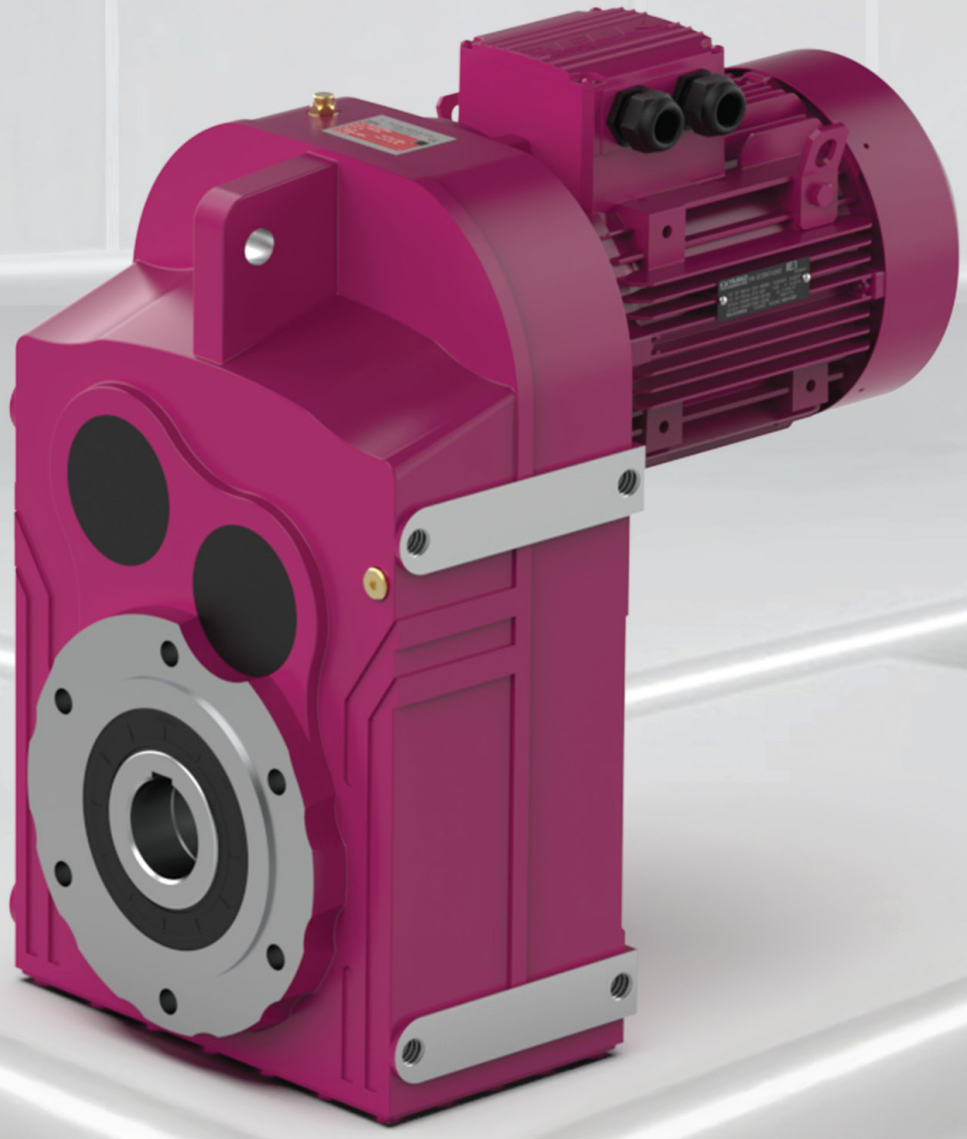
D SERİSİ
SERIES

YILMAZ
REDÜKTÖR

Delik Milli Redüktörler
Teknik Ürün Kataloğu

Hollow Shaft Gearboxes
Technical Product Catalogue



D07-...-D97
11 Büyüklük / Size
150 - 18.000 Nm

IE2 IE3 IE4
TR GB DE

D0700-0626

Firmamız, 1958 yılında saygın iş insanı Sn. Mesut Yılmaz tarafından kurulmuştur. 1963 yılından itibaren redüktör üretimine yoğunlaşan firmamız, sektörün ihtiyaçlarına uygun olarak seri, standart ve ekonomik çözümler sunmayı, en önemli hedefi ise kaliteyi her zaman ön planda tutarak uluslararası pazarda güçlü bir konum elde etmeyi amaçlamıştır.



Kurucumuz: Mesut YILMAZ
Our founder:

Our company was founded in 1958 by the respected businessman Mr. Mesut Yılmaz. Since 1963, the company has focused on the production of gearbox, aiming to provide serial, standard, and economical solutions that meet the industry's needs, with the primary goal of always prioritizing quality to establish a strong position in the international market.

Bugün, Beylikdüz'ndeki ana üretim tesisi ve Çerkezköy'deki ikinci redüktör fabrikası ile faaliyetlerini sürdüren firmamız, ELK Motor ve MES Döküm gibi grup şirketleriyle birlikte toplamda 200.000 m²'lik kapalı alanda üretim yapmaktadır.

Today, our company continues its operations with its main production facility in Beylikdüzü and a second gearbox factory in Çerkezköy. Together with our group companies, ELK Motor and MES Döküm, we carry out production in a total closed area of 200.000 m².

Yılmaz Grup Şirketleri / *Yılmaz Group Companies*



Yılmaz Redüktör Fabrikası-1 / Factory-1
40.000 m² Kapalı Alan / Closed Area
Esenyurt / İstanbul
www.yr.com.tr



Yılmaz Redüktör Fabrikası-2 / Factory-2
70.000 m² Kapalı Alan / Closed Area
Çerkezköy / Tekirdağ



ELK Motor Fabrikası / Motor Factory
50.000 m² Kapalı Alan / Closed Area
Çerkezköy / Tekirdağ
www.elkmotor.com.tr



MES Döküm Fabrikası / Casting Factory
42.000 m² Kapalı Alan / Closed Area
Çerkezköy / Tekirdağ
www.mesdokum.com.tr

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Genel Bilgiler
General Information
Einführung

Sembollerin Açıklaması	*Key of Symbols*	Erklärung der Bezeichnungen
c_t : Anahtarın devreye girme zamanı katsayısı	c_t : *Coefficient of switch on time.*	c_t : Koeffizient der Tätigkeitszeit von Schalter
f_s : Servis faktörü	f_s : *Service factor*	f_s : Betriebsfaktor
F_{ama} : Çıkış milinde müsade edilen aksiyel yükler [kN]	F_{ama} : *Permissible axial loads which can be applied to output shafts [kN]*	F_{ama} : Zulässige Axialkräfte auf Abtriebswelle [kN]
F_{ame} : Giriş milinde müsade edilen aksiyel yükler [kN]	F_{ame} : *Permissible axial loads which can be applied to input shafts [kN]*	F_{ame} : Zulässige Axialkräfte auf Antriebswelle [kN]
F_{qam} : Çıkış milinde izin verilen radyal yükler [N]	F_{qam} : *Permissible overhung loads which can be applied to output shafts [N]*	F_{qam} : Zulässige Querkräfte auf Abtriebswelle [N]
F_{qem} : Giriş milinde izin verilen radyal yükler [N]	F_{qem} : *Permissible overhung loads which can be applied to input shafts [N]*	F_{qem} : Zulässige Querkräfte auf Antriebswelle [N]
F_{qa} : Çıkış miline gelen radyal yükler [N]	F_{qa} : *Overhung loads applied to the output shaft [N]*	F_{qa} : Querkräfte auf Abtriebswelle [N]
F_{qe} : Giriş miline gelen radyal yükler [N]	F_{qe} : *Overhung loads applied to the input shafts [N]*	F_{qe} : Querkräfte auf Antriebswelle [N]
F_q : Radyal yükler [N]	F_q : *Overhung loads [N]*	F_q : Querkräfte [N]
F_a : Aksiyel yönde çıkış miline gelen yükler [N]	F_a : *Axial loads on output shaft [N]*	F_a : Axialkräfte auf Abtriebswelle [N]
i : Tahvil oranı	i : *Transmission ratio*	i : Übersetzungsverhältnis
J_{ext} : Motor miline indirgenmiş toplam dış atalet momenti [kgm^2]	J_{ext} : *The total inertia of rotating parts at outside reduced at the motor shaft [kgm^2]*	J_{ext} : Die Gesamtträgheit der rotierende Teile von der Aus gangsseite reduziert auf Motor welle [kgm^2]
M_2 : Çıkış momenti [Nm]	M_2 : *Output torque [N]*	M_2 : Ausgangsdrehmoment [N]
M_a : Anma momenti [Nm]	M_a : *Nominal torque [Nm]*	M_a : Nenndrehmoment [Nm]
n_1 : Redüktör giriş mili devri [d/dak]	n_1 : *Input speed of gearbox [rpm]*	n_1 : Antriebsdrehzahl [U/min]
n_2 : Redüktör çıkış mili devri [d/dak]	n_2 : *Output speed of gearbox [rpm]*	n_2 : Abtriebsdrehzahl [U/min]
P_{eq} : Eşdeğer güç [W]	P_{eq} : *Equivalent power [W]*	P_{eq} : Äquivalente Leistung [W]
P_e : Nominal güç (Bak. Güç-Devir Tabloları) [W]	P_e : *Nominal power (given on per formance tables) [W]*	P_e : Getriebe Nennleistung (siehe Leistungs- Drehzahltabellen) [W]
P_M : Tahrik edilecek makina için gerekli güç (Değişken yükler için eşdeğer güç alınır) [kW]	P_M : *Power consumption of the driven machine (for alternating power, refer to equivalent power) [kW]*	P_M : Leistung benötigt an der Ab triebswelle (Zur Berechnung bei variabler Leistungen äqui valente Leistung benutzen) [kW]
Ps : Ekstruder vidasındaki basınç (bar)	**Ps** : *Pressure in the extruder screw (bar)*	**Ps** : Druck in der Extruderschnecke (bar)
t : Zaman [s]	**t** : *Time [s]*	**t** : Zeit [s]
T_e : Eşdeğer moment [Nm]	T_e : *Equivalent torque [Nm]*	T_e : Äquivalentes Drehmoment [Nm]
ds : Ekstruder vidası çapı (mm)	**ds** : *Diameter of the extruder screw (mm)*	**ds** : Durchmesser der Extruderschnecke (mm)



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 makinaya sabitlenen redüktörlerdir. Dolu mil çıkışlıdır.

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.

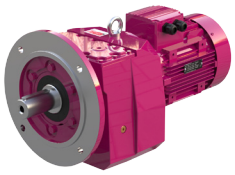
Produktpalette

Dieses Katalog umfasst nur die **D Serie** 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.



M



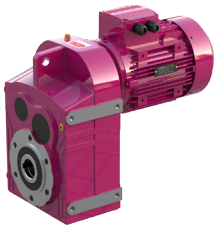
N

13 farklı büyüklükte;
Moment aralığı: 80 - 18.000 Nm
Devir aralığı: 0,1 - 800 d/dak
13 different sizes:
Torque range: 80 - 18.000 Nm
Speed range: 0,1 - 800 rpm
13 verschiedene Baugrößen:
Drehmomentbereich: 80 - 18.000 Nm
Drehzahlbereich : 0,1 - 800 U/min

- 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 makinaya sabitlenen redüktörlerdir. Delik milli veya mil çıkışlı olabilir.

- 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 connection screws on the sides, flange or torque arm on the gearbox. Can have hollow or solid output shaft.

- 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.

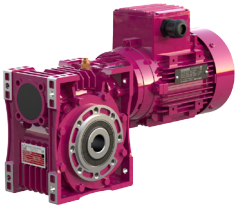


11 farklı büyüklükte;
Moment aralığı: 150 - 18.000 Nm
Devir aralığı: 0,1 - 810 d/dak
11 different sizes:
Torque range: 150 - 18.000 Nm
Speed range: 0,1 - 810 rpm
11 verschiedene Baugrößen:
Drehmomentbereich: 150 - 18.000 Nm
Drehzahlbereich : 0,1 - 810 U/min

- E Serisi
Sonsuz vida ve çark dişlili, belirli bir aralıkta ve birbirine dik konumlandırılmış giriş ve çıkış millerine sahip, çepeçevre konumlandırılmış ayak bağlantıları, flanş veya tork kolu ile makinaya sabitlenebilen redüktörlerdir. Delik milli veya mil çıkışlı olabilir.

- E Series
E series gearboxes are with worm and wormwheel. 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.

- 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.



8 farklı büyüklükte;
Moment aralığı: 5 - 1.000 Nm
Devir aralığı: 0,2 - 270 d/dak
8 different sizes:
Torque range: 5 - 1.000 Nm
Speed range: 0,2 - 270 rpm
8 verschiedene Baugrößen:
Drehmomentbereich: 5 - 1.000 Nm
Drehzahlbereich : 0,2 - 270 U/min

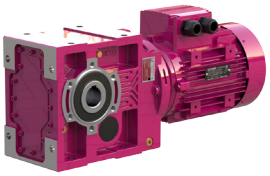


Genel Bilgiler
General Information
Einführung

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

- 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.

- 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.



13 farklı büyüklükte;
Moment aralığı: 80 - 20.000 Nm
Devir aralığı: 0,1 - 460 d/dak
13 different sizes:
Torque range: 80 - 20.000 Nm
Speed range: 0,1 - 460 rpm
13 verschiedene Baugrößen:
Drehmomentbereich: 80 - 20.000 Nm
Drehzahlbereich : 0,1 - 460 U/min

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

- T Series
T Series are gear units which are helical geared 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.

- T Serie
Die Getriebe der T-Serie sind schrägverzahnte Hohlwellen-Flachgetriebe in einem Monoblockgehäuse. Die T-Serie hat ein kompaktes Gehäuse und wird serienmäßig mit einer Abtriebshohlwelle hergestellt, sodass das Getriebe nur minimalen Platzbedarf hat.

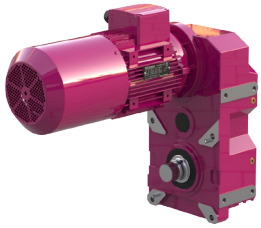


9 farklı büyüklükte;
Moment aralığı: 640 - 21.000 Nm
Tahvil oranları: 5 - 13 - 20
9 different sizes:
Torque range: 640 - 21.000 Nm
Transmission ratio: 5 - 13 - 20
9 verschiedene Baugrößen:
Drehmomentbereich : 640 - 21.000 Nm
Übersetzung: 5 - 13 - 20

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

- V Serie
V hoist drives are produced according to M1 - M8 (1Dm - 5m) crane classes.

- V Serie
V Krane und Hebezeuge werden geeignet zur Kranklasse M1 - M8 (1Dm - 5m) hergestellt.



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)

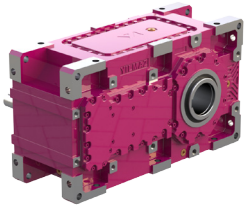


Genel Bilgiler
General Information
Einführung

- 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.

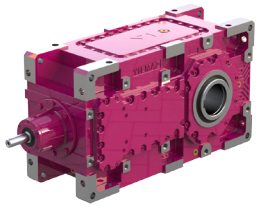
- H and B Series
These gearboxes are helical or/and bevel geared industrial gearboxes . The input and output shafts can be arranged parallel or perpendicular to each other. The gearbox can be assembled by the use of the foot connections on each side. Flange connections are optional. Can have hollow or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

- 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 Fußen, 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.



H

20 farklı büyüklükte;
Moment aralığı: 3.000 - 470.000 Nm
Tahvil oranları: 1,54 - 420
20 different sizes:
Torque range: 3.000 - 470.000 Nm
Transmission ratio: 1,54 - 420
20 verschiedene Baugrößen:
Drehmomentber. : 3.000- 470.000 Nm
Übersetzung: 1,54 - 420



B

20 farklı büyüklükte;
Moment aralığı: 3.000 - 470.000 Nm
Tahvil oranları: 3,08 - 431
20 different sizes:
Torque range: 3.000 - 470.000 Nm
Transmission ratio: 3,08 - 431
20 verschiedene Baugrößen:
Drehmomentber. : 3.000 - 470.000 Nm
Übersetzung: 3,08 - 430

- 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.

- 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.

- 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.



P



R

13 farklı büyüklükte;
Moment aralığı: 1.000 - 135.000 Nm
Tahvil oranları: 3,43 - 7588
13 different sizes:
Torque range: 1.000 - 135.000 Nm
Transmission ratio: 3,43 - 7588
13 verschiedene Baugrößen:
Drehmomentber. : 1.000 - 135.000 Nm
Übersetzung: 3,43 - 7588

- PF Serisi
Çift milli beton mikserleri (Twin Şaft) için üretilen, kasnak bağlantısı için özel giriş flanşına sahip konik giriş kademeli planet redüktörlerdir.

- PF Series
Planetary gearboxes with bevel stage input designed for twin shaft concrete mixer applications with special flange for pulley connection.

- PF Serie
Die Antriebsstufe der Baureihe PF besteht aus einem Kegelrad und diese Getriebe sind besonders für Doppelwellen-Betonmischer mit einem speziellen Antriebsflansch zur Verbindung einer Riemenscheibe konzipiert.



4 farklı büyüklükte;
Moment aralığı: 5.500 - 35.700 Nm
Tahvil oranları: 11,93 - 28,17
4 different sizes:
Torque range: 5.500 - 35.700 Nm
Transmission ratio: 11,93 - 28,17
4 verschiedene Baugrößen:
Drehmomentber. : 5.500 - 35.700 Nm
Übersetzung: 11,93 - 28,17



Genel Bilgiler
General Information
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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 uygulama 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 katalogda 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.

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

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

- Redüktörlerde oluşabilecek arızaları (mil kopması, dişli sıyırması vb.) dikkate alarak yaralanma ve hayati risk oluşumlarını önlemek için makine üreticisi veya kullanıcısı makine üzerinde veya redüktörün kullanılacağı yerde gerekli önlemleri almakta sorumludur.

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 cataloques 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 then 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.*

- The machine manufacturer or user is responsible for taking the necessary precautions on the machine or at the place where the gearbox will be used, in order to prevent injury and life-threatening risks by taking into account the shaft, gear failures etc. that may occur in the gearboxes.

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. Standart 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 beforzugt. Flachgetrieben können höhere Querkräfte als andere Getriebe tragen.

Als YILMAZ REDÜKTÖR unsere Entwurfsprinzipien sind;
- Verwenden von hohen Fertigungstech.
- 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 Ölmengen sind unverbindlich. Maßgebend ist die Ölstandsschraube in der geeigneten Montageposition. Ölviskosität und Sorte muss den Angaben des Typenschieldes 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.

- Der Maschinenhersteller oder Betreiber ist dafür verantwortlich, an der Maschine oder am Einsatzort des Getriebes die notwendigen Maßnahmen zu treffen, um Verletzungen und Lebensgefahr unter Berücksichtigung von möglichen Wellen-, Getriebeausfällen etc. in den Getrieben zu vermeiden.



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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 momenti gösterir.

- Anma Momenti (M_a) [Nm]
Redüktörün f_s=1 şartı için mekanik olarak taşıdığı moment değeridir.

- Nominal Güç (P_e) [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 3,5-25000 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 29'da 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 momentine eşit yada daha düşük olmalıdır.

- Müsade Edilen Aksiyel ve Radyal Yükler Fqem, Fqam [N]
Redüktörün giriş veya çıkış milinde müsade edilen aksiyel 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 korozif bölgeler 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_e) [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 Yilmaz Redüktör D series are between 3,5 to 25000

- 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 Fqem, Fqam [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 avaliable 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_e) [kW]
Die Nennleistung ist die mechanische Grenzfestigkeitsleistung für fs=1. Kann von der Leistung- Drehzahltabelle abgelesen werden.

- Übersetzung (i)
Wird aus dem Verhältnis von Ausgang- zu Eingangswinkelgeschwindigkeit bestimmt. Gängige Übersetzungen von Yilmaz D Serie Getrieben liegt zwischen 3,5 bis 25000

-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
Fqem, Fqam [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 korrosionsgeschützter 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
- Rücklaufsperren
- Unterschiedliche Dichtungssysteme
- Transparente Ölstandsanzeige
- 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-Korrosionkategorie. 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** *Indoor installation and outdoor installation with protection roof* *Environments with low humidity and contamination* Innenaufstellung und Außenaufstellung mit Überdachung oder Schutzeinrichtung Atmosphäre mit niedriger Luftfeuchtigkeit und Verunreinigung	**Çift Komponent Astar** *Two-Component Primer Coat* Zwei-Komponente Grundierung **Akrilik Sonkat** *Acrylic Top Coat* Akryl-Decklack	60 µm 40 µm
C3	**İç ortam ve atmosfere açık dış ortam** **Orta seviyede nem ve kirlilik olan çalışma ortamı** *Indoor installation and outdoor installation subject to weathering* *Environments with mean humidity and contamination* Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre mit mäßiger Luftfeuchtigkeit und Verunreinigung	**Epoksi Astar** *Epoxy Primer Coat* Epoxy-Grundierung **Akrilik Sonkat** *Acrylic Top Coat* Akryl-Decklack	80 µm 40 µm
C4	**İç ortam ve atmosfore açık dış ortam** **Genelde yüksek nem ve kimyasal madde olan çalışma ortamı** *Indoor installation and outdoor installation subject to weathering* *Environments with occasionally high humidity and chemical contamination* Innenaufstellung und Außenaufstellung im Freien unter Bewitterung Atmosphäre gelegentlich mit hoher Luftfeuchtigkeit und chemischer Verunreinigung	**Epoksi Astar** *Epoxy Primer Coat* Epoxy-Grundierung **Akrilik Sonkat** *Acrylic Top Coat* Akryl-Decklack	180 µm 40 µm
C5-I / C5-M	**İç ortam ve atmosfere açık dış ortam** **Sürekli yüksek nem ve kimyasal madde ile temizlik yapılan çalışma ortamı** *Indoor installation and outdoor installation subject to weathering* *Environments with permanent high humidity and chemical cleaning contamination* 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** *Epoxy Zinc Primer Coat* Epoxy-Zink-Grundierung **Epoksi Astar Miox** *Epoxy Miox Primer Coat* Epoxy-Miox-Grundierung **Akrilik Sonkat** *Acrylic Top Coat* Akryl-Decklack	70 µm 150 µm 40 µm



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 Lenght* / Gehäuselänge des Motors
Motor Büyüklüğü / *Motor Size* / Motorbaugröße
Motor Tipi / *Motor Type* / Motortyp

DN tipleri için / *For DN Types* / Für Typen DN

A06 : 63 B5 **A11** : 112 B5
B06 : 63 B14 **B11** : 112 B14
A07 : 71 B5 **A13**: 132 B5
B07 : 71 B14 **B13**: 132 B14
A08 : 80 B5 **A16**: 160 B5
B08 : 80 B14 **A18**: 180 B5
A09 : 90 B5 **A20**: 200 B5
B09 : 90 B14 **A22**: 225 B5
A10 : 100 B5 **A25**: 250 B5
B10 : 100 B14 **A28**: 280 B5

315 B5 Tip Motorlarda Kodlama
Coding in 315 B5 Type Motors
Kodierung in 315-B5-Typ-Motoren

Giriş Flanş Kodu *Input Flange Code* Antriebsflansch-Kode	**Motor Mil Çapı** *Motor Shaft Dia.* *Motorwellen Durchm.*
A31M	Ø80
A31N	Ø85
A31L	Ø90

Motor Verim Sınıfı / *Motor Efficiency Class* / Motor-Effizienzklasse

Çıkış Mili Özelliği / *Output Shaft* / Eigenschaft der Ausgangwelle

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 Disc Output* / Schrumpfscheibe
0E:**Ekstruder Çıkışlı** / *Extruder Output* / Extruder-Ausgang
0A:**Karıştırıcı Redüktörü Delik Mil Çıkışlı** / *Drywell Gearbox with Hollow Output Shaft* / Drywell Getriebe mit Hohlwelle
1A:**Karıştırıcı Redüktörü Dolu Mil Çıkışlı** / *Drywell Gearbox with Solid Output Shaft* / Drywell Getriebe mit Vollwelle
SA:**Karıştırıcı Redüktörü Sıkma Bilezikli Çıkışlı** / *Drywell Gearbox with Shrink Disc Output* / Drywell Getriebe mit Schrumpfscheibe
0K : Delik Milli Çoklu Kamalı (DIN 5480) / *Splined Hollow Output Shaft (DIN 5480)* / Hohlwelle mit Vielkeilverzahnung (DIN 5480)
1K : Mil Çıkışlı Çoklu Kamalı (DIN 5480) / *Splined Solid Output Shaft (DIN 5480)* / Vollwelle mit Vielkeilverzahnung (DIN 5480)

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
RB :**Motorlu Karıştırıcı Redüktörü** / Drywell Gearbox *with Motor* / Drywell Getriebe mit Motor
NB :**Motorsuz ve IEC B5/B14 Flanş Girişli Karıştırıcı Redüktörü** / *IEC B5/B14 Flanged* Drywell Gearbox *without Motor* / Drywell Getriebe ohne Motor und mit IEC B5/B14 Eingangsflansch
VB :**Motorlu ve IEC B5/B14 Flanş Girişli Karıştırıcı Redüktörü** / *IEC B5/B14 Flanged* Drywell Gearbox *with Motor* / Drywell Getriebe mit Motor und IEC B5/B14 Eingangsflansch
TB :**Motorsuz Karıştırıcı Redüktörü** / Drywell Gearbox *without Motor* / Drywell Getriebe mit Eingangsvollwelle ohne Motor
RE :**Ekstrüder Tipi Motorlu Redüktör** / *Extruder Type Gearbox with Motor* / Extruder Getriebe mit Motor
NE :**Ekstrüder Tipi Motorsuz ve IEC B5/B14 Flanş Girişli Redüktör** / *IEC B5/B14 Flanged Extruder Gearbox without Motor* / Extruder Getriebe ohne Motor und mit IEC B5/B14 Eingangsflansch
VE :**Ekstrüder Tipi Motorlu ve IEC B5/B14 Flanş Girişli Redüktör** / *IEC B5/B14 Flanged Extruder Gearbox with Motor* / Extruder Getriebe mit Motor und IEC B5/B14 Eingangsflansch
TE :**Ekstrüder Tipi Motorsuz Redüktör** / *Extruder Type Gearbox without Motor* / Extruder Getriebe mit Eingangsvollwelle ohne Motor

Redüktör Tipi / *Gearbox Type* **/** Getriebe

D Serisi / *D Serie* / D Serie

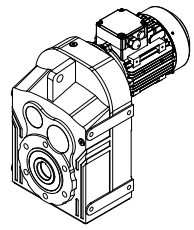
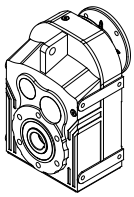
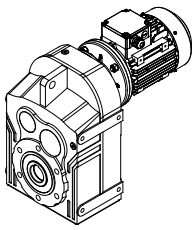
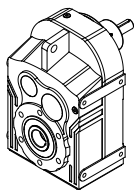
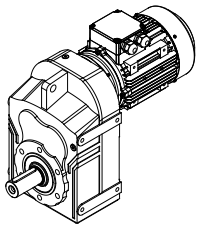
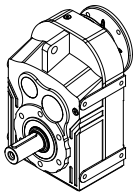
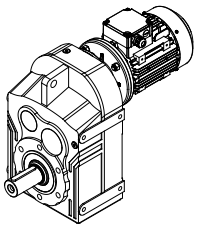
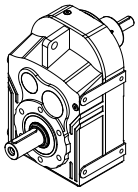
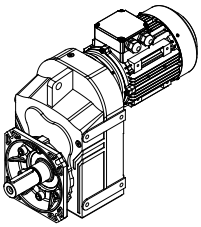
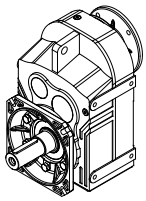
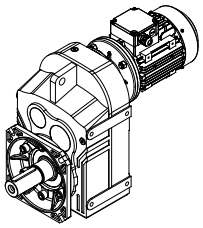
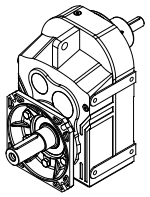
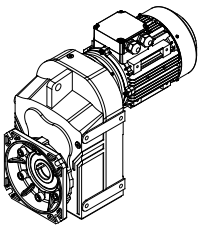
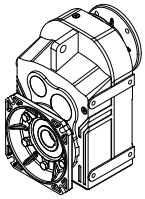
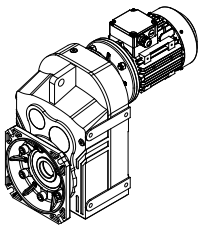
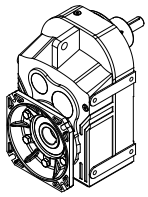
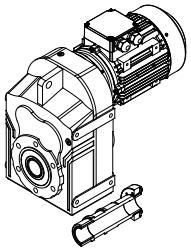
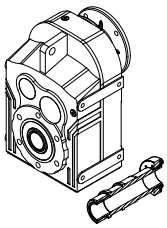
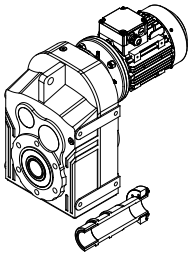
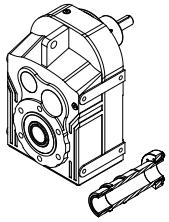
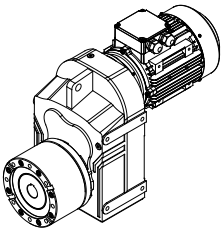
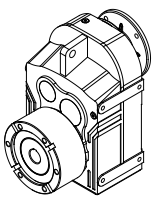
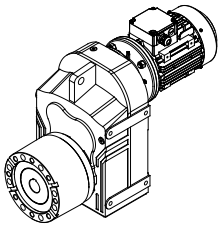
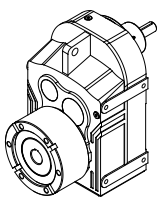
Tip Tanımlaması / *Unit Designation* / Typenbezeichnung

DR..00..	**Delik Milli Tip Helisel Redüktörler, Motor Bağlantılı, Delik Milli Çıkış** / *Hollow Shaft Helical Geared Motors, Direct Coupled Motor, Hollow Shaft Output* / Flachgetriebemotoren, 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* / Flachgetriebemotoren, Verbunden mit Motor, Ausgang mit Vollwelle
DR..02..	**Delik Milli Tip Helisel Redüktörler, Motor Bağlantılı, Mil ve Flanş Çıkışlı** / *Hollow Shaft Helical Geared Motors, Direct Motor Coupled, Solid Output Shaft and Output Flange* / Flachgetriebemotoren, Verbunden mit Motor, Ausgang mit Vollwelle Und Flansch
DR..03..	**Delik Milli Tip Helisel Redüktörler, Motor Bağlantılı Delik Milli ve Flanş Çıkışlı** / *Hollow Shaft Helical Geared Motors, Direct Motor Coupled, Hollow Output Shaft and Output Flange* / Flachgetriebemotoren, Verbunden mit Motor, Ausgang mit Hohlwelle und Flansch
DR..0S..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Sıkma Bilezik Çıkışlı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Shrink Disc Output* / Flachgetriebemotoren, Verbunden mit Motor, Ausgang mit Schrumpfscheibe
DRE..0E..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Ekstruder Çıkışlı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Extruder Output* / Flachgetriebemotoren, Verbunden mit Motor, Ausgang mit Extruder
DRB..0A..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Drywell Boğazlı ve Delik Milli** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Hollow Output Shaft with Drywell Flange* / Flachgetriebemotoren, Verbunden mit Motor, Drywell Flansch mit Hohlwelle
DRB..1A..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Drywell Boğazlı ve Mil Çıkışlı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Solid Output Shaft with Drywell Flange* / Flachgetriebemotoren, Verbunden mit Motor, Drywell Flansch mit Vollwelle
DRB..SA..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Drywell Boğazlı ve Sıkma Bilezikli Çıkışlı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Shrink Disc Output with Drywell Flange* / Flachgetriebemotoren, Verbunden mit Motor, Drywell Flansch mit Schrumpfscheibe
DR..0K..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Delik Milli ve Çoklu Kamalı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Splined Hollow Output Shaft* / Flachgetriebemotoren, Verbunden mit Motor, Hohlwelle mit Vielkeilverzahnung
DR..1K..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motor Bağlantılı, Mil Çıkışlı ve Çoklu Kamalı** / *Hollow Shaft Helical Geared Motors Direct Motor Coupled, Splined Solid Output Shaft* / Flachgetriebemotoren, Verbunden mit Motor, Vollwelle mit Vielkeilverzahnung
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* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Hohlwelle
DN..01..	**Delik Milli Tip Helisel Redüktörler, IEC B5/B14 Flanşlı Motorsuz , Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input without Motor, Solid Output Shaft* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input without Motor, Solid Output Shaft and Output Flange* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input without Motor, Hollow Output Shaft and Output Flange* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Hohlwelle und Flansch
DN..0S..	**Delik Milli Tip Helisel Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Sıkma Bilezik Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Shrink Disc Output* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Schrumpfscheibe
DNE..0E..	**Delik Milli Tip Helisel Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Ekstruder Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Extruder Output* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Ausgang mit Extruder
DNB..0A..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Drywell Boğazlı ve Delik Milli** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Hollow Output Shaft with Drywell Flange* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Drywell Flansch mit Hohlwelle
DNB..1A..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Drywell Boğazlı ve Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Solid Output Shaft with Drywell Flange* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Drywell Flansch mit Vollwelle
DNB..SA..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Drywell Boğazlı ve Sıkma Bilezikli Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Shrink Disc Output with Drywell Flange* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Drywell Flansch mit Schrumpfscheibe
DN..0K..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Delik Milli ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Splined Hollow Output Shaft* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Hohlwelle mit Vielkeilverzahnung
DN..1K..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motorsuz, Mil Çıkışlı ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged without Motor, Splined Solid Output Shaft* / Flachgetriebe, Ohne Motor mit IEC B5/B14 Flansch, Vollwelle mit Vielkeilverzahnung
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* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Hohlwelle
DV..01..	**Delik Milli Tip Helisel Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Coupled Motor, Solid Output Shaft* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Coupled Motor, Solid Output Shaft and Output Flange* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Coupled Motor, Hollow Output Shaft and Output Flange* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged with Direct Coupled Motor, Shrink Disc Output* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Schrumpfscheibe

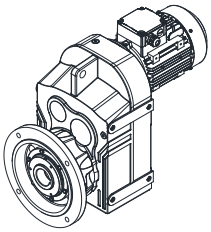
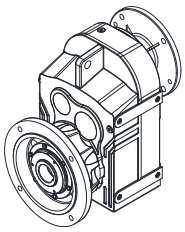
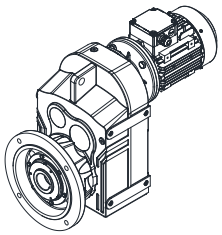
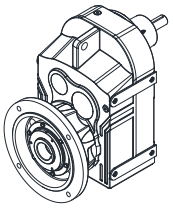
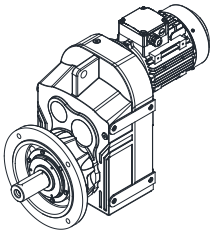
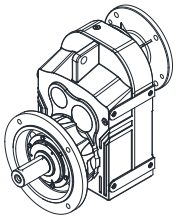
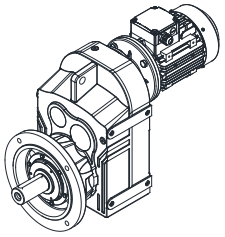
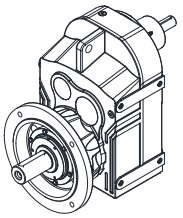
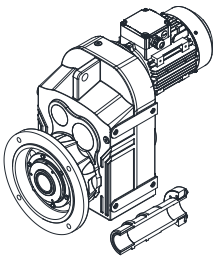
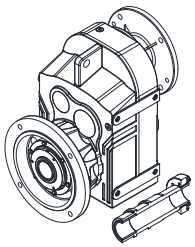
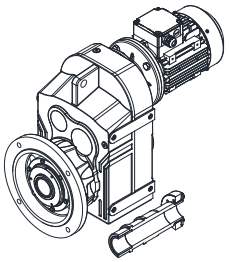
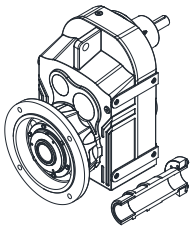
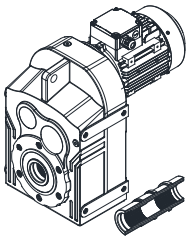
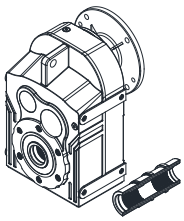
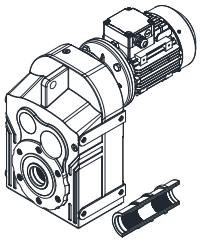
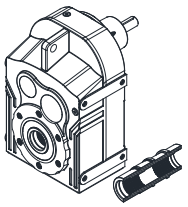
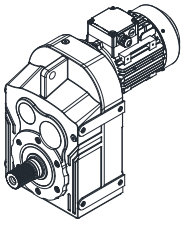
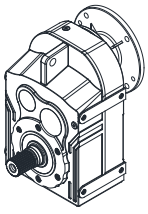
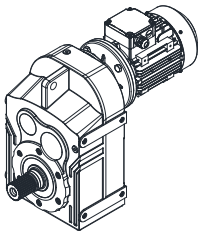
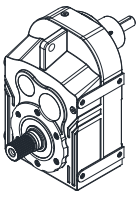


DVE..0E..	**Delik Milli Tip Helisel Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Ekstruder Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged with Direct Coupled Motor, Extruder Output* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Ausgang mit Extruder
DVB..0A..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Drywell Boğazlı ve Delik Milli** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Motor Coupled, Hollow Output Shaft with Drywell Flange* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Drywell Flansch mit Hohlwelle
DVB..1A..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Drywell Boğazlı ve Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Motor Coupled, Solid Output Shaft with Drywell Flange* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Drywell Flansch mit Vollwelle
DVB..SA..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Drywell Boğazlı ve Sıkma Bilezikli Çıkışlı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Motor Coupled, Shrink Disc Output with Drywell Flange* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Drywell Flansch mit Schrumpfscheibe
DV..0K..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Delik Milli ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Motor Coupled, Splined Hollow Output Shaft* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Hohlwelle mit Vielkeilverzahnung
DV..1K..	**Delik Milli Tip Helisel Motorlu Redüktörler, IEC B5/B14 Flanşlı Motor Bağlantılı, Mil Çıkışlı ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, IEC B5/B14 Flanged Input with Direct Motor Coupled, Splined Solid Output Shaft* / Flachgetriebe, Verbunden mit IEC B5/B14 Motorverbindung, Vollwelle mit Vielkeilverzahnung
DT..00..	**Delik Milli Tip Helisel Redüktörler, Motorsuz ve Mil Girişli, Delik Milli Çıkış** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Hollow Output Shaft* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Ausgang mit Hohlwelle
DT..01..	**Delik Milli Tip Helisel Redüktörler, Motorsuz ve Mil Girişli, Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Solid Output Shaft* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Ausgang mit Vollwelle.
DT..02..	**Delik Milli Tip Helisel Redüktörler, Motorsuz ve Mil Girişli, Mil ve Flanş Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Solid Output Shaft and Output Flange* / Flachgetriebe, 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 Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Hollow Output Shaft and Output Flange* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Ausgang mit Hohlwelle und Flansch
DT..0S..	**Delik Milli Tip Helisel Redüktörler, Motorsuz, Sıkma Bilezik Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Shrink Disc Output* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Ausgang mit Schrumpfscheibe
DTE..0E..	**Delik Milli Tip Helisel Redüktörler, Motorsuz, Ekstruder Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Extruder Output* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Ausgang mit Extruder
DTB..0A..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motorsuz ve Mil Girişli, Drywell Boğazlı ve Delik Milli** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Hollow Output Shaft with Drywell Flange* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Drywell Flansch mit Hohlwelle
DTB..1A..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motorsuz ve Mil Girişli, Drywell Boğazlı ve Mil Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Solid Output Shaft with Drywell Flange* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Drywell Flansch mit Vollwelle
DTB..SA..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motorsuz ve Mil Girişli, Drywell Boğazlı ve Sıkma Bilezikli Çıkışlı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Shrink Disc Output with Drywell Flange* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Drywell Flansch mit Schrumpfscheibe
DT..0K..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motorsuz ve Mil Girişli, Delik Milli ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Splined Hollow Output Shaft* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Hohlwelle mit Vielkeilverzahnung
DT..1K..	**Delik Milli Tip Helisel Motorlu Redüktörler, Motorsuz ve Mil Girişli, Mil Çıkışlı ve Çoklu Kamalı** / *Hollow Shaft Helical Gearboxes, Solid Shaft Input without Motor, Splined Solid Output Shaft* / Flachgetriebe, Eingang mit Vollwelle Ohne Motor, Vollwelle mit Vielkeilverzahnung

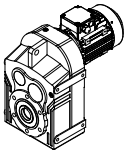
Tip Tanımlaması / *Unit Designation* / Typenbezeichnung

 **DR..00**	 **DN..00**	 **DV..00**	 **DT..00**
 **DR..01**	 **DN..01**	 **DV..01**	 **DT..01**
 **DR..02**	 **DN..02**	 **DV..02**	 **DT..02**
 **DR..03**	 **DN..03**	 **DV..03**	 **DT..03**
 **DR..0S**	 **DN..0S**	 **DV..0S**	 **DT..0S**
 **DRE..0E**	 **DNE..0E**	 **DVE..0E**	 **DTE..0E**

Tip Tanımlaması / *Unit Designation* / Typenbezeichnungen

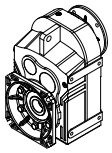
 **DRB..0A**	 **DNB..0A**	 **DVB..0A**	 **DTB..0A**
 **DRB..1A**	 **DNB..1A**	 **DVB..1A**	 **DTB..1A**
 **DRB..SA**	 **DNB..SA**	 **DVB..SA**	 **DTB..SA**
 **DR..0K**	 **DN..0K**	 **DV..0K**	 **DT..0K**
 **DR..1K**	 **DN..1K**	 **DV..1K**	 **DT..1K**

Örnek Tip Tanımlamaları
DR172.00 - 3E90S/4C - L05



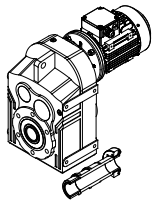
D.....: D serisi redüktör
R.....: Motor bağlantılı
1.....: Gövde büyüklük
7.....: Revizyon numarası
2.....: Kademe sayısı
00.....: Delik mil çıkışlı
3.....: Verim sınıfı
E.....: Motor tipi
90S.....: Motor büyüklüğü
4C.....: Motor kutup sayısı
L05.....: Fren Tipi

DN473.03 - A11



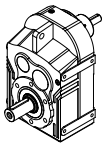
D.....: D serisi redüktör
N.....: Motorsuz ve IEC B5 giriş flanşlı
4.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
03.....: Delik milli flanş bağlantılı
A11.....: 112 tip motor, B5 bağlantı flanşı

DV573.0S - 3E100L/4C



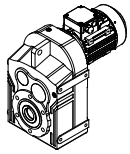
D.....: D serisi redüktör
V.....: Motorlu ve B5/B14 giriş flanşlı
5.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
0S.....: Sıkma bilezikli delik milli
3.....: Verim sınıfı
E.....: Motor tipi
100L/4.....: Motor büyüklüğü ve kutup sayısı

DT373.01



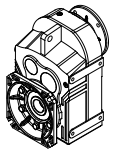
D.....: D serisi redüktör
T.....: Motorsuz giriş milli
3.....: Gövde büyüklüğü
7.....: Revizyon numarası
3.....: Kademe sayısı
01.....: Mil çıkışlı

Sample Designations
DR172 - 3E90S/4C - L05



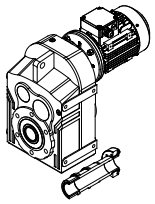
D.....: *D series gearbox*
R.....: *With motor connection*
1.....: *Gear unit size*
7.....: *Revision number*
2.....: *Stage number*
00.....: *Hollow shaft output*
3.....: Efficiency class
E.....: Motor type
90S.....: *Motor frame size*
4C.....: *Number of poles*
L05.....: *Brake type*

DN473.03 - A11



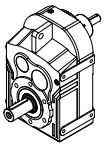
D.....: *D series gearbox*
N.....: *IEC B5 flange without motor input*
4.....: *Gear unit size.*
7.....: *Revision number*
3.....: *Stage number*
03.....: *Hollow shaft output with flange*
A11.....: Motor type 112, B5 flange

DV573.0S - 3E100L/4C



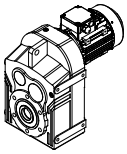
D.....: *D series gearbox*
V.....: With *Motor, B5/B14 input flange*
5.....: *Gear unit size*
7.....: *Revision number*
3.....: *Stage number*
0S.....: *Hollow shaft output with shrink disc*
3.....: Efficiency class
E.....: Motor type
100L/4.....: *Motor size and number of poles*

DT373.01



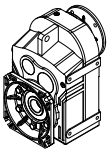
D.....: *D series gearbox*
T.....: *Solid input shaft*
3.....: *Gear unit size*
7.....: *Revision number*
3.....: *Stage number*
01.....: *Solid output shaft*

Beispiele für Typenbezeichnung
DR172 - 3E90S/4C - L05



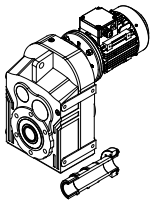
D.....: D Serie Getriebe
R.....: Motorverbindung
1.....: Größe des Gehäuses
7.....: Änderungsnummer
2.....: Stufenanzahl
00.....: Hohlausgangswelle
3.....: Effizienzklasse
E.....: Motortyp
90S.....: Motorbaugröße
4C.....: Polenzahl
L05.....: Bremse

DN473.03 - A11



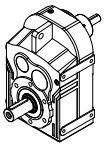
D.....: D Serie Getriebe
N.....: IEC B5 Flansch ohne Motor
4.....: Größe des Gehäuses
7.....: Änderungsnummer
3.....: Stufenanzahl
03.....: Hohlwelle mit Flanschverbindung
A11.....: Motortyp 112, B5 Motorflansch

DV573.0S - 3E100L/4C



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

DT373.01



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



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**
D.072	2	5,77-36,86	5,77-36,86	5,77-36,86	5,77-25,01	5,77-15,97	-	-
D.073	3	35,43-180,05	35,43-180,05	35,43-180,05	35,43-85,12	35,43-38,18; 67,62-72,87	-	-
D.172	2	4,86-29,67	4,86-29,67	4,86-29,67	4,86-21,79	4,86-19,04	4,86-6,72 9,54-13,19	-
D.173	3	27,18-142,89	27,18-142,89	27,18-142,89	27,18-103,34	27,18-91,25	27,18-31,52 51,88-60,16	-
D.272	2	4,98-25,78	4,98-25,78	4,98-25,78	4,98-25,78	4,98-22,67	4,98-16,00	-
D.273	3	25,44-137,94	25,44-137,94	25,44-137,94	25,44-137,94	25,44-120,49	25,44-83,46	-
D.275	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	-	-
D.276	6	1215,13-2907,19	1215,13-2907,19	1215,13-2907,19	1215,13-2907,19	-	-	-
D.282	2	4,52-6,65 8,19-29,85	4,52-6,65 8,19-29,85	4,52-6,65 8,19-29,85	4,52-6,65 8,19-29,85	3,92-24,79	3,92-18,73	3,92-14,06
D.283	3	35,35-135,52	35,35-135,52	35,35-135,52	35,35-135,52	30,28-119,16	30,28-84,12	30,28-62,55
D.285	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	-	-
D.286	6	1003,2-3800,21	1003,2-3800,21	1003,2-2692,99	1003,2-2692,99	-	-	-
D.372	2	5,05-5,79 10,25-11,77 14,74-25,42	5,05-5,79 10,25-11,77 14,74-25,42	5,05-5,79 10,25-11,77 14,74-25,42	5,05-5,79 10,25-11,77 14,74-25,42	3,65-25,42	3,65-22,46	3,65-17,65
D.373	3	27,53-171,89	27,53-171,89	27,53-171,89	27,53-171,89	23,58-151,15	23,58-106,69	23,58-79,34
D.375	5	174,88-1188,1	174,88-1188,10	174,88-1188,10	174,88-1188,10	174,88 249,67-378,91	-	-
D.376	6	1272,5-4820,21	1272,5-4820,21	1272,5-3415,8	1272,5-3415,8	-	-	-
D.472	2	-	7,54;15,02-17,01 20,74-24,54	7,54;15,02-17,01 20,74-24,54	7,54 ; 15,02-17,01 20,74-24,54	6,71-7,54 13,35-24,54	6,71-7,54 13,35-24,54	4,48-24,54
D.473	3	-	47,37-54,35 70,59-81,00 95,87-242,68	47,37-54,35 70,59-81,00 95,87-242,68	47,37-54,35 70,59-81,00 95,87-242,68	34,28-174,97	28,45-154,63	28,45-121,49
D.474	4	219,13-584,15	219,13-584,15	219,13-584,15	219,13-584,15	219,13-316,37	219,13	-
D.475	5	648,55-1937,71	648,55-1937,71	648,55-1937,71	648,55-1937,71	648,55-1140,69	648,55-752,10	-
D.476	6	2381,67-6136,10	2381,67-6136,10	2381,67-6136,10	2381,67-6136,10	2381,67-3612,19	2381,67	-
D.572	2	-	-	21,40-33,86	21,40-33,86	21,40-33,86	21,40-33,86	4,96-33,86
D.573	3	-	-	44,27-61,12 91,30-255,83	44,27-61,12 91,30-255,83	33,28-209,81	28,39-168,60	28,39-149,15
D.574	4	-	230,64-720,91	230,64-720,91	230,64-720,91	230,64-413,56	230,64-310,17	230,64
D.575	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
D.576	6	3723,69-10146,88	3723,69-10146,88	3723,69-10146,88	3723,69-10146,88	3723,69-6144,09	3723,69-4255,64	-

Tablonun devamı diğer sayfadadır. / *The table continues on the next page.* / Die Tabelle wird auf der nächsten Seite fortgesetzt.

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**
D.072	2	-	-	-	-	-	-	-
D.073	3	-	-	-	-	-	-	-
D.172	2	-	-	-	-	-	-	-
D.173	3	-	-	-	-	-	-	-
D.272	2	-	-	-	-	-	-	-
D.273	3	-	-	-	-	-	-	-
D.275	5	-	-	-	-	-	-	-
D.276	6	-	-	-	-	-	-	-
D.282	2	-	-	-	-	-	-	-
D.283	3	-	-	-	-	-	-	-
D.285	5	-	-	-	-	-	-	-
D.286	6	-	-	-	-	-	-	-
D.372	2	-	-	-	-	-	-	-
D.373	3	-	-	-	-	-	-	-
D.375	5	-	-	-	-	-	-	-
D.376	6	-	-	-	-	-	-	-
D.472	2	4,48-20,74	-	-	-	-	-	-
D.473	3	28,45-93,59;101,48	-	-	-	-	-	-
D.474	4	-	-	-	-	-	-	-
D.475	5	-	-	-	-	-	-	-
D.476	6	-	-	-	-	-	-	-
D.572	2	4,38-28,87	4,38-24,02	-	-	-	-	-
D.573	3	28,39-126,06	28,39-50,13 68,64-103,39	-	-	-	-	-
D.574	4	-	-	-	-	-	-	-
D.575	5	-	-	-	-	-	-	-
D.576	6	-	-	-	-	-	-	-

Tablonun devamı diğer sayfadadır. / *The table continues on the next page.* / Die Tabelle wird auf der nächsten Seite fortgesetzt.

Motor Büyüklüğüne Göre Geometrik Mümkün Çevrim Oranları
Geometrically Possible Combinations of Ratios According to Motor Size
Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

Tip Type Typ	**Kademe** *Stages* Stufen	**Motor Büyüklüğü** / *Motor Size* / Motorbaugröße 63	71	80	90	100	112	132
D.672	2	-	-	-	-	23,36-26,11	23,36-26,11	6,61-7,45 11,96-26,11
D.673	3	-	-	-	-	124,53-221,47	124,53-221,47	34,02-197,01
D.674	4	-	236,65-675,51	236,65-675,51	236,65-675,51	236,65-424,33	236,65-318,25	236,65
D.675	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
D.676	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	
D.772	2	-	-	-	-	-	-	7,76-8,70 13,81-22,77
D.773	3	-	-	-	-	141,55-222,16	141,55-222,16	20,87 37,12-41,85 72,50-222,16
D.774	4	-	-	223,53-256,48 321,33-632,92	223,53-256,48 321,33-632,92	223,53-632,92	223,53-632,92	223,53-384,72
D.775	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
D.776	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
D.872	2	-	-	-	-	-	-	-
D.873	3	-	-	-	-	-	-	61,27-128,20
D.874	4	-	-	-	-	139,7-607,27	139,7-607,27	139,7-537,22
D.875	5	-	744,27-2990,66	744,27-2990,66	744,27-2990,66	686,44-2990,66	686,44-1813,10	686,44-1424,58
D.876	6	-	3405,63-20225,62	3405,63-20225,62	3405,63-20225,62	3405,63-12200,68	3405,63-8612,25	3405,63-4005,78
D.972	2	-	-	-	-	-	-	-
D.973	3	-	-	-	-	-	-	-
D.974	4	-	-	-	-	197,95-523,19	197,95-523,19	197,95-523,19
D.975	5	-	-	679,53-769,47 938,19-2079,97	679,53-769,47 938,19-2079,97	603,97-2079,97	603,97-2079,97	474,03-2079,97
D.976	6	-	-	2909,37-20565,73	2909,37-20565,73	2909,37-11348,58	2909,37-8841,14	2909,37-5494,80

Motor Büyüklüğüne Göre Geometrik Mümkün Çevrim Oranları
Geometrically Possible Combinations of Ratios According to Motor Size
Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

Tip Type Typ	**Kademe** *Stages* Stufen	**Motor Büyüklüğü** / *Motor Size* / Motorbaugröße 160	180	200	225	250	280	315
D.672	2	4,28-26,11	4,28-26,11	4,28-20,20	-	-	-	-
D.673	3	30,04-167,96	30,04-139,76	30,04-106,08	-	-	-	-
D.674	4	-	-	-	-	-	-	-
D.675	5	-	-	-	-	-	-	-
D.676	6	-	-	-	-	-	-	-
D.772	2	5,06-22,77	5,06-22,77	4,47-22,77	4,47-15,46	-	-	-
D.773	3	17,95-190,20	17,95-158,23	17,95-122,41	17,95-81,72	-	-	-
D.774	4	223,53-321,33	223,53-256,48	-	-	-	-	-
D.775	5	730,48 1105,6 1656,7	-	-	-	-	-	-
D.776	6	-	-	-	-	-	-	-
D.872	2	6,35-8,12 10,97-14,02	6,35-8,12 10,97-14,02	5,07-14,02	5,07-14,02	5,07-14,02	5,07-14,02	-
D.873	3	13,58-30,50 39,92-128,20	13,58-30,50 39,92-128,20	13,58-101,03	13,58-68,62	13,58-68,62	13,58-51,94	-
D.874	4	139,7-407,42	139,70-334,15	-	-	-	-	-
D.875	5	686,44-1189,85	-	-	-	-	-	-
D.876	6	-	-	-	-	-	-	-
D.972	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
D.973	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
D.974	4	197,95-415,16	197,95-371,15	-	-	-	-	-
D.975	5	474,03-938,19	474,03-769,47	-	-	-	-	-
D.976	6	3079,47 4589,41	-	-	-	-	-	-

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 21-22).

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 22).
3. Saatteki start sayısını tespit ediniz.
4.İlk üç maddeye bağlı servis faktörünü sayfanın altında yer alan servis faktörü diyagramından seçiniz.

5. fs Redüktürümüzün tahrik tipine bağlı olarak “k” katsayısı ile çarpılarak arttırılır.

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 21-22).

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 22).

3. Determine frequency of starting
4. After determining the above mentioned factors, the service factor can be easily selected from the service factor diagram given below on this page.

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 Studen 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 (Seite 21-22).

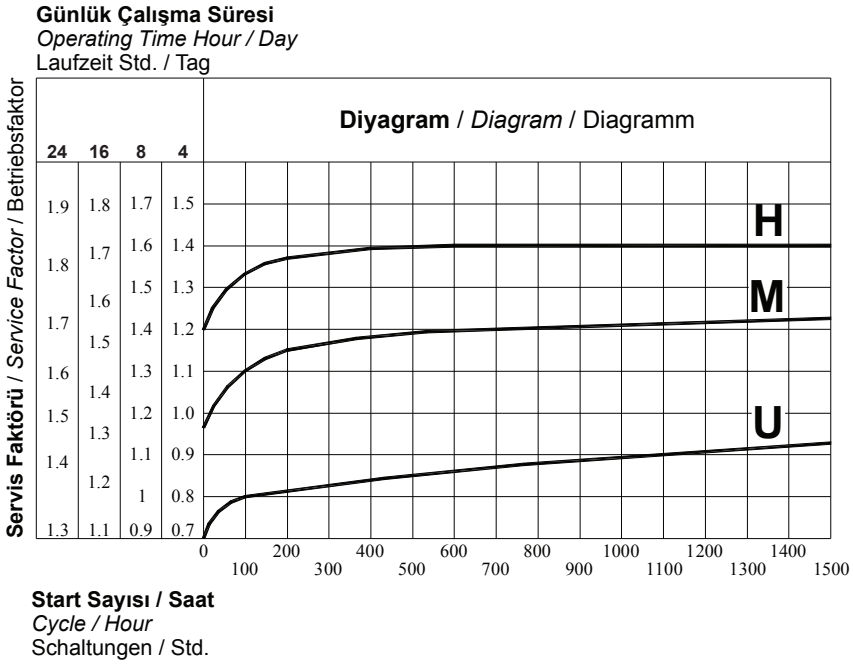
U - Gleichförmige Belastung
M - Ungleichförmige Belastung
H - Stark Ungleichförmige Belastung

Um eine bessere Auswahl zu treffen, können die Belastungsarten mit den angegebenen Formeln (Seite 22) errechnet werden.
3. Schalhäufigkeit bestimmen.
4. Nach der Bestimmung der oben angegebenen Werte können die Betriebsfaktoren aus dem Betriebsfaktor-Diagramm am unteren Rand dieser Seite ausgewählt 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 : Einzylindermotor

Servis Faktörü Diyagramı / *Service Factor Diagram* / Betriebsfaktor-Diagramm





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
- Küreli 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 Teçhizatları

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*
- *Tup 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 (zahe Flüssigkeit)
H - Prebpumpen
- Plungerpumpen

Steine und ErdenBearbeitende Masch.

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

Textilmaschinen:

M - Drukerei und Farbereimachinen
- Aufwickler
- Webstuhle
- Gerbfasser
- Reibwolfe

Erdölgewinnung:

M - Pipline 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
Einführung

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 Cepli Konveyörler
- Çelik Bantlı Konveyörler
- Dökme Yüklü Kayışlı Konv.

H - Yük Asansörleri
- Parça Yüklü Kayışlı Konv.

Building Machines:

M - Concreate 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- liquit)
- *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
- Trockenzylinder
- Glattzylinder

Kunststoffmaschinen:

M - Kalender
- Mischer

H - Extruder
- Knetwerke
- Wälzwerke

Chemische İndustrie:

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

Förderanlagen:

M - Gurttaschenbecherwerke
- Stahlbandförderer
- Gurtbandförderer (Schüttgut)

H - Schrägaufzüge
- Gurtbandförderer(Stückgut)

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**
Torque of inertia of the motor
Massenträgheitsmoment des Antriebsmotors

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

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

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	$F_i < 10$

Redüktör Dönüş Yönleri

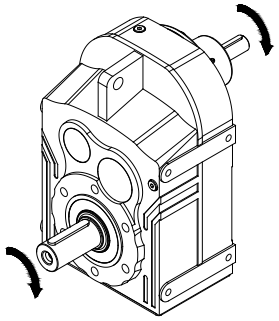
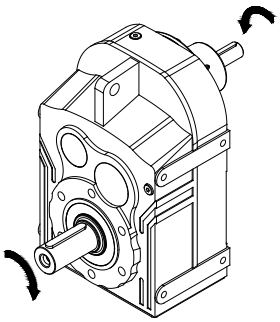
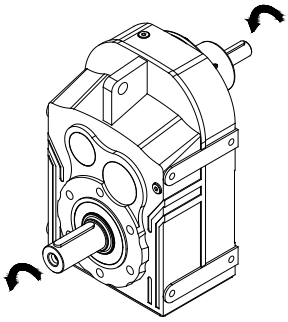
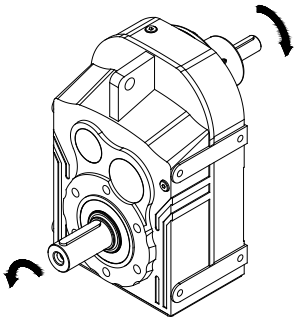
D Serisi ürünlerimiz için kullanılan yön tanımlaması aşağıdaki gibidir. Aşağıdaki tanımlama kilitli redüktörler için de geçerlidir.

Direction of Rotation

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

Getriebedrehrichtungen

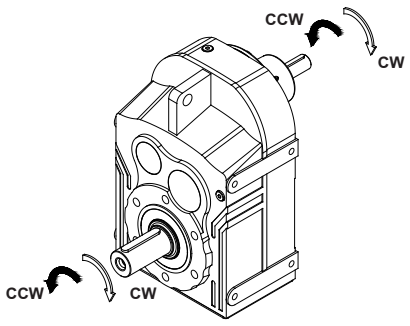
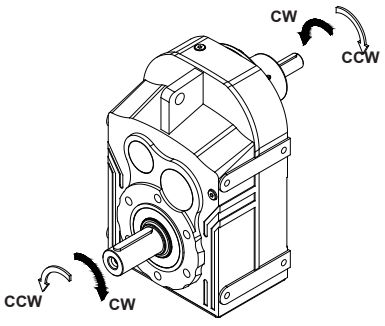
Die Drehrichtungen für D Serie Getriebe sind wie folgt definiert. Die Definition ist auch bei Getrieben mit Rücklaufsperre gültig.

	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
	

Radyal Yükler

Giriş ve çıkış miline gelebilecek radyal yükler yatak ömrüne göre belirlenmiş ve güç devir tablolarında verilmiştir. Bu tablolarda verilen F_{qam} güvenilir radyal çıkış yükü ve F_{qem} güvenilir radyal giriş yükü f_s=1,0 şartı ve yükün mil ortasına geldiği durum için verilmiştir. Farklı kullanım şartları için bize danışınız.
Darbeli yüklerin olması durumunda daha önce verilmiş olan servis faktörü tablosundaki değerler dikkate alınmalıdır. İzin verilen radyal yükler kuvvetin en kötü açı şartında etkidiği durum için verilmiştir. Mil ortasına gelen kuvvetin açısına göre daha yüksek radyal yükler mümkündür (Firmamıza danışınız). Bağlantı şekline göre oluşan radyal yük değeri F_q yandaki sayfada verilen formüller yardımı ile hesaplanabilir.
Redüktör seçiminde ;

$$F_{qa} \le F_{qam}$$
$$F_{qe} \le F_{qem}$$

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} and F_{qem} are based on fs=1,0 and are valid for forces which are applied to the midpoint of the shaft. Please consult us for other terms of use.
For shock loading applications the service factor given on the table must take into consideration. 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 next page.

In Selection ;

$$F_{qa} \le F_{qam}$$
$$F_{qe} \le F_{qem}$$

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 lenght of the application point as shown below.

Querkräfte

Die in den Leistung und Drehzahlübersicht Tabellen ange-gebenen zulässigen Radialbelastungen auf Abtriebswelle F_{qam} und Antriebswelle F_{qem} gelten bei Kraftangriff auf die Mitte Wellenendes. Den Angaben liegt der Betriebsfaktor fs=1,0 zu Grunde. Für andere Nutzungsbedingungen kontaktieren Sie uns bitte.
Bei stoßartigen Belastungsfällen ist auch hier der entsprechende Betriebsfaktor zu berücksichtigen. Bei der Ermittlung der zulässige Querkräfte sind höhere Werte möglich (Bitte Rückfragen). Die auftretende Querkraft F_q ab der Getriebewelle wird wie in der nachfolgenden Formel bestimmt.

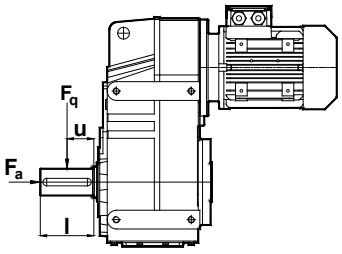
Bei dieser Auswahl;

$$F_{qa} \le F_{qam}$$
$$F_{qe} \le F_{qem}$$

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

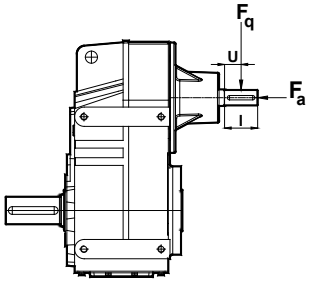
$$F_{qam}' = F_{qam} \frac{t}{y+u}$$
$$F_{qem}' = F_{qem} \frac{t}{y+u}$$

Die Werte "t" und "y" sind in den nacholgenden 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
Querkraft Auf Ausgangwelle Korrigierungszahlen

Tip *Type* Typ	DR072 DR073	DR172 DR173	DR272-3 DR275-6	DR282-3 DR285-6	DR372-3 DR374-5 DR376	DR472-3 DR474-5 DR476	DR572-3 DR574-5 DR576	DR672-3 DR674-5 DR676	DR772-3 DR774-5 DR776	DR872-3 DR874-5 DR876	DR972-3 DR974-5 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

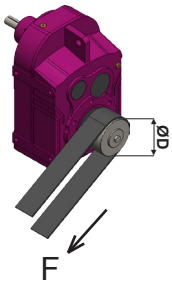


DT...01 — **Giriş Milinde Radyal Kuvvet Hesabı Düzeltme Katsayıları**
Overhung Load Correcting Values On İnput Shaft
Querkraft Auf Eingangwelle Korrigierungszahlen

Tip *Type* Typ	DT072-3 DT172-3 DT272-3-5 DT285-6 DT375-6 DT475-6	DT282-3 DT372-3 DT474 DT575-6 DT675-6	DT472-3 DT574 DT674 DT775-6 DT875-6	DT572-3 DT774 DT975-6	DT672-3 DT874	DT772-3 DT974	DT872-3	DT972-3
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







Radyal Yüklerin Hesabı

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

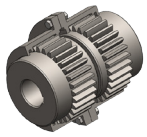
Calc. of Overhung Loads

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

1

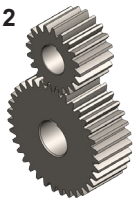


1. Elastik Kaplin
Çalışma sırasında oluşan sapmalar kaplinin güvenlik sınırları içinde ise kuvvetler ihmal edilebilir.

1. Elastic Coupling
If elastic coupling is working in its relaible 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 vernächlaßigt werden.

2



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
(Angriffwinkel=20°)

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

3



3. Küçük Hızlarda Zincir Dişli (z>17)

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

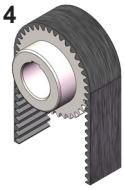
3. For Chain Drive With Low Speed (z>17)

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

3. Kettenantrieb mit niedriger Geschwindigkeit (z>17)

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

4



4. Triger Kayış

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

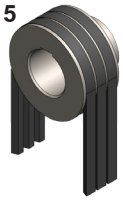
4. For Trigger Belt

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

4. Zahnriemenantrieb

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

5



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



6. Gerdirme Makaralı Kayış

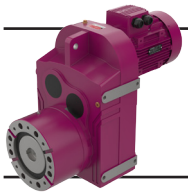
$$F_q = \frac{5000 \times M_2}{D}$$

6. Flat Belt With Spanning Pulley

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

6. Flachriemenantrieb mit Spannungstrommel

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



Ekstruder Tiplerde Müsaade Edilebilir Aksiyel Yükler
Permissible Axial Loads for Extruder Types
Zulässige Axialkräfte für Extruder Typ Getrieben

Müsade edilebilir aksiyel yükler servis faktörü 1,6'ya göre verilmiştir. / *Permissible axial loads are given for service factor 1,6.* / Zulässige Axialkräfte sind für den Betriebsfaktor 1,6 angegeben

DRE072-073				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	8,6	10,6	13,1	16,1
30	7,6	9,4	11,6	14,3
40	7,0	8,6	10,6	13,1
50	6,6	8,1	9,9	12,2
65	6,1	7,5	9,2	11,3
80	5,7	7,0	8,6	10,6
100	5,3	6,6	8,1	9,9
120	5,0	6,2	7,6	9,4
140	4,8	5,9	7,3	9,0
160	4,6	5,7	7,0	8,6
180	4,5	5,5	6,8	8,3
200	4,3	5,3	6,6	8,1
220	4,2	5,2	6,4	7,9
240	4,1	5,0	6,2	7,6
260	4,0	4,9	6,1	7,5
280	3,9	4,8	5,9	7,3
300	3,8	4,7	5,8	7,2
320	3,8	4,6	5,7	7,0

DRE172-173				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	8,6	10,6	13,1	16,1
30	7,6	9,4	11,6	14,3
40	7,0	8,6	10,6	13,1
50	6,6	8,1	9,9	12,2
65	6,1	7,5	9,2	11,3
80	5,7	7,0	8,6	10,6
100	5,3	6,6	8,1	9,9
120	5,0	6,2	7,6	9,4
140	4,8	5,9	7,3	9,0
160	4,6	5,7	7,0	8,6
180	4,5	5,5	6,8	8,3
200	4,3	5,3	6,6	8,1
220	4,2	5,2	6,4	7,9
240	4,1	5,0	6,2	7,6
260	4,0	4,9	6,1	7,5
280	3,9	4,8	5,9	7,3
300	3,8	4,7	5,8	7,2
320	3,8	4,6	5,7	7,0

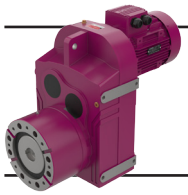
DRE272-273				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	16,0	19,7	24,3	29,9
30	14,2	17,5	21,5	26,5
40	13,0	16,0	19,7	24,3
50	12,2	15,0	18,4	22,7
65	11,2	13,8	17,0	21,0
80	10,6	13,0	16,0	19,7
100	9,9	12,2	15,0	18,4
120	9,3	11,5	14,2	17,5
140	8,9	11,0	13,5	16,7
160	8,6	10,6	13,0	16,0
180	8,3	10,2	12,5	15,4
200	8,0	9,9	12,2	15,0
220	7,8	9,6	11,8	14,5
240	7,6	9,3	11,5	14,2
260	7,4	9,1	11,2	13,8
280	7,2	8,9	11,0	13,5
300	7,1	8,7	10,8	13,3
320	7,0	8,6	10,6	13,0

DRE282-283				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	76,2	93,9	115,6	142,3
30	67,5	83,1	102,3	126,0
40	61,9	76,2	93,9	115,6
50	57,9	71,3	87,8	108,1
65	53,5	65,9	81,1	99,9
80	50,3	61,9	76,2	93,8
100	47,0	57,9	71,3	87,7
120	44,5	54,8	67,5	83,1
140	42,5	52,3	64,4	79,3
160	40,8	50,3	61,9	76,2
180	39,4	48,5	59,7	73,5
200	38,2	47,0	57,9	71,2
220	37,1	45,7	56,2	69,2
240	36,1	44,5	54,8	67,4
260	35,3	43,4	53,5	65,8
280	34,5	42,5	52,3	64,4
300	33,8	41,6	51,2	63,0
320	33,1	40,8	50,2	61,8

DRE372-373				
n_2	F_{ama}[kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	76,2	93,9	115,6	142,3
30	67,5	83,1	102,3	126,0
40	61,9	76,2	93,9	115,6
50	57,9	71,3	87,8	108,1
65	53,5	65,9	81,1	99,9
80	50,3	61,9	76,2	93,8
100	47,0	57,9	71,3	87,7
120	44,5	54,8	67,5	83,1
140	42,5	52,3	64,4	79,3
160	40,8	50,3	61,9	76,2
180	39,4	48,5	59,7	73,5
200	38,2	47,0	57,9	71,2
220	37,1	45,7	56,2	69,2
240	36,1	44,5	54,8	67,4
260	35,3	43,4	53,5	65,8
280	34,5	42,5	52,3	64,4
300	33,8	41,6	51,2	63,0
320	33,1	40,8	50,2	61,8

DRE472-473				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	101,6	125,1	154,1	189,8
30	90,0	110,8	136,4	168,0
40	82,5	101,6	125,1	154,1
50	77,2	95,0	117,0	144,1
65	71,3	87,8	108,2	133,2
80	67,0	82,5	101,6	125,1
100	62,7	77,2	95,0	117,0
120	59,3	73,1	90,0	110,7
140	56,6	69,8	85,9	105,7
160	54,4	67,0	82,5	101,6
180	52,5	64,7	79,6	98,0
200	50,9	62,7	77,2	95,0
220	49,5	60,9	75,0	92,3
240	48,2	59,3	73,0	89,9
260	47,0	57,9	71,3	87,8
280	46,0	56,6	69,7	85,8
300	45,1	55,5	68,3	84,1
320	44,2	54,4	67,0	82,4

n_2 : Çıkış Devri [d/dak] / *Output Speed [rpm]* / Abtriebsdrehzahl [U/min]



DRE572-573				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	130,9	161,2	198,6	244,5
30	115,9	142,8	175,8	216,5
40	106,3	130,9	161,2	198,5
50	99,4	122,4	150,8	185,7
65	91,9	113,2	139,3	171,6
80	86,4	106,3	130,9	161,2
100	80,8	99,4	122,4	150,7
120	76,4	94,1	115,9	142,7
140	73,0	89,9	110,7	136,2
160	70,1	86,3	106,3	130,9
180	67,7	83,3	102,6	126,3
200	65,6	80,7	99,4	122,4
220	63,7	78,5	96,6	118,9
240	62,1	76,4	94,1	115,8
260	60,6	74,6	91,9	113,1
280	59,3	73,0	89,8	110,6
300	58,1	71,5	88,0	108,3
320	56,9	70,1	86,3	106,2

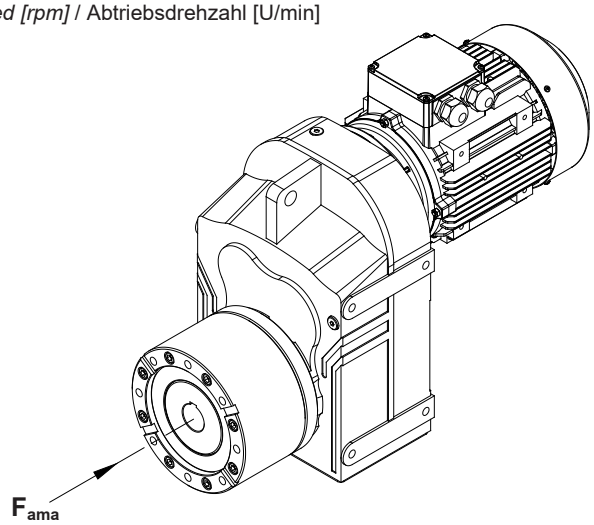
DRE672-673				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	159,3	196,1	241,5	297,4
30	141,0	173,6	213,8	263,3
40	129,3	159,3	196,1	241,5
50	121,0	148,9	183,4	225,8
65	111,8	137,7	169,5	208,7
80	105,0	129,3	159,3	196,1
100	98,2	121,0	148,9	183,4
120	93,0	114,5	141,0	173,6
140	88,8	109,3	134,6	165,7
160	85,3	105,0	129,3	159,2
180	82,3	101,4	124,8	153,7
200	79,8	98,2	120,9	148,9
220	77,5	95,4	117,5	144,6
240	75,5	93,0	114,5	140,9
260	73,7	90,8	111,8	137,6
280	72,1	88,8	109,3	134,5
300	70,6	87,0	107,0	131,8
320	69,3	85,3	105,0	129,2

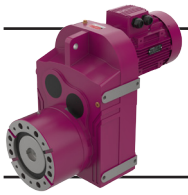
DRE772-773				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	267,7	329,7	406,0	499,9
30	237,0	291,9	359,4	442,6
40	217,4	267,7	329,7	405,9
50	203,3	250,4	308,3	379,6
65	187,9	231,4	284,9	350,8
80	176,6	217,4	267,7	329,6
100	165,1	203,3	250,3	308,2
120	156,3	192,5	237,0	291,8
140	149,2	183,8	226,3	278,6
160	143,4	176,5	217,4	267,6
180	138,4	170,4	209,8	258,3
200	134,1	165,1	203,3	250,2
220	130,3	160,4	197,5	243,2
240	126,9	156,3	192,4	236,9
260	123,9	152,6	187,9	231,2
280	121,2	149,2	183,7	226,1
300	118,7	146,2	179,9	221,5
320	116,4	143,4	176,5	217,2

DRE872-873				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	318,6	392,3	483,0	594,8
30	282,0	347,3	427,7	526,6
40	258,7	318,5	392,3	483,0
50	241,9	297,9	366,8	451,7
65	223,6	275,3	339,0	417,4
80	210,1	258,7	318,5	392,2
100	196,5	241,9	297,9	366,7
120	186,0	229,0	282,0	347,2
140	177,6	218,7	269,2	331,4
160	170,6	210,1	258,6	318,4
180	164,7	202,8	249,6	307,3
200	159,5	196,4	241,8	297,7
220	155,0	190,9	235,0	289,3
240	151,0	186,0	229,0	281,8
260	147,4	181,5	223,5	275,1
280	144,2	177,5	218,6	269,0
300	141,2	173,9	214,1	263,5
320	138,5	170,6	210,0	258,4

DRE972-973				
n_2	F_{ama} [kN]			
	Ömür / *Lifetime* / Lebensdauer **Lh [saat]** / *[hour]* / [Stunde]			
	40000	**20000**	**10000**	**5000**
20	363,5	447,6	551,2	678,8
30	321,8	396,3	488,0	600,9
40	295,2	363,5	447,6	551,1
50	276,1	339,9	418,6	515,4
65	255,1	314,2	386,9	476,3
80	239,7	295,2	363,5	447,5
100	224,2	276,0	339,9	418,5
120	212,2	261,3	321,8	396,1
140	202,6	249,5	307,2	378,2
160	194,7	239,7	295,1	363,3
180	187,9	231,4	284,9	350,7
200	182,0	224,2	276,0	339,7
220	176,9	217,8	268,2	330,1
240	172,3	212,2	261,3	321,6
260	168,2	207,2	255,0	313,9
280	164,5	202,6	249,4	307,0
300	161,2	198,4	244,3	300,7
320	158,1	194,6	239,6	294,9

n_2 : **Çıkış Devri [d/dak]** / *Output Speed [rpm]* / Abtriebsdrehzahl [U/min]





Ekstruder Vidasından Gelen Aksiyel Yük Hesabı

Ekstruder vidasından redüktöre gelen aksiyel yükü bulup kontrolünü yapmak için aşağıdaki aşamalar uygulanmalıdır.

1.Ekstruder vidasından gelen aksiyel yükü (F_a) aşağıda verilen formül ile hesaplayınız.

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps \ [kN]$$

2."Ekstruder Tiplerde Müsaade Edilebilir Aksiyel Yükler" tablolarını kullanarak çıkış devrine (n_2) denk gelen müsaade edilen yükü (F_{ama}) istenilen ömüre (L_h) göre interpolasyon kullanarak bulunuz.
3.Hesaplanan değerin müsaade edilen yükten düşük olup olmadığını kontrol ediniz.

$$Fama \geq Fa$$

Fama: Ekstruder redüktörlerde müsaade edilen aksiyel yük (kN)
Fa: Ekstruder vidasından gelen aksiyel yük (kN)
d_S: Ekstruder vidası çapı (mm)
P_S: Ekstruder vidasındaki basınç (bar)

Ekstruder Vidasından Gelen Aksiyel Yük Hesabı Örneği

Seçilen Redüktör: DRE572.0E-3E132M/4D
i: 13,60
Giriş Devri (n_1): 1465 d/dk
Çıkış Devri (n_2): 108 d/dk
Ekstruder Vidasının Çapı (d_S): 60 mm
Ekstruder Vidasındaki Basınç (P_S) : 300 bar

1.Ekstruder vidasından gelen aksiyel yük (F_a);

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps$$
$$= r \times \frac{60^2}{4 \times 10000} \times 300 = 84,82 \ kN$$

2.Müsaade edilen aksiyel yük (F_{ama});

n_2:108 d/dk, 10.000h ömür için müsaade edilen aksiyel yük interpolasyon yardımıyla **119,8 kN** bulunmuştur.
Yapılan interpolasyon işlemi;

n_2:100 d/dk, 10000h için F_{ama}: 122,4 kN
n_2:120 d/dk, 10000h için F_{ama}: 115,9 kN
n_2:108 d/dk, 10000h için

$$\frac{108 - 100}{120 - 100} = \frac{Fama - 122,4}{115,9 - 122,4}$$
$$Fama = 119,8 \ kN$$

3.Müsaade edilen aksiyel yük hesaplanan aksiyel yükten büyük ya da eşit olmalıdır.

$$Fama \geq Fa$$
$$= 119,8 \geq 84,82$$

eşitliği sağlandığı için redüktör aksiyel yük yönünden emniyetlidir.

Calculation of Axial Loads from Extruder Screw

The following steps should be applied to determine and verify the axial load transferred from the extruder screw to the gearbox.

1.Calculate the axial load (F_a) coming from the extruder screw using the formula provided below.

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps \ [kN]$$

2.Using the tables of "Permissible Axial Loads for Extruder Types," find the permissible load (F_{ama}) corresponding to the output speed (n_2) by using interpolation according to the desired lifetime (L_h).
3.Check whether the calculated value is lower than the permissible load.

$$Fama \geq Fa$$

***Fama**: Permissible axial load in extruder gearboxes (kN)*
***Fa**: Axial load from the extruder screw (kN)*
***d_S**: Diameter of the extruder screw (mm)*
***P_S**: Pressure in the extruder screw (bar)*

Axial Load from Extruder Screw Calculation Example

Selected Gearbox: DRE572.0E-3E132M/4D
i: 13,60
Input Speed (n_1): 1465 m/min
Output Speed (n_2): 108 m/min
Diameter of Extruder Screw (d_S): 60 mm
Pressure from Extruder Screw (P_S) : 300 bar

1.Axial Load from the extruder screw (F_a)

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps$$
$$= r \times \frac{60^2}{4 \times 10000} \times 300 = 84,82 \ kN$$

2.Permissible Axial Load (F_{ama})

*For n_2:108 m/min, the permissible axial load for a 10.000-hour lifetime was found to be **119,8 kN** using interpolation.*
Interpolation;

For n_2:100 m/min and 10000h; F_{ama}: 122,4 kN
For n_2:120 m/min and 10000h; F_{ama}: 115,9 kN
For n_2:108 m/min and 10000h;

$$\frac{108 - 100}{120 - 100} = \frac{Fama - 122,4}{115,9 - 122,4}$$
$$Fama = 119,8 \ kN$$

3.The calculated axial force must be less than or equal to the permissible axial load.

$$Fama \geq Fa$$
$$= 119,8 \geq 84,82$$

since the condition met, the gearbox is safe in terms of axial load.

Berechnung der Axialkraft aus der Extruderschnecke

Die folgenden Schritte sind anzuwenden, um die von der Extruderschnecke auf das Getriebe übertragene Axialkraft zu berechnen und zu überprüfen.
1.Berechnen Sie die von der Extruderschnecke kommende Axialkraft (F_a) mit der unten angegebenen Formel.

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps \ [kN]$$

2.Verwenden Sie die Tabellen „Zulässige Axialkräfte für Extrudertypen", um die der Abtriebsdrehzahl (n_2) entsprechend der zulässige Kraft (F_{ama}) durch Interpolation für die gewünschte Lebensdauer (L_h) zu ermitteln.
3.Überprüfen Sie, ob der berechnete Wert unterhalb der zulässigen Last liegt.

$$Fama \geq Fa$$

Fama: Zulässige Axialkraft in Extrudergetrieben (kN)
F_a: Axialkraft aus der Extruderschnecke (kN)
d_S: Durchmesser der Extruderschnecke (mm)
P_S: Druck in der Extruderschnecke (bar)

Beispiel zur Berechnung der Axialkraft aus der Extruderschnecke

Ausgewähltes Getriebe: DRE572.0E-3E132M/4D
i: 13,60
Eingangsdrehzahl (n_1): 1465 U/min
Ausgangsdrehzahl (n_2): 108 U/min
Durchmesser der Extruderschnecke (d_S): 60 mm
Druck in der Extruderschnecke (P_S) : 300 bar

1.Axialkraft aus der Extruderschnecke (F_a)

$$Fa = r \times \frac{ds^2}{4 \times 10000} \times Ps$$
$$= r \times \frac{60^2}{4 \times 10000} \times 300 = 84,82 \ kN$$

2.Zulässige Axialkraft (F_{ama})

Für n_2:108 U/min und eine Lebensdauer von 10.000 Stunden wurde die zulässige Axialkraft durch Interpolation mit **119,8 kN** ermittelt.
Interpolation;

Für n_2 :100 U/min und 10000h; F_{ama}: 122,4 kN
Für n_2 :120 U/min und 10000h; F_{ama}: 115,9 kN
Für n_2 :108 U/min und 10000h;

$$\frac{108 - 100}{120 - 100} = \frac{Fama - 122,4}{115,9 - 122,4}$$
$$Fama = 119,8 \ kN$$

3.Die berechnete Axialkraft muss kleiner oder gleich der zulässigen Axialkraft sein.

$$Fama \geq Fa$$
$$= 119,8 \geq 84,82$$

Da diese Bedingung erfüllt ist, ist das Getriebe in Bezug auf die Axialkraft sicher.

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 ekseni boyunca sıralanır (bakınız alttaki şekil). Bu şekile göre eşdeğer tork şu formül ile hesaplanır;

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

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

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

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 katalogda 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 the usual gearbox selection method with constant torques. The equivalent torque will be determined according 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;

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

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*

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

If all T_n values are higher then 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;

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

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

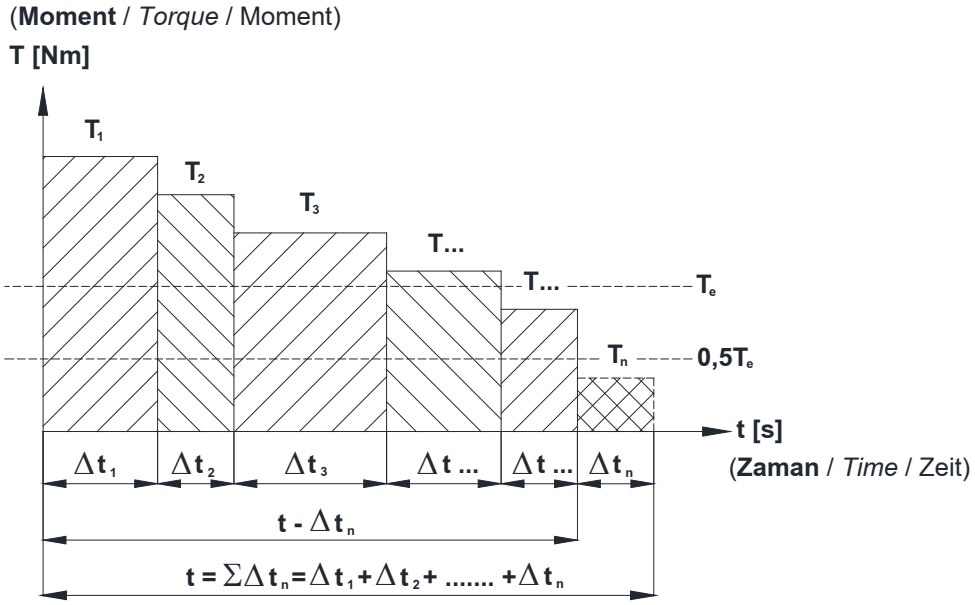
Wenn $T_n < T_e \times 0.5$ dann

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

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.





Eşdeğer Güç Hesabı Örneği

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

Veriler:
Toplam bir iş çevrimi: 2 dk.
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/dk
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;

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

=39,2 kNm

%50 eşdeğer tork;

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

Her bir tork dilimi bu değerin 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 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 katalogda 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;

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

=39,2 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 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 can make the gearbox 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;

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

=39,2 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 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.



Redüktör Seçimi

Bir redüktör seçiminde aşağıdaki yol izlenmelidir.

1. Çalışma şartlarına bağlı olarak servis faktörünü (fs) belirleyiniz. (Sayfa 20)

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 24). 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 Nm

3. Makina Gerekli Çıkış Devri:
n_2 = 50 dev/dk

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 21-22)

- 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 20)

- Makinanızın güç ihtiyacı (Redüktör Çıkış Gücü) :

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

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 20)

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 24). 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 Nm

3. Required Speed:
n_2 = 50 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 21-22), 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 20) 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) :

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

Getriebeauswahl

Für die korrekte Auswahl des Antriebes;

1.Den Betriebsfaktor(fs) in Abhängigkeit von den Betriebsbedingungen bestimmen. (Seite 20)

2. Die erforderte Drehmoment M_2 für die angetriebene Machine (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 Antriebselement bestimmen (Bezug auf Seite 24). 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 Machine berechnete Drehmoment
M_2 = 470 Nm

3. Erforderte Drehzahl:
n_2 = 50 upm

4. Betriebsdauer:
16 stunden pro Tag

5. Schalthäufigkeit:
1 Start pro Stunde

6. Antriebselement für verbindung
Getriebe-Machine:Kettentrieb (Durchmesser-130 mm)
- Von den Belastungsart Tabellen(Seite 21-22) 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 20.

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

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

- Zincir dişli uygulaması için (Sayfa 25) F_q değeri;

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

- Ortaya çıkan redüktör ihtiyacı

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs $\geq$ 1.3
$n_2 \geq$ 50 d/dk
$F_q \geq$ 7592 N

Güç ve devir sayfalarından,

DR373-3E100L/4D seçilir (Sayfa 78)

P_2= 3kW > 2,46 kW
M_2= 517 Nm > 470 Nm
fs= 1,3
n_2= 53 d/dk
F_{qam}= 16884 Nm > 7592 N
i= 27,53

- For chain drive application the requested overhang load can be calculated from (page 25);

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

- The required gearbox is as follows:

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs $\geq$ 1.3
$n_2 \geq$ 50 rpm
$F_q \geq$ 7592 N

From the performance table,

***DR373-3E100L/4D** selected (Page 78)*

P_2= 3kW > 2,46 kW
M_2= 517 Nm > 470 Nm
fs= 1,3
n_2= 53 rpm
F_{qam}=16884 Nm > 7592 N
i= 27,53

- Für Kettentrieb die erforderte Querkraft (seite 25);

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

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

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs $\geq$ 1.3
$n_2 \geq$ 50 U/min
$F_q \geq$ 7592 N

Von der Leistung- DrahzahlTabelle,

wurde **DR373-3E100L/4D** gewählt (Seite 78)

P_2= 3kW > 2,46 kW
M_2= 517 Nm > 470 Nm
fs= 1,3
n_2= 53 U/min
F_{qam}=16884 Nm > 7592 N
i= 27,53



Redüktör Seçim Formu

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

Makina İhtiyaç Gücü:
-Normal..... kW
-En çok..... kW
-En az..... kW

Tahrik Şekli:
AC Motor [ ]
AC Motor + Invertör [ ]
DC Motor [ ]
Hidromotor [ ]
1-3 Silindirli İçten Yanmalı [ ]
2-4 Silindirli İçten 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..... ^{0}C
En Yüksek..... ^{0}C
En Düşük..... ^{0}C

Kilit İhtiyacı:
Var [ ] Yok [ ]

Redüktör Giriş Opsiyonu:
R..[ ] V..[ ] N..[ ] T..[ ]
RB..[ ] VB..[ ] NB..[ ] TB..[ ]
RE..[ ] VE..[ ] NE..[ ] TE..[ ]

Redüktör Çıkış Opsiyonu:
00 [ ] 01 [ ] 02 [ ] 03 [ ] 0S [ ]
0E [ ] 0A [ ] 1A [ ] SA [ ] 0K [ ] 1K [ ]

Montaj Pozisyonu:
M1 [ ] M2[ ] M3[ ] M4 [ ] M5 [ ] M6 [ ]

Giriş Mili Bağlantı Şekli:
Elastik Kaplin [ ]
Fıçı Tipi Kaplin [ ]
Rijit Kaplin [ ]
Hidrolik Kaplin [ ]
Kayış Kasnak [ ]
Zincir Dişli [ ]
Pinyon Dişli [ ]
Bağlantı Elemanı Çapı.....mm
Radyal Yükü.....N
Radyal Yük “u” Mesafesi.....mm
Aksiyal Yükü (Mile Doğru +).....N

Çıkış Mili Bağlantı Şekli:
Elastik Kaplin [ ]
Fıçı Tipi Kaplin [ ]
Rijit Kaplin [ ]
Kayış Kasnak [ ]
Zincir Dişli [ ]
Pinyon Dişli [ ]
Delik Milli Tork Kollu [ ]
Sıkma Bilezikli Tork Kollu [ ]
Bağlantı Elemanı Çapı.....mm
Radyal Yükü.....N
Radyal Yük “u” Mesafesi.....mm
Aksiyal Yükü (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:



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.....^{0}C
Maximum.....^{0}C
Minimum.....^{0}C

Backstop Required:
Yes [ ] No [ ]

Gearbox Input Options:
R..[ ] V..[ ] N..[ ] T..[ ]
RB..[ ] VB..[ ] NB..[ ] TB..[ ]
RE..[ ] VE..[ ] NE..[ ] TE..[ ]

Gearbox output options:
00 [ ] 01 [ ] 02 [ ] 03 [ ] 0S [ ]
0E [ ] 0A [ ] 1A [ ] SA [ ] 0K [ ] 1K [ ]

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 [ ]
Schrinc 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 Shrinc 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:



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 [ ]
Kolbenmachinen mit 1-3 Zylinder [ ]
Kolbenmachinen mit 2-4 Zylinder [ ]

Motorverbindungsart (Elektromotoren):
IEC B5 Flansch [ ]
NEMA Flansch [ ]
B3 Fussausführung [ ]

IEC oder NEMA Flanschkode.....

Motorleistung:
-Nominal.....kW

Motordrehzahl:
-Normal.....U/min
-Maximal .....U/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 Antriebs-
welle.....

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 ..... ^{0}C
Maximal.....^{0}C
Minimal.....^{0}C

Rücklaufsperre erforderlich:
Ja [ ] Nein [ ]

Getriebeeingangsvarianten:
R..[ ] V..[ ] N..[ ] T..[ ]
RB..[ ] VB..[ ] NB..[ ] TB..[ ]
RE..[ ] VE..[ ] NE..[ ] TE..[ ]

Getriebeausgangsvarianten:
00 [ ] 01 [ ] 02 [ ] 03 [ ] 0S [ ]
0E [ ] 0A [ ] 1A [ ] SA [ ] 0K [ ] 1K [ ]

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:



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 sökülmeli ve redüktörün beraberinde verilen havalandırma tapası kullanılmalıdır. Bu redüktörün iç basıncından dolayı oluşacak yağ sızmalarını önleyecektir.

Redüktörlerde standart olarak kullanılan yağlar 38. sayfadaki tabloda verilmiştir. Miktarlar ve yağ tipi burada verilen değerlerden farklılık gösterebilir. 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 25.000 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 38. Oil quantities and oil type may vary from the values provided here. 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 25.000 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, Umgebumgstemparatur, Belastungsart und Lebensdauer des Öls berücksichtigt werden. Die mitgelieferte Entlüftungsschraube ist vor Inbetriebnahme oder längeren Lagern gegen die Einfüllschraube auszutauchen, 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 38 in der grau unterlegten Spalte angegebenen Schmierstoffen gefüllt. Ölmenge und Öltyp können von den hier angegebenen Werten abweichen. 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 agegebenen Füllmengen zu beachten.

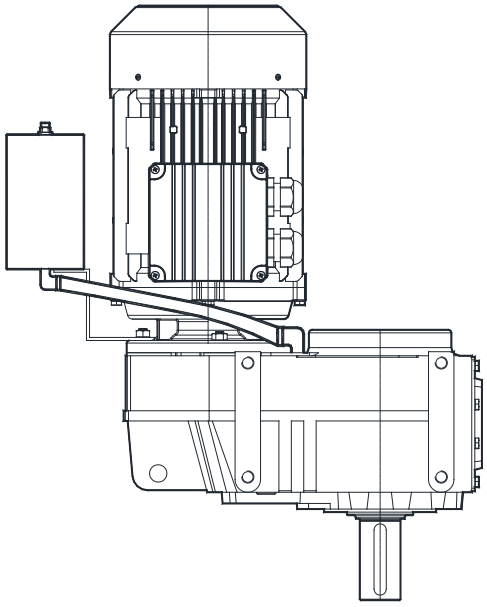
Ein Schmierstoffwechsel sollte alle 10.000 Betriebsstunden durchgeführt werden. Für synthetische Produkte beträgt diese Frist 25.000 Stunden. Bei extremen Betriebsbedingungen, z.B. hohe Luftfeuchtigkeit, aggresiver Umgebung und hohen Temparatur-schwankungen sind kürzere Schmierstoffintervalle vorteilhaft. Es ist enpfehlenswert, 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 stilsetzen erfolgen, solange das Öl noch warm ist. In dieser Zustand ist das Öl mit den Smutzpartickeln vermischt, so dass eine Entfernung des Altöls eine gute Reinigung garantiert.

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.39) 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 önlenebilmesi 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. 39) 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 then 1800 rpm we recommend using of expansion tank for all gear unit sizes for **M4** mounting position.*

Wie in der folgenden technischen Zeichnung dergestellt 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 39) sicher zu stellen. Aufgrund dieeses höhen Ölstands bildet sich Ölschaum aus, welcher aus der Entlüftungsschraube austritt.
Um das verhindern zu müssen, empfiehlt Yılmaz Redüktör bei allen D-Serie Getrieben für Getriebebaugrößen D57,D67,D77,D87 und D97 mit niedrigen Übersetzungen (i<20) einen Ölausgleichsbehälter bei der **M4** Bauform einzusetzen. Die empfehlenen 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* Gehäusegröße	**Genleşme Tankı** *Expansion Tank* Ölausgleichsbehälter	**Genleşme Tankı Kapasitesi [lt]** *Expansion Tank Capacity [lt]* Ölausgleichbehältervolumen [l]	**Kodu** *Code* *Kode*
D57..	GT006	0,6	GT006
D67..	GT020	2,0	GT020
D77..			
D87..	GT050	5,0	GT050
D97..			

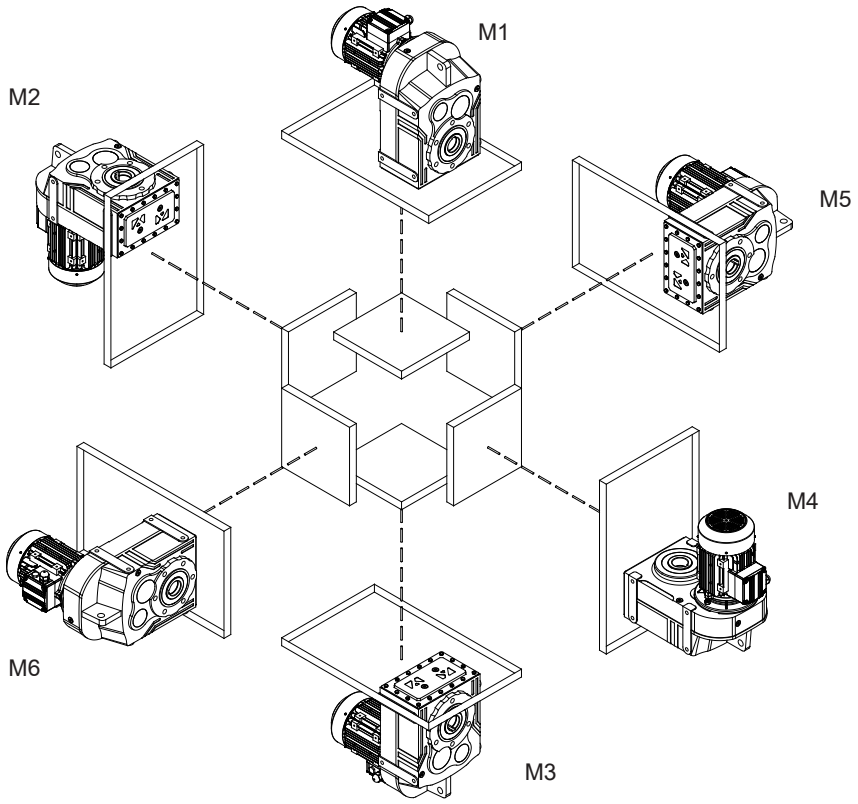


Yağ Tipleri / *Oil Types* / Schmierstoffe

Yağ Cinsi *Lubricant* Art des Schmier-stoffes	**DIN 51517-3**	**Çevre Sıcaklığı [°C]** *Ambient Temp. [°C]* Umgebungstemp. [°C] / **Daldırma Yağlama** *Dip Lubrication* Tauchschmierung	**ISO VG**	**Aral**	**Beyond Petroleum**	**Castrol**	**Klüber Lubrication**	**Mobil**	**Shell**	**Total**
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	Energsyn SG-XP 680	–	Klübersynth GH 6 -680	Mobil Glygoyle 680	Omala S4 WE 680	Carter SY 680
		-20 ... +50	460	Degol GS 460	Energsyn SG-XP 460	Alphasyn PG 460	Klübersynth GH 6 -460	Mobil Glygoyle 460	Omala S4 WE 460	Carter SY 460
		-25 ... +40	320	Degol GS 320	Energsyn SG-XP 320	Alphasyn PG 320	Klübersynth GH 6 -320	Mobil Glygoyle 320	Omala S4 WE 320	Carter SY 320
		-30 ...+30	220	Degol GS 220	Energsyn SG-XP 220	Alphasyn PG 220	Klübersynth GH 6 -220	Mobil Glygoyle 30	Omala S4 WE 220	Carter SY 220
		-35 ... +20	150	Degol GS 150	Energsyn SG-XP 150	Alphasyn 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	Enersyn EP-XF 460	Alphasyn T 460	Klübersynth GEM 4-460 N	Mobil SHC Gear 460	Omala S4 GXV 460	Carter SH 460
		-30 ... +40	320	Degol PAS 320	Enersyn EP-XF 320	Alphasyn T 320	Klübersynth GEM 4-320 N	Mobil SHC Gear 320	Omala S4 GXV 320	Carter SH 320
		-40 ... +40	220	Degol PAS 220	Enersyn EP-XF 220	Alphasyn T 220	Klübersynth GEM 4-220 N	Mobil SHC Gear 220	Omala S4 GXV 220	Carter SH 220
		-40 ... +40	150	Degol PAS 150	Enersyn EP-XF 150	Alphasyn T 150	Klübersynth GEM 4-150 N	–	Omala S4 GXV 150	Carter SH 150
		-40 ... +40	100	–	–	–	Klübersynth GEM 4-100 N	–	–	–
Gıda Uyumlu Yağ *Food Grade Oil* Lebensmittelöl	**CLP NSF H1**	-30 ... +25	220	–	–	Optileb GT 220	Klüberoil 4 UH1-220 N	Mobil SHC Cibus 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

	Ürün Kodu *Product Code* Produktcode	**Çalışma Sıcaklığı [°C]** *Working Temp. [°C]* Betriebstemperatur [°C]	**NLGI Sınıfı** *NLGI Grade* NLGI-Klasse	**Baz Yağı** *Base Oil* Basis Öl	**Renk** *Colour* Farbe
Mineral Gresler *Mineral Grease* Mineral-Fett	Mobil XHP 223	-20 ... +140	NLGI 3	ISO VG220	**Mavi** *Blue* Blau
Sentetik Gresler *Synthetic Grease* Synthetisches Fett	Mobil SHC Grease 460 WT	-30 ... +150	NLGI 1.5	ISO VG460	**Kırmızı** *Red* Rot
	Mobilith SHC 100	-40 ... +150	NLGI 2	ISO VG100	
	Mobilith SHC 007	-50 ... +150	NLGI 00	ISO VG460	
Gıda Uyumlu Gresler NSF H1 *Food Grade Grease NSF H1* Lebensmittelfett NSF H1	Mobil SHC Polyrex 222	-30 ... +170	NLGI 2	ISO VG220	**Beyaz** *White* Weiß
	Klüberlub NH1 222	-15 ... +100	NLGI 2	ISO VG220	**Sarı** *Yellow* Gelb
Sıvı Gresler (Mineral) *Liquid Grease (Mineral)* Flüssiges Fett (Mineral)	Shell Gadus S2 V 220 00	-20 ... +100	NLGI 00	ISO VG220	**Kahverengi** *Brown* Braun

Montaj Pozisyonları / *Mounting Positions* / Bauformen



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

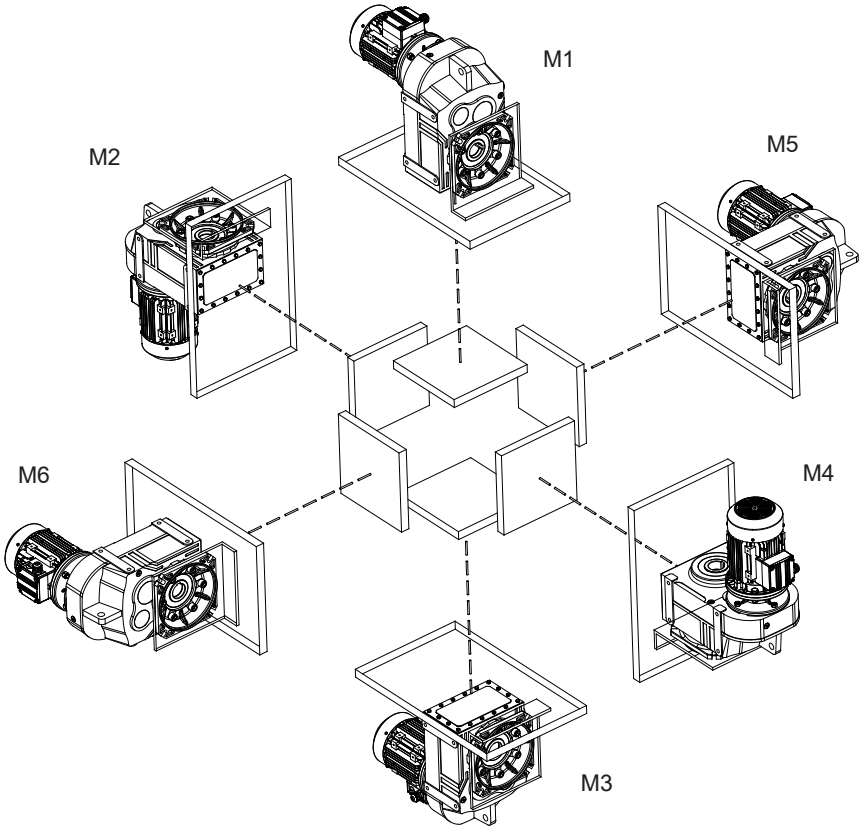
Figured mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.

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

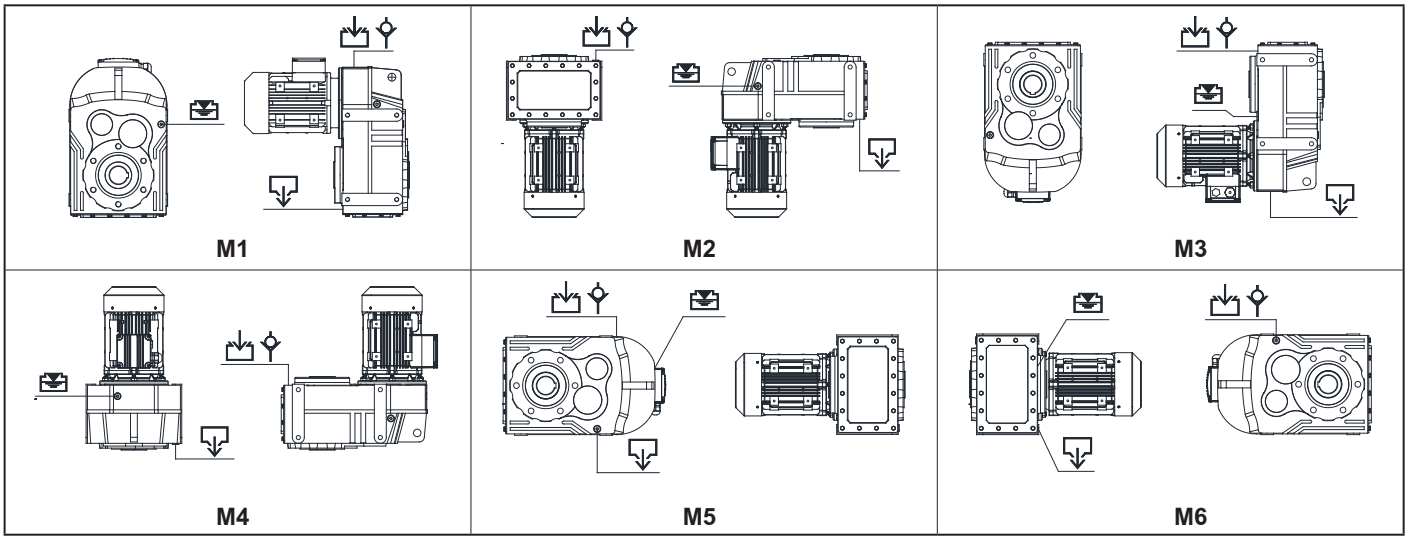
M1....M6 'ya kadar belirtilen montaj pozisyonları redüktörün duruş yönü referans alınarak belirlenmiştir. Montaj yüzeyleri bağlayıcı değildir.

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.



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	0,95	1,1	0,80	1,1	1,0	1,0
DR073	0,90	1,0	0,70	1,0	0,85	0,85
DR172	1,3	1,5	1,0	1,6	1,4	1,3
DR173	1,0	1,3	0,80	1,6	1,2	1,2
DR272	1,9	2,2	1,3	2,5	2,0	2,0
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	6,5	6,5
DR473	6,4	7,0	4,0	6,6	6,5	6,5
DR572	11	13	8,6	15	12	12
DR573	11	12	8,0	13	12	12
DR672	22	27	16	27	23	23
DR673	21	25	14	27	22	21
DR772	34	37	26	44	35	35
DR773	32	35	21	40	33	33
DR872	53	58	43	67	55	58
DR873	48,5	53	39	61	50	49
DR972	87	113	81	117	99	95
DR973	84	110	77	112	93	89

Semboller :
Symbols :
Symbole :

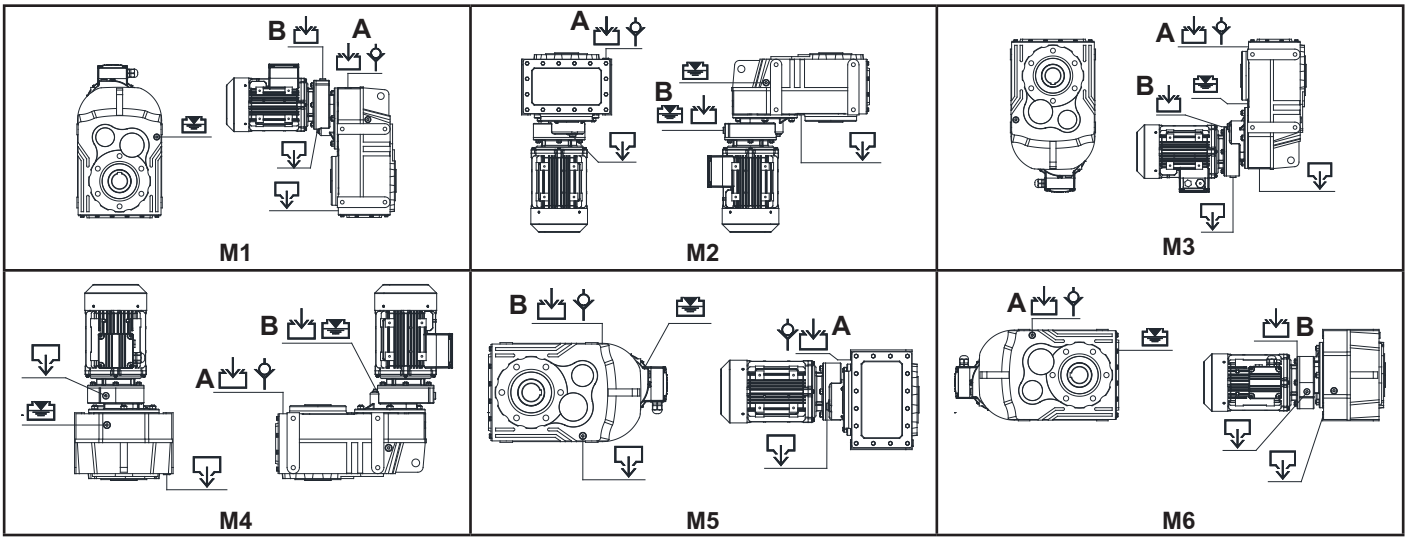
:Yağ doldurma
:Oil filling
:Ölfüllung

:Yağ boşaltma
:Drain plug
:Ölauslass

:Yağ seviyesi
:Oil level
:Ölstand

:Havalandırma
:Vent Plug
:Entlüftungsschraube

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 / 0,25	7,0 / 0,25	4,0 / 0,25	6,6 / 0,25	6,5 / 0,25	6,5 / 0,25
DR574	11 / 0,40	12 / 0,40	8,0 / 0,40	13 / 0,40	12 / 0,40	12 / 0,40
DR674	21 / 0,50	25 / 0,50	14 / 0,50	27 / 0,50	22 / 0,50	21 / 0,50
DR774	32 / 0,90	35 / 0,90	21 / 0,90	40 / 0,90	33 / 0,90	33 / 0,90
DR874	49 / 3,5	53 / 3,5	39 / 3,5	61 / 3,5	50 / 3,5	49 / 3,5
DR974	84 / 5,0	110 / 5,0	77 / 5,0	112 / 5,0	93 / 5,0	89 / 5,0

Semboller :
Symbols :
Symbole :

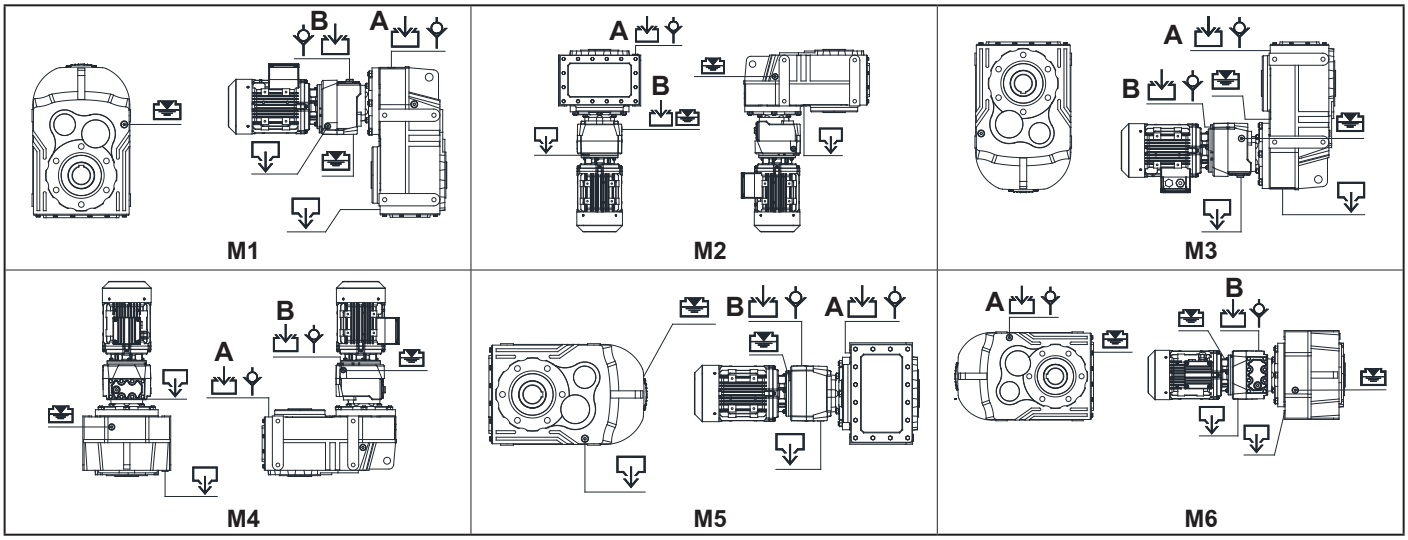
:Yağ doldurma
:Oil filling
:Ölfüllung

:Yağ boşaltma
:Drain plug
:Ölauslass

:Yağ seviyesi
:Oil level
:Ölstand

:Havalandırma
:Vent Plug
:Entlüftungschraube

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 / 0,40	2,0 / 0,60	1,2 / 0,50	2,0 / 0,60	2,0 / 0,50	2,0 / 0,50
DR276	1,8 / 0,35	2,0 / 0,55	1,2 / 0,50	2,0 / 0,55	2,0 / 0,40	2,0 / 0,40
DR285	2,3 / 0,40	2,9 / 0,60	1,8 / 0,50	2,6 / 0,60	2,3 / 0,50	2,5 / 0,50
DR286	2,3 / 0,35	2,9 / 0,55	1,8 / 0,50	2,6 / 0,55	2,3 / 0,40	2,5 / 0,40
DR375	3,0 / 0,40	3,7 / 0,60	2,0 / 0,50	3,5 / 0,60	3,3 / 0,50	3,3 / 0,50
DR376	3,0 / 0,35	3,7 / 0,55	2,0 / 0,50	3,5 / 0,55	3,3 / 0,40	3,3 / 0,40
DR475	6,4 / 0,65	7,0 / 0,95	4,0 / 0,70	6,6 / 0,95	6,5 / 0,70	6,5 / 0,70
DR476	6,4 / 0,60	7,0 / 0,80	4,0 / 0,70	6,6 / 0,80	6,5 / 0,65	6,5 / 0,65
DR575	11 / 1,2	12 / 2,1	8,0 / 2,0	13 / 2,1	12 / 1,4	12 / 1,4
DR576	11 / 1,1	12 / 2,0	8,0 / 1,9	13 / 2,0	12 / 1,3	12 / 1,3
DR675	21 / 1,2	25 / 2,1	14 / 2,0	27 / 2,1	22 / 1,4	21 / 1,4
DR676	21 / 1,1	25 / 2,0	14 / 1,9	27 / 2,0	22 / 1,3	21 / 1,3
DR775	32 / 2,0	35 / 3,4	21 / 3,1	40 / 3,4	33 / 2,8	33 / 2,8
DR776	32 / 1,9	35 / 3,3	21 / 3,0	40 / 3,3	33 / 2,6	33 / 2,6
DR875	49 / 2,0	53 / 3,4	39 / 3,1	61 / 3,4	50 / 2,8	49 / 2,8
DR876	49 / 1,9	53 / 3,3	39 / 3,0	61 / 3,3	50 / 2,6	49 / 2,6
DR975	84 / 4,5	110 / 7,5	77 / 7,5	112 / 7,5	93 / 5,5	89 / 5,5
DR976	84 / 4,0	110 / 7,0	77 / 7,0	112 / 7,0	93 / 5,0	89 / 5,0

Semboller :
Symbols :
Symbole :

:Yağ doldurma
:Oil filling
:Ölfüllung

:Yağ boşaltma
:Drain plug
:Ölauslass

:Yağ seviyesi
:Oil level
:Ölstand

:Havalandırma
:Vent Plug
:Entlüftungschraube

MOTORLAR
AC Motorlar
a- Genel Özellikler:

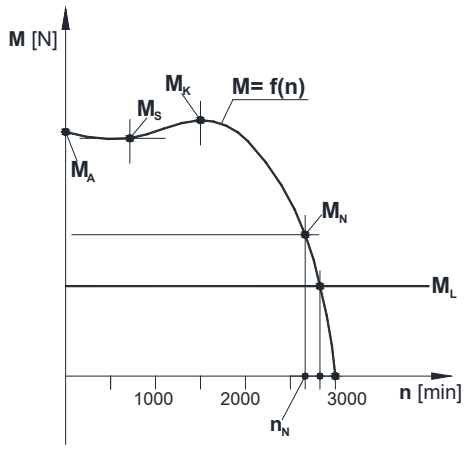
Basit konstrüksiyonlu, bakım gerektirmez, güvenirliği yüksek ve uygun fiyatlı olmaları nedeni ile trifaze asenkron motorlar en çok kullanılan motor cinsidir. Bu motorların çalışma karekteristikleri moment-hız eğrisi ile belirlenir. Aşağıda bu karekteristik eğrisine bir örnek verilmiştir.

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.

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.



M_A: Start momenti / *Starting torgue* / Anlaufmoment

M_S: Demeraj momenti / *Pull-up torgue* / Anziehungsmoment

M_K: Frenleme momenti / *Pull-out torgue* / Bremsungsmoment

M_N: Motorun ilettiği moment / *Motor rated torque* / Treibmoment

M_L: Yük momenti / *Load torque* / Lastmoment

Motorun her start yapılmasında bu eğriye uygun hareket eder ve yük momenti 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 .....:± 20%
Kalkış Akımı.....:± 20%
Kalkış Momenti.....:-15 /+25 %
Kütle Atalet Momenti.....:± 10%
Verim (37 kW'a kadar).....:-0,15 (1-η)

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 .....:± 20%
Starting current .....:± 20%
Starting torque .....:-15 /+25 %
Moment of inertia.....:± 10%
Efficiency (up to 37 kW).....:-0,15 (1-η)

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 3 phasigen 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:

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

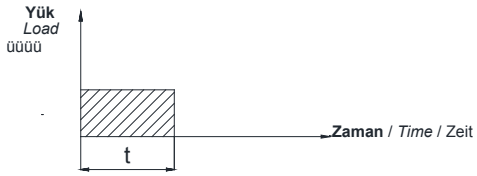
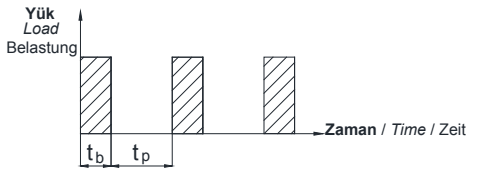
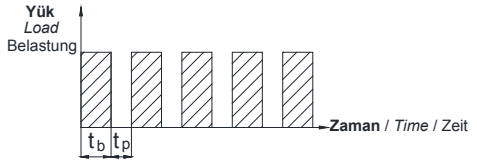
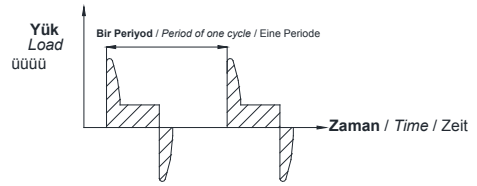
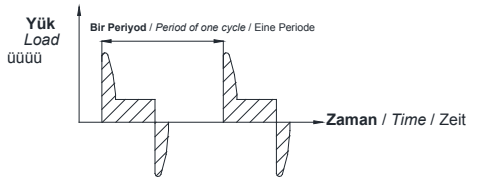
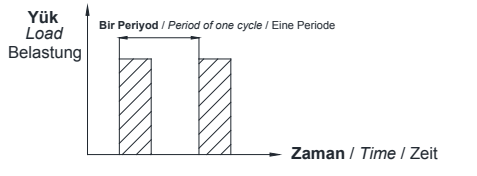
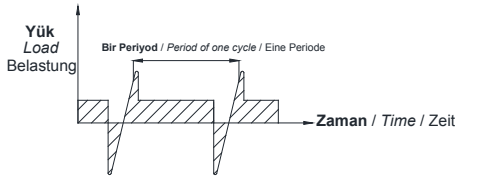
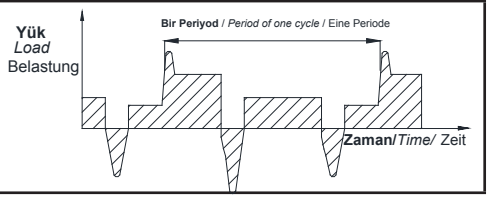
Für die nominale Werte der Drehstrommotoren sind folgende Abweichungen zulässig:
Schlumpf s .....:± 20%
Anzugsstrom .....:± 20%
Anzugsmomet .....:-15 /+25 %
Massentägheitsmoment .....:± 10%
Wirkungsgrad (bis 37 kW).....:-0,15 (1-η)



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** *Continuous operation under constant load* Dauerbetrieb mit konstanter Belastung	
S2	**Sabit yükte kısa süreli çalışma** *Short-time duty under constant load* Kurzbetrieb mit konstanter Belastung	
S3	**Yolvermede sıcaklık artımı olmadan periyodik çalışma** *Periodic duty without influence of start-up on temperature* Aussetzbetrieb ohne Einfluß des Anlaufens auf die Temparatur	
S4	**Yolvermede sıcaklık artımı olan periyodik çalışma** *Periodic duty with influence of start up on temperature* Aussetzbetrieb mit Einfluß des Anlaufes auf die Temparatur	
S5	**Yolvermede ve frenlemede sıcaklık artımlı periyodik çalışma** *Periodic duty with influence of startup and braking on temp.* Aussetzbetrieb mit Einfluß des Anlaufens / Bremsung auf die Temp.	
S6	**Sürekli orta darbeli çalışma** *Continuous operation with intermittent loading* Durchlaufbetrieb mit Ausetzungsbelastung	
S7	**Elektriksel frenlemeli sürekli orta darbeli çalışma** *Continuous operation with intermittent loading and breaking* Ununterbrochener Betrieb mit Anlauf und Bremsung	
S8	**Devir ve yük değişimli sürekli çalışma** *Continuous operation duty type with related load-speed changes* Ununterbrochener periodischer Betrieb mit Drehzahländerung	



c- Koruma Sınıfı:
Yılmaz Redüktörde standart olarak IP54 (IEC 34-5) koruma sınıflı 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 görede 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:
Yilmaz Reduktor 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:
Yilmaz Reduktor uses F (IEC 317-8) insulation class electric motors for standard products. H insolation 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. Bellow 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:
Yilmaz Redüktor Getriebemotoren werden serienmäßig mit Schutzart IP54 (IEC34-5) ausgeführt. Für andere Schutzarten bitte rückfragen.

d- Isolationsklasse:
Yilmaz Reduktor 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.

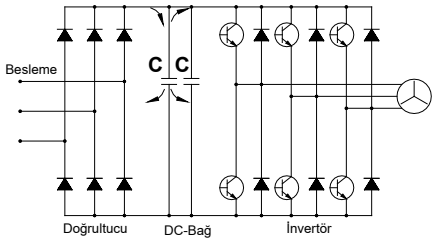
Verim Sınıfları *Efficiency Classes* Energieeffizienzklassen			**4 Kutuplu Motor Verim Değeri Hesabı** *Calculating Efficiency Values of Motors with 4 Poles* Berechnung der Wirkungsgrade von Elektromotoren mit 4 Polen	
IE2	EFF 1	**Yüksek Verim** *High Efficiency* Hohe Energieeffizienz	A=0,0278 B=-1,9247 C=10,4395 D=80,9761	$\eta_{Mn} = A \times [\log_{10}(P_L)] + B \times [\log_{10}(P_L)]^2 + C \times \log_{10}(P_L) + D$
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	A=0,2412 B=-2,3608 C=8,446 D=86,8321	

4 Kutuplu Motor Verim Değerleri *Efficiency Values of Motor with 4 poles* Sollwirkungsgrad des Motors mit 4 Polen	**Anma Yükü [kW]** *Nominal Load [kW]* Nennlast [kW]	**Verim Sınıfı** / *Efficiency Class* / Energieeffizienzklasse			**Anma Yükü [kW]** *Nominal Load [kW]* Nennlast [kW]	**Verim Sınıfı** / *Efficiency Class* / Energieeffizienzklasse	
		IE2	**IE3**	**IE4**		**IE3**	**IE4**
	0,12	%60,1	%66,0	-	**11**	%91,5	%93,3
	0,18	%64,7	%69,9	-	**15**	%92,1	%93,9
	0,25	%74,0	%76,0	-	**18,5**	%92,6	%94,2
	0,37	%76.1	%78,5	-	**22**	%93,0	%94,5
	0,55	%77,1	%80,8	-	**30**	%93,6	%94,9
	0,75	-	%82,5	-	**37**	%93,9	%95,2
	1,1	-	%84,5	-	**45**	%94,2	%95,4
	1,5	-	%85,3	-	**55**	%94,6	%95,7
	2,2	-	%86,7	-	**75**	-	%96,0
	3,0	-	%87,7	-	**90**	-	%96,1
	4,0	-	%88,6	-	**110**	-	%96,3
	5,5	-	%89,6	%91,9	**132**	-	%96,4
	7,5	-	%90,4	%92,6	**160**	-	%96,6
	9,2	-	%90,4	-	**200**	-	%96,7

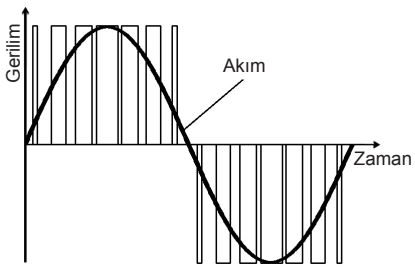
Motorlu redüktörlerimizde kullanılan motorların verimleri tabloda gri olarak belirtilmiştir. /*The efficiencies of the motors used in our geared motors have been indicated in gray in the table.* / Die Effizienz der Motoren, die in unseren Getriebemotoren verwendet werden, wurde in der Tabelle in Grau angegeben.

f- AC Frekans İnvertörler

Doğru Akımı (DC), alternatif akıma (AC) çeviren elektronik çeviricilere invertör 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 invertör olarak isimlendirilir) elektriksel blok şeması aşağıda verilmiştir.

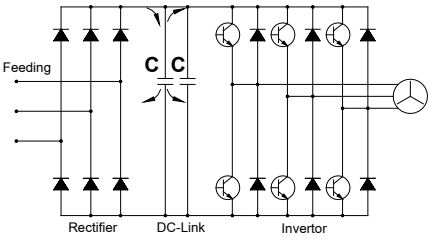


Tam dalga doğrultucuları besleyen üç faz besleme akımı DC-bağ kapasitörlerine iletilir. Kapasitörler voltajdaki dalgalanmaları azaltır ve kısa süreli ağdaki akım kesintilerinde enerji sağlar. Kapasitörlerdeki voltaj kontrolsüzdür ve gelen AC akımın pik akım değerlerine bağlıdır. DC akım tekrar AC akıma, Puls genişliği modulasyonu (PWM) kulanılarak 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 sinusodial bir motor akımı oluşur. Puls genişliği modulasyonu aşağıda gösterilmiştir.

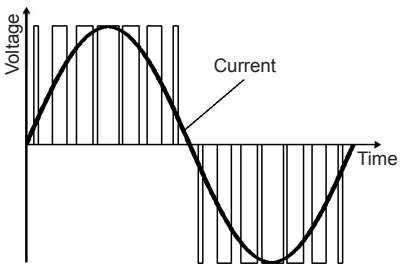


f- AC Frequency Inverters

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.

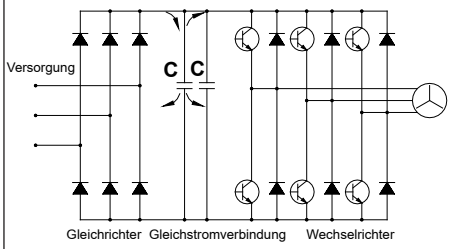


The three phase supply is fed into a full wave rectifier which supplies the DC link capacitors. The capacitors reduce the voltage ripple (especially on single supplies) and supply energy for short mains breaks. The voltage on the capacitors is uncontrolled and depends on the peak AC supply voltage. The 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 sinusodial motor current. Pulse Width Modulation is shown in the figure below.

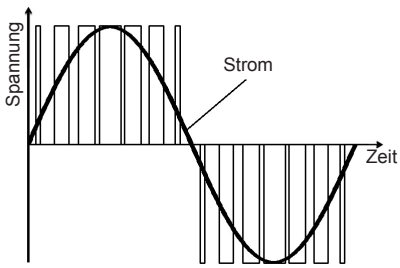


f- AC Frequenz Umrichter

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 dreiphasiger 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



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 sargılarla ulaştırılır. Bu karbon fırçalar aşındığından DC motorlar belirli periyotlarla bakıma alınmalıdır. İyi kontrol edilebilme 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 yükle beraber düşer. Bu devir farkı ufak güçlü motorlarda büyük, büyük güçlü motorlarda ise ufaktır. Fakat bu hız farkı DC doğrultucu cihazda armatür voltajı (I x 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 compensated in the DC converter device by adjusting (I x 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 Wechselspannung, 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 großeren Motoren kleiner. Der Drehzahlunterschied kann geregelt werden mit (IxR) 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



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.

30kW ve daha büyük motorlarda fren aşınmasından dolayı oluşacak riskleri önlemek için proximity switch standart olarak kullanılmalıdır. Genel olarak kullanılacak kompakt motorlarda fren seçimi motor gövde büyüklüğüne göre değil, motor gücüne göre yapılmalıdır.

Fren Çeşitleri
a) Soğutmasız tip frenler
Motor fanı çıkarılıp motor kapağı arkasına akuple 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 daimi 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 manuel olarak sistemin açılması gereken yerlerde (otomatik giriş kapıları, dış cepe boyama asansörleri 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 kullanılmaktadır. 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 bobininin voltajına düşürülür. Fren bobininin DC voltajı etiket üzerinde belirtilmiştir.

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.

A proximity switch must be used as standard to prevent risks caused by brake wear for motors with 30 kW and above. Generally, for compact motors, brake selection should be based on motor power rather than motor frame size.

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 (releasing) 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 Reduktor.
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.

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 Bremsscheibe, die axial beweglich auf dem Mitnehmer angeordnet ist, frei drehen. Wird der Strom unterbrochen, drücken die Feder die Ankerscheibe gegen die Bremsscheibe und halten die Motorwelle an.

Für Motoren mit einer Leistung von 30 kW und mehr sollte standardmäßig ein PRX-Sensor verwendet werden, um Risiken durch Bremsenverschleiß zu vermeiden. Allgemein sollte die Bremsenauswahl bei kompakten Motoren auf der Motorleistung und nicht auf der Baugröße des Motors basieren.

Bremsearten:
a)Bremsen ohne Kühlung
Diese Bremsen sind für Kurzlaufzeiten geeignet. 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. , anwendbar. 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 bestellt werden. Die Wicklungen der Bremsen brauchen Gleichspannung und deswegen abhängig von Bremsenart zwischen Versorgungsspannung und Wicklungsspannung soll Halbwellen-, Vollweggleichrichter oder Transformator verwendet werden. Als Standard die Bremsen werden mit 230V Versorgungsspannung und Halbwellengleichrichter geliefert.
a) Bremsen mit 230V Versorgungsspannung
230V AC Versorgungsspannung von Klemmenkasten wird auf die Wicklungsspannung abhängig von der Bremsentyp mit Halbwellen-oder Vollweggleichrichter reduziert. Wicklungsspannung ist auf dem Etikett angegeben.
b) Bremsen mit 400V Versorgungsspannung
400V AC Versorgungsspannung von Klemmenkasten wird auf die Wicklungsspannung mit Halbwellengleichrichter reduziert. Wicklungsspannung ist auf dem Etikett angegeben.

c) 24V DC Frenler
Kullanılan fren momentinin büyüklüğüne göre besleme transformatörü seçilir. Şebekeden veya motorun klemens kutusundan alınan besleme voltajı transformatörde 29 V'a çevrilen gerilim tam dalga doğrultuculardan geçerek 24V DC'ye çevrilir ve fren bobini beslenir.

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.

c) 24V DC Brakes
The transformator'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.

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

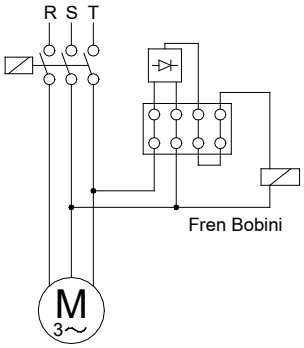
b) Sudden Braking
This type of connections are mostly used in systems when short braking times are needed. The braking torque will be produced as soon as the current fails. These brakes are mostly used in hoisting of lifting units and elevators.

c) 24 V 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 Gleichstromspannung umgewandelt. Die Größe des Transformators ist abhängig von der Größe des Bremsmoments.
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.

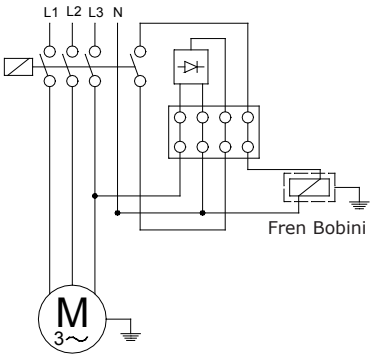
Schaltungsarten:
a)Verspätetes Bremsen
Diese Schaltung wird benutzt, wenn ein langsames und gleitendes Bremsen erforderlich ist. Am meisten wird es bei Fahrgetriebemotoren von Aufzügen verwendet. Wenn keine Angabe bei der Bestellung gegeben wird, werden die Bremsen mit verspäteter Schaltung geliefert.

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.

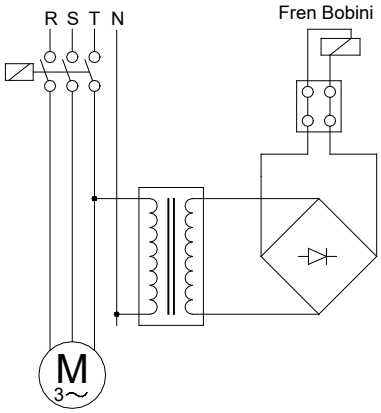
Gecikmeli Frenleme / *Delayed Running Brake* / Verspätete Bremsung
(230 V)



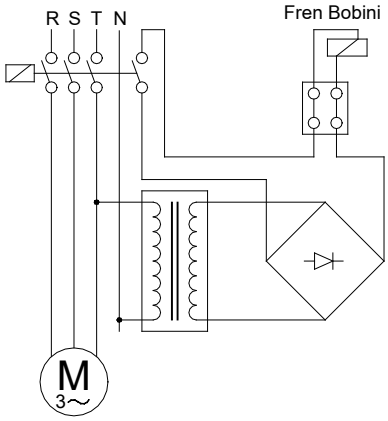
Ani Frenleme / *Sudden Brake* / Plötzliche Bremsung
(230 V)



Gecikmeli Frenleme / *Delayed Running Brake* / Verspätete Bremsung
(24 V)



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





Genel Bilgiler
General Information
Einführung

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 frenlemezamanı
- c_t :Anahtarın devreye girme zamanı katsayısı (ortalama 0,995).
- M_L [Nm] : Sistemin statik tork ihtiyacı.
- C_s : Emniyet katsayısı (C_s≥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 desMotors
- 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;

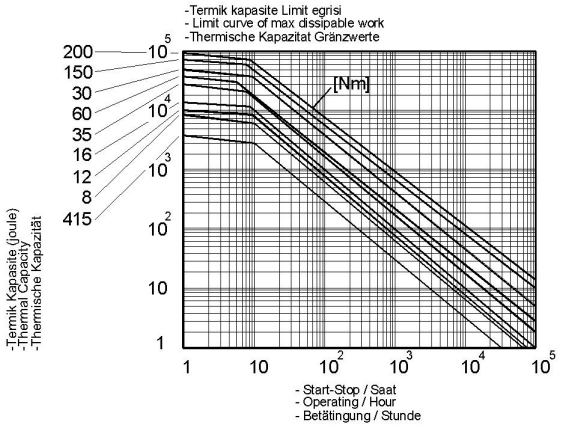
$$M_f = M_{fc} \times C_s$$

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



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/dk
Motora indirgenmiş toplam atalet momenti: 0,08 kgm²
Gerekli çalışma momenti: 50 Nm
Yük Durumu: Yük motor dönüş yönü ile aynı (Vinçten yük indirmesi: Saatte dur-kalk sayısı:30)

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

$$M_f = 73,6 \times 2 = 147,2\ Nm$$

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 torgue 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 torgue 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 torgue 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)

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

$$M_f = 73,6 \times 2 = 147,2\ Nm$$

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

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

$$M_f = 73,6 \times 2 = 147,2\ Nm$$

Eine Bremse von 150 Nm kann man auswählen.

