



I.Mak®

REDÜKTÖR & VARYATÖR A.Ş.

Sonsuz Vidalı Redüktörler

Worm Gearbox / Réducteurs à Roue et Vis Sans Fin

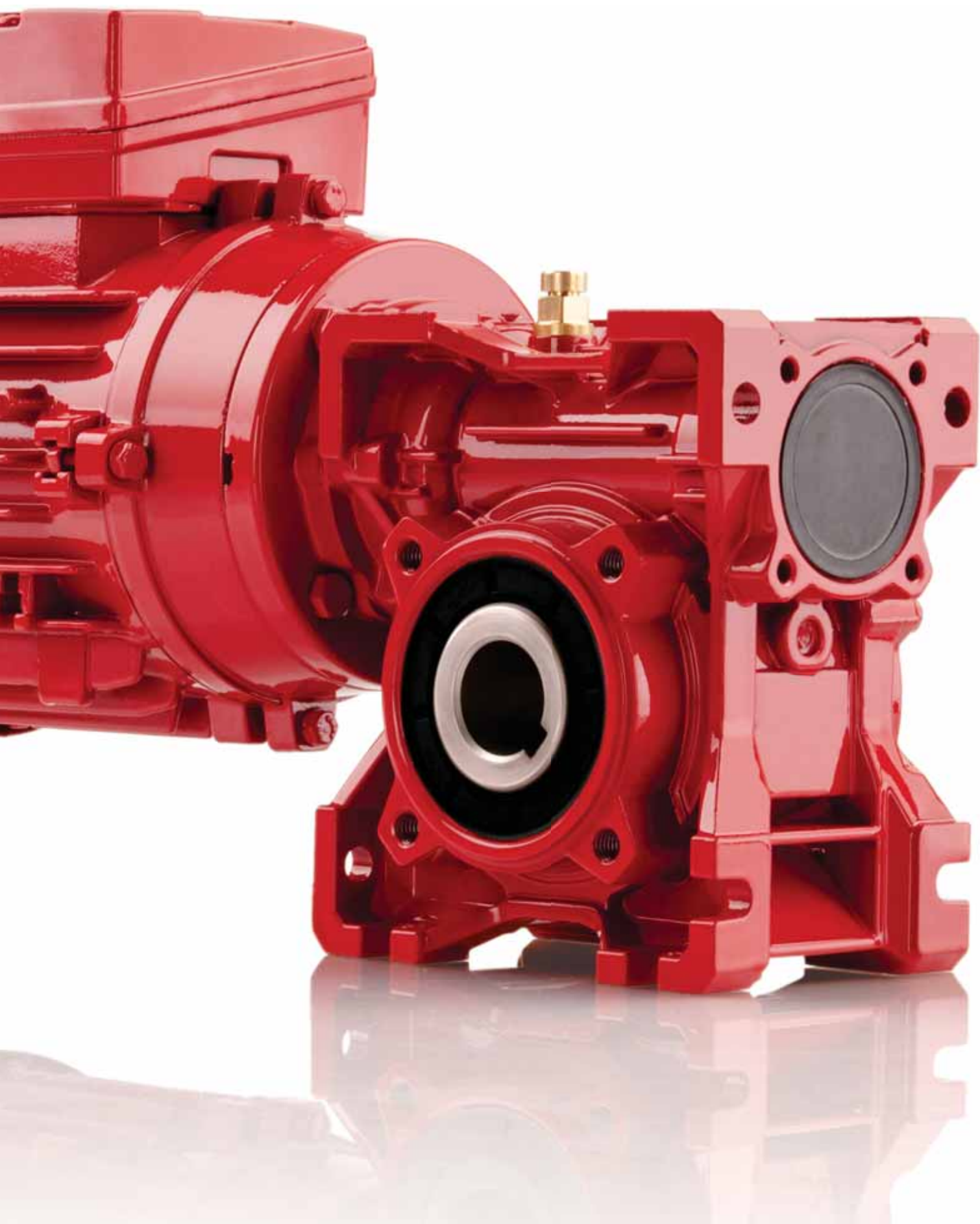
S03



SERIES
S
IRS
IRSD

2021
TR | EN | FR

Gearboxes and Drives / Moto Réducteurs



S / İRS / İRSD Serisi Redüktörlerin Genel Özellikleri Descriptions and Specifications of the S / İRS / İRSD Serie <i>Descriptions et spécifications de la serie S / İRS / İRSD</i>	1
Tip Tanımlamaları Unit Designation / <i>Types et designations</i>	5
Opsiyonlar Options / <i>Options</i>	6
Giriş Opsiyonları Input Options / <i>Options d'entrée</i>	7
Çıkış Opsiyonları Output Options / <i>Options de sortie</i>	8-10
Redüktör Bağlantı Varyasyonları Mounting Options and Variations / <i>Options de montage et d'accouplement</i>	11
Redüktör Komponent Varyasyonları Gearboxes Components Variations / <i>Options et variations</i>	12
Motor Varyasyonları Mounting Options and Variations / <i>Options de montage et d'accouplement</i>	13
Motor komponent varyasyonları Motor's Components Variations / <i>Composant et options moteurs</i>	14-15
Redüktör Sipariş Gearbox Ordering / <i>Commandez votre réducteur</i>	16
Servis Faktörü Service Factor / <i>Service facteur</i>	17
Redüktör Yükleme Karakteristikleri Load Characteristics of Gearboxes / <i>Types de machines et applications</i>	19-22
Frenler Brakes / <i>Freins</i>	23-24
Fren Seçim Tablosu Brake Selection Table / <i>Table de sélection des freins</i>	25
Kontrol ve Bakım Control and Maintenance Gearboxes / <i>Contrôle et maintenance des réducteurs</i>	26
Montaj Pozisyonları Mounting Positions / <i>Position de montage</i>	29-30

Yağ Tablosu Lubricant Table / Huiles et lubrifiants	31
Montaj Pozisyonlarına Bağlı Olarak Yağ Miktarları Oil Quantities Per Mounting Position / Quantités d'huiles en fonction des positions de montage	32
Geri Dönüş Kilitli Redüktörlerde Dönme Yönü Direction of Rotation of the Gearbox With a Backstop / Sens de rotation des roulement anti-retour	33
Çift gövdeli redüktörler montaj şekilleri Mounting Position of Dual Housing Gearboxes / Position de montage des réducteurs à double carter	34
Klemens Pozisyonları Position of Terminal Box / Position de la boîte à bornes	35
Motor İşletme Değerleri Motor Performance / Performance moteurs	36
Sertifikalarımız Certifications / Certificats	37
Sonsuz Vidalı Motorlu Redüktörler Güç ve Devir Tablosu Worm Geared Motors - Performances Tables Moto-réducteurs à roue et vis sans fin avec moteur-table de performances	38-65
Sonsuz Vidalı Redüktörler Ölçü Sayfaları Worm Gearbox / Réducteurs hélicoïdaux à roue et vis sans fin	66-120
Helisel Sonsuz Vidalı Motorlu Redüktörler Güç ve Devir Tablosu Helical Worm Geared Motors - Performances Tables Moto-réducteurs hélicoïdaux à roue et vis sans fin avec moteur-table de performances	122-148
Helisel Sonsuz Vidalı Redüktörler Ölçü Sayfaları Helical,Worm Gearbox / Réducteurs hélicoïdaux à roue et vis sans fin	150-160
Yedek Parça Listeleri General Parts List / Liste des composants	162-170

Genel Bilgiler

General Information
Informations g n rales

S

SERİSİ / SERIES / SÉRIES



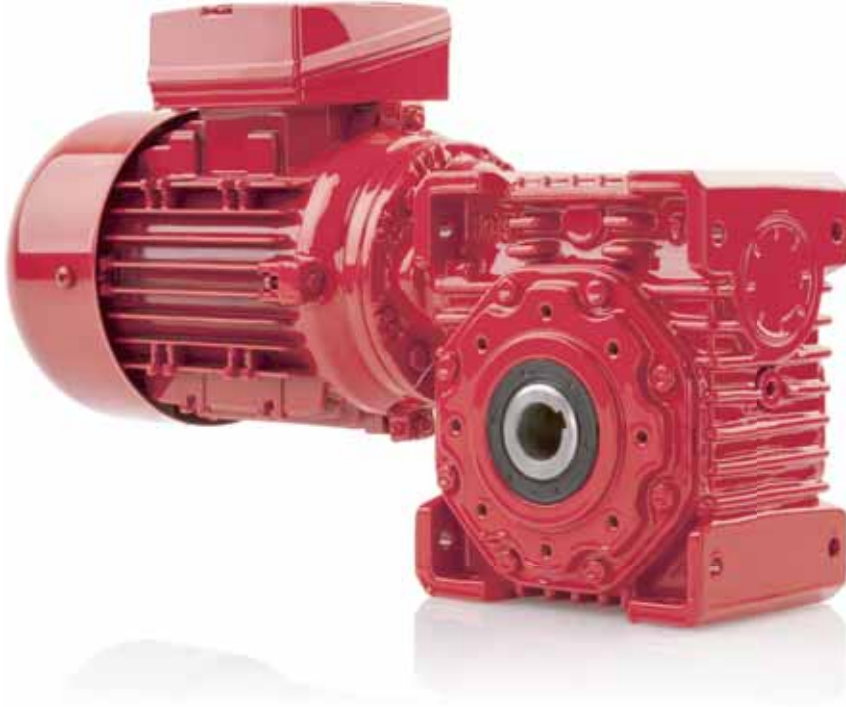
- Aluminyum gövdeli sonsuz vidalı redüktörler
- 6 Farklı gövde büyüklüğü
- 13 – 460 Nm moment aralığı
- 7,5 – 100 Tahvil aralığı

- Worm geared unit with aluminium housing
- 6 Size of housing
- Torque range from 13 to 460 Nm
- Ratio range from 7.5 to 100

- Réducteur à roue et vis sans fin avec carter en aluminium
- 6 tailles de carter
- Couple allant de 13 à 460 Nm
- Rapport de réduction compris entre 7.5 et 100

iRS

SERİSİ / SERIES / SÉRIES



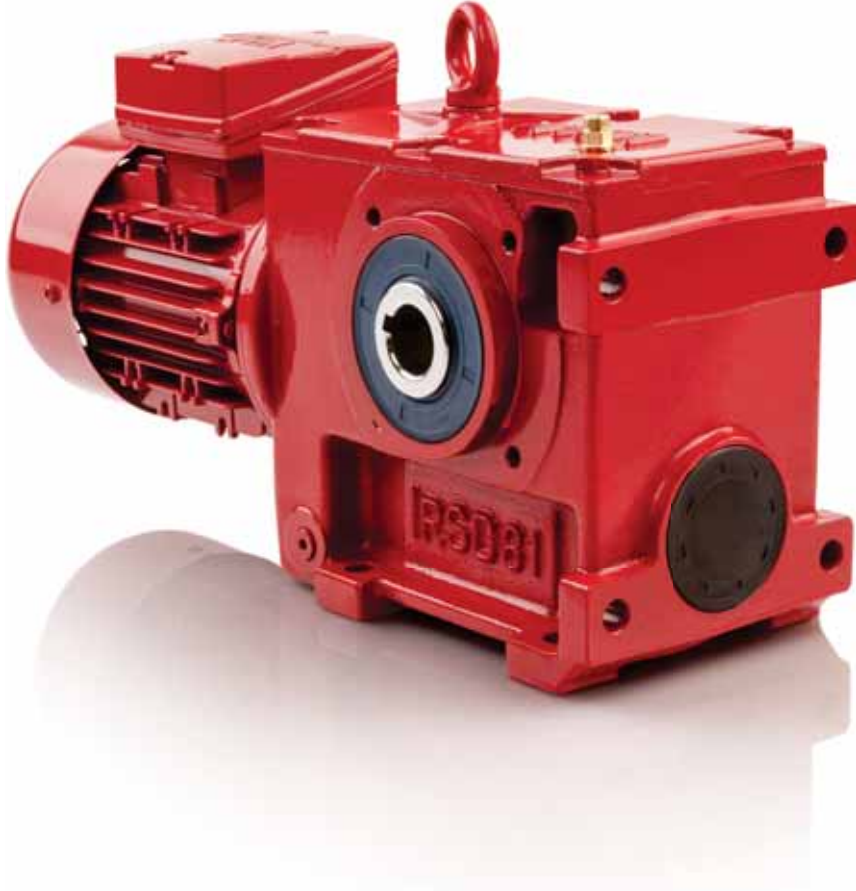
- Döküm gövdeli sonsuz vidalı redüktörler
- 8 Farklı gövde büyüklüğü
- 96 – 16876 Nm moment aralığı
- 7,25 – 115 Tahvil aralığı

- Worm geared unit with cast iron housing
- 8 Size of housing
- Torque range from 96 to 16876 Nm
- Ratio range from 7.25 to 115

- *Réducteur à roue et vis sans fin avec carter en fonte*
- *8 tailles de carter*
- *Couple allant de 96 à 16876 Nm*
- *Rapport de réduction compris entre 7.25 et 115*

İRSD

SERİSİ / SERIES / SÉRIES



- Döküm gövdeli helisel sonsuz vidalı redüktörler

- 5 Farklı gövde büyüklüğü

- 211 – 4479 Nm moment aralığı

- 25 – 333 Tahvil aralığı

- Helical worm geared unit with cast iron housing

- 5 Size of housing

- Torque range from 211 to 4479 Nm

- Ratio range from 25 to 333

- Réducteur hélicoïdal à roue et vis sans fin avec carter en fonte

- 5 tailles de carter

- Couple allant de 211 à 4479 Nm

- Rapport de réduction compris entre 25 et 4479

Alüminyum gövdeli sonsuz vidalı redüktörler

Aluminium housing worm gearbox / Réducteurs à roue et vis sans fin, carter en aluminium

Kod	Tip tanımlama	Type designation	Spécifications des types
S...	Giriş milli - ayak montajlı - delik milli	Input shaft - foot mounted - hollow shaft	Arbre d'entrée - a patte - arbre creux
SM...	Motorlu - ayak montajlı - delik milli	With motor - foot mounted - hollow shaft	Avec moteur - a pattes - arbre creux
SP...	IEC B14 giriş flanşlı - ayak montajlı - delik milli	IEC B14 input flange - foot mounted - hollow shaft	Bride d'entrée IEC B14 - a pattes - arbre creux

Döküm gövdeli sonsuz vidalı redüktörler

Cast iron housing worm gearbox / Réducteurs à roue et vis sans fin, carter en fonte

Kod	Tip tanımlama	Type designation	Spécifications des types
İRSA...	Giriş milli - ayak montajlı - delik milli	Input shaft - foot mounted - hollow shaft	Arbre d'entrée - a pattes - arbre creux
İRSF...	Giriş milli - flanş montajlı - delik milli	Input shaft - flange mounted - hollow shaft	Arbre d'entrée - bride de sortie - arbre creux
İRSAM...	Motorlu - ayak montajlı - delik milli	With motor - foot mounted - hollow shaft	Avec moteur - a pattes - arbre creux
İRSFM...	Motorlu - flanş montajlı - delik milli	With motor - flange mounted - hollow shaft	Avec moteur - bride de sortie - arbre creux
İRSAP...	IEC B14 giriş flanşlı - ayak montajlı - delik milli	IEC B14 input flange - foot mounted - hollow shaft	Bride d'entrée IEC B14 - a pattes - arbre creux
İRSFP...	IEC B14 giriş flanşlı - flanş montajlı - delik milli	IEC B14 input flange - flange mounted - hollow shaft	Bride d'entrée IEC B14 - bride de sortie - arbre creux

Döküm gövdeli helisel - sonsuz vidalı redüktörler

Cast iron housing helical - worm gearbox / Réducteurs hélicoïdal à roue et vis sans fin, carter en fonte

Kod	Tip tanımlama	Type designation	Spécifications des types
İRSD...	Giriş milli - ayak montajlı - delik milli	Input shaft - foot mounted - hollow shaft	Arbre d'entrée - a pattes - arbre creux
İRSDF...	Giriş milli - flanş montajlı - delik milli	Input shaft - flange mounted - hollow shaft	Arbre d'entrée - bride de sortie - arbre creux
İRSDM...	Motorlu - ayak montajlı - delik milli	With motor - foot mounted - hollow shaft	Avec moteur - a pattes - arbre creux
İRSDFM...	Motorlu - flanş montajlı - delik milli	With motor - flange mounted - hollow shaft	Avec moteur - bride de sortie - arbre creux
İRSDP...	IEC B14 giriş flanşlı - ayak montajlı - delik milli	IEC B14 input flange - foot mounted - hollow shaft	Bride d'entrée IEC B14 - a pattes - arbre creux
İRSDFP...	IEC B14 giriş flanşlı - flanş montajlı - delik milli	IEC B14 input flange - flange mounted - hollow shaft	Bride d'entrée IEC B14 - bride de sortie - arbre creux
İRSDPM...	IEC pam flanşlı motorlu - ayak montajlı - delik milli	IEC PAM Flange with motor - foot mounted - hollow shaft	Bride d'entrée IEC B14 - avec moteur - arbre creux
İRSDFPM...	IEC pam flanşlı motorlu - flanş montajlı - delik milli	IEC PAM Flange with motor - flange mounted - hollow shaft	Bride d'entrée IEC B14 - avec moteur - bride de sortie - arbre creux

Redüktör opsiyonları / Gearboxes options / Options des motoréducteurs

Kod	Opsiyon	Options	Options
FR	Sağ taraf çıkış flanşı	Output flange right	Bride de sortie (Droite)
FL	Sol taraf çıkış flanşı	Output flange left	Bride de sortie (Gauche)
FD	Çift çıkış flanşı	Double output flange	Bride de sortie (Double)
SR	Sağ taraf çıkış mili	Output shaft right	Arbre de sortie (Droite)
SL	Sol taraf çıkış mili	Output shaft left	Arbre de sortie (gauche)
SD	Çift çıkış mili	Output shaft double	Arbre de sortie (Double)
C	Alın mili	Double input shaft	Arbre d'entrée (Double)
CBR	Alın miline fren bağlantısı	Double input shaft with brake	Double arbre d'entrée avec freins
TR	Sağ tork kolu	Torque arm right	Bras de couple (Droit)
TL	Sol tork kolu	Torque arm left	Bras de couple (Gauche)
H *	Çektirme pulu	Retaining screw washer	Epaulement (vis de fixation)
SDR **	Sağ sıkma bilezik	Shrink disk right	Frette de serrage (Droit)
SDL **	Sol sıkma bilezik	Shrink disk left	Frette de serrage (Gauche)
OC	Çıkış koruma kapağı	Output cover	Bouchon (arbre creux)

* İRS ve İRSD redüktörler içindir. / Only for IRS and IRSD Series / Uniquement pour les séries IRS et IRSD

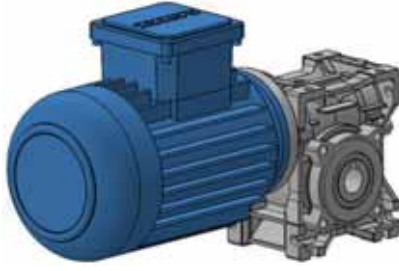
** İRSD Redüktörler içindir / Only for IRSD Series / Uniquement pour la série IRSD

Motor Opsiyonları / Motor's options / Options moteurs

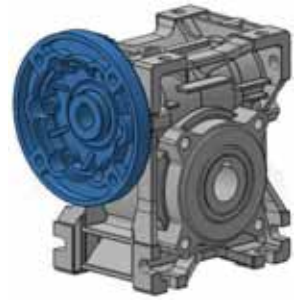
Kod	Opsiyon	Options	Options
BR	Fren	Brake	Frein
BRH	Manuel kollu fren	Brake with hand release	Frein avec ouverture manuel
BD	Çift fren	Double brake	Double frein
BDH	Manuel kollu çift fren	Double brake with hand release	Double frein avec ouverture manuel
E	Enkoder	Encoder	Encoder
EMK	Elektromanyetik kavrama	Electromagnetic clutches	Disque electromagnetique
CF	Harici fan	External fan	Ventilation externe
FG	Kanopi	Canopy	Canopé
U	Fansız motor (güdük)	Without fan	Sans ventilation
M	Monofaze motor	Mono phase motor	Moteur monophasé
BS	Mekanik kilit	Backstop	Roulement anti-retour



S
Giriş milli
Solid input shaft
Avec arbre de sortie



SM
Motorlu
With motor
Avec moteur



SP
IEC pam flanşli
IEC input flange
Avec bride PAM - IEC



İRSA
Giriş milli
Solid input shaft
Avec arbre de sortie



İRSAM
Motorlu
With motor
Avec moteur



İRSAP
IEC pam flanşli
IEC input flange
Avec bride de sortie PAM - IEC



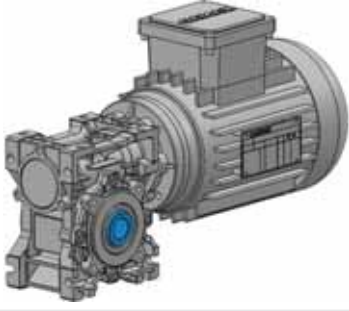
İRSD
Giriş milli
Solid input shaft
Avec arbre de sortie



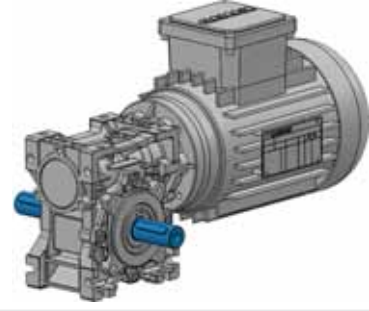
İRSDM
Motorlu
With motor
Avec moteur



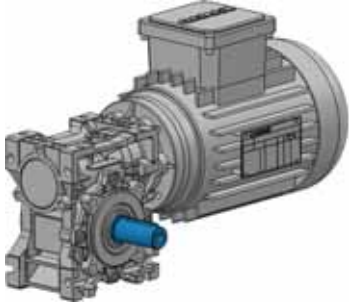
İRSDP
IEC pam flanşli
IEC input flange
Avec bride de sortie PAM - IEC



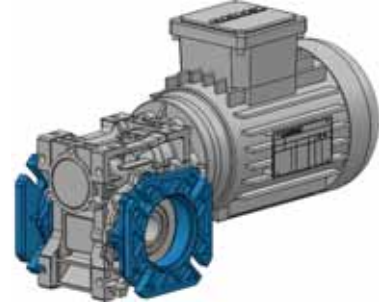
S..
Delik milli
Hollow output shaft
Arbre creux



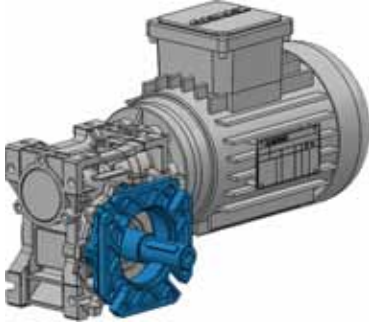
S...SD
Çift çıkış milli
Double output shaft
Double arbre de sortie



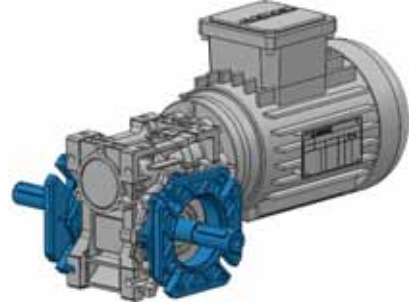
S....SL
Çıkış milli (sol)
Output shaft (Left)
Arbre de sortie (Gauche)



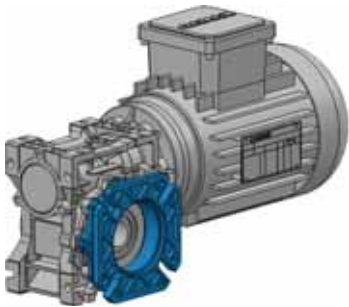
S...FD
Çift çıkış flanşlı
Double output flange
Double bride de sortie



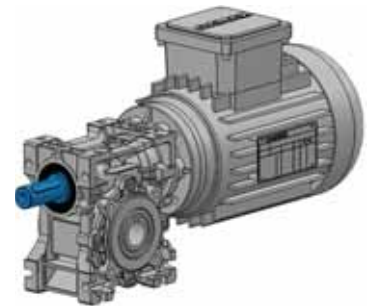
S...FL-SL
Çıkış milli - Çıkış flanşlı (sol)
Output shaft - Output flange (Left)
Arbre et bride de sortie (Gauche)



S...FD-SD
Çift çıkış flanşlı- Çift çıkış milli
Double output flange - Double output shaft
Bride de sortie double - Arbre de sortie double



S...FL
Çıkış flanşlı (sol)
Output flange (Left)
Bride de sortie (Gauche)



S...C
Alın milli
Input shaft
Arbre d'entrée



İRS..
Delik milli
Hollow output shaft
Arbre creux



İRS...SD
Çift çıkış milli
Double output shaft
Double arbre de sortie



İRS...SL
Çıkış milli (sol)
Output shaft (Left)
Arbre de sortie (Gauche)



İRSF...FD
Delik milli - Çift çıkış flanşlı
Double output flange
Double bride de sortie



İRSF...FL-SL
Çıkış milli - Çıkış flanşlı (sol)
Output shaft - Output flange (Left)
Arbre et bride de sortie (Gauche)



İRSF...FD-SD
Çift çıkış flanşlı - Çift çıkış milli
Double output flange - Double output shaft
Bride de sortie double - Arbre de sortie double



İRSF...FL
Delik milli - Çıkış flanşlı (sol)
Output flange (Left)
Bride de sortie (Gauche)



İRSA...C
Alın milli
Input shaft
Arbre d'entrée



İRSD..
Delik milli
Hollow output shaft
Arbre creux



İRSD...SD
Çift çıkış milli
Double output shaft
Double arbre de sortie



İRSD...SL
Çıkış milli (sol)
Output shaft (Left)
Arbre de sortie (Gauche)



İRSDF...FD
Çift çıkış flanşlı
Double output flange
Double bride de sortie



İRSDF...FL-SL
Çıkış milli - Çıkış flanşlı (sol)
Output shaft - Output flange (Left)
Arbre et bride de sortie (Gauche)



İRSDF...FD-SD
Çift çıkış flanşlı- Çift çıkış milli
Double output flange - Double output shaft
Bride de sortie double - Arbre de sortie double



İRSDF...FL
Delik milli - Çıkış flanşlı (sol)
Output flange (Left)
Bride de sortie (Gauche)



İRSD ...C
Alın milli
Input shaft
Arbre de sortie

Çıkış mili / Output shaft / Arbre de sortie

Kod / Code	Varyasyon	Options	Options
111	Özel mil ölçüsü	Special shaft dimensions	Dimensions de l'arbre spécial
112	Özel mil malzemesi	Special shaft materials	Matériel de l'arbre spécial
113	Sertleştirilmiş mil	Hardened shaft	Axe durci
114	Diş çekilmiş mil	Screw	Axe à vis
115	Çoklu kama uygulaması	Shaft with multiple key	Arbre à multi clavette

Kovan / Hollow shaft / Arbre creux

Kod / Code	Varyasyon	Options	Options
121	Özel kovan ölçüsü	Dimensions of special shaft	Arbre creux spécial
122	Özel kovan malzemesi	Material of special output shaft	Arbre creux en matériaux spéciaux
123	Sertleştirilmiş kovan *	Hardened steel hollow shaft	Arbre creux en acier trempé
124	Diş çekilmiş kovan**	Hollow shaft with screw	Arbre creux a vis
125	Opsiyonel kovan	Optional output shaft	Arbre creux optionnel
126	Çoklu kama uygulaması	Hollow shaft with splining	Arbre creux cannelé

* İRSD.. Serisi için geçerlidir. / Only for IRSD Series / Uniquement pour la série IRSD

**İRS.. ve İRSD.. Serileri için geçerlidir. / Only for IRS and IRSD Series / Uniquement pour les séries IRS et IRSD

Giriş mili - pam mili / Input shaft / Arbre d'entrée

Kod / Code	Varyasyon	Options	Options
131	Özel mil ölçüsü	Dimensions of the shaft	Dimensions de l'arbre (Spécial)
132	Özel mil malzemesi	Material of special shaft	Matériaux de l'arbre (Spécial)
133	Sertleştirilmiş mil	Hardened steel shaft	Arbre en acier trempé
134	Çoklu kama uygulaması	Hollow shaft with screw	Arbre creux a vis
135	Özel alın mili	Spécial input shaft	Arbre d'entrée spécial
136	Diş çekilmiş mil	Shaft with screw	Arbre de sortie avec vis

Çıkış flanşı / Output flange / Bride de sortie

Kod / Code	Varyasyon	Options	Options
141	Özel flanş ölçüsü	Dimensions of special output flange	Dimensions de la bride de sortie (Spéciale)
142	Özel flanş malzemesi	Material of special output flange	Matériaux de la bride de sortie (Spéciale)
143	Opsiyonel flanş	Optional output flange	Bride de sortie optionnelle
144	Standart dışı flanş*	Special output flange	Bride d'entrée spéciale

* İstenilen değişiklik ürünün standart flanşı üzerinde yapılamayıp yeni bir flanş tasarlanması durumudur. / In the case your configuration require the production of a special flange / Dans le cas où la configuration de votre application requiert une bride d'entrée spéciale.

Giriş flanşı / Input flange / Bride d'entrée

Kod / Code	Varyasyon	Options	Options
151	Özel flanş ölçüsü	Special input flange	Bride d'entrée (Spéciale)
152	Özel flanş malzemesi	Material of special input flange	Matériaux de la bride d'entrée (spéciale)
153	Standart dışı flanş*	Special output shaft	Bride de sortie spéciale

* İstenilen değişiklik ürünün standart flanşı üzerinde yapılamayıp yeni bir flanş tasarlanması durumudur. / In the case your configuration require the production of a special flange / Dans le cas où la configuration de votre application requiert une bride de sortie spéciale.

Yağ / Oil / Huiles

Kod / Code	Varyasyon	Options	Options
211	Sentetik yağ VG 220 (SHC 630)	Synthetic oil VG 220 (SHC 630)	Huile synthétique VG 220 (SHC 630)
212	Gıda uyumlu yağ VG 220 (CIBUS 220)	Food compatible oil VG 220 (CIBUS 220)	Huile pour industrie agroalimentaire VG 220 (CIBUS 220)
213	-40C° Uyumlu yağ VG 220 (SHC 630)	Cold resistant oil -40C° VG 220 (SHC 630)	Huile base température -40C° VG220 (SHC 630)

Keçe-tapa / Seal-cover / Joint- bouchon

Kod / Code	Varyasyon	Options	Options
221	Özel ölçü keçe	Dimensions of special seal	Dimensions du joint (Spécial)
222	Özel ölçü tapa	Dimensions of special cover	Dimensions du bouchon (Spécial)
223	Özel marka keçe	Special brand of seal	Marque du joint (Spécial)
224	Özel marka tapa	Special brand of cover	Marque du bouchon (Spécial)
225	Viton keçe	Viton seal	Joint en viton
226	Özel tip keçe uygulaması	Special configuration of seal	Configuration spéciale du joint
227	Toz kapağı	Dust cover	Bouchon anti-poussière

Rulman / Bearing / Roulement

Kod / Code	Varyasyon	Options	Options
231	Güçlendirilmiş çıkış rulmanı	Reinforced output bearing	Roulement renforcé (Sortie)
232	Güçlendirilmiş giriş rulmanı	Reinforced input bearing	Roulement renforcée (Entrée)
233	Özel marka rulman	Special brand of bearing	Marque du roulement (Spécial)
234	Özel ölçü rulman	Special dimensions of bearing	Dimensions du roulement (Spécial)
235	Mekanik kilit CW*	Backstop bearing (CW)	Roulement anti-retour (CW)
236	Mekanik kilit CCW*	Backstop bearing (CCW)	Roulement anti-retour (CCW)

* İRO ve YP serileri için geçerlidir, diğer serilerde motora uygulanmaktadır. / Available in YP and IRO Series, the other series are equipped with backstop bearings at motor side / Disponible pour les séries YP et IRO, les autres séries sont équipés de roulement anti-retour placés sur le moteur.

Gövde / Housing / Carter

Kod / Code	Varyasyon	Options	Options
241	Özel işlenmiş gövde	Special housing	Carter spéciale
242	Özel malzeme	Special housing materials	Carter avec matériaux spéciaux

Boya / Paint / Peinture

Kod / Code	Varyasyon	Options	Options
251	Özel renk boya	Special paint color	Couleur spéciale
252	Özel tip boya	Special paint type	Type de peinture spéciale
253	Epoksi boya	Epoxy paint	Peinture epoxy
254	Akrilik boya (dış ortam)	Acrylic paint	Peinture acrylique (Environnement extérieur)
255	Su bazlı boya	Water based paint	Peinture à base d'eau
256	Antikorozyon boya	Anti-corrosion paint	Peinture anti-corrosion

Dişli / Gears / Pignons

Kod / Code	Varyasyon	Options	Options
261*	Özel imalat dişli	Special gear	Pignons spéciaux
262	Katalog dışı tahvil	Gear ratio (Catalogue)	Rapport de réduction des pignons (Catalogue)

* 261 kodu, 262 yi kapsamaktadır. / 261 and 262 codes are equivalent / Les codes 261 et 262 sont équivalents

Voltaj - Frekans / Voltage and frequency / Voltage et fréquence

Kod / Code	Varyasyon	Options	Options
311	Özel voltaj motor	Special Voltage	Voltage spécial
312	Özel frekans motor	Special frequency	Fréquence spéciale

*400 V 50 Hz dışı tüm sarımlar standart dışı kabul edilir. / 400 V 50 Hz are considered as standard / 400 V 50 Hz sont les normes standards

Koruma sınıfı / IP Classification / Classification IP

Kod / Code	Varyasyon	Options	Options
321	IP 54	IP 54	IP 54
322	IP 56	IP 56	IP 56
323	IP 65	IP 65	IP 65
324	IP 66	IP 66	IP 66

IP 55 Standart kabul edilir / IP 55 is our standard / IP 55 étant la classe standard

İzolasyon sınıfı / Isolation class / Classe d'isolations

Kod / Code	Varyasyon	Options	Options
331	B sınıfı	B - class	Classe - B
332	H sınıfı	H - class	Classe - H

* F izolasyon sınıfı standart kabul edilir. / F class is accepted as a standard / La classe F étant la norme d'isolation standard

* 0 C° ile 40 C° aralığı dışındaki ortam sıcaklıkları ini fabrikaya danışınız. / Adapted for outside environment with temperature in between 0 C° and 40 C° / Adapté aux environnements extérieurs avec une température comprises entre 0° C et 40° C

Rulman / Bearing / Roulement

Kod / Code	Varyasyon	Options	Options
341	Sıcak ortam rulmanı*	Bearing for hot environment	Roulement pour environnement a températures élevées
342	Soğuk ortam rulmanı*	Bearing for cold environment	Roulement pour environnement a températures négatives
343	İzole rulman	Isolated bearing	Roulement isolé
344	Gresörlük	Bearing with greasing nipples	Roulement avec graisseurs
345	Mekanik kilit CW	Backstop bearing (CW)	Roulement anti-retour (CW)
346	Mekanik kilit CCW	Backstop bearing (CCW)	Roulement anti-retou (CCW)

* 0 C° ile 40 C° aralığı dışındaki ortam sıcaklıkları ini fabrikaya danışınız / For outside environment with temperature out of 0C° and 40C° consult our technical team / Pour des environnements avec des température non comprises entre 0C° et 40C° consulté nos équipes techniques.

Marka / Brand / Marque

Kod / Code	Varyasyon	Options	Options
351	Gamak Motor	Gamak Motor	Gamak Moteur
352	Volt Elektrik Motor	Volt Motor	Volt Moteur
353	Aemot Motor	Aemot Motor	Aemot Moteur
354	Wat Motor	Wat Motor	Wat Moteur
356	Diğer	Diğer	Diğer

Verim sınıfı / Efficiency classifications / Classes d'efficience énergétique

Kod / Code	Varyasyon	Options	Options
361	IE1	IE1	IE1
362	IE3	IE3	IE3
363	IE4	IE4	IE4

* IE 2 verim sınıfı standart kabul edilir. / IE 2 is the standard category / IE 2 étant la norme standard

Fren markasi / Brake's brand / Marque du frein

Kod / Code	Varyasyon	Options	Options
411	EMF fren	EMF brake	Frein - EMF
412	Fatih fren	Fatih brake	Frein - Fatih
413	Diğer	Other	Autres

Fren tipi / Type of brake / Type de frein

Kod / Code	Varyasyon	Options	Options
421	220 V soğutmalı	220 V cooler	220 V - avec refroidissement
422	24 V soğutmalı	24 V cooler	24 V - avec refroidissement
423	220 V soğutmasız*	220 V without cooler	220 V - sans refroidissement
424	24 V soğutmasız*	24 V without cooler	24 V - sans refroidissement
425	Çift balatalı fren	Double disk brake	Frein avec double disque
426	Özel tip fren	Special brake type	Type de frein spécial
427	Özel voltaj fren	Special voltage for brake	Frein avec voltage spécial

* Soğutmasız frenlerde motor fan muhafazası bulunmamaktadır / The brake without cooling are installed without fan or cover / Les freins sans refroidissement ne sont pas équipés de couvercle ou d'hélice.

Enkoder / Encoder / Codeur

Kod / Code	Varyasyon	Options	Options
431	HPL 100 Pulse rotary enkoder	HPL 100 Pulse rotary encoder	HPL 100 Codeur d'impulsions rotatif
432	HPL 360 Pulse rotary enkoder	HPL 360 Pulse rotary encoder	HPL 360 Codeur d'impulsions rotatif
433	HPL 500 Pulse rotary enkoder	HPL 500 Pulse rotary encoder	HPL 500 Codeur d'impulsions rotatif
434	HPL 1024 Pulse rotary enkoder	HPL 1024 Pulse rotary encoder	HPL 1024 Codeur d'impulsions rotatif
435	HPL 2048 Pulse rotary enkoder	HPL 2048 Pulse rotary encoder	HPL 2048 Codeur d'impulsions rotatif
436	HTL 1024 Pulse rotary enkoder	HTL 1024 Pulse rotary encoder	HTL 1024 Codeur d'impulsions rotatif
437	HTL 2048 Pulse rotary enkoder	HTL 2048 Pulse rotary encoder	HTL 2048 Codeur d'impulsions rotatif
438	TTL 1024 Pulse rotary enkoder	TTL 1024 Pulse rotary encoder	HTL 1024 Codeur d'impulsions rotatif
439	TTL 2048 Pulse rotary enkoder	TTL 2048 Pulse rotary encoder	TTL 2048 Codeur d'impulsions rotatif
440	Diğer	Others	Autres

* Diğer enkoder çeşitleri için fabrikaya danışınız / For different type of encoder contact our sales team / Pour des type de codeurs différents contactez notre équipe technique

Termistör - Isitici / Thermistor and heater / Thermistatet chauffage

Kod / Code	Varyasyon	Options	Options
441	PTC X 1 termistör	PTC X 1 thermistor	PTC X 1 Thermistat
442	Bimetal termostat	Bimetallic switch	Interupteur bilame
443	Basın sensörü	Pressure sensor	Senseur pression
444	110 V sargı ısıtıcı	110 V coil heat	Bobine chauffante 110 V
445	220 V sargı ısıtıcı	220 V coil heat	Bobine chauffante 220 V
446	PT 100	PT 100	PT 100

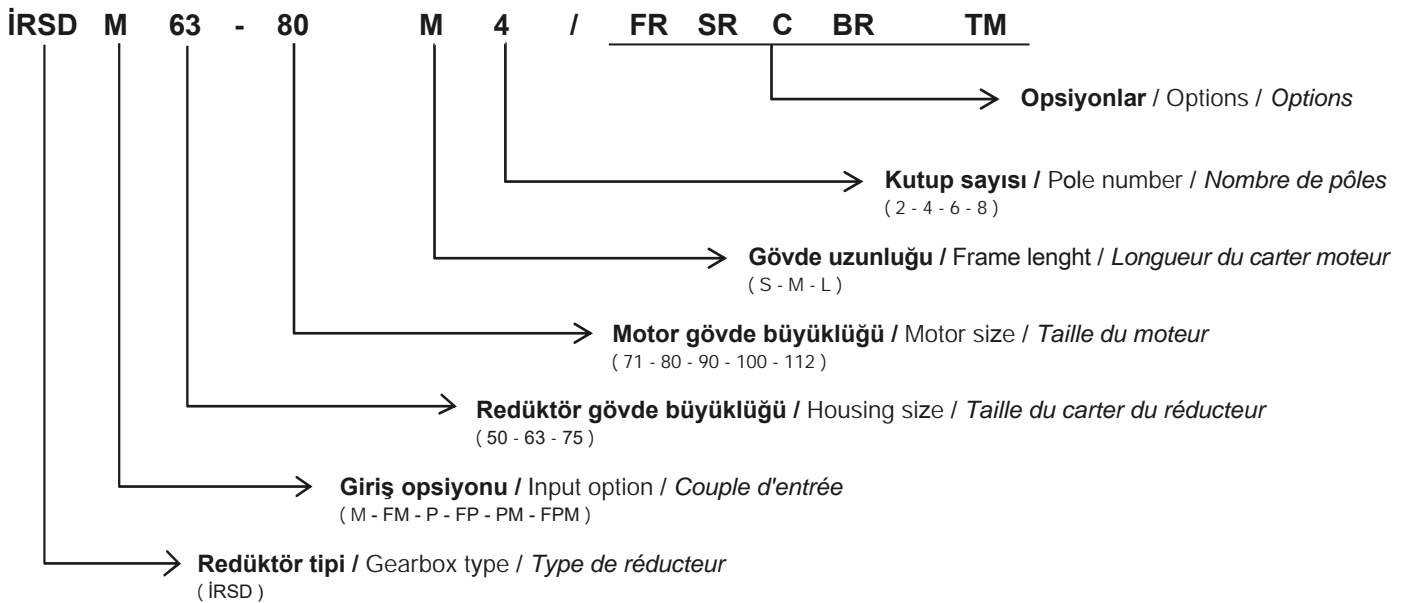
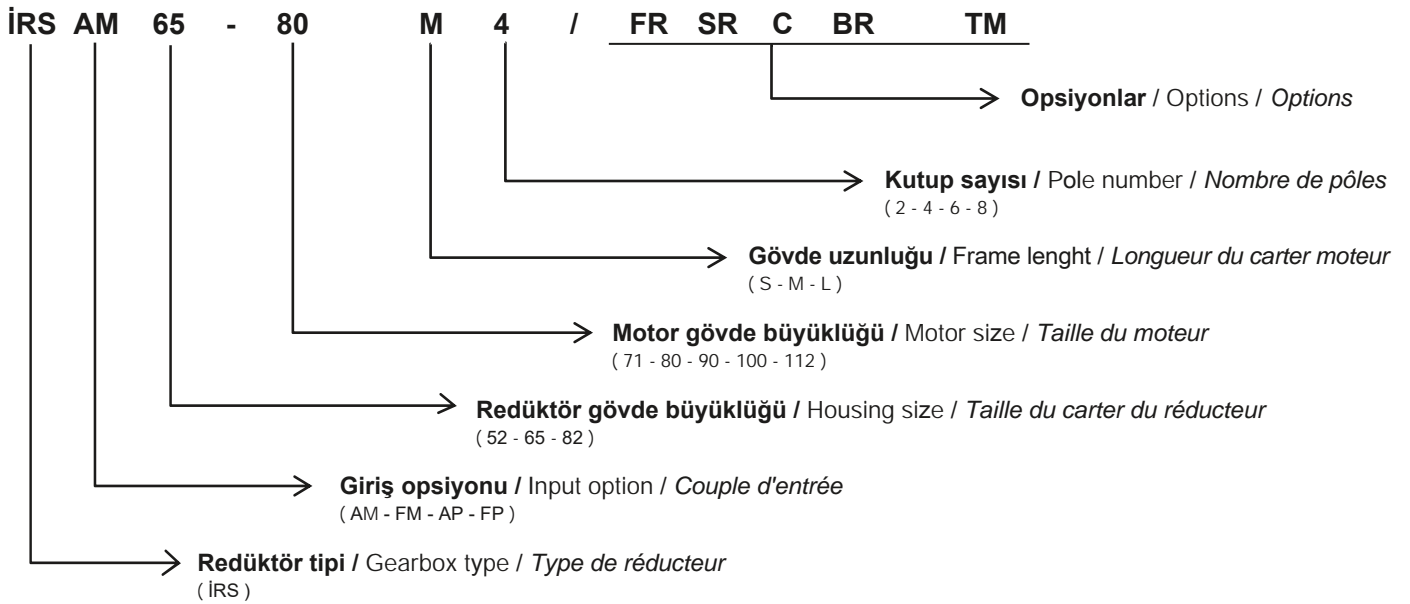
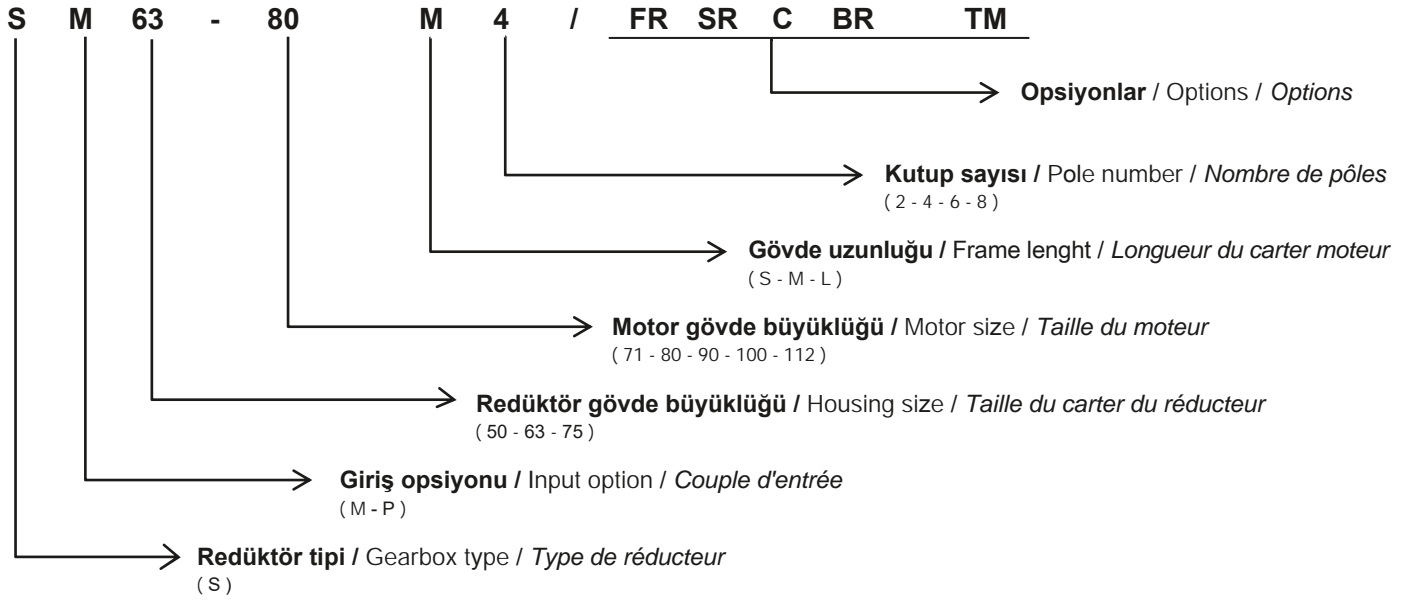
Harici fan / External Fan / Ventilateur externe

Kod / Code	Varyasyon	Options	Options
451	24 VDC (EBM)	24 VDC (EBM)	24 VDC (EBM)
452	230 VAC (EBM)	230 VAC (EBM)	230 VAC (EBM)
453	380 VAC (EBM)	380 VAC (EBM)	380 VAC (EBM)
454	230 VAC	230 VAC	230 VAC
455	380 VAC	380 VAC	380 VAC

Özel Motorlar / Special motor / Moteur spécial

Kod / Code	Varyasyon	Options	Options
461	Servo motor*	Servo motor	Servo moteur
462	DC motor*	DC motor	Moteur DC
463	Vektör motor	Vector motor	Moteur vecteur
464	Tork motoru	Tork motor	Moteur à couple élevé
465	Hidro motor*	Hydraulic motor	Moteur hydraulique
466	Pnömatik motor*	Compressed air motor	Moteur a air comprimé
467	Ex-proof motor	Explosion proof motor	Moteur anti-explosion
468	Senkron relüktans motor	Synchronous reluctance motors	Moteur à reluctance synchrone
469	Senkron motor*	Synchronous motors	Moteurs synchrones
470	Müşteri motoru	Customer's motor	Moteur en provenance du client

* Motorlar firmamız tarafından tedarik edilmemektedir / Our factory is not providing such motors / Moteur non fournis par notre usine
Özel motor kodları motorların fabrikamız tarafından takıldığı durumlarda uygulanır / Motors installed in our factory / Moteur installés dans notre usine



Servis Faktörü (F_s)

Servis Faktörü = İşletme Katsayısı = (F_s)

Redüktörlerdeki bu değer, tahrik edeceği makinenin bütün teknik ve karakteristik özelliklerine dayanma süresine bağlıdır. Genel olarak makineler yüklenme bakımından üç tip karakteristik gösterirler.

1. HAFİF YÜK (U)
2. ORTA YÜK (M)
3. AĞIR YÜK (H)

Üç değişik yükleme biçiminde çalışan, üç ayrı makinede üretilen momentler birbirine eşitte olsalar, ağır çalışan makinede daha büyük işletme katsayılı Redüktör kullanılmaktadır.

Günlük çalışma saati ise, çalışan dişli ve transmisyon elemanlarının malzeme yorulmasına maruz kalması bakımından, çalışma saatinin fazla olması halinde zararlı yönde etki eder.

Star-Stop durumuna gelince, her makinenin ilk kalkış esnasında en yüksek yüke maruz kaldığı düşünülürse tehlikeli görülür. Müteakip çalışmalarda bu daha aşağıya düşer.

Kataloğumuzda işletme katsayılarının nasıl kullanıldığının anlaşılması için bir misal ile belirtelim.

Önce tablo-1'den makinenin çalışma sahasına göre karakteristiğini belirleyelim. Makinemiz elektrik motor tahrikli ZİNCİR KOVALI EKSKAVATÖR ise yükleme durumu AĞIR' dır. (H) Tablo 2'den makine 24 saat çalışacağına göre minimum işletme katsayısı F_s = 2 bulunur.

Service Factor (F_s)

Value of the service factor of a gearbox depends on all technical and characteristic specifications of a driven machine. Generally machines have three types of loading characteristics:

1. UNIFORM LOAD (U)
2. MODERATE LOAD (M)
3. HEAVY LOAD (H)

Even if the torques required by three different machines operating at three different load specifications are equal.

Gearbox of the machine operating under heavy load conditions should have greater service factor.

Daily working period has effect on gearbox elements due to the materials fatigue of working parts.

It must be taken into account that all machines are subject to the greatest load at the first start, so that the number of starts has also effect on service factor.

This is an example how to use the service factor given in the catalogue.

Load specification of machine should be determined first, from table 1 in our example, the machine is CHAIN BUCKET EXCAVATOR driven by electric motor has HEAVY load specification and daily operation time is 24 hours. So that minimum service factor F_s = 2 is taken from Table 2.

