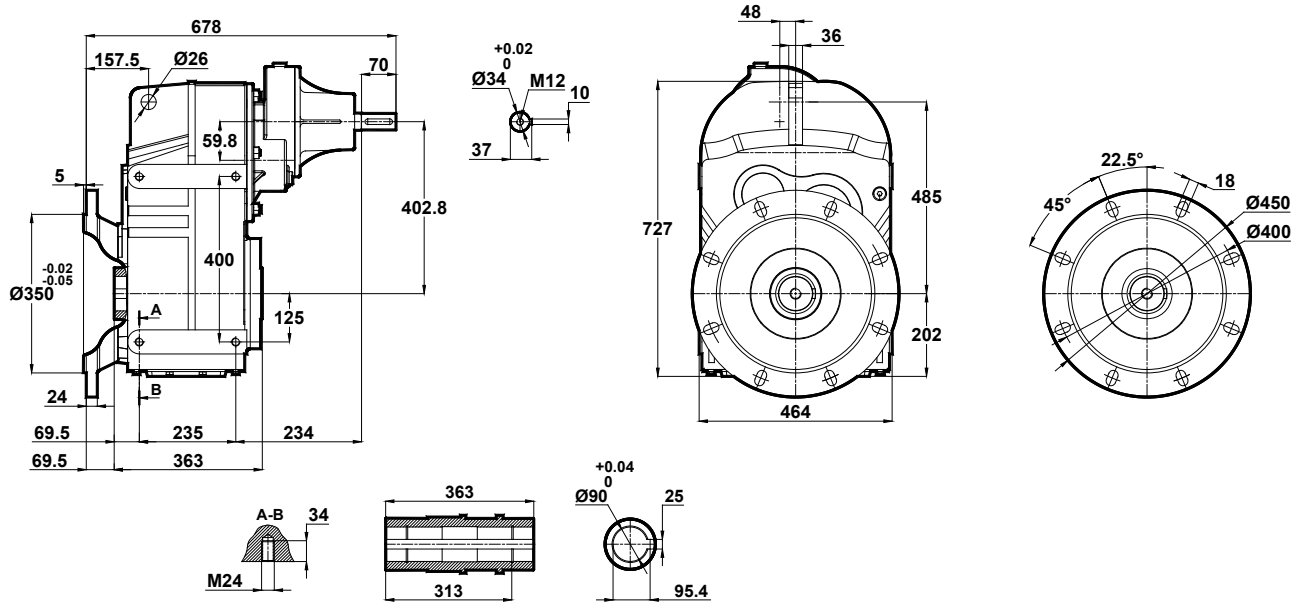
Abmessungsseiten



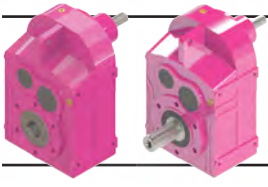
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DT774.03



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



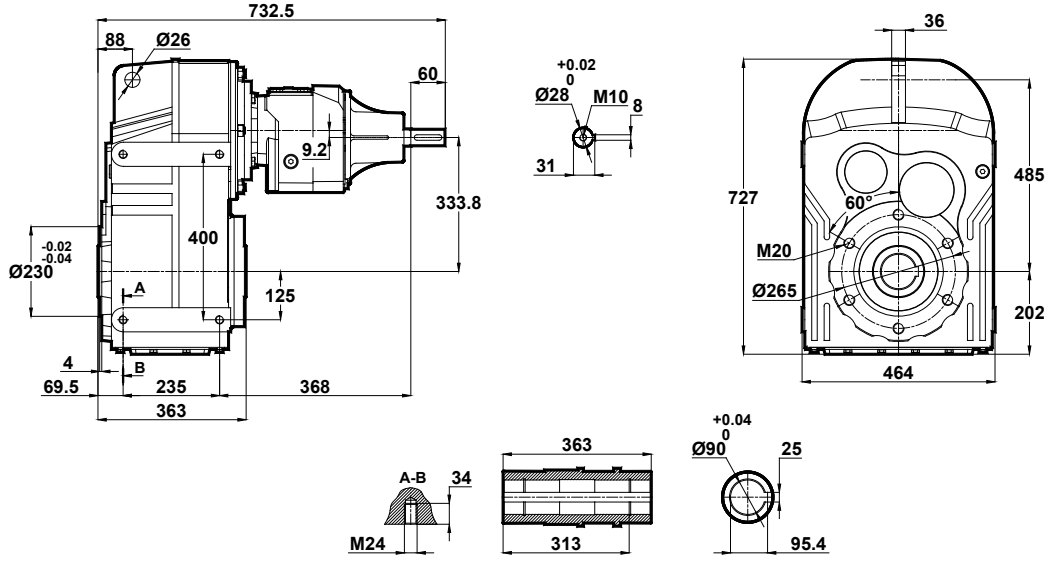
Ölçü Sayfaları

Dimension Pages

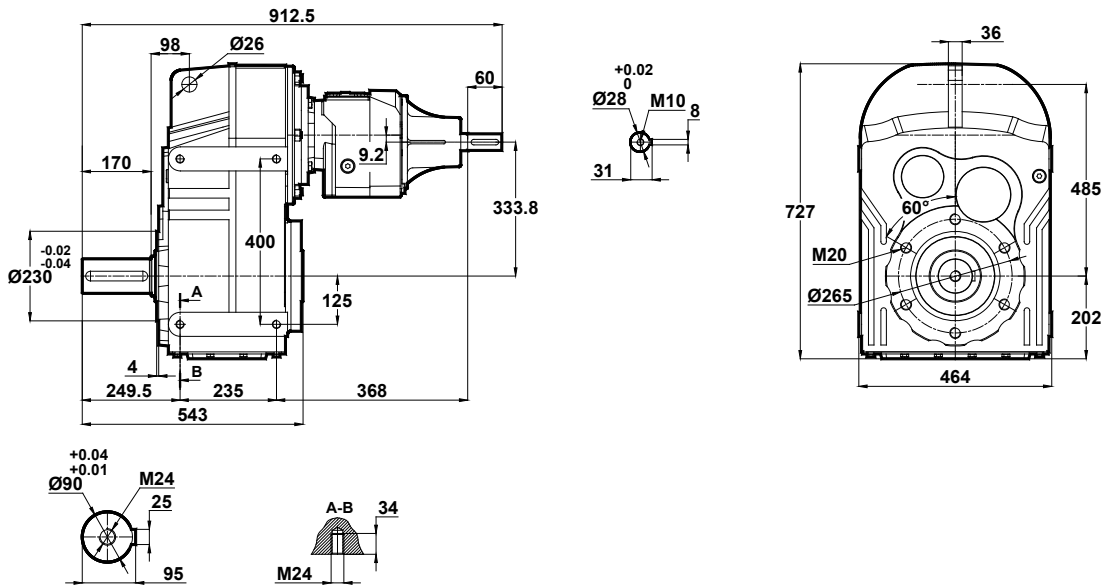
Abmessungsseiten



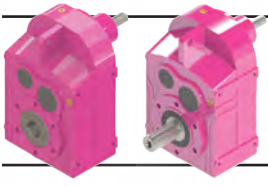
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DT775.01
DT776.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



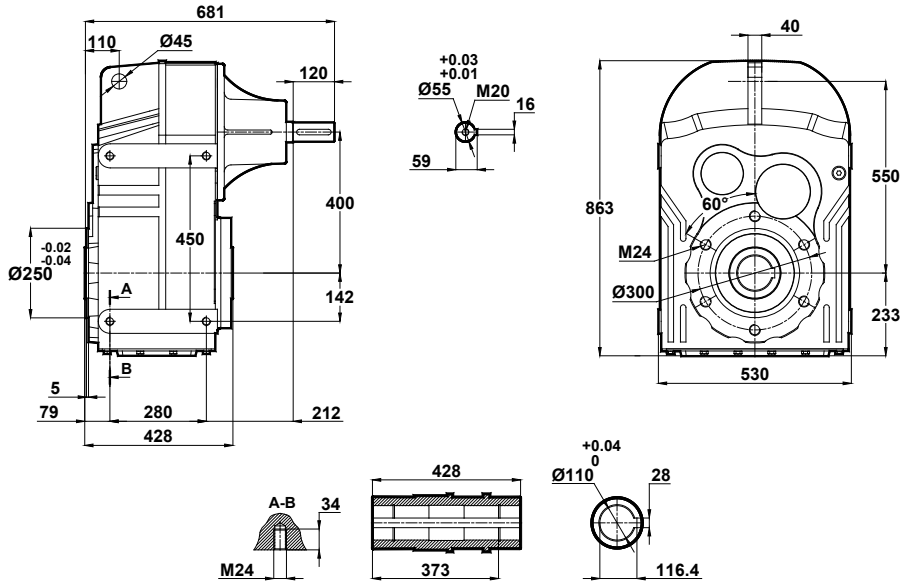
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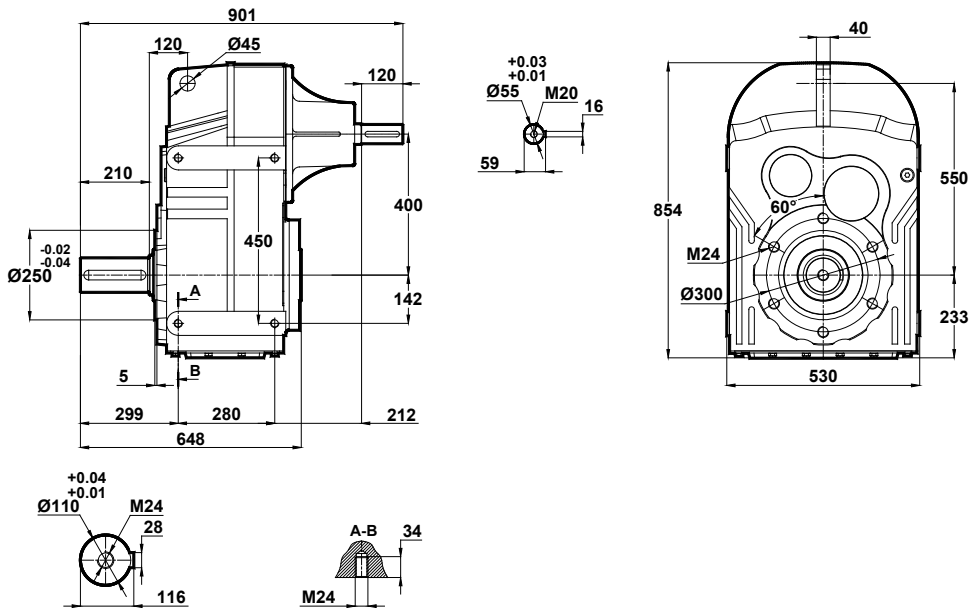
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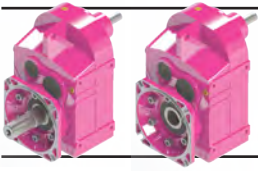
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DT873.00



DT872.01
DT873.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



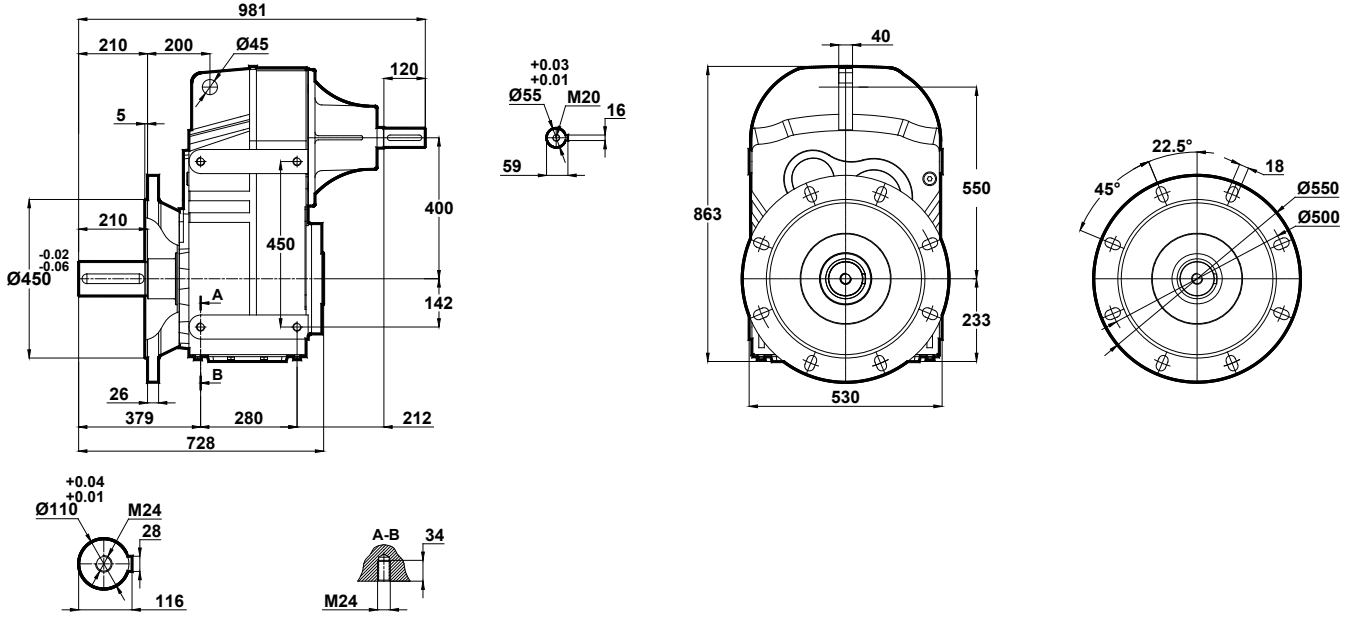
Ölçü Sayfaları

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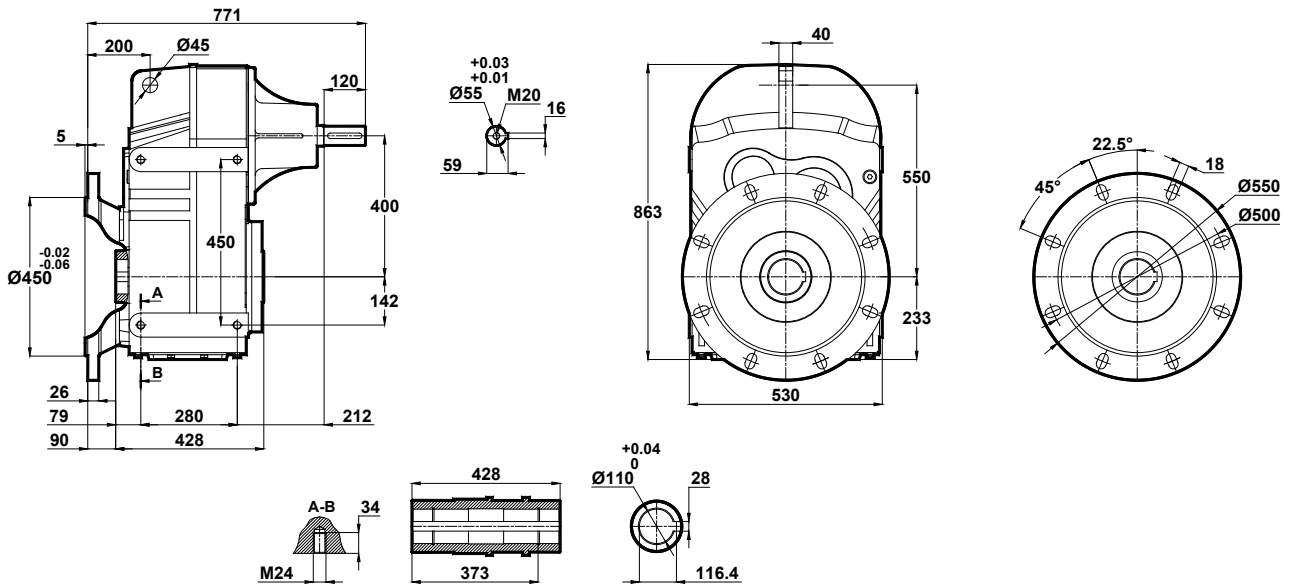
Abmessungsseiten