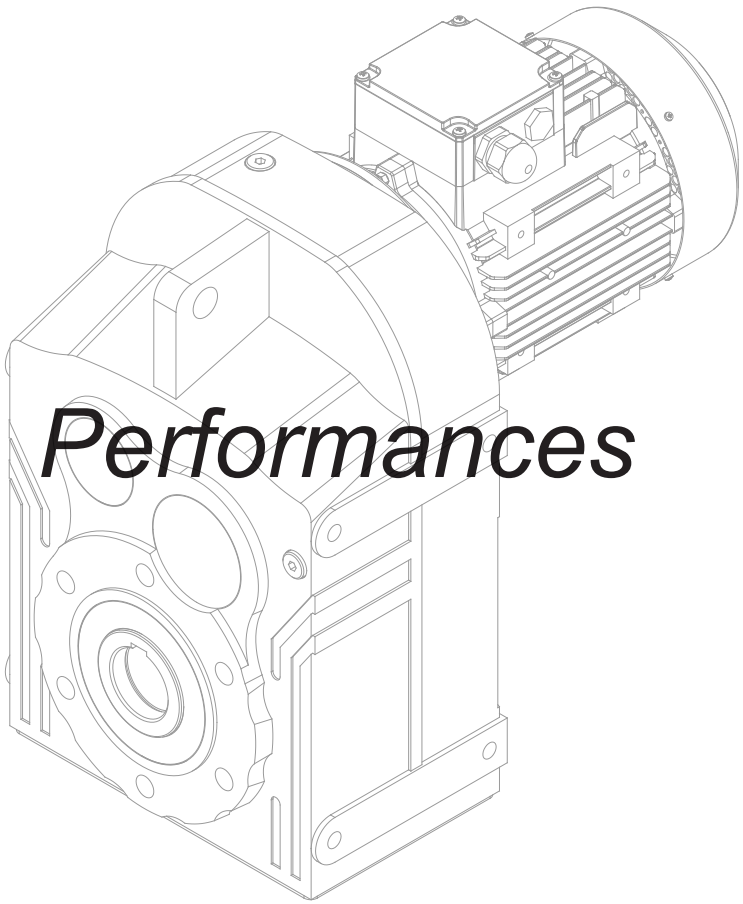
Die thermische Kapazität;

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

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

Notlar / *Notes* / Notizen

Güç ve Devir Tabloları



Performances

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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,12 0,16	0,17 0,19 0,22 0,24 0,28 0,32 0,37	5403 4593 4020 3773 3211 2794 2449	**8471,90** **7216,80** **6304,09** **5912,93** **5027,18** **4366,47** **3820,66**	10997 26050 32274 34501 38905 41680 43821	0,8 0,9 1,1 1,1 1,3 1,5 1,8	**DR676-2E63M/4B**	0,42	283	132	IE2
	0,44 0,49 0,57 0,66 0,70	2098 1871 1591 1392 1306	**3215,89** **2865,49** **2440,98** **2132,27** **1999,96**	45652 46792 48104 48978 49339	2,0 2,3 2,7 3,1 3,3	**DR675-2E63M/4B**	0,42	280	132	IE2
	0,24 0,29 0,33	3685 3135 2729	**5762,85** **4899,59** **4255,64**	7602 20192 25481	0,8 1,0 1,1	**DR576-2E63M/4B**	0,42	165	126	IE2
	0,41 0,48 0,59 0,67 0,72 0,84 0,97	2240 1895 1553 1359 1276 1085 944	**3432,03** **2900,65** **2379,02** **2078,15** **1949,20** **1657,21** **1439,41**	30303 33065 35435 36640 37129 38190 38926	1,3 1,6 1,9 2,2 2,4 2,8 3,2	**DR575-2E63M/4B**	0,42	162	126	IE2
	0,49 0,59	1827 1529	**2851,73** **2381,67**	12542 17197	0,8 1,0	**DR476-2E63M/4B**	0,42	120	120	IE2
	0,73 0,87 0,92 0,94 1,2 1,3 1,6 1,9 2,2	1264 1057 998 973 746 697 590 493 426	**1937,71** **1618,43** **1529,03** **1492,69** **1140,69** **1065,48** **900,55** **752,10** **648,55**	20171 22080 22565 22816 24477 24802 25482 26048 26422	1,2 1,5 1,6 1,6 2,1 2,2 2,6 3,1 3,6	**DR475-2E63M/4B**	0,42	119	120	IE2
	0,9 0,9 1,1	1047 948 811	**1639,97** **1484,14** **1272,49**	7309 9703 12102	0,8 0,9 1,0	**DR376-2E63M/4B**	0,42	79	114	IE2
	1,2 1,3 1,5 1,8 2,1 2,5 2,7 3,2 3,7	773 688 609 513 436 374 339 290 249	**1188,10** **1053,09** **930,99** **783,07** **665,75** **570,43** **516,22** **442,60** **378,91**	12660 13785 14702 15696 16392 16909 17184 17544 17830	1,1 1,2 1,3 1,6 1,9 2,2 2,4 2,8 3,3	**DR375-2E63M/4B**	0,42	78	114	IE2
	1,5 1,7 1,9 2,3 2,7 3,1 3,4 4,0 4,7	611 544 481 405 345 296 268 229 197	**936,69** **830,25** **733,99** **617,37** **524,87** **449,72** **406,99** **348,95** **298,73**	9041 10250 11208 12206 12900 13407 13675 14023 14299	1,0 1,1 1,2 1,5 1,7 2,0 2,2 2,6 3,0	**DR285-2E63M/4B**	0,42	35	110	IE2



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,12	1,7	538	**823,76**	10469	0,8	**DR275-2E63M/4B**	0,42	30	106	IE2
0,16	1,9	471	**720,79**	11633	1,0					
	2,3	390	**596,04**	12807	1,2					
	2,8	326	**497,10**	13598	1,4					
	3,4	273	**416,71**	14170	1,6					
	3,9	234	**356,74**	14548	1,9					
	4,2	218	**331,04**	14704	2,1					
	5,6	165	**251,08**	15158	2,7					
	6,5	142	**214,95**	15343	3,2					
	6,7	137	**207,93**	15378	3,3					
	7,7	120	**181,94**	15500	3,8					
	9,3	99	**150,45**	16006	4,0					
	10	104	**137,94**	15853	4,0	**DR273-2E63M/4B**	0,42	25	104	IE2
	12	91	**120,49**	15660	4,0					
	9,8	108	**142,89**	7012	1,9	**DR173-2E63M/4B**	0,42	20	102	IE2
	12	91	**120,64**	7214	2,2					
	14	78	**103,34**	7360	2,6					
	15	69	**91,25**	7457	2,9					
	16	64	**85,23**	7503	3,1					
	19	54	**72,04**	7602	3,7					
	23	45	**60,16**	7838	4,0					
	7,8	135	**180,05**	4708	1,1	**DR073-2E63M/4B**	0,42	15	100	IE2
	10	110	**146,60**	4515	1,4					
	10	101	**133,46**	4423	1,5					
	12	90	**120,11**	4318	1,7					
	14	76	**100,43**	4137	2,0					
	16	64	**85,12**	3968	2,3					
	19	55	**72,87**	3810	2,7					
	21	51	**67,62**	3735	2,9					
	22	48	**62,94**	3663	3,2					
	27	40	**52,62**	3486	3,8					
	31	34	**44,60**	3326	4,0					
	37	29	**38,18**	3180	4,0					
	40	27	**35,43**	3111	4,0					
	38	28	**36,86**	3147	4,0	**DR072-2E63M/4B**	0,42	14	100	IE2
	46	24	**30,71**	2982	4,0					
	51	21	**27,64**	2890	4,0					
	56	19	**25,01**	2804	4,0					
	66	16	**21,12**	2663	4,0					
	77	14	**18,09**	2539	4,0					
	88	12	**15,97**	2443	4,0					
	94	11	**14,92**	2392	4,0					
	111	10	**12,61**	2269	4,0					
	133	8,1	**10,53**	2144	4,0					
	160	6,7	**8,76**	2018	4,0					
	171	6,2	**8,18**	1974	4,0					
	202	5,3	**6,91**	1871	4,0					
	242	4,4	**5,77**	1766	4,0					
0,18	0,09	15044	**9820,98**	63892	0,9	**DR876-2E71M/6B**	0,60	481	144	IE2
0,25	0,11	13213	**8612,25**	75551	1,0					
	0,12	11699	**7613,73**	83502	1,1					
	0,14	10298	**6697,26**	89856	1,3					
	0,15	9140	**5940,18**	94533	1,4					
	0,17	8165	**5304,23**	98120	1,6					
	0,19	7335	**4762,49**	100957	1,8					
	0,23	6182	**4005,78**	104588	2,1					
	0,27	5266	**3405,63**	107242	2,5					



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,18 0,25	0,31 0,34 0,39	4724 4242 3718	**2990,66** **2683,53** **2356,74**	108721 109985 111300	2,8 3,1 3,5	**DR875-2E71M/6B**	0,60	506	144	IE2
	0,14 0,16 0,18 0,21	9481 9066 7802 6697	**6492,84** **5875,88** **5058,99** **4334,63**	42895 46880 56884 63870	0,8 0,9 1,0 1,2	**DR776-2E71M/6B**	0,60	316	138	IE2
	0,25 0,28 0,32 0,36 0,41 0,46 0,56 0,61 0,70	5822 5212 4499 3982 3564 3135 2624 2386 2099	**3691,20** **3302,14** **2855,58** **2523,53** **2257,90** **1982,78** **1656,07** **1507,38** **1323,71**	68895 71781 74860 76914 78476 79874 81594 82358 83245	1,4 1,6 1,8 2,0 2,3 2,6 3,1 3,4 3,9	**DR775-2E71M/6B**	0,60	306	138	IE2
	0,28 0,32 0,37	5083 4424 3878	**5027,18** **4366,47** **3820,66**	18685 28101 33585	0,8 1,0 1,1	**DR676-2E63M/4C**	0,56	283	132	IE2
	0,44 0,49 0,57 0,66 0,70 0,82 0,95 1,1 1,3 1,6 1,9	3322 2962 2518 2204 2069 1760 1531 1342 1112 930 781	**3215,89** **2865,49** **2440,98** **2132,27** **1999,96** **1700,37** **1476,89** **1292,28** **1068,62** **891,23** **747,10**	38099 40608 43349 45071 45762 47322 48369 49189 50132 52878 55052	1,3 1,5 1,7 2,0 2,1 2,4 2,8 3,2 3,9 4,0 4,0	**DR675-2E63M/4C**	0,56	225	132	IE2
	0,41 0,48 0,59 0,67 0,72 0,84 0,97 1,1	3546 3000 2459 2152 2020 1718 1495 1310	**3432,03** **2900,65** **2379,02** **2078,15** **1949,20** **1657,21** **1439,41** **1259,48**	12258 22159 28293 31049 32115 34333 35805 36920	0,8 1,0 1,2 1,4 1,5 1,7 2,0 2,3	**DR575-2E63M/4B**	0,56	164	126	IE2
	1,3 1,5 1,8	1170 990 812	**720,91** **609,29** **499,72**	37796 38690 39581	2,6 3,0 3,7	**DR574-2E71M/6B**	0,60	160	124	IE2
	0,72 0,87 0,92 0,94 1,2 1,3	2008 1679 1587 1546 1185 1108	**1937,71** **1618,43** **1529,03** **1492,69** **1140,69** **1065,48**	8214 15099 16436 16975 20984 21689	0,8 0,9 1,0 1,0 1,3 1,4	**DR475-2E63M/4C**	0,56	119	120	IE2
	1,6 1,8 2,0	949 849 746	**584,15** **522,66** **458,98**	23051 23767 24488	1,6 1,8 2,1	**DR474-2E71M/6B**	0,60	115	120	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,18 0,25	2,4 2,7 3,1	624 558 491	**584,15** **522,66** **458,98**	25285 25684 26038	2,5 2,8 3,2	**DR474-2E63M/4C**	0,56	122	120	IE2
	1,3 1,5 1,8 2,1 2,5 2,7 3,2 3,7 4,0 4,2 4,5	1090 964 812 691 592 536 459 394 366 347 322	**1053,09** **930,99** **783,07** **665,75** **570,43** **516,22** **442,60** **378,91** **351,62** **333,87** **309,82**	5918 9308 12096 13755 14889 15466 16183 16769 16974 17120 17307	0,8 0,9 1,0 1,2 1,4 1,5 1,8 2,1 2,2 2,4 2,5	**DR375-2E63M/4C**	0,56	78	114	IE2
	5,4 6,1 7,6	299 263 212	**171,89** **151,15** **121,67**	17455 17728 18068	2,7 3,1 3,9	**DR373-2E71M/6B**	0,60	71	112	IE2
	1,9 2,3 2,7 3,1 3,4 4,0 4,7 5,1 5,3 5,7 6,6	762 642 546 468 424 363 311 289 274 255 222	**733,99** **617,37** **524,87** **449,72** **406,99** **348,95** **298,73** **277,21** **263,22** **244,26** **212,12**	4945 8418 10218 11393 11977 12701 13248 13468 13611 13794 14088	0,8 0,9 1,1 1,3 1,4 1,7 1,9 2,1 2,2 2,4 2,7	**DR285-2E63M/4C**	0,56	38	110	IE2
	6,8 7,7 8,2 9,6	236 208 196 167	**135,52** **119,16** **112,15** **95,92**	13964 14199 14307 14517	2,5 2,9 3,1 3,6	**DR283-2E71M/6B**	0,60	34	108	IE2
	2,8 3,4 3,9 4,2 5,6	516 433 371 345 261	**497,10** **416,71** **356,74** **331,04** **251,08**	10885 12218 13045 13374 14281	0,9 1,0 1,2 1,3 1,7	**DR275-2E63M/4C**	0,56	30	106	IE2
	6,7 7,6 8,1 9,6	240 210 197 167	**137,94** **120,49** **113,02** **96,09**	14480 14774 14885 15139	1,9 2,1 2,3 2,7	**DR273-2E71M/6B**	0,60	26	104	IE2
	10 12 12 15 17 19	157 137 129 110 95 83	**137,94** **120,49** **113,02** **96,09** **83,46** **73,03**	15221 15375 15138 14494 13950 13448	2,9 3,3 3,5 4,0 4,0 4,0	**DR273-2E63M/4C**	0,56	22	104	IE2
	6,4 7,6 8,9	248 209 180	**142,89** **120,64** **103,34**	4391 5351 5941	0,8 1,0 1,1	**DR173-3E71M/6C**	0,55	23	102	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,18 0,25	9,8 12 14 15 16 19 23 27 29 31 37 44	162 137 118 104 97 82 69 59 55 51 43 36	**142,89** **120,64** **103,34** **91,25** **85,23** **72,04** **60,16** **51,88** **47,81** **44,66** **37,75** **31,52**	6085 6512 6809 6997 7087 7263 7426 7526 7571 7604 7860 8138	1,2 1,5 1,7 1,9 2,1 2,4 2,9 3,4 3,7 3,9 4,0 4,0	**DR173-2E63M/4C**	0,56	20	102	IE2
	7,8 9,5 10 12 14 16 19 21 22 27 31 37 40	204 167 152 137 114 97 83 77 72 60 51 44 41	**180,05** **146,60** **133,46** **120,11** **100,43** **85,12** **72,87** **67,62** **62,94** **52,62** **44,60** **38,18** **35,43**	4208 4126 4076 4013 3893 3771 3649 3589 3530 3383 3245 3116 3054	0,7 0,9 1,0 1,1 1,3 1,5 1,8 1,9 2,1 2,5 2,9 3,4 3,7	**DR073-2E63M/4C**	0,56	15	100	IE2
	38 46 51 56 66 77 88 94 111 133 160 171 202 242	43 36 32 29 25 21 19 17 15 12 10 9,5 8,0 6,7	**36,86** **30,71** **27,64** **25,01** **21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	3087 2938 2853 2773 2642 2525 2434 2385 2267 2145 2020 1978 1877 1775	3,5 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0	**DR072-2E63M/4C**	0,56	14	100	IE2
	266 320 342 405 485	6,0 5,0 4,7 3,9 3,3	**10,53** **8,76** **8,18** **6,91** **5,77**	1700 1600 1565 1484 1400	4,0 4,0 4,0 4,0 4,0	**DR072-2E63M/2A**	0,56	16	100	IE2
0,25 0,34	0,15 0,17 0,19 0,21 0,24 0,27 0,30 0,36 0,42	13774 12098 10711 9428 8368 7476 6716 5660 4821	**9820,98** **8612,25** **7613,73** **6697,26** **5940,18** **5304,23** **4762,49** **4005,78** **3405,63**	72263 81529 88069 93410 97399 100488 102950 106124 108461	0,9 1,1 1,2 1,4 1,6 1,7 1,9 2,3 2,7	**DR876-2E71M/4B**	0,71	516	144	IE2
	0,48 0,53 0,60	4325 3884 3404	**2990,66** **2683,53** **2356,74**	109770 110891 112120	3,0 3,3 3,8	**DR875-2E71/M4B**	0,71	506	144	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,25 0,34	0,24 0,28 0,33 0,36	8301 7144 6131 5555	**5875,88** **5058,99** **4334,63** **3922,75**	53790 61512 67209 69974	1,0 1,1 1,3 1,5	**DR776-2E71M/4B**	0,71	316	138	IE2
	0,39 0,43 0,50 0,56 0,63 0,72 0,86 0,95	5330 4772 4119 3646 3263 2870 2403 2184	**3691,20** **3302,14** **2855,58** **2523,53** **2257,90** **1982,78** **1656,07** **1507,38**	71146 73639 76208 78031 79424 80780 82304 82984	1,5 1,7 2,0 2,2 2,5 2,8 3,4 3,7	**DR775-2E71M/4B**	0,71	306	138	IE2
	0,37	5403	**3820,66**	11118	0,8	**DR676-2E71M/4B**	0,71	285	132	IE2
	0,44 0,50 0,58 0,67 0,71 0,84 0,96 1,1	4628 4126 3509 3070 2882 2452 2133 1870	**3215,89** **2865,49** **2440,98** **2132,27** **1999,96** **1700,37** **1476,89** **1292,28**	25590 31232 36678 39883 41201 43733 45468 46795	0,9 1,0 1,2 1,4 1,5 1,8 2,0 2,3	**DR675-2E71M/4B**	0,71	227	132	IE2
	1,4 1,5 1,8	1555 1387 1180	**675,51** **601,90** **512,73**	48262 48998 49860	2,8 3,1 3,6	**DR674-2E71M/6C**	0,78	221	130	IE2
	0,60 0,69 0,73 0,86 0,99 1,1	3426 2998 2814 2394 2083 1825	**2379,02** **2078,15** **1949,20** **1657,21** **1439,41** **1259,48**	14966 22156 24489 28914 31615 33577	0,9 1,0 1,1 1,3 1,4 1,6	**DR575-2E71M/4B**	0,71	165	126	IE2
	1,3 1,5 1,8	1659 1404 1152	**720,91** **609,29** **499,72**	34736 36367 37828	1,8 2,1 2,6	**DR574-2E71M/6C**	0,78	161	124	IE2
	2,0 2,3	1071 907	**720,91** **609,29**	38264 39116	2,8 3,3	**DR574-2E71M/4B**	0,71	160	124	IE2
	1,2 1,3	1651 1543	**1140,69** **1065,48**	15510 17012	0,9 1,0	**DR475-2E71M/4B**	0,71	122	120	IE2
	1,6 1,8 2,0	1346 1204 1059	**584,15** **522,66** **458,98**	19550 20924 22211	1,2 1,3 1,5	**DR474-2E71M/6C**	0,78	117	118	IE2
	2,4 2,7 3,1	869 777 683	**584,15** **522,66** **458,98**	23664 24276 24906	1,8 2,0 2,3	**DR474-2E71M/4B**	0,71	117	118	IE2
	3,8 4,3 5,3	588 521 425	**242,68** **215,03** **174,97**	25504 25901 26439	2,6 3,0 3,7	**DR473-2E71M/6C**	0,78	111	116	IE2



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,25 0,34	2,1 2,5 2,8 3,2 3,8 4,1 4,3 4,6	962 825 747 640 549 510 483 449	**665,75** **570,43** **516,22** **442,60** **378,91** **351,62** **333,87** **309,82**	9491 12007 13095 14416 15380 15758 16001 16280	0,9 1,0 1,1 1,3 1,5 1,6 1,7 1,8	**DR375-2E71M/4B**	0,71	81	114	IE2
	5,4 6,1 7,6	416 366 295	**171,89** **151,15** **121,67**	16604 17004 17463	2,0 2,2 2,8	**DR373-2E71M/6C**	0,78	71	112	IE2
	8,3 9,4	268 236	**171,89** **151,15**	17696 17915	3,1 3,5	**DR373-2E71M/4B**	0,71	70	112	IE2
	2,7 3,2 3,5 4,1 4,8 5,1 5,4 5,8 6,7	761 652 590 506 434 403 382 355 309	**524,87** **449,72** **406,99** **348,95** **298,73** **277,21** **263,22** **244,26** **212,12**	5009 8175 9436 10854 11868 12236 12482 12789 13274	0,8 0,9 1,0 1,2 1,4 1,5 1,6 1,7 1,9	**DR285-3E71M/4B**	0,71	41	110	IE2
	6,8 7,7 8,2 9,6	328 289 272 233	**135,52** **119,16** **112,15** **95,92**	13110 13501 13660 14013	1,8 2,1 2,2 2,6	**DR283-2E71M/6C**	0,78	36	108	IE2
	11 12 13	212 187 176	**135,52** **119,16** **112,15**	14171 14380 14477	2,8 3,2 3,4	**DR283-2E71M/4B**	0,71	35	108	IE2
	4,0 4,3 5,7	517 480 364	**356,74** **331,04** **251,08**	10925 11541 13172	0,9 0,9 1,2	**DR275-2E71M/4B**	0,71	32	106	IE2
	6,7 7,6 8,1 9,6	334 292 274 233	**137,94** **120,49** **113,02** **96,09**	13548 14006 14191 14587	1,4 1,6 1,7 2,0	**DR273-2E71M/6C**	0,78	26	104	IE2
	10 12 13 15 17 20 24	215 188 177 150 131 114 95	**137,94** **120,49** **113,02** **96,09** **83,46** **73,03** **60,39**	14725 14962 14782 14183 13674 13200 12545	2,1 2,4 2,5 3,0 3,4 3,9 4,0	**DR273-2E71M/4B**	0,71	25	104	IE2
	10 12 14 16 17 20 24 27 30	222 188 161 143 133 113 94 81 75	**142,89** **120,64** **103,34** **91,25** **85,23** **72,04** **60,16** **51,88** **47,81**	5043 5768 6246 6541 6668 6948 7183 7327 7393	0,9 1,1 1,2 1,4 1,5 1,8 2,1 2,5 2,7	**DR173-2E71M/4B**	0,71	22	102	IE2



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,25 0,34	32 38 45	70 59 49	**44,66** **37,75** **31,52**	7440 7559 7675	2,9 3,4 4,0	**DR173-2E71M/4B**	0,71	22	102	IE2
	11 12 14 17 20 21 23 27 32 37 40	208 187 157 133 114 106 98 82 70 60 56	**133,46** **120,11** **100,43** **85,12** **72,87** **67,62** **62,94** **52,62** **44,60** **38,18** **35,43**	3594 3575 3519 3446 3364 3321 3277 3163 3051 2943 2890	0,7 0,8 1,0 1,1 1,3 1,4 1,5 1,8 2,1 2,5 2,7	**DR073-2E71M/4B**	0,71	16	100	IE2
	39 46 52 57 67 79 89 96 113 135 163 174 206 247	58 49 44 40 34 29 25 24 20 17 14 13 11 9,2	**36,86** **30,71** **27,64** **25,01** **21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	2918 2790 2715 2645 2527 2421 2337 2292 2183 2070 1950 1910 1816 1718	2,6 3,1 3,4 3,8 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0	**DR072-2E71M/4B**	0,71	15	100	IE2
	266 320 342 405 485	8,4 7,0 6,5 5,5 4,6	**10,53** **8,76** **8,18** **6,91** **5,77**	1681 1582 1549 1469 1388	4,0 4,0 4,0 4,0 4,0	**DR072-2E63M/2B**	0,67	16	100	IE2
0,37 0,50	0,13 0,17 0,20 0,25 0,30 0,32	23273 18262 15287 12306 10304 9742	**7017,74** **5494,80** **4589,41** **3686,99** **3079,47** **2909,37**	183787 199937 208242 215571 219985 221154	0,8 1,0 1,2 1,5 1,7 1,8	**DR976-2E80M/6A**	1,08	803	150	IE2
	0,44 0,50 0,58 0,66	7104 6382 5437 4797	**2079,97** **1867,46** **1591,90** **1403,36**	226259 227547 229169 230224	2,5 2,8 3,3 3,8	**DR975-2E80M/6A**	1,08	791	150	IE2
	0,19 0,21 0,24 0,27 0,30 0,36 0,42	16342 14386 12767 11407 10246 8636 7356	**7613,73** **6697,26** **5940,18** **5304,23** **4762,49** **4005,78** **3405,63**	53493 68404 78031 84897 90074 96424 100887	0,8 0,9 1,0 1,1 1,3 1,5 1,8	**DR876-2E71M/4C**	1,00	516	144	IE2
	0,48 0,53 0,60 0,69 0,79 0,88	6599 5925 5194 4527 4007 3586	**2990,66** **2683,53** **2356,74** **2051,67** **1813,10** **1622,25**	103314 105351 107441 109244 110582 111624	2,0 2,2 2,5 2,9 3,3 3,7	**DR875-2E71M/4C**	1,00	506	144	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,37 0,50	0,33 0,36	9355 8475	**4334,63** **3922,75**	44155 51892	0,9 0,9	**DR776-2E71M/4C**	1,00	316	138	IE2
	0,39 0,72 0,86 0,95 1,1 1,3	8133 4379 3666 3333 2932 2455	**3691,20** **1982,78** **1656,07** **1507,38** **1323,71** **1105,59**	54517 75155 77955 79175 80572 82139	1,0 1,8 2,2 2,4 2,7 3,3	**DR775-2E71M/4C**	1,00	306	138	IE2
	0,58 0,67 0,71 0,84 0,96 1,1	5354 4684 4397 3741 3255 2853	**2440,98** **2132,27** **1999,96** **1700,37** **1476,89** **1292,28**	12591 24849 28367 34780 38587 41394	0,8 0,9 1,0 1,1 1,3 1,5	**DR675-2E71M/4C**	1,00	227	132	IE2
	1,4 1,5 1,8	2360 2105 1791	**675,51** **601,90** **512,73**	44307 45615 47176	1,8 2,0 2,4	**DR674-2E80M/6A**	1,08	224	130	IE2
	2,1 2,4 2,8	1532 1366 1162	**675,51** **601,90** **512,73**	48366 49086 49931	2,8 3,1 3,7	**DR674-2E71M/4C**	1,00	221	130	IE2
	0,86 0,99 1,1	3652 3178 2785	**1657,21** **1439,41** **1259,48**	8717 19513 24827	0,8 0,9 1,1	**DR575-2E71M/4C**	1,00	165	126	IE2
	1,3 1,5 1,9	2518 2131 1748	**720,91** **609,29** **499,72**	27715 31223 34195	1,2 1,4 1,7	**DR574-2E80M/6A**	1,08	161	124	IE2
	2,0 2,3 2,9	1634 1383 1134	**720,91** **609,29** **499,72**	34902 36493 37917	1,8 2,2 2,6	**DR574-2E71M/4C**	1,00	160	124	IE2
	3,6	911	**255,83**	39089	3,3	**DR573-2E80M/6A**	1,08	155	122	IE2
	1,8 2,0	1827 1607	**522,66** **458,98**	12659 16315	0,8 1,0	**DR474-2E80M/6A**	1,08	120	118	IE2
	2,4 2,7 3,1	1326 1186 1043	**584,15** **522,66** **458,98**	19670 21049 22310	1,2 1,3 1,5	**DR474-2E71M/4C**	1,00	117	118	IE2
	3,8 4,3 5,3	865 766 625	**242,68** **215,03** **174,97**	23651 24354 25280	1,8 2,0 2,5	**DR473-2E80M/6A**	1,08	112	116	IE2
	5,9 6,6	563 499	**242,68** **215,03**	25654 26027	2,8 3,1	**DR473-2E71M/4C**	1,00	109	116	IE2
	3,2 3,8 4,1 4,3 4,6	976 837 778 738 685	**442,60** **378,91** **351,62** **333,87** **309,82**	9099 11696 12597 13152 13823	0,8 1,0 1,1 1,1 1,2	**DR375-2E71M/4C**	1,00	81	114	IE2



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,37 0,50	5,4 6,1 7,6	611 538 433	**171,89** **151,15** **121,67**	14717 15455 16416	1,3 1,5 1,9	**DR373-2E80M/6A**	1,08	74	112	IE2
	8,3 9,4 12 13	398 350 282 248	**171,89** **151,15** **121,67** **106,69**	16714 17094 17598 17836	2,1 2,3 2,9 3,3	**DR373-2E71M/4C**	1,00	71	112	IE2
	4,1 4,8 5,1 5,4 5,8	771 662 615 583 542	**348,95** **298,73** **277,21** **263,22** **244,26**	4558 7956 8969 9573 10288	0,8 0,9 1,0 1,0 1,1	**DR285-2E71M/4C**	1,00	41	110	IE2
	6,8 7,8 8,2 9,6	483 425 400 342	**135,52** **119,16** **112,15** **95,92**	11219 11988 12292 12924	1,2 1,4 1,5 1,8	**DR283-2E80M/6A**	1,08	36	108	IE2
	11 12 13 15 17 19	315 277 261 223 196 173	**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	**DR283-2E71M/4C**	1,00	34	108	IE2
	6,7 7,7 8,2 9,6	491 429 403 342	**137,94** **120,49** **113,02** **96,09**	11361 12304 12669 13404	0,9 1,0 1,1 1,3	**DR273-2E80M/6A**	1,08	29	104	IE2
	10 12 13 15 17 20 24 28 34 39	319 279 262 223 194 170 141 117 99 85	**137,94** **120,49** **113,02** **96,09** **83,46** **73,03** **60,39** **50,36** **42,22** **36,38**	13658 14102 14278 13764 13311 12884 12284 11724 11193 10757	1,4 1,6 1,7 2,0 2,3 2,7 3,2 3,8 4,0 4,0	**DR273-2E71M/4C**	1,00	26	104	IE2
	14 16 17 20 24 27 30 32 38 45	239 212 198 167 140 121 111 104 88 73	**103,34** **91,25** **85,23** **72,04** **60,16** **51,88** **47,81** **44,66** **37,75** **31,52**	4596 5288 5576 6147 6581 6850 6972 7061 7256 7408	0,8 0,9 1,0 1,2 1,4 1,7 1,8 1,9 2,3 2,7	**DR173-2E71M/4C**	1,00	22	102	IE2
	48 56 65 75	70 60 52 45	**29,67** **25,24** **21,79** **19,04**	7441 7523 7217 6941	2,9 3,4 3,9 4,0	**DR172-2E71M/4C**	1,00	20	102	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,37 0,50	17 20 21 23 27 32 37 40	197 169 157 146 122 104 89 83	**85,12** **72,87** **67,62** **62,94** **52,62** **44,60** **38,18** **35,43**	2958 2953 2941 2926 2873 2809 2738 2701	0,8 0,9 1,0 1,0 1,2 1,4 1,7 1,8	**DR073-2E71M/4C**	1,00	15	100	IE2
	39 46 52 57 67 79 89 96 113 135 163 174 206 247	87 73 65 59 50 43 38 35 30 25 21 19 16 14	**36,86** **30,71** **27,64** **25,01** **21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	2720 2626 2569 2513 2417 2327 2255 2215 2118 2016 1901 1865 1777 1686	1,7 2,1 2,3 2,6 3,0 3,5 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0	**DR072-2E71M/4C**	1,00	14	100	IE2
	265 319 341 404	13 11 10 8,3	**10,53** **8,76** **8,18** **6,91**	1656 1559 1528 1452	4,0 4,0 4,0 4,0	**DR072-2E71M/2A**	0,90	16	100	IE2
0,55 0,75	0,21 0,26 0,31 0,39 0,47 0,49	22222 17437 14597 11750 9839 9302	**7017,74** **5494,80** **4589,41** **3686,99** **3079,47** **2909,37**	187652 202689 210277 216743 220885 221983	0,8 1,0 1,2 1,5 1,8 1,9	**DR976-2E80M/4B**	1,45	803	150	IE2
	0,69 0,77 0,90	6783 6094 5192	**2079,97** **1867,46** **1591,90**	226794 228013 229547	2,7 3,0 3,5	**DR975-2E80M/4B**	1,45	791	150	IE2
	0,30 0,36 0,42	15073 12704 10821	**4762,49** **4005,78** **3405,63**	63785 78376 87582	0,9 1,0 1,2	**DR876-2E80M/4B**	1,45	519	144	IE2
	0,48 0,54 0,61 0,70 0,79 0,89 1,0 1,2 1,4	9707 8716 7641 6659 5894 5275 4641 3885 3421	**2990,66** **2683,53** **2356,74** **2051,67** **1813,10** **1622,25** **1424,58** **1189,85** **1046,63**	92569 96350 100112 103271 105562 107165 108901 110853 111995	1,3 1,5 1,7 2,0 2,2 2,5 2,8 3,3 3,8	**DR875-2E80M/4B**	1,45	509	144	IE2
	0,50 0,57 0,64 0,73 0,87 0,96 1,1 1,3	9244 8183 7323 6442 5393 4902 4313 3611	**2855,58** **2523,53** **2257,90** **1982,78** **1656,07** **1507,38** **1323,71** **1105,59**	45826 54478 60514 65553 70852 73071 75549 78253	0,9 1,0 1,1 1,3 1,5 1,6 1,9 2,2	**DR775-2E80M/4B**	1,45	309	138	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,55 0,75	1,5 1,6 1,9	3273 2931 2531	**632,92** **566,21** **489,64**	79426 80608 81922	2,5 2,7 3,2	**DR774-2E80M/6B**	1,50	302	136	IE2
	0,98 1,1	4788 4197	**1476,89** **1292,28**	23887 30820	0,9 1,0	**DR675-2E80M/4B**	1,45	330	132	IE2
	1,4 1,5 1,8	3482 3106 2642	**675,51** **601,90** **512,73**	36972 39707 42671	1,2 1,4 1,6	**DR674-2E80M/6B**	1,50	224	130	IE2
	2,1 2,4 2,8 3,4 4,0	2254 2010 1710 1419 1214	**675,51** **601,90** **512,73** **424,33** **362,91**	44914 46171 47611 48840 49703	1,9 2,1 2,5 3,0 3,5	**DR674-2E80M/4B**	1,45	224	130	IE2
	1,5 1,9	3144 2578	**609,29** **499,72**	20047 27100	1,0 1,2	**DR574-2E80M/6B**	1,50	161	124	IE2
	2,0 2,4 2,9	2404 2035 1669	**720,91** **609,29** **499,72**	28817 31999 34641	1,3 1,5 1,8	**DR574-2E80M/4B**	1,45	162	124	IE2
	3,6 4,4	1347 1106	**255,83** **209,81**	36738 38094	2,2 2,7	**DR573-2E80M/6B**	1,50	155	122	IE2
	5,6	873	**255,83**	39263	3,4	**DR573-2E80M/4B**	1,45	154	122	IE2
	2,5 2,8 3,1	1951 1745 1534	**584,15** **522,66** **458,98**	9765 14073 17133	0,8 0,9 1,0	**DR474-2E80M/4B**	1,45	120	118	IE2
	3,8 4,3 5,3	1279 1133 924	**242,68** **215,03** **174,97**	20103 21494 23231	1,2 1,4 1,7	**DR473-2E80M/6B**	1,50	112	116	IE2
	5,9 6,7 8,2 10	829 734 599 474	**242,68** **215,03** **174,97** **138,35**	23953 24603 25426 26158	1,9 2,1 2,6 3,3	**DR473-2E80M/4B**	1,45	111	116	IE2
	4,6	1008	**309,82**	8517	0,8	**DR375-2E80M/4B**	1,45	84	114	IE2
	5,4 6,2 7,7	904 796 641	**171,89** **151,15** **121,67**	10607 12370 14372	0,9 1,0 1,3	**DR373-2E80M/6B**	1,50	76	112	IE2
	8,4 9,5 12 13 15 18 21	586 516 416 365 323 272 231	**171,89** **151,15** **121,67** **106,69** **94,32** **79,34** **67,45**	14998 15698 16592 17001 17295 17664 17940	1,4 1,6 2,0 2,2 2,5 3,0 3,5	**DR373-2E80M/4B**	1,45	75	112	IE2



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
0,55 0,75	6,9 7,8 8,3 9,7	714 629 592 506	**135,52** **119,16** **112,15** **95,92**	6656 8728 9443 10864	0,8 1,0 1,0 1,2	**DR283-2E80M/6B**	1,50	73	108	IE2
	11 12 13 15 17 19 23 27	463 408 384 328 288 255 215 183	**135,52** **119,16** **112,15** **95,92** **84,12** **74,36** **62,55** **53,18**	11506 12212 12492 13098 13498 13807 14139 14404	1,3 1,5 1,6 1,8 2,1 2,4 2,8 3,3	**DR283-2E80M/4B**	1,45	37	108	IE2
	10 12 13 15 17 20 24 29 34 40 47	470 411 386 328 285 250 207 173 145 125 104	**137,94** **120,49** **113,02** **96,09** **83,46** **73,03** **60,39** **50,36** **42,22** **36,38** **30,34**	11623 12516 12852 13097 12730 12374 11860 11367 10890 10493 10017	1,0 1,1 1,2 1,4 1,6 1,8 2,2 2,6 3,1 3,6 4,0	**DR273-2E80M/4B**	1,45	31	104	IE2
	56	90	**25,78**	9599	4,0	**DR272-2E80M/4B**	1,45	28	104	IE2
	20 24 28 30 32 38 46 53	246 206 178 164 153 129 108 93	**72,04** **60,16** **51,88** **47,81** **44,66** **37,75** **31,52** **27,18**	4406 5414 5961 6193 6378 6721 7010 7182	0,8 1,0 1,1 1,2 1,3 1,5 1,8 2,1	**DR173-2E80M/4B**	1,45	25	102	IE2
	66 76 81 95 109	76 66 62 53 46	**21,79** **19,04** **17,86** **15,18** **13,19**	6944 6702 6588 6302 6058	2,6 3,0 3,2 3,8 4,0	**DR172-2E80M/4B**	1,45	22	102	IE2
	27 32 38 41	180 153 131 122	**52,62** **44,60** **38,18** **35,43**	2417 2427 2414 2402	0,8 1,0 1,2 1,2	**DR073-2E80M/4B**	1,45	16	100	IE2
	39 47 52 58 68 80 90 97 114 137 164 176 208 249	128 107 96 87 74 63 56 52 44 37 31 29 24 20	**36,86** **30,71** **27,64** **25,01** **21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	2409 2369 2339 2306 2242 2178 2123 2092 2014 1929 1821 1790 1714 1633	1,2 1,4 1,6 1,7 2,0 2,4 2,7 2,9 3,4 4,0 4,0 4,0 4,0 4,0	**DR072-2E80M/4B**	1,45	15	100	IE2



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,55 0,75	265 319 341 404 483	19 16 15 12 10	**10,53** **8,76** **8,18** **6,91** **5,77**	1615 1522 1493 1422 1349	4,0 4,0 4,0 4,0 4,0	**DR072-2E71M/2B**	1,25	16	100	IE2
0,75 1,0	0,32 0,39 0,47 0,50	19768 15913 13324 12597	**4589,41** **3686,99** **3079,47** **2909,37**	195316 206283 212951 214691	0,9 1,1 1,4 1,4	**DR976-3E80M/4D**	1,77	805	150	IE3
	0,70 0,78 0,91 1,0 1,2 1,3	9186 8253 7031 6203 5507 4914	**2079,97** **1867,46** **1591,90** **1403,36** **1244,98** **1110,06**	222154 224002 226303 227786 228987 229979	2,0 2,2 2,6 2,9 3,3 3,7	**DR975-3E80M/4D**	1,77	793	150	IE3
	0,43	14654	**3405,63**	66595	0,9	**DR876-3E80M/4D**	1,77	521	144	IE3
	0,48 0,54 0,62 0,71 0,80 0,89 1,0 1,2 1,4 1,6 1,7	13146 11804 10348 9018 7982 7144 6284 5262 4633 4113 3675	**2990,66** **2683,53** **2356,74** **2051,67** **1813,10** **1622,25** **1424,58** **1189,85** **1046,63** **928,31** **828,93**	75941 82989 89644 94998 98730 101421 104147 107152 108879 110242 111344	1,0 1,1 1,3 1,4 1,6 1,8 2,1 2,5 2,8 3,2 3,5	**DR875-3E80M/4D**	1,77	511	144	IE3
	0,64 0,73 0,88 0,96 1,1 1,3	9917 8724 7303 6639 5840 4890	**2257,90** **1982,78** **1656,07** **1507,38** **1323,71** **1105,59**	38132 49865 60205 64203 68487 72910	0,8 0,9 1,1 1,2 1,4 1,6	**DR775-3E80M/4D**	1,77	311	138	IE3
	1,5 1,7 1,9	4401 3941 3404	**632,92** **566,21** **489,64**	75123 76864 78853	1,8 2,0 2,4	**DR774-3E90S/6B**	1,96	305	136	IE3
	2,3 2,6 3,0	2868 2569 2218	**632,92** **566,21** **489,64**	80719 81717 82832	2,8 3,1 3,6	**DR774-3E80M/4D**	1,77	301	136	IE3
	1,4 1,6 1,8	4683 4177 3553	**675,51** **601,90** **512,73**	24804 30824 36327	0,9 1,0 1,2	**DR674-3E90S/6B**	1,96	227	130	IE3
	2,1 2,4 2,8 3,4 4,0 4,6 5,2	3052 2722 2316 1921 1645 1445 1279	**675,51** **601,90** **512,73** **424,33** **362,91** **318,25** **281,35**	40007 42135 44462 46477 47806 48705 49415	1,4 1,6 1,9 2,2 2,6 3,0 3,4	**DR674-3E80M/4D**	1,77	226	130	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,75 1,0	1,9	3468	**499,72**	13905	0,9	**DR574-3E90S/6B**	1,96	167	124	IE3
	2,0	3256	**720,91**	18226	0,9	**DR574-3E80M/4D**	1,77	165	124	IE3
	2,4	2755	**609,29**	25206	1,1					
	2,9	2260	**499,72**	30126	1,3					
	3,7	1810	**255,83**	33689	1,7	**DR573-3E90S/6B**	1,96	161	122	IE3
	4,5	1487	**209,81**	35805	2,0					
	4,9	1365	**192,62**	36560	2,2					
	5,7	1184	**255,83**	37604	2,5	**DR573-3E80M/4D**	1,77	157	122	IE3
	6,9	973	**209,81**	38745	3,1					
	7,5	893	**192,62**	39153	3,4					
	3,9	1719	**242,68**	14462	0,9	**DR473-3E90S/6B**	1,96	118	116	IE3
	4,4	1523	**215,03**	17279	1,0					
	5,4	1241	**174,97**	20440	1,2					
	6,0	1124	**242,68**	21541	1,4	**DR473-3E80M/4D**	1,77	114	116	IE3
	6,7	996	**215,03**	22636	1,6					
	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	112	IE3
	8,4	795	**171,89**	12348	1,0	**DR373-3E80M/4D**	1,77	76	112	IE3
	9,6	700	**151,15**	13643	1,2					
	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	108	IE3
	12	553	**119,16**	10102	1,1					
	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					
	13	523	**113,02**	10747	0,9	**DR273-3E80M/4D**	1,77	31	104	IE3
	15	445	**96,09**	12022	1,0					
	17	387	**83,46**	12095	1,2					
	20	339	**73,03**	11819	1,3					
	24	281	**60,39**	11401	1,6					
	29	234	**50,36**	10984	1,9					
	34	197	**42,22**	10568	2,3					
	40	170	**36,38**	10215	2,7					
	48	142	**30,34**	9783	3,2					



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
0,75 1,0	56 64 68 79	122 107 101 86	**25,78** **22,67** **21,33** **18,25**	9399 9100 8960 8605	3,7 4,0 4,0 4,0	**DR272-3E80M/4D**	1,77	29	104	IE3
	32 38 46 53	208 176 147 127	**44,66** **37,75** **31,52** **27,18**	5325 5978 6460 6752	1,0 1,1 1,4 1,6	**DR173-3E80M/4D**	1,77	27	102	IE3
	67 76 81 96 110 126 152	103 90 85 72 63 55 45	**21,79** **19,04** **17,86** **15,18** **13,19** **11,54** **9,54**	6659 6454 6356 6106 5889 5685 5398	1,9 2,2 2,4 2,8 3,2 3,7 4,0	**DR172-3E80M/4D**	1,77	25	102	IE3
	33 38 41	207 178 165	**44,60** **38,18** **35,43**	1982 2041 2059	0,7 0,8 0,9	**DR073-3E80M/4D**	1,77	18	100	IE3
	39 47 52 58 69 80 91 97 115 138 166 177 210 251	173 145 130 118 100 86 76 71 60 50 42 39 33 27	**36,86** **30,71** **27,64** **25,01** **21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	2050 2077 2078 2072 2048 2014 1979 1959 1903 1837 1736 1711 1648 1578	0,9 1,0 1,1 1,3 1,5 1,8 2,0 2,1 2,5 3,0 3,6 3,9 4,0 4,0	**DR072-3E80M/4D**	1,77	16	100	IE3
	273 329 352 417 499	25 21 19 16 14	**10,53** **8,76** **8,18** **6,91** **5,77**	1562 1474 1447 1383 1315	4,0 4,0 4,0 4,0 4,0	**DR072-3E80M/2B**	1,59	17	100	IE3
1,1	0,50	18476	**2909,37**	199202	1,0	**DR976-3E90S/4C**	2,51	798	150	IE3
	0,70 0,78 0,91 1,0 1,2 1,3 1,5	13473 12105 10312 9098 8077 7207 6106	**2079,97** **1867,46** **1591,90** **1403,36** **1244,98** **1110,06** **938,19**	212586 215840 219817 222332 224341 225980 227956	1,3 1,5 1,7 2,0 2,2 2,5 2,9	**DR975-3E90S/4C**	2,51	798	150	IE3
	0,62 0,71 0,80 0,89 1,0 1,2	15177 13226 11707 10478 9217 7717	**2356,74** **2051,67** **1813,10** **1622,25** **1424,58** **1189,85**	62792 75488 83461 89087 94234 99676	0,9 1,0 1,1 1,2 1,4 1,7	**DR875-3E90S/4C**	2,51	516	144	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
1,1 1,5	1,4 1,6 1,7 1,9	6795 6032 5391 4844	**1046,63** **928,31** **828,93** **744,27**	102551 104912 106787 108310	1,9 2,2 2,4 2,7	**DR875-3E90S/4C**	2,51	516	144	IE3
	0,96 1,1 1,3	9737 8566 7172	**1507,38** **1323,71** **1105,59**	40181 51201 61029	0,8 0,9 1,1	**DR775-3E90S/4C**	2,51	316	138	IE3
	1,5 1,7 1,9	6489 5811 5019	**632,92** **566,21** **489,64**	65039 68629 72400	1,2 1,4 1,6	**DR774-3E90L/6C**	2,75	304	136	IE3
	2,3 2,6 3,0 3,3 3,8 4,5	4207 3767 3254 2912 2562 2145	**632,92** **566,21** **489,64** **438,10** **384,72** **321,33**	75738 77474 79376 80570 81739 83060	1,9 2,1 2,5 2,7 3,1 3,7	**DR774-3E90S/4C**	2,51	306	136	IE3
	2,1 2,4 2,8 3,4 4,0 4,6 5,2 6,1	4476 3992 3396 2818 2412 2119 1877 1582	**675,51** **601,90** **512,73** **424,33** **362,91** **318,25** **281,35** **236,65**	27375 32594 37544 41537 43892 45466 46699 48093	1,0 1,1 1,3 1,5 1,8 2,0 2,3 2,7	**DR674-3E90S/4C**	2,51	331	130	IE3
	2,9	3315	**499,72**	17181	0,9	**DR574-3E90S/4C**	2,51	167	124	IE3
	3,7 4,5 4,9	2673 2197 2016	**255,83** **209,81** **192,62**	26097 30672 32145	1,1 1,4 1,5	**DR573-3E90L/6C**	2,75	162	122	IE3
	5,7 6,9 7,5 8,6 9,7 12	1737 1428 1310 1149 1017 861	**255,83** **209,81** **192,62** **168,60** **149,15** **126,06**	34201 36162 36873 37801 38512 39313	1,7 2,1 2,3 2,6 2,9 3,5	**DR573-3E90S/4C**	2,51	162	122	IE3
	5,4	1833	**174,97**	12410	0,8	**DR473-3E90L/6C**	2,75	118	116	IE3
	6,0 6,7 8,3 9,4 10 12 14 15	1650 1462 1192 1054 943 829 694 656	**242,68** **215,03** **174,97** **154,63** **138,35** **121,49** **101,48** **95,87**	15508 18039 20919 22151 23015 23909 24807 25054	0,9 1,1 1,3 1,5 1,6 1,9 2,2 2,4	**DR473-3E90S/4C**	2,51	119	116	IE3
	19 21	531 475	**154,63** **138,35**	25810 26408	2,9 3,2	**DR473-3E80M/2C**	2,26	114	116	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
1,1 1,5	10	1027	**151,15**	7865	0,8	**DR373-3E90S/4C**	2,46	81	112	IE3
	12	827	**121,67**	11884	1,0					
	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					
	35	284	**41,42**	17814	2,8					
	41	244	**35,49**	18333	3,1					
	45	221	**32,11**	18617	3,3					
	13	764	**112,15**	4872	0,8	**DR283-3E90S/4C**	2,51	43	108	IE3
	15	654	**95,92**	8124	0,9					
	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**	2,51	40	108	IE3
	58	172	**24,79**	14484	3,5					
	17	568	**83,46**	9880	0,8	**DR273-3E90S/4C**	2,51	36	104	IE3
	20	498	**73,03**	10855	0,9					
	24	412	**60,39**	10613	1,1					
	29	344	**50,36**	10333	1,3					
	34	289	**42,22**	10027	1,6					
	40	249	**36,38**	9751	1,8					
	48	208	**30,34**	9399	2,2					
	56	179	**25,78**	9075	2,5	**DR272-3E90S/4C**	2,51	34	104	IE3
	64	157	**22,67**	8816	2,9					
	68	148	**21,33**	8694	3,0					
	79	127	**18,25**	8378	3,6					
	91	111	**16,00**	8115	4,0					
	103	98	**14,14**	7870	4,0					
	122	83	**11,90**	7531	4,0					
	46	215	**31,52**	5167	0,9	**DR173-3E90S/4C**	2,51	32	102	IE3
	53	186	**27,18**	5772	1,1					
	67	151	**21,79**	6143	1,3	**DR172-3E90S/4C**	2,51	29	102	IE3
	76	132	**19,04**	6008	1,5					
	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**	2,51	25	100	IE3
	69	146	**21,12**	1689	1,0					
	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					



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
1,1 1,5	138 166 177 210 251	73 61 57 48 40	**10,53** **8,76** **8,18** **6,91** **5,77**	1670 1582 1568 1529 1480	2,0 2,5 2,6 3,1 3,7	**DR072-3E90S/4C**	2,51	25	100	IE3
	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**	2,26	26	100	IE3
1,5 2,0	0,69 0,77 0,91 1,0 1,2 1,3 1,5	18436 16563 14110 12449 11052 9861 8355	**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 1,4 1,6 1,8 2,2	**DR975-3E90L/4D**	3,30	800	150	IE3
	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**	3,50	797	148	IE3
	0,80 0,89 1,0 1,2 1,4	16020 14337 12612 10560 9298	**1813,10** **1622,25** **1424,58** **1189,85** **1046,63**	56199 68726 78863 88889 94046	0,8 0,9 1,0 1,2 1,4	**DR875-3E90L/4D**	3,30	518	144	IE3
	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**	3,50	515	142	IE3
	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**	3,50	314	136	IE3
	2,3 2,6 3,0 3,3 3,8	5757 5155 4452 3985 3506	**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**	3,30	305	136	IE3
	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**	3,50	294	134	IE3
	2,8 3,4 4,0	4647 3856 3301	**512,73** **424,33** **362,91**	25407 33994 38339	0,9 1,1 1,3	**DR674-3E90L/4D**	3,30	233	130	IE3
	4,3 4,8	3111 2771	**221,47** **197,01**	39600 41834	1,4 1,6	**DR673-3E100L/6B**	3,50	232	128	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
1,5	5,7	2365	**167,96**	44147	1,8	**DR673-3E100L/6B**	3,50	232	128	IE3
2,0	6,8	1969	**139,76**	46253	2,2					
	7,7	1756	**124,53**	47295	2,4					
	4,6	2948	**209,81**	22865	1,0	**DR573-3E100L/6B**	3,50	171	122	IE3
	5,6	2379	**255,83**	29124	1,3	**DR573-3E90L/4D**	3,30	163	122	IE3
	6,9	1955	**209,81**	32665	1,5					
	7,5	1795	**192,62**	33841	1,7					
	8,6	1573	**168,60**	35330	1,9					
	9,7	1393	**149,15**	36403	2,2					
	11	1179	**126,06**	37652	2,5					
	14	973	**209,81**	38746	3,1	**DR573-3E90S/2B**	2,97	161	122	IE3
	15	893	**192,62**	39154	3,4					
	6,7	2002	**215,03**	8402	0,8	**DR473-3E90L/4D**	3,30	119	116	IE3
	8,3	1632	**174,97**	15819	0,9					
	9,3	1444	**154,63**	18263	1,1					
	10	1292	**138,35**	19930	1,2					
	12	1136	**121,49**	21432	1,4					
	14	950	**101,48**	22998	1,6					
	15	898	**95,87**	23396	1,7					
	19	718	**154,63**	24649	2,2	**DR473-3E90S/2B**	2,97	117	116	IE3
	21	643	**138,35**	25448	2,3					
	24	565	**121,49**	26250	2,5					
	14	995	**106,69**	8750	0,8	**DR373-3E90L/4D**	3,30	83	112	IE3
	15	880	**94,32**	11036	0,9					
	18	741	**79,34**	13135	1,1					
	21	631	**67,45**	14486	1,3					
	25	541	**57,79**	15433	1,5					
	28	490	**52,30**	15922	1,7					
	35	389	**41,42**	17054	2,0					
	41	334	**35,49**	17753	2,2					
	45	302	**32,11**	18127	2,4					
	57	242	**25,42**	17870	3,4	**DR372-3E90L/4D**	3,30	77	112	IE3
	64	214	**22,46**	18054	3,8					
	19	696	**74,36**	7173	0,9	**DR283-3E90L/4D**	3,30	45	108	IE3
	23	586	**62,55**	9579	1,0					
	27	499	**53,18**	10980	1,2					
	32	428	**45,56**	11945	1,4					
	35	388	**41,23**	12434	1,5					
	48	284	**29,85**	13513	2,1	**DR282-3E90L/4D**	3,30	42	108	IE3
	58	236	**24,79**	13955	2,5					
	68	203	**21,28**	14243	3,0					
	77	179	**18,73**	14519	3,3					
	24	564	**60,39**	9685	0,8	**DR273-3E90L/4D**	3,30	38	104	IE3
	29	471	**50,36**	9570	1,0					
	34	396	**42,22**	9396	1,1					
	40	341	**36,38**	9214	1,3					
	48	285	**30,34**	8957	1,6					



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
1,5 2,0	56 64 68 79 90 102 121 143	245 216 203 174 152 135 114 97	**25,78** **22,67** **21,33** **18,25** **16,00** **14,14** **11,90** **10,11**	8703 8491 8389 8121 7891 7673 7368 7083	1,8 2,1 2,2 2,6 3,0 3,3 4,0 4,0	**DR272-3E90L/4D**	3,30	36	104	IE3
	66 76 81 95 110 125 151 187 215 246 297	207 181 170 145 126 110 91 74 64 56 47	**21,79** **19,04** **17,86** **15,18** **13,19** **11,54** **9,54** **7,74** **6,72** **5,88** **4,86**	5372 5477 5444 5340 5230 5113 4929 4631 4492 4357 4161	1,0 1,1 1,2 1,4 1,6 1,8 2,2 2,4 2,6 2,8 3,1	**DR172-3E90L/4D**	3,30	31	102	IE3
	68 80 90 97 115 137 165 177 209 250	201 172 152 142 120 101 84 78 66 55	**21,12** **18,09** **15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	1248 1343 1397 1419 1455 1469 1398 1397 1386 1363	0,7 0,9 1,0 1,1 1,2 1,5 1,8 1,9 2,3 2,7	**DR072-3E90L/4D**	3,30	26	100	IE3
	275 331 355 419 502	50 42 39 33 27	**10,53** **8,76** **8,18** **6,91** **5,77**	1385 1311 1296 1256 1210	3,0 3,6 3,9 4,0 4,0	**DR072-3E90S/2B**	2,97	27	100	IE3
2,2 3,0	0,91 1,0 1,2 1,3 1,5 1,7	20623 18196 16154 14413 12211 11244	**1591,90** **1403,36** **1244,98** **1110,06** **938,19** **864,41**	192317 200150 205776 210362 215691 217874	0,9 1,0 1,1 1,2 1,5 1,6	**DR975-3E100L/4C**	4,65	805	150	IE3
	1,8 2,3 2,6	10546 8381 7506	**523,19** **415,16** **371,15**	219470 223866 225522	1,7 2,2 2,4	**DR974-3E112M/6B**	4,95	801	148	IE3
	2,8 3,5 3,9	6982 5549 4969	**523,19** **415,16** **371,15**	226435 228949 229915	2,6 3,2 3,6	**DR974-3E100L/4C**	4,65	799	148	IE3
	1,2 1,4	15434 13590	**1189,85** **1046,63**	61236 73373	0,8 1,0	**DR875-3E100L/4C**	4,65	825	144	IE3
	1,6 1,8 2,0 2,4	12202 10813 9712 8227	**607,27** **537,22** **482,05** **407,42**	81000 87618 92280 97896	1,1 1,2 1,3 1,6	**DR874-3E112M/6B**	4,95	521	142	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
2,2 3,0	2,4 2,7 3,0 3,6 4,3 4,9 5,6	8079 7159 6430 5447 4472 3923 3470	**607,27** **537,22** **482,05** **407,42** **334,15** **293,46** **259,15**	98328 101567 103767 106680 109347 110787 111876	1,6 1,8 2,0 2,4 2,9 3,3 3,7	**DR874-3E100L/4C**	4,65	520	142	IE3
	2,3 2,6 3,0 3,3 3,8	8414 7535 6507 5824 5124	**632,92** **566,21** **489,64** **438,10** **384,72**	52382 58704 64817 68465 71927	1,0 1,1 1,2 1,4 1,6	**DR774-3E100L/4C**	4,65	312	136	IE3
	4,3 5,0 6,1	4563 3912 3256	**222,16** **190,20** **158,23**	74383 77017 79451	1,8 2,0 2,5	**DR773-3E112M/6B**	4,95	298	134	IE3
	6,5 7,6 9,2	3030 2598 2162	**222,16** **190,20** **158,23**	80200 81650 83029	2,6 3,1 3,7	**DR773-3E100L/4C**	4,65	298	134	IE3
	4,3 4,9 5,7	4546 4048 3456	**221,47** **197,01** **167,96**	26935 32204 37227	0,9 1,1 1,2	**DR673-3E112M/6B**	4,95	236	128	IE3
	6,5 7,4 8,6 10 12	3018 2688 2295 1910 1704	**221,47** **197,01** **167,96** **139,76** **124,53**	40162 42343 44618 46564 47556	1,4 1,6 1,9 2,3 2,5	**DR673-3E100L/4C**	4,65	236	128	IE3
	5,7 6,4	3464 3068	**168,60** **149,15**	14530 21427	0,9 1,0	**DR573-3E112M/6B**	4,95	175	122	IE3
	6,9 7,5 8,6 9,7 12 14 16 18 21 24	2859 2625 2300 2038 1725 1415 1251 1113 943 841	**209,81** **192,62** **168,60** **149,15** **126,06** **103,39** **91,30** **81,15** **68,64** **61,12**	23940 26616 29696 31920 34288 36314 37243 38016 38915 39427	1,0 1,1 1,3 1,5 1,7 2,1 2,4 2,7 3,2 3,6	**DR573-3E100L/4C**	4,65	175	122	IE3
	10 12 14 15 18 21 23 27 31 35 42	1889 1661 1390 1314 1110 969 850 747 652 572 473	**138,35** **121,49** **101,48** **95,87** **81,00** **70,59** **61,85** **54,35** **47,37** **41,50** **34,28**	11205 15352 18876 19655 21633 23211 24515 25371 26277 27013 27850	0,8 0,9 1,1 1,2 1,4 1,5 1,7 1,9 2,1 2,3 2,6	**DR473-3E100L/4C**	4,65	124	116	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
2,2 3,0	21 25 28 35 41 45 53	923 792 717 569 488 442 379	**67,45** **57,79** **52,30** **41,42** **35,49** **32,11** **27,53**	10194 12393 13389 15466 16597 17144 17886	0,9 1,0 1,1 1,4 1,5 1,6 1,8	**DR373-3E100L/4C**	4,65	88	112	IE3
	57 65 72 82	354 313 280 246	**25,42** **22,46** **20,10** **17,65**	17057 17367 17606 17841	2,3 2,6 2,9 3,3	**DR372-3E100L/4C**	4,65	82	112	IE3
	27 32 35 41 48	729 626 567 486 417	**53,18** **45,56** **41,23** **35,35** **30,28**	6128 8744 9862 11139 12188	0,8 1,0 1,1 1,2 1,4	**DR283-3E100L/4C**	4,65	50	108	IE3
	58 68 77 87 103 121 140 153 177	345 296 261 232 196 168 145 132 115	**24,79** **21,28** **18,73** **16,62** **14,06** **12,03** **10,38** **9,45** **8,19**	12879 13399 13826 14292 14874 15298 15612 15232 14650	1,7 2,0 2,3 2,4 2,7 2,9 3,2 3,3 3,6	**DR282-3E100L/4C**	4,65	47	108	IE3
	34 40 48 57	578 499 417 350	**42,22** **36,38** **30,34** **25,44**	8240 8228 8144 8007	0,8 0,9 1,1 1,3	**DR273-3E100L/4C**	4,65	43	104	IE3
	64 68 79 91 103 122 143 167 212 249 291	315 297 254 223 197 166 141 121 96 82 70	**22,67** **21,33** **18,25** **16,00** **14,14** **11,90** **10,11** **8,67** **6,84** **5,82** **4,98**	7894 7828 7643 7474 7306 7060 6822 6591 6184 5950 5730	1,4 1,5 1,8 2,0 2,3 2,7 3,0 3,3 3,3 3,6 3,9	**DR272-3E100L/4C**	4,65	41	104	IE3
	81 96 110 126 152 187 216 247 298	249 212 184 161 133 108 94 82 68	**17,86** **15,18** **13,19** **11,54** **9,54** **7,74** **6,72** **5,88** **4,86**	4278 4576 4576 4548 4470 4218 4138 4050 3911	0,8 0,9 1,1 1,2 1,5 1,7 1,8 1,9 2,1	**DR172-3E100L/4C**	4,65	36	102	IE3
	375 431 493 596	54 47 41 34	**7,74** **6,72** **5,88** **4,86**	3728 3610 3497 3335	2,7 2,9 3,2 3,4	**DR172-3E90L/2C**	4,25	29	102	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
2,2 3,0	91 97 115 138 166 177 210 251	223 208 176 147 122 114 97 81	**15,97** **14,92** **12,61** **10,53** **8,76** **8,18** **6,91** **5,77**	784 855 993 1094 1050 1075 1121 1147	0,7 0,7 0,9 1,0 1,2 1,3 1,6 1,9	**DR072-3E100L/4C**	4,65	25	100	IE3
	275 331 355 419 502	74 61 57 48 40	**10,53** **8,76** **8,18** **6,91** **5,77**	1212 1152 1148 1133 1109	2,0 2,5 2,6 3,1 3,7	**DR072-3E90L/2C**	4,25	26	100	IE3
3,0 4,0	1,2 1,3 1,5 1,7	22028 19655 16652 15333	**1244,98** **1110,06** **938,19** **864,41**	187523 195673 204401 207981	0,8 0,9 1,1 1,2	**DR975-3E100L/4D**	6,26	806	150	IE3
	1,9 2,3 2,6	14233 11311 10130	**523,19** **415,16** **371,15**	210931 217867 220349	1,3 1,6 1,8	**DR974-3E132S/6B**	6,55	819	148	IE3
	2,8 3,5 3,9 4,4 5,1	9521 7567 6776 6091 5192	**523,19** **415,16** **371,15** **333,23** **284,06**	221538 225359 226807 228020 229548	1,9 2,4 2,7 3,0 3,5	**DR974-3E100L/4D**	6,26	801	148	IE3
	1,6 1,7 1,9	16451 14701 13210	**928,31** **828,93** **744,27**	52631 66292 75580	0,8 0,9 1,0	**DR875-3E100L/4D**	6,26	526	144	IE3
	2,4 2,7 3,0 3,6 4,3 4,9 5,6 6,4	11016 9762 8768 7427 6098 5350 4732 4127	**607,27** **537,22** **482,05** **407,42** **334,15** **293,46** **259,15** **225,61**	86527 91940 95901 100563 104776 106956 108655 110243	1,2 1,3 1,5 1,8 2,1 2,4 2,7 3,2	**DR874-3E100L/4D**	6,26	516	142	IE3
	2,6 3,0 3,3 3,8	10274 8873 7942 6987	**566,21** **489,64** **438,10** **384,72**	33564 48595 55907 62014	0,8 0,9 1,0 1,1	**DR774-3E100L/4D**	6,26	313	136	IE3
	4,4 5,1 6,1	6153 5275 4390	**222,16** **190,20** **158,23**	66852 71217 75104	1,3 1,5 1,8	**DR773-3E132S/6B**	6,55	318	134	IE3
	6,5 7,6 9,2 10	4135 3545 2950 2642	**222,16** **190,20** **158,23** **141,55**	76089 78360 80474 81498	1,9 2,3 2,7 3,0	**DR773-3E100L/4D**	6,26	319	134	IE3
	5,8	4660	**167,96**	25164	0,9	**DR673-3E132S/6B**	6,55	254	128	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
3,0 4,0	6,5 7,4 8,6 10 12	4118 3668 3131 2607 2325	**221,47** **197,01** **167,96** **139,76** **124,53**	31316 35396 39385 42832 44444	1,0 1,2 1,4 1,6 1,8	**DR673-3E100L/4D**	6,26	236	128	IE3
	14 16 16 19 22 25	1928 1697 1655 1425 1238 1084	**69,18** **60,82** **59,34** **51,01** **44,27** **38,70**	46507 47615 47810 48832 49622 50245	2,2 2,5 2,6 3,0 3,5 4,0	**DR673-3E132S/6B**	6,55	254	128	IE3
	7,5 8,6 9,7 12 14 16 18 21 24 29 33	3581 3139 2780 2353 1931 1708 1519 1287 1147 942 833	**192,62** **168,60** **149,15** **126,06** **103,39** **91,30** **81,15** **68,64** **61,12** **50,13** **44,27**	11083 20186 24889 29214 32746 34348 35651 37037 37830 38922 39467	0,8 1,0 1,1 1,3 1,6 1,8 2,0 2,3 2,6 3,2 3,6	**DR573-3E100L/4D**	6,26	176	122	IE3
	14 15 18 21 23 27 31 35 42	1896 1792 1515 1322 1159 1020 890 781 646	**101,48** **95,87** **81,00** **70,59** **61,85** **54,35** **47,37** **41,50** **34,28**	11053 13215 17384 20090 22159 23542 24882 25887 27043	0,8 0,9 1,0 1,1 1,2 1,4 1,5 1,7 1,9	**DR473-3E100L/4D**	6,26	124	116	IE3
	59 70	468 396	**24,54** **20,74**	26195 26586	3,3 3,9	**DR472-3E100L/4D**	6,26	119	116	IE3
	28 35 41 45 53	978 777 666 604 517	**52,30** **41,42** **35,49** **32,11** **27,53**	9067 13097 14874 15762 16884	0,8 1,0 1,1 1,2 1,3	**DR373-3E100L/4D**	6,26	89	112	IE3
	57 65 72 82 98 107 123	483 427 382 336 281 259 224	**25,42** **22,46** **20,10** **17,65** **14,74** **13,60** **11,77**	15972 16460 16823 17203 17604 17757 18146	1,7 1,9 2,1 2,4 2,9 3,2 3,5	**DR372-3E100L/4D**	6,26	83	112	IE3
	41 48	663 568	**35,35** **30,28**	7964 10008	0,9 1,0	**DR283-3E100L/4D**	6,26	51	108	IE3
	58 68 77 87 103	471 404 356 316 268	**24,79** **21,28** **18,73** **16,62** **14,06**	11328 12200 12877 13534 14319	1,3 1,5 1,7 1,8 2,0	**DR282-3E100L/4D**	6,26	47	108	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
3,0 4,0	121 140 153 177 205 218 253 278 321 370	230 198 181 156 136 127 110 100 87 75	**12,03** **10,38** **9,45** **8,19** **7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	14885 15292 14992 14443 13903 13607 13083 12754 12266 11790	2,1 2,3 2,4 2,6 2,8 2,7 2,9 3,0 3,2 3,5	**DR282-3E100L/4D**	6,26	47	108	IE3
	48 57	568 477	**30,34** **25,44**	7185 7215	0,8 0,9	**DR273-3E100L/4D**	6,26	43	104	IE3
	64 68 79 91 103 122 143 167 212 249 291	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**	7195 7173 7090 6992 6884 6708 6525 6338 5965 5765 5572	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**	6,26	41	104	IE3
	336 425 500 584	82 65 55 47	**8,67** **6,84** **5,82** **4,98**	5437 5095 4893 4705	3,9 4,0 4,0 4,0	**DR272-3E100L/2C**	5,58	41	104	IE3
	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**	6,26	36	102	IE3
	376 433 495 598	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**	5,58	38	102	IE3
	138 166 177 210 251	201 167 156 132 110	**10,53** **8,76** **8,18** **6,91** **5,77**	570 552 676 791 880	0,7 0,9 1,0 1,1 1,4	**DR072-3E100L/4D**	6,26	33	100	IE3
	276 332 356 421 504	100 83 78 66 55	**10,53** **8,76** **8,18** **6,91** **5,77**	1005 960 970 985 988	1,5 1,8 1,9 2,3 2,7	**DR072-3E100L/2C**	5,58	33	100	IE3
4,0 5,5	1,9 2,3 2,6	18977 15082 13506	**523,19** **415,16** **371,15**	197747 208766 212724	0,9 1,2 1,3	**DR974-3E132M/6C**	8,52	823	148	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
4,0 5,5	2,8 3,5 3,9 4,4 5,1 5,8 6,6 7,4	12608 10020 8973 8065 6875 6069 5390 4811	**523,19** **415,16** **371,15** **333,23** **284,06** **250,41** **222,15** **197,95**	214667 220435 222584 224365 226587 228022 229185 230203	1,4 1,8 2,0 2,2 2,6 3,0 3,3 3,7	**DR974-3E112M/4D**	8,05	813	148	IE3
	2,4 2,7 3,0 3,6 4,4 5,0 5,6 6,5	14588 12927 11611 9835 8075 7084 6267 5465	**607,27** **537,22** **482,05** **407,42** **334,15** **293,46** **259,15** **225,61**	67056 77163 83925 91781 98437 101618 104202 106576	0,9 1,0 1,1 1,3 1,6 1,8 2,1 2,4	**DR874-3E112M/4D**	8,05	524	142	IE3
	7,6 8,4 9,6 11	4757 4273 3749 3269	**128,20** **115,03** **101,03** **87,95**	108689 109905 111224 112387	2,7 3,0 3,5 4,0	**DR873-3E132M/6C**	8,52	527	140	IE3
	4,4 5,1 6,1 12 13	8212 7040 5859 3038 2698	**222,16** **190,20** **158,23** **81,72** **72,50**	53965 61827 68379 80178 81433	1,0 1,1 1,4 2,6 3,0	**DR773-3E132M/6C**	8,52	322	134	IE3
	6,6 7,7 9,2 10	5477 4696 3908 3500	**222,16** **190,20** **158,23** **141,55**	70275 73725 76929 78480	1,5 1,7 2,0 2,3	**DR773-3E112M/4D**	8,05	308	134	IE3
	7,4 8,7 10 12	4858 4148 3453 3080	**197,01** **167,96** **139,76** **124,53**	22387 31041 37109 39813	0,9 1,0 1,2 1,4	**DR673-3E112M/4D**	8,05	237	128	IE3
	14 16 19 22 25 29	2573 2209 1902 1653 1447 1273	**69,18** **59,34** **51,01** **44,27** **38,70** **34,02**	43022 45068 46637 47819 48713 49524	1,7 1,9 2,3 2,6 3,0 3,4	**DR673-3E132M/6C**	8,52	258	128	IE3
	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**	8,05	184	122	IE3
	43 51	854 729	**33,86** **28,87**	39349 40365	3,5 4,0	**DR572-3E112M/4D**	8,05	177	122	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
4,0 5,5	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**	14732 18457 20720 22769 24269 25929 27113	0,9 0,9 1,0 1,1 1,2 1,4 1,6	**DR473-3E112M/4D**	8,05	132	116	IE3
	59 70 76 86	619 524 483 430	**24,54** **20,74** **19,11** **17,01**	25309 25877 26112 26399	2,5 3,0 3,2 3,6	**DR472-3E112M/4D**	8,05	126	116	IE3
	45 53 62	800 685 588	**32,11** **27,53** **23,58**	13644 15376 16591	0,9 1,0 1,1	**DR373-3E112M/4D**	8,05	94	112	IE3
	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**	15159 15743 16286 16919 17147 17662 18232 18700 18872 18220 17523 16878 16275	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**	8,05	88	112	IE3
	78 88 104 121 141 155 178 206 220 255 280 323 373	472 419 355 304 263 239 207 180 169 146 133 115 99	**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**	11463 12453 13556 14315 14858 14664 14157 13654 13352 12861 12550 12088 11634	1,2 1,3 1,5 1,6 1,7 1,8 2,0 2,1 2,0 2,2 2,3 2,4 2,6	**DR282-3E112M/4D**	8,05	54	108	IE3
	411 439 508 559 645 745	90 84 73 66 57 50	**7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	11372 11135 10696 10421 10015 9619	3,4 3,3 3,5 3,7 3,9 4,0	**DR282-3E112M/2C**	7,28	50	108	IE3
	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**	6371 6338 6252 6140 6010 5679 5523 5365	1,1 1,3 1,5 1,7 1,8 1,8 2,0 2,2	**DR272-3E112M/4D**	8,05	48	104	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
4,0 5,5	336 426 501 585	110 87 74 63	**8,67** **6,84** **5,82** **4,98**	5280 4958 4777 4605	2,9 3,0 3,3 3,5	**DR272-3E112M/2C**	7,28	46	104	IE3
5,5 7,5	2,6	18667	**371,15**	199011	1,0	**DR974-3E132M/6D**	11,6	828	148	IE3
	2,8 3,5 3,9 4,4 5,2 5,9 6,6 7,4	17277 13730 12296 11052 9421 8316 7386 6593	**523,19** **415,16** **371,15** **333,23** **284,06** **250,41** **222,15** **197,95**	202633 211954 215398 218216 221678 223881 225649 227177	1,0 1,3 1,5 1,6 1,9 2,2 2,4 2,7	**DR974-3E132S/4C**	10,9	833	148	IE3
	4,4 5,0 5,7 6,5	11066 9707 8587 7488	**334,15** **293,46** **259,15** **225,61**	86126 92028 96551 100247	1,2 1,3 1,5 1,7	**DR874-3E132S/4C**	10,9	544	142	IE3
	7,5 8,4 9,6 11	6579 5910 5186 4522	**128,20** **115,03** **101,03** **87,95**	103371 105394 107474 109257	2,0 2,2 2,5 2,9	**DR873-3E132M/6D**	11,6	530	140	IE3
	11 13 15	4350 3908 3429	**128,20** **115,03** **101,03**	109629 110765 111948	3,0 3,3 3,8	**DR873-3E132S/4C**	10,9	531	140	IE3
	5,1 6,1	9738 8104	**190,20** **158,23**	40153 54735	0,8 1,0	**DR773-3E132M/6D**	11,6	327	134	IE3
	6,6 7,7 9,3 10 12 14 16 18 20	7506 6435 5356 4797 4145 3595 3148 2779 2468	**222,16** **190,20** **158,23** **141,55** **122,41** **105,99** **92,70** **81,72** **72,50**	58725 65096 70674 73313 76114 78129 79752 81023 82044	1,1 1,2 1,5 1,7 1,9 2,2 2,5 2,9 3,2	**DR773-3E132S/4C**	10,9	347	134	IE3
	10 12 14 16 19 21 24 25 29 33 38 43	4732 4221 3594 3094 2689 2354 2071 2020 1740 1512 1324 1165	**139,76** **124,53** **106,08** **91,19** **79,14** **69,18** **60,82** **59,34** **51,01** **44,27** **38,70** **34,02**	24236 30269 35903 39720 42338 44240 45753 46036 47360 48408 49229 49888	0,9 1,0 1,2 1,4 1,6 1,8 2,1 2,1 2,5 2,8 3,2 3,7	**DR673-3E132S/4C**	10,9	257	128	IE3
	14 16 18	3506 3100 2758	**103,39** **91,30** **81,15**	12812 20634 25032	0,9 1,0 1,1	**DR573-3E132S/4C**	10,9	204	122	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
5,5 7,5	21 24 29 33 37 44	2337 2083 1710 1512 1346 1140	**68,64** **61,12** **50,13** **44,27** **39,35** **33,28**	29293 31495 34309 35664 37191 39159	1,3 1,4 1,8 2,0 2,2 2,4	**DR573-3E132S/4C**	10,9	204	122	IE3
	51 61 68 80	999 832 742 631	**28,87** **24,02** **21,40** **18,23**	38641 39480 40060 42379	3,0 3,6 4,0 4,0	**DR572-3E132S/4C**	10,9	197	122	IE3
	31 35 43 51	1616 1417 1173 975	**47,37** **41,50** **34,28** **28,45**	18519 21196 23827 25684	0,8 0,9 1,0 1,2	**DR473-3E132S/4C**	10,9	152	116	IE3
	60 71 77 86 98 110 118 140 164 194 218 235 278 327	849 719 662 590 521 464 430 364 310 262 233 216 183 156	**24,54** **20,74** **19,11** **17,01** **15,02** **13,35** **12,40** **10,48** **8,93** **7,54** **6,71** **6,23** **5,26** **4,48**	23767 24674 25044 25489 25890 26211 26392 26486 25359 24099 23335 22866 21824 20865	1,8 2,2 2,3 2,6 3,0 3,3 3,6 4,0 4,0 4,0 4,0 4,0 4,0 4,0	**DR472-3E132S/4C**	10,9	146	116	IE3
	390 439 473 560 657	130 116 107 91 77	**7,54** **6,71** **6,23** **5,26** **4,48**	19846 19193 18793 17908 17098	4,0 4,0 4,0 4,0 4,0	**DR472-3E132S/2B**	9,90	137	116	IE3
	83 99 108 125 143 163 197 219 253 290 331 401	610 511 471 408 356 312 258 232 201 176 154 127	**17,65** **14,74** **13,60** **11,77** **10,25** **8,98** **7,42** **6,69** **5,79** **5,05** **4,42** **3,65**	14693 15697 16088 16837 17601 18178 18560 17887 17234 16626 16052 15246	1,3 1,6 1,7 1,9 2,1 2,2 2,5 2,3 2,5 2,6 2,8 3,1	**DR372-3E132S/4C**	10,9	114	112	IE3
	440 508 583 666 806	115 100 87 76 63	**6,69** **5,79** **5,05** **4,42** **3,65**	14866 14287 13752 13253 12558	3,7 4,0 4,0 4,0 4,0	**DR372-3E132S/2B**	9,90	105	112	IE3
	104 122 141 155	487 417 360 328	**14,06** **12,03** **10,38** **9,45**	12125 13291 14095 14197	1,1 1,2 1,3 1,3	**DR282-3E132S/4C**	10,9	74	108	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
5,5 7,5	179 207 220 255 281 324 374	284 246 231 200 182 157 136	**8,19** **7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	13753 13303 12992 12551 12268 11843 11421	1,4 1,5 1,5 1,6 1,7 1,8 1,9	**DR282-3E132S/4C**	10,9	74	108	IE3
	415 443 513 564 651 752	122 115 99 90 78 68	**7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	11175 10934 10519 10258 9871 9492	2,5 2,4 2,6 2,7 2,9 3,1	**DR282-3E132S/2B**	9,90	65	108	IE3
7,5 10	3,5 3,9 4,4	18723 16768 15071	**415,16** **371,15** **333,23**	198352 204044 208956	1,0 1,1 1,2	**DR974-3E132M/4D**	14,80	832	148	IE3
	5,1 5,7 6,3 7,1 8,2 9,2 10 12 14	13303 11878 10699 9465 8290 7338 6550 5887 5019	**191,74** **171,00** **153,87** **136,23** **119,15** **105,33** **93,91** **84,31** **71,87**	213157 216546 219143 221480 223907 225795 227129 228379 229692	1,4 1,5 1,7 1,9 2,2 2,5 2,7 3,1 3,6	**DR973-3E160M/6D**	15,60	850	146	IE3
	5,0 5,7 6,5	13237 11710 10211	**293,46** **259,15** **225,61**	75425 83251 90070	1,0 1,1 1,3	**DR874-3E132M/4D**	14,80	541	142	IE3
	7,6 8,4 9,6	8909 8003 7023	**128,20** **115,03** **101,03**	95338 98632 101926	1,5 1,6 1,9	**DR873-3E160M/6D**	15,60	569	140	IE3
	11 13 15 17 19	5934 5330 4678 4079 3593	**128,20** **115,03** **101,03** **87,95** **77,36**	105268 107010 108802 110365 111578	2,2 2,4 2,8 3,2 3,6	**DR873-3E132M/4D**	14,80	533	140	IE3
	7,7 9,3 10 12 14 16 18 20	8778 7306 6543 5654 4903 4294 3790 3366	**190,20** **158,23** **141,55** **122,41** **105,99** **92,70** **81,72** **72,50**	49412 60185 64613 69316 72842 75467 77436 79012	0,9 1,1 1,2 1,4 1,6 1,9 2,1 2,4	**DR773-3E132M/4D**	14,80	353	134	IE3
	23 26 29 30 35	2932 2604 2325 2240 1943	**41,85** **37,12** **33,10** **31,92** **27,65**	80571 81553 82540 82799 84369	2,7 3,1 3,4 3,6 4,0	**DR773-3E160M/6D**	15,60	406	134	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
7,5 10	14 16 19 21 24 25 29 33 38 43	4902 4221 3668 3211 2826 2756 2373 2063 1806 1590	**106,08** **91,19** **79,14** **69,18** **60,82** **59,34** **51,01** **44,27** **38,70** **34,02**	21751 30278 35393 38825 41425 41865 44128 45805 47074 48083	0,9 1,0 1,2 1,3 1,5 1,6 1,8 2,1 2,4 2,7	**DR673-3E132M/4D**	14,80	263	128	IE3
	56 63	1233 1104	**26,11** **23,36**	49626 50149	3,5 3,9	**DR672-3E132M/4D**	14,80	253	128	IE3
	21 24 29 33 37 44	3188 2842 2333 2063 1836 1555	**68,64** **61,12** **50,13** **44,27** **39,35** **33,28**	19385 24157 29405 31718 34098 36956	0,9 1,1 1,3 1,5 1,6 1,8	**DR573-3E132M/4D**	14,80	210	122	IE3
	51 61 68 80 93 108	1363 1134 1012 861 741 644	**28,87** **24,02** **21,40** **18,23** **15,67** **13,60**	36614 37920 38572 39331 40060 42133	2,2 2,6 3,0 3,5 4,0 4,0	**DR572-3E132M/4D**	14,80	203	122	IE3
	51	1330	**28,45**	23277	0,8	**DR473-3E132M/4D**	14,80	158	116	IE3
	60 71 77 86 98 110 118 140 164 194 218 235 278 327	1158 980 903 804 711 633 587 496 423 358 318 295 250 213	**24,54** **20,74** **19,11** **17,01** **15,02** **13,35** **12,40** **10,48** **8,93** **7,54** **6,71** **6,23** **5,26** **4,48**	21247 22774 23350 24087 24723 25224 25502 26012 24989 23740 23017 22571 21576 20654	1,3 1,6 1,7 1,9 2,2 2,4 2,6 3,1 3,4 3,3 3,5 3,6 4,0 4,0	**DR472-3E132M/4D**	14,80	148	116	IE3
	390 439 473 560 657	178 158 147 124 106	**7,54** **6,71** **6,23** **5,26** **4,48**	19670 19036 18648 17786 16994	4,0 4,0 4,0 4,0 4,0	**DR472-3E132S/2C**	13,20	143	116	IE3
	83 99 108 125 143 163 197 219 253 290 331 401	833 697 642 556 485 426 352 317 275 240 210 174	**17,65** **14,74** **13,60** **11,77** **10,25** **8,98** **7,42** **6,69** **5,79** **5,05** **4,42** **3,65**	11742 13690 14346 15515 16607 17410 18162 17461 16867 16307 15774 15017	1,0 1,2 1,3 1,4 1,5 1,6 1,8 1,7 1,8 1,9 2,1 2,2	**DR372-3E132M/4D**	14,80	120	112	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
7,5 10	440 508 583 666 806	158 137 119 104 86	**6,69** **5,79** **5,05** **4,42** **3,65**	14657 14107 13596 13117 12445	2,7 3,0 3,2 3,4 3,7	**DR372-3E132S/2C**	13,20	112	112	IE3
	122 141 155 179 207 220 255 281 324 374	569 492 448 388 336 315 272 248 215 186	**12,03** **10,38** **9,45** **8,19** **7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	11510 12822 13479 13221 12845 12521 12146 11901 11526 11148	0,9 0,9 1,0 1,1 1,1 1,1 1,2 1,2 1,3 1,4	**DR282-3E132M/4D**	14,80	82	108	IE3
	415 443 513 564 651 752	167 157 136 123 107 93	**7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	10952 10704 10322 10079 9717 9359	1,9 1,8 1,9 2,0 2,1 2,3	**DR282-3E132S/2C**	13,20	72	108	IE3
9,2 12,3	3,5 3,9 4,4	23046 20639 18550	**415,16** **371,15** **333,23**	183829 192263 198889	0,8 0,9 1,0	**DR974-3EC132M/4E**	18,40	838	148	IE3
	5,0 5,7 6,5	16293 14413 12569	**293,46** **259,15** **225,61**	53962 68262 79084	0,8 0,9 1,0	**DR874-3EC132M/4E**	18,40	547	142	IE3
	11 13 15 17 19	7305 6562 5759 5021 4423	**128,20** **115,03** **101,03** **87,95** **77,36**	101001 103388 105811 107900 109503	1,8 2,0 2,3 2,6 2,9	**DR873-3EC132M/4E**	18,40	539	140	IE3
	9,2 10 12 14 16 18 20	8994 8055 6961 6036 5287 4666 4145	**158,23** **141,55** **122,41** **105,99** **92,70** **81,72** **72,50**	47630 55082 62209 67390 71106 73900 76071	0,9 1,0 1,1 1,3 1,5 1,7 1,9	**DR773-3EC132M/4E**	18,40	359	134	IE3
	16 18 21 24 25 29 33 38 43	5196 4516 3953 3479 3393 2922 2540 2223 1957	**91,19** **79,14** **69,18** **60,82** **59,34** **51,01** **44,27** **38,70** **34,02**	16461 26990 32902 36868 37510 40820 43189 44966 46347	0,8 1,0 1,1 1,2 1,3 1,5 1,7 1,9 2,2	**DR673-3EC132M/4E**	18,40	269	128	IE3
	56 63	1518 1360	**26,11** **23,36**	48418 49109	2,8 3,2	**DR672-3EC132M/4E**	18,40	259	128	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
9,2 12,3	21 24 29 33 37 44	3924 3498 2872 2539 2260 1915	**68,64** **61,12** **50,13** **44,27** **39,35** **33,28**	- 13359 23786 27498 30898 34644	0,8 0,9 1,0 1,2 1,3 1,4	**DR573-3EC132M/4E**	18,40	219	122	IE3
	51 61 68 80 93 108	1678 1397 1246 1060 913 793	**28,87** **24,02** **21,40** **18,23** **15,67** **13,60**	34609 36413 37300 38323 39085 40281	1,8 2,1 2,4 2,8 3,3 3,6	**DR572-3EC132M/4E**	18,40	209	122	IE3
	59 70 76 86 97 109 118 139 164 194 218 234 277 326	1426 1207 1111 990 876 779 722 611 521 441 392 364 308 262	**24,54** **20,74** **19,11** **17,01** **15,02** **13,35** **12,40** **10,48** **8,93** **7,54** **6,71** **6,23** **5,26** **4,48**	18462 20773 21662 22682 23573 24266 24652 25363 24692 23452 22765 22338 21382 20492	1,1 1,3 1,4 1,6 1,8 2,0 2,1 2,5 2,8 2,7 2,9 2,9 3,2 3,5	**DR472-3EC132M/4E**	18,40	154	116	IE3
	83 99 107 124 142 163 197 218 252 289 330 400	1025 858 790 685 597 524 433 390 338 295 259 214	**17,65** **14,74** **13,60** **11,77** **10,25** **8,98** **7,42** **6,69** **5,79** **5,05** **4,42** **3,65**	7917 11365 12415 14129 15601 16664 17834 17108 16565 16046 15548 14834	0,8 1,0 1,0 1,2 1,2 1,3 1,5 1,4 1,5 1,6 1,7 1,8	**DR372-3EC132M/4E**	18,40	126	112	IE3
	141 155 178 206 220 255 280 323 373	605 551 477 414 388 335 305 264 229	**10,38** **9,45** **8,19** **7,09** **6,65** **5,74** **5,22** **4,52** **3,92**	11430 12377 12769 12458 12120 11804 11592 11262 10921	0,8 0,8 0,9 0,9 0,9 0,9 1,0 1,1 1,1	**DR282-3EC132M/4E**	18,40	88	108	IE3
11 15	5,1 5,7 6,3 7,1	19522 17431 15701 13889	**191,74** **171,00** **153,87** **136,23**	195964 201979 206831 211539	0,9 1,0 1,1 1,3	**DR973-3E160L/6E**	23,10	865	146	IE3
	7,6 8,6 9,5 12	12994 11603 10452 8100	**191,74** **171,00** **153,87** **119,15**	213962 216941 219630 224340	1,4 1,6 1,7 2,2	**DR973-3E160M/4C**	21,00	846	146	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
11 15	14 16 17 20	7170 6400 5753 4906	**105,33** **93,91** **84,31** **71,87**	225936 226496 220008 210640	2,5 2,8 3,1 3,7	**DR973-3E160M/4C**	21,00	846	146	IE3
	7,6 8,4 9,6	13075 11745 10307	**128,20** **115,03** **101,03**	76189 83159 89728	1,0 1,1 1,3	**DR873-3E160L/6E**	23,10	568	140	IE3
	11 13 15 17 19 21 24 27 28	8705 7820 6863 5984 5271 4681 4185 3762 3549	**128,20** **115,03** **101,03** **87,95** **77,36** **68,62** **61,27** **55,01** **51,94**	96275 99413 102535 105238 107277 108878 110166 111226 111744	1,5 1,7 1,9 2,2 2,5 2,8 3,1 3,5 3,7	**DR873-3E160M/4C**	21,00	549	140	IE3
	10 12 14 16 18 20 23 24 27 31 35 39 44 46	9599 8295 7193 6300 5561 4939 4408 4247 3684 3211 2866 2546 2273 2190	**141,55** **122,41** **105,99** **92,70** **81,72** **72,50** **64,64** **62,33** **53,99** **46,99** **41,85** **37,12** **33,10** **31,92**	41623 53303 61044 66194 69958 72832 75095 75673 77886 79601 80789 81828 82706 82958	0,8 1,0 1,1 1,3 1,4 1,6 1,8 1,9 2,2 2,5 2,8 3,1 3,5 3,7	**DR773-3E160M/4C**	21,00	386	134	IE3
	21 24 25 29 33 38 43 49	4710 4146 4043 3482 3026 2649 2332 2062	**69,18** **60,82** **59,34** **51,01** **44,27** **38,70** **34,02** **30,04**	24752 31197 32186 36977 40245 42628 44445 45809	0,9 1,0 1,1 1,2 1,4 1,6 1,8 2,1	**DR673-3E160M/4C**	21,00	296	128	IE3
	56 63 73 84	1809 1620 1400 1214	**26,11** **23,36** **20,20** **17,49**	47106 47994 48964 49740	2,4 2,7 3,1 3,5	**DR672-3E160M/4C**	21,00	286	128	IE3
	29 33 37 44 52	3422 3026 2693 2282 1950	**50,13** **44,27** **39,35** **33,28** **28,39**	14997 21754 26824 32043 35445	0,9 1,0 1,1 1,2 1,3	**DR573-3E160M/4C**	21,00	246	122	IE3
	61 68 80 93 108 123 140	1664 1485 1264 1088 945 827 728	**24,02** **21,40** **18,23** **15,67** **13,60** **11,89** **10,45**	34728 35835 37197 38167 39524 40839 41856	1,8 2,0 2,4 2,8 3,0 3,3 3,5	**DR572-3E160M/4C**	21,00	236	122	IE3



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
11	169	601	**8,65**	39511	3,4	**DR572-3E160M/4C**	21,00	236	122	IE3
15	197	518	**7,43**	37926	3,7					
	227	450	**6,45**	36483	4,0					
	260	394	**5,64**	35152	4,0					
	296	346	**4,96**	33913	4,0					
	335	306	**4,38**	32748	4,0					
	71	1438	**20,74**	18316	1,1	**DR472-3E160M/4C**	21,00	191	116	IE3
	77	1324	**19,11**	19593	1,2					
	86	1180	**17,01**	21038	1,3					
	98	1043	**15,02**	22239	1,5					
	110	928	**13,35**	23158	1,7					
	118	861	**12,40**	23660	1,8					
	140	728	**10,48**	24610	2,1					
	164	621	**8,93**	24332	2,3					
	194	525	**7,54**	23104	2,3					
	218	467	**6,71**	22454	2,4					
	235	433	**6,23**	22049	2,5					
	278	367	**5,26**	21136	2,7					
	327	313	**4,48**	20281	2,9					
15	6,3	21348	**153,87**	190136	0,8	**DR973-3E180L/6E**	30,80	935	146	IE3
20	7,2	18885	**136,23**	198061	1,0					
	7,6	17722	**191,74**	201521	1,0	**DR973-3E160L/4E**	28,70	861	146	IE3
	8,6	15825	**171,00**	206738	1,1					
	9,5	14256	**153,87**	210863	1,3					
	11	12612	**136,23**	214663	1,4					
	12	11048	**119,15**	218340	1,6					
	14	9779	**105,33**	220906	1,8					
	16	8730	**93,91**	222722	2,1					
	17	7847	**84,31**	216628	2,3					
	20	6691	**71,87**	207768	2,7					
	23	5906	**63,36**	200928	3,0					
	26	5246	**56,21**	194567	3,4					
	11	11872	**128,20**	83040	1,1	**DR873-3E160L/4E**	28,70	565	140	IE3
	13	10666	**115,03**	88576	1,2					
	15	9360	**101,03**	93920	1,4					
	17	8162	**87,95**	98325	1,6					
	19	7190	**77,36**	101590	1,8					
	21	6385	**68,62**	104135	2,0					
	24	5708	**61,27**	106096	2,3					
	27	5131	**55,01**	107712	2,5					
	28	4841	**51,94**	108496	2,7					
	32	4238	**45,41**	110068	3,1					
	37	3730	**39,92**	111333	3,5					
	14	9811	**105,99**	39394	0,8	**DR773-3E160L/4E**	28,70	401	134	IE3
	16	8593	**92,70**	50954	0,9					
	18	7584	**81,72**	58373	1,1					
	20	6736	**72,50**	63642	1,2					
	23	6013	**64,64**	67604	1,3					
	24	5793	**62,33**	68724	1,4					
	27	5025	**53,99**	72373	1,6					
	31	4379	**46,99**	75276	1,8					
	35	3909	**41,85**	76983	2,0					
	39	3473	**37,12**	78660	2,3					
	44	3100	**33,10**	79992	2,6					
	46	2987	**31,92**	80379	2,7					
	53	2591	**27,65**	81289	3,1					
	61	2258	**24,06**	78458	3,5					



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
15 20	29 33 38 43 49	4749 4128 3614 3181 2812	**51,01** **44,27** **38,70** **34,02** **30,04**	23980 31219 35838 39114 41575	0,9 1,0 1,2 1,4 1,5	**DR673-3E160L/4E**	28,70	311	128	IE3
	56 63 73 84 96 109 122 137 142	2468 2210 1910 1656 1450 1280 1136 1014 977	**26,11** **23,36** **20,20** **17,49** **15,30** **13,48** **11,96** **10,67** **10,29**	43640 45142 46607 47858 48770 49694 51109 52198 52490	1,7 1,9 2,3 2,6 3,0 3,3 3,5 3,8 3,9	**DR672-3E160L/4E**	28,70	301	128	IE3
	44 52	3112 2659	**33,28** **28,39**	23943 30286	0,9 1,0	**DR573-3E160L/4E**	28,70	261	122	IE3
	61 68 80 93 108 123 140 169 197 227 260 296 335	2270 2025 1724 1484 1289 1128 993 820 706 614 537 472 417	**24,02** **21,40** **18,23** **15,67** **13,60** **11,89** **10,45** **8,65** **7,43** **6,45** **5,64** **4,96** **4,38**	30053 32041 34292 35858 37725 39450 40763 38865 37373 36004 34734 33546 32425	1,3 1,5 1,7 2,0 2,2 2,4 2,6 2,5 2,7 2,9 3,1 3,3 3,5	**DR572-3E160L/4E**	28,70	251	122	IE3
	98 110 118 140 164 194 218 235 278 327	1423 1266 1174 994 847 717 638 591 500 427	**15,02** **13,35** **12,40** **10,48** **8,93** **7,54** **6,71** **6,23** **5,26** **4,48**	18470 20206 21106 22658 23570 22364 21799 21443 20627 19850	1,1 1,2 1,3 1,6 1,7 1,7 1,8 1,8 2,0 2,1	**DR472-3E160L/4E**	28,70	215	116	IE3
18,5 25	8,6 9,6 11 12 14 16 17 21 23 26 34	19387 17464 15450 13534 11980 10694 9613 8197 7236 6427 4972	**171,00** **153,87** **136,23** **119,15** **105,33** **93,91** **84,31** **71,87** **63,36** **56,21** **43,38**	196507 201972 207722 212628 216172 219022 213282 204879 198352 192254 179452	0,9 1,0 1,2 1,3 1,5 1,7 1,9 2,2 2,5 2,8 3,6	**DR973-3E180M/4C**	35,00	901	146	IE3
	12 13 15 17 19 21	14544 13066 11467 9999 8808 7822	**128,20** **115,03** **101,03** **87,95** **77,36** **68,62**	67406 76391 84605 91103 95782 99313	0,9 1,0 1,1 1,3 1,5 1,7	**DR873-3E180M/4C**	35,00	605	140	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
18,5 25	24	6993	**61,27**	101922	1,9	**DR873-3E180M/4C**	35,00	605	140	IE3
	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**	111830	3,7					
	18	9291	**81,72**	44784	0,9	**DR773-3E180M/4C**	35,00	441	134	IE3
	20	8252	**72,50**	53639	1,0					
	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**	73409	1,7					
	40	4254	**37,12**	75661	1,9					
	45	3798	**33,10**	77381	2,1					
	46	3659	**31,92**	77978	2,2					
	53	3174	**27,65**	79712	2,5					
	61	2766	**24,06**	77204	2,9					
	65	2638	**22,77**	76227	3,0	**DR772-3E180M/4C**	35,00	426	134	IE3
	74	2299	**19,82**	73609	3,5					
	85	2025	**17,44**	71223	4,0					
	33	5057	**44,27**	19234	0,9	**DR673-3E180M/4C**	35,00	351	128	IE3
	38	4427	**38,70**	28011	1,0					
	43	3897	**34,02**	33413	1,1					
	49	3445	**30,04**	37171	1,2					
	56	3024	**26,11**	40194	1,4	**DR672-3E180M/4C**	35,00	341	128	IE3
	63	2708	**23,36**	42220	1,6					
	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**	51400	3,1					
	143	1197	**10,29**	51672	3,2					
	166	1038	**8,91**	53077	3,4					
	190	904	**7,75**	54218	3,7					
	198	868	**7,45**	54509	3,3					
	223	771	**6,61**	52772	3,5					
	250	688	**5,89**	51145	3,7					
	260	663	**5,68**	50637	3,8					
	61	2781	**24,02**	24869	1,1	**DR572-3E180M/4C**	35,00	291	122	IE3
	69	2481	**21,40**	28079	1,2					
	81	2112	**18,23**	31385	1,4					
	94	1818	**15,67**	33628	1,7					
	108	1580	**13,60**	36043	1,8					
	124	1382	**11,89**	38148	2,0					
	141	1216	**10,45**	39743	2,1					
	171	1005	**8,65**	38231	2,0					
	198	865	**7,43**	36821	2,2					
	229	752	**6,45**	35519	2,4					
	262	658	**5,64**	34305	2,5					
	298	579	**4,96**	33164	2,7					
	337	511	**4,38**	32082	2,9					
22 30	11	18437	**136,23**	199385	1,0	**DR973-3E180L/4D**	41,40	904	146	IE3
	12	16151	**119,15**	205917	1,1					
	14	14296	**105,33**	210678	1,3					
	16	12762	**93,91**	214241	1,4					



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Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
22 30	17 20 23 26 34 38 43	11471 9781 8635 7669 5933 5238 4652	**84,31** **71,87** **63,36** **56,21** **43,38** **38,24** **33,93**	210461 202512 196291 190449 178101 172260 166826	1,6 1,8 2,1 2,3 3,0 3,4 3,9	**DR973-3E180L/4D**	41,40	904	146	IE3
	15 17 19 21 24 27 28 32 37 48 55 63	13683 11932 10511 9335 8345 7501 7078 6196 5454 4175 3655 3217	**101,03** **87,95** **77,36** **68,62** **61,27** **55,01** **51,94** **45,41** **39,92** **30,50** **26,66** **23,44**	72813 82552 89089 93895 97578 100487 101711 104682 106765 110154 111451 111782	1,0 1,1 1,2 1,4 1,6 1,7 1,8 2,1 2,4 3,1 3,6 4,0	**DR873-3E180L/4D**	41,40	608	140	IE3
	24 27 31 35 40 44 46 53 61	8469 7347 6402 5715 5077 4532 4367 3788 3301	**62,33** **53,99** **46,99** **41,85** **37,12** **33,10** **31,92** **27,65** **24,06**	51946 60083 65641 69203 72086 74503 75138 77480 76139	0,9 1,1 1,2 1,4 1,6 1,8 1,8 2,1 2,4	**DR773-3E180L/4D**	41,40	444	134	IE3
	65 74 84 95 106	3148 2744 2417 2146 1918	**22,77** **19,82** **17,44** **15,46** **13,81**	75237 72758 70485 68383 66425	2,5 2,9 3,3 3,6 3,8	**DR772-3E180L/4D**	41,40	429	134	IE3
	43 49	4651 4111	**34,02** **30,04**	25522 31539	0,9 1,0	**DR673-3E180L/4D**	41,40	354	128	IE3
	56 63 73 84 96 109 123 138 143 165 190 197 222 250 259 299 343	3608 3231 2792 2421 2120 1871 1661 1483 1428 1238 1079 1037 920 821 791 686 597	**26,11** **23,36** **20,20** **17,49** **15,30** **13,48** **11,96** **10,67** **10,29** **8,91** **7,75** **7,45** **6,61** **5,89** **5,68** **4,92** **4,28**	35981 38832 41759 43953 45575 47008 49004 50507 50839 52428 53707 54097 52412 50829 50334 48411 46602	1,2 1,3 1,5 1,8 2,0 2,3 2,4 2,6 2,7 2,9 3,1 2,8 3,0 3,1 3,2 3,5 3,7	**DR672-3E180L/4D**	41,40	344	128	IE3
	61 69 81 94	3319 2961 2520 2169	**24,02** **21,40** **18,23** **15,67**	16963 22583 27677 30916	0,9 1,0 1,2 1,4	**DR572-3E180L/4D**	41,40	294	122	IE3



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Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
22 30	108 124 141 170 198 228 261 297 336	1885 1650 1452 1199 1033 897 785 691 610	**13,60** **11,89** **10,45** **8,65** **7,43** **6,45** **5,64** **4,96** **4,38**	34084 36634 38573 37689 36362 35126 33966 32870 31827	1,5 1,6 1,8 1,7 1,8 2,0 2,1 2,3 2,4	**DR572-3E180L/4D**	41,40	294	122	IE3
30 40	16 17 21 23 26 29 34 39 43 57	17345 15590 13294 11735 10424 9305 8064 7119 6323 4831	**93,91** **84,31** **71,87** **63,36** **56,21** **50,12** **43,38** **38,24** **33,93** **25,92**	202475 203358 196473 190975 185735 180724 174459 169044 163967 151994	1,0 1,2 1,4 1,5 1,7 1,9 2,2 2,5 2,8 3,7	**DR973-3E200L/4D**	54,50	930	146	IE3
	21 24 27 28 32 37 42 48 55 63 83 95 109	12687 11342 10195 9619 8421 7413 6552 5674 4968 4373 3297 2886 2541	**68,62** **61,27** **55,01** **51,94** **45,41** **39,92** **35,24** **30,50** **26,66** **23,44** **17,67** **15,45** **13,58**	78462 85191 90282 92646 97201 100697 103433 105990 107952 109530 101221 97804 94585	1,0 1,1 1,3 1,4 1,5 1,8 2,0 2,3 2,6 3,0 3,3 3,7 4,0	**DR873-3E200L/4D**	54,50	634	140	IE3
	35 40 45 46 53 61	7768 6900 6160 5935 5149 4487	**41,85** **37,12** **33,10** **31,92** **27,65** **24,06**	57128 62675 66801 67932 71810 73469	1,0 1,2 1,3 1,3 1,6 1,8	**DR773-3E200L/4D**	54,50	470	134	IE3
	65 74 85 95 107 119 126 144 164 170 190 212 224 256 292 330	4278 3730 3285 2917 2607 2343 2210 1934 1702 1645 1470 1321 1246 1091 960 848	**22,77** **19,82** **17,44** **15,46** **13,81** **12,40** **11,71** **10,23** **9,00** **8,70** **7,76** **6,97** **6,58** **5,75** **5,06** **4,47**	72740 70589 68579 66693 64916 63234 62342 60272 58318 57342 55711 54180 53373 51512 49768 48119	1,9 2,1 2,4 2,6 2,8 3,0 3,1 3,3 3,6 3,2 3,4 3,6 3,7 4,0 4,0 4,0	**DR772-3E200L/4D**	54,50	455	134	IE3
	73 84 96 109	3795 3290 2881 2543	**20,20** **17,49** **15,30** **13,48**	34319 38327 41129 43495	1,1 1,3 1,5 1,7	**DR672-3E200L/4D**	54,50	370	128	IE3



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D Series Geared Motors Performance Tables

D Serien Getriebemotoren Leistungs- und Drehzahlübersicht



Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
30 40	123 138 143 166 190 198 223 250 260 300 344	2258 2015 1941 1684 1467 1409 1251 1117 1076 933 812	**11,96** **10,67** **10,29** **8,91** **7,75** **7,45** **6,61** **5,89** **5,68** **4,92** **4,28**	46209 48305 48790 50851 52480 52988 51426 49948 49484 47672 45956	1,8 1,9 2,0 2,1 2,3 2,0 2,2 2,3 2,4 2,5 2,7	**DR672-3E200L/4D**	54,50	370	128	IE3
37 50	21 23 26 29 34 39 44 57 65 73	16364 14445 12831 11453 9926 8763 7784 5947 5250 4664	**71,87** **63,36** **56,21** **50,12** **43,38** **38,24** **33,93** **25,92** **22,85** **20,27**	191175 186321 181618 177061 171294 166257 161494 149895 145196 140796	1,1 1,2 1,4 1,6 1,8 2,1 2,3 3,0 3,3 3,6	**DR973-3E225S/4C**	65,7	1020	146	IE3
	27 28 33 37 42 48 55 63 84 96 109	12549 11840 10366 9124 8065 6984 6115 5383 4058 3553 3128	**55,01** **51,94** **45,41** **39,92** **35,24** **30,50** **26,66** **23,44** **17,67** **15,45** **13,58**	79060 82684 89469 94513 98411 102097 104728 106900 99569 96360 93315	1,0 1,1 1,3 1,4 1,6 1,9 2,1 2,4 2,7 3,0 3,2	**DR873-3E225S/4C**	65,7	723	140	IE3
	105 120 135 151	3258 2875 2553 2278	**14,02** **12,36** **10,97** **9,78**	94785 91746 88909 86242	3,5 3,7 4,0 4,0	**DR872-3E225S/4C**	65,7	705	140	IE3
	45 46 53 61 71 79 82	7582 7305 6338 5523 4790 4276 4120	**33,10** **31,92** **27,65** **24,06** **20,87** **18,61** **17,95**	58284 60100 65864 70047 67947 66544 66087	1,1 1,1 1,3 1,4 1,2 1,3 1,3	**DR773-3E225S/4C**	65,7	555	134	IE3
	96 107 119 126 144 164 170 190 212 225 257 292 331	3590 3209 2884 2721 2381 2095 2025 1810 1627 1534 1343 1181 1044	**15,46** **13,81** **12,40** **11,71** **10,23** **9,00** **8,70** **7,76** **6,97** **6,58** **5,75** **5,06** **4,47**	65218 63601 62055 61230 59301 57463 56404 54873 53428 52663 50890 49220 47634	2,1 2,3 2,4 2,5 2,7 2,9 2,6 2,8 2,9 3,0 3,2 3,5 3,6	**DR772-3E225S/4C**	65,7	548	134	IE3



D Serisi Motorlu Güç Devir Sayfaları

D Series Geared Motors Performance Tables

D Serien Getriebemotoren Leistungs- und Drehzahlübersicht

Güç *Power* Leistung **P_g [kW]** P_g [HP]	**Çıkış Devri** *Output Speeds* Abtriebswelle Drehzahlen **n_2 [r.p.m]**	**Çıkış Momenti** *Output Torque* Abtriebswelle Drehmomente **M_2 [Nm]**	**Çevrim Oranı** *Ratio* Übersetzung **i**	**Güv. Rad. Yük Çıkış** *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) **F_{qam} [N]**	**Servis Faktörü** *Service Factors* Betriebsfaktor **f_s**	**Tipi** *Type* Typ	**Anma Akımı** *Rated Current* Nennstrom **[A]**	**Ağırlık** *Weight* Gewicht ~ **[kg]**	**Ölçü Sayfası** *Dim. Page* Maße Seite	**Motor Verim Snf.** *Motor Eff. Class* Motor Effizienz-klasse
45 60	23 26 29 34 39 44 57 65 73	17581 15616 13940 12081 10665 9474 7238 6390 5677	**63,36** **56,21** **50,12** **43,38** **38,24** **33,93** **25,92** **22,85** **20,27**	181048 176974 172948 167761 163162 158765 147591 143176 139013	1,0 1,2 1,3 1,5 1,7 1,9 2,5 2,7 3,0	**DR973-3E225M/4D**	80,00	1050	146	IE3
	89	4707	**16,64**	133080	3,8	**DR972-3E225M/4D**	80,00	1031	146	IE3
	33 37 42 48 55 63 84 96 109	12616 11106 9817 8501 7442 6552 4940 4325 3807	**45,41** **39,92** **35,24** **30,50** **26,66** **23,44** **17,67** **15,45** **13,58**	78748 86217 91795 96872 100583 103453 97737 94768 91924	1,0 1,2 1,3 1,5 1,7 2,0 2,2 2,4 2,7	**DR873-3E225M/4D**	80,00	751	140	IE3
	105 119 135 151 169 182 206 232 261 291	3966 3500 3108 2773 2484 2304 2033 1806 1611 1443	**14,02** **12,36** **10,97** **9,78** **8,75** **8,12** **7,16** **6,35** **5,66** **5,07**	93512 90629 87923 85367 82938 80822 78200 75756 73462 71294	2,8 3,0 3,3 3,5 3,7 3,4 3,7 3,9 4,0 4,0	**DR872-3E225M/4D**	80,00	735	140	IE3
	53 61 71 79 82	7714 6722 5830 5205 5015	**27,65** **24,06** **20,87** **18,61** **17,95**	57500 63681 65313 64215 63847	1,0 1,2 1,0 1,1 1,1	**DR773-3E225M/4D**	80,00	586	134	IE3
	96 107 119 126 144 164 170 190 212 224 257 292 331	4370 3906 3510 3311 2898 2550 2465 2203 1980 1868 1634 1438 1271	**15,46** **13,81** **12,40** **11,71** **10,23** **9,00** **8,70** **7,76** **6,97** **6,58** **5,75** **5,06** **4,47**	63555 62126 60738 59990 58224 56522 55363 53949 52602 51885 50214 48629 47115	1,8 1,9 2,0 2,1 2,2 2,4 2,1 2,3 2,4 2,5 2,7 2,8 3,0	**DR772-3E225M/4D**	80,00	578	134	IE3
55 75	30 34 39 44 57 65 73	16981 14716 12991 11540 8817 7784 6915	**50,12** **43,38** **38,24** **33,93** **25,92** **22,85** **20,27**	167592 163143 159100 155166 144536 140484 136623	1,1 1,2 1,4 1,6 2,0 2,2 2,4	**DR973-3E250M/4D**	95,3	1135	146	IE3



D Serisi Motorlu Güç Devir Sayfaları

D Series Geared Motors Performance Tables

D Serien Getriebemotoren Leistungs- und Drehzahlübersicht



Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
55 75	89 100 112 125	5734 5093 4554 4094	**16,64** **14,77** **13,19** **11,85**	131301 127380 123732 120315	3,1 3,5 4,0 4,0	**DR972-3E250M/4D**	95,3	1116	146	IE3
	42 49 56 63 84 96 109	11958 10355 9066 7981 6017 5268 4638	**35,24** **30,50** **26,66** **23,44** **17,67** **15,45** **13,58**	82139 89541 94741 98655 95330 92668 90078	1,1 1,3 1,4 1,6 1,8 2,0 2,2	**DR873-3E250M/4D**	95,3	836	140	IE3
	106 120 135 152 169 182 207 233 262 292	4831 4263 3786 3378 3027 2807 2477 2200 1963 1758	**14,02** **12,36** **10,97** **9,78** **8,75** **8,12** **7,16** **6,35** **5,66** **5,07**	91813 89129 86589 84174 81866 79710 77216 74879 72676 70586	2,3 2,5 2,7 2,8 3,0 2,8 3,0 3,2 3,4 3,8	**DR872-3E250M/4D**	95,3	820	140	IE3
75 97	39 44 57 65 73	17657 15685 11984 10580 9399	**38,24** **33,93** **25,92** **22,85** **20,27**	150978 147997 138466 135155 131911	1,0 1,1 1,5 1,6 1,8	**DR973-4E280S/4D**	127,00	1295	146	IE4
	89 101 113 125 150 169 189 210	7793 6923 6190 5565 4670 4148 3709 3335	**16,64** **14,77** **13,19** **11,85** **9,94** **8,82** **7,88** **7,08**	127839 124309 120988 117848 111957 108650 105568 102678	2,3 2,6 2,9 3,2 3,2 3,4 3,6 3,9	**DR972-4E280S/4D**	127,00	1170	146	IE4
	56 63 84 96 110	12322 10847 8179 7161 6304	**26,66** **23,44** **17,67** **15,45** **13,58**	80292 87463 90521 88486 86418	1,1 1,2 1,3 1,5 1,6	**DR873-4E280S/4D**	127,00	996	140	IE4
	106 120 136 152 170 183 208 234 263 293	6566 5795 5146 4592 4114 3816 3367 2990 2668 2390	**14,02** **12,36** **10,97** **9,78** **8,75** **8,12** **7,16** **6,35** **5,66** **5,07**	88462 86182 83979 81849 79786 77543 75306 73185 71164 69231	1,7 1,8 2,0 2,1 2,2 2,1 2,2 2,4 2,5 2,8	**DR872-4E280S/4D**	127,00	967	140	IE4
90 117	57 65 73	14372 12688 11272	**25,92** **22,85** **20,27**	133882 131146 128378	1,3 1,4 1,5	**DR973-4E280M/4E**	152,00	1355	146	IE4



D Serisi Motorlu Güç Devir Sayfaları

D Series Geared Motors Performance Tables

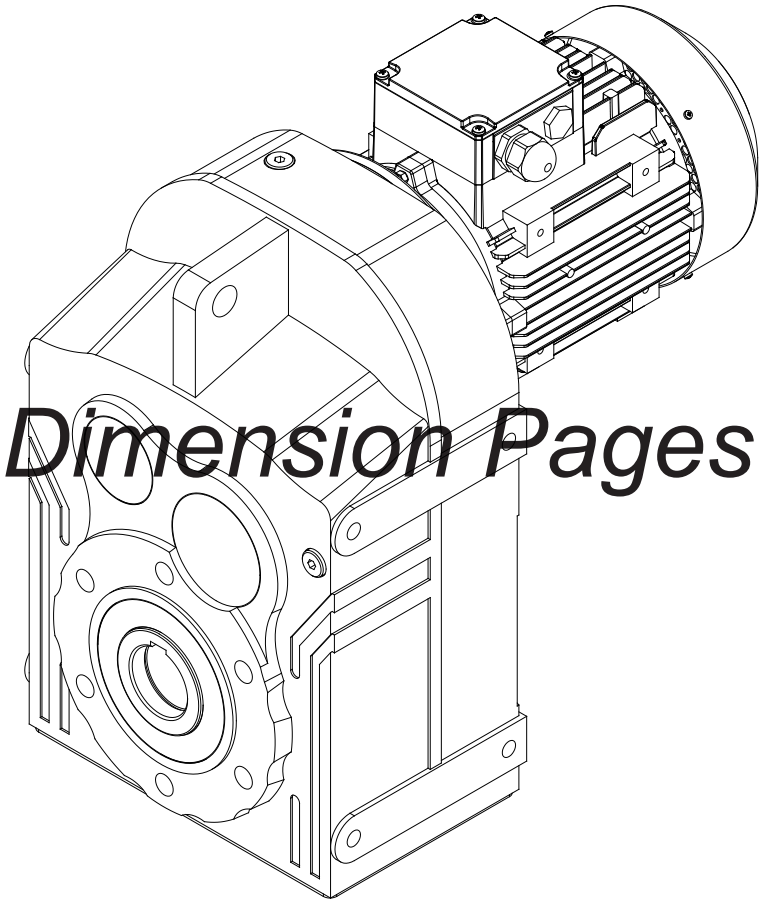
D Serien Getriebemotoren Leistungs- und Drehzahlübersicht

Güç *Power* Leistung P_g [kW] P_g [HP]	Çıkış Devri *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Çıkış Momenti *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Çevrim Oranı *Ratio* Übersetzung i	Güv. Rad. Yük Çıkış *Per.O. Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Servis Faktörü *Service Factors* Betriebsfaktor f_s	Tipi *Type* Typ	Anma Akımı *Rated Current* Nennstrom [A]	Ağırlık *Weight* Gewicht ~ [kg]	Ölçü Sayfası *Dim. Page* Maße Seite	Motor Verim Snf. *Motor Eff. Class* Motor Effizienz-klasse
90 117	89 101 113 126 150 169 189 210	9346 8302 7424 6674 5601 4975 4448 3999	**16,64** **14,77** **13,19** **11,85** **9,94** **8,82** **7,88** **7,08**	125273 122042 118970 116040 110272 107159 104240 101487	1,9 2,2 2,4 2,7 2,7 2,8 3,0 3,2	**DR972-4E280M/4E**	152,00	1230	146	IE4
	96 110	8587 7560	**15,45** **13,58**	85325 83662	1,2 1,3	**DR873-4E280M/4E**	152,00	1056	140	IE4
	106 120 136 152 170 183 208 234 263 293	7875 6950 6171 5507 4934 4576 4038 3586 3200 2867	**14,02** **12,36** **10,97** **9,78** **8,75** **8,12** **7,16** **6,35** **5,66** **5,07**	85950 83981 82036 80124 78248 75934 73894 71937 70055 68241	1,4 1,5 1,6 1,7 1,9 1,7 1,8 2,0 2,1 2,3	**DR872-4E280M/4E**	152,00	1027	140	IE4
110 150	57 65 74	17542 15487 13758	**25,92** **22,85** **20,27**	127642 125696 123582	1,0 1,1 1,2	**DR973-4E315S/4D**	187,00	1551	146	IE4
	90 101 113 126 150 169 189 210	11408 10134 9061 8146 6837 6073 5430 4881	**16,64** **14,77** **13,19** **11,85** **9,94** **8,82** **7,88** **7,08**	121801 118975 116241 113597 107994 105144 102444 99877	1,6 1,8 2,0 2,2 2,2 2,3 2,5 2,6	**DR972-4E315S/4D**	187,00	1426	146	IE4
132 180	65 74	18585 16510	**22,85** **20,27**	119592 118225	0,9 1,0	**DR973-4E315M/4E**	225,00	1572	146	IE4
	90 101 113 126 150 169 189 210	13690 12161 10874 9776 8204 7288 6516 5858	**16,64** **14,77** **13,19** **11,85** **9,94** **8,82** **7,88** **7,08**	117959 115592 113237 110915 105492 102938 100484 98125	1,3 1,5 1,7 1,8 1,8 1,9 2,1 2,2	**DR972-4E315M/4E**	225,00	1447	146	IE4
160 220	90 101 113 126 150 169 189 210	16595 14741 13181 11850 9945 8834 7899 7101	**16,64** **14,77** **13,19** **11,85** **9,94** **8,82** **7,88** **7,08**	112975 111209 109352 107449 102258 100089 97956 95867	1,1 1,2 1,4 1,5 1,5 1,6 1,7 1,8	**DR972-4E315L/4F**	272,00	1495	146	IE4

Notlar / *Notes* / Notizen

DR Serisi / *Series* / Serie

Ölçü Sayfaları

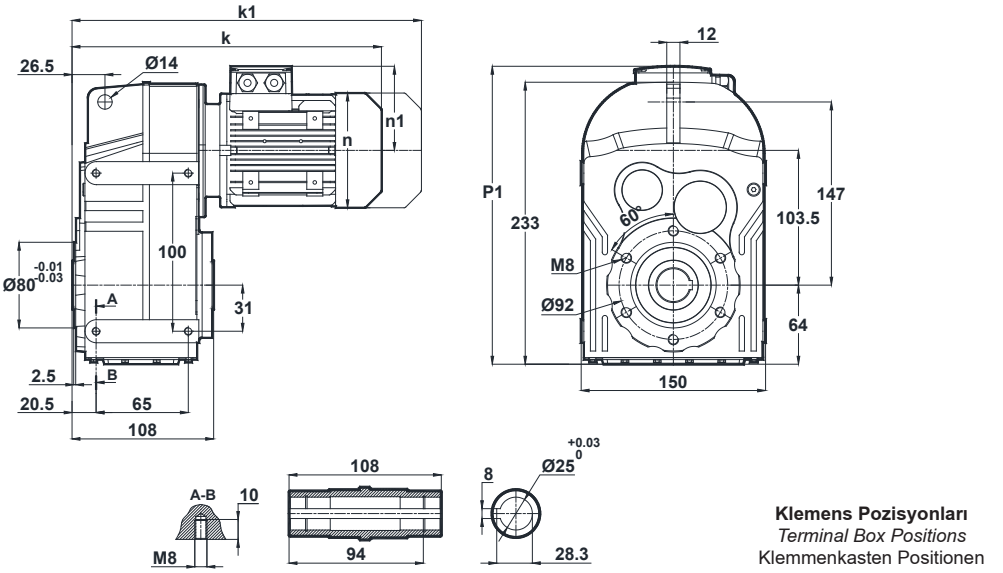


Dimension Pages

Abmessungsseiten

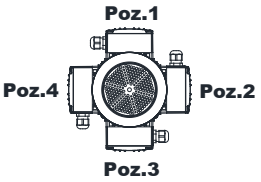
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR072.00
DR073.00



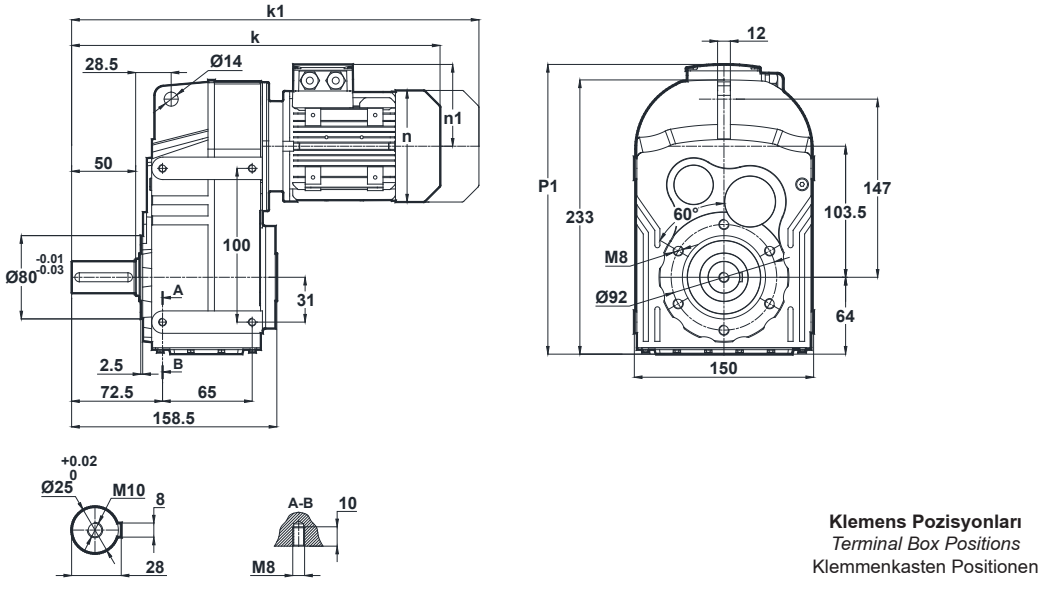
	63	71	80	90S	90L	100L
k	301	328	362	401	401	449
k1	372	419	455	480	480	557
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



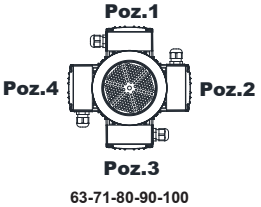
63-71-80-90-100
Tip / *Type* / Typ

DR072.01
DR073.01



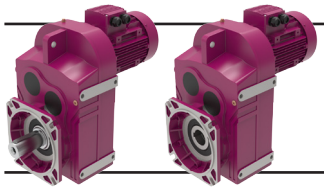
	63	71	80	90S	90L	100L
k	353	380	414	453	453	501
k1	424	471	507	532	532	609
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

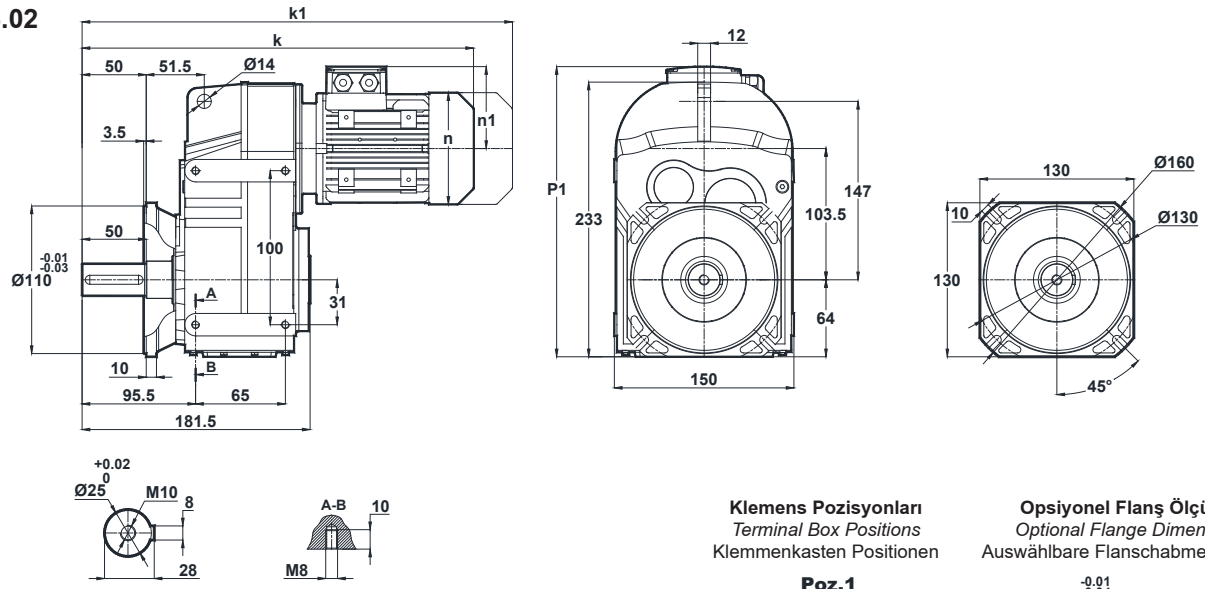
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

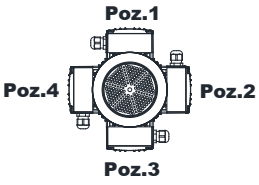
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR072.02
DR073.02



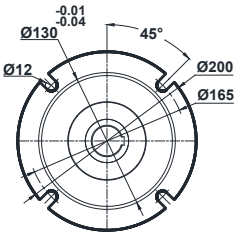
	63	71	80	90S	90L	100L
k	376	403	437	476	476	524
k1	447	494	530	555	555	632
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

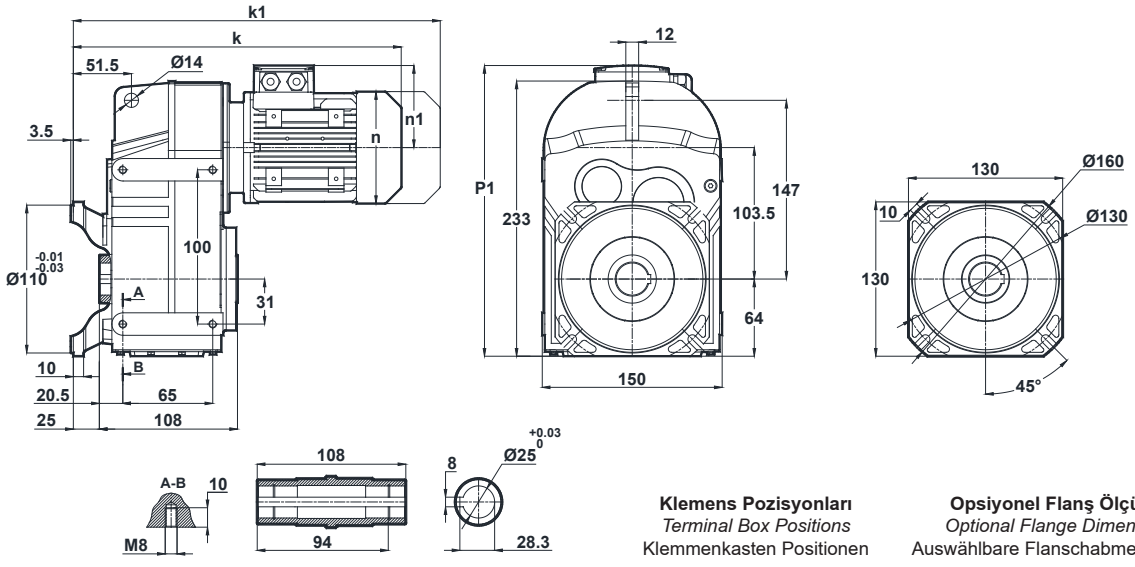


63-71-80-90-100
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

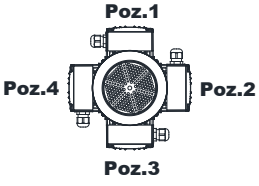


DR072.03
DR073.03



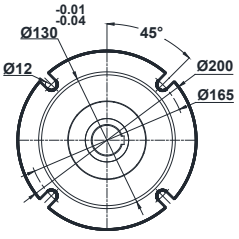
	63	71	80	90S	90L	100L
k	326	353	387	426	426	474
k1	397	444	480	505	505	582
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

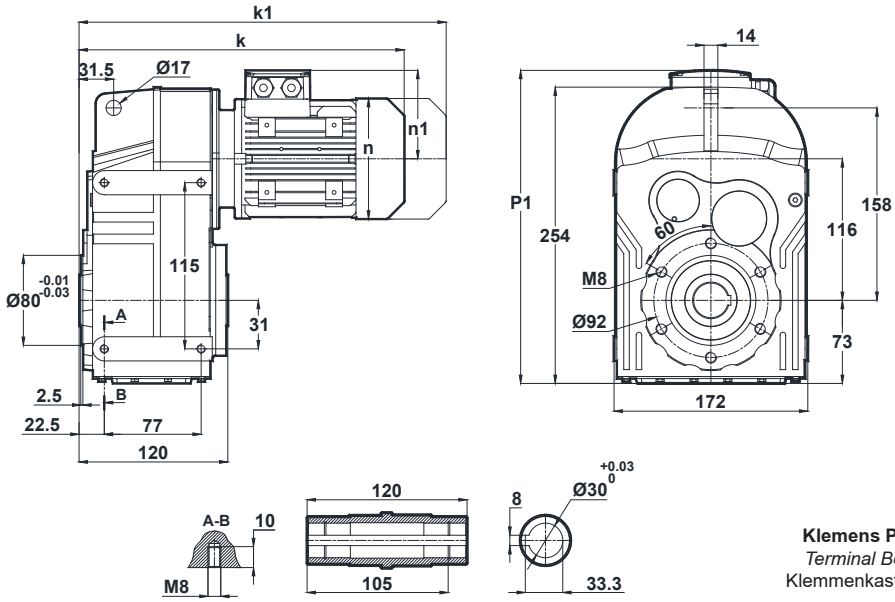
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



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

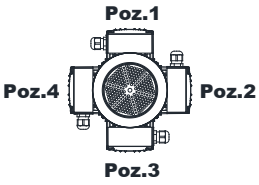
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR172.00
DR173.00



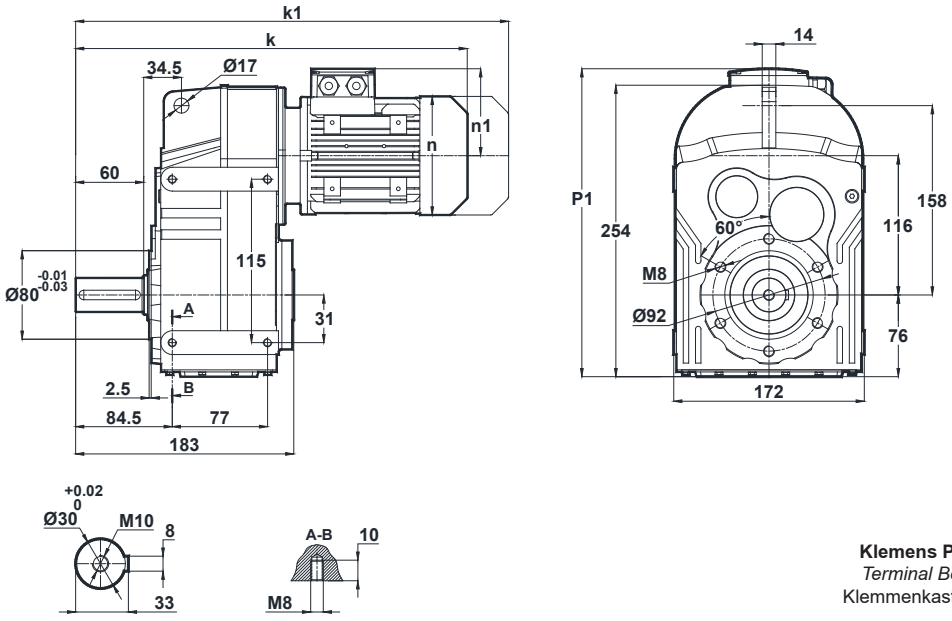
	63	71	80	90S	90L	100L
k	310	337	371	410	410	458
k1	381	428	464	489	489	566
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



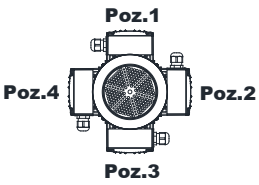
63-71-80-90-100
Tip / *Type* / Typ

DR172.01
DR173.01



	63	71	80	90S	90L	100L
k	373	400	434	473	473	521
k1	444	491	527	552	552	629
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

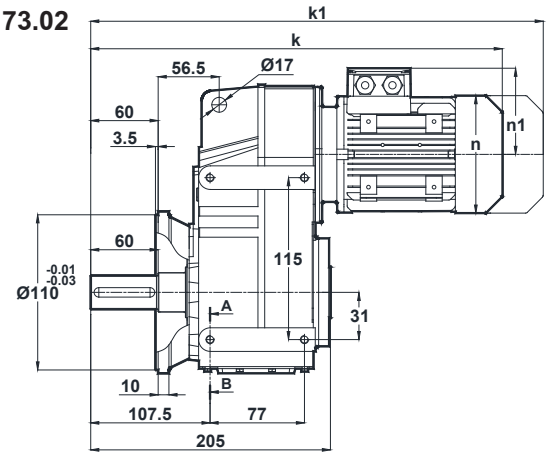


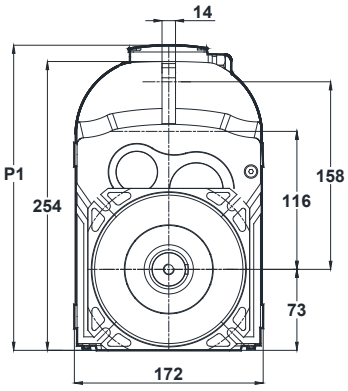
63-71-80-90-100
Tip / *Type* / Typ

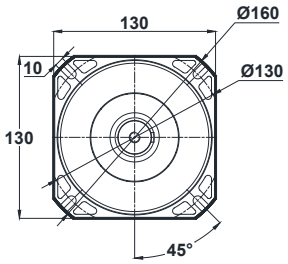
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

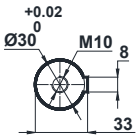
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

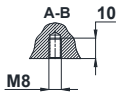
DR172.02
DR173.02





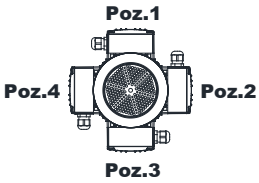






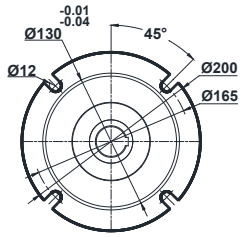
	63	71	80	90S	90L	100L
k	395	422	456	495	495	543
k1	466	513	549	574	574	651
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

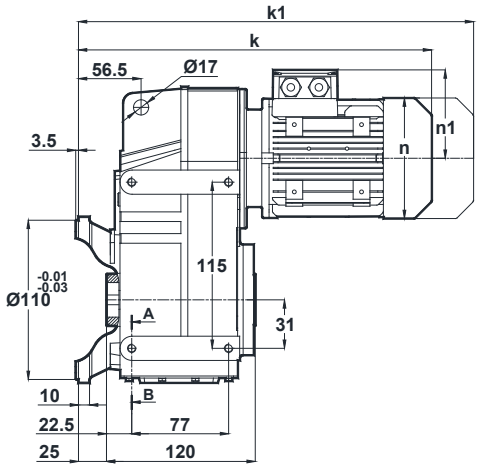


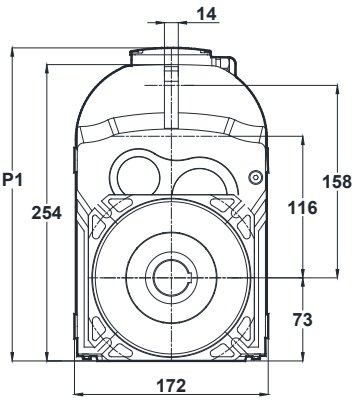
63-71-80-90-100
Tip / *Type* / Typ

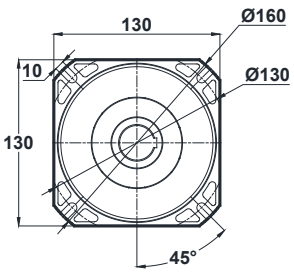
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

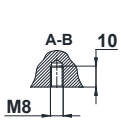


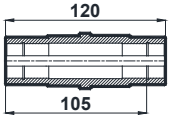
DR172.03
DR173.03

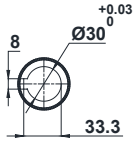






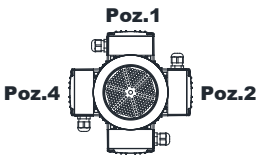






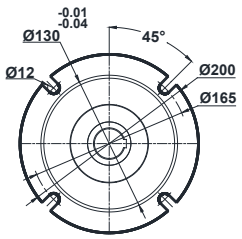
	63	71	80	90S	90L	100L
k	335	362	396	435	435	483
k1	406	453	489	514	514	591
n	119	137	155	176	176	193
n1	101	118	127	136	136	149
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

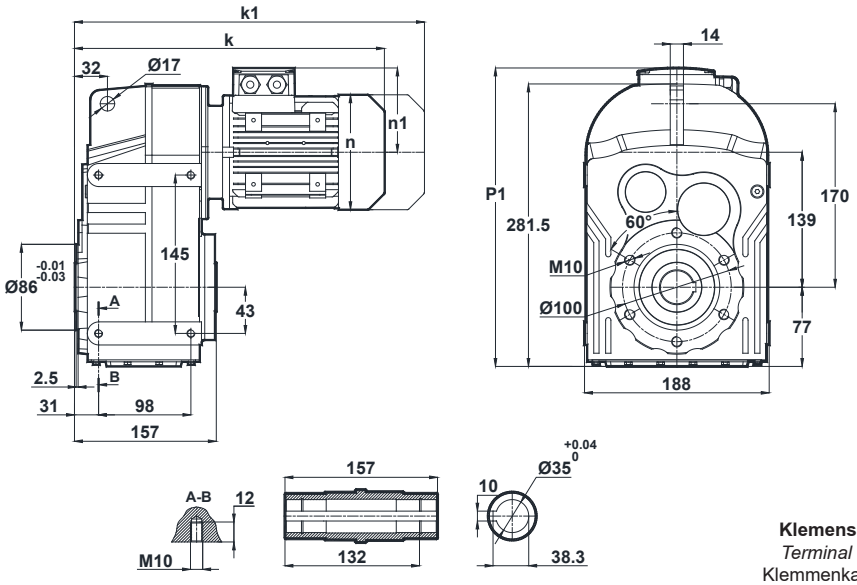
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



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

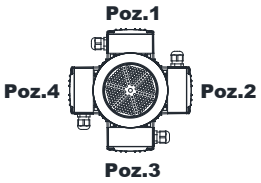
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR272.00
DR273.00



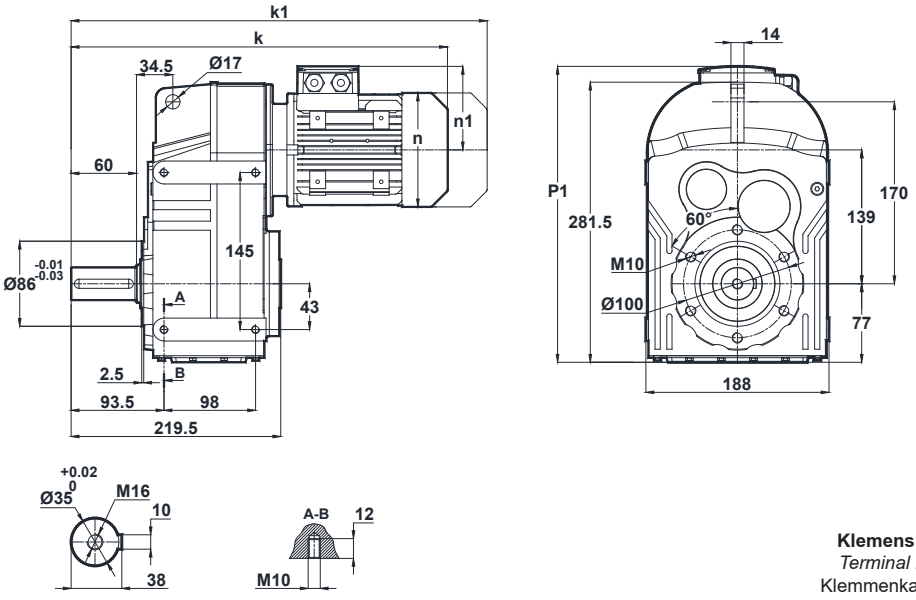
	63	71	80	90S	90L	100L	112M
k	340	367	401	440	440	488	512
k1	411	458	494	519	519	596	617
n	119	137	155	176	176	193	215
n1	101	118	127	136	136	149	161
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



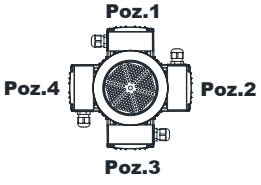
63-71-80-90-100-112
Tip / *Type* / Typ

DR272.01
DR273.01



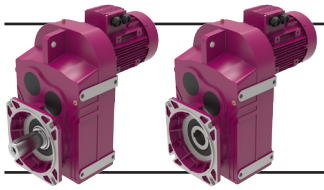
	63	71	80	90S	90L	100L	112M
k	402	429	463	502	502	550	574
k1	473	520	556	581	581	658	679
n	119	137	155	176	176	193	215
n1	101	118	127	136	136	149	161
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112
Tip / *Type* / Typ

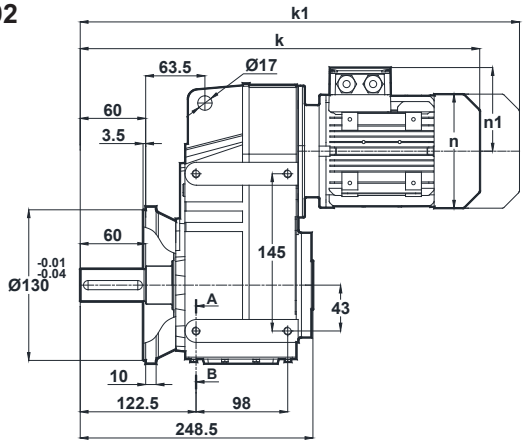
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

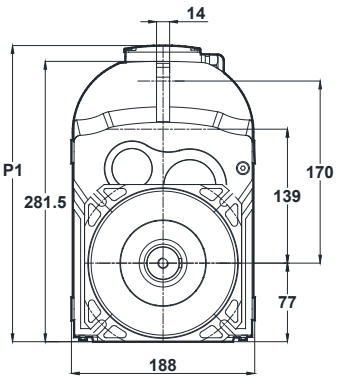


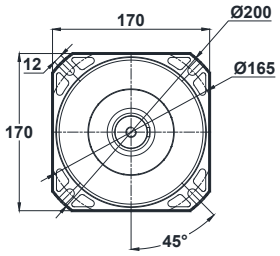
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

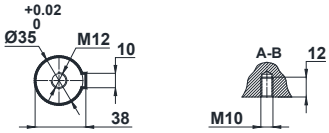
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR272.02
DR273.02

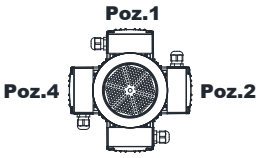






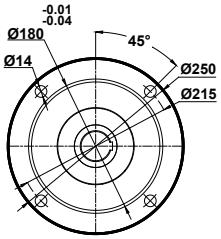


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



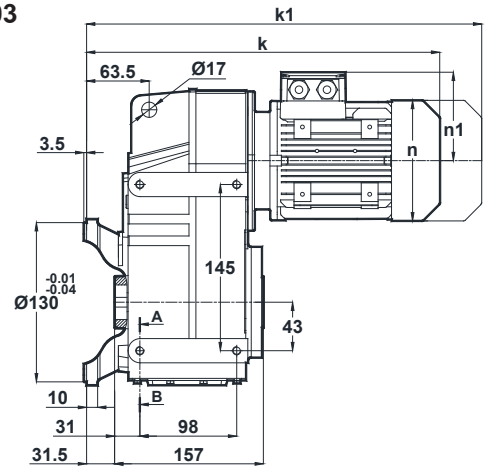
63-71-80-90-100-112
Tip / *Type* / Typ

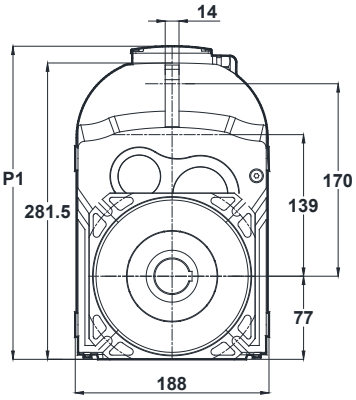
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

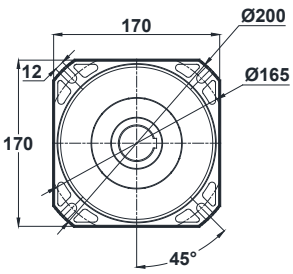


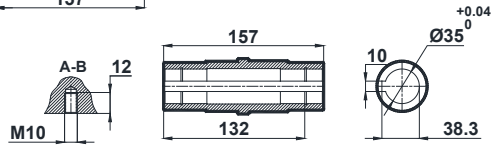
	63	71	80	90S	90L	100L	112M
k	431	458	492	531	531	579	603
k1	502	549	585	610	610	687	708
n	119	137	155	176	176	193	215
n1	101	118	127	136	136	149	161
P1	317	334	343	352	352	365	377

DR272.03
DR273.03

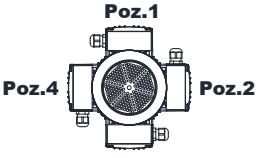






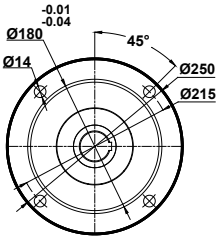


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

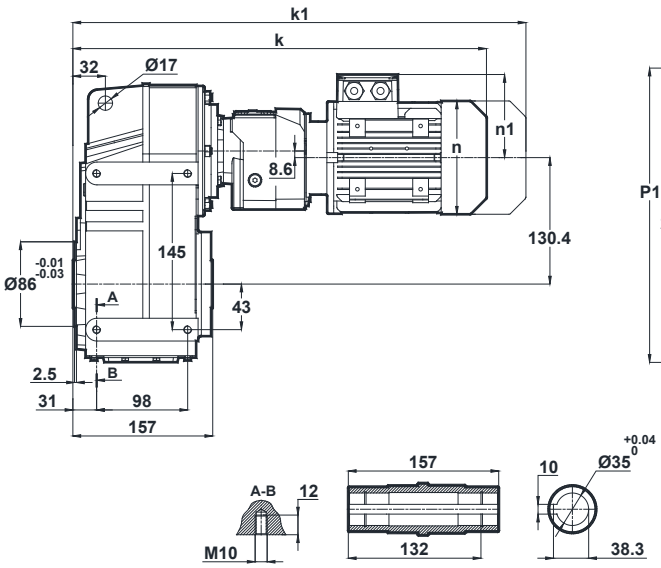


	63	71	80	90S	90L	100L	112M
k	370,5	398	432	471	471	519	543
k1	441,5	489	525	550	550	627	648
n	119	137	155	176	176	193	215
n1	101	118	127	136	136	149	161
P1	317	334	343	352	352	365	377

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

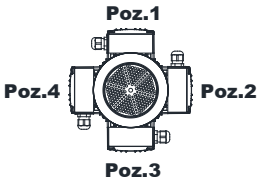
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR275.00
DR276.00



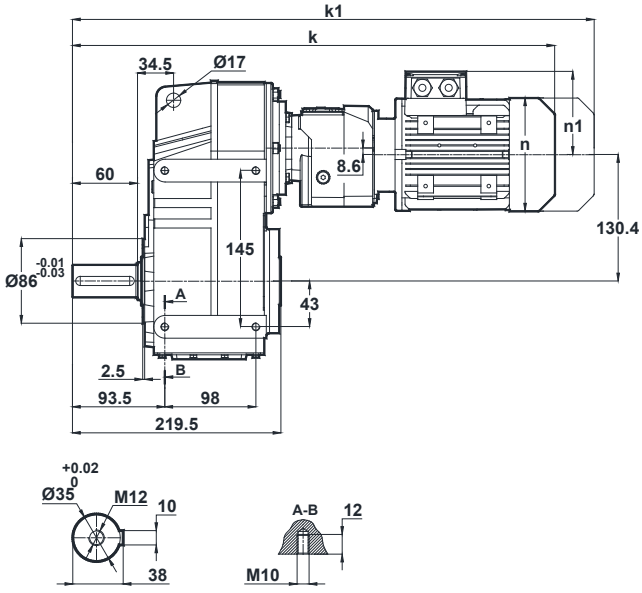
	63	71
k	486	513
k1	557	604
n	119	137
n1	101	118
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



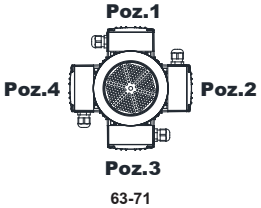
63-71
Tip / *Type* / Typ

DR275.01
DR276.01



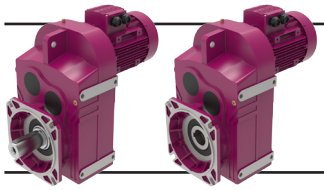
	63	71
k	548	575
k1	619	666
n	119	137
n1	101	118
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

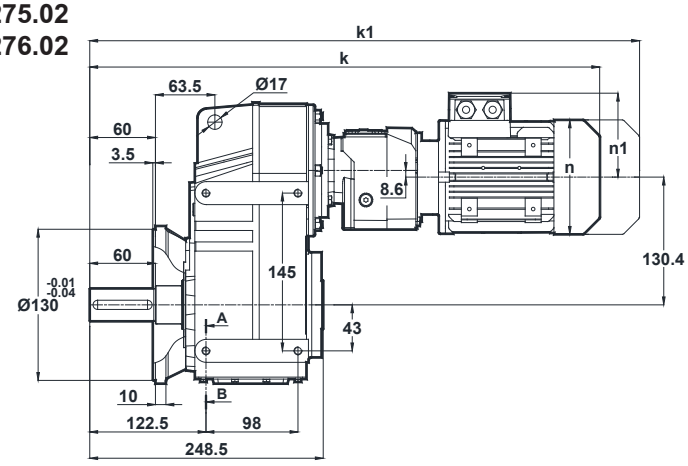
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

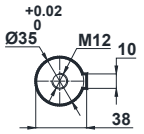


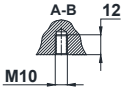
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

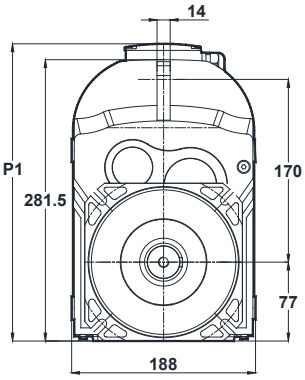
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

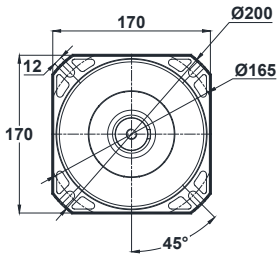
DR275.02
DR276.02





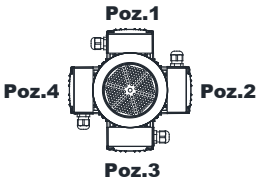






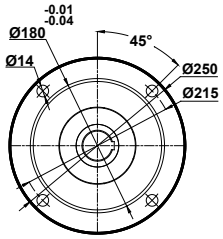
	63	71
k	577	604
k1	648	695
n	119	137
n1	101	118
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

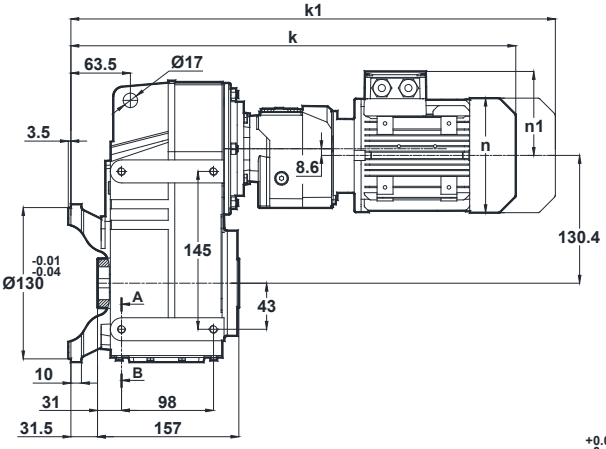


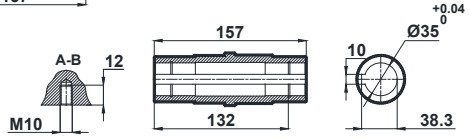
63-71
Tip / *Type* / Typ

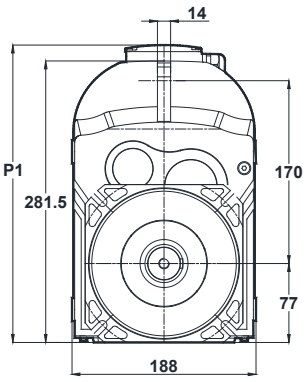
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

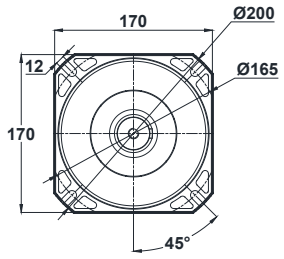


DR275.03
DR276.03



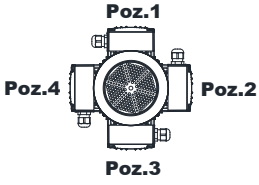






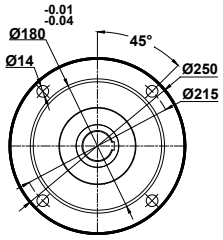
	63	71
k	517	544
k1	588	635
n	119	137
n1	101	118
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

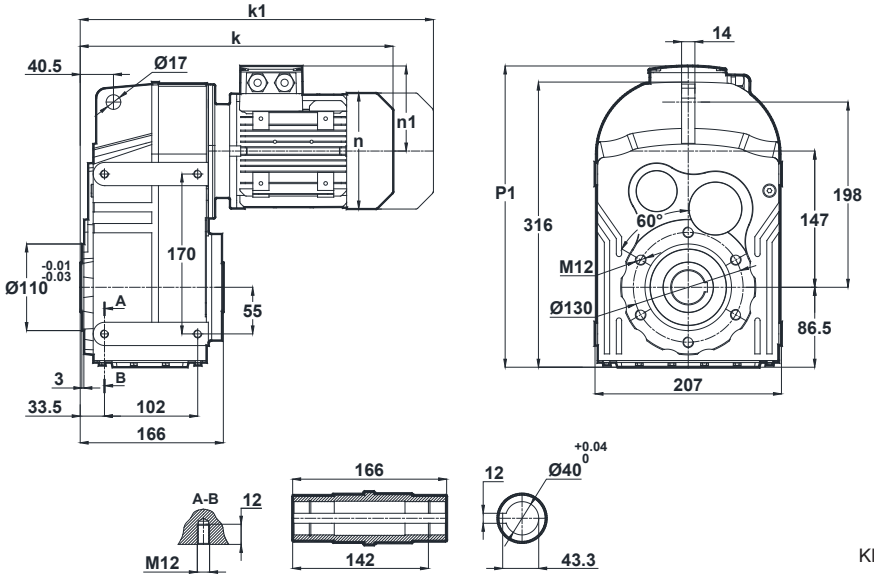
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



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

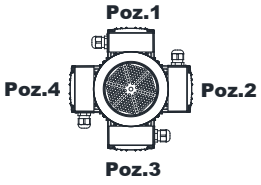
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR282.00
DR283.00



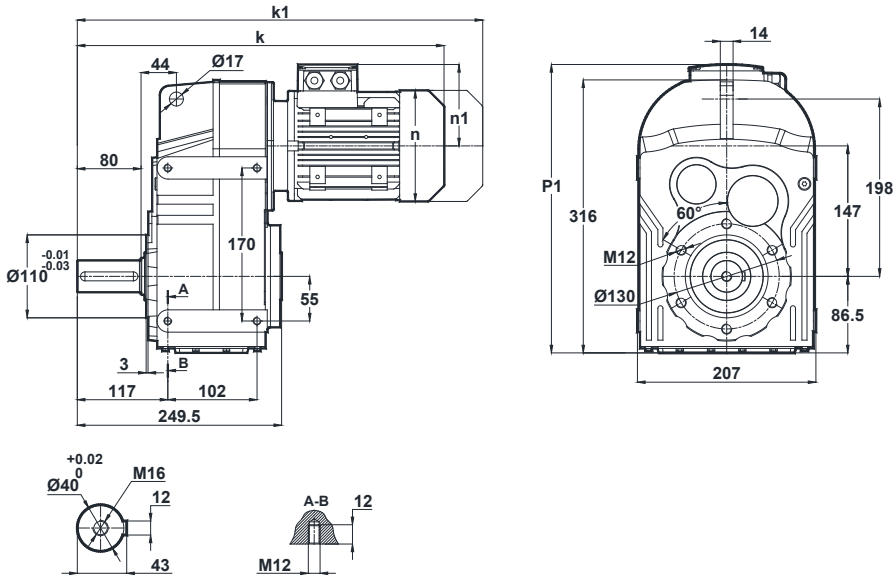
	71	80	90S	90L	100L	112M	132S	132M
k	370	404	443	443	491	515	598	598
k1	461	497	522	522	599	620	728	728
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



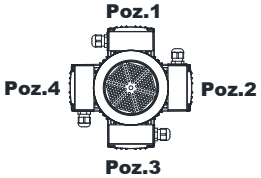
71-80-90-100-112-132
Tip / *Type* / Typ

DR282.01
DR283.01



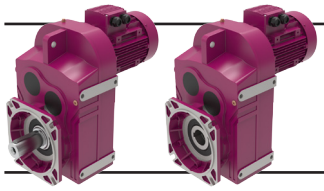
	71	80	90S	90L	100L	112M	132S	132M
k	454	488	527	527	575	599	682	682
k1	545	581	606	606	683	704	812	812
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

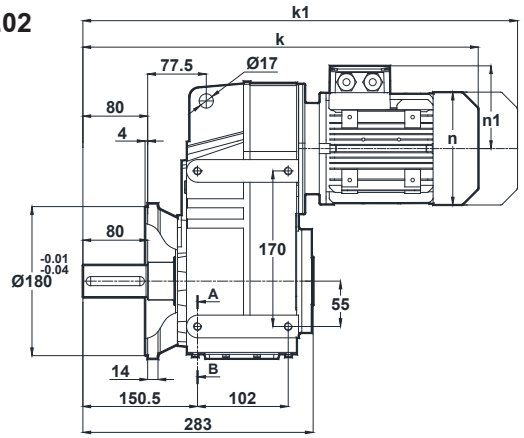
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

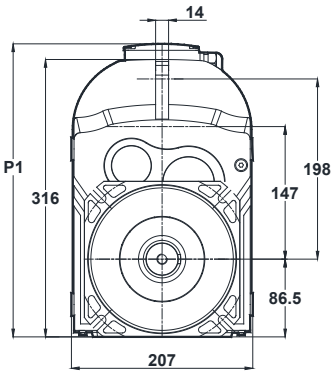


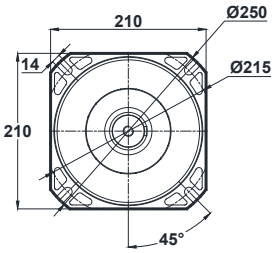
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

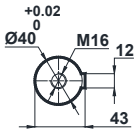
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

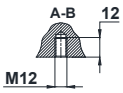
DR282.02
DR283.02





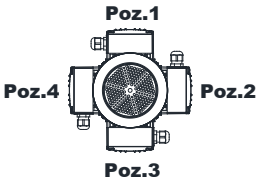






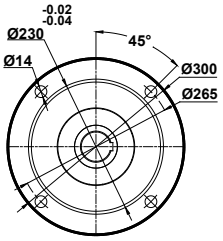
	71	80	90S	90L	100L	112M	132S	132M
k	487	521	560	560	608	632	715	715
k1	578	614	639	639	716	737	845	845
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



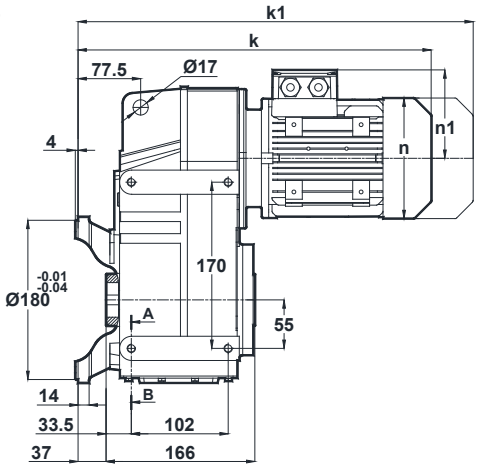
71-80-90-100-112-132
Tip / *Type* / Typ

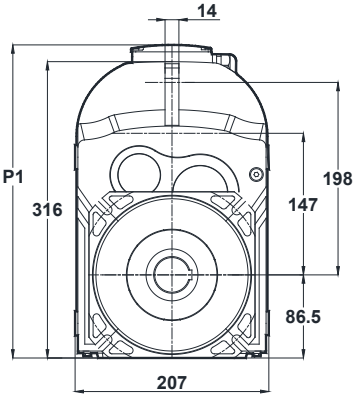
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

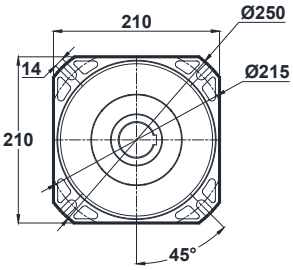


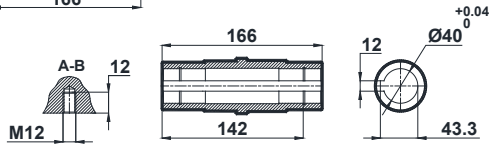
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DR282.03
DR283.03



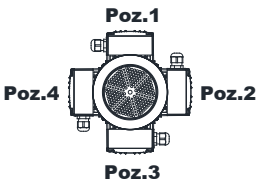






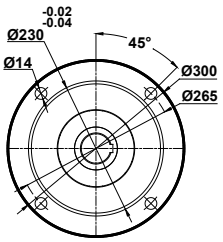
	71	80	90S	90L	100L	112M	132S	132M
k	407	441	480	480	528	552	635	635
k1	498	534	559	559	636	657	765	765
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

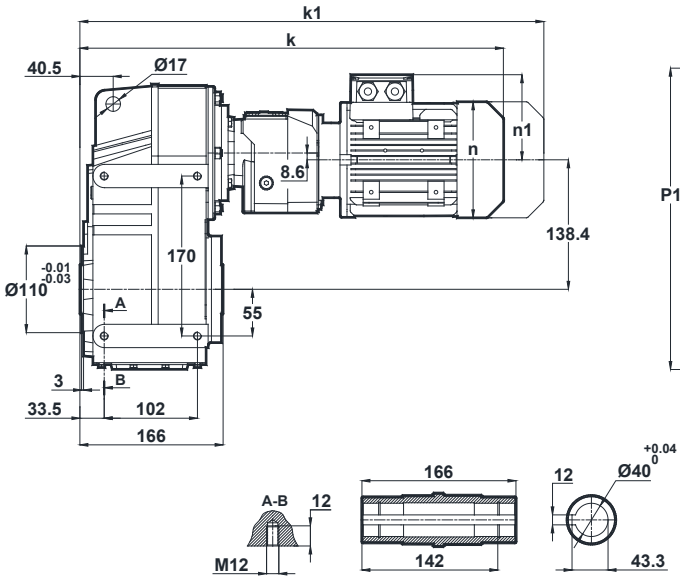


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

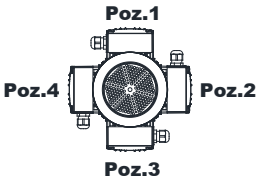
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR285.00
DR286.00



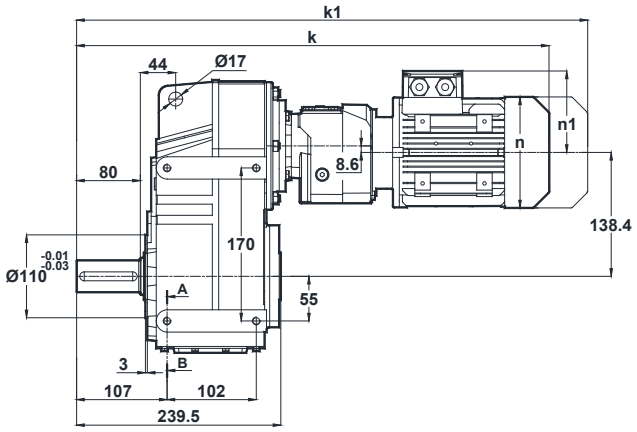
	63	71
k	494	521
k1	565	612
n	119	137
n1	101	118
P1	327	344

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



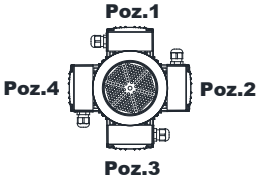
63-71
Tip / *Type* / Typ

DR285.01
DR286.01



	63	71
k	578	605
k1	649	696
n	119	137
n1	101	118
P1	327	344

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

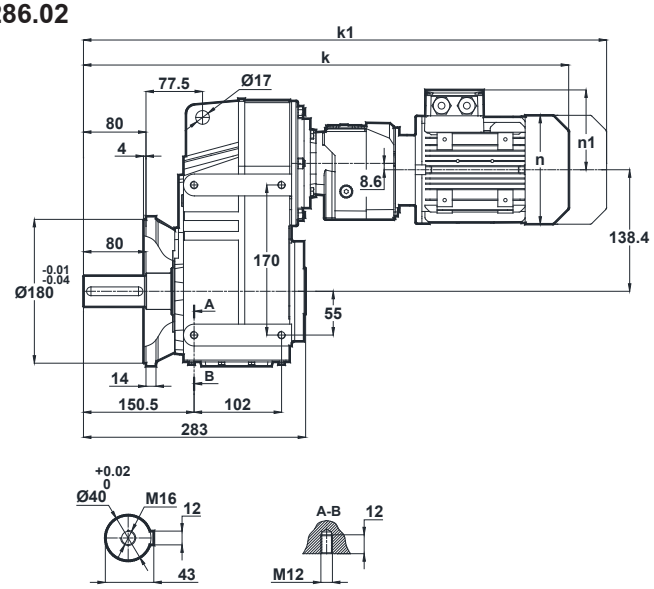


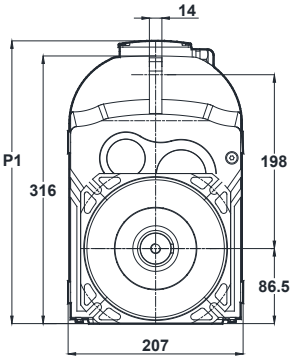
63-71
Tip / *Type* / Typ

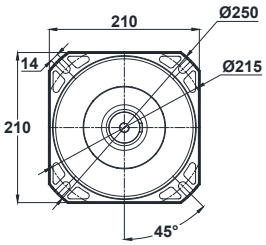
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

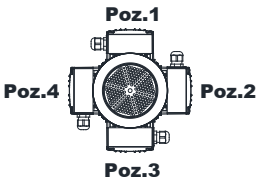
DR285.02
DR286.02





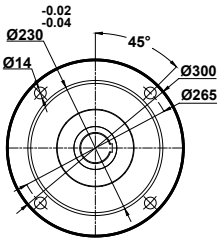


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

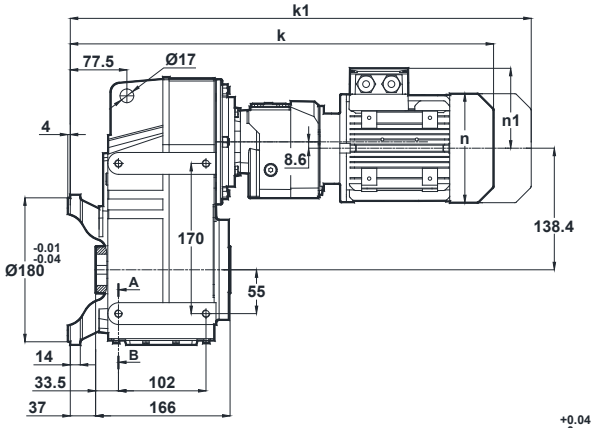
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

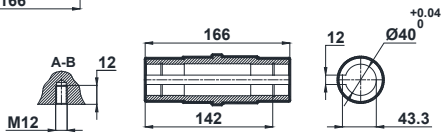


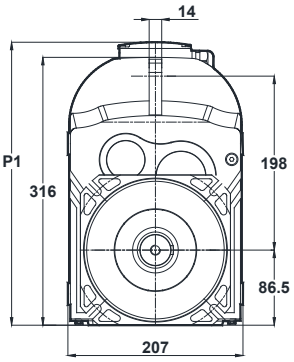
	63	71
k	611	638
k1	682	729
n	119	137
n1	101	118
P1	327	344

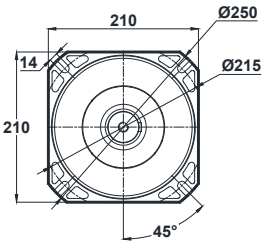
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DR285.03
DR286.03

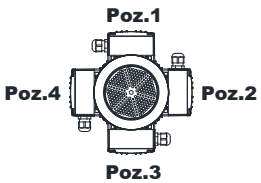






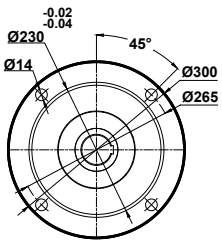


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



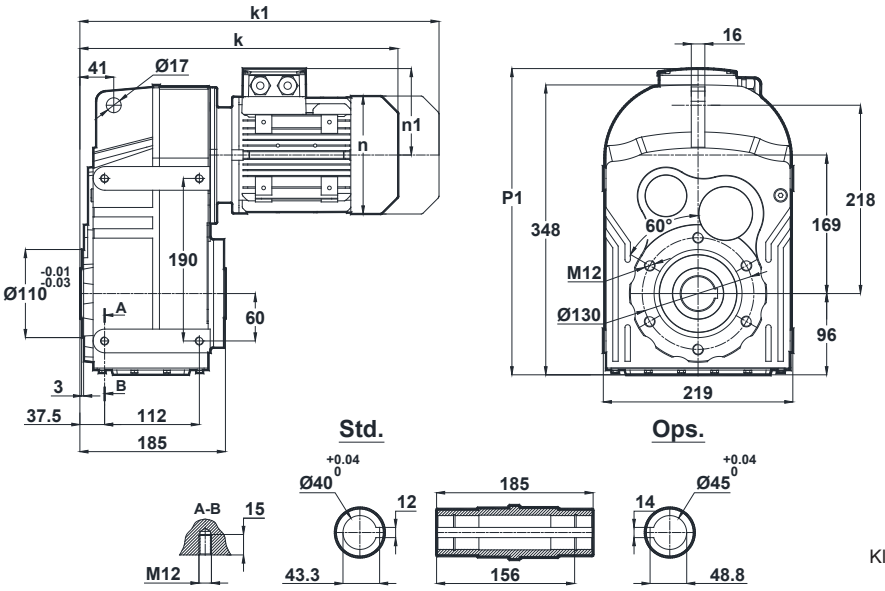
	63	71
k	531	558
k1	602	649
n	119	137
n1	101	118
P1	327	344

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

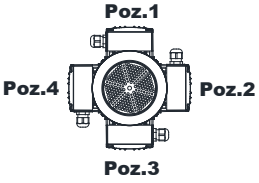
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR372.00
DR373.00



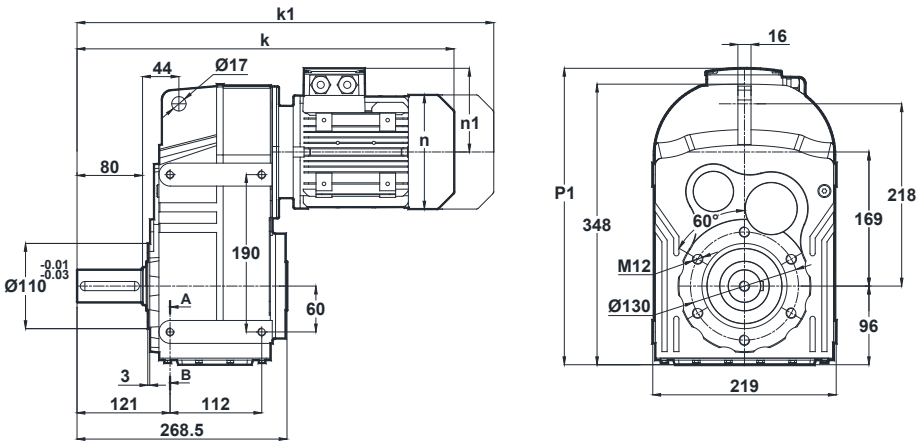
	71	80	90S	90L	100L	112M	132S	132M
k	381	415	454	454	502	526	609	609
k1	472	508	533	533	610	631	739	739
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	383	392	401	401	414	426	447	447

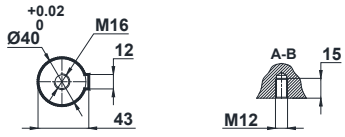
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

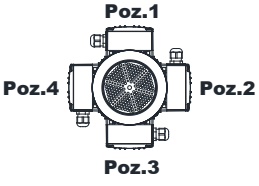
DR372.01
DR373.01





	71	80	90S	90L	100L	112M	132S	132M
k	464	498	537	537	585	609	692	692
k1	555	591	616	616	693	714	822	822
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	383	392	401	401	414	426	447	447

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

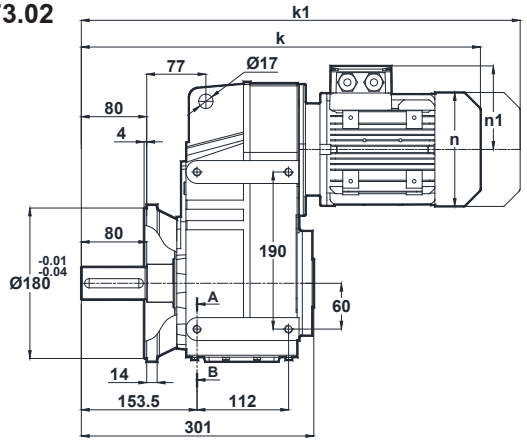


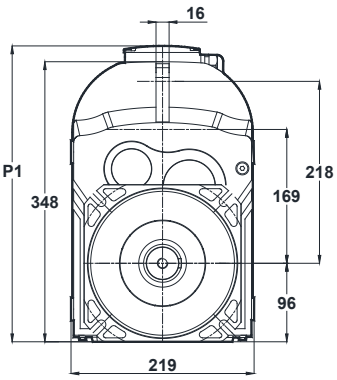
71-80-90-100-112-132
Tip / *Type* / Typ

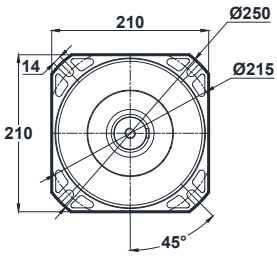
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

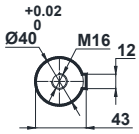
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

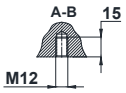
DR372.02
DR373.02





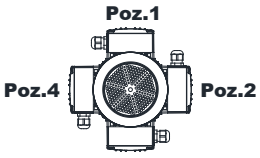






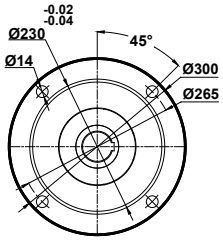
	71	80	90S	90L	100L	112M	132S	132M
k	497	531	570	570	618	642	725	725
k1	588	624	649	649	726	747	855	855
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	383	392	401	401	414	426	447	447

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



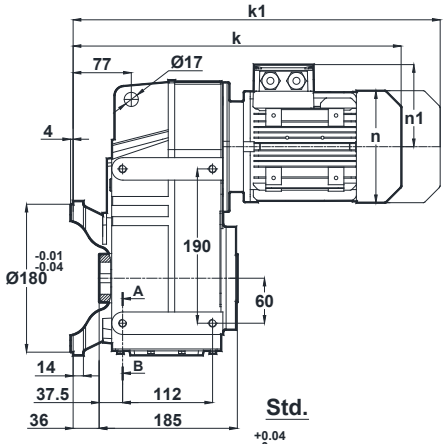
71-80-90-100-112-132
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

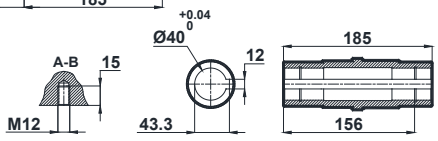


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

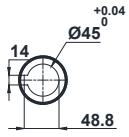
DR372.03
DR373.03

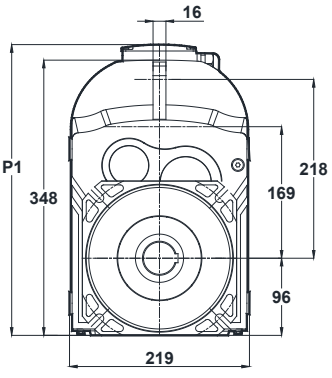


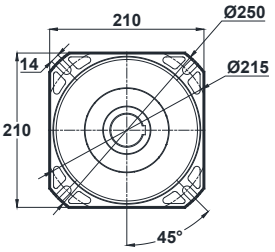
Std.



Ops.

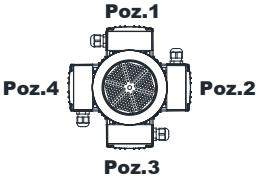






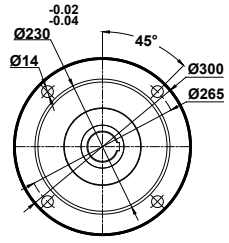
	71	80	90S	90L	100L	112M	132S	132M
k	417	451	490	490	538	562	645	645
k1	508	544	569	569	646	667	775	775
n	137	155	176	176	193	215	257	257
n1	118	127	136	136	149	161	182	182
P1	383	392	401	401	414	426	447	447

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

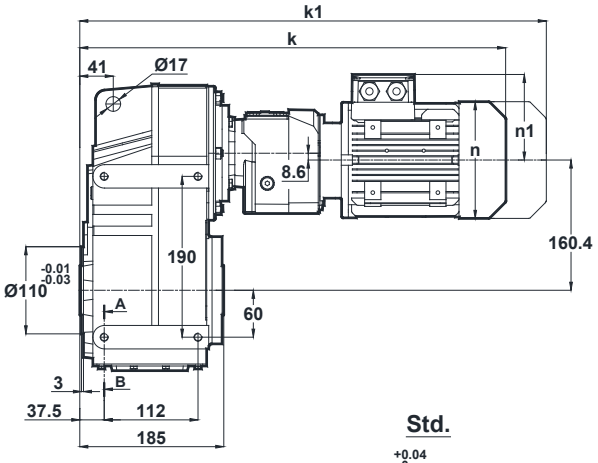


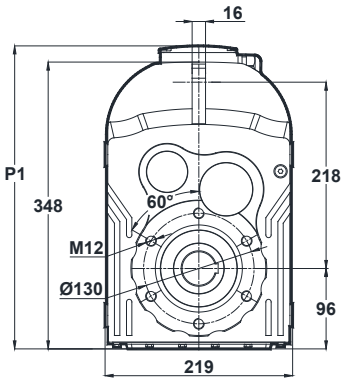
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

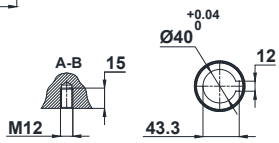
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

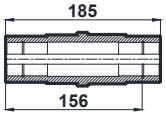
DR375.00
DR376.00



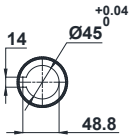


Std.



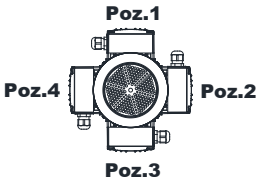


Ops.