Service facteur (F_s)

La valeur du service facteur d'un motoréducteur dépend des caractéristique de l'application. Ont distingue trois type de charges différentes

1. Charges uniformes (U)
2. Charges modérées (M)
3. Charges élevées (H)

Les spécifications des charges restent les même lorsque trois machines différentes sont soumises à des charges distinctes.

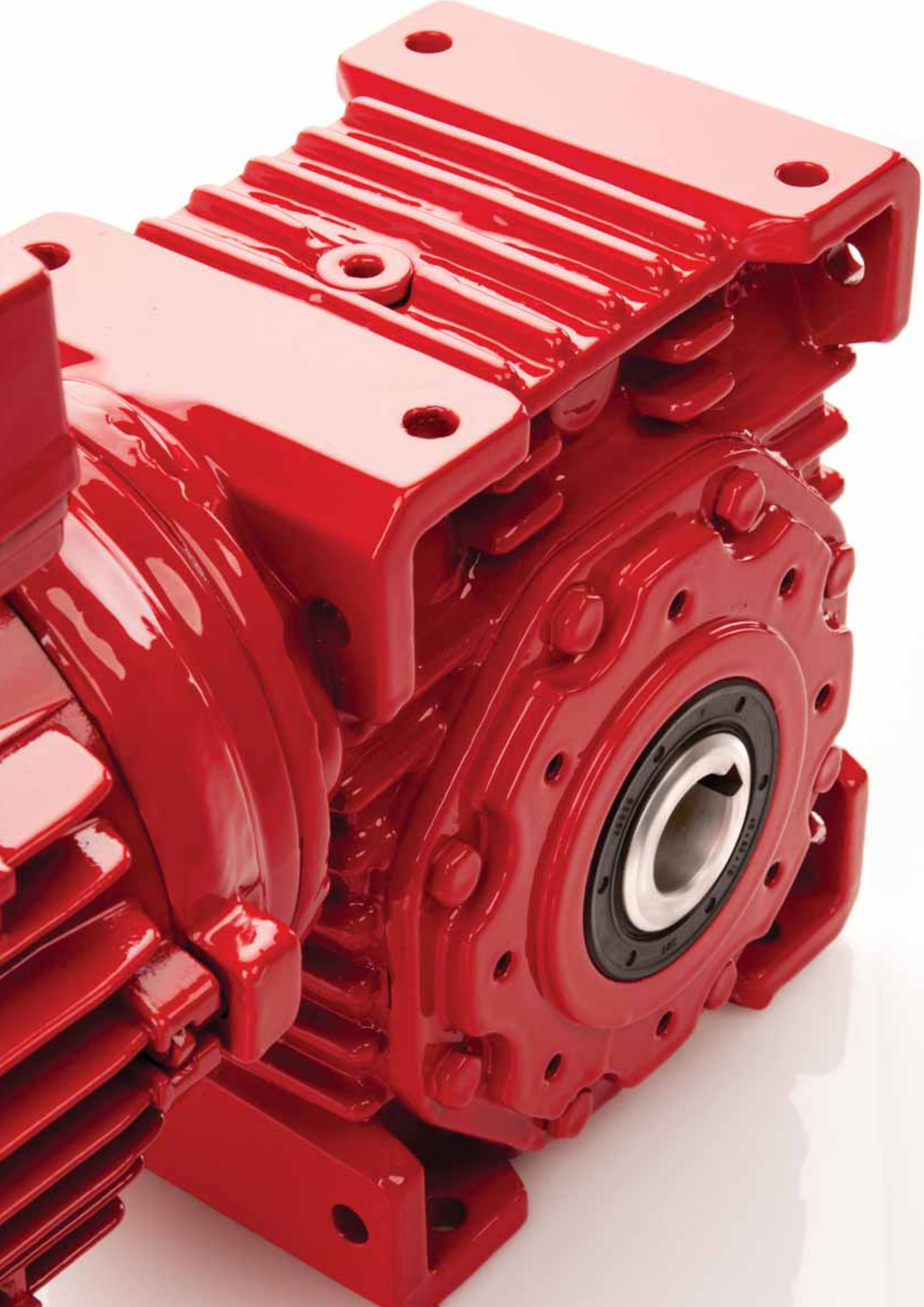
Les réducteurs utilisés dans des applications soumises à de fortes charges doivent obligatoirement avoir des services facteurs élevés.

Le nombre d'heures d'utilisations journalières a une influence directe sur l'usure des pièces et composants du réducteur.

Le réducteur est soumis à une charge maximale lors du démarrage de l'application. Le nombre d'arrêt/rédémarrage est donc à prendre en compte lors de l'analyse du service facteur.

L'exemple çı-dessous explique le processus d'analyse et de calcul du service facteur.

L'application étudiée est un excavateur a godets (Tableau 1) , le réducteur est actionné par un moteur électrique. La charge est "élevée" et la durée de fonctionnement journalière est de 24h. En se basant sur le tableau 2, le service facteur minimum requis est F_s = 2



Ekskavatörler		Excavators		Excavateur	
Zincir kovalı ekskavatörler	H	Chain-Bucket excavators	H	Excavateurs à gaudets	H
Paletli yürüyüşler	H	Travelling gears (Caterpillar)	H	Convoyeur à étage	H
Ray üzerinde yürüyüşler	M	Travelling gears (Rails)	M	Convoyeur à rails	M
Manevra mekanizmaları	U	Manoeuvring winches	U	Grues à manœuvre	U
Emiş pompaları	M	Pumps	M	Pompes	M
Kovalı çarklar	H	Bucket wheels	H	Roue à gaudets	H
Dönüş mekanizmalar	M	Slewing gears	M	Pignons rotatif	M

İnşaat Makinaları		Building Machines		Machine de Construction	
İnşaat asansörleri	U	Hoists	U	Grues de construction	U
Betoniyerler	M	Concrete mixers	M	Malaxeur à béton	M
Yol inşaat makinaları	M	Road construction machines	M	Machine de construction(routes)	M

Kaldırma ve İletme Tesisleri		Conveyor		Convoyeurs	
Zincirli konveyör	M	Through chain conveyors	M	Convoyeurs à chaines	M
Mafsal bantlı konveyörler	M	Link conveyors	M	Convoyeur à bande souple	M
Lastik bantlı konveyörler (Dökme Yükler)	U	Belt conveyors (Bulk Goods)	U	Convoyeur à bande rigide	U
Lastik bantlı elevatörler	M	Ballast elevators	M	Elevateurs à bande	M
Lastik cepli elevatörler	M	Ballast pocket elevators	M	Elevateur à poche	M
Lastik bantlı konveyörler (Parça Yükler)	M	Belt conveyors (Piece Goods)	M	Convoyeur à bande	M
Askılı konveyörler	U	Chain conveyors	U	Convoyeur à chaines	U
Yük asansörleri	M	Goods lifts	M	Élévateur à chaines	M
Kovalı elevatörler (Toz Malzeme)	U	Bucket elevators (Flour Goods)	U	Élévateur à godets (graviers)	U
Helezon konveyör	M	Screw conveyors	M	Vis d'Archimède	M
Kovalı elevatörler (Parçalı Malzeme)	M	Bucket elevators (Piece Goods)	M	Élévateurs à godets (Roches)	M
Eğik asansörler	H	Inclined hoists	H	Grues inclinées	H
Çelik bantlı konveyörler	M	Steel belt conveyors	M	Convoyeur à bande (Acier)	M
Paletli konveyörler	M	Apron conveyors	M	Convoyeurs à palettes	M

Tahrik Makinası Torque Machine Machines couplées	Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure)	Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges		
		Hafif Yük U Uniform Load U Charge uniforme U	Orta Yük M Moderate Load M Charge modérée M	Ağır Yük H Heavy Load H Charge élevée H
Elekt. Motorlu / Elect. Motor / <i>Moteurs élect.</i> Türbin / Turbin / <i>Turbine</i> Hidrolik / Hydraulic / <i>Hydraulique</i>	0.....3	0.8	1	1.5
	3....10	1	1.25	1.75
	10...24	1.25	1.5	2
Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylindir) <i>Machine à pistons (4.....6 Cylindres)</i>	0.....3	1	1.25	2
	3....10	1.25	1.5	2
	10...24	1.5	1.75	2
Pistonlu Makinalar (1.....2 Silindir) Piston Machines (1.....2 Cylindir) <i>Machine à pistons (1.....2 Cylindres)</i>	0.....3	1.25	1.5	2
	3....10	1.5	1.75	2.25
	10...24	1.75	2	2.5

Kimya Endüstrisi		Chemical Industry		Industrie Chimique	
Soğutma tamburları	M	Cooling drums	M	Tambours de refroidissement	M
Karıştırıcılar	M	Mixers	M	Mixeurs	M
Çalkalayıcılar (Hafif Akışkanlar)	U	Agitators (Liquids)	U	Agitateurs (Liquides)	U
Çalkalayıcılar (Ağır Akışkanlar)	M	Agitators (Semi Liquids)	M	Agitateurs (Semi liquide)	M
Tambur kurutucuları	M	Drying drums	M	Tambours de séchage	M
Santrifüjler	U	Centrifuges (Lights)	U	Centrifugeuse (Légère)	U
Santrifüjler	H	Centrifuges (Heavy)	H	Centrifugeuse (Lourde)	H

Petrol Endüstrisi		Oil Industry		Pétrole et Hydrocarbures	
Boru hattı pompaları	M	Pipeline pumps	M	Pompes à oléoducs	M
Kuyu açma mekanizmaları	H	Rotary drilling equipment	H	Foreuse à cylindres	H

Ventilatör Ve Aspiratörler		Fans		Ventilations	
Pistonlu ventilatörler	M	Rotary piston blowers	M	Souffleurs rotatifs	M
Ventilatör (Aksiyal ve Radyal)	U	Blowers (Axial and Radial)	U	Souffleurs (Axe et radial)	U
Santrifüj (türbinli) körük	H	Centrifugal	H	Centrifugeuse	H

Kauçuk Makinaları		Rubber Machines		Industrie du Caoutchouc	
Ekstruder ve kanderler	H	Extruders and calenders	H	Extrudeuse	H
Yoğurma makinaları	H	Pug mills	H	Malaxeur	H
Karıştırıcılar	M	Mixers	M	Mixeurs	M
Silindirme makinaları	H	Rolling mills	H	Presse	H

Ağaç İşleme Makinaları		Wood Working Machine		Industries Forestières	
Yontma tamburları	H	Backers	H	Presse à bois	H
Planya makinaları	M	Planing machines	M	Aplanisseuses	M
Ağaç işleme tezgahları	U	Wood working machines	U	Découpe de bois	U
Şerit testereler	H	Band saws	H	Scie	H

Yıkama Makinaları		Washing Machines		Laveuses	
Yıkama makinaları	U	Washing machines	U	Machine de lavage	U
Tamburlu kurutucular	M	Tumblers	M	Tambours	M

Tahrik Makinası Torque Machine Machines couplées	Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure)	Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges		
		Hafif Yük U Uniform Load U Charge uniforme U	Orta Yük M Moderate Load M Charge modérée M	Ağır Yük H Heavy Load H Charge élevée H
Elekt. Motorlu / Elect. Motor / Moteurs élect. Türbin / Turbin / Turbine Hidrolik / Hydraulic / Hydraulique	0....3	0.8	1	1.5
	3....10	1	1.25	1.75
	10...24	1.25	1.5	2
Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylindir) Machine à pistons (4....6 Cylindres)	0....3	1	1.25	2
	3....10	1.25	1.5	2
	10...24	1.5	1.75	2
Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylindir) Machine à pistons (1....2 Cylindres)	0....3	1.25	1.5	2
	3....10	1.5	1.75	2.25
	10...24	1.75	2	2.5

Vinç Tesisleri		Cranes		Grues	
Bom kaldırma	H	Derricking jib bomm gear	H	Bras ouvrant	H
Vinç yürüyüşleri	U	Travelling gears	U	Grues(Charriot)	U
Yük kaldırma	H	Hoist gears	H	Grues	H
Dönüş tertibatları	U	Slewing gears	U	Pignons rotatifs	U

Metal İşleme Makinaları		Metal Working Machines		Métallurgie et Acieries	
Planya makineleri	S	Planing machine	S	Aplaniseuses	S
Çekiç tokmak	S	Hammer	S	Marteau	S
Oyma makinesi	S	Engraving machine	S	Graveuses	S
Presler	H	Presses	H	Presses	H
Makaslar (Giyotin)	M	Shears	M	Découpeuses	M
Sıcak basma presleri	H	Forging presses	H	Presse à forge	H
Takım tezgahları (Ana Tahrık)	M	Machines tools (Main Drives)	M	Machine outil (Axe principal)	M
Takım tezgahları (Yardımcı Tahrık)	U	Machines tools (Auxiliarily Drives)	U	Machine outil (axe secondaire)	U

Gıda Endüstri Makinaları		Food Industry Machines		Industrie Agroalimentaire	
Doldurma makinaları (Şişe, Kavanoz vs.)	U	Filling machines (Bottles, Contaniers.)	U	Embouteilleuse	U
Yoğurma makinaları	M	Kneading machines	M	Malaxeurs	M
Ambalaj makinaları	U	Packaging machines	U	Machine d'emballage	U
Şeker kamışı kırıcıları	M	Cane crushers	M	Presse à canne	M
Şeker kamışı kesicileri	M	Cane cutters	M	Découpeuse de canne	M
Şeker kamışı öğütücüleri	H	Cane millis	H	Broyeurs de cannes	H
Şeker pancarı kesicileri	M	Sugar beet cutters	M	Découpeuse de betteraves	M
Şeker pancarı yıkayıcıları	M	Suger beet washers	M	Laveuse à betteraves	M

Pompalar		Pumps		Pompes	
Pistonlu pompalar (Q1 / 100)	H	Piston pumps (Q1 / 100)	H	Pompes à piston (Q1 / 100)	H
Pistonlu pompalar (Q1 / 100 : 1 / 20)	M	Piston pumps (Q1 / 100 : 1 / 20)	M	Pompes à piston (Q1 / 100 : 1 / 20)	M
Türbin (Hafif Akışkan)	U	Turbin (Light - Liquids)	U	Turbine (Liquides légers)	U
Türbin (Ağır Akışkan)	M	Turbin (Semi - Liquids)	M	Turbine (Semi-liquide)	M

Tahrık Makinası Torque Machine Machines couplées	Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure)	Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges		
		Hafif Yük U Uniform Load U Charge uniforme U	Orta Yük M Moderate Load M Charge modérée M	Ağır Yük H Heavy Load H Charge élevée H
Elekt. Motorlu / Elect. Motor / Moteurs élect. Türbin / Turbin / Turbine Hidrolik / Hydrolic / Hydraulique	0.....3	0.8	1	1.5
	3....10	1	1.25	1.75
	10...24	1.25	1.5	2
Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylindir) Machine à pistons (4....6 Cylindres)	0.....3	1	1.25	2
	3....10	1.25	1.5	2
	10...24	1.5	1.75	2
Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylindir) Machine à pistons (1....2 Cylindres)	0.....3	1.25	1.5	2
	3....10	1.5	1.75	2.25
	10...24	1.75	2	2.5

Kağıt Endüstri Makinaları		Paper Industry Machines		Industrie Papetière	
Düzeleme silindirleri	H	Glazing Cylinders	H	Cylindres appliniseurs	H
Holender	M	Hollenders	M	Hollenders	M
Kağıt hamur makineleri	H	Pulpers	H	Pulpeuses	H
Kalender	H	Calender	H	Calendrier	H
Taş presler	H	Stone Presses	H	Presse	H
Vakum presler	H	Vacum Presses	H	Presse à aspiration	H
Kuru silindirler	H	Drying Cylinders	H	Cylindres de séchage	H

Taş ve Kil Makinaları		Stone and Clay Working Machines		Roches et Argiles	
Kırıcılar	H	Breakers	H	Broyeurs	H
Döner fırınlar	M	Rotary ovens	M	Four rotatifs	M
Çekiçli değirmenler	H	Hammer mills	H	Broyeux à marteaux	H
Bilyalı değirmenler	H	Ball mills	H	Broyeurs à billes	H
Çarpmalı öğütücüler	H	Beater mills	H	Broyeux à percussions	H
Tuğla presleri	H	Brick presses	H	Presse à pavés	H

Tekstil Makinaları		Textile Machines		Industrie du Textile	
Sargı makineleri (Q1 / 100)	M	Batchers (Q1 / 100)	M	Machines d'emballages	M
Basma ve boyama mak.	M	Printing and dyeing machines	M	Presse et imprimante	M
Dokuma tezgahları	M	Looms	M	Tisseuse	M

Kompresörler		Compressors		Compresseurs	
Turbo kompresör	M	Turbo compressors	M	Turbocompresseurs	M

Silindirme ve Çekme Tesisleri		Metal Rolling Mills		Acieries	
Sac kesme makineleri	H	Sheet metal cutting machines	H	Découpeuses	H
Hız ayarlı silindirler	M	Roller adjustment drivers	M	Ajusteuse à presses	M
Çubuk kesme makineleri	H	Billet shears	H	Scies	H
Kabuk sıyırma makineleri	H	Descaling machines	H	Eplucheuse	H
Tel çekme tesisleri	M	Wire drawing machines	M	Enrouleuses	M
Soğuk çekme tesisleri	H	Cooling beds	H	Bande de refroidissements	H
Rulolu nakil (Hafif)	M	Roller tables (Lights)	M	Enrouleuses (légères)	M
Rulolu nakil (Ağır)	H	Roller tables (Heavy)	H	Enrouleuses (lourdes)	H
Silindir haddeme	H	Manipulators	H	Cylindres	H

Tahrik Makinası Torque Machine Machines couplées	Günlük Çalışma Müddeti (Saat) Daily Working Period (Hour) Utilisation journalière (Heure)	Makinanın Yükleme Karakteristiği Load Characteristics of Machines Caractéristique des charges		
		Hafif Yük U Uniform Load U Charge uniforme U	Orta Yük M Moderate Load M Charge modérée M	Ağır Yük H Heavy Load H Charge élevée H
Elekt. Motorlu / Elect. Motor / Moteurs élect. Türbin / Turbin / Turbine Hidrolik / Hydraulic / Hydraulique	0.....3	0.8	1	1.5
	3....10	1	1.25	1.75
	10...24	1.25	1.5	2
Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylindir) Machine à pistons (4.....6 Cylindres)	0.....3	1	1.25	2
	3....10	1.25	1.5	2
	10...24	1.5	1.75	2
Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylindir) Machine à pistons (1.....2 Cylindres)	0.....3	1.25	1.5	2
	3....10	1.5	1.75	2.25
	10...24	1.75	2	2.5

Frenler

1) Pervanesiz frenler

Elektrik motorunun arkasındaki soğutma kapağı takılmayarak bunların yerine monte edilen frenlerdir. Kısa süreli çalışan motorlarda bu tip frenler kullanılır.

2) Pervaneli frenler

Elektrik motorunun motor mili ve fan kapağı uzatılarak monte edilen frenlerdir. Devamlı çalışan motorlarda bu tip frenler kullanılır.

3) Mikro anahtarlı frenler

Elektrik motorlarının demeraj akımının yüksek olması ve freni açmada gecikmesi dolayısıyla istenmeyen durumlar meydana gelir. Bunları önlemek için, frenin üzerine konulan bir mikro anahtar vasıtasıyla freni açtıktan hemen sonra motorun çalışması sağlanır. Bu tip frenler özellikle büyük güçteki redüktörlerin elektrik motorları için uygundur.

Redüktörlerin ani veya gecikmeli frenlenmesi

Gecikmeli veya ani frenlenen redüktörler birçok sanayi makinalarında kullanılmaktadır. Bu sebepten frenler hem ani hem de gecikmeli fren yapacak şekilde dizayn edilmişlerdir. Frenlerin elektrik bağlantısında yapılacak bir değişiklikle ani veya gecikmeli frenleme sağlanır. Her frenli redüktör ile birlikte elektrik bağlantı şeması verilmektedir.

Frenli redüktörleri teslim aldığınızda fren bağlantısının gecikmeli olarak yapıldığını unutmayınız.

Brakes

1) Brakes without cooling fan

Brake which is mounted on fan side of electric motor by cancelling cooling fan and fan cover of motor. This type of brake is used for a short period running motors.

2) Brakes with cooling fan

Brake which is mounted on fan side of electric motor by extending motor shaft and fan cover to use fan. This type of brake is necessary for continuously running motors

3) Brakes with micro switch

Because of high starting current of motors delayed disengagement of magnetic brakes undesirable conditions occur. To prevent this situation, starting of motor is provided after disengagement of brake by means of brake by means of a micro switch installed on the brake. This type of brake is especially suitable for high power geared motors.

Non-delayed or delayed braking of geared motors

Delayed or non-delayed geared motors are used in many industrial machines. Therefore, brakes are designed to operate in both delayed and non-delayed conditions. This is supplied with each brake mounted geared motor.

Please do not forget that the brakes are connected for delayed operations standard.

Freins

1) Freins sans hélices de refroidissements

Freins montés directement à l'emplacement de l'hélice de refroidissement. Dans cette configuration l'hélice et le couvercle extérieur sont retirés. Ce type de configuration est conseillé pour les applications et moteurs avec une durée de fonctionnement réduite.

2) Freins avec hélice de refroidissement

Le frein est monté directement à l'arrière de l'emplacement de l'hélice de refroidissement. Ce type de configuration nécessite une prolongation de l'arbre d'entraînement du moteur. Ce type de configuration est conseillé pour les applications nécessitant un usage continu du frein.

3) Frein à ouverture manuelle

La forte charge appliquée par le moteur sur certains freins entraîne une prolongation de la période de blocage. Afin d'éviter un arrêt prolongé certains freins sont équipés d'un clé d'ouverture manuelle, cette option permet un redémarrage immédiat du moteur. Ce type de freins est particulièrement adapté aux moteurs à forte puissance.

Freins avec ou sans retardement d'arrêt.

Les motoréducteurs équipés de freins à retardement d'arrêt sont utilisés dans notre nombreuses applications et secteurs. Les freins sont conçus pour opérés avec ou sans l'option de retardement. Cette option est disponible pour l'ensemble de notre gamme de motoréducteurs. A noter que le freins dois être correctement connecté pour permettre un fonctionnement optimale de cette option.

Fren alıştırma Voltajları

Frenler 24V-DC veya 220V-AC ile çalışacak şekilde imal edilir. 220 voltluk frenlerin bağlantıları motor klemens kutusunda yapılmaktadır. 24V ile çalışan frenlerin bağlantısı için ayrıca 220/30V trafo ile doğrultucu gerekmektedir. İstenildiğinde bunlar firmamızca temin edilmektedir.

Frenli redüktörlerin elektrik motorlarına toprak hattı bağlantısı muhakkak yapılmalıdır.

Fren Siparişlerinde Belirtilmesi Gereken Hususlar

- 1) Fren Momenti
- 2) Fren Tipi
- 3) Fren voltajı

24V ile çalışan fren siparişlerinde trafolu doğrultucu istenip istenmediğini lütfen belirtiniz.

Fren bağlantı şemaları

Operating Voltage of Brakes

Brakes are manufactured to operate at 24V-DC or 220V-AC. 220V brakes are connected to the motor terminal box directly, but 220/30V transformer with rectifier unit needed for 24V operating brakes. This unit will be supplied if required.

Geared brake motors must be earthed.

Required Ordering Data for Brakes

- 1) Brake Torque
- 2) Brake Type
- 3) Brake Operating Voltage.

Please inform as if you need 220/30V transformer with rectifier unit for 24V operating brakes

Brake connection types

Voltage et Caractéristique des Freins

Les freins sont adaptés à un voltage de 24V-DC ou 220V-AC. Les freins fonctionnant sous 220V sont directement connectés à la boîte de Klemens, Les freins fonctionnant sous 24V doivent impérativement être couplés à un transformateur, cette unité est disponible en option.

Données Nécessaire à la Commande d'un Frein.

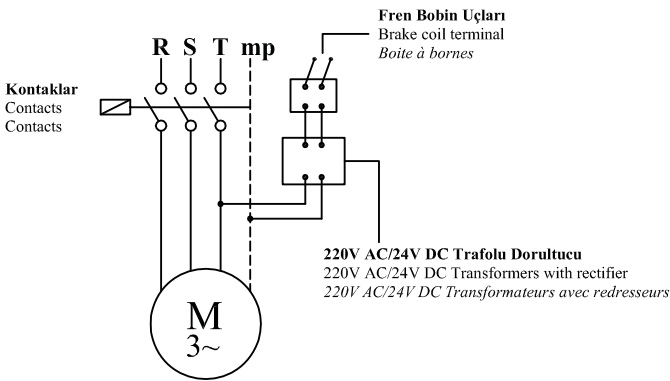
- 1) Couple des freins
- 2) Type de freins
- 3) Type de voltage

Veillez à nous informer si une unité de transformation 220/30V est nécessaire au branchement de votre frein (24 V)

Type de connexion des freins

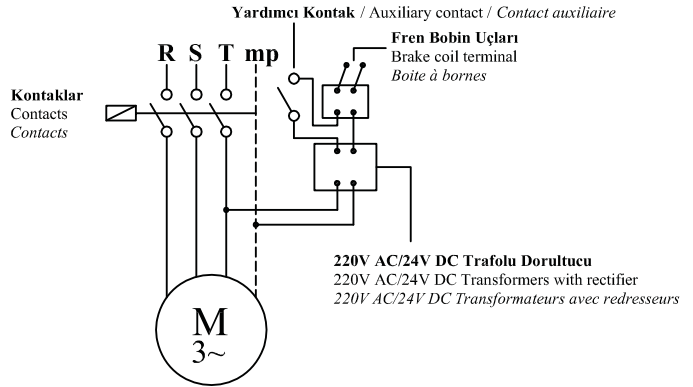
Gecikmeli Frenleme (24V)

Delayed Running Brake (24V)
Frein à retardement (24 V)



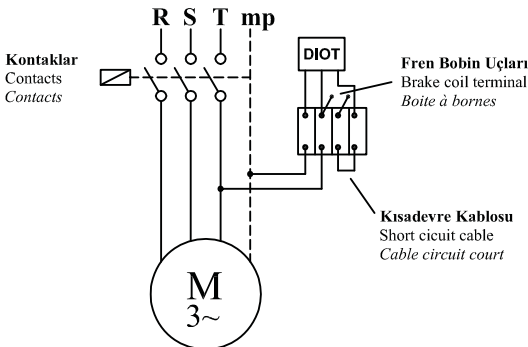
Ani Frenleme (24V)

Sudden Running Brake (24V)
Frein à arrêt immédiat (24 V)



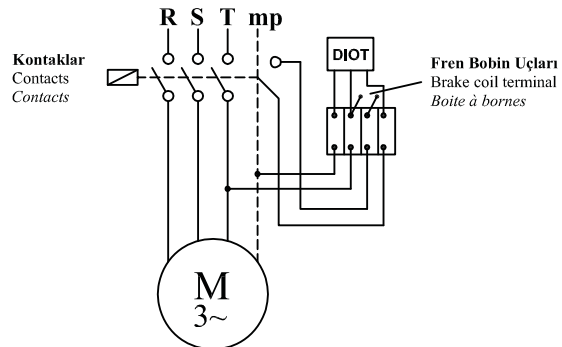
Gecikmeli Frenleme (220V)

Delayed Running Brake (220V)
Frein à retardement (220 V)



Ani Frenleme (220V)

Sudden Running Brake (220V)
Frein à arrêt immédiat (220 V)



Tablo 1 / Table 1 / Tableau 1

Motor Büyüklüğü Motor Size Dimensions du moteur	n1 d/d / r.p.m / r.p.m			
	750	1000	1500	3000
	Güç / Power / Puissance [kW]			
63			0,12 - 0,18	0,18 - 0,25
71	0,09 - 0,12	0,18 - 0,28	0,25 - 0,37	0,37 - 0,55
80	0,18 - 0,25	0,37 - 0,55	0,55 - 0,75	0,75 - 1,1
90 S	0,37	0,75	1,1	1,5
90 L	0,55	1,1	1,5	2,2
100	0,75 - 1,1	1,5	2,2 - 3	3
112	1,5	2,2	4	4
132 S	2,2	3	5,5	5,5 - 7,5
132 M	3	4 - 5,5	7,5	11
160 M	4-5,5	7,5	11	15
160 L	7,5	11	15	18,5
180 M			18,5	22
180 L	11	15	22	
200	15	18,5 - 22	30	30 - 37
225 S	18,5		37	
225 M	22	30	45	45
250	30	37	55	55
280 S	37	45	75	75
280 M	45	55	90	90

Tablo 2 / Table 2 / Tableau 2

Motor Büyüklüğü Motor Size Dimensions du moteur	Fren Momenti [kgm] Braking Torque [kgm] Puissance de freinage [kgm]																			
	Hafif Frenleme Light Braking Freins legers										Kuvvetli Frenleme Strong Braking Freins lourds									
	0,5	1	2,5	4	5	10	20	30	50	80	0,5	1	2,5	4	5	10	20	30	50	80
63																				
71																				
80																				
90 S																				
90 L																				
100																				
112																				
132 S																				
132 M																				
160 M																				
160 L																				
180 M																				
180 L																				
200																				
225 S																				
225 M																				
250																				
280 S																				
280 M																				

Kontrol ve bakım redüktörler

- Redüktörlerin yağ seviyesi ve miktarını kontrol ediniz. Yağın cinsini İ.MAK kataloğunda yer alan yağ çizelgelerini kullanarak seçiniz.
- Havalandırma tapasının faal olup olmadığına bakınız. Hava tahliye deliği çalışmaz ise redüktör gövdesinin içinde biriken hava, basınç oluşturarak keçelerden yağ sızmasına sebep olur. Böylece yağ azalarak çevre kirliliğine yol açar ve redüktörün verimli çalışmasını engellemiş olur.
- Redüktör bağlantı civatalarının gevşeyip gevşemediğini kontrol ediniz, gevşeyen civatalar var ise sıkılmak suretiyle tedbir alınız. Redüktör montajında meydana gelen eksen kaçıklığında zararlı sarsıntılara dikkat ediniz.
- Redüktörün ilk çalıştırmadan 500 saat sonra, sonraki her 6000 saatte periyodik olarak yağını değiştiriniz.
- Özel hususlar ve çalışma şartları hakkında mutlaka firmamıza danışınız.

Control and maintenance gearboxes

- Check the oil levels and quantity of your gearboxes. Choose the type and quantity of oil from the İ.MAK catalogue.
- Check if the ventilation stopper is active or not. If the air evacuation hole does not work properly, the accumulated air in the gearbox trunk might causes pressure and gas leakage from the mats.
- Before starting your geared motors, proceed to the checking of connection bolts and screw. Check if they have loosened or not during transport or installation. Take measures by firming loosened bolts. A wrong connexion might create vibration to the axis and conduct to damage of the geared motor.
- Change the oil after 500 hours of initial operation and periodically every 6000 hours of operating the geared motor.
- If you are facing any technical issue, please consult the user guide delivered with the geared motor. In case of special issue or emergency please directly contact your reseller or the closest I-MAK technical center.

Contrôle et maintenance des réducteurs

- Vérifiez le niveau et la quantité d'huile de façons régulière. Consultez le catalogue I-MAK pour obtenir les niveaux d'huiles requis en fonction du modèle et de la position du réducteur.
- Vérifiez le fonctionnement de la valve d'aération. L'absence d'évacuation de l'air peut provoquer une augmentation de la pression dans le réducteur pouvant conduire à des fuites d'huiles.
- Contrôler les vis et boulons reliant le moteur au réducteur, en cas de mauvaise fermeture le moteur peut créer des vibrations de l'arbre entraînant l'endommagement du motoréducteur.
- La première vidange doit être effectuée après 500 heures d'utilisations du motoréducteur, les vidanges suivantes doivent être effectuées au bout de 6000 heures d'utilisations.
- En cas de problèmes techniques, consultez le manuel d'utilisation fournis à la livraison du motoréducteur. En cas de problèmes particulier ou d'urgence, veuillez à contacter votre revendeur ou le centre technique I-MAK le plus proche.



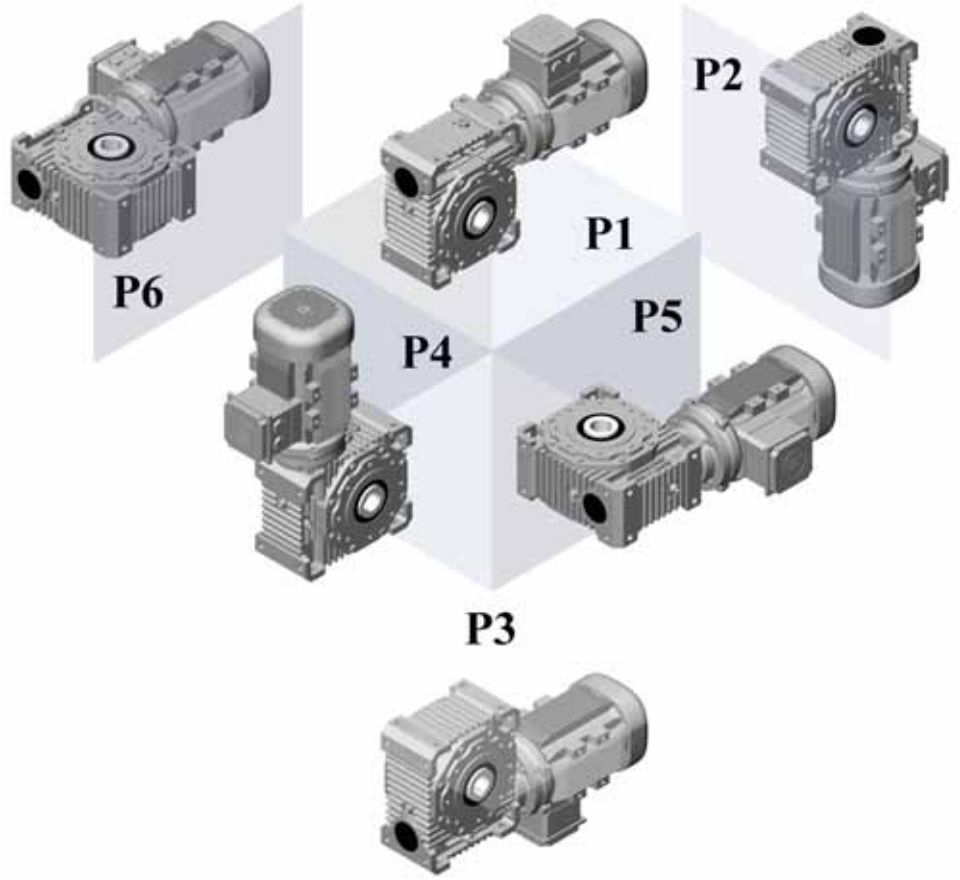


İRSA.... ,S....

Ayak montajlı redüktörlerde montaj pozisyonu "P" ile gösterilir

Foot mounted gearboxes position are defined as "P"

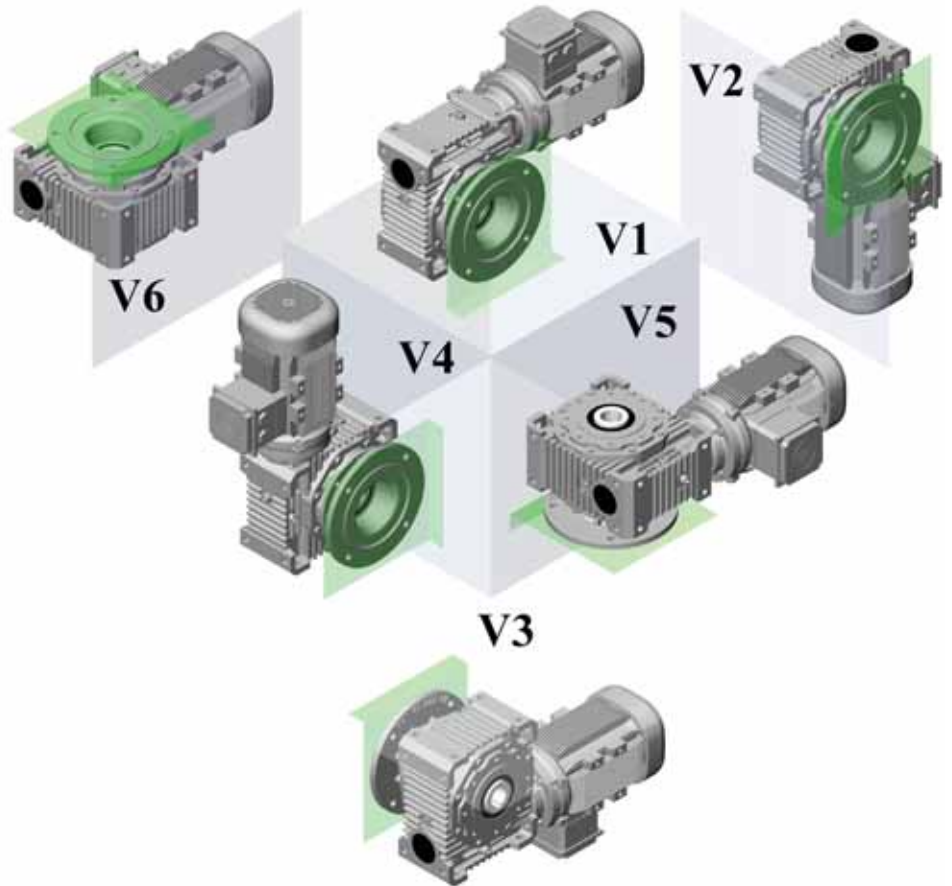
Les positions de montages des réducteurs à pattes sont définis par "P"



Flanş montajlı redüktörlerde montaj pozisyonu "V" ile gösterilir

Flange mounted gearboxes position are defined as "V"

Les positions de montages des réducteurs à brides sont définis par "V"

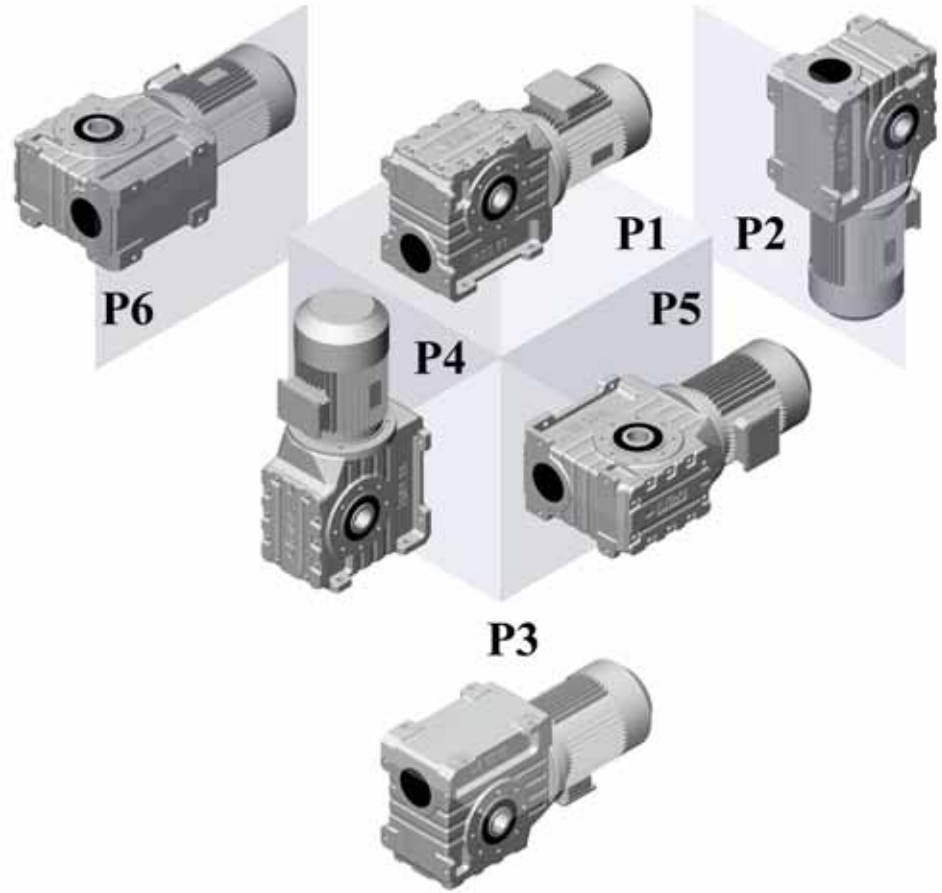


İRSD

Ayak montajlı redüktörlerde montaj pozisyonu "P" ile gösterilir

Foot mounted gearboxes position are defined as "P"

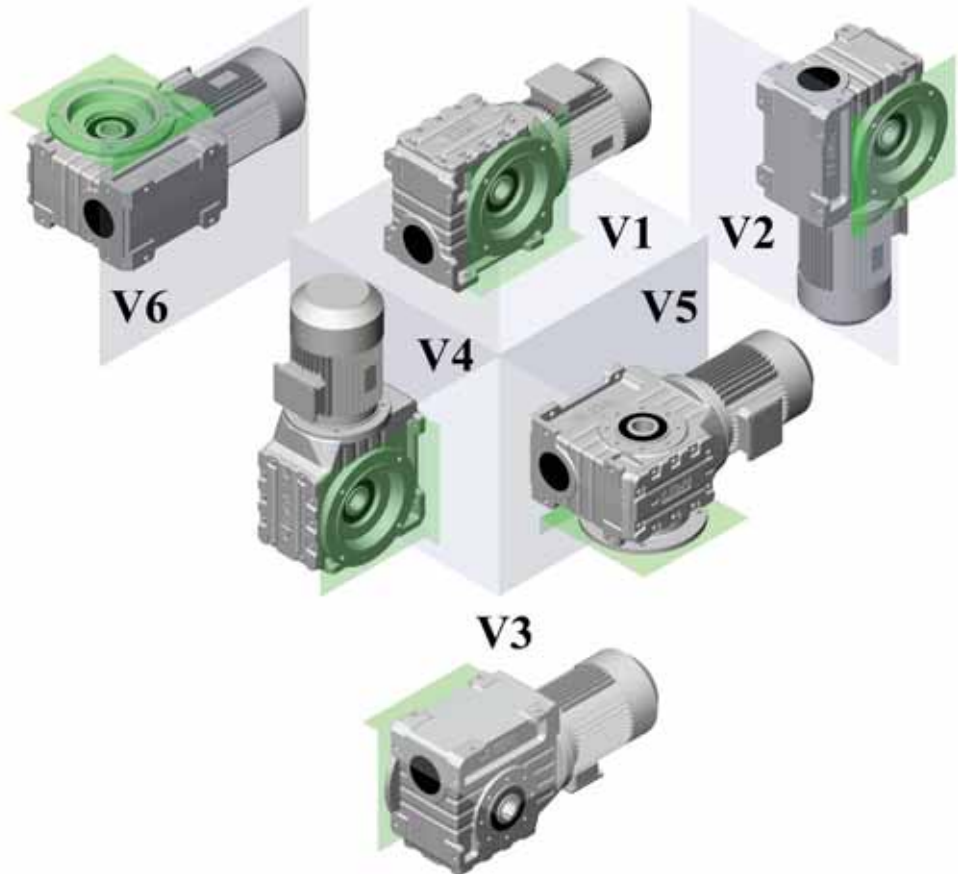
Les positions de montages des réducteurs à pattes sont définis par "P"



Flanş montajlı redüktörlerde montaj pozisyonu "V" ile gösterilir

Flange mounted gearboxes position are defined as "V"

Les positions de montages des réducteurs à brides sont définis par "V"



Yağ Cinsi Lubricant Art des Lubrifiant	ISO Viskozite sınıfı Viscosity class Catégorie de viscosite	DIN 51517-3	Kullanım sıcaklığı Usage temperature Gebrauchs temperatur d'usage C°	Firma Firm Marque						
										
Mineral Yağ Mineral Oil Huile Minéral	ISO VG 320	CLP	0.....+100	Mobilgea XMP 320	Degol BG 320	Energol GR-XP 320	Omala F320	Alpha SP 320	GEM 1 320 N	Belgear M - 320 - süper
	ISO VG 220	CLP	-5.....+100	Mobilgea XMP 220	Degol BG 220	Energol GR-XP 220	Omala F220	Alpha SP 220	GEM 1 220 N	Belgear M - 220 - süper
	ISO VG 150	CLP	-5.....+100	Mobilgea XMP 150	Degol BG 150	Energol GR-XP 150	Omala 150	Alpha SP 150	GEM 1 150 N	Belgear M - 150 - süper
	ISO VG 100	CLP	-5.....+100	-	Degol BG 220	Energol GR-XP 220	Omala 100	Alpha SP 100	GEM 1 100 N	Belgear M - 100 - süper
Sentetik Yağ Synthetic Oil Huile Synthétique	ISO VG 320	CLP PG	-25.....+140	Gylgoyle 320	Degol GS 320	Energol SG-XP320	Tivela S 320	Alphasyn PG 320	Klübersynth GH 6-320	-
	ISO VG 220	CLP PG	-25.....+140	-	Degol GS 220	Energol SG-XP220	Tivela S 220	Alphasyn PG 220	Klübersynth GH 6-220	-
	ISO VG 150	CLP PG	-30.....+140	-	Degol GS 150	Energol SG-XP150	Tivela S 150	Alphasyn PG 150	Klübersynth GH 6-150	-
	ISO VG 100	CLP PG	-30.....+140	-	-	-	-	-	Klübersynth GH 6-100	-

Tip Type Type	Bağlantı pozisyonları için yağ miktarları (litre) Oil quantities per mounting positions (liter) Quantités d'huiles en fonction de la position de montage (litres)												
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2	
SM 30													0,04
SM 40													0,08
SM 50													0,16
SM 63													0,34
SM 75													0,55
SM 90													0,82

Tip Type Type	Bağlantı pozisyonları için yağ miktarları (litre) Oil quantities per mounting positions (liter) Quantités d'huiles en fonction de la position de montage (litres)											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İRS_M 52	0,6			0,65			0,3				0,5	
İRS_M 65	1,25			1,35			0,75				1	
İRS_M 82	2,25			2,35			1				2	
İRS_M 102	2,3			2,5			1,5				2	
İRS_M 127	4,5			4,75			3				4	
İRS_M 162	12			12,5			8				10	
İRS_M 201	18			24			23				21	
İRS_M 250	31			40			38				35	

Tip Type Type	Bağlantı pozisyonları için yağ miktarları (litre) Oil quantities per mounting positions (liter) Quantités d'huiles en fonction de la position de montage (litres)											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İRSD_ 53	2			1,8			2				1,5	
İRSD_ 63	3			2,5			3				2	
İRSD_ 73	5			4			5				4	
İRSD_ 83	13			12			13				12	
İRSD_ 161	17			16			17				16	

Bazı uygulamalarda redüktör kullanıcıları redüktör durduğunda sistemin ağırlıkla beraber geri kaymasını istemez. Bu gibi durumlarda redüktörlerde kilitli rulman uygulaması yapılır. Buna göre aşağıda verilen tiplere göre dönüş yönü belirtilmelidir.

Ccw : Saat Yönünün Tersİ
Cw : Saat Yönü

In certain applications when the machinery stops, the operator would not like the gearbox to slip and lose its adjustment. Under these circumstances, the gearbox would be equipped with a locked ball bearing. Accordingly, the direction of rotation should be noted as shown below.

Ccw : Counterclockwise
Cw : Clockwise

Afin de répondre aux besoins de précision et de sécurité de certaines applications, nos réducteurs sont disponibles avec une option anti-retour. Cette option se compose d'un roulement anti-retour qui permet au réducteur de rester dans la position d'arrêt jusqu'au redémarrage de l'application par l'opérateur.

Ccw : Sens anti-horaire
Cw : Sens horaire





W1



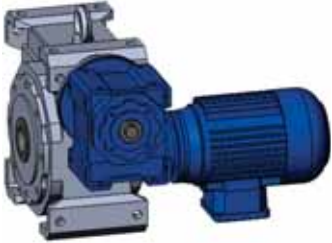
W2



N1



N2



E1



E2



S1



S2

Standart montaj şekli “W1” dir. Aksi belirtilmediği sürece standart şekilde montajlanır.

The standard mounting position is “W1”, if the mounting position is not defined during the order, the mounting position is always “W1”

La position de montage standard est W1, si aucune position de montage n'est précisée lors de la prise de commande, la position W1 sera attribuée par défaut.

“1” konumunda ikinci redüktör FL-SL opsiyonları ile birlikte uygulanır. “2” konumunda ikinci redüktör FR-SR opsiyonları ile birlikte uygulanır.

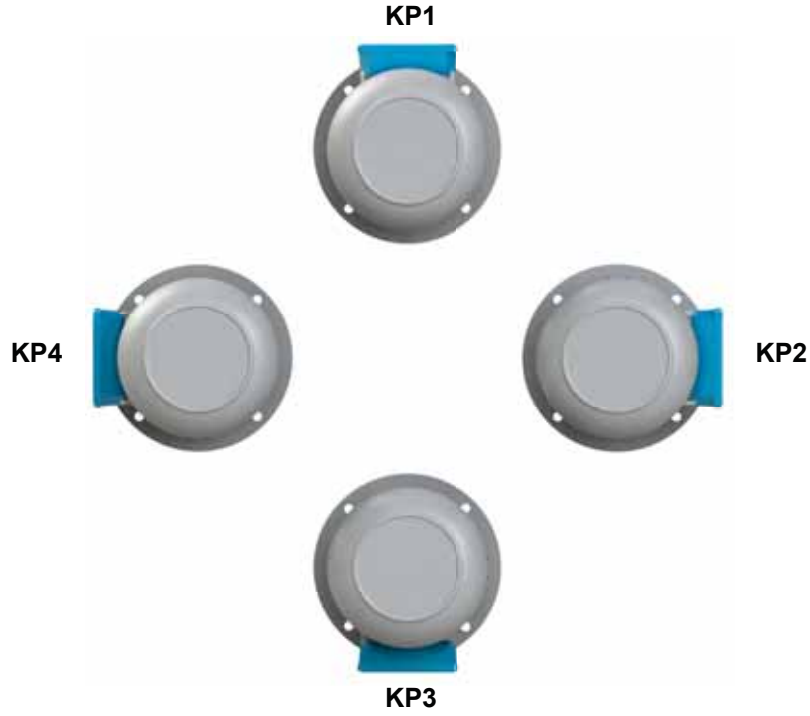
The first column is defining the mounting position of the second gearbox when on the left side. The second column is defining the mounting position of the second gearbox when on the right side.

La première colonne définit la position de montage du second réducteur lorsqu'il est installé sur la gauche du premier réducteur. La seconde colonne définit la position de montage du second réducteur lorsqu'il est installé sur la droite du premier réducteur.

Standart klemens pozisyonu "KP1" dir, aksi belirtilmediği sürece standart pozisyonda yapılır.

The standard mounting position is "KP1", if the mounting position is not defined during the order, the mounting position is always "KP1"

La position de montage standard est "KP1", si aucune position de montage n'est précisée lors de la prise de commande, la position "KP1" sera attribuée par défaut.