DT872.02
DT873.02



DT872.03
DT873.03



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



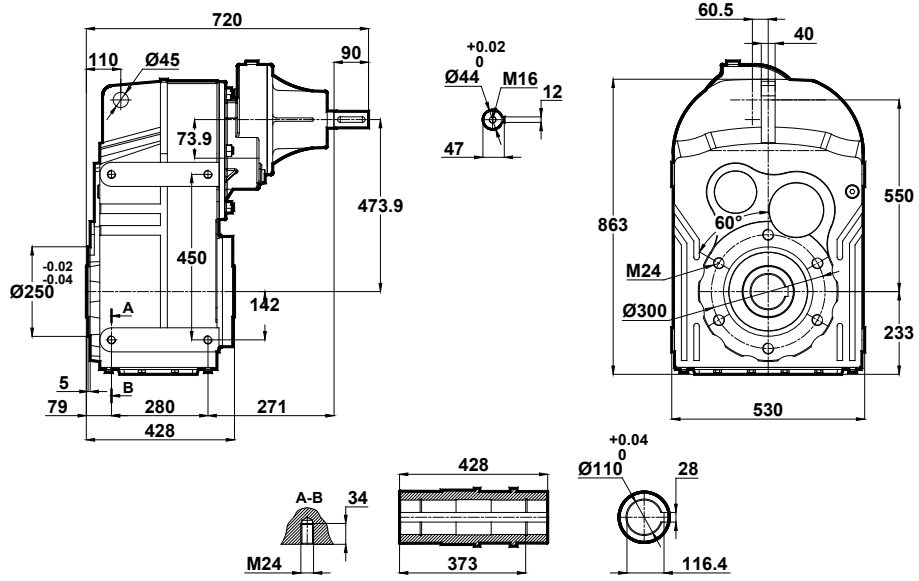
Ölçü Sayfaları

Dimension Pages

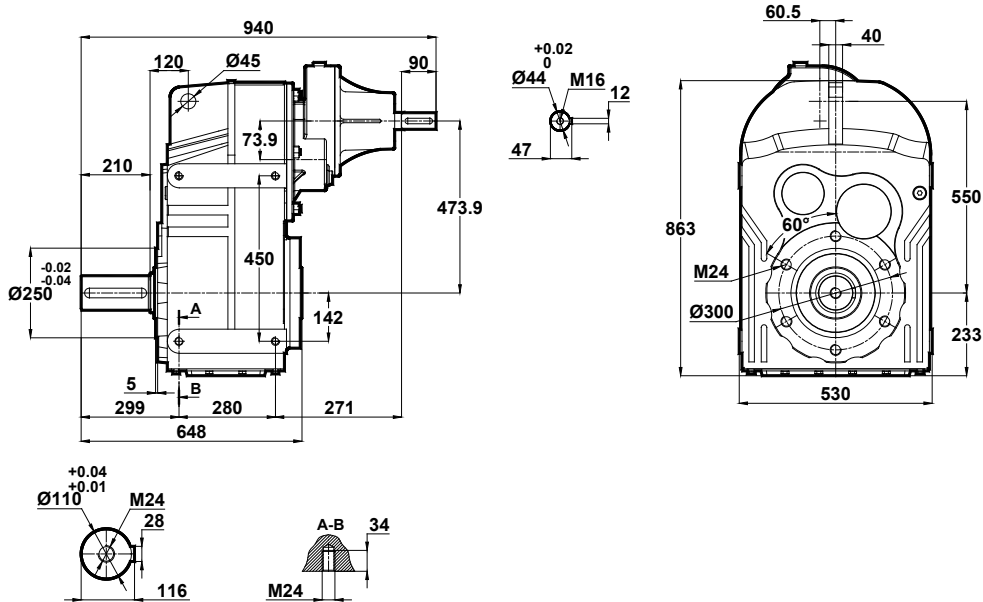
Abmessungsseiten



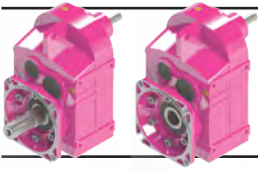
DT874.00



DT874.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



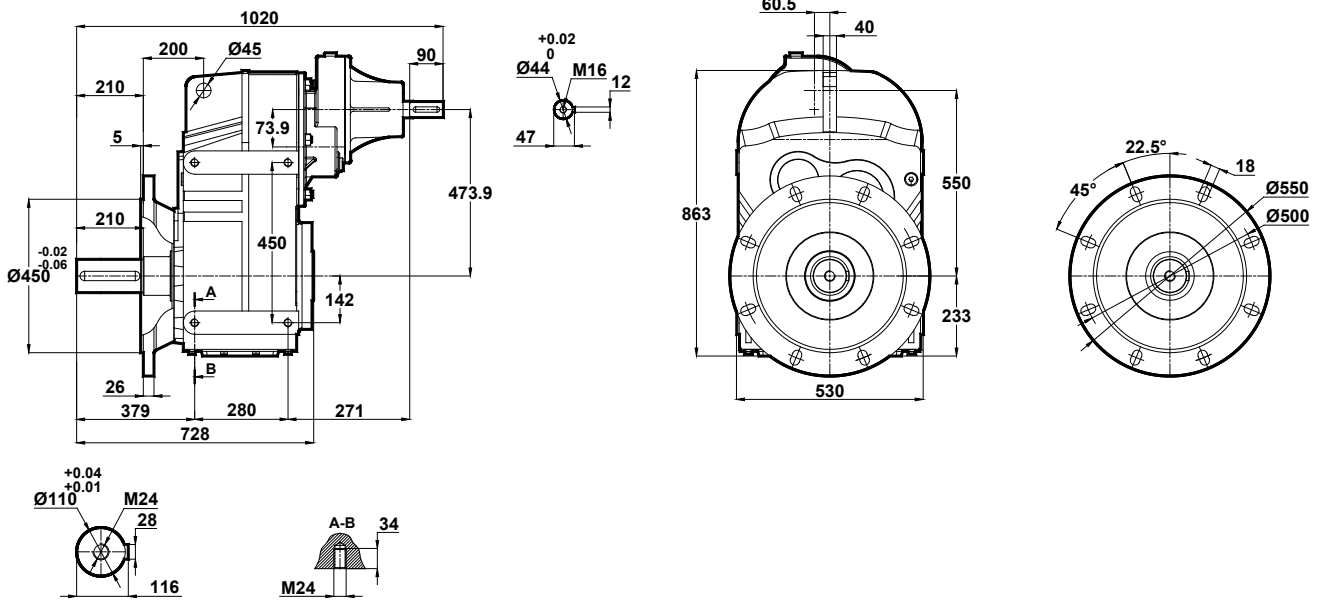
Ölçü Sayfaları

Dimension Pages

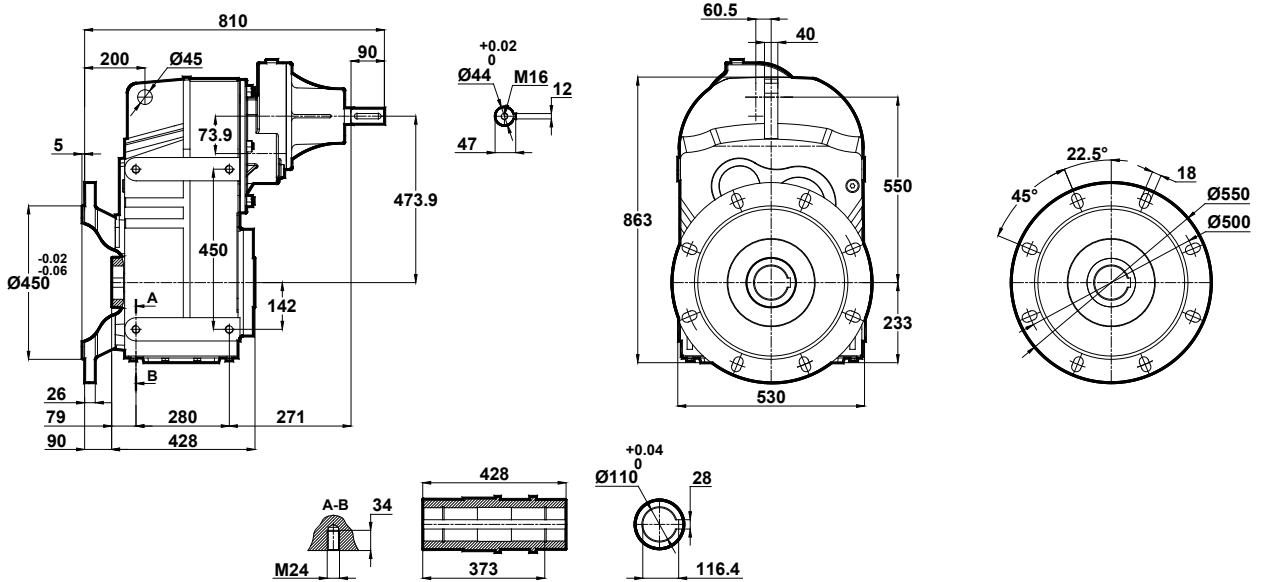
Abmessungsseiten



DT874.02



DT874.03



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



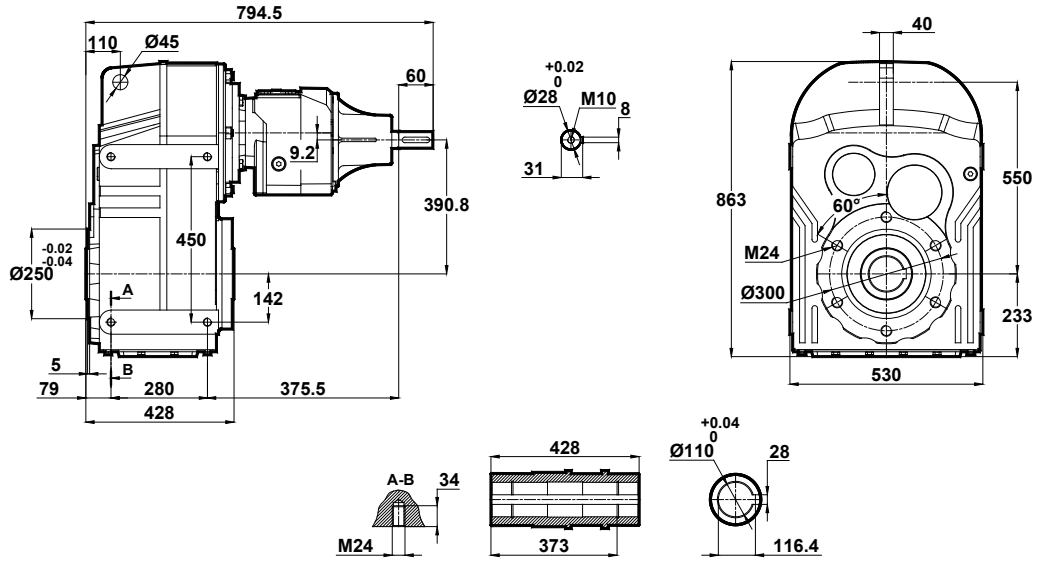
Ölçü Sayfaları

Dimension Pages

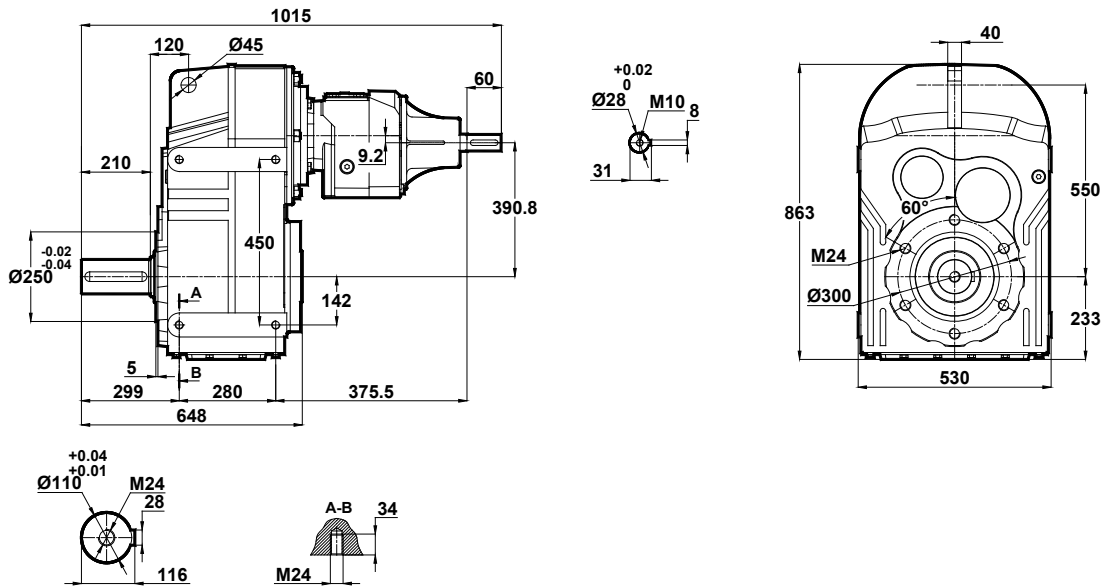
Abmessungsseiten



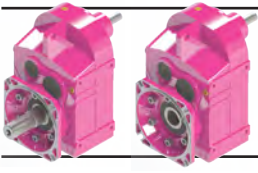
DT875.00
DT876.00



DT875.01