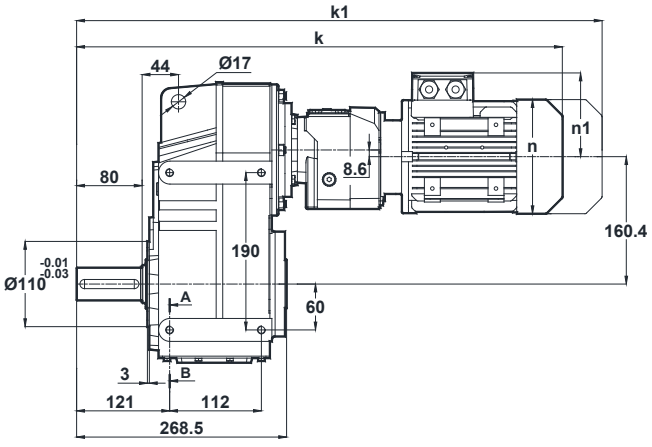
	63	71	80
k	505	532	566
k1	576	623	659
n	119	137	155
n1	101	118	127
P1	358	375	384

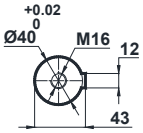
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

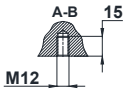


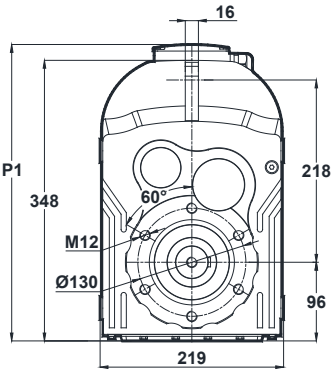
63-71-80
Tip / *Type* / Typ

DR375.01
DR376.01



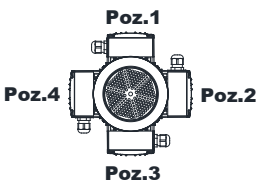






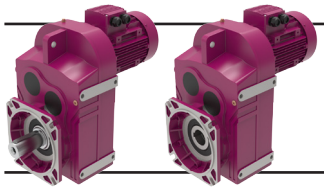
	63	71	80
k	588	615	649
k1	659	706	742
n	119	137	155
n1	101	118	127
P1	358	375	384

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

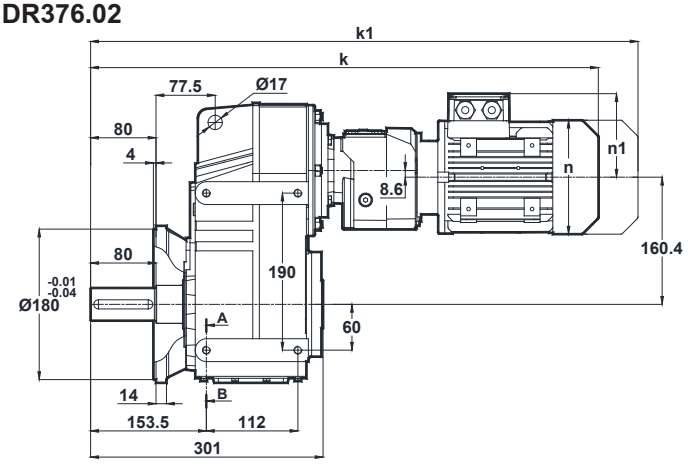
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

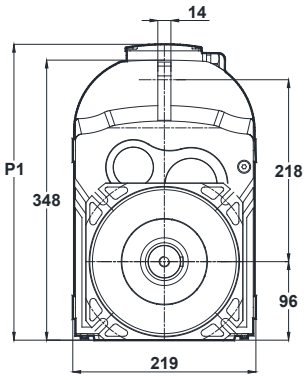


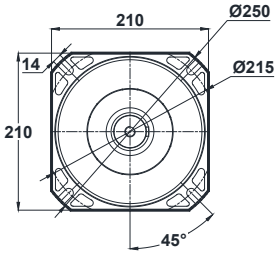
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

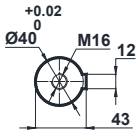
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

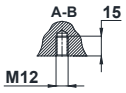
DR375.02
DR376.02



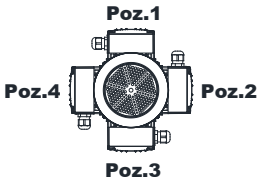






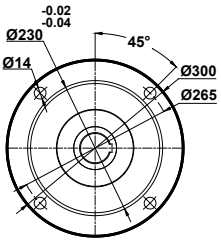


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

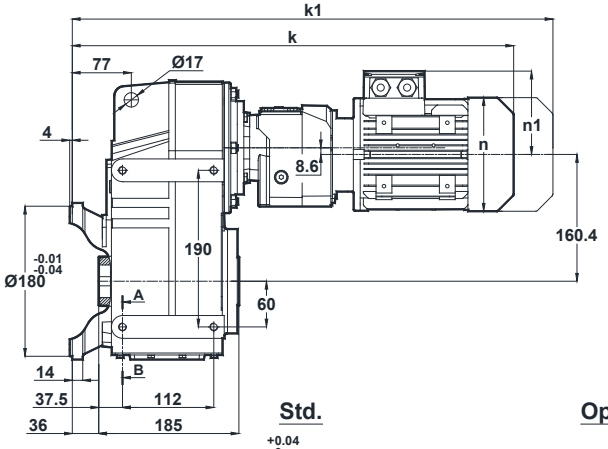
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

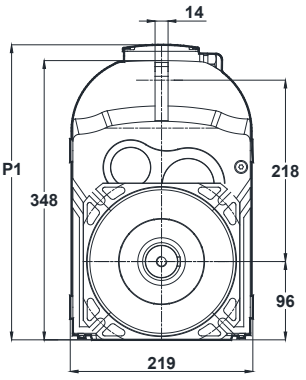


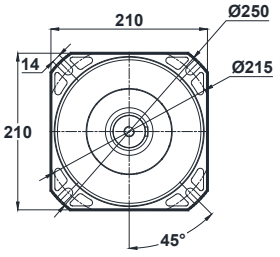
	63	71	80
k	621	648	682
k1	692	739	775
n	119	137	155
n1	101	118	127
P1	358	375	384

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

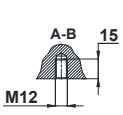
DR375.03
DR376.03

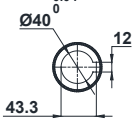


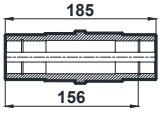




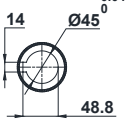
Std.



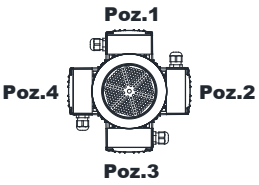




Ops.

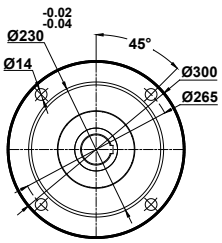


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



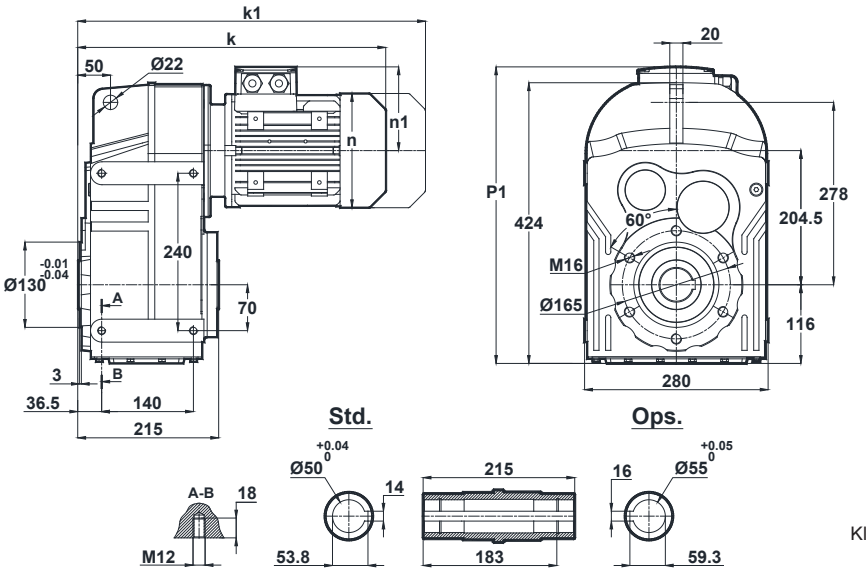
	63	71	80
k	541	568	602
k1	612	659	695
n	119	137	155
n1	101	118	127
P1	358	375	384

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

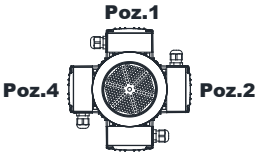
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR472.00
DR473.00



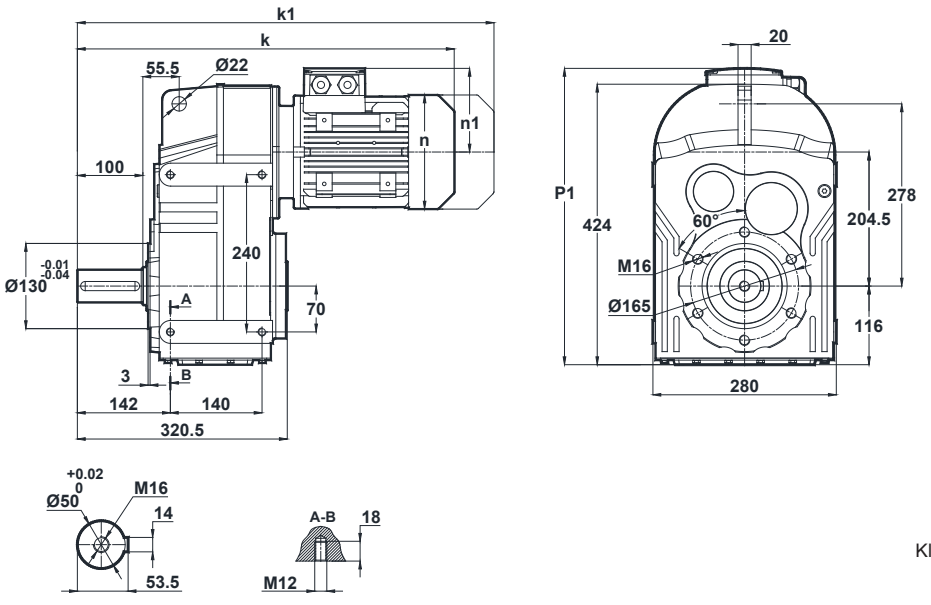
	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	405	439	478	478	526	550	637	637	733	733
k1	496	532	557	557	634	655	767	767	883	883
n	137	155	176	176	193	215	257	257	316	316
n1	118	127	136	136	149	161	182	182	226	226
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



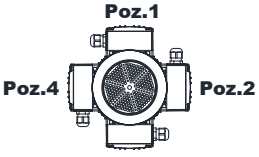
71-80-90-100-112-132-160
Tip / *Type* / Typ

DR472.01
DR473.01



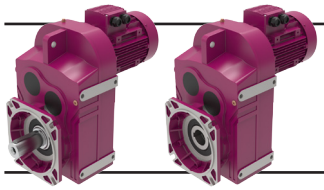
	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	510	544	583	583	631	655	742	742	838	838
k1	601	637	662	662	739	760	872	872	988	988
n	137	155	176	176	193	215	257	257	316	316
n1	118	127	136	136	149	161	182	182	226	226
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132-160
Tip / *Type* / Typ

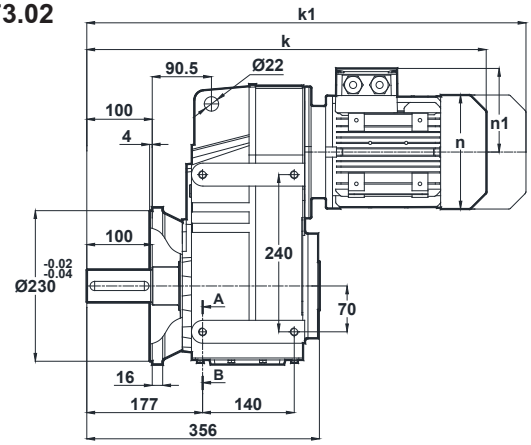
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

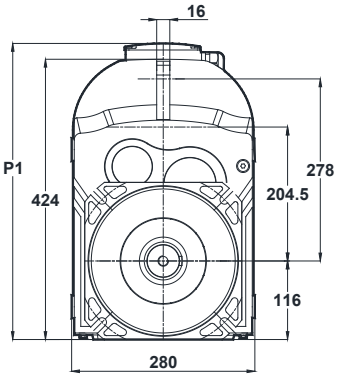


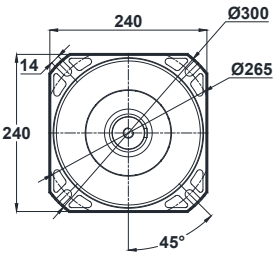
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

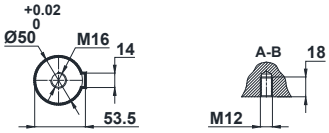
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR472.02
DR473.02



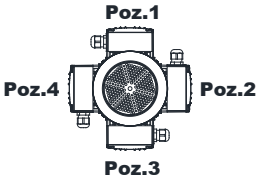






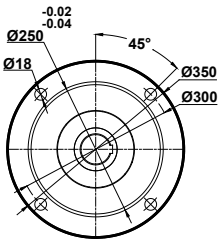
	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	545	579	618	618	666	690	777	777	873	873
k1	636	672	697	697	774	795	907	907	1023	1023
n	137	155	176	176	193	215	257	257	316	316
n1	118	127	136	136	149	161	182	182	226	226
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



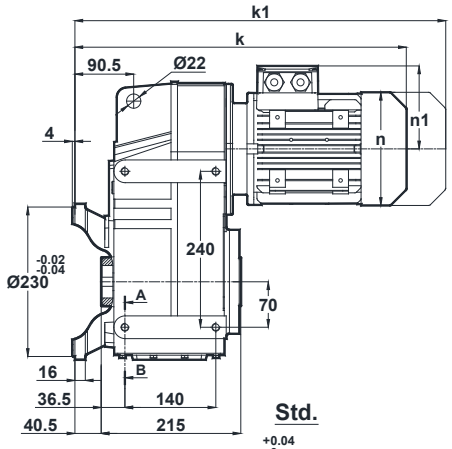
71-80-90-100-112-132-160
Tip / *Type* / Typ

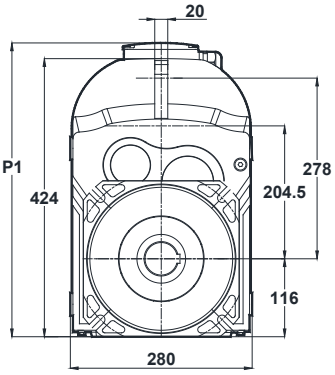
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

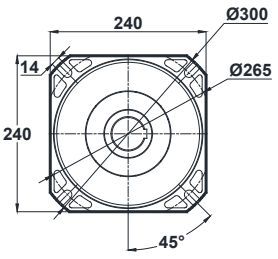


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

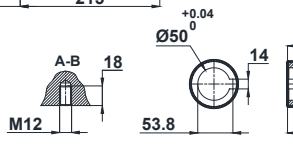
DR472.03
DR473.03



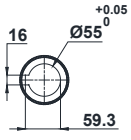




Std.

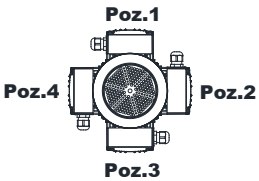


Ops.



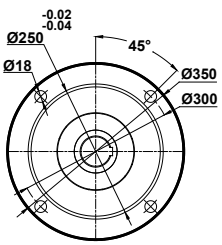
	71	80	90S	90L	100L	112M	132S	132M	160M	160L
k	445	479	518	518	566	590	677	677	773	773
k1	536	572	597	597	674	695	807	807	923	923
n	137	155	176	176	193	215	257	257	316	316
n1	118	127	136	136	149	161	182	182	226	226
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132-160
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

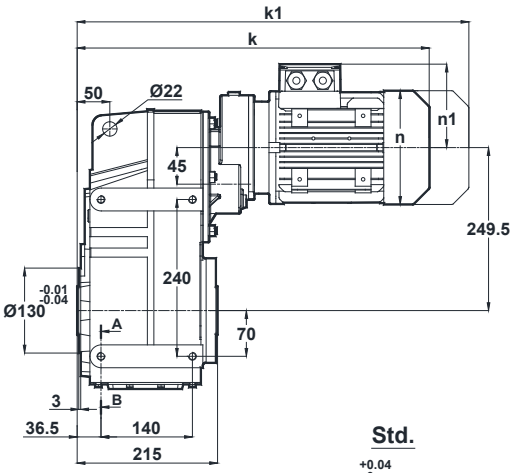


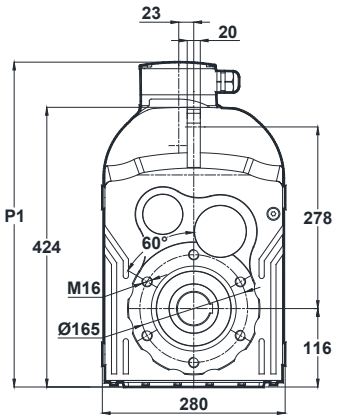
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

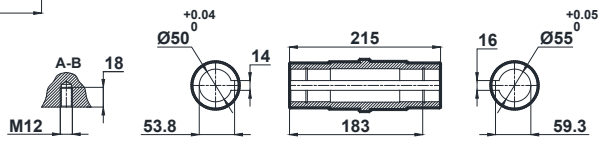
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR474.00



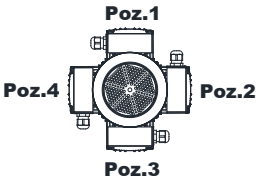


Std. **Ops.**



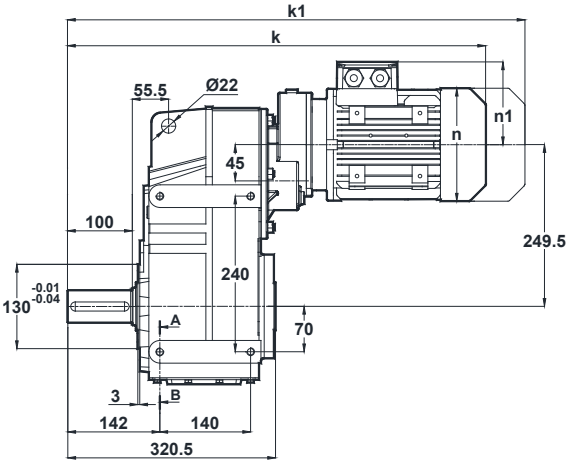
	63	71	80
k	458	484	518
k1	529	575	611
n	119	137	155
n1	101	118	127
P1	467	484	493

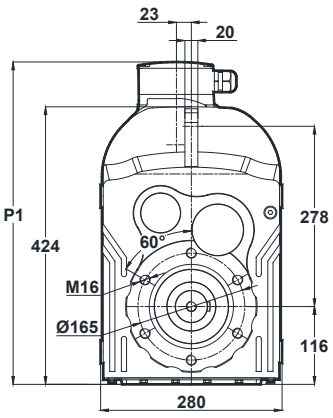
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

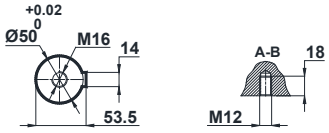


63-71-80
Tip / *Type* / Typ

DR474.01

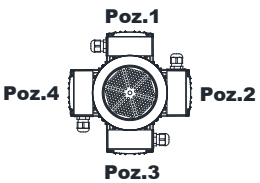






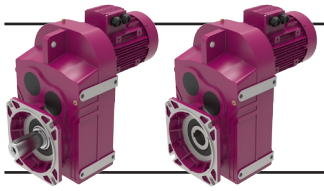
	63	71	80
k	563	589	623
k1	634	680	716
n	119	137	155
n1	101	118	127
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

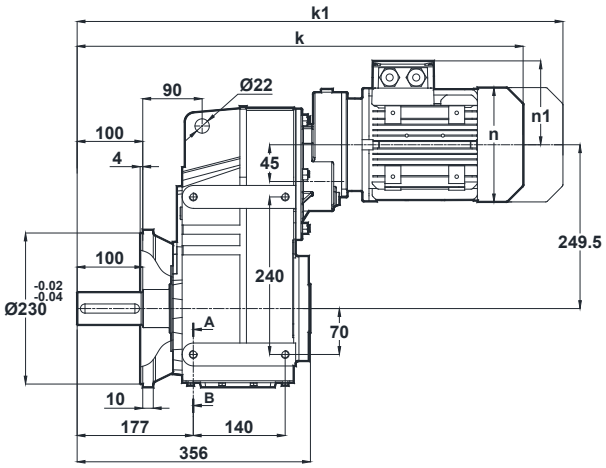
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

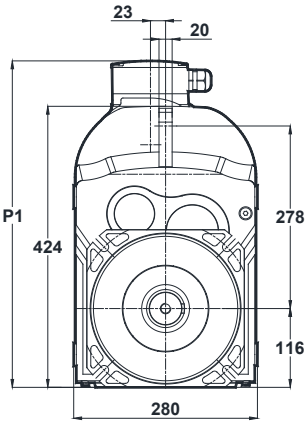


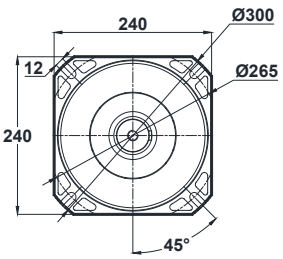
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

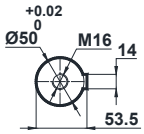
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

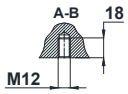
DR474.02





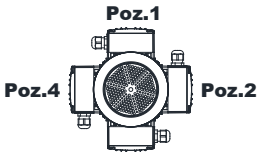






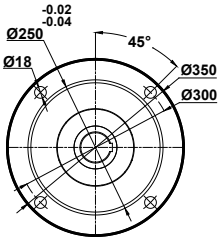
	63	71	80
k	598	624	658
k1	669	715	751
n	119	137	155
n1	101	118	127
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



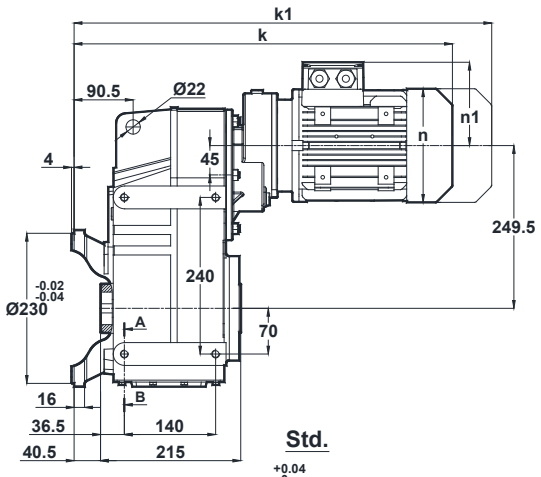
63-71-80
Tip / *Type* / Typ

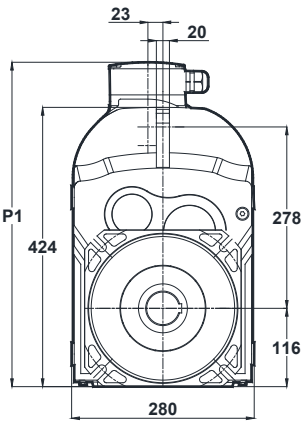
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

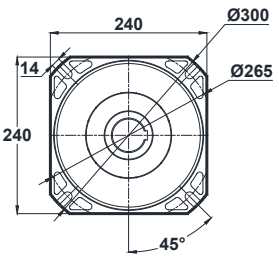


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

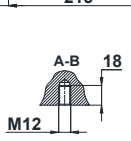
DR474.03

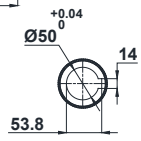


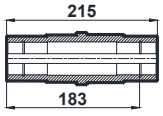




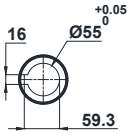
Std.





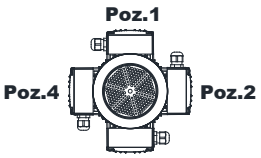


Ops.



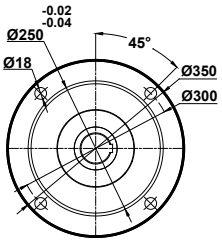
	63	71	80
k	498	524	558
k1	569	615	651
n	119	137	155
n1	101	118	127
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

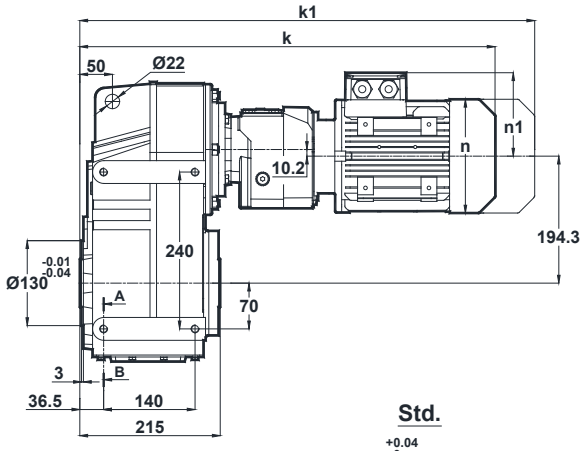


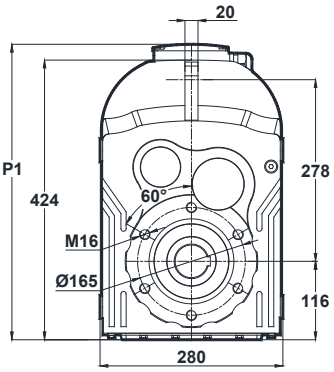
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

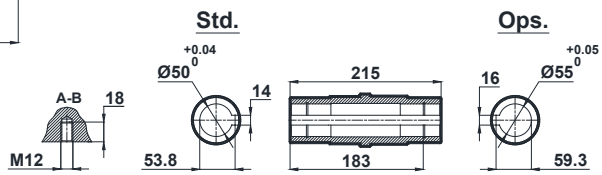
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

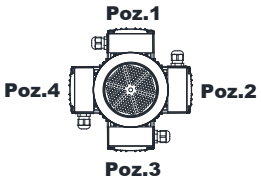






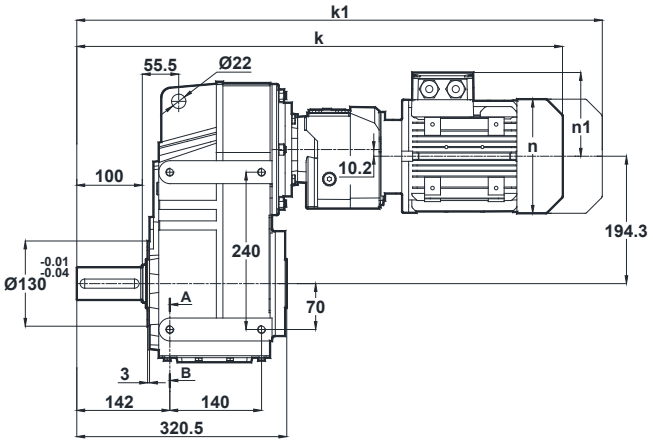
	63	71
k	560	585
k1	631	676
n	119	137
n1	101	118
P1	-	429

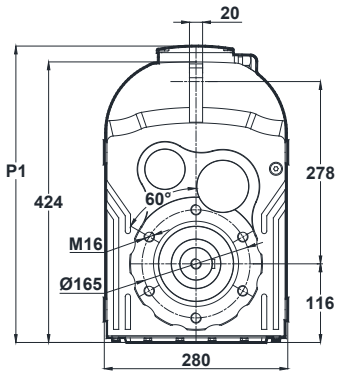
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

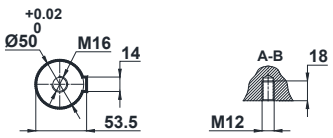


63-71
Tip / *Type* / Typ

DR475.01
DR476.01

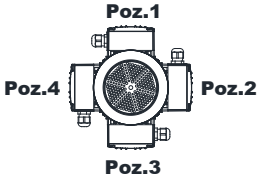






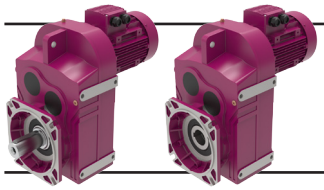
	63	71
k	665	690
k1	736	781
n	119	137
n1	101	118
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

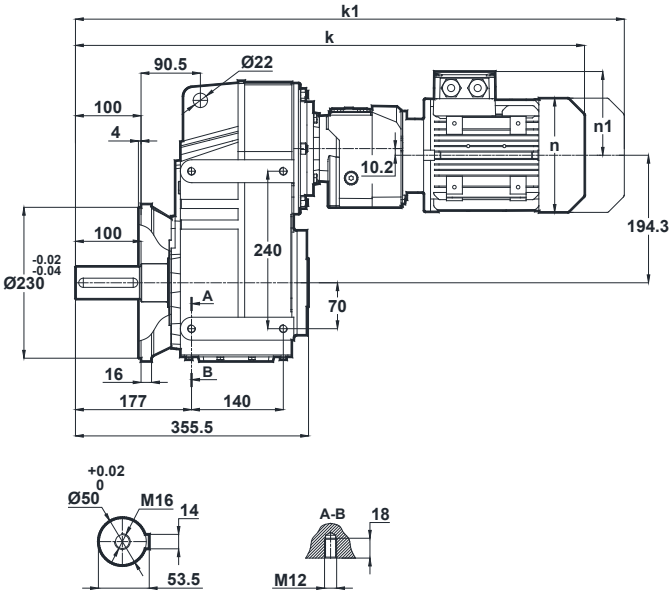
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

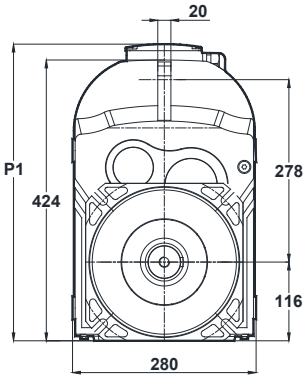


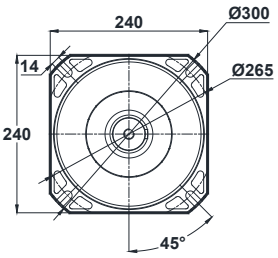
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

DR475.02
DR476.02

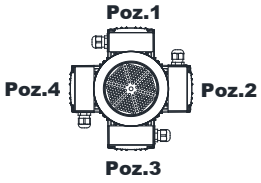






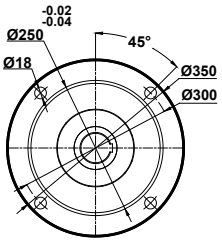
	63	71
k	700	725
k1	771	816
n	119	137
n1	101	118
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



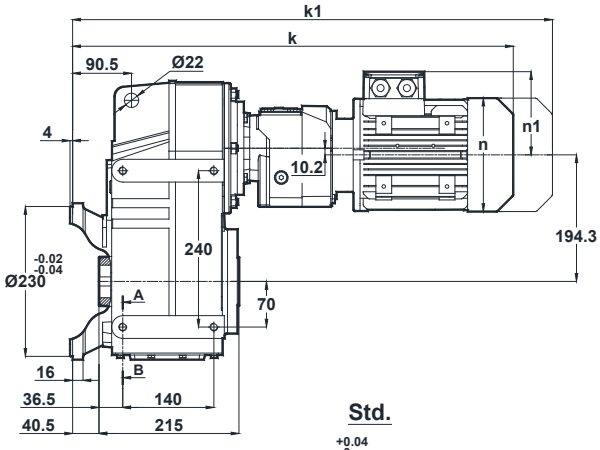
63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

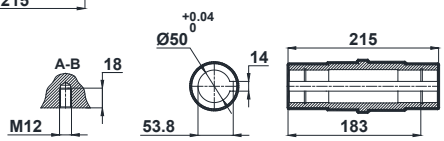


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

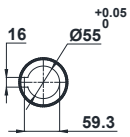
DR475.03
DR476.03

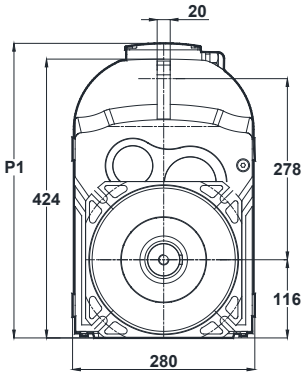


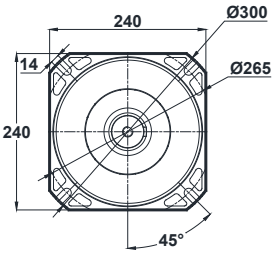
Std.



Ops.

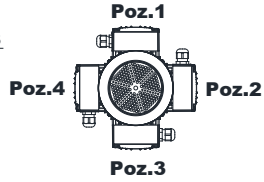






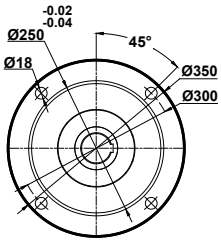
	63	71
k	600	625
k1	671	716
n	119	137
n1	101	118
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



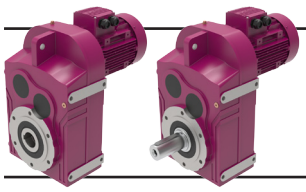
63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



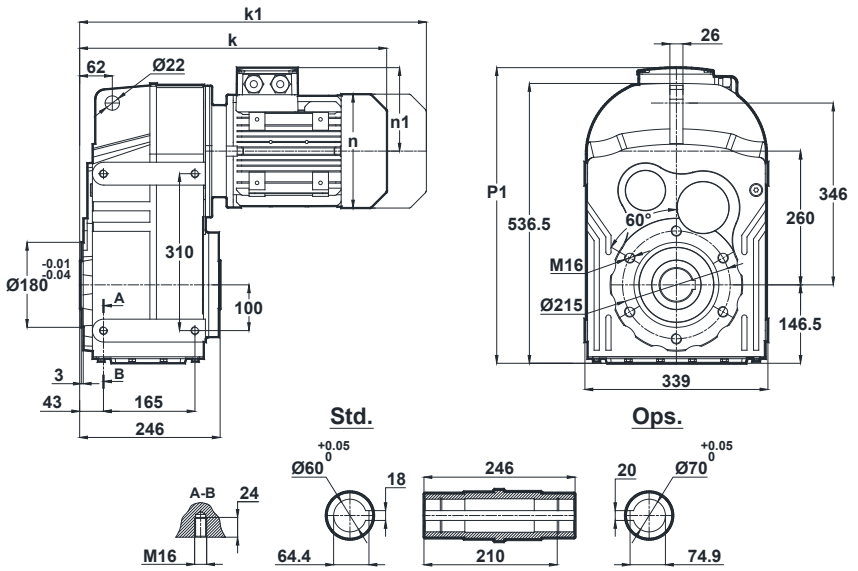
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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



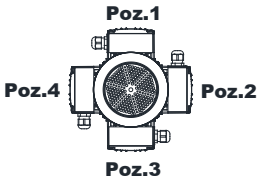
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR572.00
DR573.00



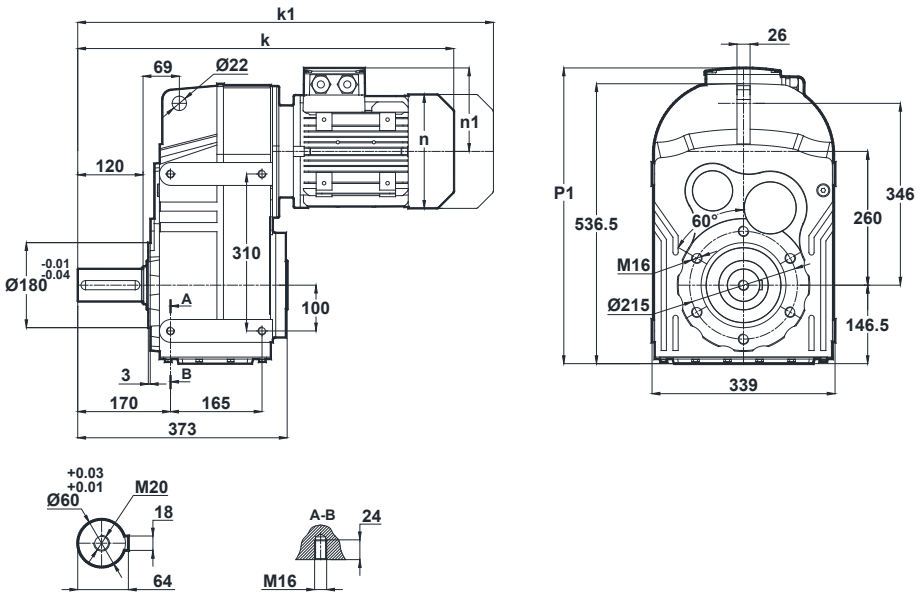
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	461	500	500	545	569	654	654	750	750	822	822
k1	554	579	579	653	674	784	784	900	900	1009	1009
n	155	176	176	193	215	257	257	316	316	348	348
n1	127	136	136	149	161	182	182	226	226	242	242
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



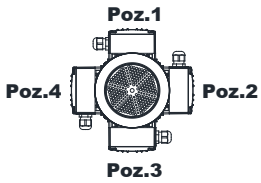
80-90-100-112-132-160-180
Tip / *Type* / Typ

DR572.01
DR573.01



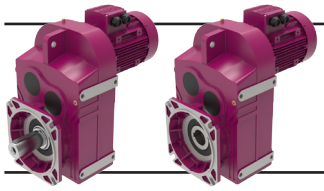
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	588	627	627	672	696	781	781	877	877	949	949
k1	681	706	706	780	801	911	911	1027	1027	1136	1136
n	155	176	176	193	215	257	257	316	316	348	348
n1	127	136	136	149	161	182	182	226	226	242	242
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / *Type* / Typ

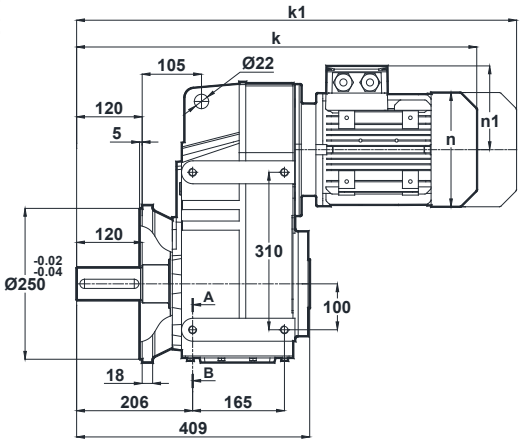
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

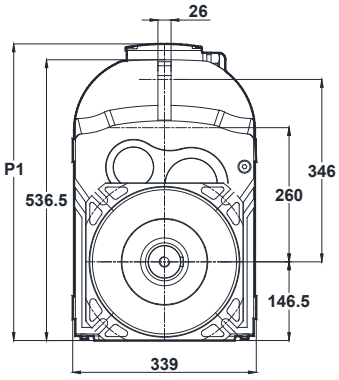


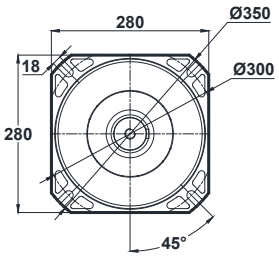
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

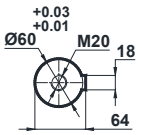
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

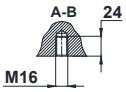
DR572.02
DR573.02



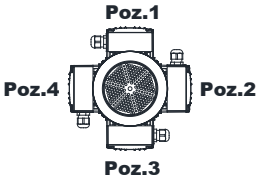






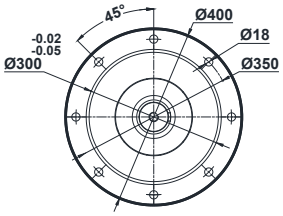


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / *Type* / Typ

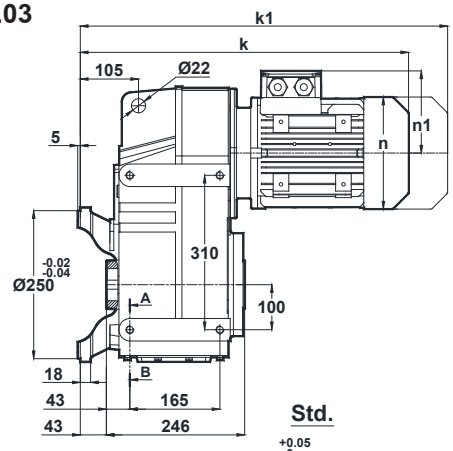
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

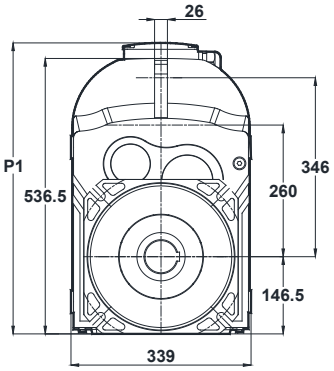


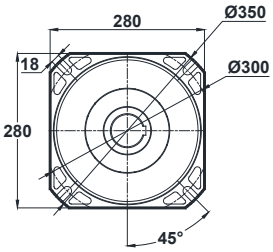
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	624	663	663	708	732	817	817	913	913	985	985
k1	717	742	742	816	837	947	947	1063	1063	1172	1172
n	155	176	176	193	215	257	257	316	316	348	348
n1	127	136	136	149	161	182	182	226	226	242	242
P1	-	543	543	556	568	589	589	633	633	649	649

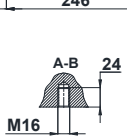
DR572.03
DR573.03

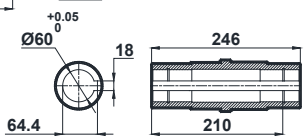




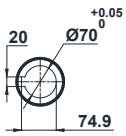


Std.

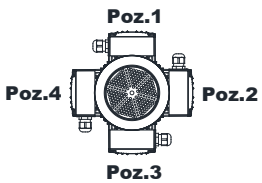




Ops.

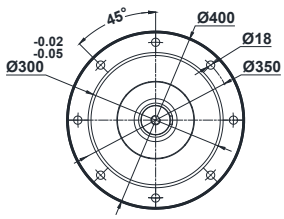


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



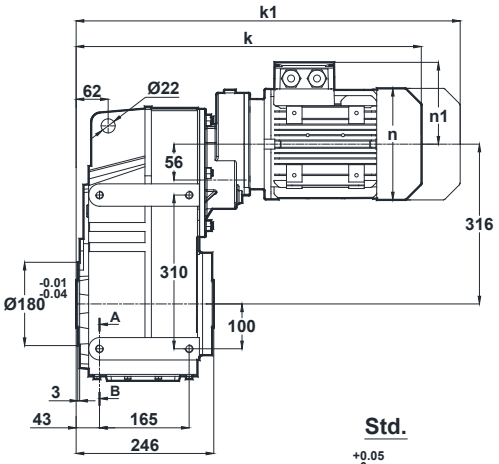
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

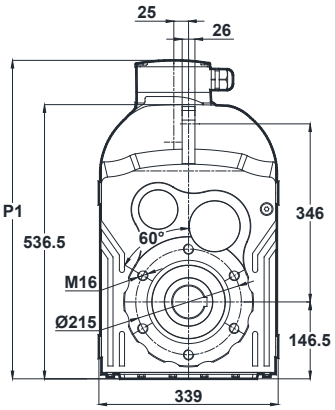
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	504	543	543	588	612	697	697	793	793	865	865
k1	597	622	622	696	717	827	827	943	943	1052	1052
n	155	176	176	193	215	257	257	316	316	348	348
n1	127	136	136	149	161	182	182	226	226	242	242
P1	-	543	543	556	568	589	589	633	633	649	649

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

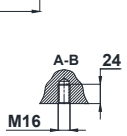
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

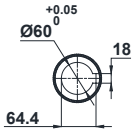
DR574.00

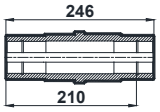




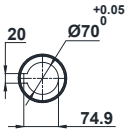
Std.





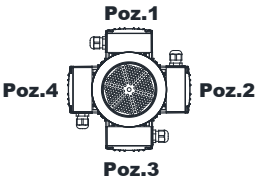


Ops.



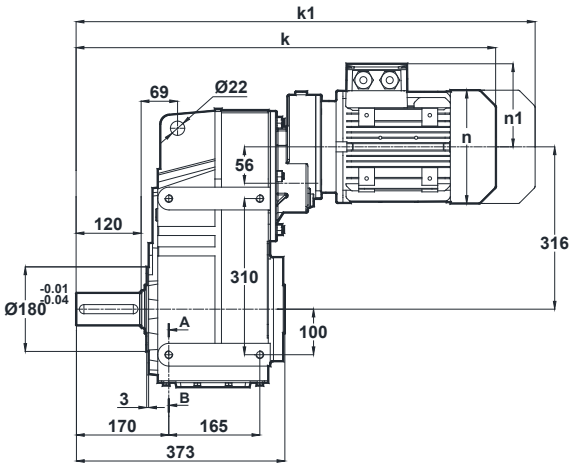
	71	80	90S	90L
k	520	554	593	593
k1	611	647	672	672
n	137	155	176	176
n1	118	127	136	136
P1	581	590	599	599

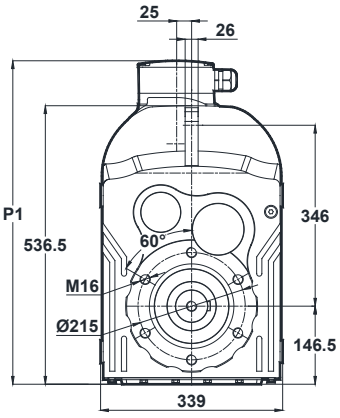
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

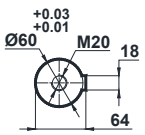


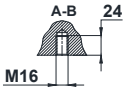
71-80-90
Tip / *Type* / Typ

DR574.01



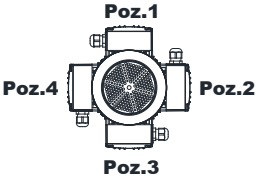






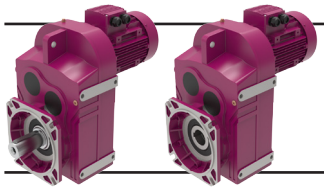
	71	80	90S	90L
k	647	681	720	720
k1	738	774	799	799
n	137	155	176	176
n1	118	127	136	136
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

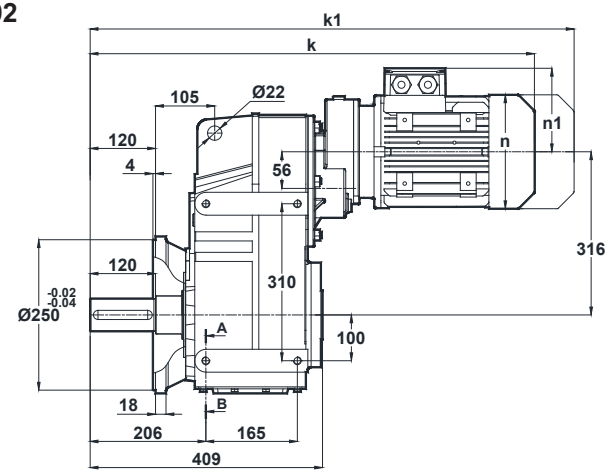
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

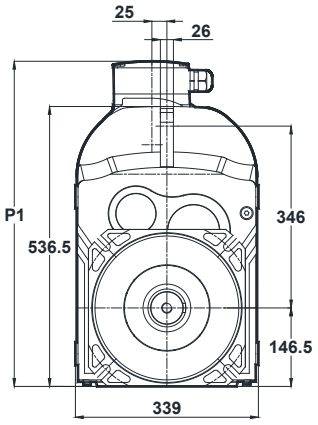


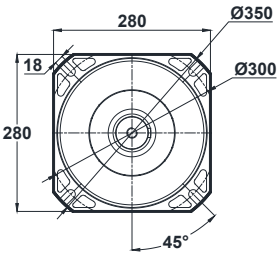
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

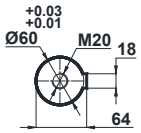
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

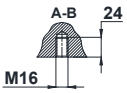
DR574.02





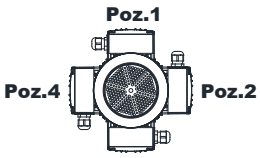






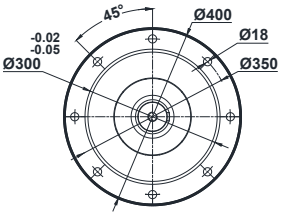
	71	80	90S	90L
k	683	717	756	756
k1	774	810	835	835
n	137	155	176	176
n1	118	127	136	136
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



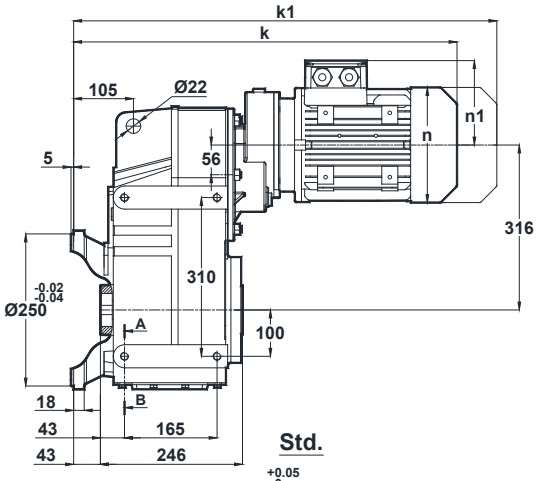
71-80-90
Tip / *Type* / Typ

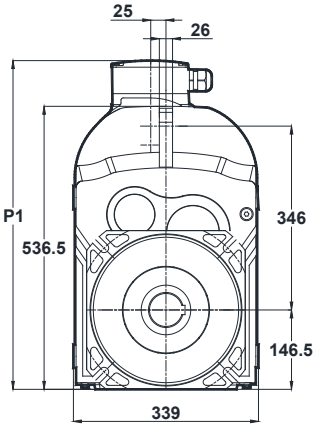
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

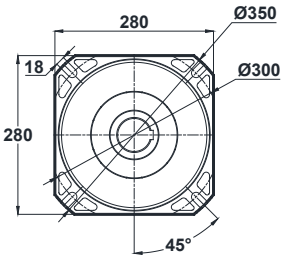


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

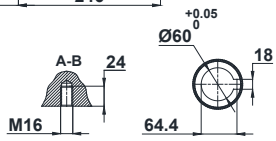
DR574.03

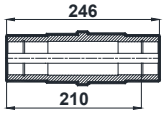




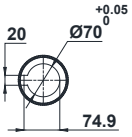


Std.



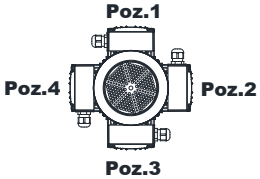


Ops.



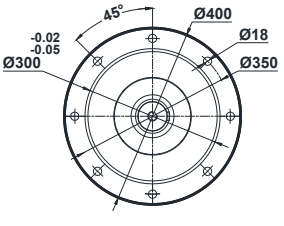
	71	80	90S	90L
k	563	597	636	636
k1	654	690	715	715
n	137	155	176	176
n1	118	127	136	136
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

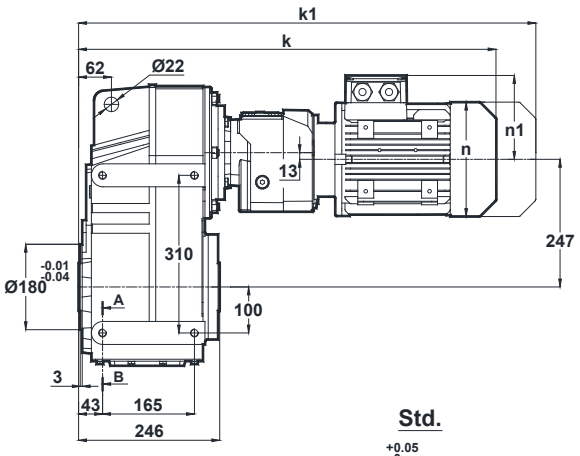


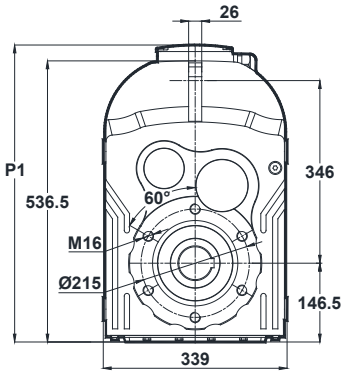
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

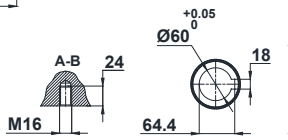
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR575.00
DR576.00

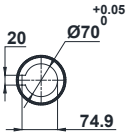




Std.

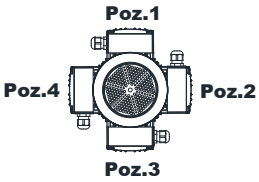


Ops.



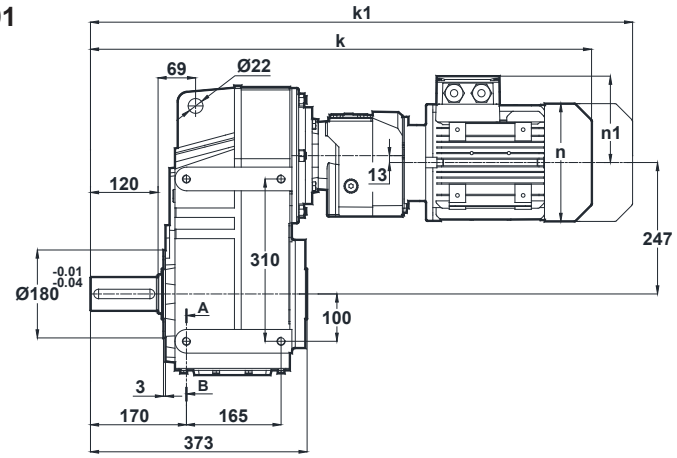
	63	71
k	624	650
k1	695	741
n	119	137
n1	101	118
P1	-	-

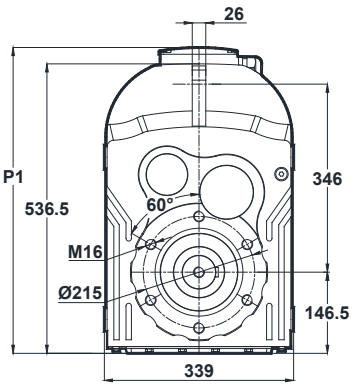
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

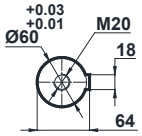


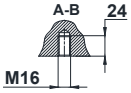
63-71
Tip / *Type* / Typ

DR575.01
DR576.01



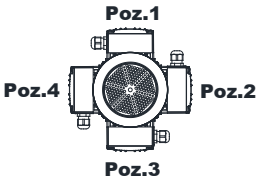






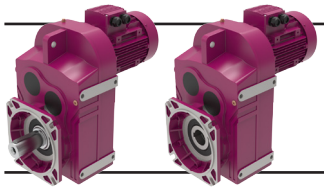
	63	71
k	751	777
k1	822	868
n	119	137
n1	101	118
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

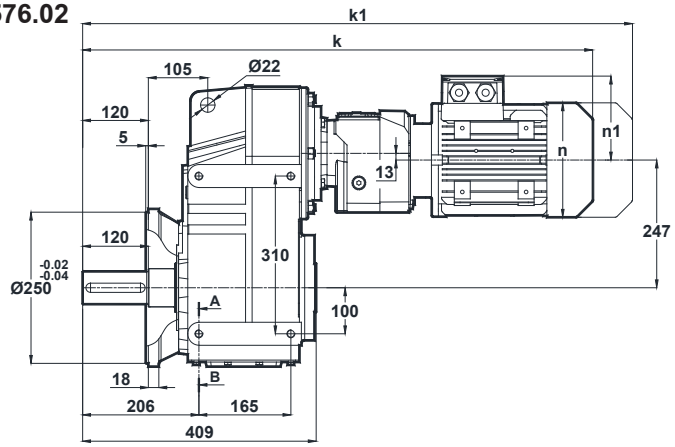
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

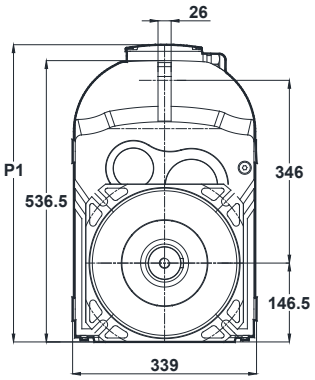


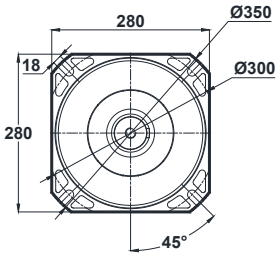
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

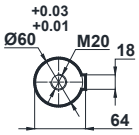
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

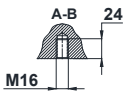
DR575.02
DR576.02





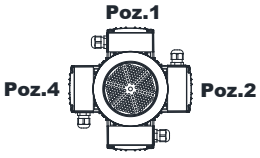






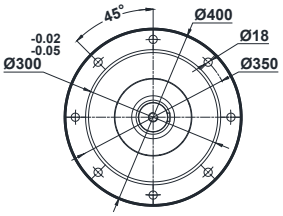
	63	71
k	787	813
k1	858	904
n	119	137
n1	101	118
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



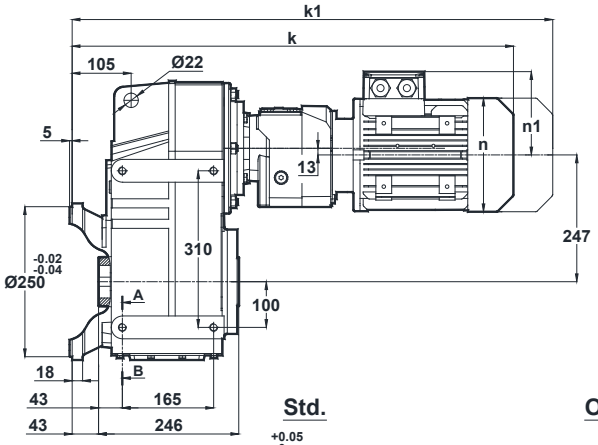
63-71
Tip / *Type* / Typ

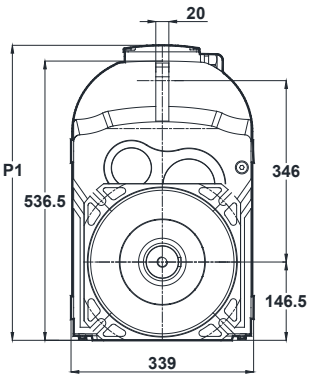
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

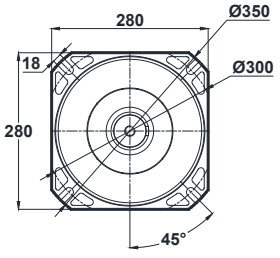


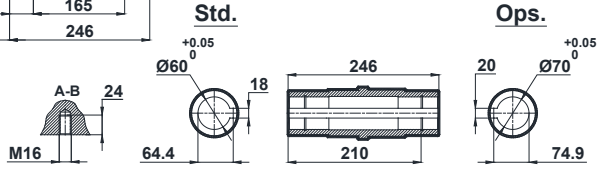
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DR575.03
DR576.03



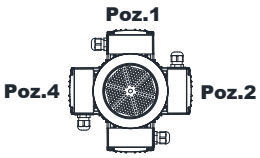






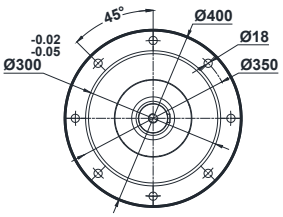
	63	71
k	667	693
k1	738	784
n	119	137
n1	101	118
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

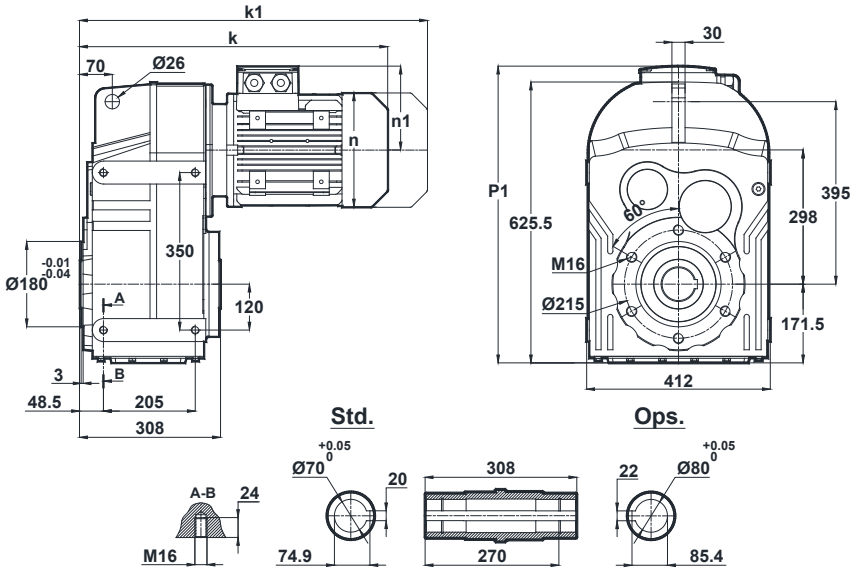


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

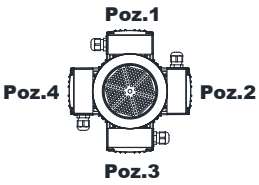
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR672.00
DR673.00



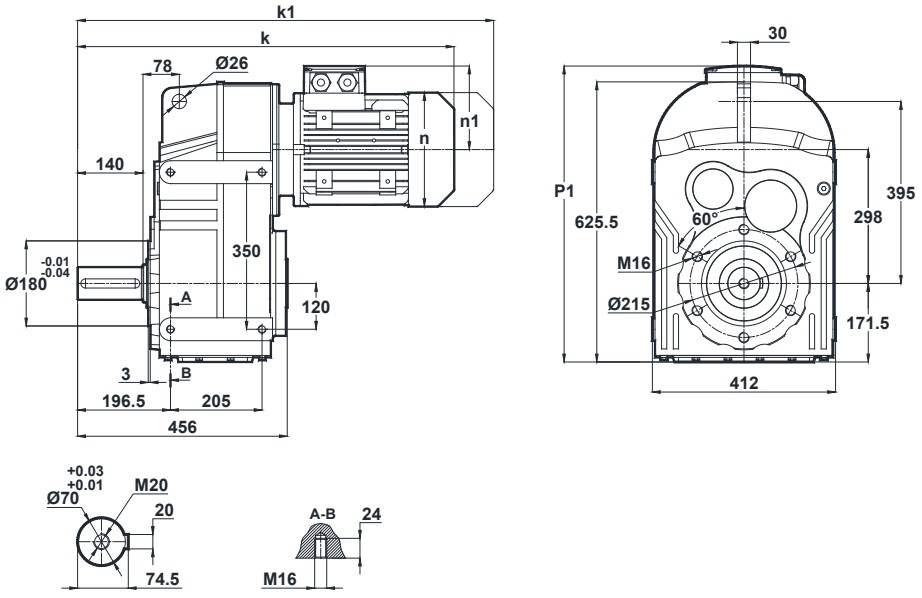
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	593	617	704	704	800	800	872	872	911
k1	701	722	834	834	950	950	1059	1059	1103
n	193	215	257	257	316	316	348	348	396
n1	149	161	182	182	226	226	242	242	294
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



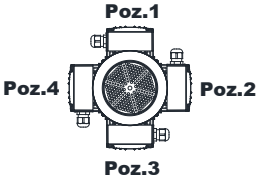
100-112-132-160-180-200
Tip / *Type* / Typ

DR672.01
DR673.01



	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	741	765	852	852	948	948	1020	1020	1059
k1	849	870	982	982	1098	1098	1207	1207	1251
n	193	215	257	257	316	316	348	348	396
n1	149	161	182	182	226	226	242	242	294
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

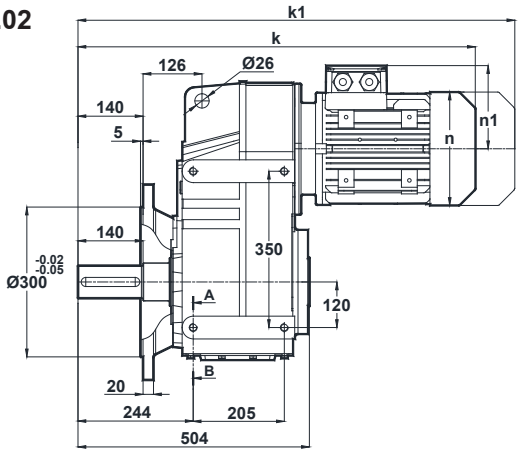


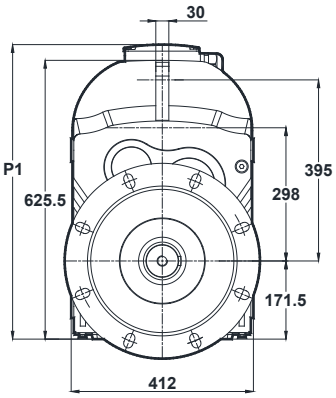
100-112-132-160-180-200
Tip / *Type* / Typ

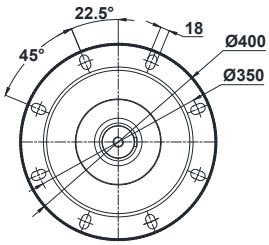
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

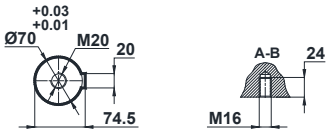
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR672.02
DR673.02



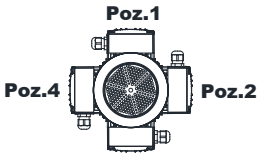






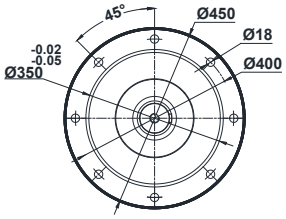
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	789	813	900	900	996	996	1068	1068	1107
k1	897	918	1030	1030	1146	1146	1255	1255	1299
n	193	215	257	257	316	316	348	348	396
n1	149	161	182	182	226	226	242	242	294
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



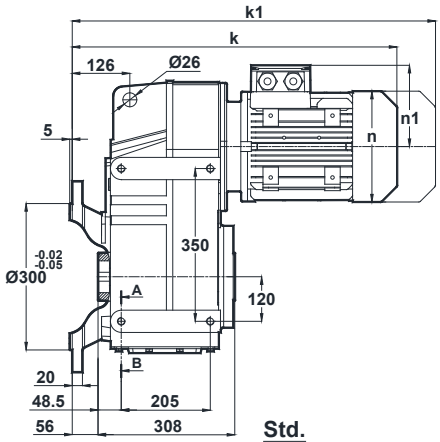
100-112-132-160-180-200
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

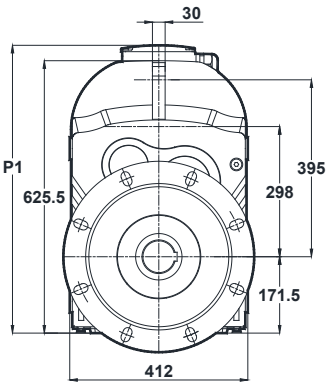


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

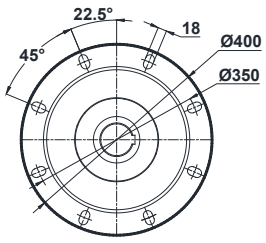
DR672.03
DR673.03

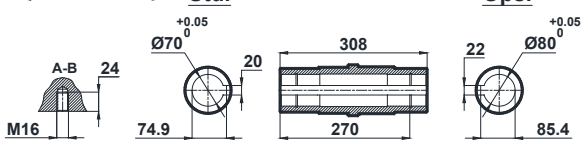


Std.



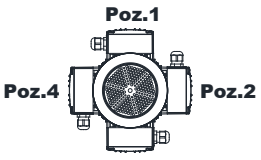
Ops.





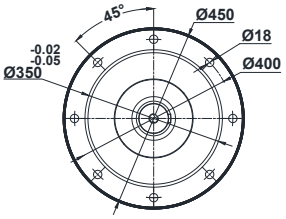
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	649	673	760	760	856	856	928	928	967
k1	757	778	890	890	1006	1006	1115	1115	1159
n	193	215	257	257	316	316	348	348	396
n1	149	161	182	182	226	226	242	242	294
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

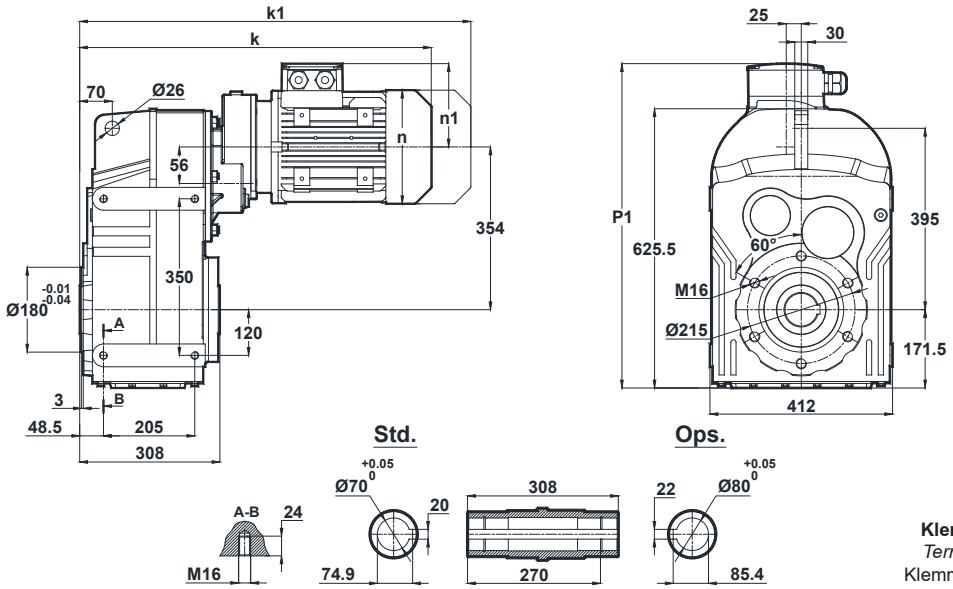


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

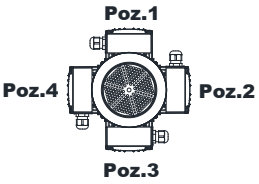
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR674.00



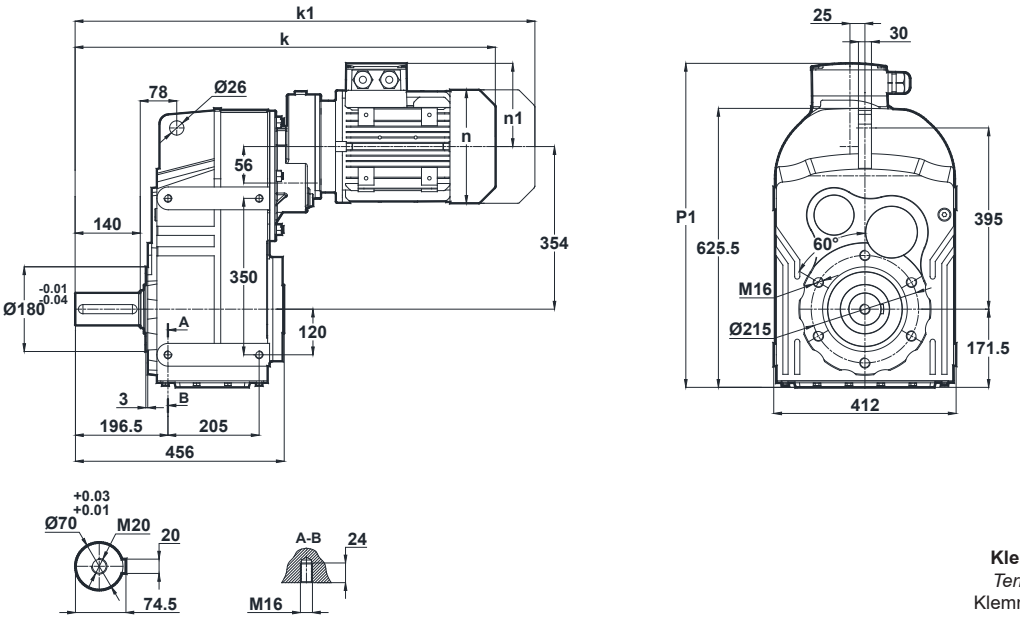
	71	80	90S	90L
k	573	607	646	646
k1	664	700	725	725
n	137	155	176	176
n1	118	127	136	136
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



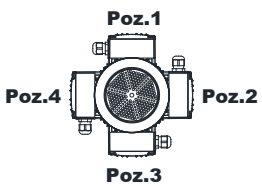
71-80-90
Tip / *Type* / Typ

DR674.01



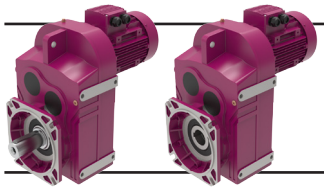
	71	80	90S	90L
k	721	755	794	794
k1	812	848	873	873
n	137	155	176	176
n1	118	127	136	136
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

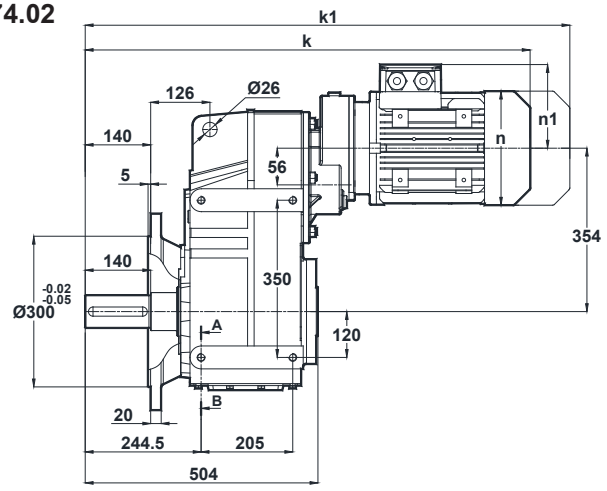
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

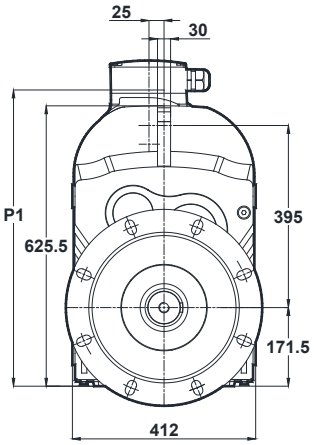


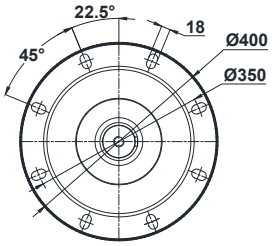
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

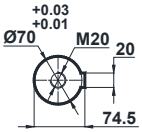
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

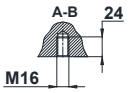
DR674.02





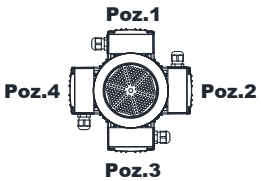






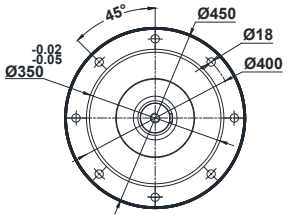
	71	80	90S	90L
k	769	803	842	842
k1	860	896	921	921
n	137	155	176	176
n1	118	127	136	136
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



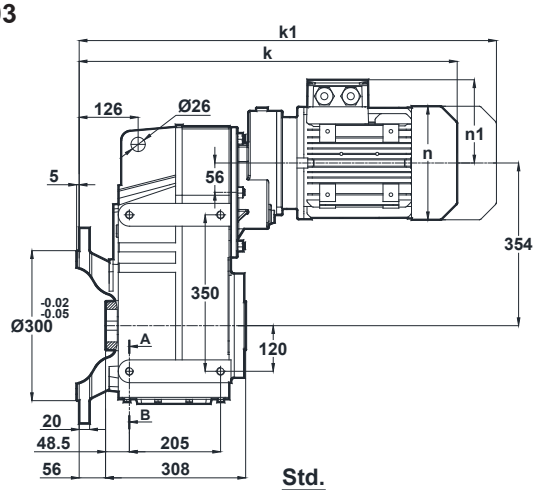
71-80-90
Tip / *Type* / Typ

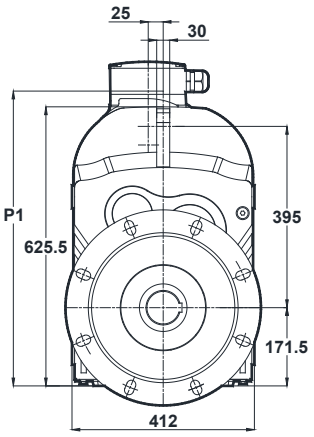
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

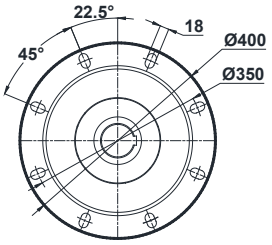


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

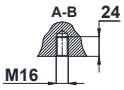
DR674.03

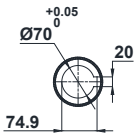


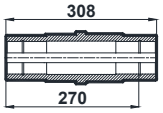




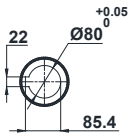
Std.





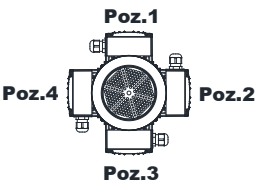


Ops.



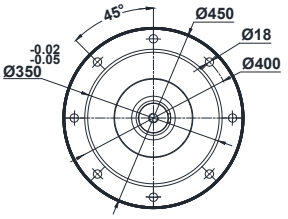
	71	80	90S	90L
k	629	663	702	702
k1	720	756	781	781
n	137	155	176	176
n1	118	127	136	136
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

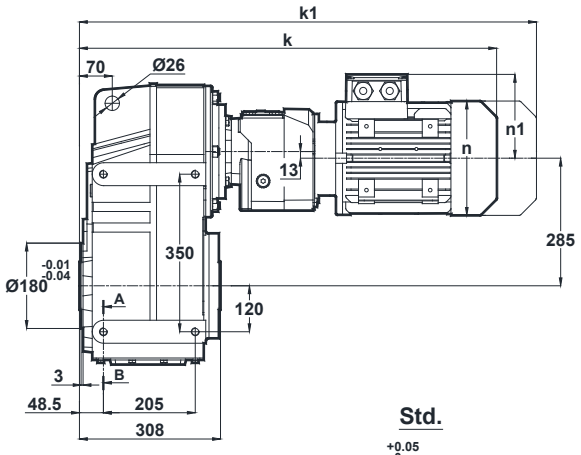


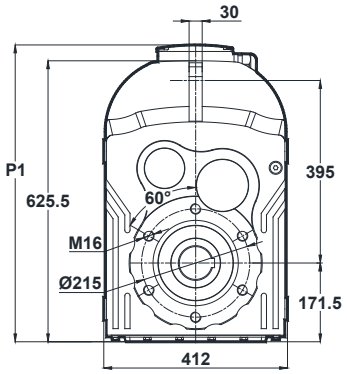
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

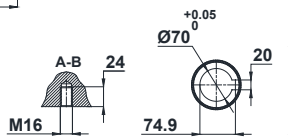
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR675.00
DR676.00

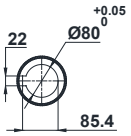




Std.

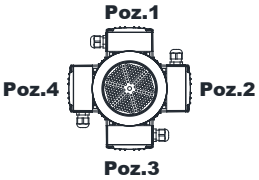


Ops.



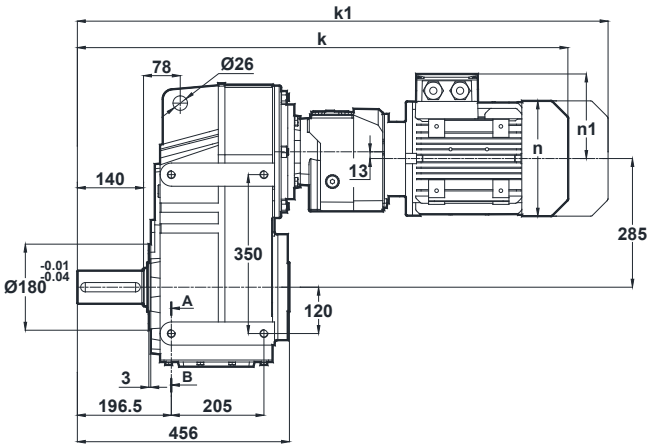
	63	71	80
k	679	705	739
k1	750	796	832
n	119	137	155
n1	101	118	127
P1	-	-	-

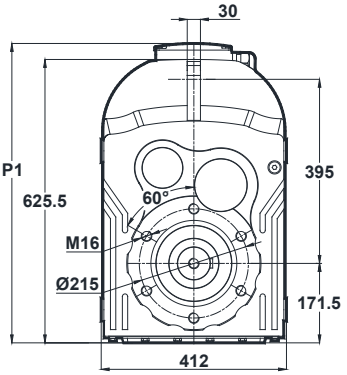
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

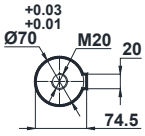


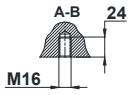
61-71-80
Tip / *Type* / Typ

DR675.01
DR676.01



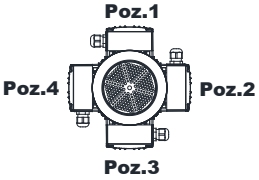






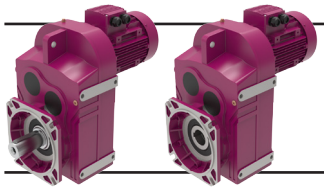
	63	71	80
k	827	853	887
k1	898	944	980
n	119	137	155
n1	101	118	127
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



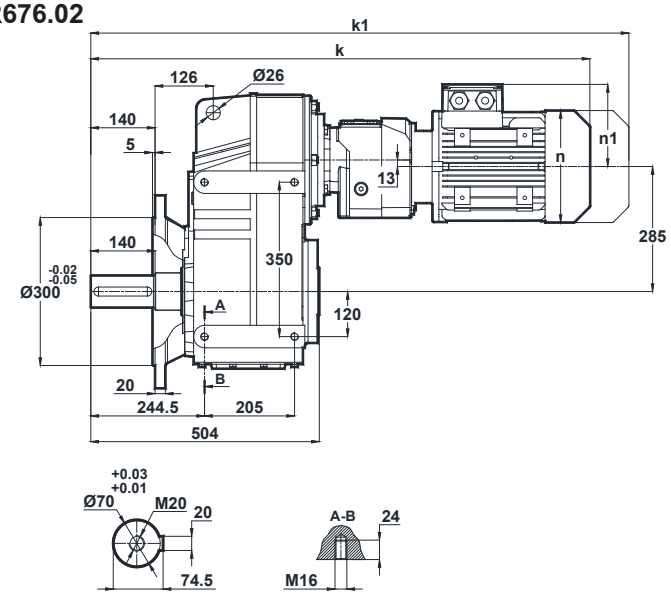
61-71-80
Tip / *Type* / Typ

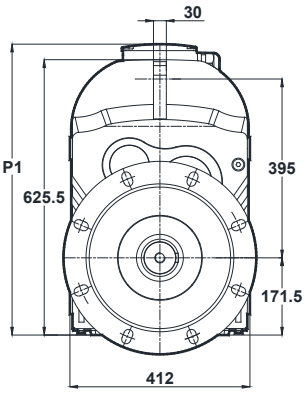
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

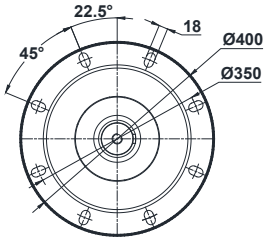


Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR675.02
DR676.02

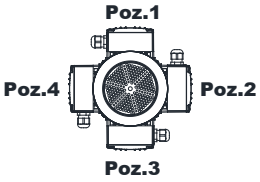






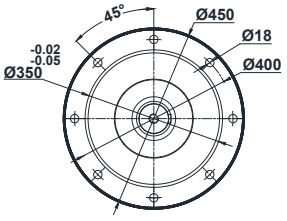
	63	71	80
k	875	901	935
k1	946	992	1028
n	119	137	155
n1	101	118	127
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



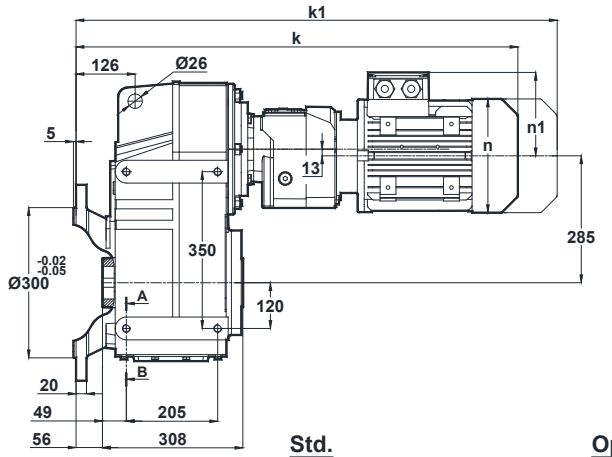
61-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

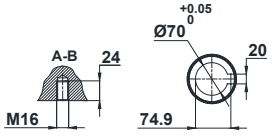


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

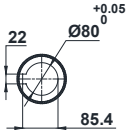
DR675.03
DR676.03

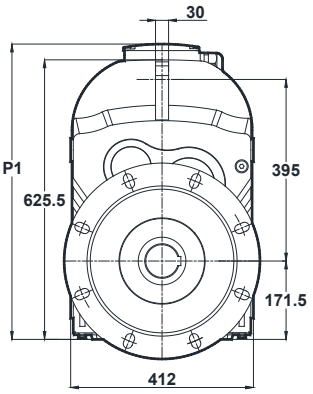


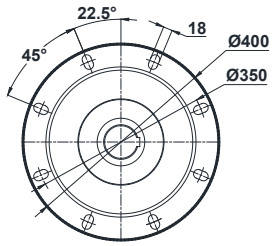
Std.



Ops.

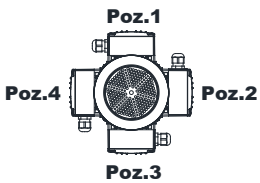






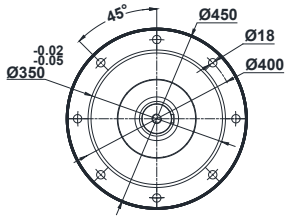
	63	71	80
k	735	761	795
k1	806	852	888
n	119	137	155
n1	101	118	127
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



61-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

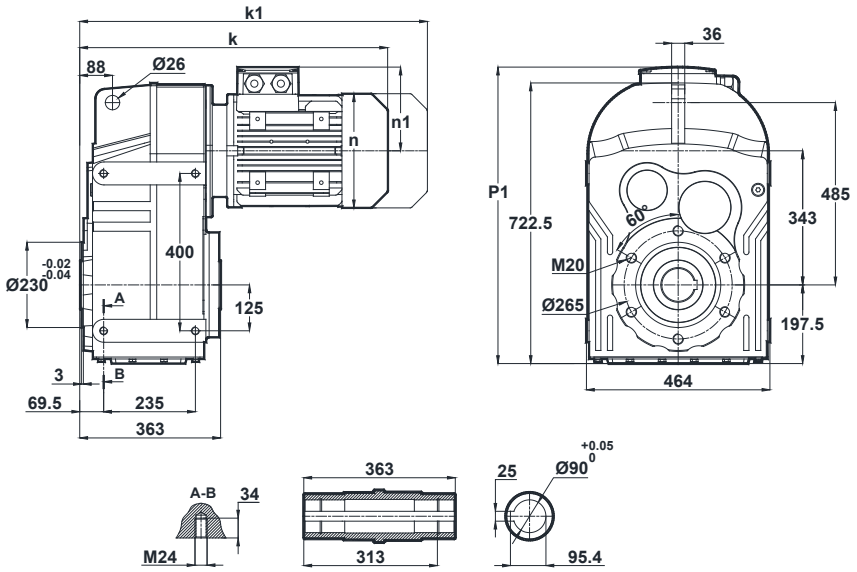


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

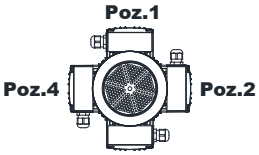
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR772.00
DR773.00



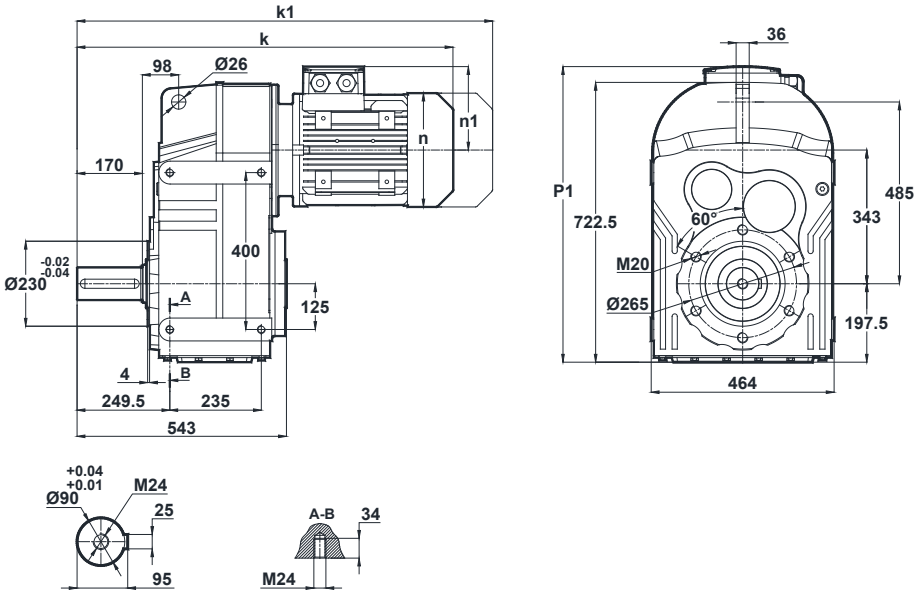
	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	585	655	742	742	838	838	910	910	949	1011	1011
k1	693	760	872	872	988	988	1097	1097	1141	1194	1194
n	193	215	257	257	316	316	348	348	396	438	438
n1	149	161	182	182	226	226	242	242	294	312	312
P1	-	-	723	723	767	767	783	783	835	853	853

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



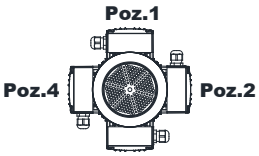
100-112-132-160-180-200-225
Tip / *Type* / Typ

DR772.01
DR773.01



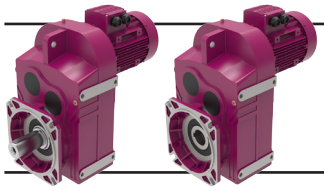
	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	733	835	922	922	1018	1018	1090	1090	1129	1191	1191
k1	841	940	1052	1052	1168	1168	1277	1277	1321	1374	1374
n	193	215	257	257	316	316	348	348	396	438	438
n1	149	161	182	182	226	226	242	242	294	312	312
P1	-	-	723	723	767	767	783	783	835	853	853

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225
Tip / *Type* / Typ

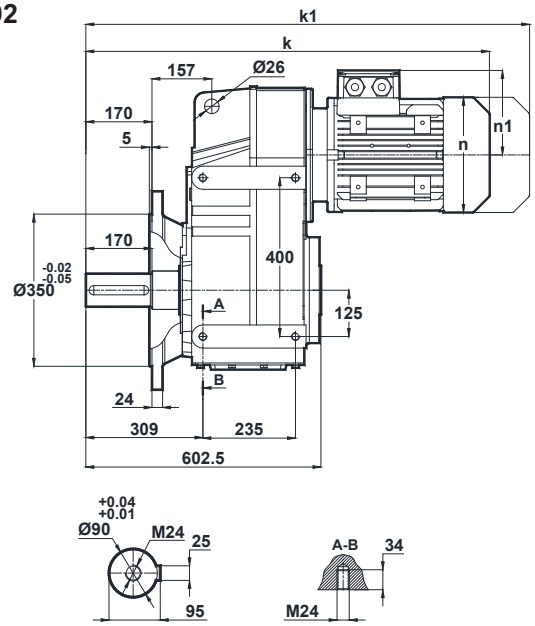
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

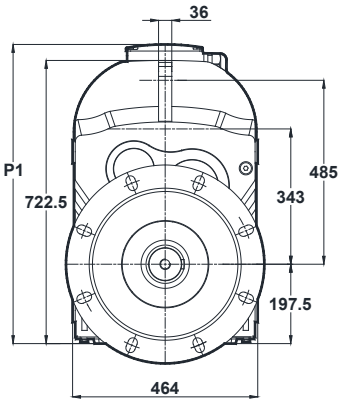


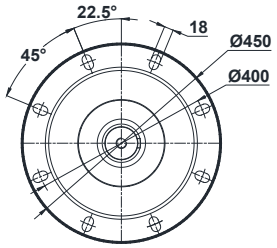
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

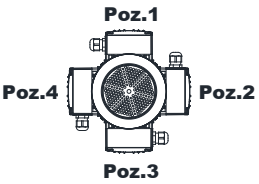






	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	781	895	982	982	1078	1078	1150	1150	1189	1251	1251
k1	889	1000	1112	1112	1228	1228	1337	1337	1381	1434	1434
n	193	215	257	257	316	316	348	348	396	438	438
n1	149	161	182	182	226	226	242	242	294	312	312
P1	-	-	723	723	767	767	783	783	835	853	853

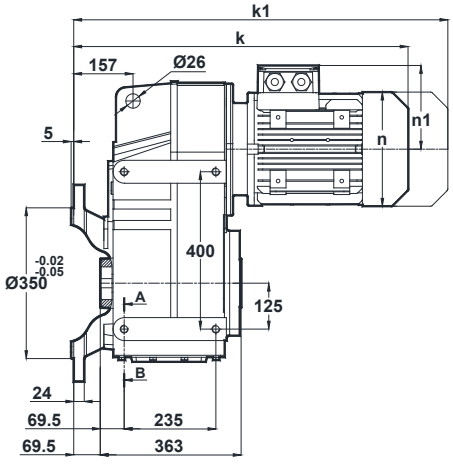
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

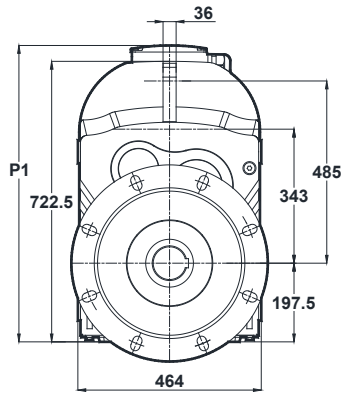


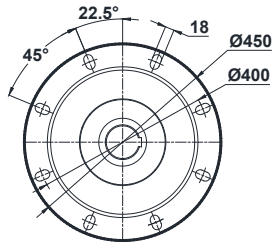
100-112-132-160-180-200-225
Tip / *Type* / Typ

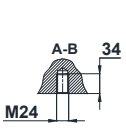
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

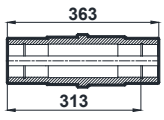
DR772.03
DR773.03

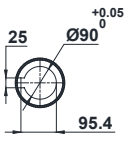






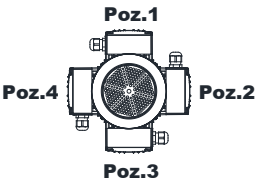






	100L	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	641	725	812	812	908	908	980	980	1019	1081	1081
k1	749	830	942	942	1058	1058	1167	1167	1211	1264	1264
n	193	215	257	257	316	316	348	348	396	438	438
n1	149	161	182	182	226	226	242	242	294	312	312
P1	-	-	723	723	767	767	783	783	835	853	853

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



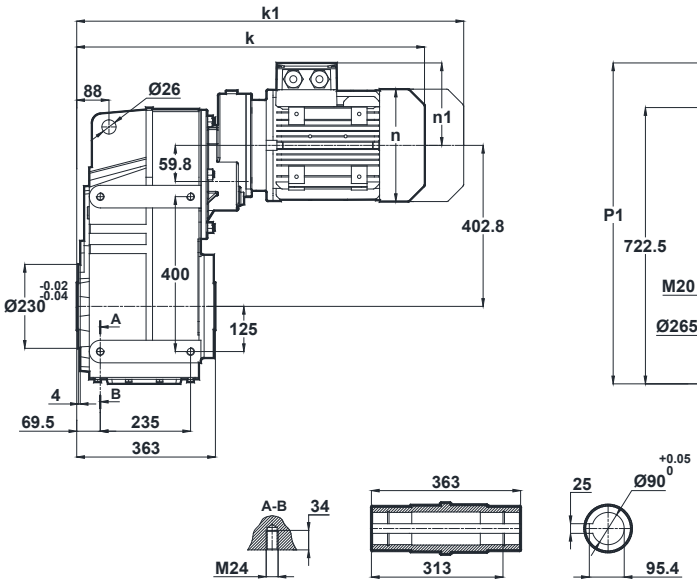
100-112-132-160-180-200-225
Tip / *Type* / Typ

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

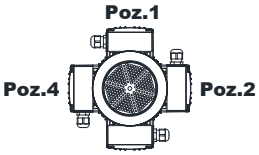
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR774.00



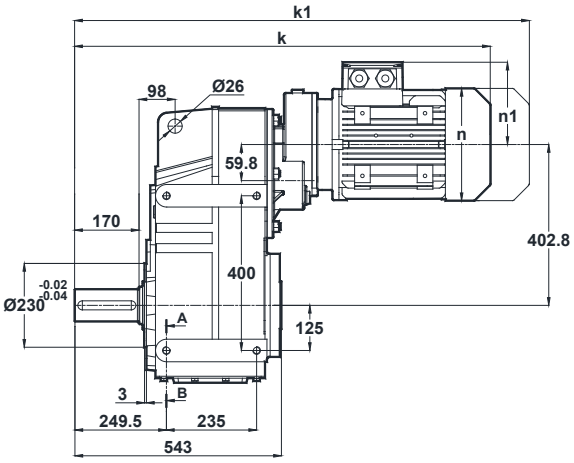
	80	90S	90L	100L
k	664	703	703	748
k1	757	782	782	856
n	155	176	176	193
n1	127	136	136	149
P1	728	737	737	750

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



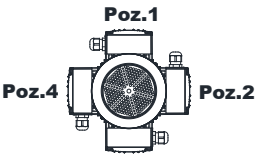
80-90-100
Tip / *Type* / Typ

DR774.01



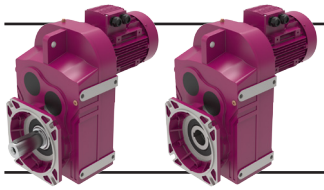
	80	90S	90L	100L
k	844	883	883	928
k1	937	962	962	1036
n	155	176	176	193
n1	127	136	136	149
P1	728	737	737	750

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100
Tip / *Type* / Typ

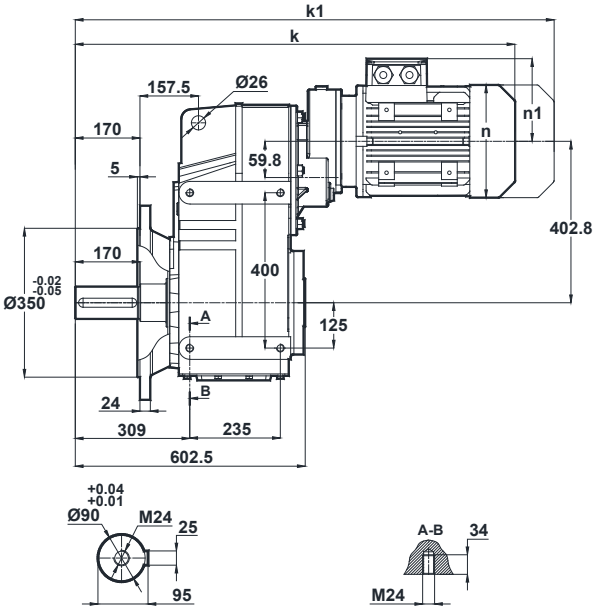
''k1'' ölçüsü frenli redüktörlere aittir. / *Dimensions ''k1'' is for motors with brake.* / Maße ''k1'' ist für Bremsenmotoren.

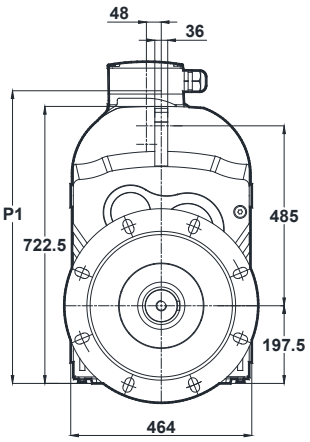


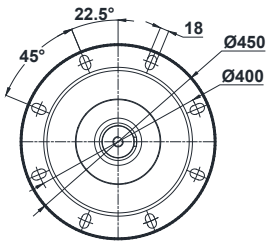
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

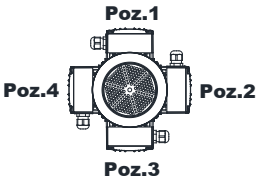






	80	90S	90L	100L
k	904	943	943	988
k1	997	1022	1022	1096
n	155	176	176	193
n1	127	136	136	149
P1	728	737	737	750

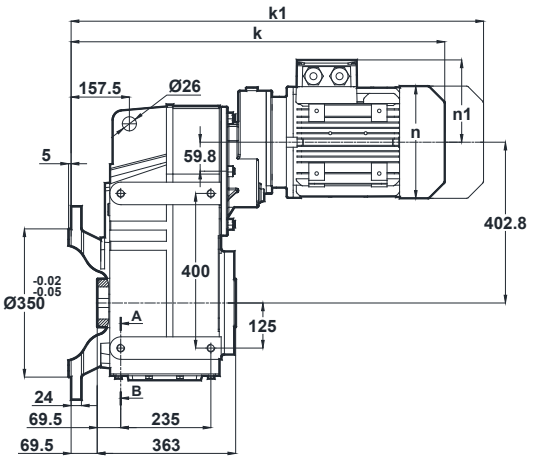
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

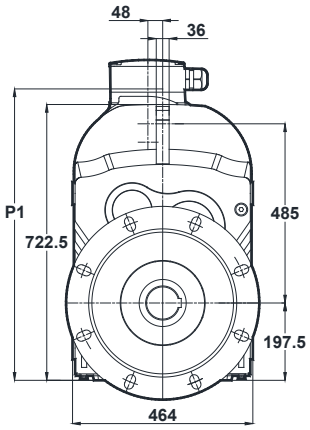


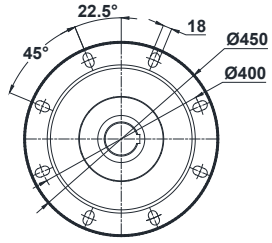
80-90-100
Tip / *Type* / Typ

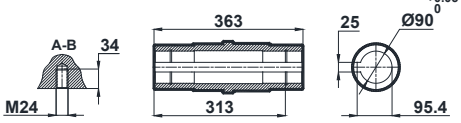
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DR774.03



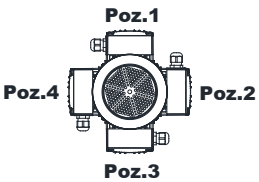






	80	90S	90L	100L
k	734	773	773	818
k1	827	852	852	926
n	155	176	176	193
n1	127	136	136	149
P1	728	737	737	750

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



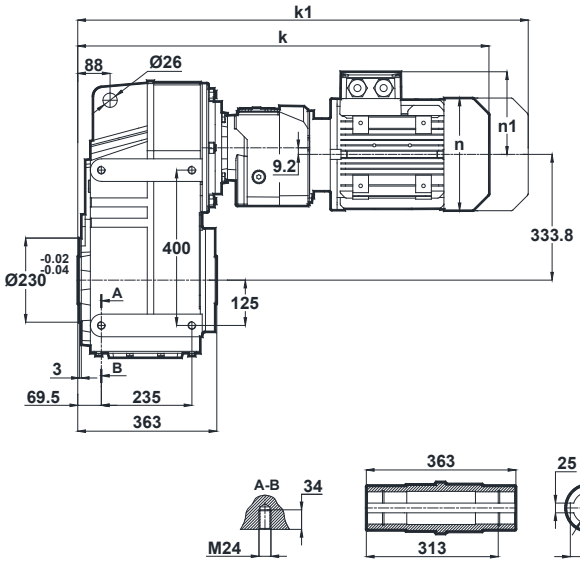
80-90-100
Tip / *Type* / Typ

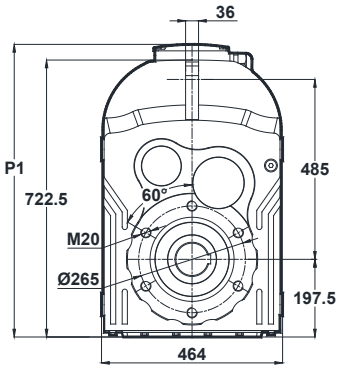
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

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

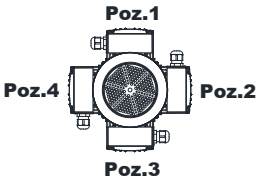
DR775.00
DR776.00





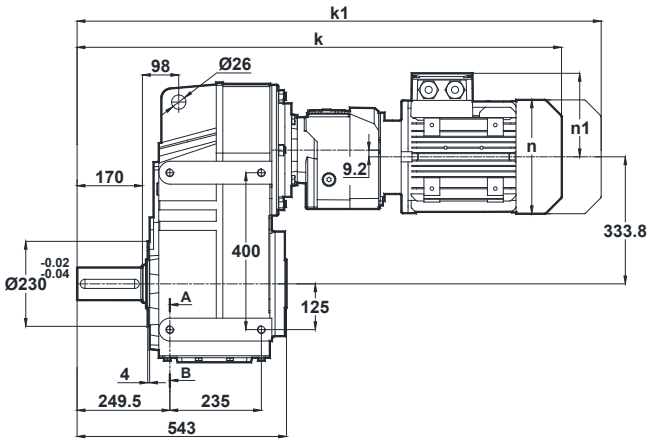
	71	80	90S	90L
k	775	809	848	848
k1	866	902	927	927
n	137	155	176	176
n1	118	127	136	136
P1	-	-	-	-

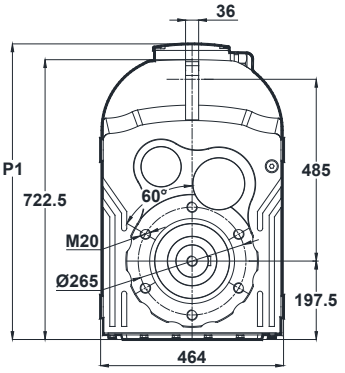
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

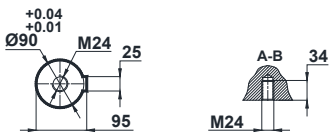


71-80-90
Tip / *Type* / Typ

DR775.01
DR776.01

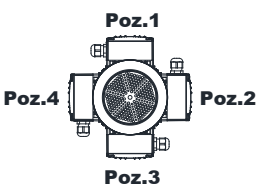






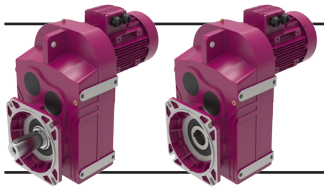
	71	80	90S	90L
k	955	989	1028	1028
k1	1046	1082	1107	1107
n	137	155	176	176
n1	118	127	136	136
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

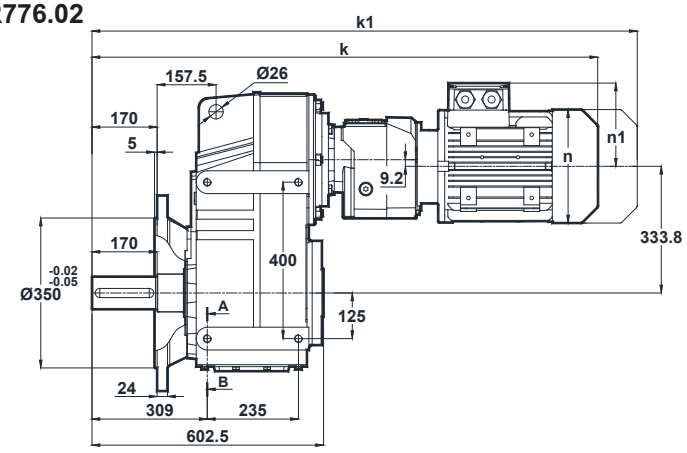
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

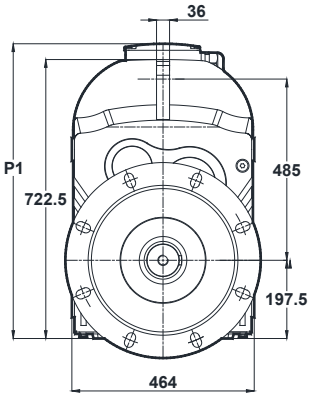


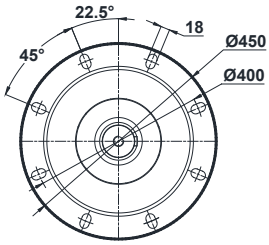
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

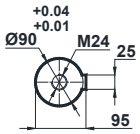
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

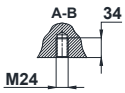
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DR776.02





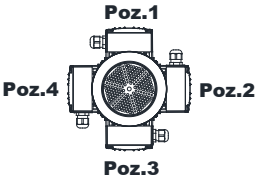






	71	80	90S	90L
k	1015	1049	1088	1088
k1	1106	1142	1167	1167
n	137	155	176	176
n1	118	127	136	136
P1	-	-	-	-

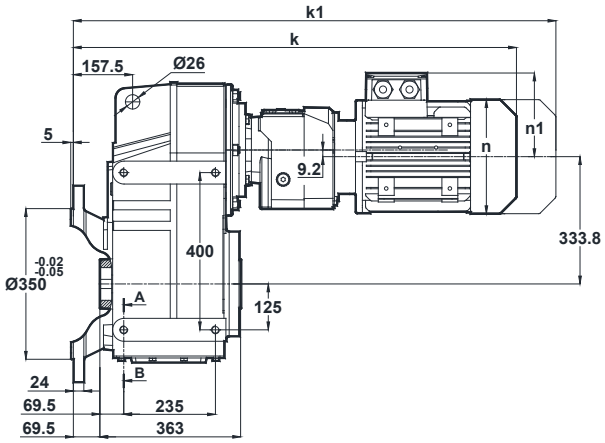
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

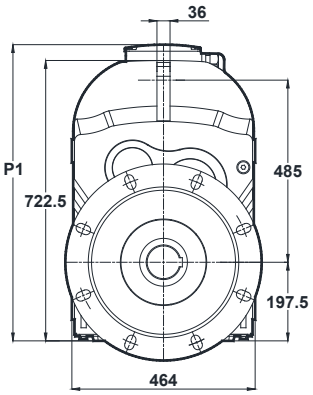


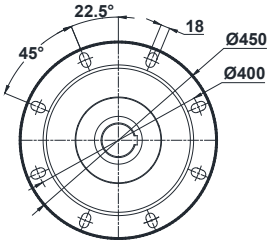
71-80-90
Tip / *Type* / Typ

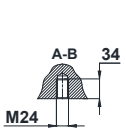
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

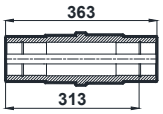
DR775.03
DR776.03

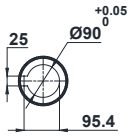






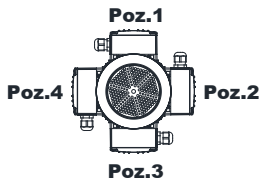






	71	80	90S	90L
k	845	879	918	918
k1	936	972	997	997
n	137	155	176	176
n1	118	127	136	136
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



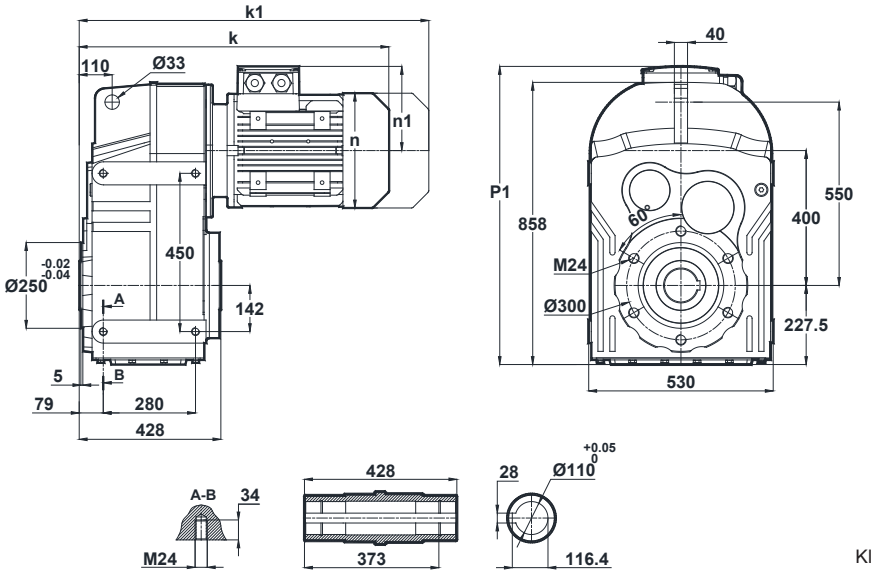
71-80-90
Tip / *Type* / Typ

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

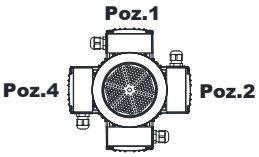
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR872.00
DR873.00



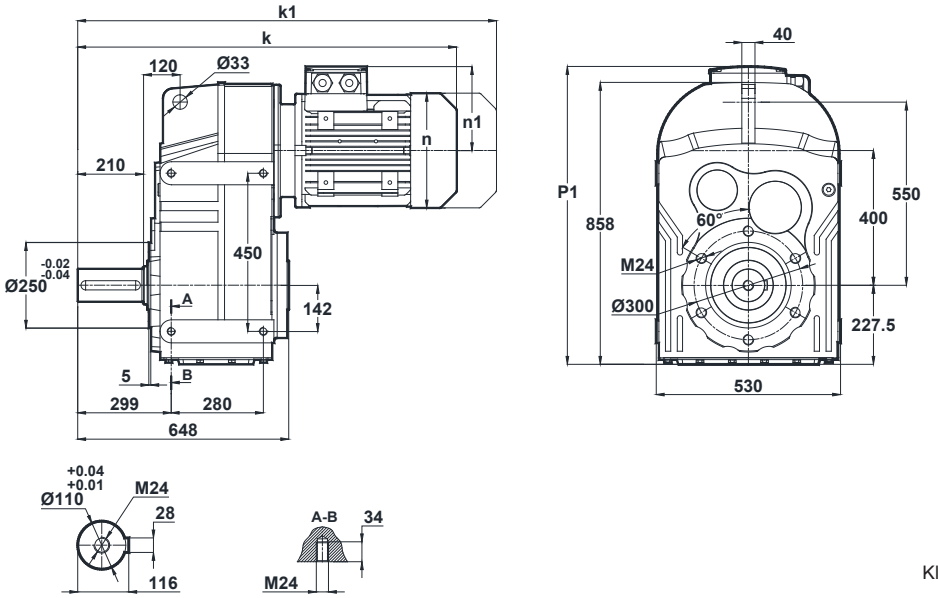
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	809	809	885	885	957	957	996	1061	1061	1144	1263	1263
k1	939	939	1035	1035	1144	1144	1188	1244	1244	1301	1461	1461
n	257	257	316	316	348	348	396	438	438	481	547	547
n1	182	182	226	226	242	242	294	312	312	337	402	402
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



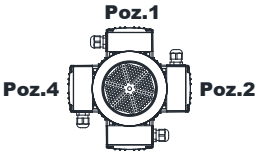
132-160-180-200-225-250-280
Tip / *Type* / Typ

DR872.01
DR873.01



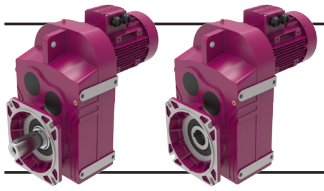
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1029	1029	1105	1105	1177	1177	1216	1281	1281	1364	1483	1483
k1	1159	1159	1255	1255	1364	1364	1408	1464	1464	1521	1681	1681
n	257	257	316	316	348	348	396	438	438	481	547	547
n1	182	182	226	226	242	242	294	312	312	337	402	402
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



132-160-180-200-225-250-280
Tip / *Type* / Typ

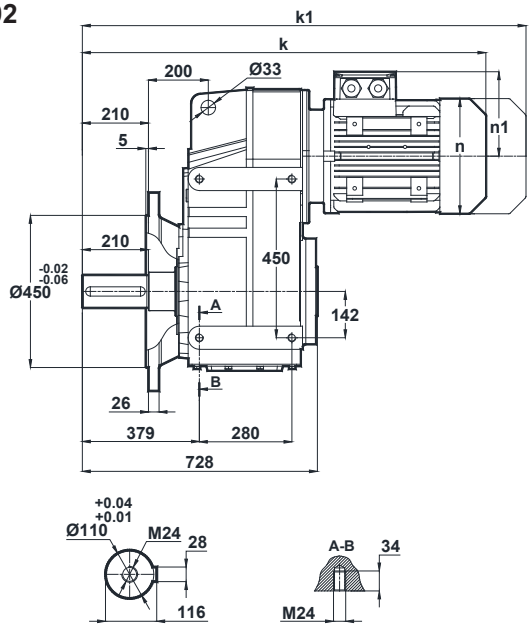
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

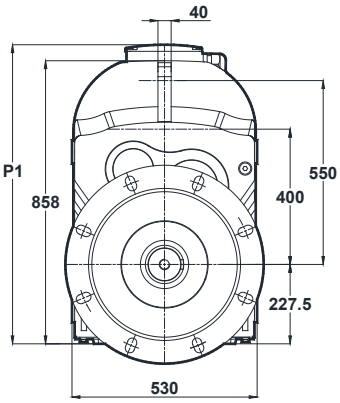


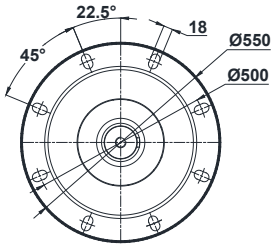
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

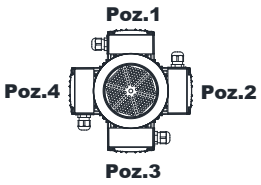
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DR873.02







Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

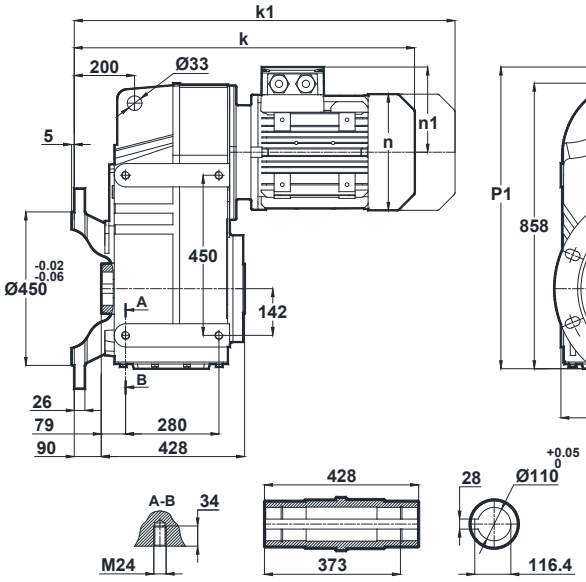


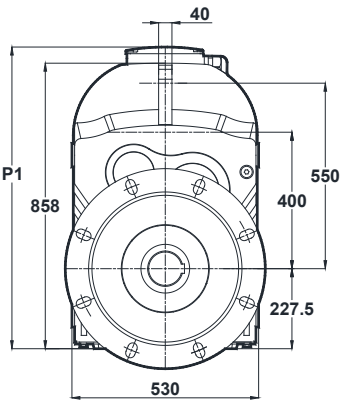
132-160-180-200-225-250-280
Tip / *Type* / Typ

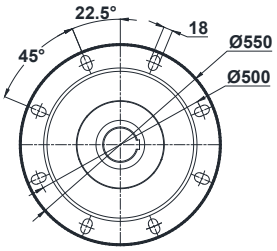
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1109	1109	1185	1185	1257	1257	1296	1361	1361	1444	1563	1563
k1	1239	1239	1335	1335	1444	1444	1488	1544	1544	1601	1761	1761
n	257	257	316	316	348	348	396	438	438	481	547	547
n1	182	182	226	226	242	242	294	312	312	337	402	402
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

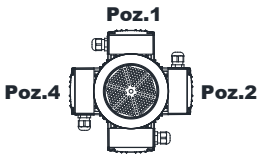
DR872.03
DR873.03







Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



132-160-180-200-225-250-280
Tip / *Type* / Typ

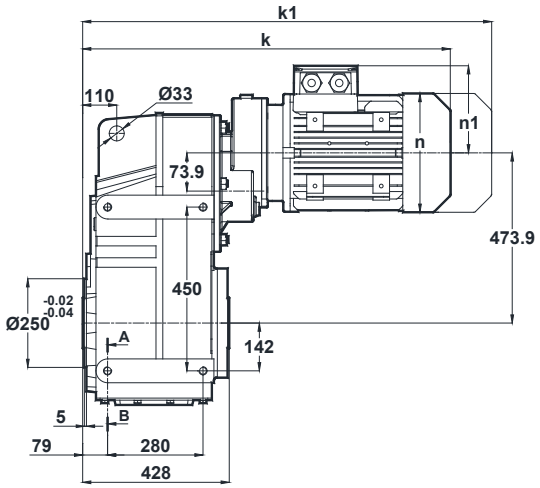
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	899	899	975	975	1047	1047	1086	1151	1151	1234	1353	1353
k1	1029	1029	1125	1125	1234	1234	1278	1334	1334	1391	1551	1551
n	257	257	316	316	348	348	396	438	438	481	547	547
n1	182	182	226	226	242	242	294	312	312	337	402	402
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

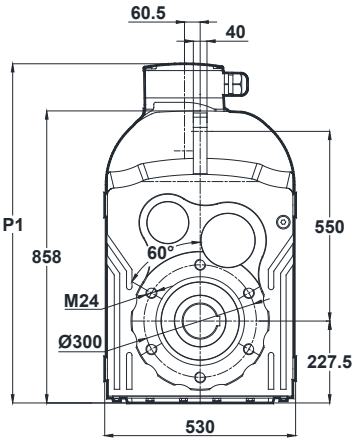
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

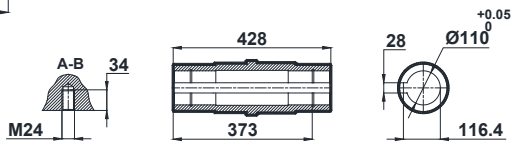
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

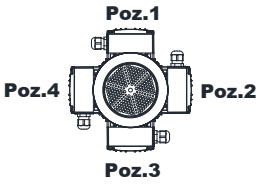






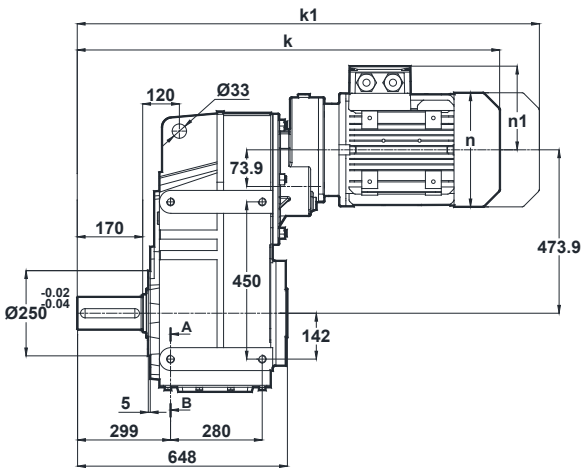
	100L	112M	132S	132M
k	820	844	931	931
k1	928	949	1061	1061
n	193	215	257	257
n1	149	161	182	182
P1	-	863	884	884

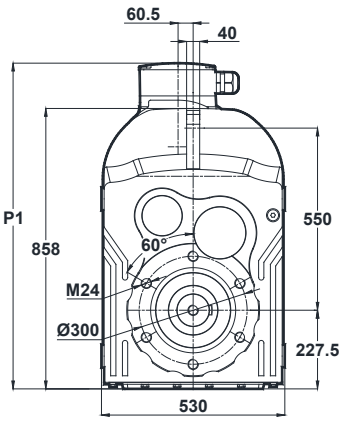
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

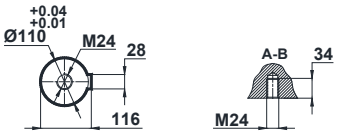


100-112-132
Tip / *Type* / Typ

DR874.01

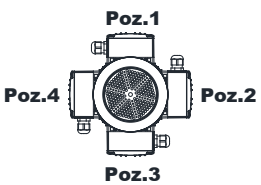






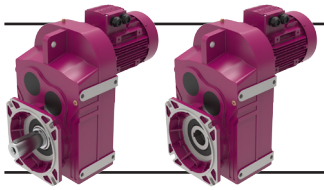
	100L	112M	132S	132M
k	1040	1064	1151	1151
k1	1148	1169	1281	1281
n	193	215	257	257
n1	149	161	182	182
P1	-	863	884	884

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132
Tip / *Type* / Typ

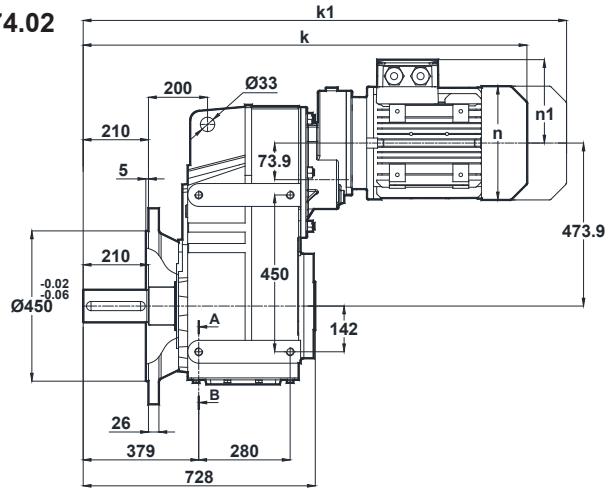
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

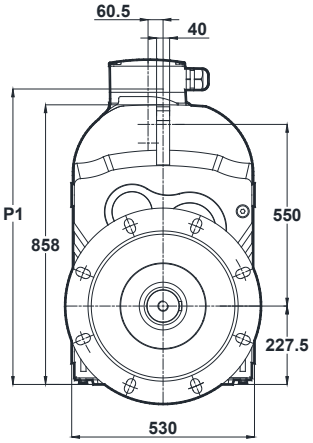


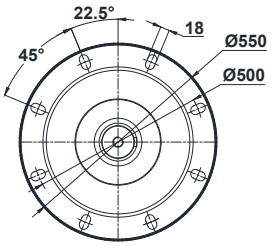
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

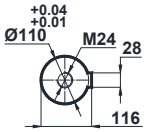
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

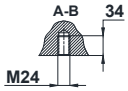
DR874.02





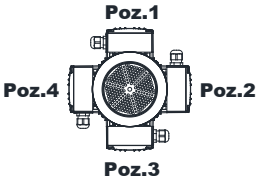






	100L	112M	132S	132M
k	1120	1144	1231	1231
k1	1228	1249	1361	1361
n	193	215	257	257
n1	149	161	182	182
P1	-	863	884	884

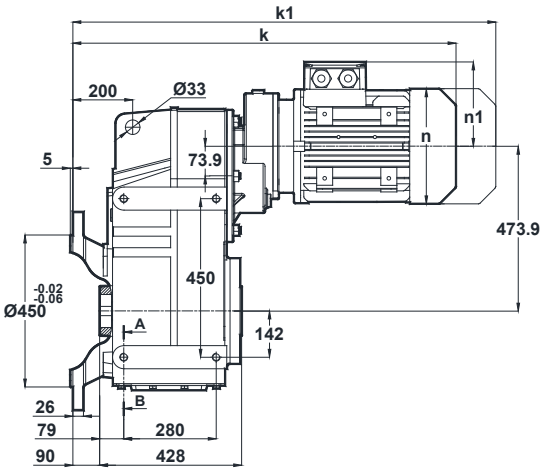
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

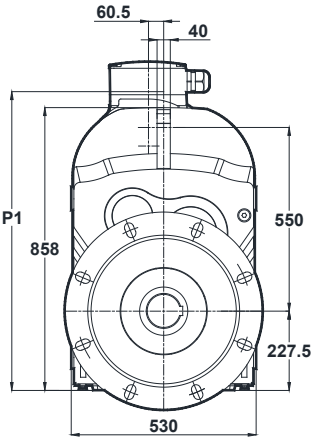


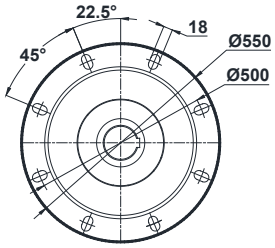
100-112-132
Tip / *Type* / Typ

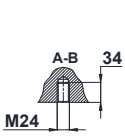
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

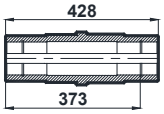
DR874.03

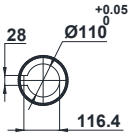






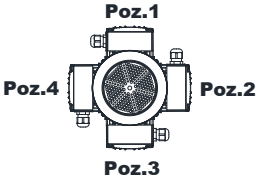






	100L	112M	132S	132M
k	910	934	1021	1021
k1	1018	1039	1151	1151
n	193	215	257	257
n1	149	161	182	182
P1	-	863	884	884

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



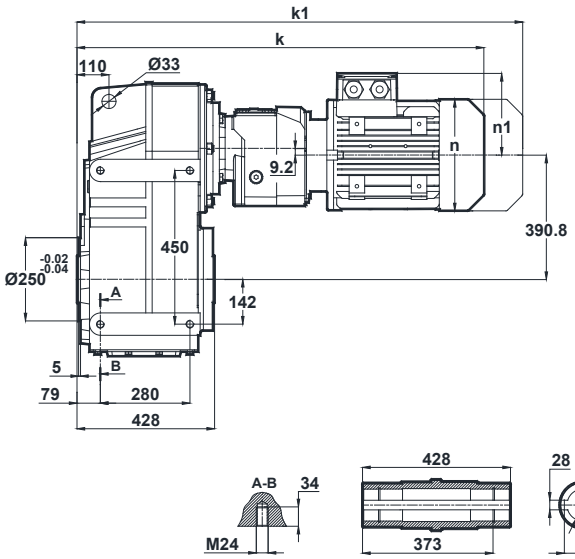
100-112-132
Tip / *Type* / Typ

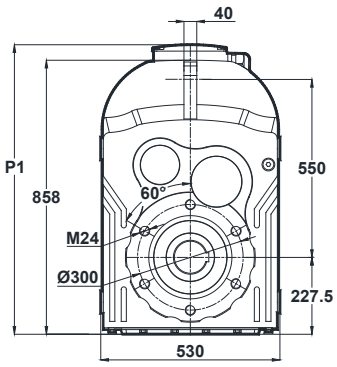
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

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

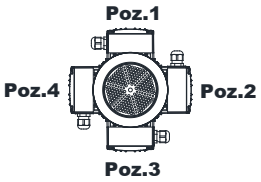
DR875.00
DR876.00





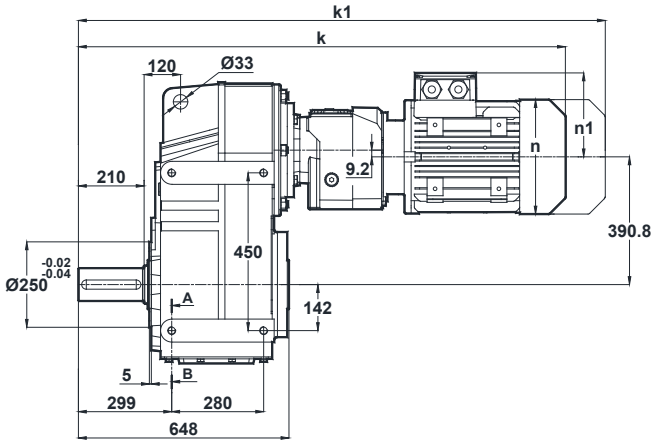
	71	80	90S	90L	100L
k	838	872	911	911	959
k1	929	965	990	990	1067
n	137	155	176	176	193
n1	118	127	136	136	149
P1	-	-	-	-	-

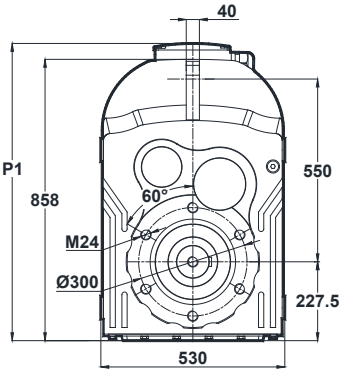
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

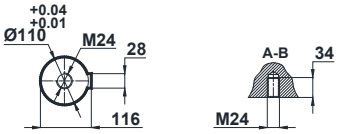


71-80-90-100
Tip / *Type* / Typ

DR875.01
DR876.01

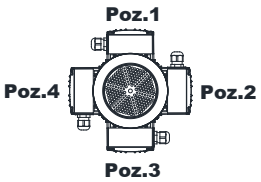






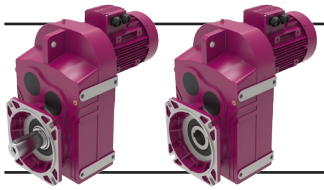
	71	80	90S	90L	100L
k	1058	1092	1131	1131	1179
k1	1149	1185	1210	1210	1287
n	137	155	176	176	193
n1	118	127	136	136	149
P1	-	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

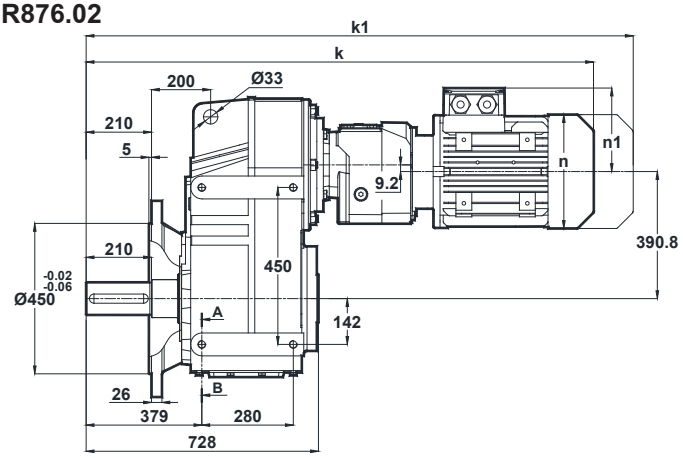
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

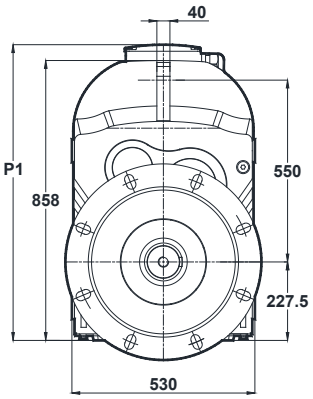


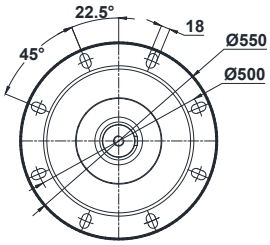
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

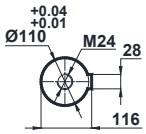
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

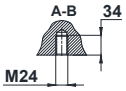
DR875.02
DR876.02





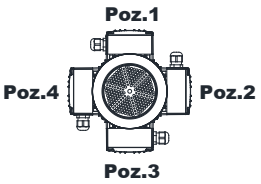






	71	80	90S	90L	100L
k	1138	1172	1211	1211	1259
k1	1229	1265	1290	1290	1367
n	137	155	176	176	193
n1	118	127	136	136	149
P1	-	-	-	-	-

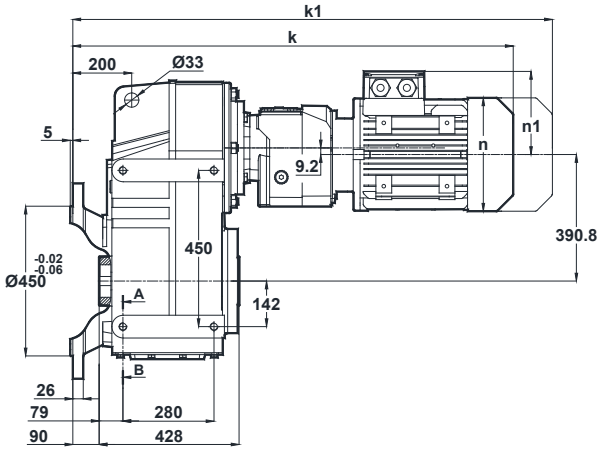
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

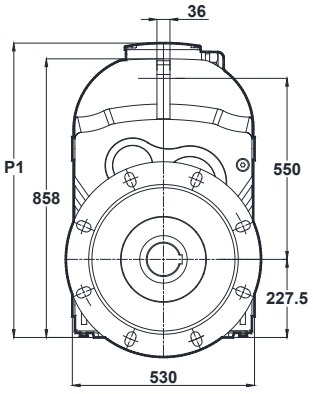


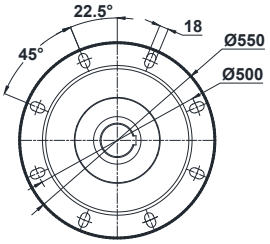
71-80-90-100
Tip / *Type* / Typ

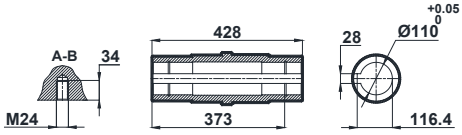
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DR875.03
DR876.03



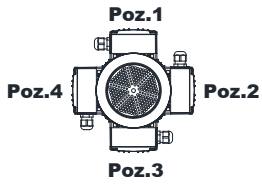






	71	80	90S	90L	100L
k	928	962	1001	1001	1049
k1	1019	1055	1080	1080	1157
n	137	155	176	176	193
n1	118	127	136	136	149
P1	-	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



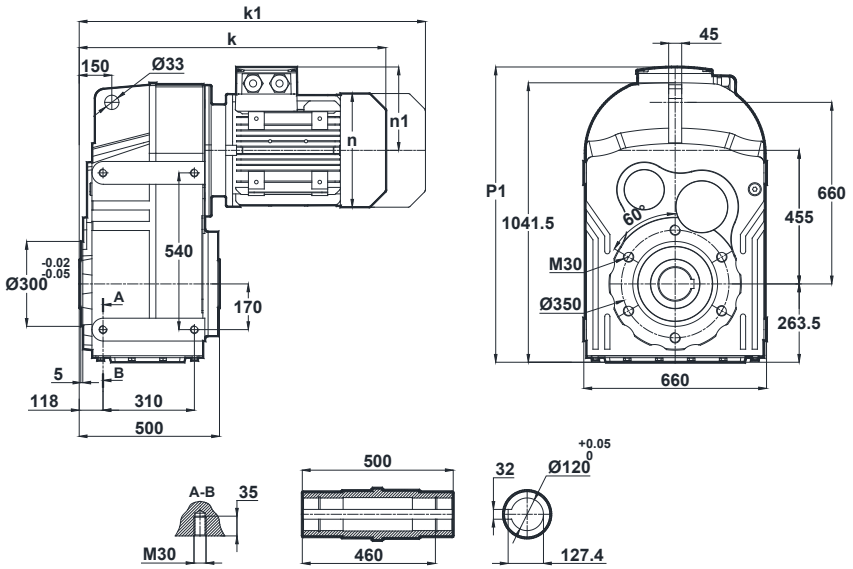
71-80-90-100
Tip / *Type* / Typ

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

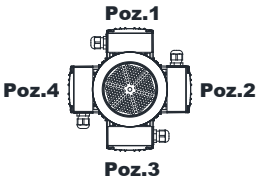
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR972.00
DR973.00



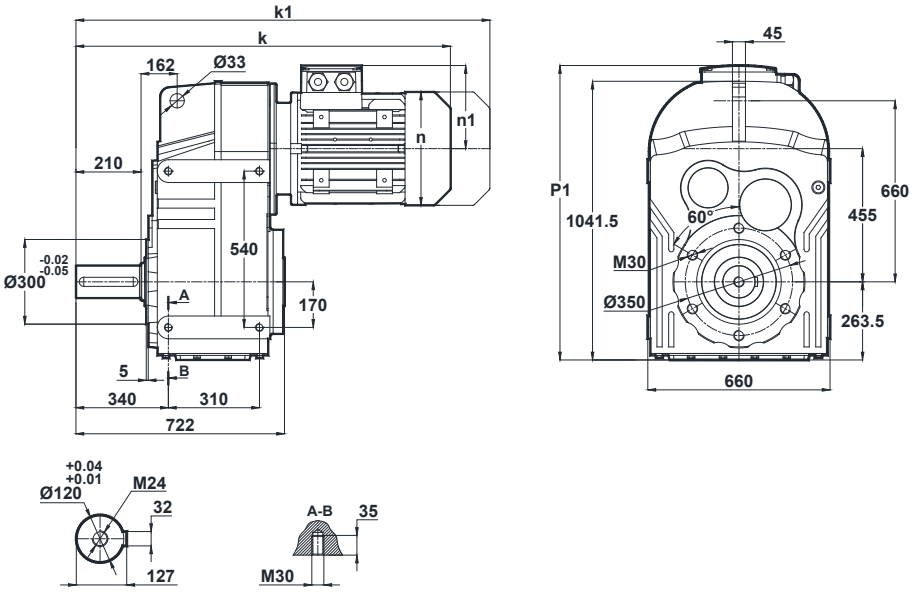
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
k	952	952	1024	1024	1063	1115	1115	1198	1317	1317	1531	1531	1531
k1	1102	1102	1211	1211	1255	1298	1298	1355	1515	1515	1940	1940	1940
n	316	316	348	348	396	438	438	481	547	547	622	622	622
n1	226	226	242	242	294	312	312	337	402	402	499	499	499
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



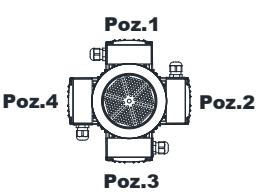
160-180-200-225-250-280-315
Tip / *Type* / Typ

DR972.01
DR973.01



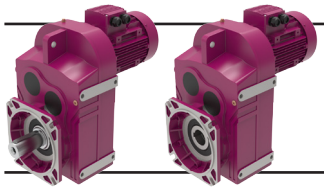
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
k	1174	1174	1246	1246	1285	1337	1337	1420	1539	1539	1753	1753	1753
k1	1324	1324	1433	1433	1477	1520	1520	1577	1737	1737	2162	2162	2162
n	316	316	348	348	396	438	438	481	547	547	622	622	622
n1	226	226	242	242	294	312	312	337	402	402	499	499	499
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



160-180-200-225-250-280-315
Tip / *Type* / Typ

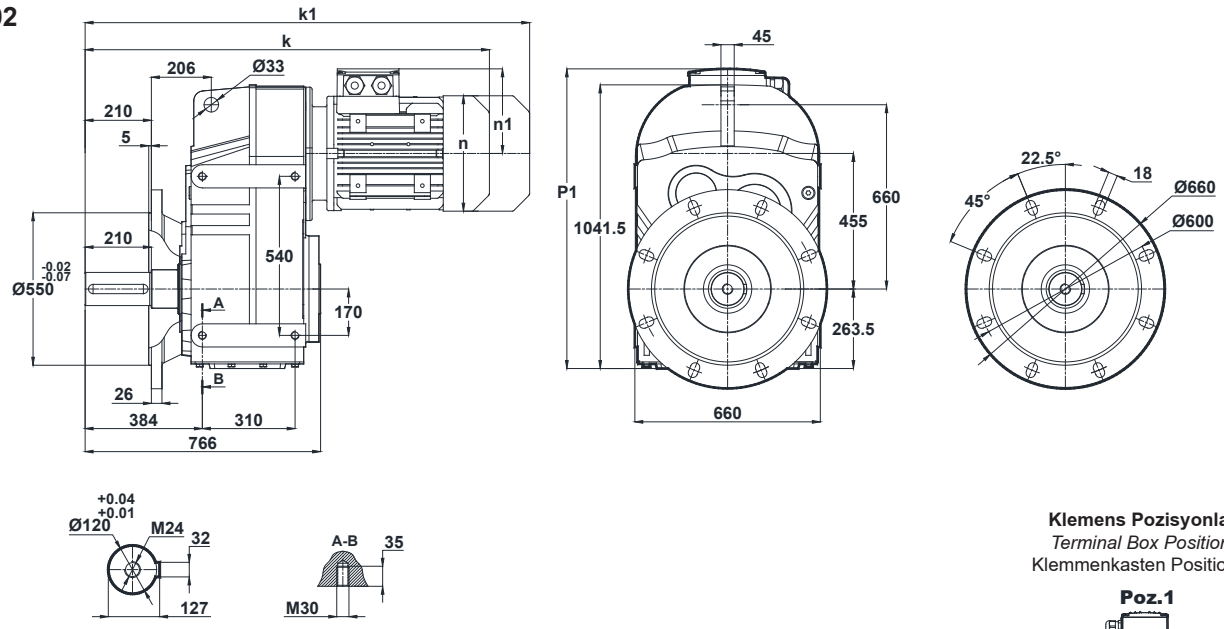
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

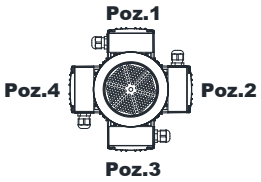
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR972.02
DR973.02



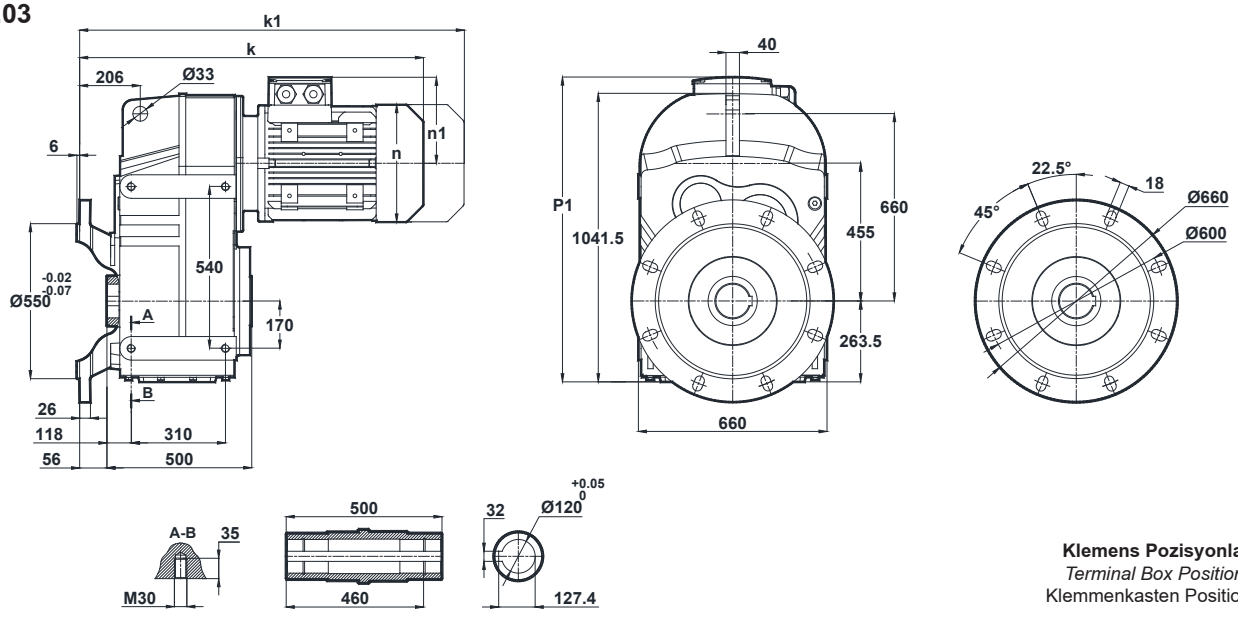
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
k	1218	1218	1290	1290	1329	1381	1381	1464	1583	1583	1797	1797	1797
k1	1368	1368	1477	1477	1521	1564	1564	1621	1781	1781	2206	2206	2206
n	316	316	348	348	396	438	438	481	547	547	622	622	622
n1	226	226	242	242	294	312	312	337	402	402	499	499	499
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



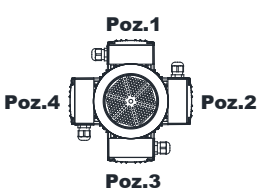
160-180-200-225-250-280-315
Tip / *Type* / Typ

DR972.03
DR973.03



	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
k	1008	1008	1080	1080	1119	1171	1171	1254	1373	1373	1587	1587	1587
k1	1158	1158	1267	1267	1311	1354	1354	1411	1571	1571	1996	1996	1996
n	316	316	348	348	396	438	438	481	547	547	622	622	622
n1	226	226	242	242	294	312	312	337	402	402	499	499	499
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

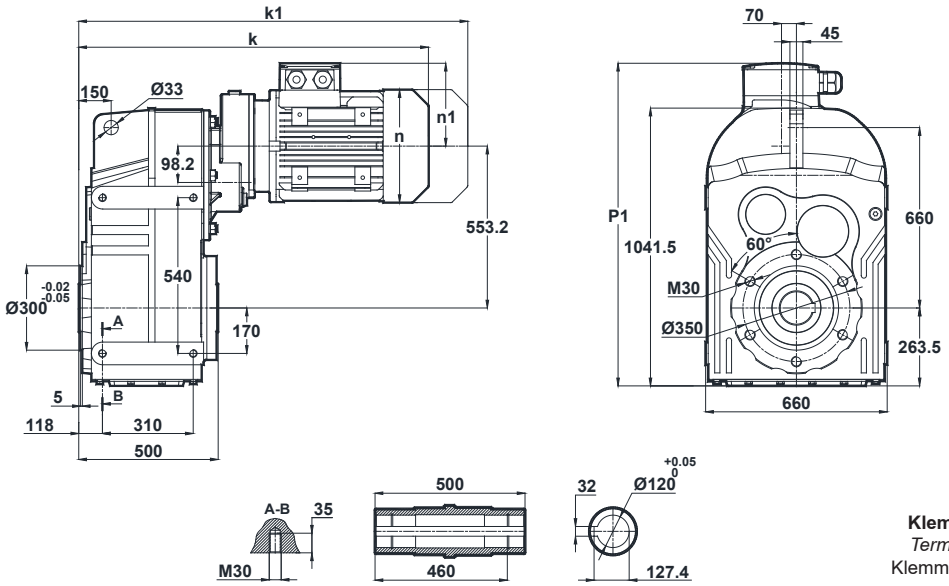


160-180-200-225-250-280-315
Tip / *Type* / Typ

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

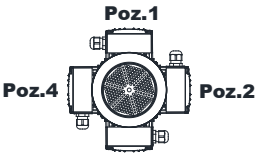
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR974.00



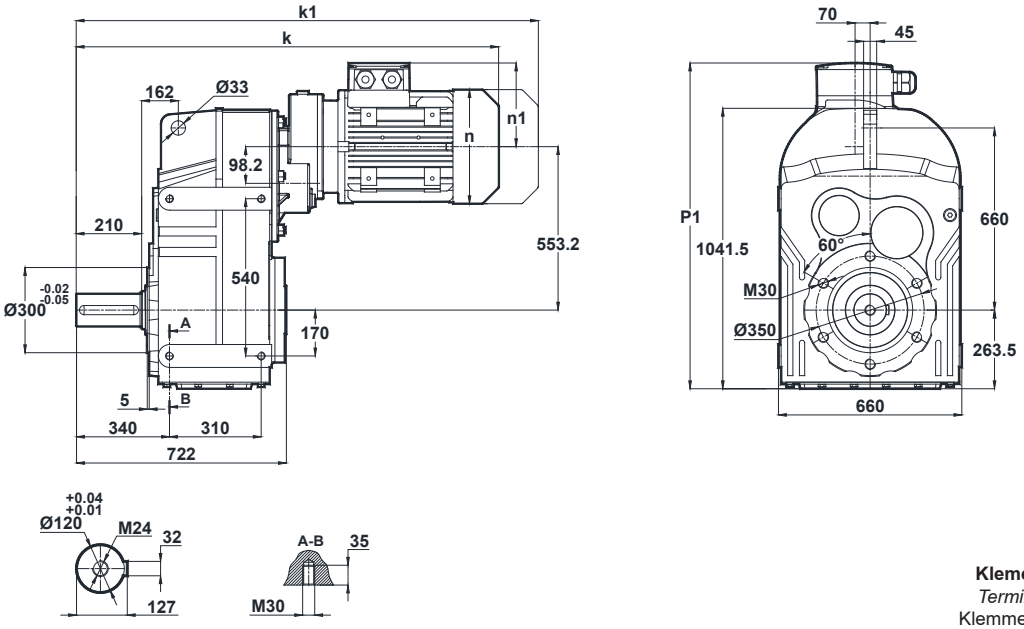
	100L	112M	132S	132M
k	921	945	1032	1032
k1	1029	1050	1162	1162
n	193	215	257	257
n1	149	161	182	182
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



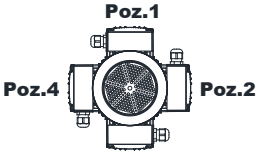
100-112-132
Tip / *Type* / Typ

DR974.01



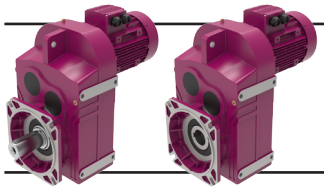
	100L	112M	132S	132M
k	1143	1167	1254	1254
k1	1251	1272	1384	1384
n	193	215	257	257
n1	149	161	182	182
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132
Tip / *Type* / Typ

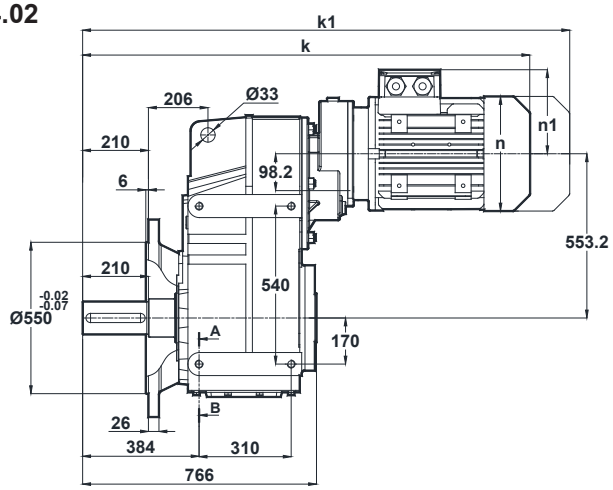
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

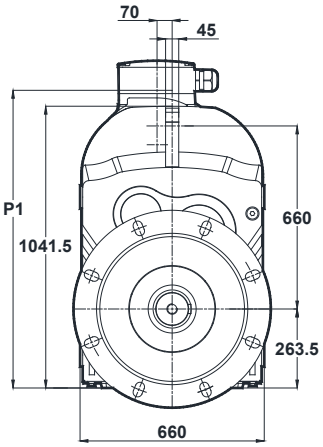


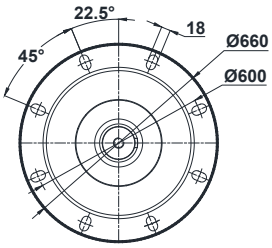
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

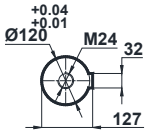
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

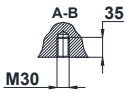
DR974.02





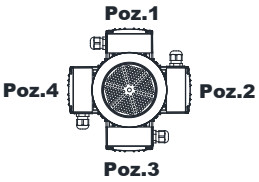






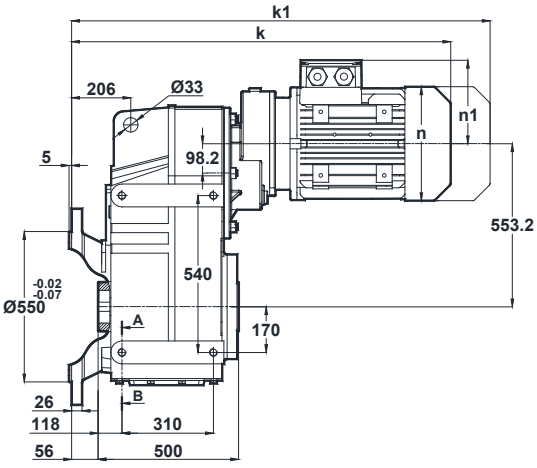
	100L	112M	132S	132M
k	1187	1211	1298	1298
k1	1295	1316	1428	1428
n	193	215	257	257
n1	149	161	182	182
P1	-	-	-	-

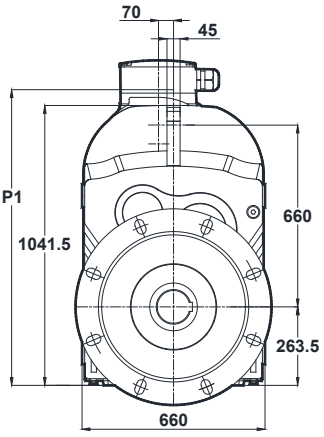
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

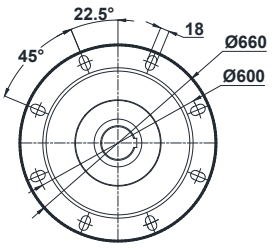


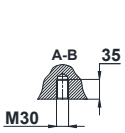
100-112-132
Tip / *Type* / Typ

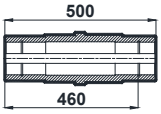
DR974.03

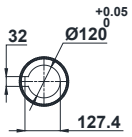






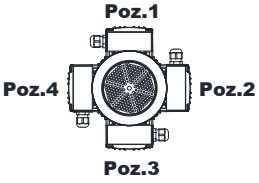






	100L	112M	132S	132M
k	977	1001	1088	1088
k1	1085	1106	1218	1218
n	193	215	257	257
n1	149	161	182	182
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

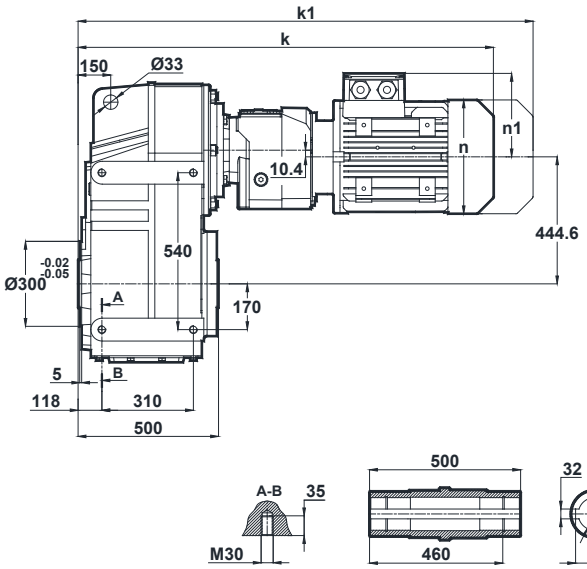


100-112-132
Tip / *Type* / Typ

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

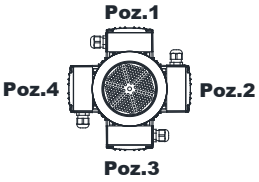
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DR975.00
DR976.00



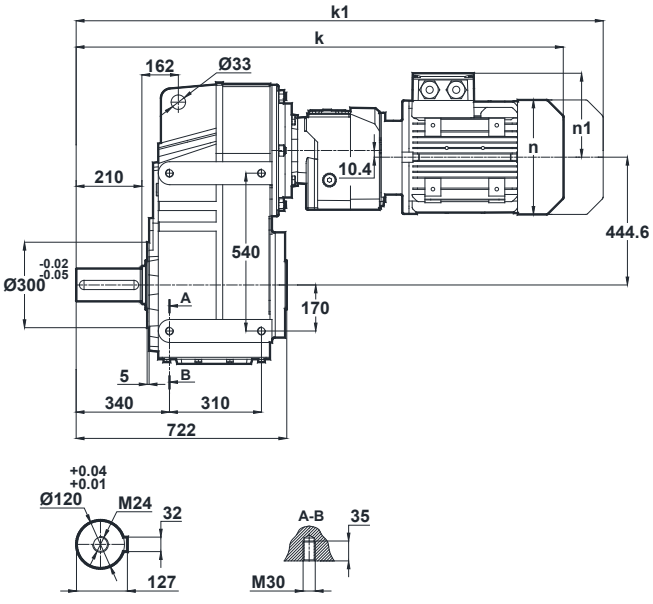
	80	90S	90L	100L
k	1000	1039	1039	1084
k1	1093	1118	1118	1192
n	155	176	176	193
n1	127	136	136	149
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



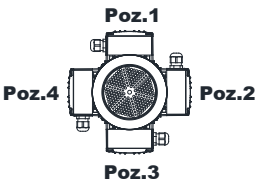
80-90-100
Tip / *Type* / Typ

DR975.01
DR976.01



	80	90S	90L	100L
k	1222	1261	1261	1306
k1	1315	1340	1340	1414
n	155	176	176	193
n1	127	136	136	149
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

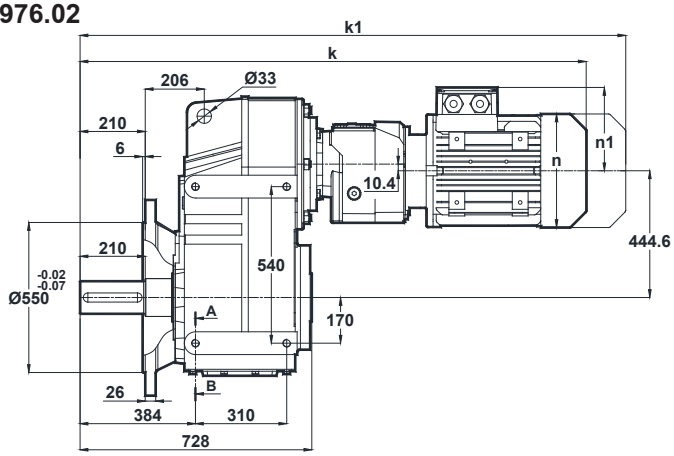


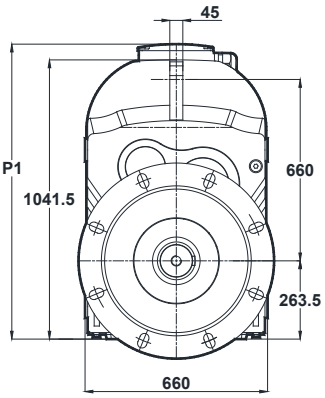
80-90-100
Tip / *Type* / Typ

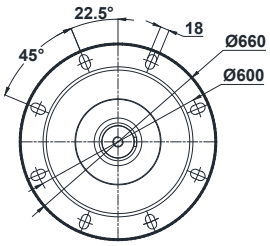
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

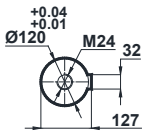
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

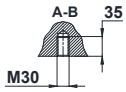
DR975.02
DR976.02





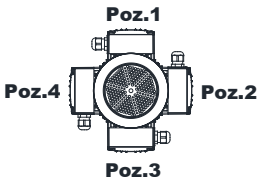






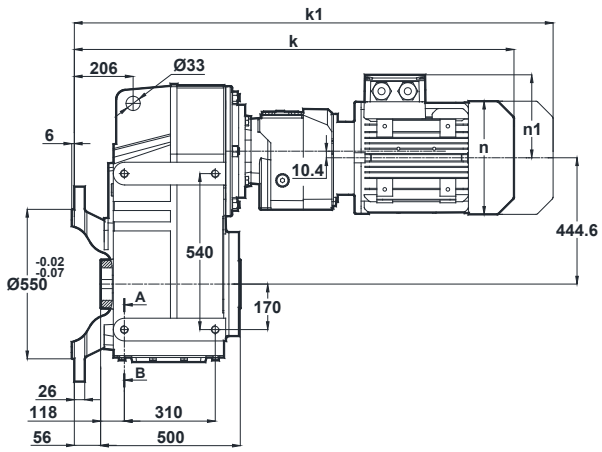
	80	90S	90L	100L
k	1266	1305	1305	1349
k1	1359	1384	1384	1458
n	155	176	176	193
n1	127	136	136	149
P1	-	-	-	-

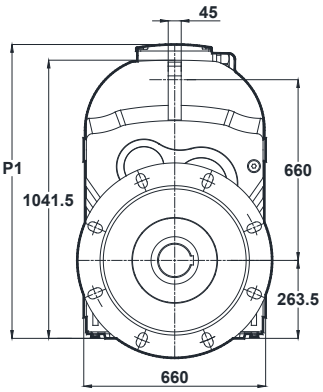
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

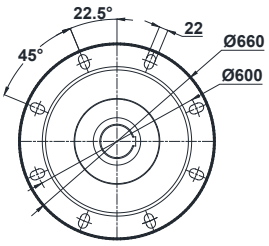


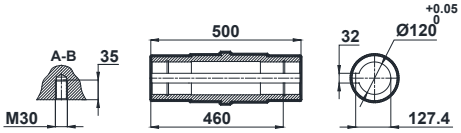
80-90-100
Tip / *Type* / Typ

DR975.03
DR976.03



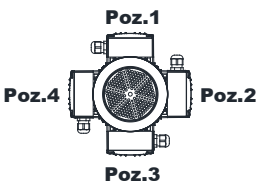






	80	90S	90L	100L
k	1056	1095	1095	1140
k1	1149	1174	1174	1248
n	155	176	176	193
n1	127	136	136	149
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