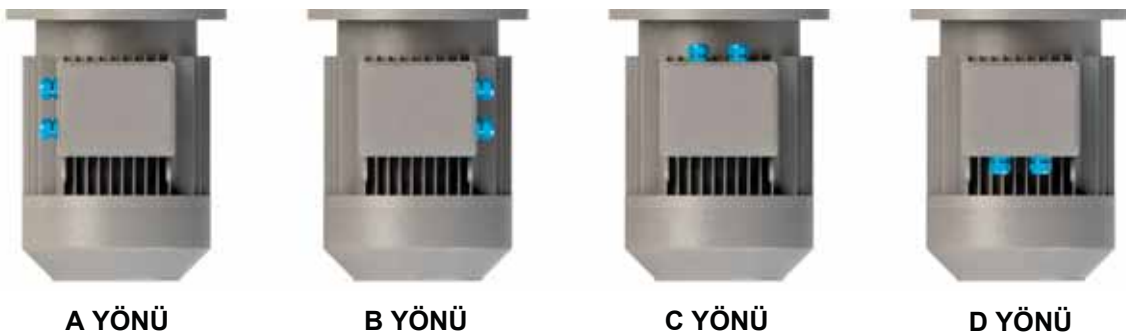
Rakor Yönleri

Cable Entry / Entrée des câbles

Standart rakor yönü "A" dır, belirtilmediği sürece standart yönde yapılır.

The standard position of the cable entry is "A", if the position is not specified during the order, the mounting position will be accepted as "A"

La position standard de l'entrée des câbles est "A", si aucune position de montage n'est précisée lors de la prise de commande, la position "A" sera attribuée par défaut.



A YÖNÜ

B YÖNÜ

C YÖNÜ

D YÖNÜ

1500 d/d Motorlar / Motors / Moteurs

Kod	Güç (KW)	Hız (d/d)	Anma Akımı	Moment (Nm)	Verim		IE Sınıfı	Çalışma Sınıfı
					100%	75%		
Code	Power (KW)	Speed (r.p.m.)	Rated Current	Torque (Nm)	Efficiency		IE Class	Duty Type
					100%	75%		
Code	Puissance (kW)	Vitesse (r.p.m)	Ampère	Couple (Nm)	Efficience		Classe IE	Classe d'utilisation
					100%	75%		
63M4a	0,12	1365	0,41	0,84	57,1	57,1	IE1	S1
63M4b	0,18	1340	0,60	1,28	59,7	59,7	IE1	S1
C63M4	0,25	1350	0,95	1,77	60,7	60,7	IE1	S1
71M4a	0,25	1380	0,81	1,73	61,9	61,8	IE1	S1
71M4b	0,37	1390	1,15	2,54	68,1	68,1	IE1	S1
C71M4	0,55	1385	1,50	3,75	68,6	68,6	IE1	S1
80M4a	0,55	1365	1,60	3,85	69,1	69,0	IE1	S1
80M4b	0,75	1410	2,10	5,08	79,6	79,6	IE2	S1
90S4	1,1	1420	2,60	7,39	82,0	82,0	IE2	S1
90L4	1,5	1430	3,50	10,02	83,0	83,0	IE2	S1
C90L4	2,2	1435	5,00	14,60	84,4	84,5	IE2	S1
100L4a	2,2	1435	5,00	14,60	84,5	84,6	IE2	S1
100L4b	3	1435	6,60	20,00	85,5	85,7	IE2	S1
C100L4	4	1455	8,20	26,30	86,5	86,6	IE2	S1
112M4	4	1455	8,20	26,30	86,7	86,8	IE2	S1
132S4	5,5	1465	11,20	35,90	87,9	88,8	IE2	S1
132M4	7,5	1465	15,40	48,90	89,0	89,1	IE2	S1
C132M4	11	1465	21,00	71,70	89,9	90,0	IE2	S1
160M4	11	1465	21,00	71,70	90,0	90,1	IE2	S1
160L4	15	1465	29,80	97,80	90,6	90,7	IE2	S1
180M4	18,5	1470	34,50	120,00	91,3	91,4	IE2	S1
180L4	22	1470	42,50	143,00	91,7	91,4	IE2	S1

1000 d/d Motorlar / Motors / Moteurs

Kod	Güç (KW)	Hız (d/d)	Anma Akımı	Moment (Nm)	Verim		IE Sınıfı	Çalışma Sınıfı
					100%	75%		
Code	Power (KW)	Speed (r.p.m.)	Rated Current	Torque (Nm)	Efficiency		IE Class	Duty Type
					100%	75%		
Code	Puissance (kW)	Vitesse (r.p.m)	Ampère	Couple (Nm)	Efficience		Classe IE	Classe d'utilisation
					100%	75%		
71M6a	0,18	915	0,61	1,88	63,0	62,9	IE1	S1
71M6b	0,25	915	0,83	2,61	63,8	63,7	IE1	S1
80M6a	0,37	910	1,10	3,88	72,9	72,8	IE1	S1
80M6b	0,55	890	1,50	5,90	70,4	70,3	IE1	S1
90S6	0,75	920	2,00	7,79	75,9	75,9	IE2	S1
90L6	1,1	930	2,90	11,30	78,1	78,1	IE2	S1
100L6	1,5	945	3,60	15,20	79,8	79,7	IE2	S1
112M6	2,2	950	5,40	22,00	81,8	81,7	IE2	S1
132S6	3	960	6,90	29,80	83,3	83,2	IE2	S1
132M6a	4	960	9,00	39,80	84,6	84,5	IE2	S1
132M6b	5,5	960	12,30	54,70	86,0	86,0	IE2	S1
160M6	7,5	960	15,00	74,60	87,2	87,2	IE2	S1
160L6	11	965	22,00	108,90	88,7	88,7	IE2	S1
180L6	15	965	29,00	148,00	89,7	89,7	IE2	S1

* Motor teknik değerleri GAMAK marka motorlar içindir, kullanılan diğer markalar için değişiklik gösterebilir.

		YERLİ MALİ BELGESİ Domestic goods certificate <i>Certificat de produit national</i>
		TÜRK STANDARTLARI ENSTİTÜSÜ KRİTERE UYGUNLUK BELGESİ Certificate of conformity to Turkish standards <i>Certificats de conformité aux standards Turcs</i>
		MARKA YENİLEME BELGESİ Certificate of trademark registration <i>Certificat d'enregistrement de marque</i>
		ISO 9001:2008 YÖNETİM SİSTEMİ ISO 9000:2008 Quality management system <i>ISO 9000:2008 : Systèmes de management de la qualité</i>
		ISO10002:2004 MÜŞTERİ MEMNUNİYETİ YÖNETİM SİSTEMİ ISO 10002:2004 Customer satisfaction management system <i>ISO 10002:2004 Management de la qualité - Satisfaction clients</i>
		OHSAS 18001:2007 İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMİ OHSAS 18001:2007 : Occupational health and safety management <i>OHSAS 18001:2007 : Management de la santé et de la sécurité au travail</i>
		AT UYGUNLUK BEYANI CE Declaration of conformity <i>Déclaration de conformité aux standards CE</i>
		EC TYPE EXAMINATION CERTIFICATE ATEX Certificate <i>Certificat ATEX</i>

Sonsuz Vidalı Motorlu Redüktörler Güç ve Devir Tabloları

Worm Geared Motors - Performances Tables

Moto-réducteurs à roue et vis sans fin avec moteur - Table de performances



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg				
0,12 0,16	0,76	1800	0,90	547	8180	SM	90 S 40 / 63 M 4a	87	18				
	0,57	2400	0,90	695	8180								
	0,91	1500	1,01	553	8300								
	1,1	1200	1,19	472	8300								
	1,5	900	1,51	370	8300	İRSAM İRSFM	82 S 40 / 63 M 4a	105 106	31 33				
	1,8	750	1,74	322	8300								
	2,3	600	2,09	268	8300								
	3,0	450	2,61	215	8300								
	4,6	300	3,77	149	8300								
	6,1	225	4,84	116	8300								
	0,91	1500	0,90	495	7380	SM	75 S 40 / 63 M 4a	85 86	15				
	1,1	1200	1,10	415	7380								
	1,5	900	1,30	335	7380								
	1,8	750	1,50	299	7380								
	2,3	600	1,80	248	7380								
	2,7	500	2,01	188	7380								
	3,4	400	2,50	164	7380								
	4,6	300	3,30	134	7380								
	5,5	250	3,20	120	7380								
	1,5	900	0,80	319	6270					SM	63 S 30 / 63 M 4a	83 84	11
	1,8	750	1,00	285	6270								
	2,3	600	1,10	237	6270								
	2,7	500	1,10	217	6270								
	3,4	400	1,60	156	6270								
	4,6	300	2,10	127	6270								
	5,5	250	2,00	117	6270								
	6,8	200	2,60	97	6270								
	9,1	150	3,40	77	6270								
	2,7	500	0,70	500	4840	SM	50 S 30 / 63 M 4a	81 82	8				
	3,4	400	0,80	400	4840								
	4,6	300	1,20	300	4840								
	5,5	250	1,00	250	4840								
	6,8	200	1,30	200	4788								
	9,1	150	1,80	150	4350								
	14	100	2,60	100	3800								
	14	100	1,30	41	4280					SM	50 / 63 M 4a	73 74	7
	17	80	1,80	35	3973								
	14	100	0,70	39	3118	SM	40 / 63 M 4a	71 72	5,5				
	17	80	1,00	35	2895								
	23	60	1,30	29	2630								
27	50	1,60	26	2475									
34	40	2,10	22	2298									
46	30	2,80	17	2087									
55	25	2,50	16	1964									
68	20	3,30	13	1824									
27	50	0,80	23	1286	SM					30 / 63 M 4a	69 70	4,5	
34	40	1,00	20	1194									
46	30	1,30	16	1085									
55	25	1,60	14	1021									
68	20	1,50	12	948									
91	15	2,00	10	861									
137	10	2,80	7	752	SM	102 İR 43 / 63 M 4b	113 114	52 56					
182	7,5	3,20	5	750									
0,18 0,25	0,95	1409	0,79	1257	11800	İRSAM İRSFM	102 İR 43 / 63 M 4b	113 114	52 56				
	1,2	1091	1,03	974	11800								
	1,6	842	1,33	751	11800								
	2,0	685	1,63	611	11800								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
0,18 0,25	1,2	1200	1,00	629	8180	SM	90 S 40 / 63 M 4b	87	18
	0,93	1500	0,80	735	8180			88	
	1,5	900	0,99	565	7700	İRSAM İRSFM	82 S 40 / 63 M 4b	105 106	32 34
	1,8	750	1,14	492	7700				
	2,2	600	1,37	410	7700				
	3,0	450	1,71	328	7700				
	4,5	300	2,46	227	7700				
	6,0	225	3,17	177	7700				
	1,5	900	0,90	502	7420	SM	75 S 40 / 63 M 4b	85 86	15
	1,8	750	1,00	448	7420				
	2,2	600	1,20	372	7420				
	2,7	500	1,30	282	7420				
	3,4	400	1,70	246	7420				
	4,5	300	2,20	200	7420				
	5,4	250	2,10	180	7420				
	6,7	200	2,80	150	7420				
	2,7	500	0,90	265	6245	SM	63 S 30 / 63 M 4b	83 84	12
	3,4	400	1,10	228	6245				
	4,5	300	1,50	175	6245				
	5,4	250	1,40	171	6110				
	8,9	150	1,90	113	5650				
	13	100	1,90	81	4950	SM	63 / 71 M 6a	75 76	11
	9,2	100	1,40	92	6250				
	11	80	1,70	71	6030				
	15	60	2,30	68	5450				
	18	50	2,70	59	5100				
	23	40	3,40	50	4750				
	4,5	300	0,80	183	4800	SM	50 S 30 / 63 M 4b	81 82	9
	6,7	200	0,90	141	4700				
	8,9	150	1,20	112	4400	SM	50 / 71 M 6a	73 74	8
	11	80	0,90	76	4521				
	15	60	1,20	64	4156				
	18	50	1,40	57	3920				
	23	40	1,80	49	3708				
	31	30	2,40	40	3350				
	37	25	2,10	35	3215				
	46	20	2,80	29	3100				
	13	100	0,90	61	4310	SM	50 / 63 M 4b	73 74	7
	17	80	1,20	53	3944				
	23	40	1,00	48	2662	SM	40 / 71 M 6a	71 72	7
	31	30	1,40	38	2516				
	37	25	1,30	35	2405				
46	20	1,70	29	2200					
61	15	2,20	23	2105					
92	10	3,00	16	2043					
22	60	0,90	43	2545	SM				
27	50	1,10	39	2426					
34	40	1,40	32	2271					
45	30	1,80	26	2116					
54	25	1,70	23	2078					
67	20	2,20	19	2010					
89	15	2,90	15	1987					
45	30	0,90	24	1056		SM	30 / 63 M 4b	69 70	5,5
54	25	1,00	21	1041					
67	20	1,00	18	955					
89	15	1,30	14	920					
134	10	1,90	10	853					
179	7,5	2,40	8	706					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
0,25 0,34	0,70	1984	1,27	1409	16500	İRSAM İRSFM	127 İRS 65 / 71 M 4a	109 110	85 89
	0,86	1600	1,31	1367	16500				
	1,1	1248	1,61	1116	16500				
	1,4	960	2,09	858	16500				
	1,7	800	2,27	789	16500				
	2,2	624	2,80	640	16500	İRSAM İRSFM	127 İR 43 / 71 M 4a	115 116	83 87
	0,92	1503	0,96	1858	16500				
	1,4	1019	1,42	1260	16500				
	1,6	838	1,73	1036	16500				
	2,0	675	2,15	835	16500				
	2,4	568	2,55	703	16500	İRSAM İRSFM	102 İRS 52 / 71 M 4a	107 108	56 60
	3,0	467	3,10	578	16500				
	3,3	416	3,49	514	16500				
	0,92	1500	0,90	1114	10500				
	1,2	1140	1,04	963	10500				
	1,6	870	1,32	757	10500	İRSAM İRSFM	102 İR 43 / 71 M 4a	113 114	53 57
	1,8	750	1,45	691	10500				
	2,4	570	1,78	562	10500				
	3,2	435	2,30	434	10500				
	2,2	633	1,31	762	10500				
	2,6	533	1,56	641	10500	İRSAM İRSFM	102 İR 42 / 71 M 4a	113 114	52 56
	3,1	438	1,89	527	10500				
	3,5	390	2,13	469	10500				
	4,1	337	2,46	406	10500				
	5,3	260	3,19	313	10500				
	7,6	182	4,55	220	10500	SM	90 S 40 / 71 M 4a	87 88	19
	9,4	147	5,65	177	10500				
	2,3	600	1,20	512	8180				
	1,8	750	0,90	598	8180				
	1,5	900	0,80	667	8180				
	1,7	795	0,85	664	7600	İRSAM İRSFM	82 S 40 / 71 M 4a	105 106	33 35
	2,3	600	1,01	553	7600				
	3,1	450	1,26	443	7600				
	4,6	300	1,83	306	7600				
	6,1	225	2,35	238	7600				
	2,8	500	0,90	391	7420	SM	75 S 40 / 71 M 4a	85 86	16
	3,5	400	1,20	342	7420				
	4,6	300	1,60	278	7420				
	5,5	250	1,50	250	7420				
	6,9	200	2,00	209	7420				
9,2	150	2,60	165	6752	İRSAM İRSFM	65 / 71 M 6b	91 92	23 24	
14	100	3,00	116	5813					
11	82	1,76	118	6450					
15	62	2,36	83	6325					
18	50	3,36	82	6123					
23	39	4,64	67	5841	SM	63 / 71 M 6b	75 76	12	
9,2	100	1,00	127	6225					
11	80	1,20	113	6026					
15	60	1,60	94	5410					
18	50	2,00	82	5093					
23	40	2,40	70	4711	SM	63 / 71 M 4a	75 76	11	
14	100	1,30	89	5590					
17	80	1,50	79	5187					
23	60	2,10	64	4705					
28	50	2,50	57	4432					
35	40	3,10	48	4109					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
0,25 0,34	15	62	1,32	89	4252	İRSAM İRSFM	52 / 71 M 6b	89 90	17 19
	18	50	1,68	78	4160				
	24	38	2,52	64	4112				
	32	29	3,41	50	4064				
	37	25	2,52	46	4016				
	48	19	3,60	38	3975				
	63	14,5	4,93	29	3920				
	15	60	0,90	89	4180	SM	50 / 71 M 6b	73 74	9
	18	50	1,00	80	3940				
	23	40	1,30	68	3623				
	31	30	1,70	55	3453				
	37	25	1,50	49	3369				
	46	20	2,00	41	3298				
	61	15	2,90	32	3156				
	22	62	1,76	60	4356	İRSAM İRSFM	52 / 71 M 4a	89 90	15 17
	28	50	2,24	50	4269				
	36	38	3,39	43	4122				
	48	29	4,52	34	4063				
	55	25	3,36	31	4023				
	73	19	4,85	25	3987				
	95	14,5	6,58	20	3850				
	17	80	0,90	74	4264	SM	50 / 71 M 4a	73 74	8
	23	60	1,20	61	4019				
	28	50	1,40	55	3695				
	35	40	1,80	46	3522				
	46	30	2,40	37	3436				
	55	25	2,20	33	3364				
	69	20	2,90	27	3219				
	31	30	1,00	53	2440	SM	40 / 71 M 6b	71 72	8
	37	25	0,90	48	2285				
46	20	1,20	40	2193					
61	15	1,60	31	1945					
92	10	2,20	22	1820					
122	7,5	2,70	17	1785					
35	40	1,00	45	2489	SM				
46	30	1,30	36	2331					
55	25	1,20	32	2237					
69	20	1,60	27	1984					
92	15	2,10	21	1856					
138	10	3,00	15	1821					
69	20	0,70	25	965		SM	30 / C63 M 4	69 70	6
92	15	1,00	20	865					
138	10	1,30	14	795					
184	7,5	1,70	11	744					
0,87	1600	1,00	1793	17300	İRSAM İRSFM				
1,1	1248	1,13	1591	17300					
1,5	928	1,47	1219	17300					
1,7	800	1,61	928	17300					
2,2	624	1,93	723	17300					
2,9	480	2,48	506	17300					
4,5	312	3,54	493	17300					
2,1	675	1,46	1227	17300	İRSAM İRSFM	127 İR 43 / 71 M 4b	115 116	84 90	
2,4	568	1,74	1032	17300					
3,0	467	2,11	849	17300					
3,3	416	2,37	755	17300					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			 kg
0,37 0,5	1,6	870	0,90	1113	9600	İRSAM İRSFM	102 İRS 52 / 71 M 4b	107	57
	1,9	750	0,98	1016	9600			108	61
	2,4	570	1,21	826	9600	İRSAM İRSFM	102 İR 43 / 71 M 4b	113	54
	3,2	435	1,57	638	9600			114	58
	2,2	633	0,89	1120	9600	İRSAM İRSFM	102 İR 42 / 71 M 4b	113	53
	2,6	533	1,06	942	9600			114	57
	3,2	438	1,29	775	9600	İRSAM İRSFM	90 / 80 M 6a	79	20
	3,6	390	1,45	689	9600			80	
	4,1	337	1,68	596	9600	SM	90 S 40 / 71 M 4b	87	20
	5,3	260	2,17	460	9600			88	
	7,6	182	3,10	323	9600	SM	82 S 40 / 71 M 4b	105	34
	9,5	147	3,84	260	9600			106	36
	11	80	1,70	185	8180	İRSAM İRSFM	75 S 40 / 71 M 4b	85	17
	9,0	100	1,30	212	8180			86	
	4,7	300	1,50	402	8180	SM	75 / 80 M 6a	77	17
	3,5	400	1,20	523	8180			78	
	2,8	500	0,90	611	8180	SM	65 / 80 M 6a	91	22
	2,3	600	0,80	757	8180			92	24
	3,1	450	0,86	651	7550	İRSAM İRSFM	63 / 80 M 6a	91	22
	4,6	300	1,24	450	7550			92	24
	6,2	225	1,60	350	7550	İRSAM İRSFM	63 / 71 M 4b	75	14
	3,5	400	0,80	506	7400			76	
	4,6	300	1,10	412	7400	SM	63 / 71 M 4b	75	12
	5,6	250	1,00	370	7400			76	
	7,0	200	1,40	309	7400	SM	63 / 71 M 4b	75	12
	9,3	150	1,70	245	6852			76	
	14	100	2,10	172	6455	SM	63 / 71 M 4b	75	12
	9,1	100	1,00	200	7380			76	
	11	80	1,30	176	7123	SM	63 / 71 M 4b	75	12
	15	60	1,70	146	6350			76	
	18	50	2,00	126	6241	SM	63 / 71 M 4b	75	12
	23	40	2,60	108	6112			76	
	30	30	3,30	87	6053	SM	63 / 71 M 4b	75	12
	36	25	3,10	77	5987			76	
	11	82	1,2	175	6320	İRSAM İRSFM	63 / 71 M 4b	75	12
	15	62	1,6	123	6285			76	
	18	50	2,3	122	6124	İRSAM İRSFM	63 / 71 M 4b	75	12
	23	39	3,1	100	6098			76	
	30	30	3,9	76	6025	İRSAM İRSFM	63 / 71 M 4b	75	12
	36	25	3,2	73	5963			76	
47	20	4,5	58	5951	İRSAM İRSFM	63 / 71 M 4b	75	12	
61	15	5,5	44	5820			76		
93	9,75	6,7	32	5750	İRSAM İRSFM	63 / 71 M 4b	75	12	
11	80	0,80	167	5237			76		
15	60	1,10	139	5156	SM	63 / 71 M 4b	75	12	
18	50	1,30	122	5111			76		
23	40	1,70	104	5091	SM	63 / 71 M 4b	75	12	
30	30	2,10	84	5012			76		
36	25	2,00	75	4863	SM	63 / 71 M 4b	75	12	
46	20	2,70	61	4765			76		
14	100	0,90	131	5595	SM	63 / 71 M 4b	75	12	
17	80	1,00	117	5525			76		
23	60	1,40	95	5123	SM	63 / 71 M 4b	75	12	
28	50	1,70	85	4982			76		
35	40	2,10	72	4713	SM	63 / 71 M 4b	75	12	



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg			
0,37 0,5	15	62	0,89	132	3850	İRSAM İRSFM	52 / 80 M 6a	89 90	19 20		
	18	50	1,14	116	3810						
	24	38	1,70	96	3756						
	31	29	2,30	74	3701						
	36	25	1,70	68	3640						
	48	19	2,43	56	3562						
	63	14,5	3,33	43	3502						
	96	9,5	3,55	31	3427						
	126	7,25	4,89	21	3326						
	30	30	1,20	81	3353						
	0,37 0,5	36	25	1,00	73	3186	SM	50 / 80 M 6a	73 74	12	
		46	20	1,40	60	2987					
		61	15	2,00	47	2740					
		91	10	2,80	33	2417					
		0,37 0,5	22	62	1,19	88	3927	İRSAM İRSFM	52 / 71 M 4b	89 90	16 18
			28	50	1,52	74	3848				
			37	38	2,29	64	3831				
			48	29	3,05	50	3738				
			56	25	2,27	46	3676				
			73	19	3,28	37	3633				
	96		14,5	4,45	29	3607					
	146		9,5	4,77	20	3496					
	192		7,25	6,49	16	3359					
	23		60	0,80	91	3646					
	0,37 0,5	28	50	1,00	81	3465	SM	50 / 71 M 4b	73 74	9	
		35	40	1,20	69	3248					
		46	30	1,60	55	2980					
		56	25	1,50	49	2831					
70		20	1,90	40	2653						
93		15	2,60	31	2433						
0,37 0,5		46	30	0,90	54	2108	SM	40 / 71 M 4b	71 72	8	
		56	25	0,80	48	2003					
		70	20	1,10	40	1879					
		93	15	1,40	31	1723					
	139	10	2,10	21	1519						
	185	7,5	2,50	16	1394						
0,55 0,75	1,1	1248	0,74	2409	12980	İRSAM İRSFM	127 İRS 65 / 80 M 4a	109 110	92 98		
	1,4	960	0,94	1909	12980						
	1,7	800	1,06	1685	12980						
	2,2	624	1,28	1405	12980						
	2,9	480	1,64	1095	12980						
	4,4	312	2,34	766	12980						
	5,8	240	3,00	597	12980						
	2,5	550	1,19	1511	12980						
	0,55 0,75	2,9	482	135,00	1324	12980	İRSAM İRSFM	127 İR 52 / 80 M 4a	117 118	91 97	
		3,7	378	1,72	1039	12980					
		4,6	303	2,15	833	12980					
		2,4	570	0,80	1250	8470					
	0,55 0,75	3,2	435	1,03	966	8470	İRSAM İRSFM	102 İRS 52 / 80 M 4a	107 108	59 63	
		4,9	285	1,60	625	8470					
		6,4	218	2,07	483	8470					
		5,3	260	1,43	696	8470					
	0,55 0,75	7,6	182	2,05	488	8470	İRSAM İRSFM	102 İR 42 / 80 M 4a	113 114	54 58	
		9,4	147	2,54	394	8470					
		18	80	1,50	189	6783					
		14	100	1,20	221	7140					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			 kg					
0,55	18	50	2,00	198	6719	SM	90 / 80 M 6b	79 80	22					
	15	60	1,60	224	7140									
	11	80	1,10	275	7859									
	9,0	100	0,90	315	8180									
	14	62	2,11	205	7900	İRSAM İRSFM	82 / 80 M 6b	93 94	32 36					
	17	53	2,80	206	7850									
	22	40	3,63	151	7721									
	30	30	5,36	122	7516									
	11	80	0,80	262	7033	SM	75 / 80 M 6b	77 78	18					
	15	60	1,10	217	6326									
	18	50	1,40	187	5896									
	22	40	1,70	161	5420									
	14	100	0,90	210	6538	SM	75 / 80 M 4a	77 78	16					
	17	80	1,10	183	6010									
	23	60	1,40	149	5407									
	28	50	1,70	131	5039									
	35	40	2,20	110	4633									
	11	82	0,80	266,2	5715					İRSAM İRSFM	65 / 80 M 6b	91 92	27 28	
	14	62	1,07	186,6	5682									
	18	50	1,53	185,9	5601									
	23	39	2,11	152	5496									
	30	30	2,60	115	5326									
	15	60	0,70	207	5257	SM	63 / 80 M 6b	75 76	16					
	18	50	0,90	181	4995									
	22	40	1,10	154	4682									
	30	30	1,40	124	4296									
	0,75	17	82	1,09	174	5823	İRSAM İRSFM	65 / 80 M 4a	91 92	25 26				
		22	62	1,40	127	5741								
		28	50	2,06	123	5703								
		36	39	2,81	101	5620								
		46	30	3,38	77	5573								
		55	25	2,91	71	5403								
		71	20	4,05	58	5362								
		92	15	4,78	44	5250								
		142	9,75	6,14	31	5123								
		17	80	0,70	174	4808					SM	63 / 80 M 4a	75 76	13
		23	60	0,90	142	4410								
		28	50	1,10	126	4189								
	35	40	1,40	107	3926									
	46	30	1,90	84	3601									
	55	25	1,80	74	3421									
	69	20	2,40	62	3208									
92	15	3,20	47	2944										
23	38	1,14	146	3305	İRSAM İRSFM	52 / 80 M 6b	89 90	20 21						
31	29	1,55	113	3245										
36	25	1,15	103	3200										
47	19	1,64	85	3158										
61	14,5	2,24	66	3091										
94	9,5	2,39	47	2980										
123	7,25	3,29	32	2880	SM	50 / 80 M 6b	73 74	13						
30	30	0,80	121	3453										
36	25	0,70	108	3218										
45	20	0,90	90	2958										
59	15	1,30	70	2661										



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg					
0,55 0,75	22	62	0,80	132	3320	İRSAM İRSFM	52 / 80 M 4a	89 90	19 20				
	28	50	1,02	110	3245								
	36	38	1,54	95	3215								
	48	29	2,05	75	3158								
	55	25	1,53	68	3112								
	73	19	2,20	55	2980								
	96	14,5	2,99	43	2885								
	146	9,5	3,21	30	2756								
	191	7,25	4,37	23	2641								
	46	30	1,10	82	2703	SM	50 / 80 M 4a	73 74	11				
	55	25	1,00	72	2568								
	69	20	1,30	60	2407								
	92	15	1,70	47	2208								
	139	10	2,40	33	1948								
	185	7,5	3,10	25	1787								
	69	20	0,70	59	1754	SM	40 / C71 M 4	71 72	9,5				
	92	15	0,90	47	1609								
	139	10	1,40	32	1419								
185	7,5	1,70	24	1302									
0,75 1	0,89	1590	0,82	4095	21500	İRSAM İRSFM	162 İRS 82 / 80 M 4b	111 112	199 222				
	1,2	1200	1,04	3233	21500								
	1,6	900	1,38	2425	21500								
	1,8	795	1,42	2363	21500								
	2,4	600	1,81	1854	21500								
	2,3	624	0,97	1855	11610					İRSAM İRSFM	127 İRS 65 / 80 M 4b	109 110	93 99
	2,9	480	1,24	1445	11610								
	4,5	312	1,77	1012	11610								
	5,9	240	2,28	788	11610								
	2,6	550	0,90	1995	11610								
	2,9	482	1,03	1748	11610	İRSAM İRSFM	127 İR 52 / 80 M 4b	117 118	92 98				
	3,7	378	1,31	1372	11610								
	4,7	303	1,63	1100	11610								
	6,1	229	2,15	833	11610								
	7,6	186	2,65	676	11610								
	3,2	435	0,78	1275	8100					İRSAM İRSFM	102 İRS 52 / 80 M 4b	107 108	60 64
	4,9	285	1,21	825	8100								
	6,5	218	1,57	638	8100								
	9,9	143	1,76	457	8100								
	157	9	2,28	353	8100								
	28	50	1,80	184	5799	SM	90 / 80 M 4b	79 80	23				
	23	60	1,50	212	6163								
	18	80	1,10	258	6783								
	14	100	0,90	302	7306								
	30	30	2,60	179	5667					SM	90 / 90 S 6a	79 80	24
	23	40	1,80	226	6238								
	18	50	1,40	271	6719								
	15	60	1,10	306	7140								
	15	62	1,55	270	7700								
	17	53	2,05	272	7700	İRSAM İRSFM	82 / 90 S 6a	93 94	38 40				
	23	40	2,67	199	7700								
	31	30	3,93	161	7700								
	35	26,5	2,93	159	7700								
	46	20	3,73	121	7700								
	15	60	0,80	296	6088					SM	75 / 90 S 6a	77 78	20
	18	50	1,00	255	5784								
	23	40	1,30	220	5420								
	31	30	1,60	177	4973								
	37	25	1,60	155	4725								
	46	20	2,10	127	4430								
	61	15	2,70	99	4065								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
0,75 1	18	80	0,80	250	5783	SM	75 / 80 M 4b	77 78	18
	24	60	1,10	203	5304				
	28	50	1,30	179	5039				
	35	40	1,60	149	4723				
	47	30	2,10	118	4334				
	56	25	2,10	104	4119				
	71	20	2,80	85	3862				
	18	50	1,12	245	5423	İRSAM İRSFM	65 / 90 S 6a	91 92	28 29
	24	39	1,55	200	5263				
	31	30	1,91	152	5123				
	37	25	1,60	146	5050				
	47	19,5	2,24	117	4950				
	61	15	2,71	89	4812				
	94	9,75	3,30	64	4756				
	23	40	0,80	210	4506	SM	63 / 90 S 6a	75 76	17
	31	30	1,00	170	4132				
	37	25	1,00	151	3927				
	46	20	1,30	124	3681				
	61	15	1,70	98	3376				
	92	10	2,30	68	2979				
	123	7,5	2,90	53	2734				
	17	82	0,80	233	5127	İRSAM İRSFM	65 / 80 M 4b	91 92	26 27
	23	62	1,03	170	5296				
	28	50	1,51	165	5200				
	36	39	2,06	135	5055				
	47	30	2,48	104	4955				
	56	25	2,14	95	4957				
	72	19,5	2,97	77	4856				
	94	15	3,51	59	4744				
	145	9,75	4,50	42	4701				
	188	7,5	5,49	32	4635				
	28	50	0,80	171	4189	SM	63 / 80 M 4b	75 76	15
	35	40	1,00	145	3926				
	47	30	1,40	115	3601				
	56	25	1,30	101	3421				
	71	20	1,70	84	3208				
94	15	2,30	64	2944					
28	50	0,75	147	2608	İRSAM İRSFM	52 / 80 M 4b	89 90	20 21	
37	38	1,13	127	2554					
49	29	1,51	100	2501					
56	25	1,12	91	2478					
74	19	1,62	74	2435					
97	14,5	2,19	57	2397					
148	9,5	2,35	41	2359					
194	7,25	3,20	31	2321					
47	30	0,80	112	2703	SM	50 / 80 M 4b	73 74	12	
56	25	0,70	99	2568					
71	20	1,00	82	2407					
94	15	1,30	64	2208					
141	10	1,80	45	1948					
188	7,5	2,30	34	1787					
1,1 1,5	1,6	900	0,90	3739	20700	İRSAM İRSFM	162 İRS 82 / 90 S 4a	111 112	201 224
	1,8	795	0,96	3486	20700				
	2,3	600	1,24	2700	20700				
	3,1	450	1,59	2103	20700				
	4,7	300	2,28	1471	20700				



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
1,1 1,5	1,9	755	0,82	4094	20700	İRSAM İRSFM	162 İR 63 / 90 S 4a	119	206
	2,2	645	0,96	3498	20700			120	209
	2,6	545	1,13	2958	20700	İRSAM İRSFM	127 İRS 65 / 90 S 4a	109	96
	2,9	480	0,85	2105	10800			110	102
	4,5	312	12,00	1491	10800	İRSAM İRSFM	127 İR 52 / 90 S 4a	117	95
	5,9	240	1,56	1147	10800			118	101
	3,8	378	0,90	1997	10800	İRSAM İRSFM	102 / 90 S 4a	95	54
	4,8	303	1,12	1601	10800			96	58
	6,3	229	1,48	1213	10800	SM	90 / 90 L 6b	79	26
	7,7	186	1,82	984	10800			80	
	8,9	161	2,11	851	10800	SM	90 / 90 S 4a	79	25
	11	130	2,61	687	10800			80	
	11	82	1,44	519	7900	İRSAM İRSFM	82 / 90 L 6b	93	40
	15	63	1,86	399	7900			94	42
	19	50	2,69	378	7900	İRSAM İRSFM	82 / 90 S 4a	93	38
	36	25	1,60	231	5333			94	40
	30	30	1,80	263	5667	İRSAM İRSFM	82 / 90 L 6b	93	40
	23	40	1,20	331	6238			94	42
	18	50	1,00	397	6719	İRSAM İRSFM	82 / 90 S 4a	93	38
	15	60	0,80	448	7140			94	40
	35	40	1,60	225	5383	SM	75 / 90 L 6b	77	21
	28	50	1,30	270	5799			78	
	23	60	1,00	311	6163	SM	75 / 90 S 4a	77	20
	15	62	1,05	392	6852			78	
	18	53	1,40	395	6700	İRSAM İRSFM	65 / 90 L 6b	91	26
	23	40	1,82	289	6623			92	28
	31	30	2,68	234	6496	İRSAM İRSFM	65 / 90 L 6b	91	26
	35	27	2,00	230	6382			92	28
	47	20	2,54	176	6267	SM	75 / 90 S 4a	77	20
	62	15	3,91	134	6153			78	
	93	10	3,95	94	6038	SM	75 / 90 S 4a	77	20
	23	62	1,36	275	6623			78	
	27	53	2,09	267	6470	SM	75 / 90 S 4a	77	20
	36	40	2,34	198	6382			78	
	47	30	3,46	160	6247	SM	75 / 90 S 4a	77	20
	54	27	2,65	149	6153			78	
	71	20	3,29	115	6057	SM	75 / 90 S 4a	77	20
	95	15	5,00	90	5960			78	
	142	10	5,10	63	5800	SM	75 / 90 S 4a	77	20
	23	40	0,90	322	5318			78	
	31	30	1,10	259	4878	SM	75 / 90 S 4a	77	20
	37	25	1,10	228	4635			78	
	47	20	1,40	187	4344	SM	75 / 90 S 4a	77	20
	62	15	1,80	145	3985			78	
93	10	2,30	100	3516	SM	75 / 90 S 4a	77	20	
124	7,5	2,80	77	3195			78		
24	60	0,70	297	5254	SM	75 / 90 S 4a	77	20	
28	50	0,90	263	4991			78		
36	40	1,10	219	4678	SM	75 / 90 S 4a	77	20	
47	30	1,40	173	4292			78		
57	25	1,40	152	4078	SM	75 / 90 S 4a	77	20	
71	20	1,90	125	3824			78		
95	15	2,40	97	3474	SM	75 / 90 S 4a	77	20	
24	39	1,06	291	4865			78		
31	30	1,30	220	4801	SM	75 / 90 S 4a	77	20	
37	25	1,09	212	4723			78		
48	19,5	1,53	170	4650	SM	75 / 90 S 4a	77	20	
62	15	1,85	129	4555			78		
95	9,75	2,25	93	4489	SM	75 / 90 S 4a	77	20	
124	7,5	2,90	71	4321			78		





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			 kg
1,1 1,5	47	20	0,90	182	3791	SM	63 / 90 L 6b		20
	62	15	1,20	144	3444				
	93	10	1,50	99	3009				
	124	7,5	2,00	77	2734				
	28	50	1,03	240	4910	İRSAM İRSFM	65 / 90 S 4a		26 28
	36	39	1,41	196	4801				
	47	30	1,69	151	4723				
	57	25	1,46	139	4650				
	73	19,5	2,02	113	4555				
	95	15	2,39	87	4489				
	146	9,75	3,07	61	4321	SM	63 / 90 S 4a		17
	189	7,5	3,74	47	4259				
	47	30	0,90	169	3533				
	57	25	0,90	148	3356				
	71	20	1,20	123	3146				
	95	15	1,60	95	2886				
142	10	2,10	65	2546	İRSAM İRSFM	162 İRS 82 / 90 L 4a		203 226	
189	7,5	2,60	50	2336					
1,5 2	2,4	600	0,99	3376	19950	İRSAM İRSFM	162 İRS 82 / 90 L 4a		111 112
	3,2	450	1,28	2629	19950				
	4,8	300	1,82	1839	19950	İRSAM İRSFM	127 İR 52 / 90 L 4a		97 103
	4,7	303	0,83	1475	9650				
	6,2	229	1,09	1117	9650				
	7,7	186	1,34	907	9650				
	8,9	161	1,56	784	9650				
	11	130	1,93	632	9650				
	11	83	1,80	705	9650	İRSAM İRSFM	127 / 100 L 6a		91 95
	15	65	2,33	581	9650				
	18	52	3,47	544	9650				
	24	40	4,67	437	9650				
	12	82	1,05	696	7750	İRSAM İRSFM	102 / 100 L 6a		63 67
	15	63	1,37	535	7750				
	19	50	1,97	508	7750				
	24	40	2,61	418	7720				
	32	30	3,50	318	7690				
	38	25	2,87	296	7520				
	47	20	3,80	240	7300	SM	90 / 100 L 6a		31
	90	10	2,70	138	3929				
	60	15	2,10	201	4498				
	45	20	1,50	258	4951				
	36	25	1,20	314	5333				
	30	30	1,30	358	5667				
	70	20	2,10	172	4273	SM	90 / 90 L 4a		28
	56	25	1,60	210	4603				
	47	30	1,70	239	4891				
	35	40	1,20	307	5383				
	28	50	0,90	368	5799				
	23	60	0,80	424	6163				
	18	53	1,03	530	6650	İRSAM İRSFM	82 / 100 L 6a		44 46
	24	40	1,33	388	6450				
32	30	1,97	314	6420					
36	26,5	1,47	309	6380					
47	20	1,86	236	6190					
63	15	2,87	180	6050					
95	10	2,90	126	5960					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
1,5 2	23	62	1,00	373	6450	İRSAM İRSFM	82 / 90 L 4a	93 94	40 42
	27	53	1,53	361	6420				
	36	40	1,71	268	6380				
	48	30	2,53	216	6190				
	54	26,5	1,95	202	6050				
	72	20	2,41	156	5960				
	95	15	3,67	122	5800				
	143	10	3,74	85	5680				
	47	20	1,10	255	4181	SM	75 / 100 L 6a	77 78	29
	63	15	1,30	198	3835				
	95	10	1,70	137	3382				
	126	7,5	2,00	105	3103				
	36	40	0,80	299	4547	SM	75 / 90 L 4a	77 78	22
	48	30	1,00	236	4171				
	57	25	1,00	207	3962				
	72	20	1,40	170	3713				
	95	15	1,70	132	3407				
	143	10	2,20	90	3005				
	191	7,5	2,70	68	2757				
	29	50	0,75	325,6	4817				
37	39	1,03	265,7	4707					
48	30	1,24	204,4	4676					
57	25	1,07	187,8	4559					
73	19,5	1,48	152,4	4466					
95	15	1,75	117,2	4445					
147	9,75	2,25	83,0	4195					
191	7,5	2,74	63,9	4112					
72	20	1,10	255	4181	SM	63 / 90 L 4a	75 76	19	
95	15	1,30	198	3835					
143	10	1,70	137	3382					
191	7,5	2,00	105	3103					
2,2 3	3,9	366	0,91	3627	19800	İRSAM İRSFM	162 İR 62 / 100 L 4a	119 120	207 230
	4,8	302	1,10	2993	19800				
	5,6	255	1,30	2530	19800				
	6,8	213	1,56	2110	19800				
	8,0	180	1,85	1781	19800				
	9,0	160	2,08	1582	19800				
	11	135	2,47	1335	19800				
	13	111	2,99	1103	19800				
	11	87	2,14	1116	19800	İRSAM İRSFM	162 / 112 M 6a	99 100	190 213
	18	54	4,27	836	19800				
	23	42	5,54	659	19800				
	11	83	1,23	1028	9500				
	15	65	1,59	848	9500	İRSAM İRSFM	127 / 112 M 6a	97 98	100 104
	18	52	2,36	794	9500				
	24	40	3,18	637	9420				
	30	32	3,96	531	9300				
	17	83	1,58	753	9500	İRSAM İRSFM	127 / 100 L 4a	97 98	88 92
	22	65	2,00	619	9450				
	28	52	3,05	548	9300				
	36	40	4,00	433	9220				
	18	82	1,00	720	7730	İRSAM İRSFM	102 / 100 L 4a	95 96	59 63
	23	63	1,20	572	7620				
	29	50	1,75	505	7590				
	36	40	2,27	422	7540				
48	30	3,00	325	7420					
57	25	2,52	289	7360					
72	20	3,32	237	7250					
96	15	4,36	180	7100					
144	10	4,87	126	7030					
191	7,5	6,36	96	6950					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg					
2,2 3	187	7,5	2,90	101	3081	SM	90 / 100 L 4a	79 80	30				
	140	10	2,30	134	3391								
	93	15	1,90	194	3882								
	70	20	1,40	252	4273								
	56	25	1,10	308	4603								
	47	30	1,20	351	4891								
	120	7,5	2,20	156	3570	SM	90 / 112 M 6a	79 80	39				
	90	10	1,80	203	3929								
	60	15	1,40	294	4498								
	45	20	1,00	378	4951								
	27	53	1,04	528	6320								
	36	40	1,17	392	6250								
	3	48	30	1,73	316	6125	İRSAM İRSFM	82 / 100 L 4a	93 94	43 45			
		54	26,5	1,33	295	6050							
		72	20	1,64	228	5975							
		96	15	2,50	178	5950							
		144	10	2,55	124	5900							
		72	20	0,90	249	3609					SM	75 / 100 L 4a	77 78
96		15	1,20	194	3310								
144		10	1,50	132	2919								
191		7,5	1,80	100	2678								
5,1		280	1,10	4150	28460	İRSAM İRSFM	201 İR 72 / 100 L 4b	101 102	355 367				
6,4		224	1,40	3323	28460								
7,9		182	1,70	2700	28460								
9,6	150	2,00	2220	28460									
12	122	2,50	1801	28460									
14	100	3,10	1477	28460									
3 4	11	87	1,57	1506	19800	İRSAM İRSFM	162 / 132 S 6b	99 100	201 224				
	18	54	3,13	1128	19800								
	23	42	4,07	890	19800								
	32	30	5,73	663	19800								
	17	83	1,16	1027	9500					İRSAM İRSFM	127 / 100 L 4b	97 98	91 95
	22	65	1,47	844	9400								
	28	52	2,23	747	9320								
	36	40	2,93	591	9240								
	45	32	3,60	486	9520								
	55	26	3,23	420	9360								
	72	20	4,27	327	9210								
	90	16	5,40	268	9180								
	110	13	4,73	223	8930								
	23	63	0,88	780	7620	İRSAM İRSFM	102 / 100 L 4b	95 96	62 66				
	29	50	1,28	689	7590								
	36	40	1,67	575	7480								
	48	30	2,20	443	7620								
	57	25	1,85	394	7530								
	72	20	2,43	323	7450								
	96	15	3,20	246	7360								
144	10	3,57	172	7290									
191	7,5	4,67	130	7130									
187	7,5	2,10	138	3081	SM					90 / 100 L 4b	79 80	36	
140	10	1,70	182	3391									
93	15	1,40	264	3882									
70	20	1,00	344	4273									
56	25	0,80	420	4603									
47	30	0,90	479	4891									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
3 4	36	40	0,86	535	6250	İRSAM İRSFM	82 / 100 L 4b	93 94	45 47
	48	30	1,27	431	6125				
	54	26,5	0,97	402	6050				
	72	20	1,21	311	5975				
	96	15	1,83	243	5950				
	144	10	1,87	170	5900				
	191	7,5	2,70	129	5860				
4 5,5	5,2	280	0,83	5457	28460	İRSAM İRSFM	201 İR 72 / 112 M 4b	121 122	342 374
	6,5	224	1,04	4369	28460				
	8,0	182	1,28	3550	28460				
	9,8	150	1,55	2918	28460				
	12	122	1,91	2369	28460				
	15	100	2,33	1941	28460				
	12	83	2,25	2081	28460	İRSAM İRSFM	201 / 132 M 6a	101 102	344 376
	15	63	3,27	1780	28460				
	17	55	4,00	1620	28460				
	24	40	4,31	1210	28460	İRSAM İRSFM	162 / 132 M 6a	99 100	209 232
	11	87	1,18	2008	19800				
	18	54	2,35	1504	19800				
	23	42	3,05	1187	19800				
	32	30	4,30	883	19800	İRSAM İRSFM	127 / 112 M 4b	97 98	100 104
	46	21	4,38	669	19800				
	18	83	0,87	1351	9406				
	22	65	1,10	1109	9216				
	28	52	1,67	983	9228				
	36	40	2,20	777	9059				
	45	32	2,70	639	9333	İRSAM İRSFM	102 / 112 M 4b	95 96	66 69
	56	26	2,42	553	9267				
	73	20	3,20	431	8942				
	91	16	4,05	353	9089				
	112	13	3,55	294	9020				
	29	50	0,96	906	7545				
	36	40	1,25	756	7441				
	49	30	1,65	583	7406				
	58	25	1,39	519	7471				
	73	20	1,83	425	7382				
	97	15	2,40	323	7376	SM	90 / 112 M 4b	79 80	42
	146	10	2,68	226	7146				
	194	7,5	3,50	171	7218				
	187	7,5	1,60	184	3081				
140	10	1,30	243	3391	İRSAM İRSFM	82 / C100 L 4	93 94	52 54	
93	15	1,00	352	3882					
70	20	0,80	458	4273					
48	30	0,95	575	6127					
54	26,5	0,73	536	6005					
72	20	0,90	415	5990					
96	15	1,38	323	5858					
144	10	1,40	226	5833					
191	7,5	2,02	172	5842	İRSAM İRSFM	201 / 132 M 6b	101 102	351 383	
12	83	1,68	2909	28100					
15	63	2,22	2246	28100					
17	55	2,93	2193	28100					
24	40	4,28	1647	28100					
11	87	0,85	2761	19800		İRSAM İRSFM	162 / 132 M 6b	99 100	216 251
18	54	1,71	2068	19800					
23	42	2,22	1632	19800					
32	30	3,13	1215	19800					
46	21	3,18	919	19800					
64	15	4,55	681	19800					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg								
5,5 7,5	17	87	1,07	1996	19800	İRSAM İRSFM	162 / 132 S 4c	99 100	202 227							
	27	54	2,16	1433	19800											
	35	42	2,75	1129	19800											
	49	30	3,82	839	19800											
	54	27	3,16	794	19800											
	70	21	3,95	625	19800											
	98	15	5,55	457	19800	İRSAM İRSFM	127 / C112 M 4	97 98	102 106							
	23	65	0,80	1515	9560											
	28	52	1,22	1342	9520											
	37	40	1,60	1061	9410											
	46	32	1,96	872	9630											
	56	26	1,76	755	9350											
	73	20	2,33	588	9260											
	92	16	2,95	482	9450											
113	13	2,58	401	9210	İRSAM İRSFM	201 / 160 M 6b	101 102	415 447								
147	10	3,42	312	8960												
12	83	1,20	3901	27500												
15	63	1,75	3337	27500												
17	55	2,13	3037	27500												
24	40	2,30	2268	27500												
18	54	1,25	2820	19800					İRSAM İRSFM	162 / 160 M 6b	99 100	230 303				
23	42	1,63	2225	19800												
32	30	2,29	1656	19800												
46	21	2,33	1253	19800												
64	15	3,33	929	19800												
17	87	0,79	2722	19800									İRSAM İRSFM	162 / 132 M 4b	99 100	212 235
27	54	1,59	1954	19800												
35	42	2,01	1540	19800												
49	30	2,80	1144	19800												
70	21	2,89	852	19800												
98	15	4,07	623	19800	İRSAM İRSFM	127 / 132 M 4b	97 98	119 123								
37	40	1,17	1447	9373												
46	32	1,44	1189	9333												
56	26	1,29	1030	9317												
73	20	1,71	802	9441												
92	16	2,16	657	9167												
113	13	1,89	547	9168												
147	10	2,51	425	9175												
183	8	3,17	344	9119	İRSAM İRSFM	250 / 160 L 6b	103 104	626 656								
19	52	2,09	4492	33000												
24	40	3,55	3547	33000												
37	26	5,73	2910	33000												
48	20	6,20	1962	33000												
15	63	1,00	4526	25850					İRSAM İRSFM	201 / 160 L 6b	101 102	430 462				
18	55	1,36	4251	25850												
24	40	2,00	3222	25850												
32	30	2,09	2482	25850												
18	54	0,85	4115	23250									İRSAM İRSFM	162 / 160 L 6b	99 100	296 319
23	42	1,11	3246	23250												
32	30	1,56	2417	23250												
46	21	1,59	1829	23250												
64	15	2,27	1355	23250												
27	54	1,08	2865	23250	İRSAM İRSFM	162 / 160 M 4b	99 100	273 296								
35	42	1,37	2259	23250												
49	30	1,91	1678	23250												
70	21	1,97	1250	23250												
98	15	2,77	914	23250												
140	10,5	2,86	625	23250												
195	7,5	4,00	479	23250												