DT876.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



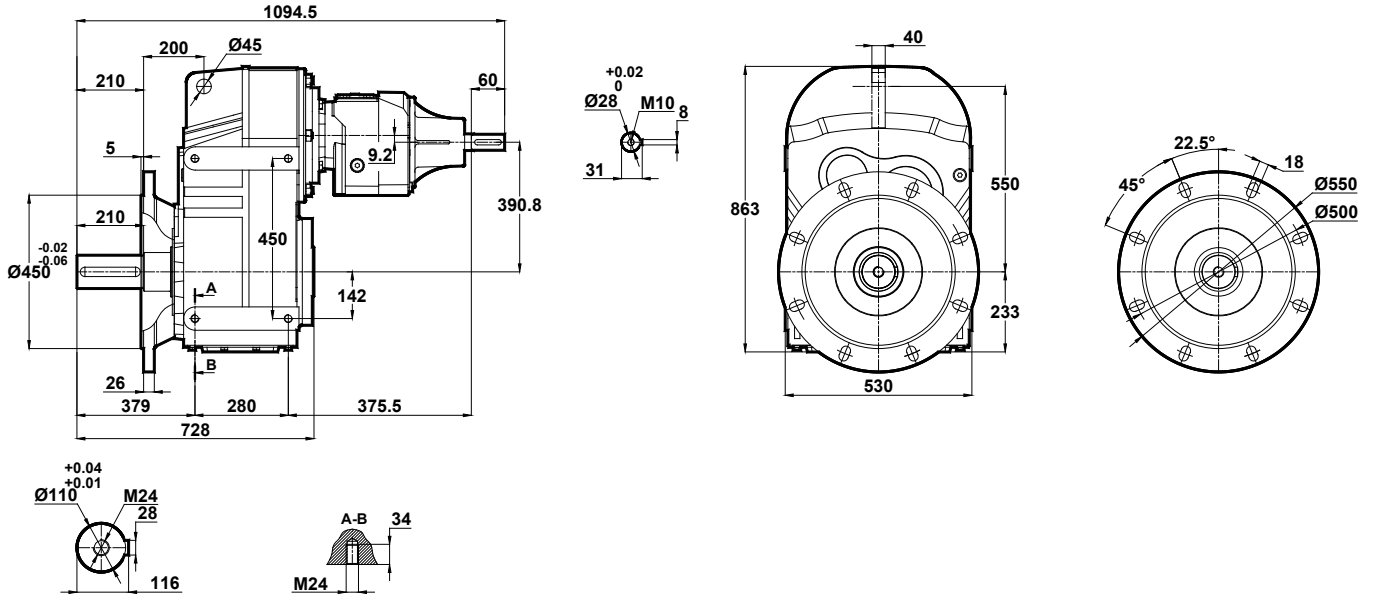
Ölçü Sayfaları

Dimension Pages

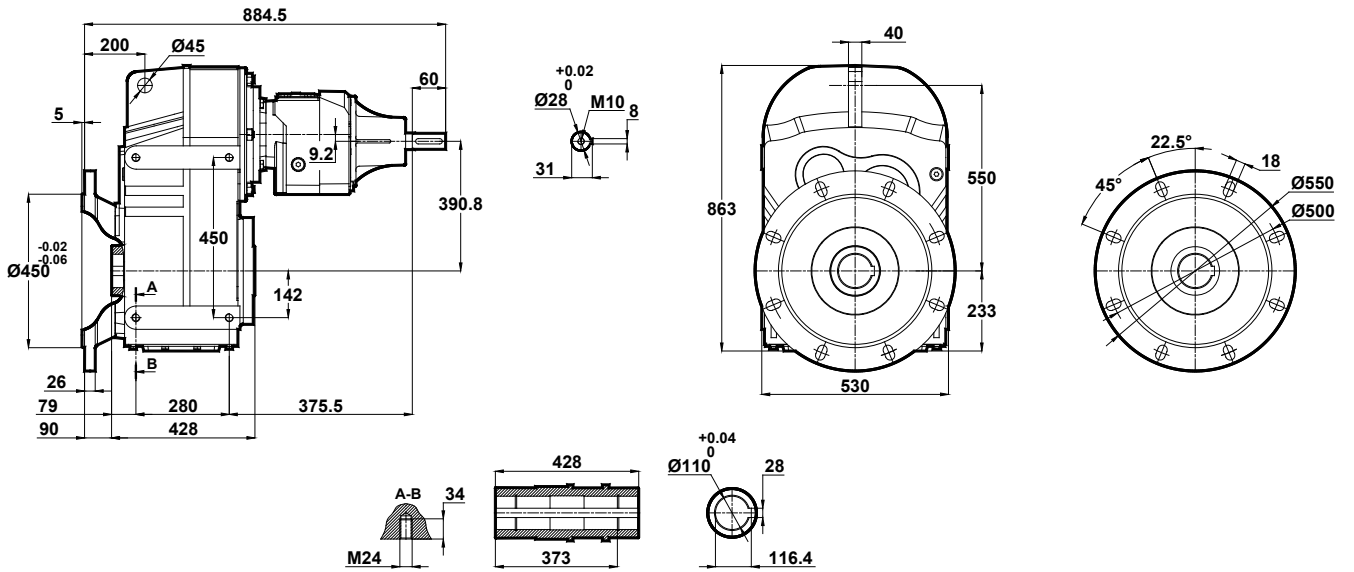
Abmessungsseiten



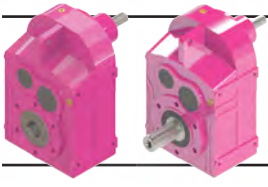
DT875.02
DT876.02



DT875.03
DT876.03



-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



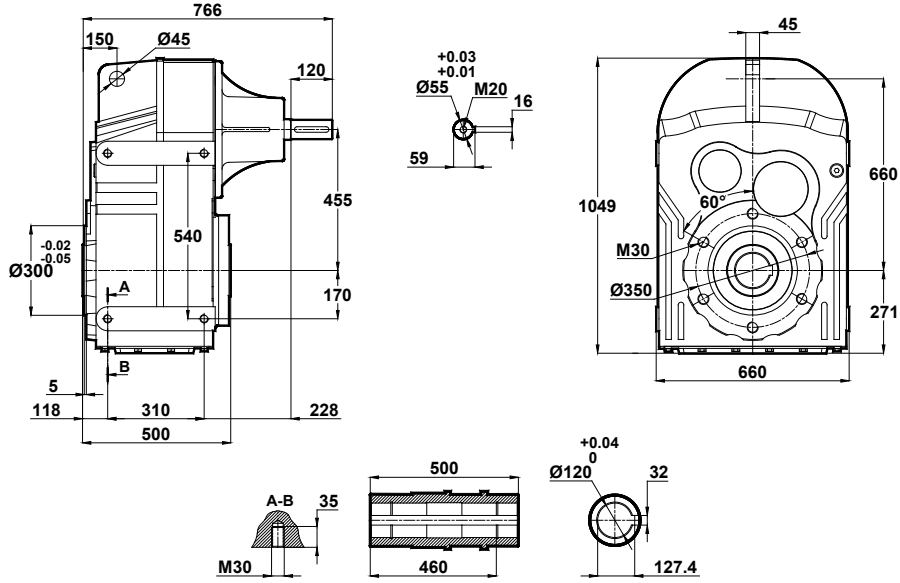
Ölçü Sayfaları

Dimension Pages

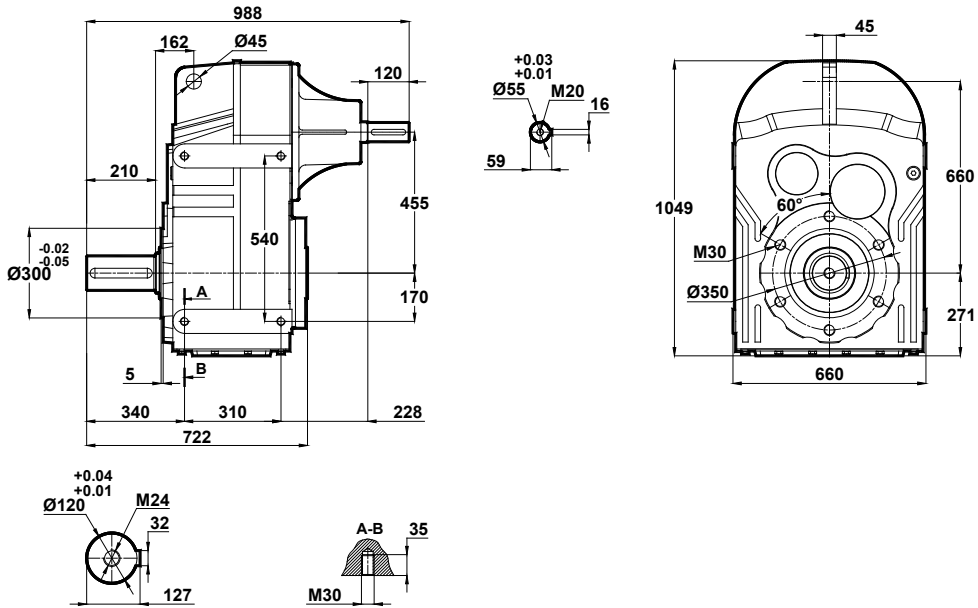
Abmessungsseiten



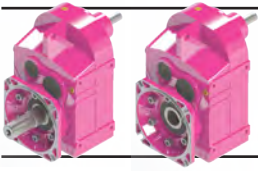
DT972.00
DT973.00



DT972.01
DT973.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



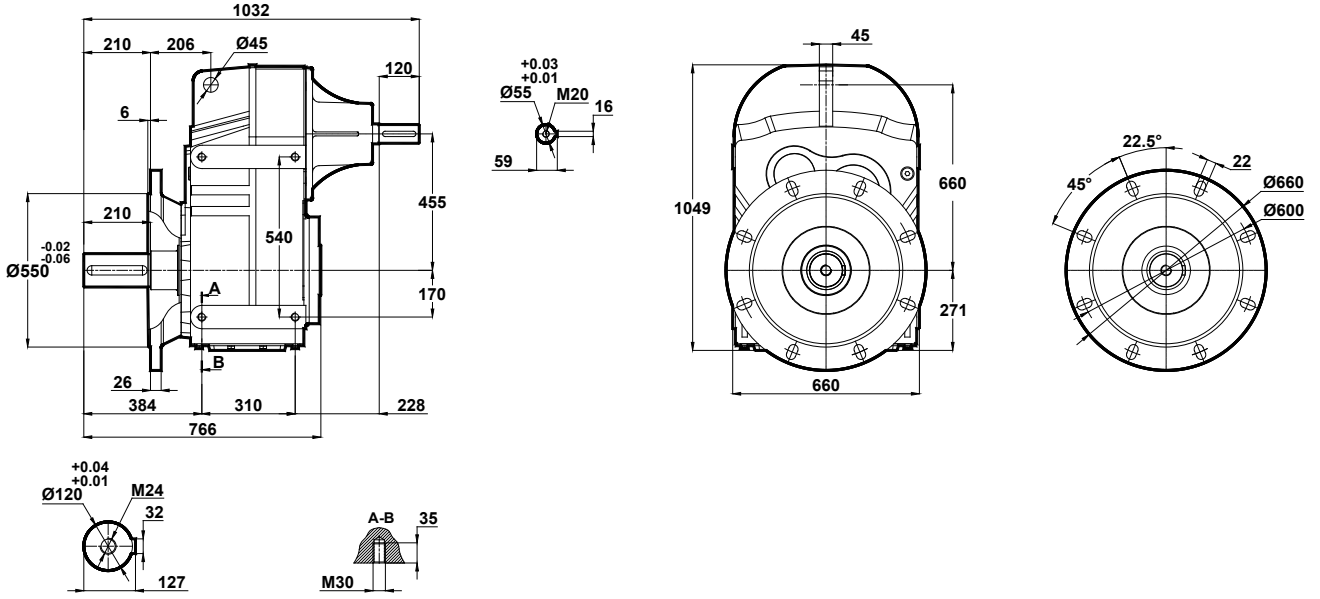
Ölçü Sayfaları

Dimension Pages

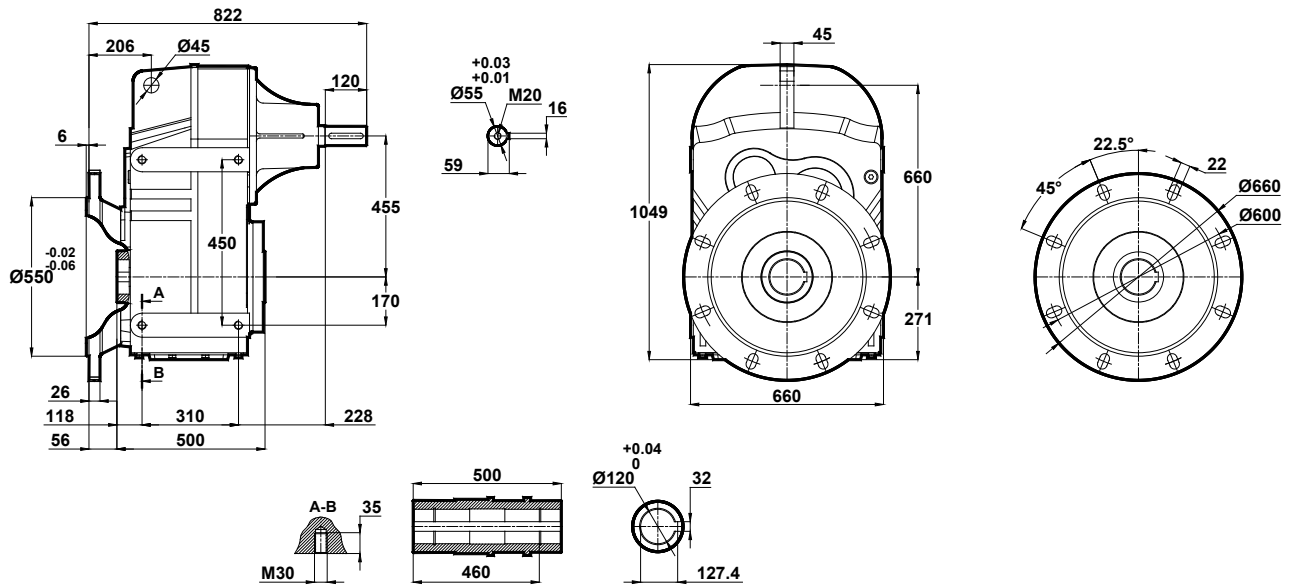
Abmessungsseiten



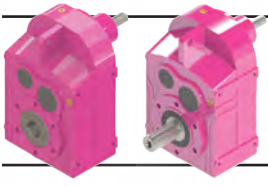
DT972.02
DT973.02