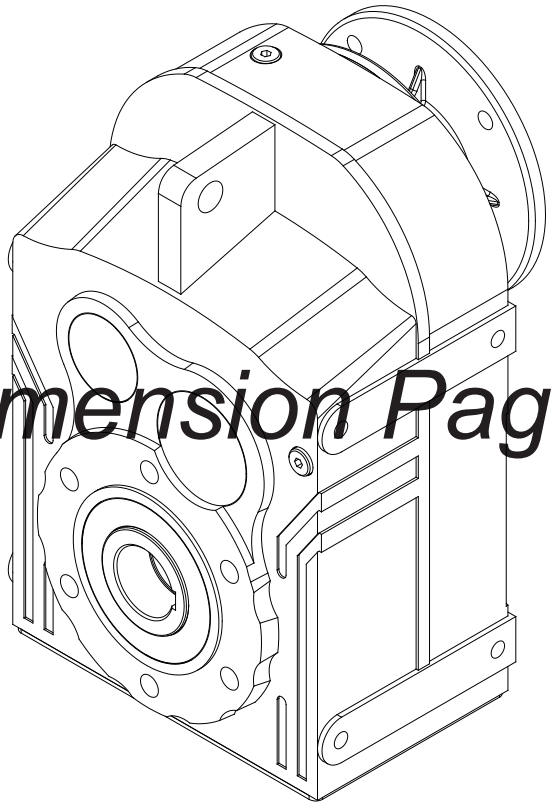
80-90-100
Tip / *Type* / Typ

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

Notlar / *Notes* / Notizen

DN Serisi / *Series* / Serie

Ölçü Sayfaları

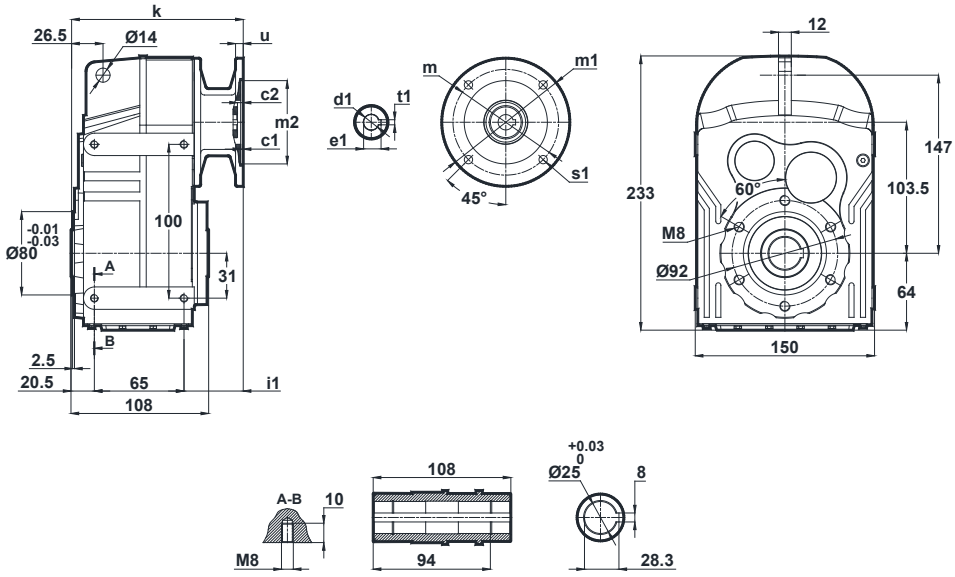


Dimension Pages

Abmessungsseiten

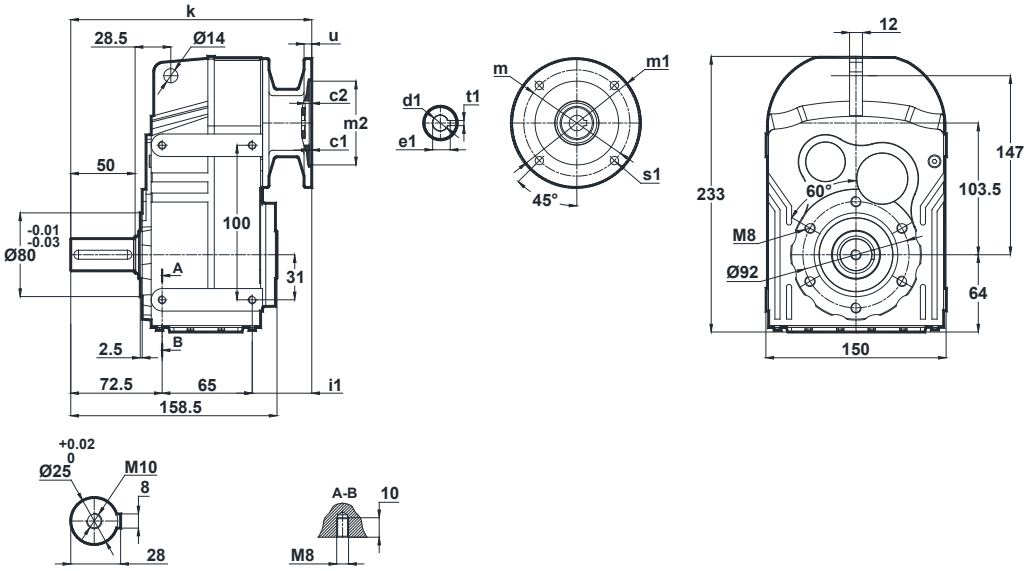
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN072.00
DN073.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	145	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	147	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	162	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	162	24	8	27.3
90/B14			9	115	140	95						
100/B5	4.5	5.5	15	215	250	180	82	14	173	28	8	31.3
100/B14	4		9	130	160	110						

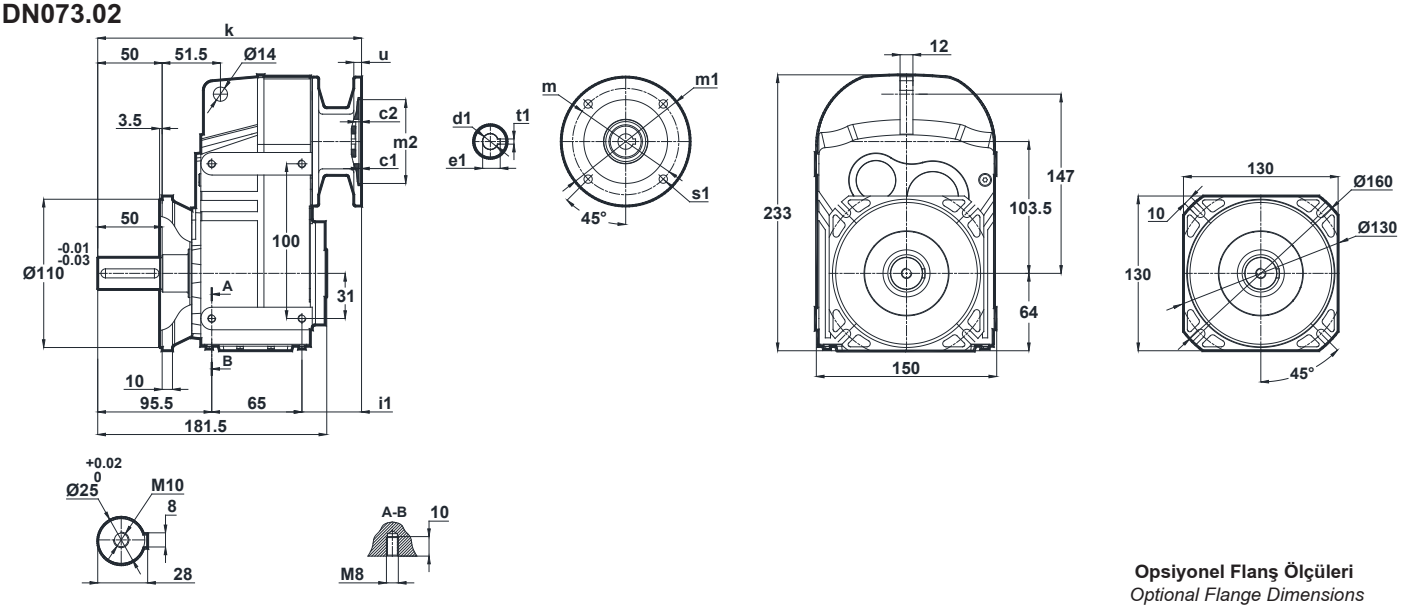
DN072.01
DN073.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	197	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	199	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	214	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	214	24	8	27.3
90/B14			9	115	140	95						
100/B5	4.5	5.5	15	215	250	180	82	14	225	28	8	31.3
100/B14	4		9	130	160	110						

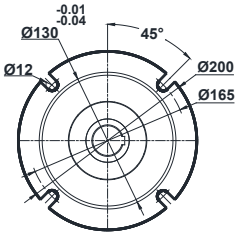
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN072.02
DN073.02

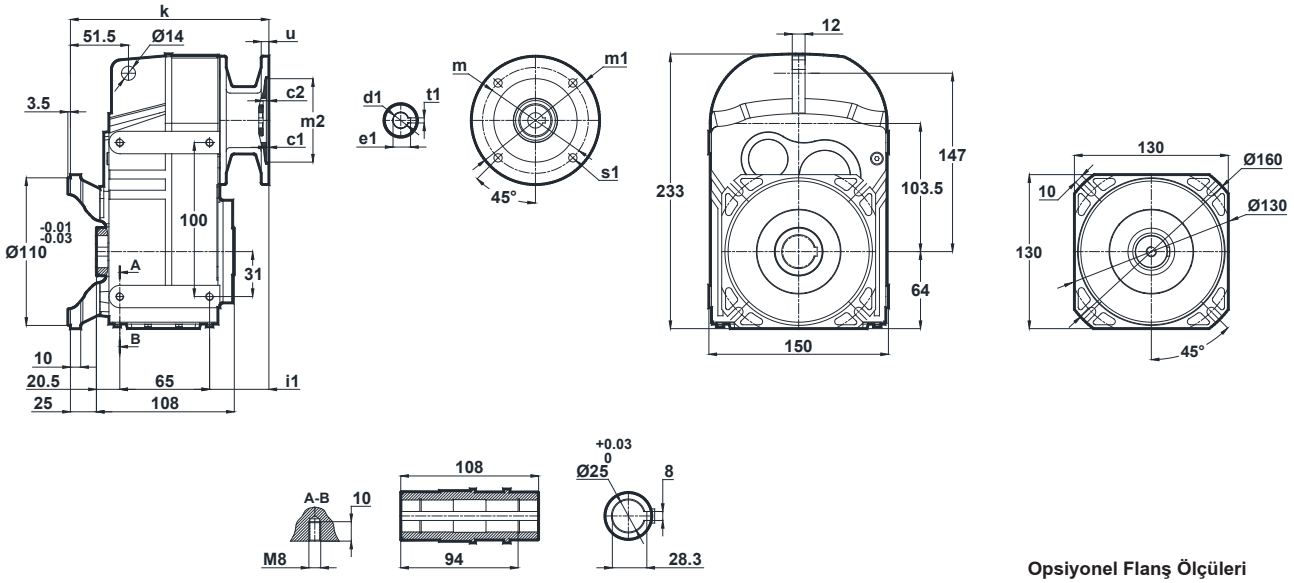


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	220	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	222	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	237	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	237	24	8	27.3
90/B14			9	115	140	95						
100/B5	4.5	5.5	15	215	250	180	82	14	248	28	8	31.3
100/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

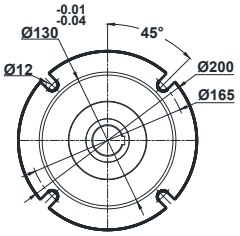


DN072.03
DN073.03



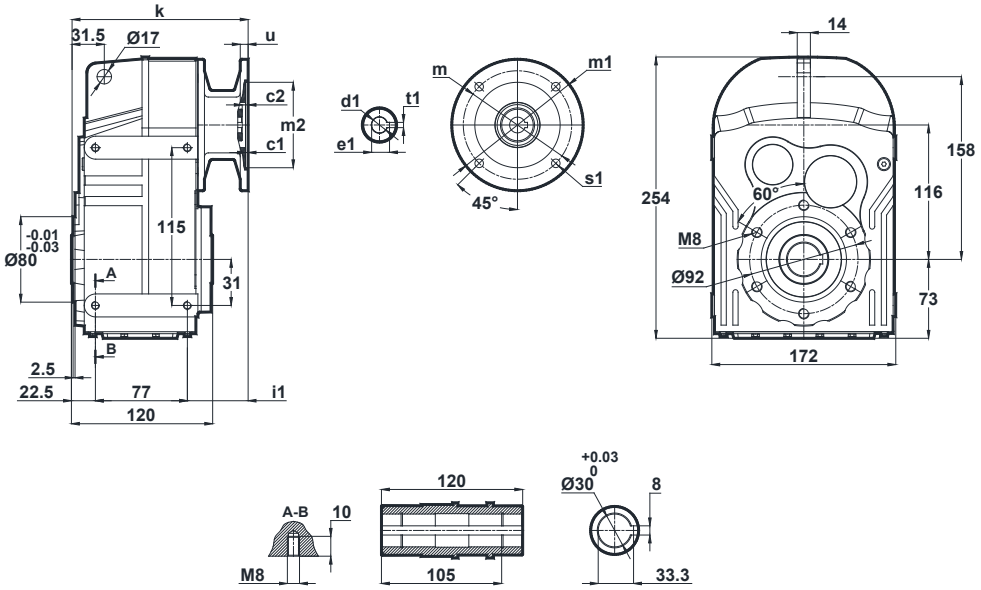
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	170	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	172	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	187	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	187	24	8	27.3
90/B14			9	115	140	95						
100/B5	4.5	5.5	15	215	250	180	82	14	198	28	8	31.3
100/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



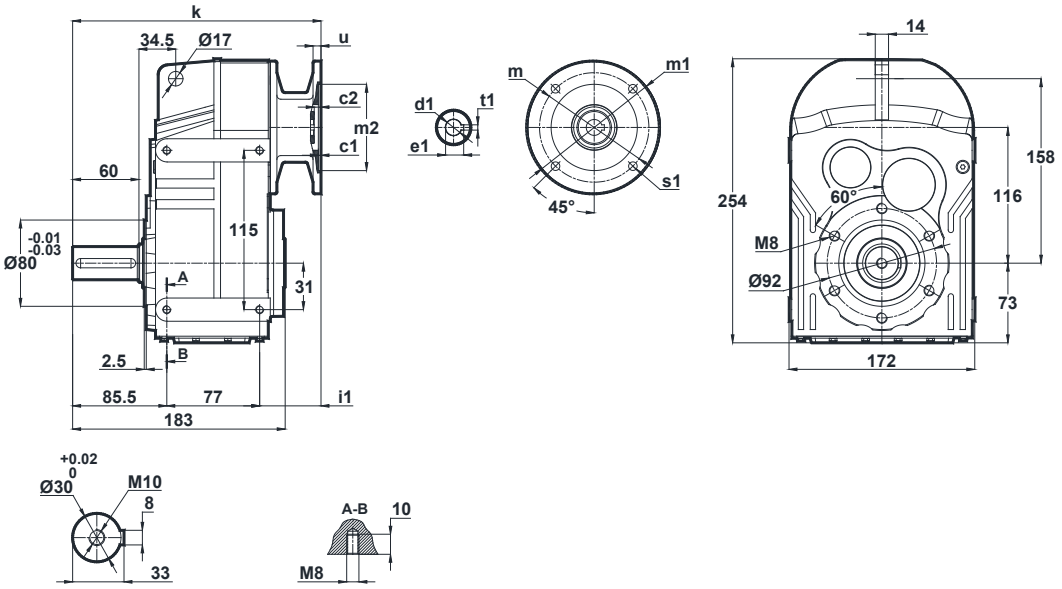
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN172.00
DN173.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 **63/B14**	3.5 2.5	5	10 5.5	115 75	140 90	95 60	55	10	154	11	4	12.8
71/B5 **71/B14**	4 3	4.5	11 7	130 85	160 105	110 70	56	12 10	156	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	71	12	171	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	71	12	171	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	5.5	15 9	215 130	250 160	180 110	82	14	182	28	8	31.3

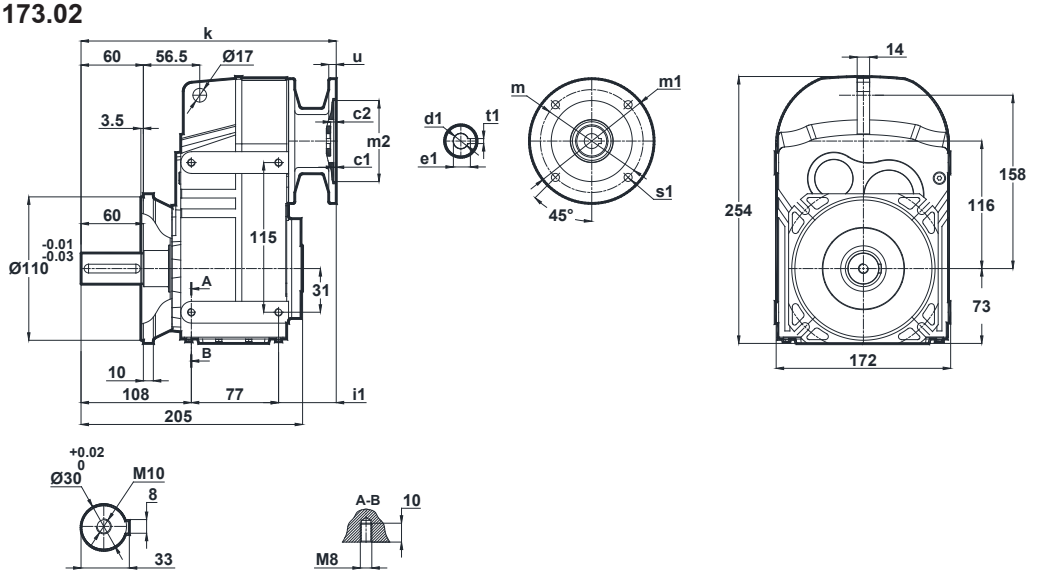
DN172.01
DN173.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 **63/B14**	3.5 2.5	5	10 5.5	115 75	140 90	95 60	55	10	217	11	4	12.8
71/B5 **71/B14**	4 3	4.5	11 7	130 85	160 105	110 70	56	12 10	219	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	71	12	234	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	71	12	234	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	5.5	15 9	215 130	250 160	180 110	82	14	245	28	8	31.3

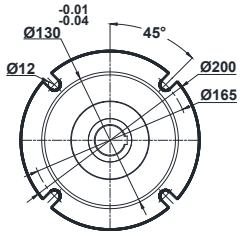
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN172.02
DN173.02

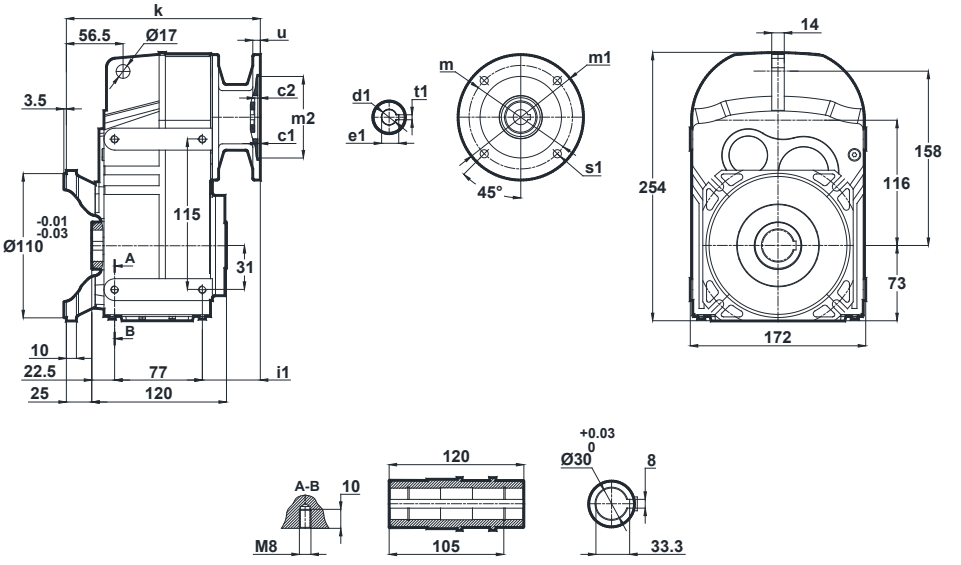


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	239	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	241	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	256	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	256	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	82	14	267	28	8	31.3
100-112/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

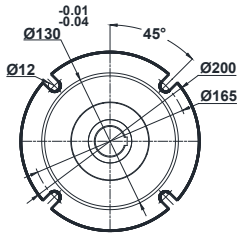


DN172.03
DN173.03



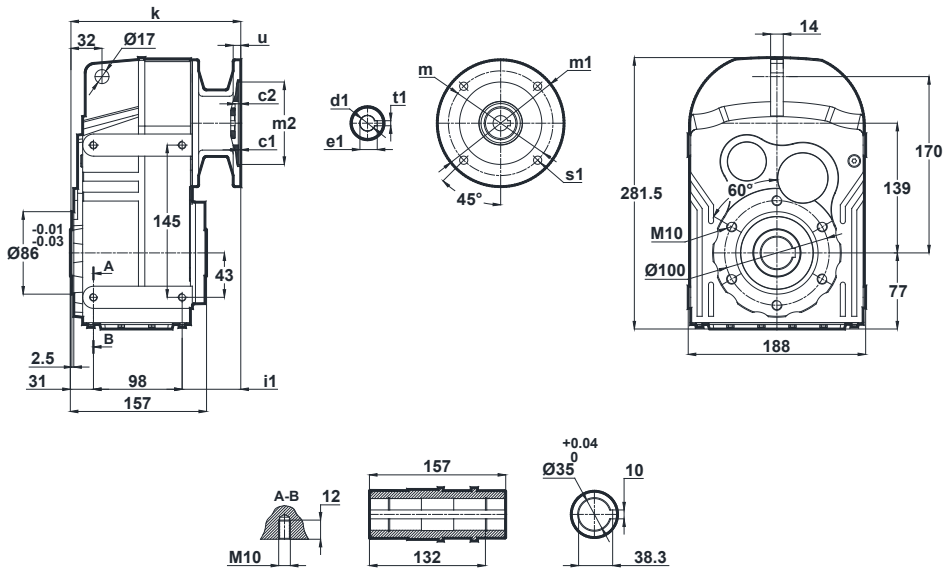
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	179	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	181	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	196	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	196	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	82	14	207	28	8	31.3
100-112/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



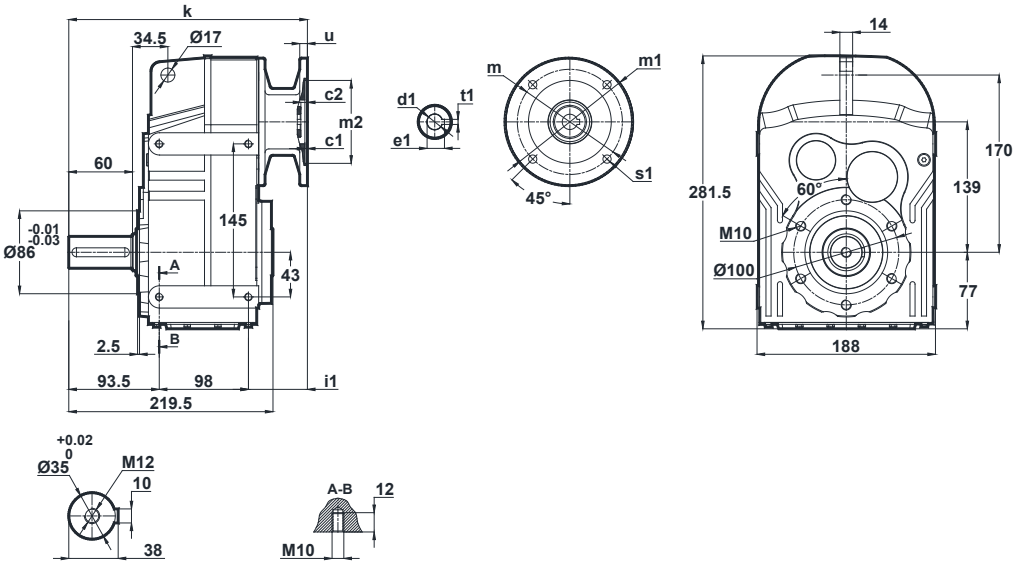
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN272.00
DN273.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	184	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	186	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	201	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	201	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	82	14	212	28	8	31.3
100-112/B14	4		9	130	160	110						

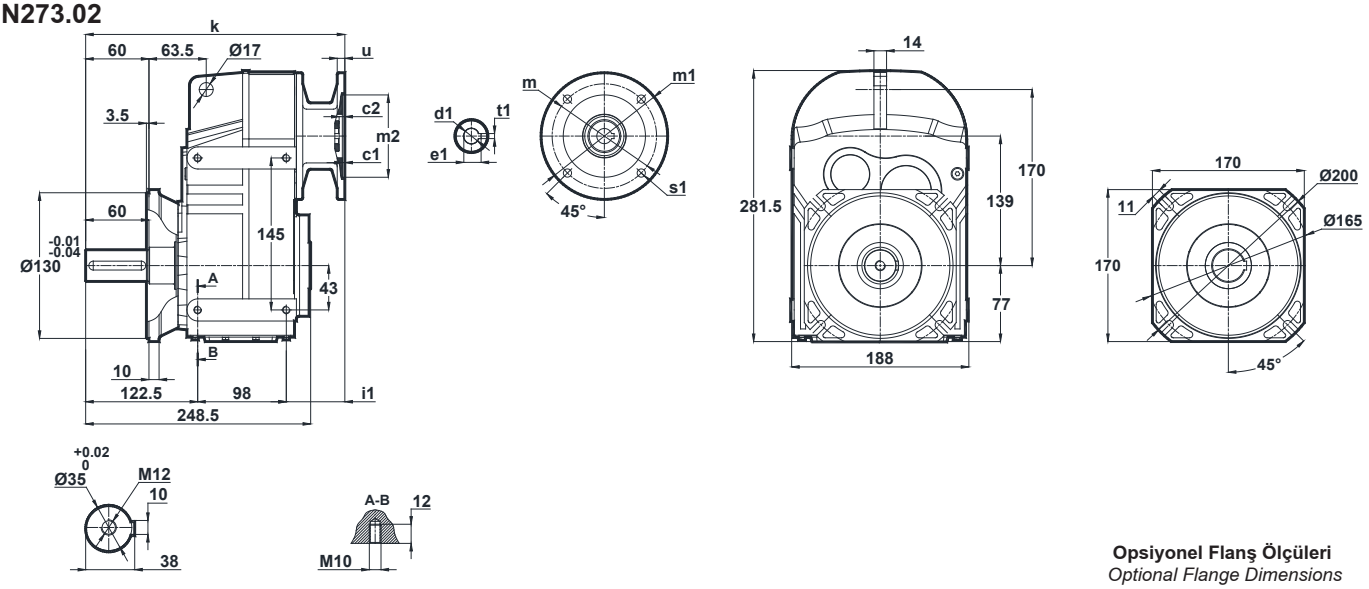
DN272.01
DN273.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	55	10	246	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	56	12	248	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	71	12	263	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	71	12	263	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	82	14	274	28	8	31.3
100-112/B14	4		9	130	160	110						

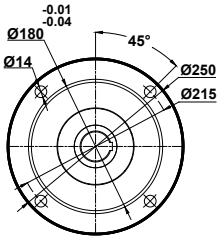
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN272.02
DN273.02

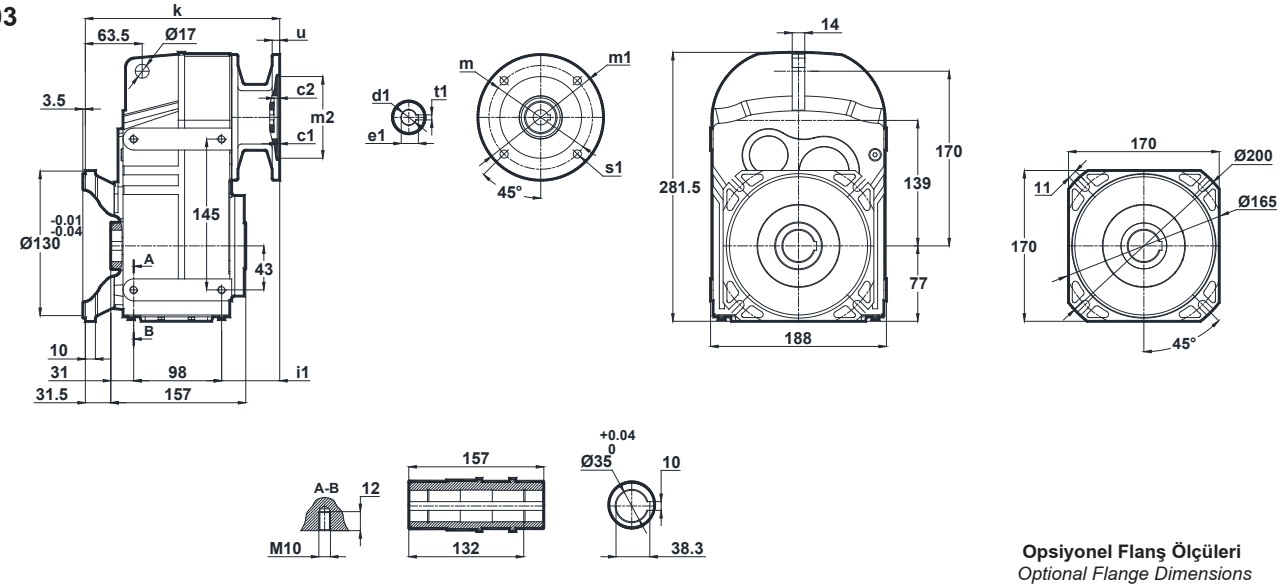


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 63/B14	3.5 2.5	5	10 5.5	115 75	140 90	95 60	55	10	275	11	4	12.8
71/B5 71/B14	4 3	4.5	11 7	130 85	160 105	110 70	56	12 10	277	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	71	12	292	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	71	12	292	24	8	27.3
100-112/B5 100-112/B14	4.5 4	5.5	15 9	215 130	250 160	180 110	82	14	303	28	8	31.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

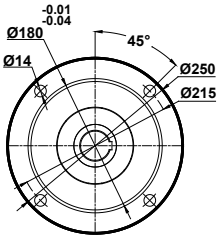


DN272.03
DN273.03



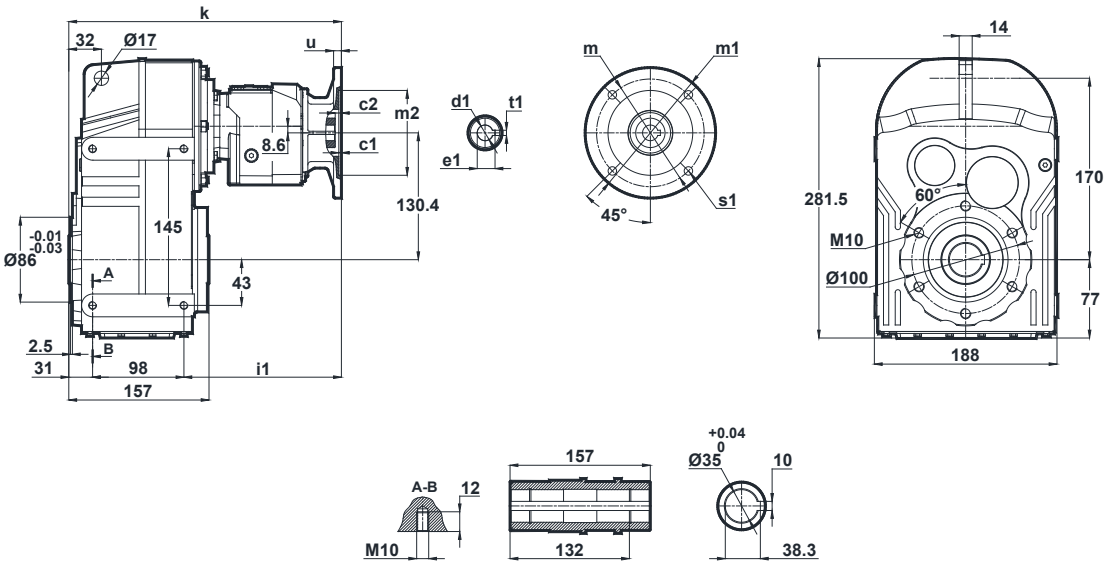
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 63/B14	3.5 2.5	5	10 5.5	115 75	140 90	95 60	55	10	215	11	4	12.8
71/B5 71/B14	4 3	4.5	11 7	130 85	160 105	110 70	56	12 10	217	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	71	12	232	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	71	12	232	24	8	27.3
100-112/B5 100-112/B14	4.5 4	5.5	15 9	215 130	250 160	180 110	82	14	243	28	8	31.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



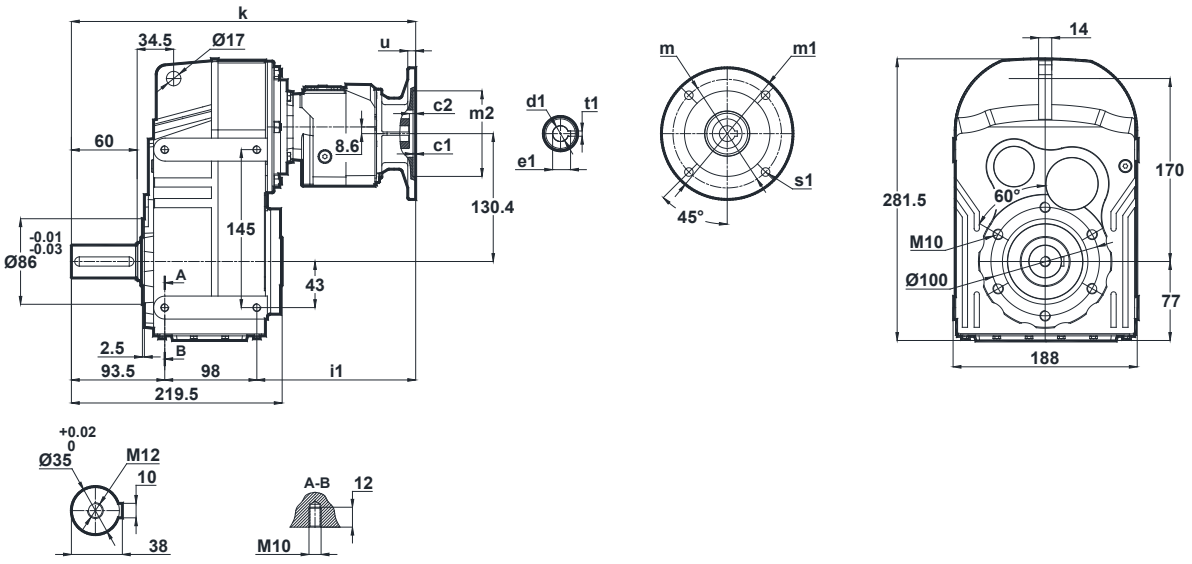
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN275.00
DN276.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	204	10	333	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	205	12	335	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	220	12	350	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	220	12	350	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	231	14	361	28	8	31.3
100-112/B14	4		9	130	160	110						

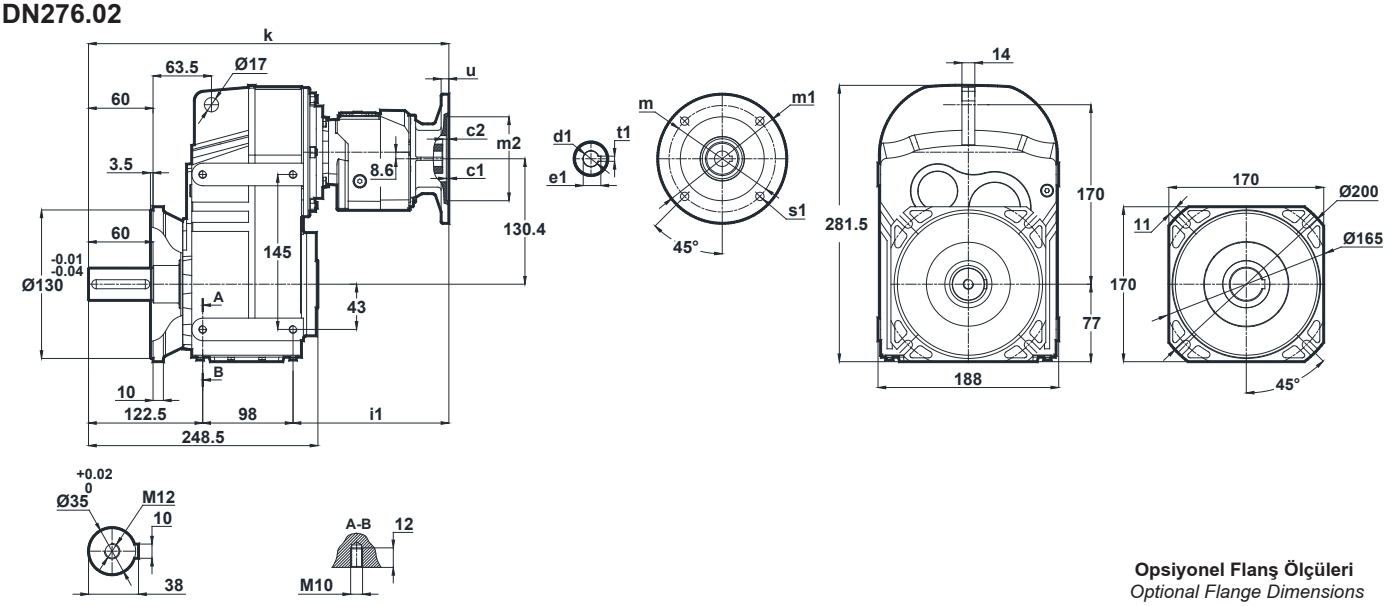
DN275.01
DN276.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	204	10	395	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	205	12	397	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	220	12	412	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	220	12	412	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	231	14	423	28	8	31.3
100-112/B14	4		9	130	160	110						

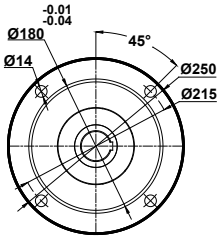
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN275.02
DN276.02

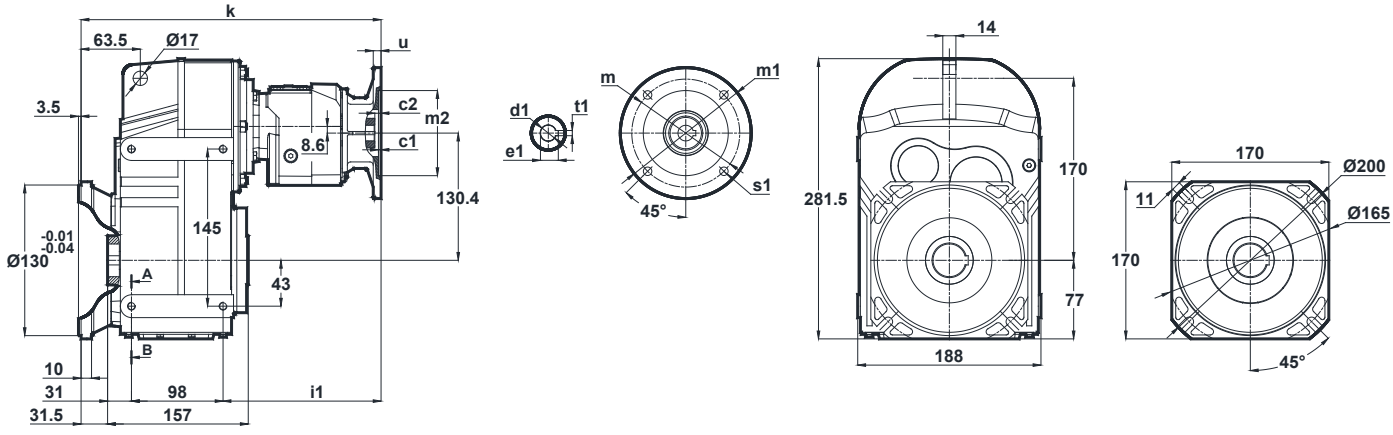


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	204	10	424	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	205	12	426	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	220	12	441	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	220	12	441	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	231	14	452	28	8	31.3
100-112/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

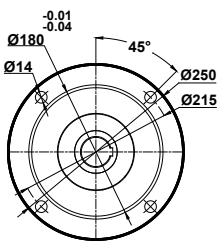


DN275.03
DN276.03



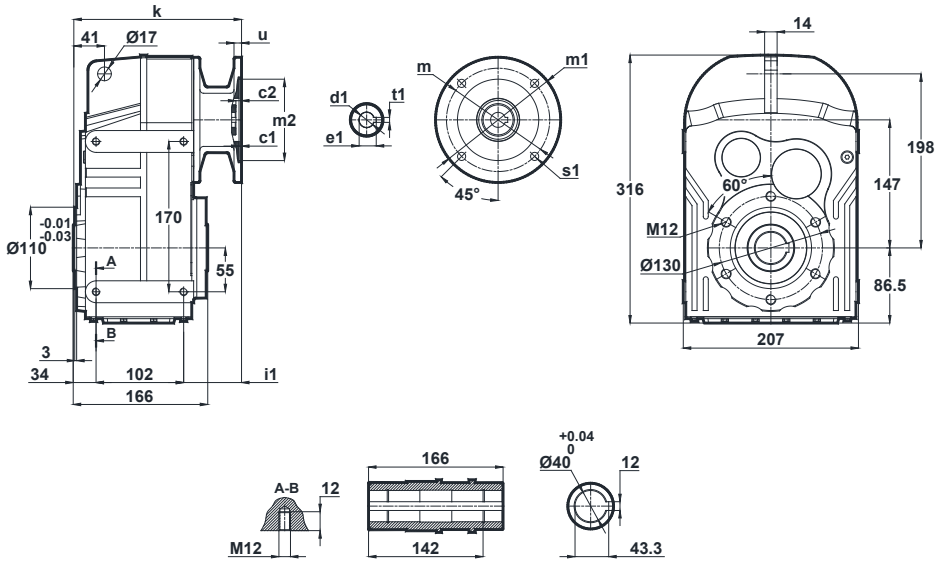
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	204	10	364	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	205	12	366	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	220	12	381	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	220	12	381	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	231	14	392	28	8	31.3
100-112/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



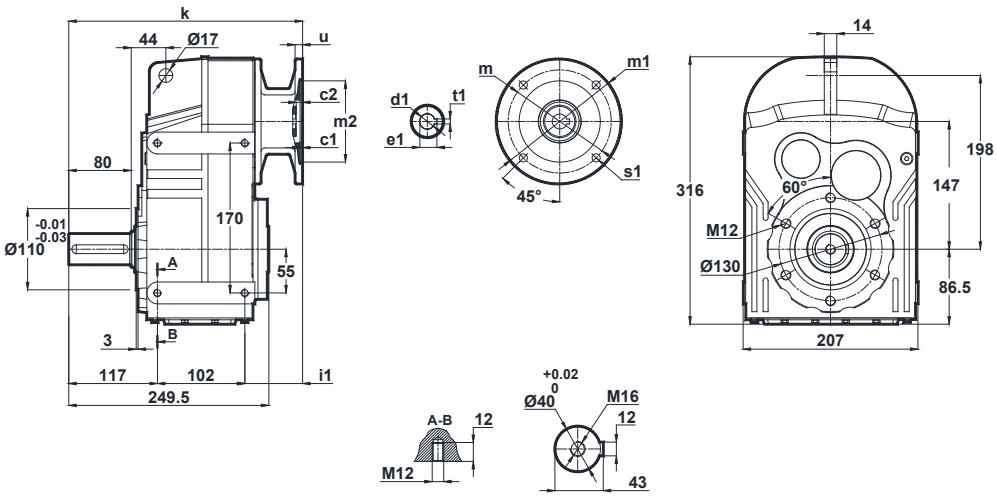
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN282.00
DN283.00

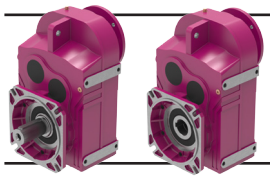


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	87	12	223	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	58	12 10	194	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	87	12	223	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	87	12	223	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	80	12	216	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	127	15	259	38	10	41.3

DN282.01
DN283.01



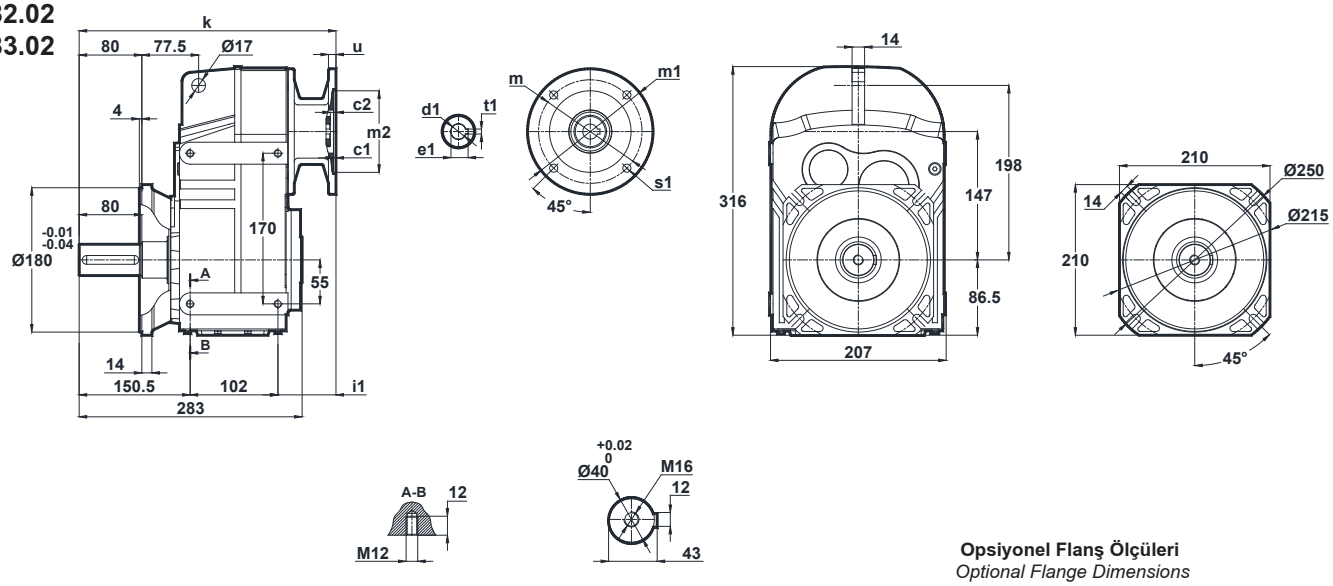
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	87	12	307	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	58	12 10	278	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	87	12	307	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	87	12	307	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	80	12	300	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	127	15	343	38	10	41.3



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

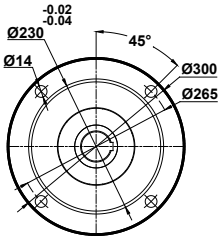
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN282.02
DN283.02



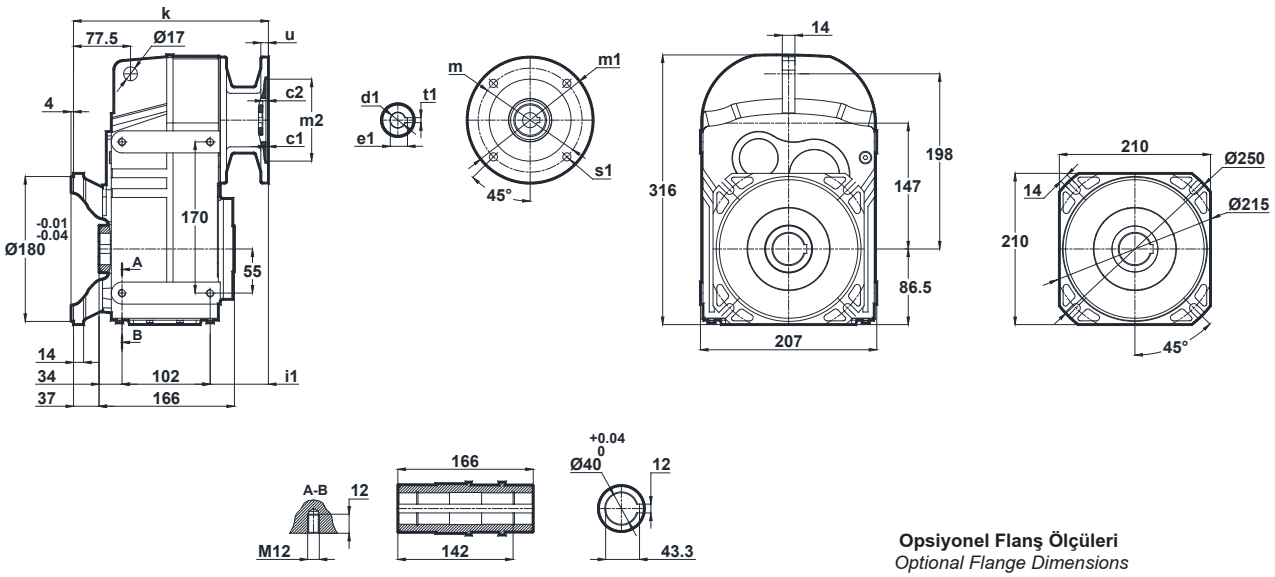
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	87	12	340	11	4	12.8
71/B5	4	8.5	11	130	160	110	58	12	311	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	87	12	340	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	87	12	340	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4	5.5	15	215	250	180	80	12	333	28	8	31.3
100-112/B14	3.5		9	130	160	110						
132/B5	4.5	7	15	265	300	230	127	15	376	38	10	41.3
132/B14		6	11	165	200	130						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



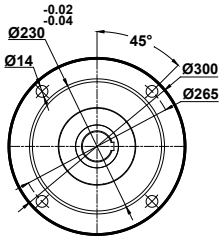
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN282.03
DN283.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	87	12	260	11	4	12.8
71/B5	4	8.5	11	130	160	110	58	12	231	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	87	12	260	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	87	12	260	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4	5.5	15	215	250	180	80	12	253	28	8	31.3
100-112/B14	3.5		9	130	160	110						
132/B5	4.5	7	15	265	300	230	127	15	296	38	10	41.3
132/B14		6	11	165	200	130						

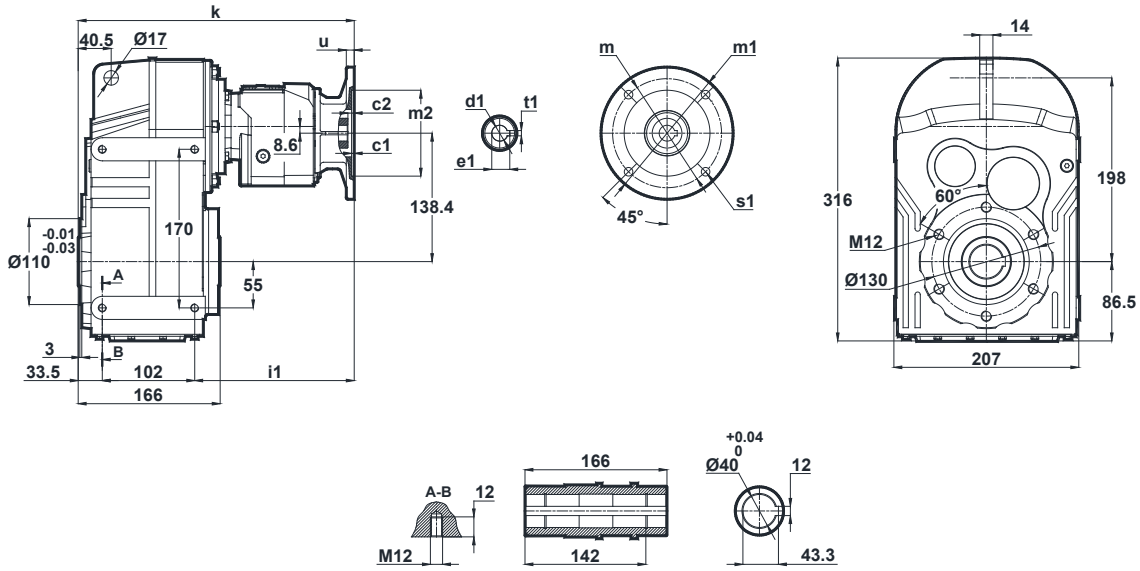
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

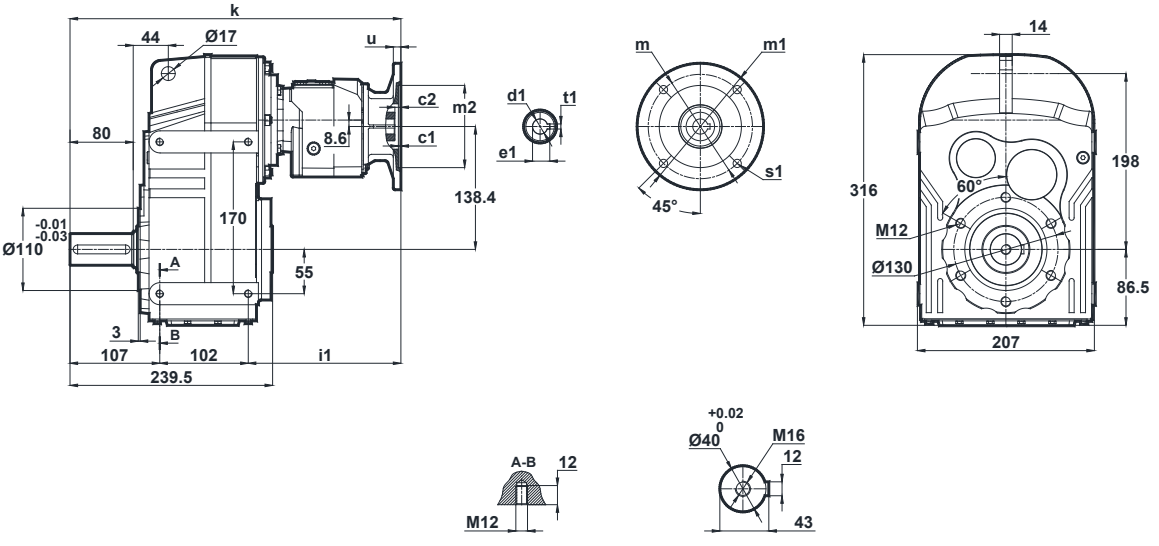
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN285.00
DN286.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	203	10	338	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	204	12	340	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	219	12	355	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	219	12	355	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	230	14	366	28	8	31.3
100-112/B14	4		9	130	160	110						

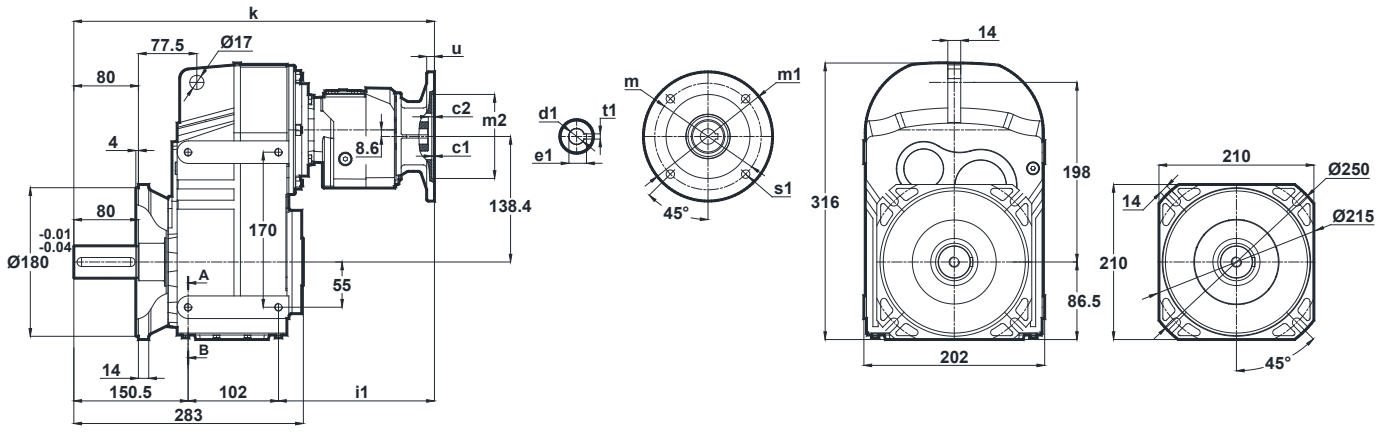
DN285.01
DN286.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	203	10	422	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	204	12	424	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	219	12	439	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	219	12	439	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	230	14	450	28	8	31.3
100-112/B14	4		9	130	160	110						

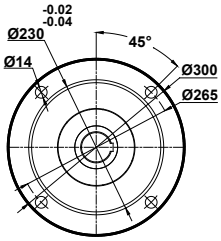
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN285.02
DN286.02





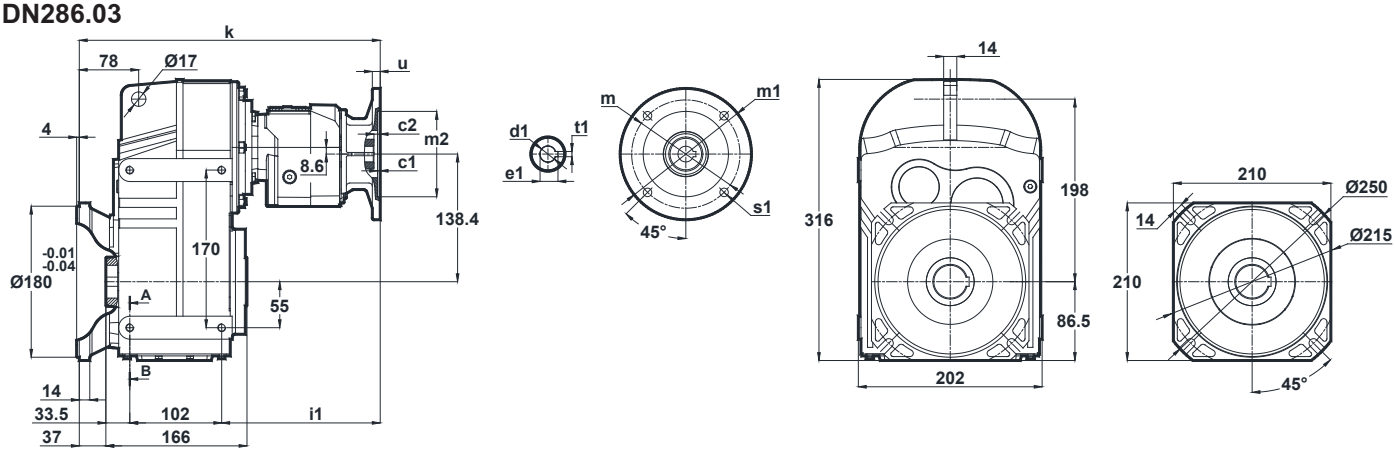
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

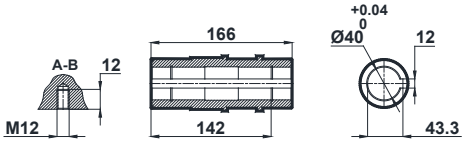


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

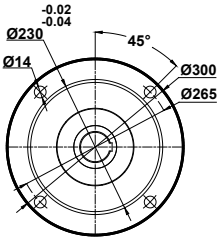
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	203	10	455	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	204	12	457	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	219	12	472	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	219	12	472	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	230	14	483	28	8	31.3
100-112/B14	4		9	130	160	110						

DN285.03
DN286.03





Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

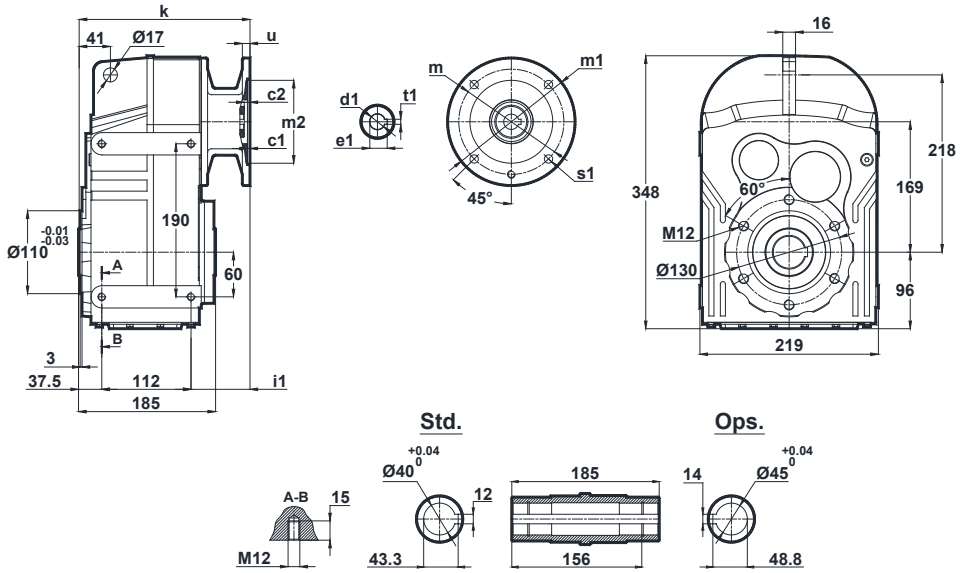


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	203	10	375	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	204	12	377	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	219	12	392	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	219	12	392	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	230	14	403	28	8	31.3
100-112/B14	4		9	130	160	110						

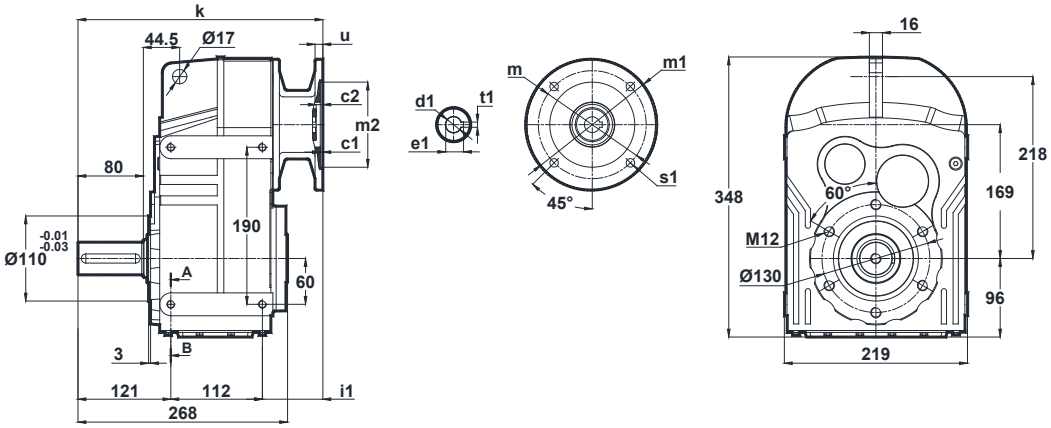
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

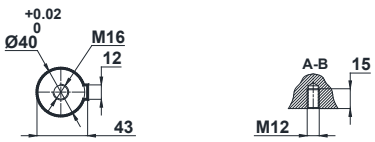
DN372.00
DN373.00



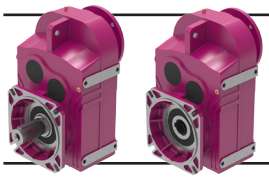
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	84	12	234	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	84	12 10	205	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	84	12	234	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	84	12	234	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	77	12	227	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	124	15	270	38	10	41.3

DN372.01
DN373.01





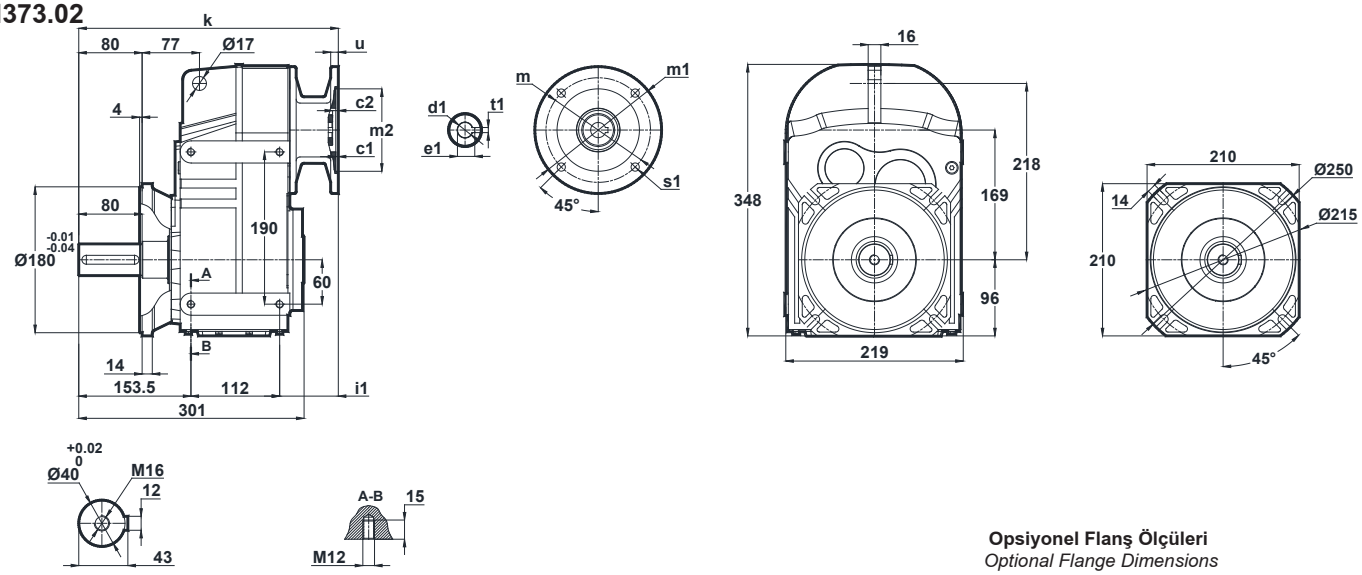
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	84	12	317	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	84	12 10	288	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	84	12	317	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	84	12	317	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	77	12	310	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	124	15	353	38	10	41.3



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

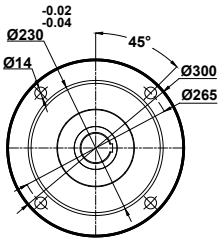
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN372.02
DN373.02



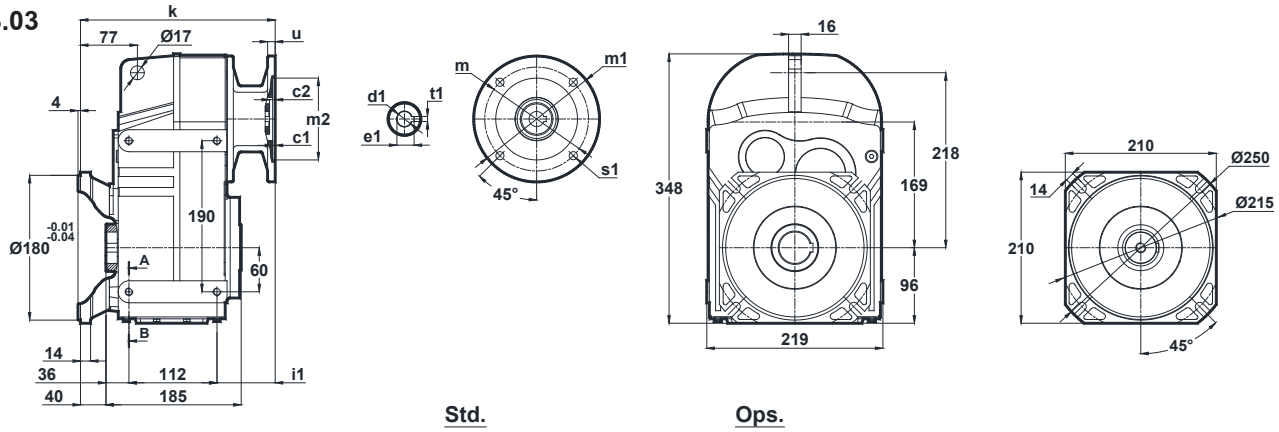
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	84	12	350	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	84	12 10	321	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	84	12	350	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	84	12	350	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	77	12	343	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	124	15	386	38	10	41.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



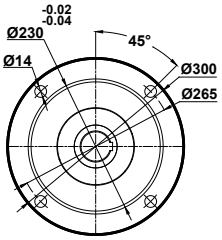
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN372.03
DN373.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	84	12	270	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	84	12 10	241	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	84	12	270	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	84	12	270	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	77	12	263	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	124	15	306	38	10	41.3

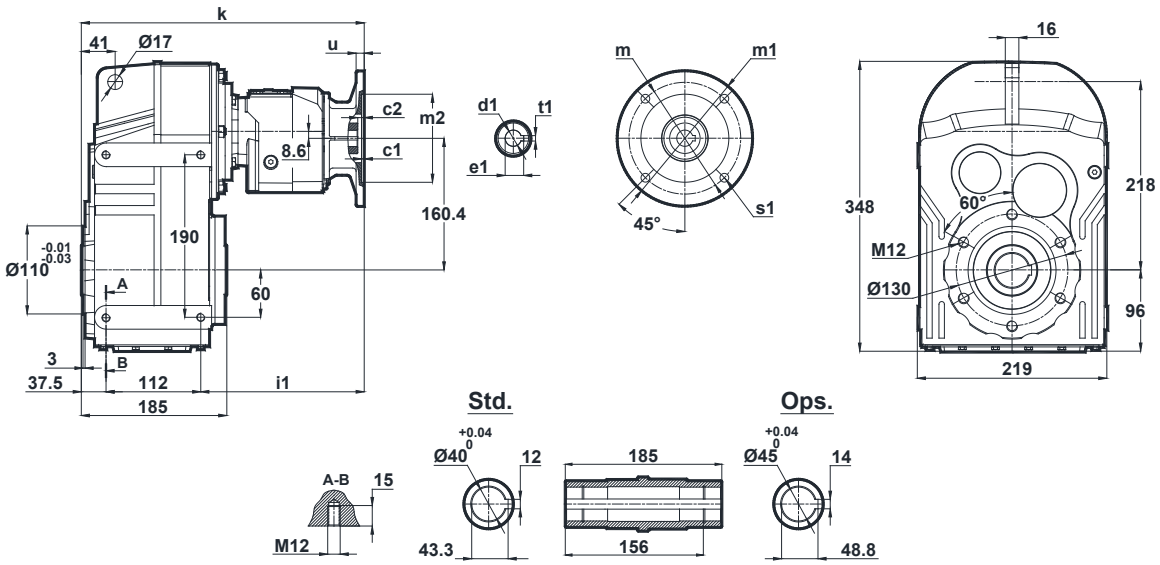
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

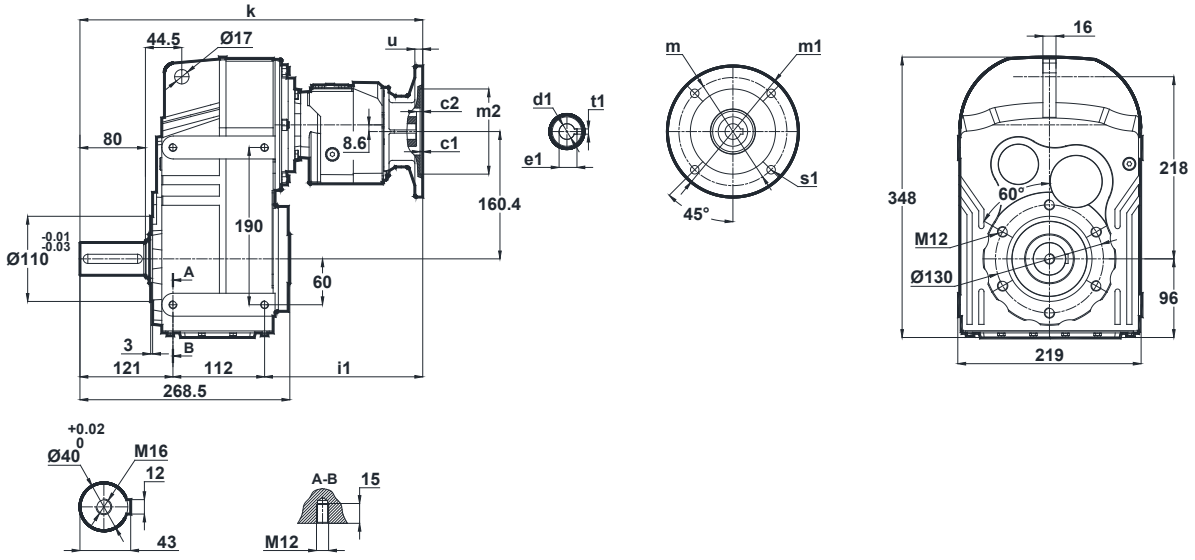
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN375.00
DN376.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	199	10	349	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	201	12	351	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	216	12	366	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	216	12	366	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	227	14	377	28	8	31.3
100-112/B14	4		9	130	160	110						

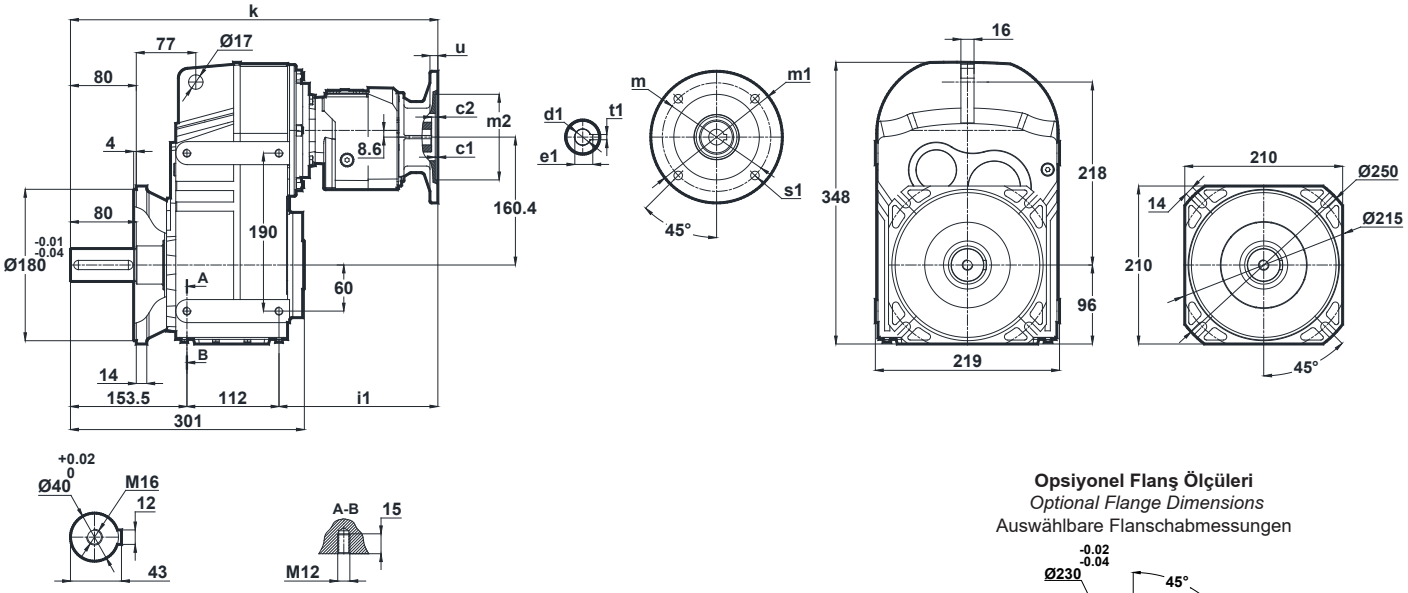
DN375.01
DN376.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	199	10	432	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	201	12	434	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	216	12	449	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	216	12	449	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	227	14	460	28	8	31.3
100-112/B14	4		9	130	160	110						

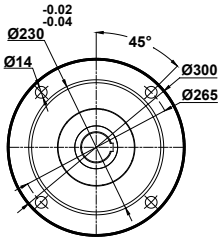
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN375.02
DN376.02



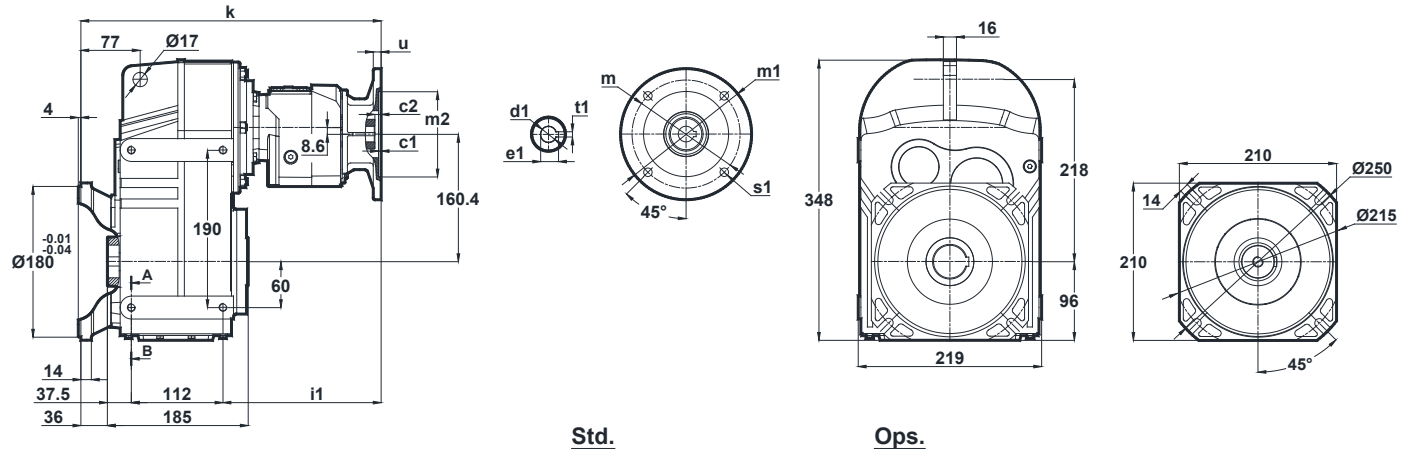
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 63/B14	3.5 2.5	5	10 5.5	115 75	140 90	95 60	199	10	465	11	4	12.8
71/B5 71/B14	4 3	4.5	11 7	130 85	160 105	110 70	201	12 10	467	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	216	12	482	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	216	12	482	24	8	27.3
100-112/B5 100-112/B14	4.5 4	5.5	15 9	215 130	250 160	180 110	227	14	493	28	8	31.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

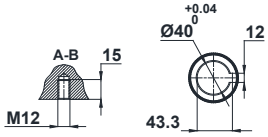


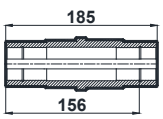
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN375.03
DN376.03

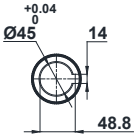


Std.



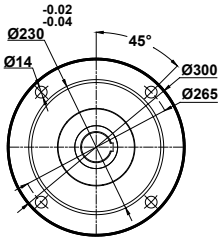


Ops.



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5 63/B14	3.5 2.5	5	10 5.5	115 75	140 90	95 60	199	10	385	11	4	12.8
71/B5 71/B14	4 3	4.5	11 7	130 85	160 105	110 70	201	12 10	387	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	216	12	402	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	216	12	402	24	8	27.3
100-112/B5 100-112/B14	4.5 4	5.5	15 9	215 130	250 160	180 110	227	14	413	28	8	31.3

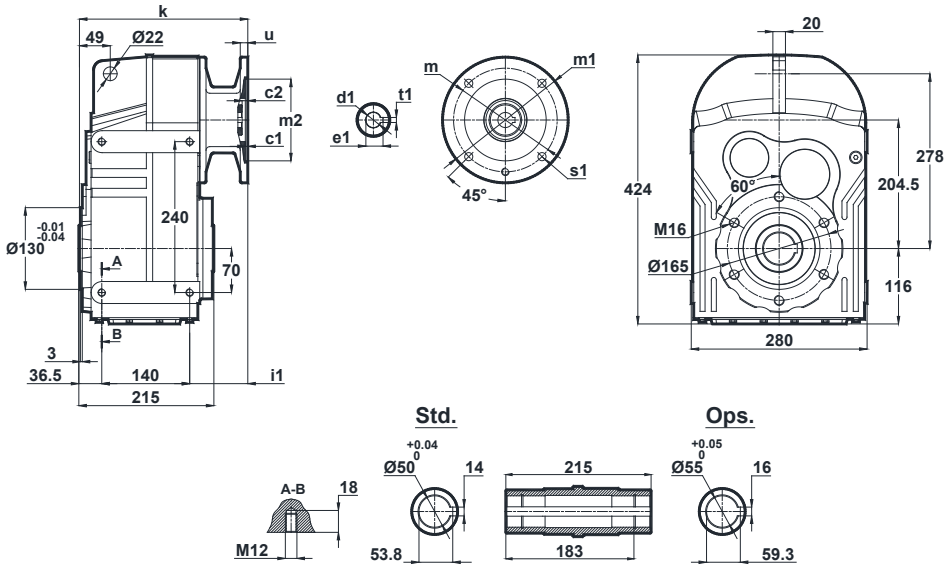
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

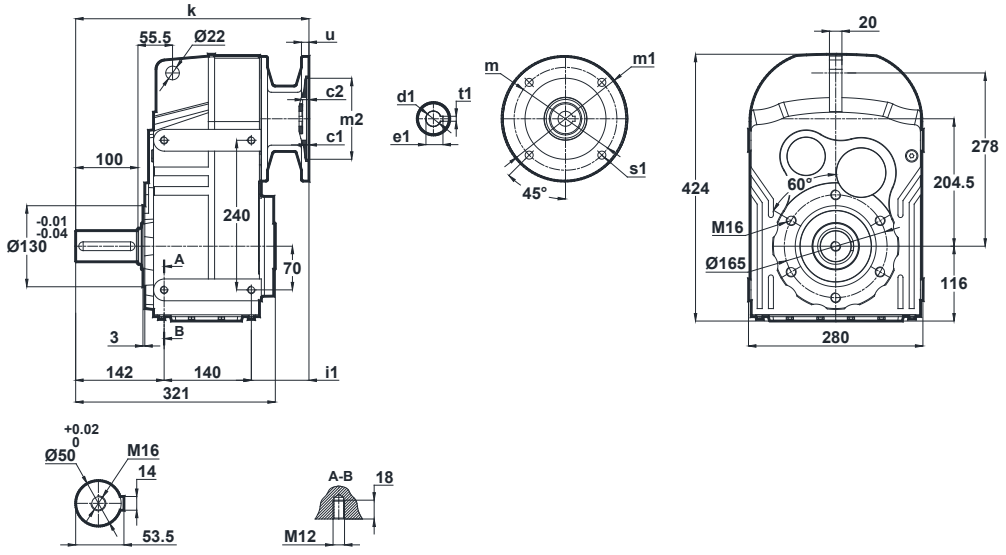
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN472.00
DN473.00

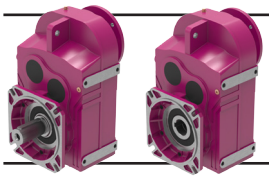


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	260	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	83	12	260	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	83	12	260	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	100	15	277	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	120	15	297	38	10	41.3
160/B5	5.5	10	19	300	350	250	199	20	376	42	12	45.3

DN472.01
DN473.01



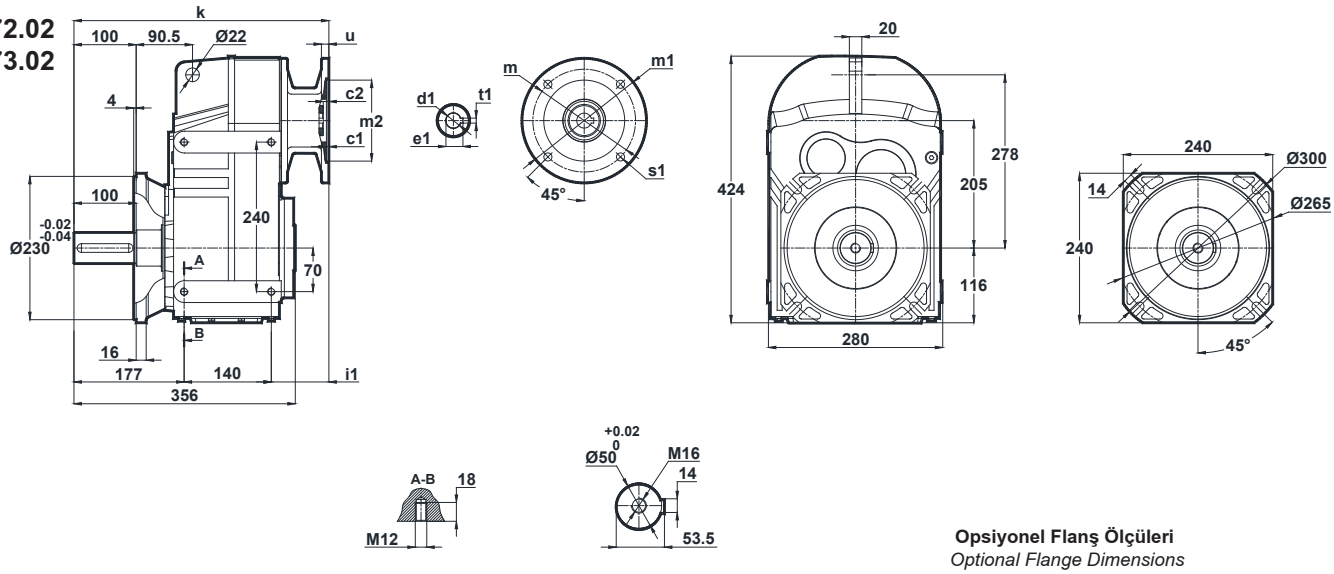
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	365	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	83	12	365	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	83	12	365	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	100	15	382	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	120	15	402	38	10	41.3
160/B5	5.5	10	19	300	350	250	199	20	481	42	12	45.3



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

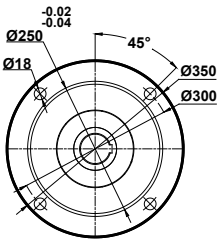
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN472.02
DN473.02



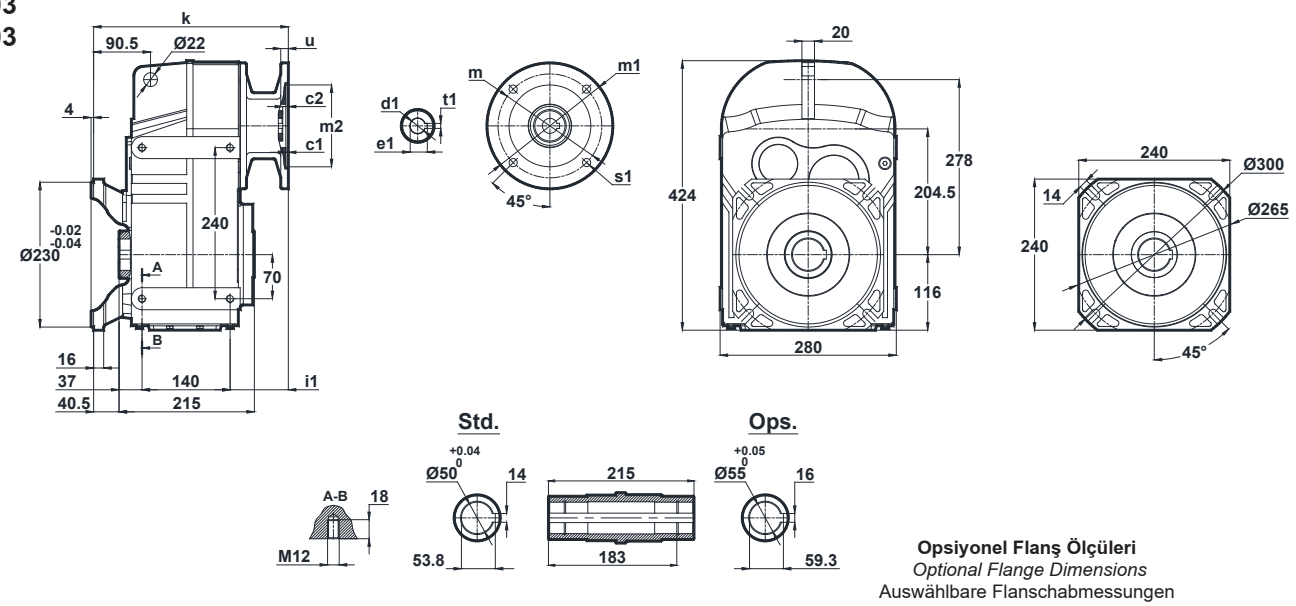
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	83	12	400	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	83	12	400	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	83	12	400	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	100	15	417	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	120	15	437	38	10	41.3
160/B5	5.5	10	19	300	350	250	199	20	516	42	12	45.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



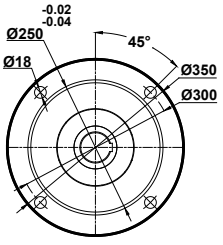
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN472.03
DN473.03



	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	83	12	300	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	83	12	300	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	100	15	317	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	120	15	337	38	10	41.3
160/B5	5.5	10	19	300	350	250	199	20	416	42	12	45.3

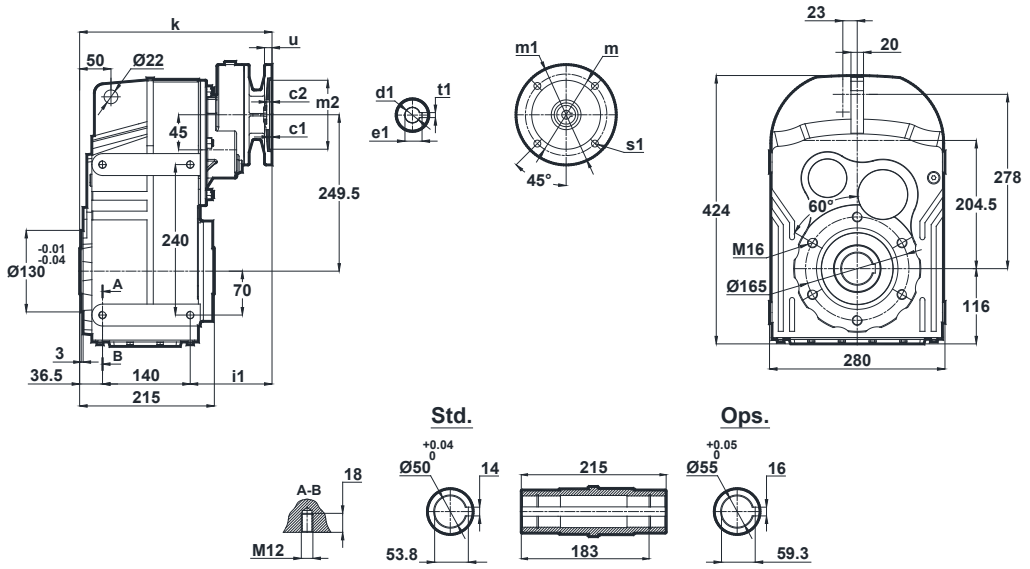
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

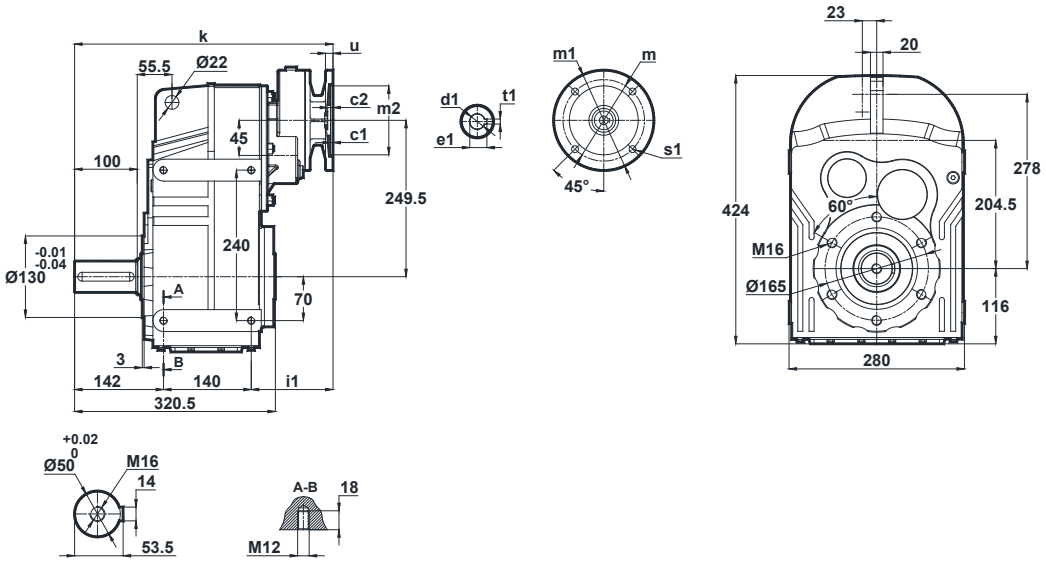
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN474.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	160	12	337	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	131	12 10	308	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	160	12	337	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	160	12	337	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	153	12	330	28	8	31.3

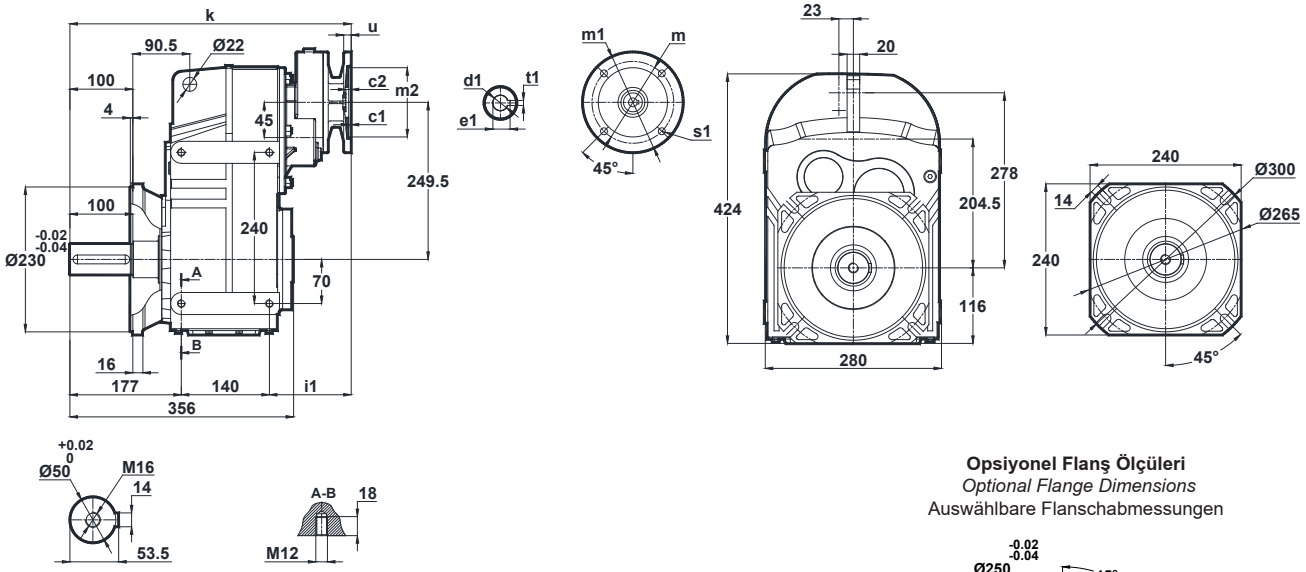
DN474.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	160	12	442	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	131	12 10	413	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	160	12	442	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	160	12	442	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	153	12	435	28	8	31.3

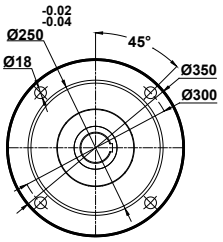
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN474.02



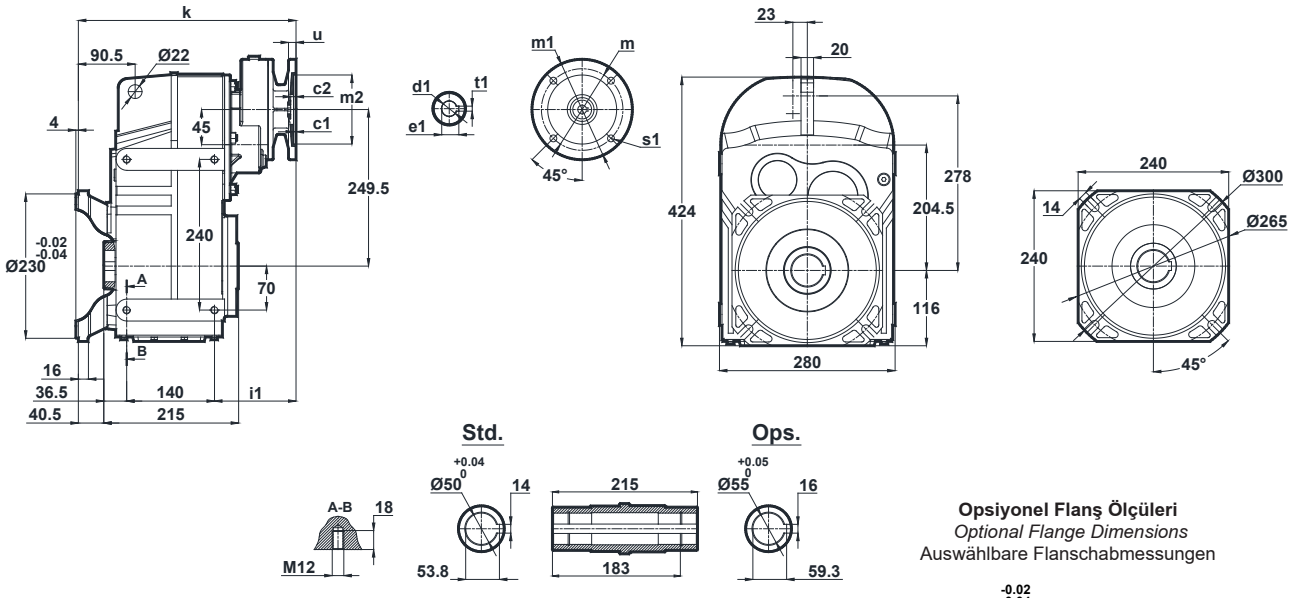
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	160	12	477	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	131	12 10	448	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	160	12	477	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	160	12	477	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	153	12	470	28	8	31.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



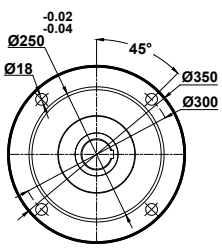
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN474.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	160	12	377	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	131	12 10	348	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	160	12	377	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	160	12	377	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	153	12	370	28	8	31.3

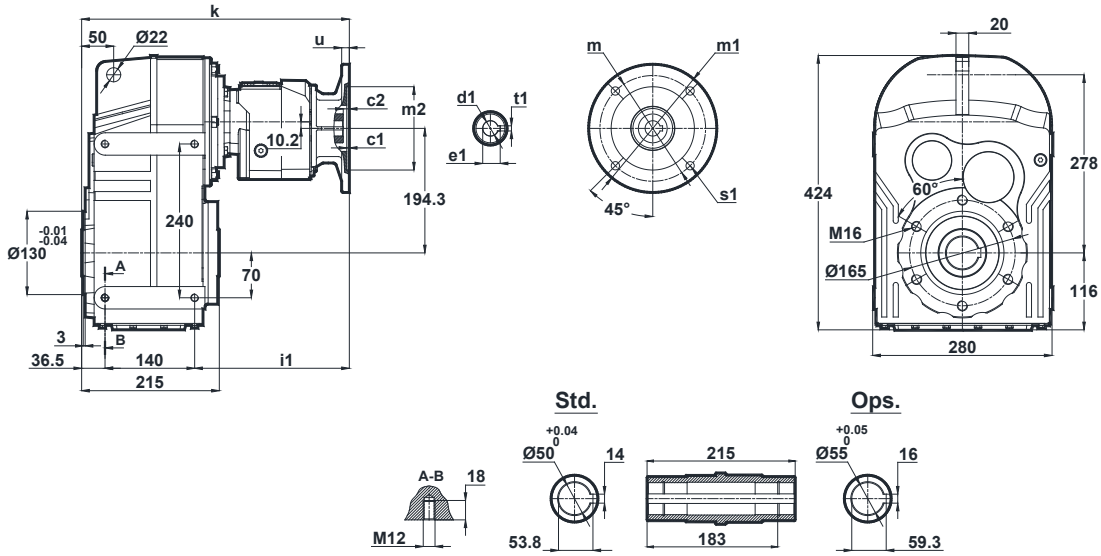
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

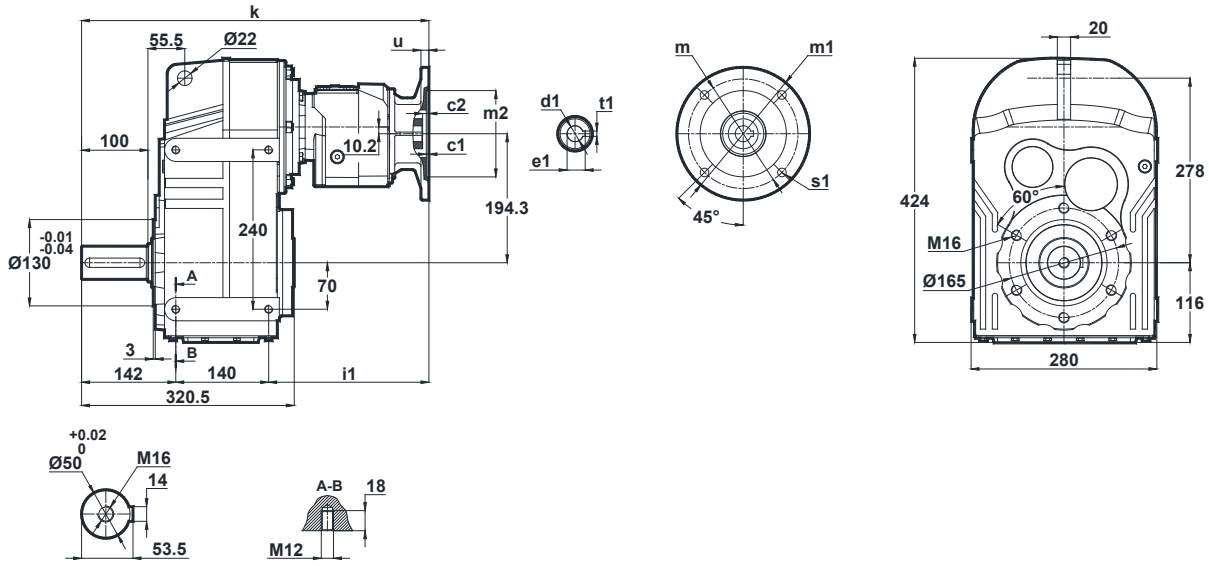
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN475.00
DN476.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	225	10	402	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	226	12	404	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	241	12	419	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	241	12	419	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	252	14	430	28	8	31.3
100-112/B14	4		9	130	160	110						

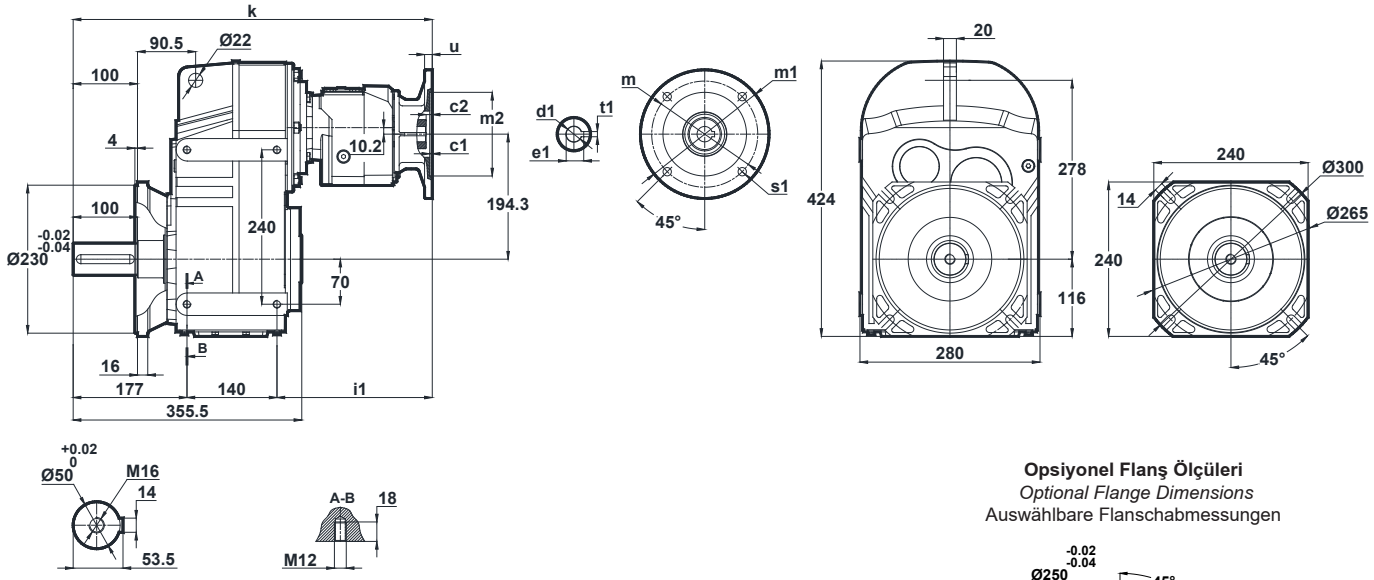
DN475.01
DN476.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	225	10	507	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	226	12	509	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	241	12	524	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	241	12	524	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	252	14	535	28	8	31.3
100-112/B14	4		9	130	160	110						

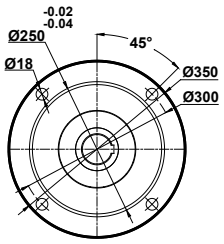
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN475.02
DN476.02



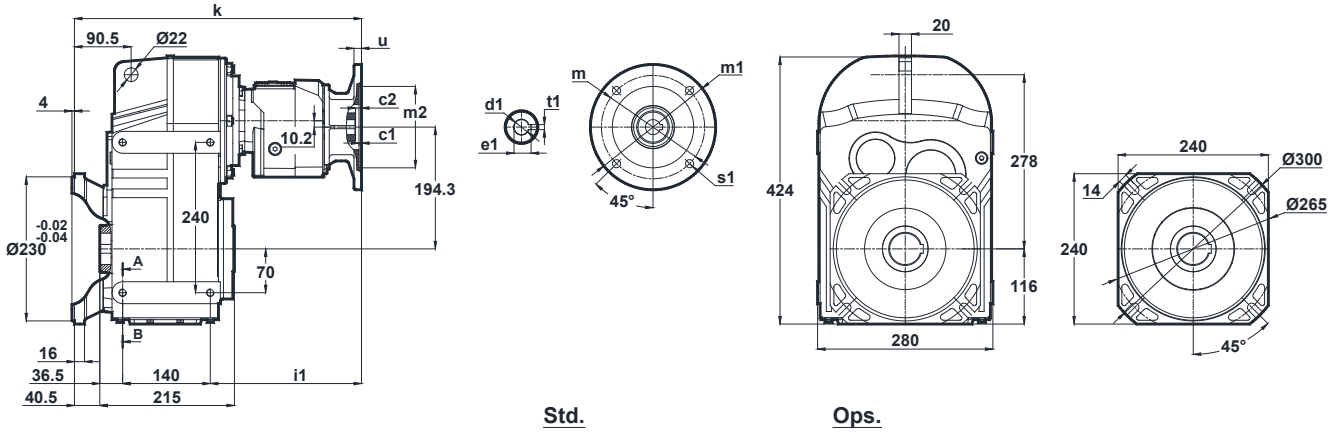
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	225	10	542	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	226	12	544	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	241	12	559	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	241	12	559	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	252	14	570	28	8	31.3
100-112/B14	4		9	130	160	110						

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

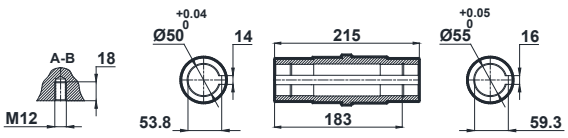


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN475.03
DN476.03

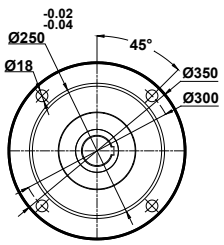


Std. **Ops.**



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	225	10	442	11	4	12.8
63/B14	2.5		5.5	75	90	60						
71/B5	4	4.5	11	130	160	110	226	12	444	14	5	16.3
71/B14	3		7	85	105	70		10				
80/B5	4	5	12	165	200	130	241	12	459	19	6	21.8
80/B14			7	100	120	80						
90/B5	4	5	12	165	200	130	241	12	459	24	8	27.3
90/B14			9	115	140	95						
100-112/B5	4.5	5.5	15	215	250	180	252	14	470	28	8	31.3
100-112/B14	4		9	130	160	110						

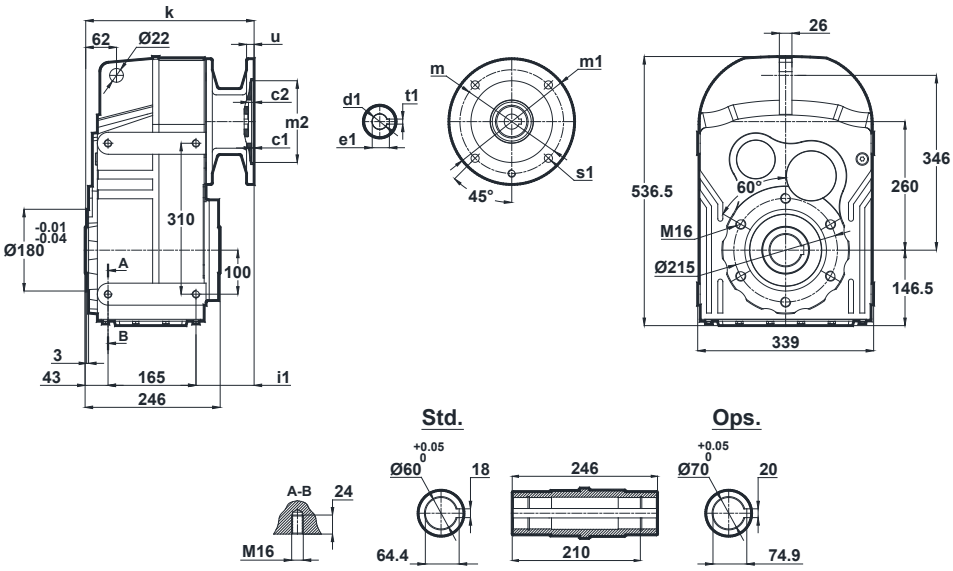
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

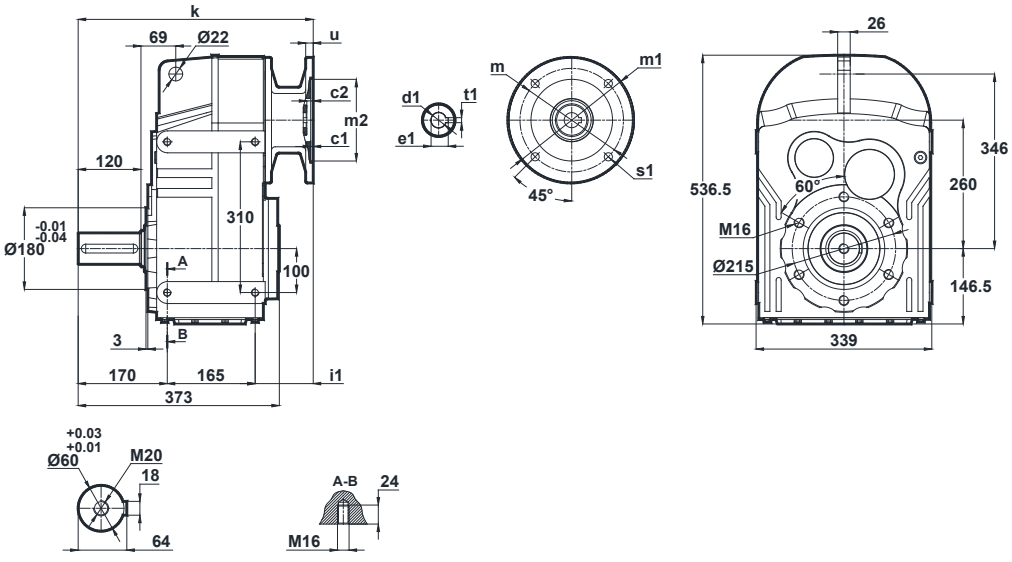
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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 **90/B14**	4	5	12 9	165 115	200 140	130 95	68	12	277	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	87	15	295	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	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	5.5	10	19	300	350	250	185	20	393	48	14	51.8

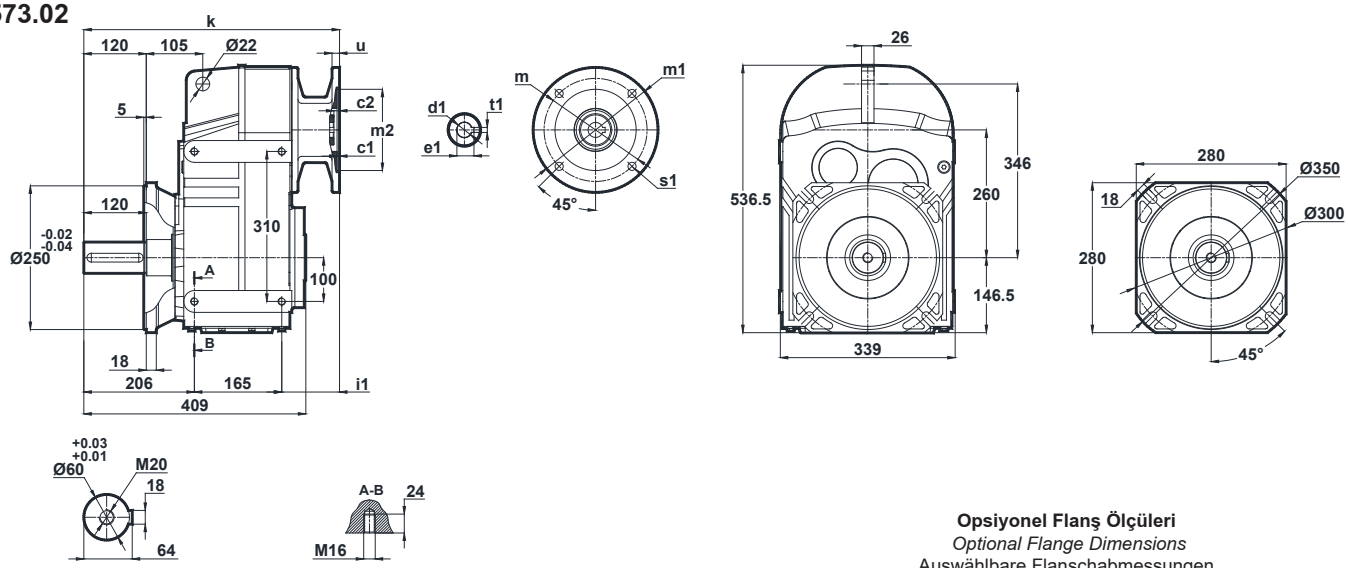
DN572.01
DN573.01



	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 **90/B14**	4	5	12 9	165 115	200 140	130 95	68	12	404	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	87	15	422	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	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	5.5	10	19	300	350	250	185	20	520	48	14	51.8

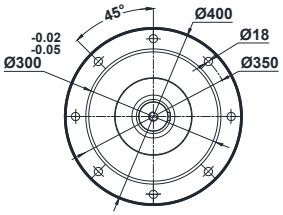
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN572.02
DN573.02



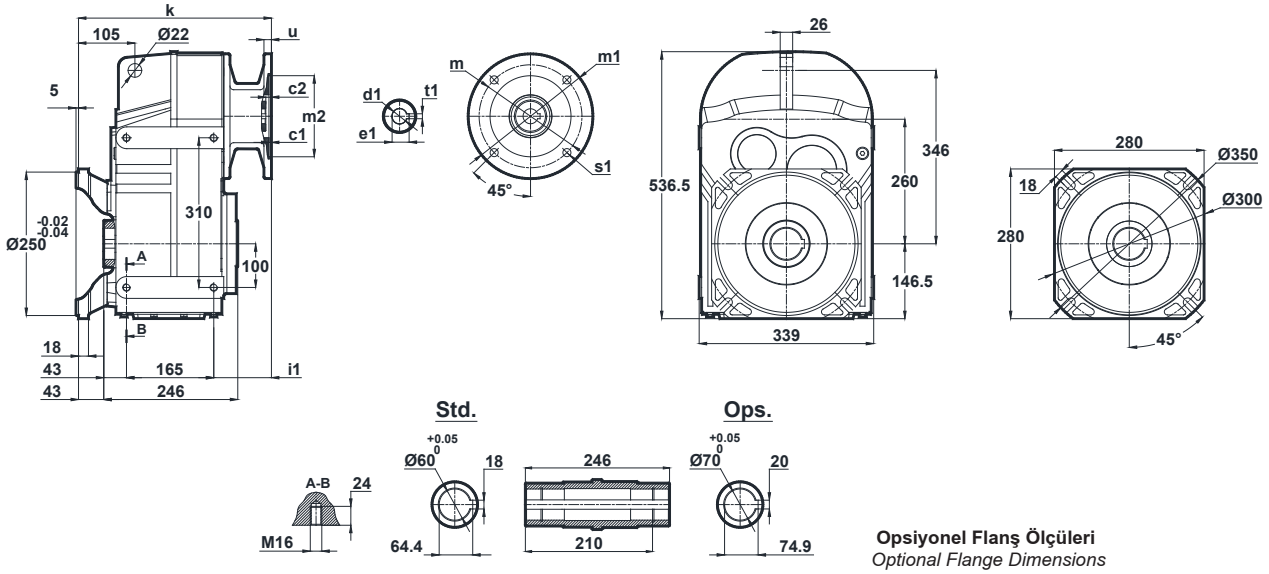
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	68	12	440	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	68	12	440	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	87	15	458	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	105	15	477	38	10	41.3
160/B5	5.5	10	19	300	350	250	185	20	556	42	12	45.3
180/B5	5.5	10	19	300	350	250	185	20	556	48	14	51.8

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



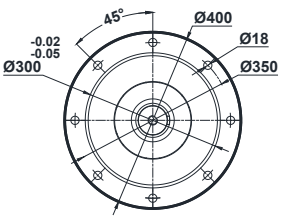
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN572.03
DN573.03



	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 **90/B14**	4	5	12 9	165 115	200 140	130 95	68	12	320	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	87	15	338	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	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	5.5	10	19	300	350	250	185	20	436	48	14	51.8

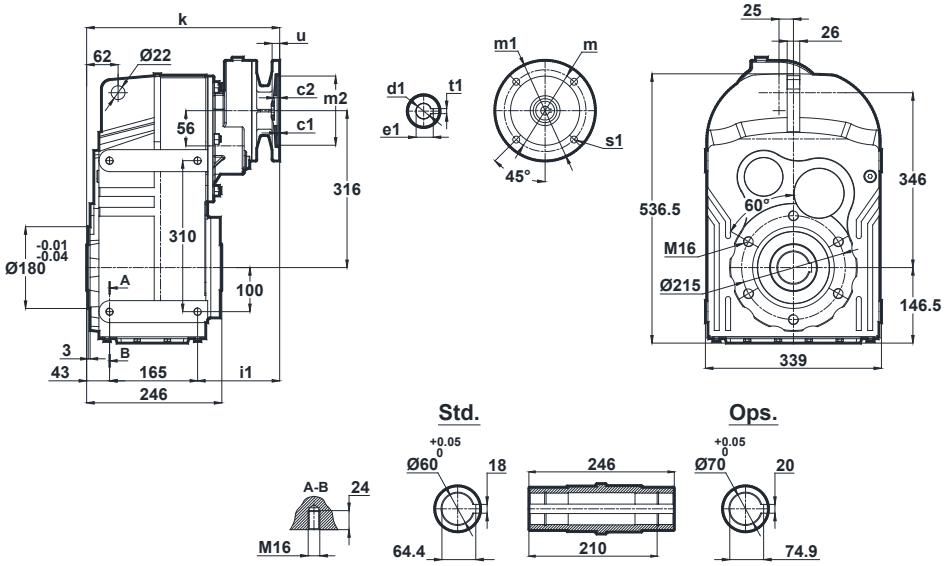
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

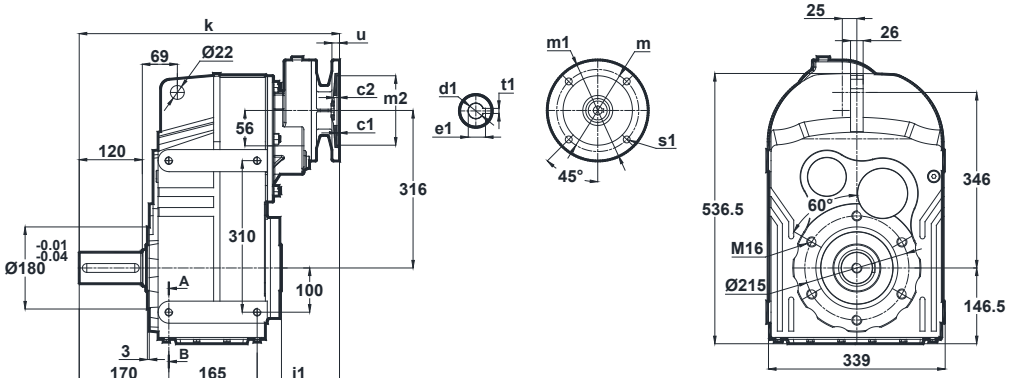
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

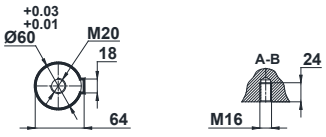
DN574.00



	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	166	12	375	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	166	12	375	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	183	15	392	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	203	15	412	38	10	41.3

DN574.01

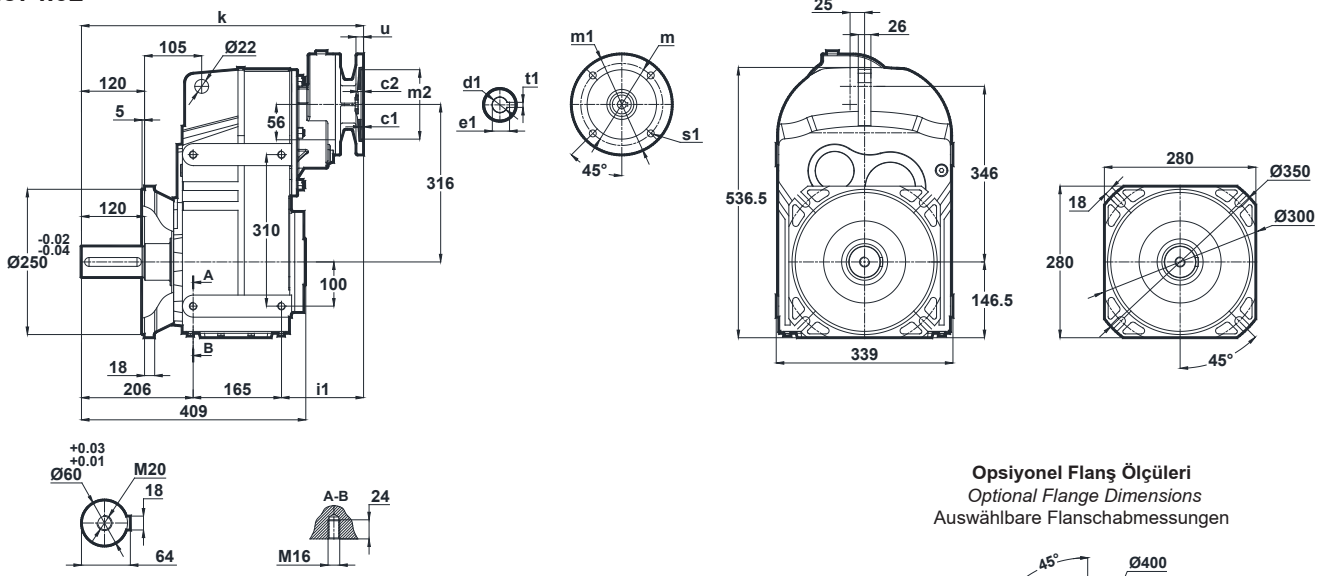




	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	502	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	166	12	502	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	166	12	502	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	183	15	519	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	203	15	539	38	10	41.3

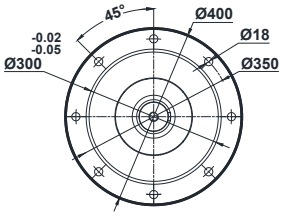
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN574.02



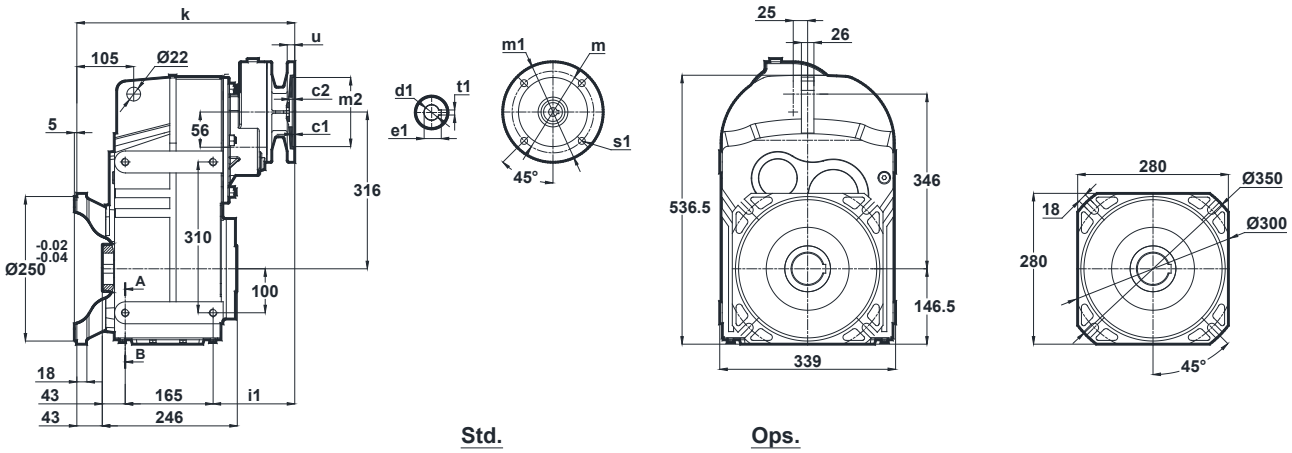
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	166	12	538	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	166	12	538	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	166	12	538	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	183	15	555	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	203	15	575	38	10	41.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

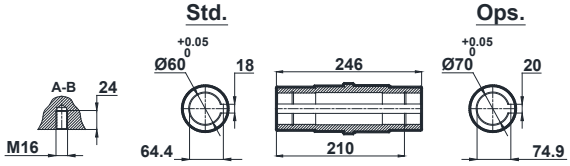


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN574.03

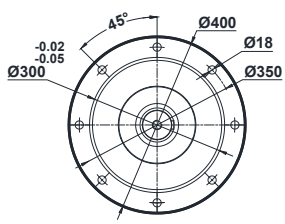


Std. **Ops.**



	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	166	12	418	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	166	12	418	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	183	15	435	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	203	15	455	38	10	41.3

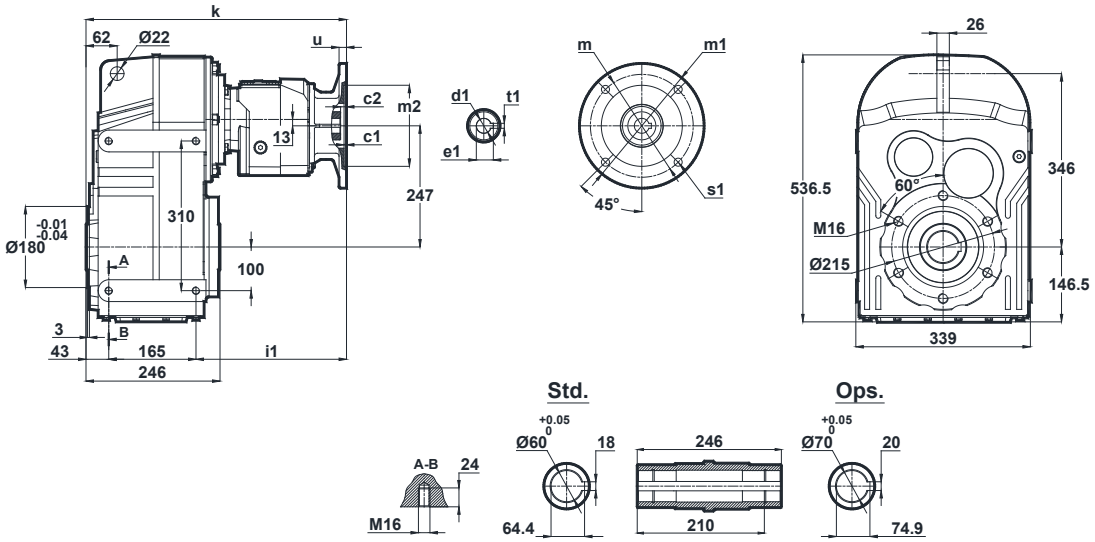
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
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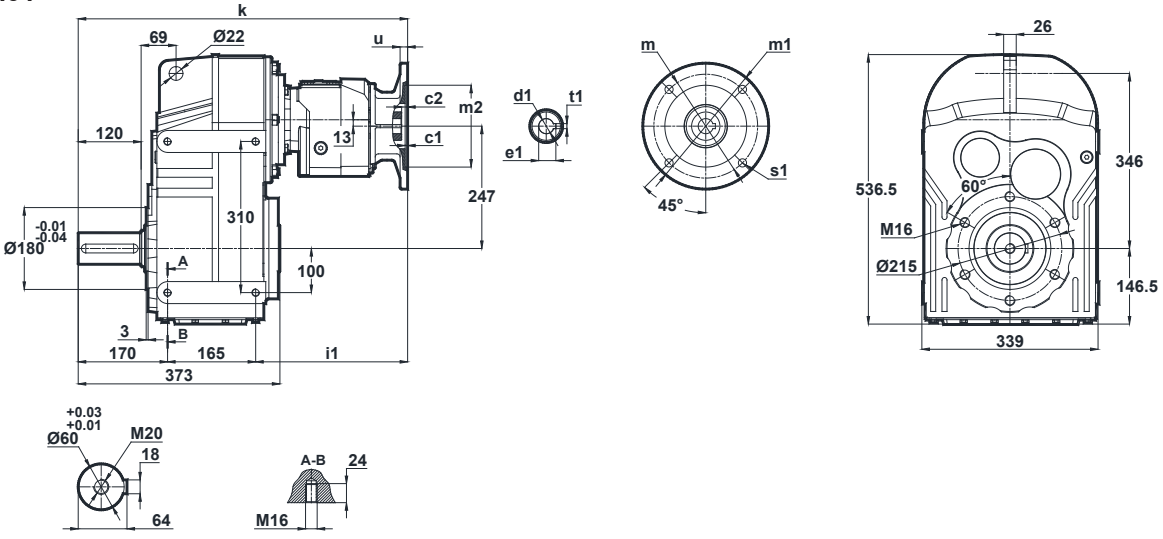
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN575.00
DN576.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	294	12	503	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	265	12 10	474	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	294	12	503	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	294	12	503	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	287	12	496	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	330	15	538	38	10	41.3

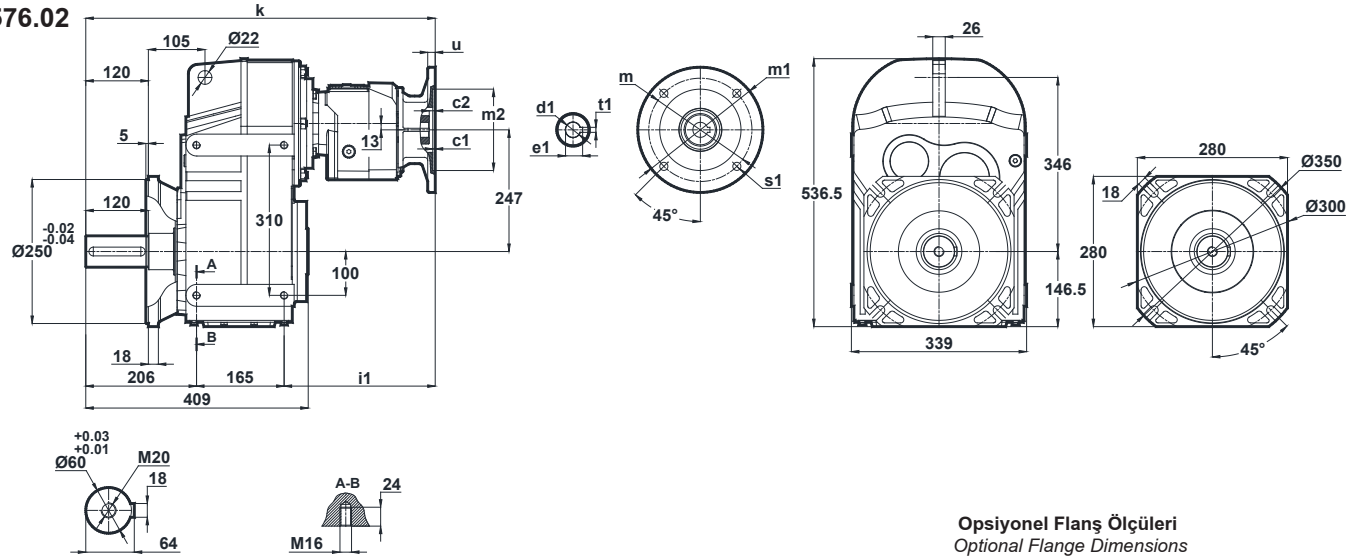
DN575.01
DN576.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	294	12	630	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	265	12 10	601	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	294	12	630	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	294	12	630	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	287	12	623	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	330	15	665	38	10	41.3

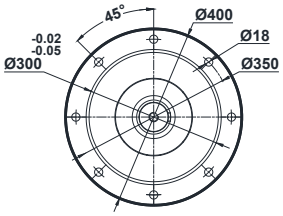
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN575.02
DN576.02



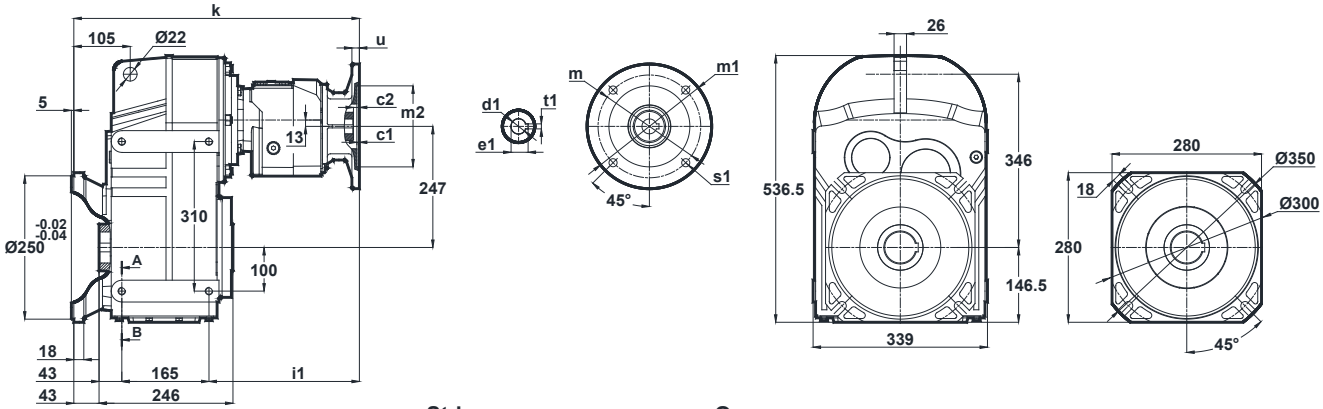
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	294	12	666	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	265	12 10	637	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	294	12	666	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	294	12	666	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	287	12	659	28	8	31.3
132/B5 132/B14	4.5	7 6	15 11	265 165	300 200	230 130	330	15	701	38	10	41.3

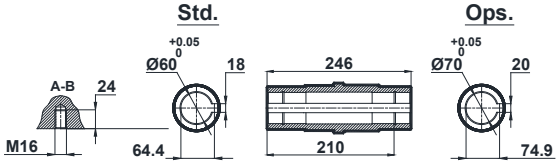
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

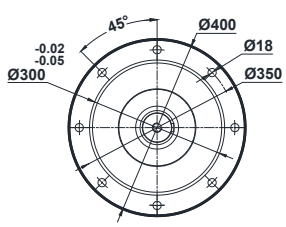
DN575.03
DN576.03





	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	294	12	546	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	265	12 10	517	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	294	12	546	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	294	12	546	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	287	12	539	28	8	31.3
132/B5 132/B14	4.5	7 6	15 11	265 165	300 200	230 130	330	15	581	38	10	41.3

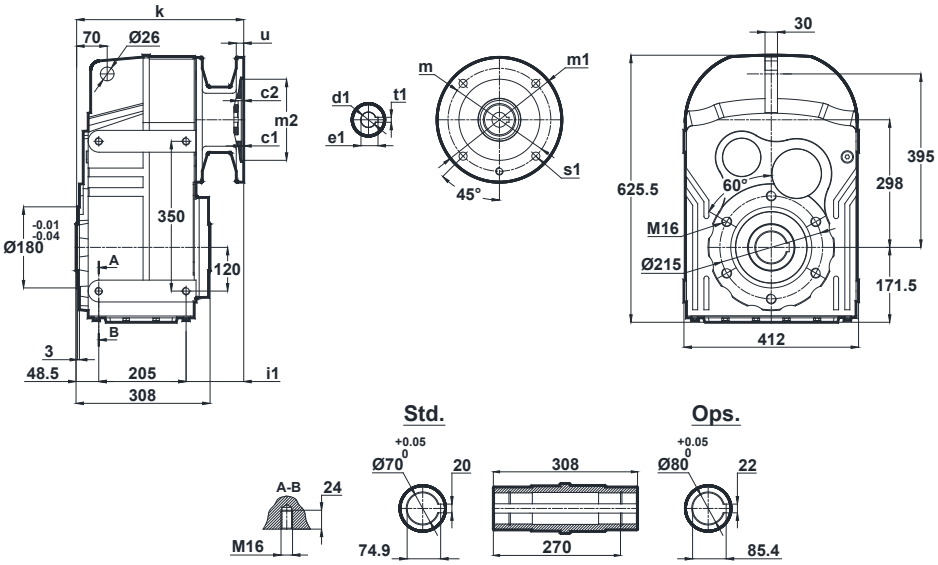
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
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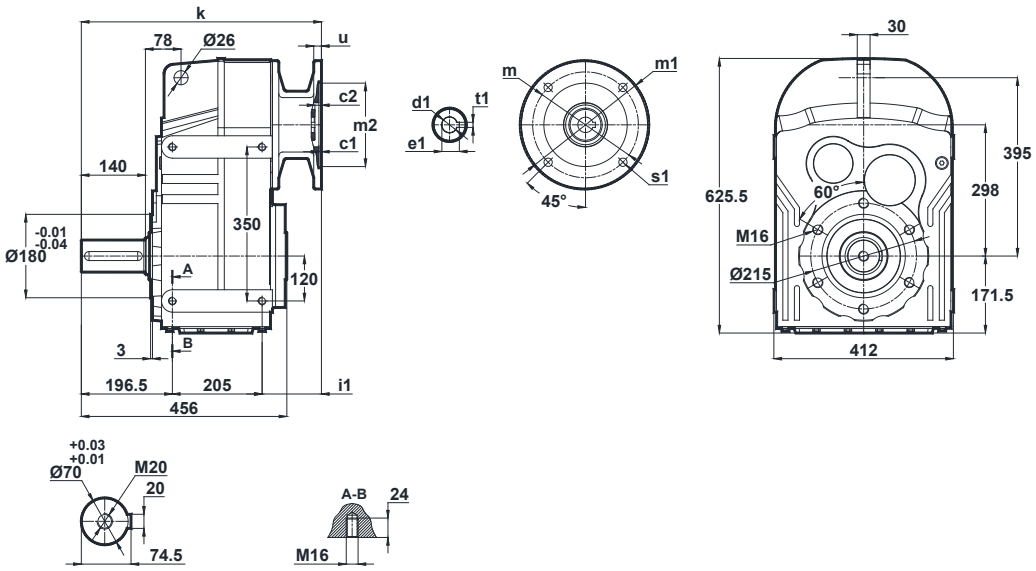
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN672.00
DN673.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	94	15	348	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	115	15	369	38	10	41.3
160/B5	5.5	10	19	300	350	250	191	18	444	42	12	45.3
180/B5	5.5	10	19	300	350	250	191	18	444	48	14	51.8
200/B5	5.5	10	19	350	400	300	211	22	464	55	16	59.3

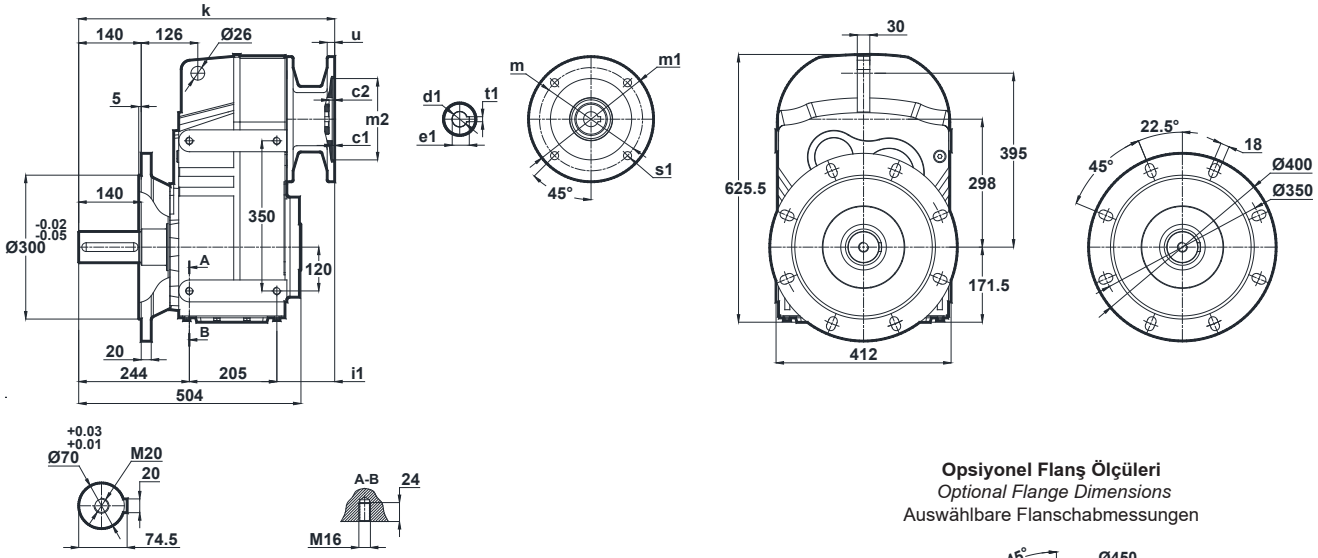
DN672.01
DN673.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	94	15	496	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	115	15	517	38	10	41.3
160/B5	5.5	10	19	300	350	250	191	18	592	42	12	45.3
180/B5	5.5	10	19	300	350	250	191	18	592	48	14	51.8
200/B5	5.5	10	19	350	400	300	211	22	612	55	16	59.3

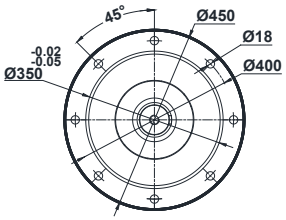
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN672.02
DN673.02



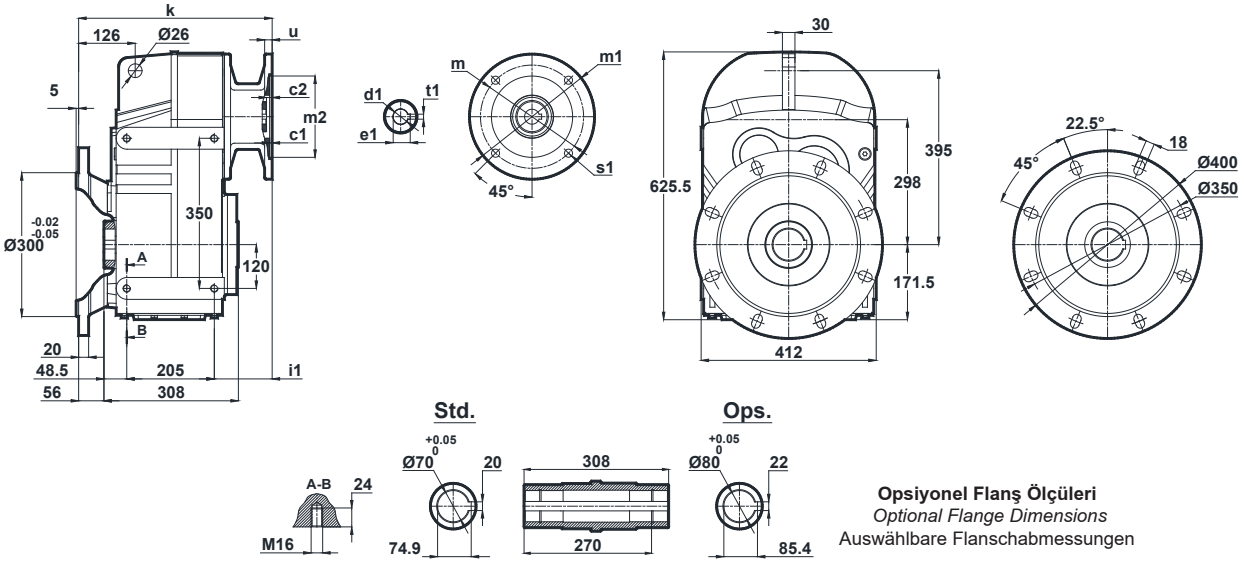
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	94	15	544	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	115	15	565	38	10	41.3
160/B5	5.5	10	19	300	350	250	191	18	640	42	12	45.3
180/B5	5.5	10	19	300	350	250	191	18	640	48	14	51.8
200/B5	5.5	10	19	350	400	300	211	22	660	55	16	59.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



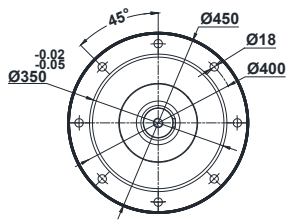
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DN672.03
DN673.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	94	15	404	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	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	5.5	10	19	300	350	250	191	18	500	48	14	51.8
200/B5	5.5	10	19	350	400	300	211	22	520	55	16	59.3

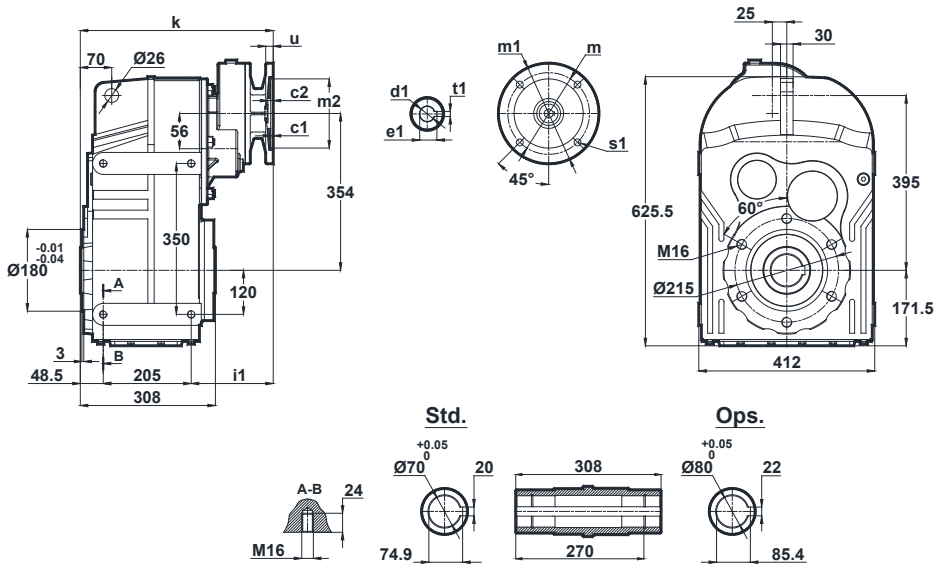
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

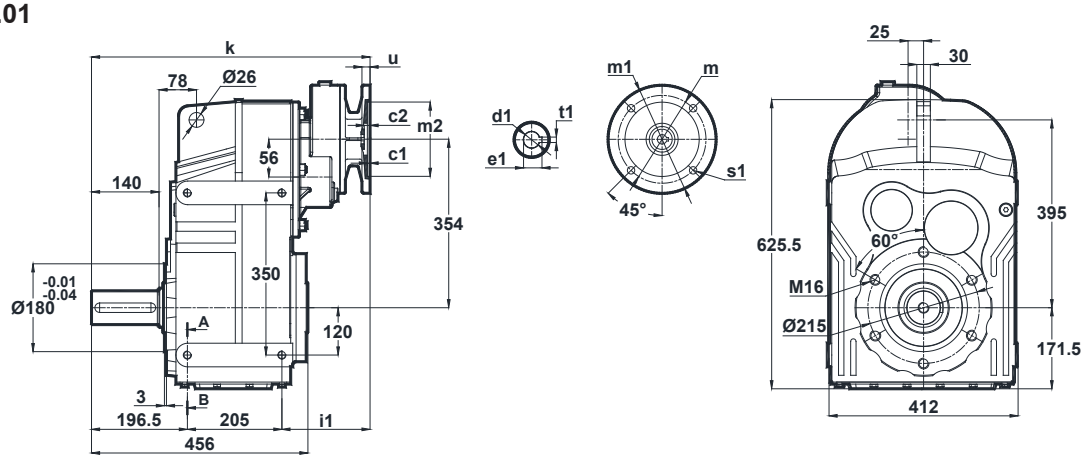
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

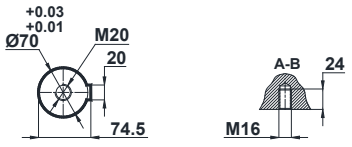
DN674.00



	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 80/B14	4	9	12 7	165 100	200 120	130 80	174	12	428	19	6	21.8
90/B5 90/B14	4	9	12 9	165 115	200 140	130 95	174	12	428	24	8	27.3
100-112/B5 100-112/B14	4.5 4	9	15 9	215 130	250 160	180 110	191	15	445	28	8	31.3
132/B5 132/B14	4.5	9	15 11	265 165	300 200	230 130	211	15	465	38	10	41.3

DN674.01

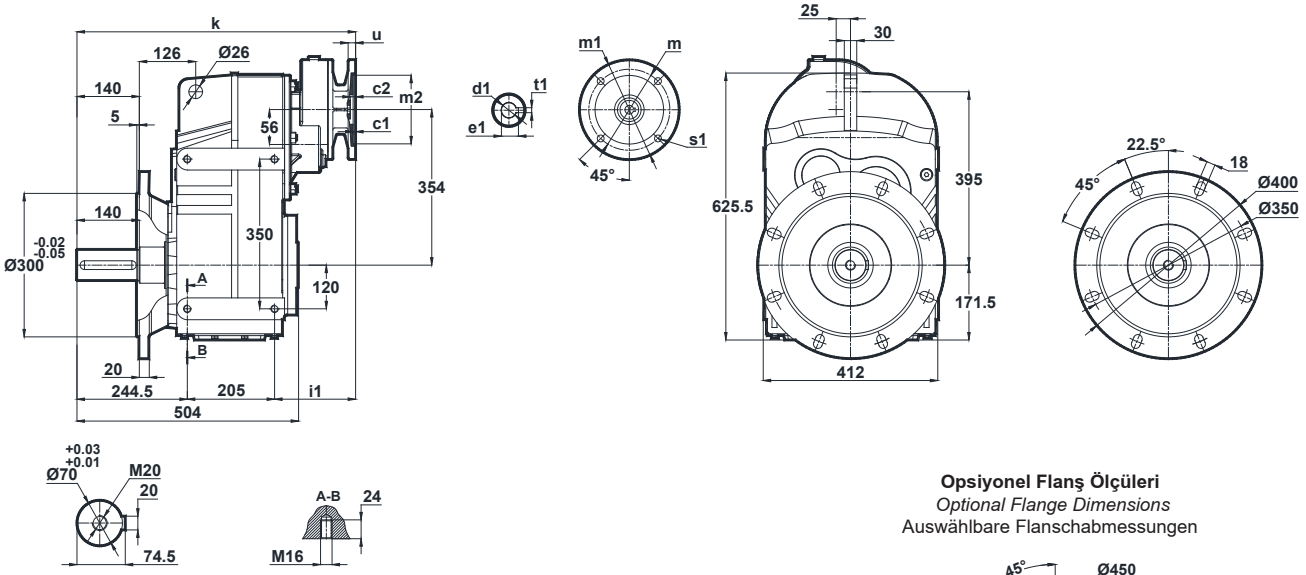




	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	576	14	5	16.3
80/B5 80/B14	4	9	12 7	165 100	200 120	130 80	174	12	576	19	6	21.8
90/B5 90/B14	4	9	12 9	165 115	200 140	130 95	174	12	576	24	8	27.3
100-112/B5 100-112/B14	4.5 4	9	15 9	215 130	250 160	180 110	191	15	593	28	8	31.3
132/B5 132/B14	4.5	9	15 11	265 165	300 200	230 130	211	15	613	38	10	41.3

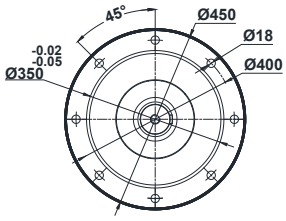
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN674.02



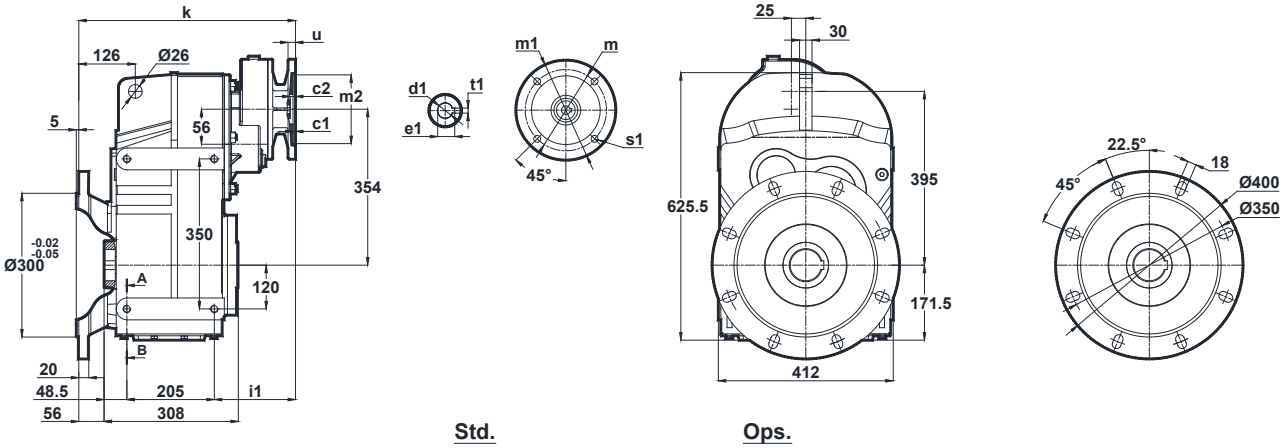
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	174	12	624	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	174	12	624	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	174	12	624	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	191	15	641	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	211	15	661	38	10	41.3

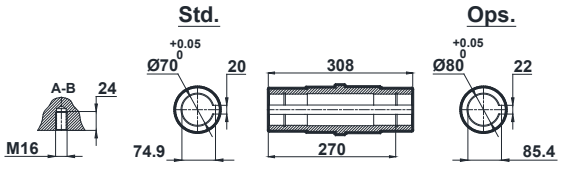
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

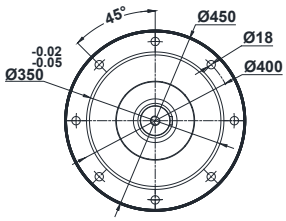
DN674.03





	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	174	12	484	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	174	12	484	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	191	15	501	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	211	15	521	38	10	41.3

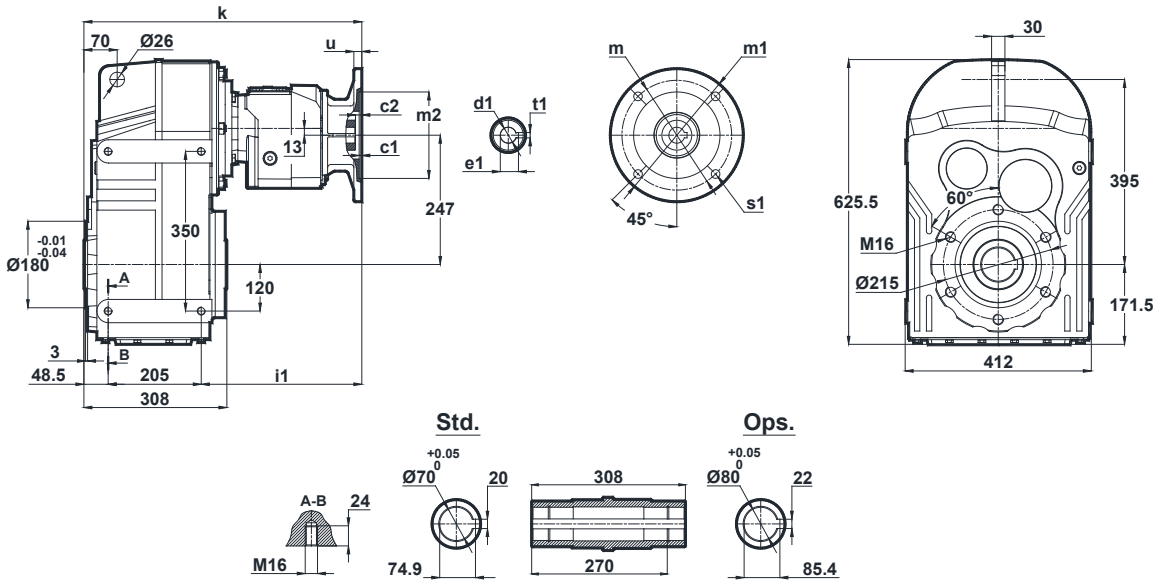
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

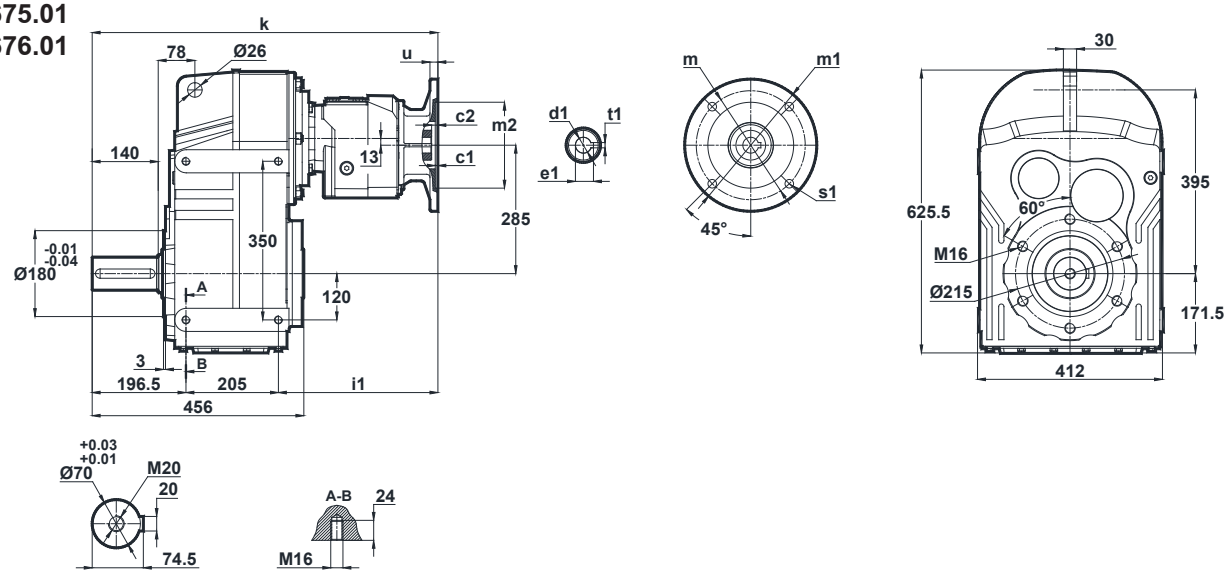
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN675.00
DN676.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	304	12	558	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	275	12 10	529	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	304	12	558	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	304	12	558	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	297	12	551	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	340	15	593	38	10	41.3

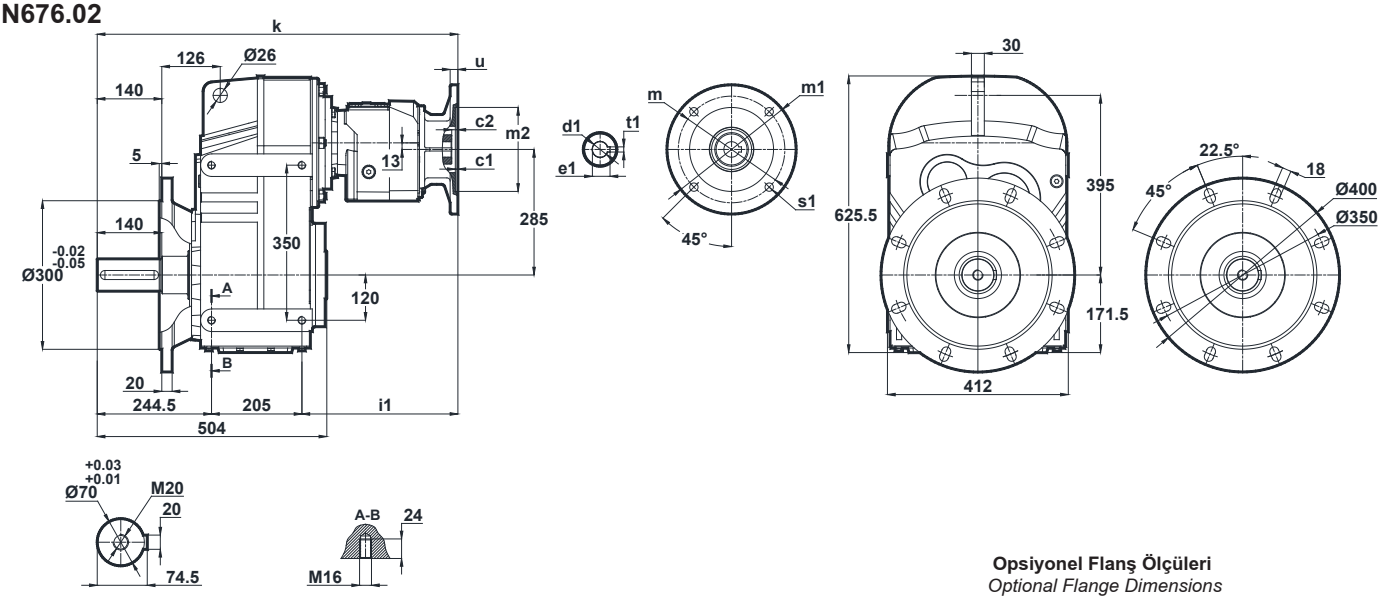
DN675.01
DN676.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	304	12	706	11	4	12.8
71/B5 **71/B14**	4 3	8.5	11 7	130 85	160 105	110 70	275	12 10	677	14	5	16.3
80/B5 **80/B14**	4	5	12 7	165 100	200 120	130 80	304	12	706	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	304	12	706	24	8	27.3
100-112/B5 **100-112/B14**	4 3.5	5.5	15 9	215 130	250 160	180 110	297	12	699	28	8	31.3
132/B5 **132/B14**	4.5	7 6	15 11	265 165	300 200	230 130	340	15	741	38	10	41.3

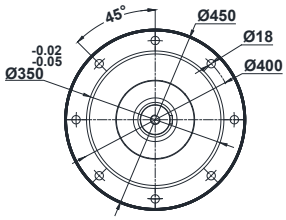
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN675.02
DN676.02



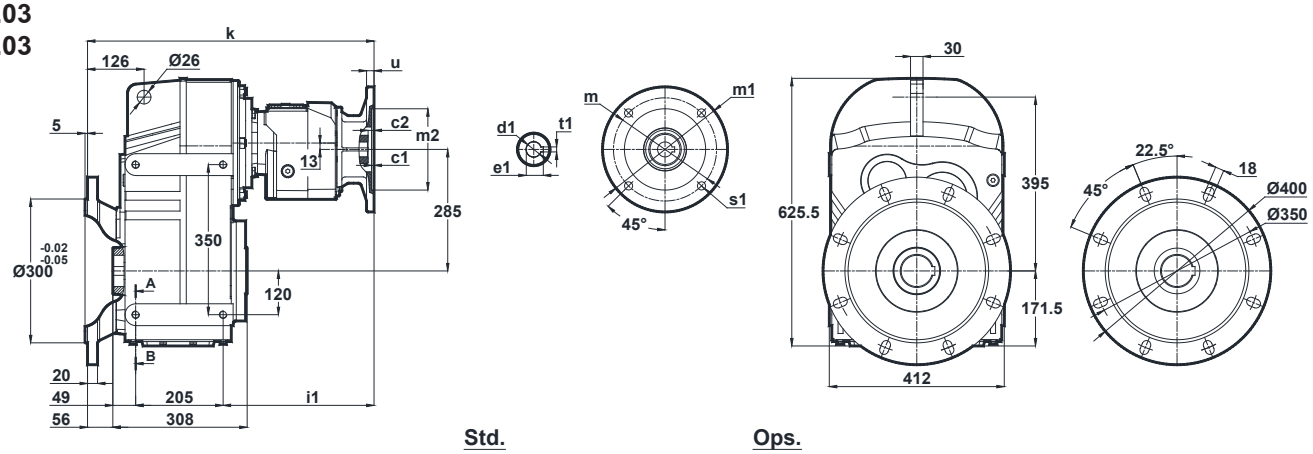
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	304	12	754	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	275	12 10	725	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	304	12	754	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	304	12	754	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	297	12	747	28	8	31.3
132/B5 132/B14	4.5	7 6	15 11	265 165	300 200	230 130	340	15	789	38	10	41.3

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

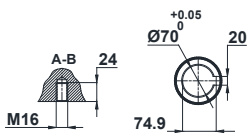


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

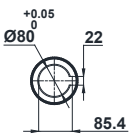
DN675.03
DN676.03



Std.