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
11 15	37	40	0,80	2123	9465	İRSAM İRSFM	127 / C132 M 4	97 98	124 132
	46	32	0,98	1744	9333				
	56	26	0,88	1510	9317				
	73	20	1,16	1176	9441				
	92	16	1,47	964	9167				
	113	13	1,29	802	9168				
	147	10	1,71	624	9175				
	183	8	2,16	505	9119				
15 20	15	63	1,27	5424	32700	İRSAM İRSFM	250 / 180 L 6a	103 104	684 704
	19	52	2,00	5712	32700				
	24	40	2,73	4513	32700				
	31	31	2,93	3589	32700				
	37	26	3,33	3203	32700				
	48	20	4,00	2494	32700				
	28	52	2,47	3966	32700	İRSAM İRSFM	250 / 160 L 4a	103 104	637 667
	37	40	3,27	3090	32700				
	47	31	3,93	2395	32700				
	56	26	3,53	2161	32700				
	73	20	4,80	1682	32700				
	95	15,5	5,73	1303	32700				
	147	10	6,93	870	32700	İRSAM İRSFM	201 / 160 L 4a	101 102	442 474
	27	55	1,33	4033	25100				
	37	40	1,88	3051	25100				
	49	30	1,95	2317	25100				
	53	27,5	2,58	2232	25100				
	73	20	2,79	1662	25100				
	98	15	2,79	1261	25100				
	107	13,75	3,77	1183	25100				
147	10	4,05	870	25100	İRSAM İRSFM	162 / 160 L 4a	99 100	298 318	
195	7,5	5,51	653	25100					
35	42	1,01	3114	22400					
49	30	1,42	2312	22400					
70	21	1,48	1723	22400					
98	15	2,06	1260	22400					
140	10,5	2,11	892	22400	İRSAM İRSFM	250 / 180 M 4b	103 104	657 687	
195	7,5	2,95	681	22400					
28	52	2,00	4875	32450					
37	40	2,65	3798	32450					
47	31	3,19	2943	32450					
57	26	2,86	2656	32450					
74	20	3,89	2067	32450					
95	15,5	4,65	1602	32450					
147	10	5,62	1070	32450					
190	7,75	6,76	829	32450					
27	55	1,06	4958	24650					
37	40	1,54	3750	24650					
49	30	2,04	2848	24650					
53	28	1,52	2743	24650					
74	20	2,23	2043	24650					
98	15	2,99	1550	24650					
107	13,75	2,21	1454	24650					
147	10	3,25	1070	24650					
196	7,5	4,35	802	24650					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			 kg
18,5 25	35	42	0,82	3786	21200	İRSAM İRSFM	162 / C160 L 4	99 100	285 305
	49	30	1,14	2812	21200				
	70	21	1,17	2095	21200				
	98	15	1,65	1532	21200				
	140	10,5	1,70	1047	21200				
	196	7,5	2,38	802	21200				
22 30	28	52	1,68	5797	32200	İRSAM İRSFM	250 / 180 L 4b	103 104	682 702
	37	40	2,23	4516	32200				
	47	31	2,68	3500	32200				
	74	20	3,27	2458	32200				
	95	15,5	3,91	1905	32200				
	147	10	4,73	1272	32200				
	190	7,75	5,68	986	32200				

Sonsuz Vidalı Redüktörler Güç ve Devir Tabloları

Worm Gear Unit - Performances Tables

Réducteurs à roue et vis sans fin - Table de performances



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n ₁ =1400rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
13-21 Nm	0,05	18	80	48	13	190	1250	S	30	69 70	1,2
	0,07	23	60	54	15	190	1250				
	0,09	28	50	56	17	190	1250				
	0,11	35	40	60	18	190	1250				
	0,13	47	30	66	18	190	1250				
	0,17	56	25	71	21	190	1250				
	0,18	70	20	75	18	190	1250				
	0,23	93	15	78	18	190	1250				
	0,31	140	10	80	17	190	1250				
0,40	187	7,5	83	17	190	1250					
28-42 Nm	0,09	14	100	45	28	330	2100	S	40	71 72	2,1
	0,12	18	80	49	32	330	2100				
	0,14	23	60	55	32	330	2100				
	0,18	28	50	61	37	330	2100				
	0,22	35	40	65	39	330	2100				
	0,30	47	30	68	42	330	2100				
	0,30	56	25	71	36	330	2100				
	0,35	70	20	74	35	330	2100				
	0,46	93	15	79	37	330	2100				
	0,66	140	10	82	37	330	2100				
0,85	187	7,5	85	37	330	2100					
50-71 Nm	0,16	14	100	46	50	450	3000	S	50	73 74	3,3
	0,20	18	80	53	58	450	3000				
	0,26	23	60	57	61	450	3000				
	0,31	28	50	61	64	450	3000				
	0,40	35	40	65	71	450	3000				
	0,50	47	30	68	70	450	3000				
	0,50	56	25	71	61	450	3000				
	0,64	70	20	74	65	450	3000				
	0,85	93	15	79	69	450	3000				
	1,11	140	10	82	62	450	3000				
1,54	187	7,5	85	67	450	3000					
96-152 Nm	0,44	23	62	56	104	490	3400	İRSA İRSF	52	89 90	9 11
	0,56	28	50	58	111	490	3400				
	0,85	37	38	66	145	490	3400				
	1,13	48	29	68	152	490	3400				
	0,84	56	25	72	103	490	3400				
	1,21	74	19	77	121	490	3400				
	1,64	97	14,5	78	127	490	3400				
	1,77	147	9,5	84	96	490	3400				
2,4	193	7,25	85	101	490	3400					
114-145 Nm	0,32	14	100	52	114	650	4200	S	63	75 76	6
	0,38	18	80	58	120	650	4200				
	0,50	23	60	60	123	650	4200				
	0,60	28	50	62	127	650	4200				
	0,75	35	40	67	137	650	4200				
	1,00	47	30	71	145	650	4200				
	0,99	56	25	74	125	650	4200				
	1,20	70	20	78	128	650	4200				
	1,60	93	15	80	131	650	4200				
	2,20	140	10	82	123	650	4200				
2,81	187	7,5	85	122	650	4200					
176-280 Nm	0,6	17	82	56	188	670	4900	İRSA İRSF	65	91 92	14 15
	0,77	23	62	54	176	670	4900				
	1,13	28	50	65	251	670	4900				
	1,55	36	39	68	280	670	4900				
	1,86	47	30	68	259	670	4900				



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n ₁ =1400rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type	Tip Type	kg	
	İRSF	65	91 92	14 15							
176-280 Nm	1,6	56	25	75	205	670	4900	İRSA İRSF	65	91 92	14 15
	2,23	72	19,5	78	231	670	4900				
	2,63	93	15	78	210	670	4900				
	3,37	144	9,75	85	191	670	4900				
	4,11	187	7,5	85	179	670	4900				
172-221 Nm	0,48	14	100	53	174	700	5800	S	75	77 78	9
	0,56	18	80	58	177	700	5800				
	0,75	23	60	60	184	700	5800				
	0,85	28	50	63	183	700	5800				
	1,1	35	40	67	201	700	5800				
	1,5	47	30	72	221	700	5800				
	1,5	56	25	76	194	700	5800				
	1,8	70	20	78	192	700	5800				
	2,2	93	15	80	180	700	5800				
	3	140	10	84	172	700	5800				
	4	187	7,5	86	176	700	5800				
270-460 Nm	0,67	14	100	59	270	7306	1270	S	90	79 80	12
	0,83	18	80	63	285	6783	1270				
	1,1	23	60	71	320	6163	1270				
	1,4	28	50	71	340	5799	1270				
	1,8	35	40	73	460	5383	1270				
	2,6	47	30	77	410	4891	1270				
	2,4	56	25	83	340	4603	1270				
	3,1	70	20	84	355	4273	1270				
	4,1	93	15	86	360	3882	1270				
	5,1	140	10	89	310	3391	1270				
	6,3	187	7,5	90	290	3081	1270				
325-560 Nm	1,5	23	62	60	381	850	6900	İRSA İRSF	82	93 94	24 26
	2,3	26	53	68	565	850	6900				
	2,57	35	40	67	470	850	6900				
	3,8	47	30	72	560	850	6900				
	2,92	53	26,5	76	401	850	6900				
	3,62	70	20	78	385	850	6900				
	5,5	93	15	81	456	850	6900				
	5,6	140	10	85	325	850	6900				
	8,1	187	7,5	86	356	850	6900				
623-1000 Nm	2,20	17	82	60	738	1450	10000	İRSA İRSF	102	95 96	39 43
	2,64	22	63	62	703	1450	10000				
	3,85	28	50	69	906	1450	10000				
	5,00	35	40	72	982	1450	10000				
	6,60	47	30	74	999	1450	10000				
	5,55	56	25	79	748	1450	10000				
	7,30	70	20	81	807	1450	10000				
	9,60	93	15	82	805	1450	10000				
	10,70	140	10	86	628	1450	10000				
	14,00	187	7,5	87	623	1450	10000				
1083-1792 Nm	3,47	17	83	62	1218	2300	17000	İRSA İRSF	127	97 98	69 73
	4,4	22	65	65	1268	2300	17000				
	6,7	27	52	72	1711	2300	17000				
	8,8	35	40	74	1777	2300	17000				
	10,8	44	32	76	1792	2300	17000				
	9,7	54	26	81	1393	2300	17000				
	12,8	70	20	82	1432	2300	17000				
	16,2	88	16	84	1485	2300	17000				
	14,2	108	13	86	1083	2300	17000				
	18,8	140	10	87	1116	2300	17000				



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n1=1400rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type	kg		
1873-3352 Nm	4,6	13	111	62	2159	2900	21500	İRSA İRSF	162	99 100	163 186
	5,9	16	87	64	2241	2900	21500				
	11,9	26	54	74	3244	2900	21500				
	15,1	33	42	75	3245	2900	21500				
	21,0	47	30	78	3352	2900	21500				
	17,4	52	27	82	2628	2900	21500				
	21,7	67	21	83	2580	2900	21500				
	30,5	93	15	85	2653	2900	21500				
	31,5	133	10,5	83	1873	2900	21500				
	44,0	187	7,5	89	2003	2900	21500				
3521-5746 Nm	7,5	12	115	65	3824	3250	24750	İRSA İRSF	201	101 102	300 332
	11	17	83	68	4235	3250	24750				
	14	22	63	70	4212	3250	24750				
	19	25	55	75	5346	3250	24750				
	27	35	40	78	5746	3250	24750				
	28	47	30	79	4527	3250	24750				
	37	51	27,5	83	5761	3250	24750				
	40	70	20	85	4639	3250	24750				
	40	93	15	86	3520	3250	24750				
	54	102	13,75	88	4457	3250	24750				
	58	140	10	89	3521	3250	24750				
79	187	7,5	89	3597	3250	24750					
5791-13370 Nm	23	22	63	58	5791	3750	29000	İRSA İRSF	250	103 104	493 513
	37	27	52	78	10237	3750	29000				
	49	35	40	79	13370	3750	29000				
	59	45	31	79	9856	3750	29000				
	53	54	26	85	7990	3750	29000				
	72	70	20	86	8448	3750	29000				
	86	90	15,5	86	7820	3750	29000				
	104	140	10	89	6314	3750	29000				
	125	181	7,75	89	5881	3750	29000				





Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n1=900rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
15-22 Nm	0,04	11	80	43	15	190	1300	S	30	69 70	1,2
	0,06	15	60	45	17	190	1300				
	0,07	18	50	48	18	190	1300				
	0,09	23	40	52	20	190	1300				
	0,11	30	30	61	21	190	1300				
	0,12	36	25	68	22	190	1300				
	0,12	45	20	72	18	190	1300				
	0,16	60	15	74	19	190	1300				
	0,23	90	10	77	19	190	1300				
0,29	120	7,5	81	19	190	1300					
31-43 Nm	0,07	9	100	42	31	330	2250	S	40	71 72	2,1
	0,09	11	80	44	34	330	2250				
	0,10	15	60	52	33	330	2250				
	0,12	18	50	55	35	330	2250				
	0,16	23	40	61	41	330	2250				
	0,21	30	30	65	43	330	2250				
	0,21	36	25	69	38	330	2250				
	0,26	45	20	72	40	330	2250				
	0,35	60	15	77	43	330	2250				
0,49	90	10	80	42	330	2250					
0,64	120	7,5	82	42	330	2250					
49-80 Nm	0,11	9	100	42	49	450	3300	S	50	73 74	3,3
	0,15	11	80	46	59	450	3300				
	0,20	15	60	52	66	450	3300				
	0,25	18	50	55	73	450	3300				
	0,3	23	40	61	78	450	3300				
	0,35	30	30	65	72	450	3300				
	0,35	36	25	69	64	450	3300				
	0,45	45	20	72	69	450	3300				
	0,65	60	15	77	80	450	3300				
0,90	90	10	80	76	450	3300					
1,11	120	7,5	84	74	450	3300					
103-173 Nm	0,33	15	62	55	119	490	3550	İRSA İRSF	52	89 90	9 11
	0,42	18	50	60	134	490	3550				
	0,63	24	38	65	165	490	3550				
	0,85	31	29	66	173	490	3550				
	0,63	36	25	70	117	490	3550				
	0,90	47	19	76	138	490	3550				
	1,23	62	14,5	77	146	490	3550				
	1,32	95	9,5	83	110	490	3550				
1,81	124	7,25	74	103	490	3550					
119-162 Nm	0,25	9	100	45	119	650	4350	S	63	75 76	6
	0,27	11	80	52	119	650	4350				
	0,37	15	60	56	132	650	4350				
	0,42	18	50	58	129	650	4350				
	0,55	23	40	63	147	650	4350				
	0,75	30	30	68	162	650	4350				
	0,68	36	25	70	126	650	4350				
	0,90	45	20	74	141	650	4350				
	1,10	60	15	78	137	650	4350				
1,70	90	10	80	144	650	4350					
2,20	120	7,5	84	147	650	4350					
198-317 Nm	0,44	11	82	55	211	670	4900	İRSA İRSF	65	91 92	14 15
	0,59	15	62	51	198	670	4900				
	0,84	18	50	63	281	670	4900				
	1,16	23	39	66	317	670	4900				
1,43	30	30	65	296	670	4900					



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n ₁ =900rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type	Tip Type	kg	
198-317 Nm	1,20	36	25	75	239	670	4900	İRSA İRSF	65	91 92	14 15
	1,68	46	19,5	77	268	670	4900				
	2,03	60	15	76	246	670	4900				
	2,47	92	9,75	84	215	670	4900				
	3,19	120	7,5	84	213	670	4900				
178-242 Nm	0,35	9	100	48	178	700	6000	S	75	77 78	9
	0,40	11	80	54	183	700	6000				
	0,52	15	60	56	185	700	6000				
	0,62	18	50	59	194	700	6000				
	0,8	23	40	63	214	700	6000				
	1,10	30	30	69	242	700	6000				
	1,10	36	25	72	210	700	6000				
	1,40	45	20	75	223	700	6000				
	1,75	60	15	78	217	700	6000				
	2,5	90	10	81	215	700	6000				
	3	120	7,5	85	203	700	6000				
	280-460 Nm	0,49	9	100	54	280	8180				
0,63		11	80	59	315	7859	1270				
0,86		15	60	64	350	7140	1270				
1,1		18	50	67	360	6719	1270				
1,4		23	40	69	410	6238	1270				
1,90		30	30	76	460	5667	1270				
1,80		36	25	77	370	5333	1270				
2,30		45	20	80	390	4951	1270				
3,1		60	15	85	420	4498	1270				
4		90	10	87	370	3929	1270				
4,8		120	7,5	89	340	3570	1270				
383-648 Nm	1,16	15	62	56	427	850	7100	İRSA İRSF	82	93 94	24 26
	1,54	17	53	66	572	850	7100				
	2,00	23	40	64	543	850	7100				
	2,95	30	30	69	648	850	7100				
	2,20	34	26,5	77	476	850	7100				
	2,00	45	20	78	463	850	7100				
	4,3	60	15	79	541	850	7100				
	4,35	90	10	83	383	850	7100				
	6,3	120	7,5	85	426	850	7100				
758-1170 Nm	1,58	11	82	56	770	1450	10400	İRSA İRSF	102	95 96	39 43
	2,50	14	63	56	767	1450	10400				
	2,96	18	50	67	1052	1450	10400				
	3,92	23	40	69	1148	1450	10400				
	5,25	30	30	70	1170	1450	10400				
	4,30	36	25	78	890	1450	10400				
	5,70	45	20	79	956	1450	10400				
	7,66	60	15	80	975	1450	10400				
	8,40	90	10	85	758	1450	10400				
	11,20	120	7,5	85	758	1450	10400				
1313-2216 Nm	2,7	11	83	56	1332	2300	17000	İRSA İRSF	127	97 98	69 73
	3,5	14	65	59	1424	2300	17000				
	5,2	17	52	69	1980	2300	17000				
	7	23	40	72	2139	2300	17000				
	8,7	28	32	75	2216	2300	17000				
	7,6	35	26	79	1656	2300	17000				
	10,2	45	20	80	1732	2300	17000				
	13	56	16	81	1788	2300	17000				
	11,2	69	13	85	1313	2300	17000				
	15	90	10	85	1353	2300	17000				



Servis Faktörü Service Factor Service facteur $S_f = 1$	P_1 GÜÇ Power Puissance	n_2 Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M_2 Çıkış Momenti Output Torque Couple de sortie	F_{Q1} Rad. Yük Over Loads Charges radiales	F_{Q10} Rad. Yük Over Loads Charges radiales	Tip Type			
	[kW]	[r.p.m] ($n_1=900$ rpm)	[%]	[Nm]	[N]	[N]	kg				
2443-3860 Nm	4,7	10	87	58	2517	2900	21500	İRSA İRSF	162	99 100	163 186
	9,4	17	54	70	3770	2900	21500				
	12,2	21	42	71	3860	2900	21500				
	17,2	30	30	74	4052	2900	21500				
	13,7	33	27	80	3140	2900	21500				
	17,5	43	21	80	3120	2900	21500				
	25,0	60	15	83	3303	2900	21500				
	25,5	86	10,5	86	2443	2900	21500				
	36,0	120	7,5	87	2493	2900	21500				
4392-7237 Nm	6,1	8	115	59	4392	3250	24750	İRSA İRSF	201	101 102	300 332
	9	11	83	63	4994	3250	24750				
	11	14	63	66	4853	3250	24750				
	15	16	55	71	6215	3250	24750				
	22	23	40	74	6759	3250	24750				
	23	30	30	76	5564	3250	24750				
	31	33	27,5	80	7237	3250	24750				
	32	45	20	83	5637	3250	24750				
	33	60	15	84	4412	3250	24750				
	45	65	13,75	86	5646	3250	24750				
	48	90	10	87	4431	3250	24750				
	65	120	7,5	88	4552	3250	24750				
	7367-13226 Nm	19	14	63	58	7367	3750				
30		17	52	74	12249	3750	29000				
41		23	40	76	13226	3750	29000				
44		29	31	78	11289	3750	29000				
50		35	26	83	11449	3750	29000				
60		45	20	84	10696	3750	29000				
72		58	15,5	85	10066	3750	29000				
8		90	10	88	8124	3750	29750				
106		116	7,75	89	7758	3750	29750				



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n1=700rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
	S		40		50		63				
16-25 Nm	0,04	9	80	41	16	190	1350	S	30	69 70	1,2
	0,05	12	60	43	18	190	1350				
	0,06	14	50	47	20	190	1350				
	0,08	18	40	53	22	190	1350				
	0,09	23	30	60	22	190	1350				
	0,11	28	25	66	25	190	1350				
	0,11	35	20	69	21	190	1350				
	0,15	47	15	72	22	190	1350				
	0,2	70	10	76	21	190	1350				
0,26	93	7,5	80	22	190	1350					
33-48 Nm	0,06	7	100	40	33	330	2300	S	40	71 72	2,1
	0,08	9	80	42	36	330	2300				
	0,09	12	60	49	37	330	2300				
	0,12	14	50	52	41	330	2300				
	0,14	18	40	60	45	330	2300				
	0,18	23	30	64	48	330	2300				
	0,18	28	25	68	43	330	2300				
	0,23	35	20	71	44	330	2300				
	0,31	47	15	75	48	330	2300				
0,44	70	10	78	46	330	2300					
0,56	93	7,5	81	46	330	2300					
57-87 Nm	0,10	7	100	40	57	450	3450	S	50	73 74	3,3
	0,13	9	80	44	64	450	3450				
	0,17	12	60	49	70	450	3450				
	0,21	14	50	54	77	450	3450				
	0,26	18	40	60	86	450	3450				
	0,33	23	30	64	86	450	3450				
	0,33	28	25	68	76	450	3450				
	0,40	35	20	71	78	450	3450				
	0,57	47	15	75	87	450	3450				
0,80	70	10	78	85	450	3450					
1,02	93	7,5	82	85	450	3450					
119-210 Nm	0,27	11	62	52	119	490	3850	İRSA İRSF	52	89 90	9 11
	0,35	14	50	55	131	490	3850				
	0,53	18	38	62	170	490	3850				
	0,71	24	29	65	183	490	3850				
	0,52	28	25	69	122	490	3850				
	0,75	37	19	75	146	490	3850				
	1,40	48	14,5	76	210	490	3850				
	1,10	74	9,5	82	117	490	3850				
1,53	97	7,25	83	126	490	3850					
120-168 Nm	0,20	7	100	44	120	650	4470	S	63	75 76	6
	0,23	9	80	50	126	650	4470				
	0,32	12	60	53	138	650	4470				
	0,37	14	50	56	142	650	4470				
	0,49	18	40	61	162	650	4470				
	0,62	23	30	66	168	650	4470				
	0,60	28	25	69	141	650	4470				
	0,77	35	20	72	151	650	4470				
	0,98	47	15	75	151	650	4470				
	1,49	70	10	78	159	650	4470				
1,90	93	7,5	82	159	650	4470					
215-335 Nm	0,37	9	82	52	215	670	5750	İRSA İRSF	65	91 92	14 15
	0,50	11	62	50	211	670	5750				
	0,70	14	50	61	219	670	5750				
	0,97	18	39	65	335	670	5750				
	1,22	23	30	64	320	670	5750				



Servis Faktörü Service Factor Service facteur $S_f = 1$	P ₁ GÜÇ Power Puissance [kW]	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] (n ₁ =700rpm)	İ Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [%]	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q1} Rad. Yük Over Loads Charges radiales [N]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type	kg		
215-335 Nm	1,00	28	25	74	252	670	5750	İRSA İRSF	65	91 92	14 15
	1,41	36	19,5	76	285	670	5750				
	1,72	47	15	75	264	670	5750				
	2,08	72	9,75	83	230	670	5750				
	2,71	93	7,5	83	230	670	5750				
182-248 Nm	0,29	7	100	46	182	700	6150	S	75	77 78	9
	0,36	9	80	50	194	700	6150				
	0,45	12	60	52	193	700	6150				
	0,53	14	50	57	208	700	6150				
	0,71	18	40	61	236	700	6150				
	0,93	23	30	65	248	700	6150				
	0,92	28	25	70	219	700	6150				
	1,20	35	20	73	239	700	6150				
	1,52	47	15	75	234	700	6150				
	2,17	70	10	78	231	700	6150				
	2,65	93	7,5	82	222	700	6150				
255-454 Nm	0,38	7	100	49	255	8180	1270	S	90	79 80	12
	0,49	9	80	55	294	8180	1270				
	0,67	12	60	57	312	8180	1270				
	0,86	14	50	63	368	8174	1270				
	1,09	18	40	65	386	7588	1270				
	1,48	23	30	75	454	6894	1270				
	1,4	28	25	71	339	6487	1270				
	1,79	35	20	76	371	6022	1270				
	2,41	47	15	84	414	5472	1270				
	3,11	70	10	85	361	4780	1270				
	3,73	93	7,5	88	336	4343	1270				
418-701 Nm	0,98	11	62	55	456	850	7300	İRSA İRSF	82	93 94	24 26
	1,29	13	53	65	606	850	7300				
	1,70	18	40	63	584	850	7300				
	2,52	23	30	68	701	850	7300				
	1,85	26	26,5	76	508	850	7300				
	2,39	35	20	75	489	850	7300				
	3,65	47	15	78	583	850	7300				
	3,74	70	10	82	418	850	7300				
	5,40	93	7,5	84	464	850	7300				
825-1271 Nm	1,35	9	82	55	831	1450	11600	İRSA İRSF	102	95 96	39 43
	1,75	11	63	57	857	1450	11600				
	2,53	14	50	66	1139	1450	11600				
	3,35	18	40	68	1243	1450	11600				
	4,50	23	30	69	1271	1450	11600				
	3,65	28	25	77	959	1450	11600				
	4,90	35	20	78	1043	1450	11600				
	6,60	47	15	79	1067	1450	11600				
	7,20	70	10	84	825	1450	11600				
9,70	93	7,5	85	844	1450	11600					
1415-2323 Nm	2,32	8	83	57	1497	2300	19000	İRSA İRSF	127	97 98	69 73
	3,00	11	65	57	1516	2300	19000				
	4,40	13	52	68	2123	2300	19000				
	6,00	18	40	69	2259	2300	19000				
	7,60	22	32	70	2323	2300	19000				
	6,50	27	26	78	1798	2300	19000				
	8,80	35	20	79	1897	2300	19000				
	11,3	44	16	80	1973	2300	19000				
	9,50	54	13	84	1415	2300	19000				
12,9	70	10	85	1496	2300	19000					



Servis Faktörü Service Factor Service facteur $S_f = 1$	P_1 GÜÇ Power Puissance	n_2 Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M_2 Çıkış Momenti Output Torque Couple de sortie	F_{Q1} Rad. Yük Over Loads Charges radiales	F_{Q10} Rad. Yük Over Loads Charges radiales	Tip Type			
	[kW]	[r.p.m] ($n_1=700\text{rpm}$)	[%]	[Nm]	[N]	[N]	kg				
2626-4479 Nm	3,1	6	111	57	2676	2900	23500	İRSA İRSF	162	99 100	163 186
	4,1	8	87	58	2823	2900	23500				
	8,1	13	54	69	4117	2900	23500				
	10,6	17	42	69	4191	2900	23500				
	15,2	23	30	72	4479	2900	23500				
	11,8	26	27	79	3434	2900	23500				
	15,4	33	21	79	3486	2900	23500				
	22	47	15	81	3647	2900	23500				
	22,5	67	10,5	84	2707	2900	23500				
	32	93	7,5	86	2816	2900	23500				
4740-8003 Nm	5,3	6	115	57	4740	3250	27300	İRSA İRSF	201	101 102	300 332
	7	8	83	60	4756	3250	27300				
	10	11	63	62	5329	3250	27300				
	13	13	55	68	6633	3250	27300				
	19	18	40	72	7465	3250	27300				
	20	23	30	74	6057	3250	27300				
	27	25	27,5	79	8003	3250	27300				
	28	35	20	81	6188	3250	27300				
	29	47	15	82	4866	3250	27300				
	40	51	13,75	85	6378	3250	27300				
	43	70	10	86	5045	3250	27300				
	59	93	7,5	87	5252	3250	27300				
8839-14538 Nm	18	11	63	58	8973	3750	31000	İRSA İRSF	250	103 104	493 513
	26	13	52	72	13281	3750	31000				
	36	18	40	74	14538	3750	31000				
	39	23	31	76	12536	3750	31000				
	45	27	26	81	12929	3750	31000				
	53	35	20	82	11858	3750	31000				
	65	45	15,5	83	11408	3750	31000				
	78	70	10	87	9258	3750	31000				
	95	90	7,75	88	8839	3750	31000				

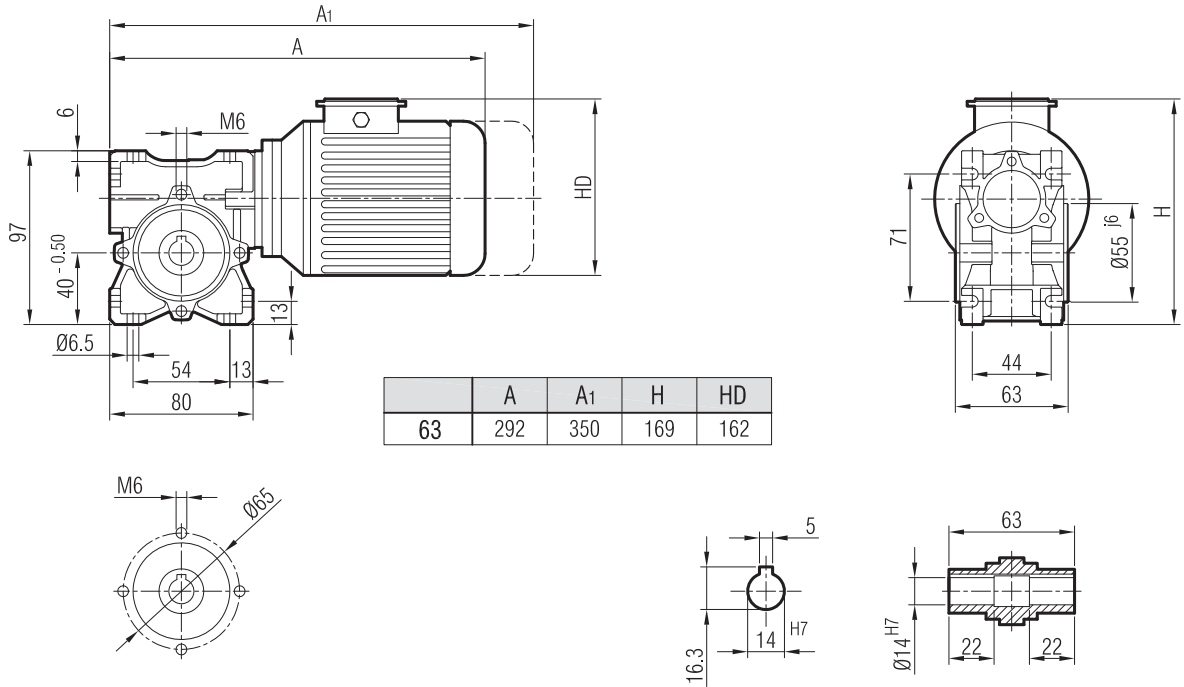
Sonsuz Vidalı Redüktörler Ölçü Sayfaları

Worm Gearbox Dimension Pages

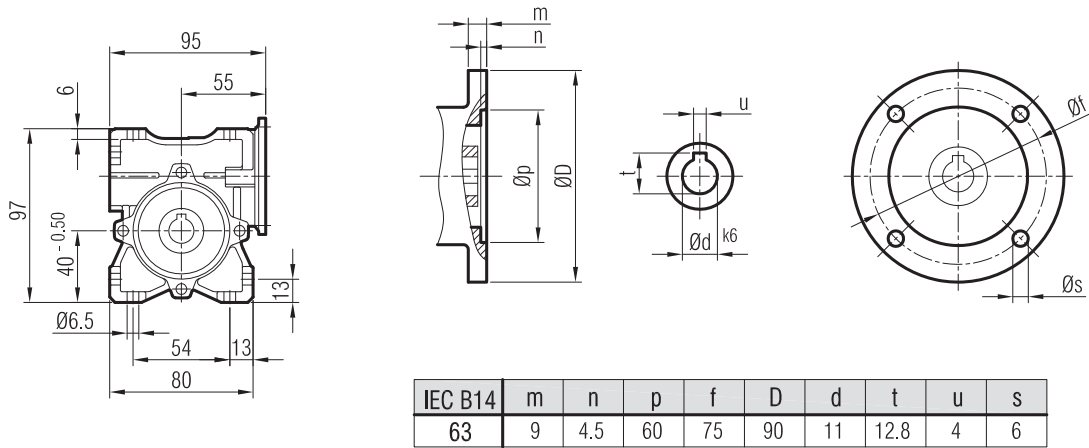
Réducteurs à roue et vis sans fin dimensions



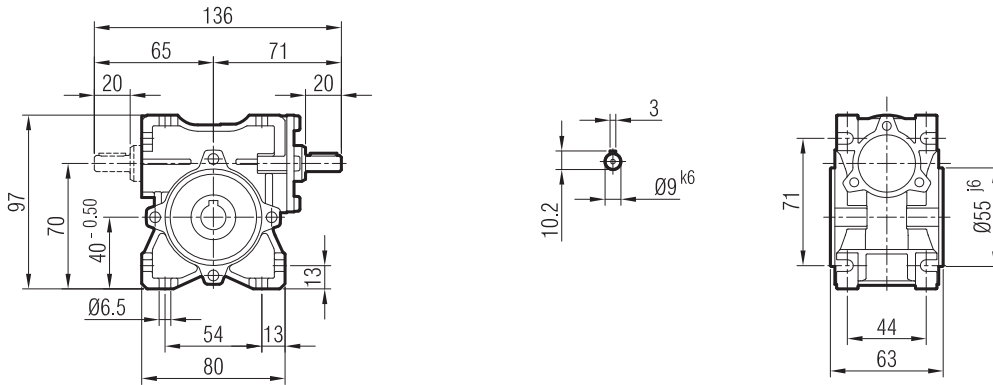
SM 30



SP 30



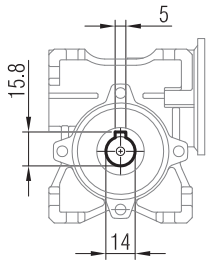
S 30



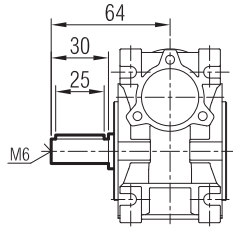
"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.



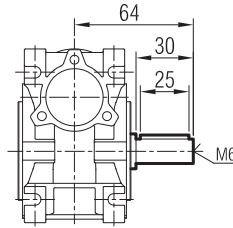
SM / SP / S



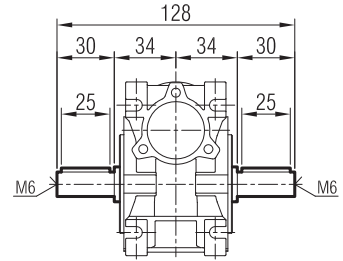
- SR



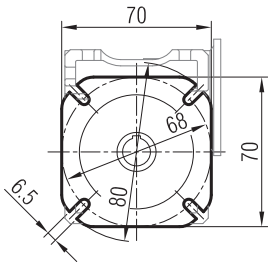
- SL



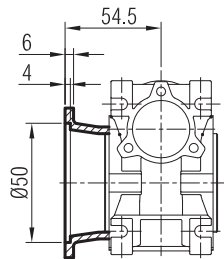
- SD



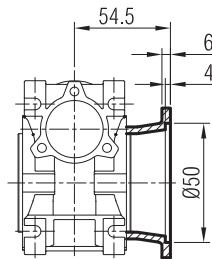
SM / SP / S



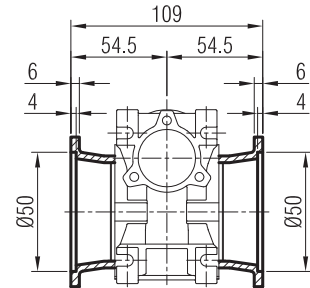
- FR



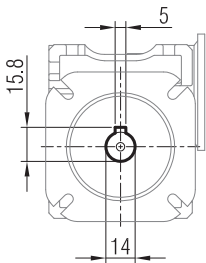
- FL



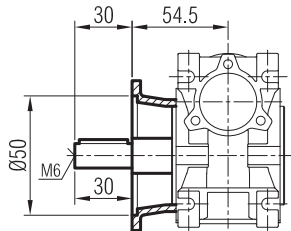
- FD



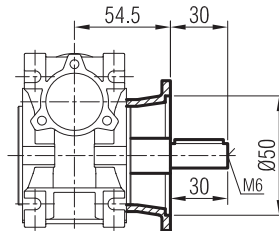
SM / SP / S



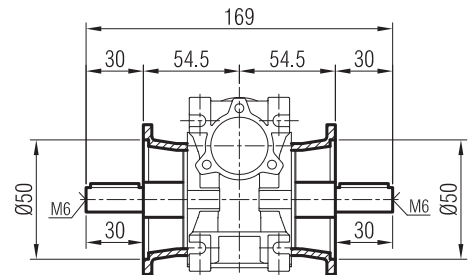
- FR - SR



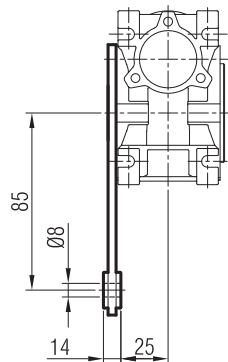
- FL - SL



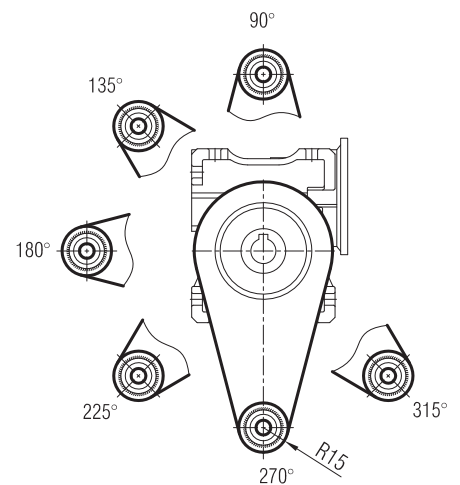
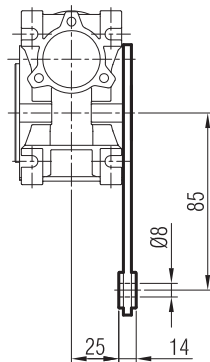
- FD - SD



- TR

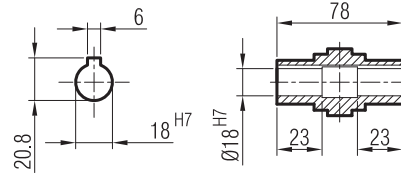
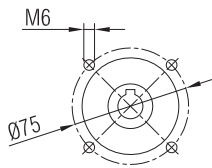
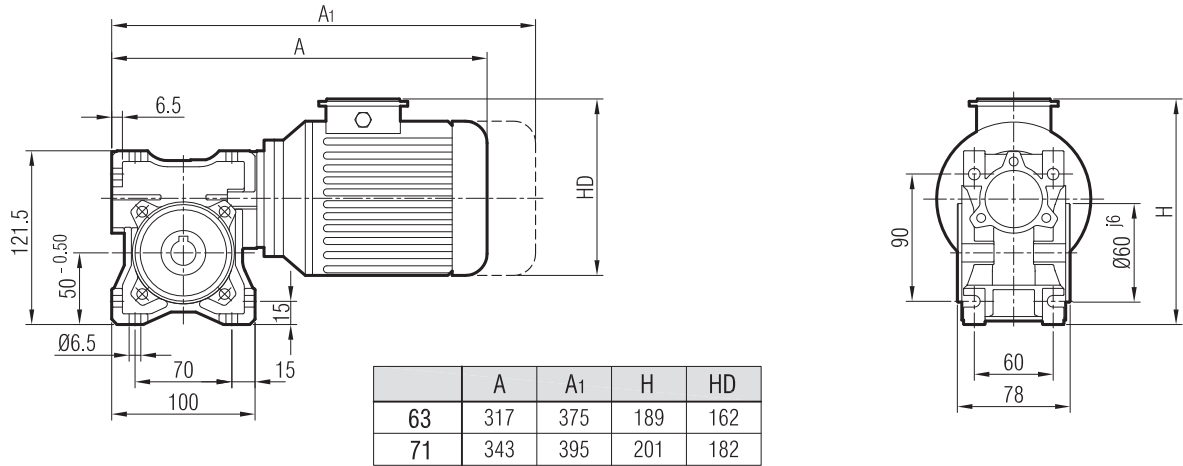


- TL

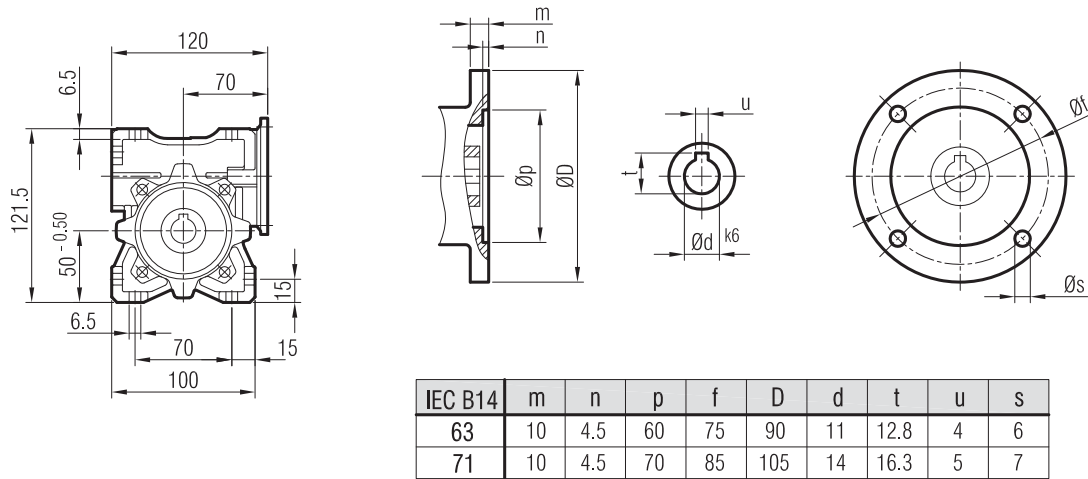




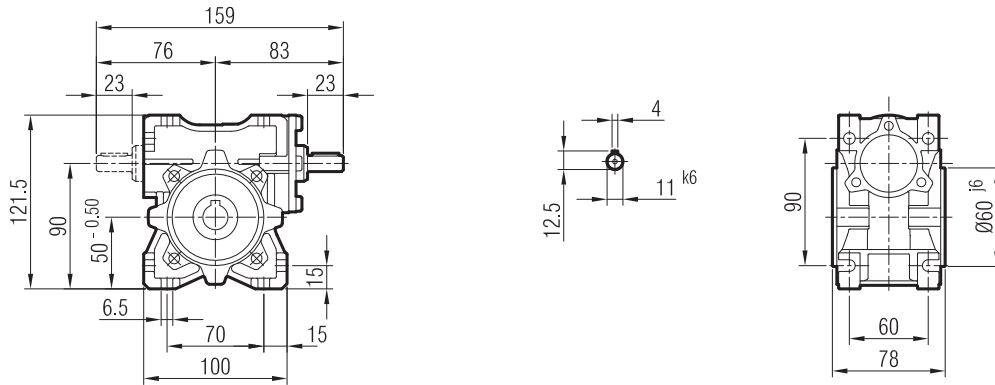
SM 40



SP 40



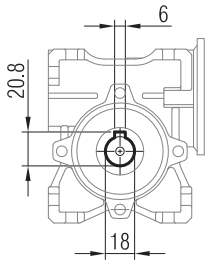
S 40



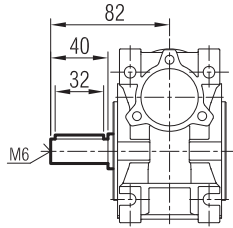
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspond aux moteurs équipés de freins.



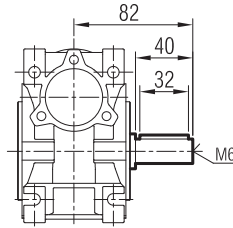
SM / SP / S



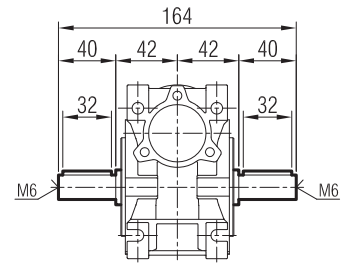
- SR



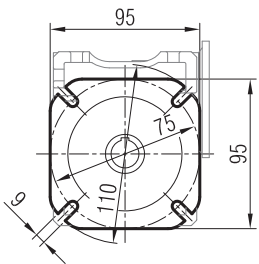
- SL



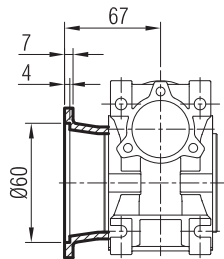
- SD



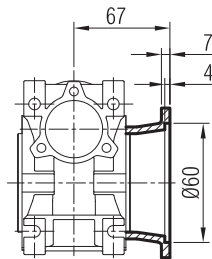
SM / SP / S



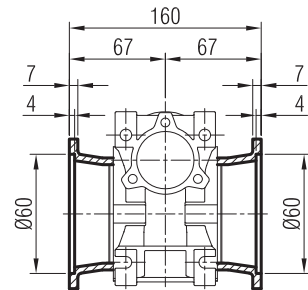
- FR



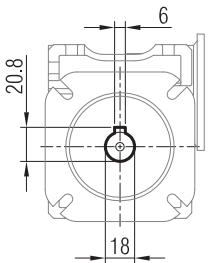
- FL



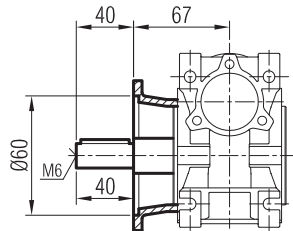
- FD



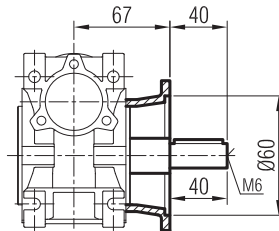
SM / SP / S



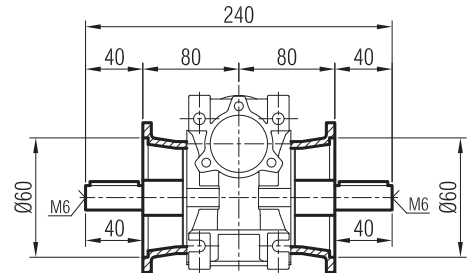
- FR - SR



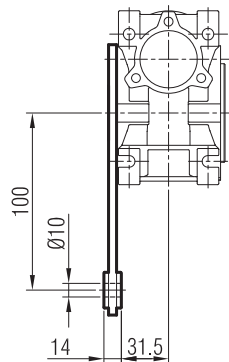
- FL - SL



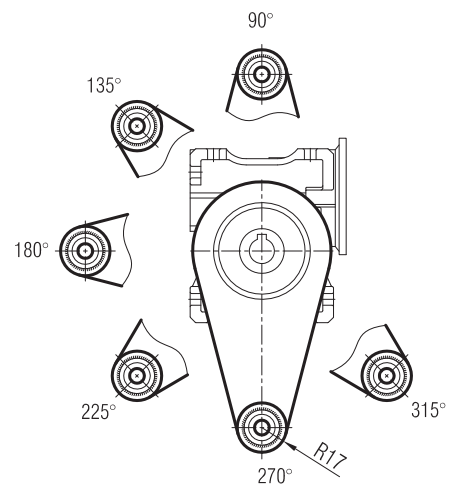
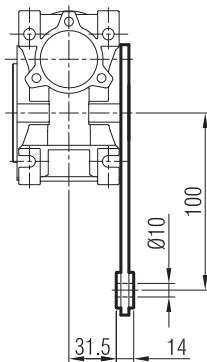
- FD - SD



- TR

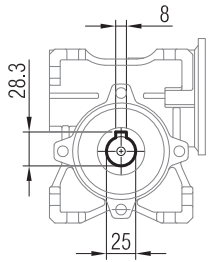


- TL

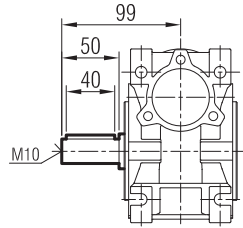




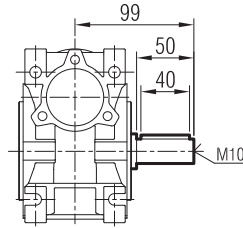
SM / SP / S



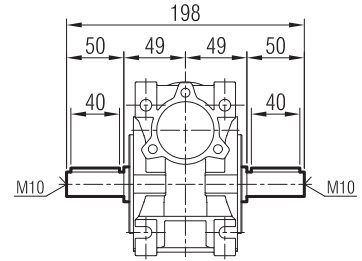
- SR



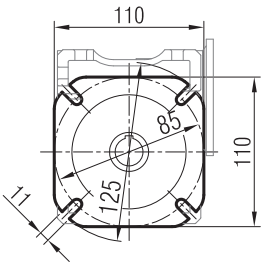
- SL



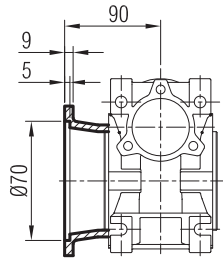
- SD



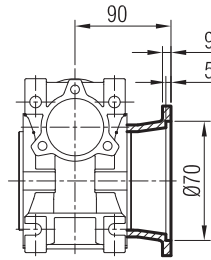
SM / SP / S



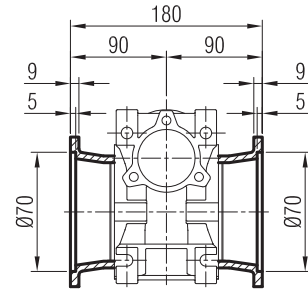
- FR



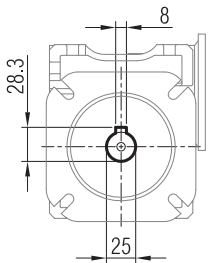
- FL



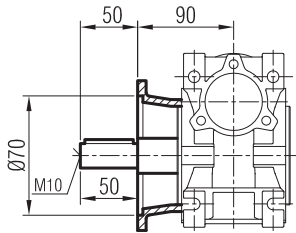
- FD



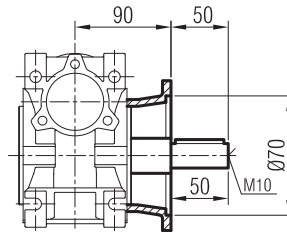
SM / SP / S



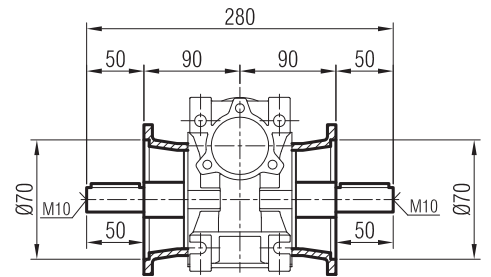
- FR - SR



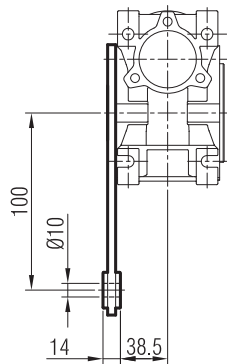
- FL - SL



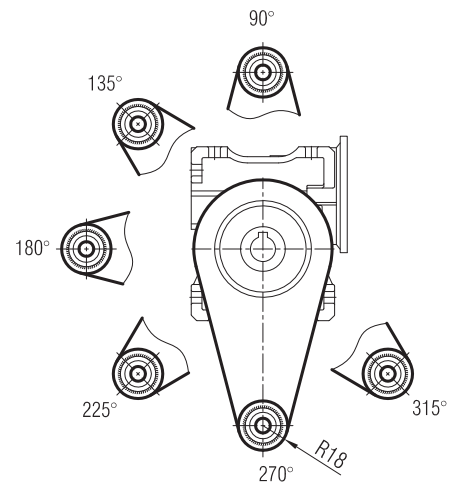
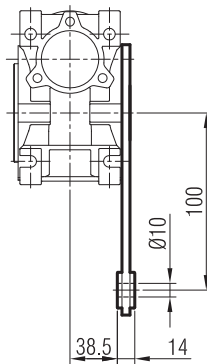
- FD - SD