DT972.03
DT973.03



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



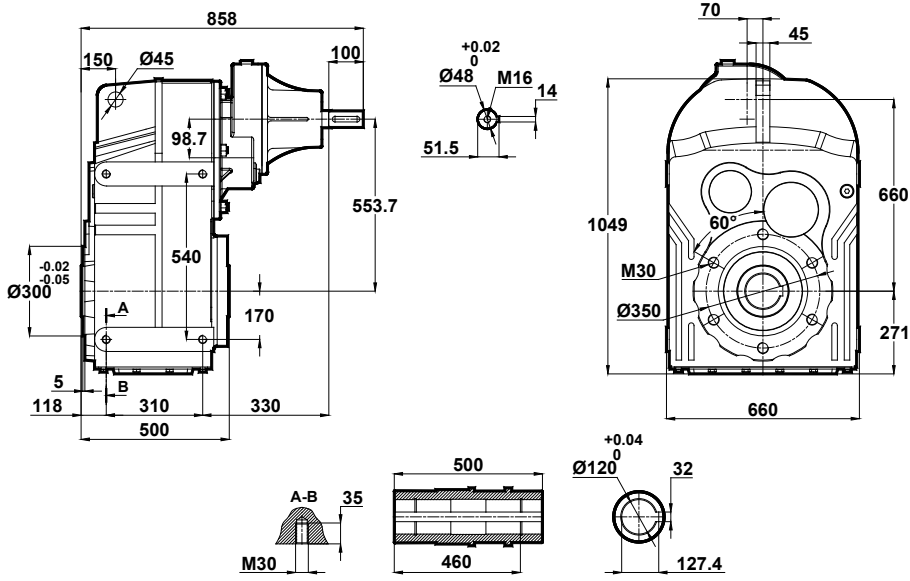
Ölçü Sayfaları

Dimension Pages

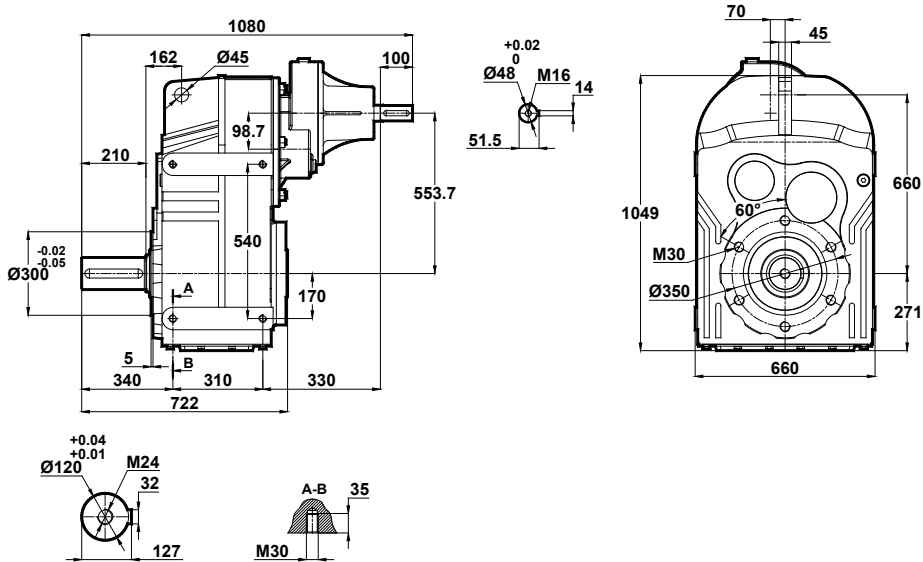
Abmessungsseiten



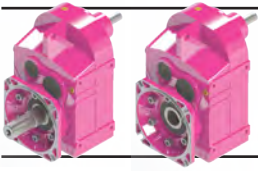
DT974.00



DT974.01



-Mil ucu çekirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



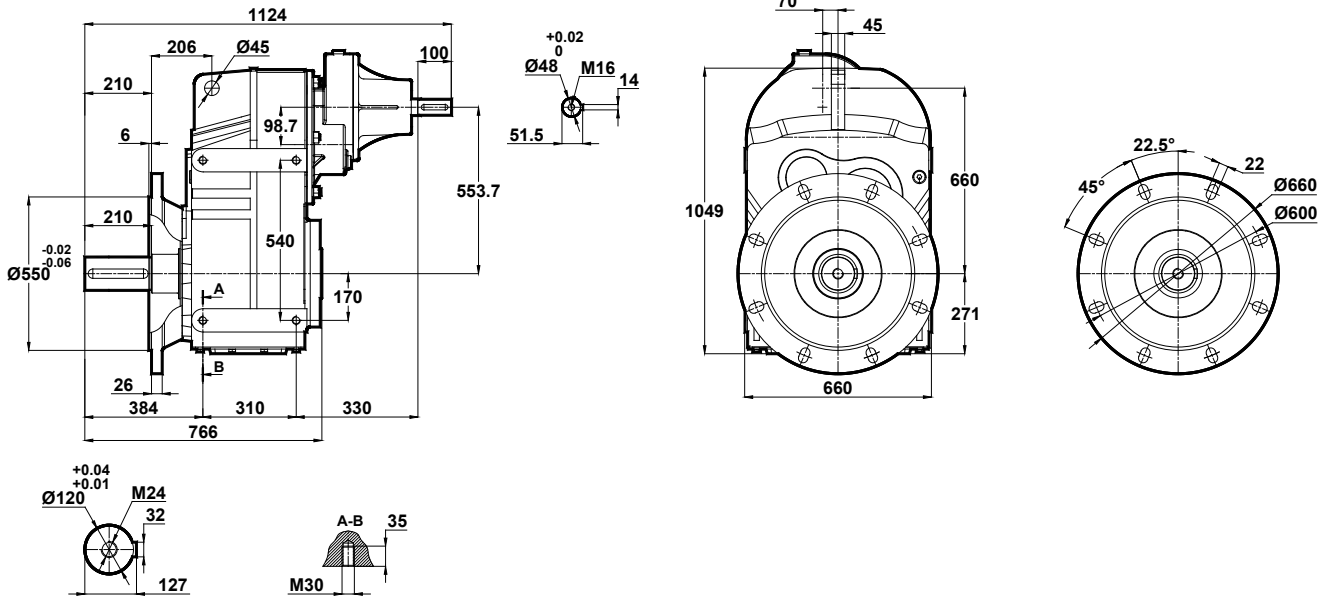
Ölçü Sayfaları

Dimension Pages

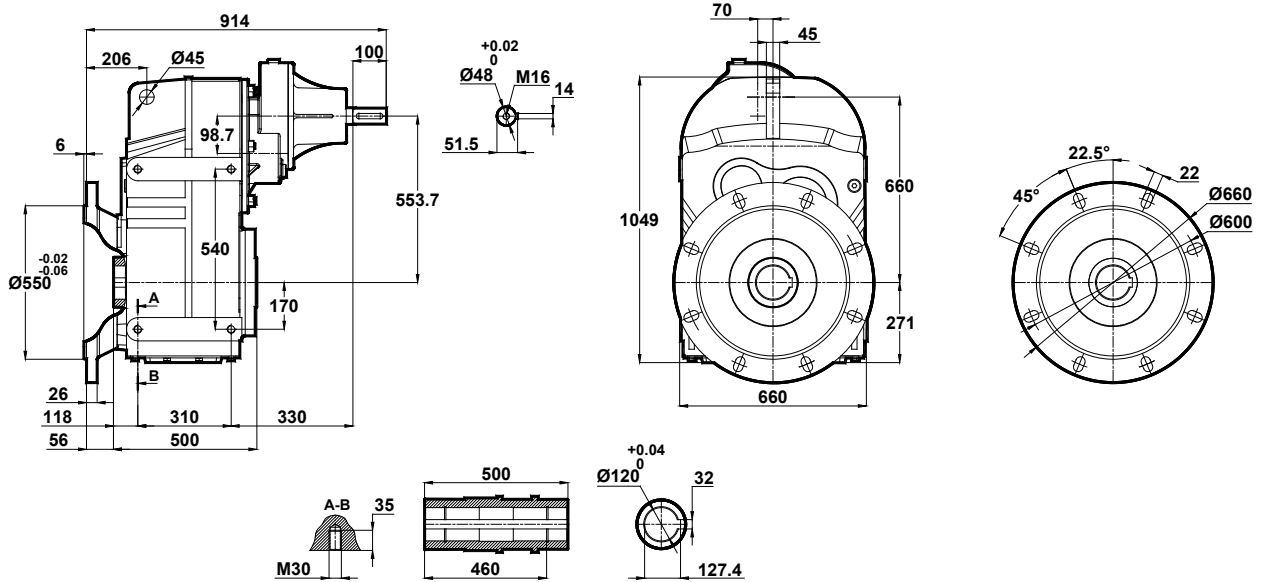
Abmessungsseiten



DT974.02



DT974.03



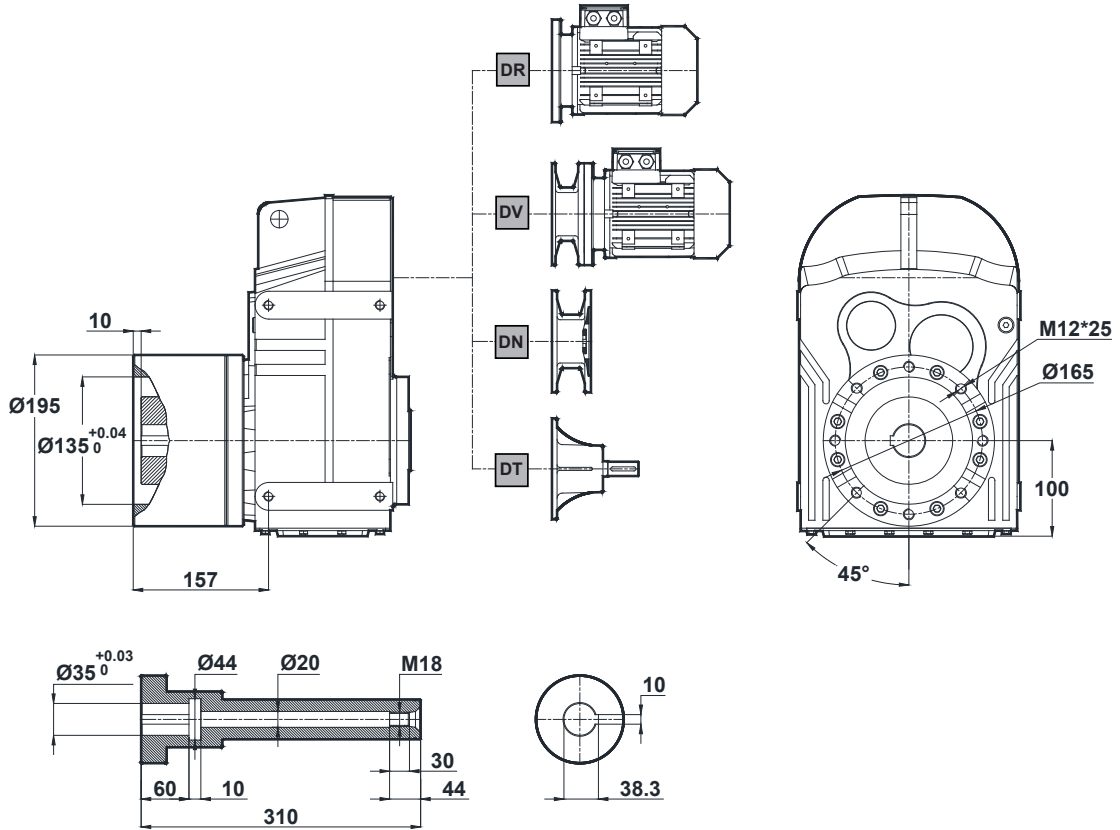
-Mil ucu çektirme deliği DIN 332 sayfa 2 / Tapped center hole according to DIN 332, sheet 2 / Zentrierung mit Gewinde nach DIN 332, Blatt 2



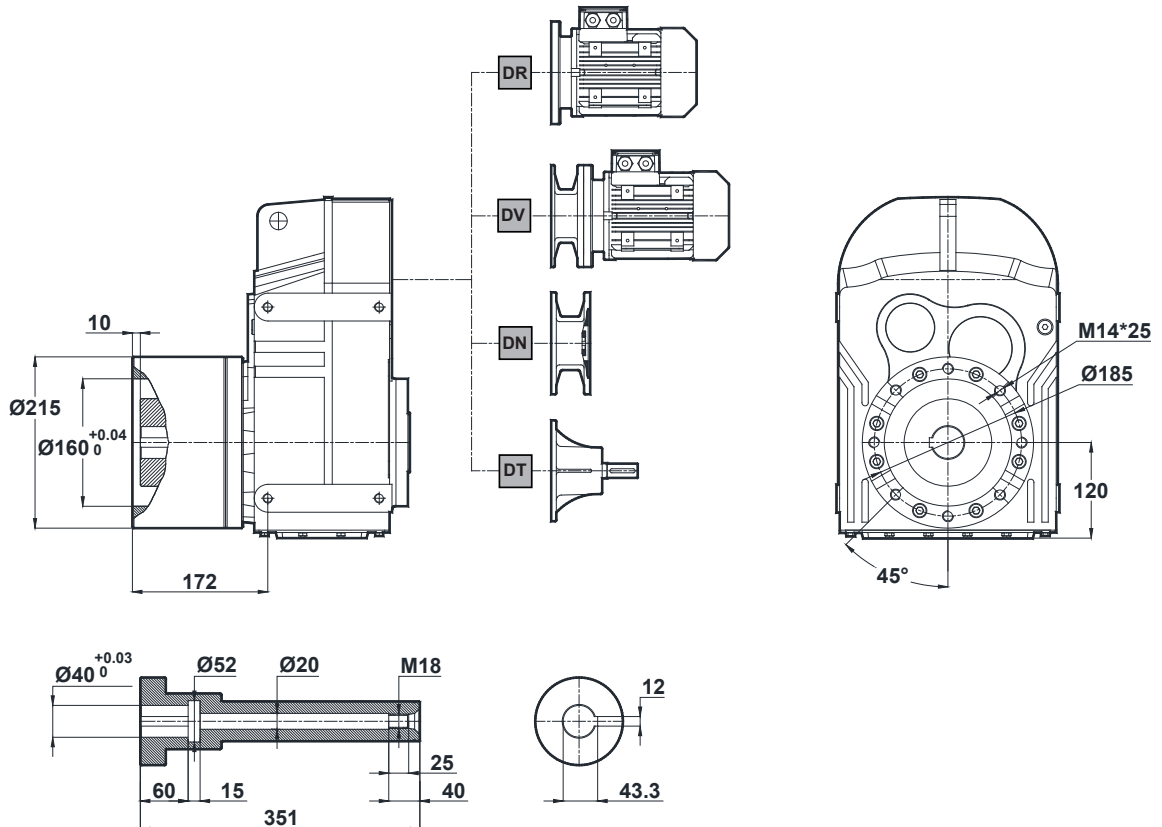
Ölçü Sayfaları Dimension Pages Abmessungenseiten