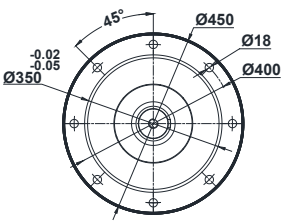


Ops.



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	304	12	614	11	4	12.8
71/B5 71/B14	4 3	8.5	11 7	130 85	160 105	110 70	275	12 10	585	14	5	16.3
80/B5 80/B14	4	5	12 7	165 100	200 120	130 80	304	12	614	19	6	21.8
90/B5 90/B14	4	5	12 9	165 115	200 140	130 95	304	12	614	24	8	27.3
100-112/B5 100-112/B14	4 3.5	5.5	15 9	215 130	250 160	180 110	297	12	607	28	8	31.3
132/B5 132/B14	4.5	7 6	15 11	265 165	300 200	230 130	340	15	649	38	10	41.3

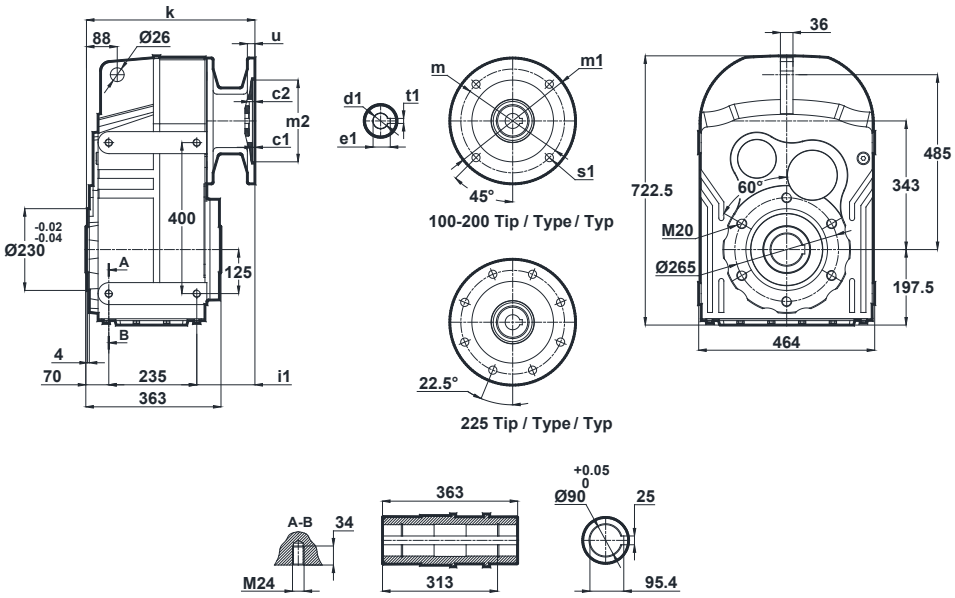
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

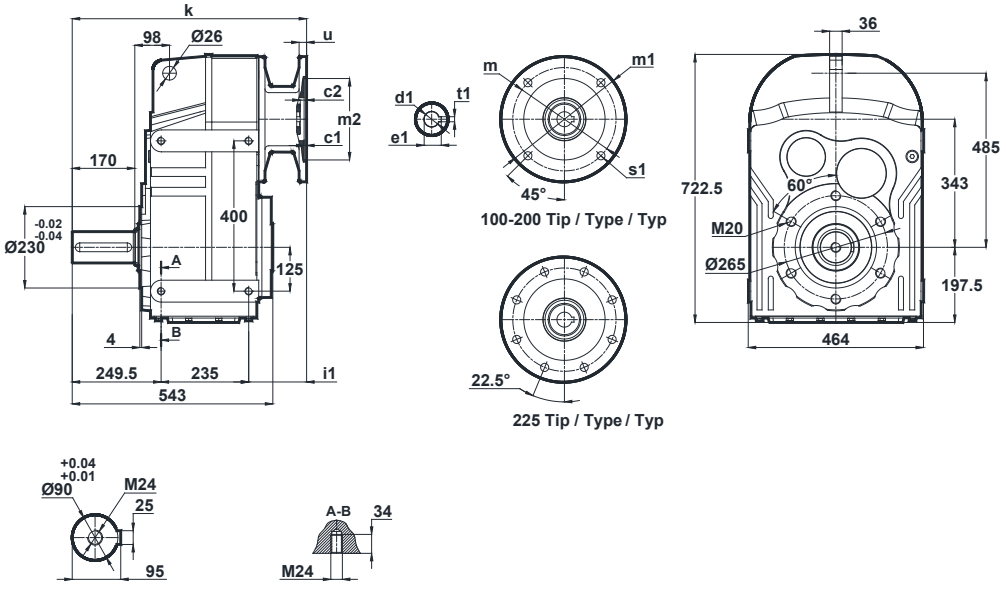
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN772.00
DN773.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	15	215	250	180	85	17.5	390	28	8	31.3
132/B5 **132/B14**	4.5	9	15	265 165	300 200	230 130	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	5.5	10	19	300	350	250	175	20	480	48	14	51.8
200/B5	5.5	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

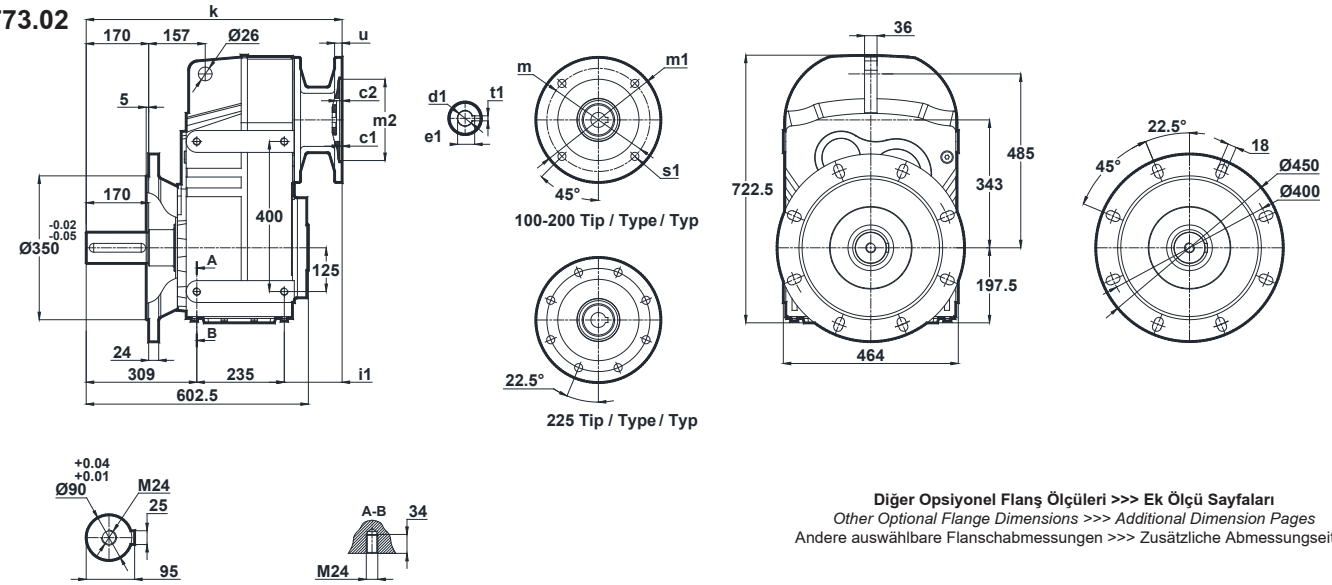
DN772.01
DN773.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	15	215	250	180	85	17.5	570	28	8	31.3
132/B5 **132/B14**	4.5	9	15	265 165	300 200	230 130	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	5.5	10	19	300	350	250	175	20	660	48	14	51.8
200/B5	5.5	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

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

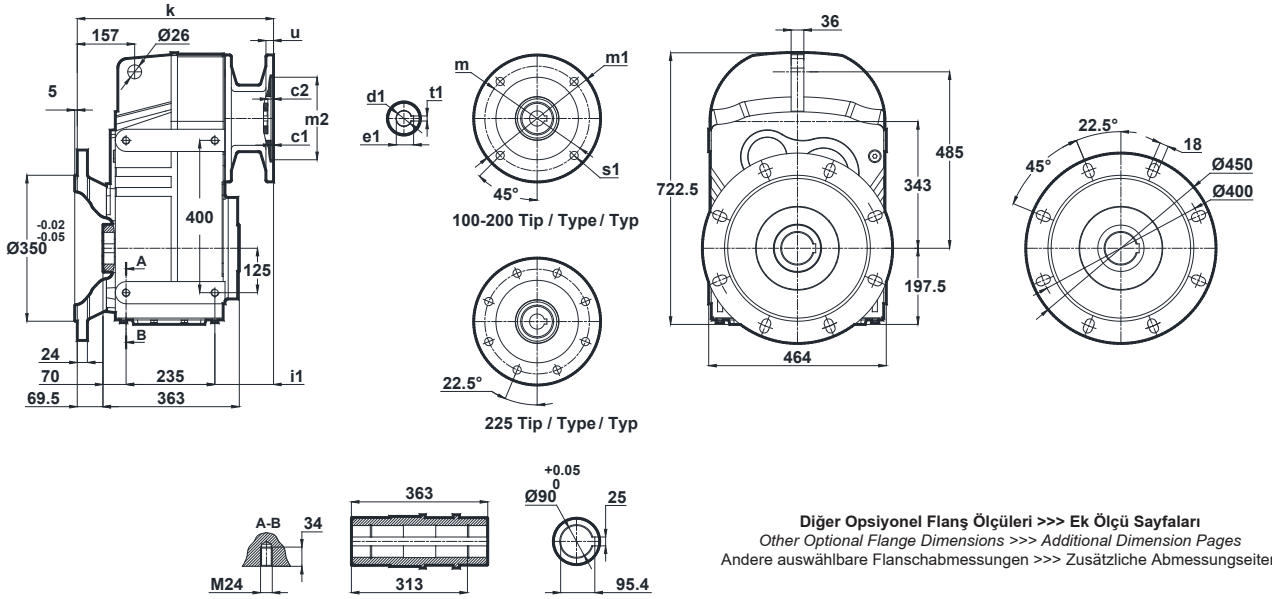
DN772.02
DN773.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	15	215	250	180	85	17.5	630	28	8	31.3
132/B5 **132/B14**	4.5	9	15	265 165	300 200	230 130	100	15	645	38	10	41.3
160/B5	5.5	10	19	300	350	250	175	20	720	42	12	45.3
180/B5	5.5	10	19	300	350	250	175	20	720	48	14	51.8
200/B5	5.5	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

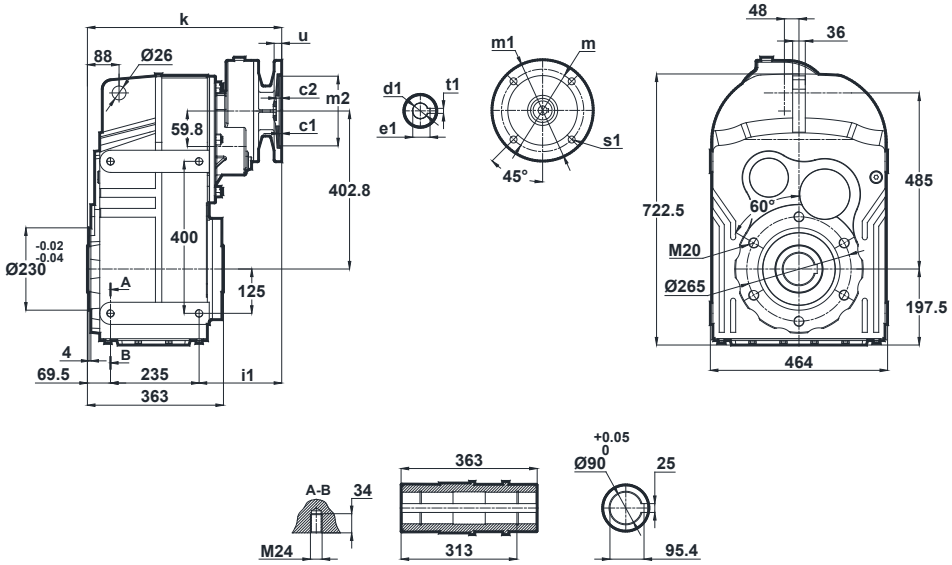


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	15	215	250	180	85	17.5	460	28	8	31.3
132/B5 **132/B14**	4.5	9	15	265 165	300 200	230 130	100	15	475	38	10	41.3
160/B5	5.5	10	19	300	350	250	175	20	550	42	12	45.3
180/B5	5.5	10	19	300	350	250	175	20	550	48	14	51.8
200/B5	5.5	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

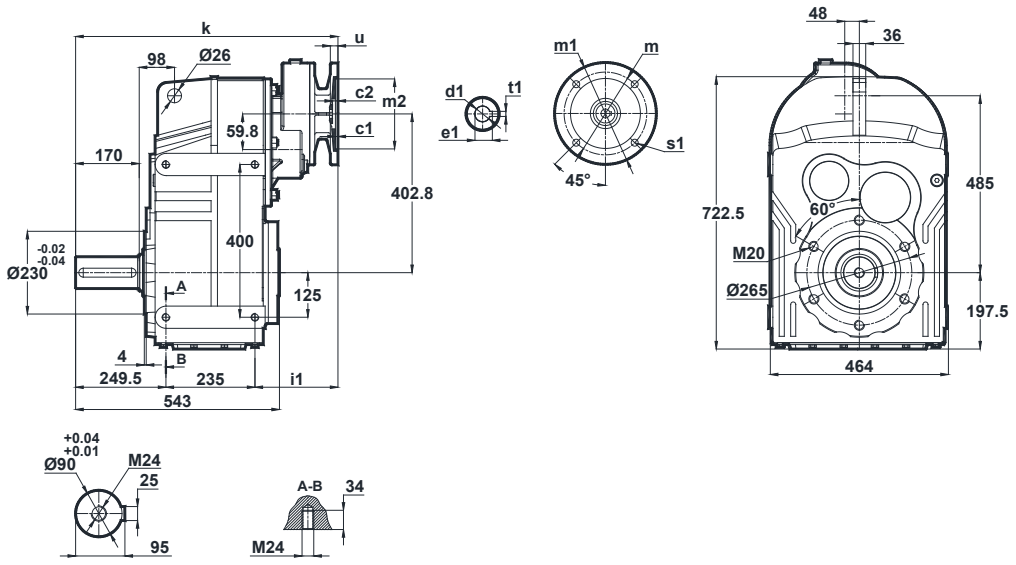
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	194	15	498	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	212	15	517	38	10	41.3
160/B5	5.5	10	19	300	350	250	292	20	596	42	12	45.3
180/B5	5.5	10	19	300	350	250	292	20	596	48	14	51.8

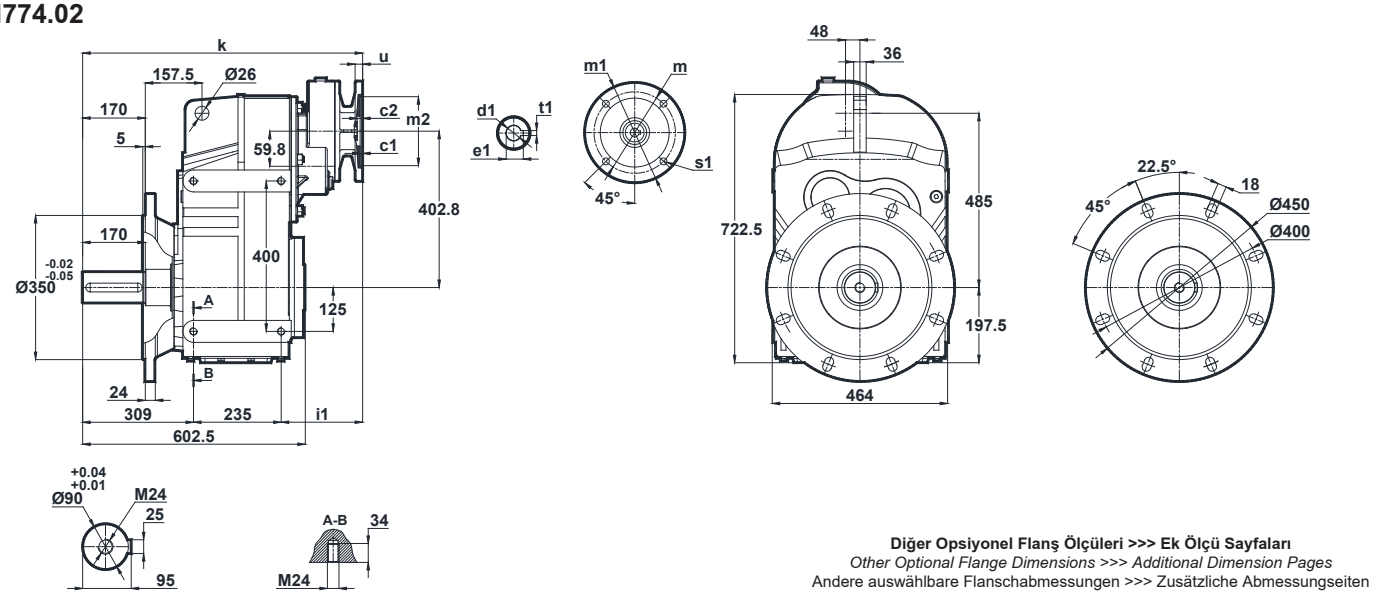
DN774.01



	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
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	194	15	678	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	212	15	697	38	10	41.3
160/B5	5.5	10	19	300	350	250	292	20	776	42	12	45.3
180/B5	5.5	10	19	300	350	250	292	20	776	48	14	51.8

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

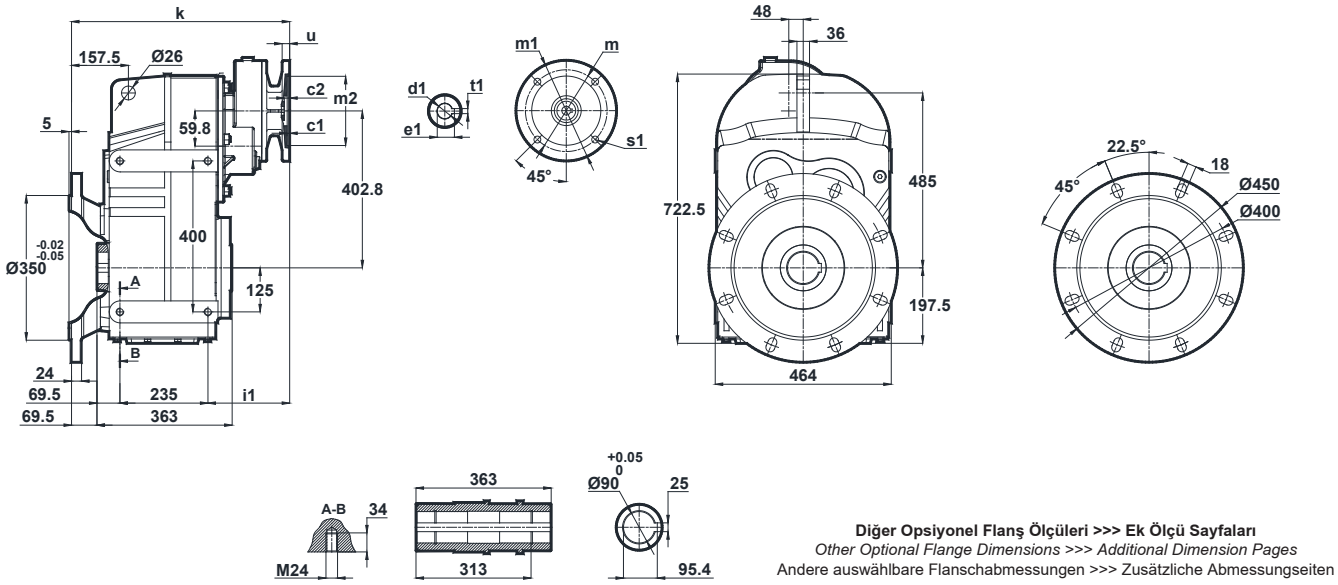
DN774.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	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
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	194	15	738	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	212	15	757	38	10	41.3
160/B5	5.5	10	19	300	350	250	292	20	836	42	12	45.3
180/B5	5.5	10	19	300	350	250	292	20	836	48	14	51.8

DN774.03

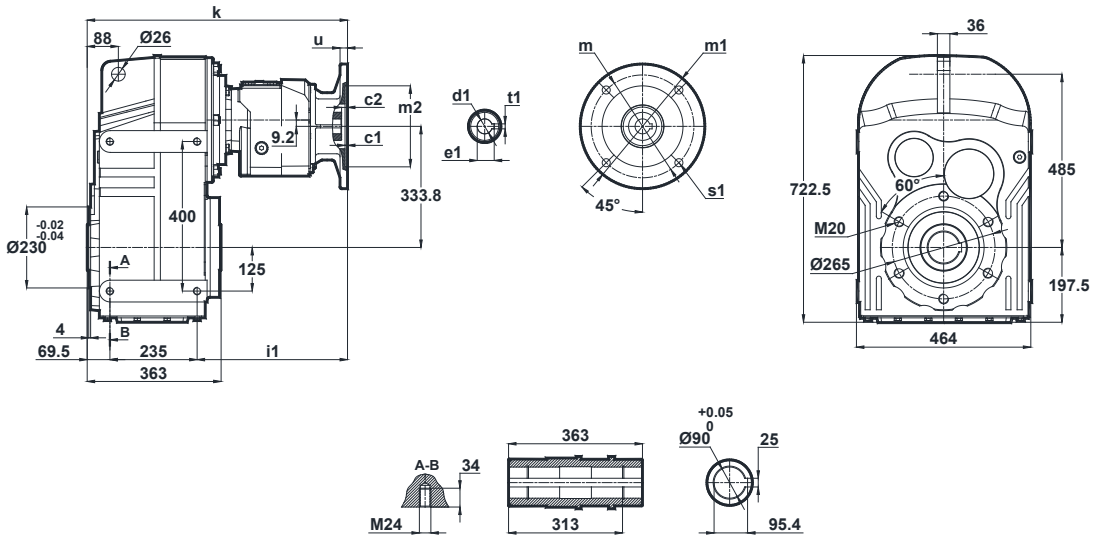


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	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
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	194	15	568	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	212	15	587	38	10	41.3
160/B5	5.5	10	19	300	350	250	292	20	666	42	12	45.3
180/B5	5.5	10	19	300	350	250	292	20	666	48	14	51.8

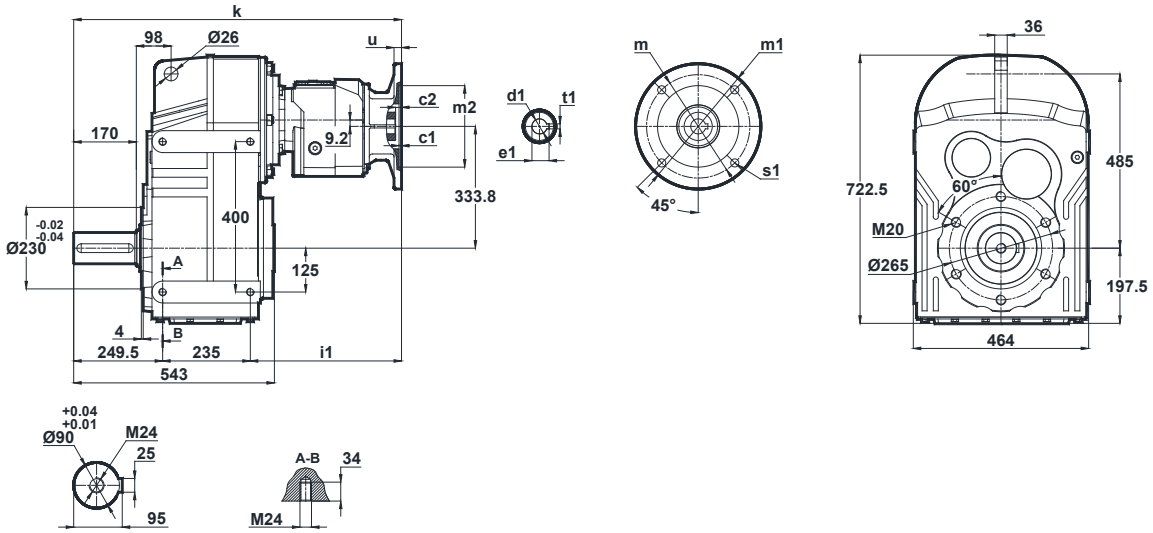
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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 **80/B14**	4	9	12 7	165 100	200 120	130 80	326	12	630	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	326	12	630	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	343	15	647	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	363	15	667	38	10	41.3
160/B5	5.5	10	19	300	350	250	442	20	747	42	12	45.3

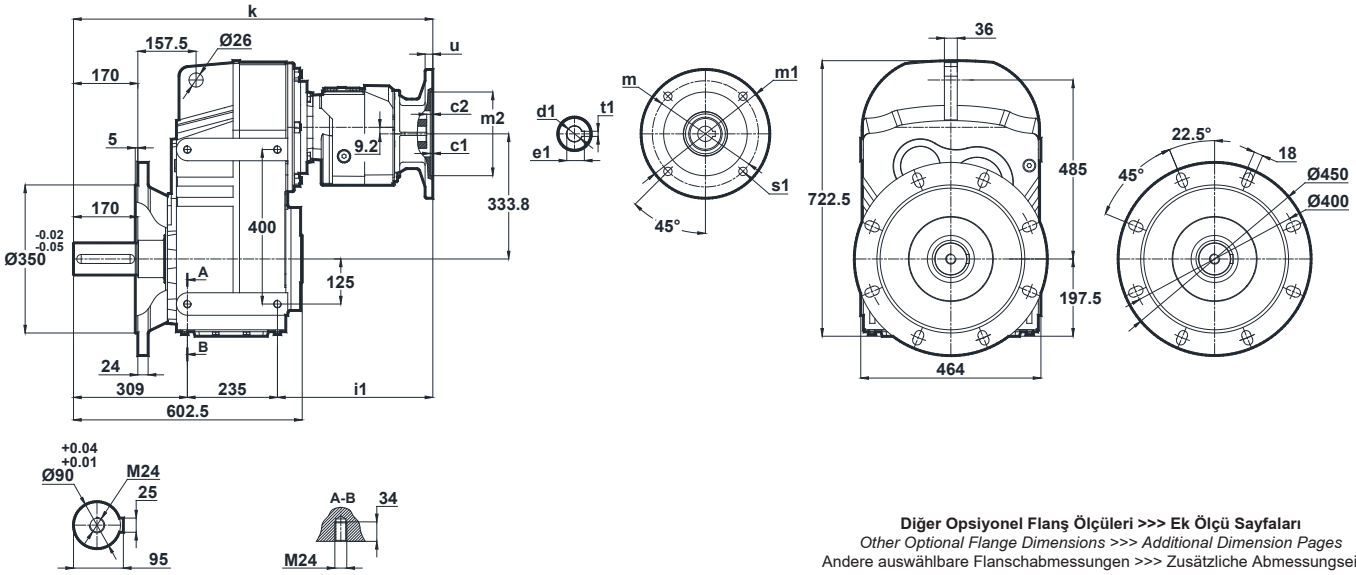
DN775.01
DN776.01



	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	326	12	810	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	326	12	810	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	343	15	827	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	363	15	847	38	10	41.3
160/B5	5.5	10	19	300	350	250	442	20	927	42	12	45.3

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

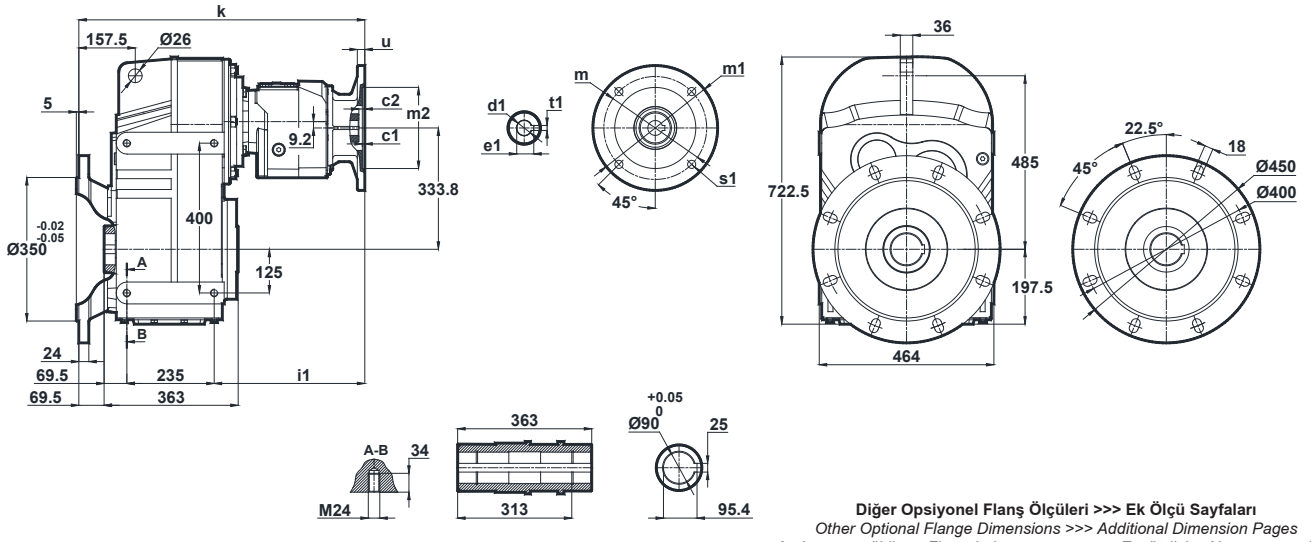
DN775.02
DN776.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

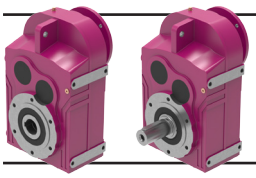
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	870	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	326	12	870	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	326	12	870	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	343	15	887	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	363	15	907	38	10	41.3
160/B5	5.5	10	19	300	350	250	442	20	987	42	12	45.3

DN775.03
DN776.03



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

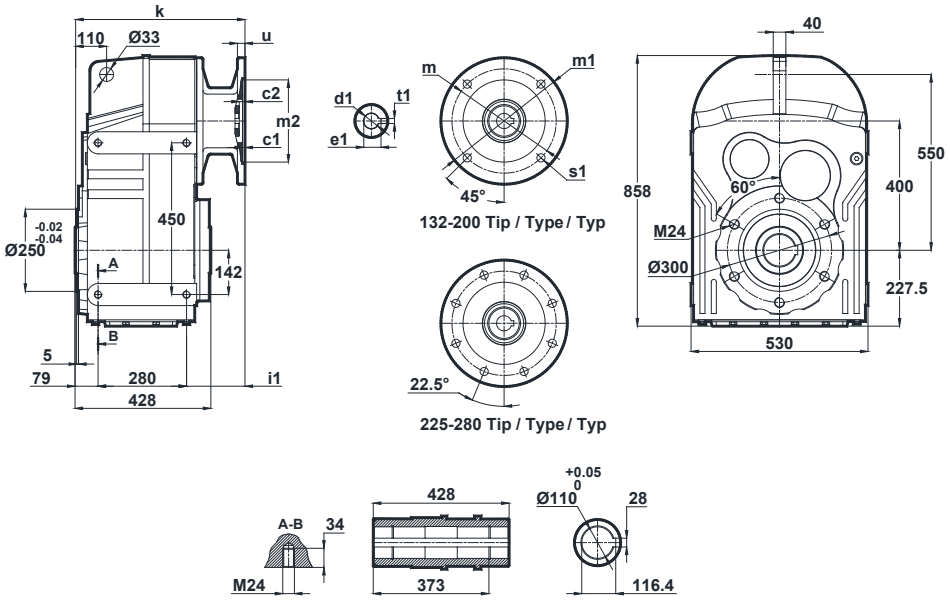
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	326	12	700	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	326	12	700	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	326	12	700	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	343	15	717	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	363	15	737	38	10	41.3
160/B5	5.5	10	19	300	350	250	442	20	817	42	12	45.3



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

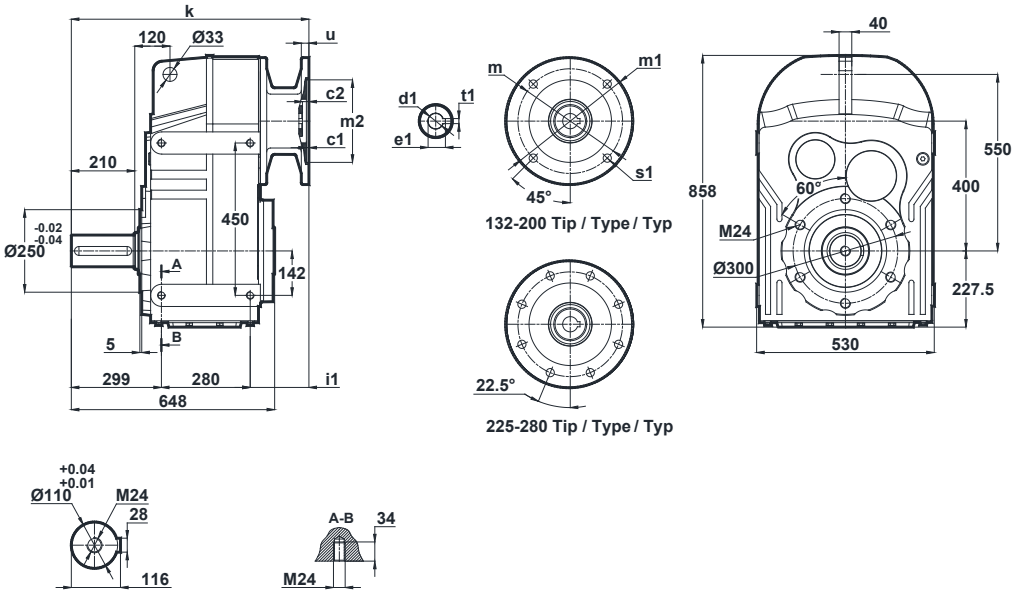
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN872.00
DN873.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	4.5	14	15	265	300	230	98	15	457	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	24	602	42	12	45.3
180/B5	5.5	10	19	300	350	250	243	24	602	48	14	51.8
200/B5	5.5	10	19	350	400	300	243	24	602	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	602	60	18	64.4
250/B5	5.5	10	19	500	550	450	243	24	602	65	18	69.4
280/B5	5.5	10	19	500	550	450	243	24	602	75	20	79.9

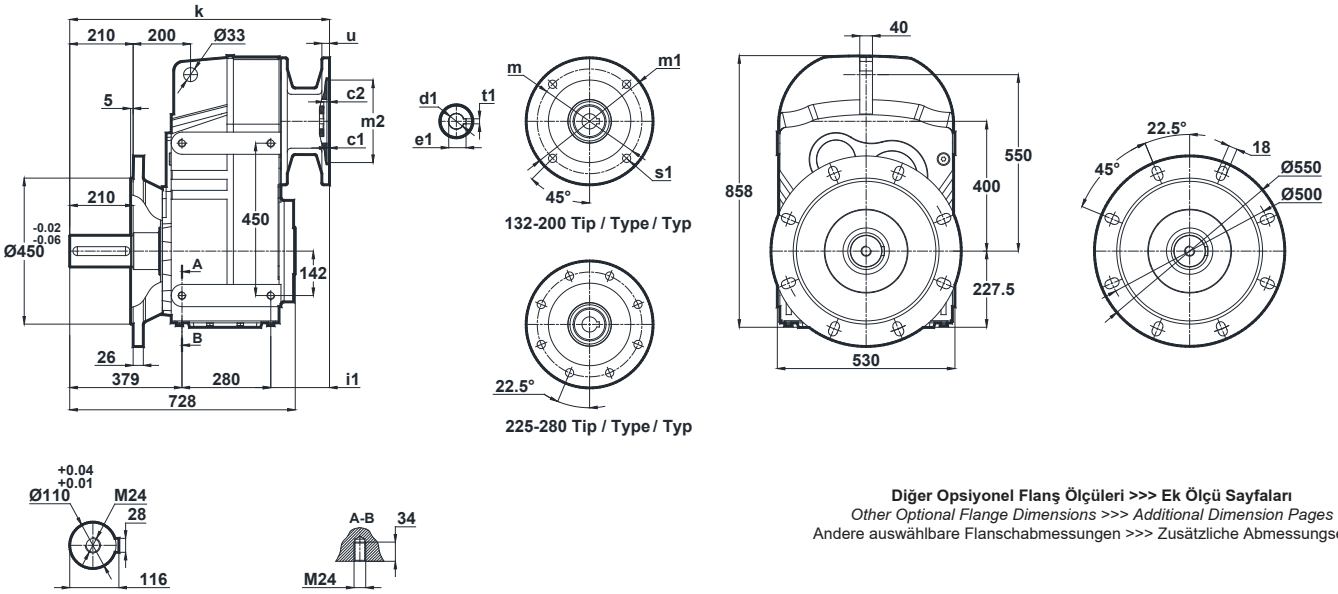
DN872.01
DN873.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	4.5	14	15	265	300	230	98	15	677	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	24	822	42	12	45.3
180/B5	5.5	10	19	300	350	250	243	24	822	48	14	51.8
200/B5	5.5	10	19	350	400	300	243	24	822	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	822	60	18	64.4
250/B5	5.5	10	19	500	550	450	243	24	822	65	18	69.4
280/B5	5.5	10	19	500	550	450	243	24	822	75	20	79.9

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

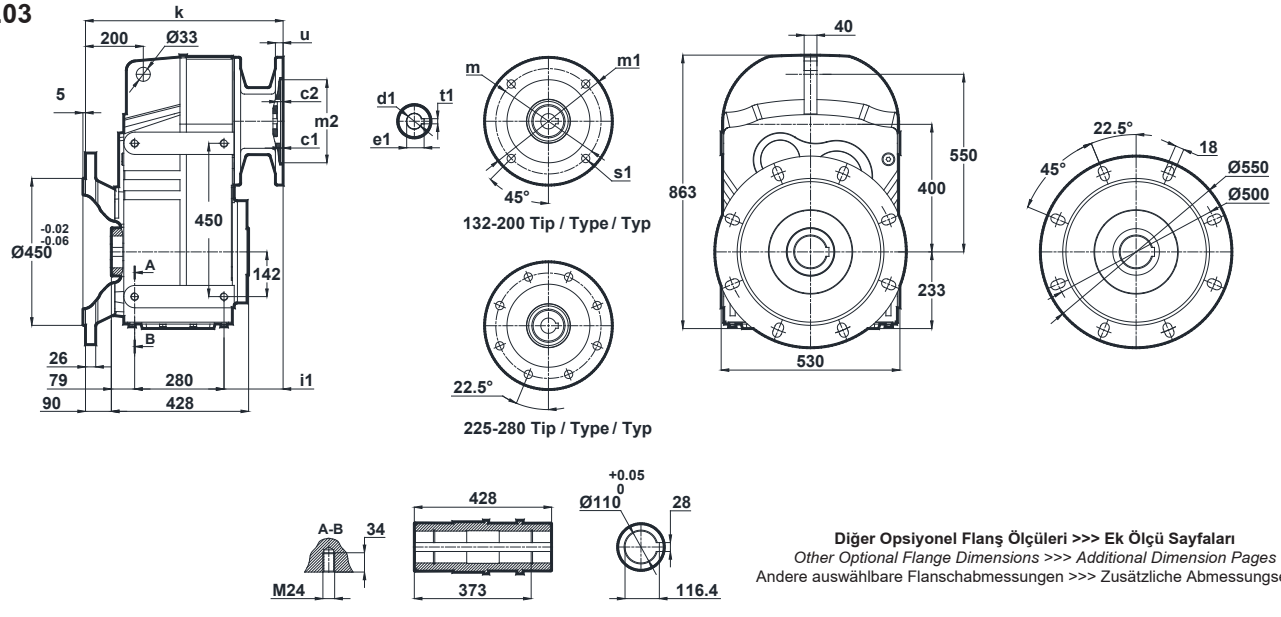
DN872.02
DN873.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	4.5	14	15	265	300	230	98	15	757	15	10	41.3
160/B5	5.5	10	19	300	350	250	243	24	902	42	12	45.3
180/B5	5.5	10	19	300	350	250	243	24	902	48	14	51.8
200/B5	5.5	10	19	350	400	300	243	24	902	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	902	60	18	64.4
250/B5	5.5	10	19	500	550	450	243	24	902	65	18	69.4
280/B5	5.5	10	19	500	550	450	243	24	902	75	20	79.9

DN872.03
DN873.03

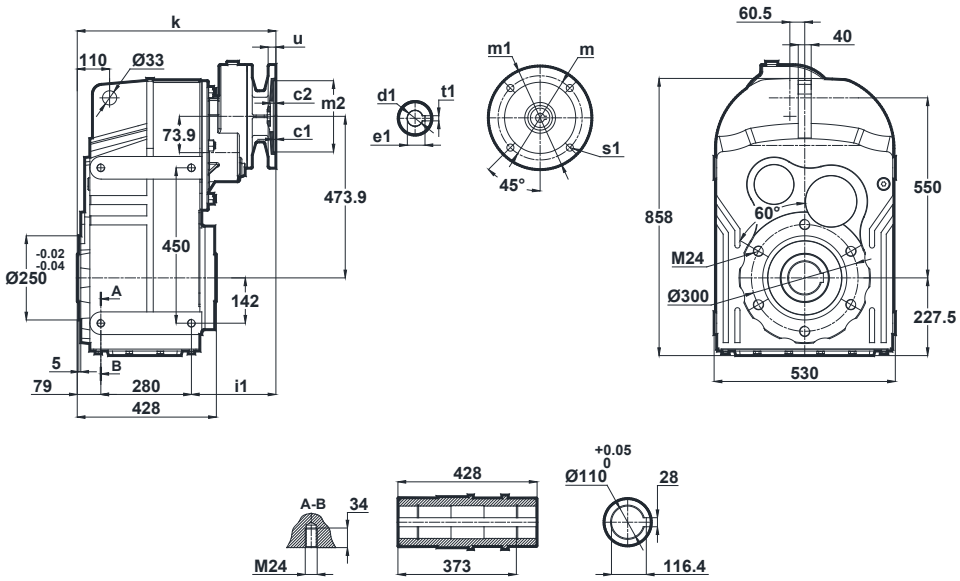


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
132/B5	4.5	14	15	265	300	230	98	15	547	38	10	41.3
160/B5	5.5	10	19	300	350	250	243	24	692	42	12	45.3
180/B5	5.5	10	19	300	350	250	243	24	692	48	14	51.8
200/B5	5.5	10	19	350	400	300	243	24	692	55	16	59.3
225/B5	5.5	10	19	400	450	350	243	24	692	60	18	64.4
250/B5	5.5	10	19	500	550	450	243	24	692	65	18	69.4
280/B5	5.5	10	19	500	550	450	243	24	692	75	20	79.9

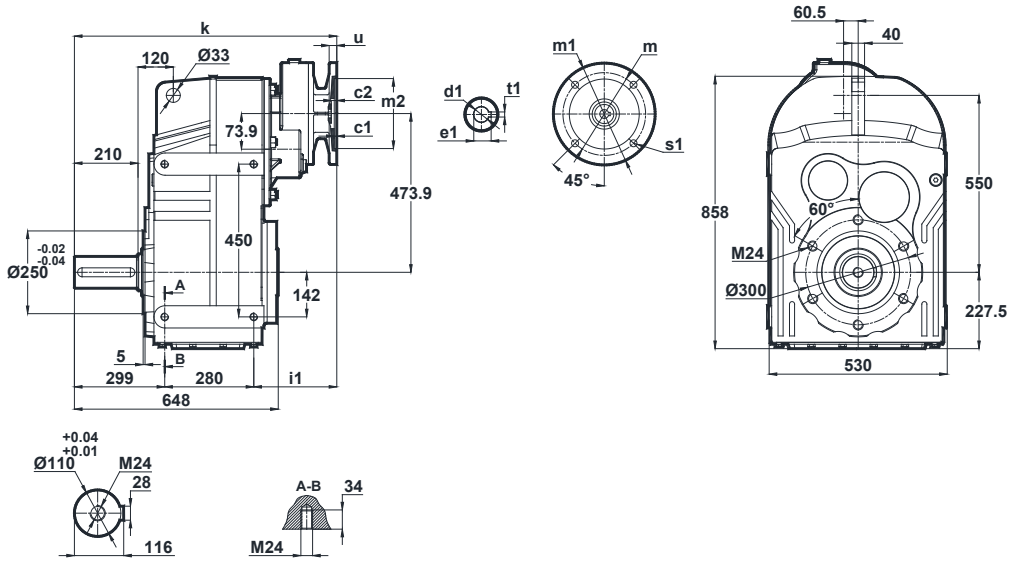
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN874.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	215	15	575	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	236	15	596	38	10	41.3
160/B5	5.5	10	19	300	350	250	312	18	671	42	12	45.3
180/B5	5.5	10	19	300	350	250	312	18	671	48	14	51.8

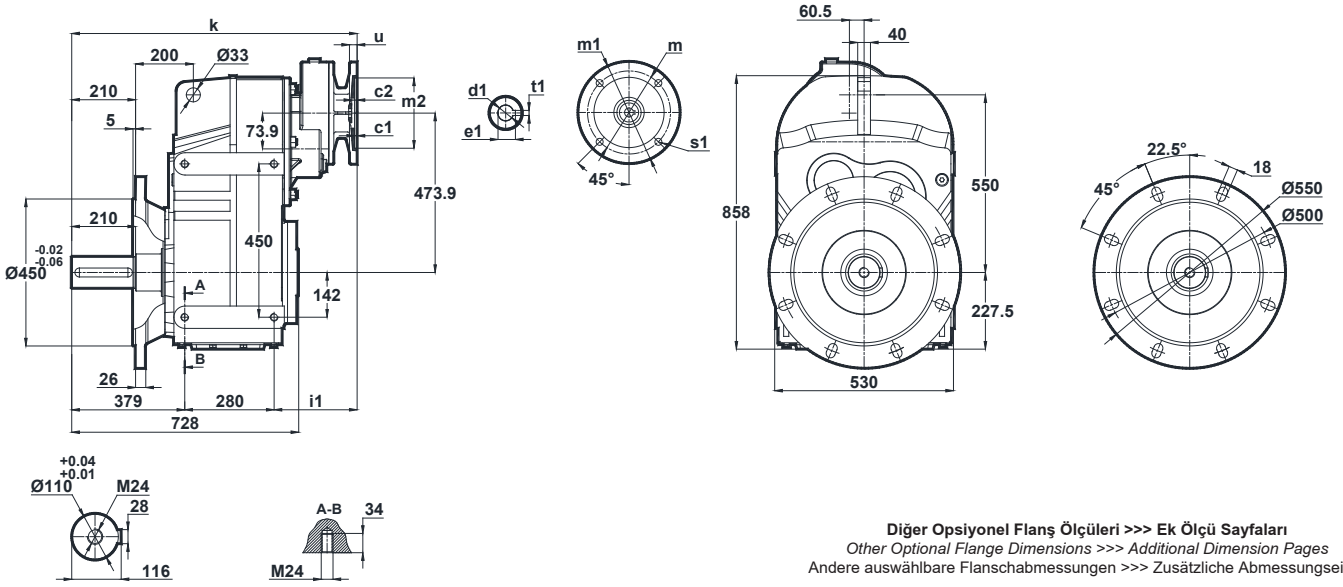
DN874.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	215	15	795	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	236	15	816	38	10	41.3
160/B5	5.5	10	19	300	350	250	312	18	891	42	12	45.3
180/B5	5.5	10	19	300	350	250	312	18	891	48	14	51.8

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

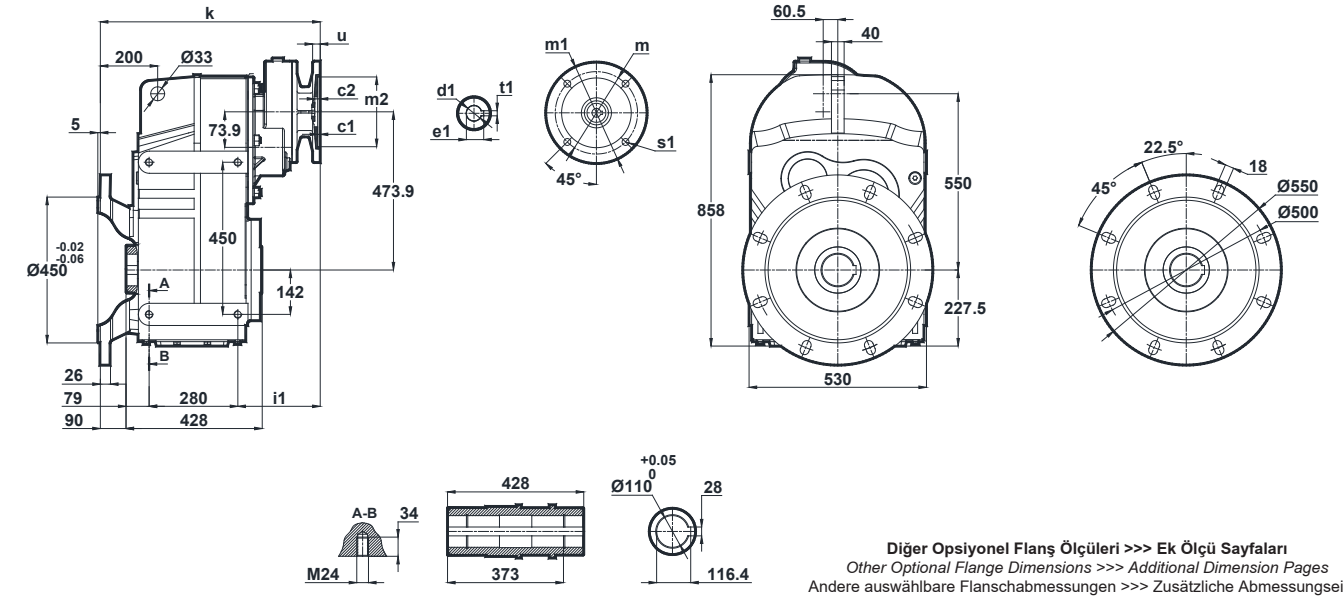
DN874.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	215	15	875	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	236	15	896	38	10	41.3
160/B5	5.5	10	19	300	350	250	312	18	971	42	12	45.3
180/B5	5.5	10	19	300	350	250	312	18	971	48	14	51.8

DN874.03

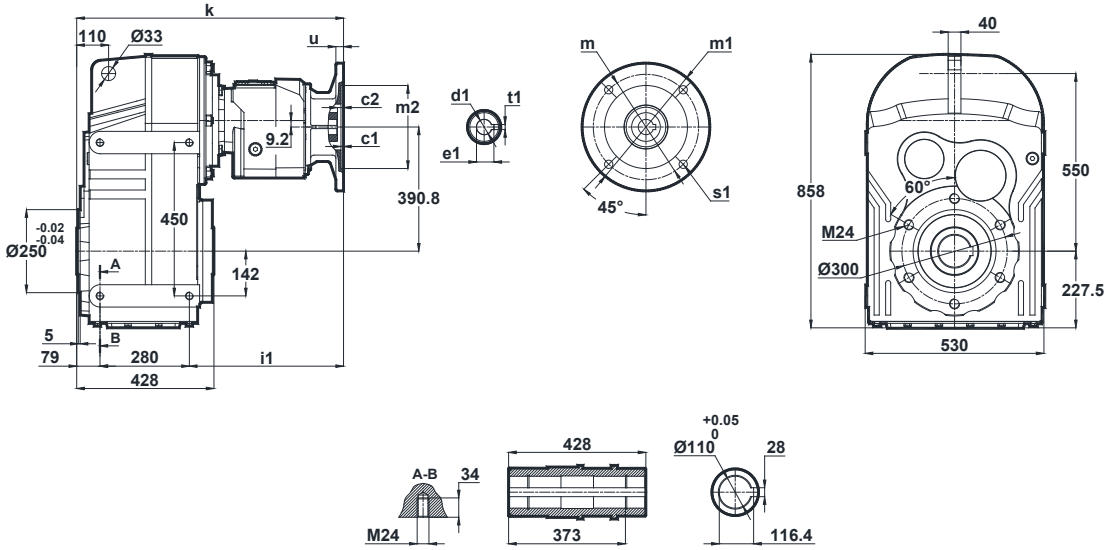


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	9	15	215	250	180	215	15	665	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	236	15	686	38	10	41.3
160/B5	5.5	10	19	300	350	250	312	18	761	42	12	45.3
180/B5	5.5	10	19	300	350	250	312	18	761	48	14	51.8

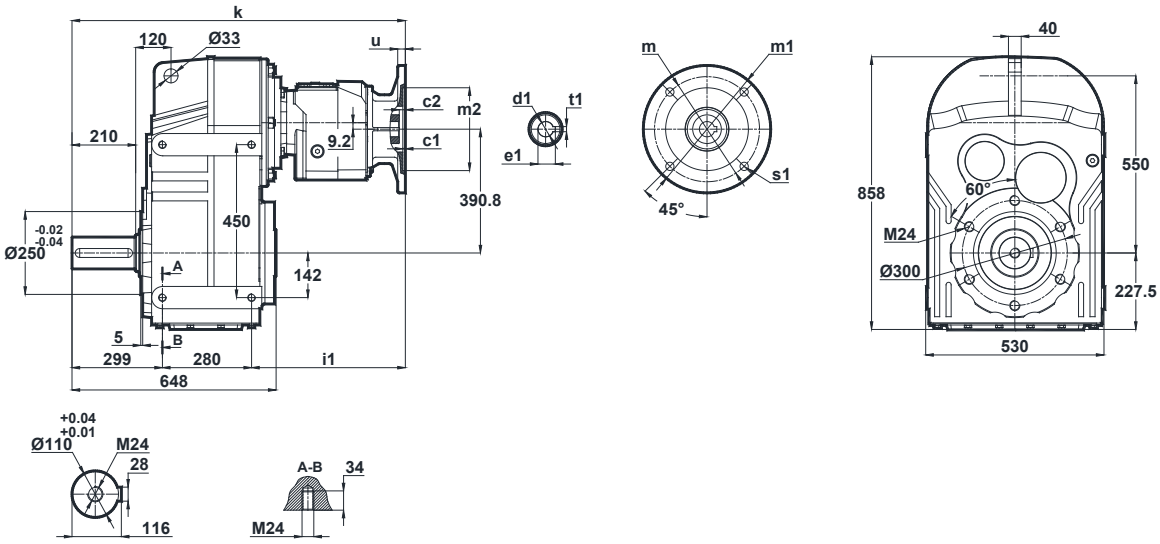
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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 **80/B14**	4	9	12 7	165 100	200 120	130 80	333	12	693	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	333	12	693	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	350	15	710	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	370	15	730	38	10	41.3
160/B5	5.5	10	19	300	350	250	450	20	809	42	12	45.3

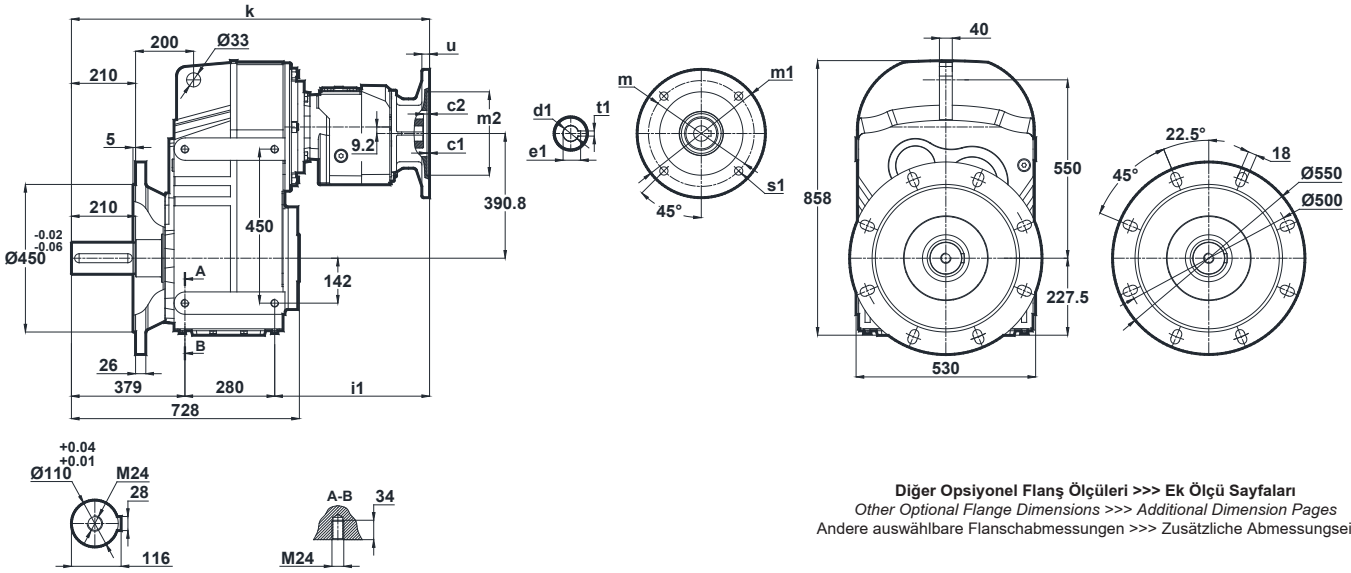
DN875.01
DN876.01



	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 **80/B14**	4	9	12 7	165 100	200 120	130 80	333	12	913	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	333	12	913	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	350	15	930	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	370	15	950	38	10	41.3
160/B5	5.5	10	19	300	350	250	450	20	1029	42	12	45.3

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

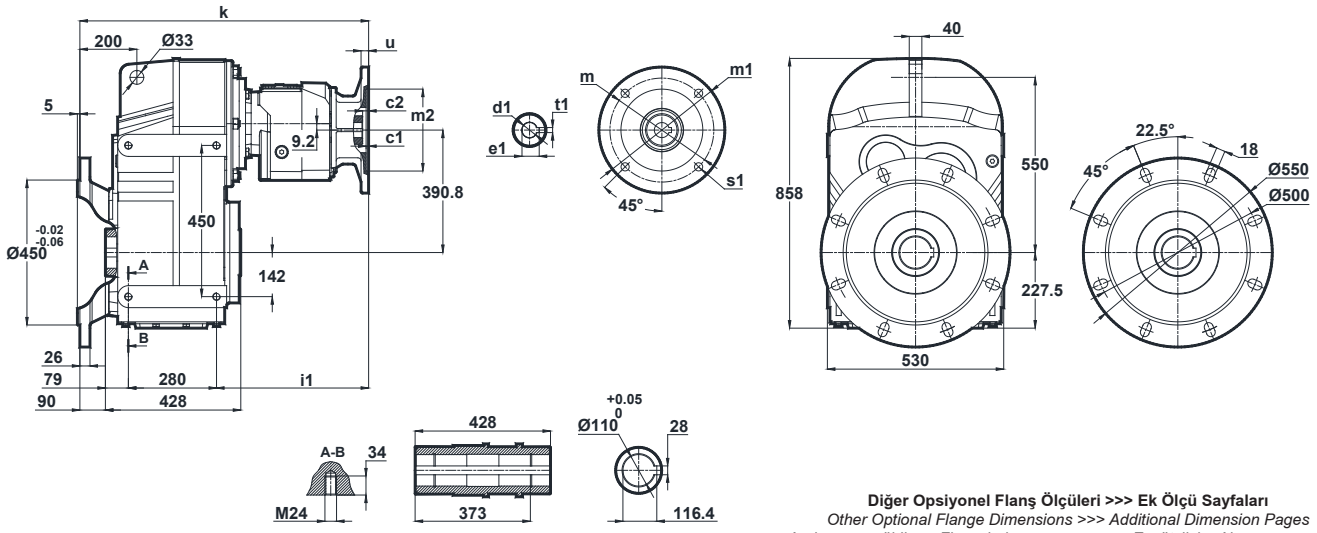
DN875.02
DN876.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

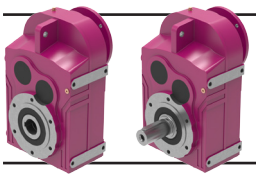
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	993	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	333	12	993	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	333	12	993	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	350	15	1010	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	370	15	1030	38	10	41.3
160/B5	5.5	10	19	300	350	250	450	20	1109	42	12	45.3

DN875.03
DN876.03



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

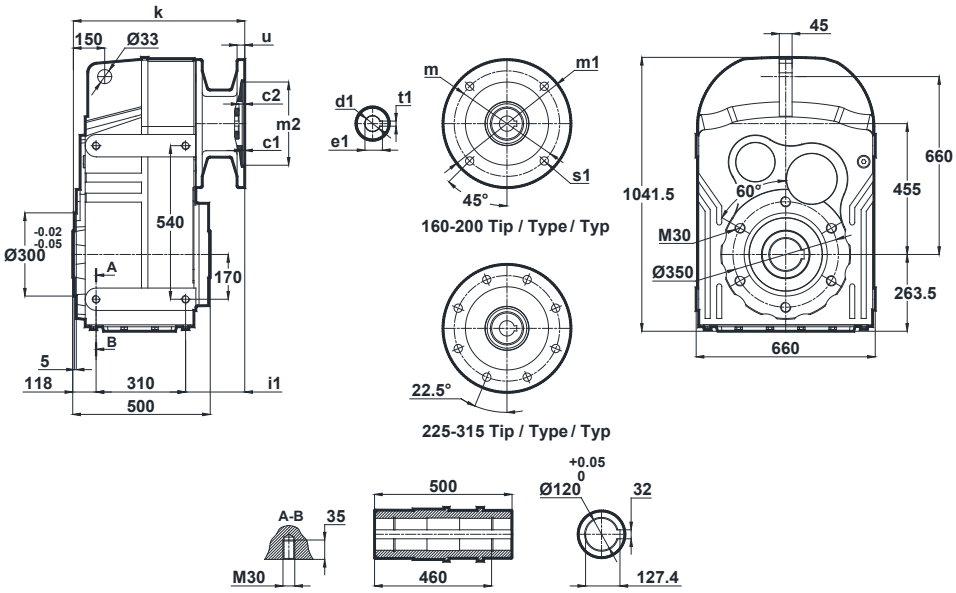
	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	333	12	783	14	5	16.3
80/B5 **80/B14**	4	9	12 7	165 100	200 120	130 80	333	12	783	19	6	21.8
90/B5 **90/B14**	4	9	12 9	165 115	200 140	130 95	333	12	783	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	350	15	800	28	8	31.3
132/B5 **132/B14**	4.5	9	15 11	265 165	300 200	230 130	370	15	820	38	10	41.3
160/B5	5.5	10	19	300	350	250	450	20	899	42	12	45.3



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

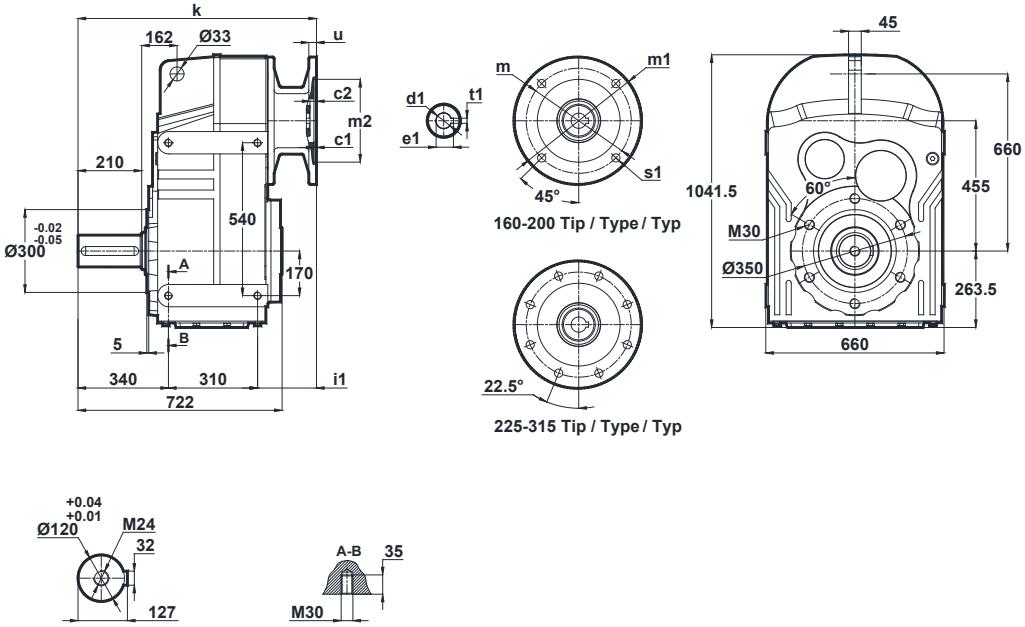
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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	79.9
315M/B5	7	15	24	610	660	550	331	28	759	80	22	85.4
315N/B5	7	15	24	610	660	550	331	28	759	85	22	90.4
315L/B5	7	15	24	610	660	550	331	28	759	90	25	95.4

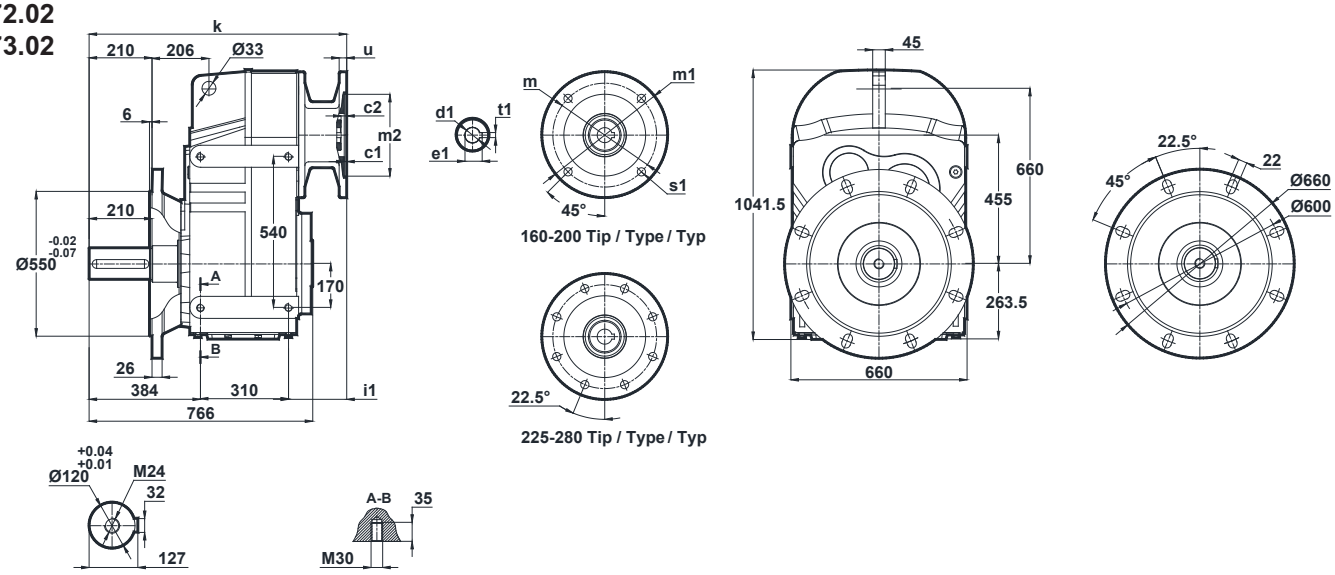
DN972.01
DN973.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
160/B5	5.5	10	19	300	350	350	163	20	813	42	12	45.3
180/B5	5.5	10	19	300	350	350	163	20	813	48	14	51.8
200/B5	5.5	10	19	350	400	400	187	22	837	55	16	59.3
225/B5	5.5	10	19	400	450	450	229	24	879	60	18	64.4
250/B5	5.5	10	19	500	550	550	281	24	931	65	18	69.4
280/B5	5.5	10	19	500	550	550	281	24	931	75	20	79.9
315M/B5	7	15	24	610	660	660	331	28	981	80	22	85.4
315N/B5	7	15	24	610	660	660	331	28	981	85	22	90.4
315L/B5	7	15	24	610	660	660	331	28	981	90	25	95.4

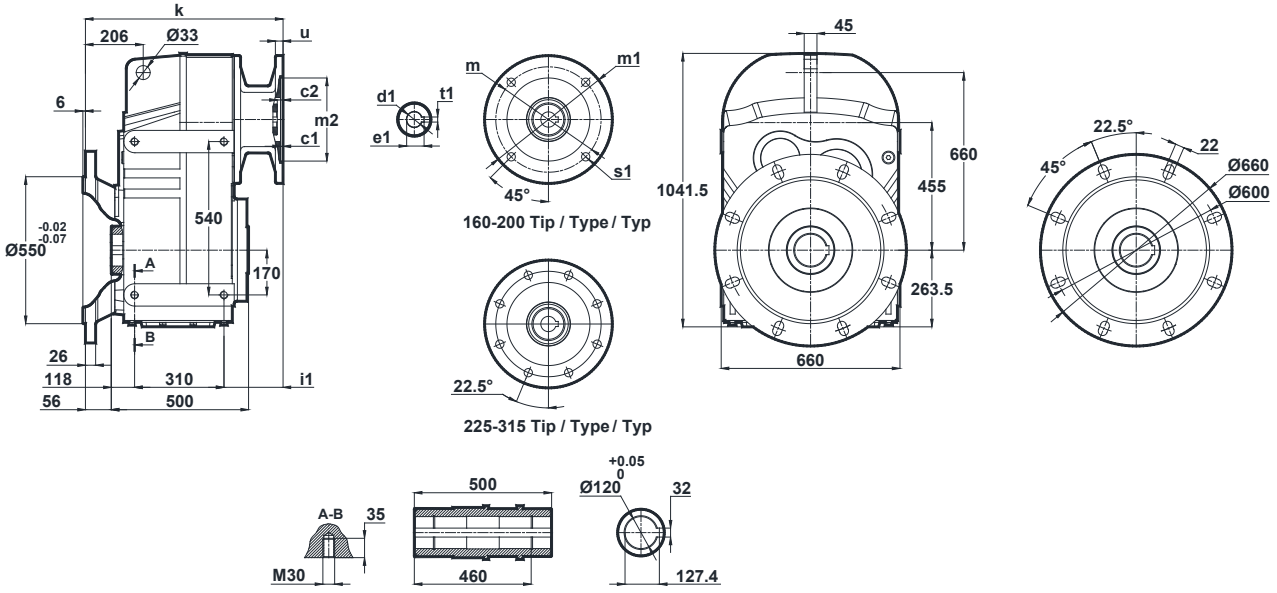
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

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	79.9
315M/B5	7	15	24	610	660	550	331	28	1025	80	22	85.4
315N/B5	7	15	24	610	660	550	331	28	1025	85	22	90.4
315L/B5	7	15	24	610	660	550	331	28	1025	90	25	95.4

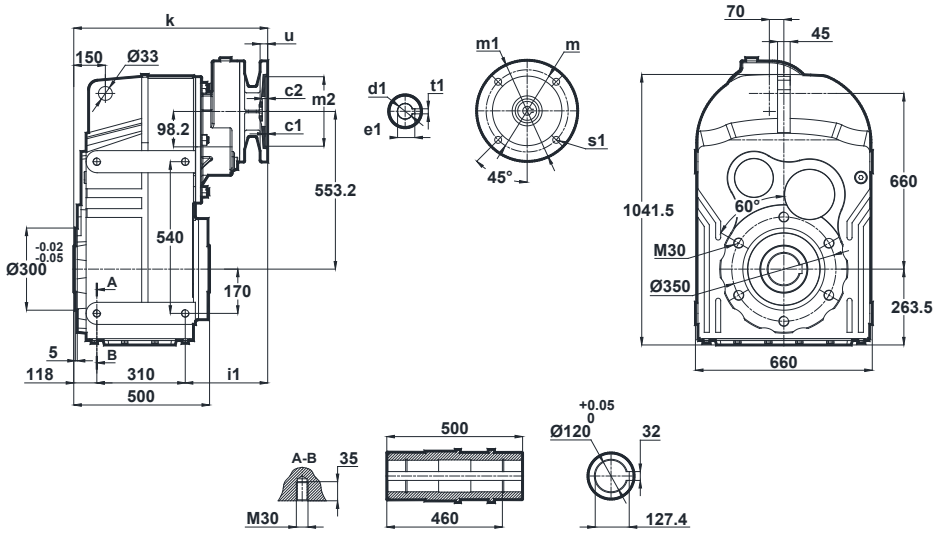
DN972.03
DN973.03



	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	79.9
315M/B5	7	15	24	610	660	550	331	28	815	80	22	85.4
315N/B5	7	15	24	610	660	550	331	28	815	85	22	90.4
315L/B5	7	15	24	610	660	550	331	28	815	90	25	95.4

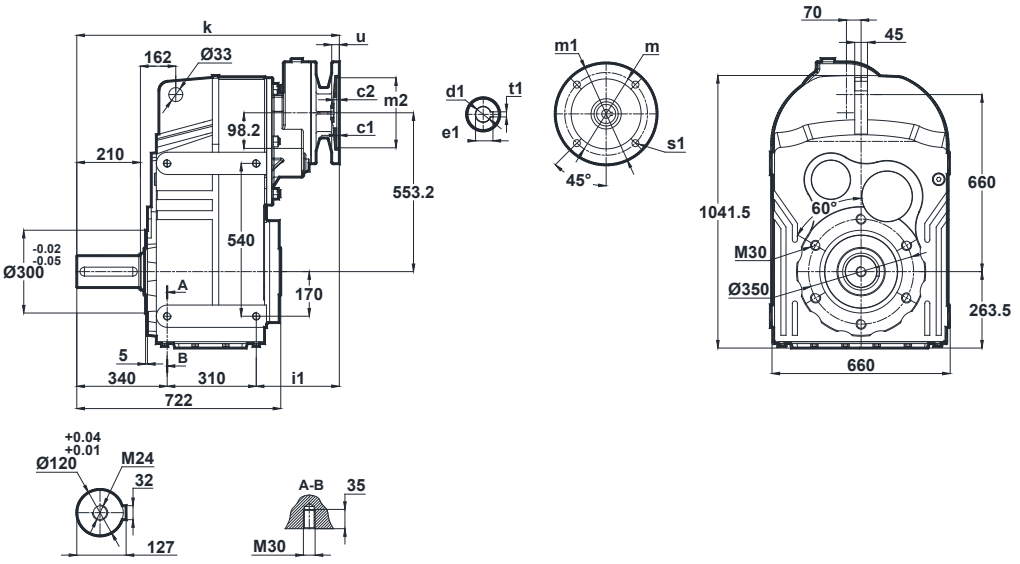
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN974.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	15	215	250	180	252	17.5	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
160/B5	5.5	10	19	300	350	250	342	20	770	42	12	45.3
180/B5	5.5	10	19	300	350	250	342	20	770	48	14	51.8

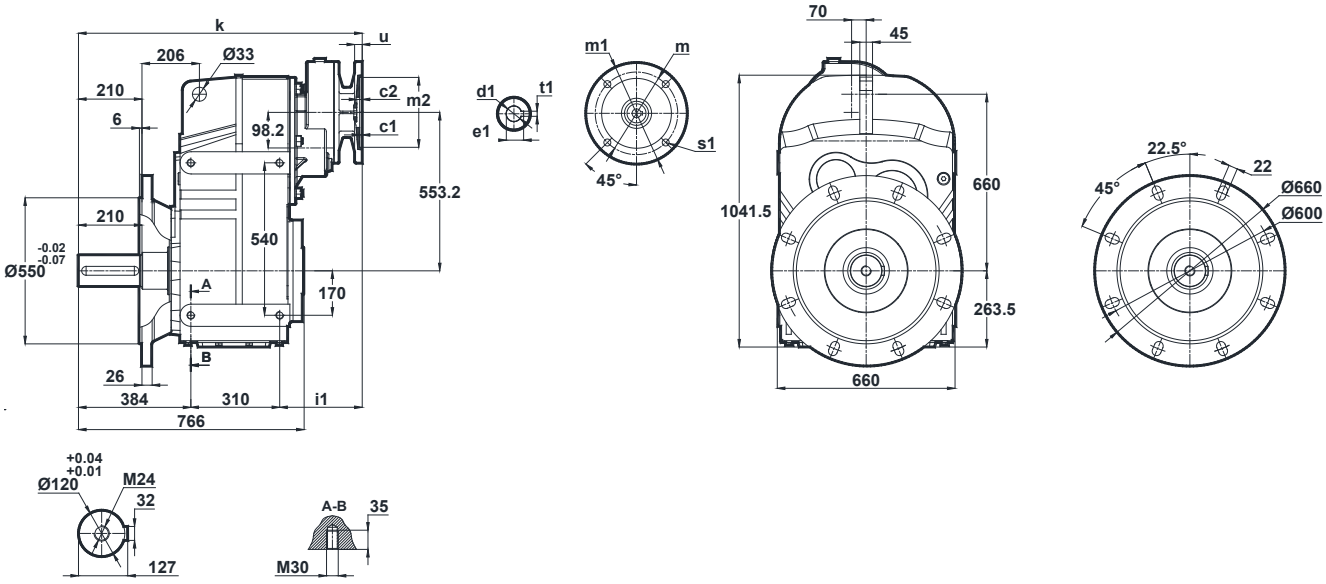
DN974.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	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
160/B5	5.5	10	19	300	350	250	342	20	992	42	12	45.3
180/B5	5.5	10	19	300	350	250	342	20	992	48	14	51.8

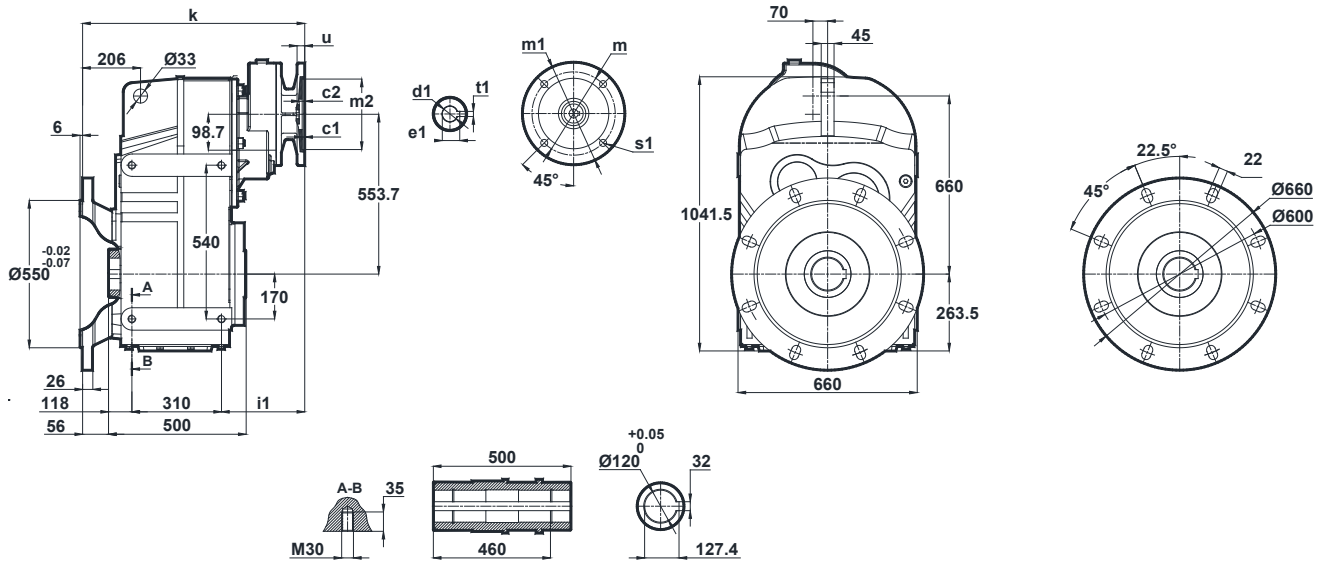
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN974.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	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
160/B5	5.5	10	19	300	350	250	342	20	1036	42	12	45.3
180/B5	5.5	10	19	300	350	250	342	20	1036	48	14	51.8

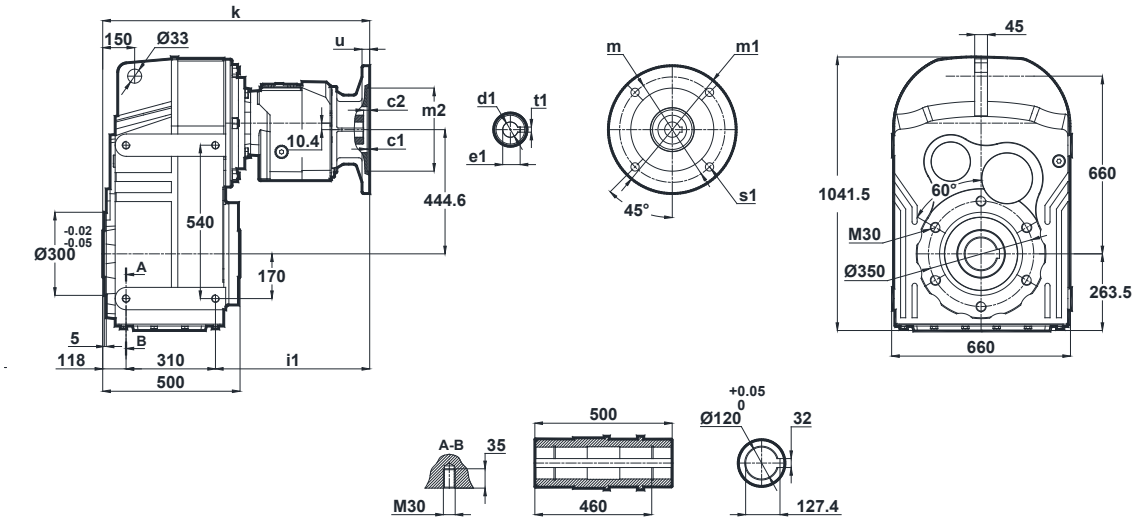
DN974.03



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
100-112/B5	4.5	14.5	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
160/B5	5.5	10	19	300	350	250	342	20	826	42	12	45.3
180/B5	5.5	10	19	300	350	250	342	20	826	48	14	51.8

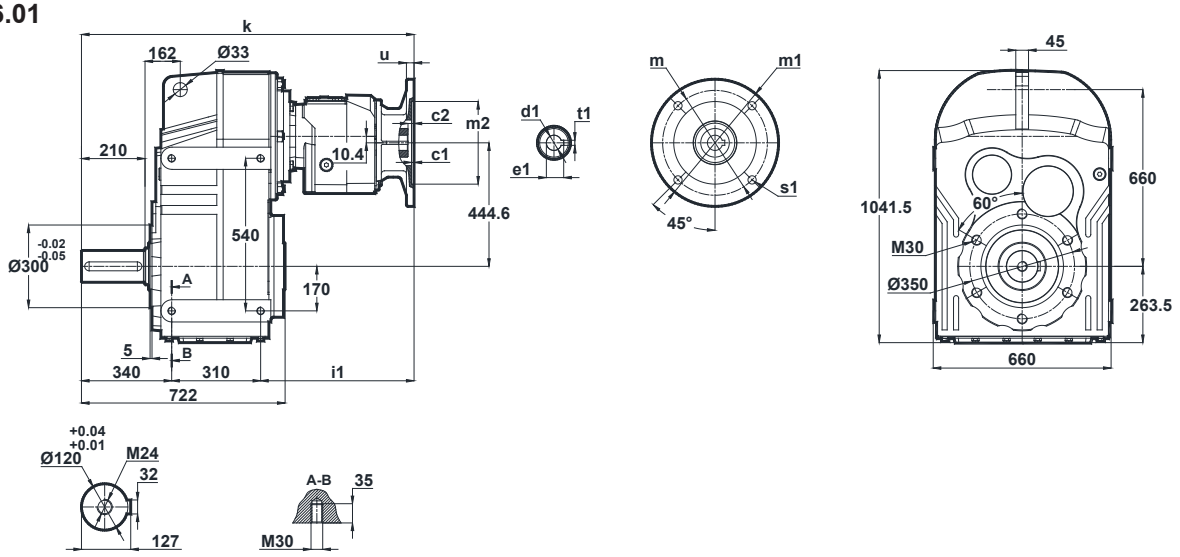
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN975.00
DN976.00



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	388	12	816	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	388	12	816	24	8	27.3
100-112/B5 **100-112/B14**	4.5 4	9	15 9	215 130	250 160	180 110	406	15	834	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	425	15	853	38	10	41.3
160/B5	5.5	10	19	300	350	250	504	20	932	42	12	45.3
180/B5	5.5	10	19	300	350	250	504	20	932	48	14	51.8

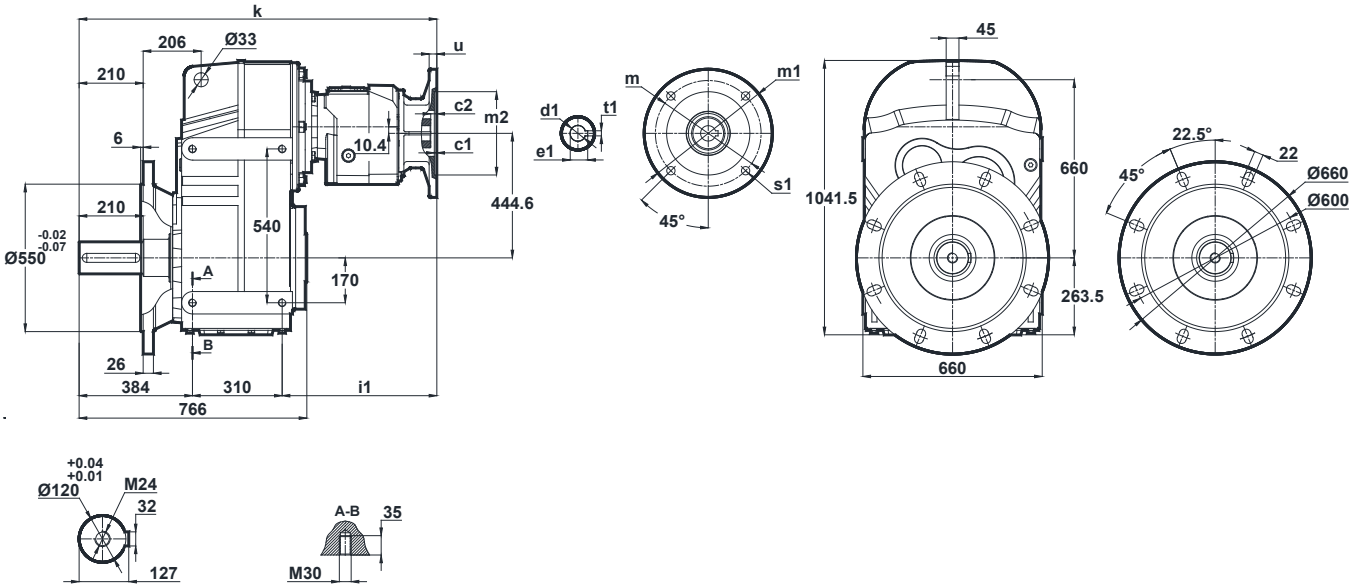
DN975.01
DN976.01



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	388	12	1038	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	388	12	1038	24	8	27.3
100-112/B5 **100-112/B14**	5 4	9	15 9	215 130	250 160	180 110	406	15	1056	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	425	15	1075	38	10	41.3
160/B5	5.5	10	19	300	350	250	504	20	1154	42	12	45.3
180/B5	5.5	10	19	300	350	250	504	20	1154	48	14	51.8

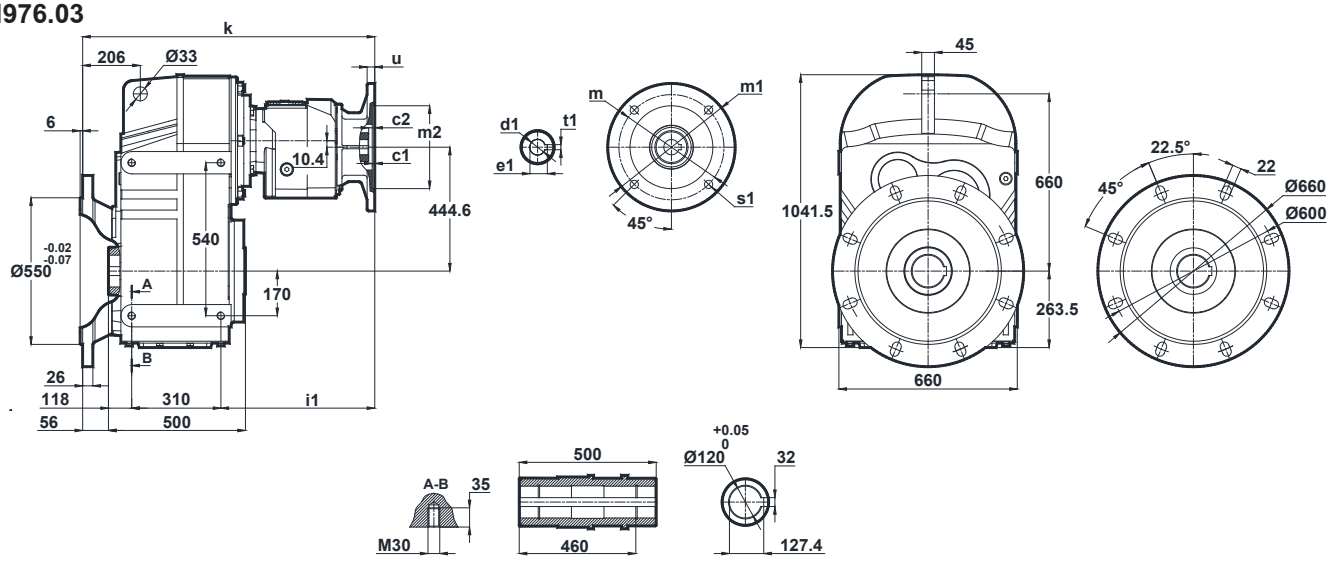
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DN975.02
DN976.02



	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	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
100-112/B5 **100-112/B14**	5 4	9	15 9	215 130	250 160	180 110	406	15	1100	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	425	15	1119	38	10	41.3
160/B5	5.5	10	19	300	350	250	504	20	1198	42	12	45.3
180/B5	5.5	10	19	300	350	250	504	20	1198	48	14	51.8

DN975.03
DN976.03

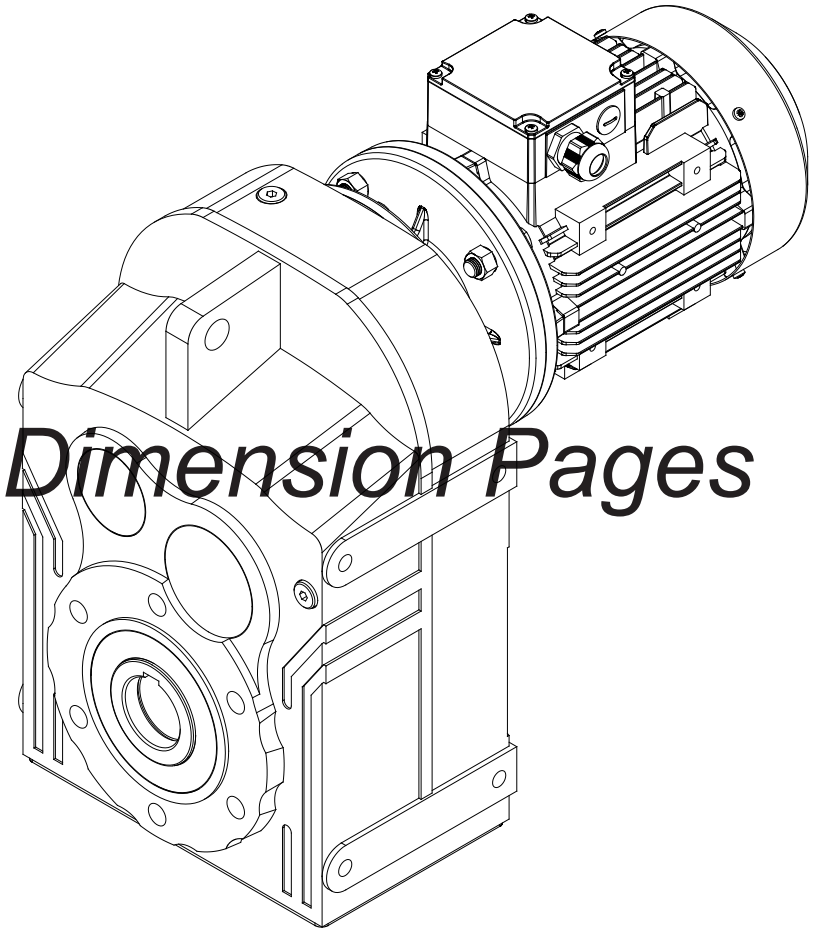


	c1	c2	s1	m	m1	m2(H7)	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	388	12	872	19	6	21.8
90/B5 **90/B14**	4	5	12 9	165 115	200 140	130 95	388	12	872	24	8	27.3
100-112/B5 **100-112/B14**	5 4	9	15 9	215 130	250 160	180 110	406	15	890	28	8	31.3
132/B5 **132/B14**	4.5	6	15 11	265 165	300 200	230 130	425	15	909	38	10	41.3
160/B5	5.5	10	19	300	350	250	504	20	988	42	12	45.3
180/B5	5.5	10	19	300	350	250	504	20	988	48	14	51.8

Notlar / *Notes* / Notizen

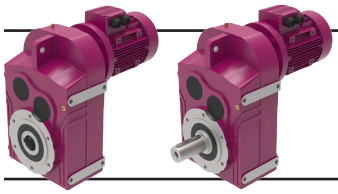
DV Serisi / *Series* / Serie

Ölçü Sayfaları



Dimension Pages

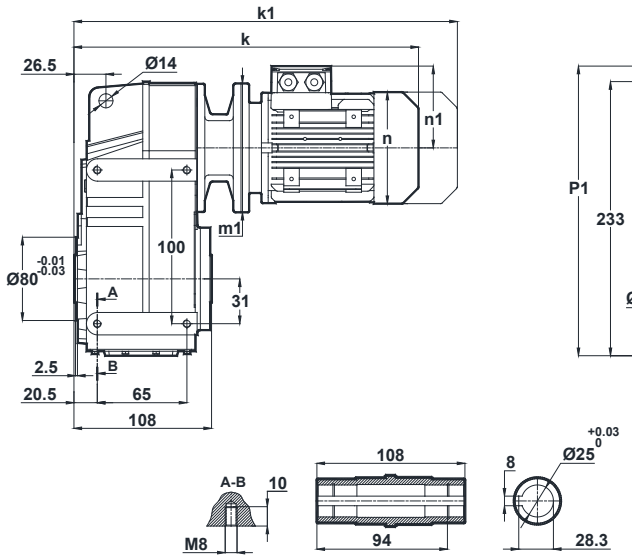
Abmessungsseiten



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

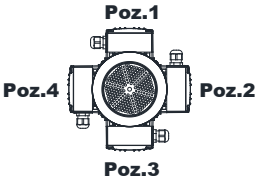
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV072.00
DV073.00



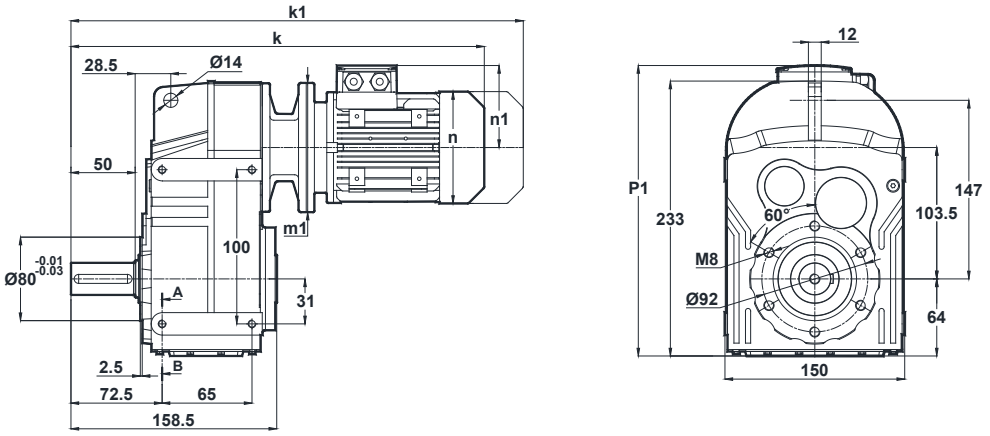
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	335	359	396	437	437	482
k1	406	450	489	516	516	590
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

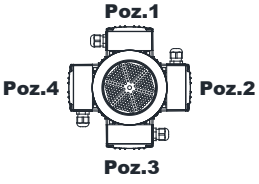
DV072.01
DV073.01





	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	387	411	448	489	489	534
k1	458	502	541	568	568	642
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	269	286	295	304	304	317

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

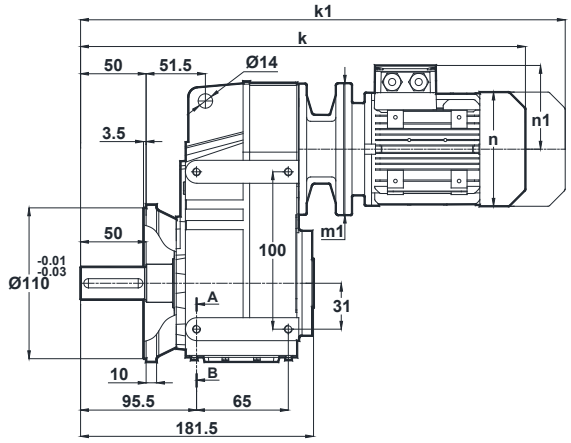


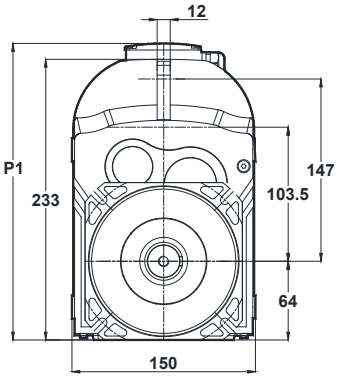
63-71-80-90-100
Tip / *Type* / Typ

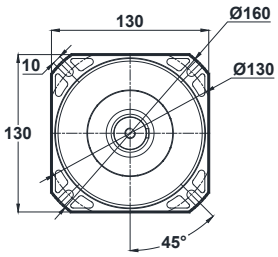
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

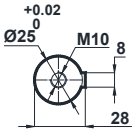
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

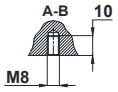
DV072.02
DV073.02



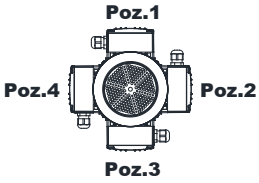






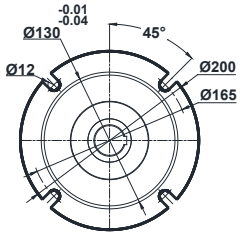


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



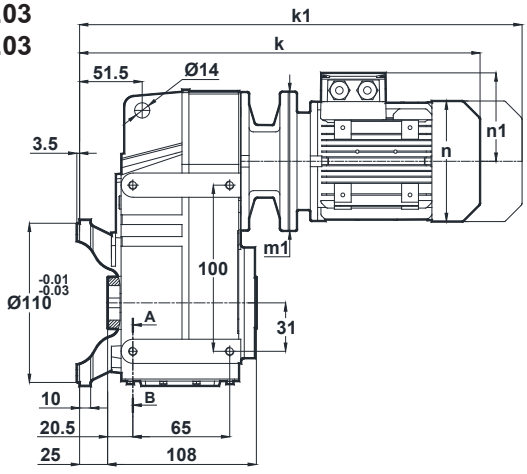
63-71-80-90-100
Tip / *Type* / Typ

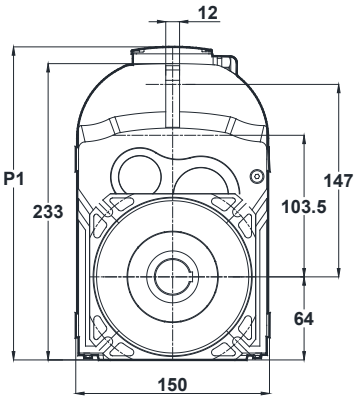
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

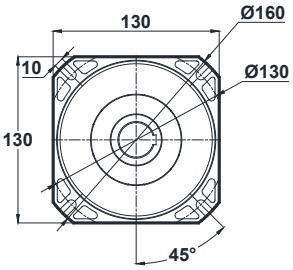


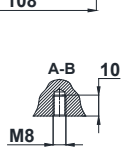
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	410	434	471	512	512	557
k1	481	525	564	591	591	665
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	269	286	295	304	304	317

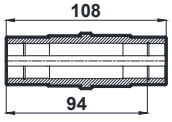
DV072.03
DV073.03

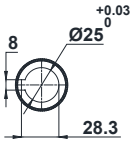




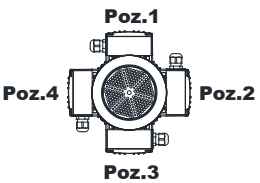






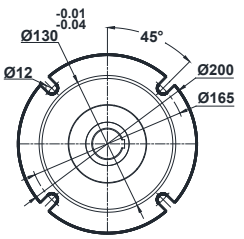


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

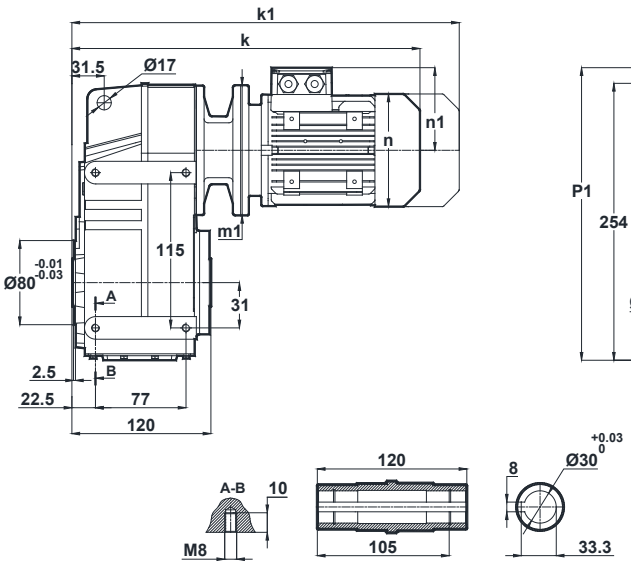


	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	360	384	421	462	462	507
k1	431	475	514	541	541	615
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	269	286	295	304	304	317

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

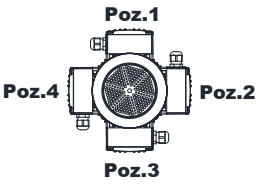
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV172.00
DV173.00



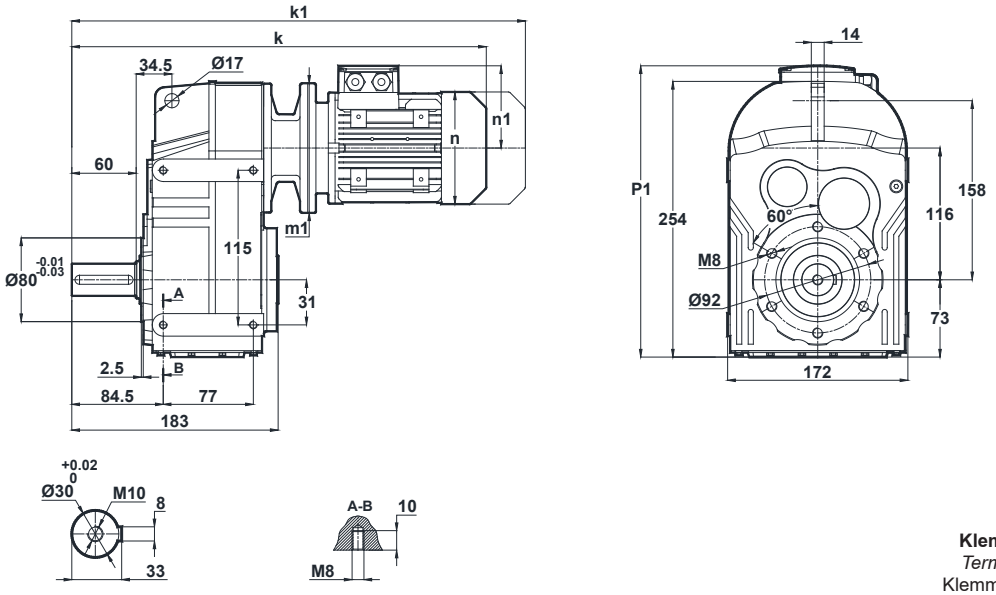
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	344	368	405	446	446	491
k1	415	459	498	525	525	599
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



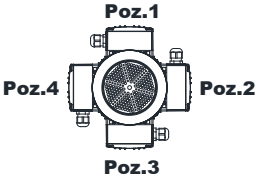
63-71-80-90-100
Tip / *Type* / Typ

DV172.01
DV173.01



	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	407	431	468	509	509	554
k1	478	522	561	588	588	662
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

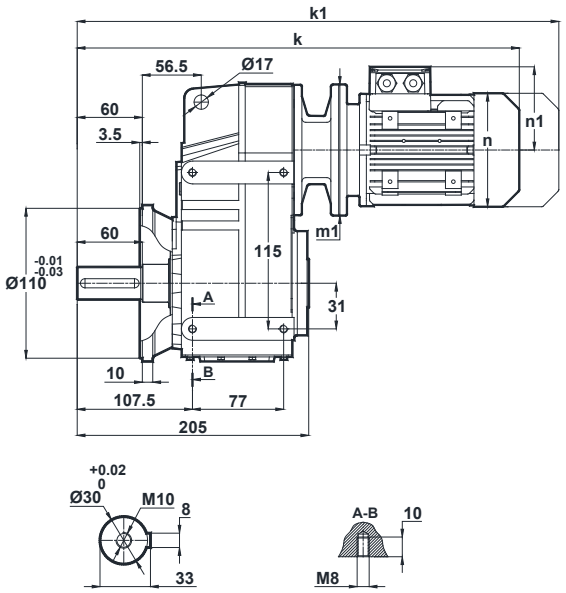


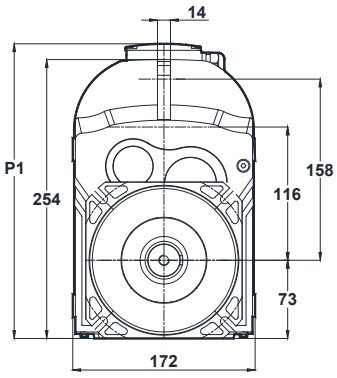
63-71-80-90-100
Tip / *Type* / Typ

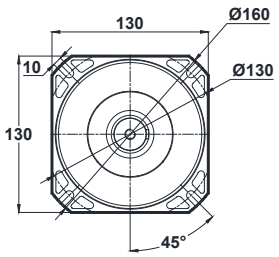
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

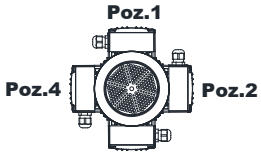






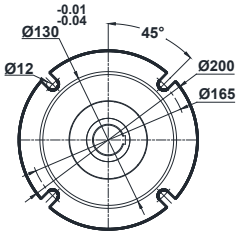
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	429	453	490	531	531	576
k1	500	544	583	610	610	684
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

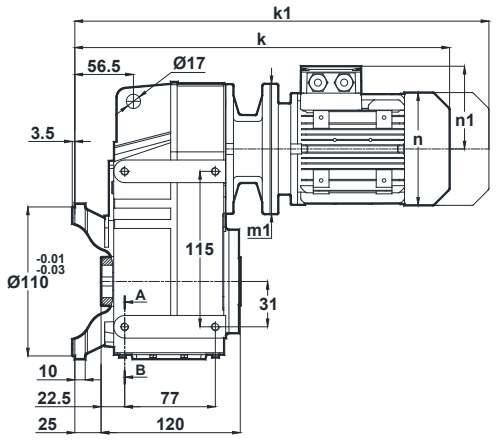


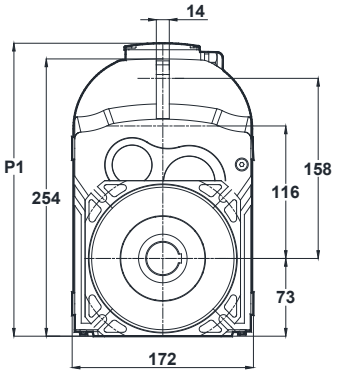
63-71-80-90-100
Tip / *Type* / Typ

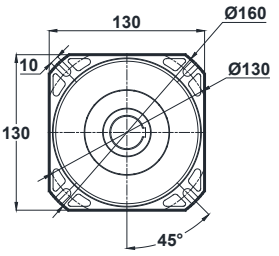
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

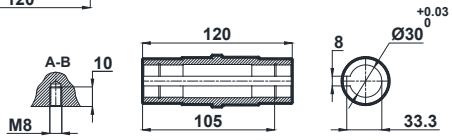


DV172.03
DV173.03



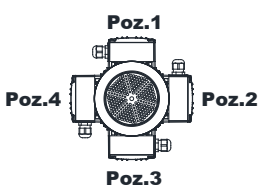






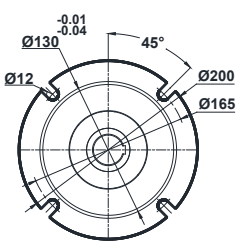
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	369	393	430	471	471	516
k1	440	484	523	550	550	624
n / n1	119/101	137/118	155/127	176/136	176/136	193/149
m1 (B5)	140	160	200	200	200	250
m1 (B14)	90	105	120	140	140	160
P1	293	310	319	328	328	341

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

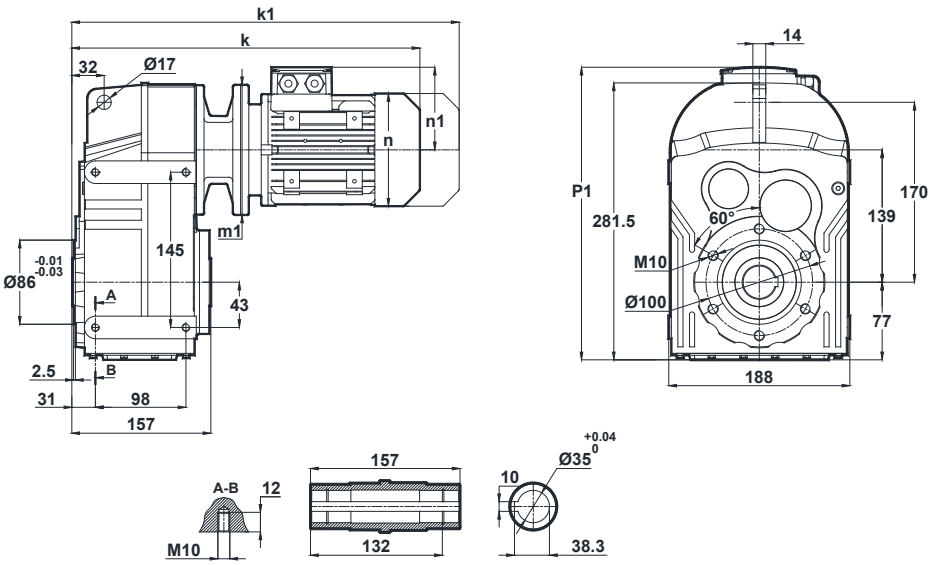
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



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

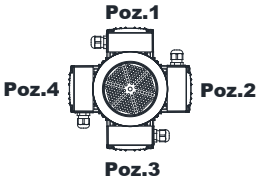
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV272.00
DV273.00



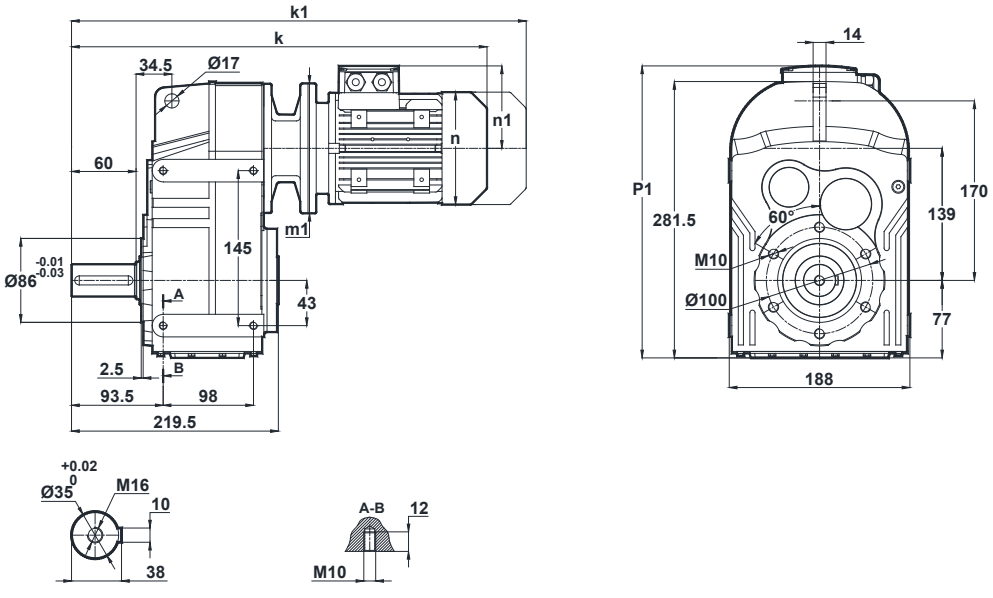
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	374	398	435	476	476	521	544
k1	445	489	528	555	555	629	649
n / n1	119/101	137/118	155/127	176/136	176/136	193/149	215/161
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	90	105	120	140	140	160	160
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



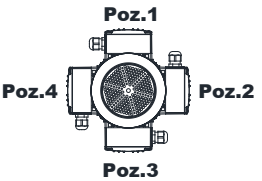
63-71-80-90-100-112
Tip / *Type* / Typ

DV272.01
DV273.01



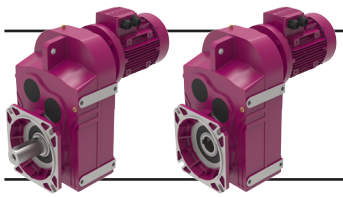
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	436	460	497	538	538	583	606
k1	507	551	590	617	617	691	711
n / n1	119/101	137/118	155/127	176/136	176/136	193/149	215/161
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	90	105	120	140	140	160	160
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112
Tip / *Type* / Typ

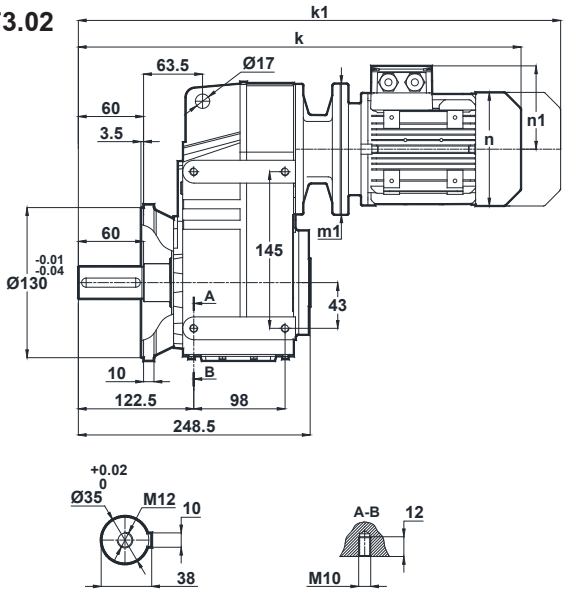
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

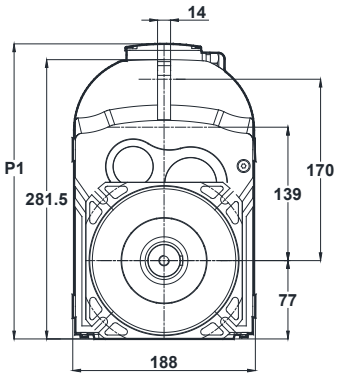


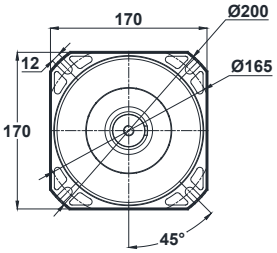
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

DV272.02
DV273.02

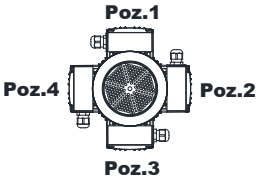






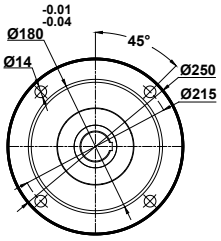
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	465	489	526	567	567	612	635
k1	536	580	619	646	646	720	740
n / n1	119/101	137/118	155/127	176/136	176/136	193/149	215/161
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	90	105	120	140	140	160	160
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

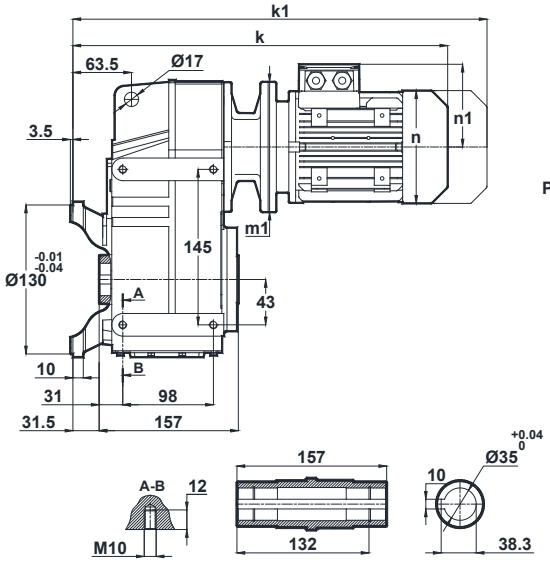


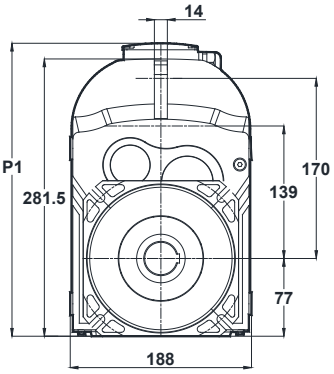
63-71-80-90-100-112
Tip / *Type* / Typ

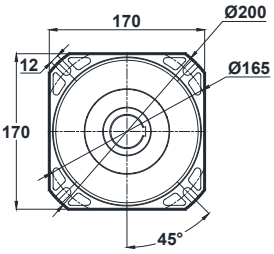
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DV272.03
DV273.03

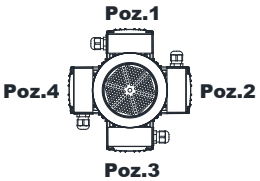






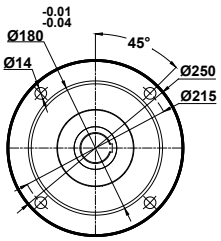
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	405	429	466	507	507	552	575
k1	476	520	559	586	586	660	680
n / n1	119/101	137/118	155/127	176/136	176/136	193/149	215/161
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	90	105	120	140	140	160	160
P1	317	334	343	352	352	365	377

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112
Tip / *Type* / Typ

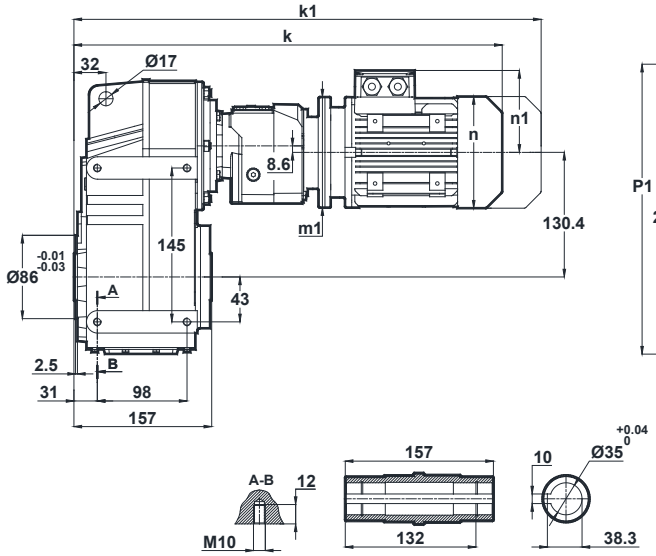
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



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

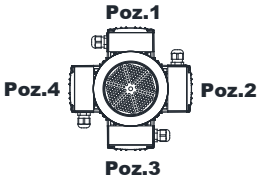
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV275.00
DV276.00



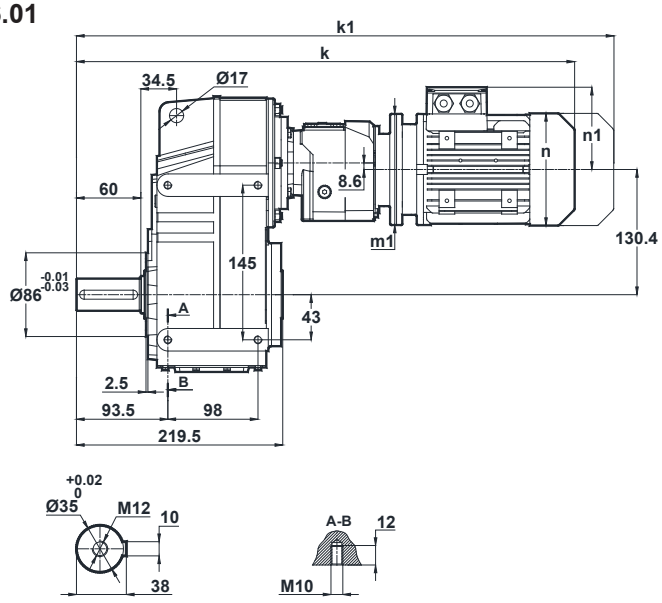
	63/B5 63/B14	71/B5 71/B14
k	523	547
k1	594	638
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



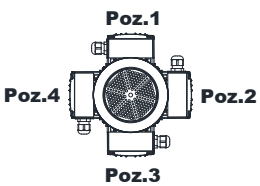
63-71
Tip / *Type* / Typ

DV275.01
DV276.01



	63/B5 63/B14	71/B5 71/B14
k	585	609
k1	656	700
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

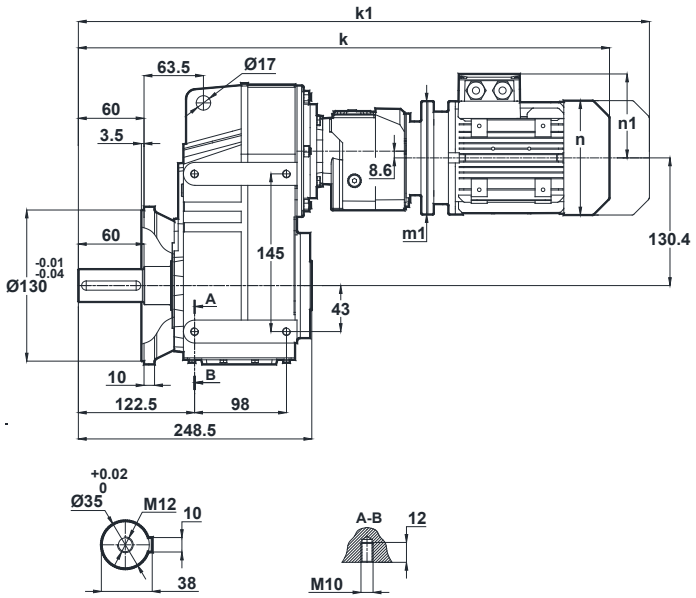


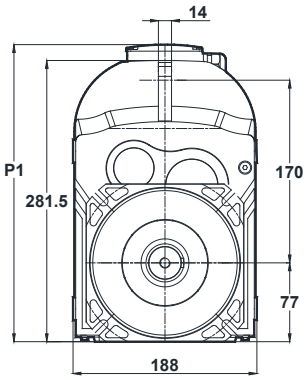
63-71
Tip / *Type* / Typ

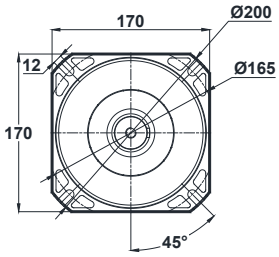
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

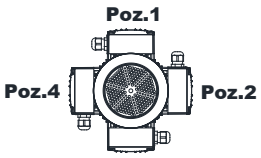






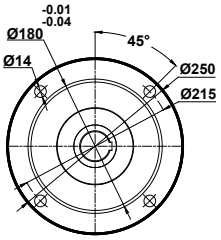
	63/B5 63/B14	71/B5 71/B14
k	614	638
k1	685	729
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

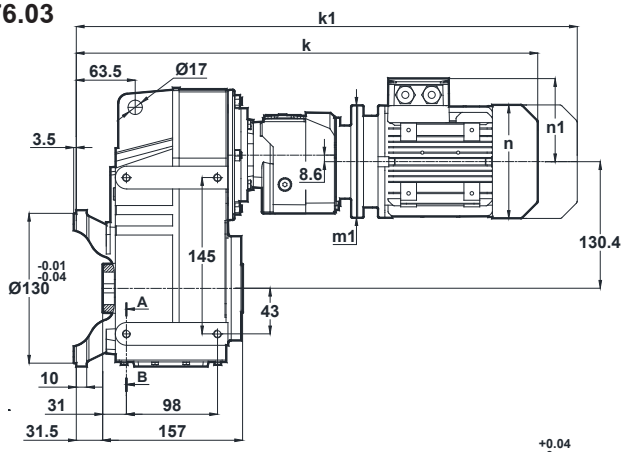


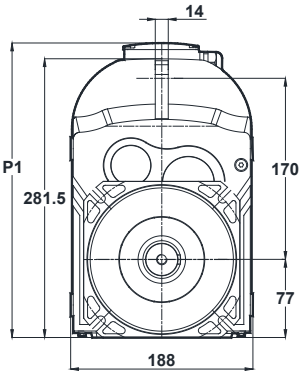
63-71
Tip / *Type* / Typ

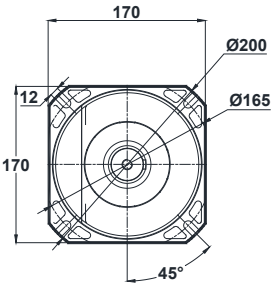
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

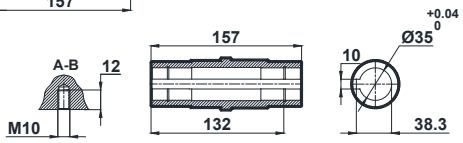


DV275.03
DV276.03



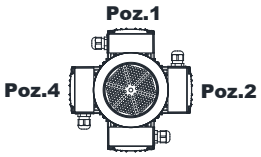






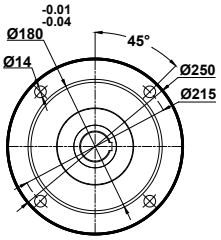
	63/B5 63/B14	71/B5 71/B14
k	554	578
k1	625	669
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	309	326

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

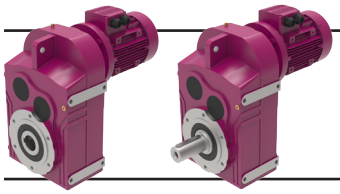


63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



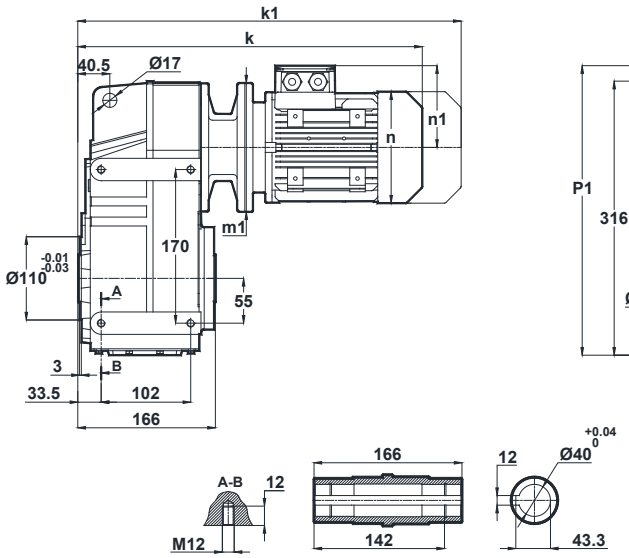
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

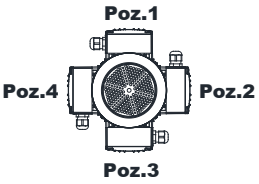
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV282.00
DV283.00



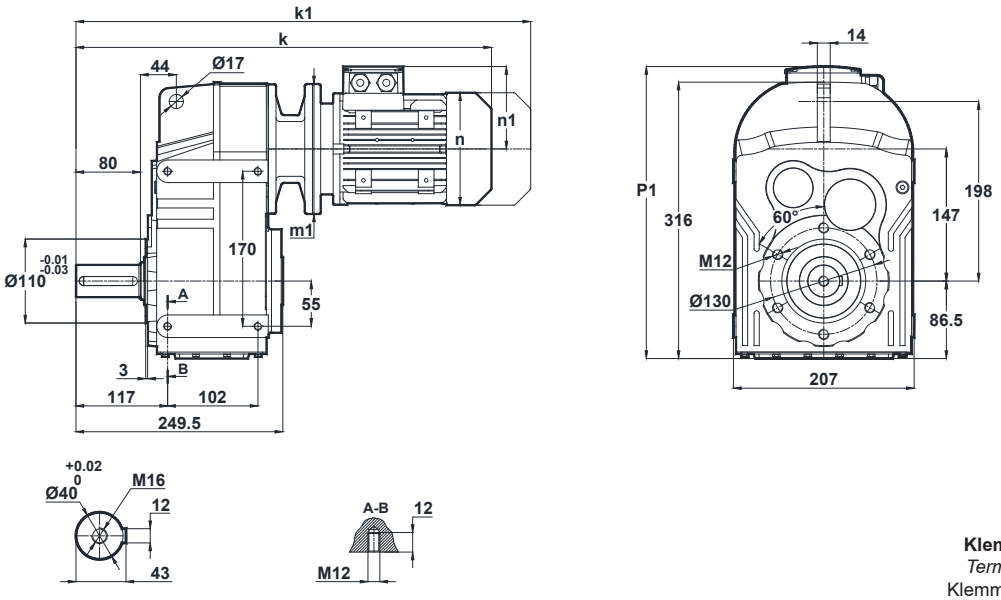
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	406	457	498	498	525	548	674	674
k1	497	550	577	577	633	653	804	804
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



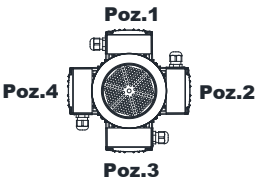
71-80-90-100-112-132
Tip / *Type* / Typ

DV282.01
DV283.01



	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	490	541	582	582	609	632	758	758
k1	581	634	661	661	717	737	888	888
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

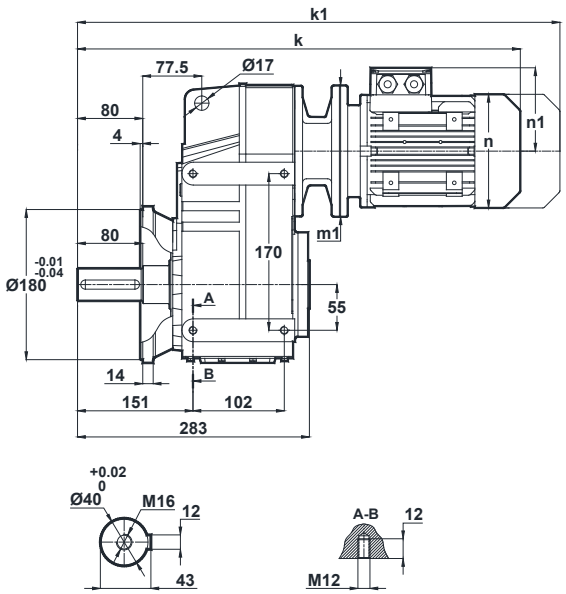


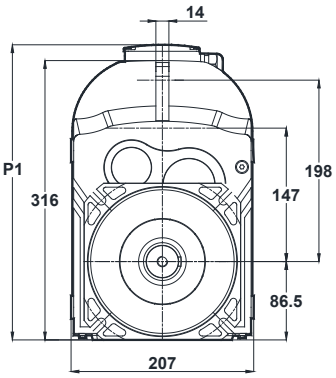
71-80-90-100-112-132
Tip / *Type* / Typ

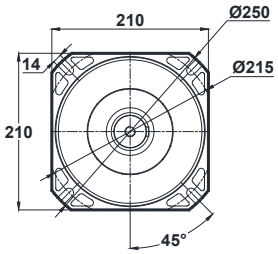
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

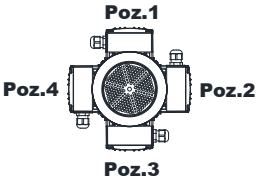






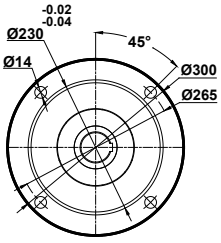
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	523	574	615	615	642	665	791	791
k1	614	667	694	694	750	770	921	921
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



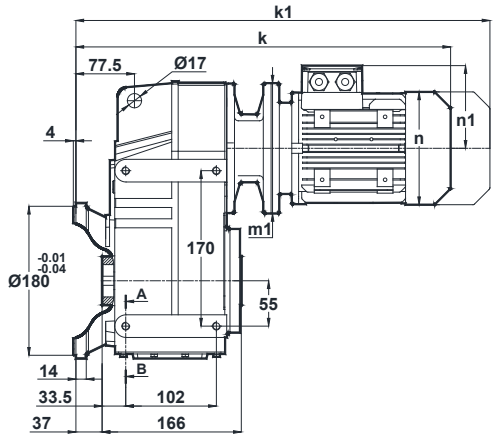
71-80-90-100-112-132
Tip / *Type* / Typ

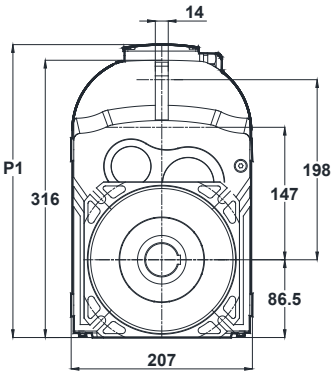
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

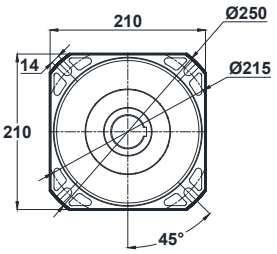


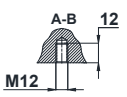
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

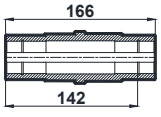
DV282.03
DV283.03

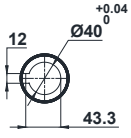






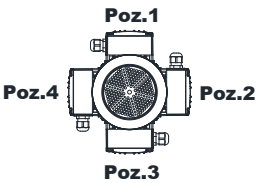






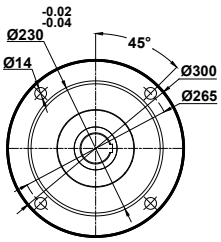
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	443	494	535	535	562	585	711	711
k1	534	587	614	614	670	690	841	841
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	352	361	370	370	383	395	416	416

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

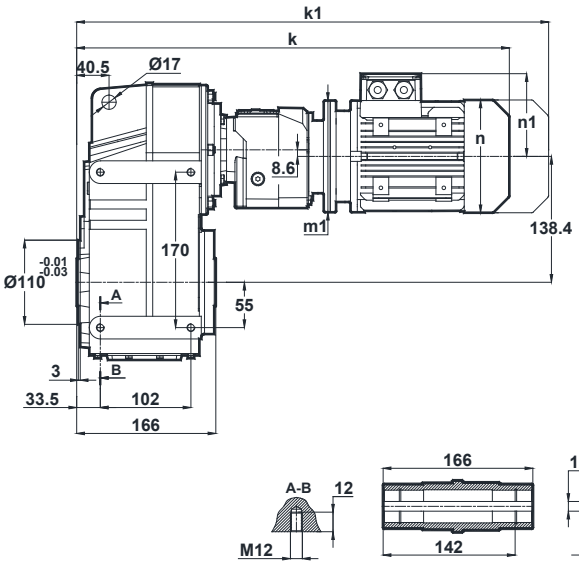


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

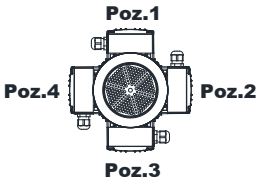
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV285.00
DV286.00



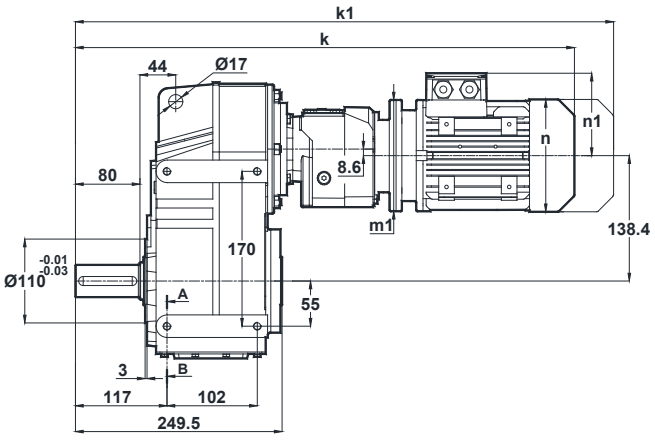
	63/B5 63/B14	71/B5 71/B14
k	528	552
k1	599	643
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	327	344

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



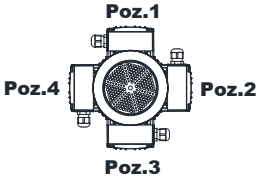
63-71
Tip / *Type* / Typ

DV285.01
DV286.01



	63/B5 63/B14	71/B5 71/B14
k	612	636
k1	683	727
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	327	344

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

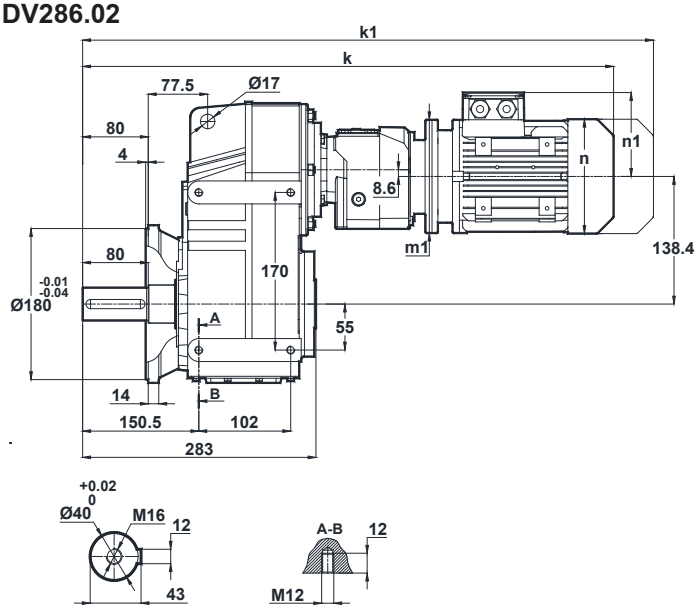


63-71
Tip / *Type* / Typ

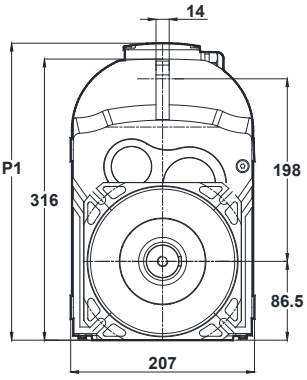
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

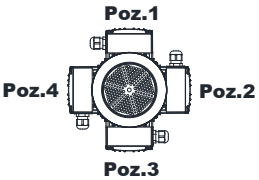
DV285.02
DV286.02



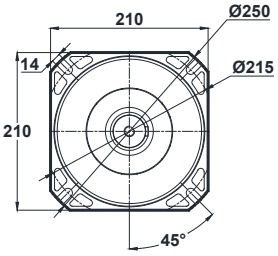
	63/B5 63/B14	71/B5 71/B14
k	645	669
k1	716	760
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	327	344



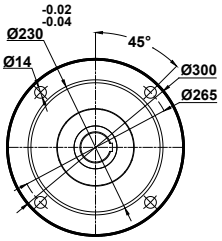
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

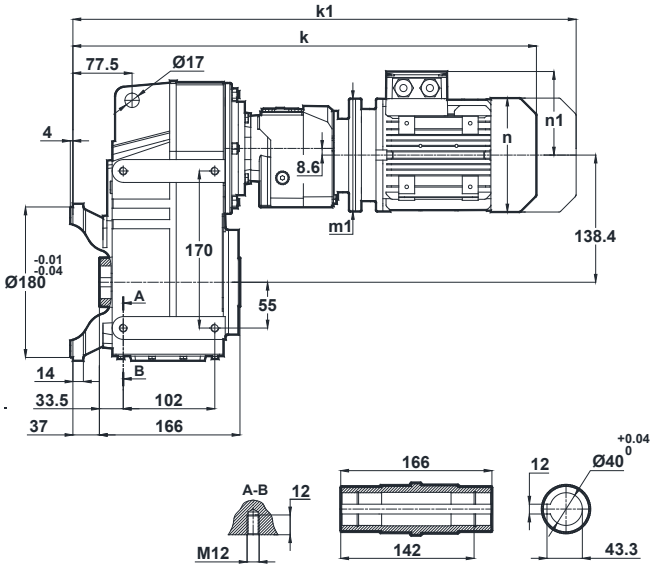


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

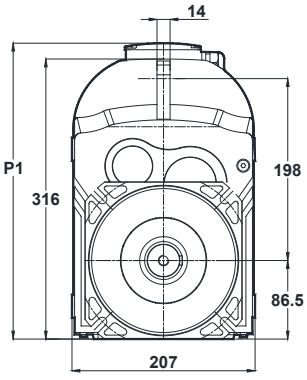


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

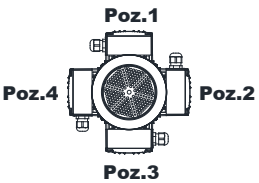
DV285.03
DV286.03



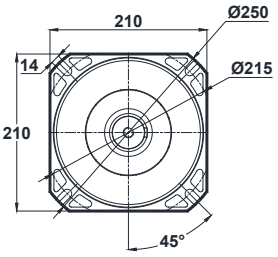
	63/B5 63/B14	71/B5 71/B14
k	565	589
k1	636	680
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	327	344



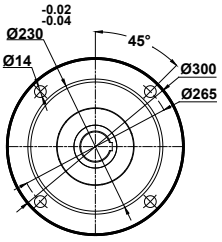
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71
Tip / *Type* / Typ

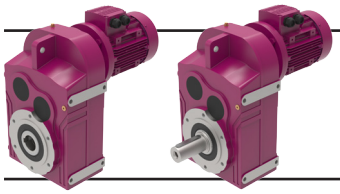


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

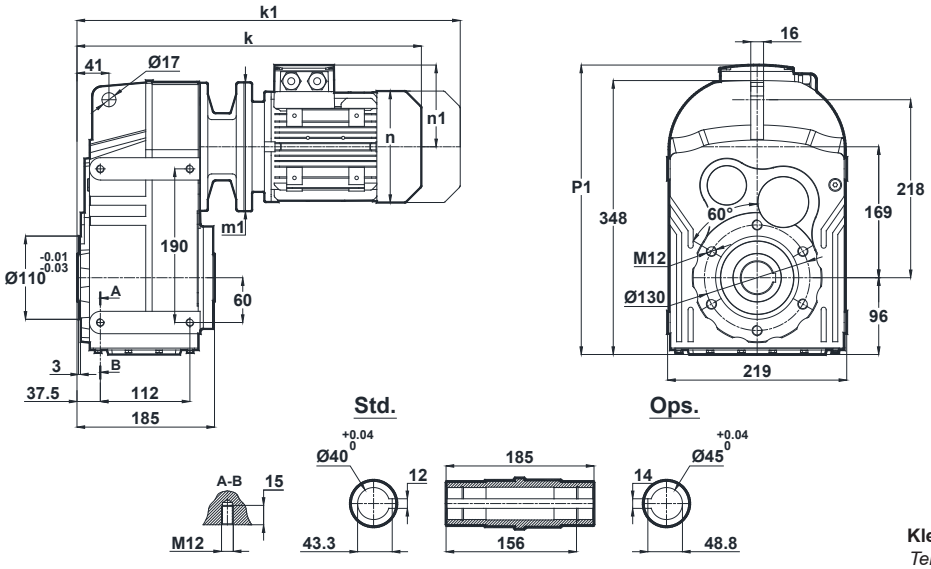
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

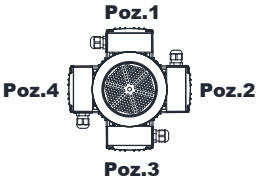
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV372.00
DV373.00



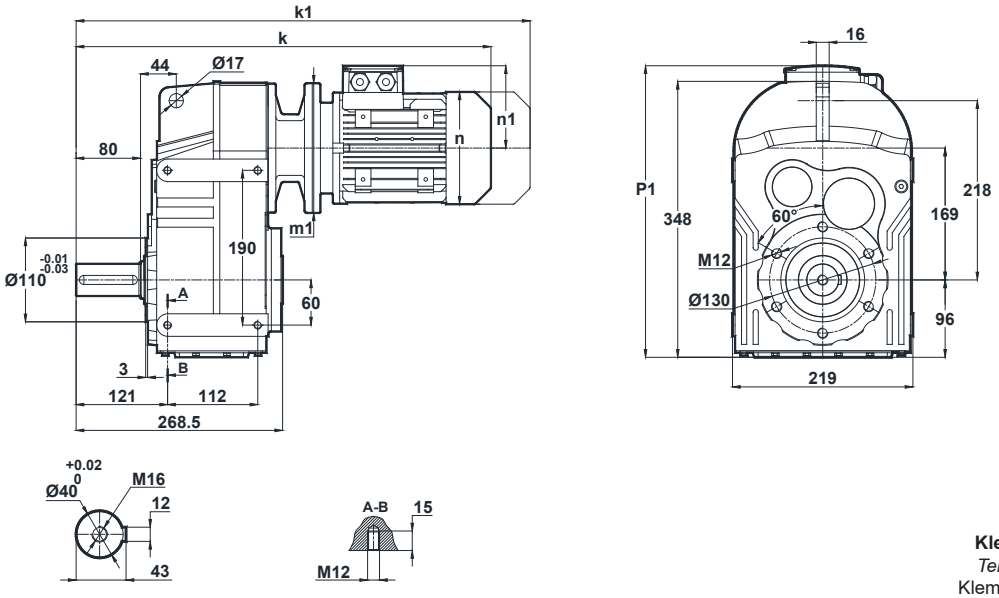
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	417	468	509	509	536	559	685	685
k1	508	561	588	588	644	664	815	815
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	383	392	401	401	414	426	447	447

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



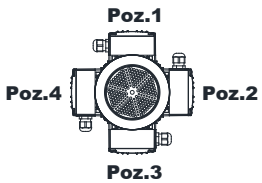
71-80-90-100-112-132
Tip / *Type* / Typ

DV372.01
DV373.01



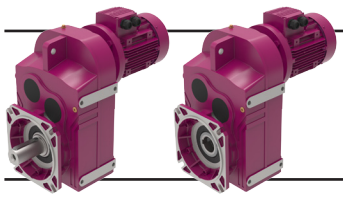
	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	500	551	592	592	619	642	768	768
k1	591	644	671	671	727	747	898	898
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	383	392	401	401	414	426	447	447

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

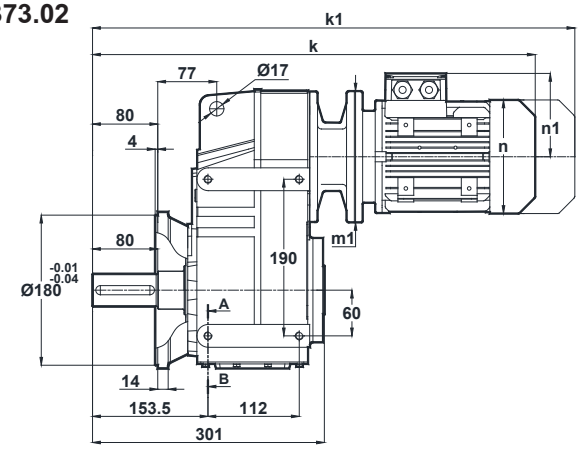
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

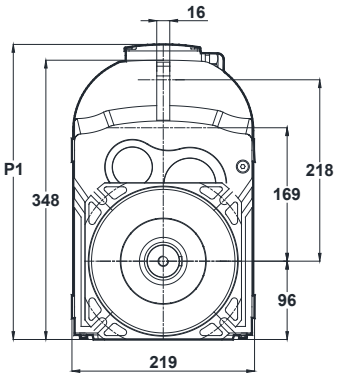


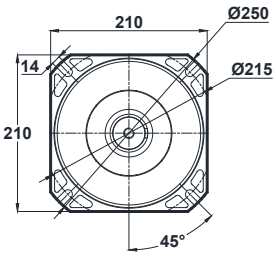
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

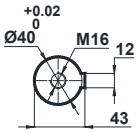
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

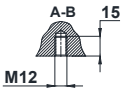
DV372.02
DV373.02



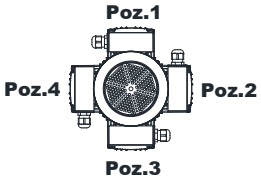






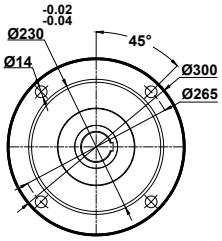


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

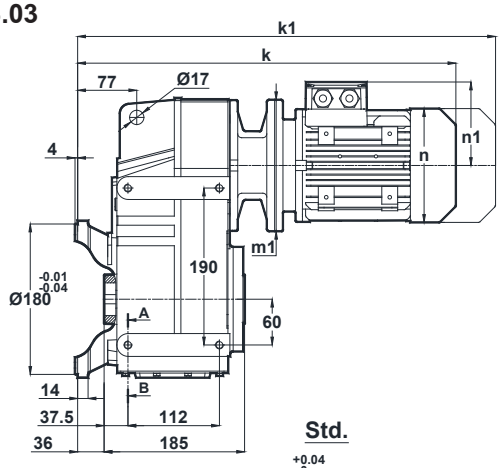
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

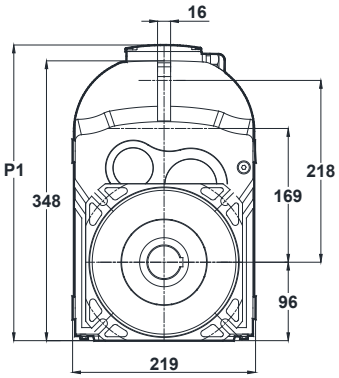


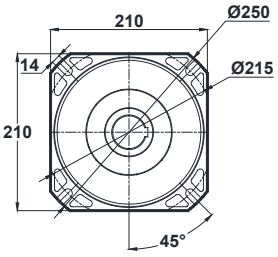
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	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	533	584	625	625	652	675	801	801
k1	624	677	704	704	760	780	931	931
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	383	392	401	401	414	426	447	447

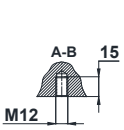
DV372.03
DV373.03

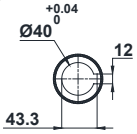


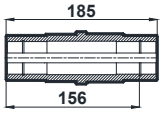




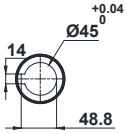
Std.



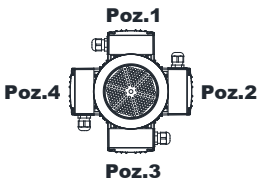




Ops.

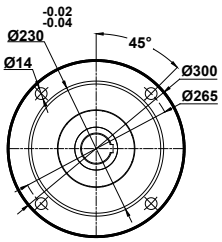


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132
Tip / *Type* / Typ

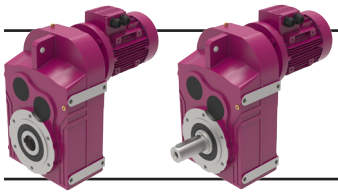
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	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	453	504	545	545	572	595	721	721
k1	544	597	624	624	680	700	851	851
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	105	120	140	140	160	160	200	200
P1	383	392	401	401	414	426	447	447

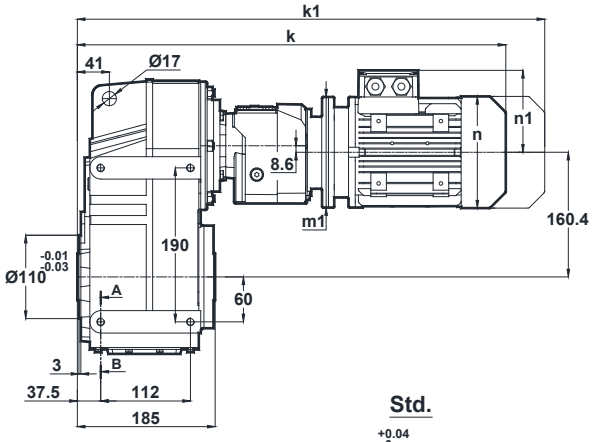
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

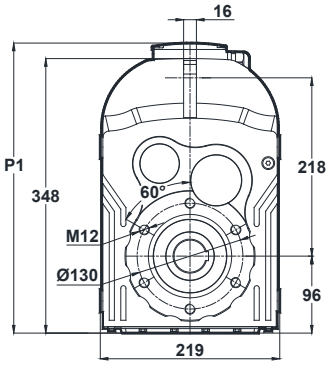


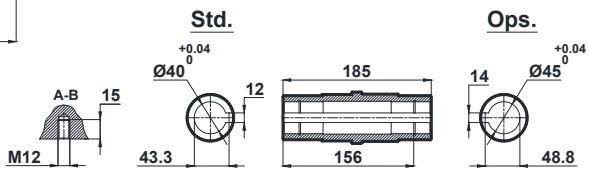
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

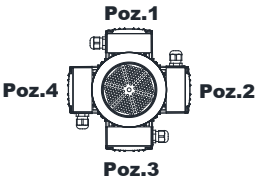






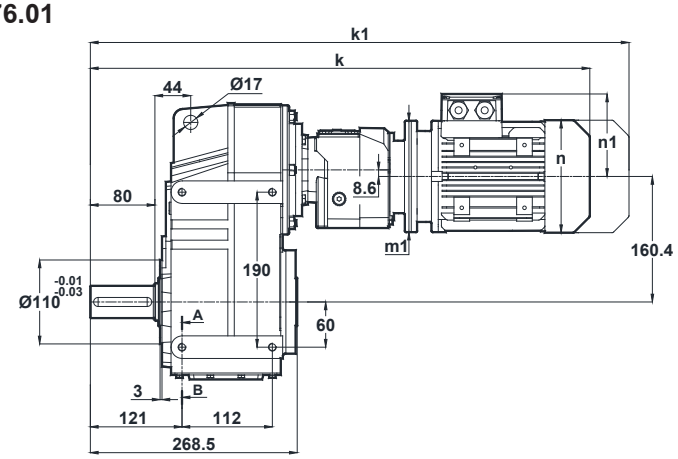
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	539	563	600
k1	610	654	693
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	90	105	120
P1	358	375	384

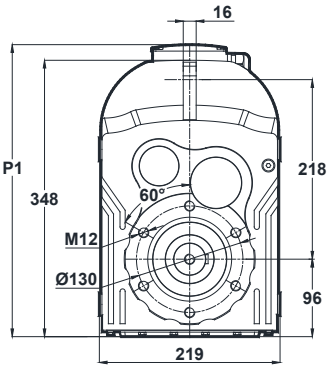
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

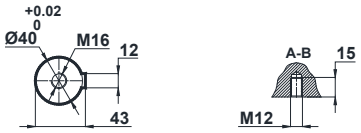


63-71-80
Tip / *Type* / Typ

DV375.01
DV376.01

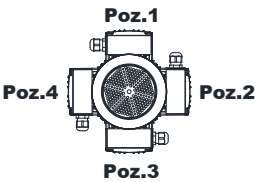






	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	622	646	683
k1	693	737	776
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	90	105	120
P1	358	375	384

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

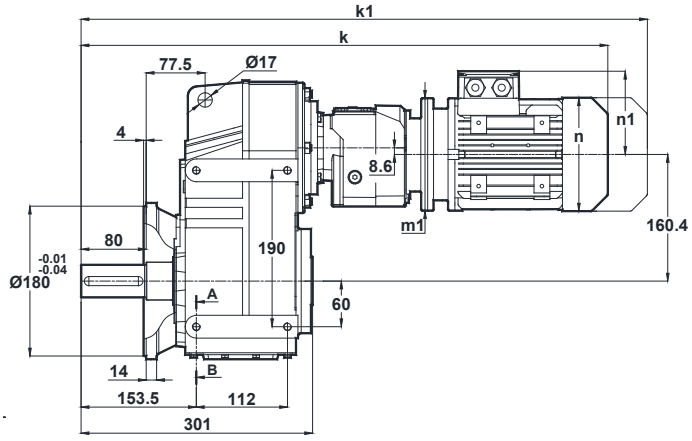


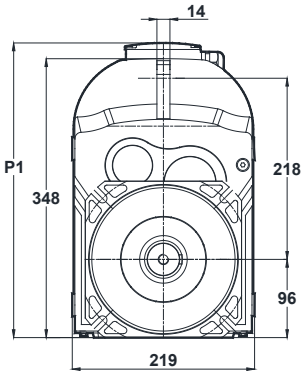
63-71-80
Tip / *Type* / Typ

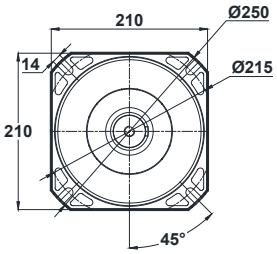
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

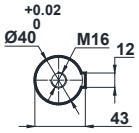
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

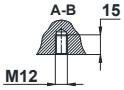
DV375.02
DV376.02





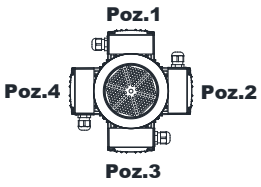






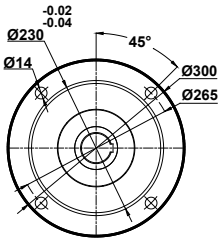
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	655	679	716
k1	726	770	809
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	90	105	120
P1	358	375	384

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



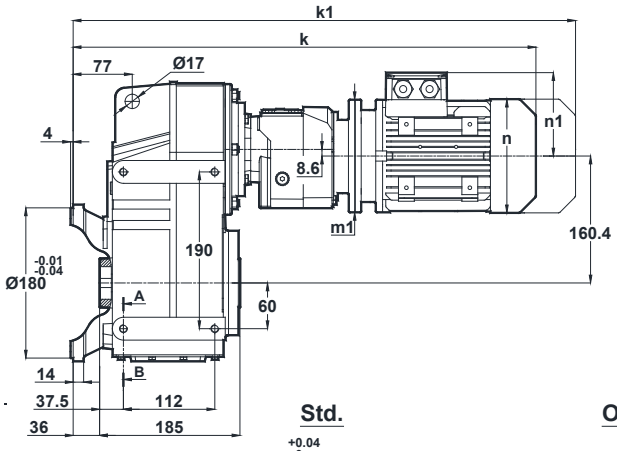
63-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

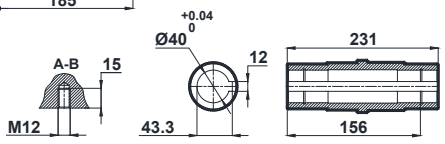


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

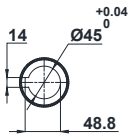
DV375.03
DV376.03

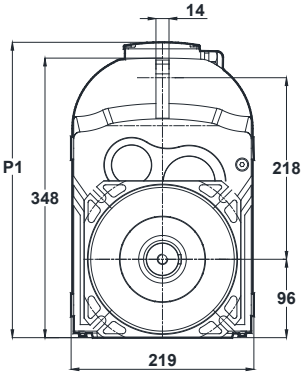


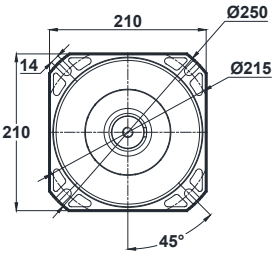
Std.



Ops.