- TR

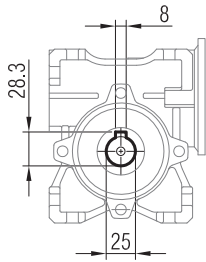


- TL

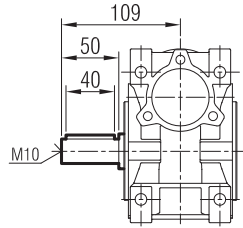




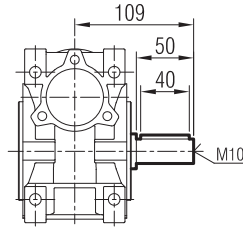
SM / SP / S



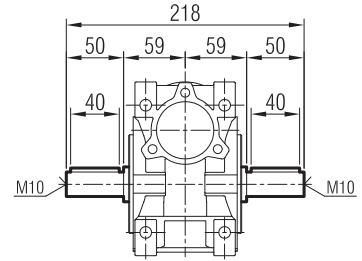
- SR



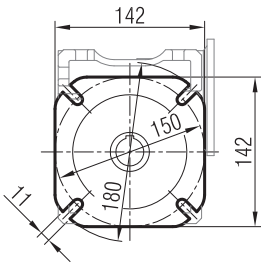
- SL



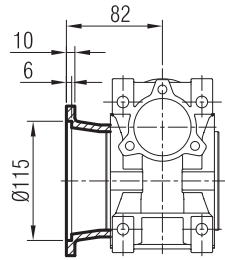
- SD



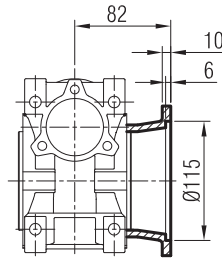
SM / SP / S



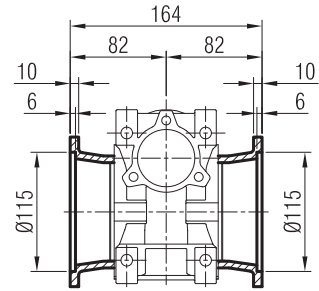
- FR



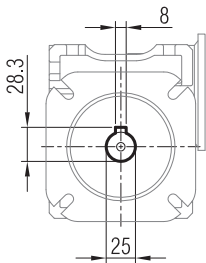
- FL



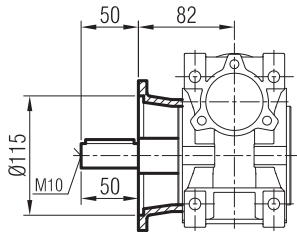
- FD



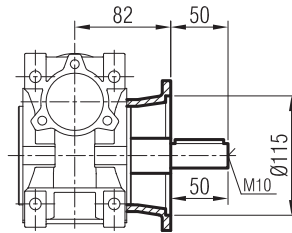
SM / SP / S



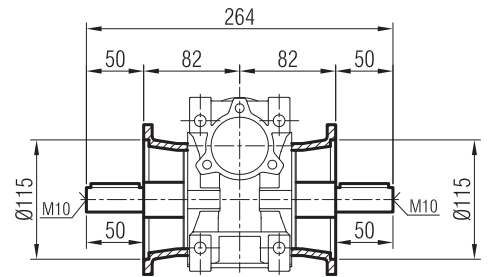
- FR - SR



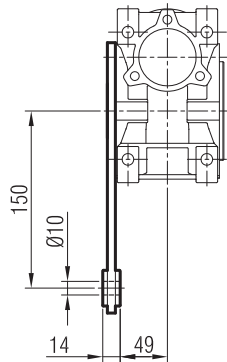
- FL - SL



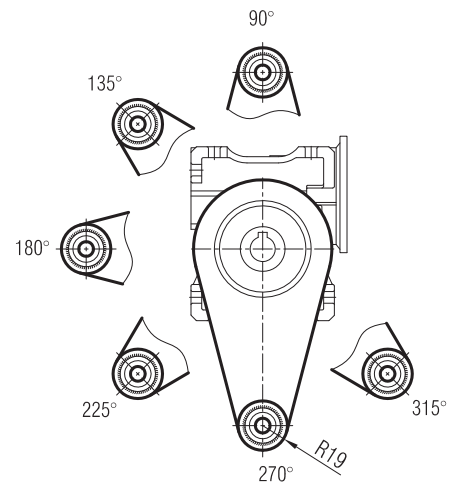
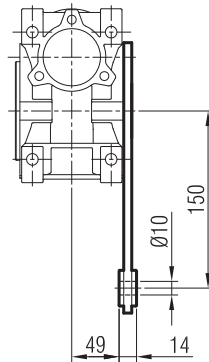
- FD - SD



- TR

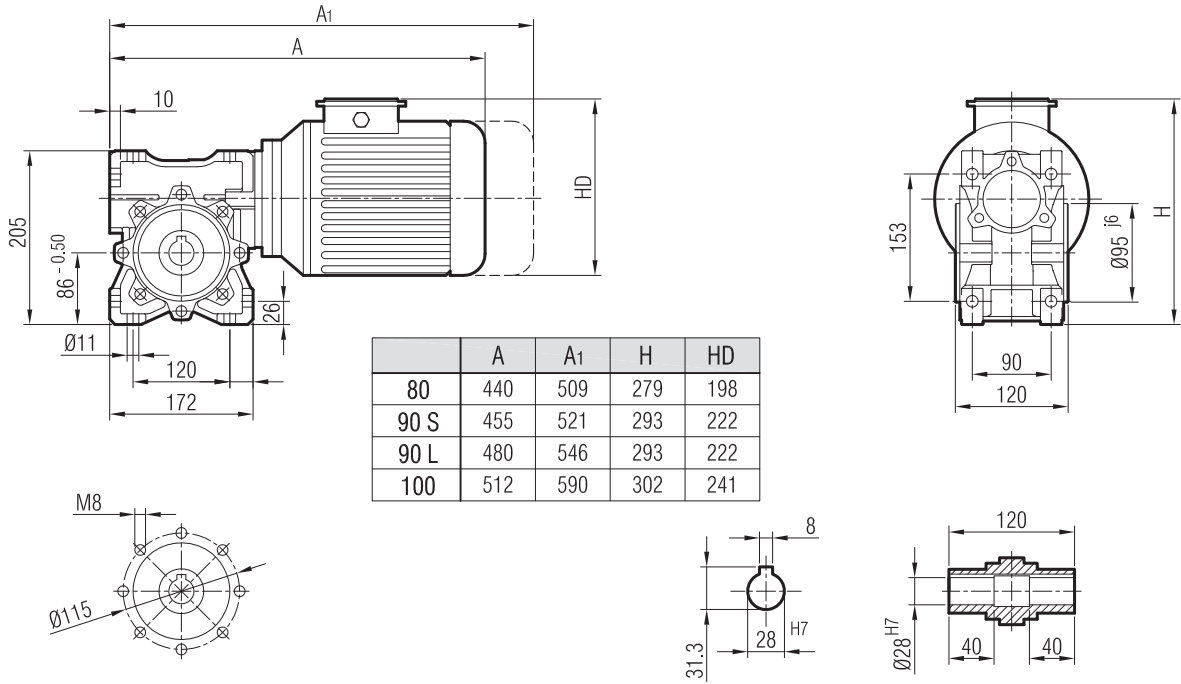


- TL

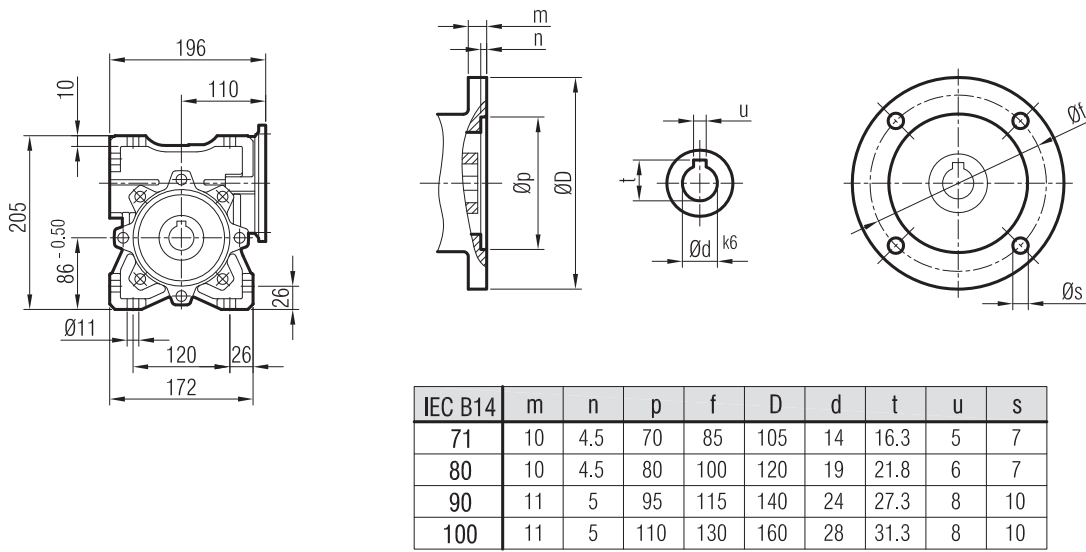




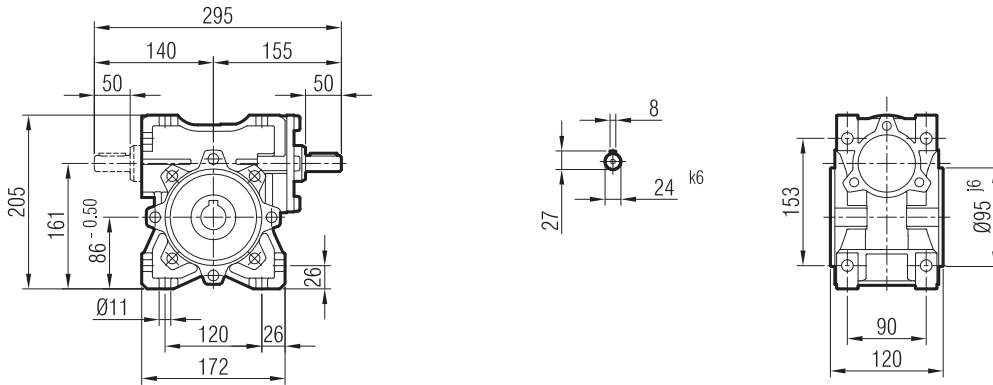
SM 75



SP 75



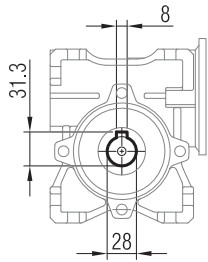
S 75



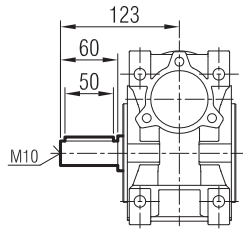
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspond aux moteurs équipés de freins.



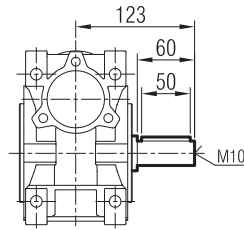
SM / SP / S



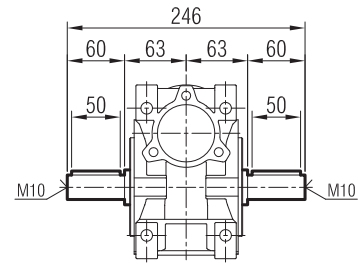
- SR



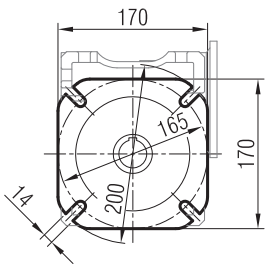
- SL



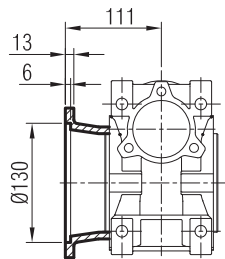
- SD



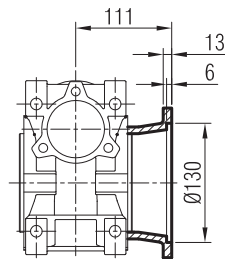
SM / SP / S



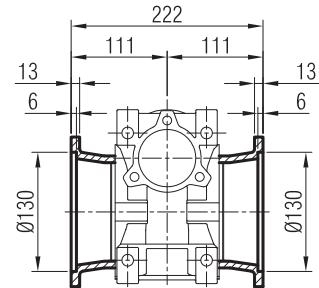
- FR



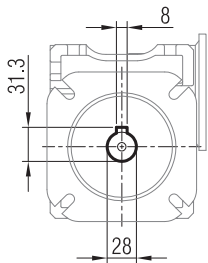
- FL



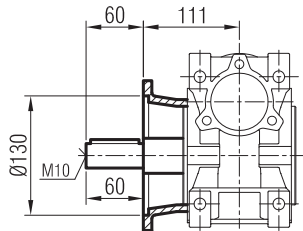
- FD



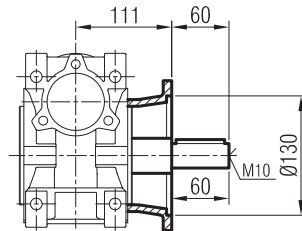
SM / SP / S



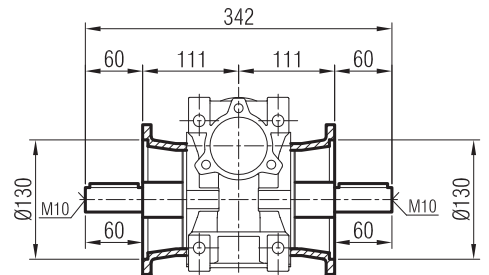
- FR - SR



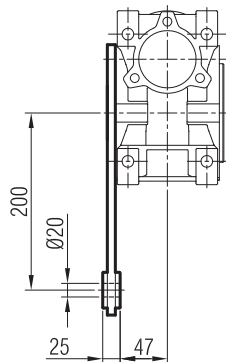
- FL - SL



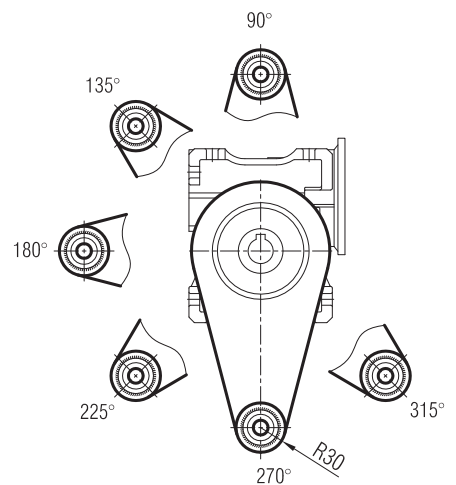
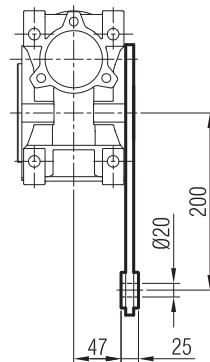
- FD - SD



- TR

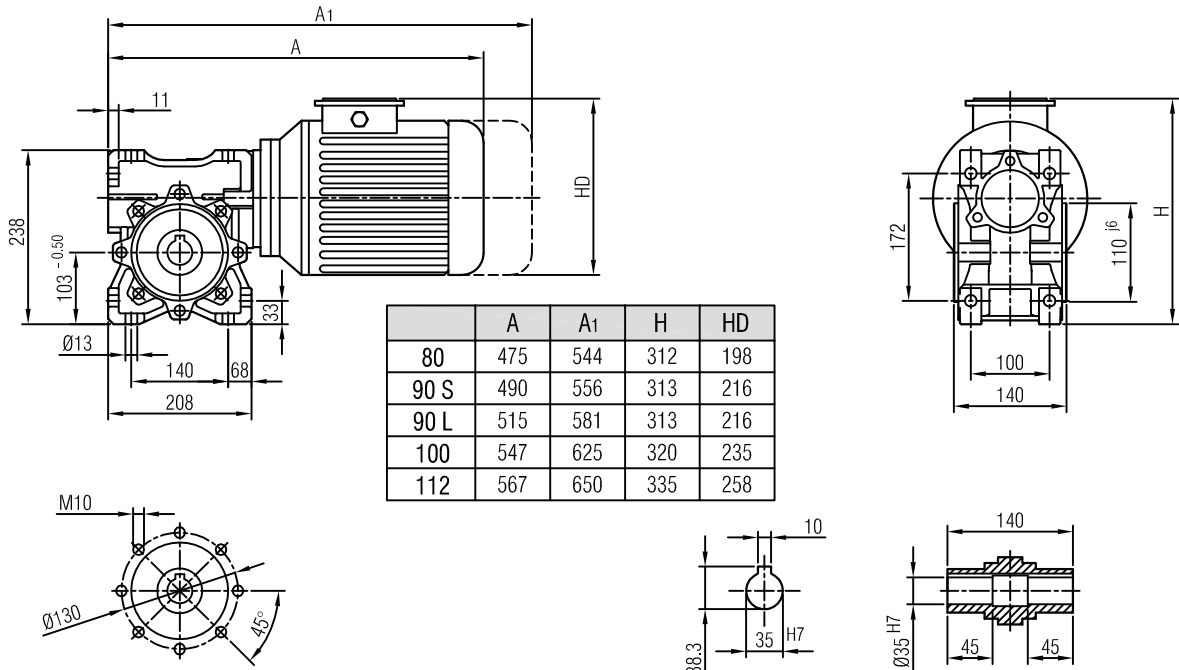


- TL

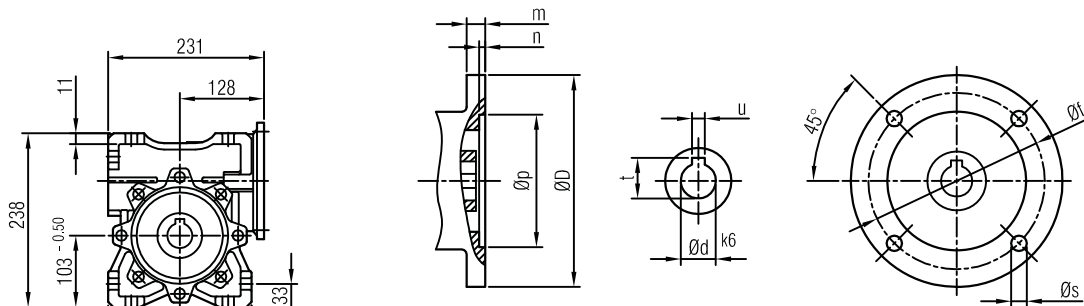




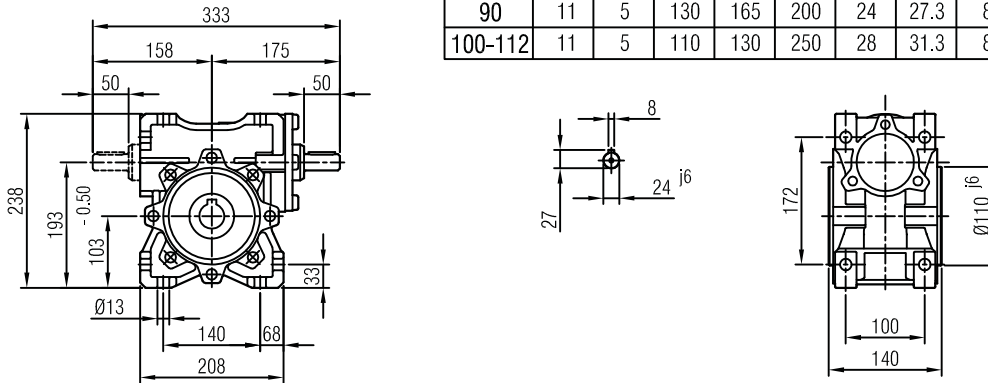
SM 90



SP 90



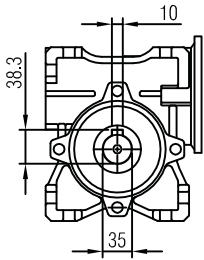
S 90



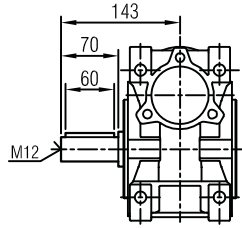
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.



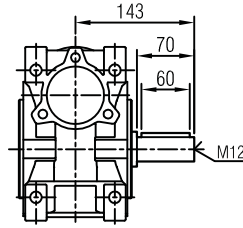
SM / SP / S



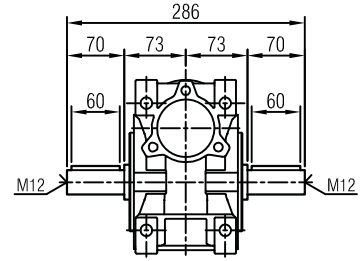
- SR



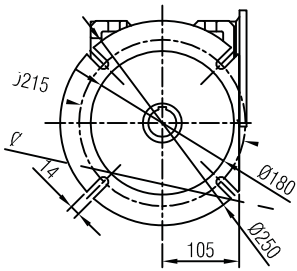
- SL



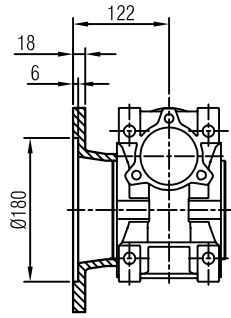
- SD



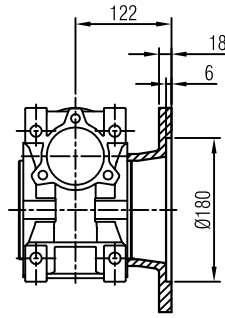
SM / SP / S



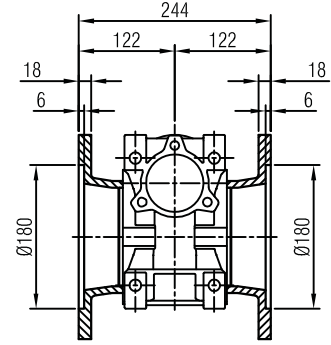
- FR



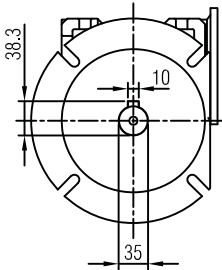
- FL



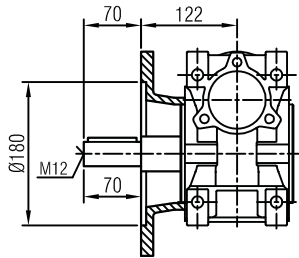
- FD



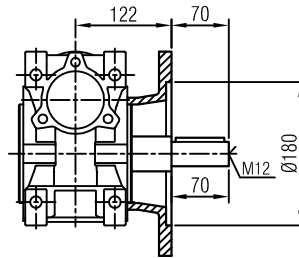
SM / SP / S



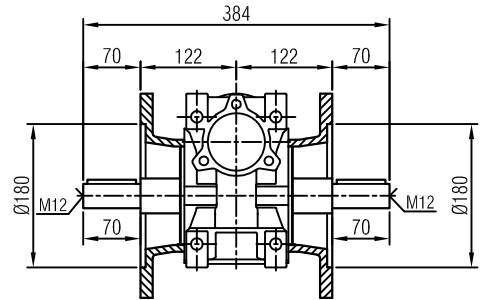
- FR - SR



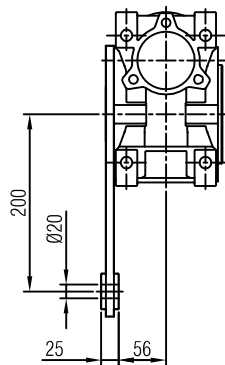
- FL - SL



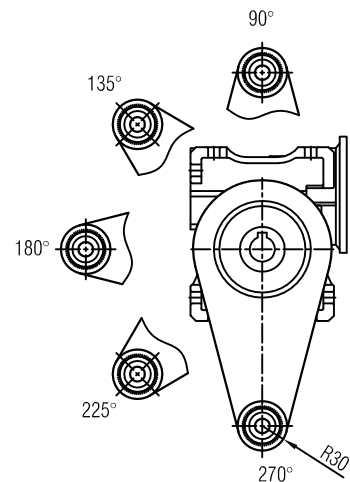
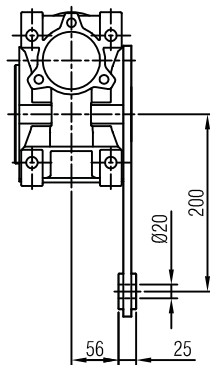
- FD - SD



- TR

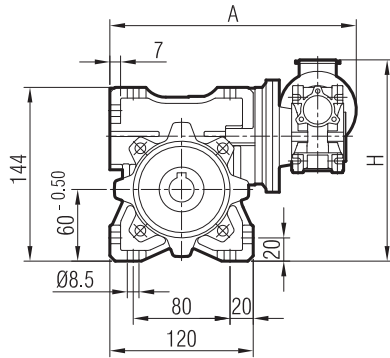


- TL

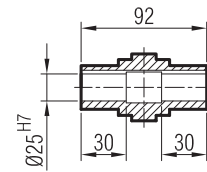
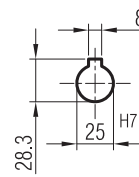
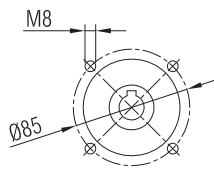
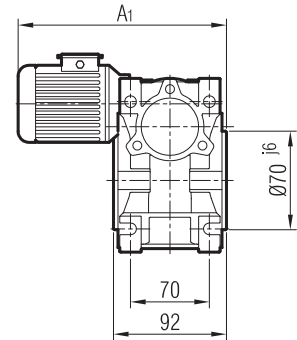




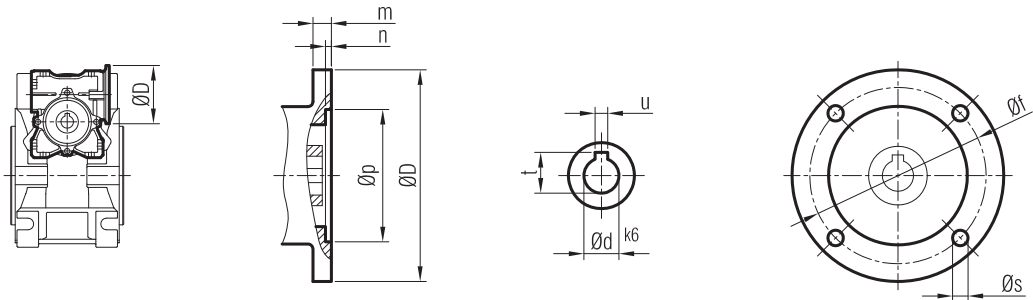
SM 50 S 30



	A	A ₁	H
63	256	298	210

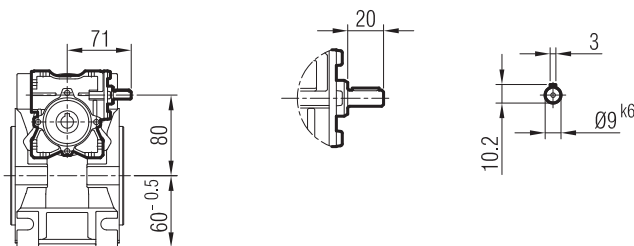


SP 50 S 30



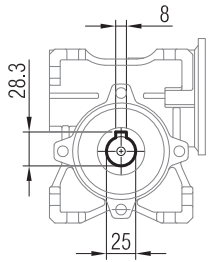
IEC B14	m	n	p	f	D	d	t	u	s
63	9	4.5	60	75	90	11	12.8	4	6

S 50 S 30

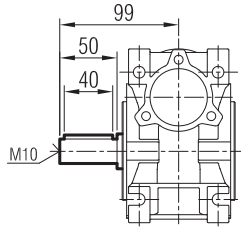




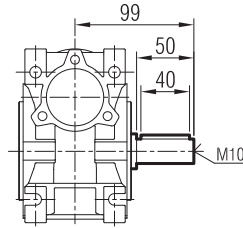
SM / SP / S



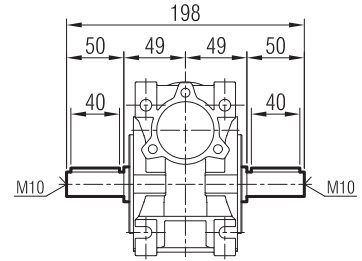
- SR



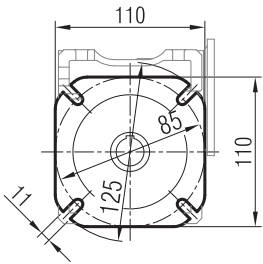
- SL



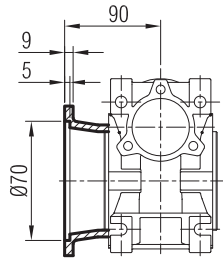
- SD



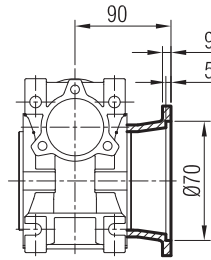
SM / SP / S



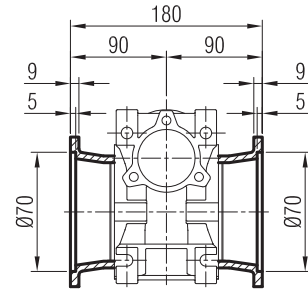
- FR



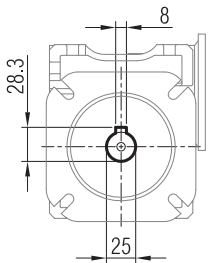
- FL



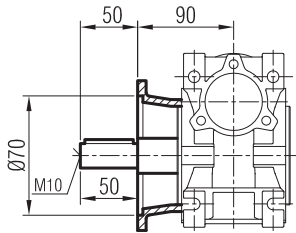
- FD



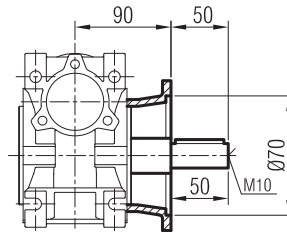
SM / SP / S



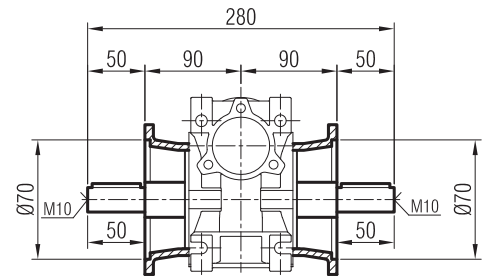
- FR - SR



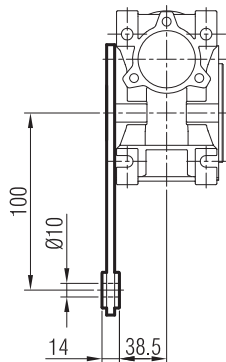
- FL - SL



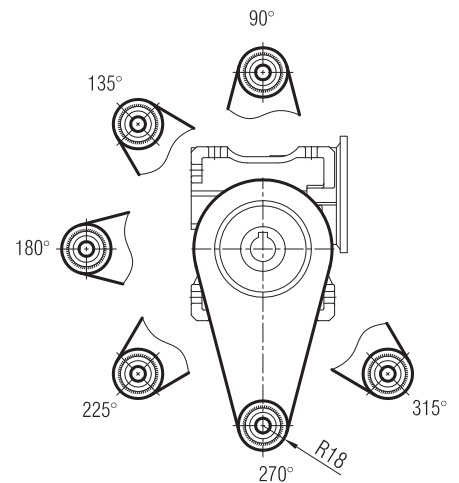
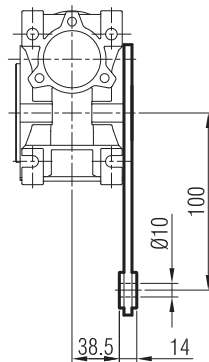
- FD - SD



- TR

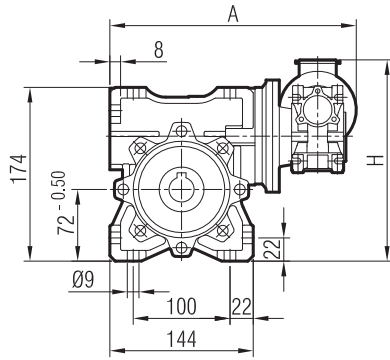


- TL

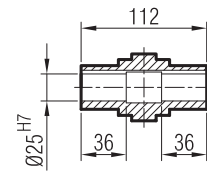
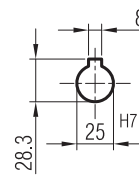
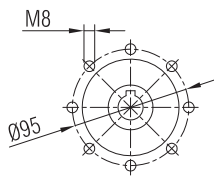
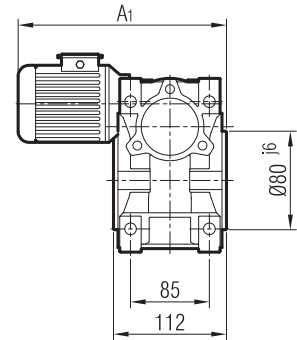




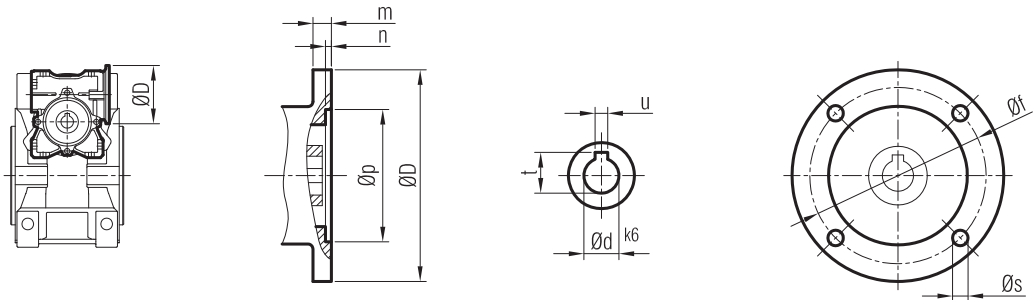
SM 63 S 30



	A	A ₁	H
63	283	308	264

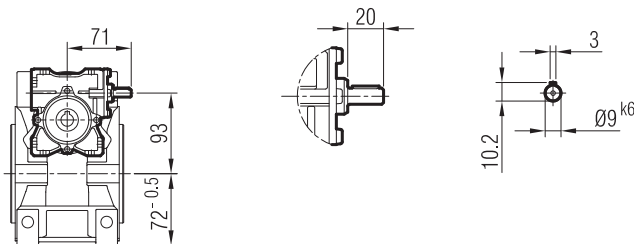


SP 63 S 30



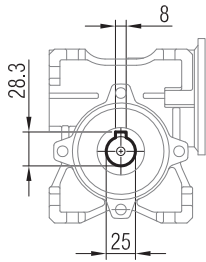
IEC B14	m	n	p	f	D	d	t	u	s
63	9	4.5	60	75	90	11	12.8	4	6

S 63 S 30

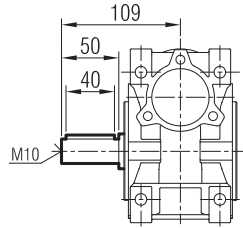




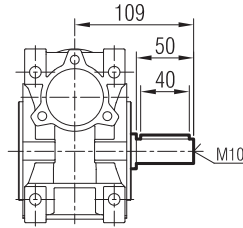
SM / SP / S



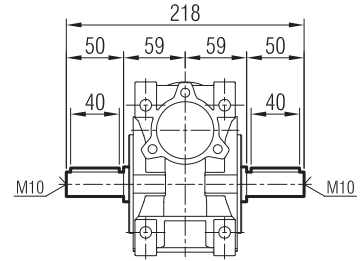
- SR



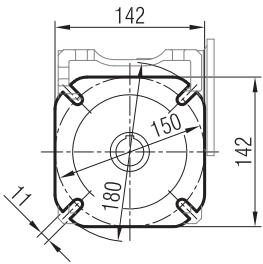
- SL



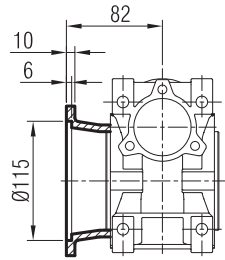
- SD



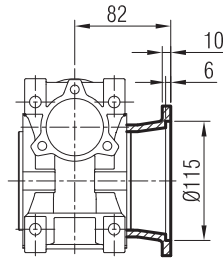
SM / SP / S



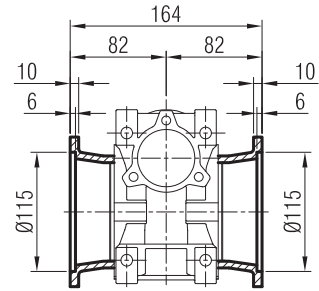
- FR



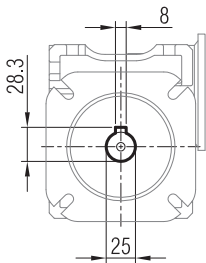
- FL



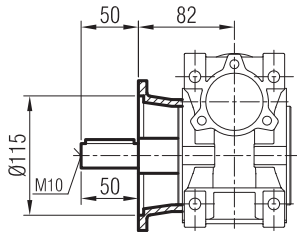
- FD



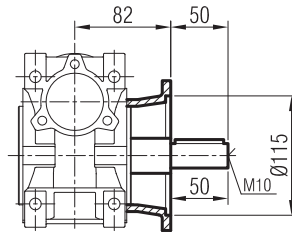
SM / SP / S



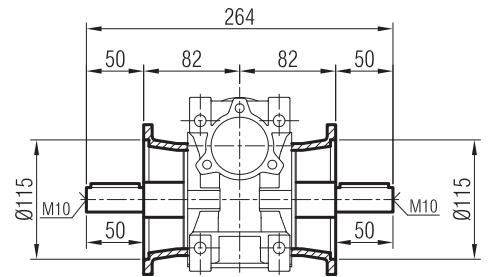
- FR - SR



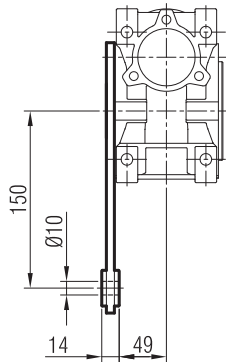
- FL - SL



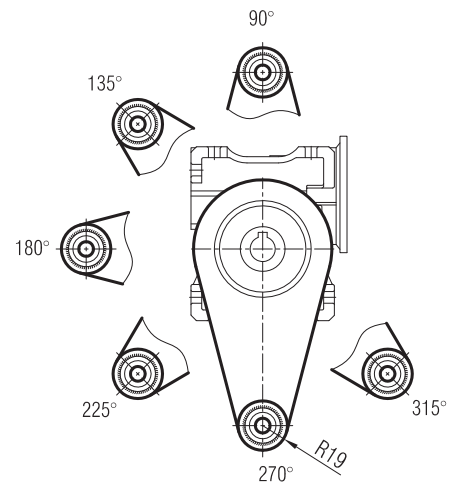
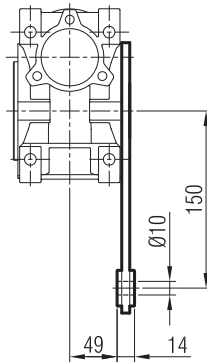
- FD - SD



- TR

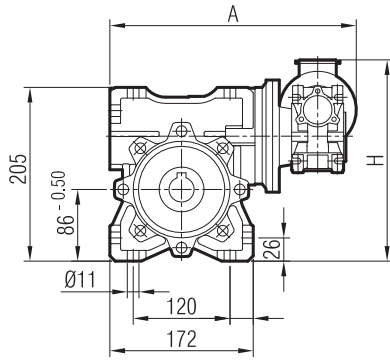


- TL

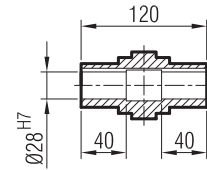
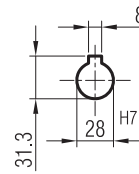
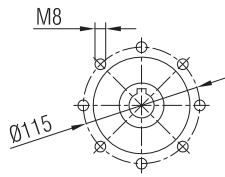
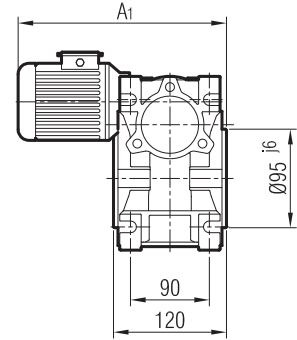




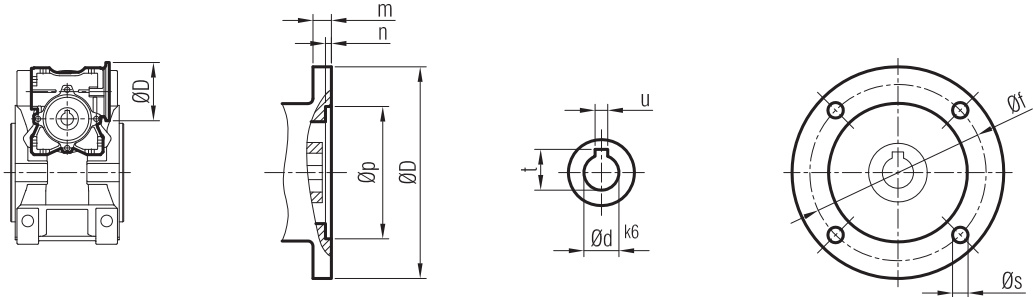
SM 75 S 40



	A	A ₁	H
63	312	385	300
71	320	426	312

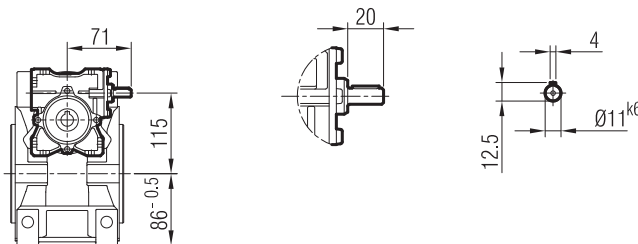


SP 75 S 40



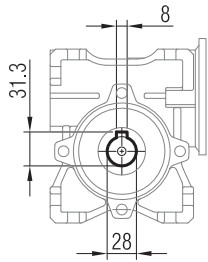
IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

S 75 S 40

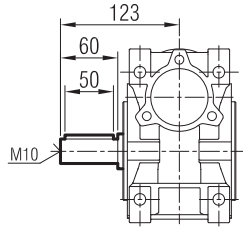




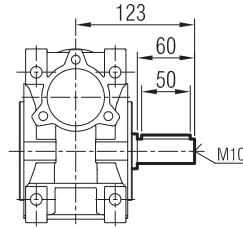
SM / SP / S



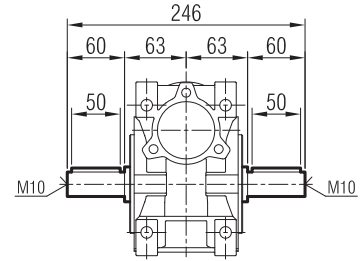
- SR



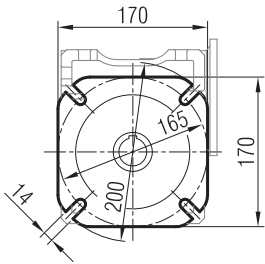
- SL



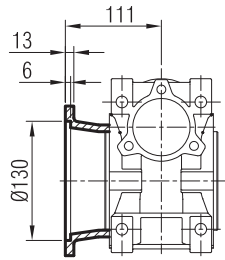
- SD



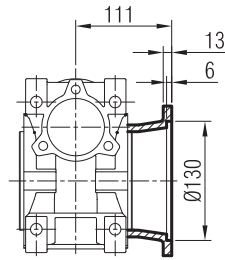
SM / SP / S



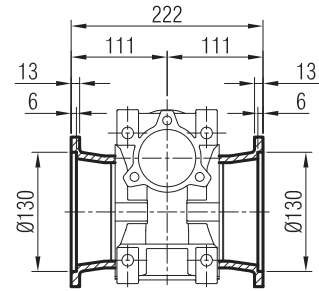
- FR



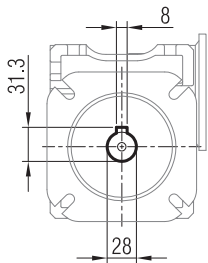
- FL



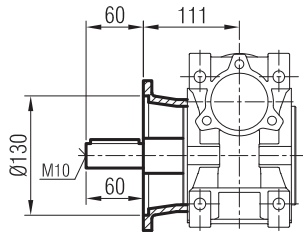
- FD



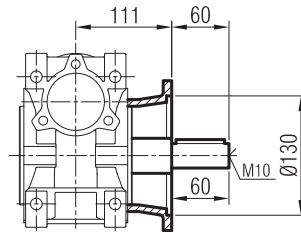
SM / SP / S



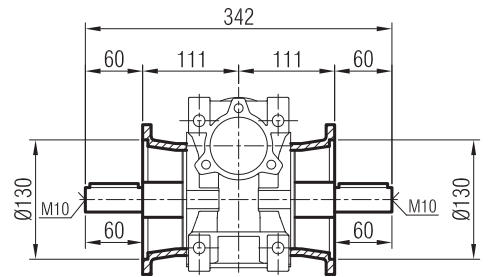
- FR - SR



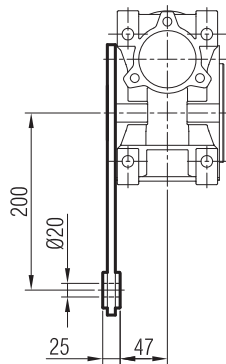
- FL - SL



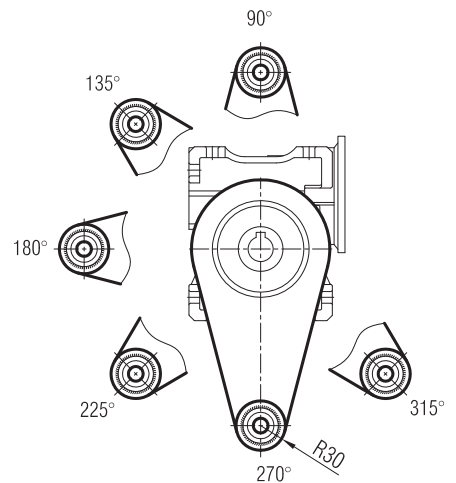
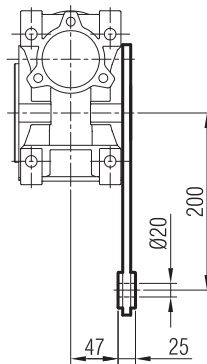
- FD - SD



- TR

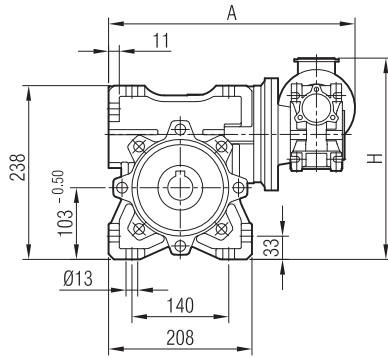


- TL

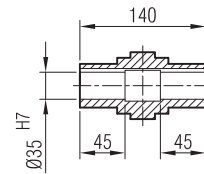
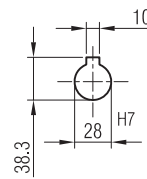
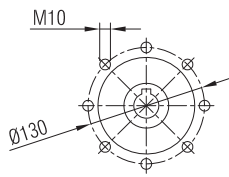
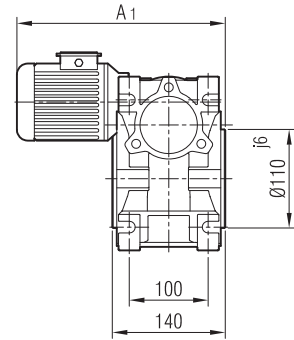




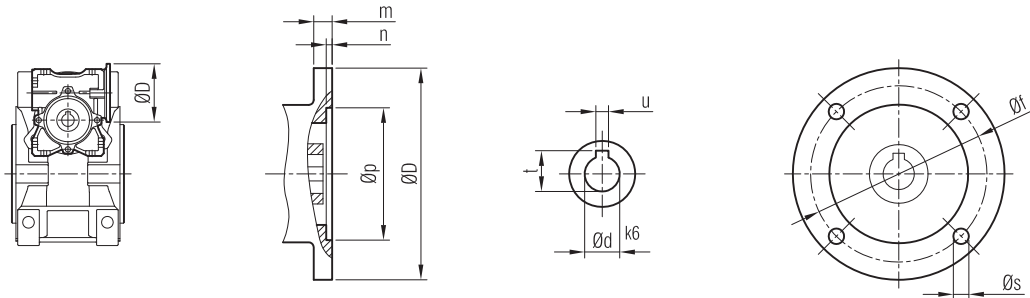
SM 90 S 40



	A	A ₁	H
63	357	337	242
71	367	363	304

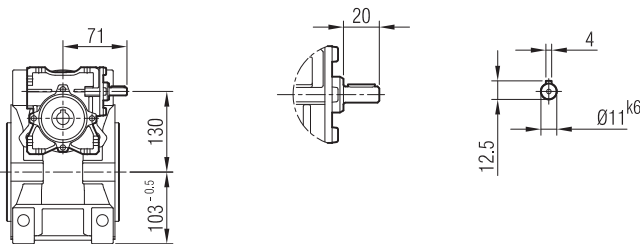


SP 90 S 40



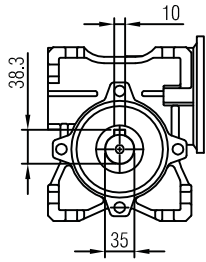
IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

S 90 S 40

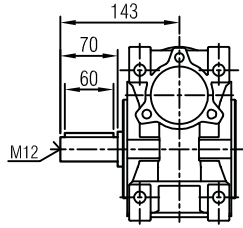




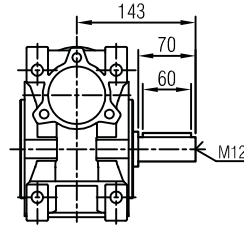
SM / SP / S



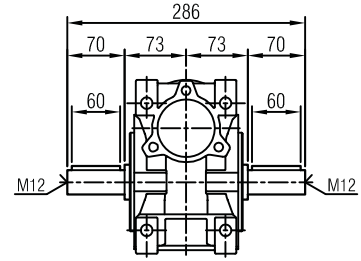
- SR



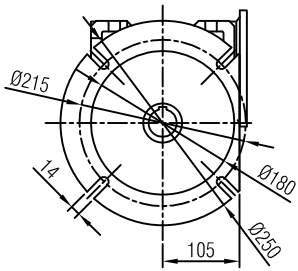
- SL



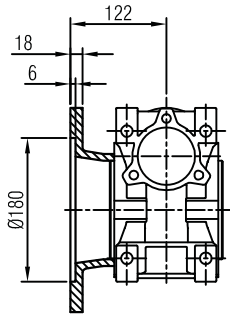
- SD



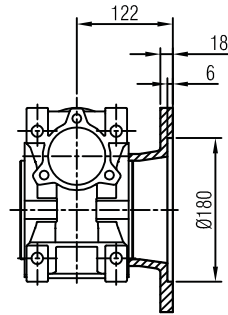
SM / SP / S



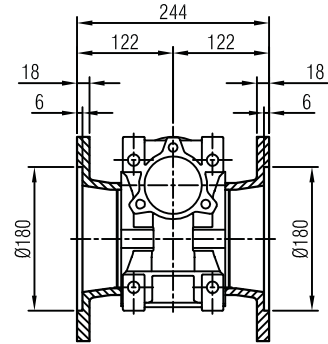
- FR



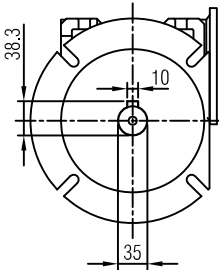
- FL



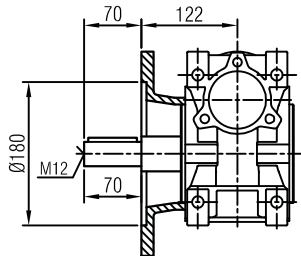
- FD



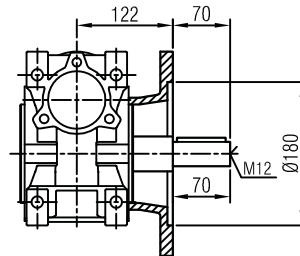
SM / SP / S



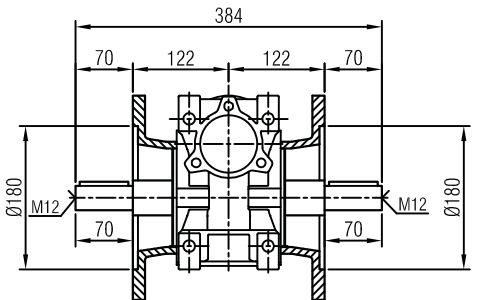
- FR - SR



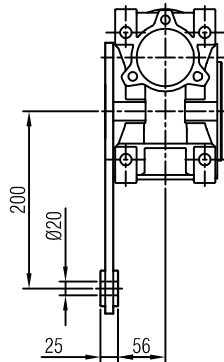
- FL - SL



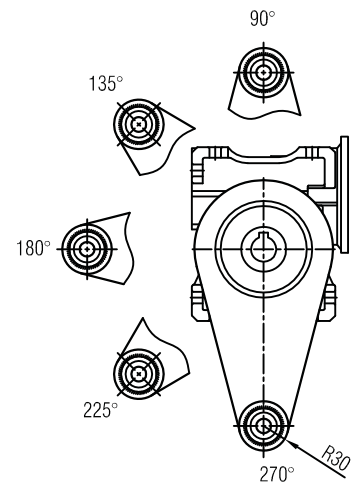
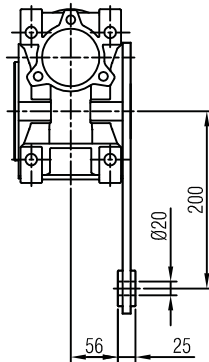
- FD - SD