D.37.0E



D.47.0E

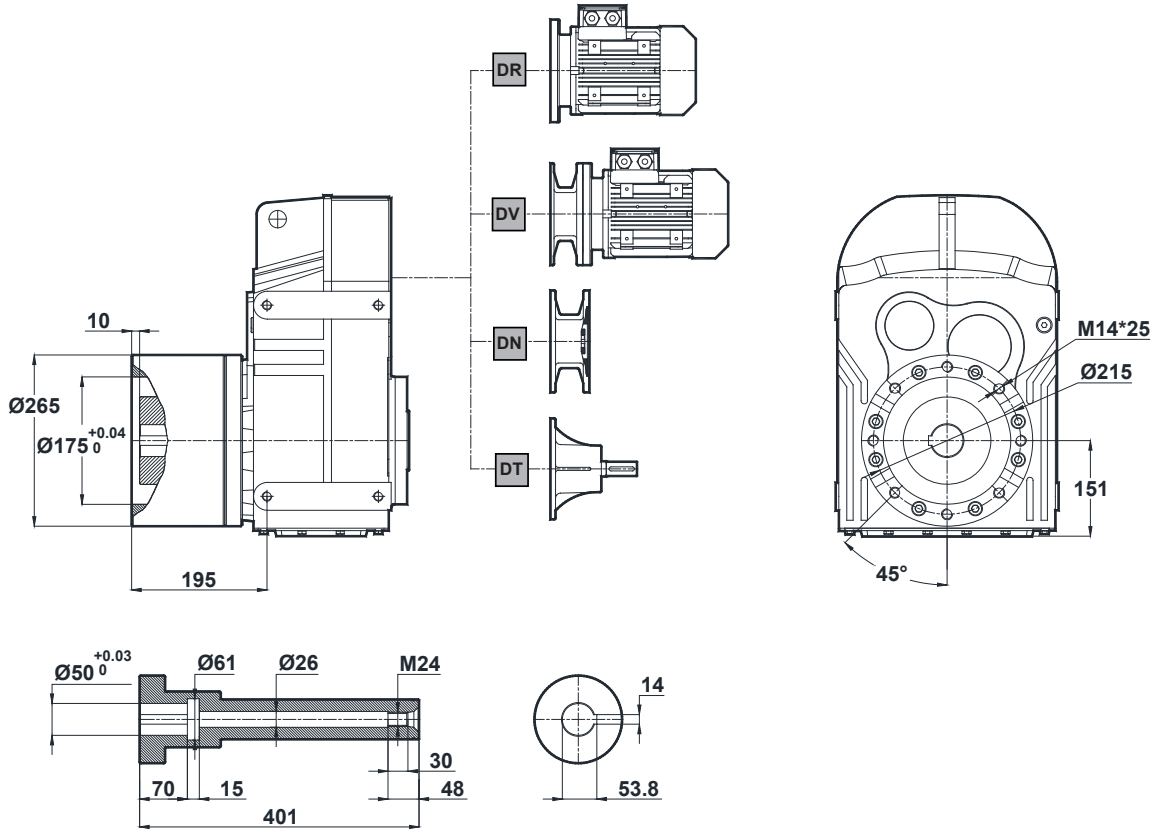




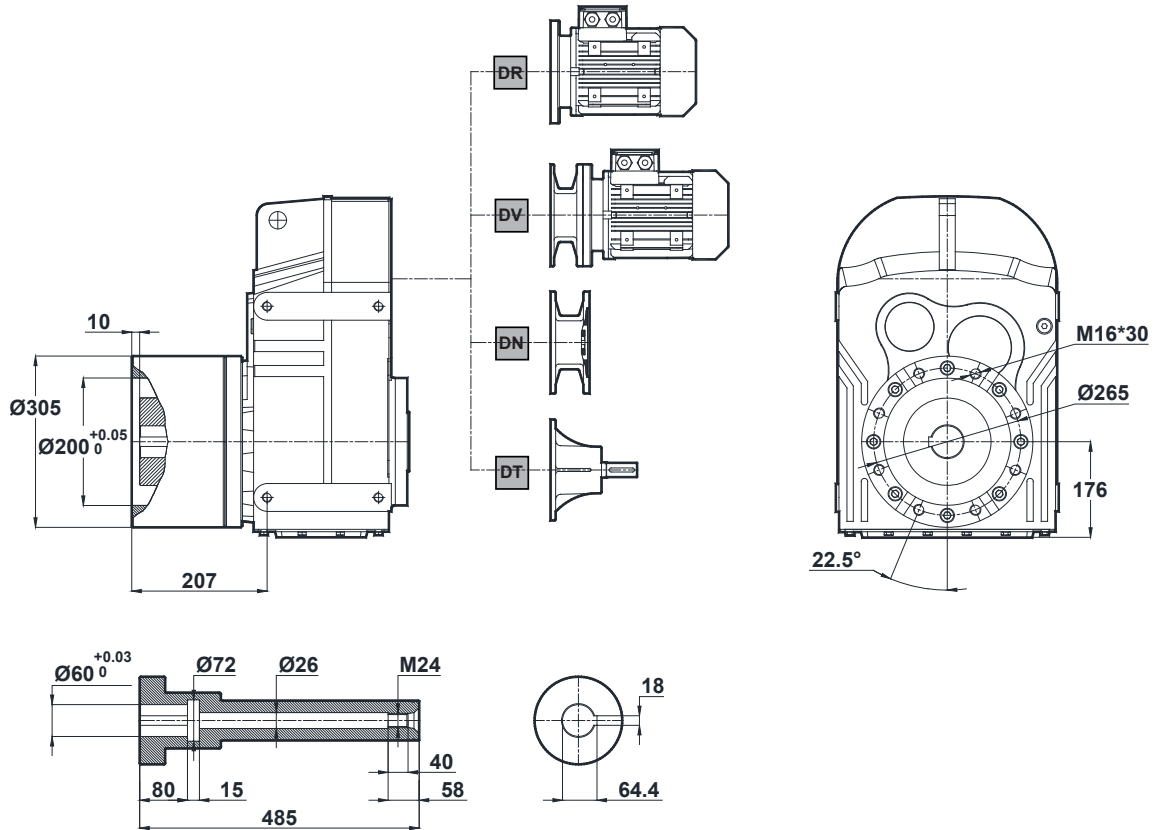
Ölçü Sayfaları
Dimension Pages
Abmessungenseiten



D.57.0E



D.67.0E

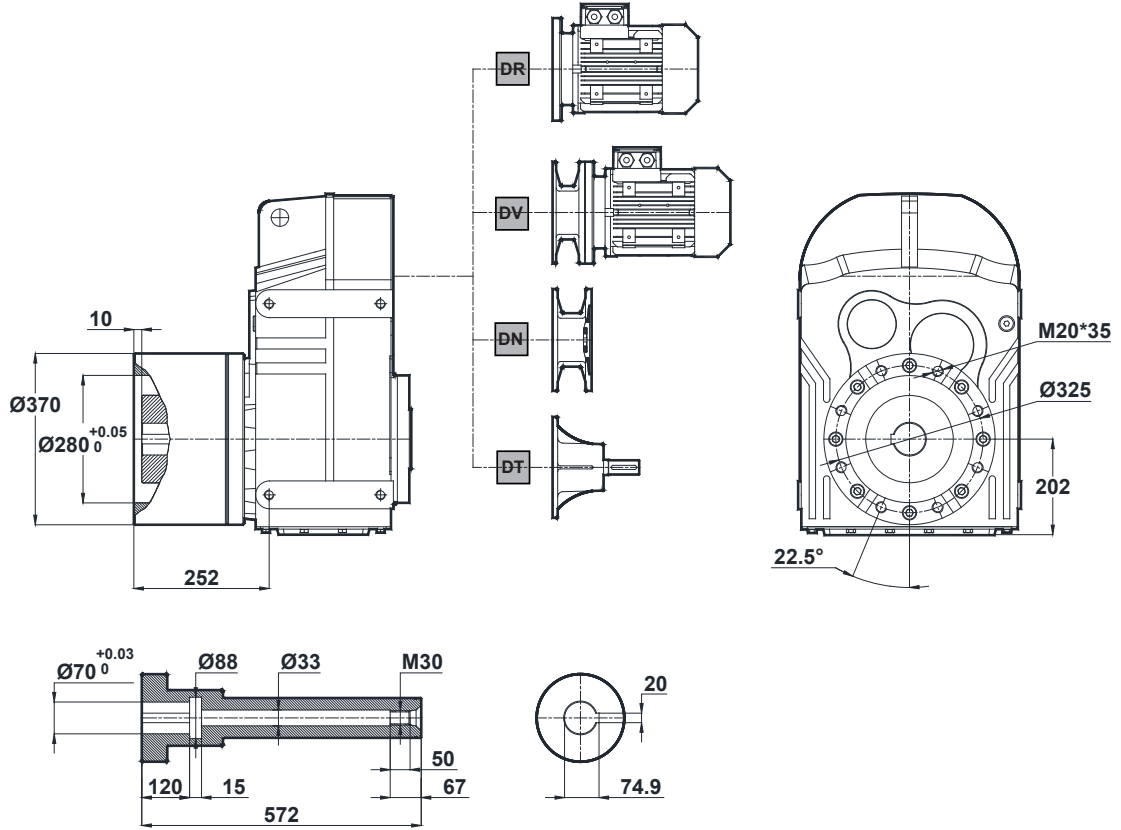




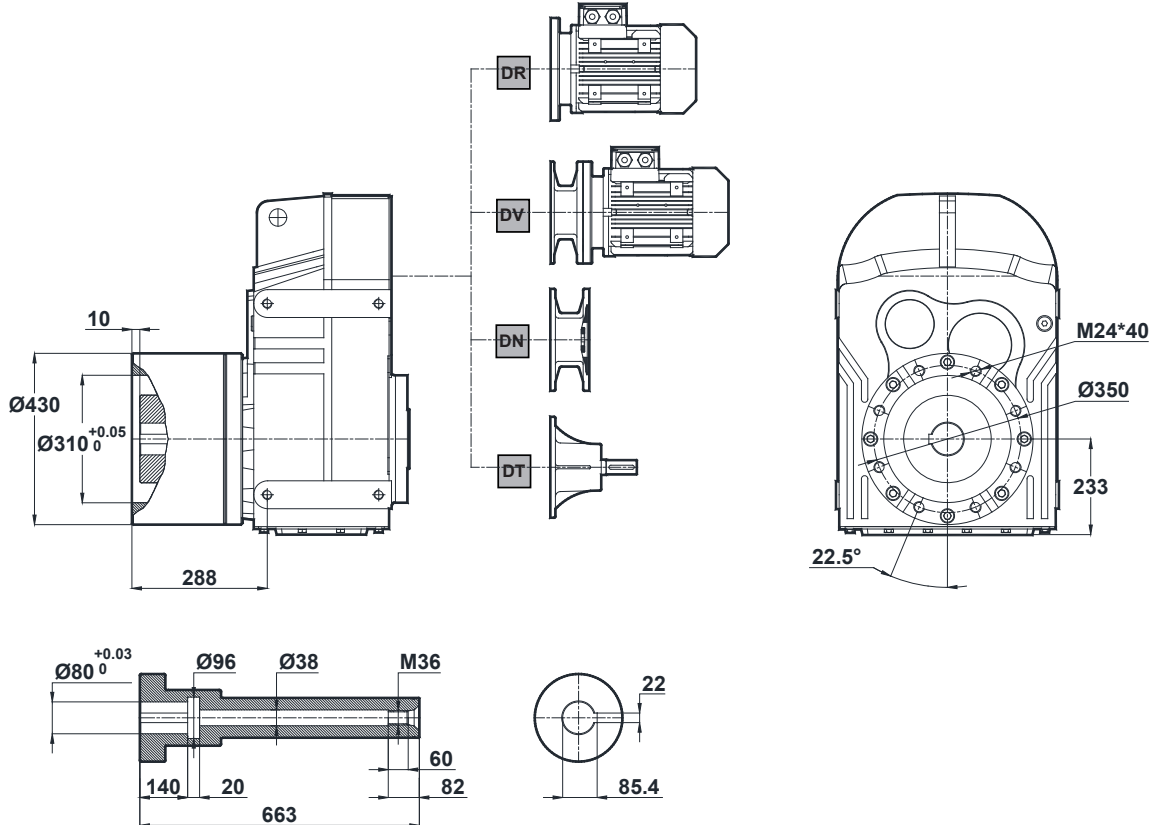
Ölçü Sayfaları Dimension Pages Abmessungenseiten



D.77.0E



D.87.0E

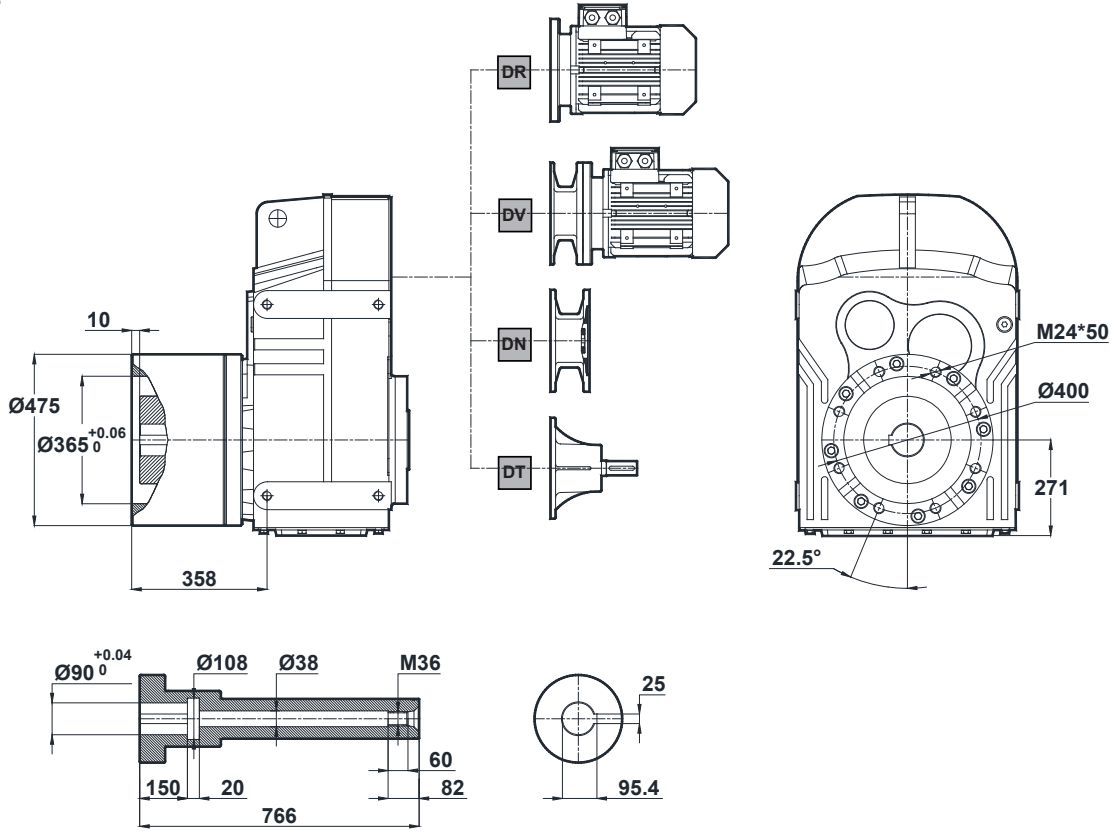




Ölçü Sayfaları
Dimension Pages
Abmessungenseiten



D.97.0E

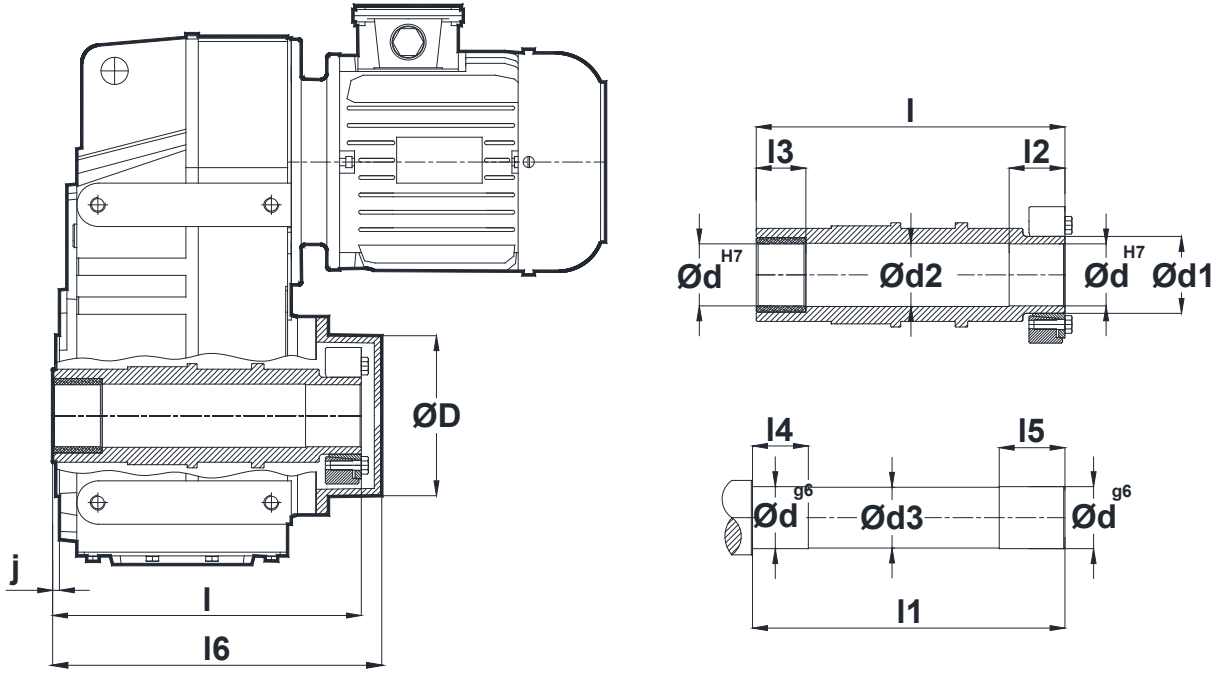




Ölçü Sayfaları Dimension Pages Abmessungsseiten



D SERİSİ DELİK MİLLİ SIKMA BİLEZİKLİ REDÜKTÖRLER D SERIES HOLLOW SHAFT WITH SHRINK DISC CONNECTOR D SERIE HOHLWELLE MIT SCHRUMPFSCHEIBE