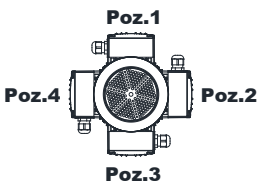






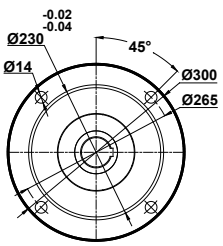
	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14
k	575	599	636
k1	646	690	729
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	90	105	120
P1	358	375	384

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

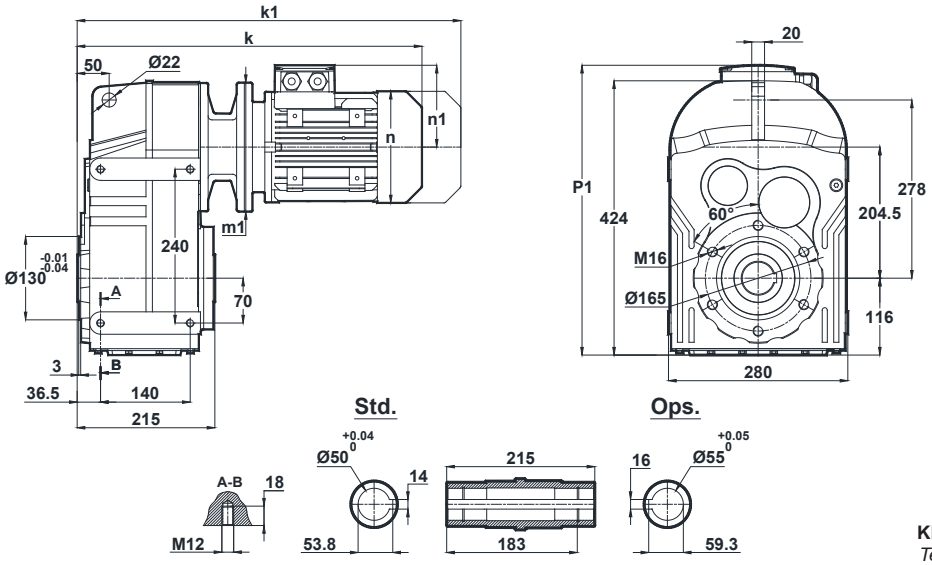


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

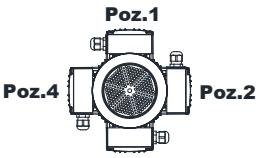
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV472.00
DV473.00



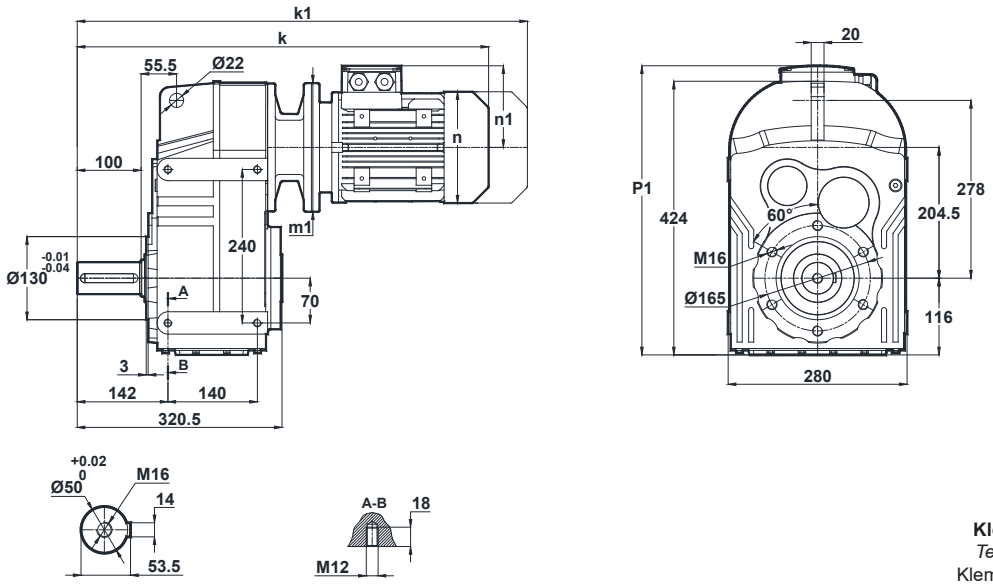
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	472	494	535	535	586	609	712	712	871	871
k1	563	587	614	614	694	714	842	842	1021	1021
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



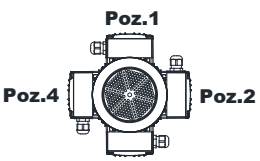
71-80-90-100-112-132-160
Tip / *Type* / Typ

DV472.01
DV473.01



	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	577	599	640	640	691	714	817	817	976	976
k1	668	692	719	719	799	819	947	947	1126	1126
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

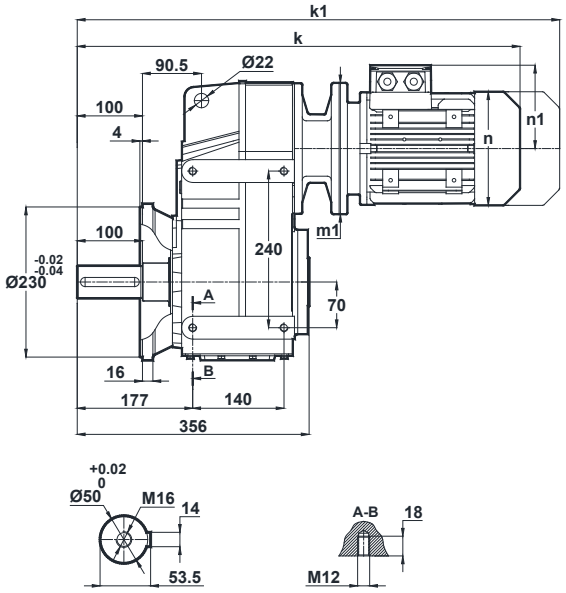


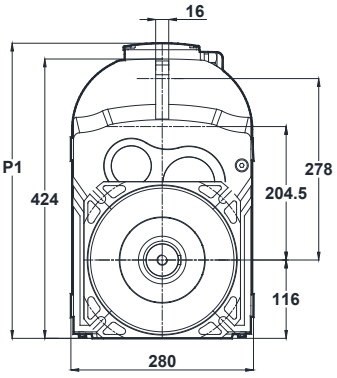
71-80-90-100-112-132-160
Tip / *Type* / Typ

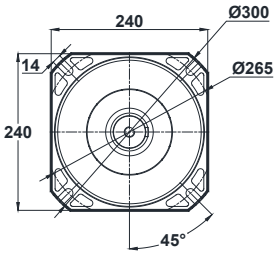
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

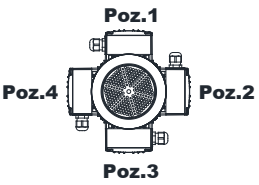






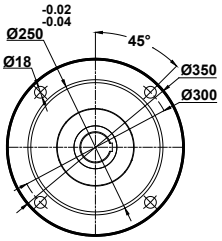
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5
k	612	634	675	675	726	749	852	852	1011	1011
k1	703	727	754	754	834	854	982	982	1161	1161
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
P1	439	448	457	457	470	482	503	503	547	547

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



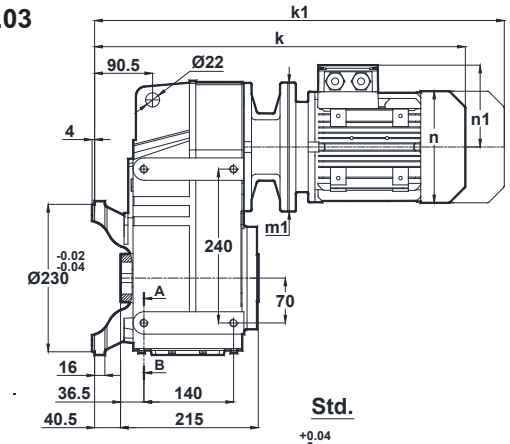
71-80-90-100-112-132-160
Tip / *Type* / Typ

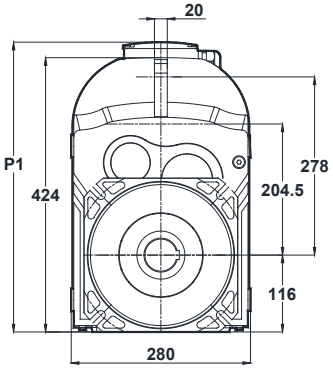
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

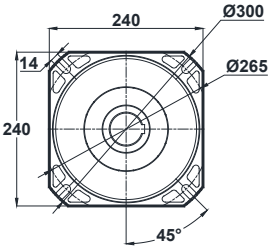


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

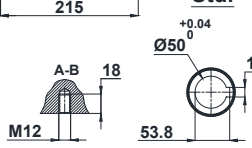
DV472.03
DV473.03

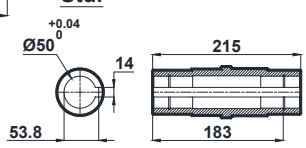




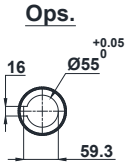


Std.

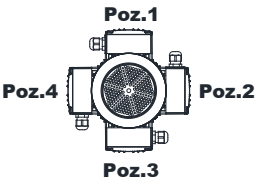




Ops.

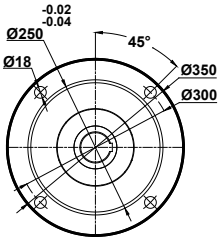


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132-160
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



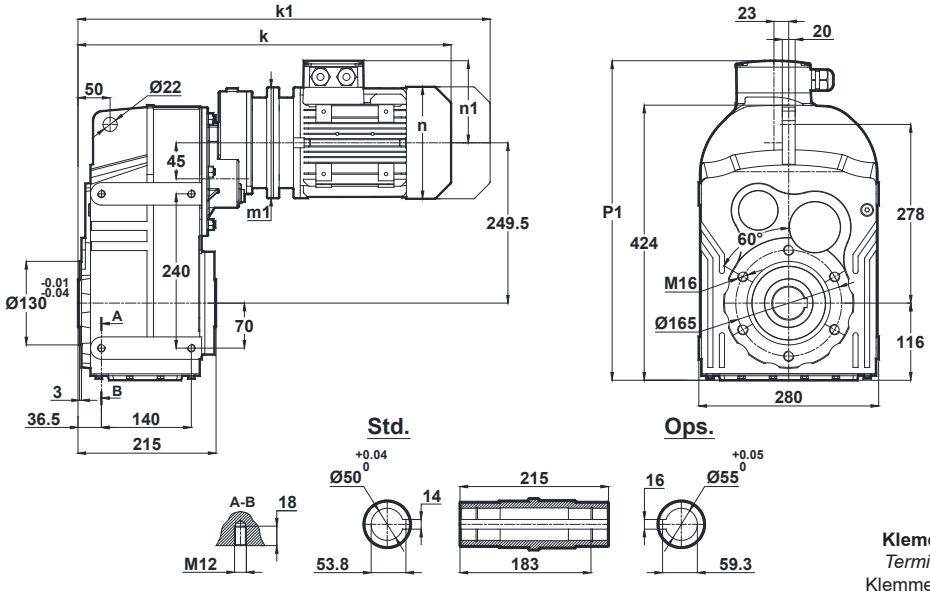
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

	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	512	534	575	575	626	649	752	752	911	911
k1	603	627	654	654	734	754	882	882	1061	1061
n / n1	137/118	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226
m1 (B5)	160	200	200	200	250	250	300	300	350	350
m1 (B14)	-	120	140	140	160	160	200	200	-	-
P1	439	448	457	457	470	482	503	503	547	547

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

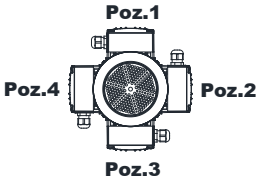
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV474.00



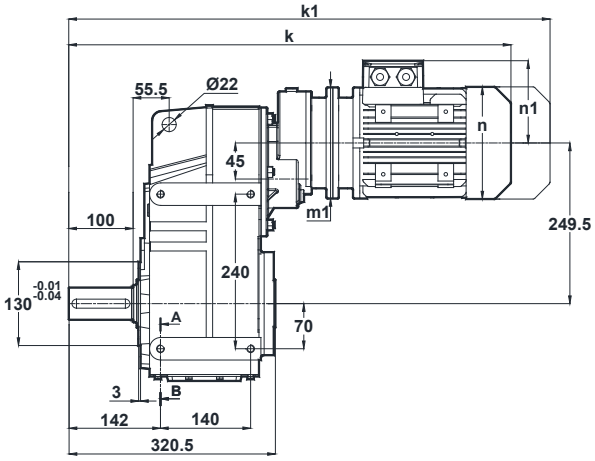
	63/B5	71/B5 71/B14	80/B5 80/B14
k	527	520	577
k1	598	611	670
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	467	484	493

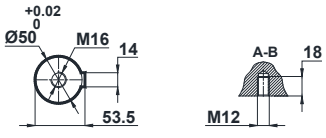
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

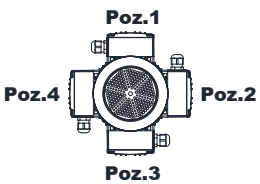
DV474.01





	63/B5	71/B5 71/B14	80/B5 80/B14
k	632	625	682
k1	703	716	775
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

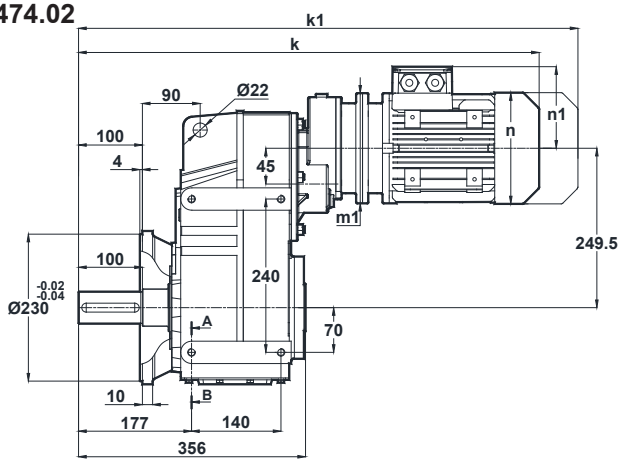


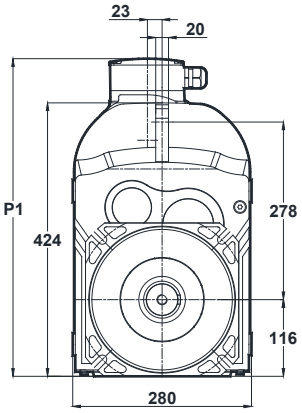
63-71-80
Tip / *Type* / Typ

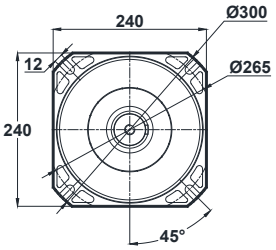
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

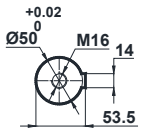
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

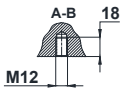
DV474.02





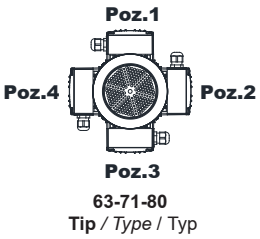






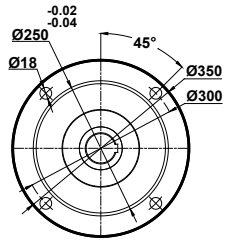
	63/B5	71/B5 71/B14	80/B5 80/B14
k	667	660	717
k1	738	751	810
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



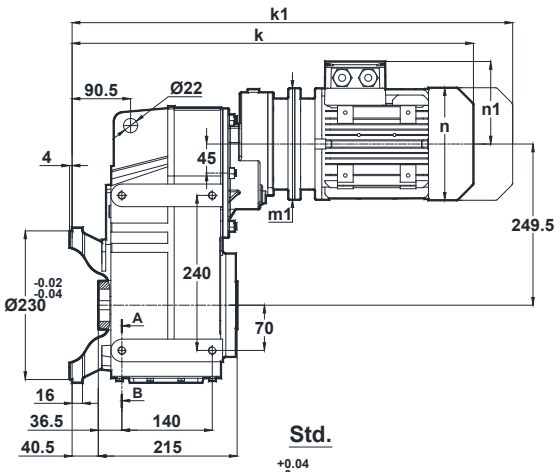
63-71-80
Tip / *Type* / Typ

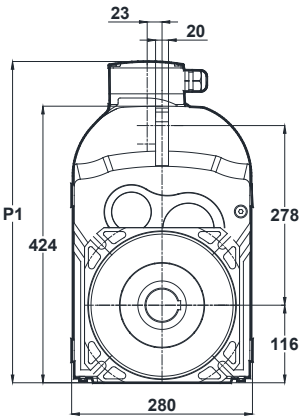
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

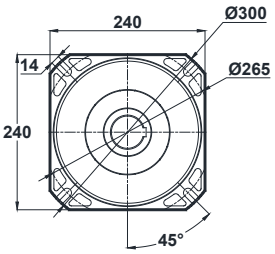


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

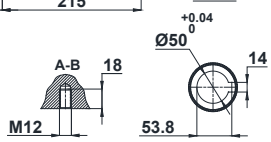
DV474.03



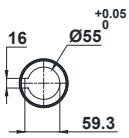




Std.

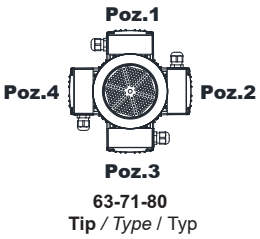


Ops.



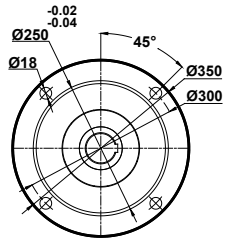
	63/B5	71/B5 71/B14	80/B5 80/B14
k	567	560	617
k1	638	651	710
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	467	484	493

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

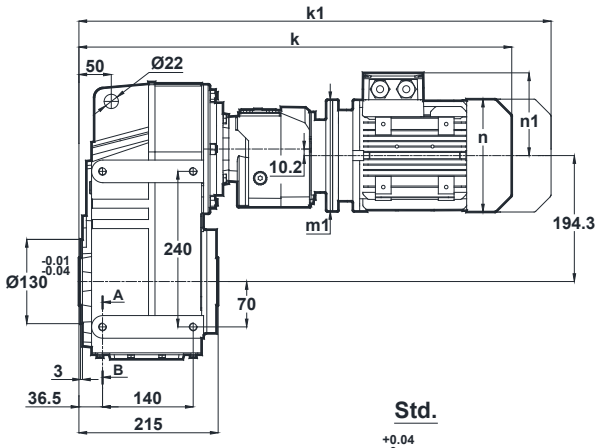


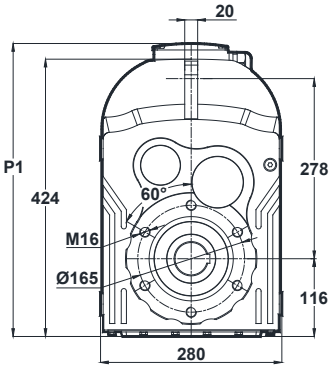
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

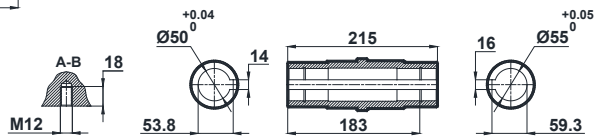
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV475.00
DV476.00



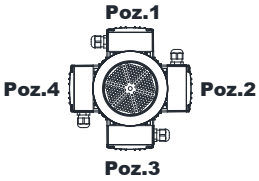


Std. **Ops.**



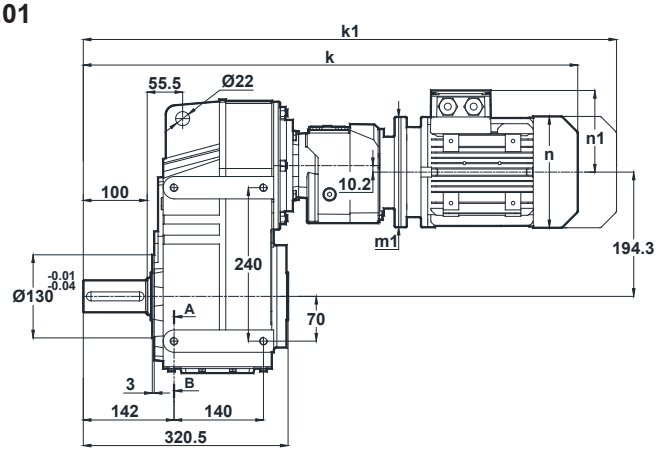
	63/B5 63/B14	71/B5 71/B14
k	595	615
k1	666	706
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	-	429

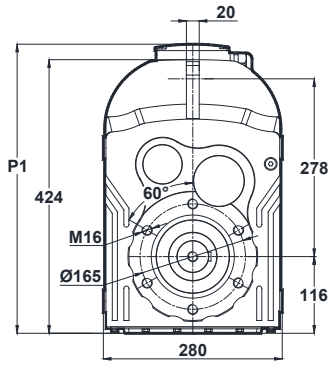
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

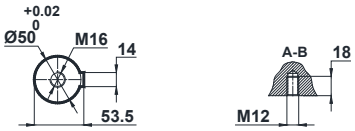


63-71
Tip / *Type* / Typ

DV475.01
DV476.01

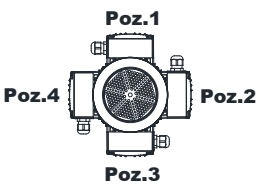






	63/B5 63/B14	71/B5 71/B14
k	700	720
k1	771	811
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

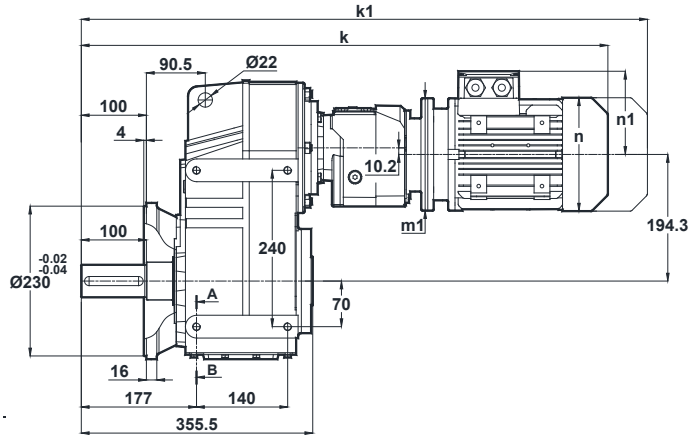


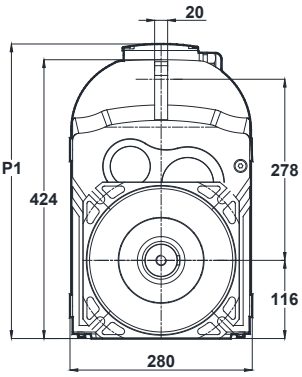
63-71
Tip / *Type* / Typ

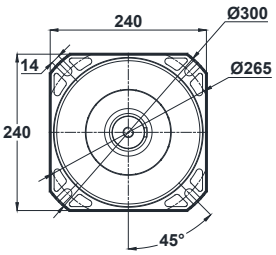
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

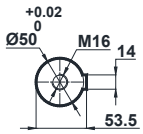
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

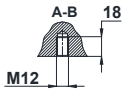
DV475.02
DV476.02





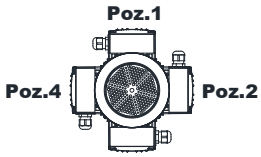






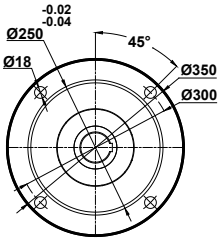
	63/B5 63/B14	71/B5 71/B14
k	735	755
k1	806	846
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



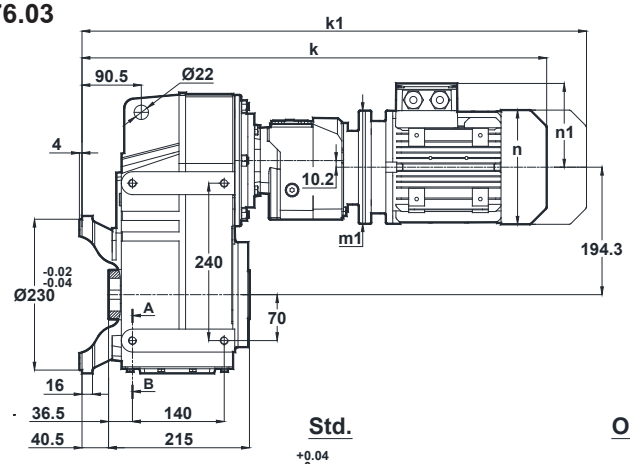
63-71
Tip / *Type* / Typ

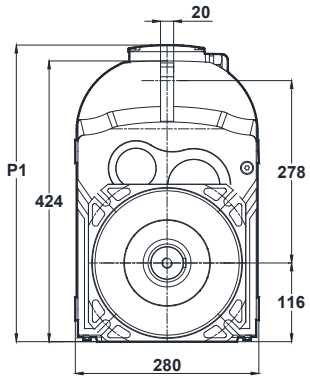
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

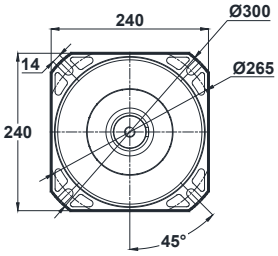


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

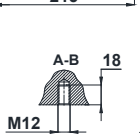
DV475.03
DV476.03

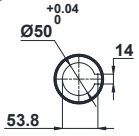


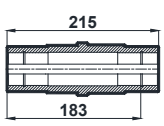




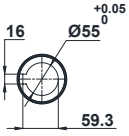
Std.





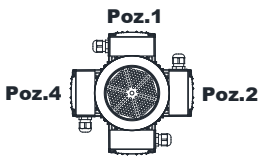


Ops.



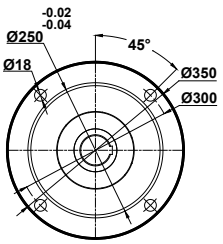
	63/B5 63/B14	71/B5 71/B14
k	635	655
k1	706	746
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	90	105
P1	-	429

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



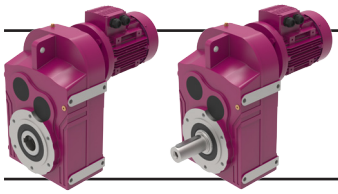
63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

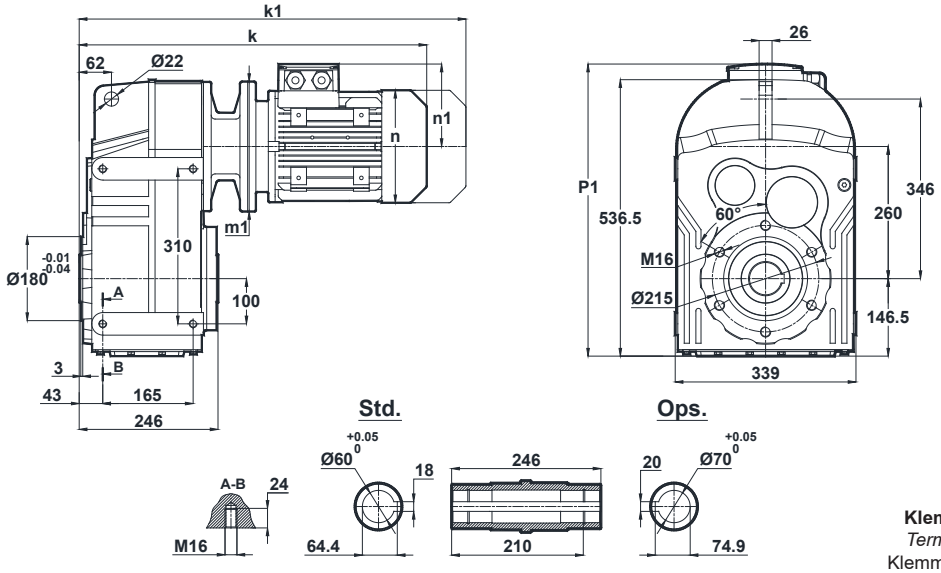
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

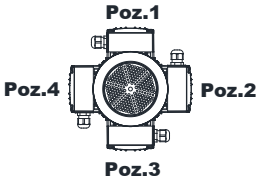
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV572.00
DV573.00



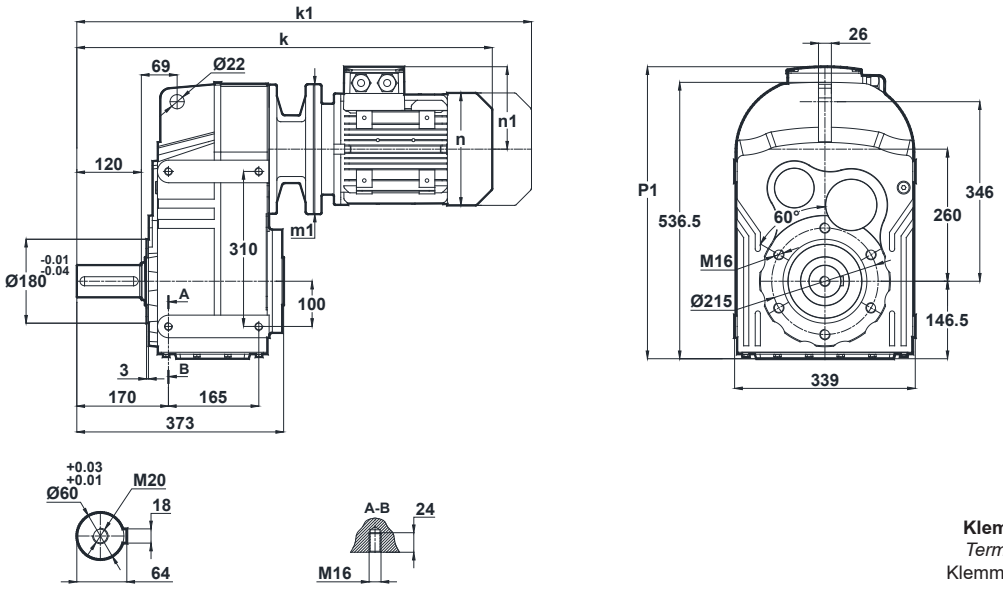
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	511	552	552	604	627	729	729	888	888	979	979
k1	604	631	631	712	732	859	859	1038	1038	1166	1166
n / n1	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



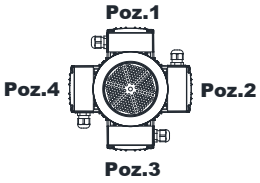
80-90-100-112-132-160-180
Tip / *Type* / Typ

DV572.01
DV573.01



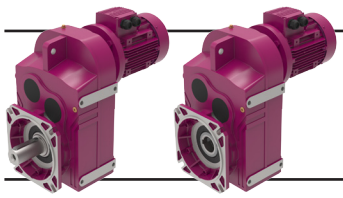
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	638	679	679	731	754	856	856	1015	1015	1106	1106
k1	731	758	758	839	859	986	986	1165	1165	1293	1293
n / n1	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / *Type* / Typ

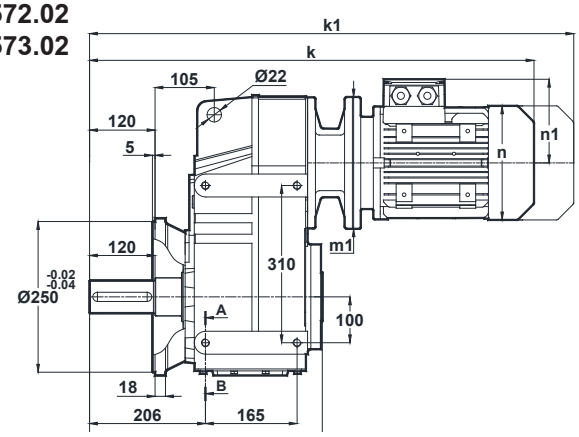
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

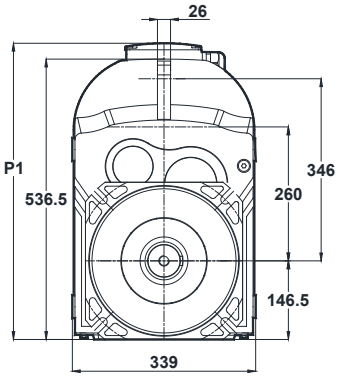


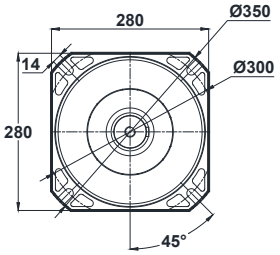
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

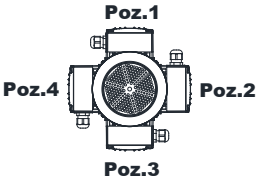






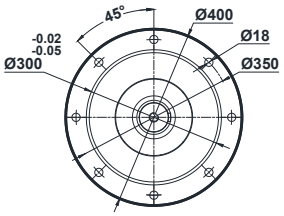
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	674	715	715	767	790	892	892	1051	1051	1142	1142
k1	767	794	794	875	895	1022	1022	1201	1201	1329	1329
n / n1	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



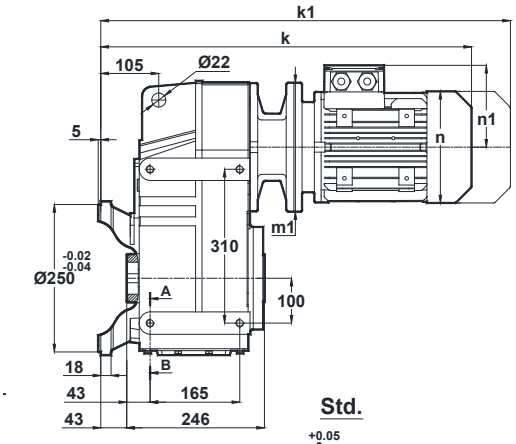
80-90-100-112-132-160-180
Tip / *Type* / Typ

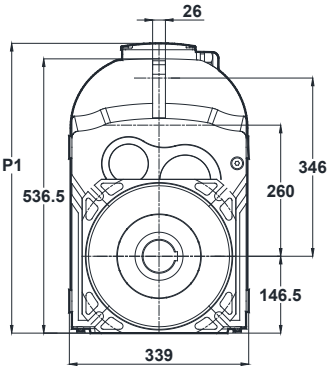
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

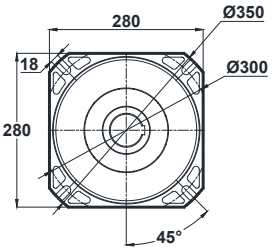


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

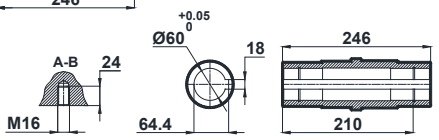
DV572.03
DV573.03



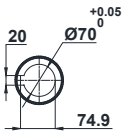




Std.

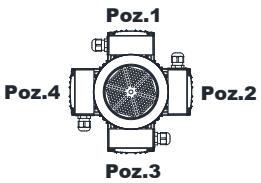


Ops.



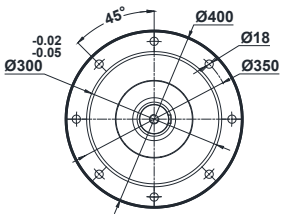
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	554	595	595	647	670	772	772	931	931	1022	1022
k1	647	674	674	755	775	902	902	1081	1081	1209	1209
n / n1	155/127	176/136	176/136	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
P1	-	543	543	556	568	589	589	633	633	649	649

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

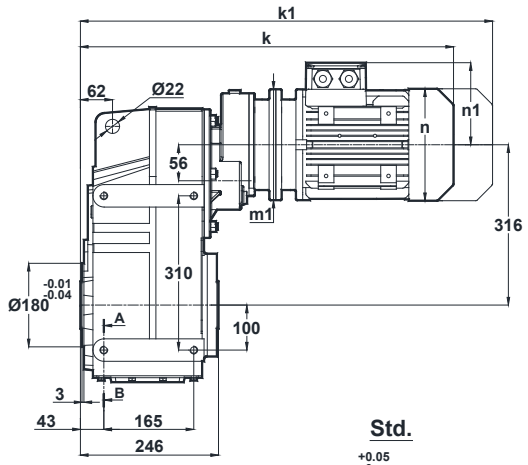


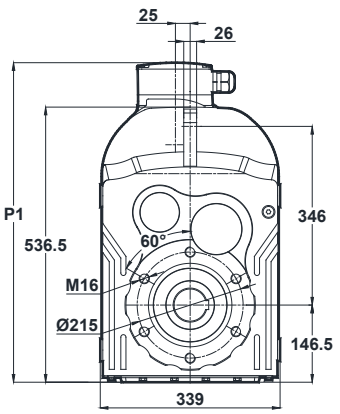
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

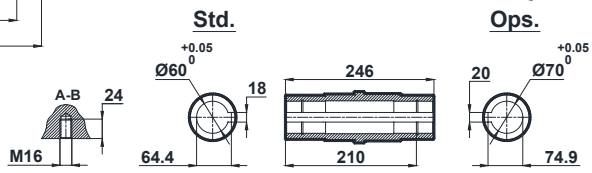
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

DV574.00

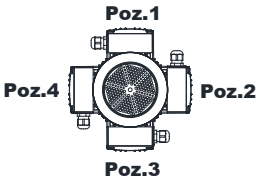






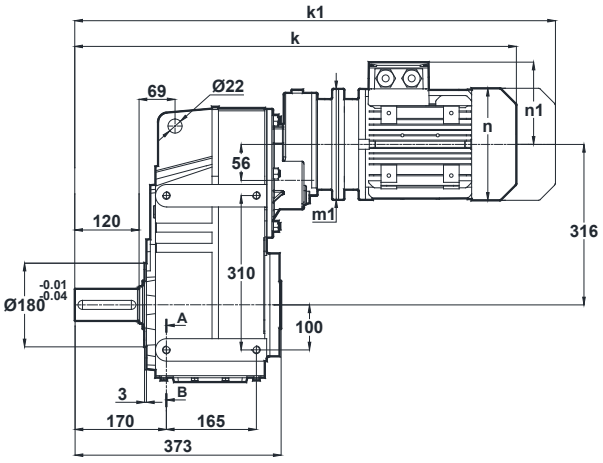
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	587	609	650	650
k1	678	702	729	729
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	581	590	599	599

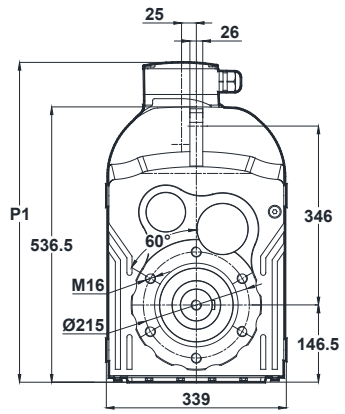
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

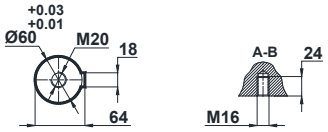


71-80-90
Tip / *Type* / Typ

DV574.01

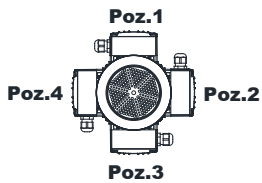






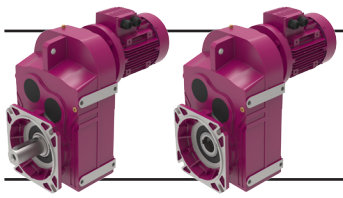
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	714	736	777	777
k1	805	829	856	856
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

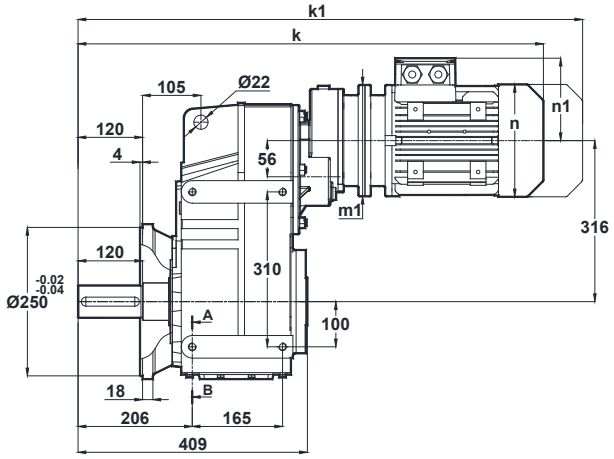
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

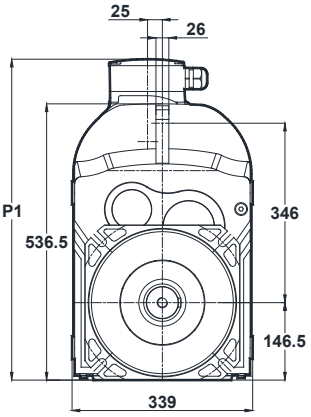


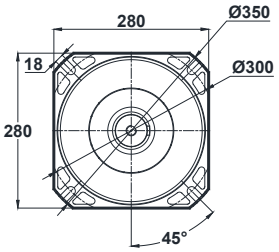
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

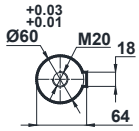
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

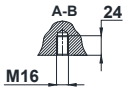
DV574.02





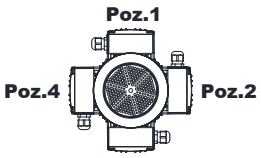






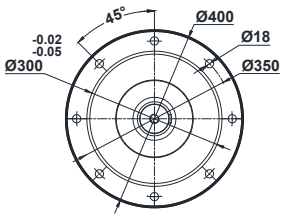
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	750	772	813	813
k1	841	865	892	892
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



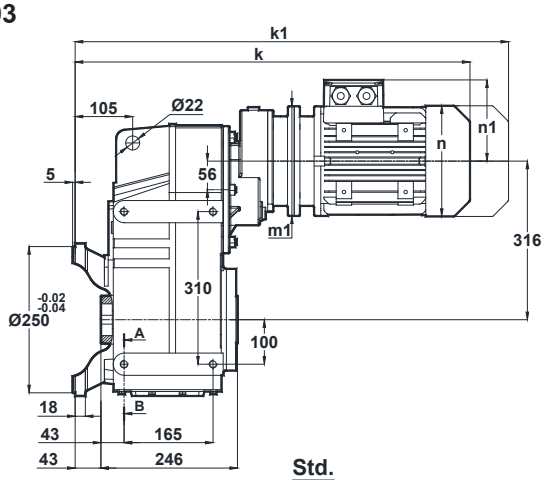
71-80-90
Tip / *Type* / Typ

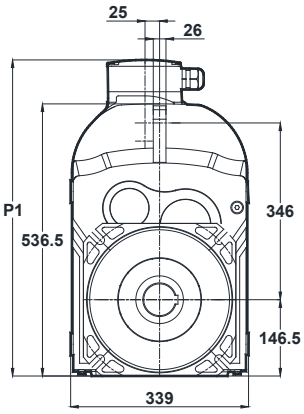
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

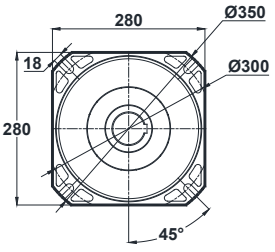


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

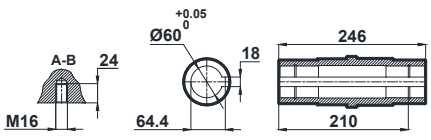
DV574.03



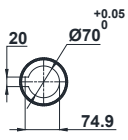




Std.

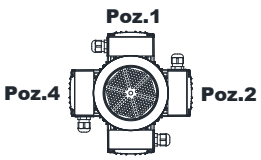


Ops.



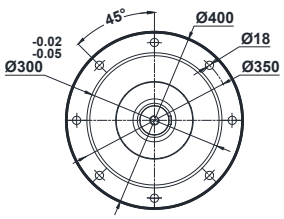
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	630	652	693	693
k1	721	745	772	772
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	581	590	599	599

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

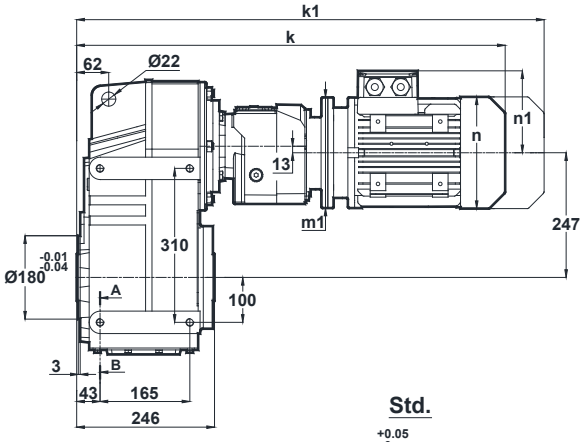


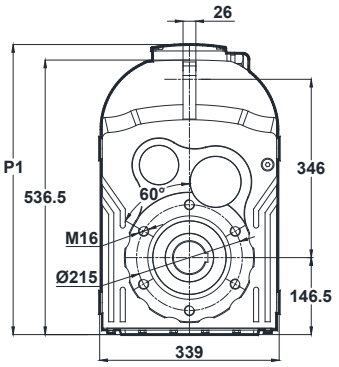
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

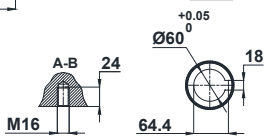
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV575.00
DV576.00

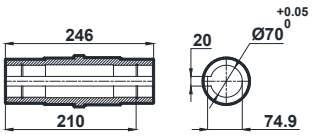




Std.

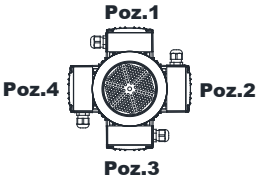


Ops.



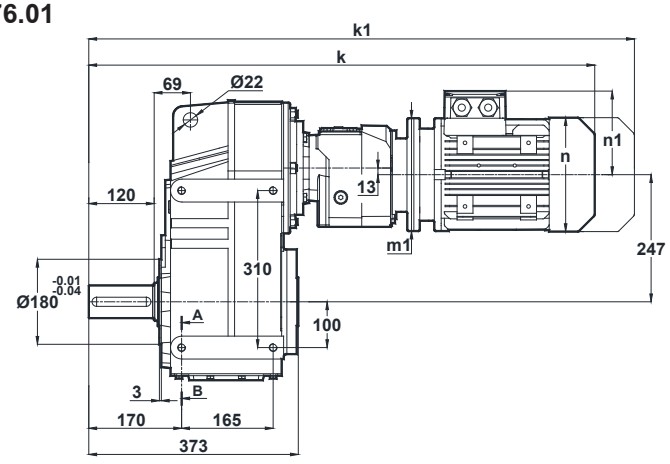
	63/B5	71/B5 71/B14
k	693	686
k1	764	777
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	-	105
P1	-	-

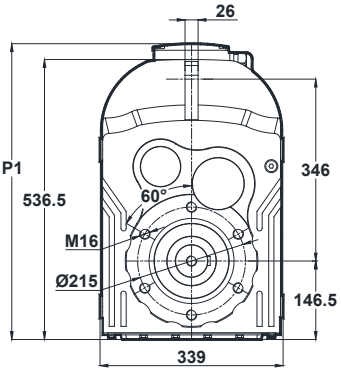
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

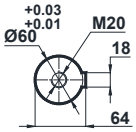


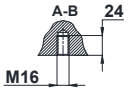
63-71
Tip / *Type* / Typ

DV575.01
DV576.01



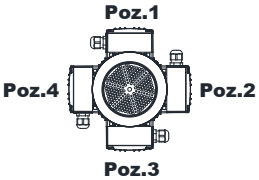






	63/B5	71/B5 71/B14
k	820	813
k1	891	904
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	-	105
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

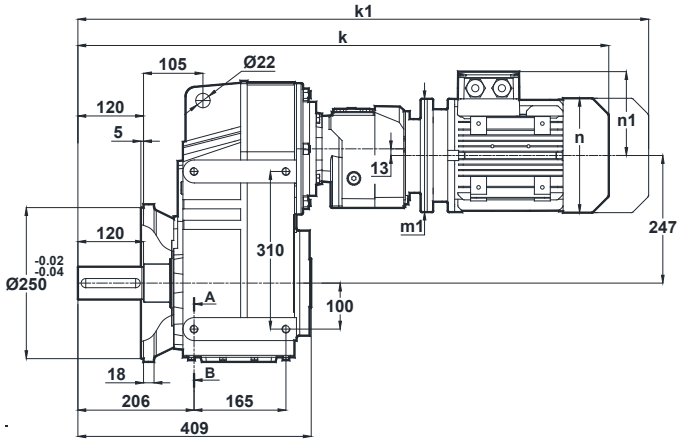


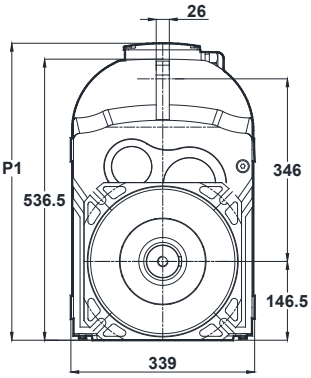
63-71
Tip / *Type* / Typ

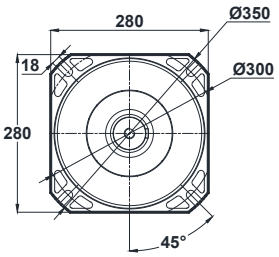
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

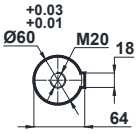
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

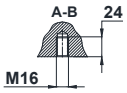
DV575.02
DV576.02





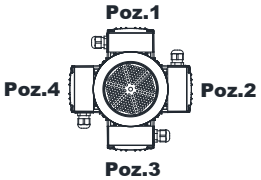






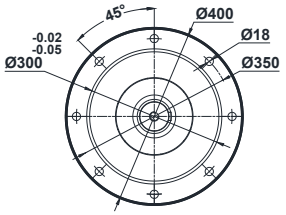
	63/B5	71/B5 71/B14
k	856	849
k1	927	940
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	-	105
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



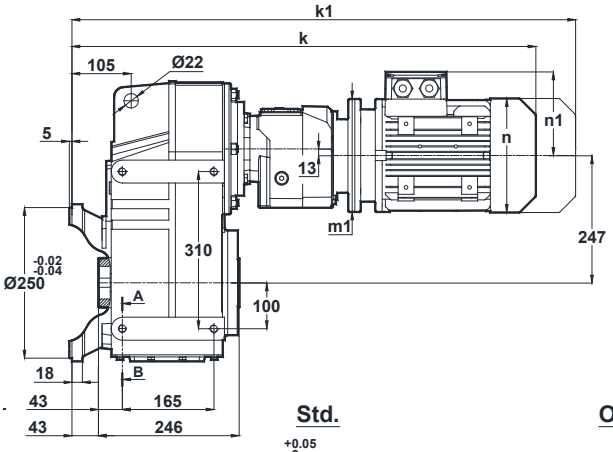
63-71
Tip / *Type* / Typ

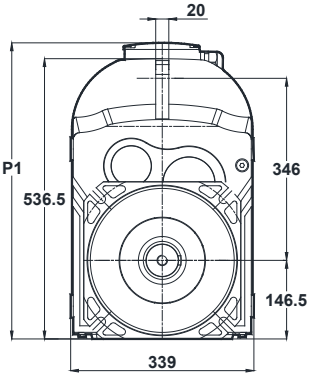
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

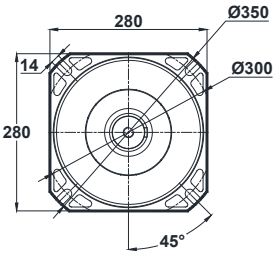


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

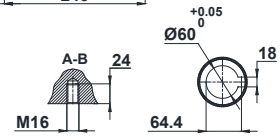
DV575.03
DV576.03



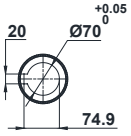




Std.

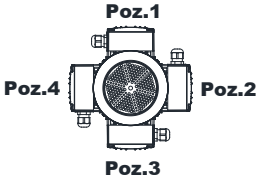


Ops.



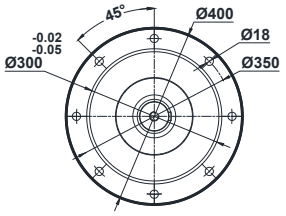
	63/B5	71/B5 71/B14
k	736	729
k1	807	820
n / n1	119/101	137/118
m1 (B5)	140	160
m1 (B14)	-	105
P1	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



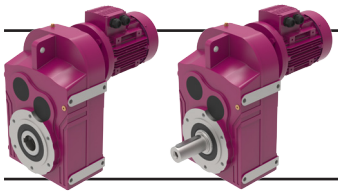
63-71
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



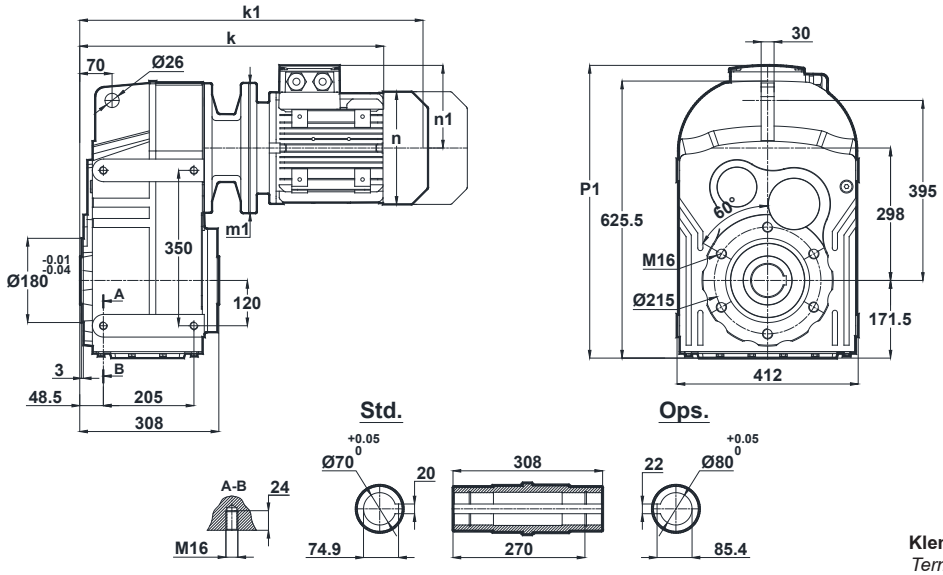
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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



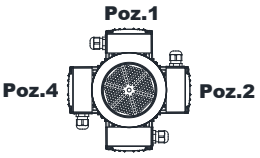
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV672.00
DV673.00



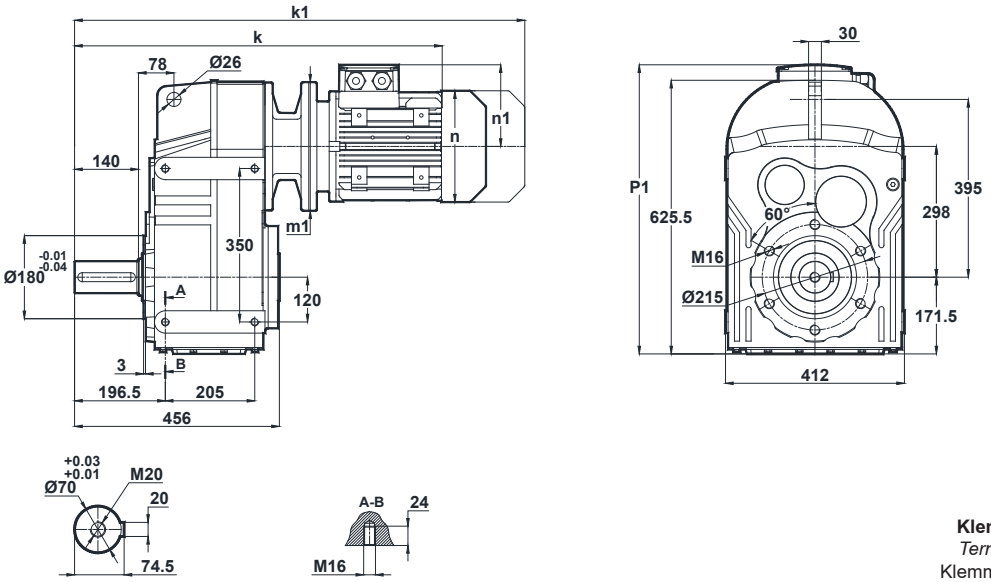
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	657	680	784	784	939	939	1030	1030	1091
k1	765	785	914	914	1089	1089	1217	1217	1283
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



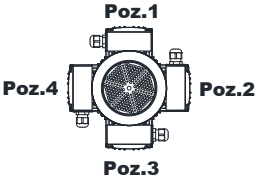
100-112-132-160-180-200
Tip / *Type* / Typ

DV672.01
DV673.01



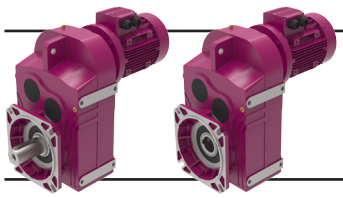
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	805	828	932	932	1087	1087	1178	1178	1239
k1	913	933	1062	1062	1237	1237	1365	1365	1431
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200
Tip / *Type* / Typ

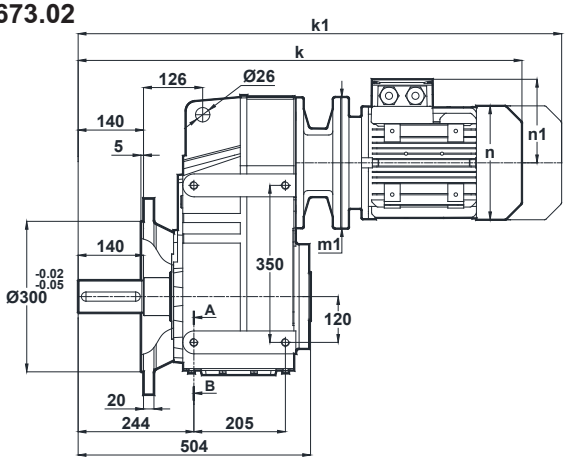
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

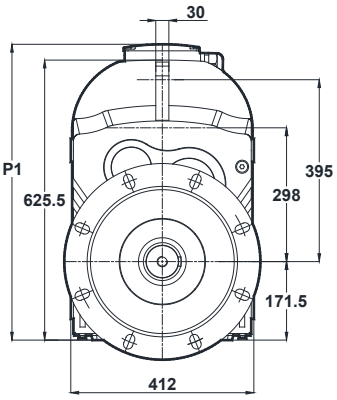


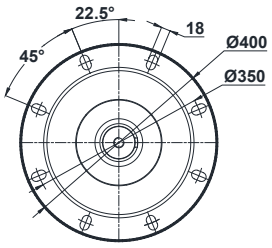
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

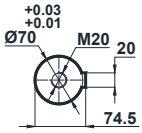
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

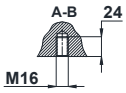
DV672.02
DV673.02





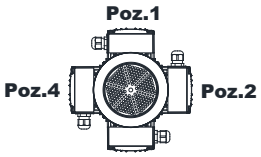






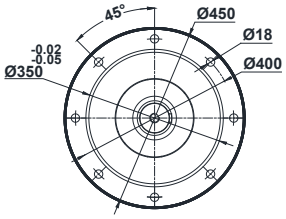
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	853	876	980	980	1135	1135	1226	1226	1287
k1	961	981	1110	1110	1285	1285	1413	1413	1479
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



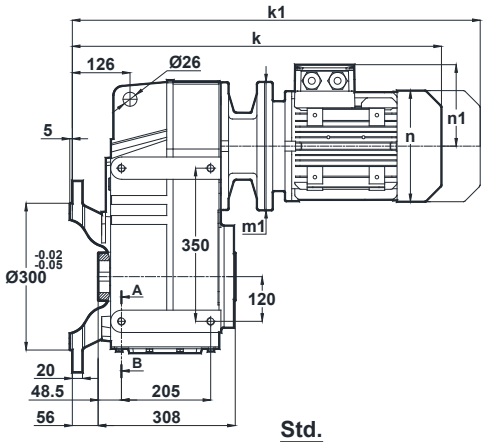
100-112-132-160-180-200
Tip / *Type* / Typ

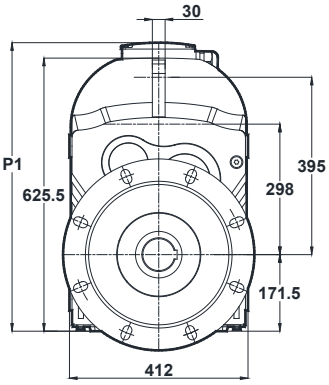
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

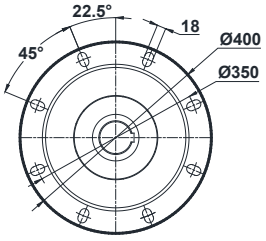


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

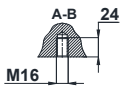
DV672.03
DV673.03

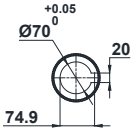


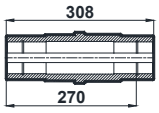




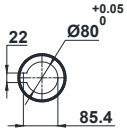
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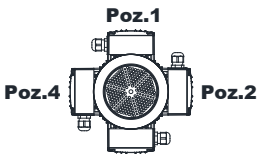


Ops.



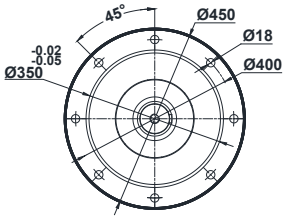
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	713	736	840	840	995	995	1086	1086	1147
k1	821	841	970	970	1145	1145	1273	1273	1339
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
P1	-	631	652	652	696	696	712	712	764

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

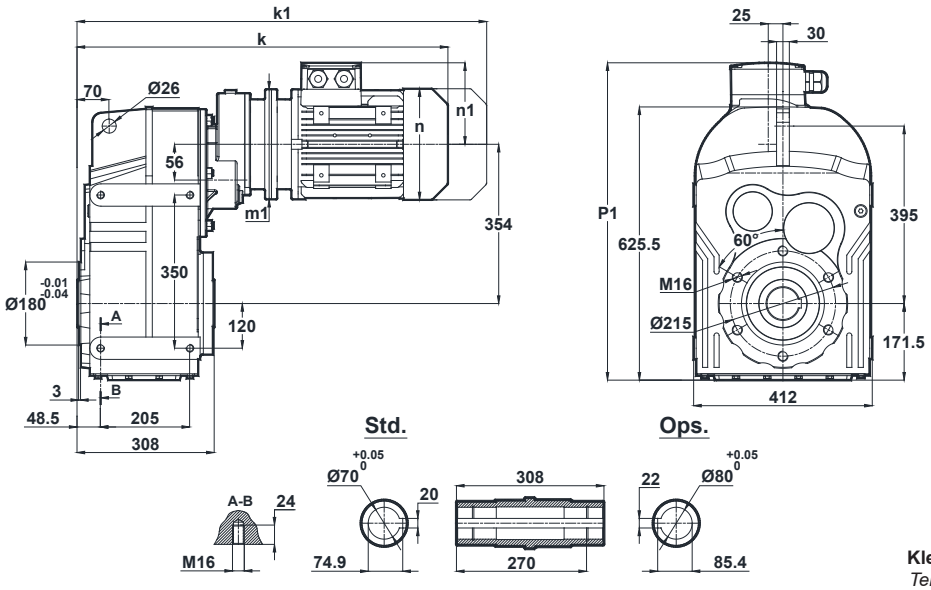


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

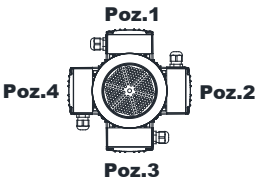
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV674.00



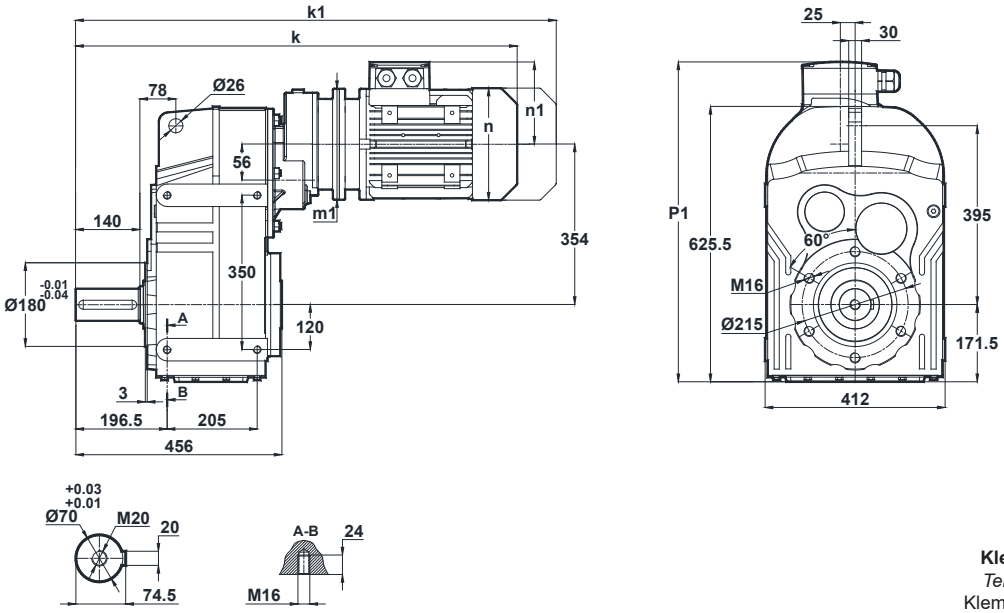
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	640	662	703	703
k1	731	755	782	782
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



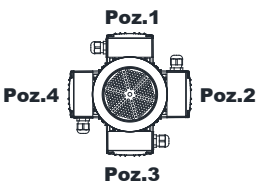
71-80-90
Tip / *Type* / Typ

DV674.01



	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	788	810	851	851
k1	879	903	930	930
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

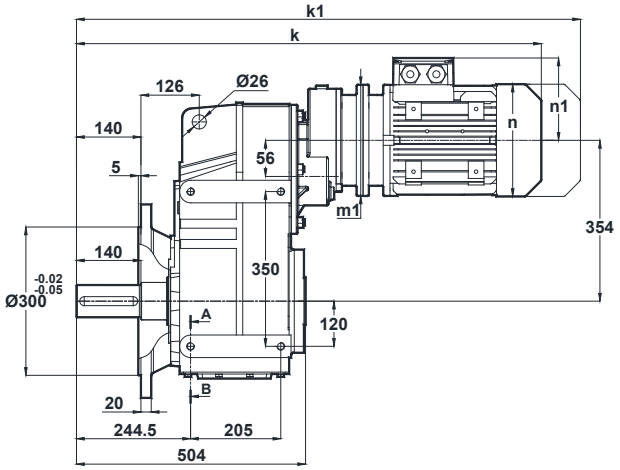


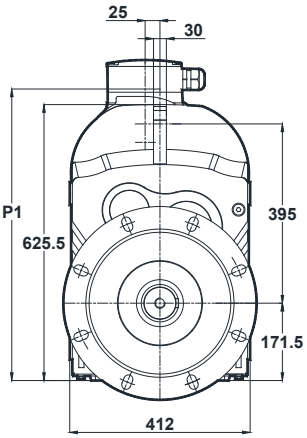
71-80-90
Tip / *Type* / Typ

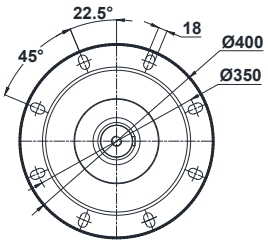
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

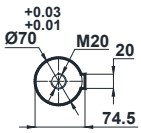
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

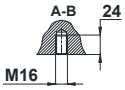
DV674.02





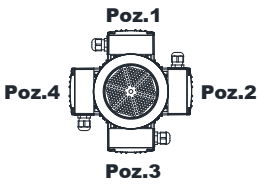






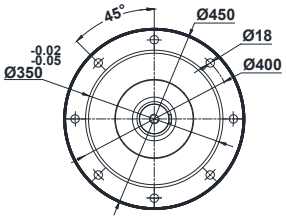
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	836	858	899	899
k1	927	951	978	978
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



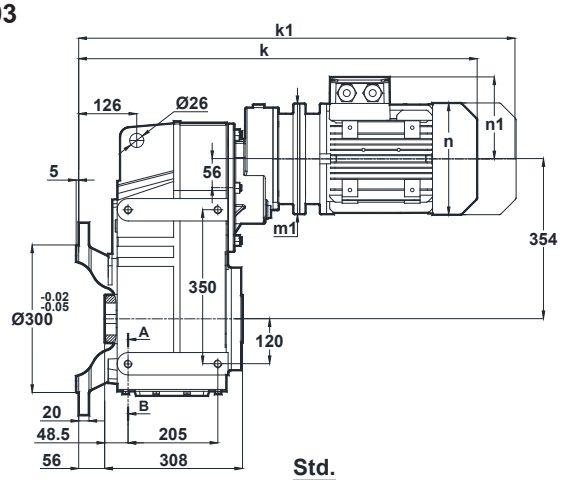
71-80-90
Tip / *Type* / Typ

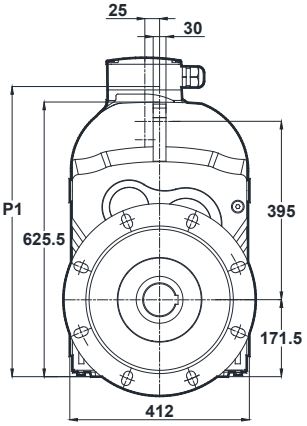
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

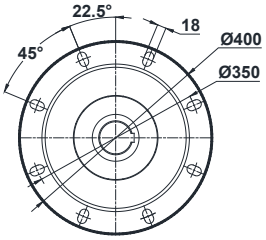


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

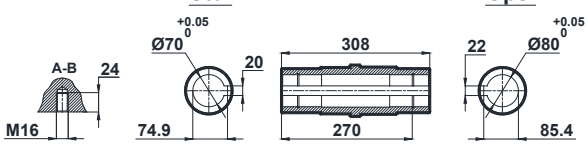
DV674.03





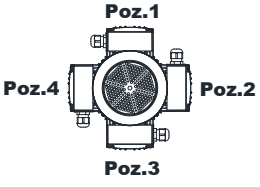


Std. **Ops.**



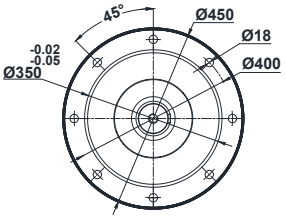
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	696	718	759	759
k1	787	811	838	838
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	642	651	660	660

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



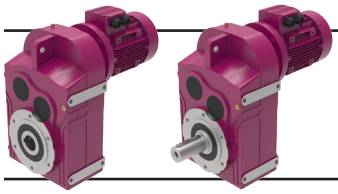
71-80-90
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

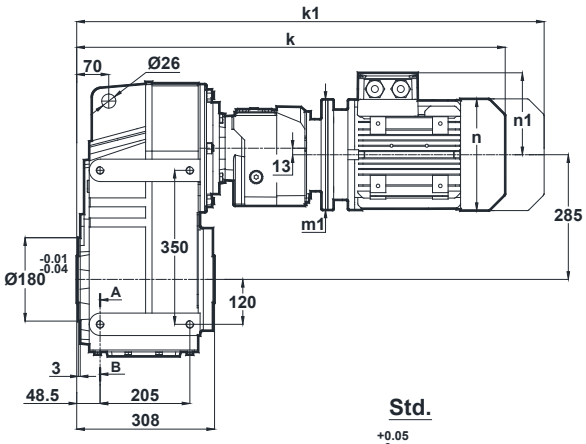
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

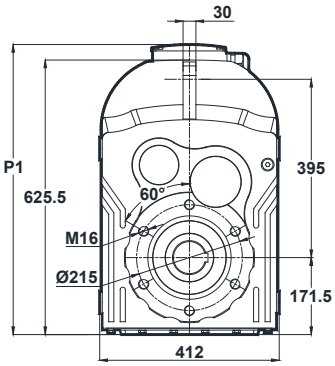


Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

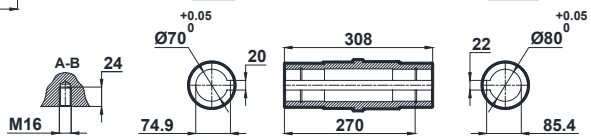
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV675.00
DV676.00



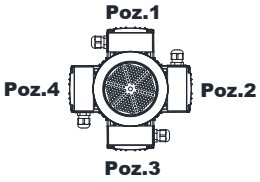


Std. **Ops.**



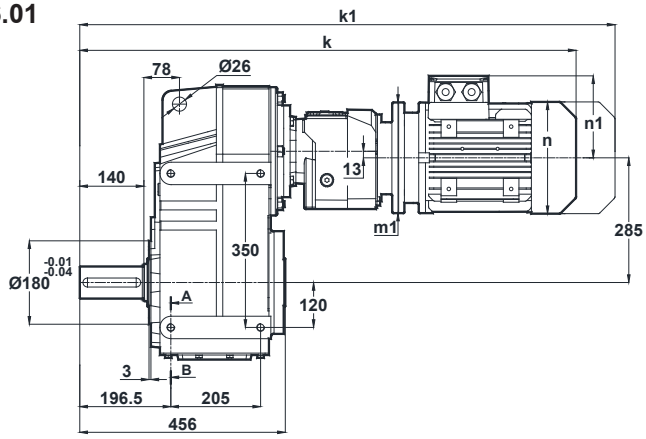
	63/B5	71/B5 71/B14	80/B5 80/B14
k	748	741	792
k1	819	832	885
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	-	-	-

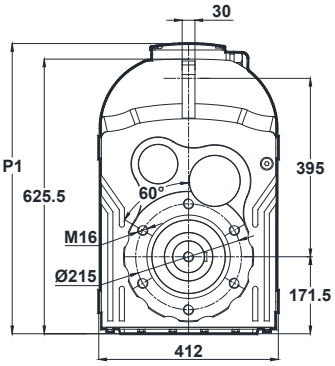
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

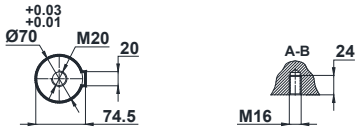


61-71-80
Tip / *Type* / Typ

DV675.01
DV676.01

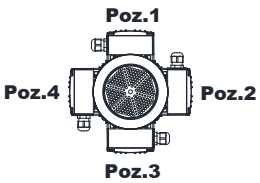






	63/B5	71/B5 71/B14	80/B5 80/B14
k	896	889	940
k1	967	980	1033
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

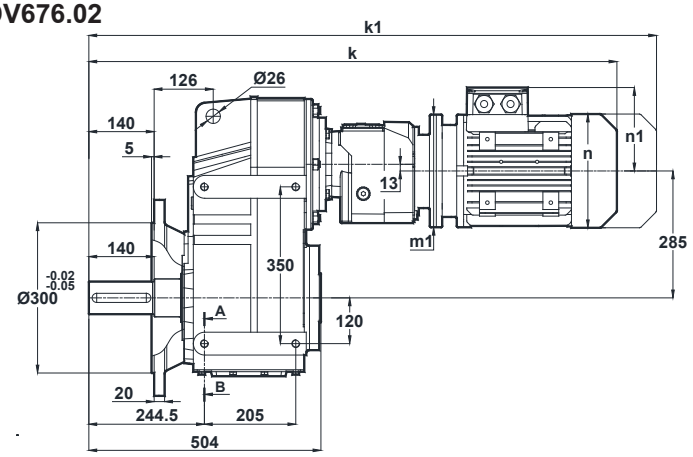


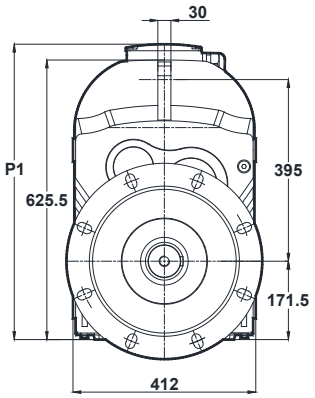
61-71-80
Tip / *Type* / Typ

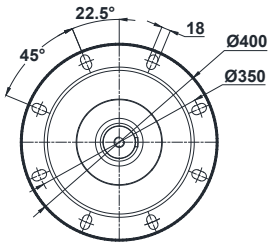
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

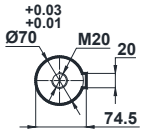
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

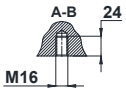
DV675.02
DV676.02





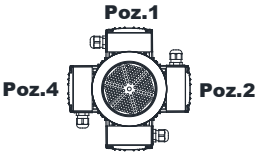






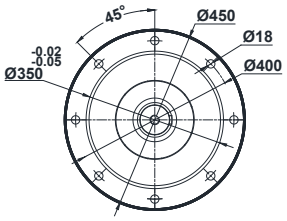
	63/B5	71/B5 71/B14	80/B5 80/B14
k	944	937	988
k1	1015	1028	1081
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



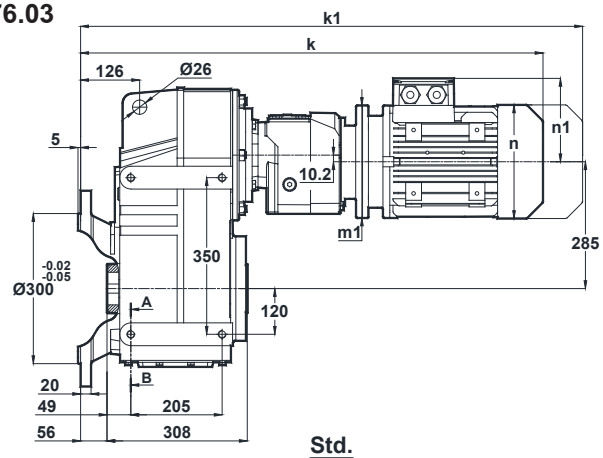
61-71-80
Tip / *Type* / Typ

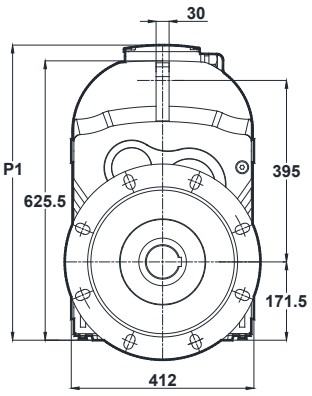
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

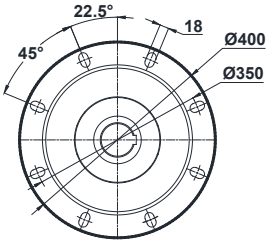


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

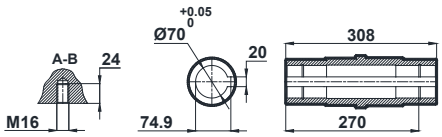
DV675.03
DV676.03



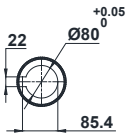




Std.

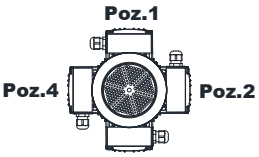


Ops.



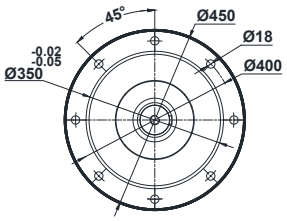
	63/B5	71/B5 71/B14	80/B5 80/B14
k	804	797	848
k1	875	888	941
n / n1	119/101	137/118	155/127
m1 (B5)	140	160	200
m1 (B14)	-	105	120
P1	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



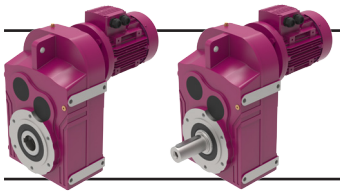
61-71-80
Tip / *Type* / Typ

Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



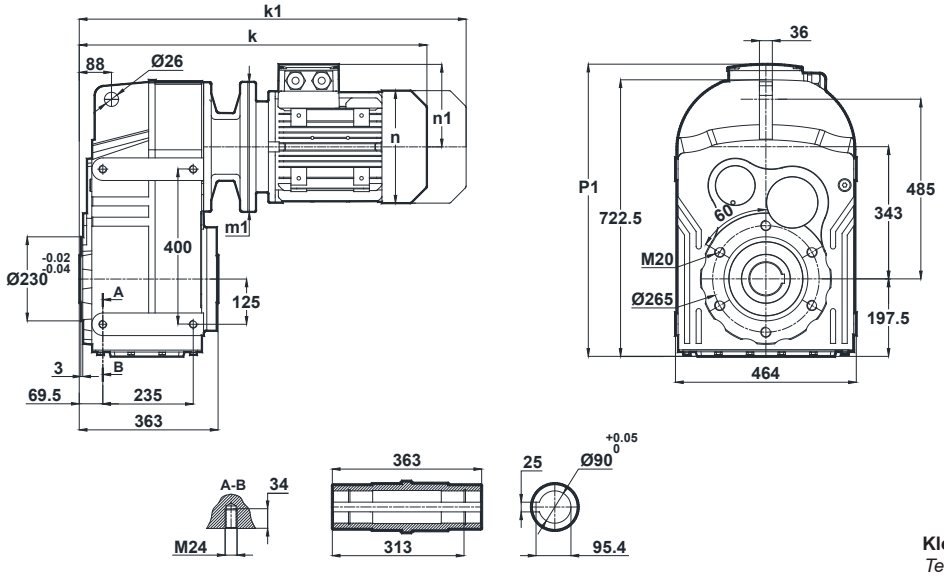
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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



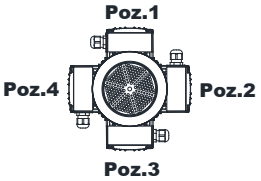
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV772.00
DV773.00



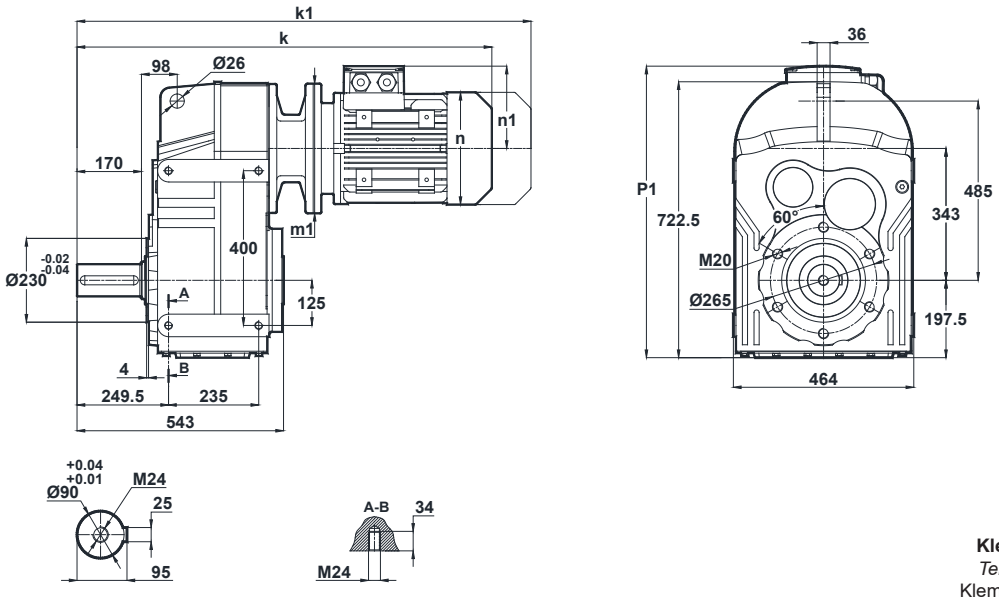
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	699	722	820	820	975	975	1066	1066	1127	1243	1243
k1	807	827	950	950	1125	1125	1253	1253	1319	1426	1426
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
P1	-	-	723	723	767	767	783	783	835	853	853

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



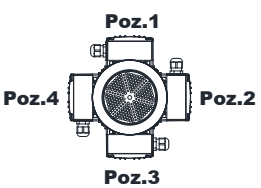
100-112-132-160-180-200-225
Tip / *Type* / Typ

DV772.01
DV773.01



	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	879	902	1000	1000	1155	1155	1246	1246	1307	1423	1423
k1	987	1007	1130	1130	1305	1305	1433	1433	1499	1606	1606
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
P1	-	-	723	723	767	767	783	783	835	853	853

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

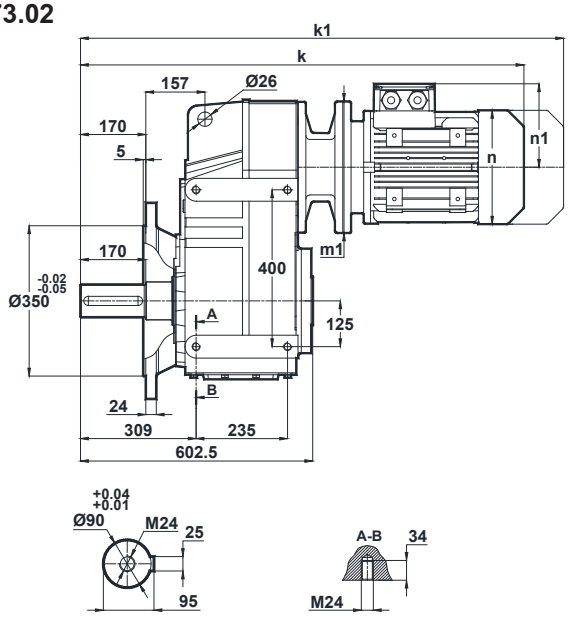


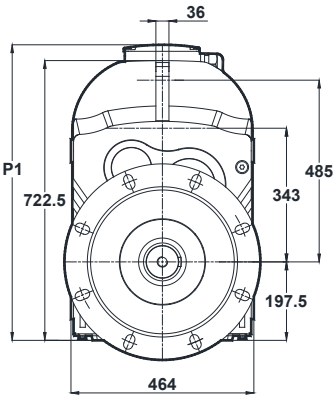
100-112-132-160-180-200-225
Tip / *Type* / Typ

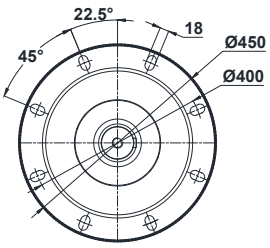
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

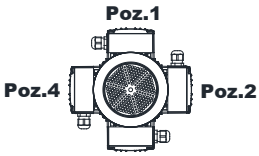






Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

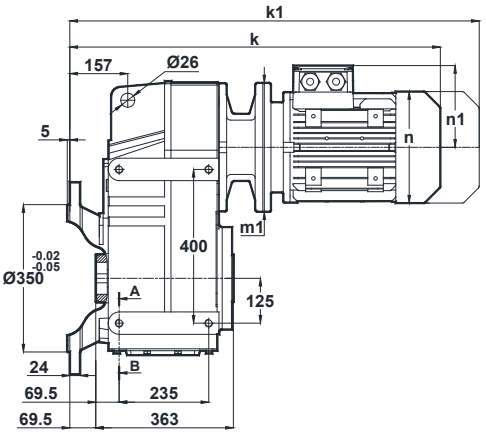
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

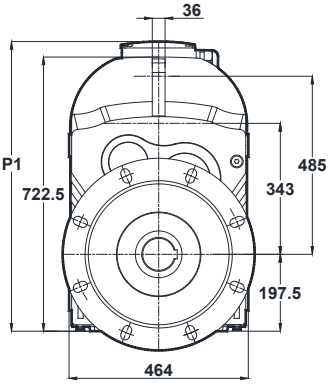


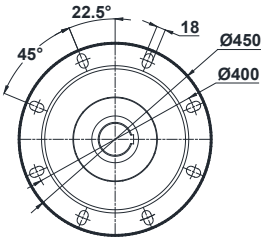
100-112-132-160-180-200-225
Tip / *Type* / Typ

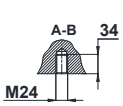
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	939	962	1060	1060	1215	1215	1306	1306	1367	1483	1483
k1	1047	1067	1190	1190	1365	1365	1493	1493	1559	1666	1666
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
P1	-	-	723	723	767	767	783	783	835	853	853

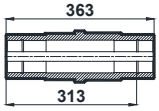
DV772.03
DV773.03

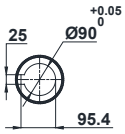






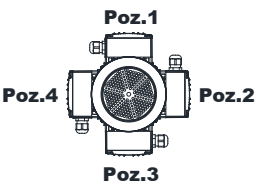






Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



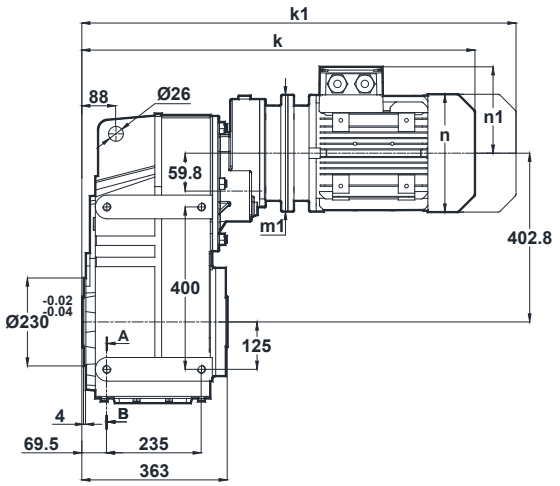
100-112-132-160-180-200-225
Tip / *Type* / Typ

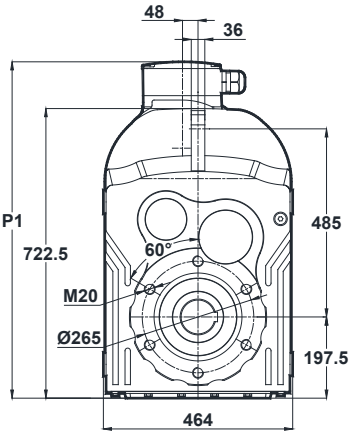
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	769	792	890	890	1045	1045	1136	1136	1197	1313	1313
k1	877	897	1020	1020	1195	1195	1323	1323	1389	1496	1496
n / n1	193/149	215/161	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312
m1 (B5)	250	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	-	200	200	-	-	-	-	-	-	-
P1	-	-	723	723	767	767	783	783	835	853	853

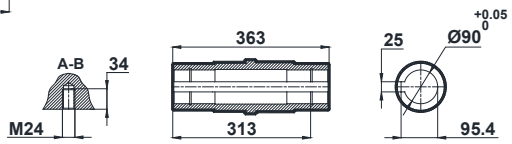
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

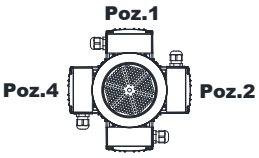






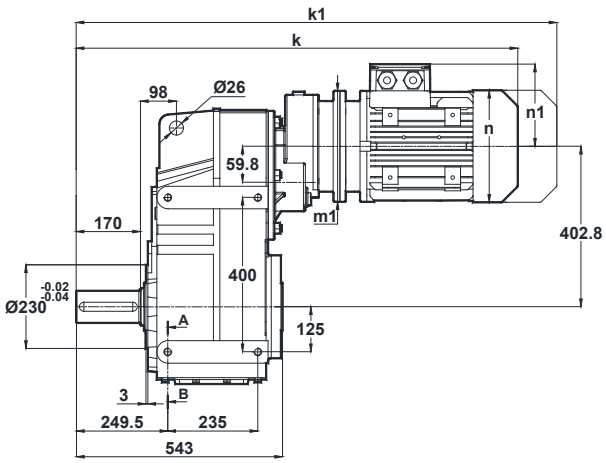
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	714	755	755	807
k1	807	834	834	915
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	728	737	737	750

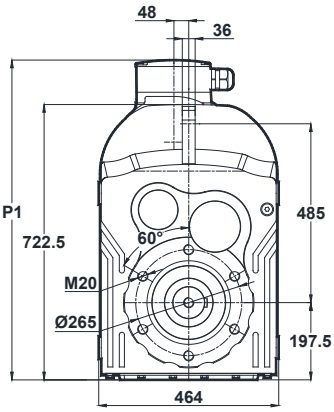
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

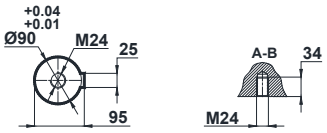


80-90-100
Tip / *Type* / Typ

DV774.01

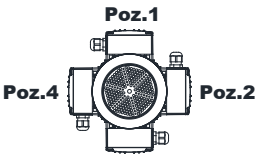






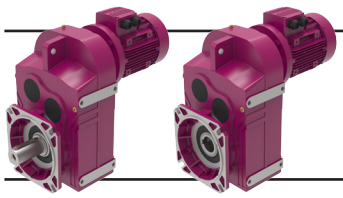
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	894	935	935	987
k1	987	1014	1014	1095
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	728	737	737	750

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100
Tip / *Type* / Typ

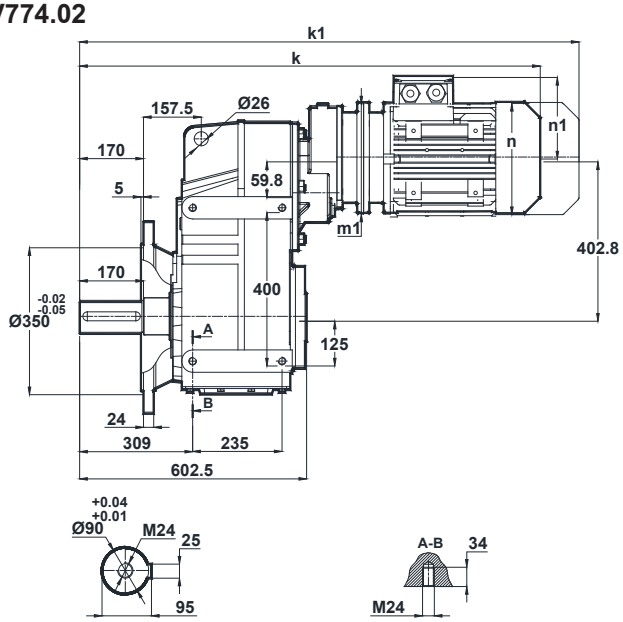
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

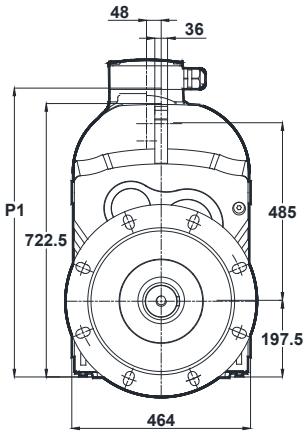


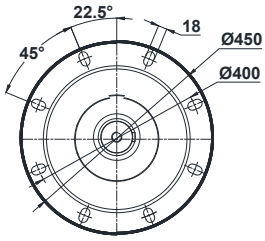
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

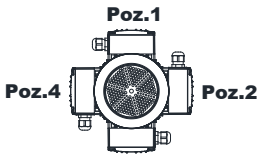






	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	954	995	995	1047
k1	1047	1074	1074	1155
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	728	737	737	750

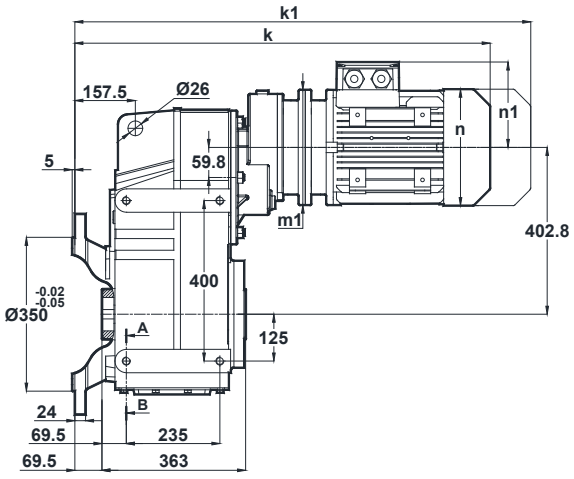
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

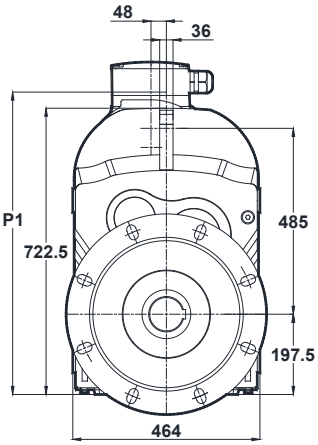


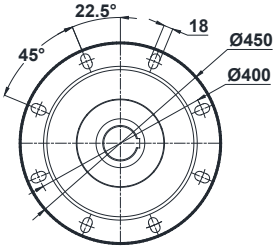
80-90-100
Tip / *Type* / Typ

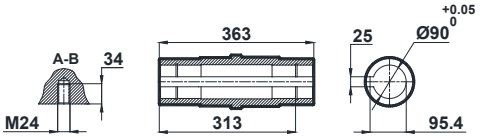
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
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DV774.03



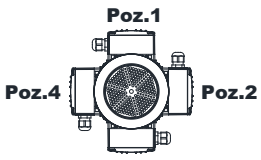






	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	784	825	825	877
k1	877	904	904	985
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	728	737	737	750

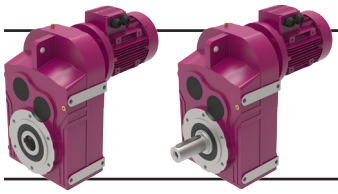
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100
Tip / *Type* / Typ

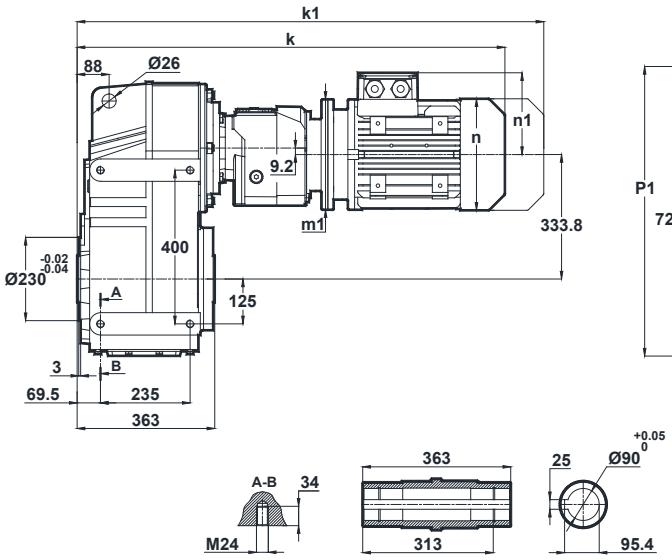
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



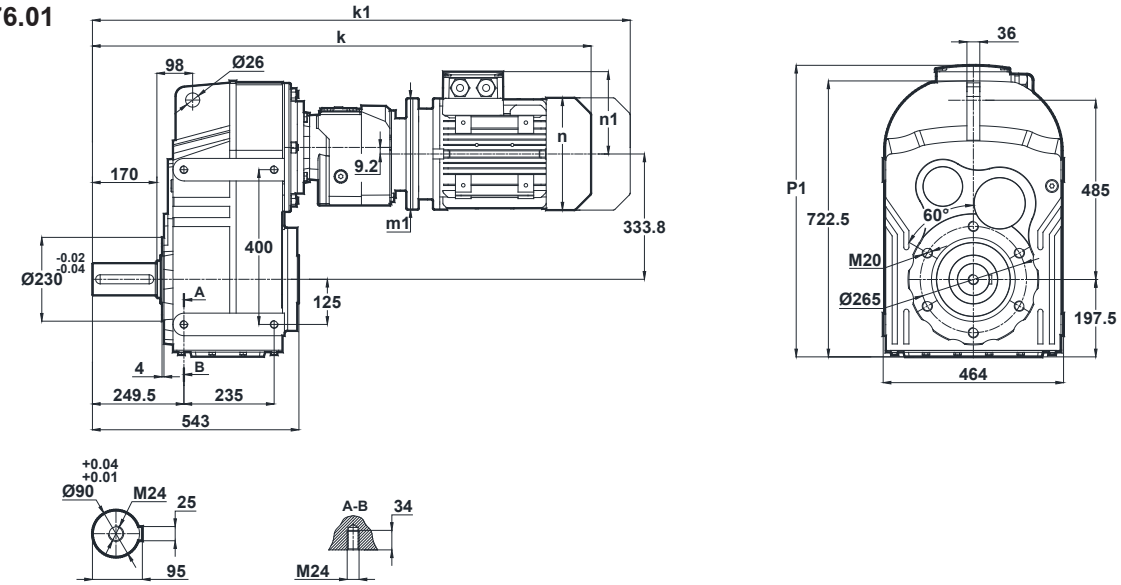
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV775.00
DV776.00



	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	842	864	905	905
k1	933	957	984	984
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	-	-	-	-

DV775.01
DV776.01

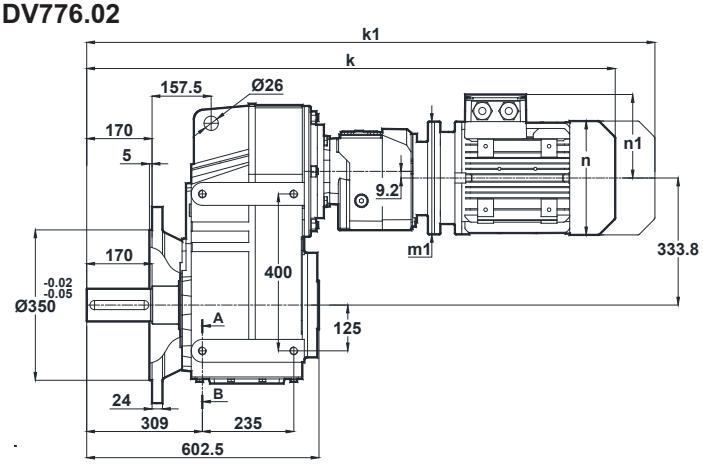


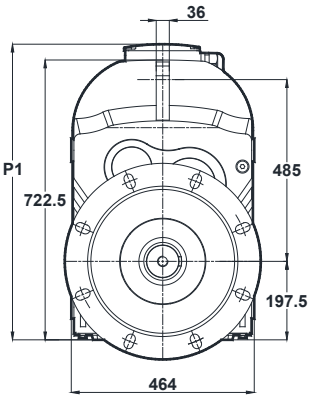
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1022	1044	1085	1085
k1	1113	1137	1164	1164
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	-	-	-	-

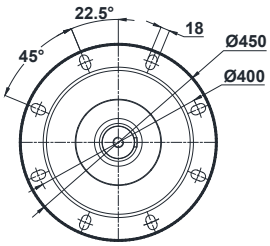
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

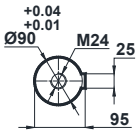
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

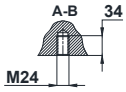
DV775.02
DV776.02





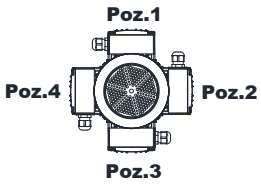






	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1082	1104	1145	1145
k1	1173	1197	1224	1224
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	-	-	-	-

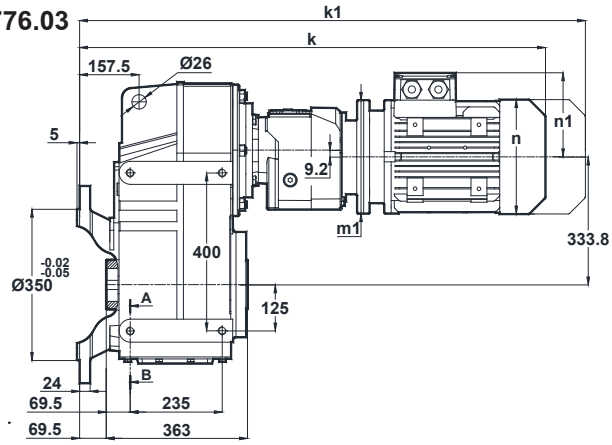
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

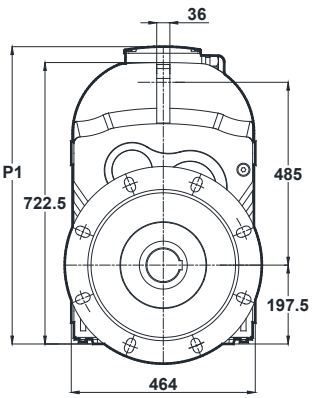


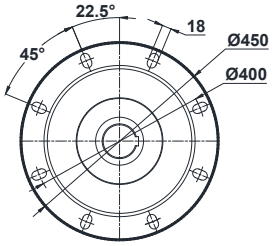
71-80-90
Tip / *Type* / Typ

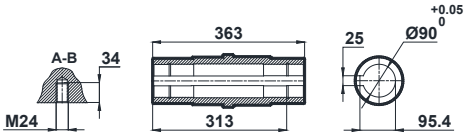
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DV775.03
DV776.03



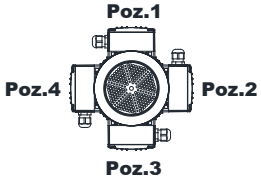






	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	912	934	975	975
k1	1003	1027	1054	1054
n / n1	137/118	155/127	176/136	176/136
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140
P1	-	-	-	-

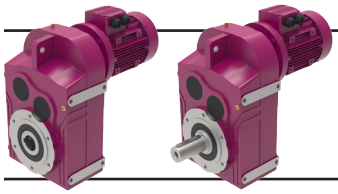
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90
Tip / *Type* / Typ

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

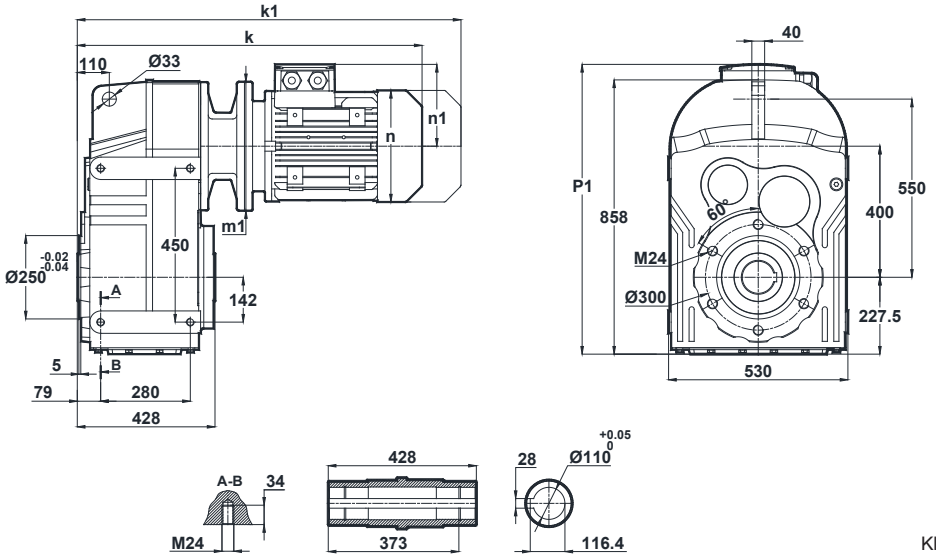
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

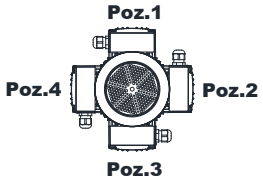
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV872.00
DV873.00



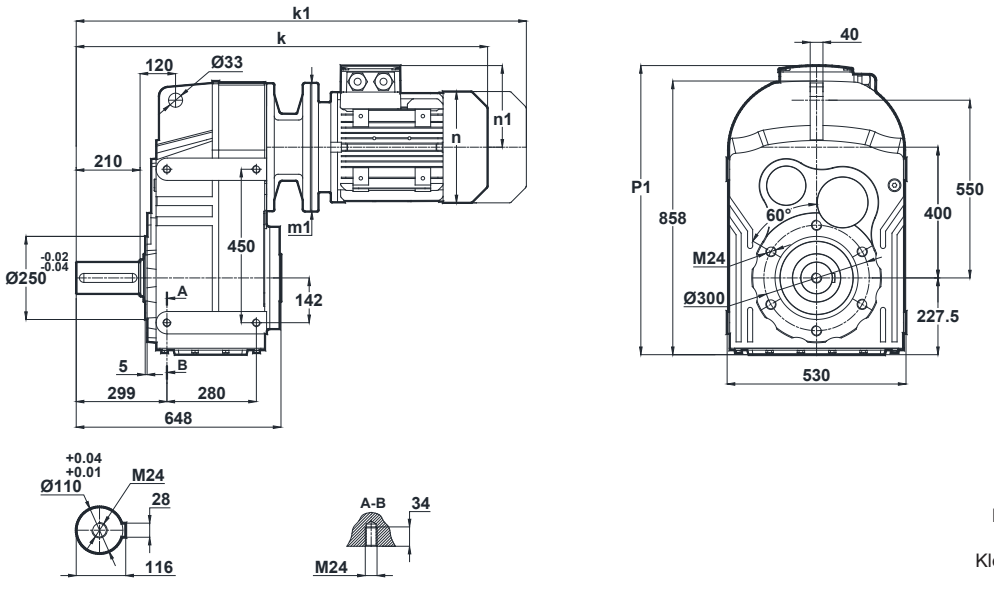
	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	872	872	1097	1097	1188	1188	1229	1292	1292	1358	1474	1474
k1	1002	1002	1247	1247	1375	1375	1421	1475	1475	1515	1672	1672
n / n1	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



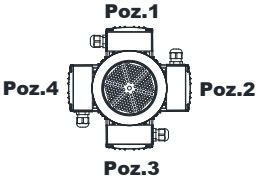
132-160-180-200-225-250-280
Tip / *Type* / Typ

DV872.01
DV873.01



	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	1408	1408	1449	1512	1512	1578	1694	1694
k1	1222	1222	1467	1467	1595	1595	1641	1695	1695	1735	1892	1892
n / n1	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

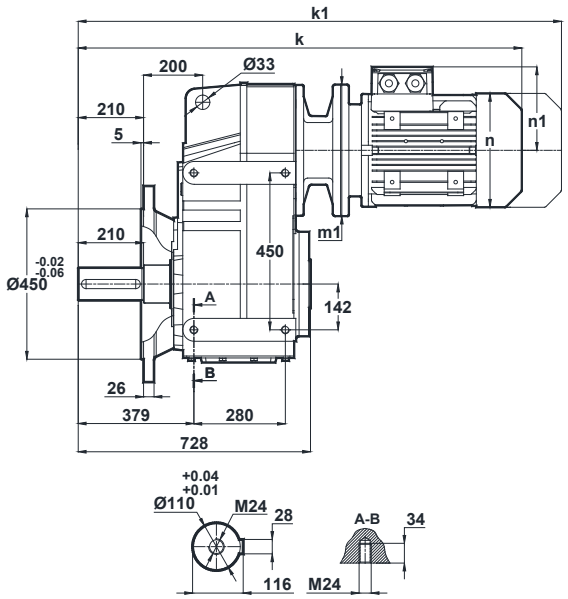


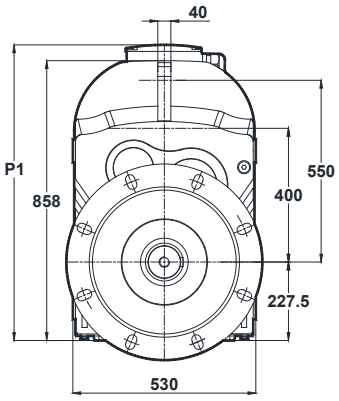
132-160-180-200-225-250-280
Tip / *Type* / Typ

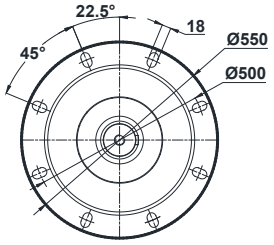
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

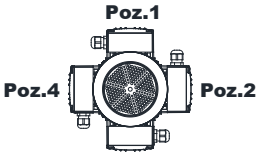






Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

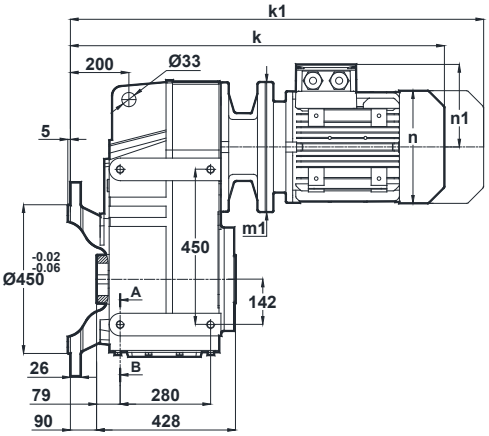
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

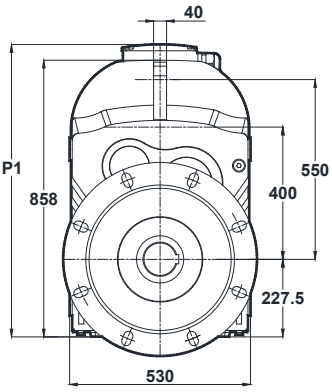


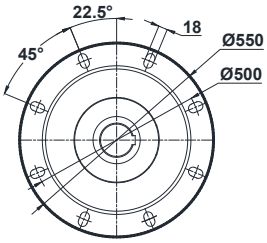
132-160-180-200-225-250-280
Tip / *Type* / Typ

	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	1488	1488	1529	1592	1592	1658	1774	1774
k1	1302	1302	1547	1547	1675	1675	1721	1775	1775	1815	1972	1972
n / n1	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

DV872.03
DV873.03

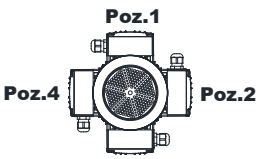






Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

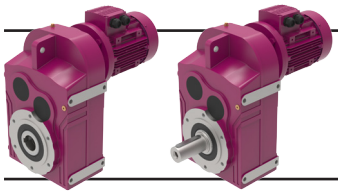
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



132-160-180-200-225-250-280
Tip / *Type* / Typ

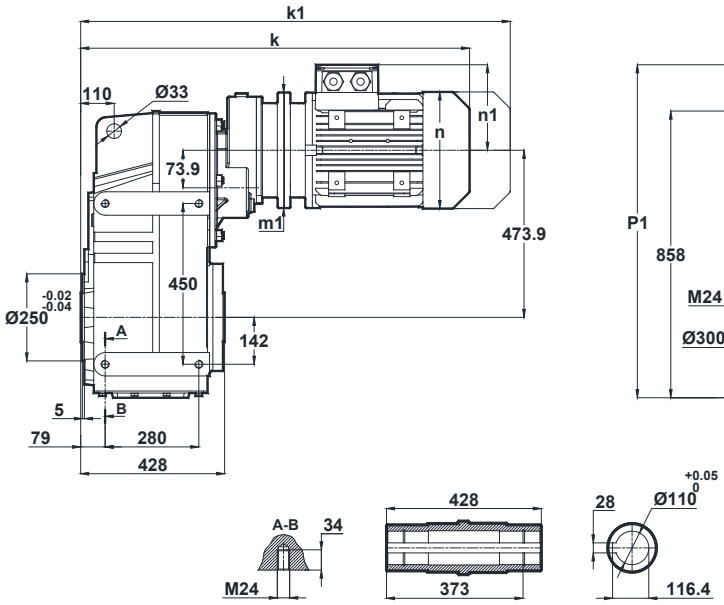
	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	962	962	1187	1187	1278	1278	1319	1382	1382	1448	1564	1564
k1	1092	1092	1337	1337	1465	1465	1511	1565	1565	1605	1762	1762
n / n1	257/182	257/182	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402
m1 (B5)	300	300	350	350	350	350	400	450	450	550	550	550
P1	-	-	-	-	870	870	922	940	940	965	1030	1030

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



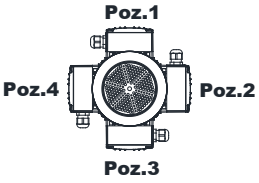
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV874.00



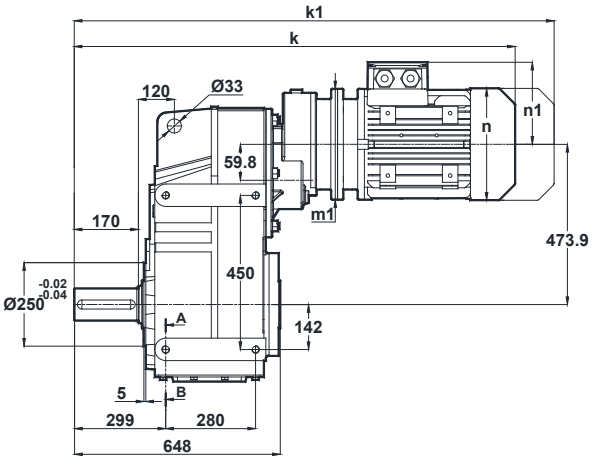
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	884	907	1011	1011
k1	992	1012	1141	1141
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	863	884	884

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



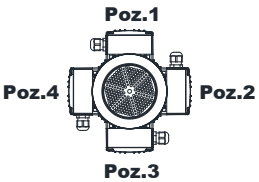
100-112-132
Tip / *Type* / Typ

DV874.01



	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1104	1127	1231	1231
k1	1212	1232	1361	1361
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	863	884	884

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

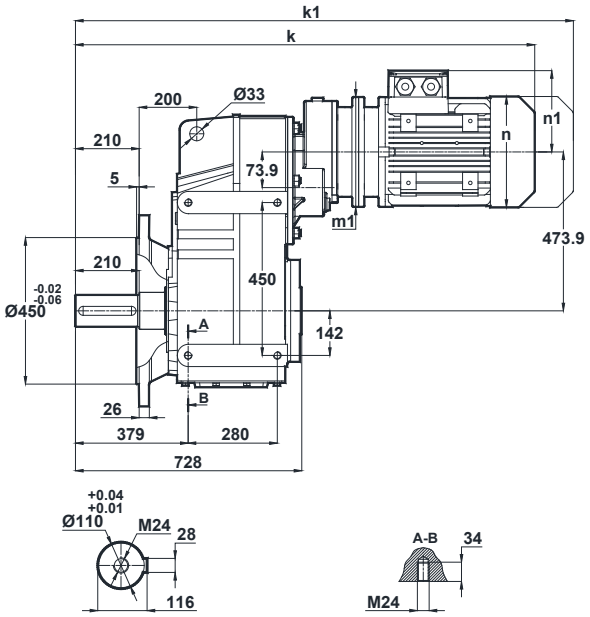


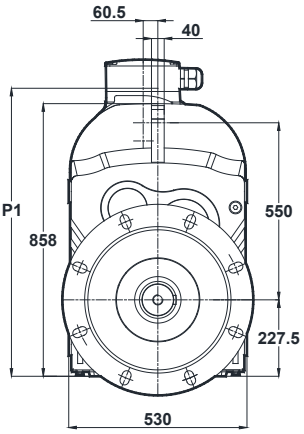
100-112-132
Tip / *Type* / Typ

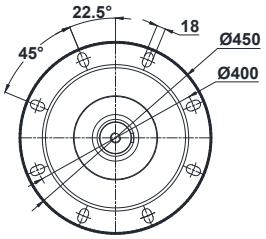
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

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

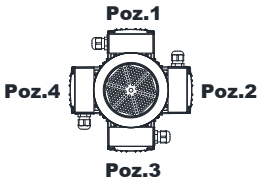






	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1184	1207	1311	1311
k1	1292	1312	1441	1441
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	863	884	884

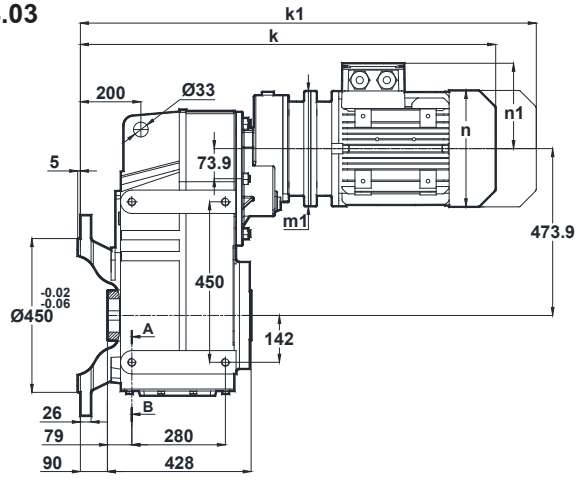
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

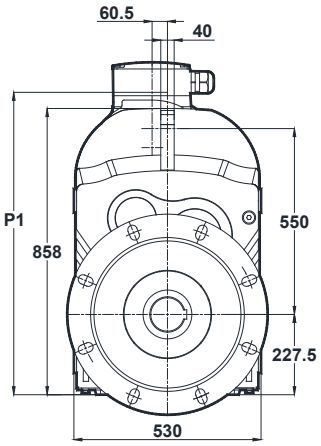


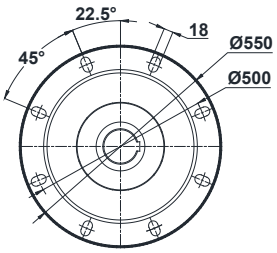
100-112-132
Tip / *Type* / Typ

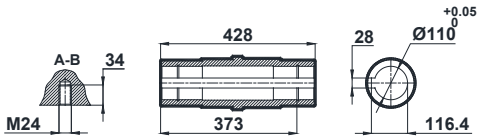
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DV874.03



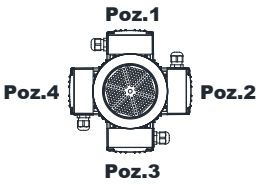






	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	974	997	1101	1101
k1	1082	1101	1231	1231
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	863	884	884

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



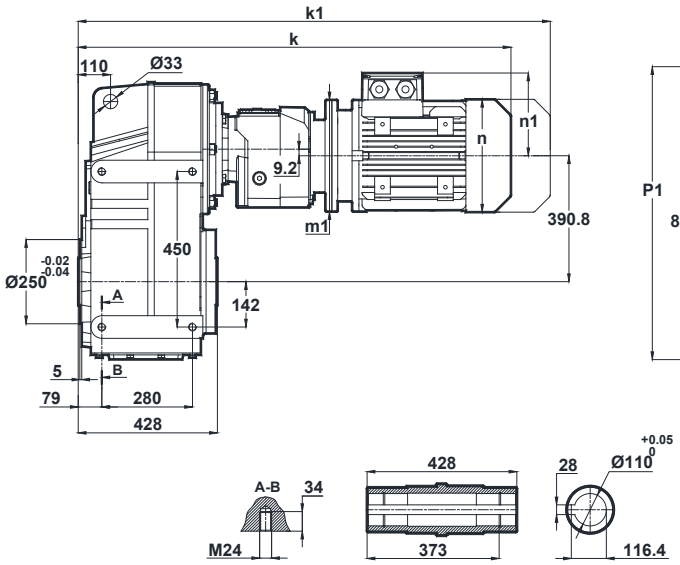
100-112-132
Tip / *Type* / Typ

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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

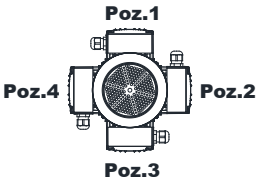
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV875.00
DV876.00



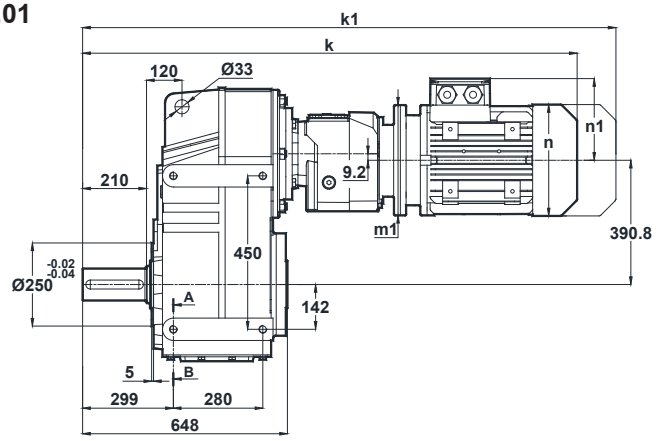
	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	905	927	968	968	1019
k1	996	1020	1047	1047	1127
n / n1	137/118	155/127	176/136	176/136	193/149
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
P1	-	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



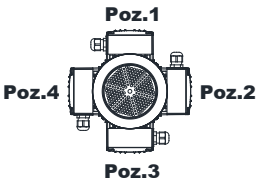
71-80-90-100
Tip / *Type* / Typ

DV875.01
DV876.01



	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1125	1147	1188	1188	1239
k1	1216	1240	1267	1267	1347
n / n1	137/118	155/127	176/136	176/136	193/149
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
P1	-	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

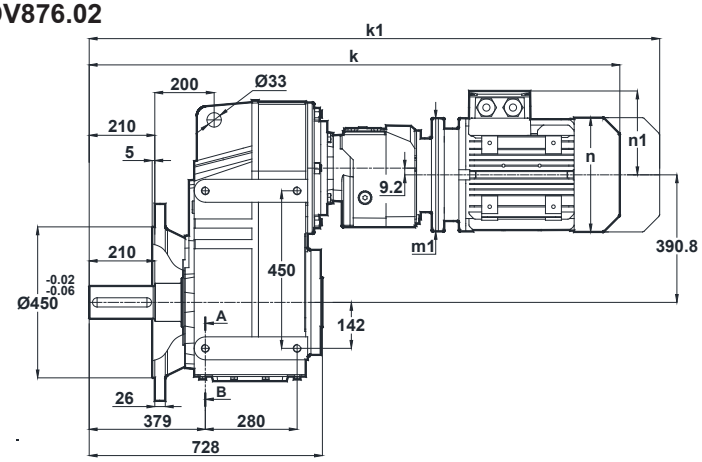


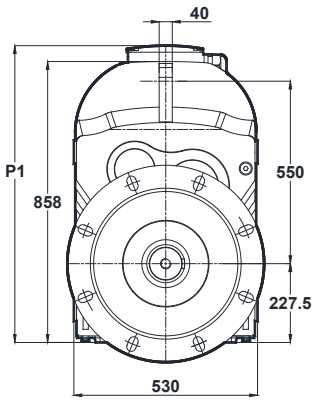
71-80-90-100
Tip / *Type* / Typ

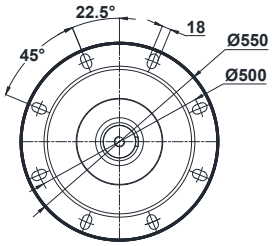
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

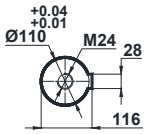
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

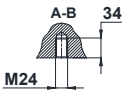
DV875.02
DV876.02





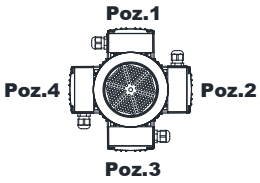






	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1205	1227	1268	1268	1319
k1	1296	1320	1347	1347	1427
n / n1	137/118	155/127	176/136	176/136	193/149
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
P1	-	-	-	-	-

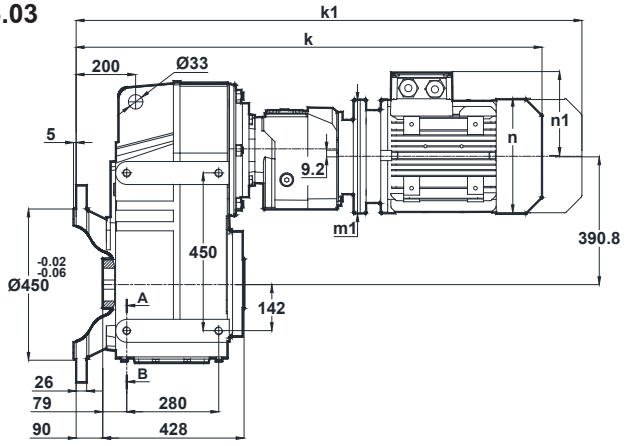
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

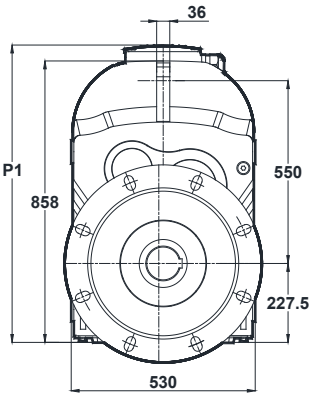


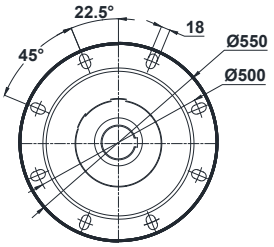
71-80-90-100
Tip / *Type* / Typ

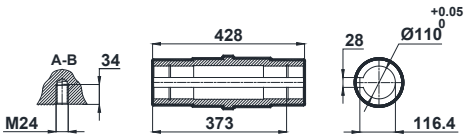
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DV875.03
DV876.03



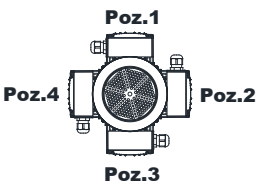






	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	995	1017	1058	1058	1109
k1	1086	1110	1137	1137	1217
n / n1	137/118	155/127	176/136	176/136	193/149
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160
P1	-	-	-	-	-

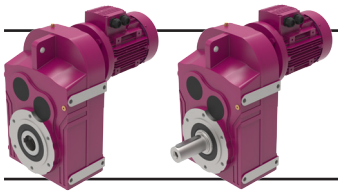
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



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

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

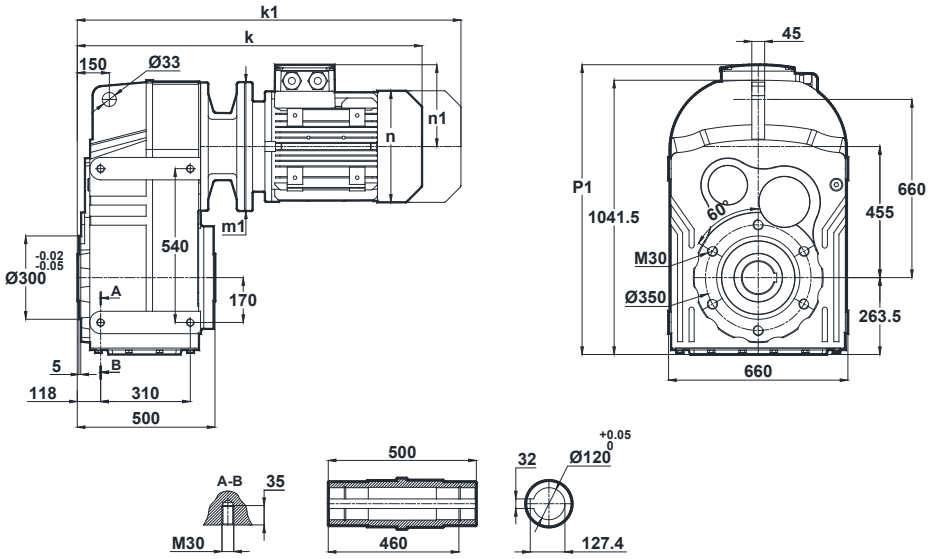
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.



Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

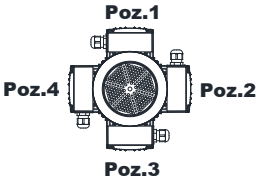
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV972.00
DV973.00



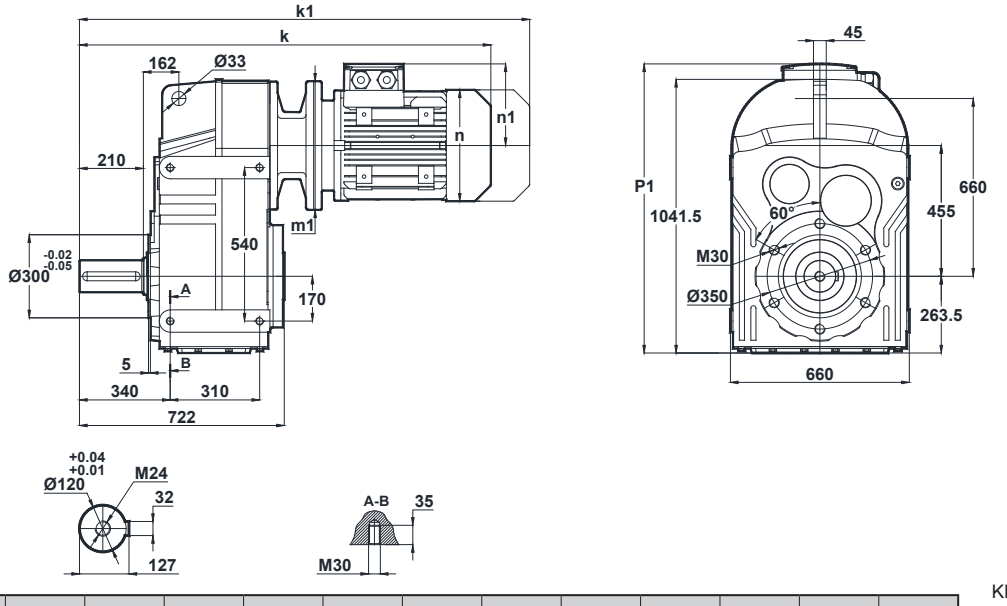
	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5	315L/B5
k	1086	1086	1177	1177	1242	1347	1347	1465	1581	1581	1861	1861	2008
k1	1236	1236	1364	1364	1434	1530	1530	1622	1779	1779	2270	2270	2417
n / n1	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402	622/499	622/499	622/499
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-	-
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



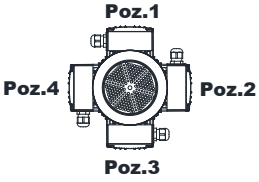
160-180-200-225-250-280-315
Tip / *Type* / Typ

DV972.01
DV973.01



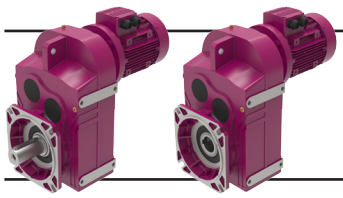
	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5	315L/B5
k	1308	1308	1399	1399	1464	1569	1569	1687	1803	1803	2083	2083	2230
k1	1458	1458	1586	1586	1656	1752	1752	1844	2001	2001	2492	2492	2639
n / n1	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402	622/499	622/499	622/499
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-	-
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



160-180-200-225-250-280-315
Tip / *Type* / Typ

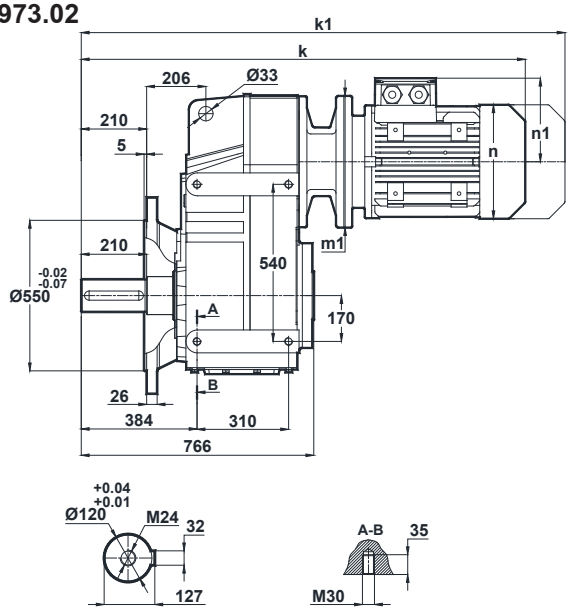
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

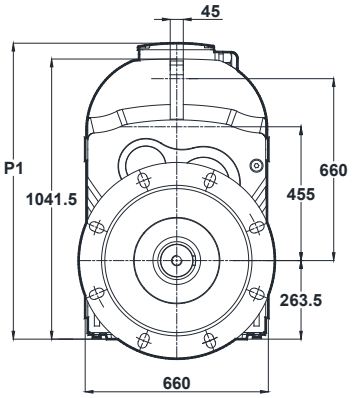


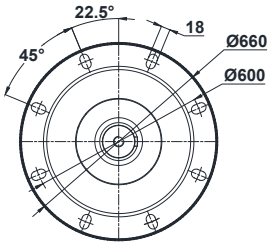
Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

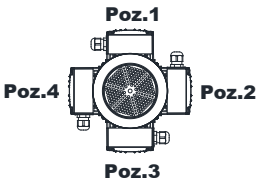






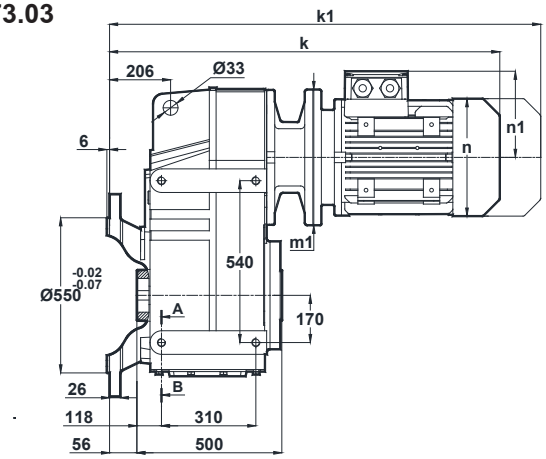
	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5	315L/B5
k	1352	1352	1443	1443	1508	1613	1613	1731	1847	1847	2127	2127	2274
k1	1502	1502	1630	1630	1700	1796	1796	1888	2045	2045	2536	2536	2683
n / n1	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402	622/499	622/499	622/499
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-	-
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

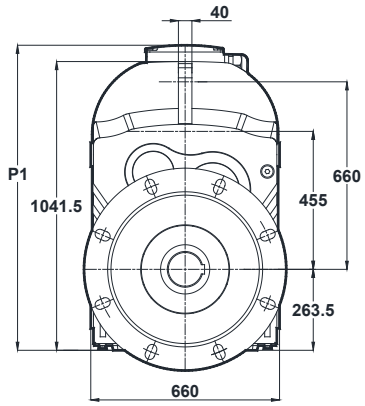
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

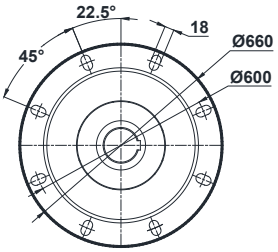


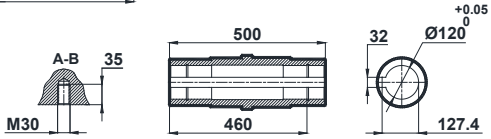
160-180-200-225-250-280-315
Tip / *Type* / Typ

DV972.03
DV973.03



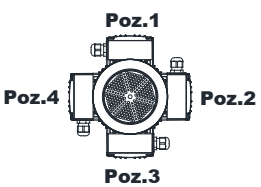






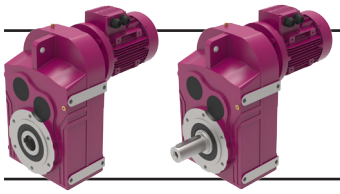
	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/B5	315M/B5	315L/B5
k	1142	1142	1233	1233	1298	1403	1403	1521	1637	1637	1917	1917	2064
k1	1292	1292	1420	1420	1490	1586	1586	1678	1835	1835	2326	2326	2473
n / n1	316/226	316/226	348/242	348/242	396/294	438/312	438/312	481/337	547/402	547/402	622/499	622/499	622/499
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-	-
P1	-	-	-	-	-	-	-	1056	1121	1121	1218	1218	1218

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



160-180-200-225-250-280-315
Tip / *Type* / Typ

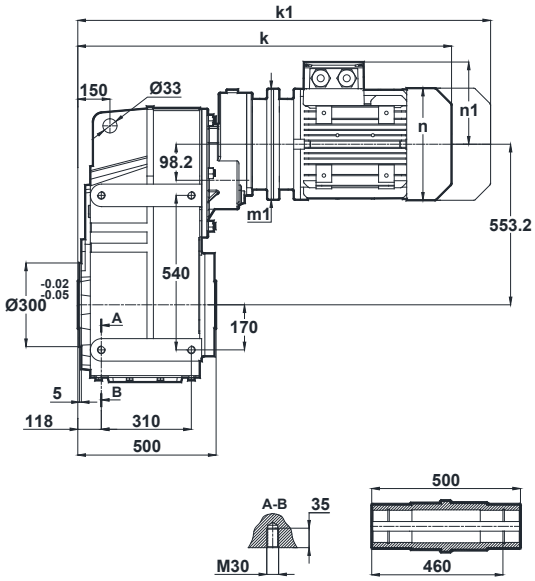
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

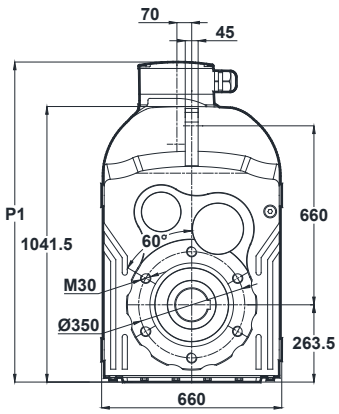


Ölçü Sayfaları
Dimension Pages
Abmessungsseiten

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

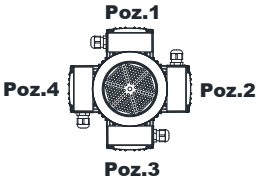
DV974.00





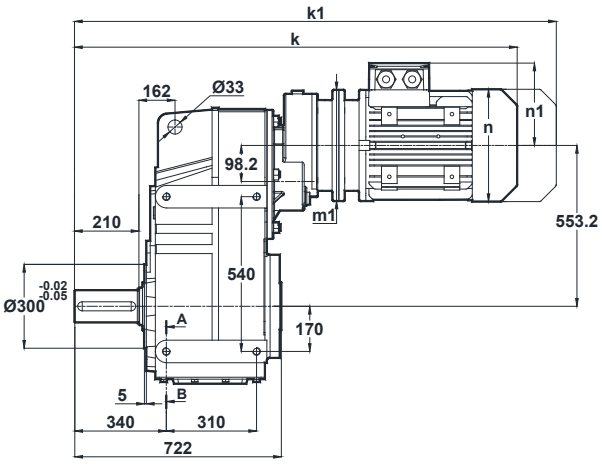
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	989	1012	1110	1110
k1	1097	1117	1240	1240
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	-	-	-

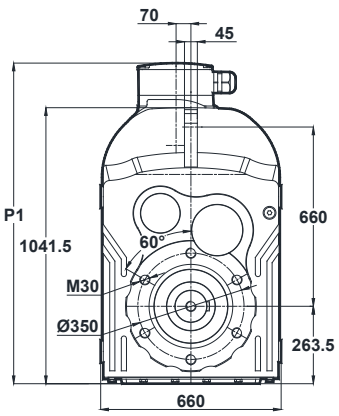
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

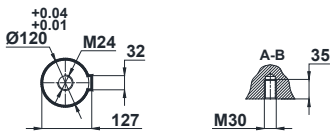


100-112-132
Tip / *Type* / Typ

DV974.01

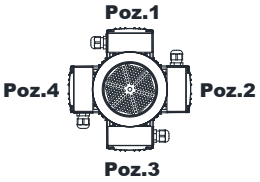






	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1211	1234	1332	1332
k1	1319	1339	1462	1462
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

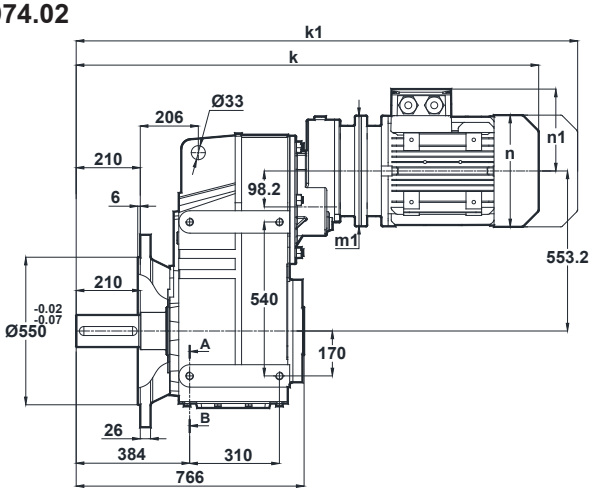


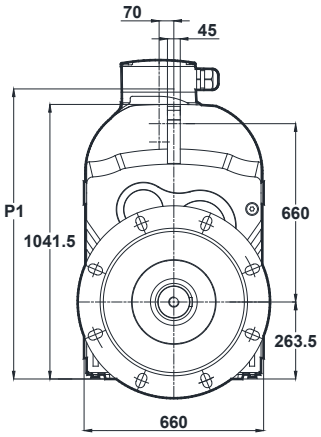
100-112-132
Tip / *Type* / Typ

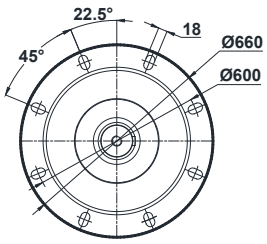
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

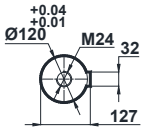
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

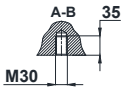
DV974.02





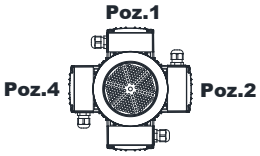






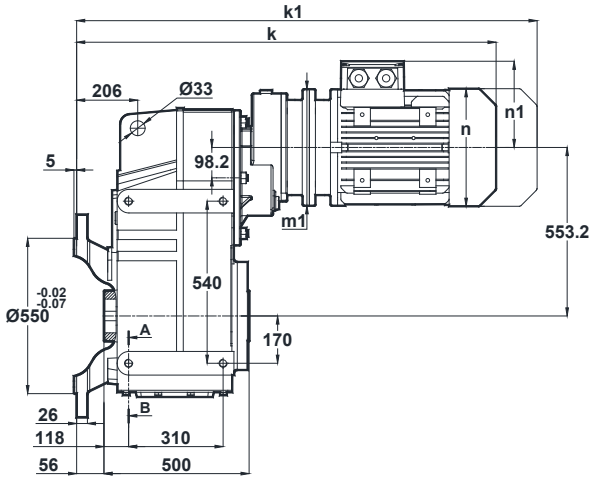
	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1255	1278	1376	1376
k1	1363	1383	1506	1506
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	-	-	-

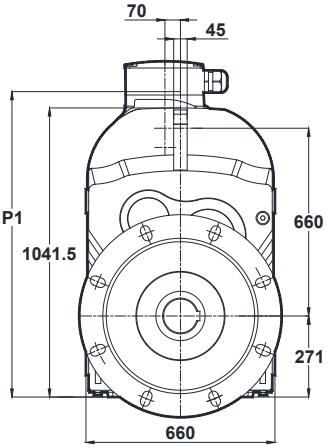
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

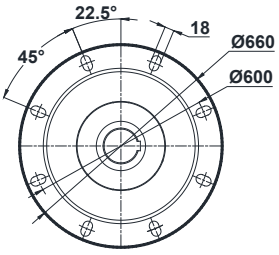


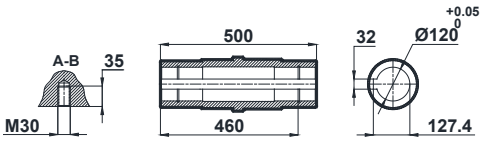
100-112-132
Tip / *Type* / Typ

DV974.03



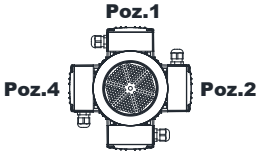






	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1045	1068	1166	1166
k1	1153	1173	1296	1296
n / n1	193/149	215/161	257/182	257/182
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

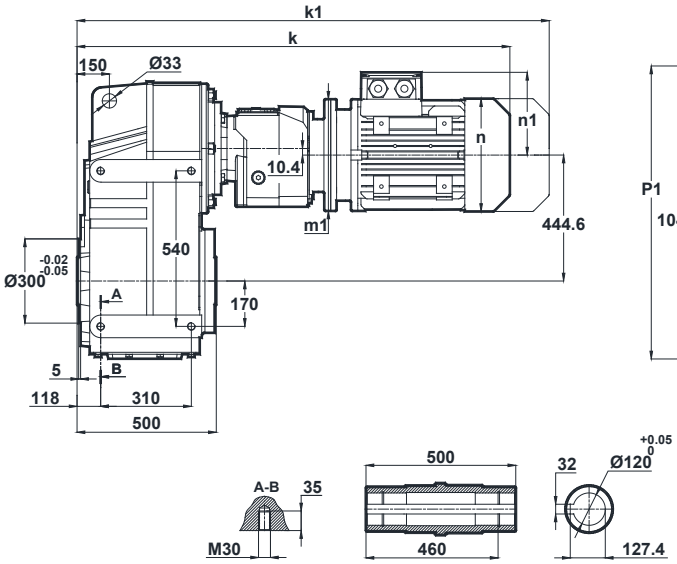


100-112-132
Tip / *Type* / Typ

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

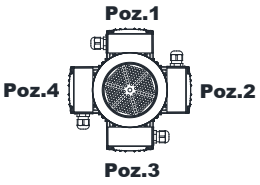
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DV975.00
DV976.00



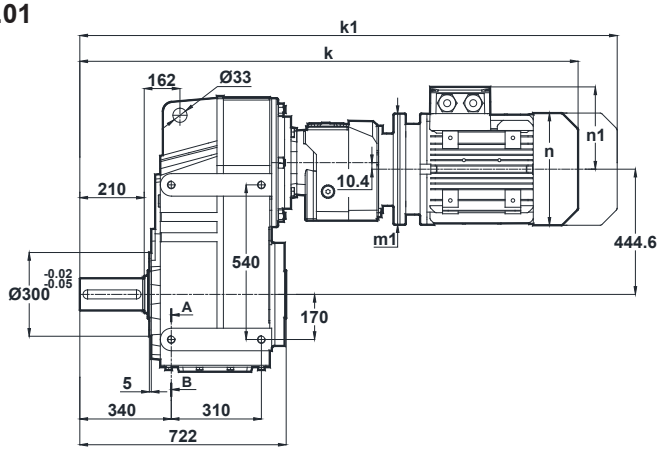
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1050	1091	1091	1143
k1	1143	1170	1170	1251
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



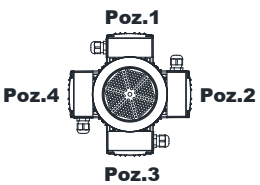
80-90-100
Tip / *Type* / Typ

DV975.01
DV976.01



	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1272	1313	1313	1365
k1	1365	1392	1392	1473
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

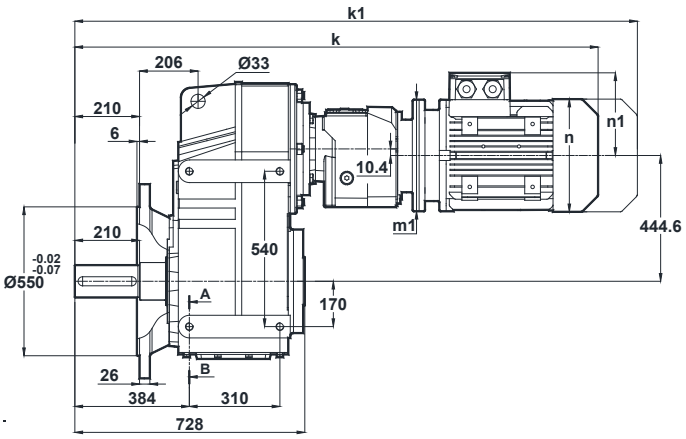


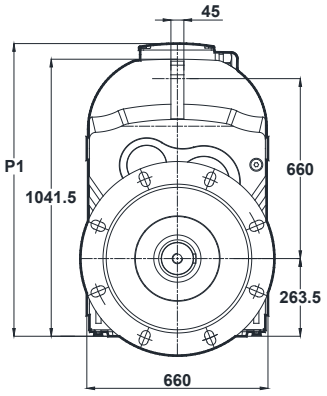
80-90-100
Tip / *Type* / Typ

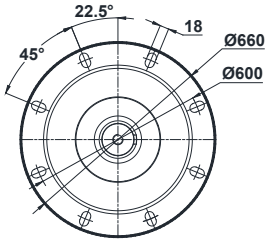
"k1" ölçüsü frenli redüktörlere aittir. / *Dimensions "k1" is for motors with brake.* / Maße "k1" ist für Bremsenmotoren.