- TR

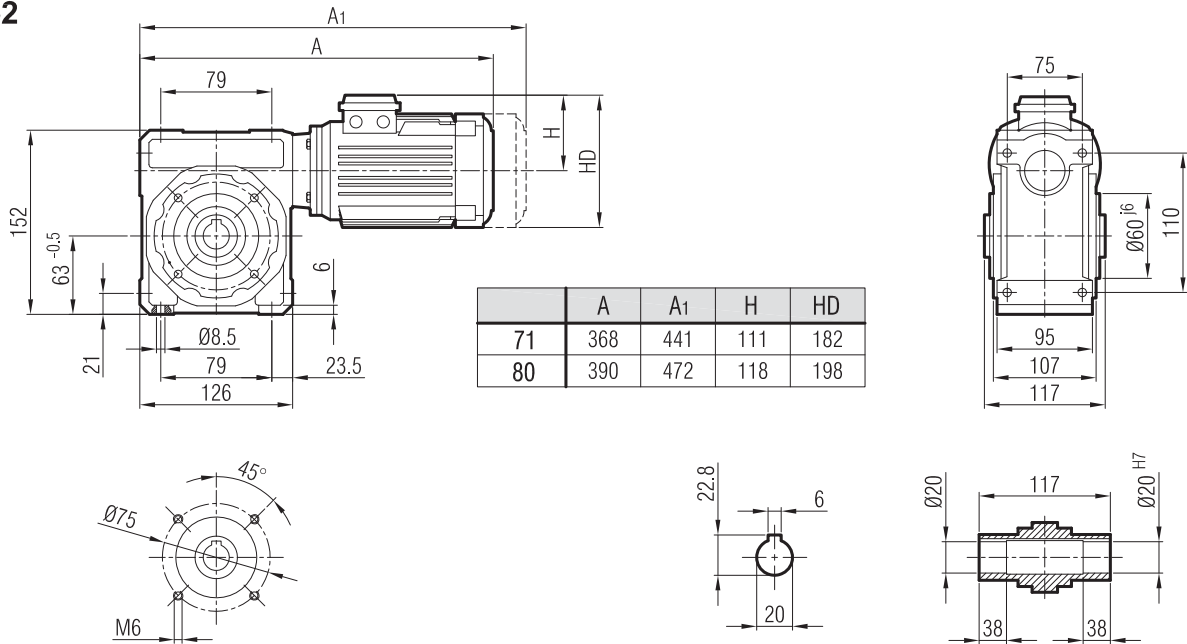


- TR

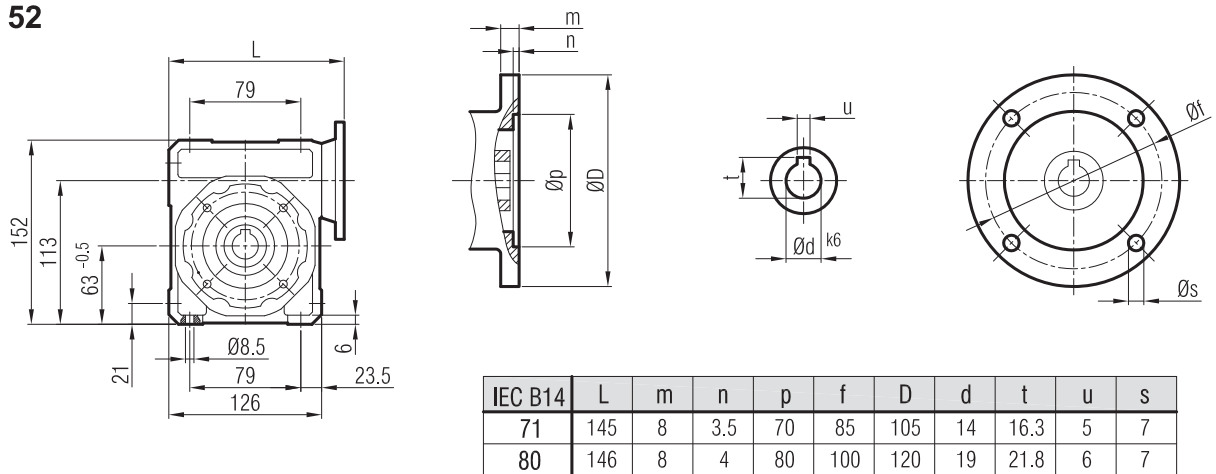




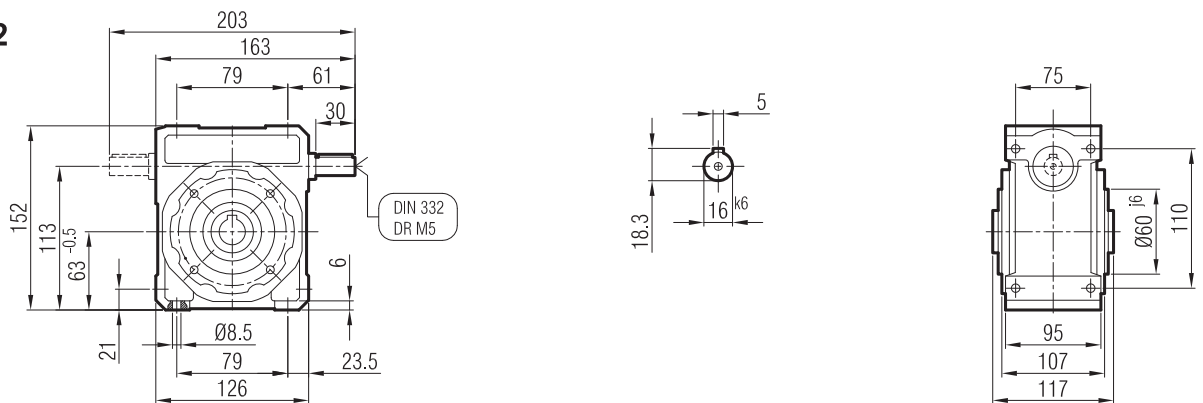
İRSAM 52



İRSAP 52

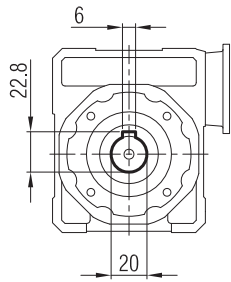


İRSA 52

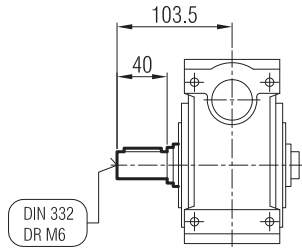




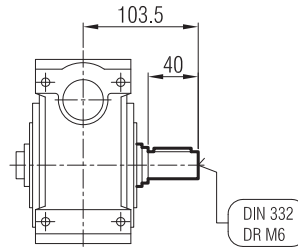
İRSAM / İRSAP / İRSA



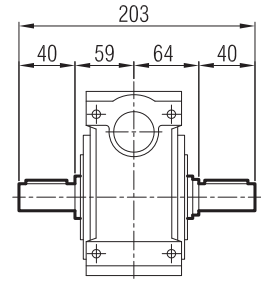
- SR



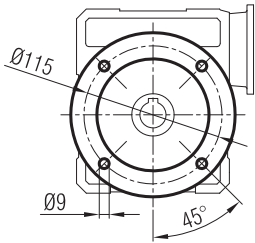
- SL



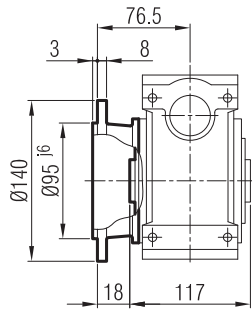
- SD



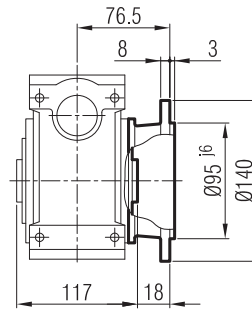
İRSFM / İRSFP / İRSF



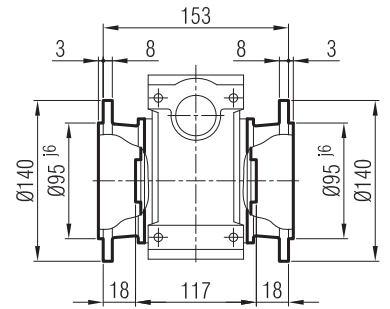
- FR



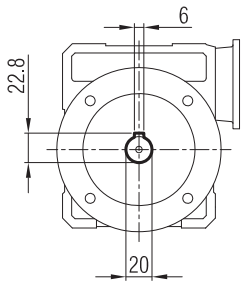
- FL



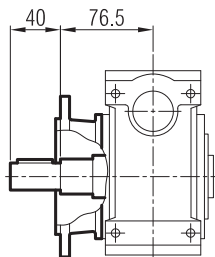
- FD



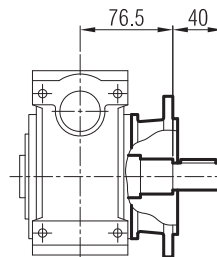
İRSFM / İRSFP / İRSF



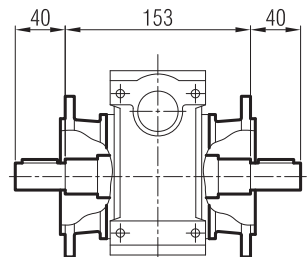
- FR - SR



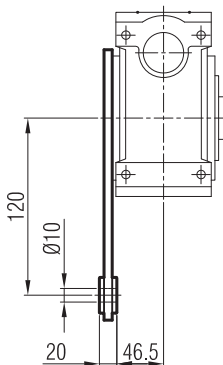
- FL - SL



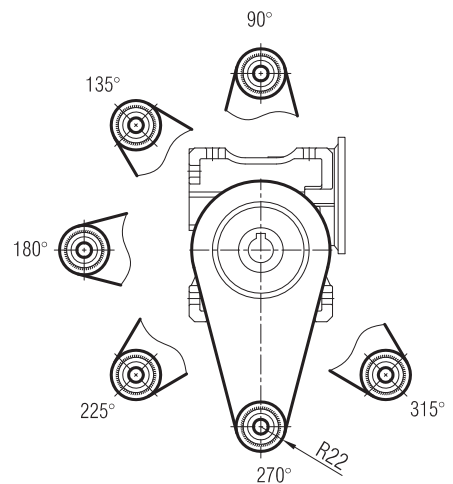
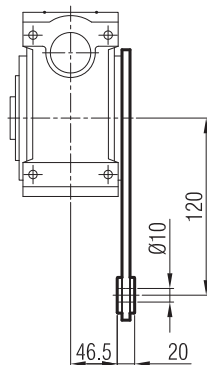
- FD - SD



- TR

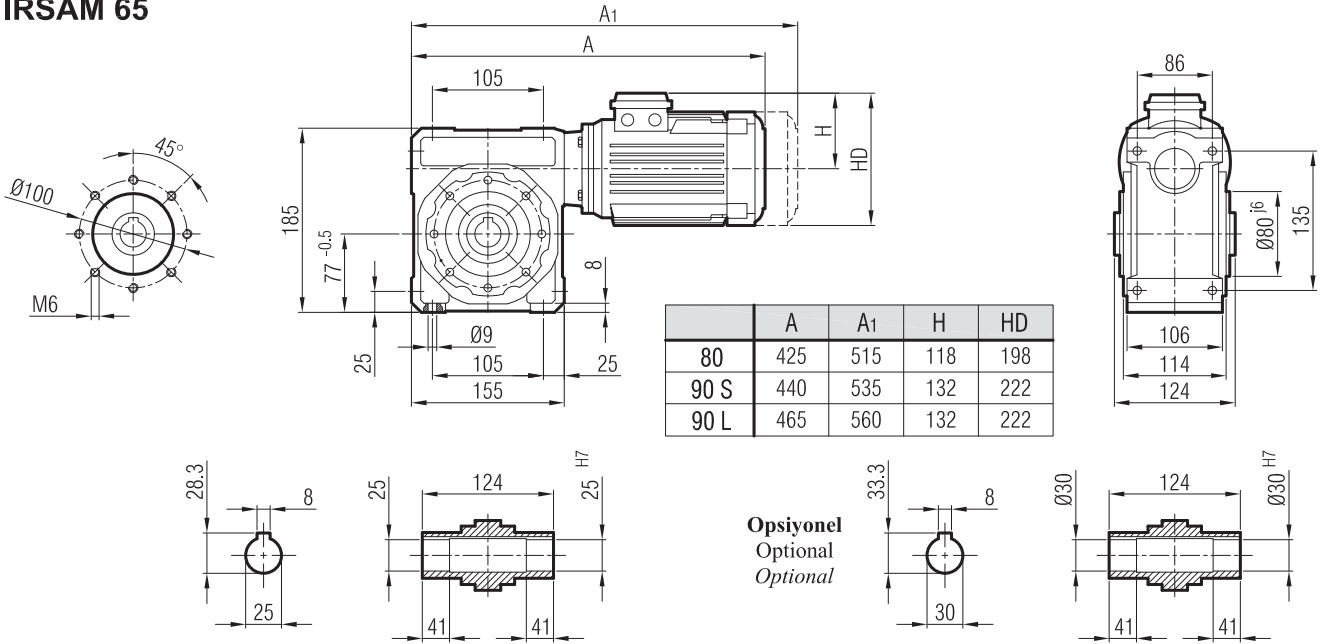


- TL

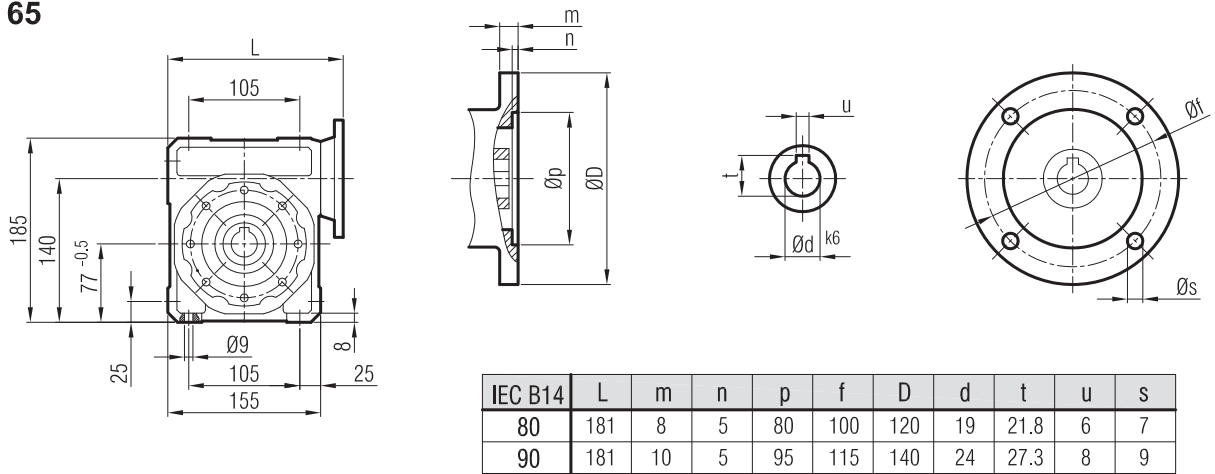




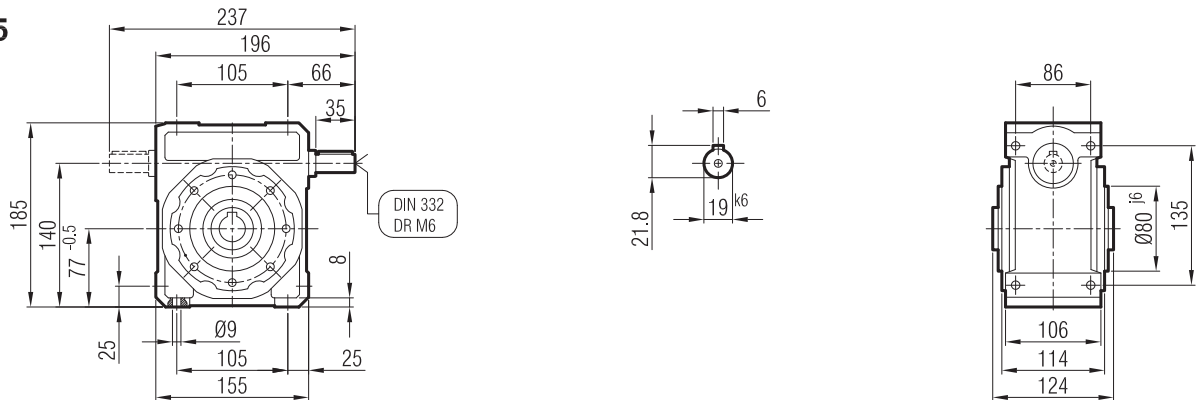
İRSAM 65



İRSAP 65

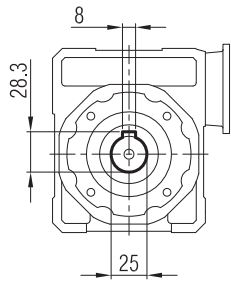


İRSA 65

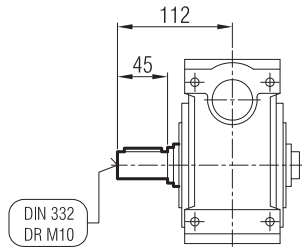




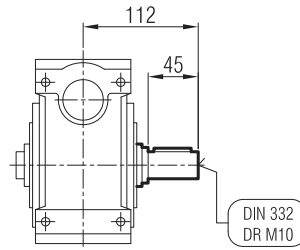
İRSAM / İRSAP / İRSA



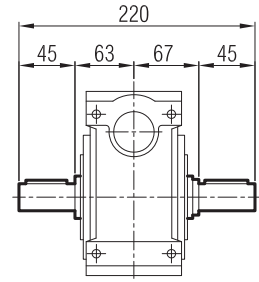
- SR



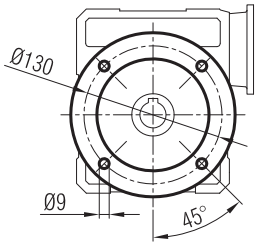
- SL



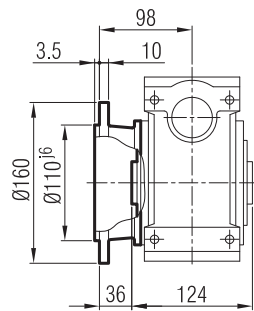
- SD



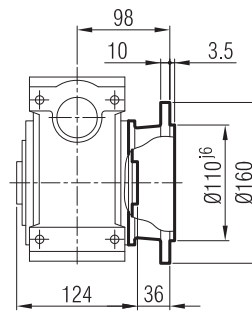
İRSFM / İRSFP / İRSF



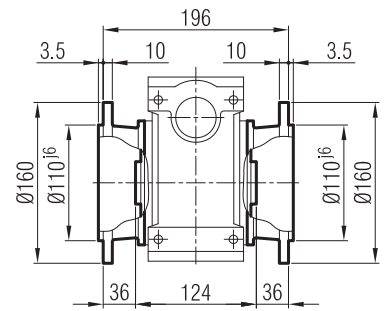
- FR



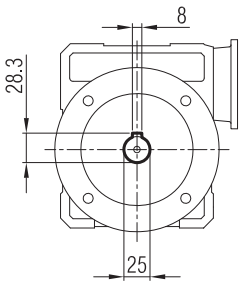
- FL



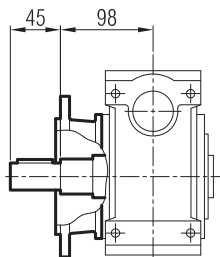
- FD



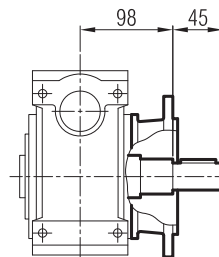
İRSFM / İRSFP / İRSF



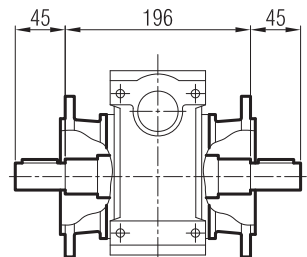
- FR - SR



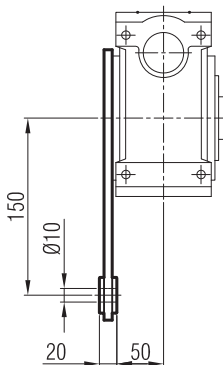
- FL - SL



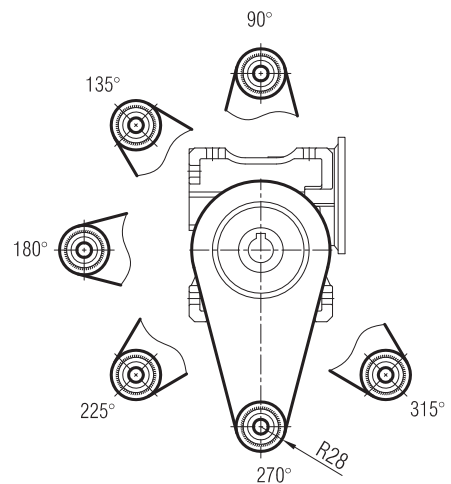
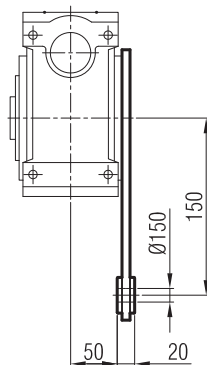
- FD - SD



- TR

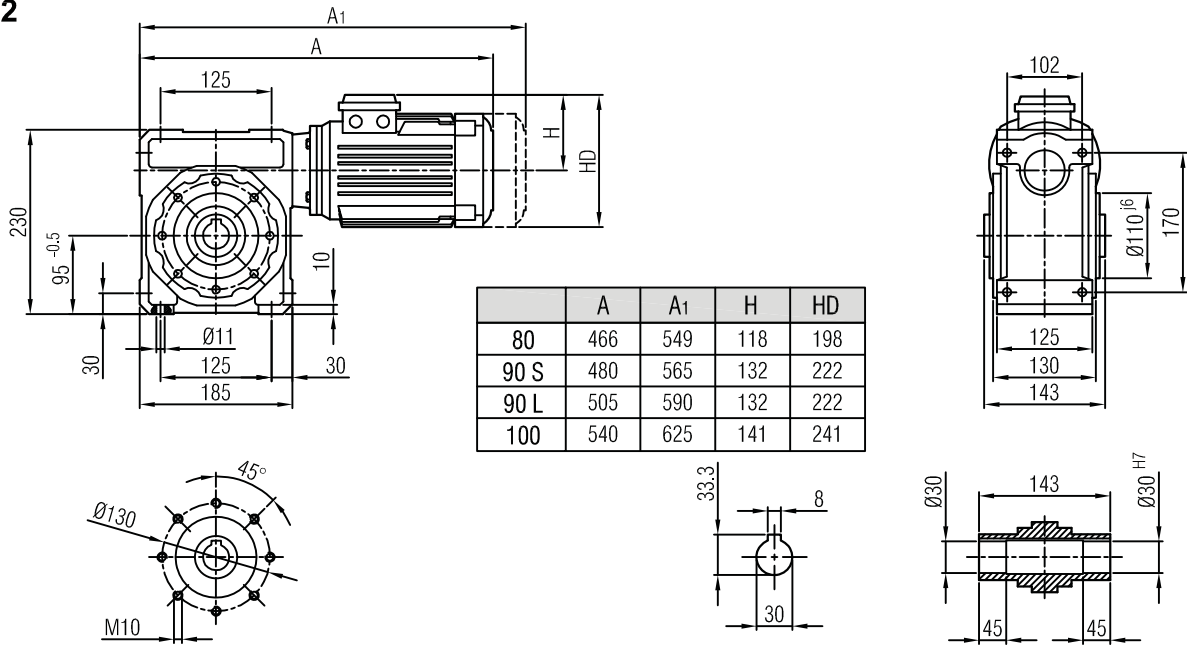


- TL

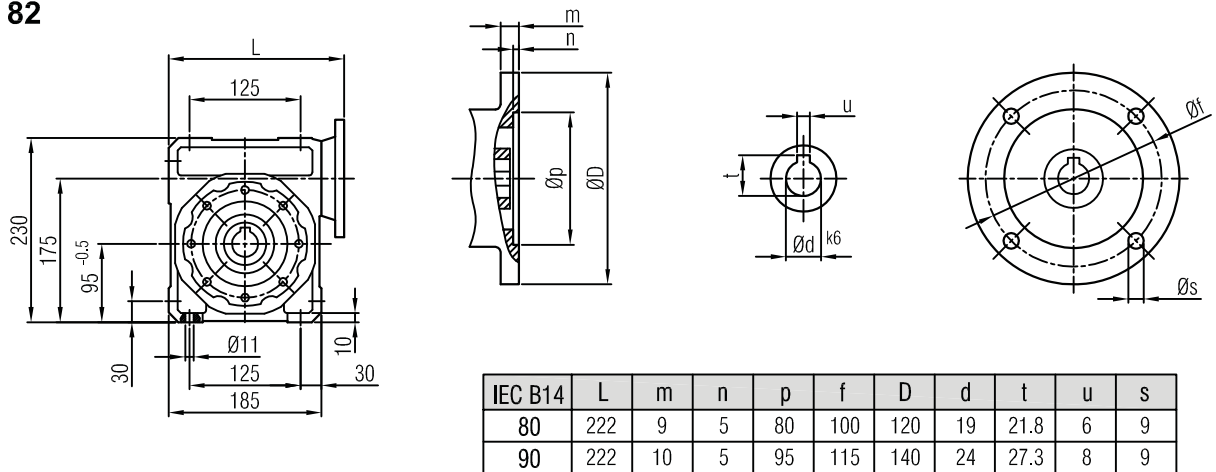




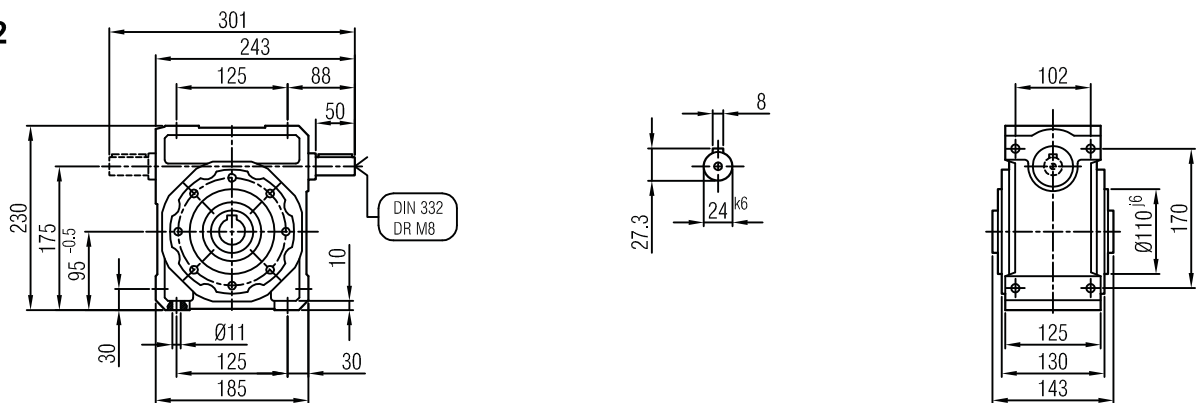
İRSAM 82



İRSAP 82



İRSA 82



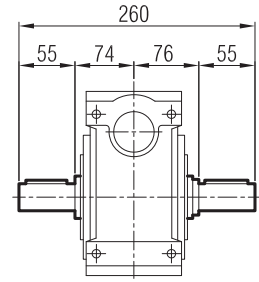
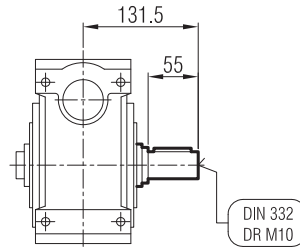
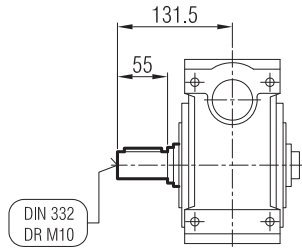
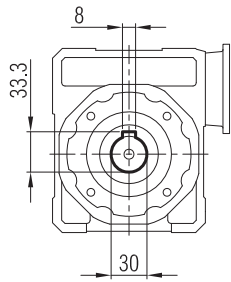


İRSAM / İRSAP / İRSA

- SR

- SL

- SD

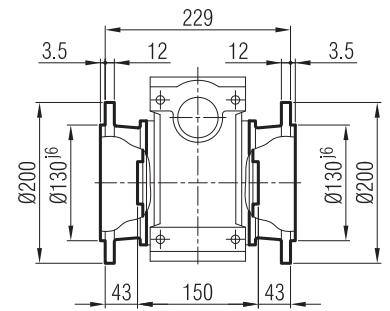
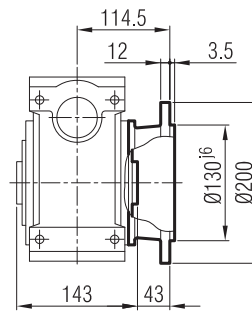
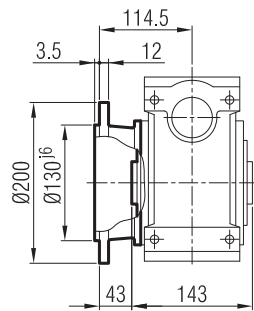
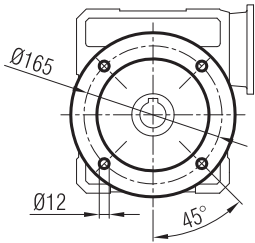


İRSFM / İRSFP / İRSF

- FR

- FL

- FD

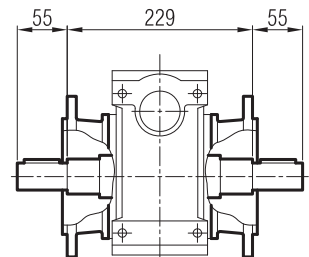
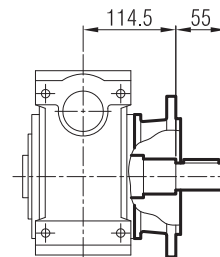
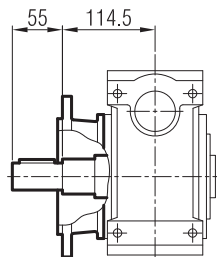
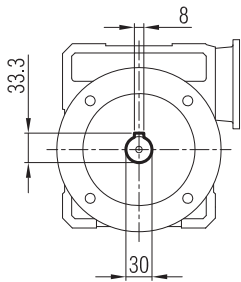


İRSFM / İRSFP / İRSF

- FR - SR

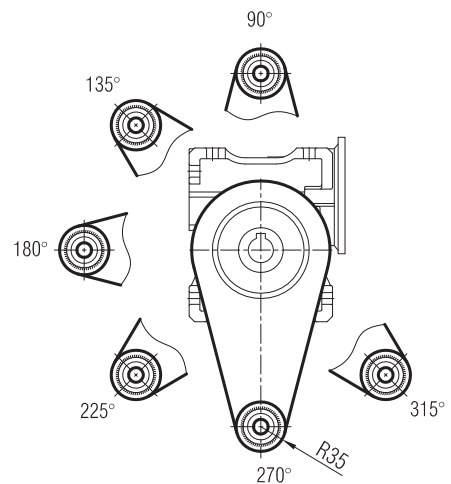
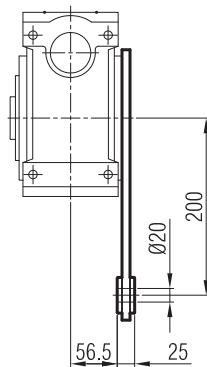
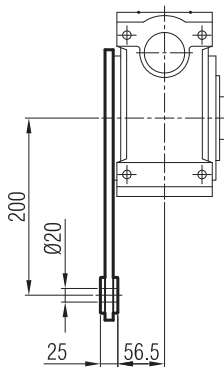
- FL - SL

- FD - SD



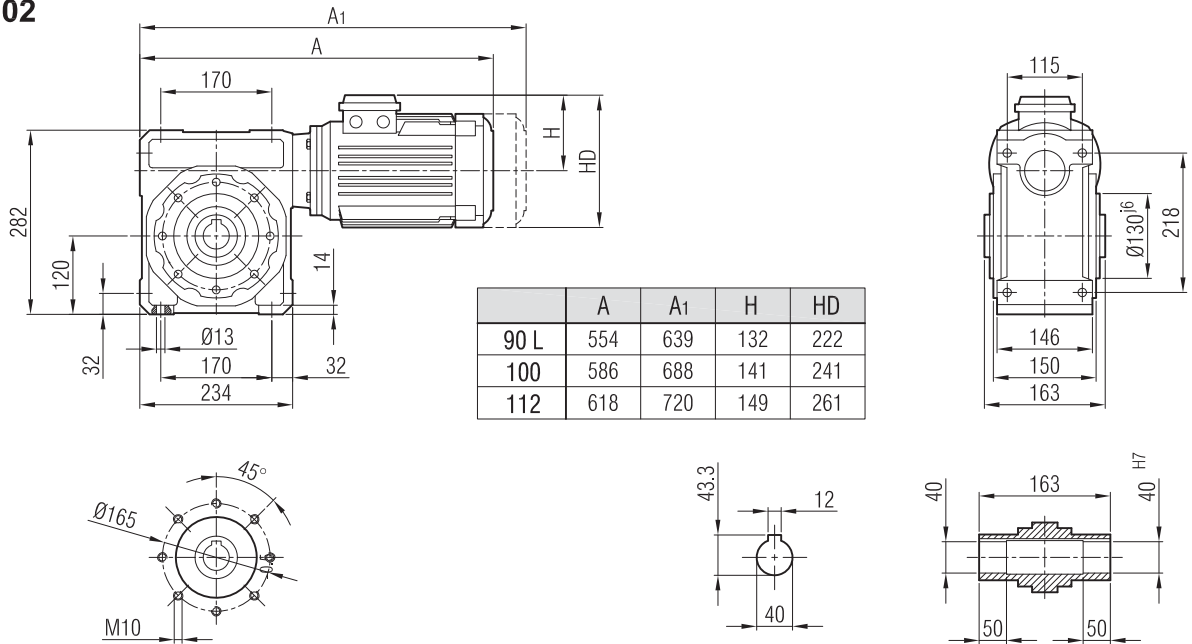
- TR

- TL

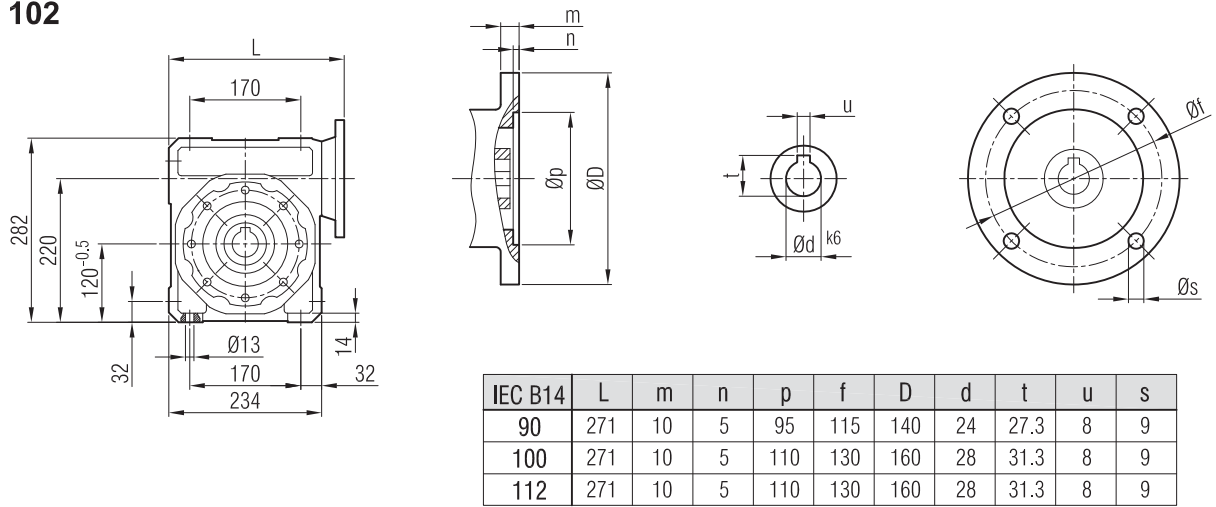




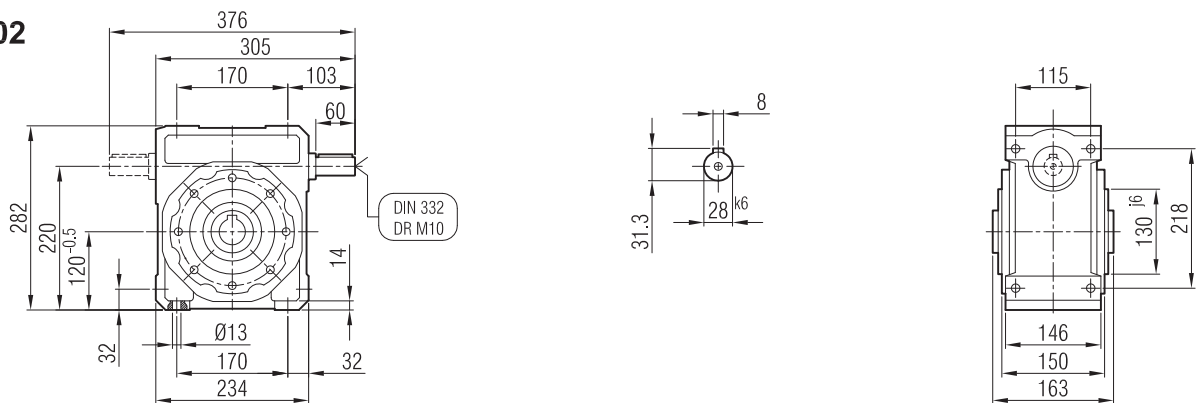
İRSAM 102



IRSAP 102

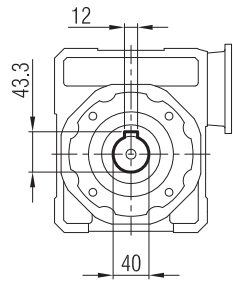


İRSA 102

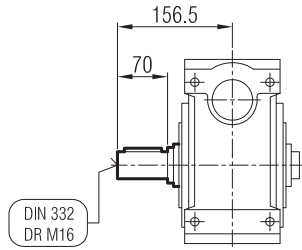




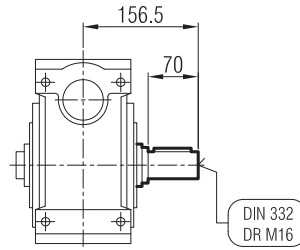
İRSAM / İRSAP / İRSA



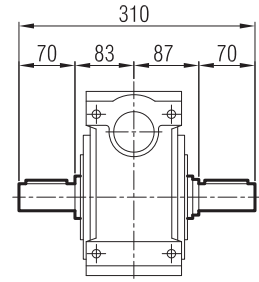
- SR



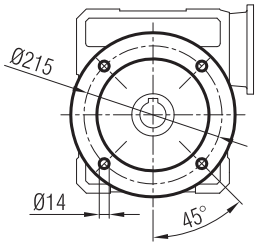
- SL



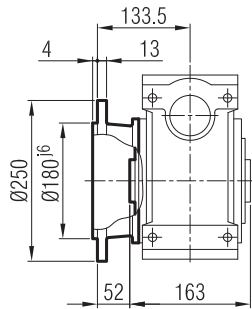
- SD



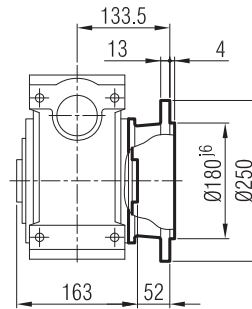
İRSFM / İRSFP / İRSF



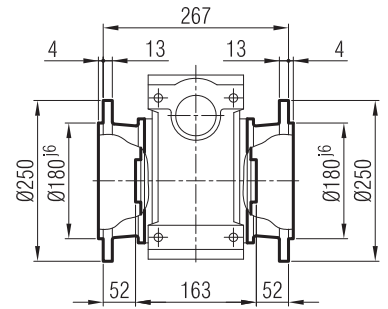
- FR



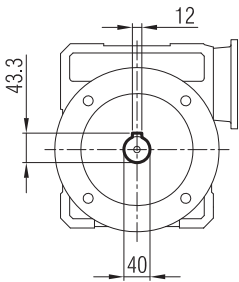
- FL



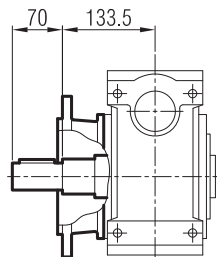
- FD



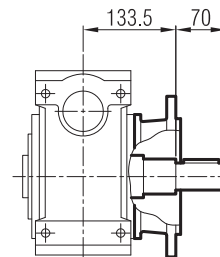
İRSFM / İRSFP / İRSF



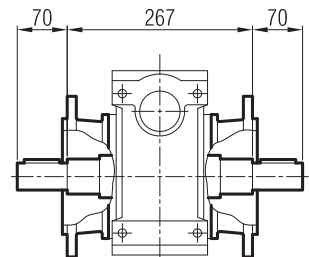
- FR - SR



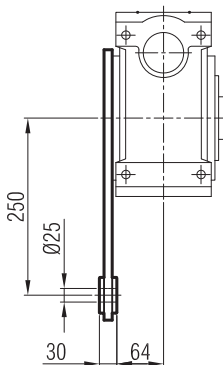
- FL - SL



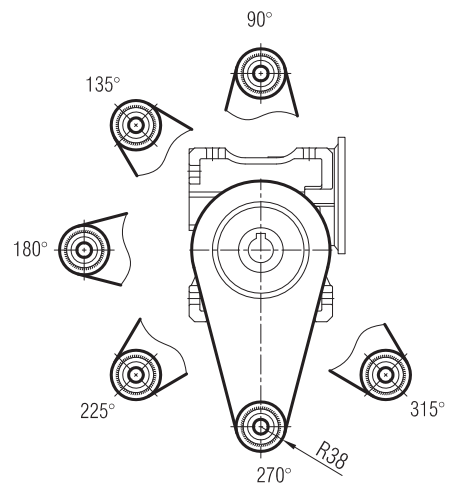
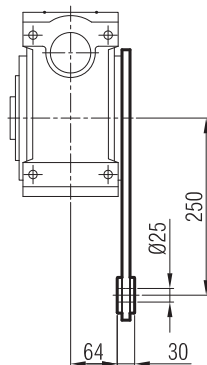
- FD - SD



- TR

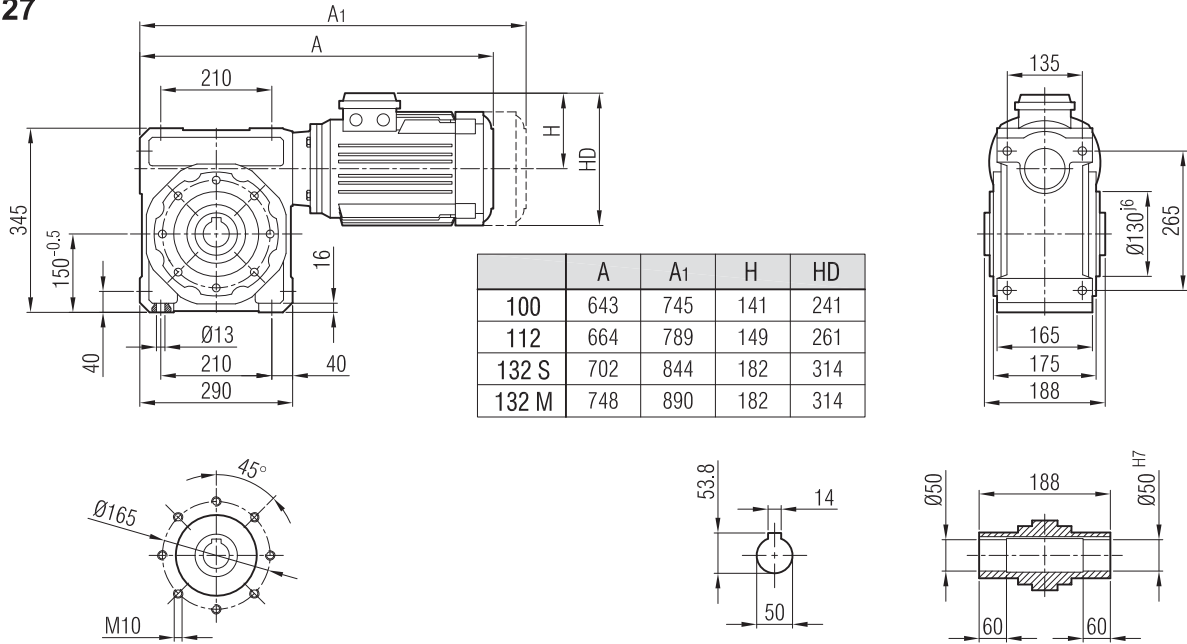


- TL

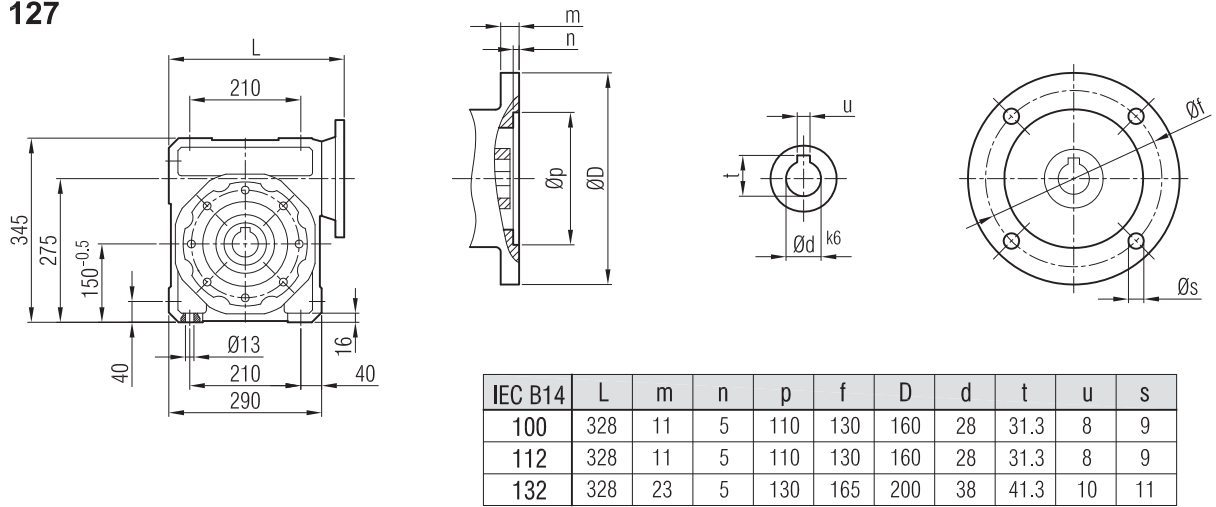




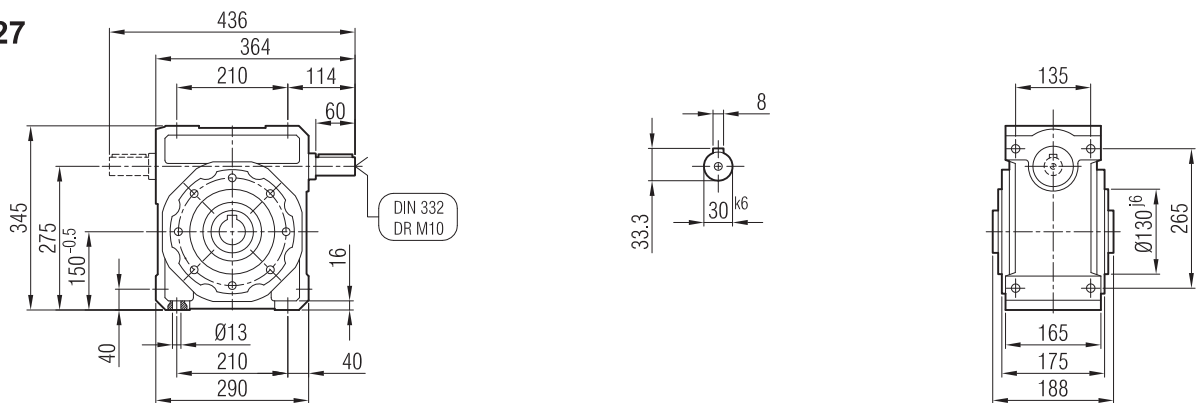
İRSAM 127



IRSAP 127

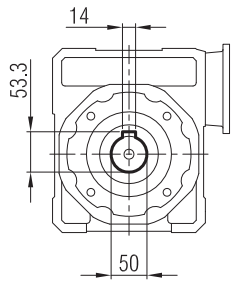


İRSA 127

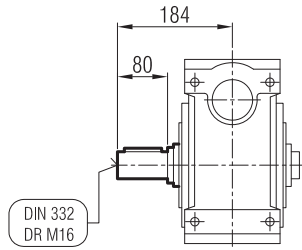




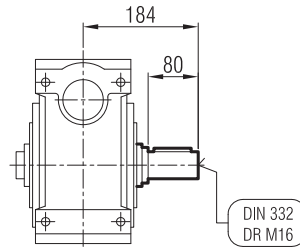
İRSAM / İRSAP / İRSA



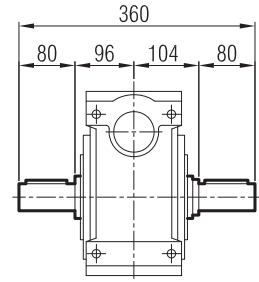
- SR



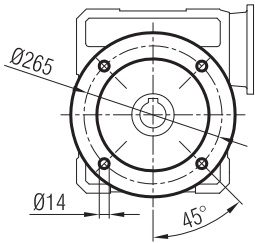
- SL



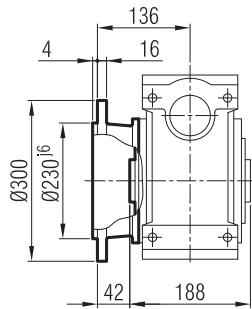
- SD



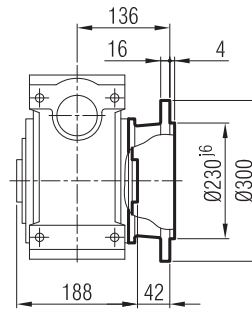
İRSFM / İRSFP / İRSF



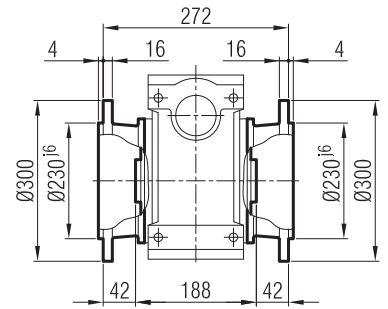
- FR



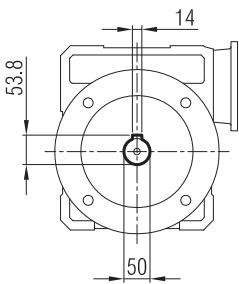
- FL



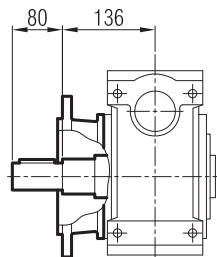
- FD



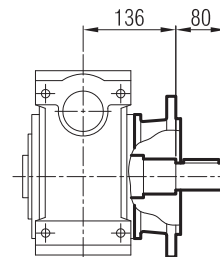
İRSFM / İRSFP / İRSF



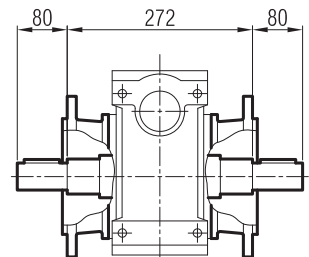
- FR - SR



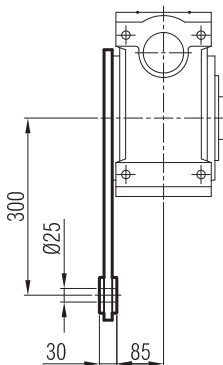
- FL - SL



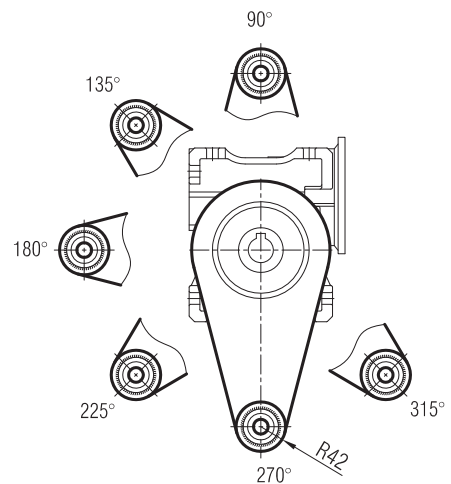
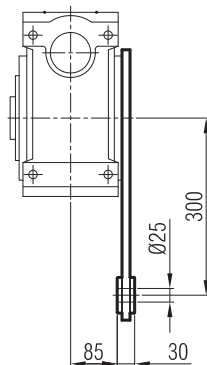
- FD - SD