Istenilen yüzey pürüzlülüğü değeri: $Rz \leq 16 \mu m$
Desired surface roughness value: $Rz \leq 16 \mu m$
Gewünschtes Oberflächenrauheitswert: $Rz \leq 16 \mu m$

Tipi Type Typ	ØD	Ød	Ød1	Ød2	Ød3	l	l1	l2	l3	l4	l5	l6	j	M	Z	Ta[Nm]
D.07.. 0S	73	25	30	26	24	131	134	30	20	25	38	142,5	4	M5	6	4
D.17.. 0S	85	30	36	31	29	146	149	30	20	25	38	162	4	M6	5	12
D.27.. 0S	94	35	44	36	34	186	189	35	25	30	43	201	4.5	M6	7	12
D.28.. 0S	104	40	50	41	39	197	200	35	30	35	43	213	5	M6	8	12
D.37.. 0S	106	40	50	41	39	216	219	40	35	40	48	232	6	M6	8	12
D.47.. 0S	129	50	62	51	49	249	252	45	40	45	53	266	5.5	M6	10	12
D.57.. 0S	159	60	75	61	59	282	285	50	45	50	58	305	5.5	M8	7	30
D.67.. 0S	164	70	80	71	69	345	348	55	50	55	63	366	6	M8	7	30
D.77.. 0S	204	80	110	91	89	418	421	70	60	70	83	440	7.5	M10	9	59
D.87.. 0S	252	110	140	111	109	492	495	80	70	80	93	519	9	M12	10	100
D.97.. 0S	288	120	155	121	119	570	573	90	80	90	103	593	10	M12	12	100

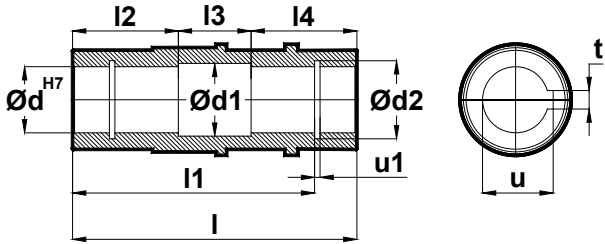
M: Civata Ölçüsü / Bolt dimension / Muttergröße
Z: Civata Sayısı / Bolt Quantity / Anzahl von Muttern
Ta: Sıkma Momenti / Tightening Torque / Schrupfmoment



Ölçü Sayfaları Dimension Pages Abmessungenseiten

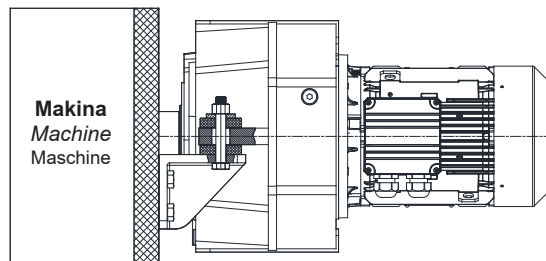
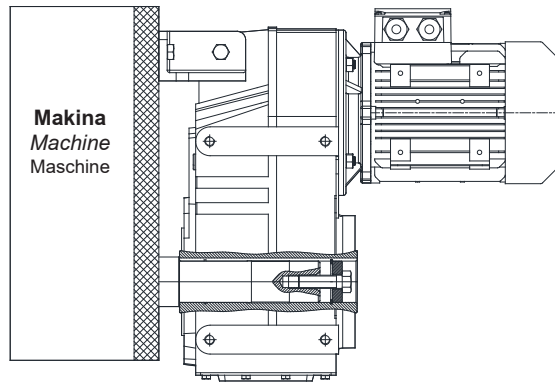


D serisi redüktör kovan ölçüleri Hollow Shaft Dimensions for D Series Gearboxes Hohlwelleabmessungen Von D Serie Getrieben



Tip Type Typ	d	d1	d2	l	l1	l2	l3	l4	u1	t	u
D.07..	25	26	26.2	108	94	40	28	40	1.3	8	28.3
D.17..	30	31	31.4	120	105	45	30	45	1.3	8	33.3
D.27..	35	36	37	157	132	60	37	60	1.6	10	38.3
D.28..	40	41	42.5	166	142	64	38	64	1.85	12	43.3
D.37..	40	41	42.5	185	156	70	45	70	1.85	12	43.3
D.47..	50	51	53	215	183	82	51	82	2.15	14	53.8
D.57..	60	61	63	246	210	96	54	96	2.15	18	64.4
D.67..	70	71	73	308	270	110	88	110	2.65	20	74.9
D.77..	90	91	93.5	363	313	135	93	135	3.15	25	95.4
D.87..	110	111	114	428	373	160	108	160	4.15	28	116.4
D.97..	120	121	124	500	460	180	140	180	4.15	32	127.4

Moment kolu bağlantı detayı Torque Arm Mounting details Drehmomentstütze montage zeichnungen

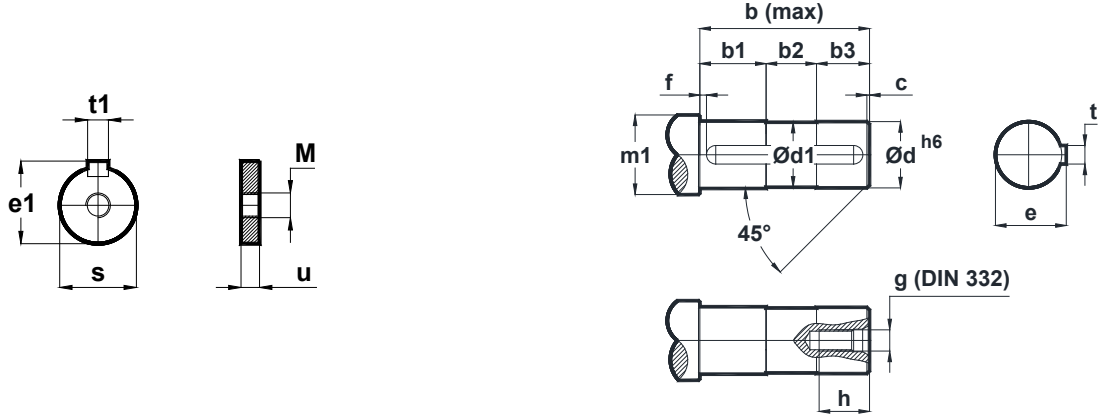




Ölçü Sayfaları Dimension Pages Abmessungsseiten

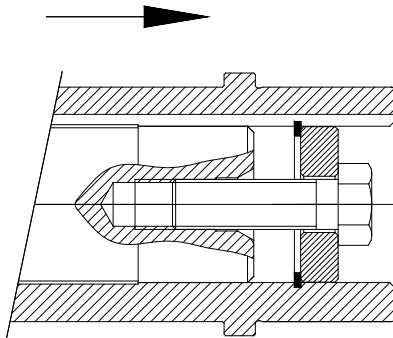


D SERİSİ REDÜKTÖRLERDE TAVSİYE EDİLEN MİL BOYU MONTAJ-DEMONTAJ ŞEKLİ VE AKSESUARLARI
ADVISED SHAFT DIMENSIONS AND ACCESSORIES ASSEMBLING FOR D SERIES GEARBOXES
EMPFOHLENE WELLEN MASSEN UND VERBINDUNGSELEMENTE BEI MONTAGE FÜR D SERIE GETRIEBE

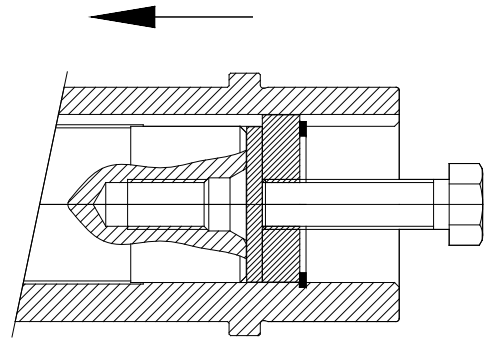


Tipi Type Typ	s	u	e1	t1	M	d	d1	m1	f	b	b1	b2	b3	c	g	h	e	t
D.07..	24.7	8	28	7.5	M12	25	24	30	5	82	45	18	19	1	M10	24	28	8
D.17..	29.7	10	33	7.5	M12	30	29	36		89	50	20	19	1	M10	24	33	8
D.27..	34.7	12	38	9.5	M16	35	34	43		114	65	27	22	1	M12	30	38	10
D.28..	39.7	12	43	11.5	M20	40	39	50		124	69	28	27	2	M16	38	43	12
D.37..	39.7	12	43	11.5	M20	40	39	50		138	75	35	28	2	M16	38	43	12
D.47..	49.7	12	53.5	13.5	M20	50	49	60		165	87	41	37	3	M16	38	53.5	14
D.57..	59.7	16	64	17.5	M24	60	59	75		188	101	44	43	3	M20	44	64	18
D.67..	69.7	16	74.5	19.5	M24	70	69	85		248	115	78	55	4	M20	44	74.5	20
D.77..	89.7	20	95	24.5	M30	90	89	110		287	140	83	64	4	M24	52	95	25
D.87..	109.7	20	116	27.5	M30	110	109	130		347	165	98	84	4	M24	52	116	28
D.97..	119.7	20	127	31	M30	120	119	140	434	185	130	119	4	M24	52	127	32	

Mil Çektirme / Shaft Mounting / Einziehen



Mil Çıkartma / Shaft Pulling Out / Heraus Drücken



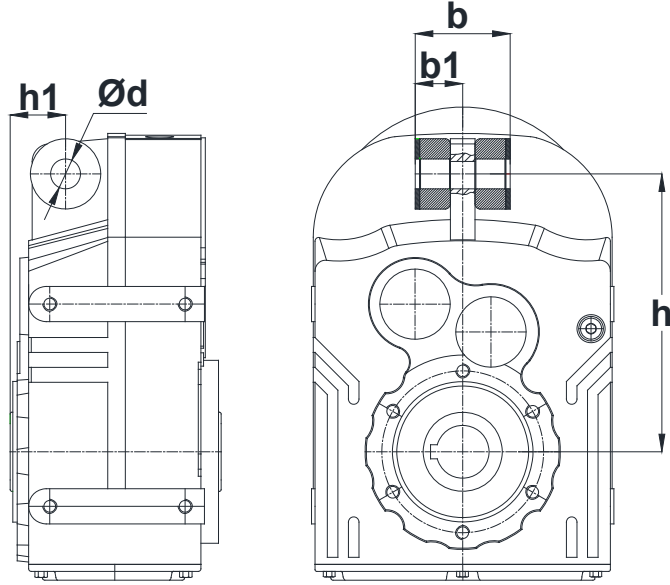
6 Köşe Başlı Civata / 6 Contour Bolt / Sechskantschraube
(DIN ISO 4014 . DIN ISO 4017)
(DIN ISO 8765)



Ölçü Sayfaları Dimension Pages Abmessungenseiten



D Serisi Redüktörlerde Moment Kolu Bağlantı Ölçüleri Torque Arm Mounting Dimensions for D Series Gear Units Montageabmessungen der Drehmomentstütze von D Serie Getriebe



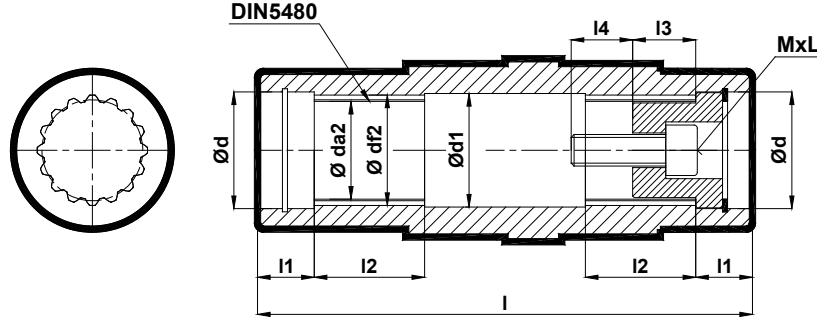
Tip Type Typ	d	b	b1	h	h1
D.07..	14	42	21	147	26.5
D.17.	17	54	27	158	31.5
D.27.	17	54	27	170	32
D.28.	17	54	27	198	40.5
D.37.	17	56	28	218	41
D.47.	22	80	40	278	50
D.57.	22	86	43	346	62
D.67.	26	110	55	395	70
D.77.	26	116	58	485	88
D.87.	32	160	80	550	110
D.97.	32	165	82.5	660	150



Ölçü Sayfaları Dimension Pages Abmessungsseiten



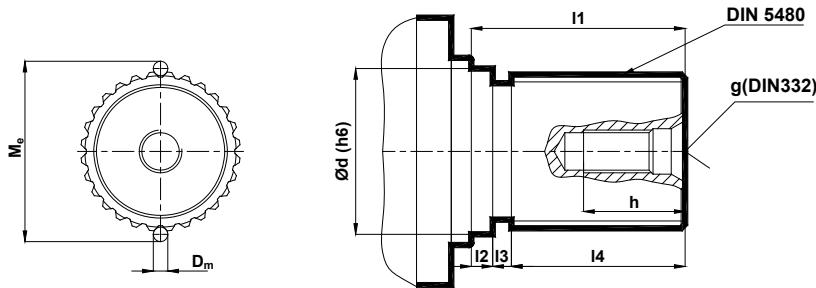
D.07.. - D.97.. DIN 5480 ÇOKLU KAMA ÖLÇÜLERİ
D.07.. - D.97.. DIMENSIONS OF SPLINED HOLLOW SHAFT TO DIN 5480
D.07.. - D.97.. ABMESSUNGEN VON HOHLWELLE MIT VIELKEILVERZÄHNUNG NACH DIN 5480



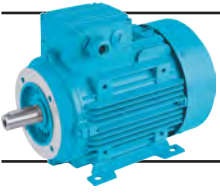
Tip Type Typ	DIN5480	ød	ød1	ød2	øda2	ødf2	l	l1	l2	l3	l4	MxL
D07	N25x1.25x30x18x9H	27	26	48	22.5	25.25	104	17	22	20	20	M10x30
D17	N30x1,25x30x22x9H	32	31	53	27,5	30,25	120	18	25	20	20	M10x30
D27 D28	N35x2x30x16x9H	37	36	58 63,5	31	35,4	157 166	18	35	20	20	M10x30
D37	N45x2x30x21x9H	47	46	74	41	45,4	185	25	45	24	32	M16x50
D47	N50x2x30x24x9H	55	51	84	46	50,4	215	25	55	24	32	M16x50
D57	N65x2x30x31x9H	72	66	104	61	65,4	246	25	65	30	40	M20x60
D67	N70x2x30x34x9H	72	71	119	66	70,4	308	25	75	30	40	M20x60
D77	N85x3x30x27x9H	90	86	139,5	79	85,6	363	26	90	30	40	M20x60
D87	N100x4x30x24x9H	110	101	169	92	100,8	428	30	105	41	50	M24x80
D97	N120x4x30x28x9H	130	121	179	112	120,8	500	35	120	41	50	M24x80

NOT: Makina mil boyu tek tarafli çoklu kama uzunluk ölçüsüne (l1+l2) göre yapılmalıdır! Delik mil boydan boya kullanılamaz!
NOTE: The customer shaft length must be made only for one sided (l1+l2) splined hollow shaft dimensions! The total length (l) of the splined hollow shaft can not be used in this case!