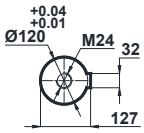
Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

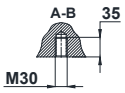
DV975.02
DV976.02





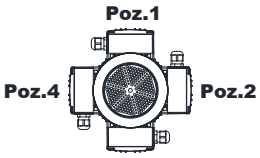






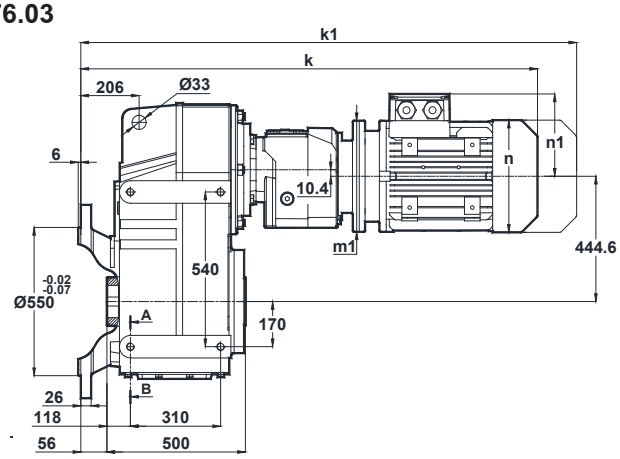
	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1316	1357	1357	1409
k1	1409	1436	1436	1517
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	-	-	-	-

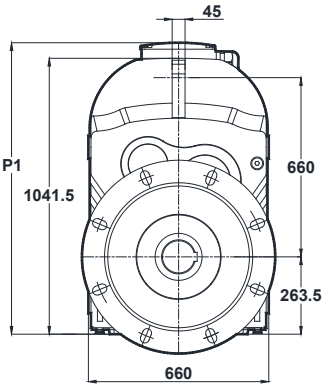
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen

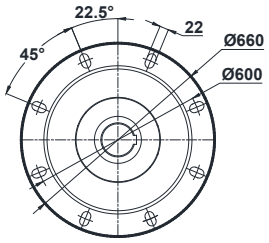


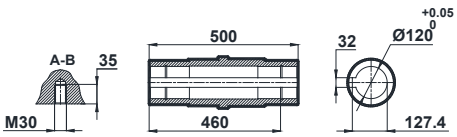
80-90-100
Tip / *Type* / Typ

DV975.03
DV976.03



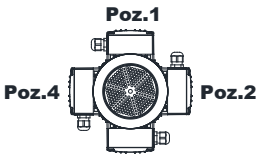






	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1106	1147	1147	1199
k1	1199	1226	1226	1307
n / n1	155/127	176/136	176/136	193/149
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160
P1	-	-	-	-

Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



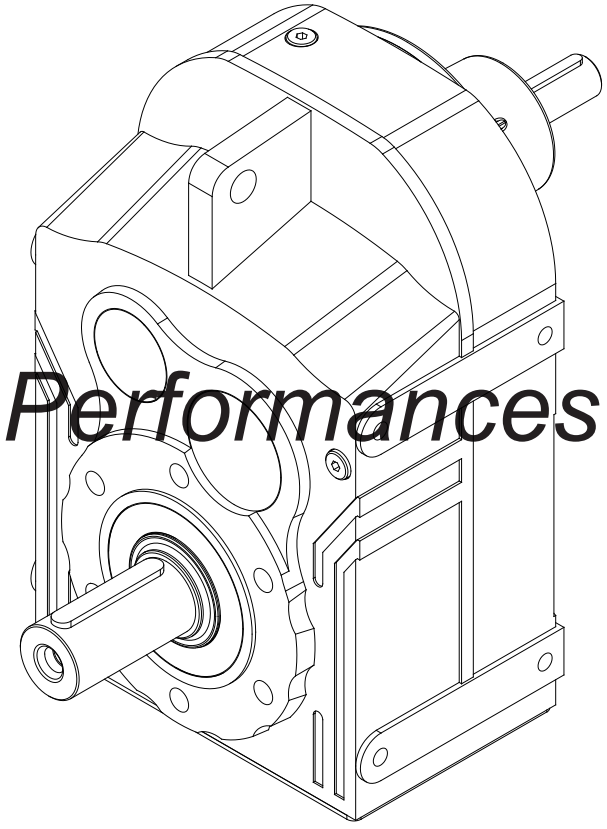
80-90-100
Tip / *Type* / Typ

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



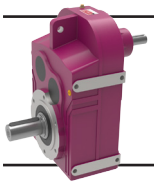
Notlar / *Notes* / Notizen

Güç ve Devir Tabloları



Performances

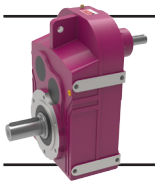
Leistungs- und Drehzahlübersicht



D Serisi Motorsuz Güç Devir Sayfaları
D Series Gear Units Performance Tables
D Serien Getriebe Leistungs- 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) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
150	5,77	251	**DT072**	8,1	**4,1**	2,7	2,1	1,3	1,0	115	-	8	274
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	274
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	276
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	276
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	11087	-	21	278
295	5,82	249		13	**8,0**	6,0	4,8	3,7	3,0	11554	-		
320	6,84	212		12	**7,3**	5,5	4,4	3,4	2,6	12000	-		
395	8,67	167		12	**7,2**	5,4	4,1	2,7	2,0	12801	-		
425	10,11	143		11	**6,6**	4,6	3,5	2,3	1,8	12600	-		

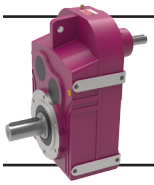


D Serisi Motorsuz Güç Devir Sayfaları

D Series Gear Units Performance Tables

D Serien Getriebe Leistungs- und Drehzahlübersicht

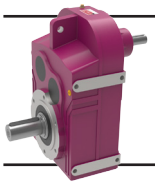
Anma Momenti *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Çevrim Oranı** *Ratio* Übersetzung i	**Çıkış Devri** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipi** *Type* Typ	**Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				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	12000	-	21	278
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	12000	189	22	278
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	280
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	280
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	10244	-	31	282
280	4,52	321		16	**9,7**	7,3	5,8	4,5	3,6	10632	-		
300	5,22	278		15	**9,0**	6,8	5,5	4,2	3,4	11040	-		
315	5,74	253		14	**8,6**	6,5	5,2	4,0	3,3	11309	-		
340	6,65	218		13	**8,0**	6,0	4,9	3,7	3,0	11739	-		
380	7,09	205		14	**8,4**	6,3	5,1	3,9	3,2	11968	-		
410	8,19	177		13	**7,9**	5,9	4,8	3,6	2,9	12405	-		
440	9,45	153		12	**7,3**	5,5	4,4	3,3	2,5	12867	-		
460	10,38	140		11	**7,0**	5,2	4,2	3,0	2,3	13187	-		
490	12,03	121		10	**6,4**	4,8	3,9	2,6	2,0	12600	-		
525	14,06	103		10	**5,9**	4,4	3,4	2,2	1,7	11700	-		
565	16,62	87		8,7	**5,4**	3,7	2,9	1,9	1,4	10600	-		
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	-		



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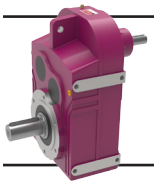


Anma Momenti *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Çevrim Oranı** *Ratio* Übersetzung i	**Çıkış Devri** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipi** *Type* Typ	**Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				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	9200	1309	32	282
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	284
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	284
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**	27	**17**	12	10	7,8	6,3	13247	-	65	286
435	4,42	328		25	**15**	11	9,3	7,1	5,8	13878	-		
465	5,05	287		23	**14**	10	8,7	6,7	5,4	14354	-		
495	5,79	250		22	**13**	10	8,2	6,2	5,1	14886	-		
530	6,69	217		20	**12**	9,3	7,5	5,8	4,7	15456	-		
640	7,42	195		22	**14**	10	8,2	5,7	4,3	15857	-		
700	8,98	161		20	**12**	9,2	7,2	4,7	3,6	14900	-		
745	10,25	141		19	**11**	8,3	6,3	4,1	3,1	13900	-		
795	11,77	123		17	**11**	7,2	5,5	3,6	2,7	12700	-		
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	16000	1104	67	286
680	27,53	53		6,2	**3,9**	3,0	2,4	1,6	1,2	15400	1123		
720	32,11	45		5,6	**3,6**	2,7	2,1	1,4	1,0	14500	1142		
745	35,49	41		5,3	**3,4**	2,4	1,9	1,2	0,93	14000	1149		



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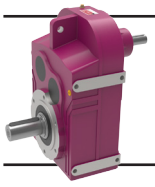
Anma Momenti *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Çevrim Oranı** *Ratio* Übersetzung i	**Çıkış Devri** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipi** *Type* Typ	**Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				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	12800	1157	67	286
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	288
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	288
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**	52	**32**	24	19	15	12	16573	-	103	290
990	5,26	276		48	**29**	22	17	13	11	17230	-		
1070	6,23	233		44	**27**	20	16	12	9,8	17967	-		
1130	6,71	216		43	**26**	20	16	11	9,1	18175	-		
1190	7,54	192		40	**25**	19	15	10	8,1	18724	-		
1445	8,93	162		41	**25**	18	14	9,0	6,8	19661	-		
1550	10,48	138		38	**23**	15	12	7,7	5,8	17000	-		
1550	12,40	117		34	**20**	13	10	6,5	4,9	17000	-		
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**	9,9	**6,2**	4,7	3,8	2,8	2,1	24600	1446	104	290
1210	34,28	42		8,8	**5,5**	4,2	3,4	2,3	1,8	23500	1467		
1290	41,50	35		7,8	**4,9**	3,7	3,0	1,9	1,5	22300	1486		
1350	47,37	31		7,1	**4,5**	3,4	2,6	1,7	1,3	21200	1494		
1410	54,35	27		6,5	**4,1**	3,0	2,3	1,5	1,1	20100	1502		
1440	61,85	23		5,8	**3,7**	2,6	2,0	1,3	0,99	19300	1671		
1500	70,59	21		5,3	**3,4**	2,3	1,7	1,1	0,87	18100	1679		
1550	81,00	18		4,9	**3,0**	2,0	1,5	1,0	0,76	17000	1691		



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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) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
1550	95,87	15	**DT473**	4,4	**2,6**	1,7	1,3	0,84	0,64	17000	1724	104	290
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	292
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	294
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	294
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**	85	**52**	39	32	24	20	27553	-	150	296
1570	4,96	292		80	**49**	37	30	23	19	28416	-		
1670	5,64	257		75	**46**	35	28	21	17	29374	-		
1780	6,45	225		70	**43**	32	26	20	16	30409	-		
1900	7,43	195		65	**40**	30	24	18	15	31549	-		
2030	8,65	168		60	**37**	28	22	17	14	32836	-		
2560	10,45	139		62	**38**	29	23	15	11	31300	-		
2710	11,89	122		58	**36**	26	20	13	9,9	28300	-		
2870	13,60	107		54	**33**	23	17	11	8,7	25100	-		
3000	15,67	93		49	**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**	23	**14**	10	8,3	5,5	4,1	30400	-	153	296
2750	33,28	44		21	**13**	9,3	7,1	4,7	3,5	27800	-		
2910	39,35	37		18	**12**	7,9	6,0	4,0	3,0	24000	-		
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		13	**6,9**	4,5	3,4	2,3	1,7	22500	1566		

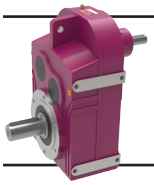
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				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
3000	81,15	18	**DT573**	11	**5,8**	3,8	2,9	1,9	1,5	22500	1630	153	296
3000	91,30	16		10	**5,2**	3,4	2,6	1,7	1,3	22500	1669		
3000	103,39	14		9,1	**4,6**	3,0	2,3	1,5	1,1	22500	1705		
3000	126,06	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	298
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	1707	165	300
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	300
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	39677	-	201	302
2370	4,92	295		-	**75**	56	45	35	28	41059	-		
2550	5,68	255		114	**70**	52	42	32	26	42564	-		
2580	5,89	246		111	**68**	51	41	31	26	43022	-		
2730	6,61	219		104	**64**	48	39	30	24	44289	-		
2880	7,45	195		98	**60**	45	37	28	23	45708	-		
3300	7,75	187		-	**66**	50	40	29	22	44300	-		
3540	8,91	163		-	**62**	46	38	25	19	41500	-		
3790	10,29	141		93	**58**	43	33	22	16	38694	-		
3830	10,67	136		91	**56**	41	32	21	16	38291	-		
4030	11,96	121		85	**53**	37	28	19	14	35135	-		
4250	13,48	108		80	**49**	33	25	16	13	31078	-		
4300	15,30	95		75	**44**	29	22	15	11	29600	-		
4300	17,49	83		69	**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**	43	**22**	15	11	7,4	5,6	29600	370	204	302
4300	34,02	43		39	**20**	13	10	6,5	5,0	29600	849		
4300	38,70	37		35	**17**	11	8,7	5,7	4,4	29600	1284		
4300	44,27	33		30	**15**	10	7,7	5,0	3,8	29600	1681		

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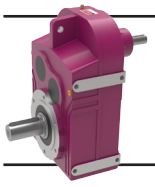


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				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
4300	51,01	28	**DT673**	26	**13**	8,7	6,7	4,4	3,3	29600	2043	204	302
4300	59,34	24		23	**11**	7,5	5,7	3,8	2,9	29600	2374		
4300	60,82	24		22	**11**	7,3	5,6	3,7	2,8	29600	3134		
4300	69,18	21		19	**9,8**	6,4	4,9	3,2	2,4	29600	3197		
4300	79,14	18		17	**8,5**	5,6	4,3	2,8	2,1	29600	3254		
4300	91,19	16		15	**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	304
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	306
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	306
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	36488	-	275	308
4080	5,06	287		-	**125**	94	76	58	47	39319	-		
4350	5,75	252		-	**118**	88	71	54	44	40521	-		
4630	6,58	220		178	**110**	82	66	51	41	41868	-		
4770	6,97	208		173	**107**	80	64	49	40	42406	-		
5010	7,76	187		163	**101**	75	61	46	37	43533	-		
5260	8,70	167		153	**94**	71	57	44	36	44793	-		
6050	9,00	161		-	**105**	79	63	46	35	45031	-		
6420	10,23	142		-	**98**	73	59	40	31	46433	-		
6820	11,71	124		148	**91**	68	54	35	27	47960	-		
7000	12,40	117		143	**88**	66	51	33	25	48620	-		
7330	13,81	105		135	**83**	60	46	30	23	49933	-		
7680	15,46	94		126	**78**	53	41	27	20	51385	-		
8000	17,44	83		117	**72**	47	36	24	18	53158	-		
8000	19,82	73		109	**63**	42	32	21	16	56132	-		
8000	22,77	64		100	**55**	36	28	18	14	55100	-		
5560	17.95	81	**DT773**	79	**48**	36	29	22	17	58779	-	276	308

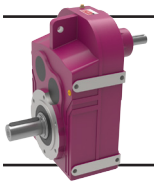
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Anma Momenti *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Çevrim Oranı** *Ratio* Übersetzung i	**Çıkış Devri** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipi** *Type* Typ	**Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
5620	18,61	78	**DT773**	76	**47**	35	28	22	17	59427	-	276	308
5820	20,87	69		71	**43**	33	26	20	15	61497	-		
8000	24,06	60		-	**52**	34	26	17	13	55500	-		
8000	27,65	52		-	**45**	30	23	15	11	55500	-		
8000	31,92	45		78	**39**	26	20	13	9,8	55500	-		
8000	33,10	44		75	**38**	25	19	12	9,5	55500	-		
8000	37,12	39		67	**34**	22	17	11	8,4	55500	-		
8000	41,85	35		60	**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		40	**20**	13	10	6,6	5,0	55500	3029		
8000	64,64	22		39	**19**	13	10	6,4	4,8	55500	3039		
8000	72,50	20		34	**17**	11	8,7	5,7	4,3	55500	3122		
8000	81,72	18		31	**15**	10	7,7	5,1	3,8	55500	3199		
8000	92,70	16		27	**14**	8,9	6,8	4,5	3,4	55500	3270		
8000	105,99	14		24	**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	310
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	312
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	312
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	5,07	286	**DT872**	-	**204**	153	123	94	77	35090	-	390	314
6660	5,66	256		-	**183**	137	110	84	69	41392	-		

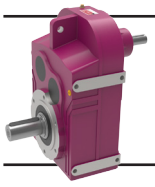
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Anma Momenti *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Çevrim Oranı** *Ratio* Übersetzung i	**Çıkış Devri** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipi** *Type* Typ	**Pe= Nominal Güç [kW] (Servis Faktörü fs=1,0 için)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360			
7040	6,35	228	**DT872**	-	**172**	129	104	80	65	46313	-	390	314
7440	7,16	202		-	**162**	121	98	75	61	51687	-		
7870	8,12	179		245	**151**	113	91	70	57	57591	-		
9130	8,75	166		-	**162**	122	98	75	58	61320	-		
9610	9,78	148		-	**153**	115	93	68	52	66686	-		
10120	10,97	132		-	**144**	108	87	61	46	69230	-		
10660	12,36	117		-	**135**	101	81	54	41	71345	-		
11250	14,02	103		203	**125**	94	73	48	36	73655	-		
10150	13,58	107	**DT873**	-	**116**	87	70	49	37	72337	-	394	314
10550	15,45	94		-	**106**	80	64	43	33	75187	-		
11000	17,67	82		157	**97**	73	58	38	29	78239	-		
13000	23,44	62		-	**86**	57	43	29	22	76000	-		
13000	26,66	54		-	**76**	50	38	25	19	76000	-		
13000	30,50	48		125	**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		78	**39**	26	20	13	9,8	76000	2678		
13000	55,01	26		74	**37**	24	19	12	9,3	76000	3038		
13000	61,27	24		66	**33**	22	17	11	8,3	76000	3530		
13000	68,62	21		59	**30**	19	15	9,8	7,4	76000	3992		
13000	77,36	19		52	**26**	17	13	8,7	6,6	76000	4424		
13000	87,95	16		46	**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	316
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	318
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	318
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		

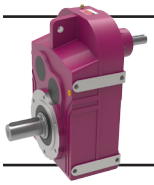
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				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
13000	8612,25	0,17	**DT876**	0,53	**0,27**	0,19	0,15	0,10	0,07	76000	2171	409	318
13000	9820,98	0,15		0,52	**0,26**	0,19	0,14	0,09	0,07	76000	2173		
13000	12200,68	0,12		0,42	**0,21**	0,15	0,12	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	78287	-	570	320
13490	7,88	184		-	**266**	199	161	117	89	80341	-		
14170	8,82	164		-	**250**	187	151	105	80	82585	-		
14900	9,94	146		379	**233**	175	141	93	71	85086	-		
17920	11,85	122		-	**236**	156	119	78	59	88682	-		
18000	13,19	110		-	**213**	140	107	70	53	92683	-		
18000	14,77	98		-	**190**	125	96	63	48	97220	-		
18000	16,64	87		304	**169**	111	85	56	42	101000	-		
16800	20,27	72	**DT973**	-	**129**	91	69	46	35	104100	19858	575	320
17400	22,85	63		-	**118**	81	62	40	31	102300	19950		
18000	25,92	56		176	**108**	71	54	36	27	100700	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		129	**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		78	**39**	26	20	13	9,8	100000	25359		
18000	84,31	17		67	**33**	22	17	11	8,4	100000	25531		
18000	93,91	15		60	**30**	20	15	9,9	7,5	100000	25619		
18000	105,33	14		53	**27**	18	13	8,8	6,7	100000	25702		
18000	119,15	12		47	**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	322
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	324
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	324
18000	3079,47	0,47		2,0	**1,0**	0,66	0,51	0,33	0,25	100000	2056		

Sentetik yağ kullanılmalıdır. / *Synthetic oil must be used.* / Synthetisches Öl muss verwendet werden

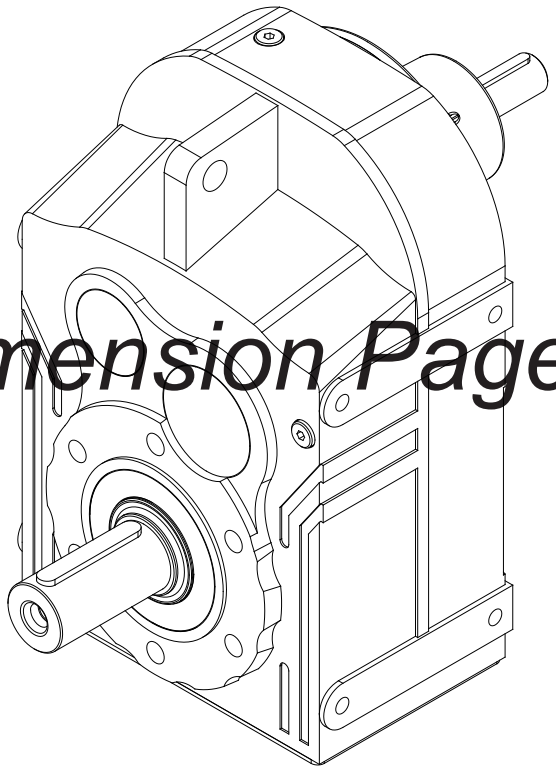


D Serisi Motorsuz Güç Devir Sayfaları
D Series Gear Units Performance Tables
D Serien Getriebe Leistungs- und Drehzahlübersicht

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) **Giriş devri[d/d]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**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
				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	324
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		

DT Serisi / *Series* / Serie

Ölçü Sayfaları

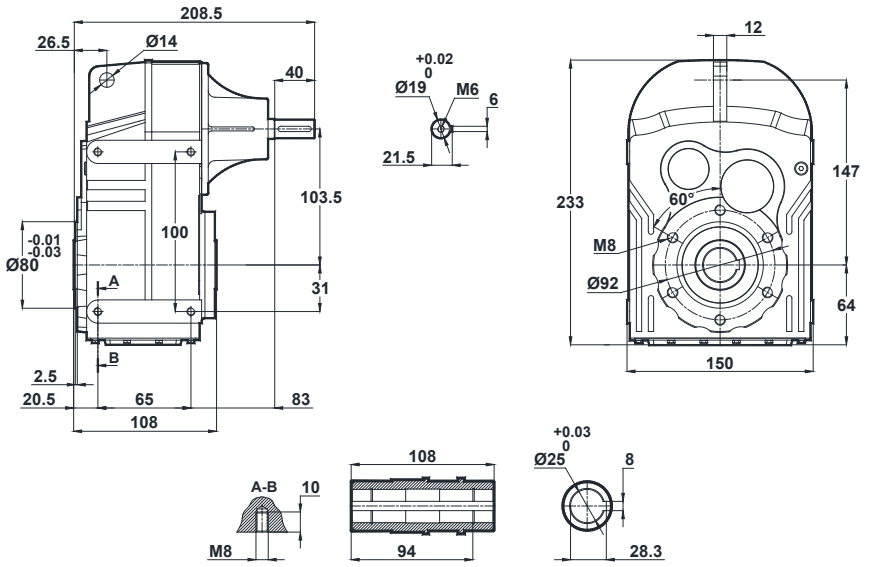


Dimension Pages

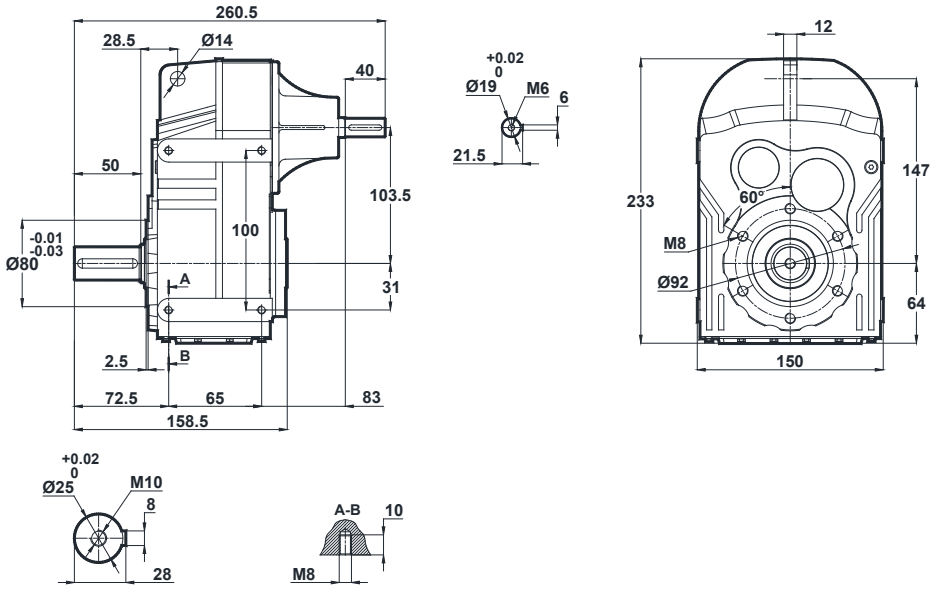
Abmessungsseiten

-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

DT072.00
DT073.00

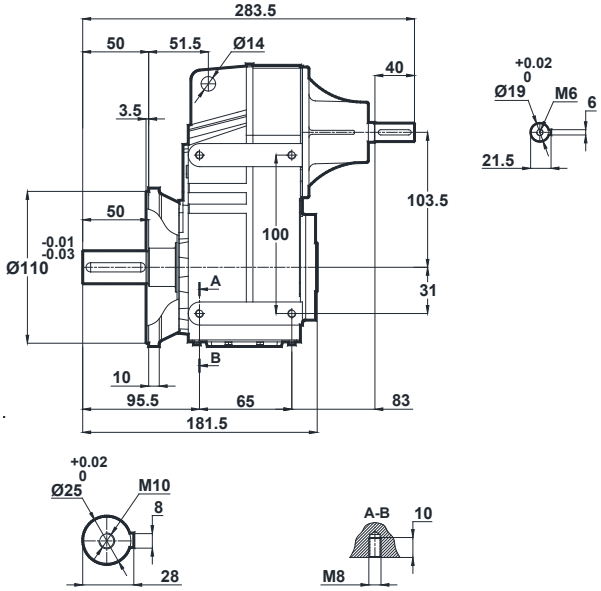


DT072.01
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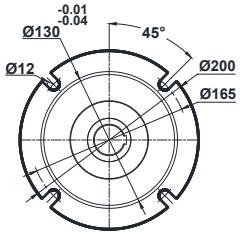


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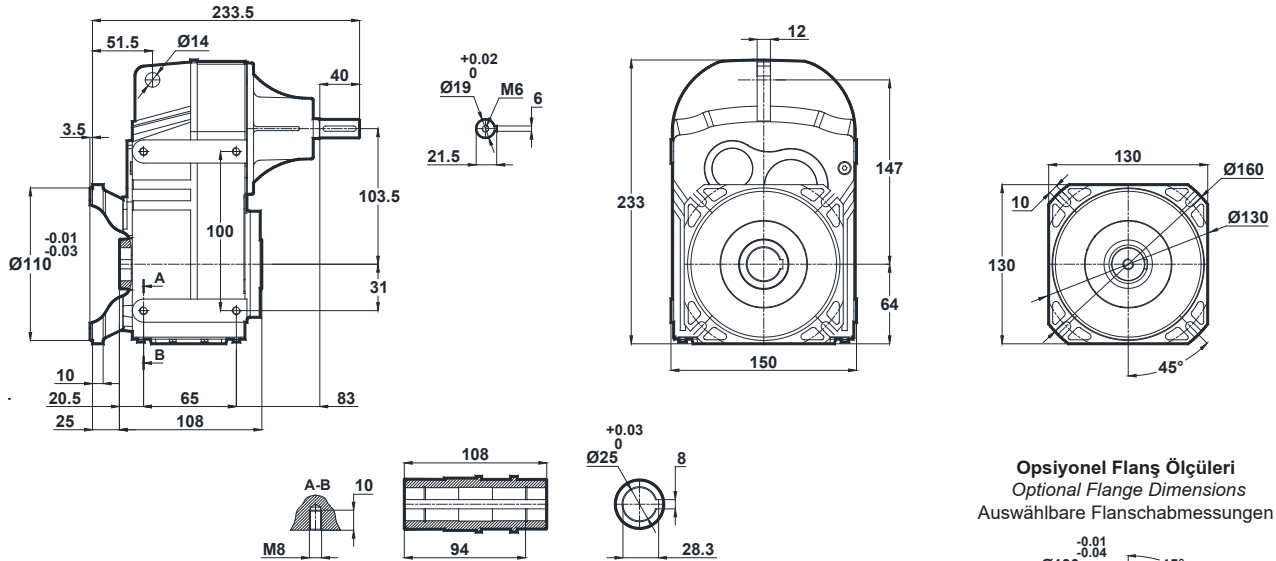
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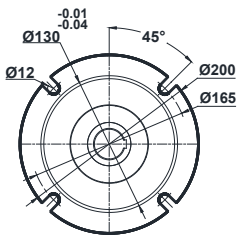
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



DT072.03
DT073.03

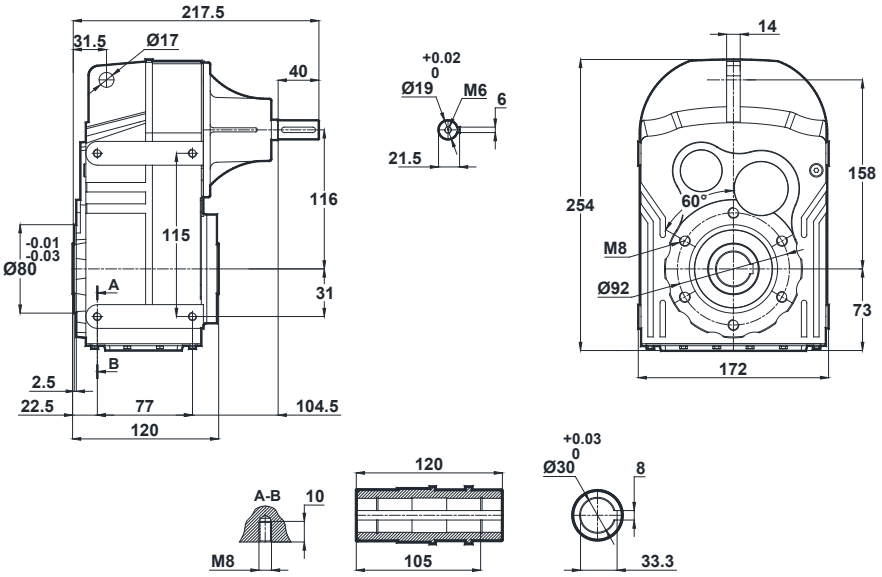


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

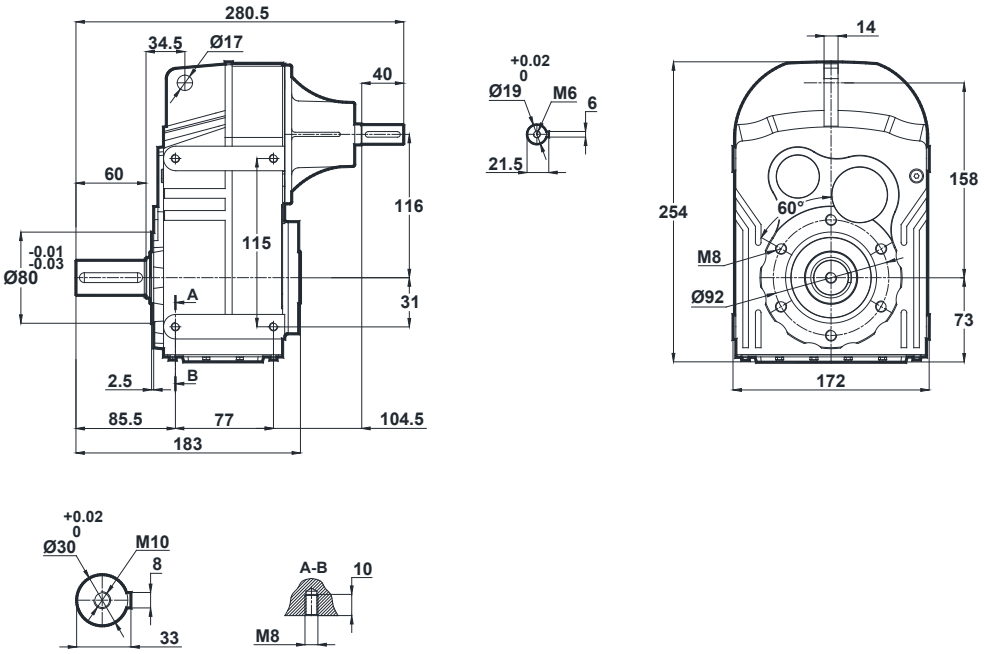


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT172.00
DT173.00

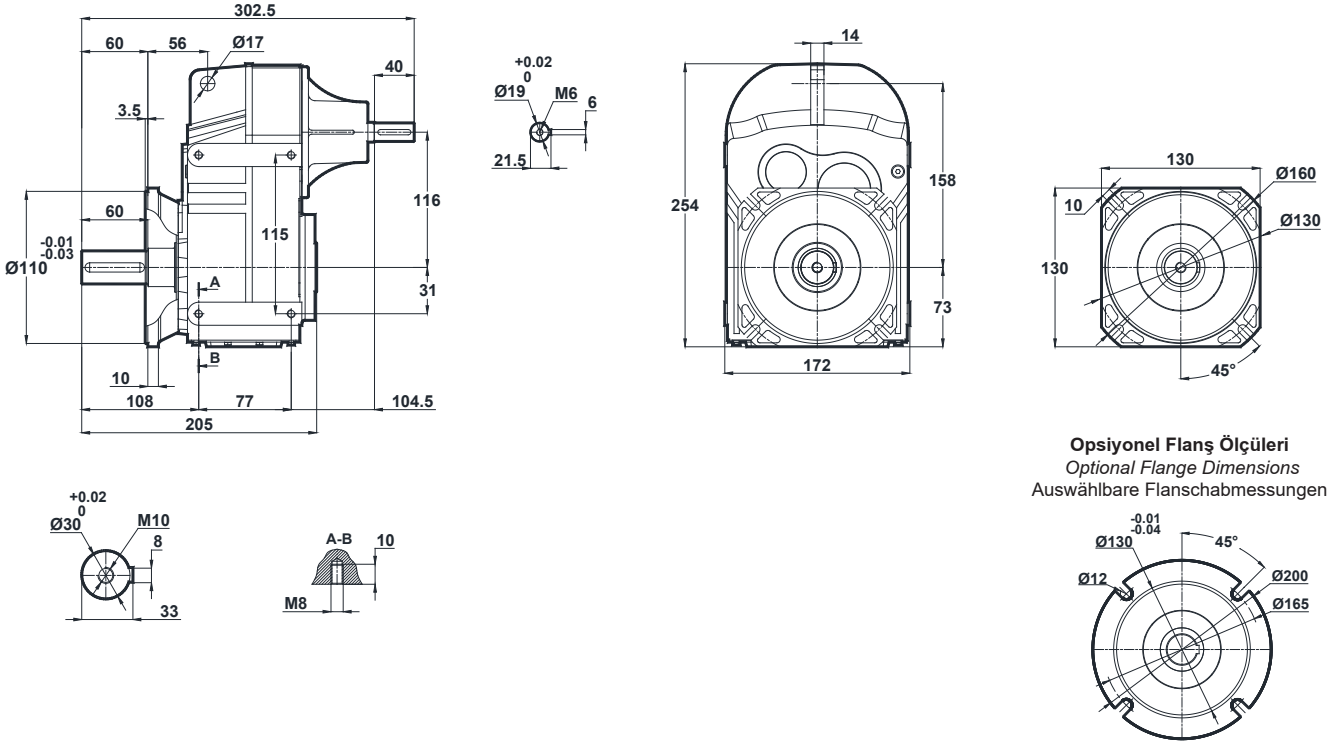


DT172.01
DT173.01



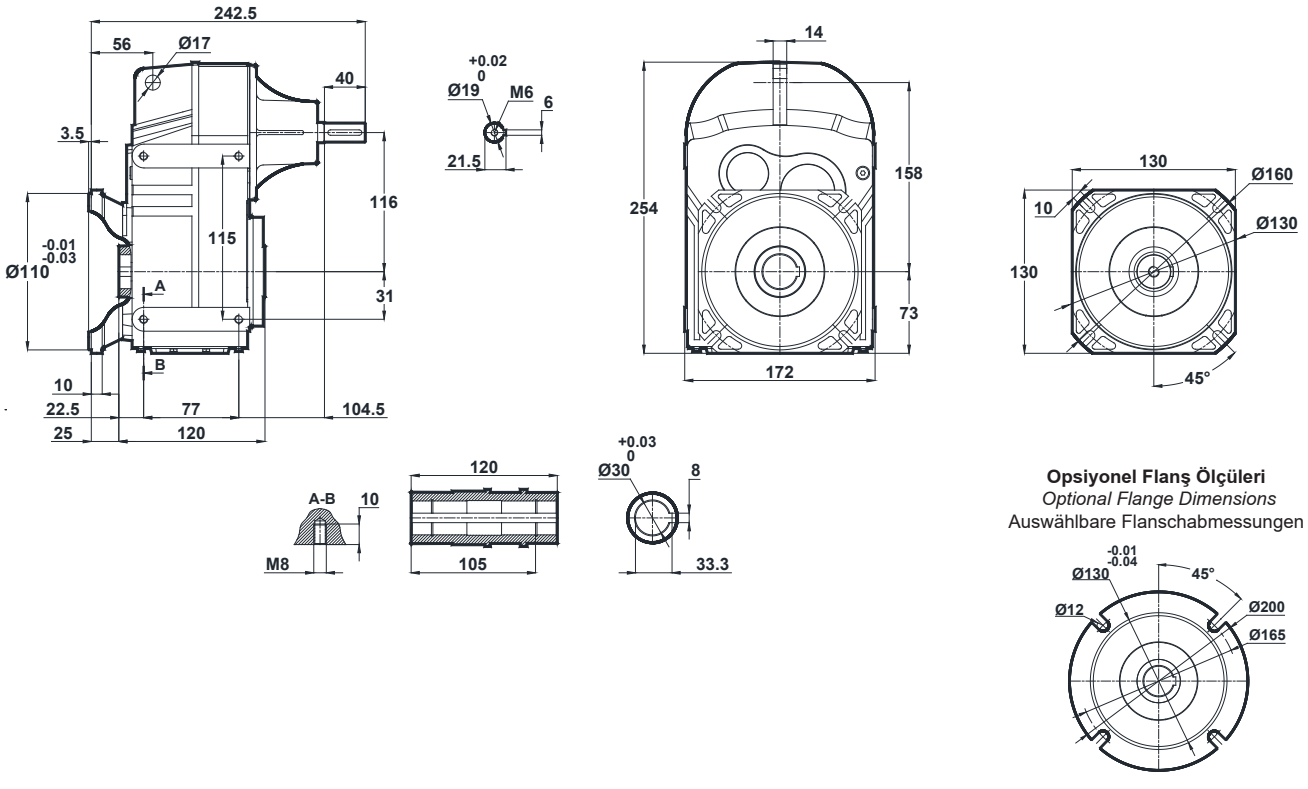
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DT172.02
DT173.02



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

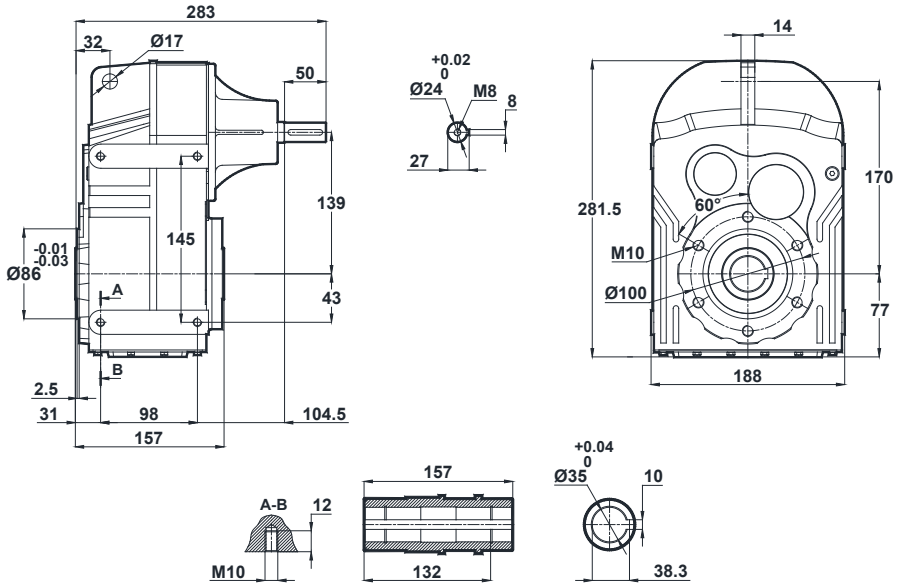
DT172.03
DT173.03



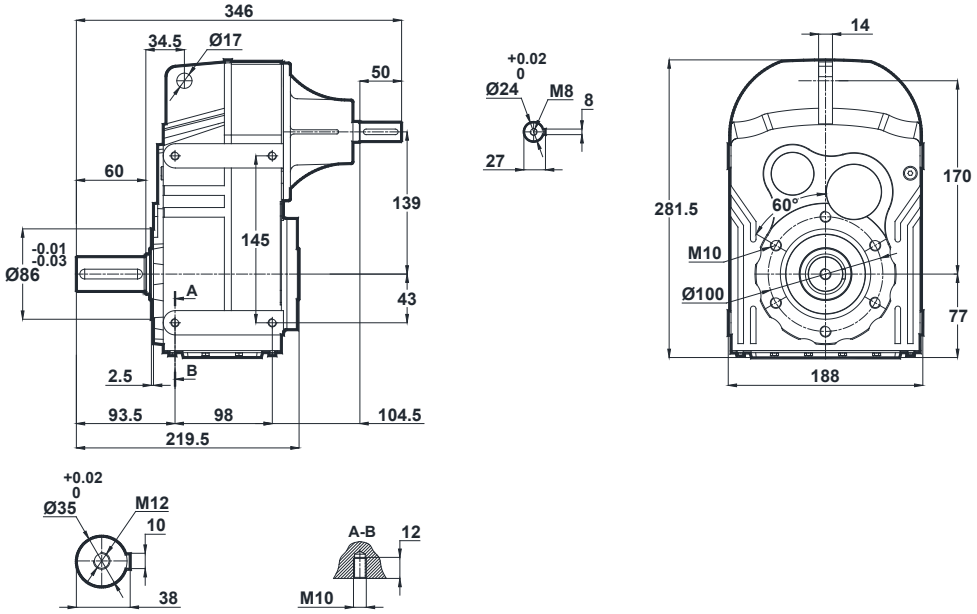
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

-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

DT272.00
DT273.00

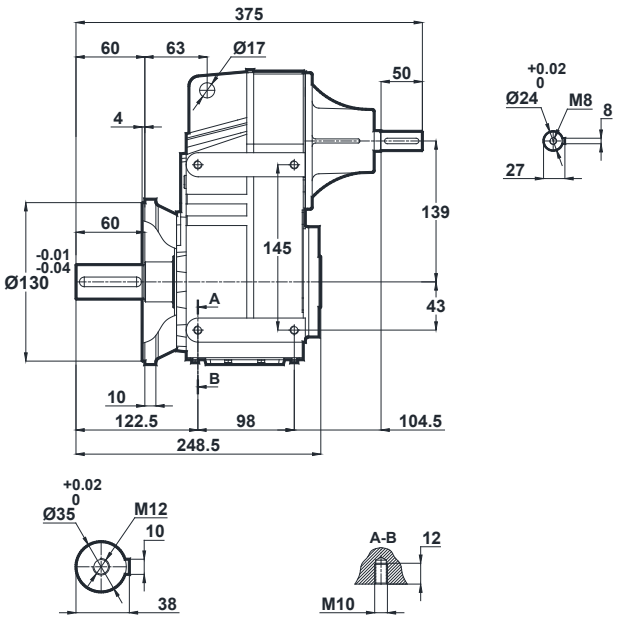


DT272.01
DT273.01

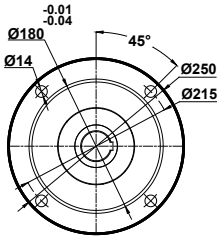


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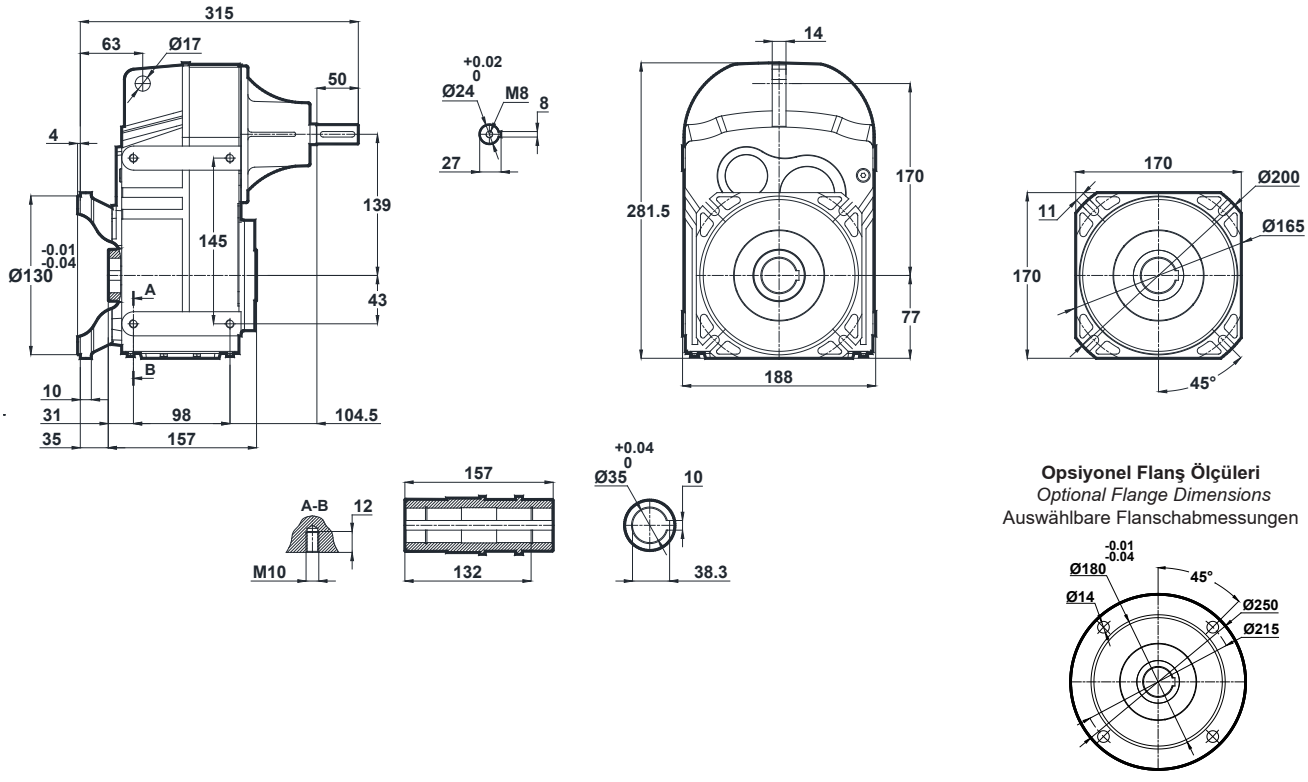
DT272.02
DT273.02



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



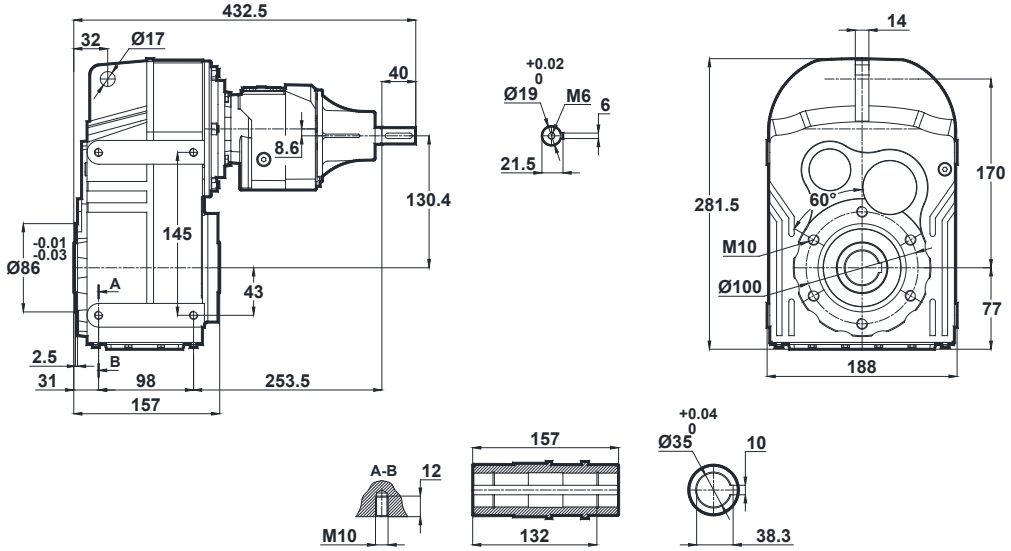
DT272.03
DT273.03



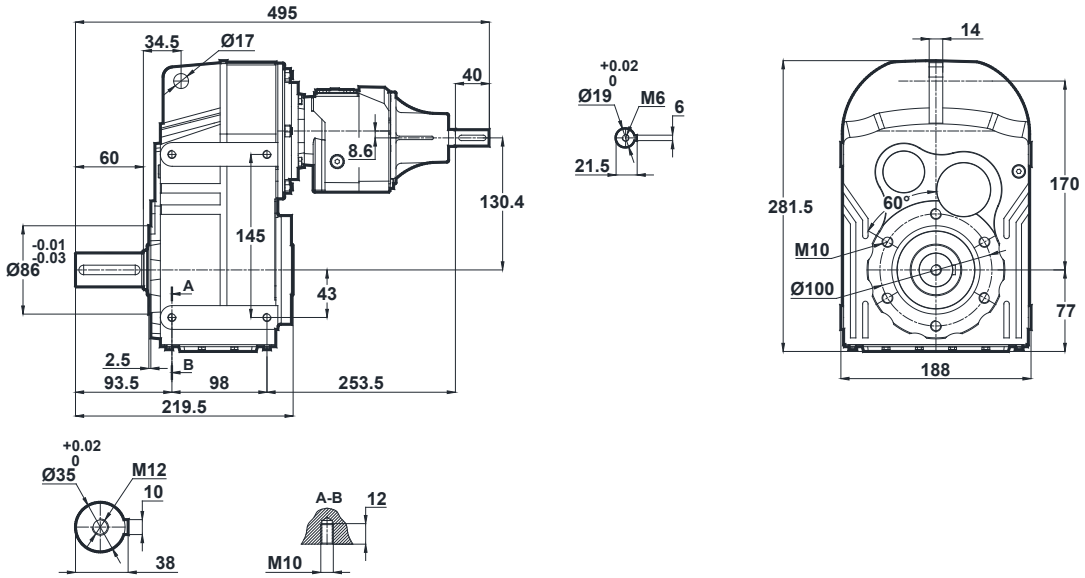
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

-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

DT275.00
DT276.00

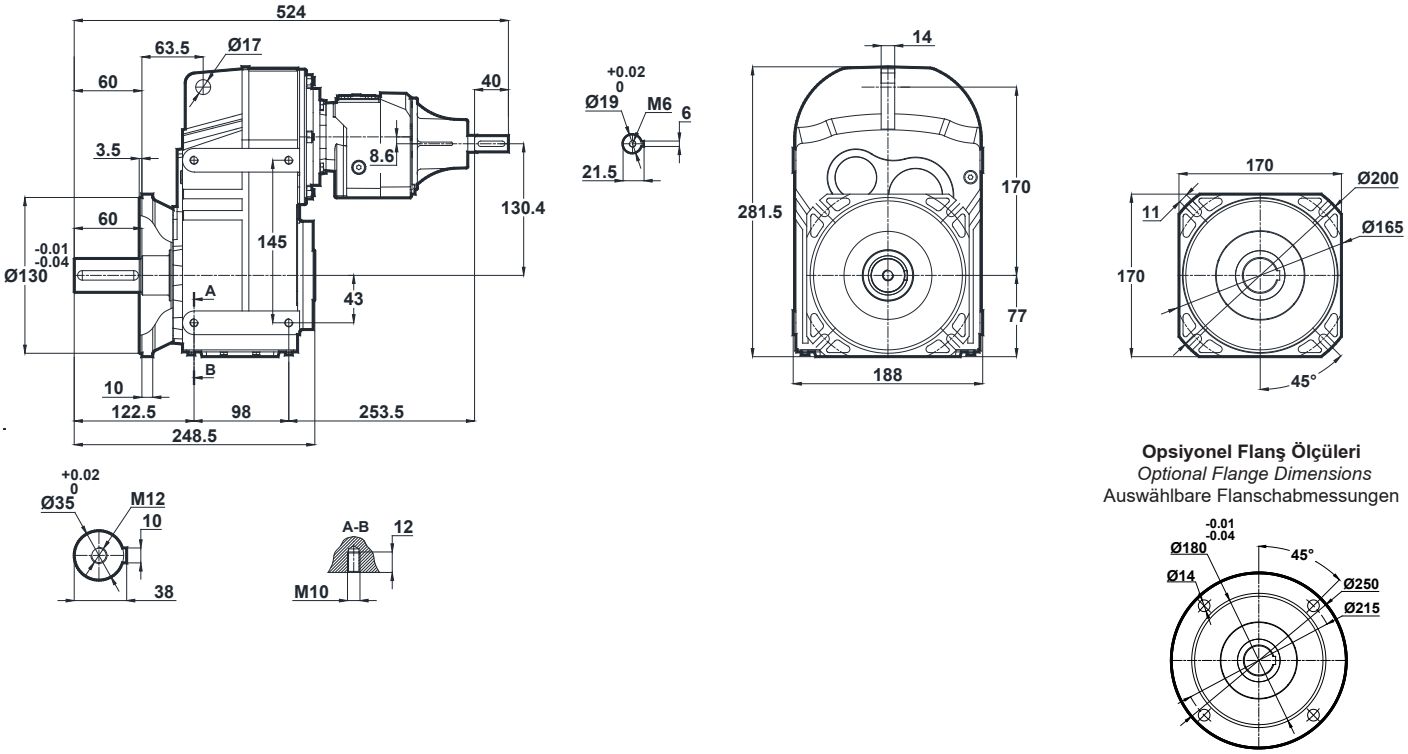


DT275.01
DT276.01



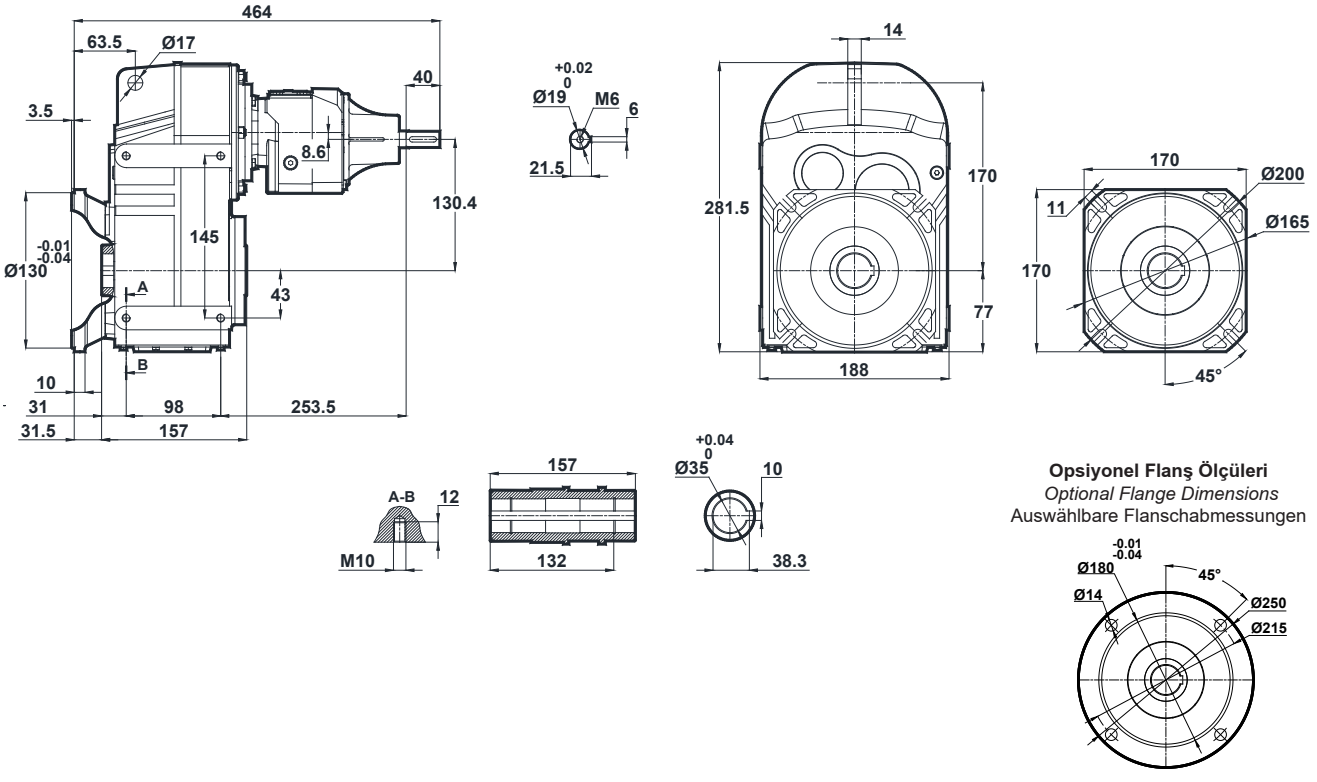
-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT275.02
DT276.02



Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

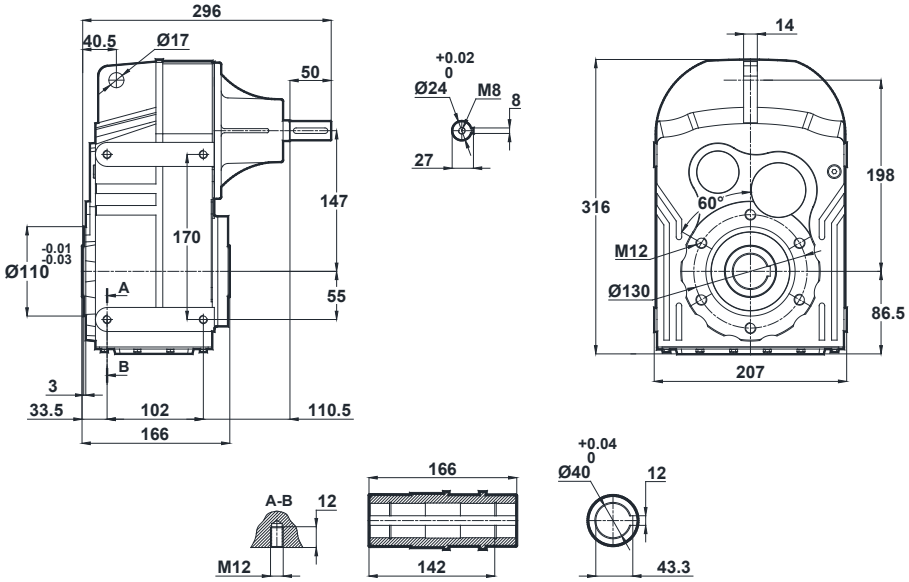
DT275.03
DT276.03



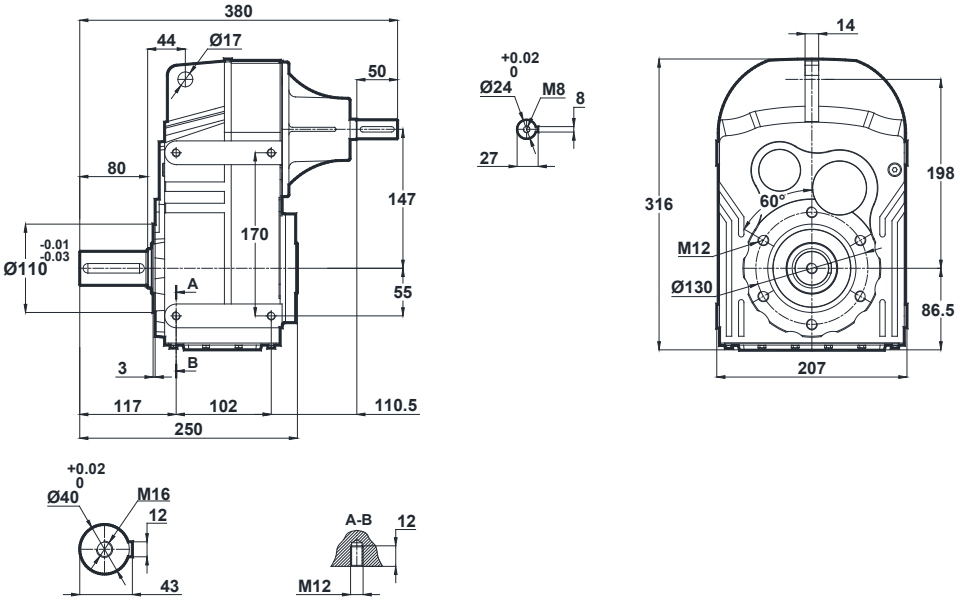
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

-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

DT282.00
DT283.00

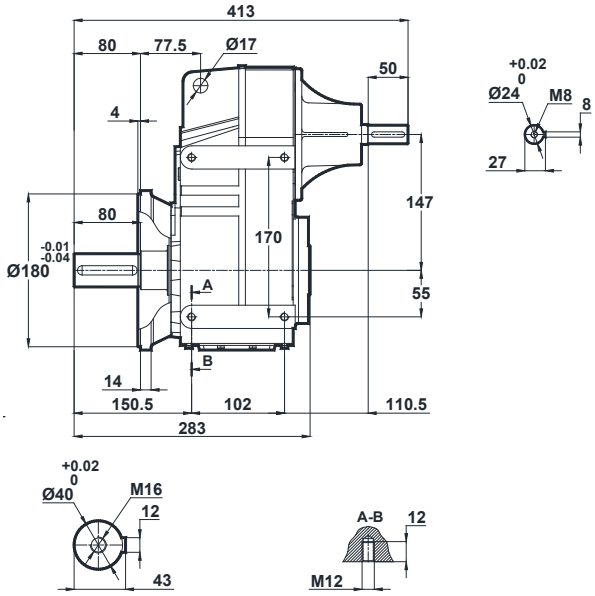


DT282.01
DT283.01

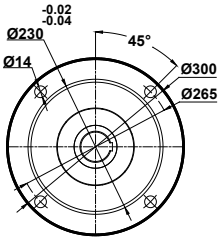


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT282.02
DT283.02

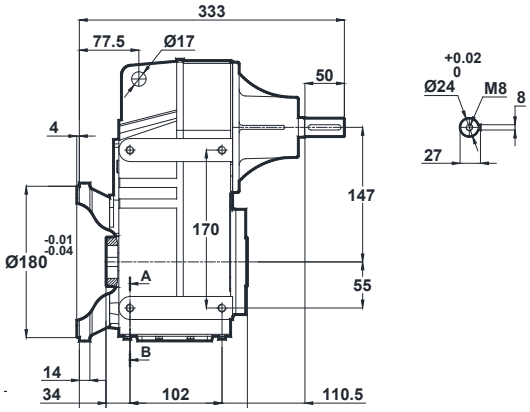


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

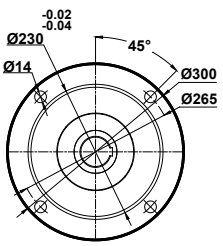


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT282.03
DT283.03



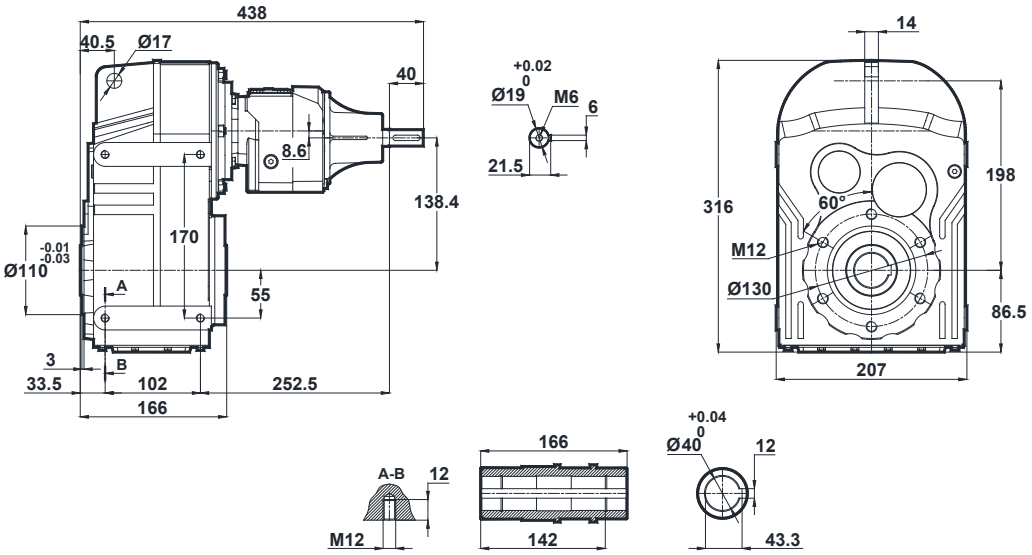
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



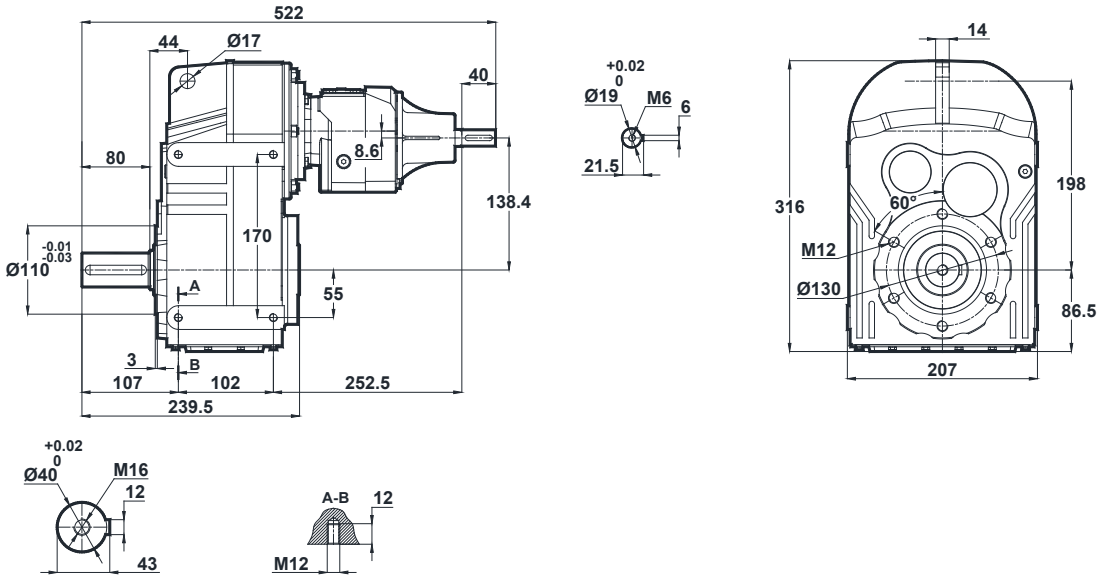
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT285.00
DT286.00

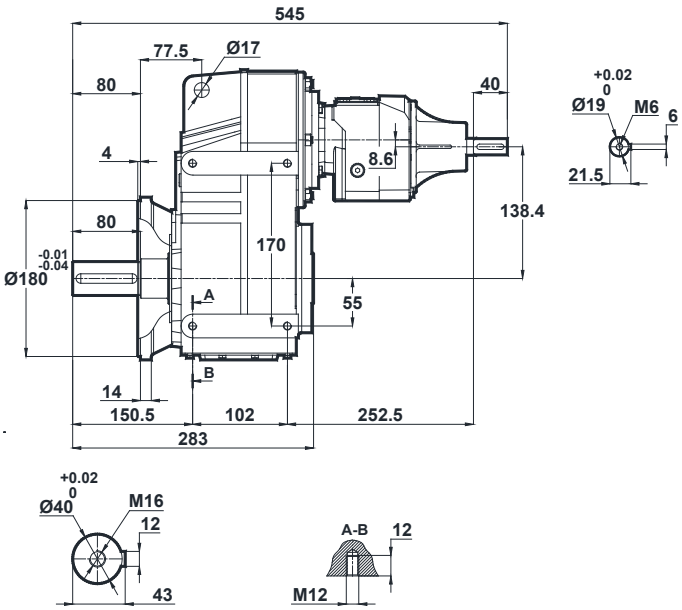


DT285.01
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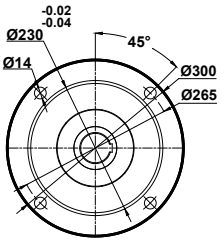


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT285.02
DT286.02

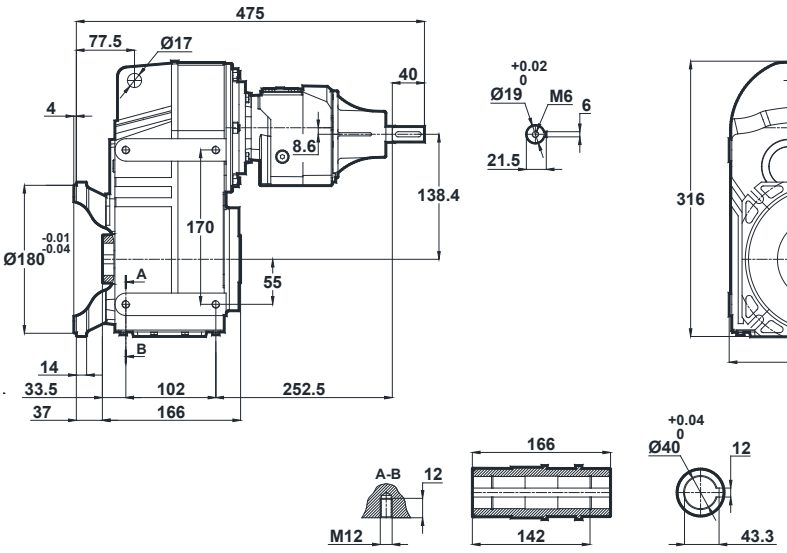


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

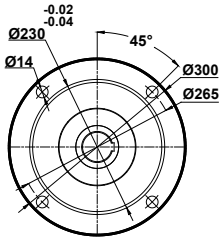


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT285.03
DT286.03



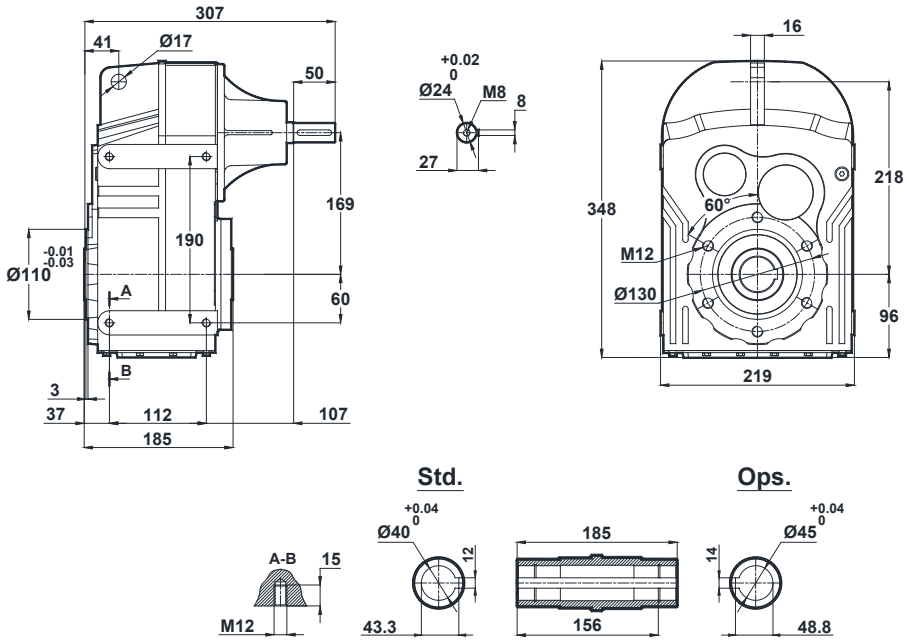
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



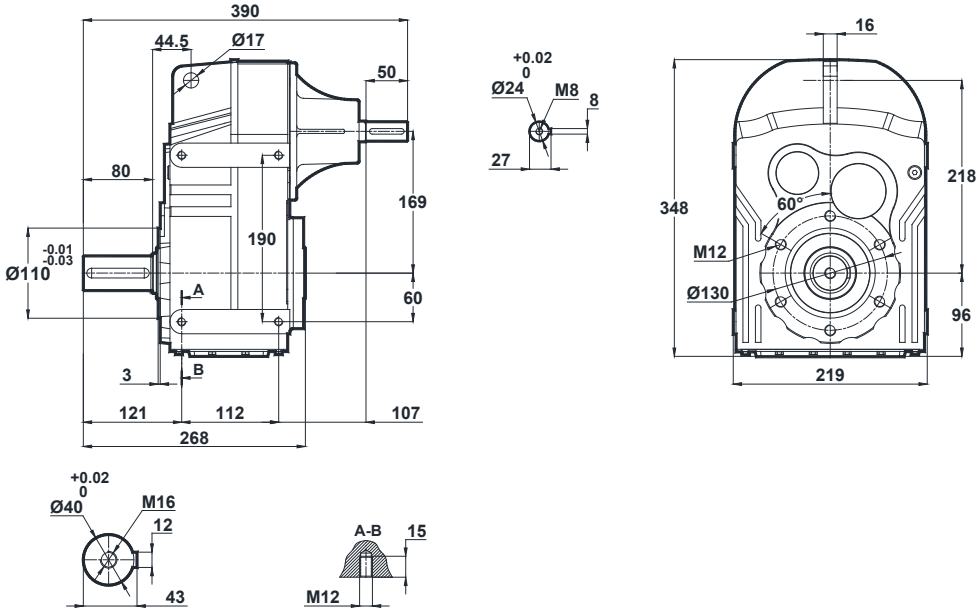
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT372.00
DT373.00

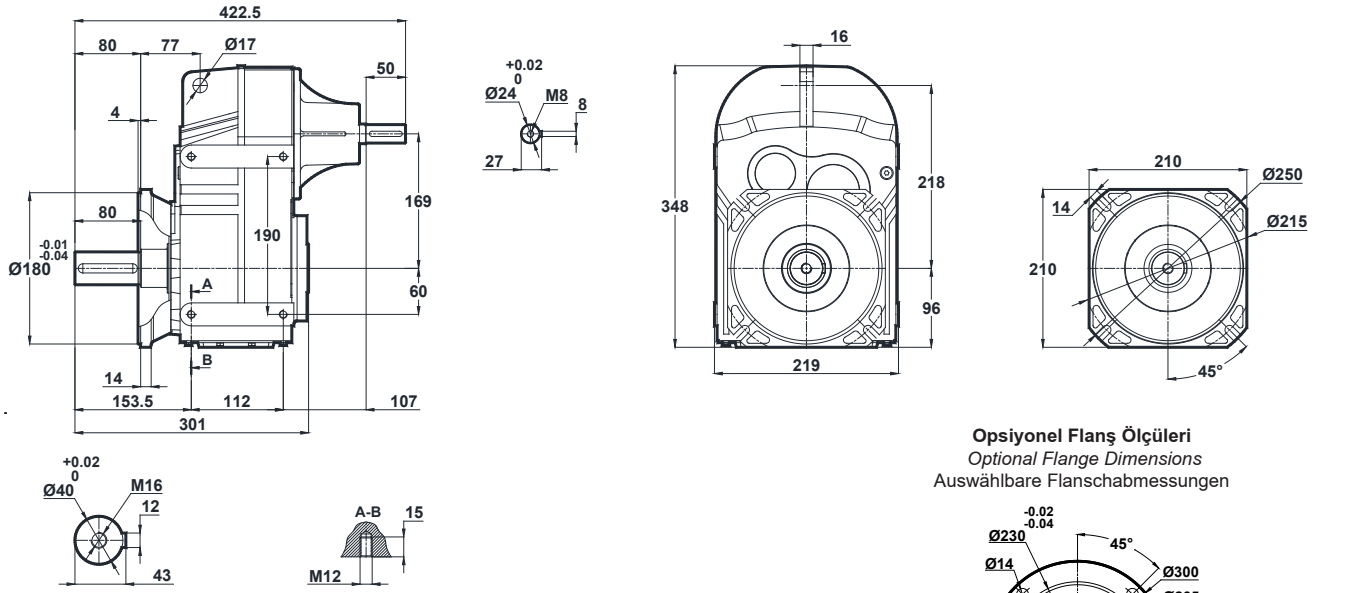


DT372.01
DT373.01

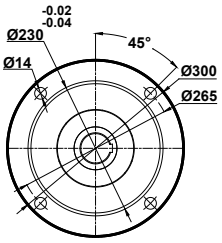


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DT372.02
DT373.02

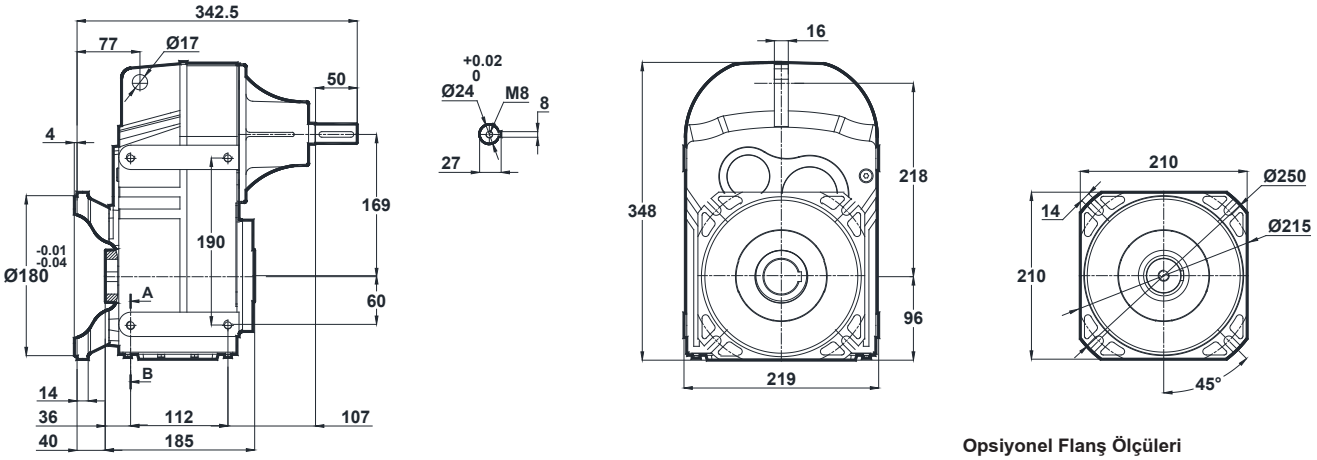


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

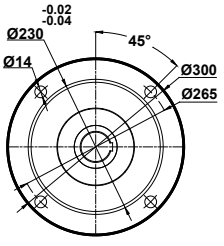


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT372.03
DT373.03



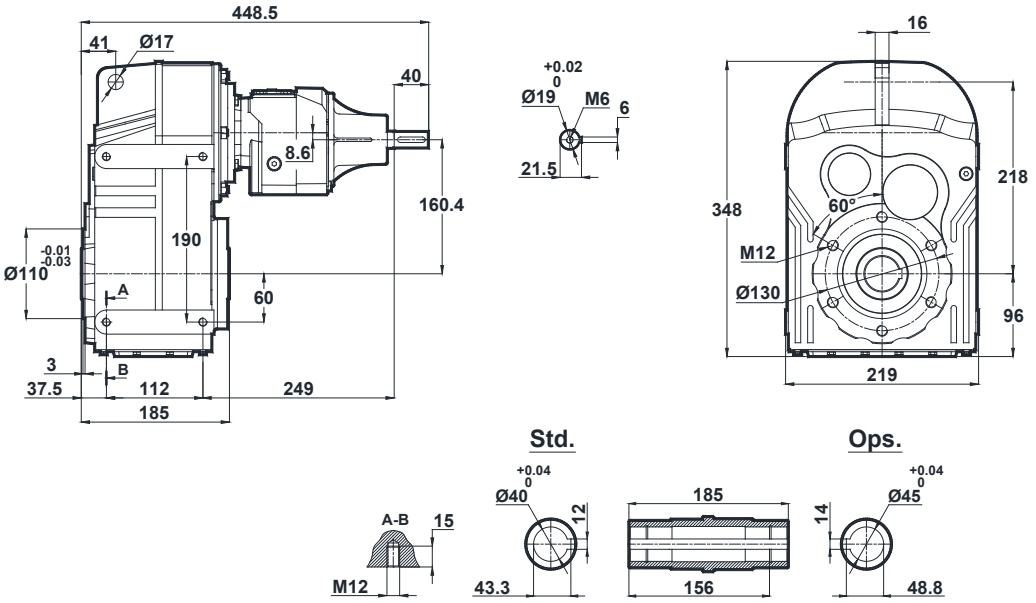
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



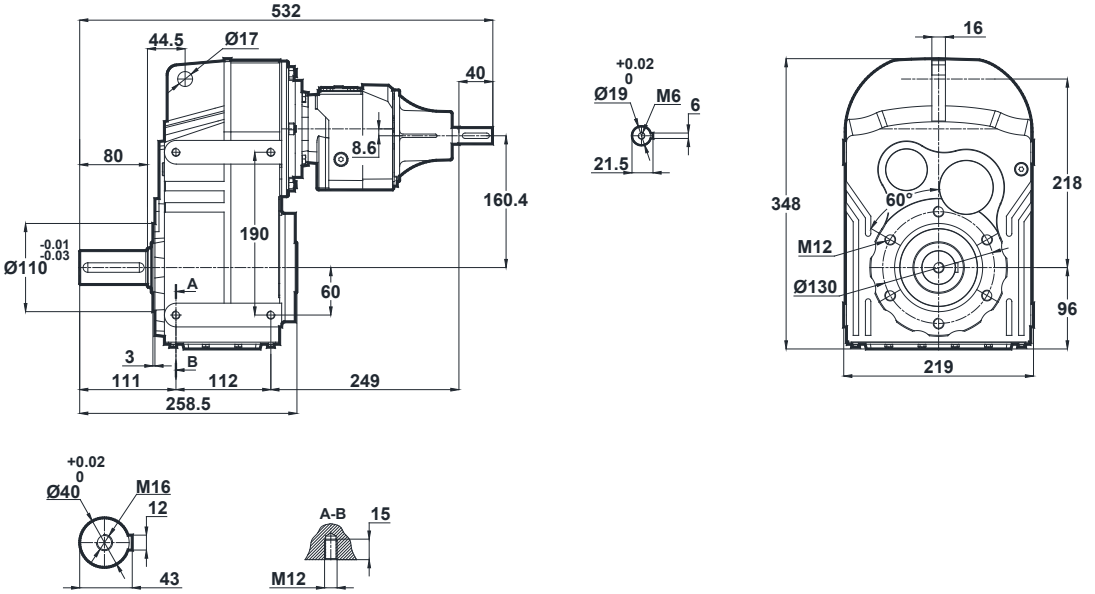
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT375.00
DT376.00

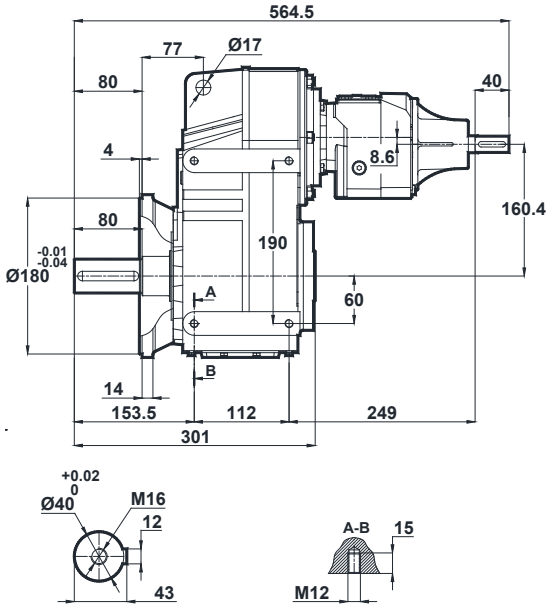


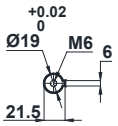
DT375.01
DT376.01

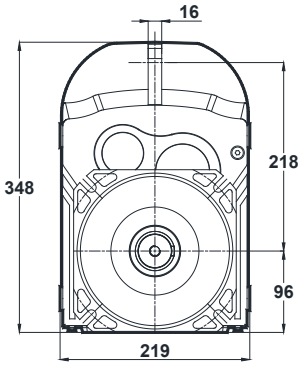


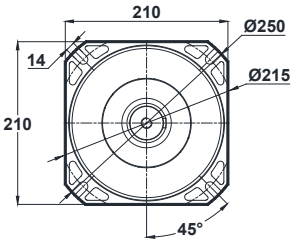
-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT375.02
DT376.02

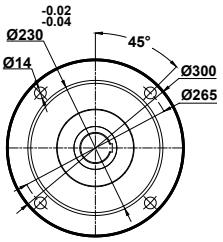






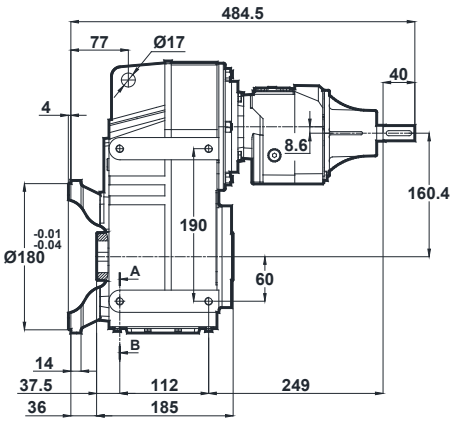


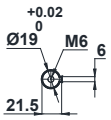
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

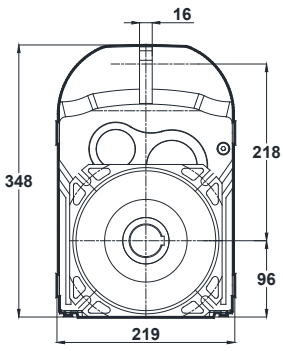


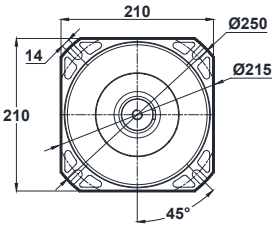
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT375.03
DT376.03

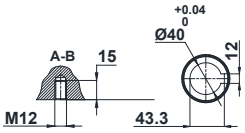


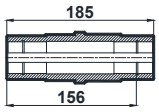




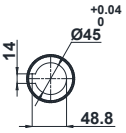


Std.

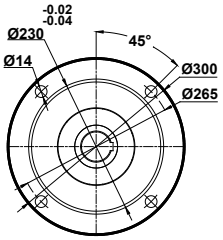




Ops.



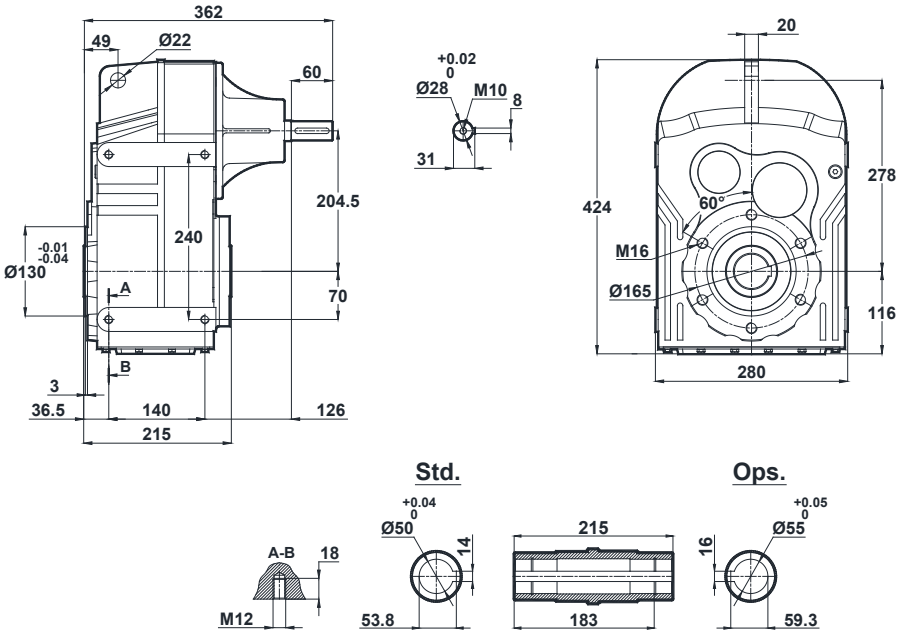
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



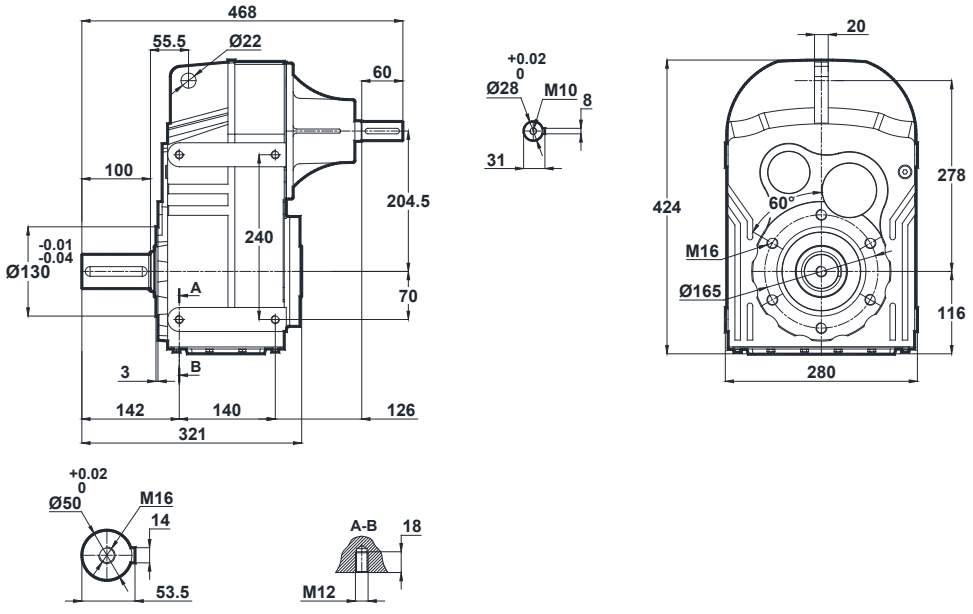
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT472.00
DT473.00

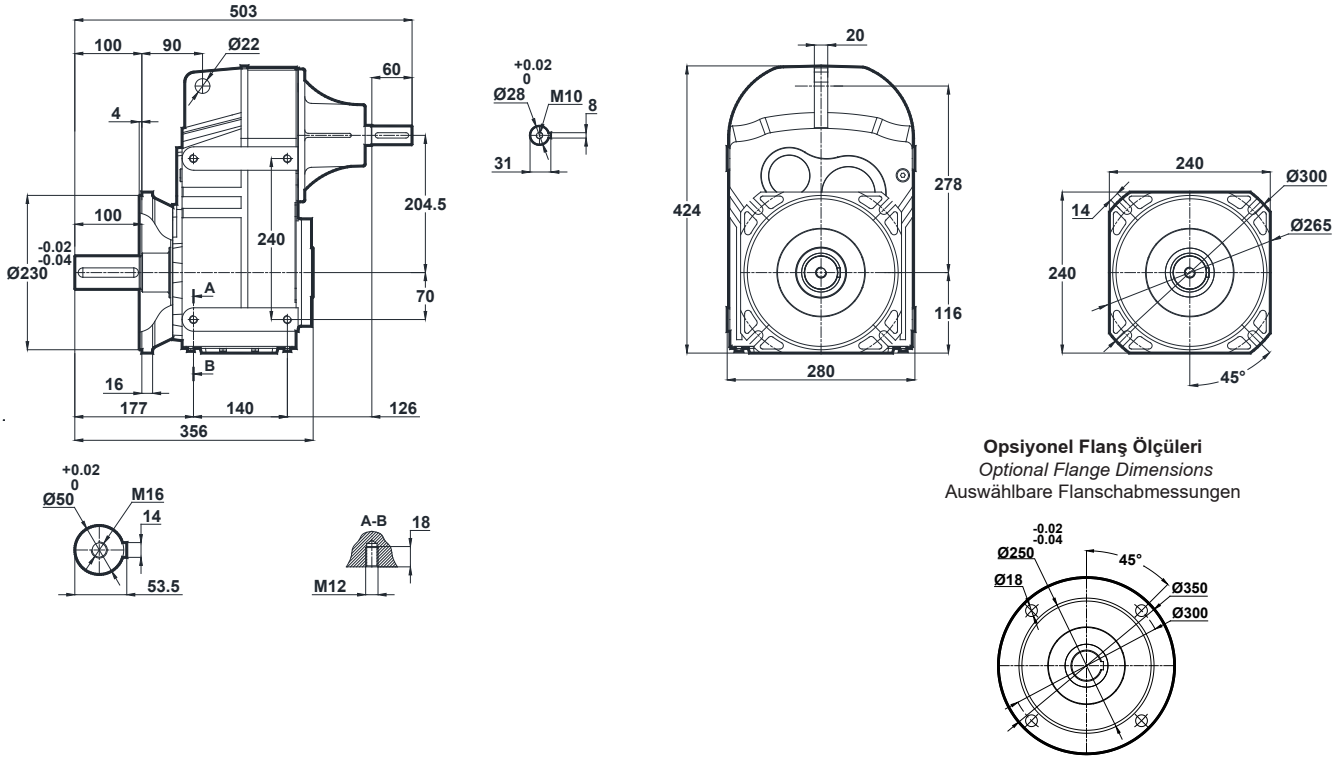


DT472.01
DT473.01



-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

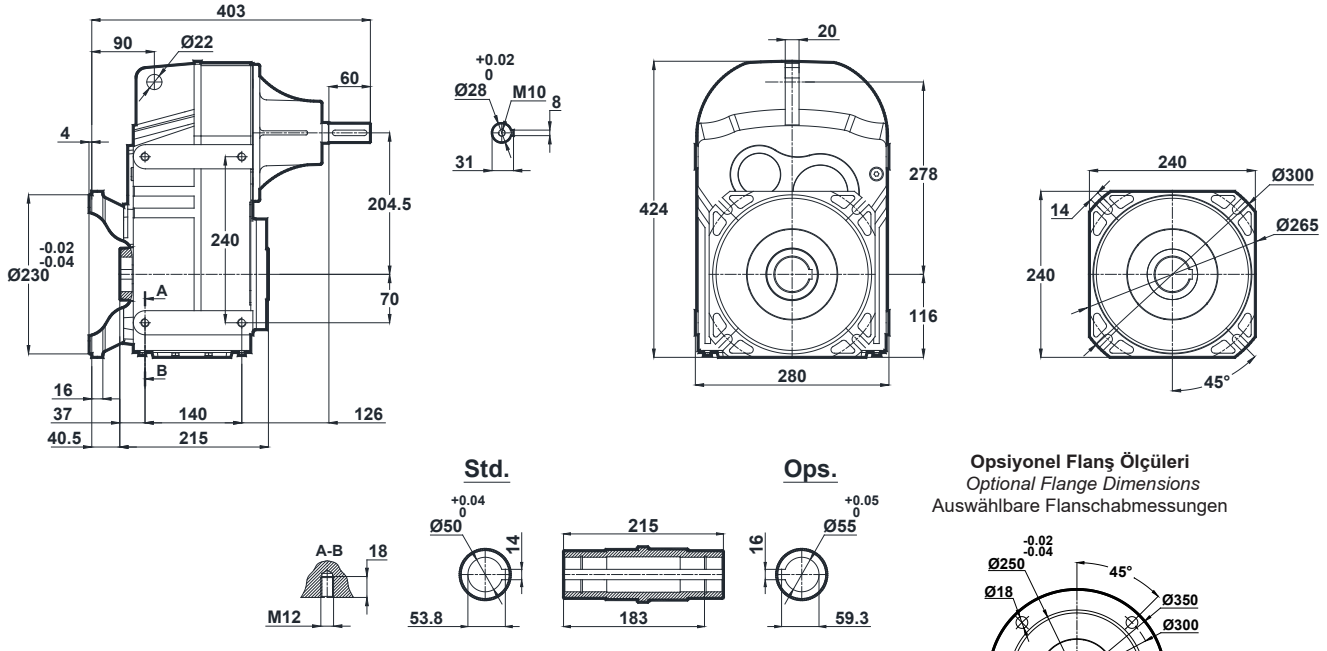
DT472.02
DT473.02



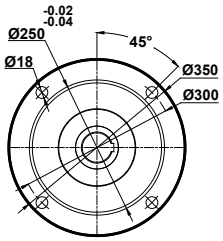
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT472.03
DT473.03



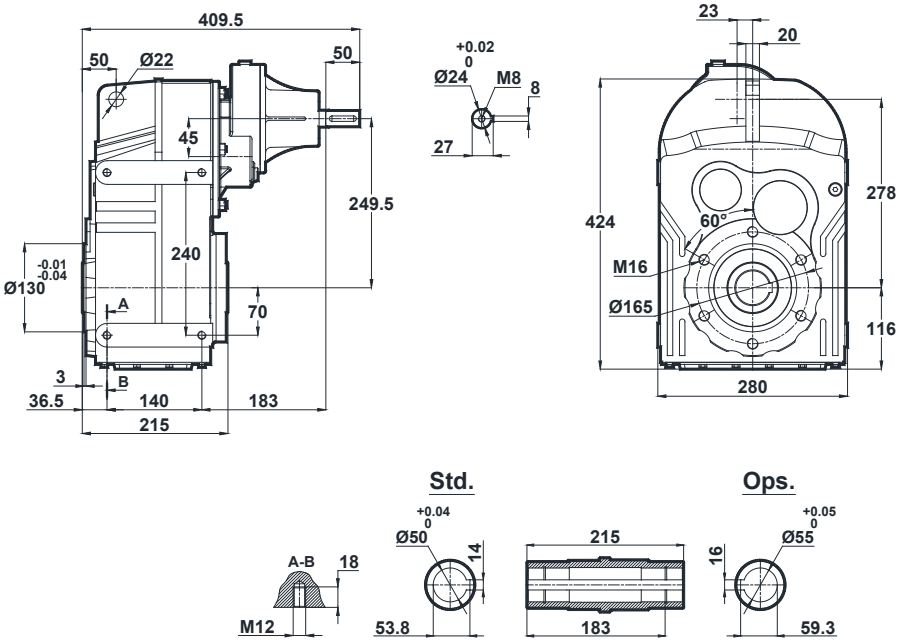
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



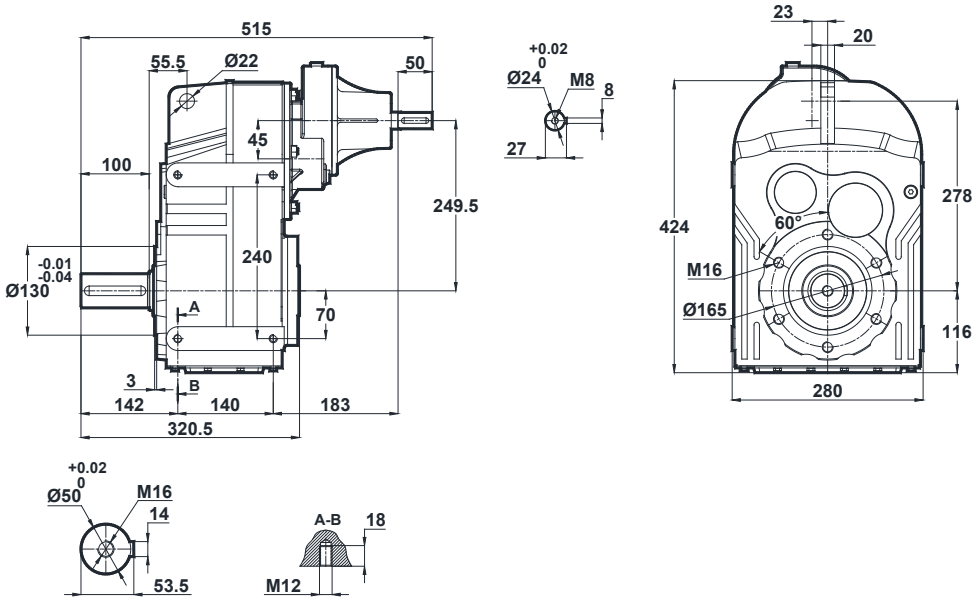
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT474.00

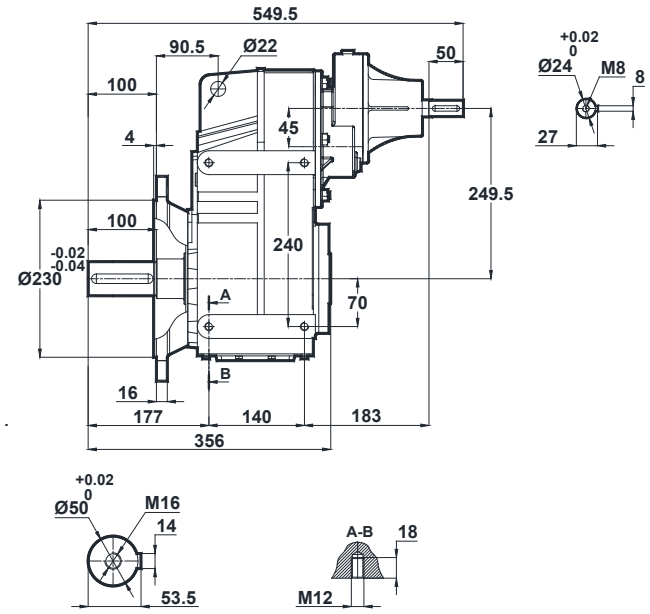


DT474.01

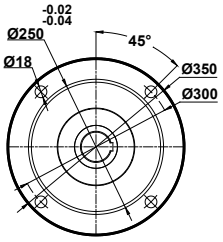


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DT474.02

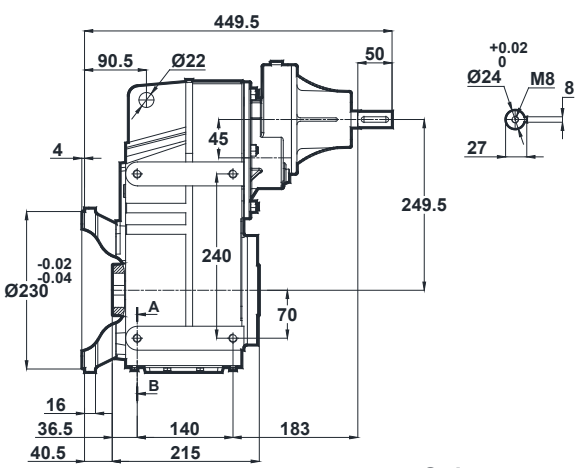


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

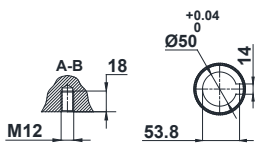


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

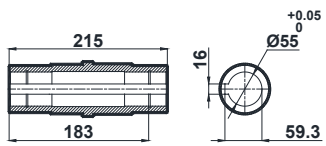
DT474.03



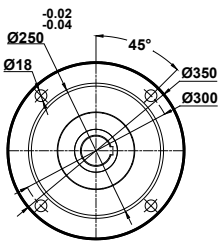
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Ops.



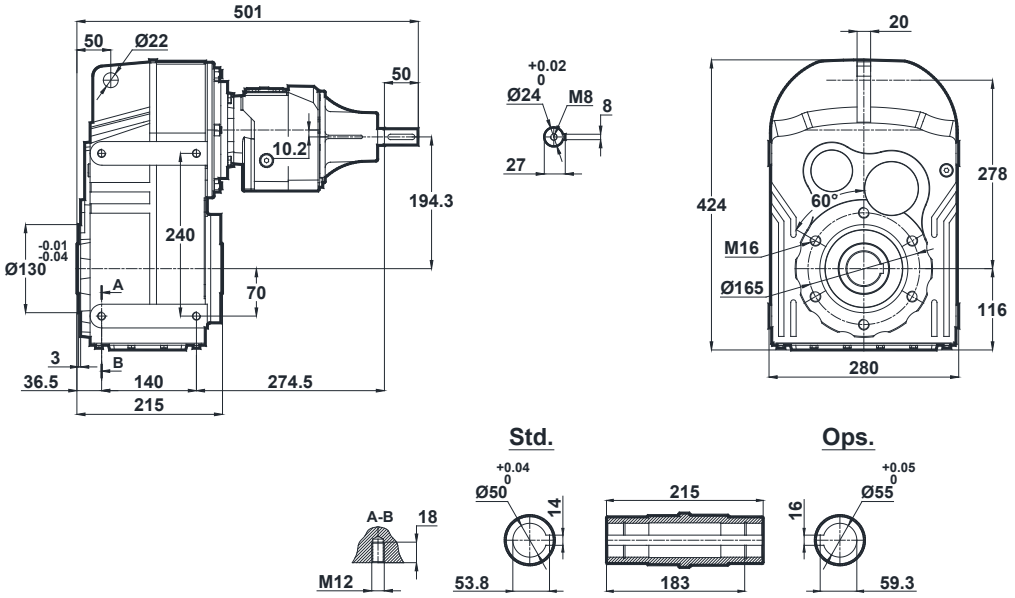
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



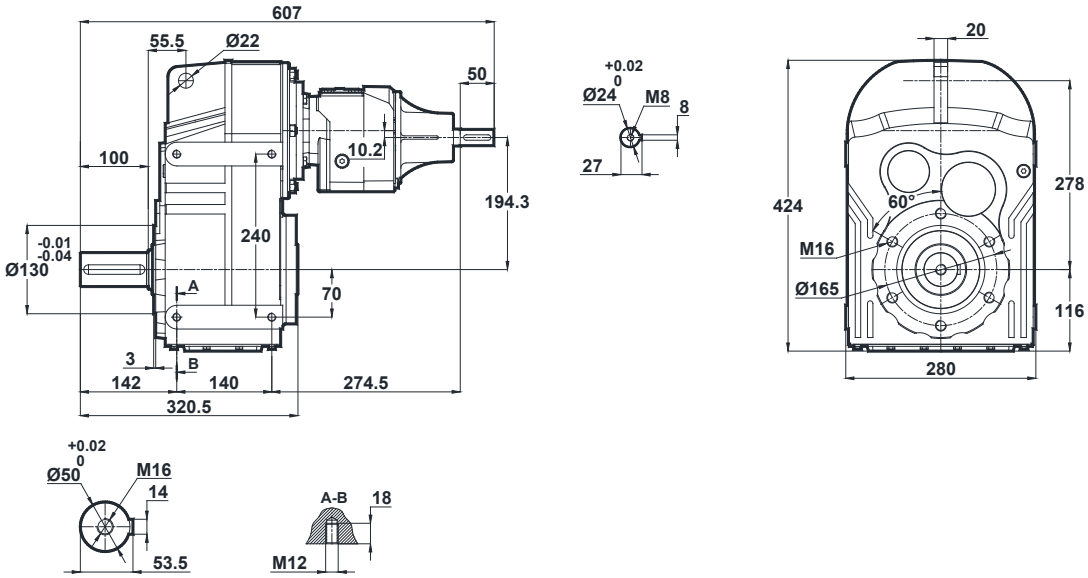
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT475.00
DT476.00

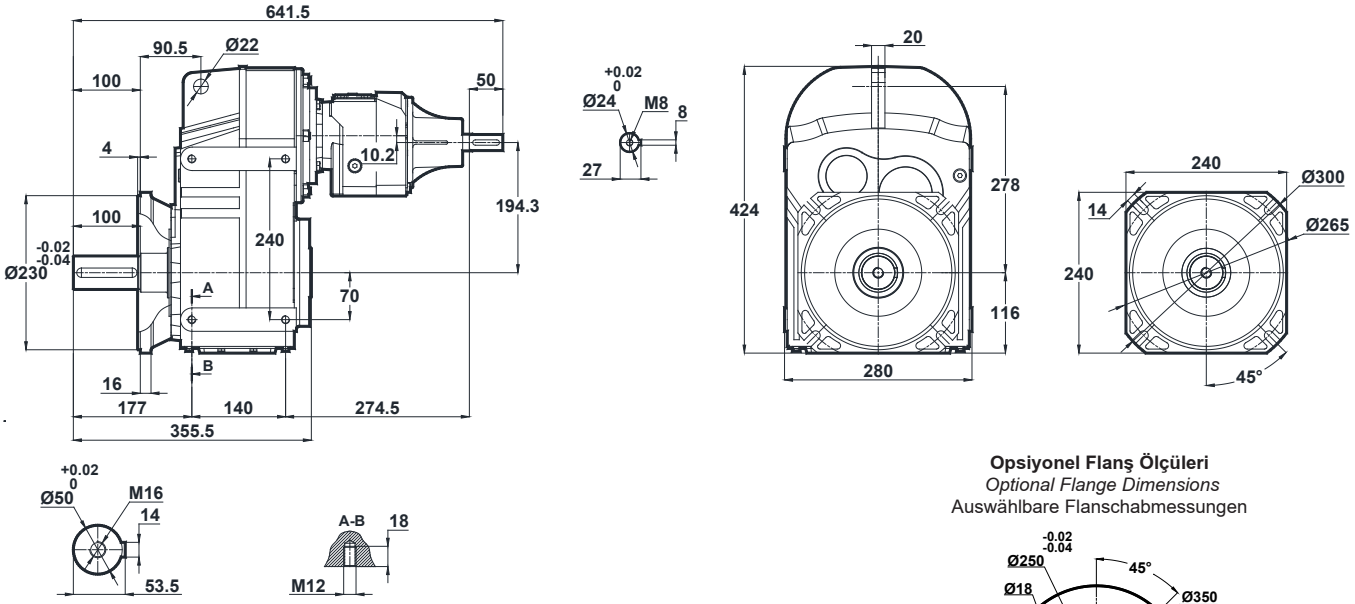


DT475.01
DT476.01

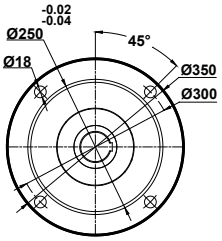


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT475.02
DT476.02

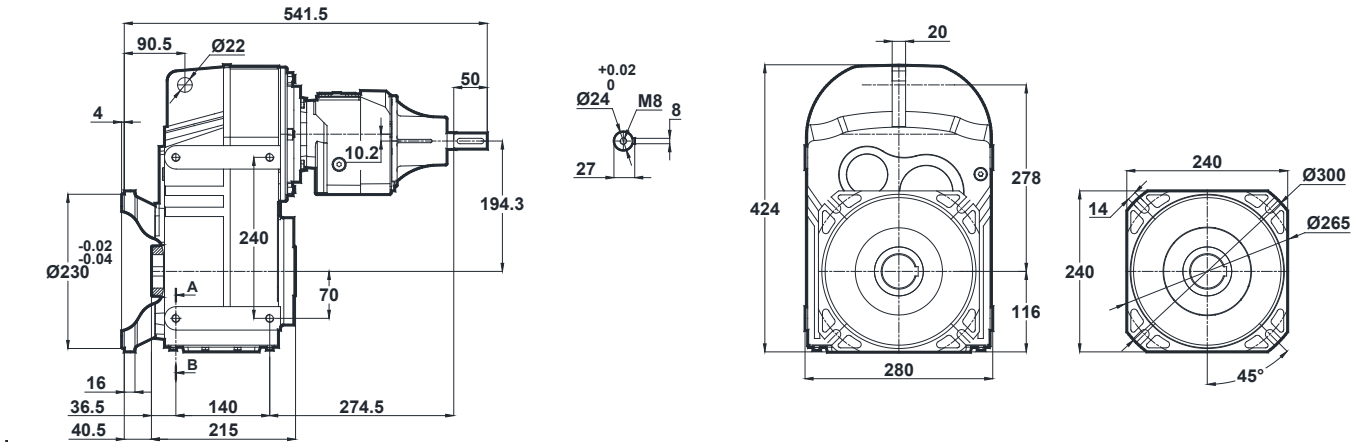


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

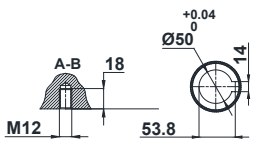


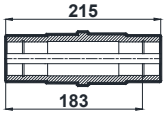
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT475.03
DT476.03

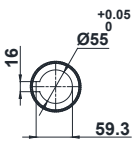


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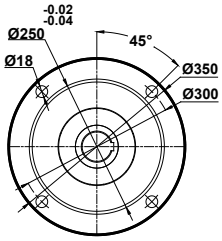




Ops.



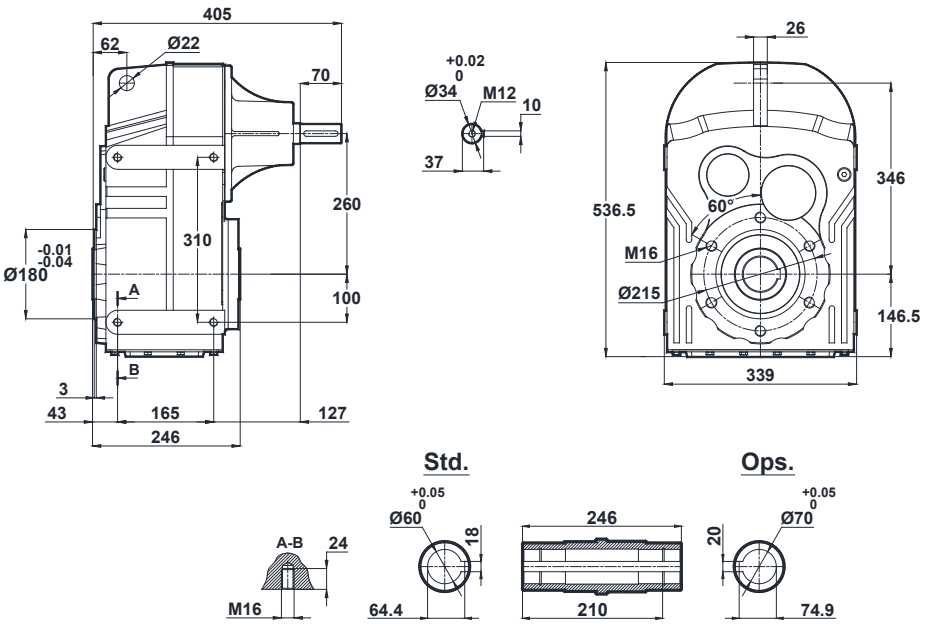
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



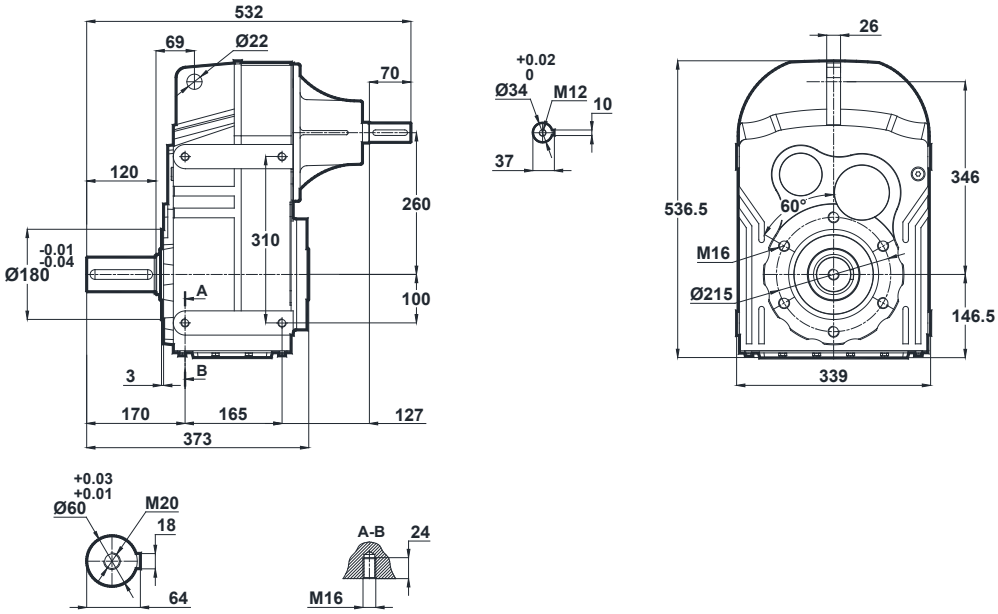
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT572.00
DT573.00

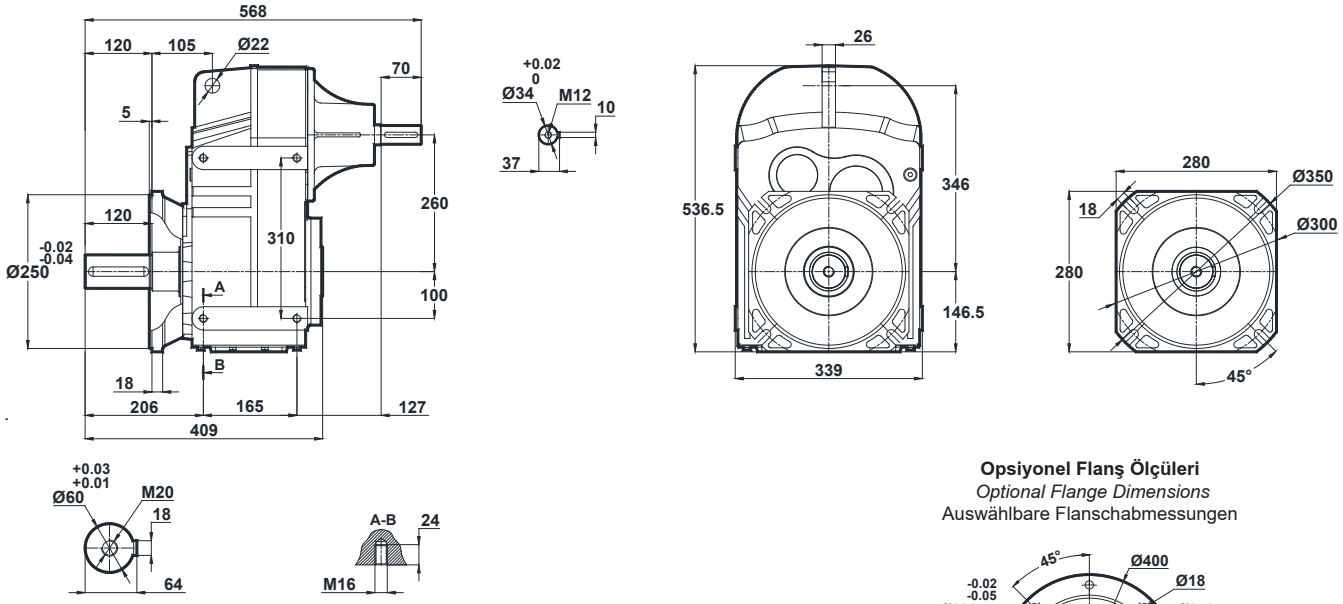


DT572.01
DT573.01

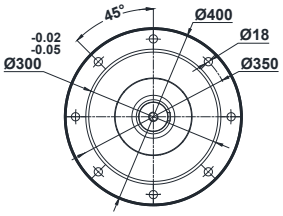


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT572.02
DT573.02

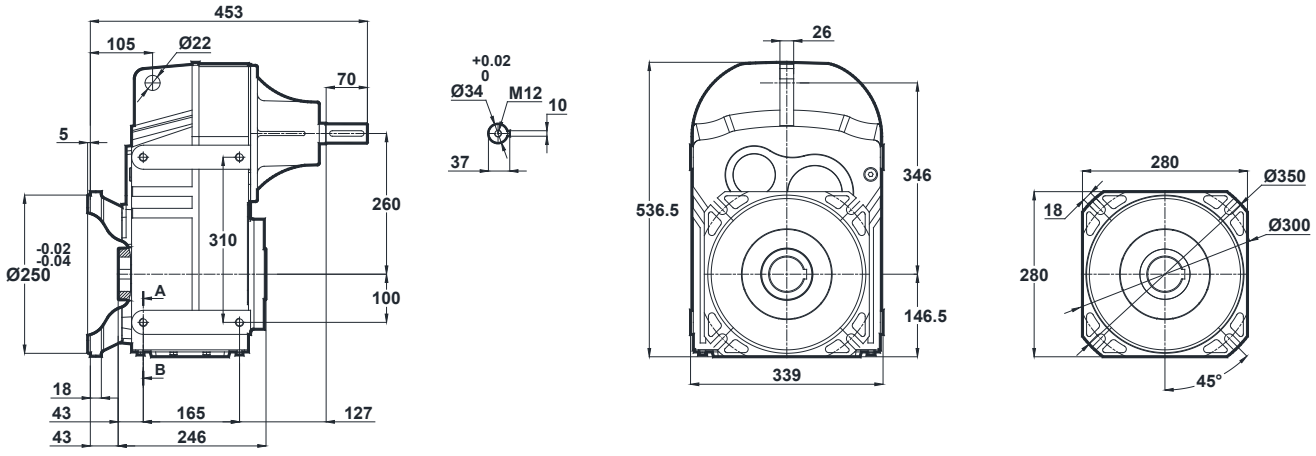


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

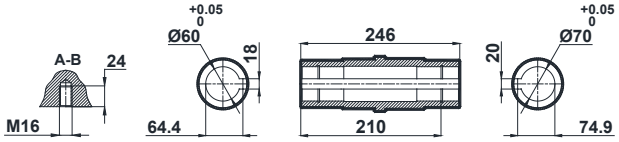


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

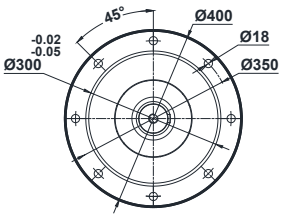
DT572.03
DT573.03



Std. **Ops.**



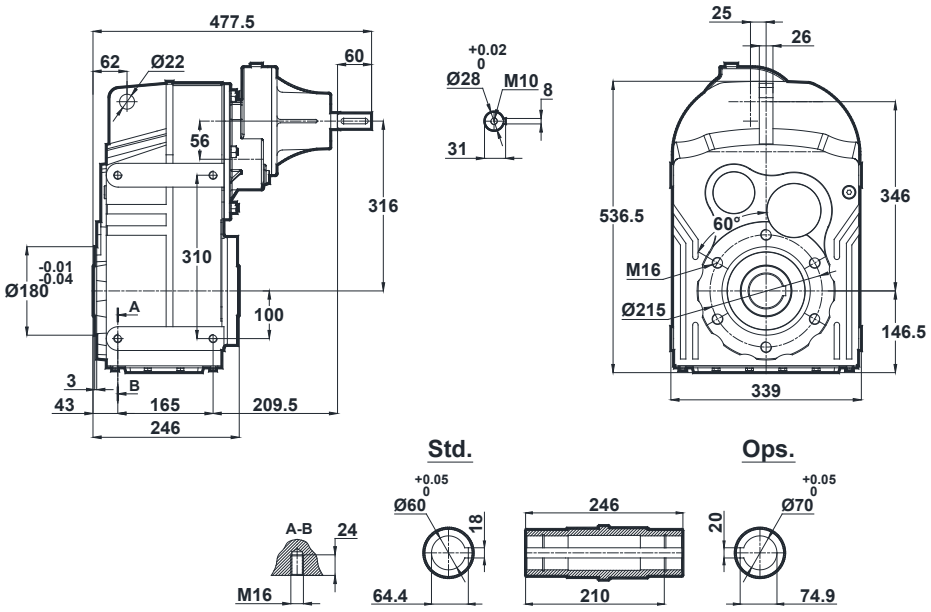
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



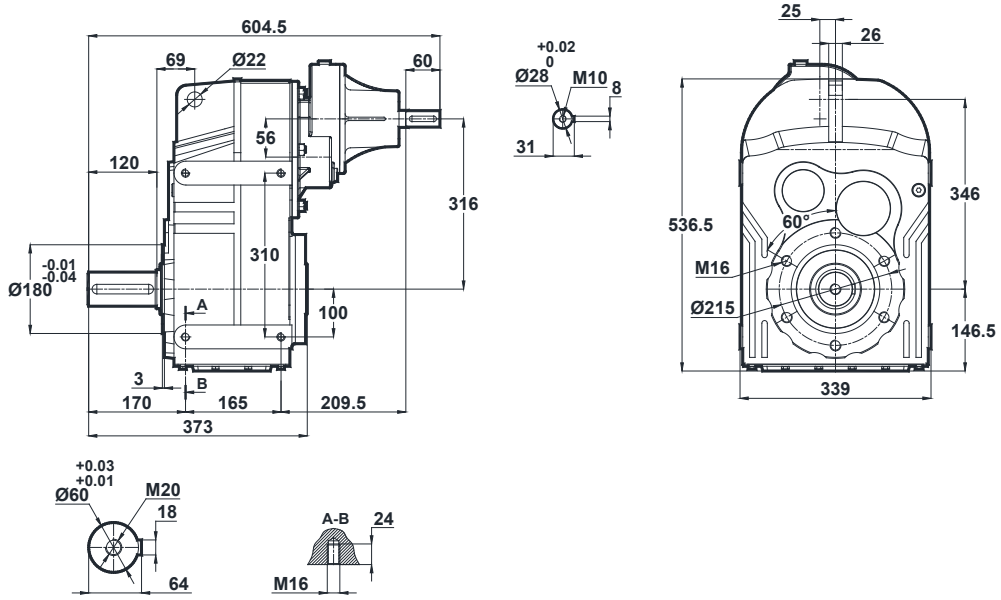
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT574.00

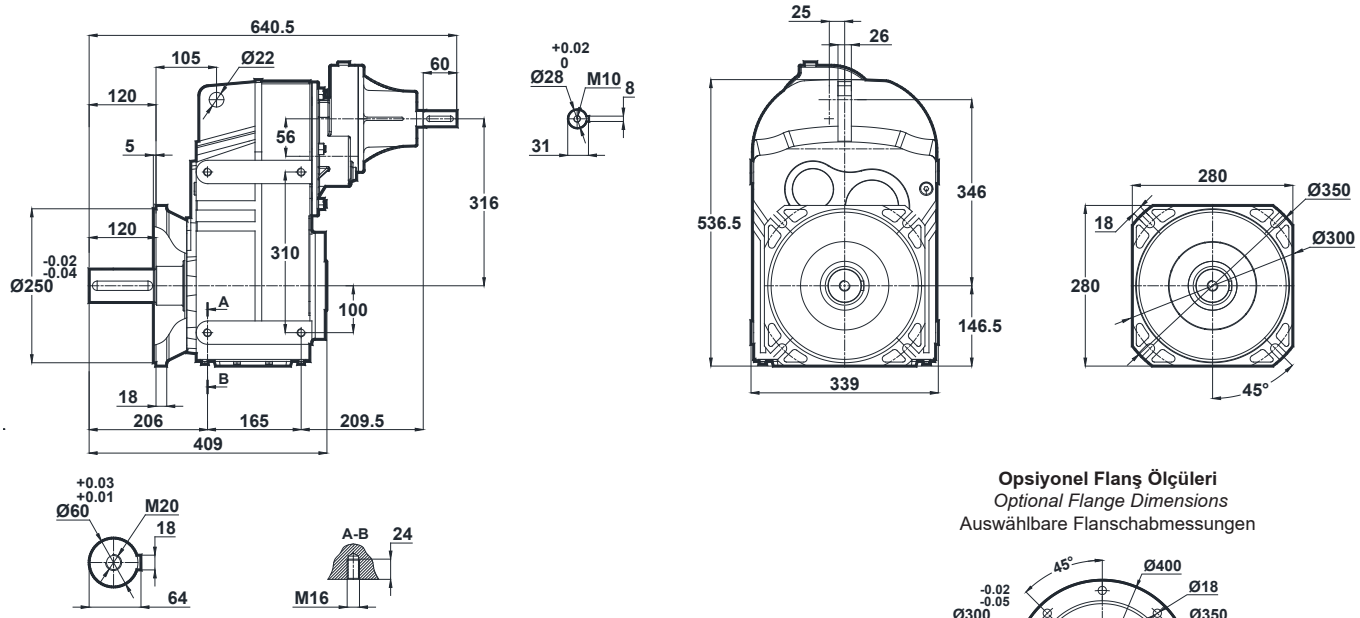


DT574.01

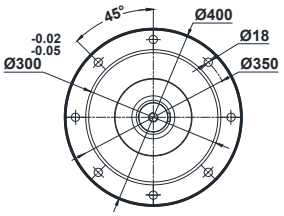


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT574.02

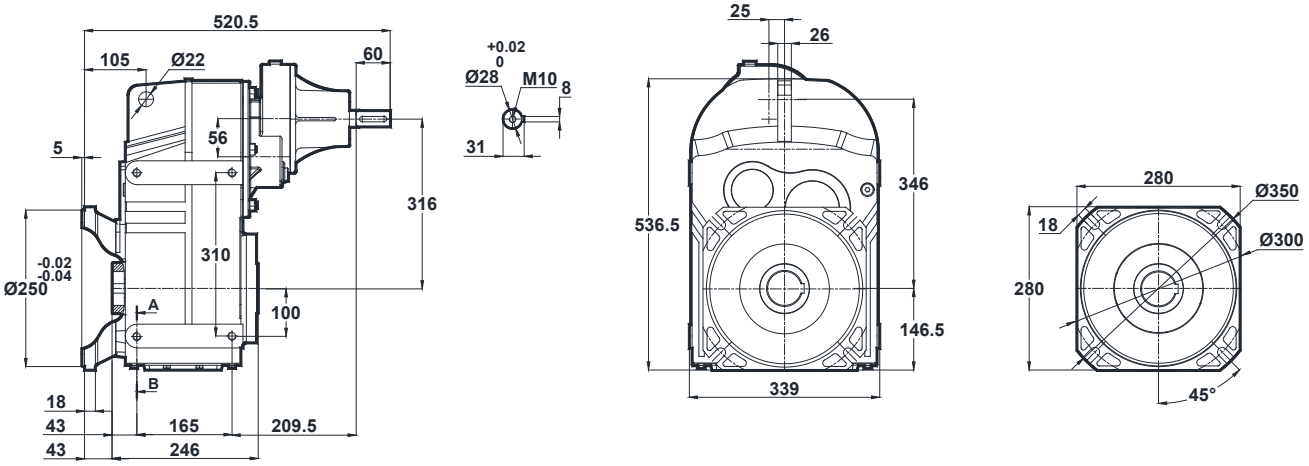


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

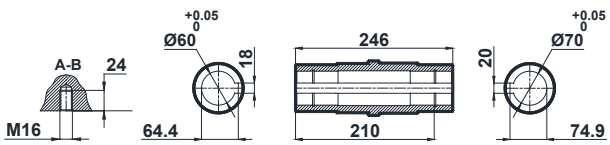


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

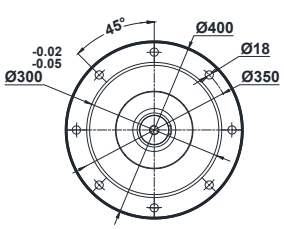
DT574.03



Std. **Ops.**



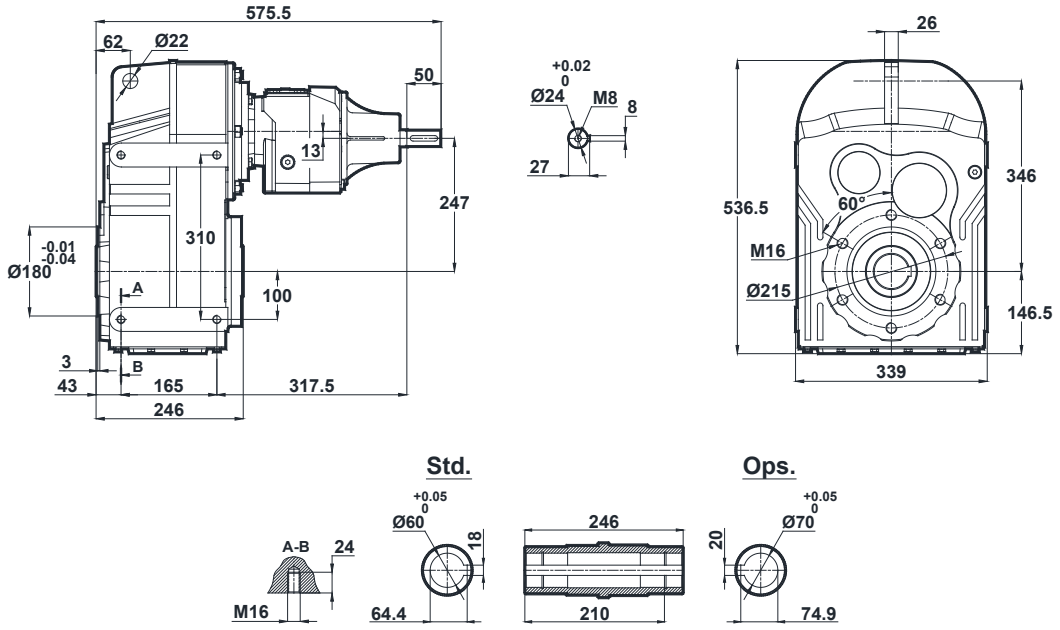
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



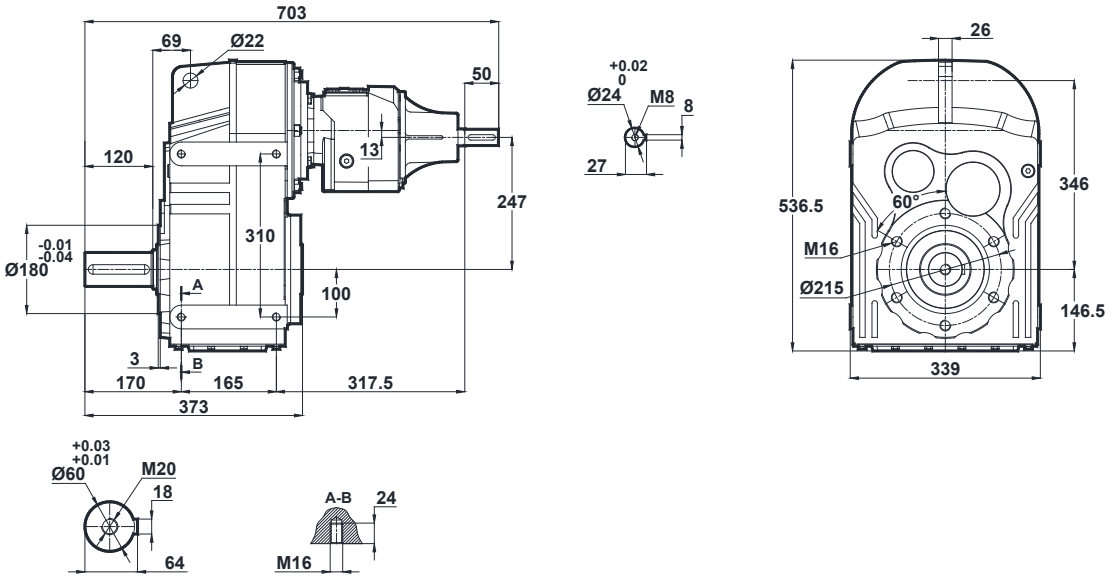
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT575.00
DT576.00

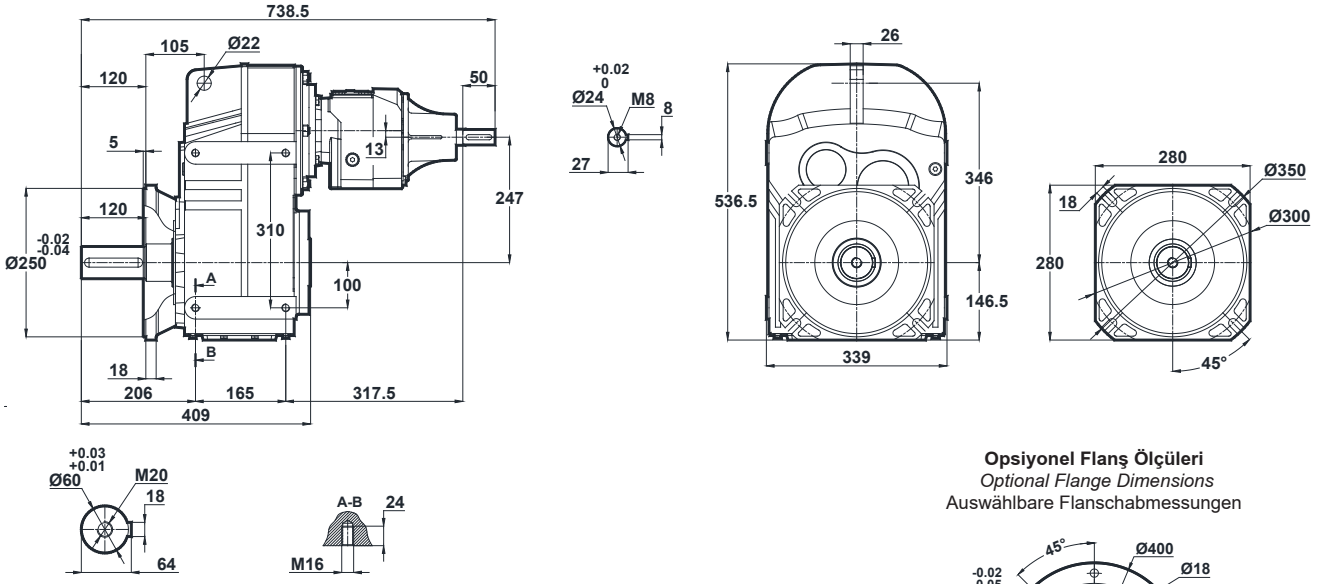


DT575.01
DT576.01

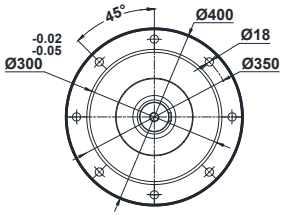


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT575.02
DT576.02

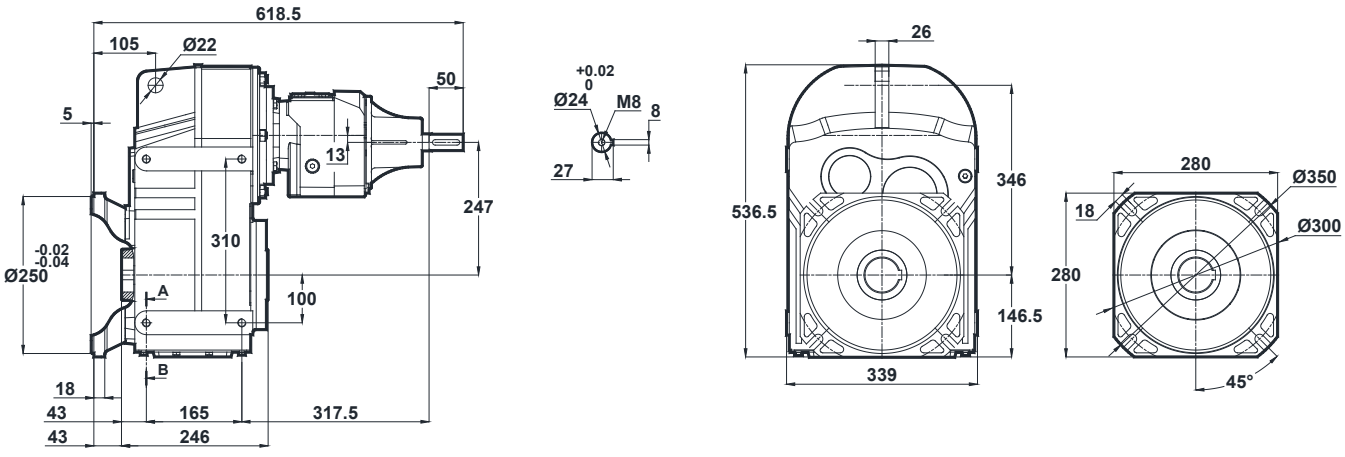


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

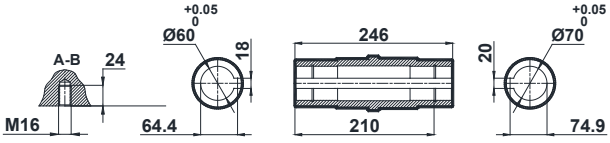


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

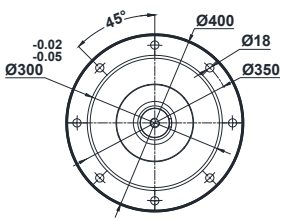
DT575.03
DT576.03



Std. **Ops.**



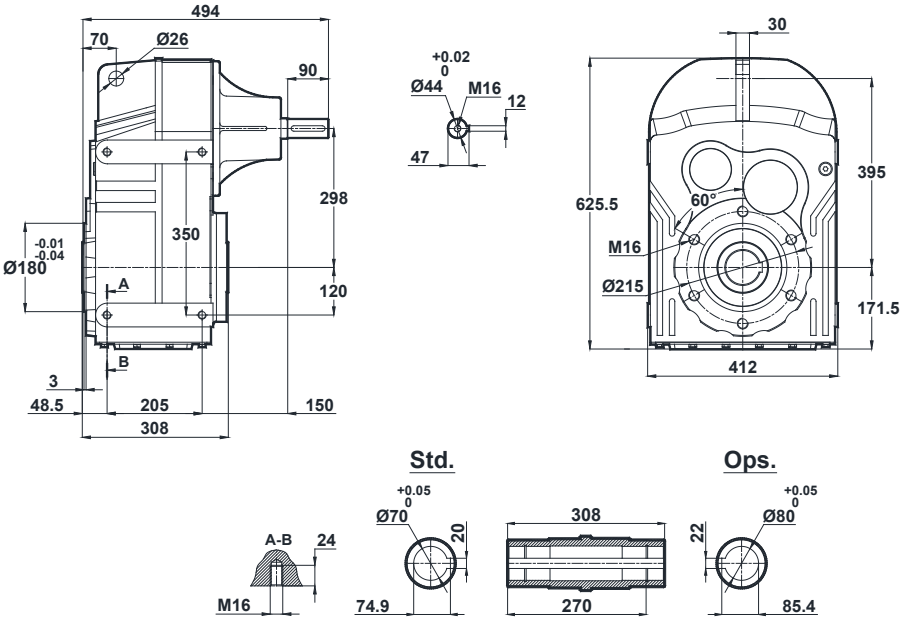
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



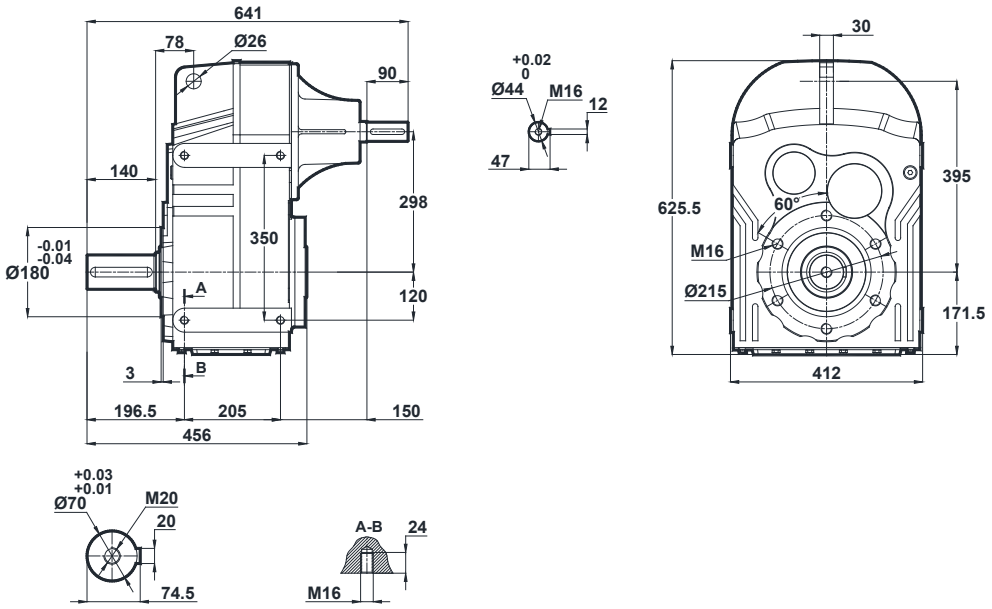
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT672.00
DT673.00

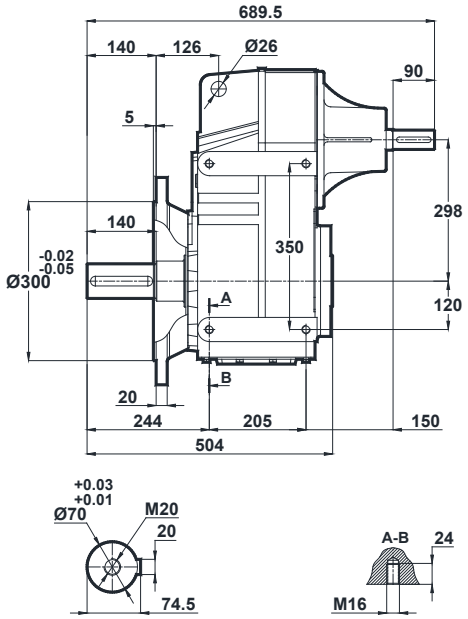


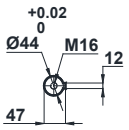
DT672.01
DT673.01

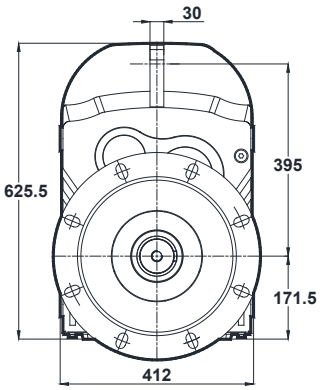


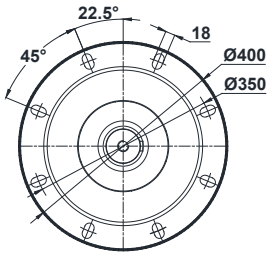
-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT672.02
DT673.02

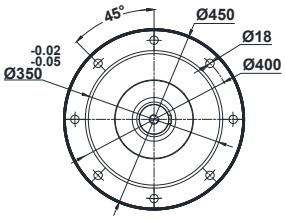






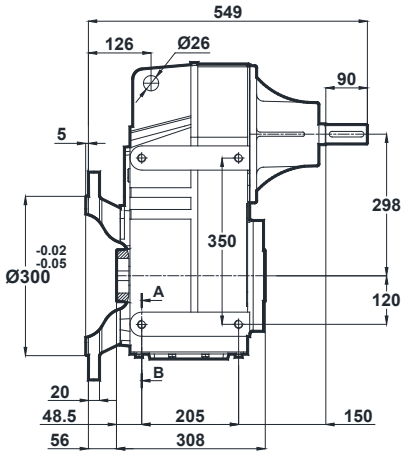


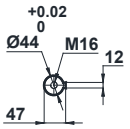
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

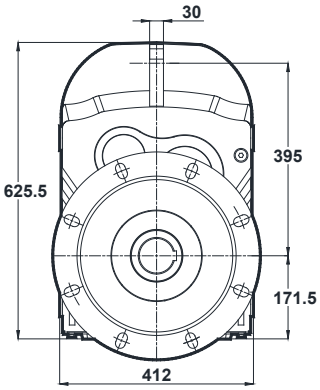


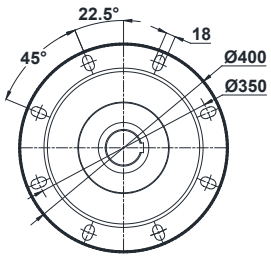
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT672.03
DT673.03

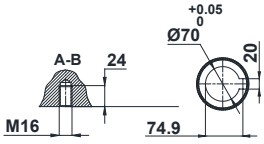


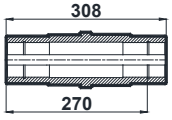




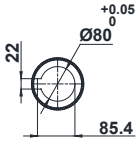


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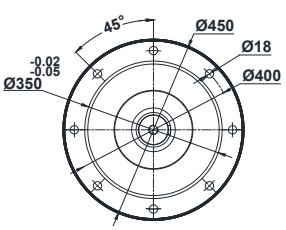




Ops.



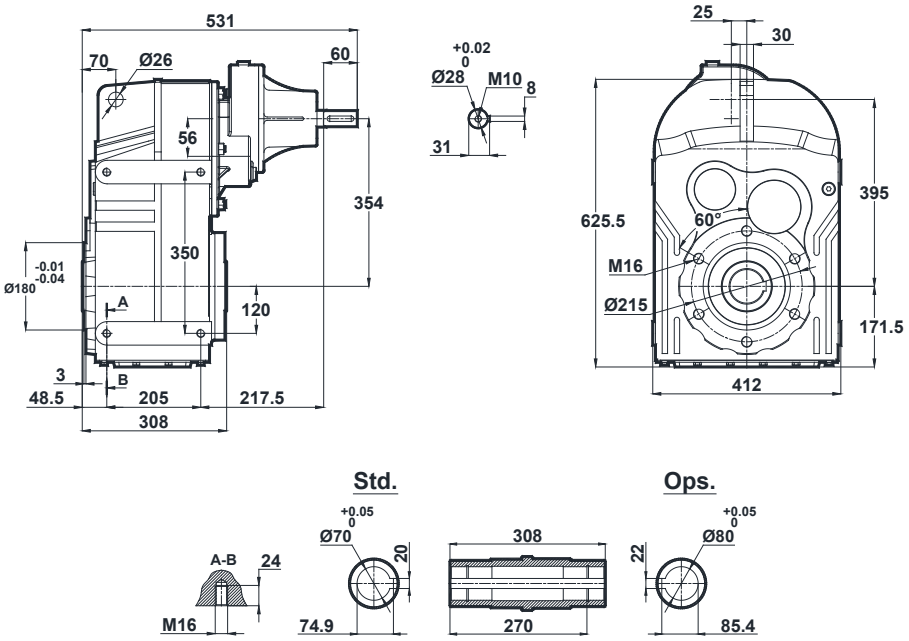
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



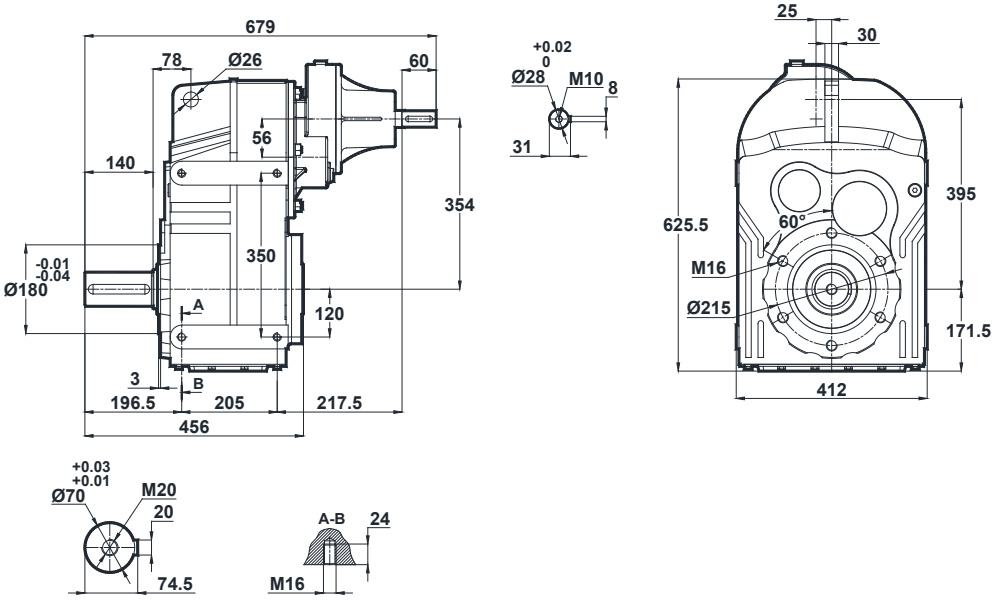
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT674.00

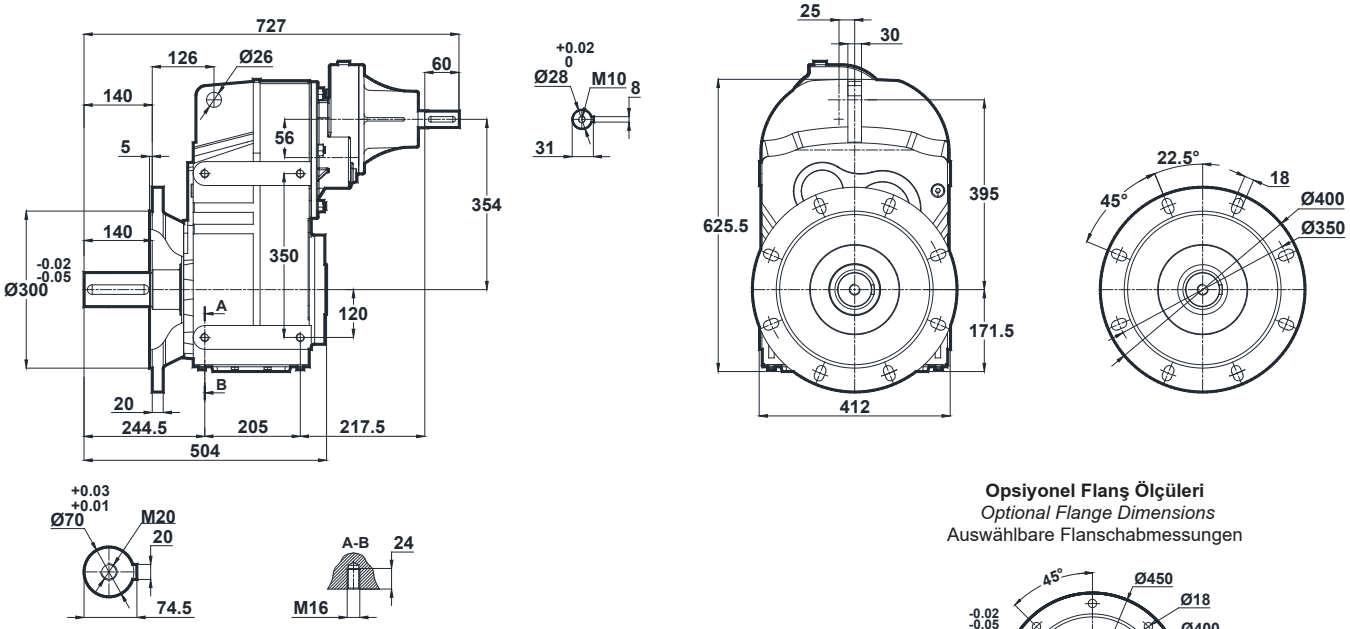


DT674.01

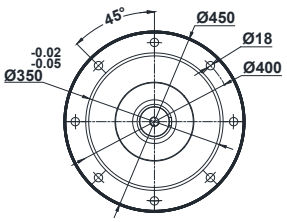


-Mil ucu çektirme deliği DIN 332 sayfa 2 / *Tapped center hole according to DIN 332, sheet 2* / Zentrierung mit Gewinde nach DIN 332, Blatt 2

DT674.02

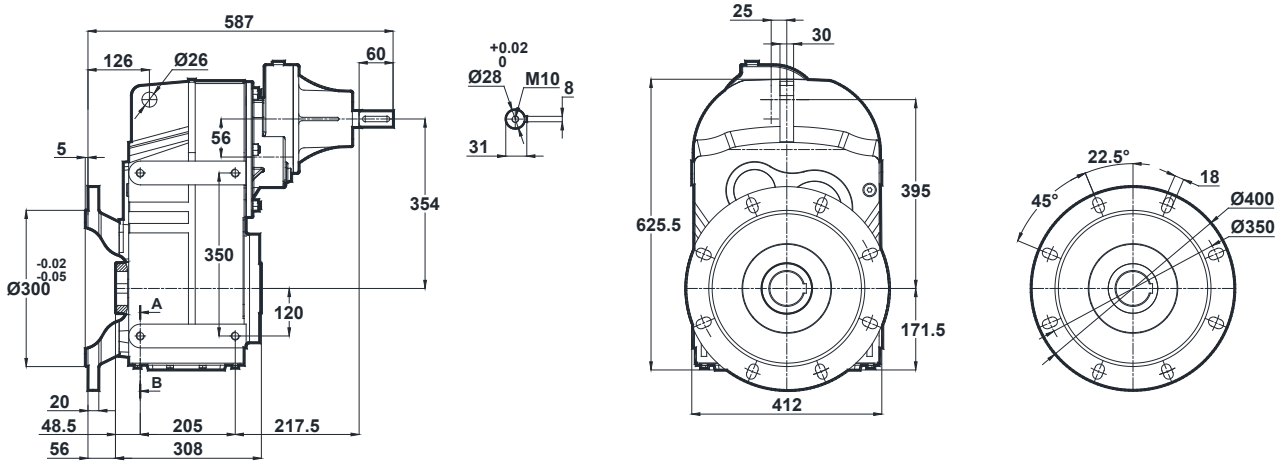


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

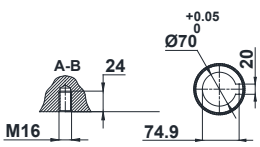


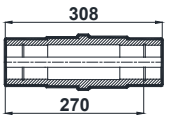
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

DT674.03

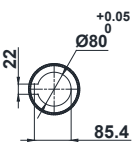


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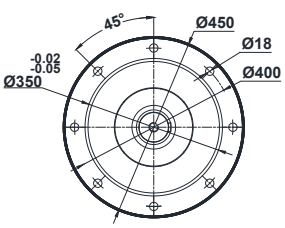




Ops.