- TR

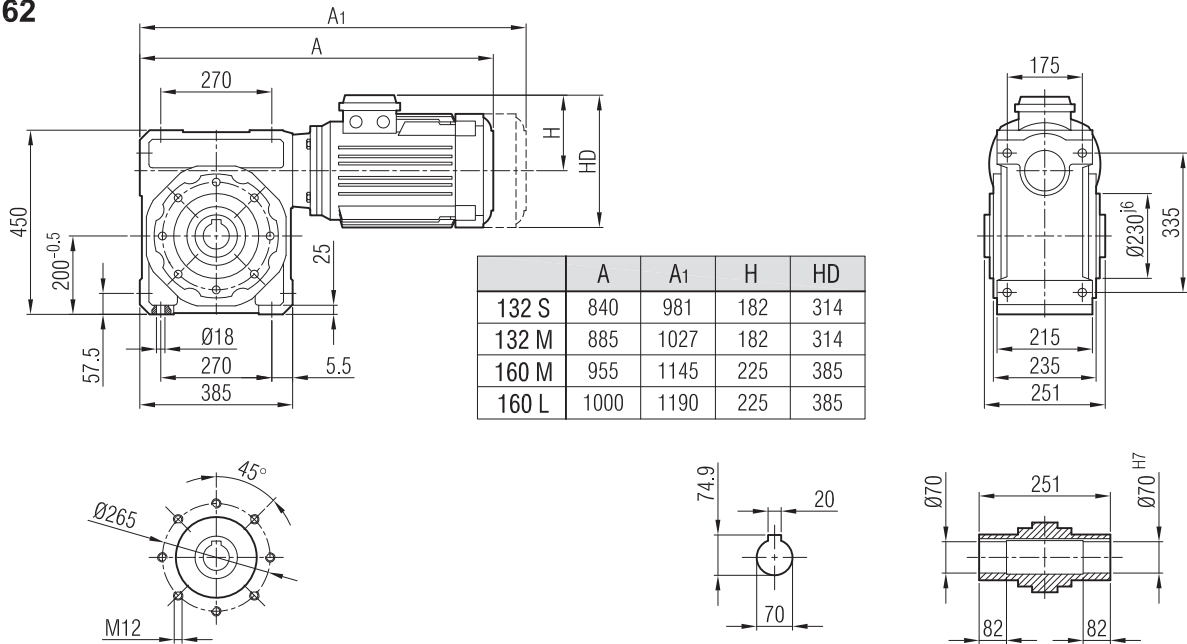


- TL

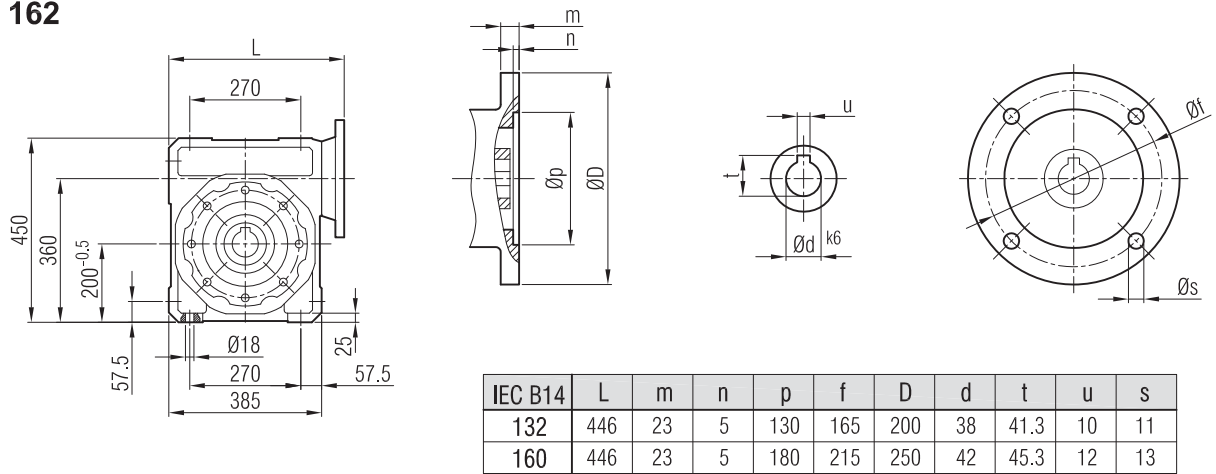




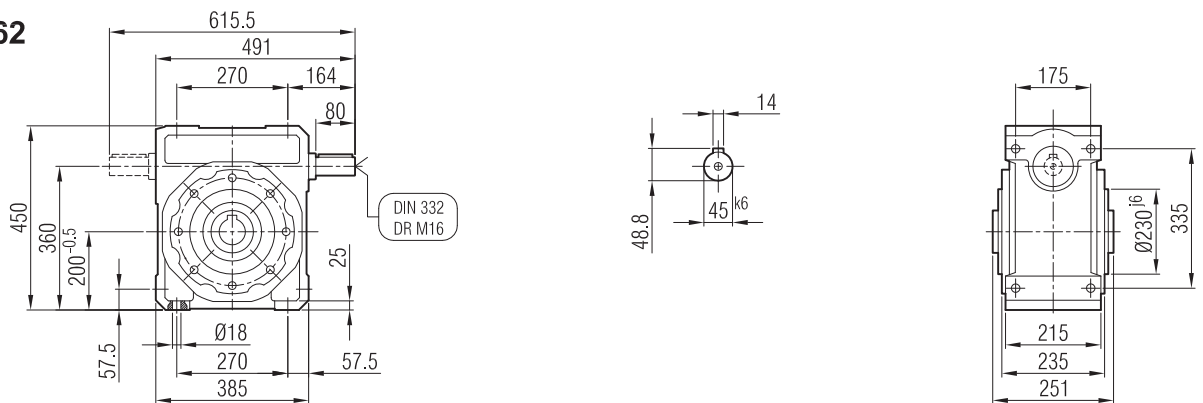
İRSAM 162



İRSAP 162

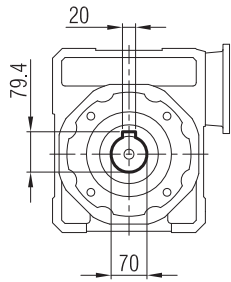


İRSA 162

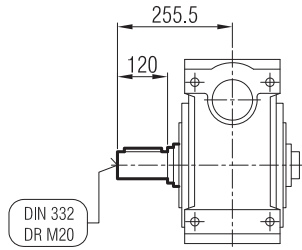




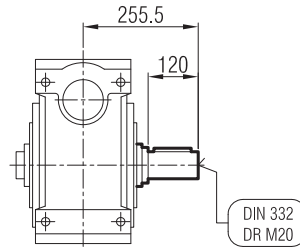
İRSAM / İRSAP / İRSA



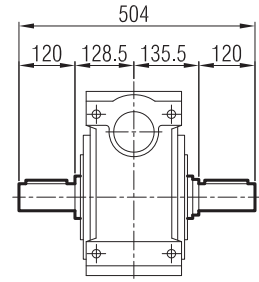
- SR



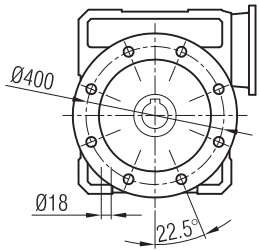
- SL



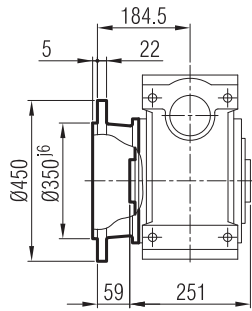
- SD



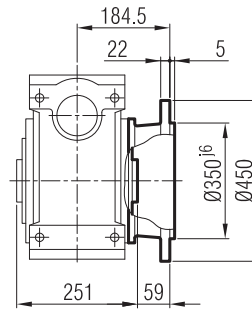
İRSFM / İRSFP / İRSF



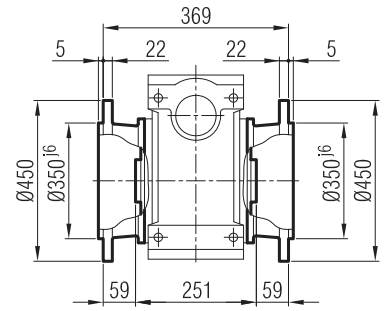
- FR



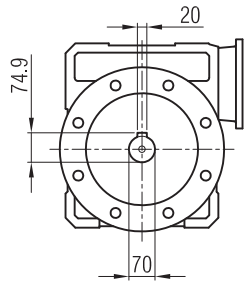
- FL



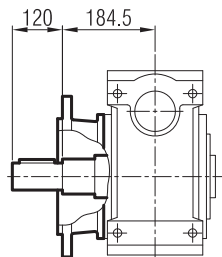
- FD



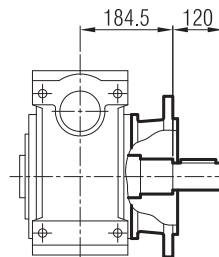
İRSFM / İRSFP / İRSF



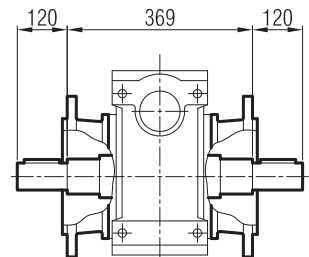
- FR - SR



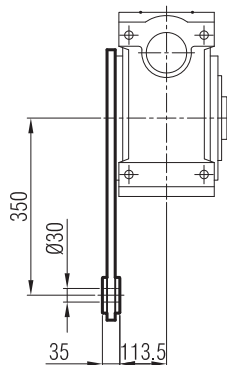
- FL - SL



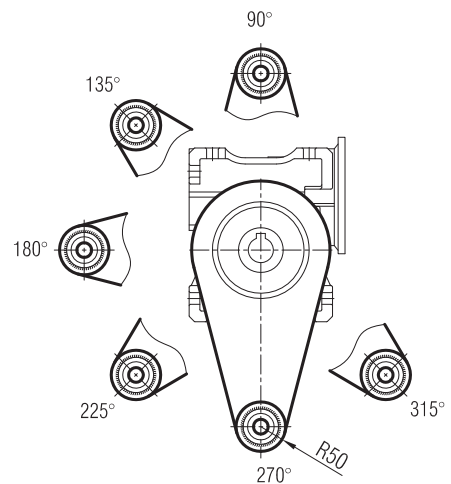
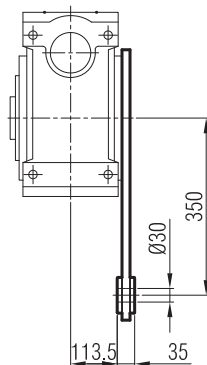
- FD - SD



- TR

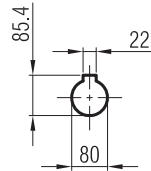
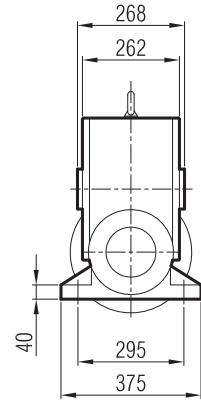
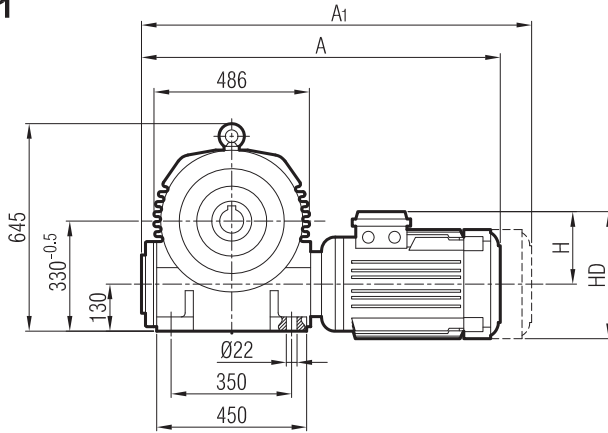


- TL

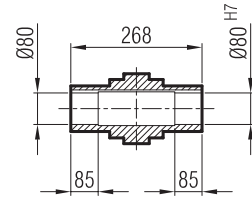




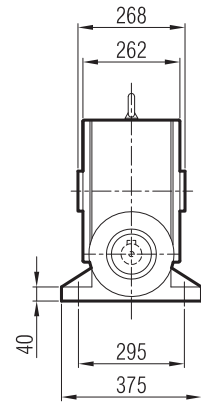
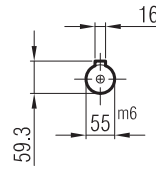
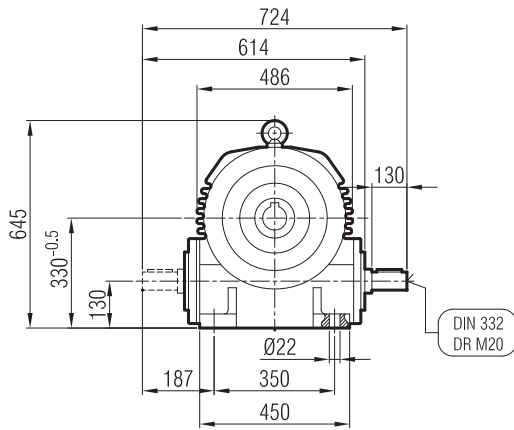
İRSAM 201



	A	A ₁	H	HD
132 S	888	1030	182	314
132 M	934	1076	182	314
160 M	1002	1192	225	385
160 L	1046	1236	225	385

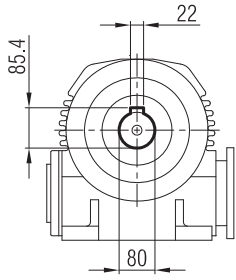


İRSA 201

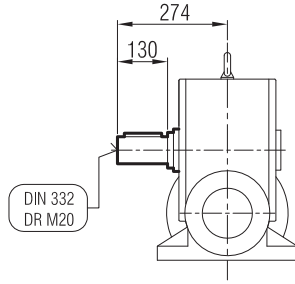




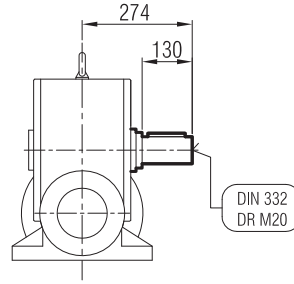
İRSAM / IRSA



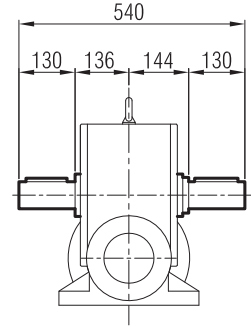
- SR



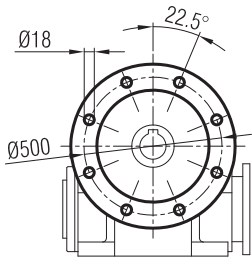
- SL



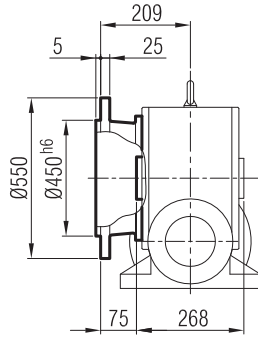
- SD



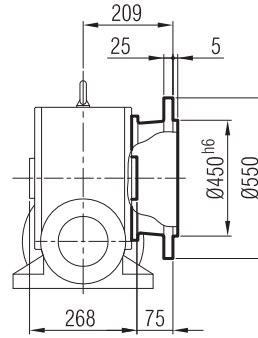
İRSFM / IRSF



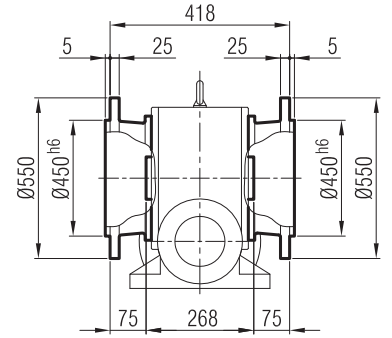
- FR



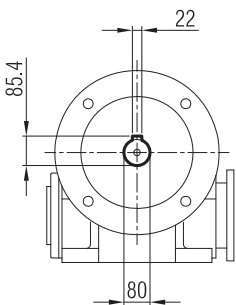
- FL



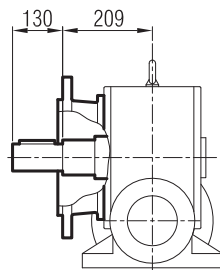
- FD



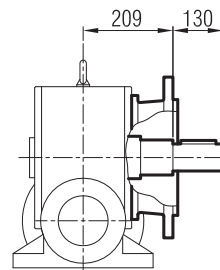
İRSFM / IRSF



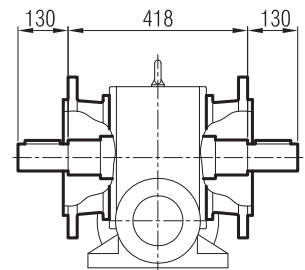
- FR - SR



- FL - SL

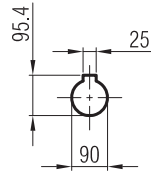
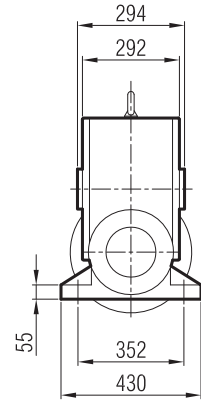
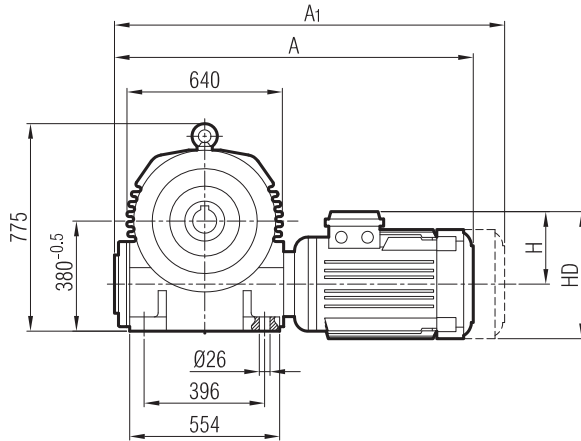


- FD - SD

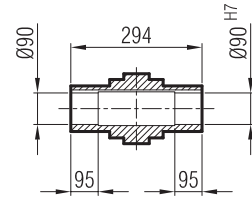




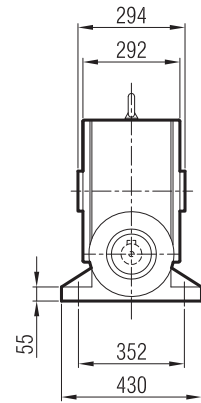
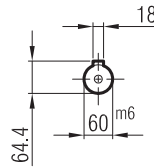
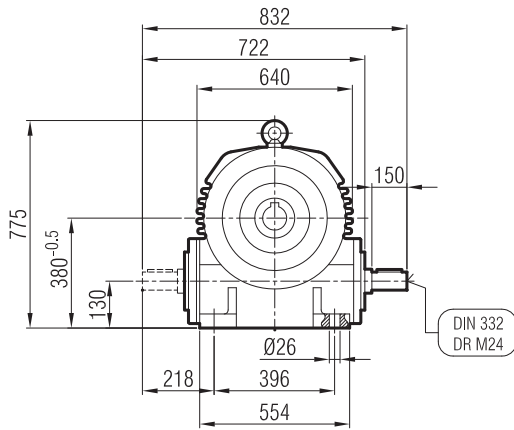
İRSAM 250



	A	A1	H	HD
160 L	1150	1340	225	385
180 M	1161	1356	248	428
180 L	1199	1394	248	428

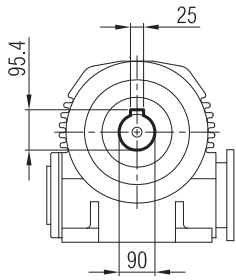


İRSA 250

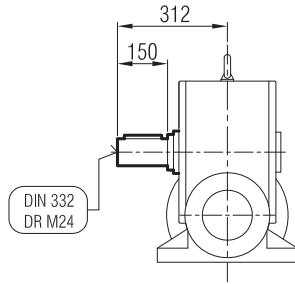




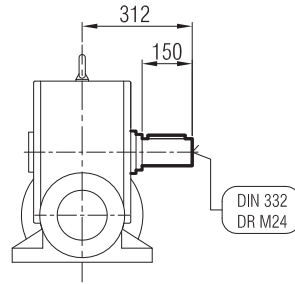
İRSAM / IRSA



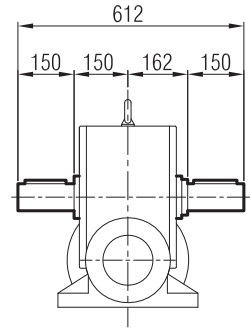
- SR



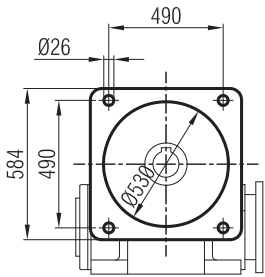
- SL



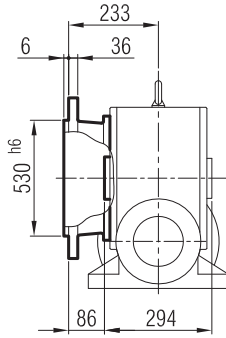
- SD



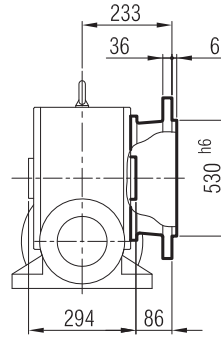
İRSFM / IRSF



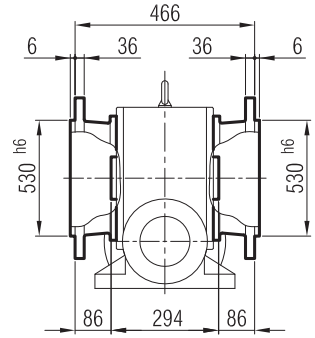
- FR



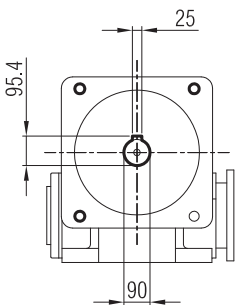
- FL



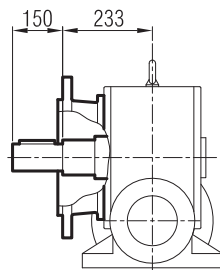
- FD



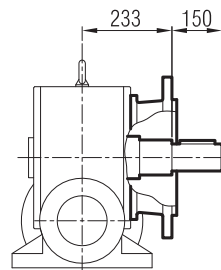
İRSFM / IRSF



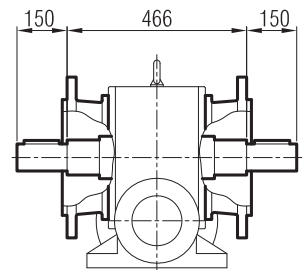
- FR - SR



- FL - SL

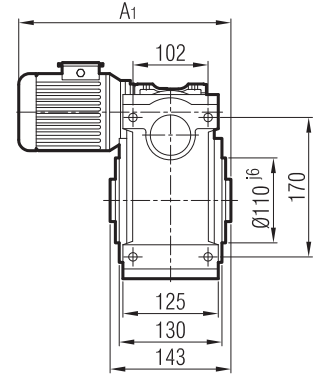
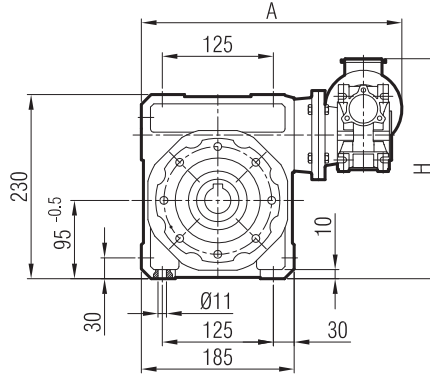
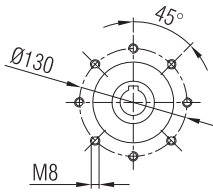


- FD - SD

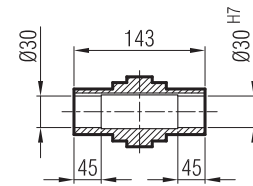
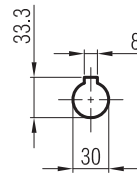




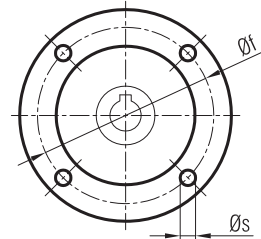
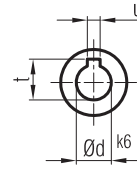
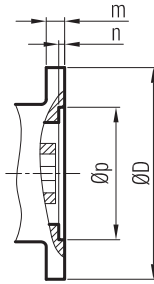
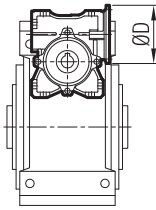
İRSAM 82 S 40



	A	A1	H
63	423	339	377
71	440	365	397

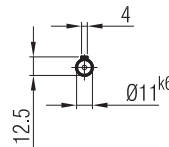
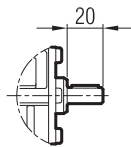
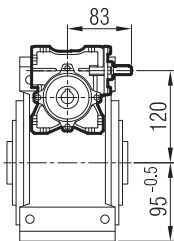


İRSAP 82 S 40



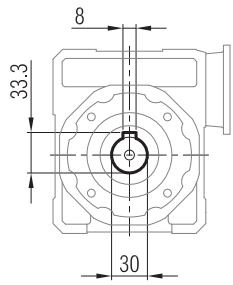
IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

İRSA 82 S 40

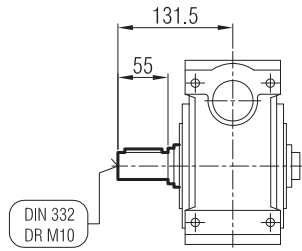




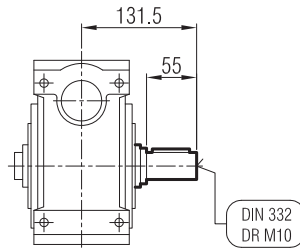
İRSAM / İRSAP / İRSA



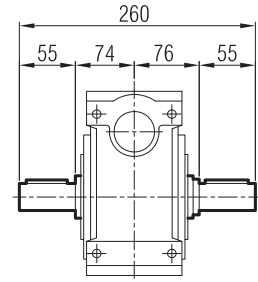
- SR



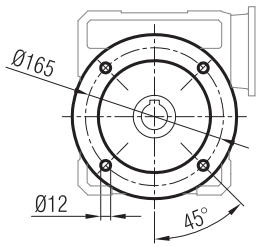
- SL



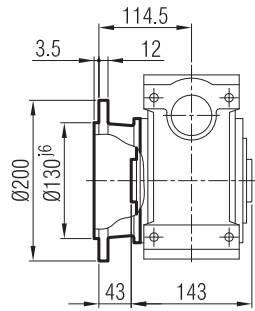
- SD



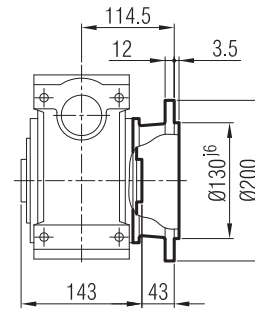
İRSFM / İRSFP / İRSF



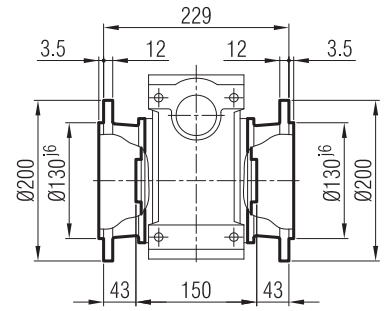
- FR



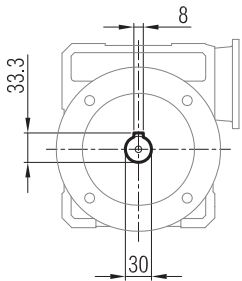
- FL



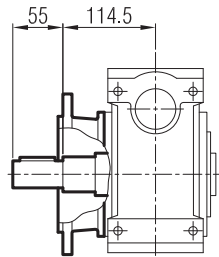
- FD



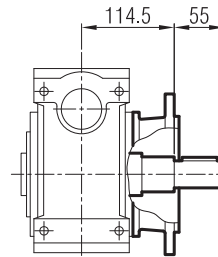
İRSFM / İRSFP / İRSF



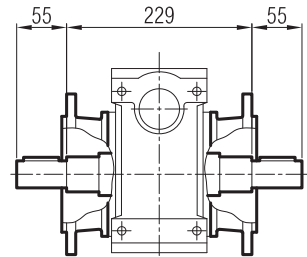
- FR - SR



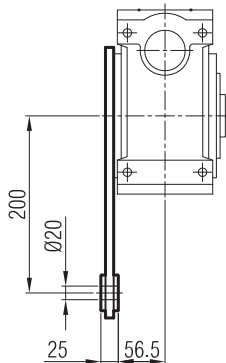
- FL - SL



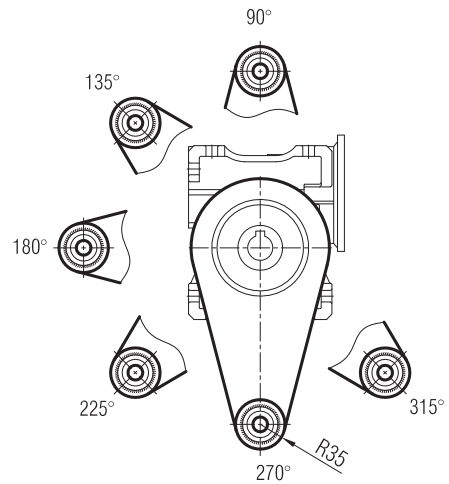
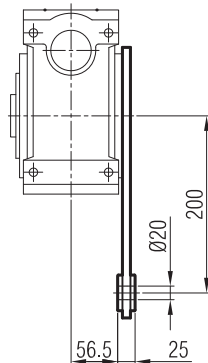
- FD - SD



- TR

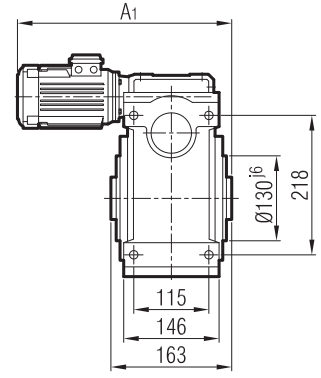
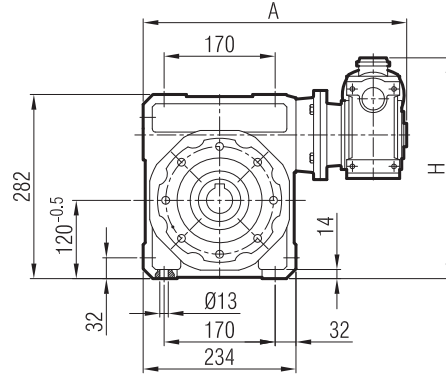
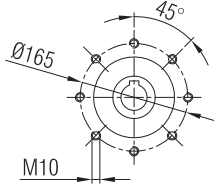


- TL

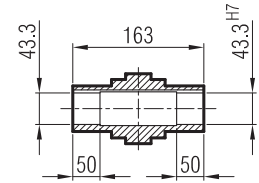
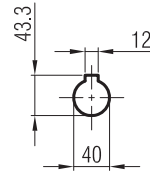




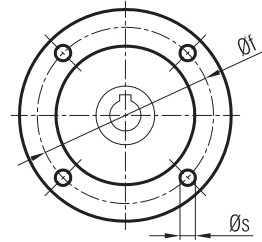
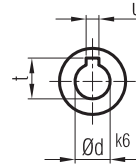
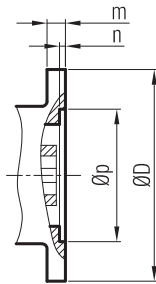
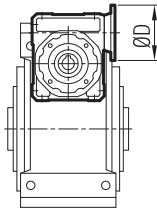
İRSAM 102 İRS 52



	A	A ₁	H
71	406	387	336
80	406	409	343

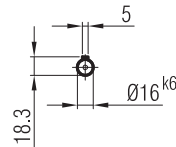
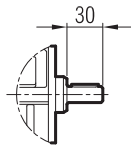
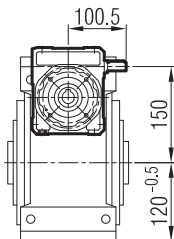


İRSAP 102 İRS 52



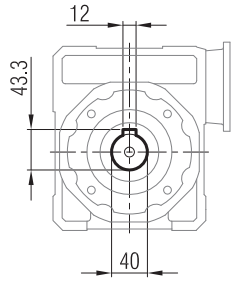
IEC B14	m	n	p	f	D	d	t	u	s
71	8	3.5	70	85	105	14	16.3	5	7
80	8	4	80	100	120	19	21.8	6	7

İRSA 102 İRS 52

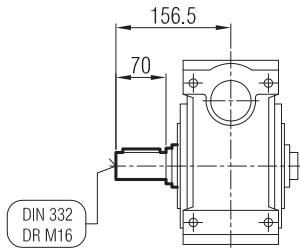




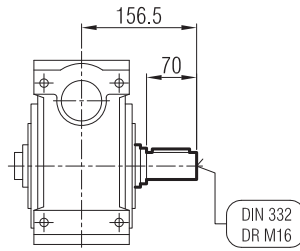
İRSAM / İRSAP / İRSA



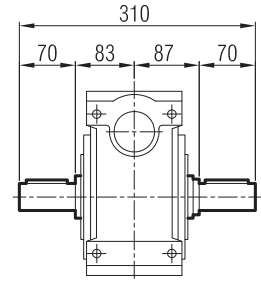
- SR



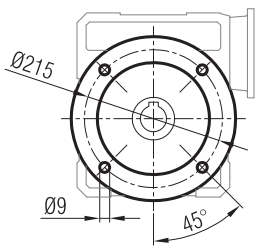
- SL



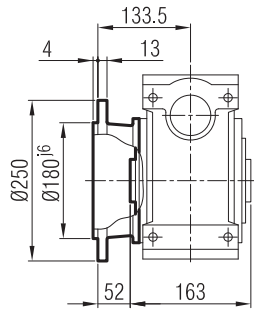
- SD



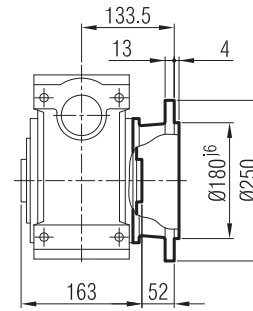
İRSFM / İRSFP / İRSF



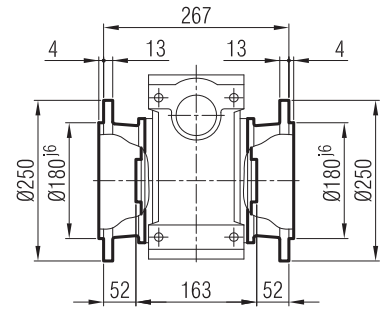
- FR



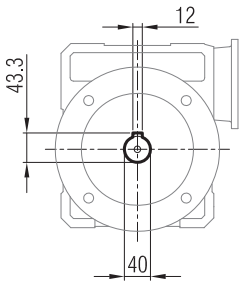
- FL



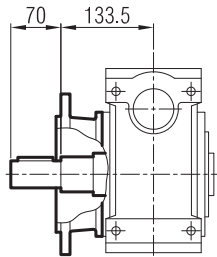
- FD



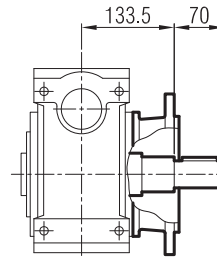
İRSFM / İRSFP / İRSF



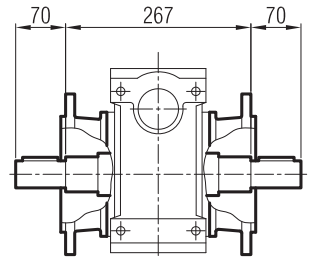
- FR - SR



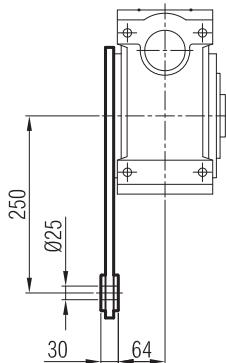
- FL - SL



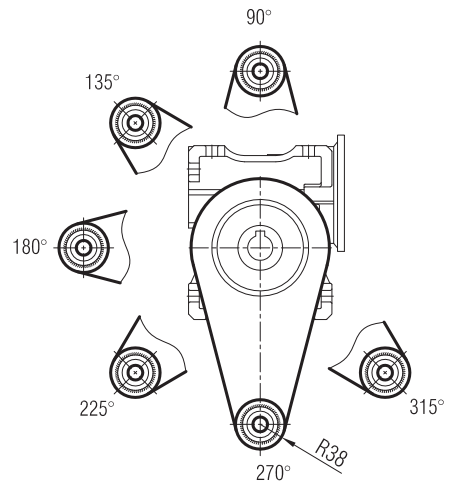
- FD - SD



- TR

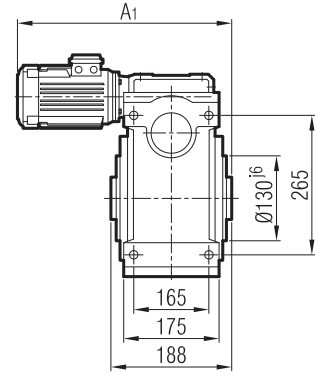
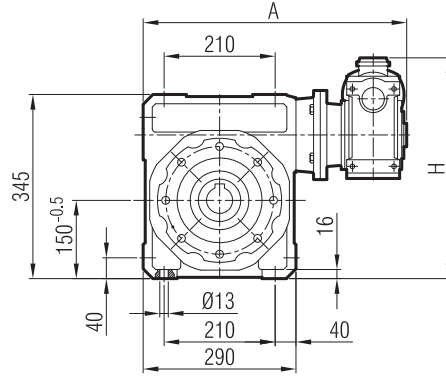
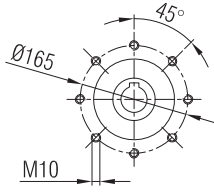


- TL

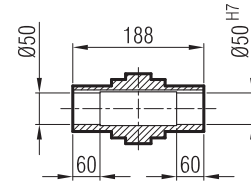
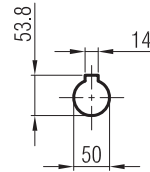




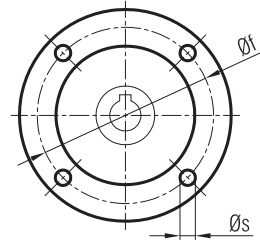
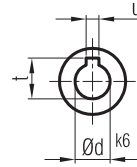
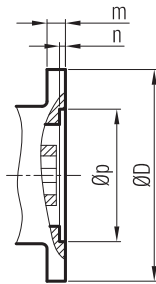
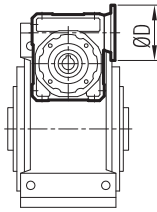
İRSAM 127 İRS 65



	A	A ₁	H
90 S	488	457	470
90 L	488	482	470

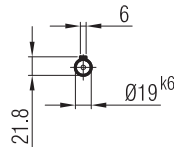
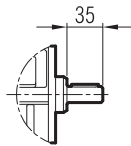
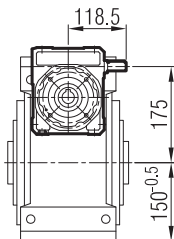


İRSAP 127 İRS 65



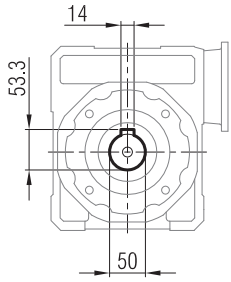
IEC B14	m	n	p	f	D	d	t	u	s
90	10	5	95	115	140	24	27.3	8	9

İRSA 127 İRS 65

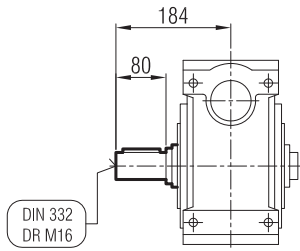




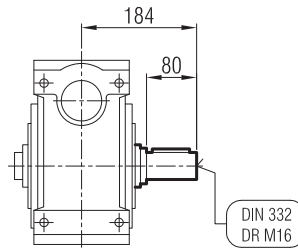
İRSAM / İRSAP / İRSA



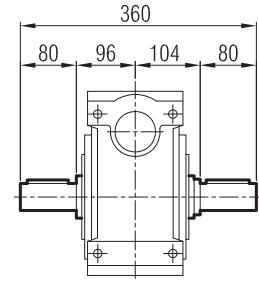
- SR



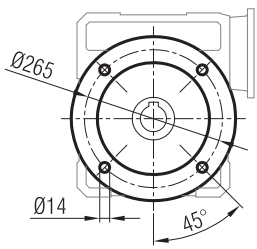
- SL



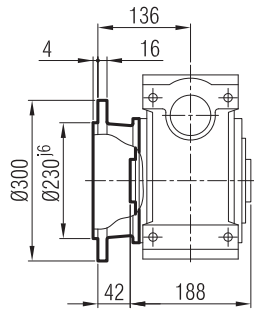
- SD



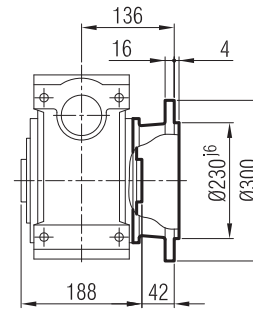
İRSFM / İRSFP / İRSF



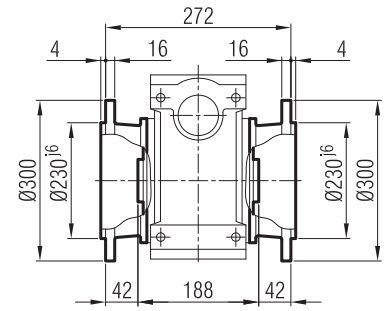
- FR



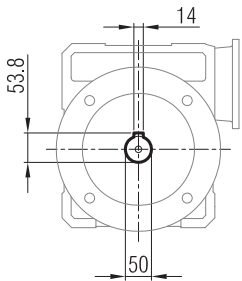
- FL



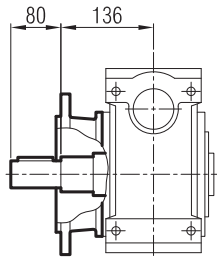
- FD



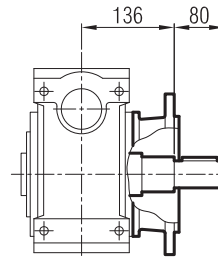
İRSFM / İRSFP / İRSF



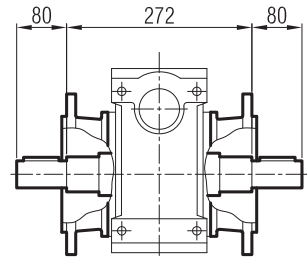
- FR - SR



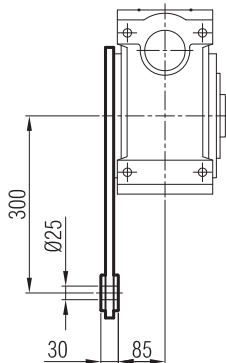
- FL - SL



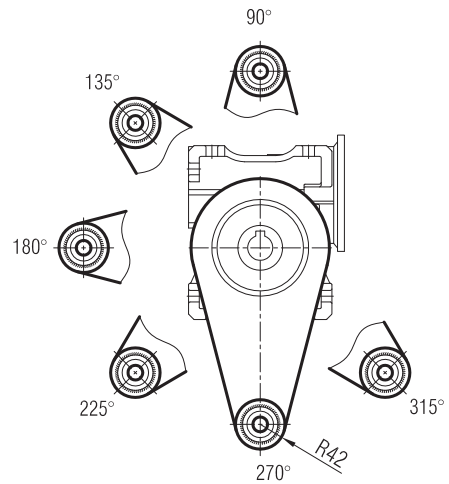
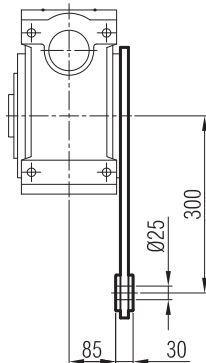
- FD - SD



- TR

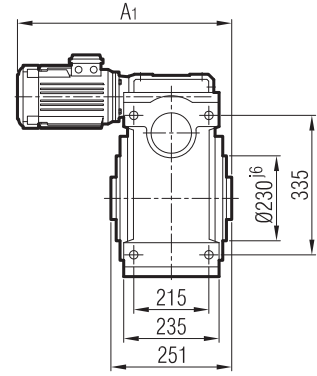
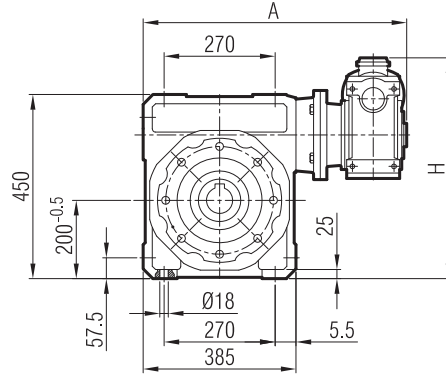
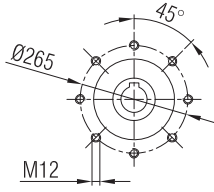


- TL

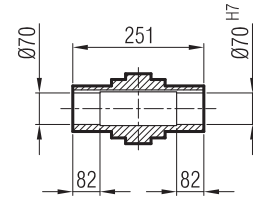
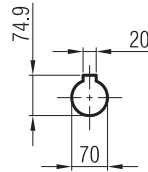




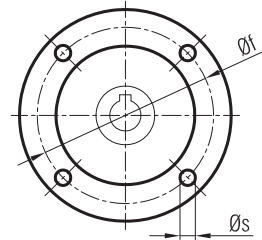
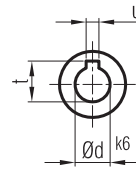
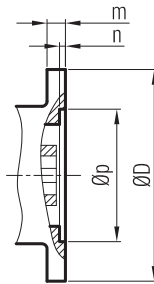
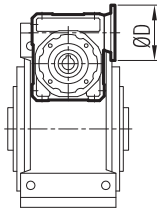
İRSAM 162 İRS 82



	A	A ₁	H
80	632	374	653

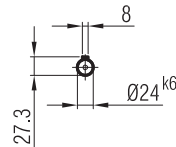
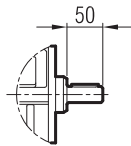
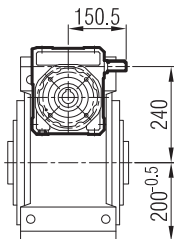


İRSAP 162 İRS 82



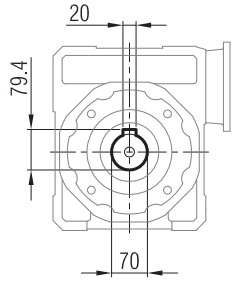
IEC B14	m	n	p	f	D	d	t	u	s
90	10	5	95	115	140	24	27.3	8	9