HINWEIS: Die Kundenwellenlänge muss nur für einseitig (l1+l2) Hohlwelle mit Vielkeilverzahnung gefertigt werden. Die Gesamtlänge der Hohlwelle (l) kann in diesem Fall nicht verwendet werden!

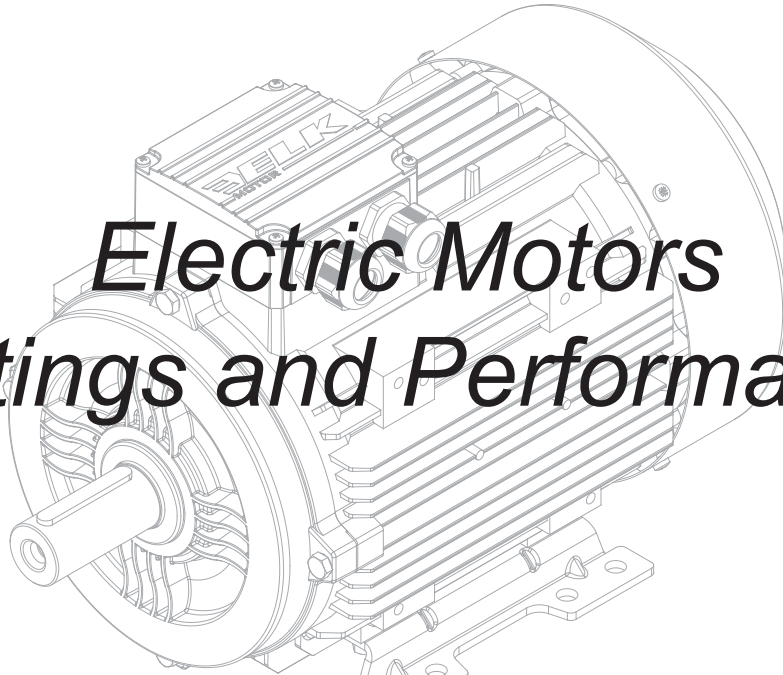


Tip Type Typ	DIN5480	ød	l1	l2	l3	l4	Me	Dm	g (DIN332)
D07	W25x1.25x30x18x8f	27	44	10	7	27	28,01 ^{0/-0,03}	2,75	M10x24
D17	W30x1,25x30x22x8f	32	48	11	7	30	33,05 ^{0/-0,04}	2,75	M10x24
D27 D28	W35x2x30x16x8f	37	58	11	7	40	38,94 ^{0/-0,05}	4,00	M10x24
D37	W45x2x30x21x8f	47	75	18	7	50	48,88 ^{0/-0,05}	4,00	M16x38
D47	W50x2x30x24x8f	55	85	18	7	60	54,16 ^{0/-0,05}	4,00	M16x38
D57	W65x2x30x31x8f	72	95	17	8	70	68,99 ^{0/-0,06}	4,00	M20x44
D67	W70x2x30x34x8f	72	105	17	8	80	74,18 ^{0/-0,06}	4,00	M20x44
D77	W85x3x30x27x8f	90	121	16	10	95	91,02 ^{0/-0,05}	6,00	M20x44
D87	W100x4x30x24x8f	110	140	20	10	110	108,37 ^{0/-0,06}	8,00	M24x52
D97	W120x4x30x28x8f	130	160	23	12	125	127,89 ^{0/-0,06}	8,00	M24x52

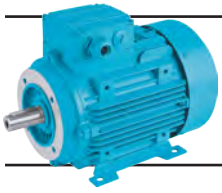


Elektrik Motorlarının Performans Deęerleri

*Electric Motors
Ratings and Performance*



**Elektromotoren
Leistungsdaten**



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

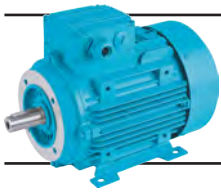
Elektromotoren Leistungsdaten



400V 50Hz 3000 d/d / 400V 50Hz 3000 rpm / 400V 50Hz 3000 UpM

IE3

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten								Kalkış Değerleri Starting Data Startdaten		Devrilme Momenti Breakdown Torque Kippmo- ment	Atalet Momenti Moment of Inertia Trägheits- moment	B3 Motor Ağırlığı B3 Motor Gewicht	Ses Seviyesi Noise Level Geräusch- pegel
	Güç	Devir	Akım	Moment	Güç Faktörü	Verim % η			Akım	Moment				
	Power	Speed	Current	Torque	Power Factor	Efficiency % η			Current	Torque				
	Leistung	Drehzahl	Nennstrom	Drehmoment	Leistungsfaktor	Wirkungsgrad % η			Nennstrom	Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm ²	kg	dB(A)
3E71M/2B	0,37	2830	0,86	1,25	0,81	76,6	77,0	75,0	6,0	2,8	3,0	0,00086	6,2	53
3E71M/2C	0,55	2830	1,19	1,86	0,84	79,4	80,2	78,8	6,1	2,9	3,3	0,00096	7,2	53
3E80M/2B	0,75	2880	1,59	2,49	0,84	80,7	82,0	81,5	6,7	3,0	3,6	0,00140	9,6	54
3E80M/2C	1,1	2880	2,26	3,64	0,85	82,7	83,0	82,4	6,8	3,1	3,8	0,00165	10,9	54
3E90S/2B	1,5	2900	2,97	4,94	0,86	84,8	85,4	84,2	7,6	3,1	3,9	0,00220	15,6	59
3E90L/2C	2,2	2900	4,25	7,24	0,87	85,9	86,8	86,1	7,2	3,0	3,8	0,00310	17,0	59
3E100L/2C	3	2915	5,58	9,83	0,89	87,1	87,6	86,9	7,9	3,0	4,1	0,00540	23,3	62
3E112M/2C	4	2915	7,28	13,1	0,90	88,1	88,8	88,2	7,5	2,6	3,9	0,01100	29,1	65
3E132S/2B	5,5	2945	9,9	17,83	0,90	89,2	89,0	88,6	8,9	2,9	3,9	0,02200	44,4	67
3E132S/2C	7,5	2945	13,2	24,32	0,91	90,1	90,5	89,7	8,4	2,6	4,0	0,02900	51,5	67
3E160M/2A	11	2955	19,5	35,5	0,89	91,2	91,2	90,4	8,5	3,1	4,0	0,03400	105	70
3E160M/2B	15	2955	27	48,5	0,87	91,9	91,8	91,6	7,5	2,4	3,0	0,04600	120	70
3E160L/2	18,5	2960	31,5	59,9	0,92	92,4	92,5	92,0	8,2	3,0	3,2	0,05600	145	70
3E180M/2	22	2960	38	71	0,90	92,7	92,6	92,2	7,0	2,4	3,0	0,07500	170	70
3G200L/2a	30	2980	52	96	0,89	93,3	93,3	92,8	8,5	2,8	3,5	0,15000	240	73
3G200L/2b	37	2980	63	119	0,90	93,7	93,7	93,1	8,3	2,8	3,1	0,17000	270	73
3G225M/2	45	2980	77	144	0,91	94,0	94,1	93,0	8,7	2,7	3,1	0,26000	380	73
3G250M/2	55	2985	92	176	0,92	94,3	94,5	93,3	8,7	2,9	3,0	0,47000	480	76
3G280S/2	75	2985	127	240	0,90	94,7	94,6	94,0	8,0	2,9	3,2	0,62000	585	76
3G280M/2	90	2985	148	288	0,92	95,0	95,0	93,7	8,2	2,9	3,0	0,74000	645	76
3G315S/2	110	2985	186	353	0,90	95,2	95,2	94,0	8,0	2,5	3,0	1,20000	742	76
3G315M/2a	132	2985	223	423	0,90	95,4	95,4	94,1	8,0	2,4	3,5	1,40000	812	79
3G315M/2b	160	2985	265	513	0,91	95,6	95,6	94,2	8,0	2,5	3,0	1,50000	912	79



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

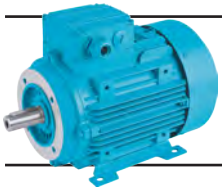
Elektromotoren Leistungsdaten



400V 50Hz 1500 d/d / 400V 50Hz 1500 rpm / 400V 50Hz 1500 UpM

IE3

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten							Kalkış Değerleri Starting Data Startdaten			Devrilme Momenti Breakdown Torque	Atalet Momenti Moment of Inertia	B3 Motor Ağırlığı B3 Motor Weight	Ses Seviyesi Noise Level
	Güç	Devir	Akım	Moment	Güç Faktörü	Verim % η			Akım	Moment				
	Power	Speed	Current	Torque	Power Factor	Efficiency % η			Current	Torque				
	Leistung	Drehzahl	Nennstrom	Drehmoment	Leistungsfaktor	Wirkungsgrad % η			Nennstrom	Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm ²	kg	dB(A)
3E71M/4C	0,25	1435	0,67	1,66	0,71	76,0	75,4	71,5	5,4	2,2	3,0	0,00096	6,8	45
3E71M/4D	0,37	1435	0,97	2,46	0,70	78,5	78,2	75,0	5,5	2,2	3,1	0,00120	7,5	45
3E80M/4C	0,55	1450	1,34	3,62	0,73	80,8	80,4	77,0	5,9	2,1	3,1	0,00220	10,5	50
3E80M/4D	0,75	1450	1,77	4,94	0,74	82,5	82,3	80,0	6,2	2,5	3,4	0,00360	11,6	50
3E90S/4C	1,1	1450	2,46	7,25	0,76	84,5	84,3	82,0	7,0	2,6	3,6	0,00420	16,3	51
3E90L/4D	1,5	1450	3,3	9,88	0,77	85,3	85,2	83,0	7,2	2,8	3,8	0,00480	18,0	51
3E100L/4C	2,2	1450	4,65	14,49	0,79	86,7	87,2	86,0	7,2	2,8	3,6	0,01100	24,4	53
3E100L/4D	3	1450	6,26	19,76	0,79	87,7	88,0	87,0	7,2	2,8	3,6	0,01300	26,7	53
3E112M/4D	4	1460	8,05	26,16	0,81	88,6	88,4	87,5	7,4	2,8	3,8	0,01500	33,9	58
3E132S/4C	5,5	1460	10,65	36	0,83	89,6	90,2	90,0	7,4	2,8	3,4	0,03500	53,4	61
3E132M/4D	7,5	1465	14,4	48,9	0,83	90,4	90,4	89,4	7,9	3,0	3,8	0,04200	59,5	61
3E160M/4C	11	1470	21	71,5	0,83	91,4	91,3	91,0	6,9	2,4	3,1	0,07200	120	63
3E160L/4D	15	1470	29	97,4	0,81	92,1	92,0	91,8	6,9	2,5	3,2	0,09200	144	63
3E180M/4	18,5	1475	34,5	120	0,84	92,6	92,6	91,6	7,8	3,2	3,8	0,15000	180	64
3E180L/4	22	1475	42,5	142	0,80	93,0	92,8	92,0	8,3	3,5	4,0	0,17000	190	64
3G200L/4	30	1475	55	194	0,84	93,6	93,5	93,3	7,9	2,8	3,7	0,25000	240	64
3G225S/4	37	1475	67	240	0,85	93,9	93,9	93,5	7,5	3,1	3,3	0,36000	330	64
3G225M/4	45	1475	80	291	0,86	94,2	94,2	93,4	7,4	3,0	3,1	0,44000	360	64
3G250M/4	55	1480	96	355	0,87	94,6	94,7	94,0	7,7	3,2	3,0	0,78000	445	67
3G280S/4	75	1485	133	482	0,86	95,0	94,9	94,4	7,6	2,9	3,0	1,11000	605	67
3G280M/4	90	1485	158	579	0,86	95,2	95,2	94,8	7,4	2,9	3,0	1,32000	665	67
3G315S/4	110	1487	194	707	0,86	95,4	95,2	95,0	7,4	2,4	3,0	2,5000	861	74
3G315M/4a	132	1487	230	848	0,87	95,6	95,4	95,3	7,4	2,4	3,0	2,8000	882	74
3G315M/4b	160	1488	275	1027	0,88	95,8	95,6	95,6	6,9	2,2	2,9	3,0000	930	74



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

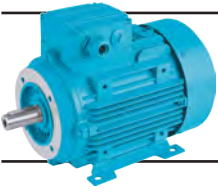
Elektromotoren Leistungsdaten



400V 50Hz 1000 d/d / 400V 50Hz 1000 rpm / 400V 50Hz 1000 UpM

IE3

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten								Kalkış Değerleri Starting Data Startdaten		Devrilme Momenti Breakdown Torque Kippmoment	Atalet Momenti Moment of Inertia Trägheitsmoment	B3 Motor Ağırlığı B3 Motor Weight B3 Motor Gewicht	Ses Seviyesi Noise Level Geräuschpegel
	Güç Power Leistung	Devir Speed Drehzahl	Akım Current Nennstrom	Moment Torque Drehmoment	Güç Faktörü Power Factor Leistungsfaktor	Verim % η Efficiency % η Wirkungsgrad % η			Akım Current Nennstrom	Moment Torque Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N				
											M_K/M_N	kgm ²	kg	dB(A)
3E71M/6C	0,18	930	0,55	1,85	0,69	68,0	67,4	62,6	3,6	2,0	2,4	0,00092	6,7	41
3E71M/6D	0,25	930	0,77	2,57	0,67	70,0	69,7	66,0	3,6	2,2	2,5	0,00105	7,5	41
3E80M/6B	0,37	930	1,03	3,8	0,70	74,0	73,8	70,0	4,4	2,1	2,6	0,00240	9,8	43
3E80M/6C	0,55	935	1,47	5,62	0,70	77,2	77,3	74,4	4,3	2,2	2,7	0,00270	10,6	43
3E90S/6B	0,75	945	1,96	7,58	0,70	78,9	79,5	77,6	4,7	2,2	2,7	0,00400	14,6	46
3E90L/6C	1,1	940	2,75	11,2	0,71	81,0	80,8	79,4	5,0	2,2	2,7	0,00480	17,0	46
3E100L/6B	1,5	955	3,5	15	0,75	82,5	82,7	81,4	5,3	2,1	2,8	0,01400	22,5	50
3E112M/6B	2,2	965	4,95	21,7	0,76	84,3	84,5	83,5	5,5	2,2	3,0	0,01900	27,2	56
3E132S/6B	3	970	6,55	29,4	0,77	85,6	85,5	84,5	6,2	2,1	3,0	0,03400	46,5	58
3E132M/6C	4	970	8,52	39,4	0,78	86,8	87,0	85,5	6,2	2,2	3,0	0,03900	51,0	58
3E132M/6D	5,5	970	11,55	54,15	0,78	88,0	88,9	88,5	6,2	2,2	3,0	0,04200	56,0	58
3E160M/6	7,5	970	15	73,8	0,81	89,1	89,0	88,1	6,3	2,2	2,8	0,11000	126	62
3E160L/6	11	970	21,5	108,3	0,82	90,3	90,3	89,0	7,0	2,5	3,2	0,14000	146	62
3E180L/6	15	975	29	147	0,82	91,2	91,2	90,8	6,9	2,6	3,2	0,24000	209	62
3G200L/6a	18,5	975	36,5	181	0,80	91,7	91,6	91,3	7,0	2,6	3,2	0,26000	222	61
3G200L/6b	22	975	43	215	0,80	92,2	92,0	91,7	7,0	2,6	3,2	0,32000	245	61
3G225M/6	30	985	58	291	0,80	92,9	92,9	92,1	7,0	3,3	2,7	0,69000	325	62
3G250M/6	37	987	69	358	0,83	93,3	93,2	92,9	7,0	2,8	2,6	0,99000	440	64
3G280S/6	45	990	92	434	0,75	93,7	93,7	92,9	6,9	3,0	2,8	1,5000	553	65
3G280M/6	55	990	107	531	0,79	94,1	94,1	92,8	7,3	3,3	3,2	1,7000	578	65
3G315S/6	75	992	140	722	0,82	94,6	94,6	94,4	7,2	2,7	3,0	2,9000	805	72
3G315M/6a	90	992	166	866	0,83	94,9	94,9	94,5	7,2	2,7	3,0	3,5000	860	72
3G315M/6b	110	992	198	1058	0,84	95,1	95,1	94,9	7,2	2,7	3,0	4,2000	980	72
3G315L/6	132	992	235	1270	0,85	95,4	95,4	95,2	7,2	2,7	3,0	4,3000	1150	72
3G355M/6a	160	993	290	1538	0,83	95,6	95,6	95,0	7,0	2,4	3,2	6,8000	1185	72