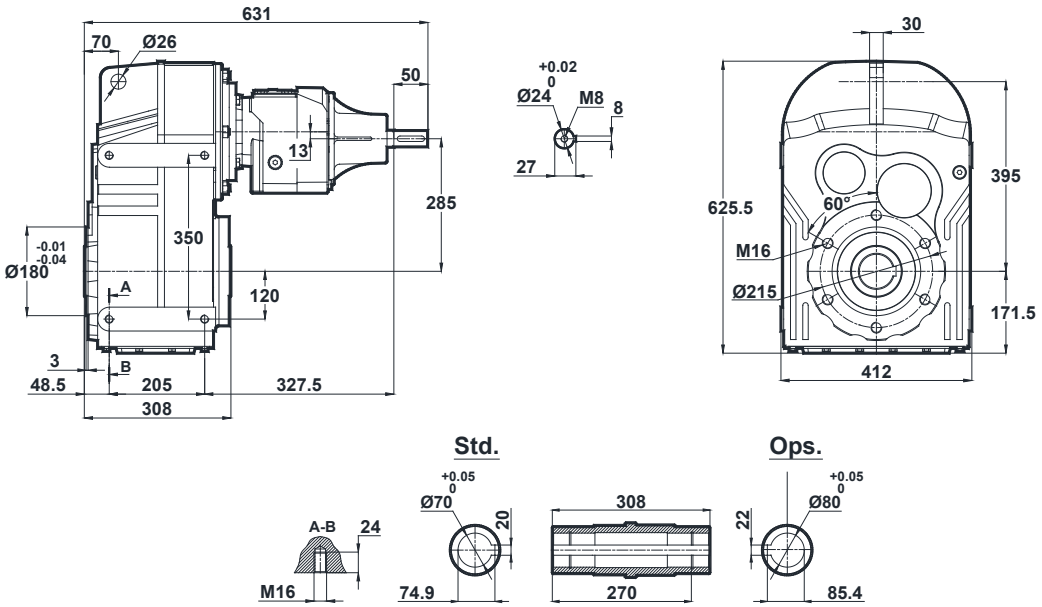
Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen



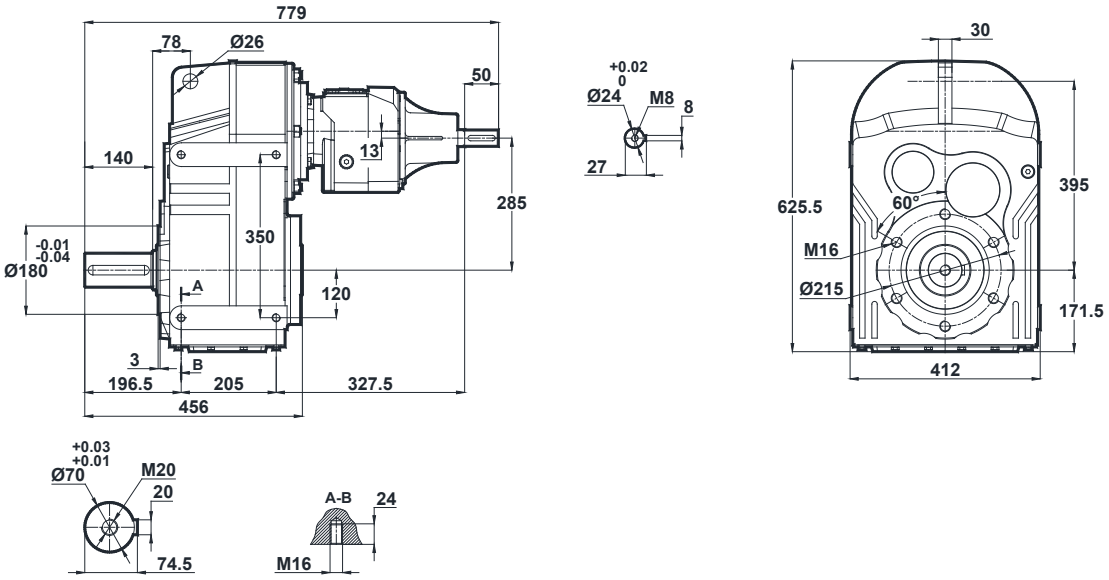
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT675.00
DT676.00

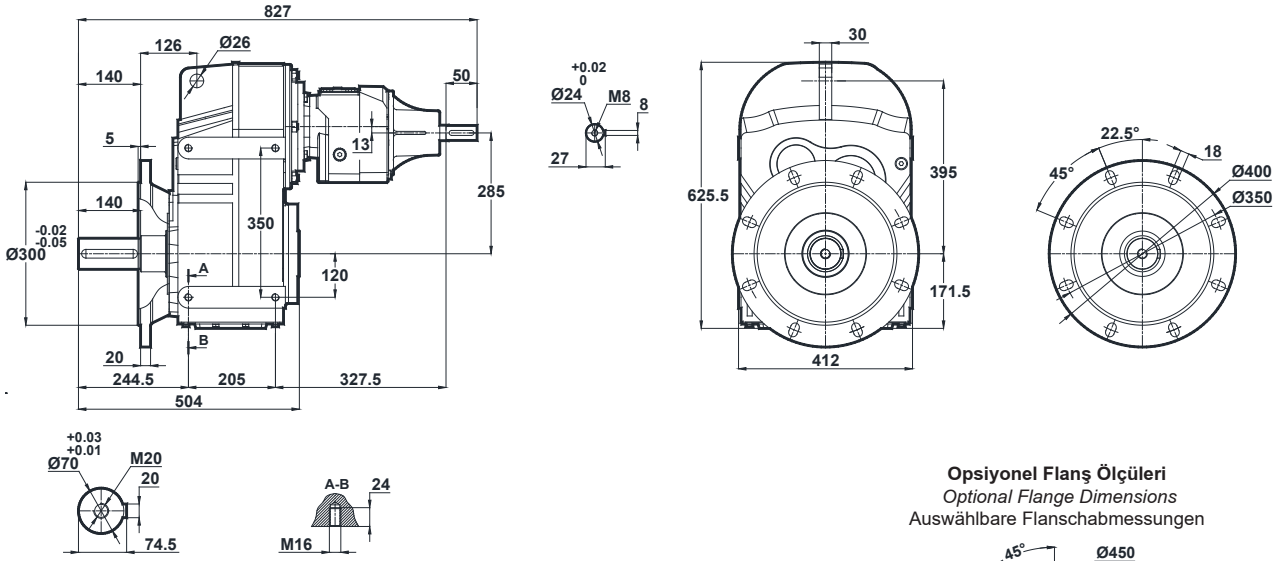


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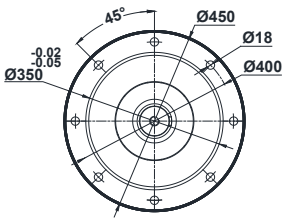


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DT675.02
DT676.02

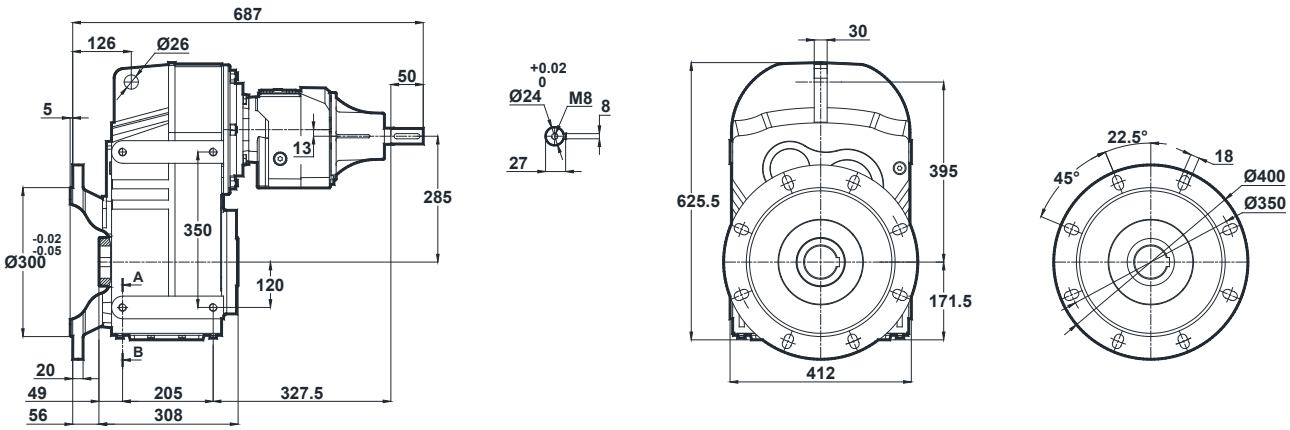


Opsiyonel Flanş Ölçüleri
Optional Flange Dimensions
Auswählbare Flanschabmessungen

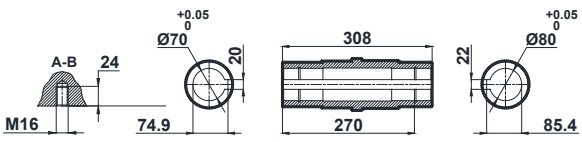


Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

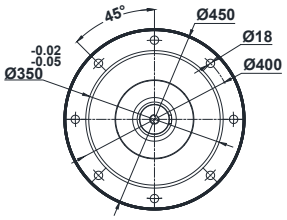
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Std. **Ops.**



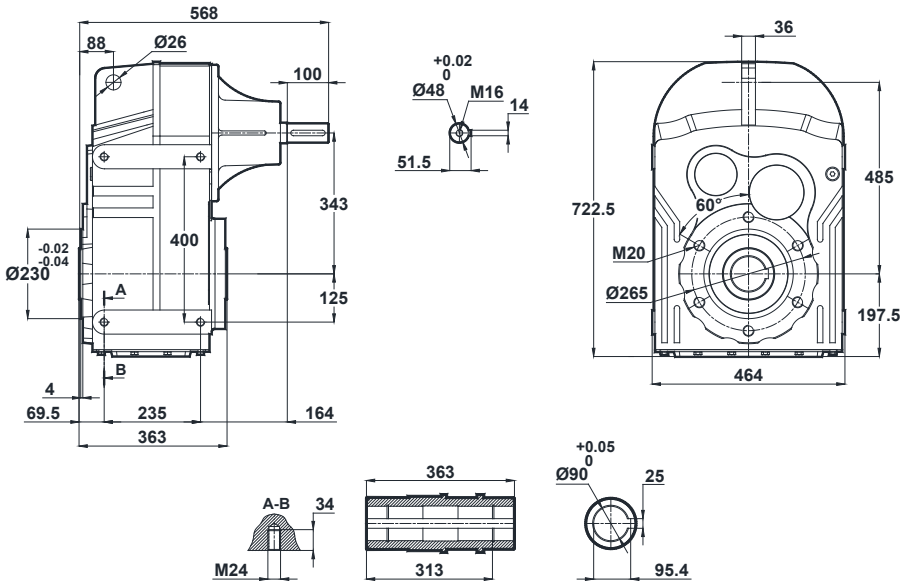
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Optional Flange Dimensions
Auswählbare Flanschabmessungen



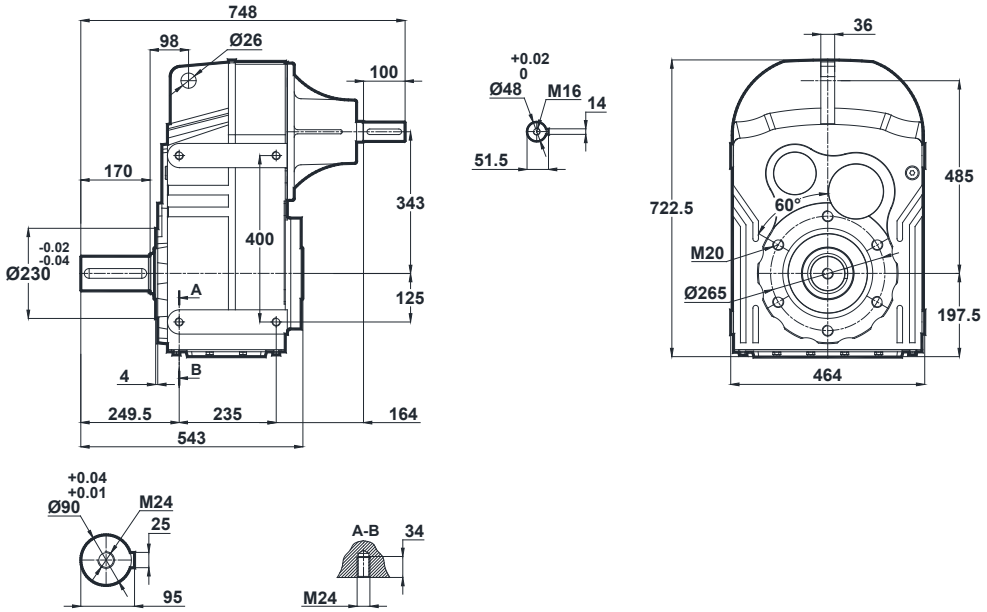
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Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT772.00
DT773.00

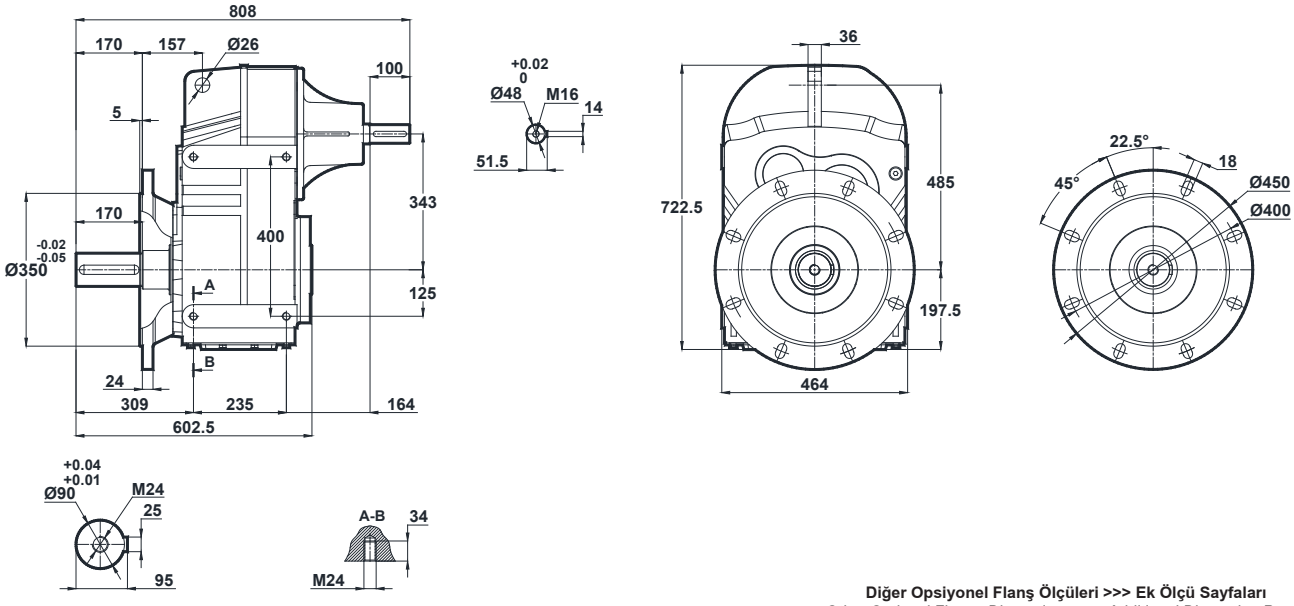


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DT773.01



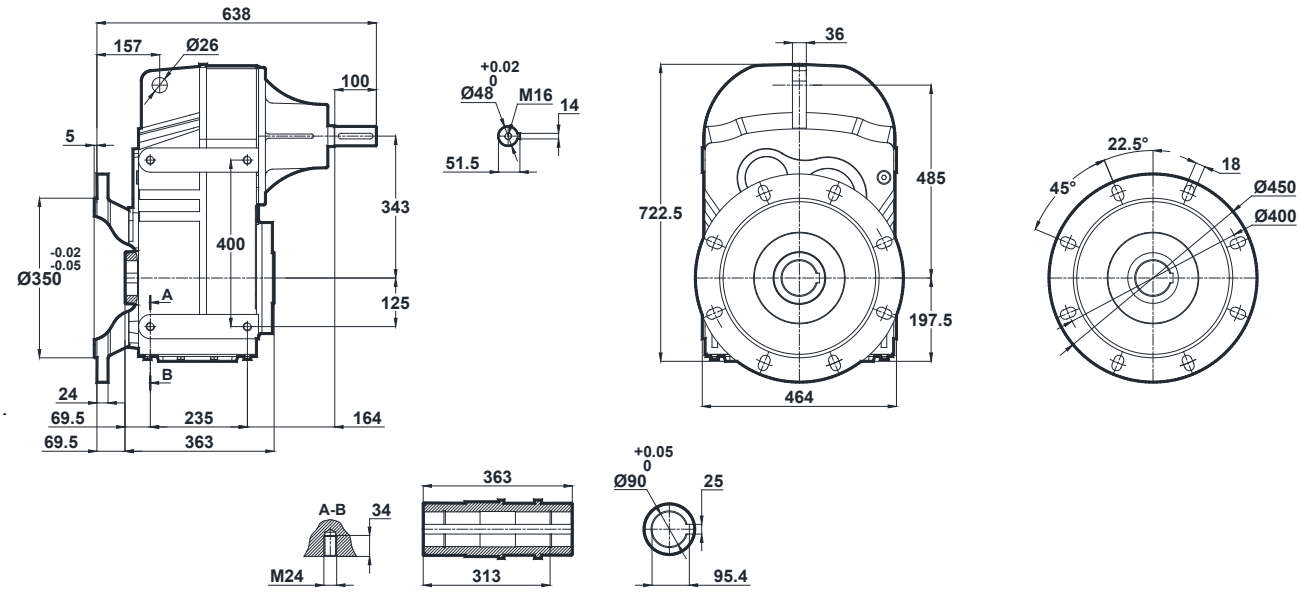
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DT772.02
DT773.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

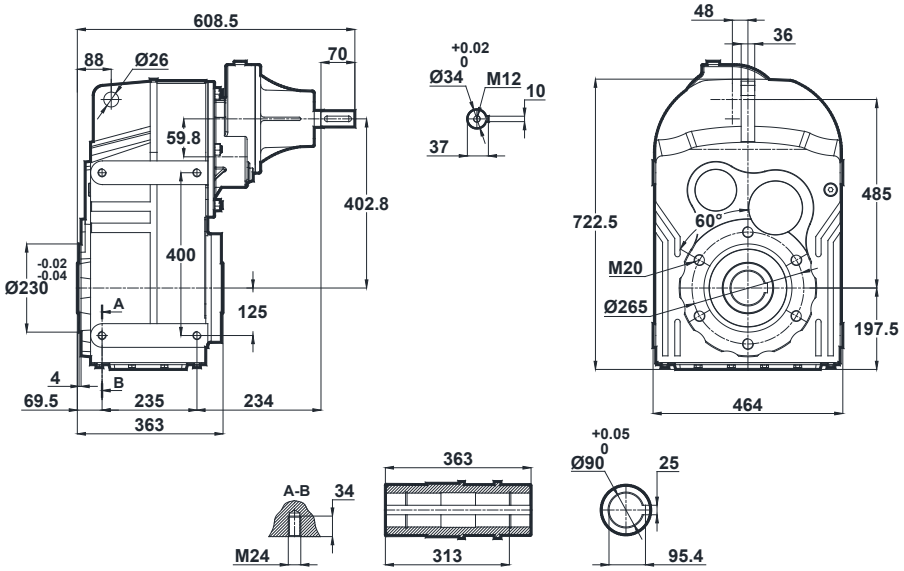
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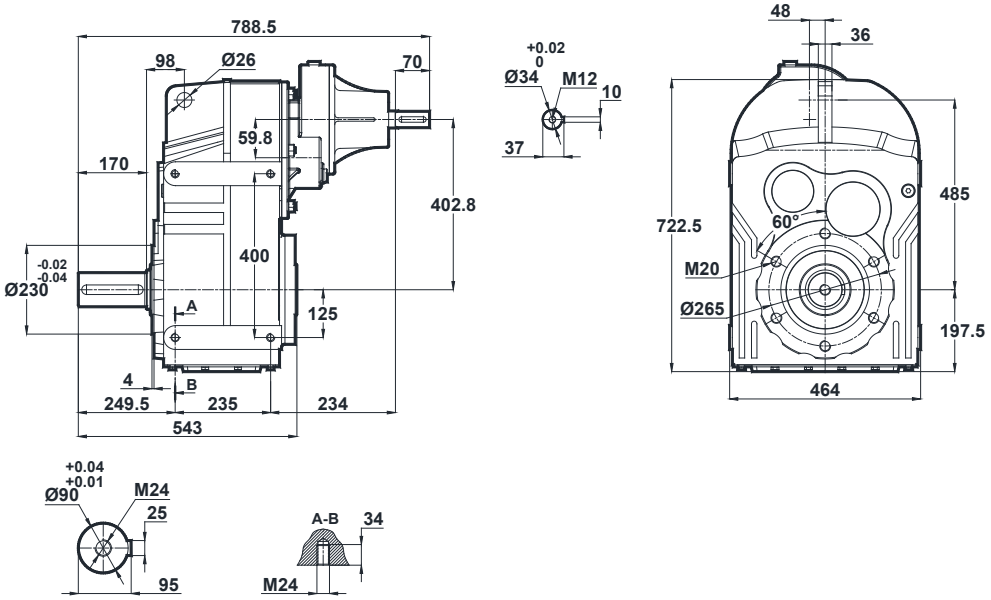
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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DT774.00

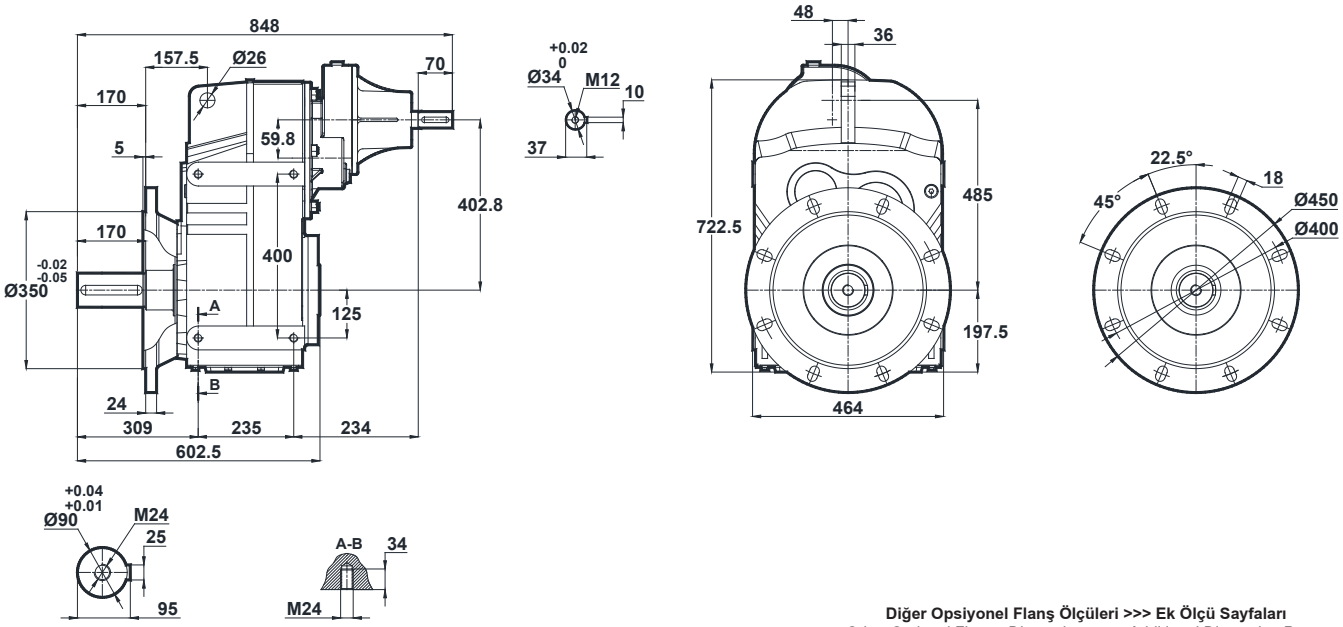


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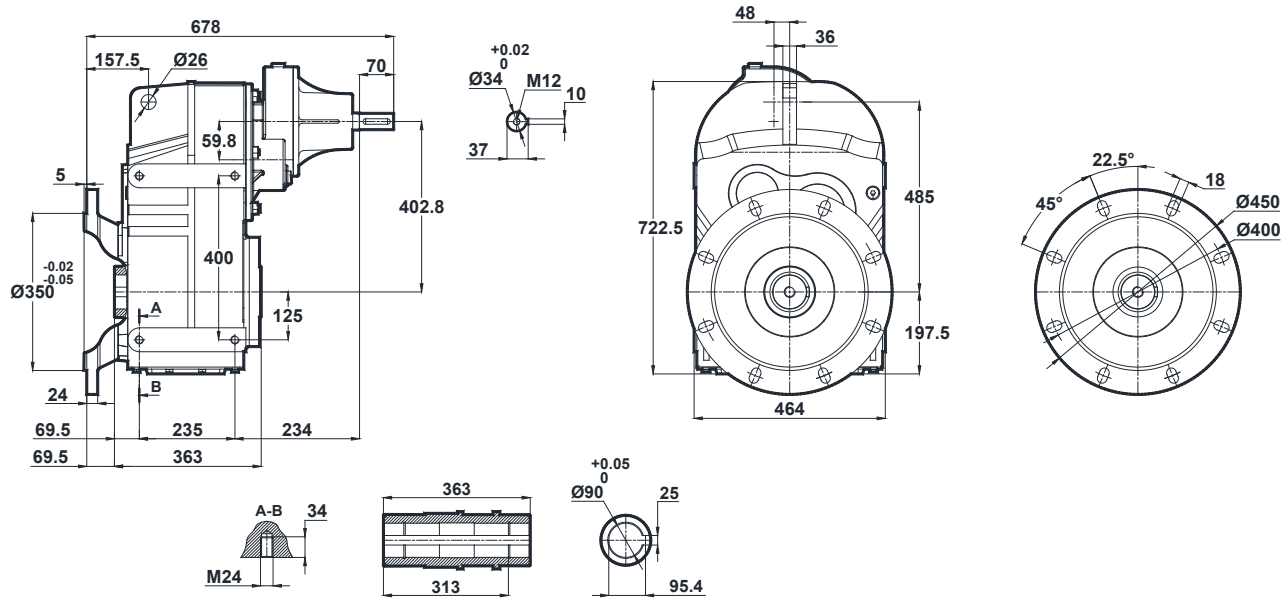
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DT774.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

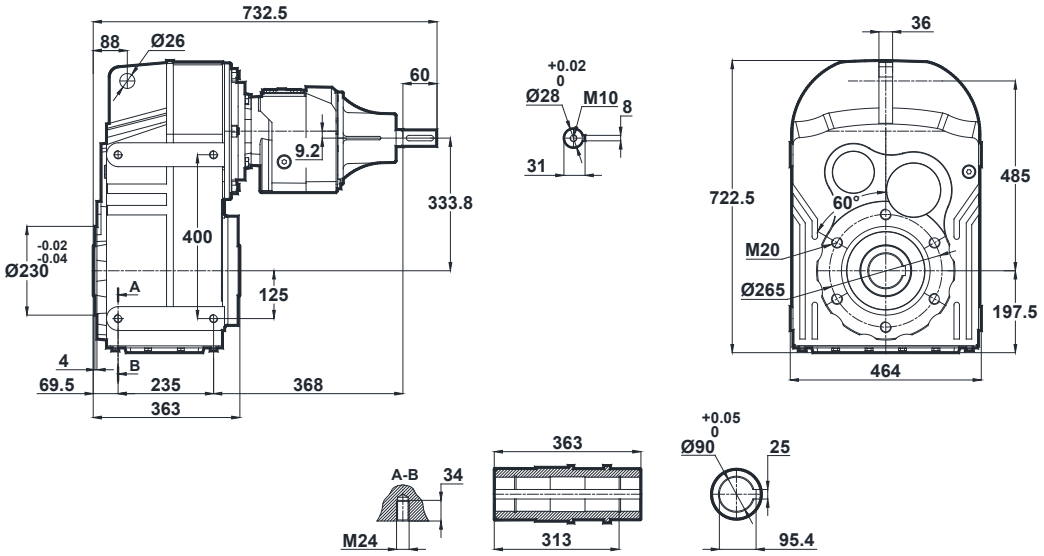
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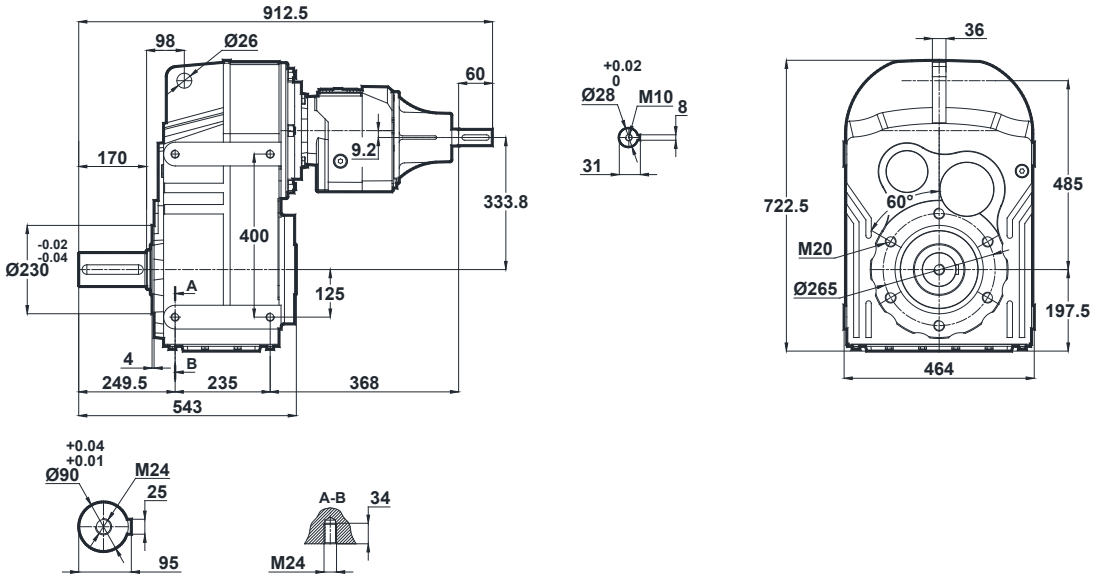
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT775.00
DT776.00

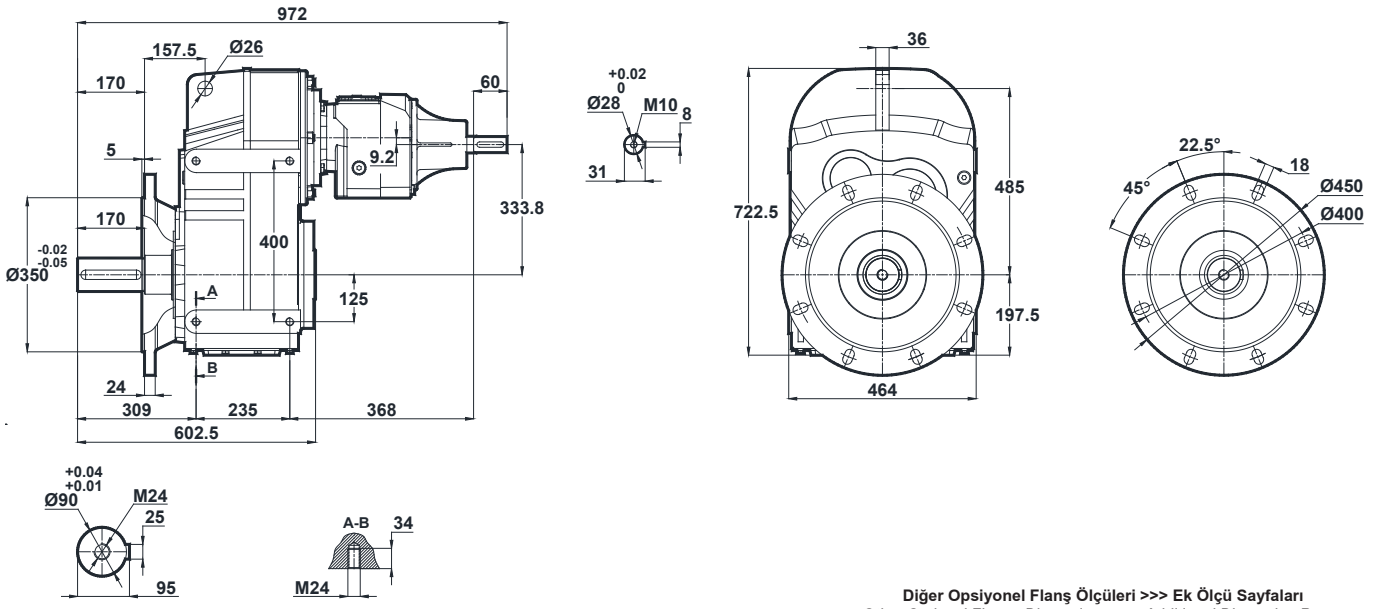


DT775.01
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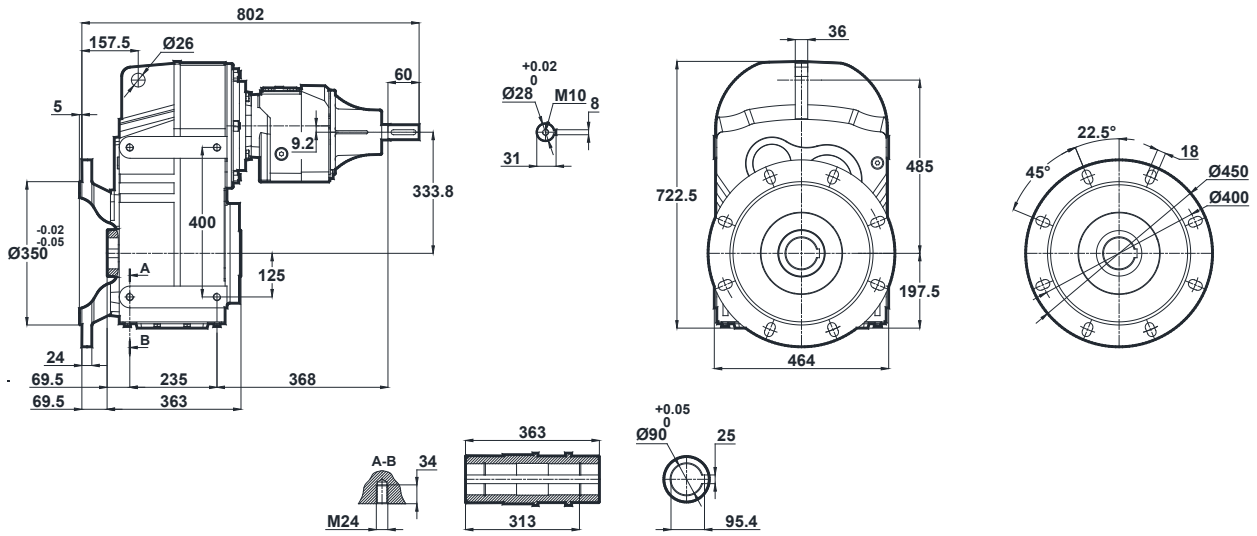
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DT775.02
DT776.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

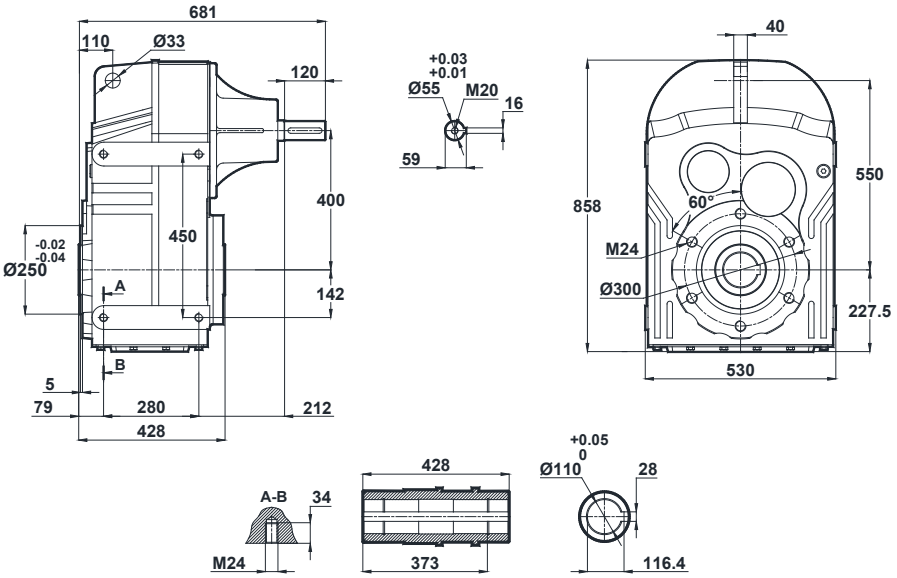
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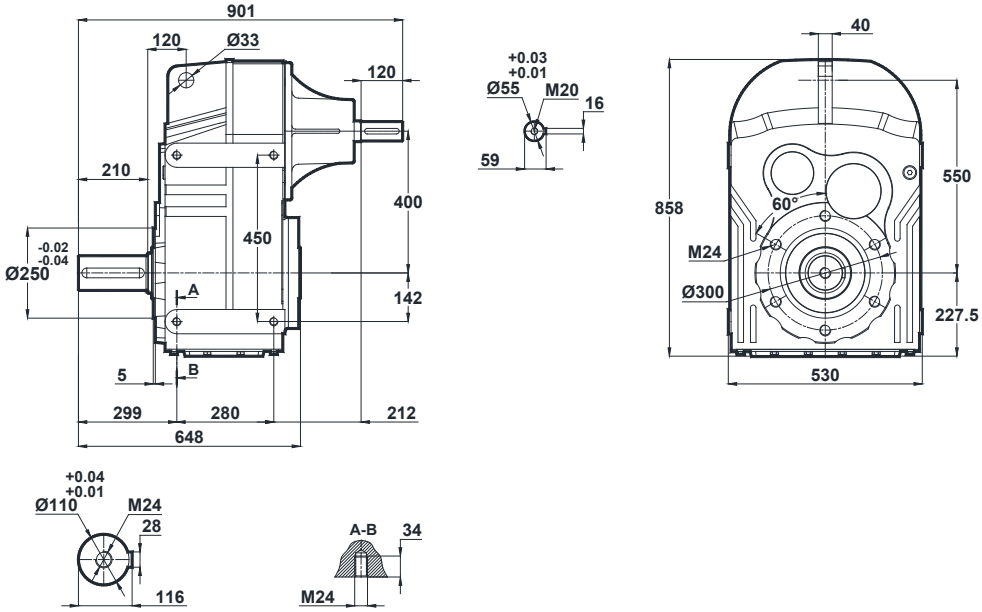
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT872.00
DT873.00

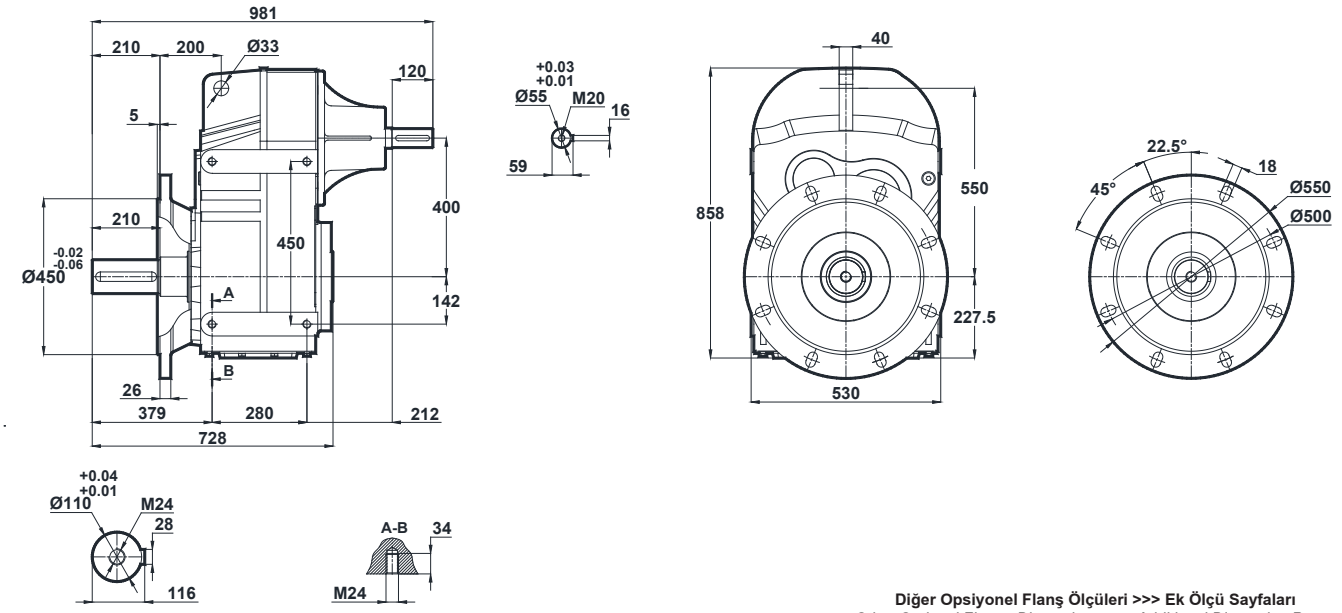


DT872.01
DT873.01



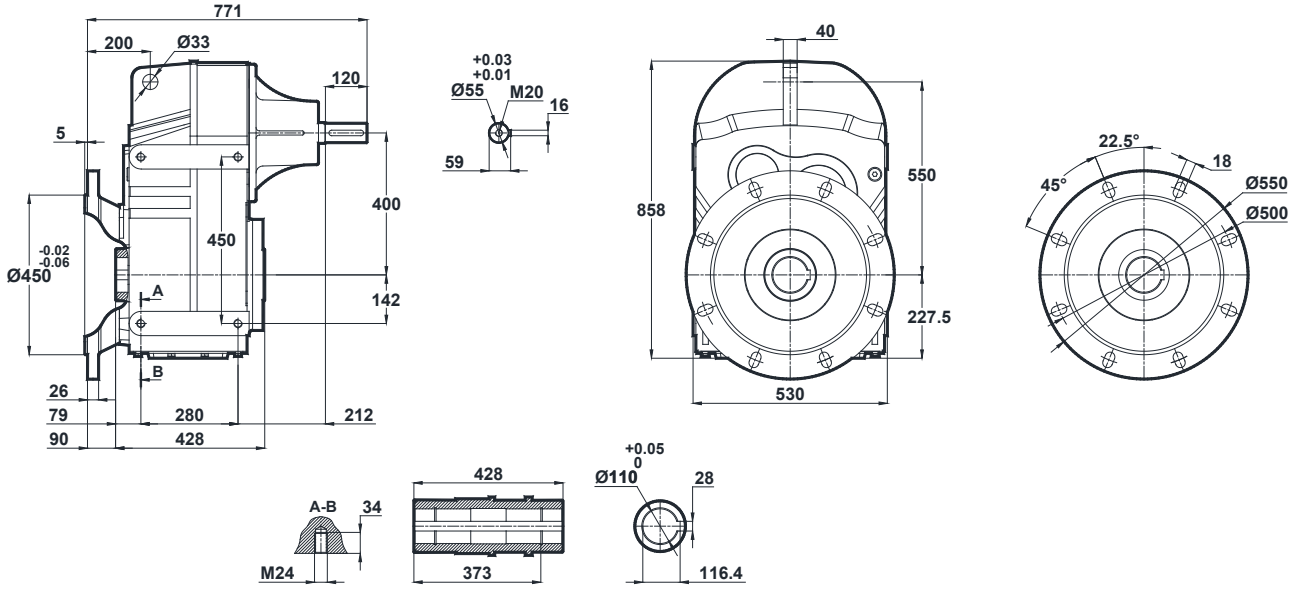
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DT872.02
DT873.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

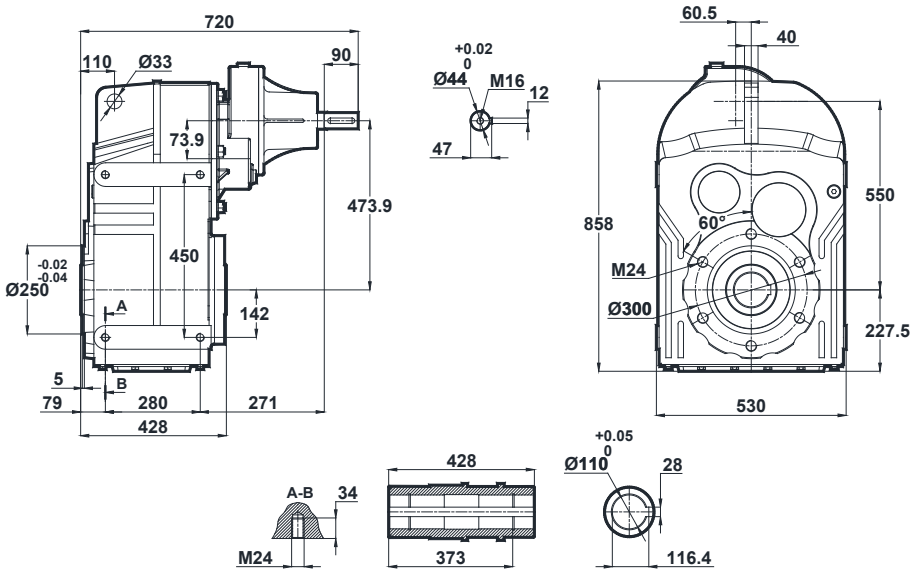
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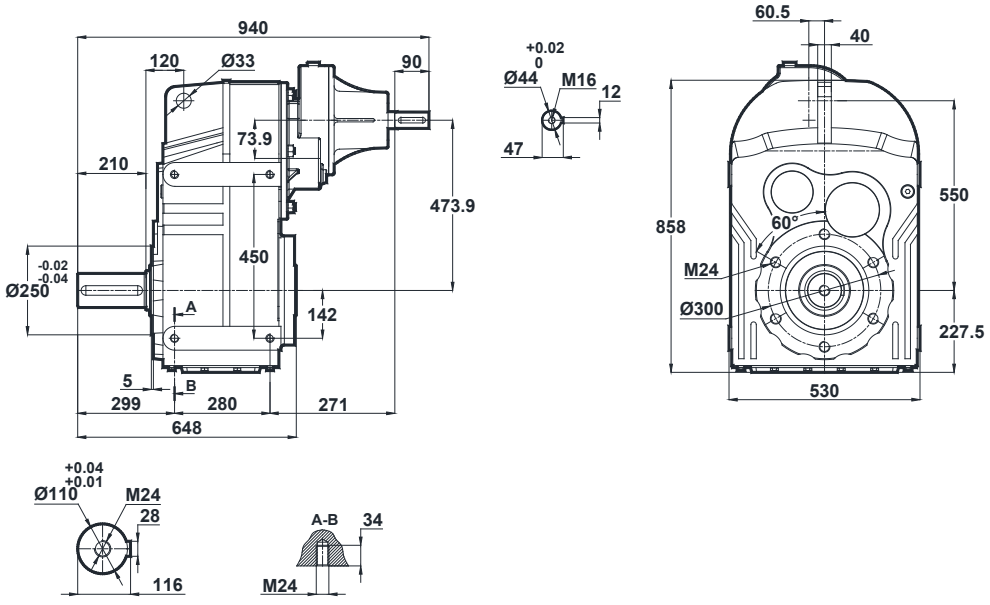
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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DT874.00

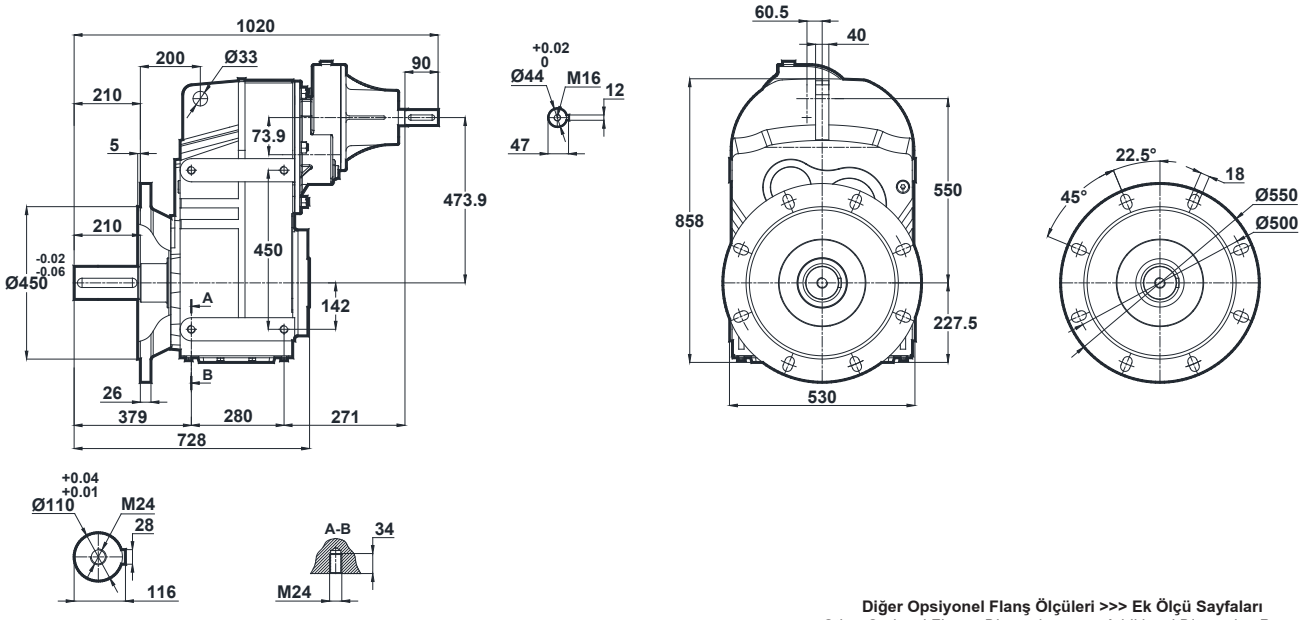


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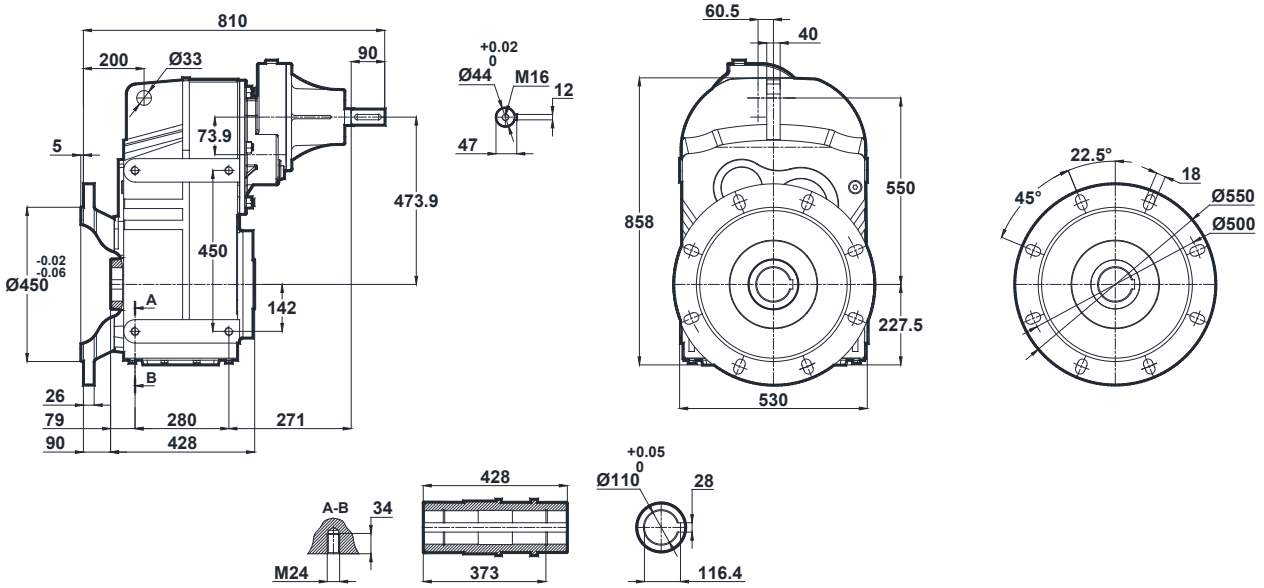
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DT874.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

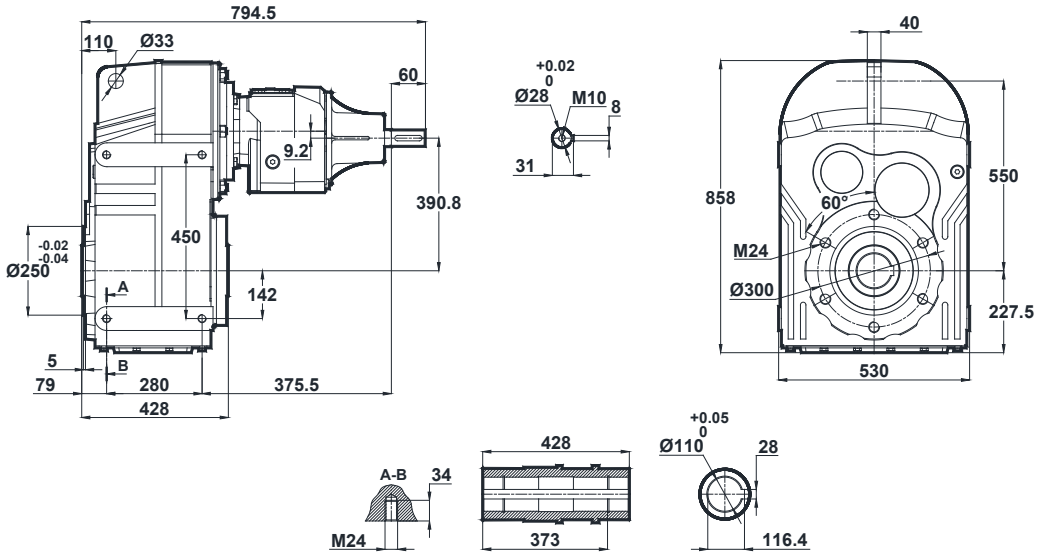
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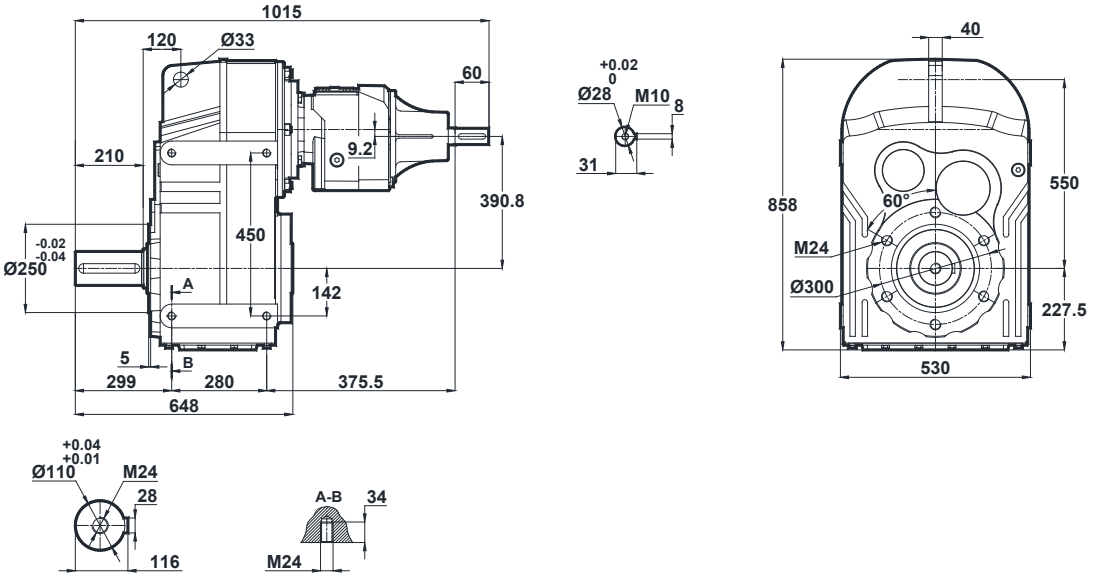
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Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

-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

DT875.00
DT876.00

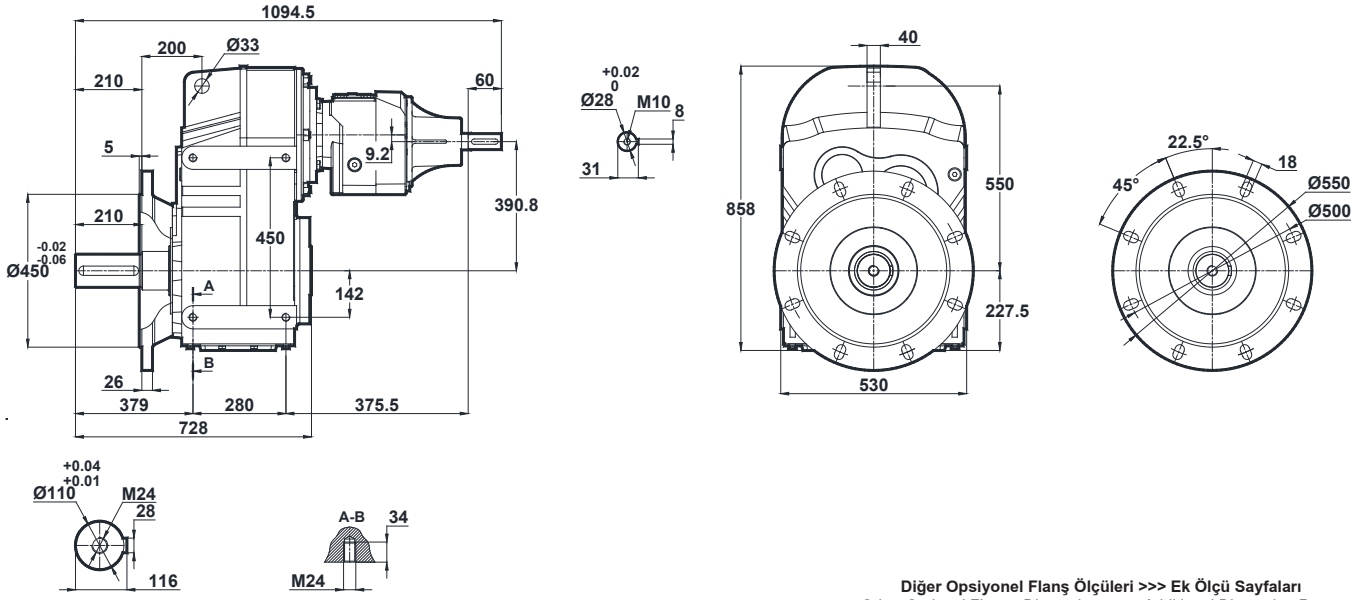


DT875.01
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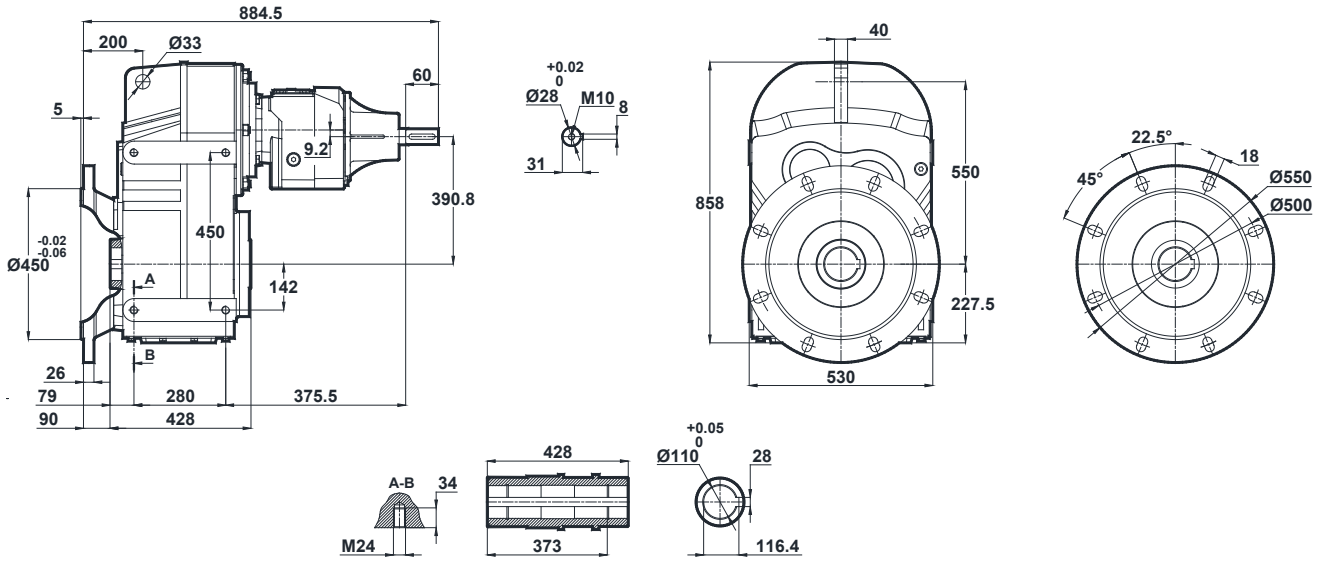
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DT875.02
DT876.02



Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
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Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

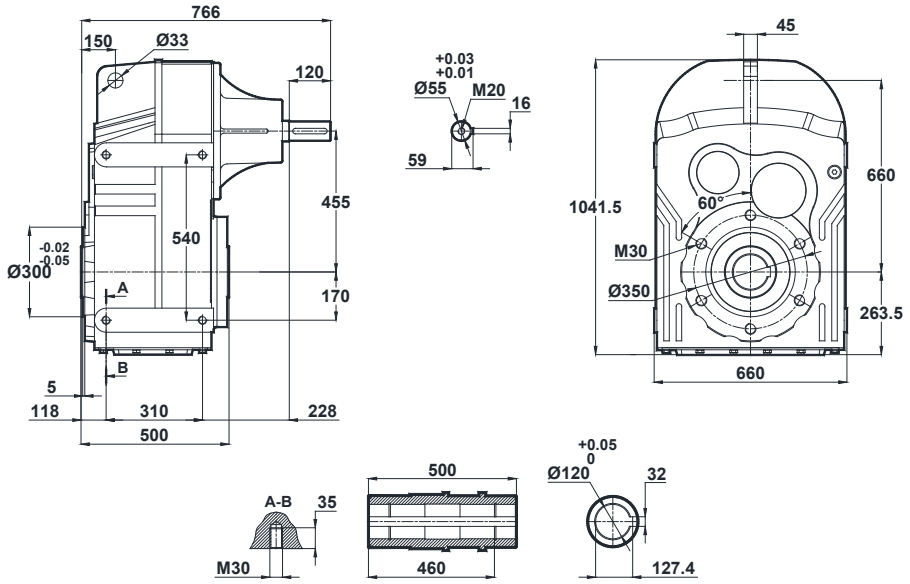
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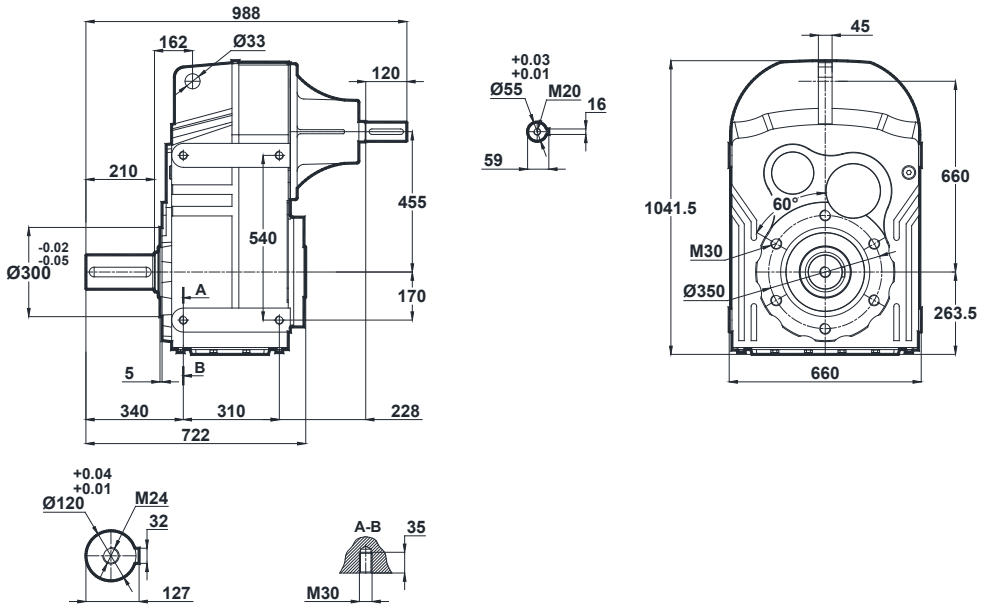
Diğer Opsiyonel Flanş Ölçüleri >>> Ek Ölçü Sayfaları
Other Optional Flange Dimensions >>> Additional Dimension Pages
Andere auswählbare Flanschabmessungen >>> Zusätzliche Abmessungseiten

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DT972.00
DT973.00

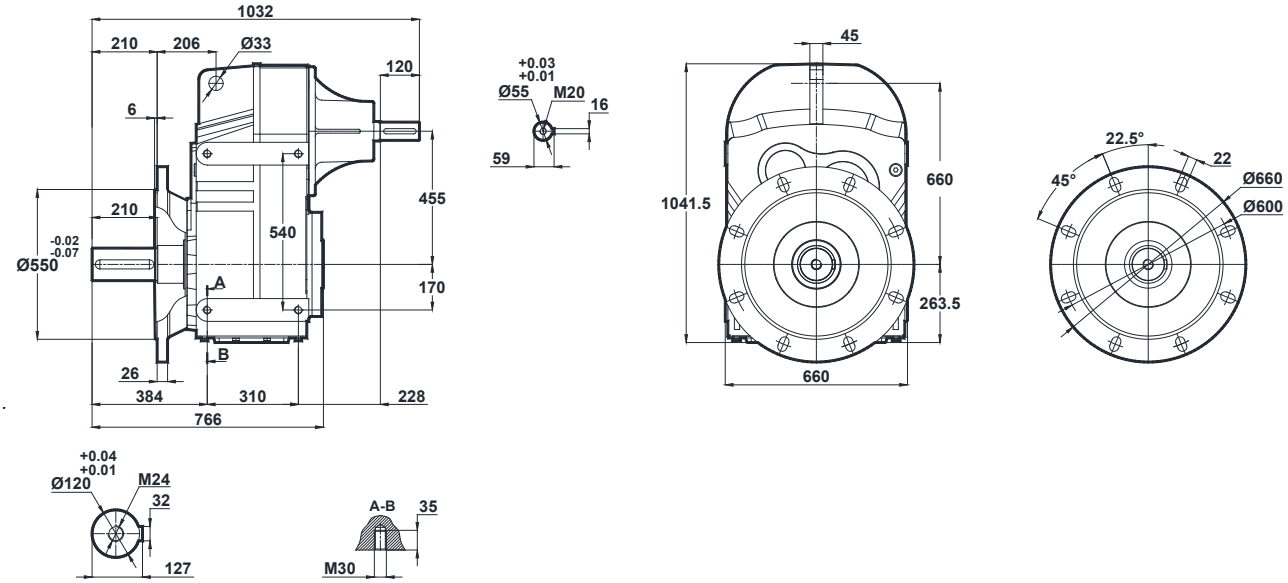


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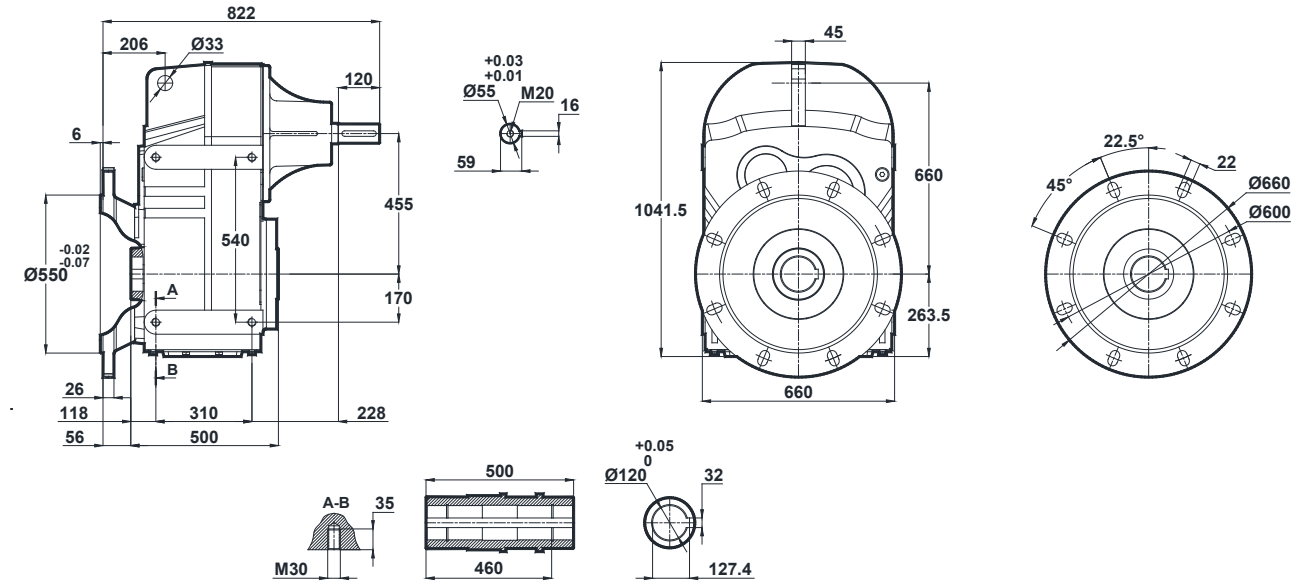


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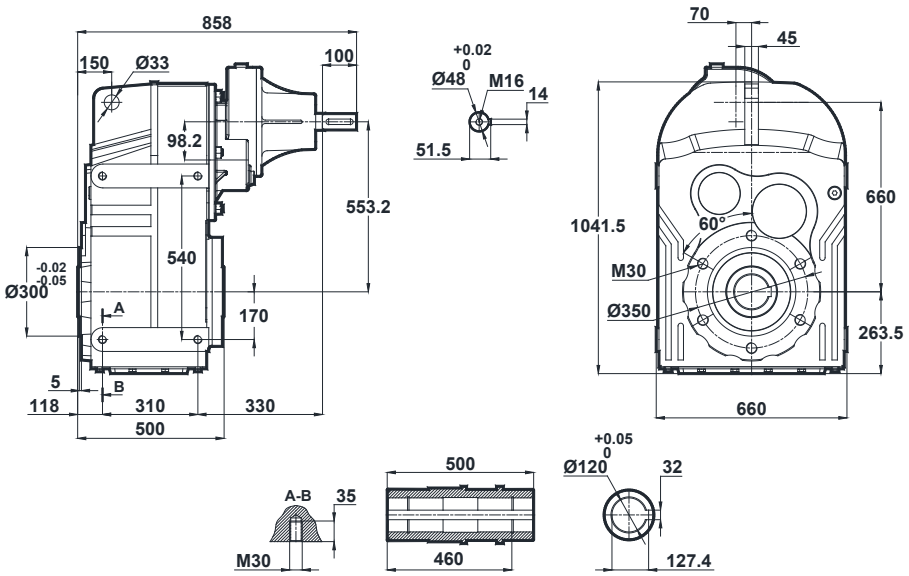


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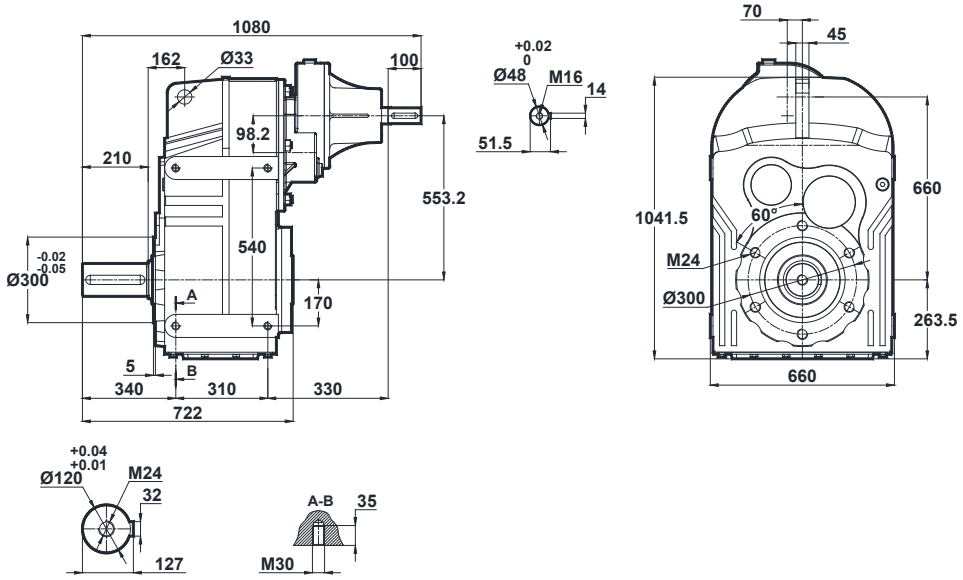


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DT974.00

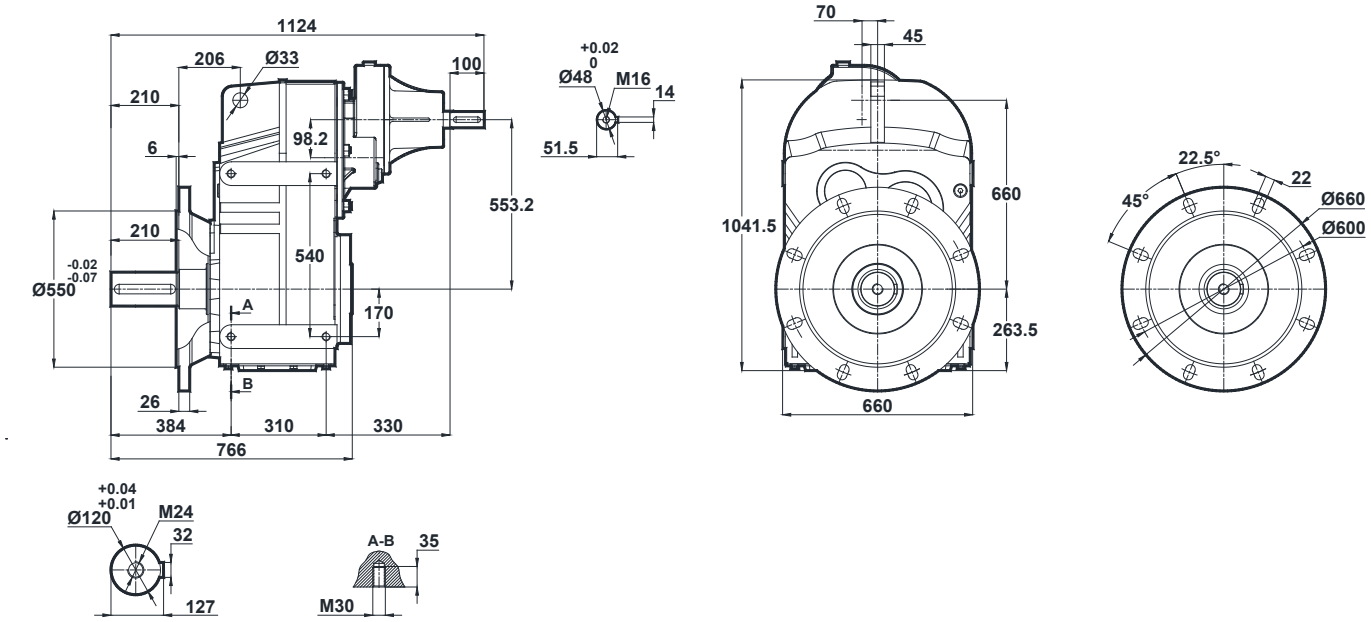


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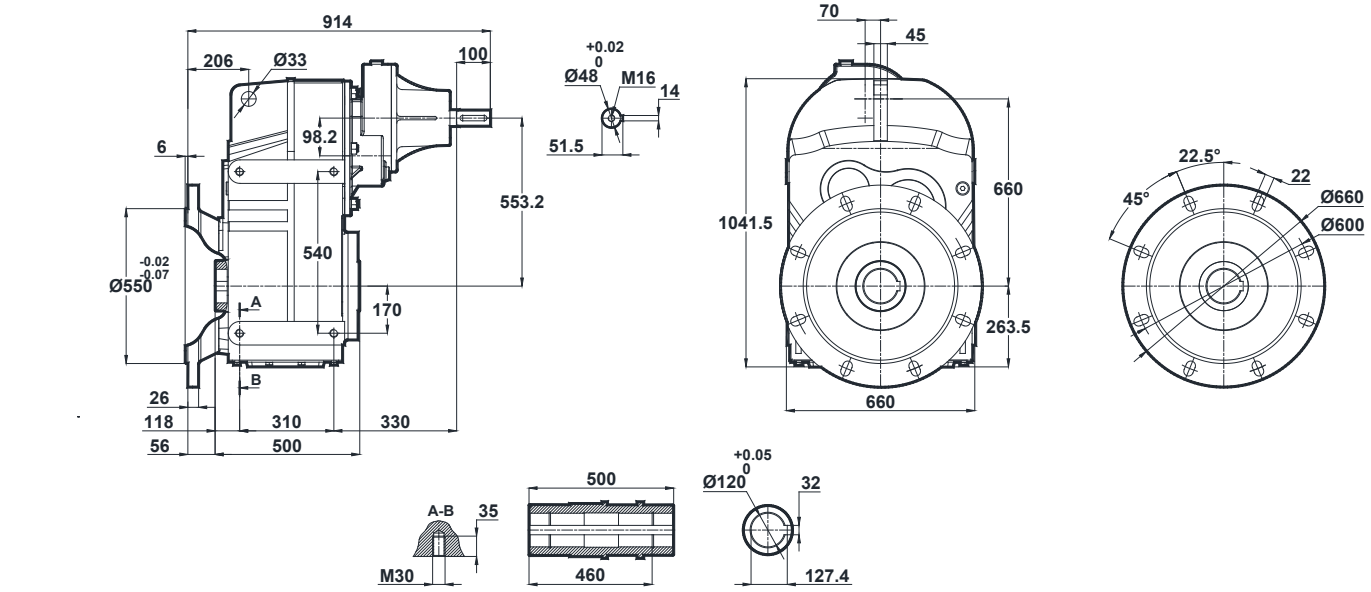


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DT974.02

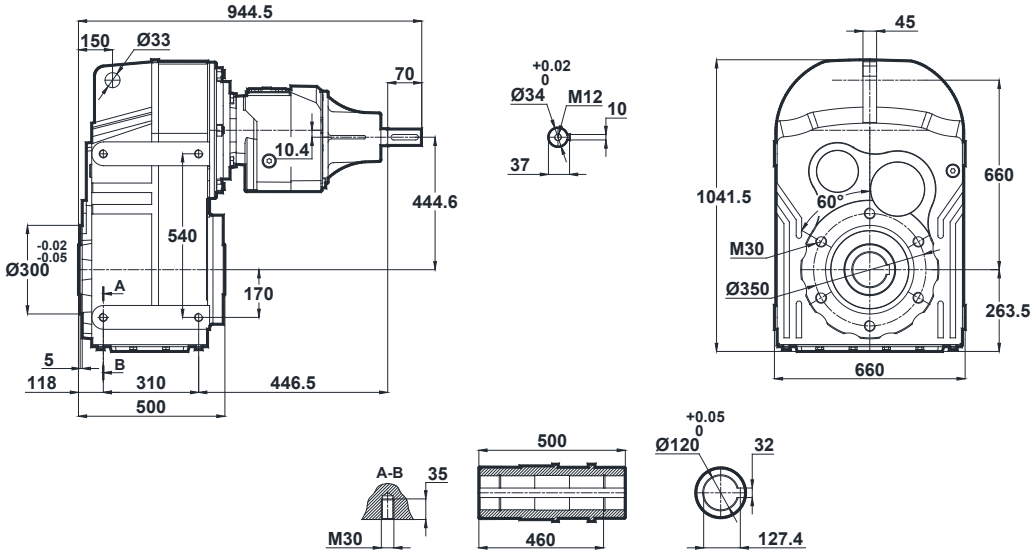


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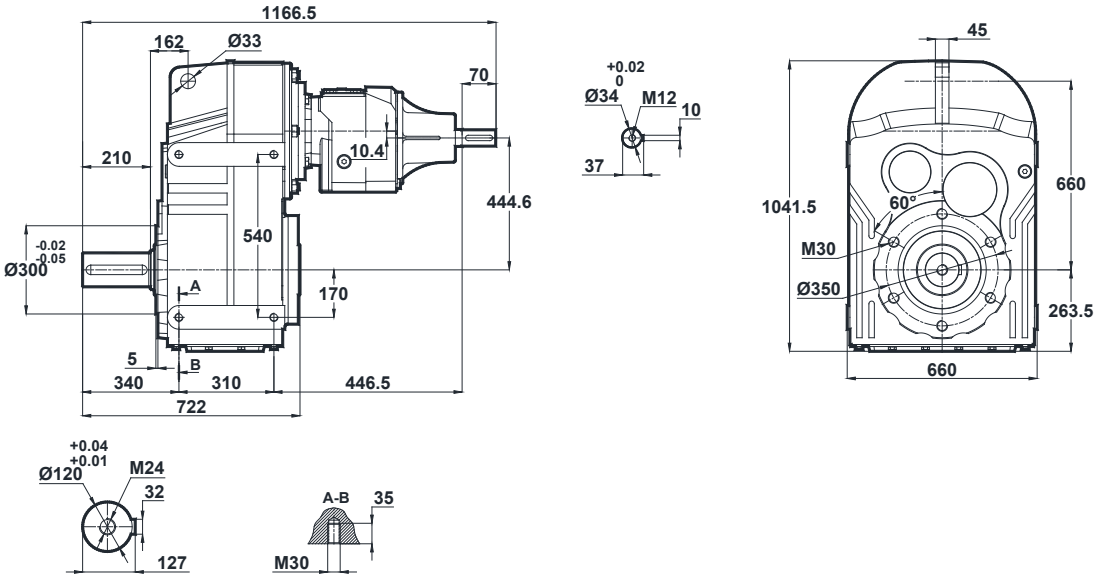


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DT975.00
DT976.00

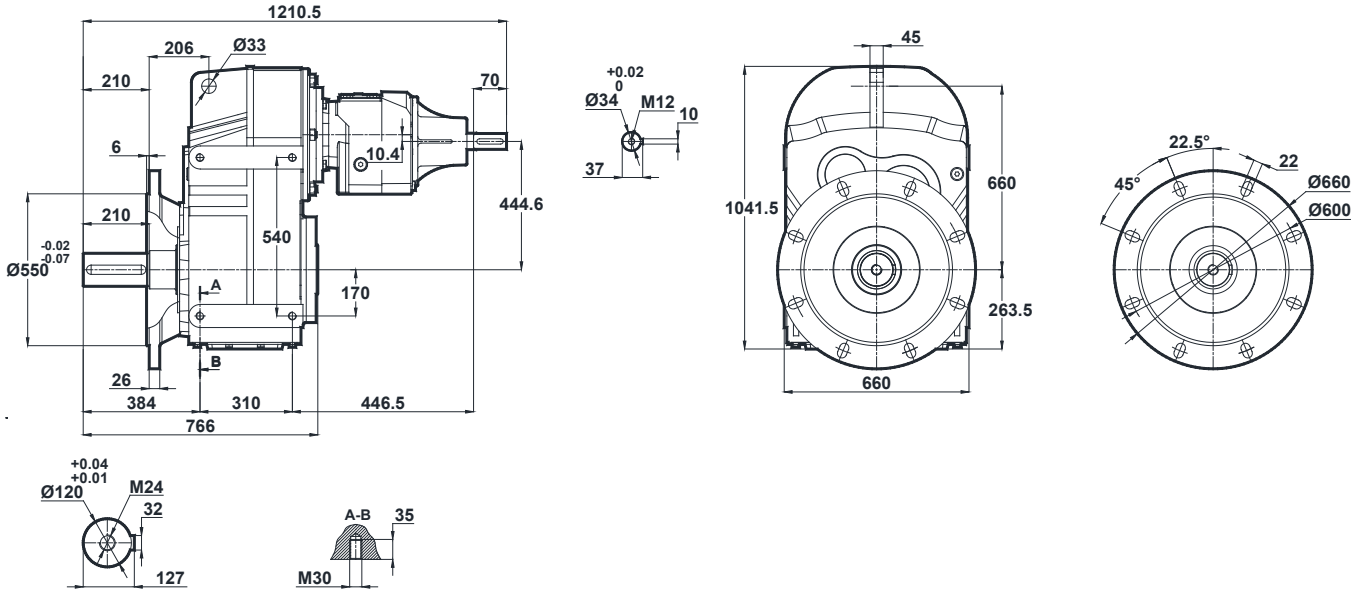


DT975.01
DT976.01

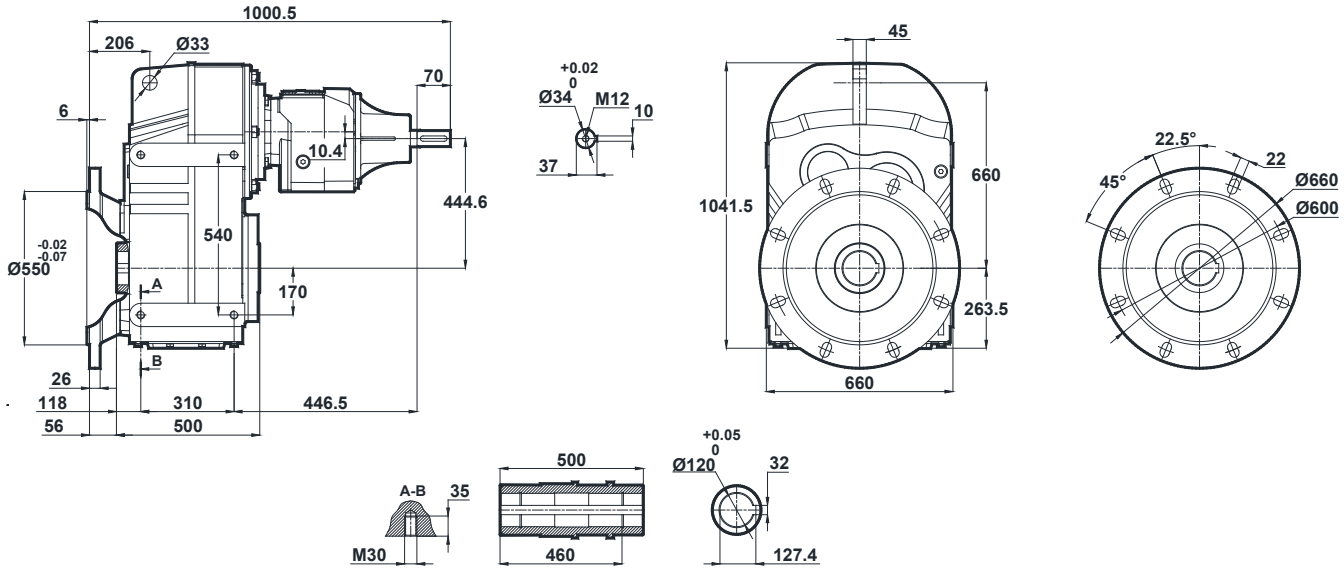


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DT975.02
DT976.02



DT975.03
DT976.03

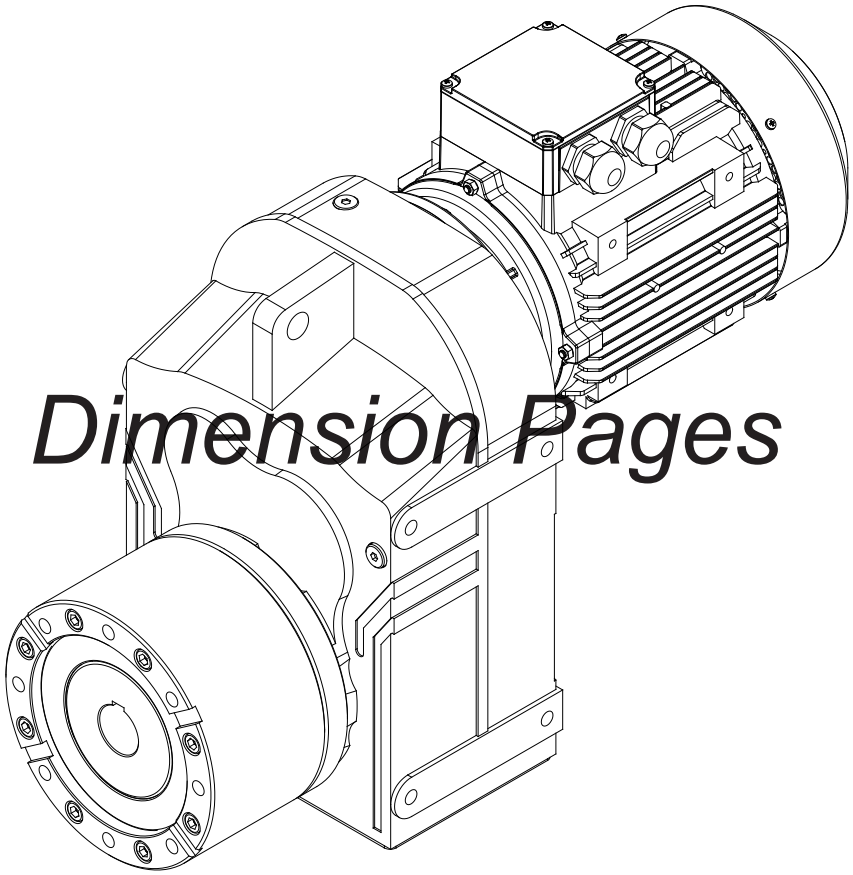




Notlar / *Notes* / Notizen

D.E Serisi / *Series* / Serie

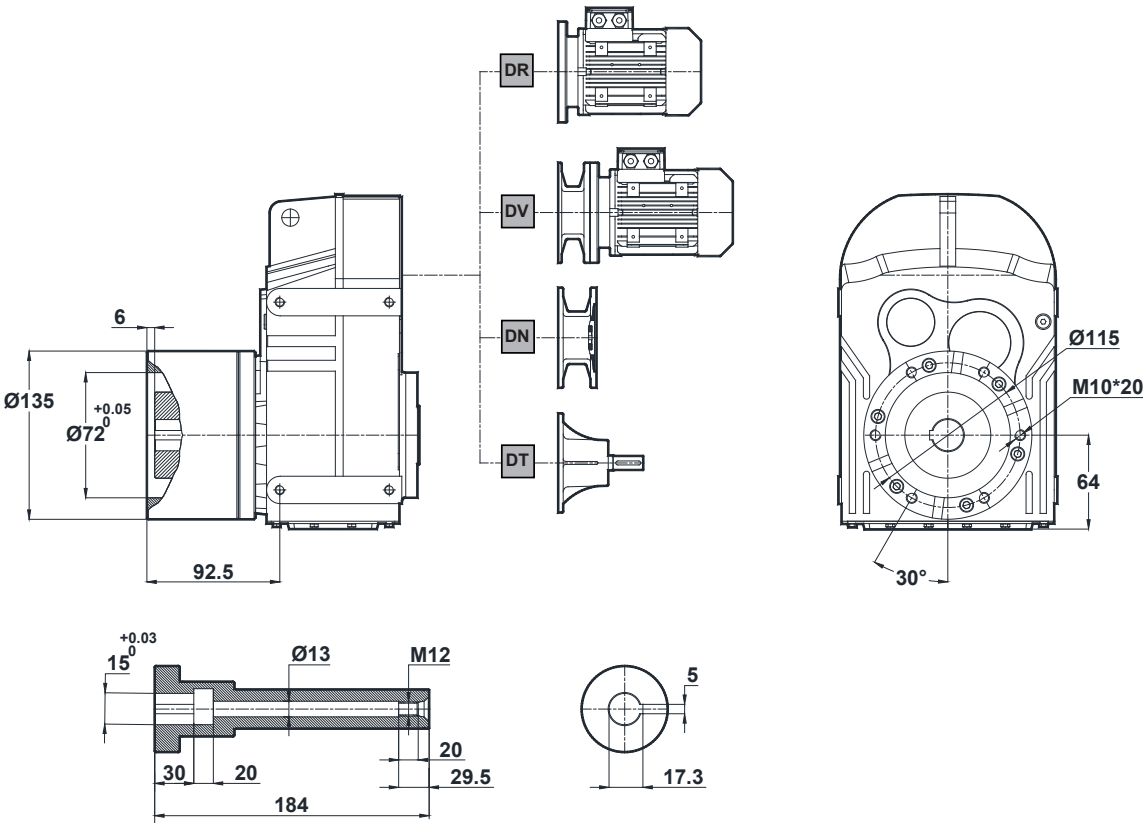
Ölçü Sayfaları



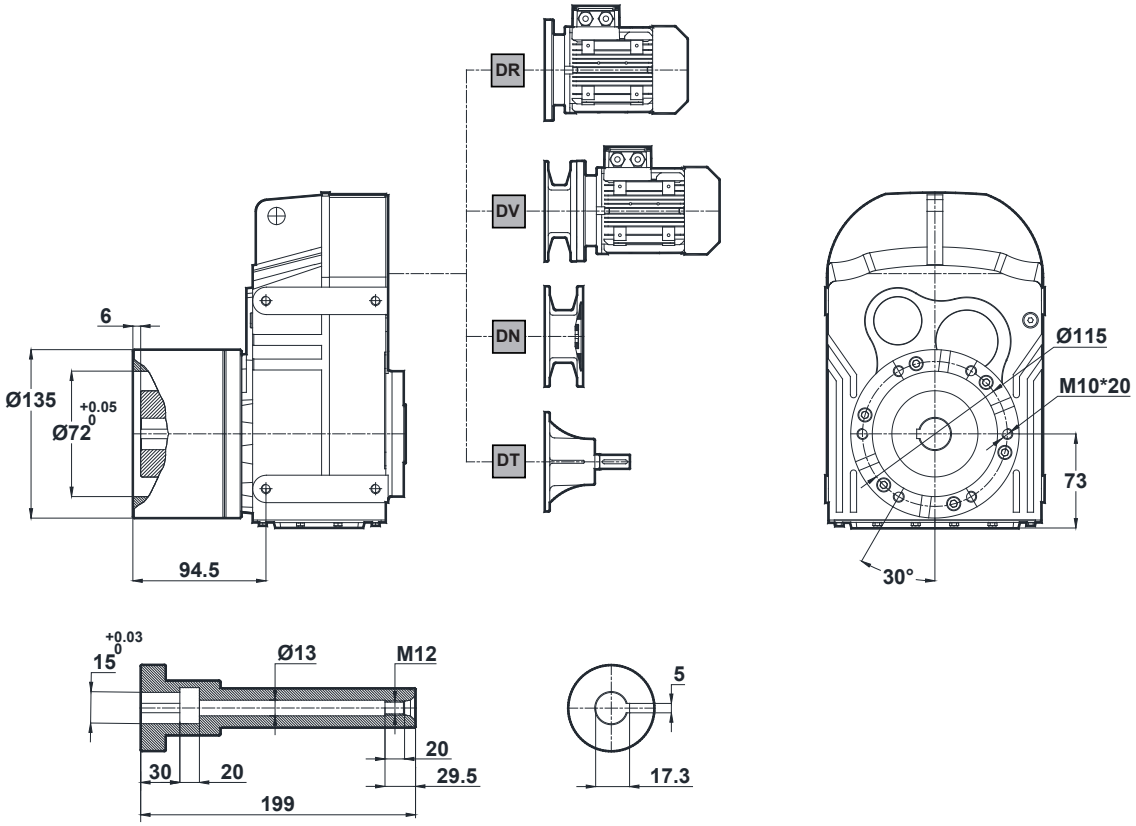
Dimension Pages

Abmessungsseiten

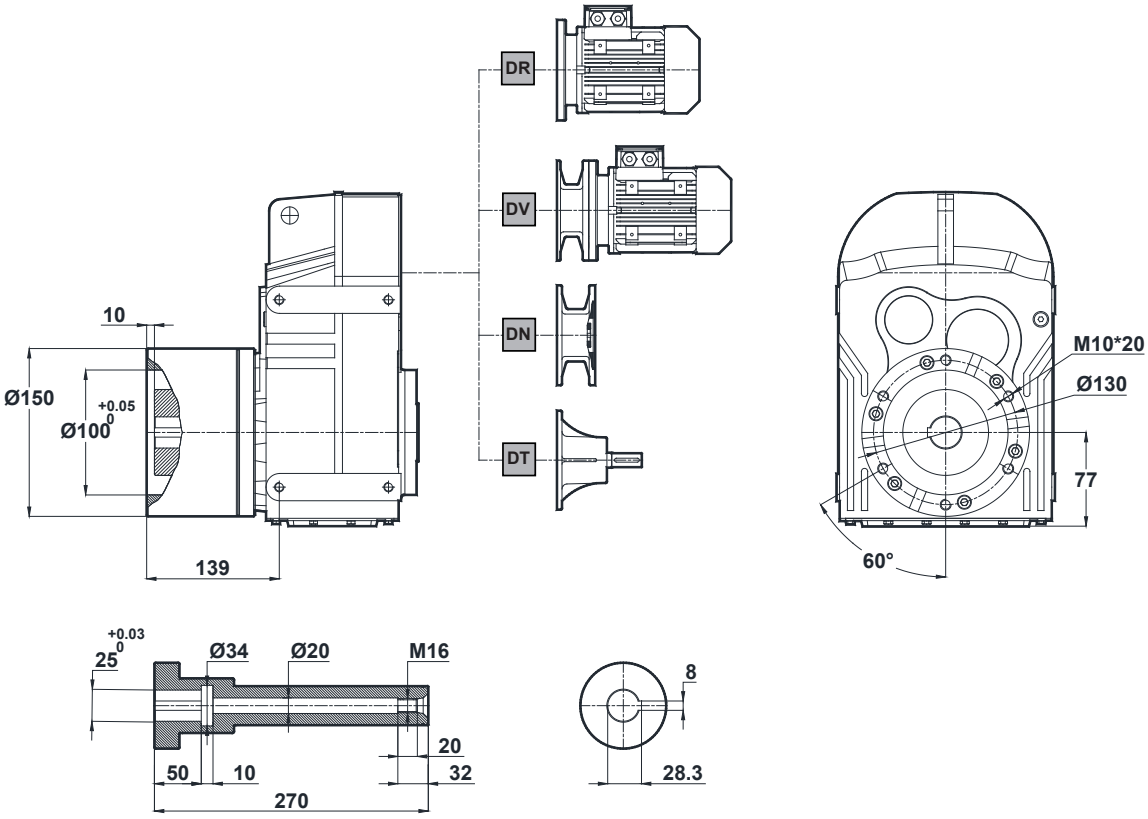
D.07.0E


DR
DV
DN
DT
6
Ø135
Ø72 +0.05 0
92.5
Ø115
M10*20
64
30°
15 +0.03 0
Ø13
M12
20
29.5
30
20
184
5
17.3

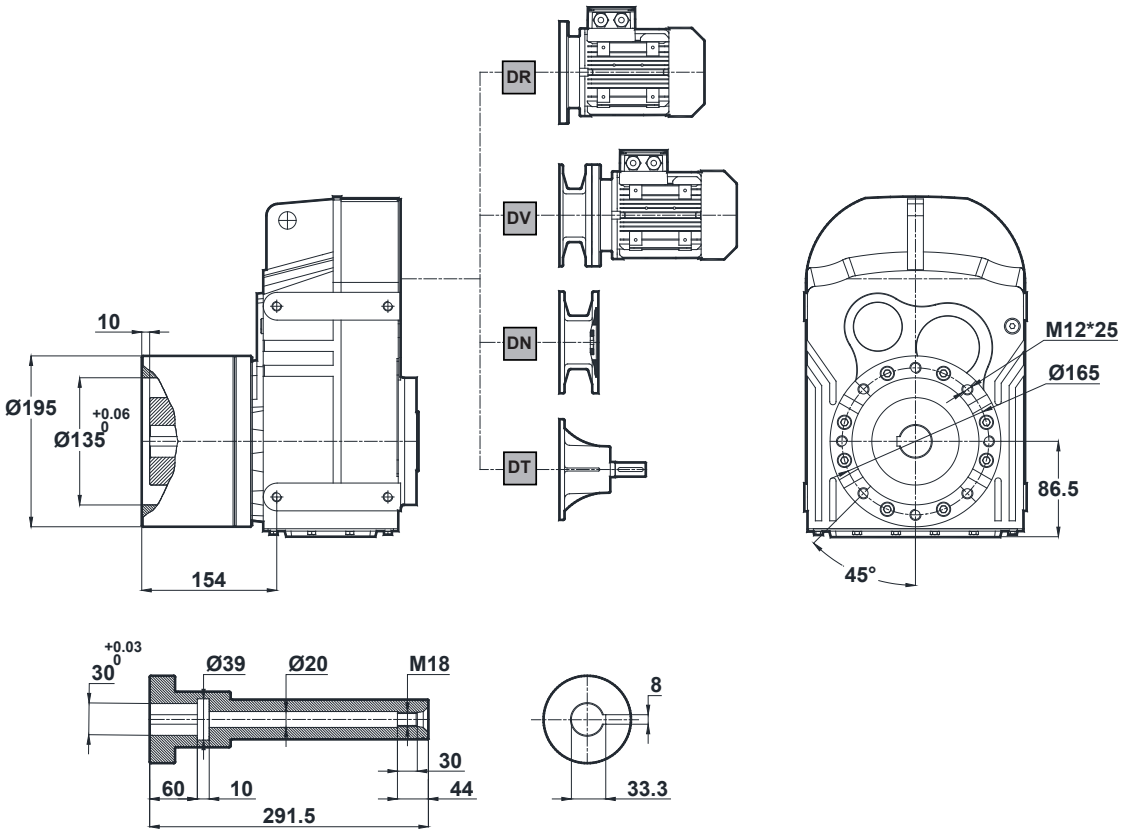
D.17.0E


DR
DV
DN
DT
6
Ø135
Ø72 +0.05 0
94.5
Ø115
M10*20
73
30°
15 +0.03 0
Ø13
M12
20
29.5
30
20
199
5
17.3

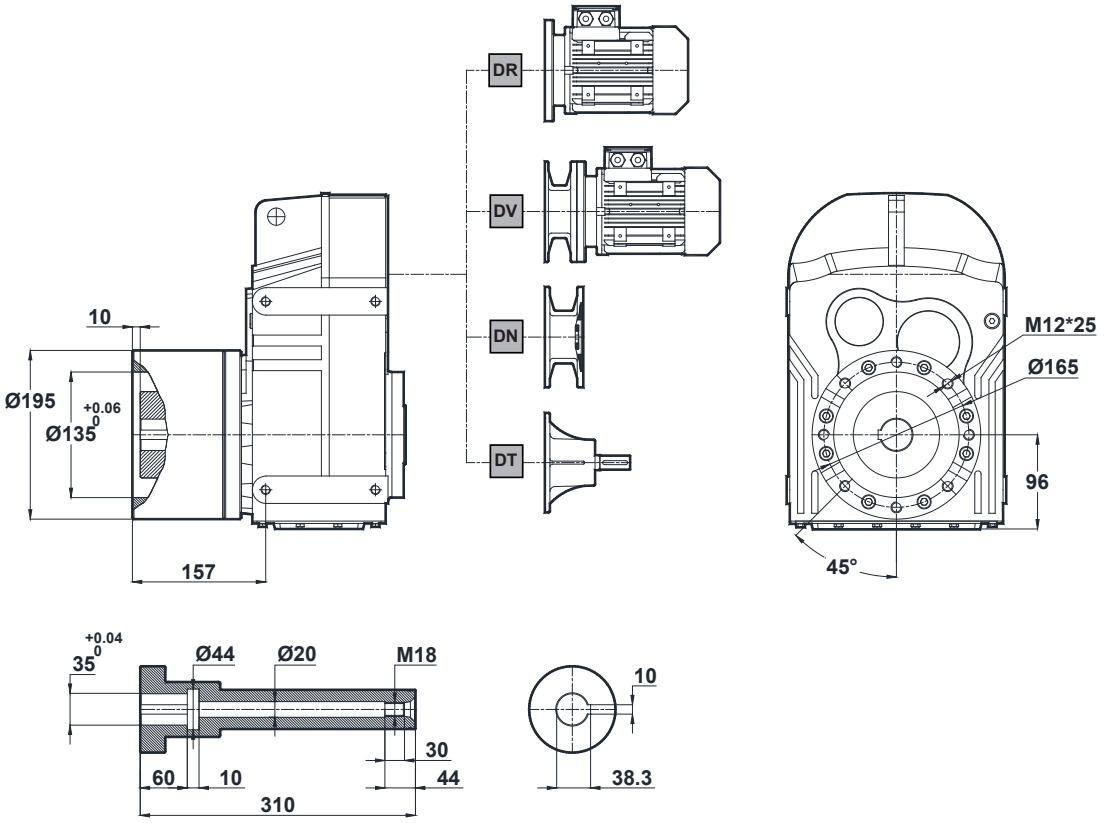
D.27.0E


DR
DV
DN
DT
10
Ø150
Ø100 +0.05 0
139
M10*20
Ø130
77
60°
25 +0.03 0
Ø34
Ø20
M16
20
50
10
32
270
8
28.3

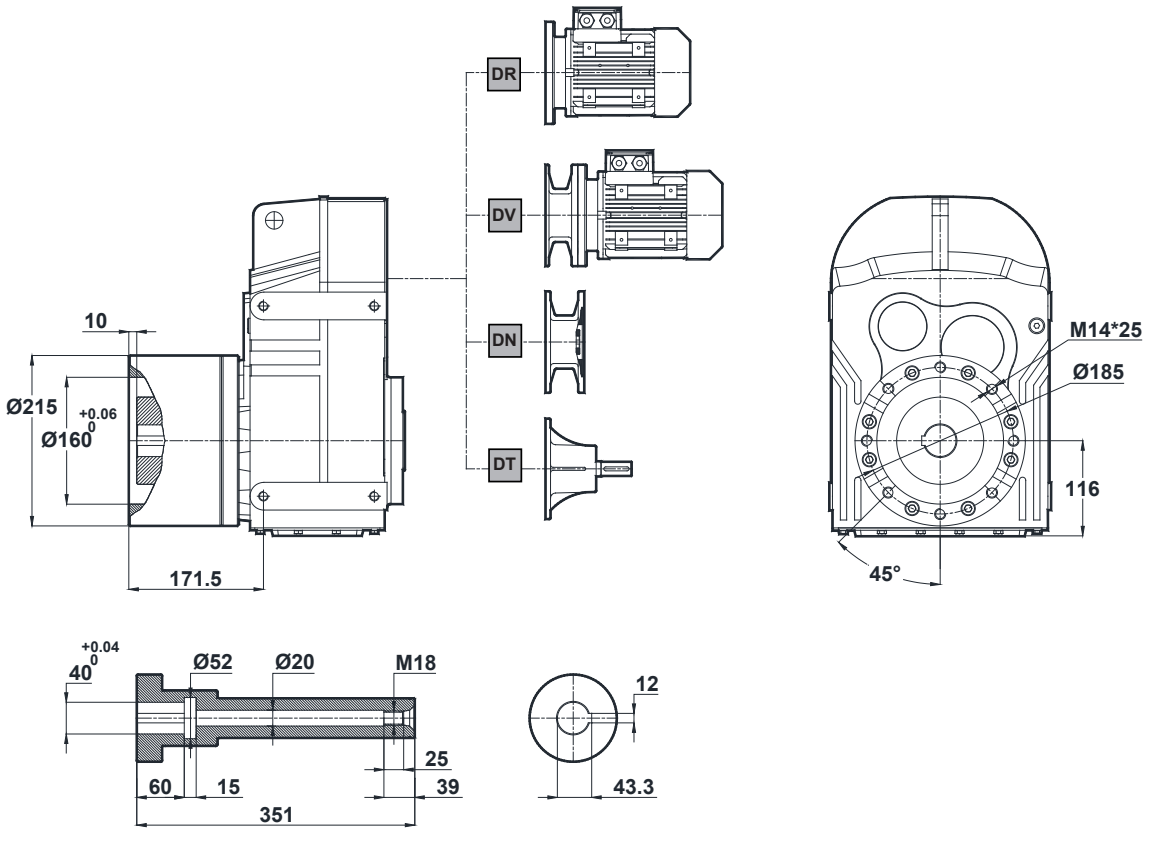
D.28.0E


DR
DV
DN
DT
10
Ø195
Ø135 +0.06 0
154
M12*25
Ø165
86.5
45°
30 +0.03 0
Ø39
Ø20
M18
30
60
10
44
291.5
8
33.3

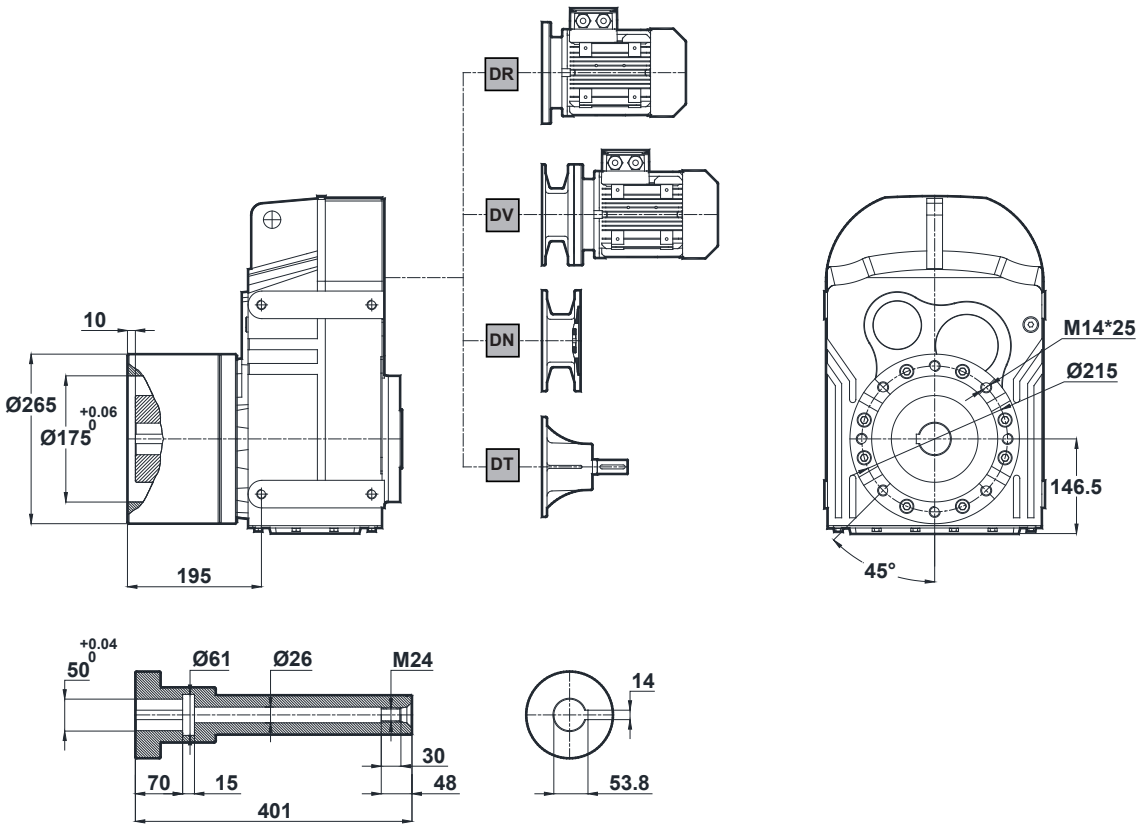
D.37.0E


DR
DV
DN
DT
10
Ø195
Ø135 +0.06 0
157
M12*25
Ø165
96
45°
35 +0.04 0
Ø44
Ø20
M18
30
60
10
44
310
10
38.3

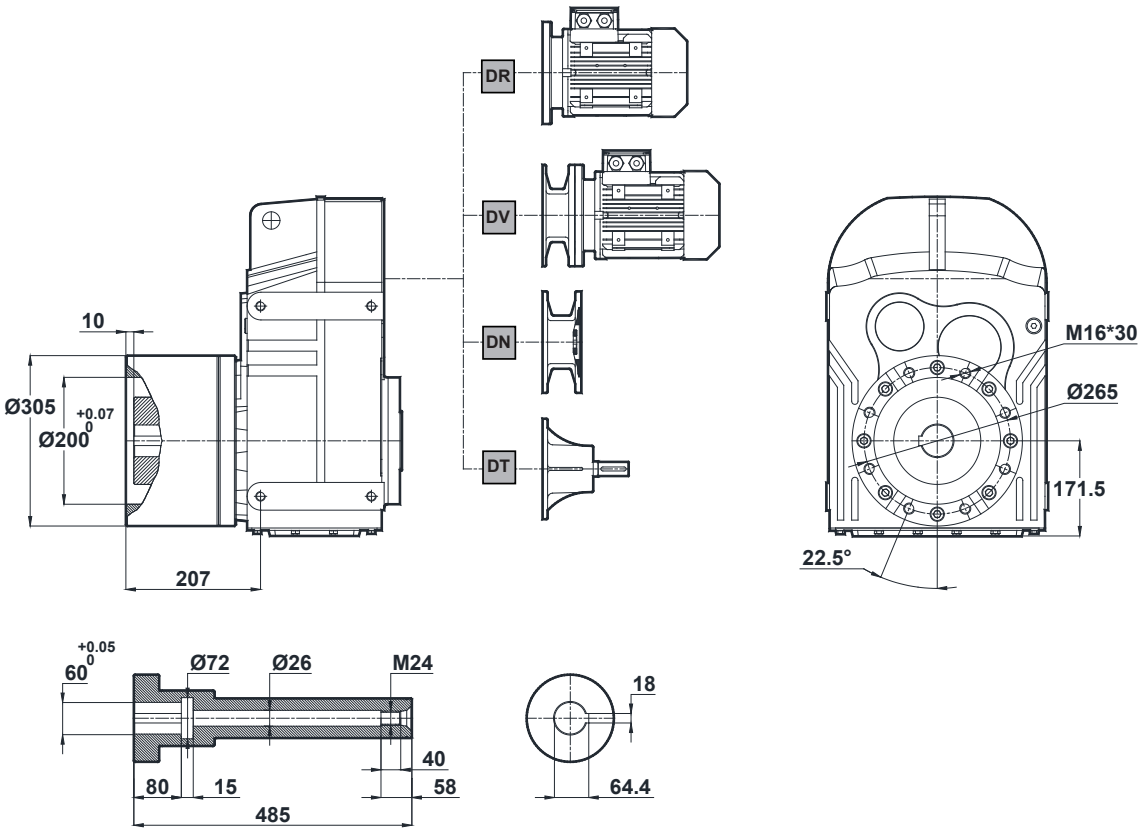
D.47.0E


DR
DV
DN
DT
10
Ø215
Ø160 +0.06 0
171.5
M14*25
Ø185
116
45°
40 +0.04 0
Ø52
Ø20
M18
25
60
15
39
351
12
43.3

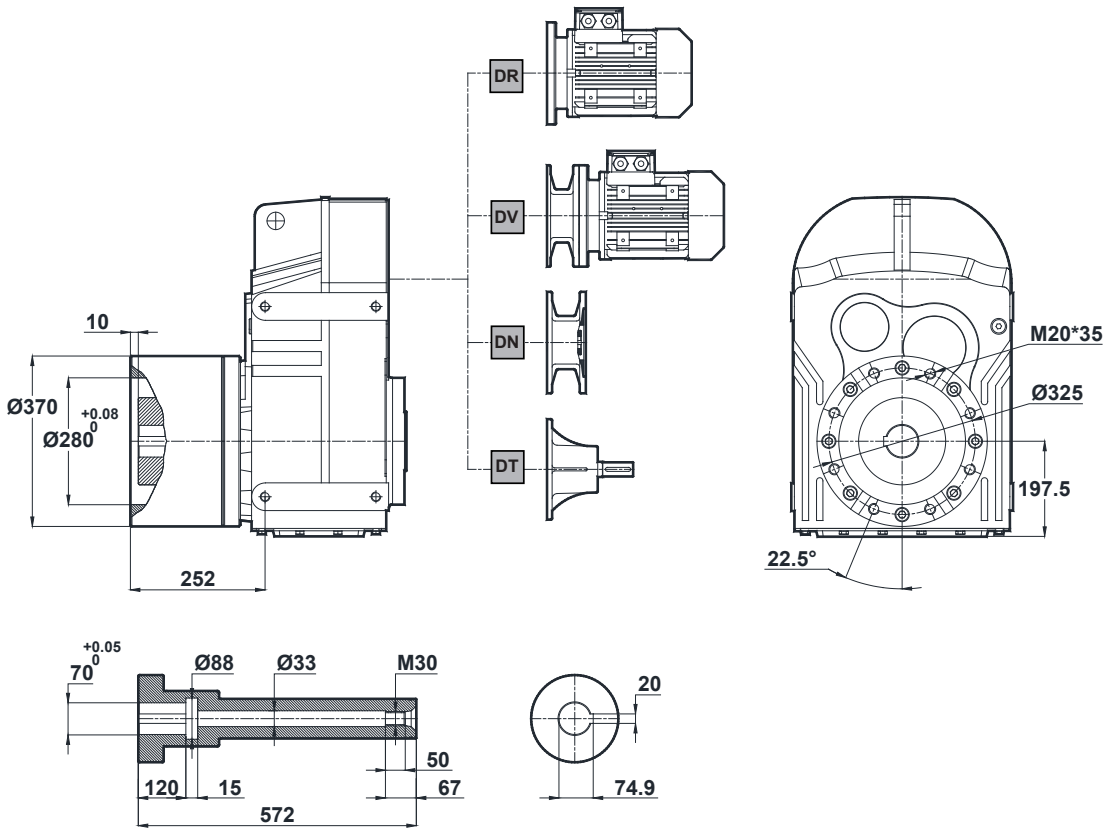
D.57.0E


DR
DV
DN
DT
10
Ø265
Ø175 +0.06 0
195
M14*25
Ø215
146.5
45°
50 +0.04 0
Ø61
Ø26
M24
30
70
15
48
401
14
53.8

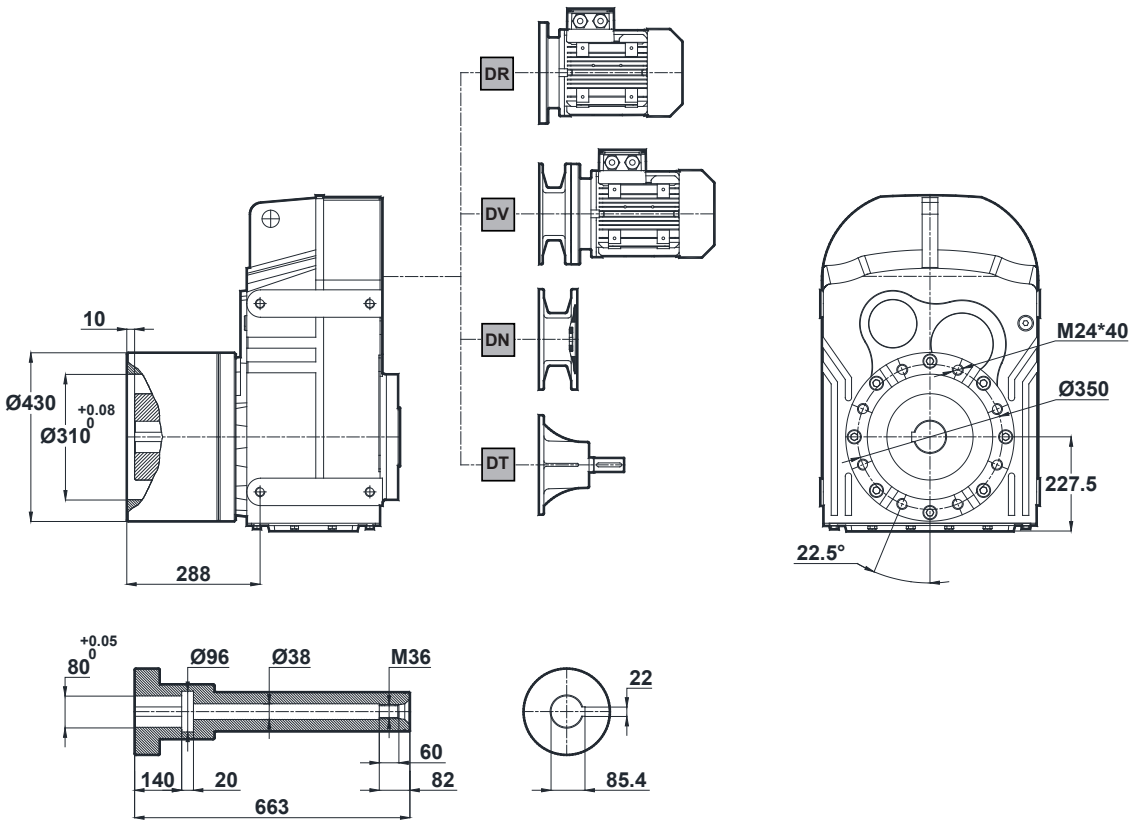
D.67.0E


DR
DV
DN
DT
10
Ø305
Ø200 +0.07 0
207
M16*30
Ø265
171.5
22.5°
60 +0.05 0
Ø72
Ø26
M24
40
80
15
58
485
18
64.4

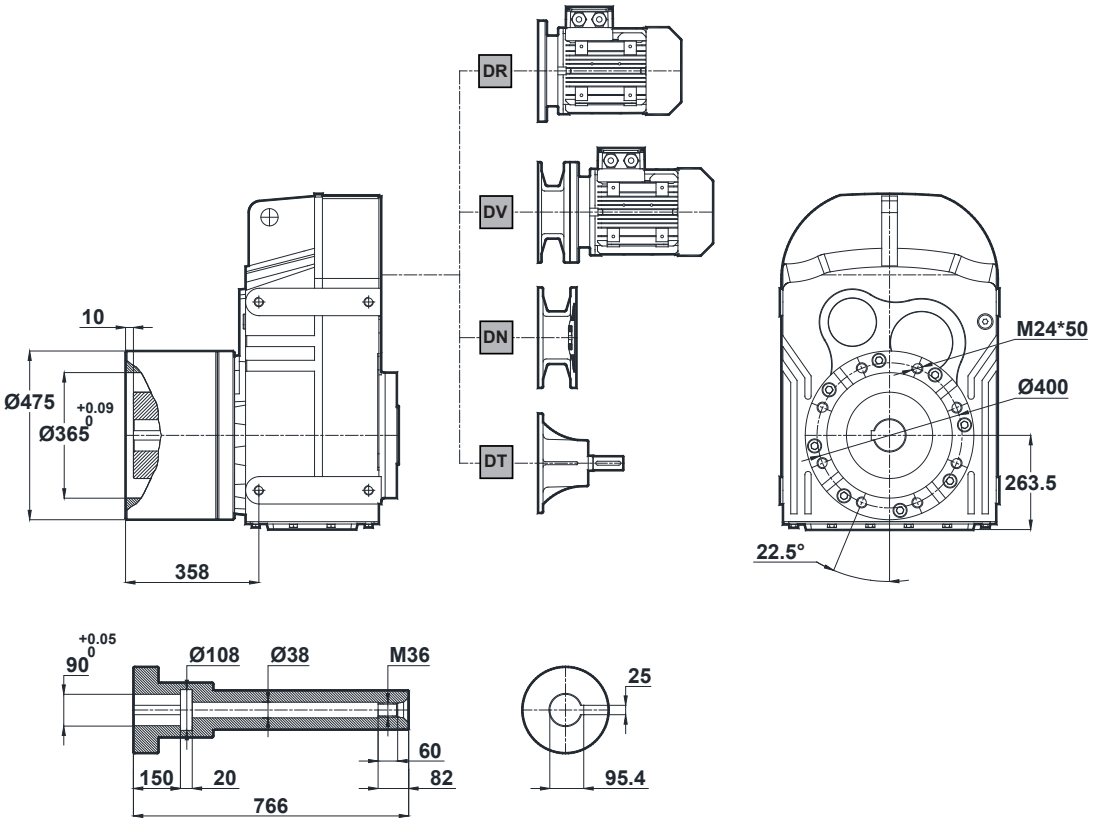
D.77.0E

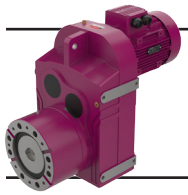

DR
DV
DN
DT
10
Ø370
Ø280 +0.08 0
252
M20*35
Ø325
197.5
22.5°
70 +0.05 0
Ø88
Ø33
M30
50
120
15
67
572
20
74.9

D.87.0E


DR
DV
DN
DT
10
Ø430
Ø310 +0.08 0
288
M24*40
Ø350
227.5
22.5°
80 +0.05 0
Ø96
Ø38
M36
60
140
20
82
663
22
85.4

D.97.0E


DR
DV
DN
DT
10
Ø475
Ø365 +0.09 0
358
M24*50
Ø400
263.5
22.5°
90 +0.05 0
Ø108
Ø38
M36
60
150
20
82
766
25
95.4



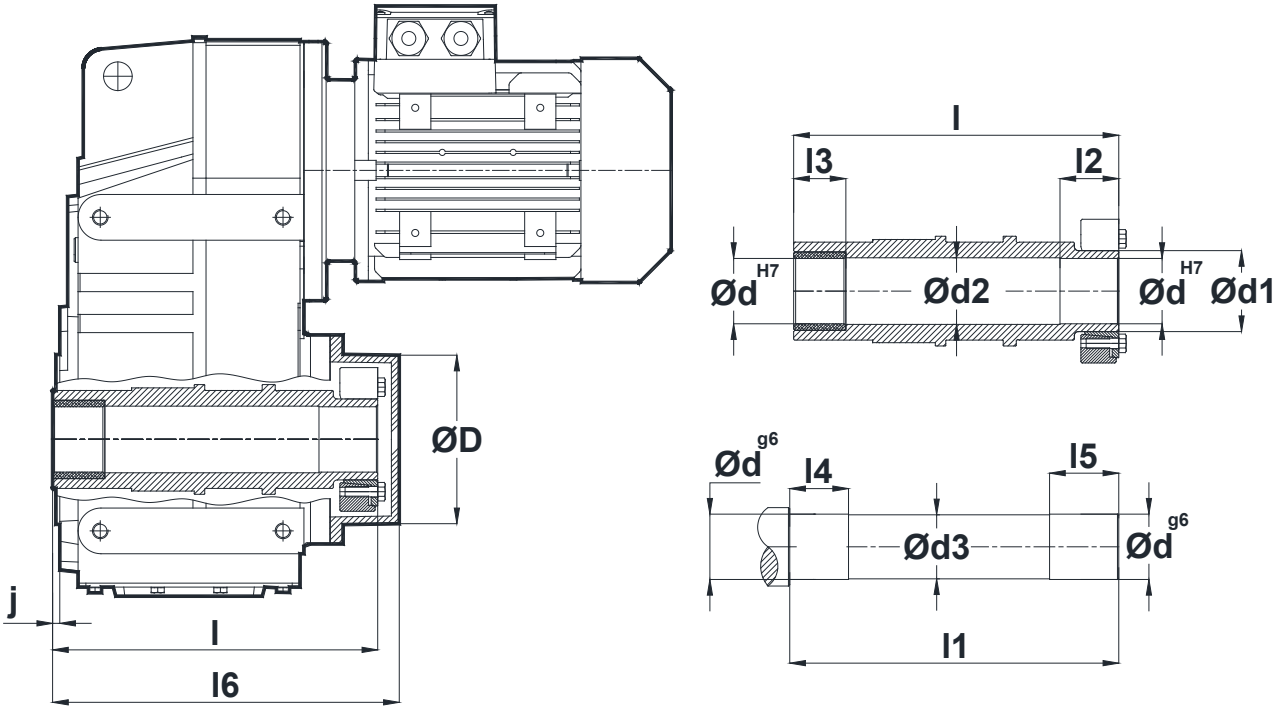
Notlar / *Notes* / Notizen

Ek Ölçü Sayfaları

Additional Dimension Pages

Zusätzliche Abmessungsseiten

D Serisi Delik Milli Sıkma Bilezikli Redüktörler
D Series Hollow Shaft with Shrink Disc Connector
D Serie Hohlwelle mit Schrumpfscheibe

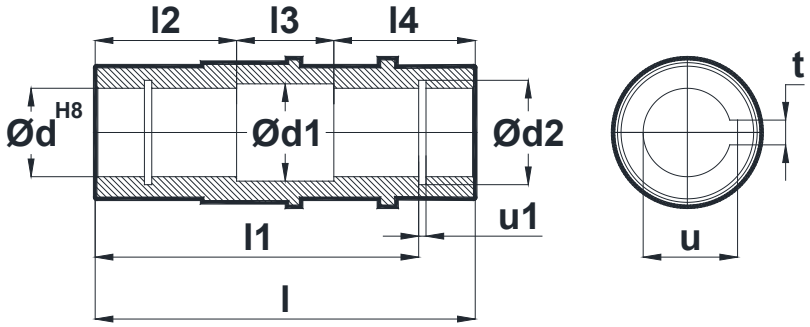


İstenilen yüzey pürüzlülüğü değeri: Rz ≤ 16 µm
Desired surface roughness value: Rz ≤ 16 µm
Gewünschtes Oberflächenrauhigkeitswert: Rz ≤ 16 µm

Tip *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	6
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	90	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	M10	11	59

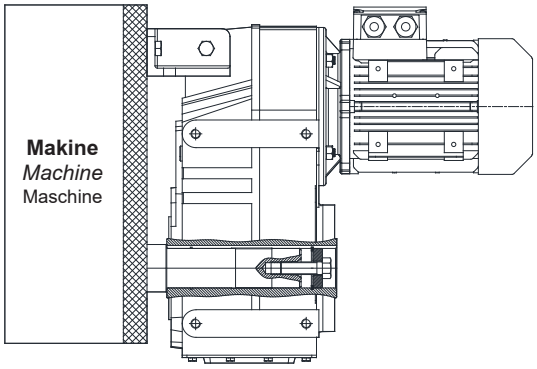
M: **Civata Ölçüsü** / Bolt dimension / Muttergröße
Z: **Civata Sayısı** / Bolt Quantity / Anzahl von Muttern
Ta: **Sıkma Momenti** / Tightening Torque / Schrumpfmoment

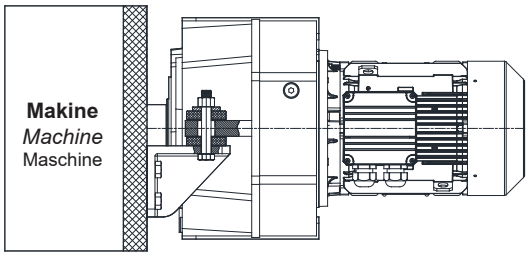
D Serisi Redüktör Kovan Ölçüleri
Hollow Shaft Dimensions for D Series Gearboxes
Hohlwelleabmessungen von D Serie Getrieben



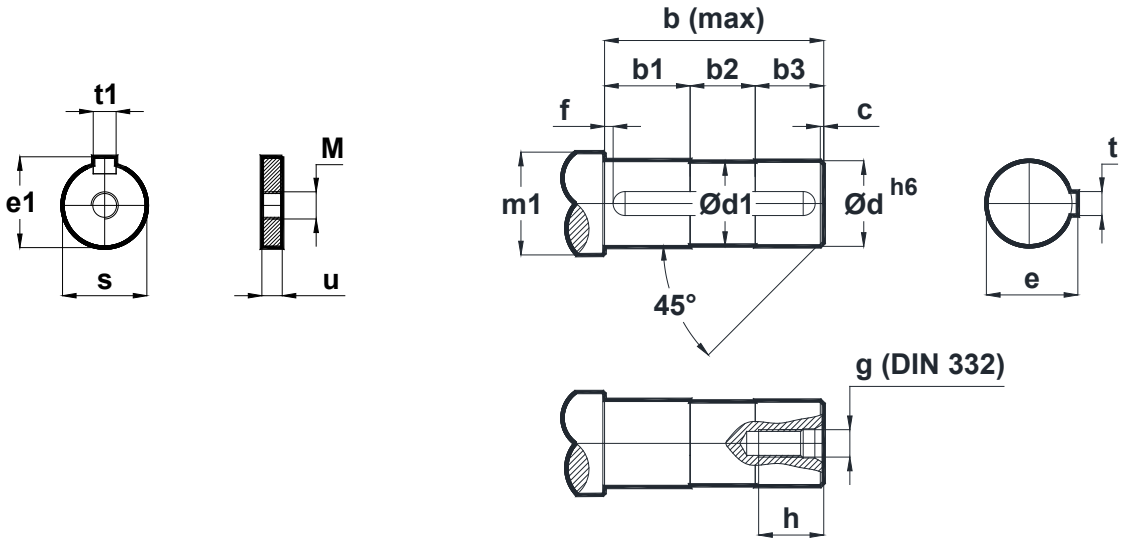
Tip *Type* Typ	d	d1	d2	l	l1	l2	l3	l4	u1	t	u
D.07..	25	26	26.2	108	94	40	28	40	1.3	8	28.3
D.17..	30	31	31.4	120	105	45	30	45	1.3	8	33.3
D.27..	35	36	37	157	132	60	37	60	1.6	10	38.3
D.28..	40	41	42.5	166	142	64	38	64	1.85	12	43.3
D.37..	40	41	42.5	185	156	70	45	70	1.85	12	43.3
D.47..	50	51	53	215	183	82	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



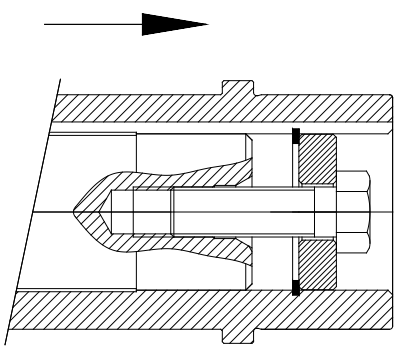


D Serisi Redüktörlerde Tavsiye Edilen Mil Boyu Montaj-Demontaj Şekli ve Aksesuarları
Advised Shaft Dimensions and Accessories Assembling for D Series Gearboxes
Empfohlene Wellen Massen und Verbindungselemente bei Montage für D Serie Getriebe

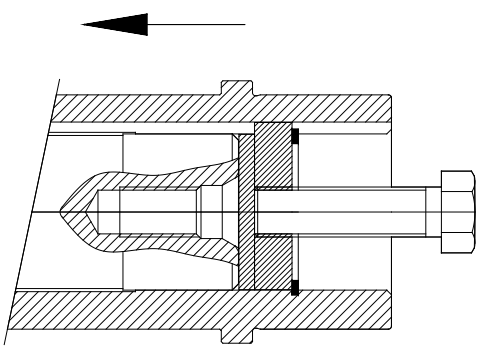


Tipi *Type* Typ	s	u	e1	t1	M	d	d1	m1	f	b	b1	b2	b3	c	g	h	e	t
D.07..	24.7	8	28	7.5	M12	25	24	30		82	45	18	19	1	M10	24	28	8
D.17..	29.7	10	33	7.5	M12	30	29	36		89	50	20	19	1	M10	24	33	8
D.27..	34.7	12	38	9.5	M16	35	34	43		114	65	27	22	1	M12	30	38	10
D.28..	39.7	12	43	11.5	M20	40	39	50		124	69	28	27	2	M16	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	5	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

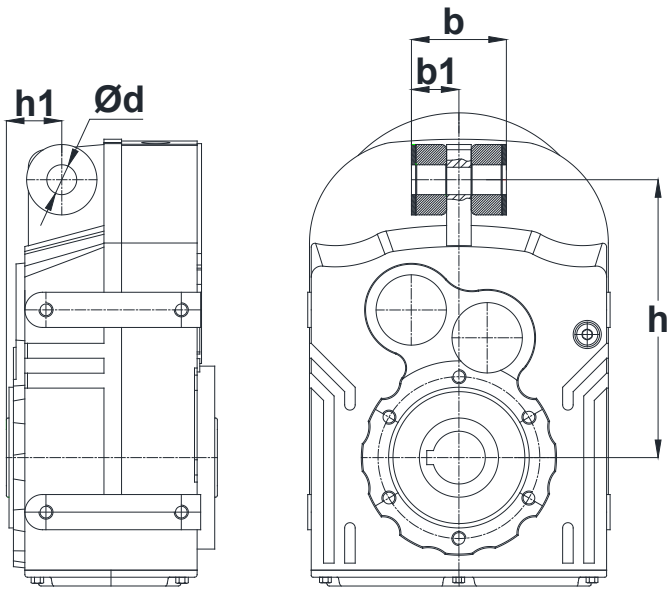


Mil Çıkartma / *Shaft Pulling Out* / Heraus Drücken



6 Köşe Başlı Civata / *6 Contour Bolt* / Sechskantschraube
(DIN ISO 4014 . DIN ISO 4017)
(DIN ISO 8765)

D Serisi Redüktörlerde Moment Kolu Bağlantı Ölçüleri
Torque Arm Mounting Dimensions for D Series Gear Units
Montageabmessungen der Drehmomentstütze von D Serie Getriebe

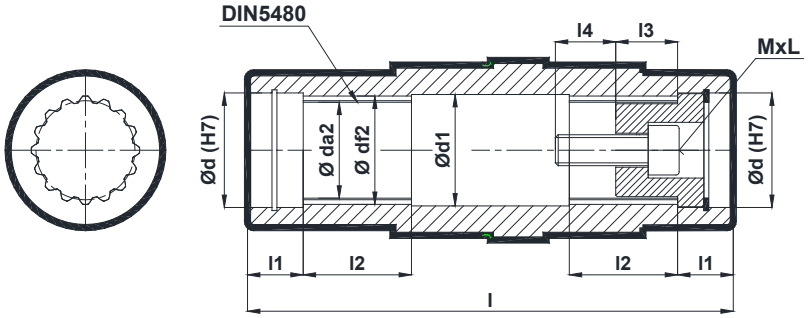


Tip *Type* Typ	d	b	b1	h	h1
D.07..	14	42	21	147	26.5
D.17..	17	54	27	158	31.5
D.27..	17	54	27	170	32
D.28..	17	54	27	198	40.5
D.37..	17	56	28	218	41
D.47..	22	80	40	278	50
D.57..	22	86	43	346	62
D.67..	26	110	55	395	70
D.77..	26	116	58	485	88
D.87..	32	160	80	550	110
D.97..	32	165	82.5	660	150

D.07.. - D.97.. DIN 5480 Çoklu Kama Ölçüleri

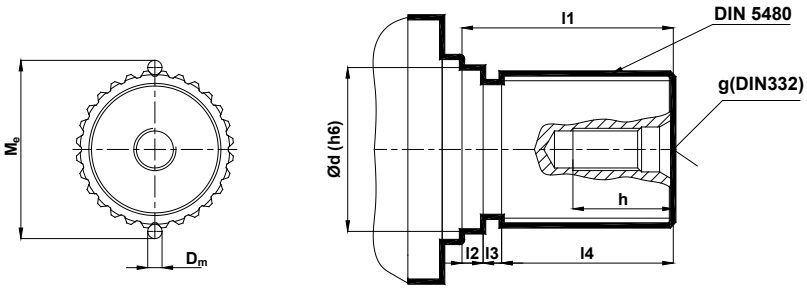
D.07.. - D.97.. Dımensions Of Splined Hollow Shaft To DIN 5480

D.07..- D.97.. Abmessungen von Hohlwelle mit Vielkeilverzahnung Nach DIN 5480



Tip Type Typ	DIN5480	Ød (H7)	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	M10x60
D17	N30x1.25x30x22x9H	32	31	53	27,5	30,25	120	18	25	20	20	M10x60
D27	N35x2x30x16x9H	37	36	58	31	35,4	157	18	35	20	20	M10x90
D28	N35x2x30x16x9H	37	36	63,5	31	35,4	166	18	35	20	20	M10x100
D37	N45x2x30x21x9H	47	46	74	41	45,4	185	25	45	24	32	M16x110
D47	N50x2x30x24x9H	55	51	84	46	50,4	215	25	55	24	32	M16x130
D57	N65x2x30x31x9H	72	66	104	61	65,4	246	25	65	30	40	M20x150
D67	N70x2x30x34x9H	72	71	119	66	70,4	308	25	75	30	40	M20x210
D77	N85x3x30x27x9H	90	86	139,5	79	85,6	363	26	90	30	40	M20x240
D87	N100x4x30x24x9H	110	101	169	92	100,8	428	30	105	41	50	M24x290
D97	N120x4x30x28x9H	130	121	179	112	120,8	500	35	120	41	50	M24x340

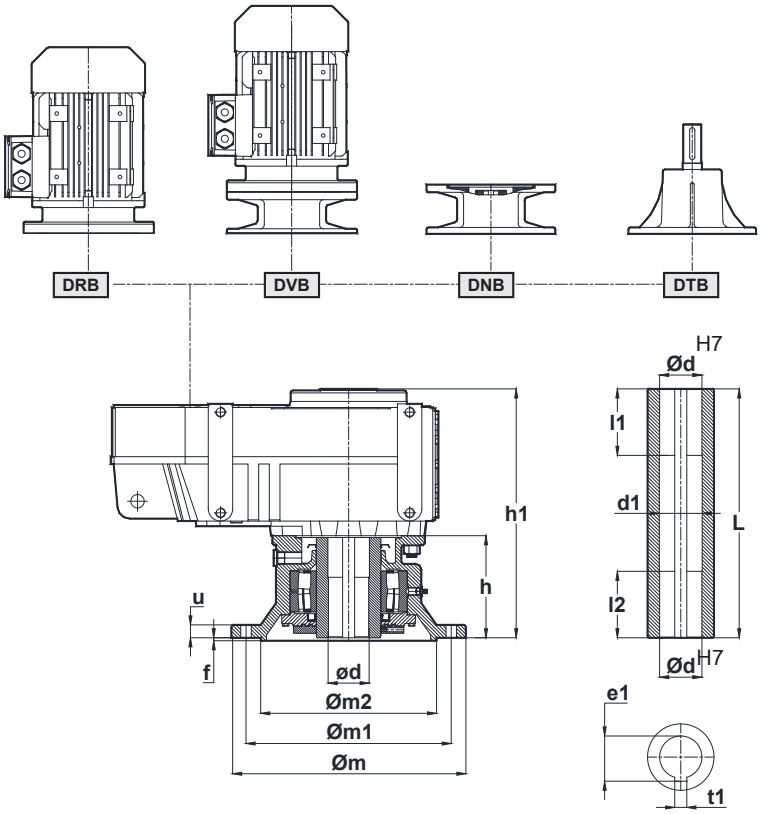
NOT: Makina mil boyu tek taraflı çoklu kama uzunluk ölçüsüne (l1+l2) göre yapılmalıdır! Delik mil boydan boya kullanılamaz!
NOTE: *The customer shaft length must be made only for one sided (l1+l2) splined hollow shaft dimensions! The total length (l) of the splined hollow shaft can not be used in this 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	MxL
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	W35x2x30x16x8f	37	58	11	7	40	$38,94^{0\ /\ -0,05}$	4,00	M10x24
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

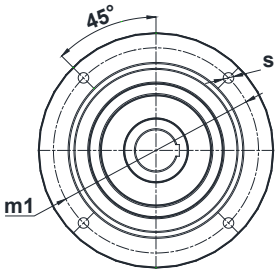
D Serisi Delik Milli Karıştırıcı Redüktörleri Ölçüleri
D Series Drywell Gearboxes with Hollow Shaft Dimensions
D Serien Drywell Getriebe mit Hohlwelle Abmessungen

0A Delik Mil Opsiyonu
0A Hollow Shaft Option
0A Hohlwelle-Ausführung

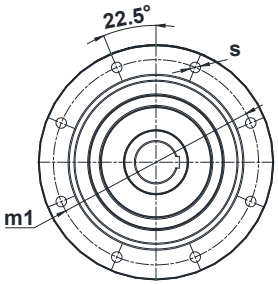


Çıkış Flanşı
Output Flange
Abtriebsflansch

D.28 - D.67



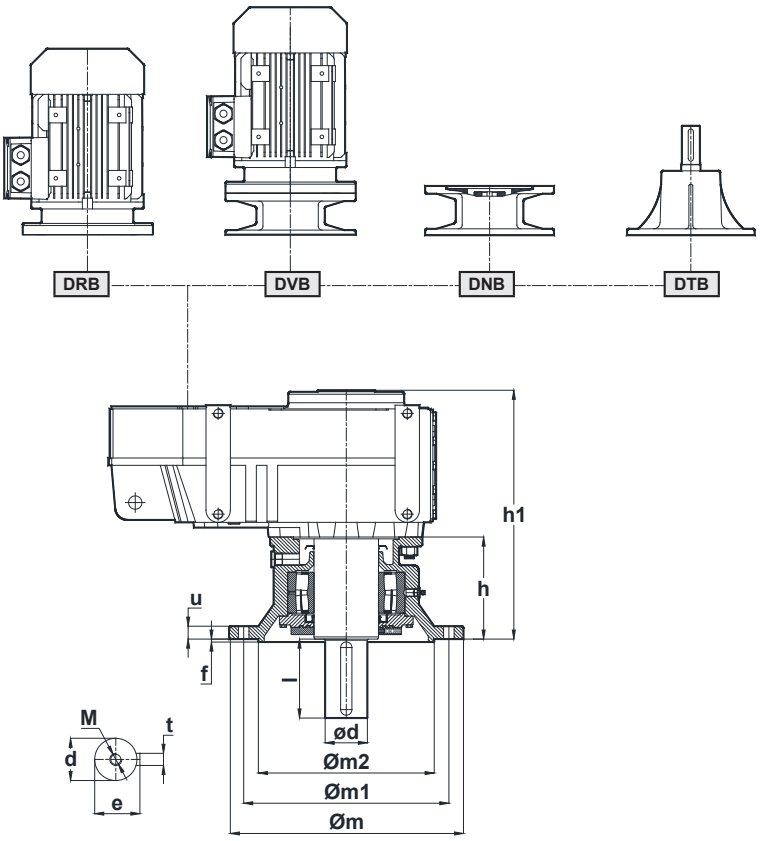
D.77 - D.97



Tip *Type* Typ	m	m1	m2	h	h1	f	u	s	L	l1	l2	d	d1	e1	t1
D28	250	215	180	96	257	4	16	13,5x4	257	60	60	40	41	43,3	12
D37	250	215	180	96	275,5	4	16	13,5x4	275,5	70	70	40	41	43,3	12
D47	300	265	230	100	309,5	4	20	14x4	309,5	82	82	50	51	53,8	14
D57	350	300	250	124	364,5	5	20	18x4	364,5	96	96	60	61	64,4	18
D67	400	350	300	174	476	5	22	18x4	476	110	110	70	71	79,9	20
D77	450	400	350	194	549,5	5	24	18x8	549,5	135	135	90	91	95,4	25
D87	550	500	450	210	629	5	28	18x8	629	160	160	110	111	116,4	28
D97	660	600	550	227	717	6	28	22x8	722	180	180	120	121	127,4	32

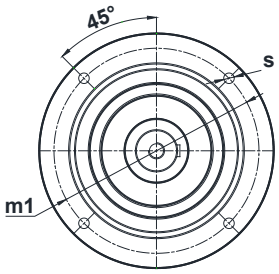
D Serisi Dolu Milli Karıştırıcı Redüktörleri Ölçüleri
D Series Drywell Gearboxes with Solid Shaft Dimensions
D Serien Drywell Getriebe mit Vollwelle Abmessungen

1A Dolu Mil Opsiyonu
1A Solid Shaft Option
1A Vollwelle-Ausführung

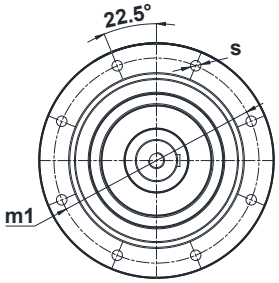


Çıkış Flanşı
Output Flange
Abtriebsflansch

D.28 - D.67



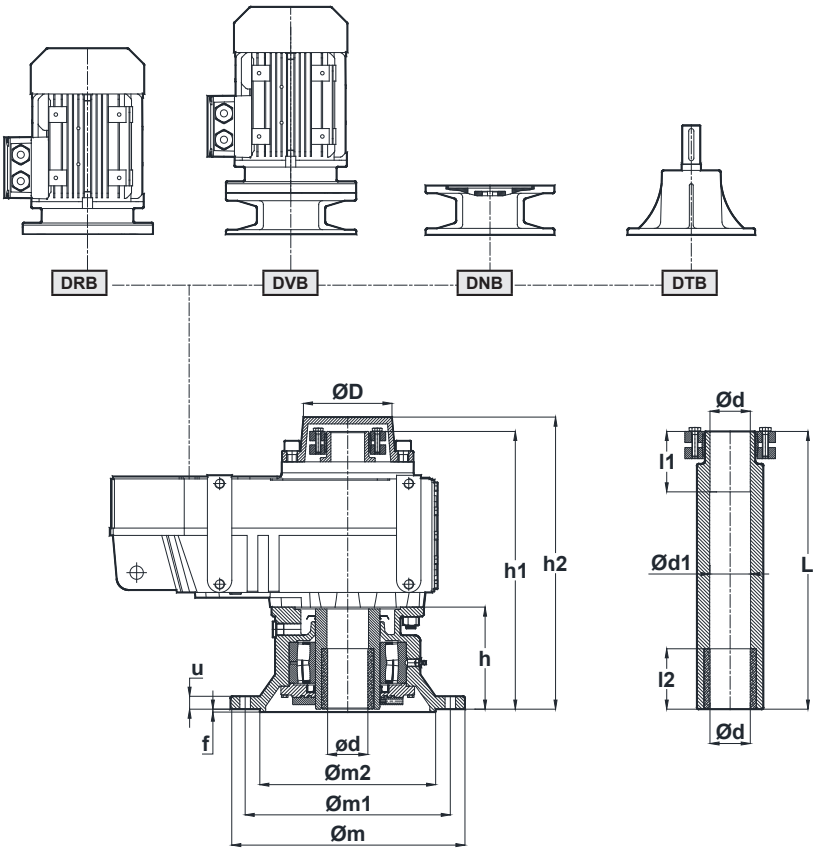
D.77 - D.97



Tip *Type* Typ	m	m1	m2	h	h1	f	u	s	d	l	e	t	M
D28	250	215	180	96	255	4	16	13,5x4	40	80	43	12	M16
D37	250	215	180	96	272	4	16	13,5x4	40	80	43	12	M16
D47	300	265	230	100	307	4	20	14x4	50	100	53,5	14	M16
D57	350	300	250	124	362	5	20	18x4	60	120	64	18	M20
D67	400	350	300	174	473	5	22	18x4	75	140	79,5	20	M20
D77	450	400	350	194	545	5	24	18x8	90	170	95	25	M24
D87	550	500	450	210	625	5	28	18x8	110	210	116	28	M24
D97	660	600	550	227	711	6	28	22x8	120	210	127	32	M24

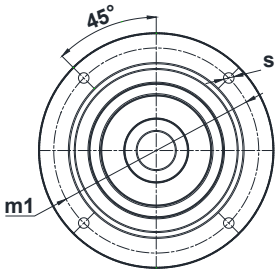
D Serisi Sıkma Bilezikli Karıştırıcı Redüktörleri Ölçüleri
D Series Drywell Gearboxes with Shrink Disc Dimensions
D Serien Drywell Getrıebe mit Schrumpfscheibe Abmessungen

SA Sıkma Bilezik Opsiyonu
SA Shrink Disc Option
SA Schrumpfscheibe -Ausführung

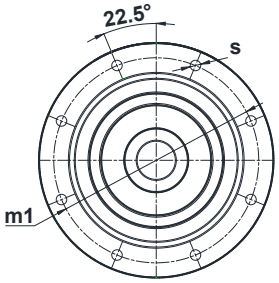


Çıkış Flanşı
Output Flange
Abtriebsflansch

D.28 - D.67



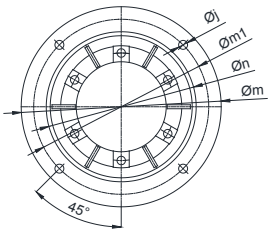
D.77 - D.97



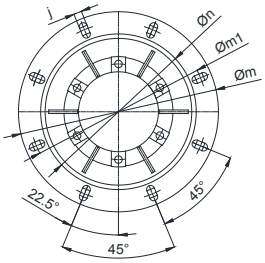
Tip *Type* Typ	m	m1	m2	h	h1	h2	f	u	s	L	l1	l2	D	d	d1
D28	250	215	180	96	288	304	4	16	13,5x4	288	35	30	104	40 H7	41
D37	250	215	180	96	306,5	325	4	16	13,5x4	306,5	45	50	106	40 H7	41
D47	300	265	230	100	343,5	360	4	20	14x4	343,5	47,5	52,5	120	50 H7	51
D57	350	300	250	124	400,5	423	5	20	18x4	400,5	55	60	159	60 H7	61
D67	400	350	300	174	512	540	5	22	18x4	512	60	65	164	70 H7	71
D77	450	400	350	194	604,5	626	5	24	18x8	604,5	80	80	204	90 H7	91
D87	550	500	450	210	693	720	5	28	18x8	693	85	90	252	110 H7	111
D97	660	600	550	227	787	810	6	28	22x8	787	90	80	288	120 H7	121

D Serisi Opsiyonel Çıkış Flanş Ölçüleri
Optional Output Flange Dimensions For D Series
Auswählbare Abtriebsflangedimensionen Für Baureihe D

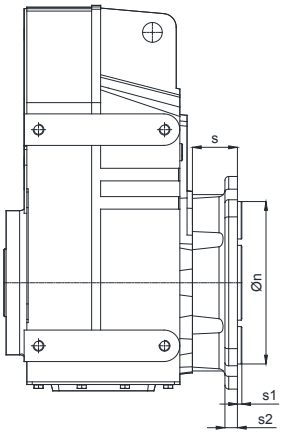
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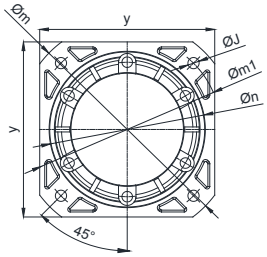
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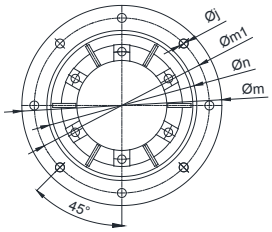
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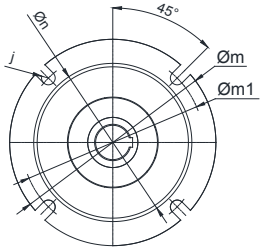
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D

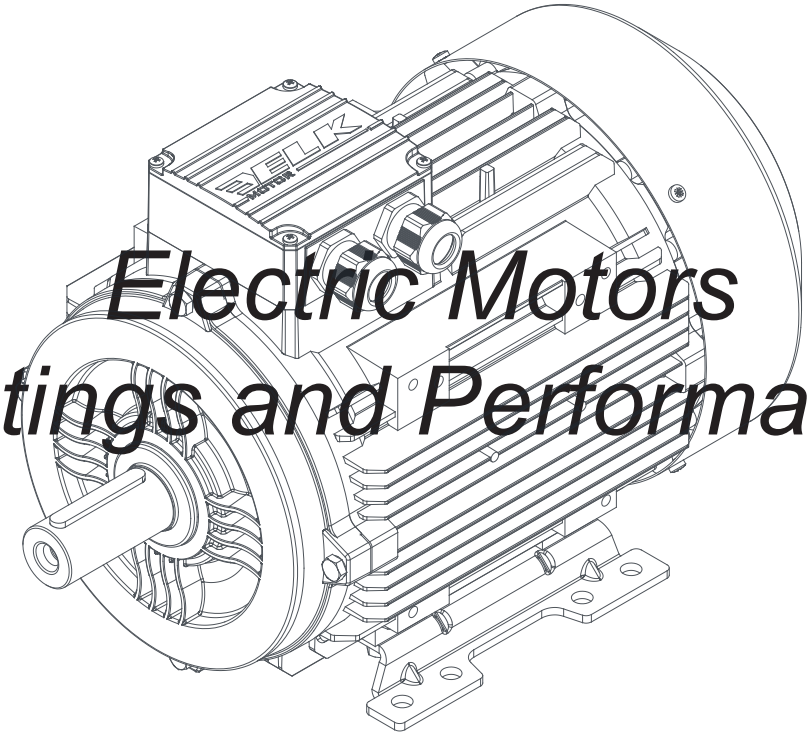


E



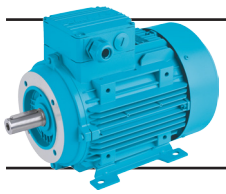
Tip *Type* Typ	**Flanş Kodu** *Flange Code* Flanschkode	**Flanş Tipi** *Flange Type* Flanschtyp	**Montaj Ölçüleri** *Mounting Dimensions* Montageabmessungen							
			øm	**øm1**	**øn**	**j**	**s**	**s1**	**s2**	**y**
D073 **D173**	DX05.5D173-200	E1	200	165	130	14	28	3,5	12	-
D273	DX05.5D273-250	A1	250	215	180	Ø14	39,5	4	15	-
D283 **D373**	MX05.5K373-250X05	A1	250	215	180	Ø14	86	4	15	-
	MX05.5K373-300	C1	300	265	230	14	46	4	16	240x240
	DX05.5D283-200	A1	200	165	130	12	30	4	19	-
	DX05.5D283-250	A1	250	215	180	Ø14	40	4	15	-
	DX05.5D373-300	A1	300	265	230	Ø14	40,5	4	15	-
D473	MX05.5K473-250	A1	250	215	180	14	28	4	16	-
	MX05.5K473-350	A1	350	300	250	Ø18	46,5	4	18	-
D573 **D673**	MX05.5K573X08	C1	350	300	250	Ø18	78	5	18	280x280
	MX05.5K573-300	A1	300	265	230	M12	30	4	20	-
	MX05.5K673-450	B1	450	400	350	18	62	5	22	-
	DX05.5D573-400	D1	400	350	300	Ø18	55	5	20	-
	DX05.5D673-450	D1	450	400	350	Ø18	54,5	5	20	-
D773	MX05.5K773-400	B1	400	350	300	Ø18	77	5	24	-
D873	MX05.5K873-450	B1	450	400	350	Ø18	99	5	26	-
	MX05.5K873-550X01	B1	550	500	450	18	51	5	25	-

Elektrik Motorlarının Performans Değerleri



Electric Motors Ratings and Performance

Elektromotoren Leistungsdaten

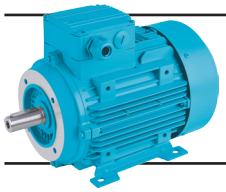


Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 3000 d/d / *400V 50Hz 3000 rpm* / 400V 50Hz 3000 UpM

IE4

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
4E71M/2B	0,37	2825	0,83	1,25	0,82	78,1	78,3	76,5	5,7	2,8	3,2	0,00037	6,50	58
4E71M/2C	0,55	2825	1,17	1,86	0,83	81,5	81,9	79,5	6,2	2,9	3,5	0,00046	7,50	58
4E80M/2C	0,75	2875	1,56	2,49	0,83	83,5	84,0	81,0	6,8	2,9	3,5	0,00124	11,0	59
4E80M/2D	1,1	2880	2,19	3,65	0,85	85,2	85,5	84,9	7,5	2,9	3,7	0,00135	12,0	59
4E90S/2C	1,5	2900	2,95	4,94	0,85	86,5	86,9	85,7	7,8	2,9	3,7	0,00221	17,2	64
4E90L/2D	2,2	2900	4,20	7,24	0,86	88,0	88,5	87,6	8,2	3,0	3,8	0,00234	20,0	64
4E100L/2D	3,0	2910	5,50	9,85	0,88	89,1	89,5	88,5	8,5	3,0	4,0	0,00503	25,9	67
4E112M/2D	4,0	2940	7,30	13,0	0,88	90,0	90,3	89,7	8,7	3,0	4,2	0,00734	32,2	70
4E132S/2C	5,5	2945	9,60	17,8	0,91	90,9	90,9	90,0	8,9	3,2	4,2	0,02104	52,5	72
4E132S/2D	7,5	2945	13,0	24,5	0,91	91,7	92,2	91,8	8,5	3,2	4,2	0,02290	55,6	72
4E160M/2C	11	2950	18,9	35,6	0,91	92,6	92,7	91,2	8,5	3,3	4,3	0,03913	89,0	74
4E160M/2D	15	2950	25,6	48,6	0,91	93,3	93,6	92,8	8,5	3,3	4,3	0,04409	96,8	74
4E160L/2E	18,5	2955	31,4	59,8	0,91	93,7	93,8	92,9	8,7	3,2	4,3	0,05000	114	74
4E180M/2C	22	2960	37,2	71,1	0,91	94,0	94,4	93,5	8,9	3,0	4,0	0,07000	158	74
4E200L/2C	30	2970	51,0	96,5	0,90	94,5	94,7	94,0	8,3	3,2	3,7	0,17500	215	74
4E200L/2D	37	2970	63,3	120	0,89	94,8	95,0	94,2	8,3	3,2	4,0	0,20000	235	74
4E225M/2D	45	2975	76,0	145	0,90	95,0	95,2	94,9	9,0	3,4	4,2	0,29000	355	74
4E250M/2D	55	2975	92,6	177	0,90	95,3	95,5	94,9	8,2	3,4	3,7	0,52000	445	74
4E280S/2C	75	2982	126	240	0,90	95,6	95,6	95,2	7,7	2,7	3,2	0,98000	620	76
4E280M/2D	90	2985	151	288	0,90	95,8	95,9	95,0	7,7	2,8	3,5	1,10000	640	77
4E315S/2C	110	2985	184	352	0,90	96,0	96,0	95,7	7,8	3,1	4,0	1,60000	1110	77
4E315M/2D	132	2986	220	422	0,90	96,2	96,3	96,0	8,0	3,1	4,0	2,00000	1070	77
4E315L/2E	160	2986	267	512	0,90	96,3	96,5	96,0	8,0	3,2	4,0	2,20000	1230	78
4E315L/2F	200	2987	332	639	0,90	96,5	96,7	96,3	8,1	3,2	4,0	2,70000	1340	78



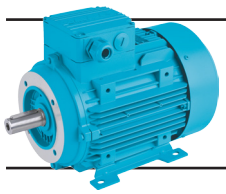
Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1500 d/d / *400V 50Hz 1500 rpm* / 400V 50Hz 1500 UpM

IE4

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								Kalkış Değerleri *Starting Data* Startdaten		Devrilme Momenti *Breakdown Torque* Kippmo-ment	Atalet Momenti *Moment of Inertia* Trägheits-moment	B3 Motor Ağırlığı *B3 Motor Weight* B3 Motor Gewicht	Ses Seviyesi *Noise Level* Geräusch-pegel
	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**	**Cosφ**	**4 / 4**	**3 / 4**	**1 / 2**	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	**kg**	**dB(A)**
4E132S/4D	5,5	1470	11,1	35,7	0,78	91,9	91,8	90,6	7,7	3,8	3,7	0,03418	56,7	61
4E132M/4F*	7,5	1470	14,6	48,7	0,80	92,6	92,7	91,5	7,7	3,8	4,0	0,04316	72,8	62
4E160M/4E	11	1470	21,0	71,5	0,81	93,3	93,5	93,3	7,7	3,0	3,6	0,08600	100	64
4E160L/4F*	15	1475	29,5	97,5	0,79	93,9	94,1	93,4	8,0	3,7	3,9	0,12000	112	64
4E180M/4D	18,5	1475	34,6	120	0,82	94,2	94,4	94,0	8,0	3,1	3,5	0,14700	142	64
4E180L/4E	22	1475	41,0	142	0,82	94,5	94,7	94,2	8,2	3,2	3,8	0,17000	168	64
4E200L/4E	30	1480	53,0	194	0,86	94,9	95,3	95,2	8,3	3,3	3,8	0,35000	235	64
4E225S/4D	37	1480	65,0	239	0,86	95,2	95,7	95,0	8,1	3,3	3,3	0,44100	350	70
4E225M/4E	45	1480	79,2	290	0,86	95,4	95,6	95,6	8,2	3,5	3,3	0,52000	370	70
4E250M/4E	55	1485	94,3	354	0,88	95,7	96,0	96,0	8,5	3,3	3,4	1,05000	490	70
4E280S/4D	75	1487	127	482	0,89	96,0	96,3	96,2	8,7	3,0	3,2	1,50000	670	70
4E280M/4E	90	1488	152	578	0,89	96,1	96,3	96,3	8,9	3,1	3,2	1,95000	720	71
4E315S/4D	110	1491	187	705	0,88	96,3	96,5	96,0	8,9	2,8	3,3	2,80000	1200	73
4E315M/4E	132	1492	225	845	0,88	96,4	96,7	96,2	8,9	2,9	3,3	3,30000	1270	73
4E315L/4F	160	1492	272	1024	0,88	96,6	96,9	96,5	8,9	3,1	3,4	4,40000	1370	76
4E315L/4G	200	1492	339	1280	0,88	96,7	97,0	96,6	8,8	3,3	3,5	5,20000	1520	76

* İşaretli motorlar simetrik gövde yapısına sahip değildir.

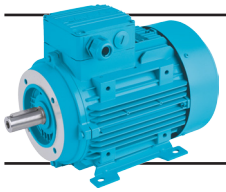


Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 3000 d/d / *400V 50Hz 3000 rpm* / 400V 50Hz 3000 UpM

IE3

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								Kalkış Değerleri *Starting Data* Startdaten		Devrilme Momenti *Breakdown Torque* Kippmo-ment	Atalet Momenti *Moment of Inertia* Trägheits-moment	B3 Motor Ağırlığı *B3 Motor Weight* B3 Motor Gewicht	Ses Seviyesi *Noise Level* Geräusch-pegel
	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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
3E63M/2A	0,18	2805	0,48	0,61	0,77	70,0	68,5	62,8	4,5	3,0	3,1	0,00012	4,00	51
3E63M/2B	0,25	2805	0,65	0,85	0,79	71,0	69,7	64,2	4,6	3,0	3,1	0,00015	4,20	51
3E71M/2B	0,37	2830	0,84	1,25	0,82	76,6	77,0	75,0	6,0	2,8	3,0	0,00037	6,30	53
3E71M/2C	0,55	2830	1,19	1,86	0,84	79,4	80,2	78,8	6,1	2,9	3,3	0,00046	7,00	53
3E80M/2B	0,75	2880	1,59	2,49	0,84	80,7	82,0	81,5	6,7	3,0	3,6	0,00103	9,60	54
3E80M/2C	1,1	2880	2,26	3,64	0,85	82,7	83,0	82,4	6,8	3,1	3,8	0,00124	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	0,00178	15,2	59
3E90L/2C	2,2	2900	4,25	7,24	0,87	85,9	86,8	86,1	7,2	3,0	3,8	0,00221	17,5	59
3E100L/2C	3,0	2910	5,58	9,85	0,89	87,1	87,6	86,9	7,9	3,0	4,1	0,00450	23,8	62
3E112M/2C	4,0	2915	7,28	13,1	0,90	88,1	88,8	88,2	7,5	2,6	3,9	0,00618	29,4	65
3E132S/2B	5,5	2945	9,90	17,8	0,90	89,2	89,0	88,6	8,9	2,9	3,9	0,01732	45,7	67
3E132S/2C	7,5	2945	13,2	24,3	0,91	90,1	90,5	89,7	8,4	2,6	4,0	0,02104	52,0	67
3E160M/2B	11	2950	19,7	35,6	0,88	91,2	91,0	90,5	8,5	2,6	3,9	0,03318	79,7	69
3E160M/2C	15	2950	26,5	48,6	0,89	91,9	92,1	91,6	8,9	3,1	4,2	0,03913	87,8	69
3E160L/2D	18,5	2945	31,7	60,0	0,91	92,4	92,7	92,3	8,9	3,1	4,2	0,04409	95,2	69
3E180M/2B	22	2957	38,1	71,1	0,90	92,7	92,9	92,0	8,6	3,1	3,9	0,06299	131	70
3E200L/2B	30	2965	52,0	96,6	0,89	93,6	93,8	93,6	8,6	3,2	3,5	0,16168	181	72
3E200L/2C	37	2965	63,3	119	0,90	93,7	94,1	93,8	8,6	3,2	3,4	0,17458	191	72
3E225M/2C	45	2970	76,8	145	0,90	94,0	94,4	94,2	8,6	3,3	3,1	0,25353	335	74
3E250M/2C	55	2970	93,3	177	0,90	94,4	94,8	94,5	8,6	3,3	3,4	0,38000	425	75

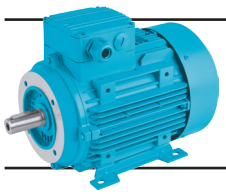


Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1500 d/d / *400V 50Hz 1500 rpm* / 400V 50Hz 1500 UpM

IE3

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
3E63M/4B	0,12	1405	0,37	0,82	0,70	66,0	64,9	58,2	3,7	2,3	2,7	0,00018	4,10	42
3E63M/4C	0,18	1405	0,52	1,22	0,71	69,9	68,8	63,6	3,8	2,3	2,8	0,00022	4,50	42
3E71M/4C	0,25	1435	0,67	1,66	0,71	76,0	75,4	71,5	5,4	2,1	2,8	0,00082	7,10	45
3E71M/4D	0,37	1435	0,97	2,46	0,70	78,5	78,2	75,0	5,5	2,2	2,9	0,00093	7,80	45
3E80M/4C	0,55	1450	1,34	3,62	0,73	80,8	80,4	77,0	5,9	2,1	3,0	0,00200	10,5	50
3E80M/4D	0,75	1450	1,77	4,94	0,74	82,5	82,3	80,0	6,2	2,5	3,1	0,00227	11,6	50
3E90S/4C	1,1	1450	2,51	7,25	0,75	84,5	84,3	82,0	7,0	2,6	3,4	0,00355	16,3	51
3E90L/4D	1,5	1445	3,30	9,91	0,77	85,3	85,2	83,0	7,2	2,8	3,4	0,00411	18,0	51
3E100L/4C	2,2	1450	4,65	14,5	0,79	86,7	87,2	86,0	7,2	2,8	3,6	0,00775	24,4	53
3E100L/4D	3,0	1450	6,26	19,8	0,79	87,7	88,0	87,0	7,2	2,8	3,6	0,00888	27,0	53
3E112M/4D	4,0	1460	8,05	26,2	0,81	88,6	88,4	87,5	7,4	2,8	3,8	0,01437	32,6	58
3E132S/4C	5,5	1465	10,9	36,0	0,81	89,6	90,2	90,0	7,0	3,0	3,3	0,03059	53,4	61
3E132M/4D	7,5	1465	14,8	48,9	0,81	90,4	91,0	90,5	7,8	3,2	3,4	0,03418	56,6	61
3E132M/4E	9,2	1460	18,4	60,2	0,80	90,4	91,6	91,2	7,4	3,1	3,4	0.03600	62,0	64
3E160M/4C	11	1465	21,0	71,7	0,83	91,5	92,1	91,7	7,6	2,8	3,3	0,07011	89,2	63
3E160L/4E	15	1465	28,7	97,8	0,82	92,1	92,4	91,9	7,8	2,8	3,5	0,08579	97,5	63
3E180M/4C	18,5	1475	35,0	120	0,82	92,6	93,2	92,9	7,7	3,0	3,3	0,12901	128	64
3E180L/4D	22	1470	41,4	143	0,82	93,0	93,7	93,7	8,0	3,0	3,4	0,14667	141	64
3E200L/4D	30	1475	54,5	194	0,85	93,6	94,1	94,0	8,0	3,0	3,4	0,28413	193	65
3E225S/4C	37	1478	65,7	239	0,87	93,9	94,5	94,5	8,3	3,2	3,3	0,38229	320	66
3E225M/4D	45	1477	80,0	291	0,86	94,2	94,7	94,7	8,6	3,3	3,2	0,44100	350	67
3E250M/4D	55	1482	95,3	354	0,88	94,6	95,1	95,2	8,7	3,3	3,2	0,73000	460	68

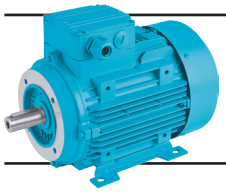


Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1000 d/d / *400V 50Hz 1000 rpm* / 400V 50Hz 1000 UpM

IE3

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								Kalkış Değerleri *Starting Data* Startdaten		Devrilme Momenti *Breakdown Torque* Kippmo-ment	Atalet Momenti *Moment of Inertia* Trägheits-moment	B3 Motor Ağırlığı *B3 Motor Weight* B3 Motor Gewicht	Ses Seviyesi *Noise Level* Geräusch-pegel
	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	Cosφ	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	0,00096	6,80	41
3E71M/6D	0,25	930	0,77	2,57	0,67	70,0	69,7	66,0	3,6	2,2	2,5	0,00116	7,50	41
3E80M/6B	0,37	930	1,03	3,80	0,70	74,0	73,8	70,0	4,4	2,1	2,6	0,00202	9,90	43
3E80M/6C	0,55	935	1,47	5,62	0,70	77,2	77,3	74,4	4,3	2,2	2,7	0,00228	11,0	43
3E90S/6B	0,75	945	1,96	7,58	0,70	78,9	79,2	77,6	4,7	2,2	2,7	0,00354	16,0	46
3E90L/6C	1,1	940	2,75	11,2	0,71	81,0	80,8	79,4	5,0	2,2	2,7	0,00428	16,8	46
3E100L/6B	1,5	955	3,50	15,0	0,75	82,5	82,7	81,4	5,3	2,1	2,8	0,00821	22,5	50
3E112M/6B	2,2	960	4,95	21,9	0,76	84,3	84,5	83,5	5,5	2,2	3,0	0,01319	29,6	56
3E132S/6B	3,0	970	6,55	29,4	0,77	85,6	85,5	84,5	6,2	2,1	3,0	0,03051	46,7	58
3E132M/6C	4,0	970	8,52	39,4	0,78	86,8	87,0	85,5	6,2	2,2	2,9	0,03493	50,9	58
3E132M/6D	5,5	965	11,6	54,4	0,78	88,0	88,9	88,5	6,2	2,2	2,8	0,03934	57,3	58
3E160M/6D	7,5	972	15,6	73,7	0,78	89,1	89,4	88,4	6,3	2,6	3,0	0,07870	96,0	61
3E160L/6E	11	972	23,1	108	0,76	90,3	90,9	90,5	6,6	2,9	3,1	0,08580	104	62
3E180L/6E	15	975	30,8	147	0,77	91,2	91,6	91,0	6,7	2,9	3,1	0,15264	141	63
3E200L/6C	18,5	977	36,4	181	0,80	91,7	91,8	91,8	6,1	2,6	2,6	0,36100	164	64
3E200L/6D	22	978	42,5	215	0,81	92,2	92,9	93,0	6,2	2,6	2,6	0,39355	180	64
3E225S/6C	30	985	57,6	291	0,81	92,9	92,9	92,6	6,6	2,9	2,7	0,60000	340	65
3E250M/6C	37	988	68,8	358	0,83	93,4	93,6	93,5	7,3	2,9	2,8	0,82000	435	65
3E280S/6B	45	989	83,5	435	0,83	93,7	93,9	93,2	6,8	2,9	2,8	1,45000	590	65
3E280M/6C	55	989	102	531	0,83	94,1	94,4	93,5	6,9	2,9	2,8	1,65000	620	65



Elektrik Motorlarının Performans Değerleri
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

IE2

400V 50Hz 3000 d/d / *400V 50Hz 3000 rpm* / 400V 50Hz 3000 UpM

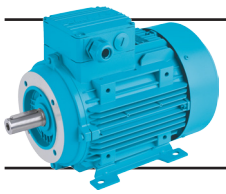
Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								Kalkış Değerleri *Starting Data* Startdaten		Devrilme Momenti *Breakdown Torque* Kippmoment	Atalet Momenti *Moment of Inertia* Trägheitsmoment	B3 Motor Ağırlığı *B3 Motor Weight* B3 Motor Gewicht	Ses Seviyesi *Noise Level* Geräuschpegel
	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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
2E63M/2A	0,18	2800	0,50	0,61	0,77	67,5	66,0	62,0	4,5	2,9	3,0	0,00012	3,80	51
2E63M/2B	0,25	2800	0,67	0,85	0,78	69,0	68,0	63,5	4,5	2,9	3,0	0,00015	4,00	51
2E71M/2A	0,37	2790	0,90	1,26	0,80	74,2	74,5	72,5	5,0	2,5	2,8	0,00031	5,70	54
2E71M/2B	0,55	2790	1,27	1,88	0,82	75,8	77,0	76,0	5,0	2,8	2,9	0,00037	6,20	54

400V 50Hz 1500 d/d / *400V 50Hz 1500 rpm* / 400V 50Hz 1500 UpM

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
2E63M/4B	0,12	1400	0,42	0,82	0,70	60,1	60,5	54,5	3,0	2,1	2,3	0,00018	4,00	42
2E63M/4C	0,18	1400	0,56	1,23	0,71	64,7	65,8	61,5	3,0	2,1	2,3	0,00022	4,40	42
2E71M/4B	0,25	1425	0,71	1,68	0,69	74,0	73,5	70,5	4,4	2,0	3,0	0,00067	6,30	46
2E71M/4C	0,37	1425	1,00	2,47	0,70	76,1	75,5	71,5	4,6	2,0	3,0	0,00082	7,00	46
2E80M/4B	0,55	1440	1,45	3,65	0,71	77,1	76,7	75,0	5,2	2,0	3,0	0,00175	9,70	50

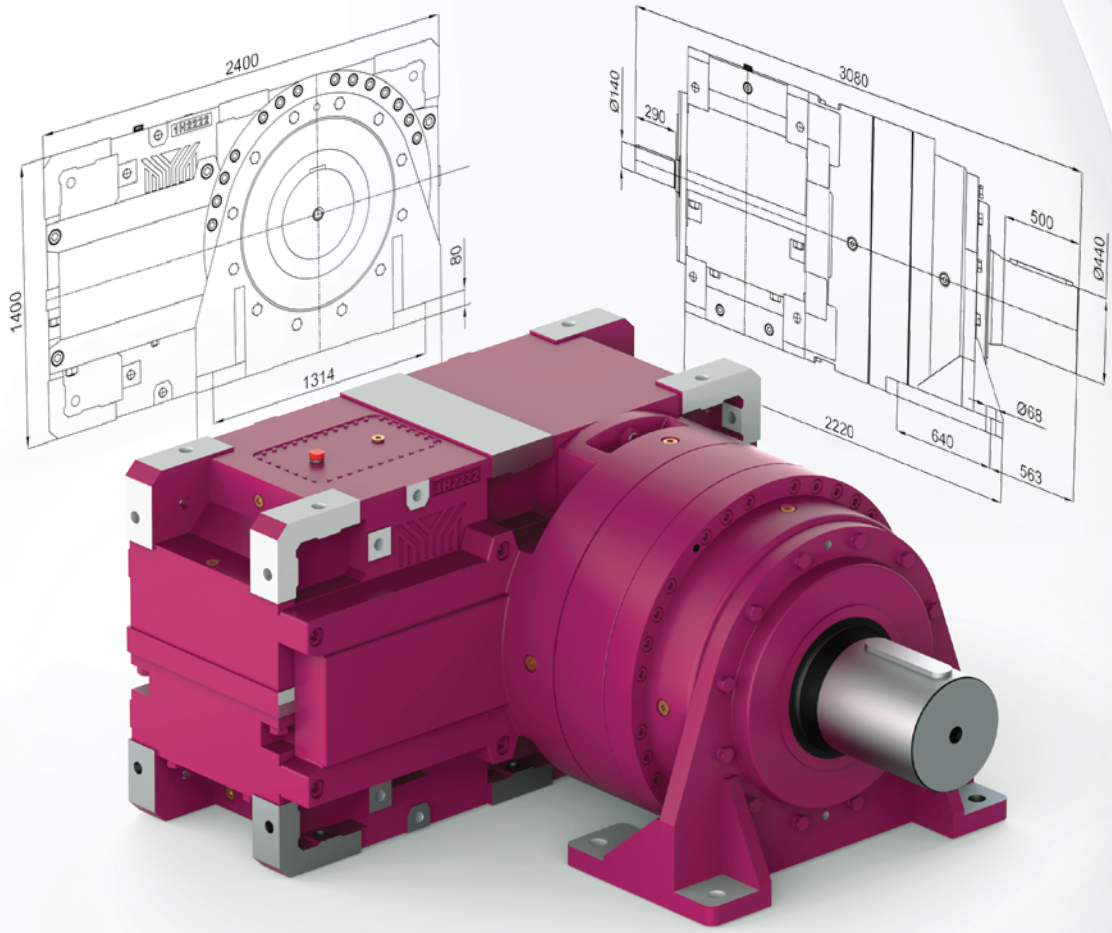
400V 50Hz 1000 d/d / *400V 50Hz 1000 rpm* / 400V 50Hz 1000 UpM

Tip *Type* Typ	Tam Yük Değerleri *Full-load Data* Volllastdaten								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	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
2E71M/6B	0,18	920	0,60	1,87	0,67	64,5	63,0	57,0	3,2	1,9	2,3	0,00076	6,10	42
2E71M/6C	0,25	920	0,78	2,59	0,69	66,5	66,0	61,0	3,3	1,9	2,3	0,00096	6,70	42
2E80M/6A	0,37	925	1,08	3,82	0,69	71,4	71,5	70,0	4,0	2,0	2,6	0,00176	9,10	45
2E80M/6B	0,55	932	1,50	5,64	0,72	73,5	74,0	71,0	4,2	2,1	2,6	0,00202	9,80	45



Notlar / *Notes* / Notizen

H22 + R55



1.500.000 Nm

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