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

Elektromotoren Leistungsdaten

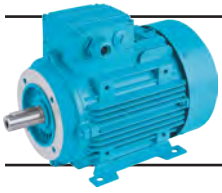


400V 50Hz 3000 d/d / 400V 50Hz 3000 rpm / 400V 50Hz 3000 UpM

IE2

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten							Kalkış Değerleri Starting Data Startdaten			Devrilme Momenti Breakdown Torque Kippmo- ment M_K/M_N	Atalet Momenti Moment of Inertia Trägheits- moment kgm^2	B3 Motor Ağırlığı B3 Motor Weight B3 Motor Gewicht kg	Ses Seviyesi Noise Level Geräusch- pegel dB(A)
	Güç	Devir	Akım	Moment	Güç Faktörü	Verim % η			Akım	Moment				
	Power	Speed	Current	Torque	Power Factor	Efficiency % η			Current	Torque				
	Leistung	Drehzahl	Nennstrom	Drehmoment	Leistungsfaktor	Wirkungsgrad % η			Nennstrom	Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N				
G56/2b*	0,12	2800	0,35	0,41	0,74	64,5	64,1	56,9	4,2	2,5	2,8	0,00012	2,8	42
G63/2a*	0,18	2820	0,5	0,61	0,73	64,4	64,2	57,7	4,6	2,9	2,9	0,00011	3,6	52
G63/2b*	0,25	2840	0,67	0,84	0,63	67,3	67,1	60,9	4,5	2,5	2,9	0,00013	4,0	52
2E71M/2A	0,37	2805	0,9	1,26	0,80	74,2	74,5	72,5	5,0	2,5	2,8	0,00067	5,5	54
2E71M/2B	0,55	2800	1,25	1,87	0,84	75,8	77,0	76,0	5,0	2,4	2,7	0,00086	6,3	54
2E80M/2A	0,75	2850	1,67	2,51	0,83	78,0	79,0	77,5	5,7	2,5	3,0	0,00120	8,7	56
2E80M/2B	1,1	2850	2,36	3,69	0,84	80,1	81,3	80,7	5,8	2,7	3,1	0,00140	9,7	56
2E90S/2A	1,5	2880	3,19	4,98	0,83	81,8	82,6	82,0	6,0	2,4	3,1	0,00200	14,1	60
2E90L/2B	2,2	2860	4,48	7,35	0,85	83,2	85,0	85,0	6,0	2,6	3,1	0,00260	15,5	60
2E100L/2B	3	2900	5,8	9,88	0,88	84,8	85,2	84,7	7,0	2,6	3,4	0,00460	20,8	63
2E112M/2A	4	2910	7,5	13,13	0,89	86,5	87,1	86,8	7,0	2,4	3,6	0,00850	25,7	66
2E132S/2A	5,5	2930	10,2	17,93	0,89	87,4	87,8	87,0	7,5	2,4	3,7	0,01900	41	68
2E132S/2B	7,5	2925	13,6	24,5	0,90	88,5	88,8	88,6	7,6	2,6	3,7	0,02200	45,2	68
2E160M/2A	11	2945	19,5	35,7	0,91	89,5	89,5	88,6	8,5	3,4	3,6	0,03400	105	70
2E160M/2B	15	2945	28,3	48,6	0,85	90,4	90,4	89,7	7,5	3,0	3,5	0,04100	113	70
2E160L/2	18,5	2950	32,3	59,9	0,91	90,9	90,8	90,1	8,2	3,0	3,2	0,05100	135	70
2E180M/2	22	2960	38,3	71	0,91	91,3	91,3	90,8	8,2	3,0	3,5	0,07500	170	70
2G200L/2a	30	2970	52	96	0,91	92,0	92,0	91,2	8,3	2,7	3,0	0,13000	210	73
2G200L/2b	37	2970	65	119	0,89	92,6	92,6	91,7	8,3	2,7	3,0	0,15000	240	73
2G225M/2	45	2975	77	144	0,91	92,9	93,0	91,8	8,7	2,7	3,1	0,23000	343	73
2G250M/2	55	2980	94	176	0,91	93,2	93,7	92,2	8,7	2,9	3,0	0,41000	445	76
2G280S/2	75	2980	127	240	0,91	93,9	94,1	92,5	8,0	2,9	3,2	0,62000	585	76
2G280M/2	90	2980	151	288	0,91	94,2	94,2	92,7	8,5	2,7	3,0	0,74000	645	76
2G315S/2	110	2980	186	353	0,91	94,3	94,3	92,8	8,0	2,5	3,0	1,20000	742	79
2G315M/2a	132	2980	223	423	0,90	94,6	94,5	92,9	8,0	2,5	3,0	1,40000	812	79
2G315M/2b	160	2980	266	513	0,92	94,8	94,8	93,4	8,0	2,5	3,0	1,50000	912	79

* : IE1 Verisi / IE1 Data / IE1 Daten



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

Elektromotoren Leistungsdaten

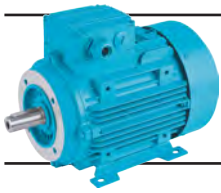


400V 50Hz 1500 d/d / 400V 50Hz 1500 rpm / 400V 50Hz 1500 UpM

IE2

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten							Kalkış Değerleri Starting Data Startdaten			Devrilme Momenti Breakdown Torque Kippmoment	Atalet Momenti Moment of Inertia Trägheits- moment	B3 Motor Ağırlığı B3 Motor Gewicht	Ses Seviyesi Noise Level Geräusch- pegel
	Güç	Devir	Akım	Moment	Güç Faktörü	Verim % η			Akım	Moment				
	Power	Speed	Current	Torque	Power Factor	Efficiency % η			Current	Torque				
	Leistung	Drehzahl	Nennstrom	Drehmoment	Leistungsfaktor	Wirkungsgrad % η			Nennstrom	Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm ²	kg	dB(A)
G63/4a*	0,12	1365	0,41	0,84	0,74	57,1	57,1	53,3	3,1	2,0	2,2	0,00017	3,4	43
G63/4b*	0,18	1340	0,6	1,28	0,73	59,7	59,7	55,8	2,9	2,0	2,0	0,00021	3,9	43
2E71M/4B	0,25	1425	0,71	1,68	0,69	74,0	73,5	70,5	4,4	2,0	3,0	0,00080	5,9	46
2E71M/4C	0,37	1425	1,0	2,47	0,70	76,1	75,5	71,5	4,6	2,0	3,0	0,00096	6,7	46
2E80M/4B	0,55	1440	1,45	3,65	0,71	77,1	76,7	75,0	5,2	2,0	3,0	0,00180	9,7	50
2E80M/4C	0,75	1440	1,89	4,97	0,72	79,6	79,2	77,0	5,2	2,0	3,0	0,00220	10,5	50
2E90S/4B	1,1	1440	2,6	7,3	0,75	81,4	81,4	80,5	5,6	2,2	3,1	0,00290	14,4	52
2E90L/4C	1,5	1440	3,4	9,95	0,77	82,8	83,0	82,0	6,0	2,3	3,2	0,00360	17,2	52
2E100L/4B	2,2	1445	4,85	14,6	0,78	84,3	85,3	84,2	6,0	2,1	3,2	0,00800	22,7	54
2E100L/4C	3	1440	6,42	19,89	0,79	85,5	85,7	84,6	6,3	2,3	3,1	0,01100	24,2	54
2E112M/4C	4	1450	8,2	26,35	0,81	86,8	87,4	86,5	6,6	2,5	3,4	0,01300	32	58
2E132S/4B	5,5	1455	11,05	36,1	0,82	87,7	88,6	88,0	6,7	2,6	3,2	0,03000	47,8	62
2E132M/4C	7,5	1460	15	49	0,81	88,7	89,0	89,0	7,0	2,7	3,3	0,03500	54,8	62
2E160M/4B	11	1470	21	71,5	0,84	90,0	90,1	89,3	6,9	2,8	3,1	0,07200	130	63
2E160L/4C	15	1470	29,3	97,4	0,82	90,6	90,7	89,7	7,5	2,6	3,5	0,09200	141	63
2E180M/4	18,5	1475	34,5	120	0,85	91,3	91,4	90,4	7,7	3,2	3,4	0,15000	180	64
2E180L/4	22	1475	42,5	142	0,82	91,7	91,7	90,6	8,3	3,7	3,8	0,17000	190	64
2G200L/4	30	1475	55	194	0,85	92,5	92,6	92,1	8,0	3,1	3,6	0,23000	227	64
2G225S/4	37	1475	67	240	0,86	92,7	92,7	92,2	7,2	3,0	3,0	0,35000	314	64
2G225M/4	45	1475	80	291	0,87	93,3	93,3	92,4	7,3	3,0	3,0	0,44000	360	64
2G250M/4	55	1480	96	355	0,88	93,7	93,8	93,2	7,6	3,1	2,9	0,78000	445	67
2G280S/4	75	1485	133	482	0,87	94,0	94,1	93,4	7,9	2,6	2,8	1,11000	605	67
2G280M/4	90	1485	158	579	0,87	94,3	94,5	93,8	7,4	2,9	3,0	1,32000	665	67
2G315S/4	110	1485	195	707	0,86	94,5	94,5	93,8	7,0	2,3	2,6	2,10000	784	74
2G315M/4a	132	1485	235	849	0,86	94,7	94,5	93,8	7,0	2,3	2,6	2,50000	861	74
2G315M/4b	160	1485	280	1029	0,87	95,0	94,9	94,0	7,0	2,3	2,6	2,70000	882	74

* : IE1 Verisi / IE1 Data / IE1 Daten



Elektrik Motorlarının Performans Değerleri

Electric Motors Ratings and Performance

Elektromotoren Leistungsdaten



400V 50Hz 1000 d/d / 400V 50Hz 1000 rpm / 400V 50Hz 1000 UpM

IE2

Tip Type Typ	Tam Yük Değerleri Full-load Data Vollastdaten							Kalkış Değerleri Starting Data Startdaten			Devrilme Momenti Breakdown Torque Kippmo- ment M_K/M_N	Atalet Momenti Moment of Inertia Trägheits- moment kgm^2	B3 Motor Ağırlığı B3 Motor Gewicht kg	Ses Seviyesi Noise Level Geräusch- pegel dB(A)
	Güç	Devir	Akım	Moment	Güç Faktörü	Verim % η			Akım	Moment				
	Power	Speed	Current	Torque	Power Factor	Efficiency % η			Current	Torque				
	Leistung	Drehzahl	Nennstrom	Drehmoment	Leistungsfaktor	Wirkungsgrad % η			Nennstrom	Drehmoment				
	kW	d/d rpm UpM	A	Nm	cos ϕ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N				
2E71M/6B	0,18	920	0,6	1,87	0,67	64,5	63,0	57,0	3,2	1,9	2,3	0,00075	5,9	42
2E71M/6C	0,25	920	0,78	2,59	0,69	66,5	66,0	61,0	3,3	1,9	2,3	0,00092	6,6	42
2E80M/6A	0,37	925	1,08	3,82	0,69	71,4	71,5	70,0	4,0	2,0	2,6	0,00190	9,1	45
2E80M/6B	0,55	932	1,5	5,64	0,72	73,5	74,0	71,0	4,2	2,1	2,6	0,00240	9,9	45
2E90S/6A	0,75	940	2,0	7,62	0,71	75,9	76,1	73,1	4,1	2,0	2,6	0,00360	13,3	48
2E90L/6B	1,1	940	2,9	11,18	0,70	78,1	78,3	75,0	4,3	2,1	2,6	0,00400	14,8	48
2E100L/6A	1,5	950	3,72	15	0,73	79,8	80,2	79,5	4,5	2,1	2,6	0,01000	20,2	52
2E112M/6A	2,2	960	5,32	21,9	0,73	81,8	82,0	81,5	5,3	2,1	2,7	0,01400	25	56
2E132S/6A	3	970	6,85	29,6	0,76	83,3	84,0	83,0	5,6	2,0	2,8	0,02800	42	60
2E132M/6B	4	970	8,8	39,38	0,77	85,2	85,7	85,3	5,2	2,1	2,6	0,03400	46	60
2E132M/6C	5,5	965	12	54,4	0,77	86,0	87,2	87,0	5,7	2,1	2,7	0,03900	51	60
2E160M/6	7,5	960	15	74,6	0,83	87,2	87,2	84,5	6,5	2,5	3,0	0,11000	126	62
2E160L/6	11	965	22	108,9	0,81	88,7	88,7	85,7	6,5	2,5	3,0	0,14000	146	62
2E180L/6	15	965	29	148	0,83	89,7	89,7	86,8	6,5	2,4	3,0	0,20000	189	62
2G200L/6a	18,5	975	36,5	181	0,81	90,4	90,4	87,7	7,0	2,5	3,0	0,26000	222	61
2G200L/6b	22	975	43	215	0,81	91,1	91,1	88,4	7,0	2,5	3,0	0,32000	245	61
2G225M/6	30	980	58	292	0,81	91,7	91,7	89,6	7,0	3,0	2,6	0,69000	325	62
2G250M/6	37	985	69	359	0,84	92,2	92,2	90,1	7,0	3,0	2,6	0,99000	440	64
2G280S/6	45	990	92	434	0,76	92,7	92,7	90,9	7,0	3,3	2,6	1,50000	553	65
2G280M/6	55	990	107	531	0,80	93,1	93,1	91,5	7,0	3,3	2,6	1,60000	578	65
2G315S/6	75	990	140	723	0,82	93,7	93,7	92,4	7,0	2,5	3,0	2,50000	727	72
2G315M/6a	90	990	166	868	0,83	94,0	94,0	92,6	7,0	2,5	3,0	3,10000	805	72
2G315M/6b	110	990	198	1061	0,85	94,3	94,3	92,7	7,0	2,5	3,0	3,20000	860	72
2G315L/6a	132	990	235	1273	0,86	94,6	94,6	93,0	7,0	2,5	3,0	3,50000	1020	72
2G315L/6b	160	990	290	1543	0,84	94,8	94,8	93,2	7,0	2,5	3,0	3,80000	1120	72