İRSA 162 İRS 82

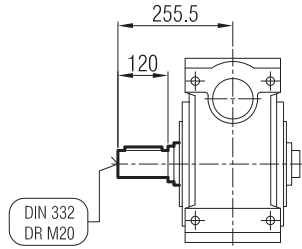




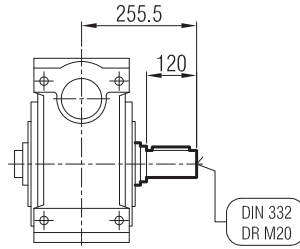
İRSAM / İRSAP / İRSA



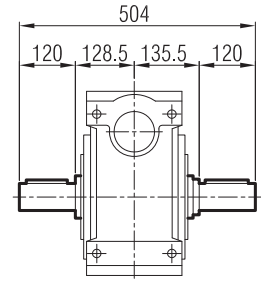
- SR



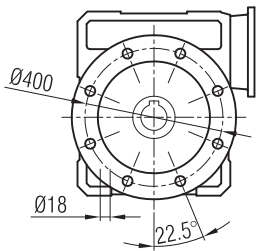
- SL



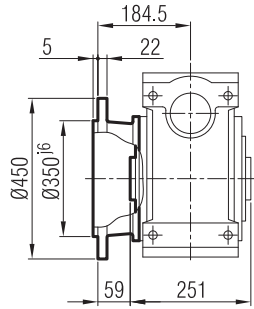
- SD



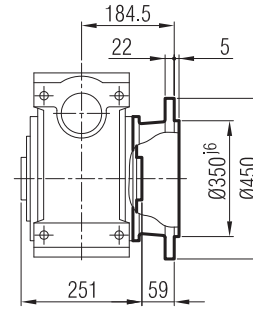
İRSFM / İRSFP / İRSF



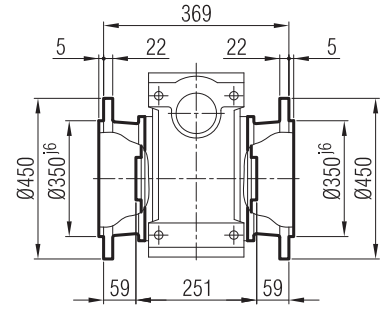
- FR



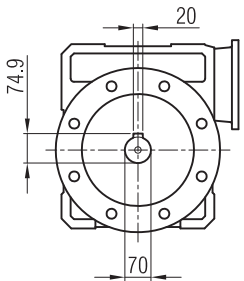
- FL



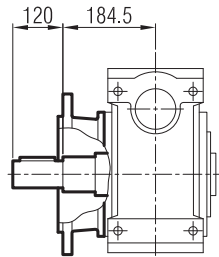
- FD



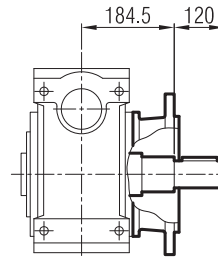
İRSFM / İRSFP / İRSF



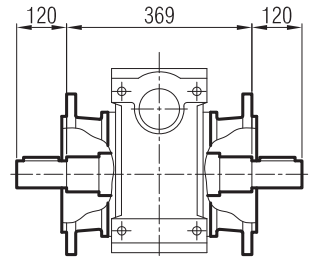
- FR - SR



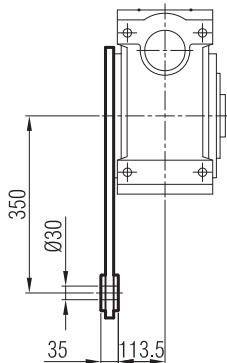
- FL - SL



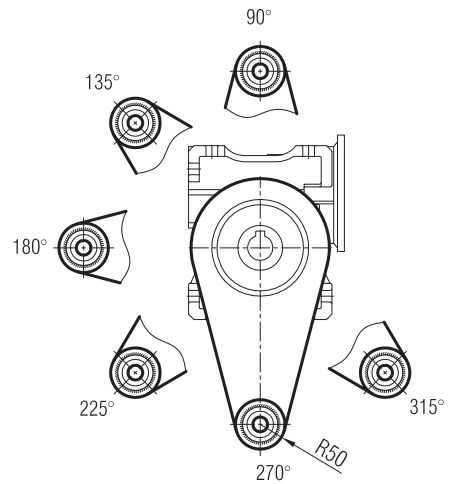
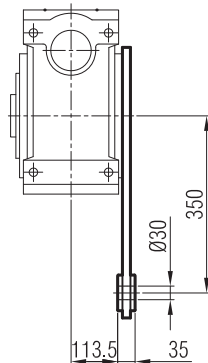
- FD - SD



- TR

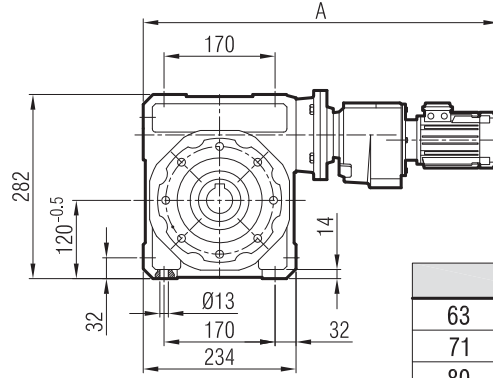
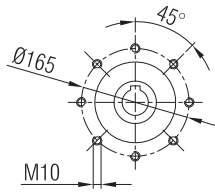


- TL

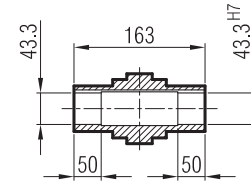
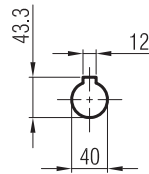
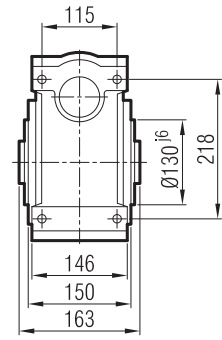




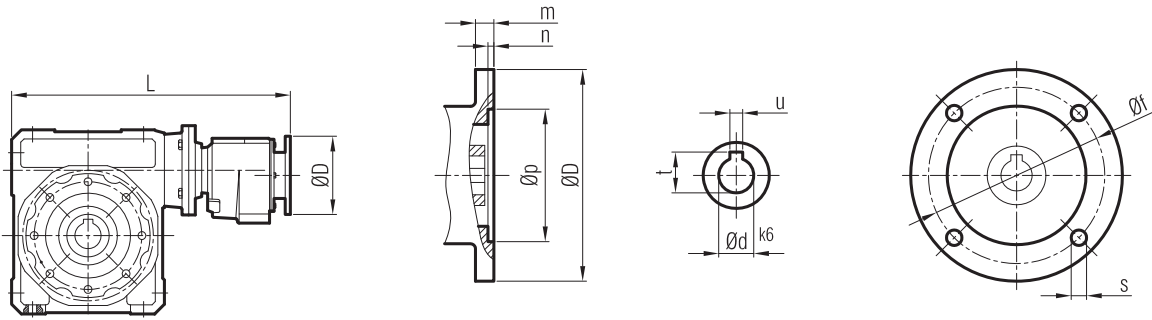
İRSAM 102 İR 43
İRSAM 102 İR 42



	A
63	587
71	615
80	645

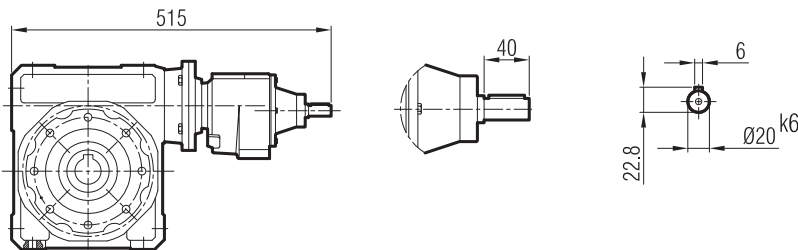


İRSAP 102 İR 43
İRSAP 102 İR 42



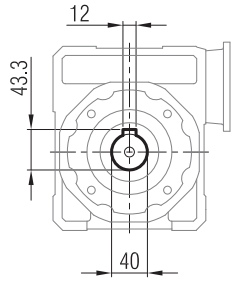
IEC B5	L	m	n	p	f	D	d	t	u	s
63	432	8	4	95	115	140	11	12.8	4	M8
71	440	9	4	110	130	160	14	16.3	5	M8
80	442	12	5	130	165	200	19	21.8	6	M10

İRSA 102 İR 43
İRSA 102 İR 42

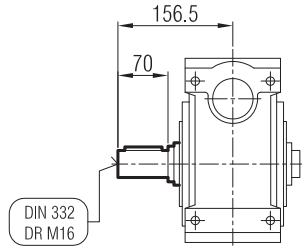




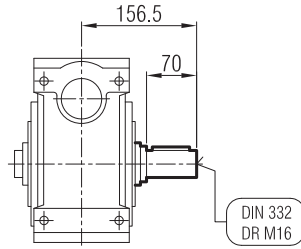
İRSAM / İRSAP / İRSA



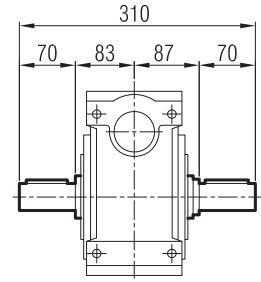
- SR



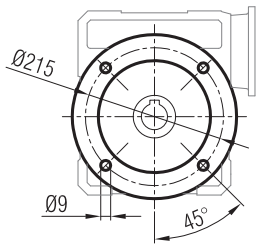
- SL



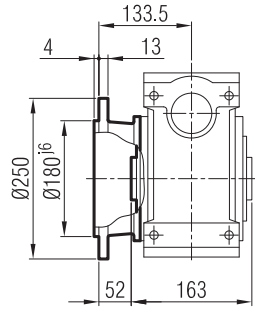
- SD



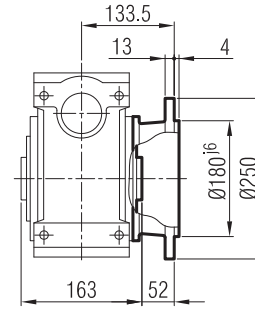
İRSFM / İRSFP / İRSF



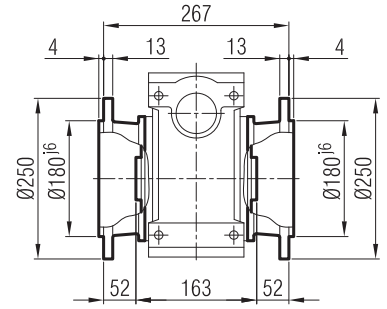
- FR



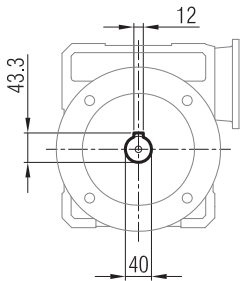
- FL



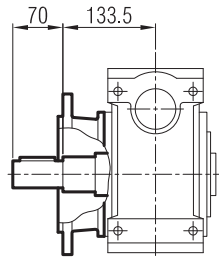
- FD



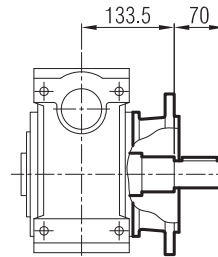
İRSFM / İRSFP / İRSF



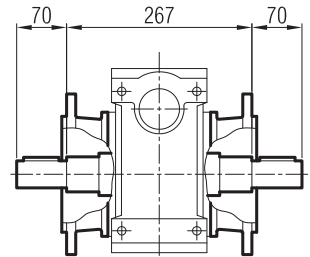
- FR - SR



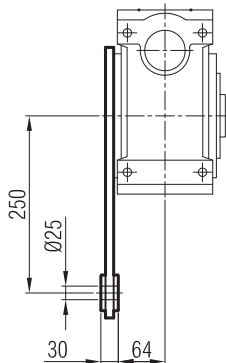
- FL - SL



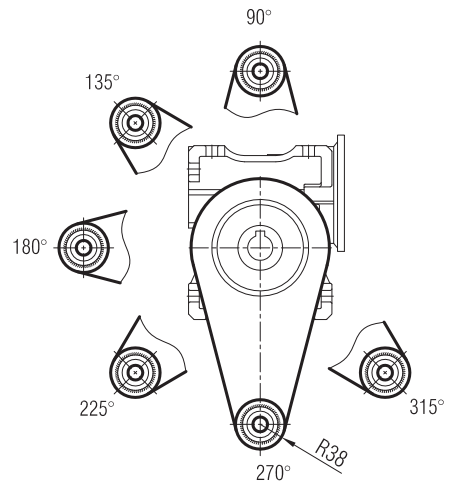
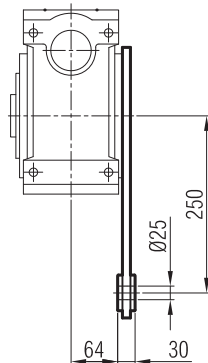
- FD - SD



- TR

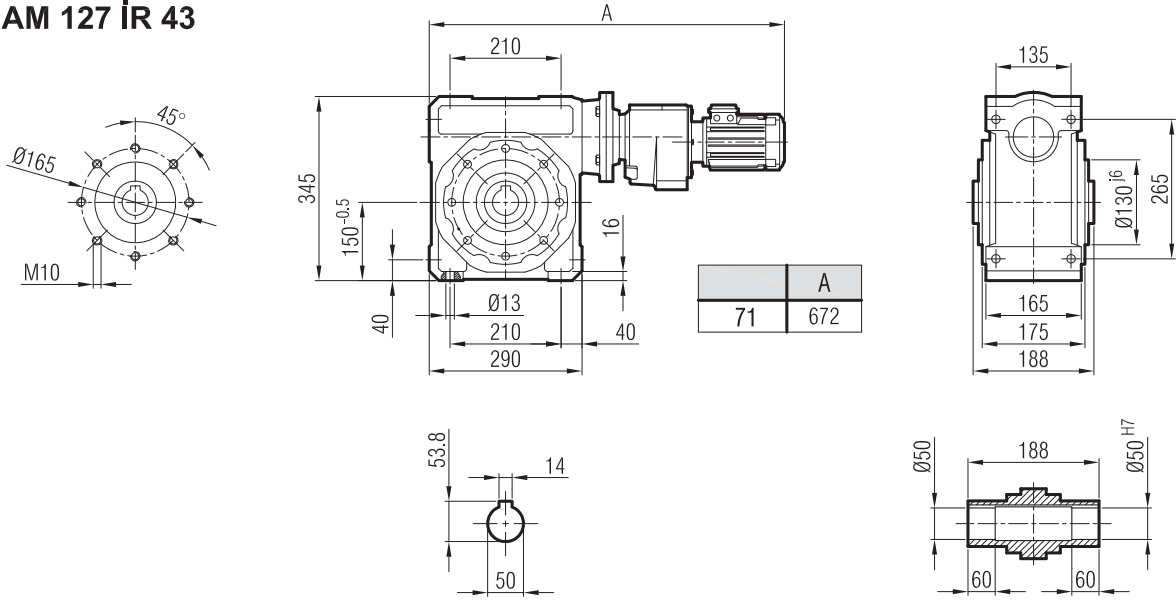


- TL

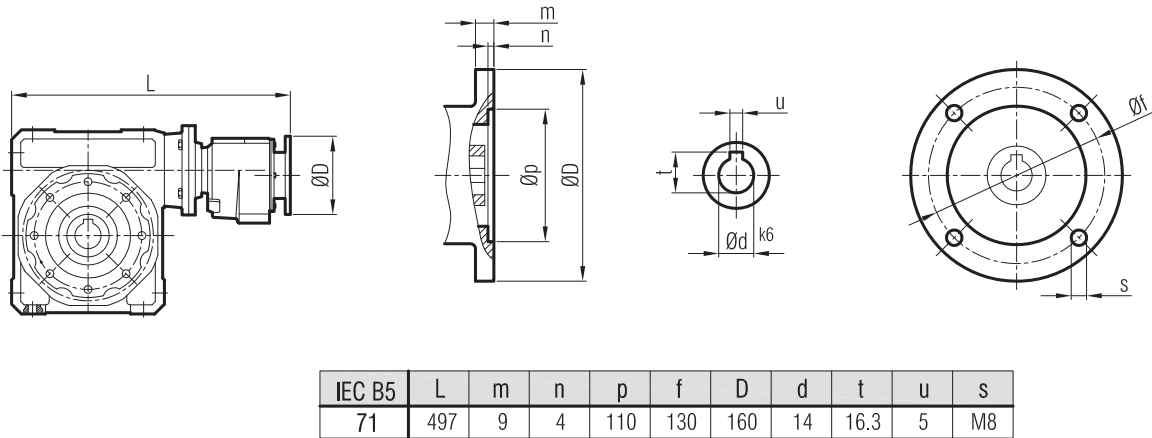




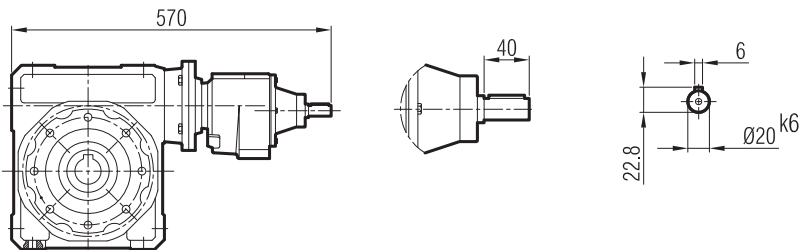
İRSAM 127 İR 43



İRSAP 127 İR 43

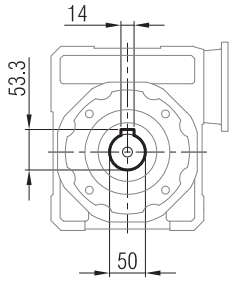


İRSA 127 İR 43

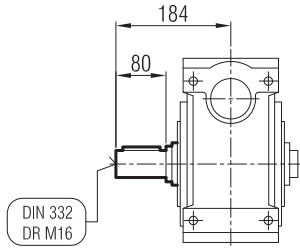




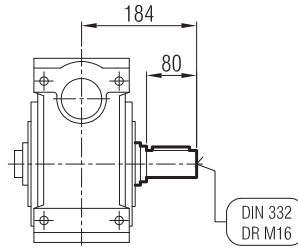
İRSAM / İRSAP / İRSA



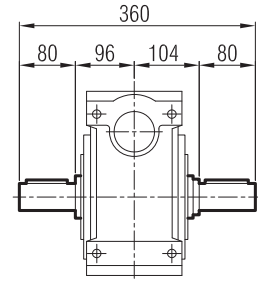
- SR



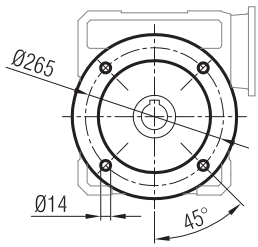
- SL



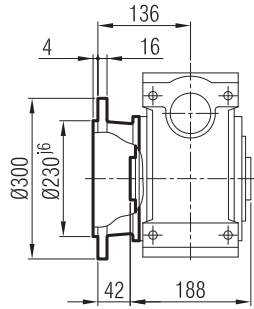
- SD



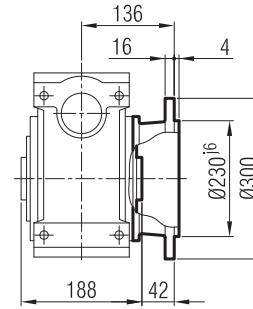
İRSFM / İRSFP / İRSF



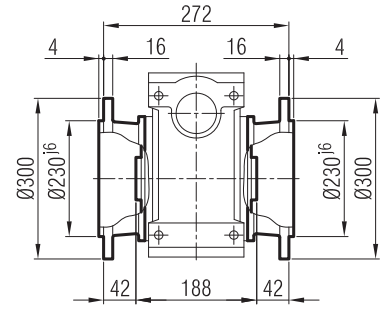
- FR



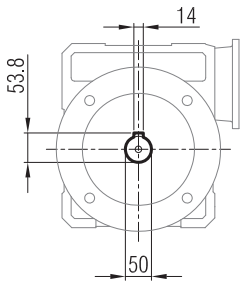
- FL



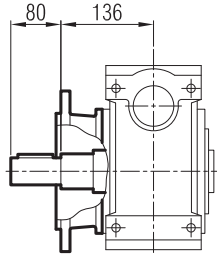
- FD



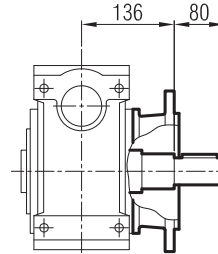
İRSFM / İRSFP / İRSF



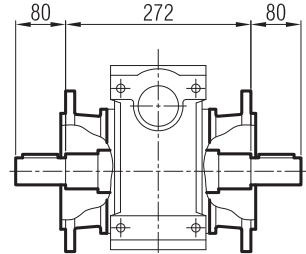
- FR - SR



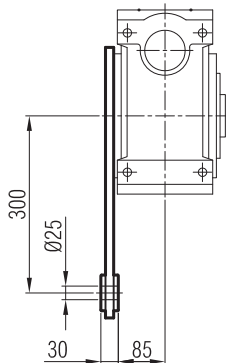
- FL - SL



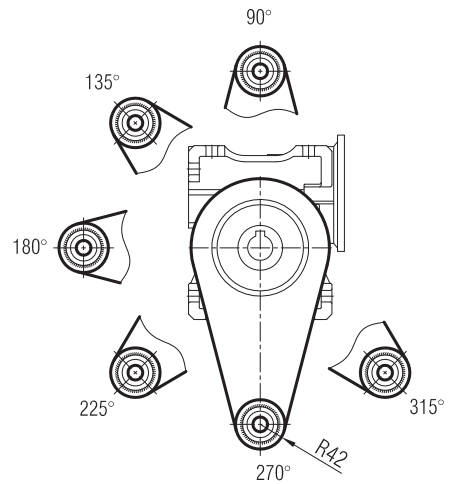
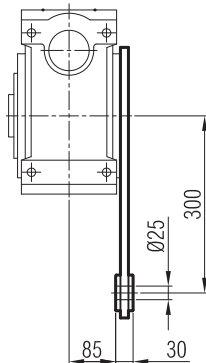
- FD - SD



- TR

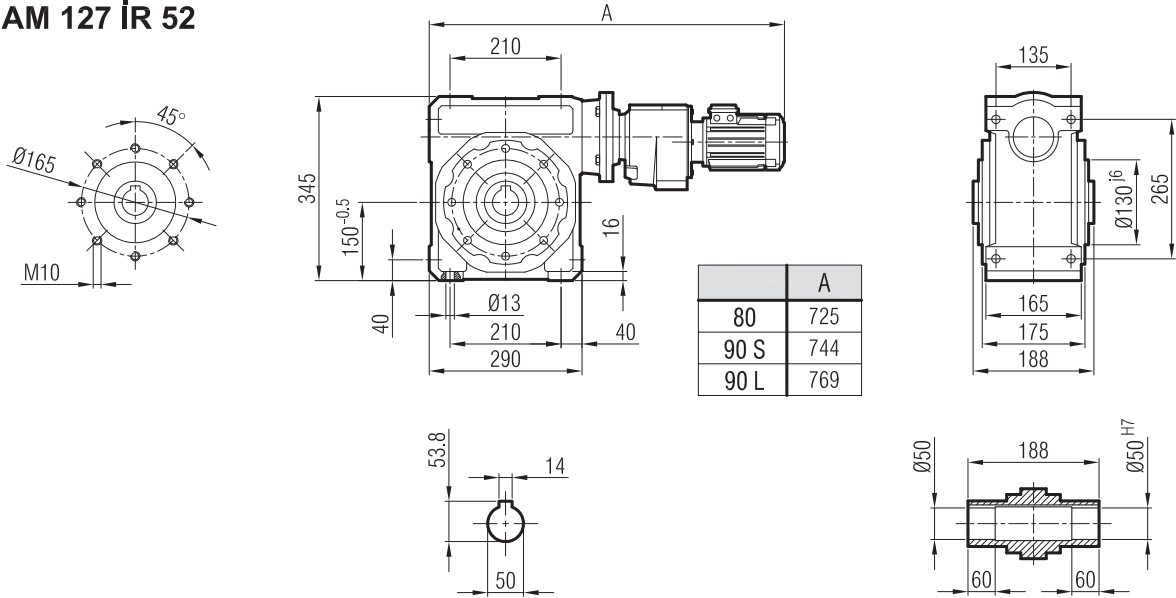


- TL

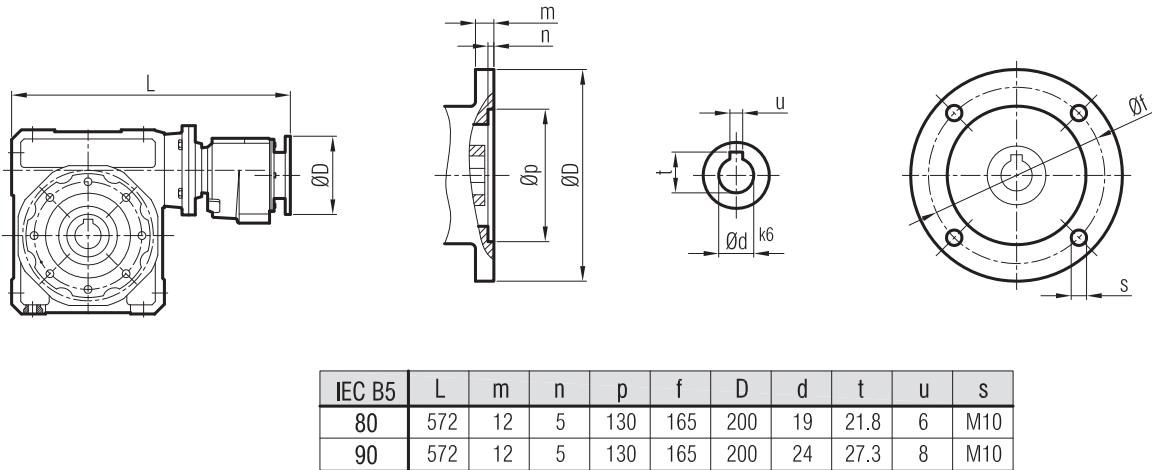




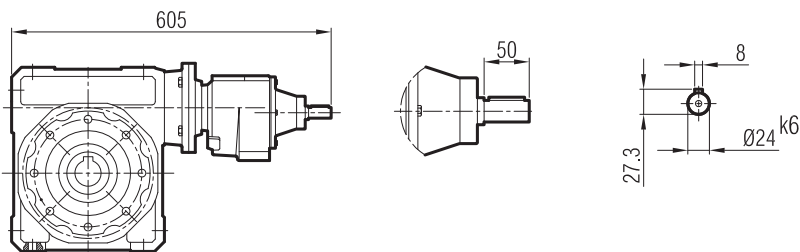
İRSAM 127 İR 52



İRSAP 127 İR 52

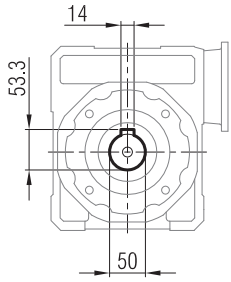


İRSA 127 İR 52

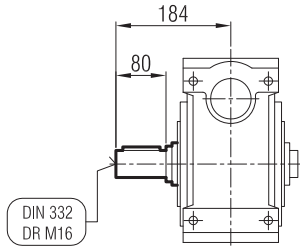




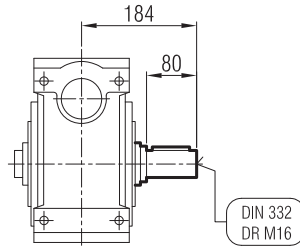
İRSAM / İRSAP / İRSA



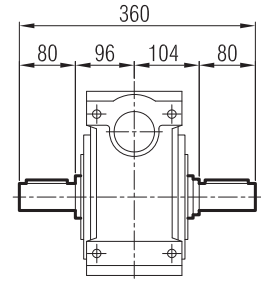
- SR



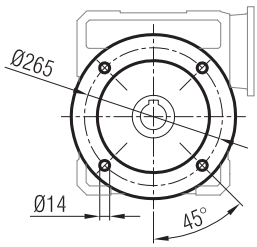
- SL



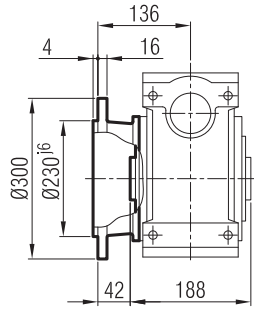
- SD



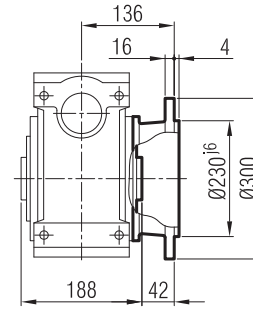
İRSFM / İRSFP / İRSF



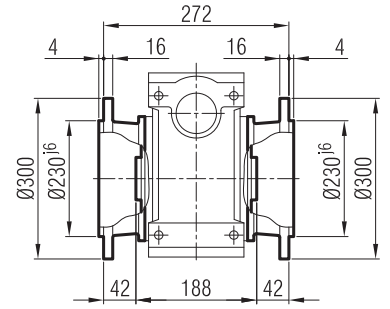
- FR



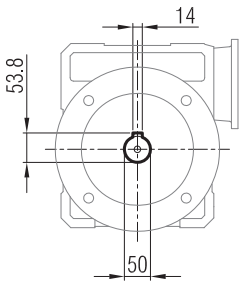
- FL



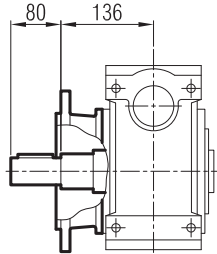
- FD



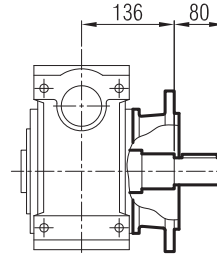
İRSFM / İRSFP / İRSF



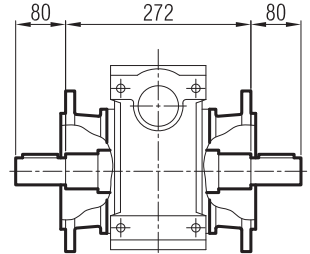
- FR - SR



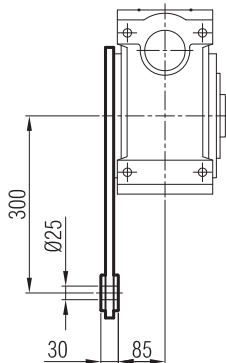
- FL - SL



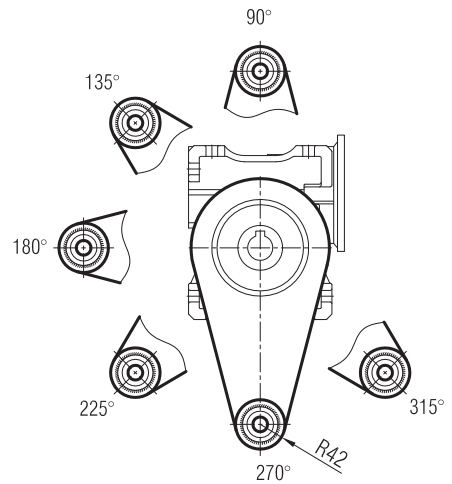
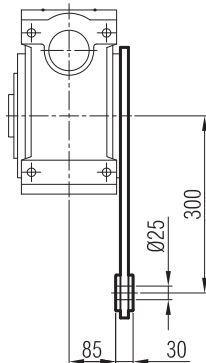
- FD - SD



- TR

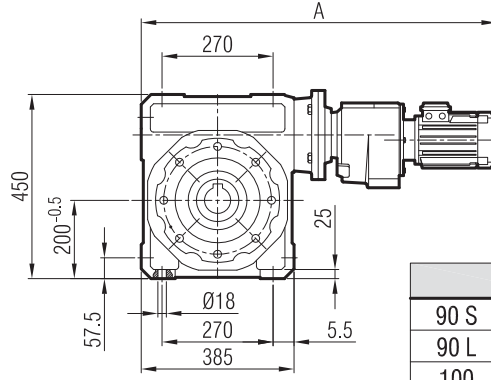
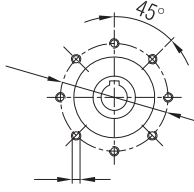


- TL

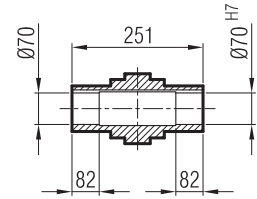
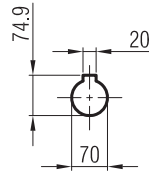
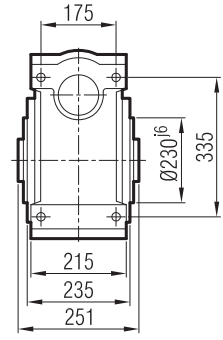




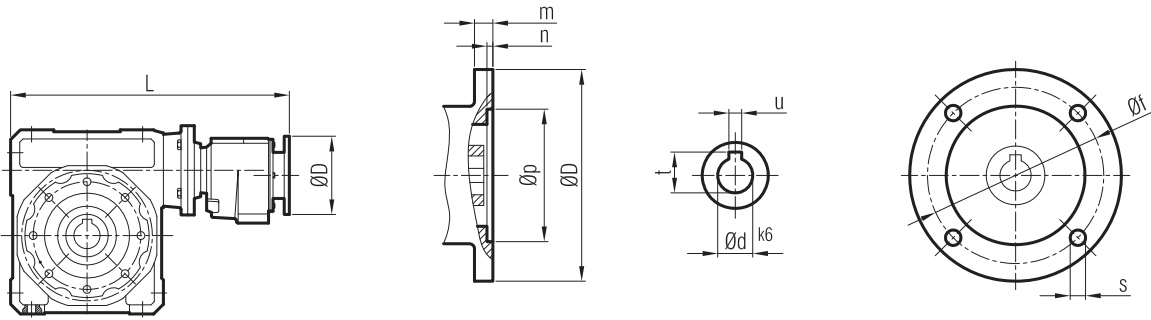
İRSAM 162 İR 63
İRSAM 162 İR 62



	A
90 S	862
90 L	887
100	916

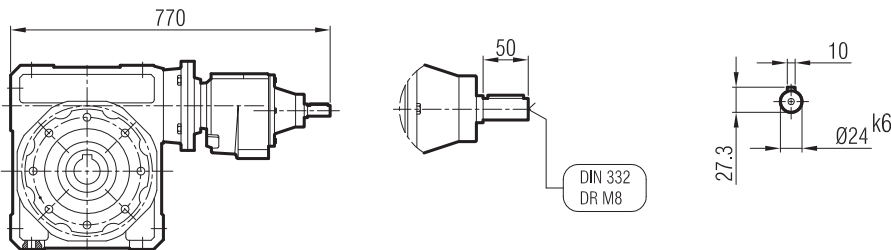


İRSAP 162 İR 63
İRSAP 162 İR 62



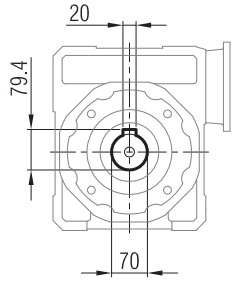
IEC B5	L	m	n	p	f	D	d	t	u	s
90	677	12	5	130	165	200	24	27.3	8	M10
100	690	14	5	180	215	250	28	31.3	8	M12

İRSA 162 İR 63
İRSA 162 İR 62

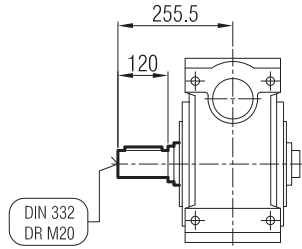




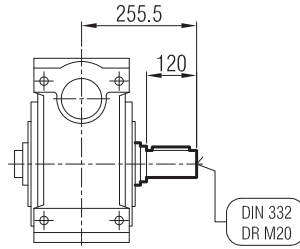
İRSAM / İRSAP / İRSA



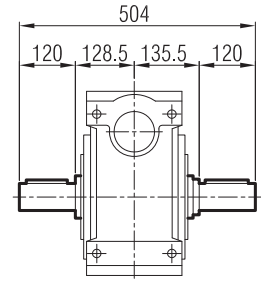
- SR



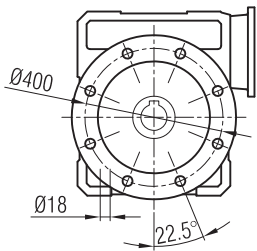
- SL



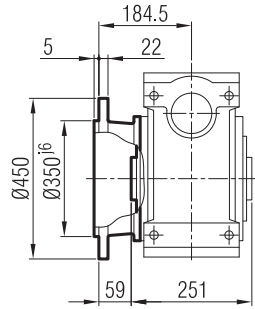
- SD



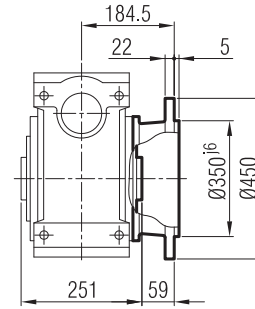
İRSFM / İRSFP / İRSF



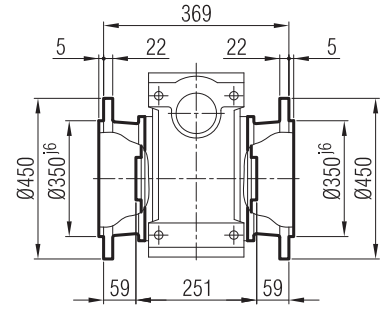
- FR



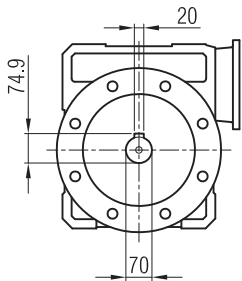
- FL



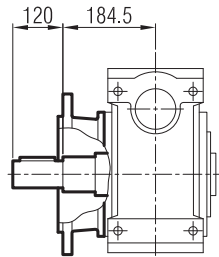
- FD



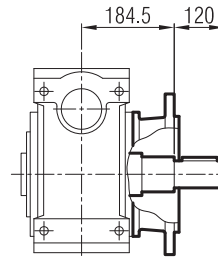
İRSFM / İRSFP / İRSF



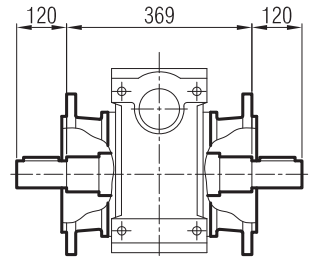
- FR - SR



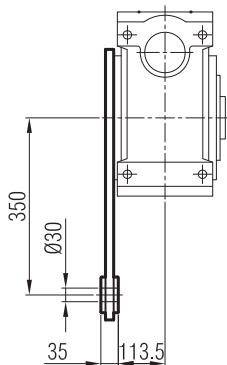
- FL - SL



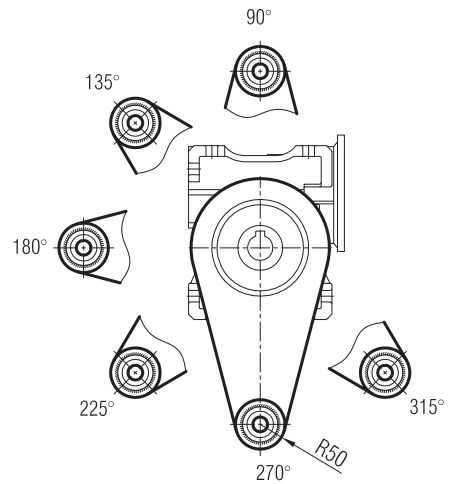
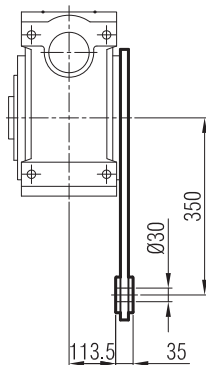
- FD - SD



- TR

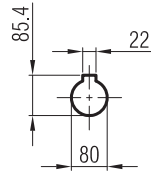
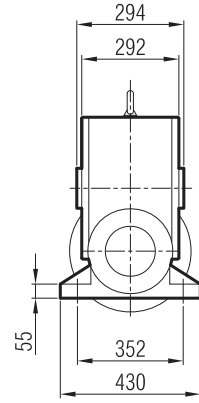
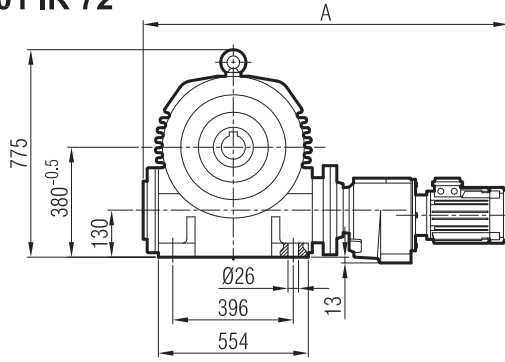


- TL

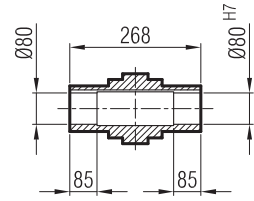




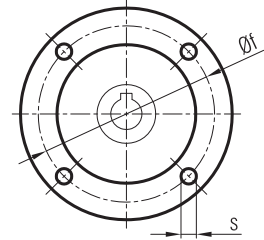
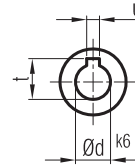
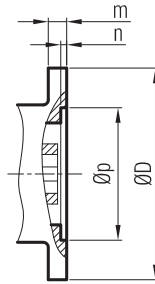
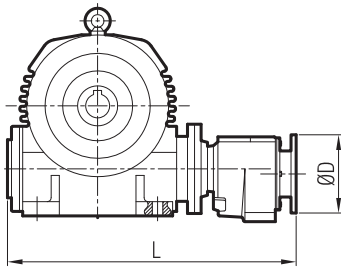
İRSAM 201 İR 72



	A
100	1080
112	1282

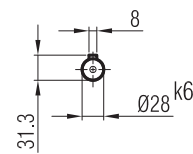
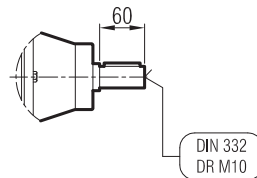
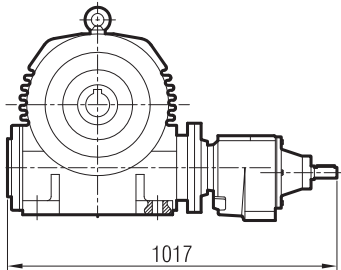


İRSAP 201 İR 72



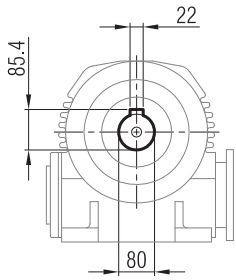
IEC B5	L	m	n	p	f	D	d	t	u	s
100	924	14	5	180	215	250	28	31.3	8	M12
112	924	14	5	180	215	250	28	31.3	8	M12

İRSA 201 İR 72

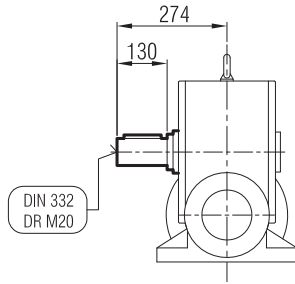




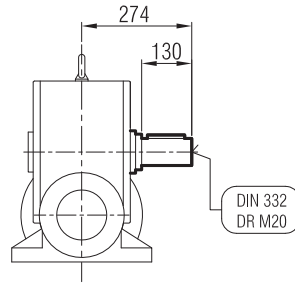
İRSAM / İRSA



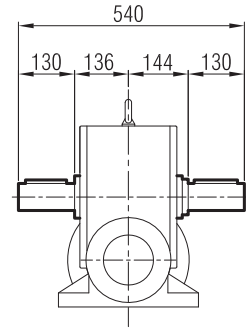
- SR



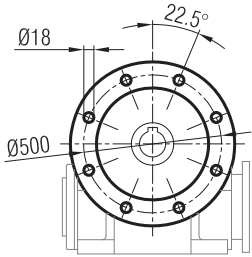
- SL



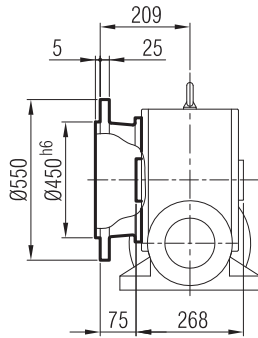
- SD



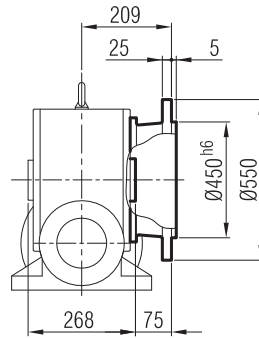
İRSFM / İRSF



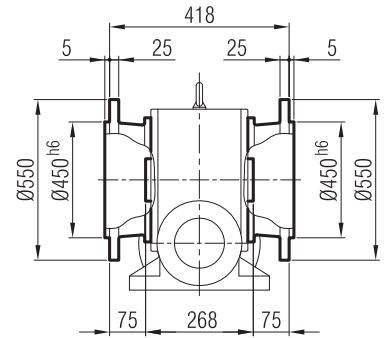
- FR



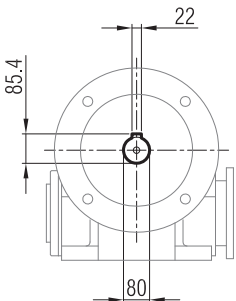
- FL



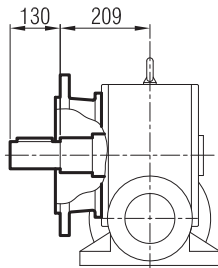
- FD



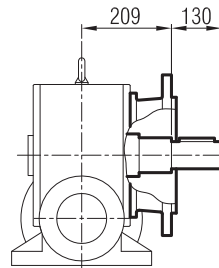
İRSFM / İRSF



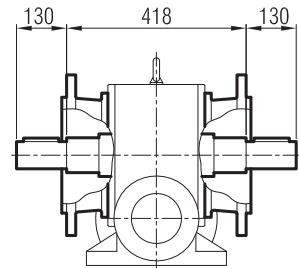
- FR - SR

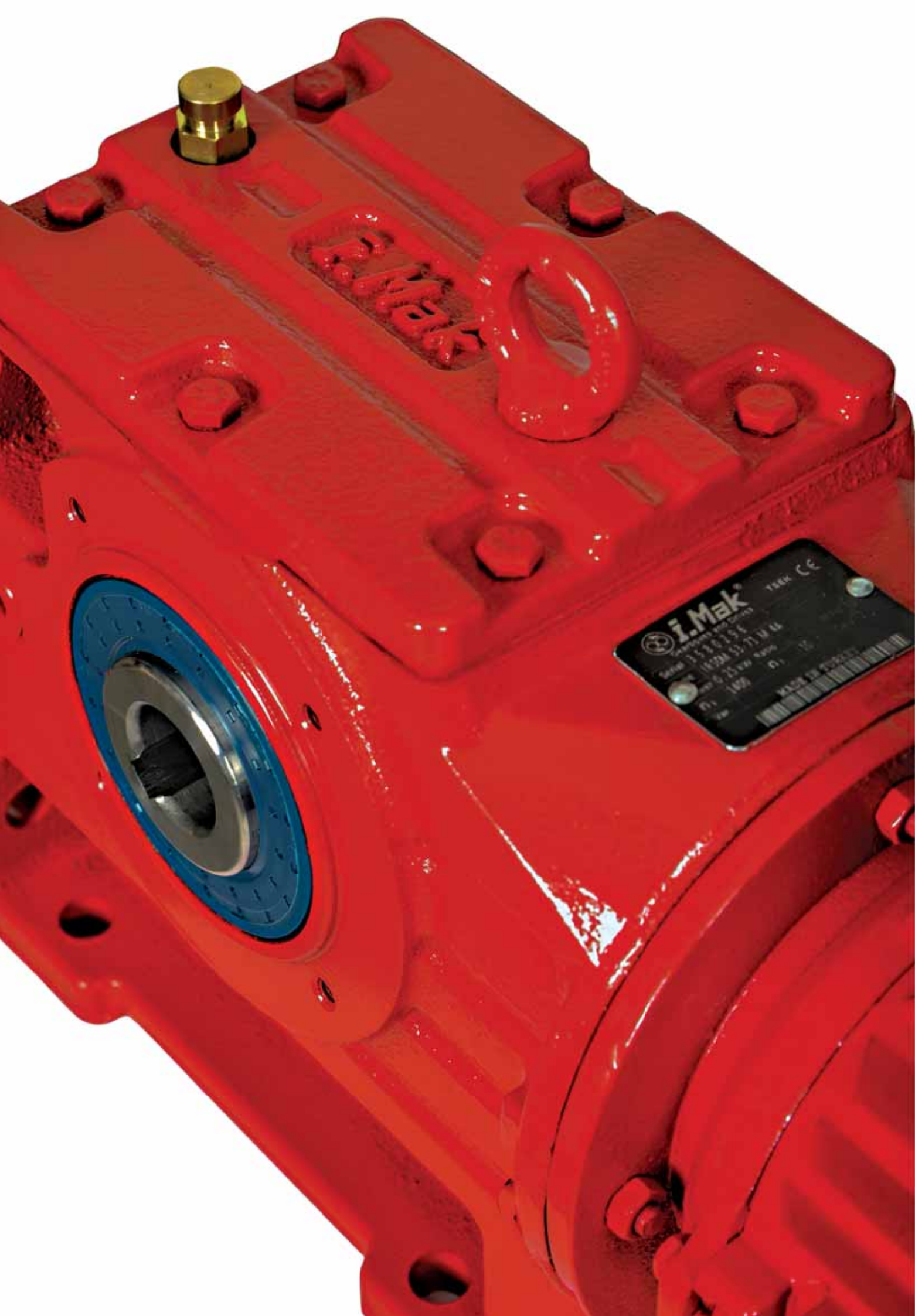


- FL - SL



- FD - SD





i.Mak TRUCK CE
SPECIALTY PUMPS AND DRIVES
Serial 1172 0194
117201 11 71 14 14
1000 25 100 1000
100 100
MADE IN CHINA
117201 11 71 14 14

Helisel Sonsuz Vidalalı Motorlu Redüktörler Güç ve Devir Tabloları

Helical Worm Geared Motors - Performances Tables

Moto-réducteurs hélicoïdaux à roue et vis sans fin avec moteur - Table de performances



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			 kg				
0,18 0,25	3,1	62	285,89	2,00	323	9900	İRSDPM İRSDFPM	63 / 71 M 6a	155	34				
										156	37			
	3,4	62	267,58	2,10	308	9900	İRSDM İRSDFM	63 / 71 M 6a	155 156	34 37				
	3,9	53	228,74	2,70	295	9900								
	4,3	62	210,26	2,60	235	9900								
	5,0	53	179,74	3,30	230	9900								
	3,3	82	271,89	0,95	285	6150	İRSDM İRSDFM	53 / 71 M 6a	153 154	16 18				
	3,8	82	238,19	1,07	250	6150								
	4,4	62	205,58	1,36	210	6150								
	5,0	62	180,10	1,51	183	6150								
5,4	50	165,79	1,83	204	6150									
6,2	50	145,24	2,00	175	6150									
0,25 0,34	2,1	106	429,05	2,90	661	21000	İRSDM İRSDFM	83 / 80 M 6a	159 160	89 99				
	2,4		382,52	3,10	603	21000								
	2,6		343,44	3,40	533	21000								
	2,7	83	335,95	4,00	522	21000	İRSDPM İRSDFPM	63 / 71 M 6b	155 156	34 37				
	3,1	62	285,89	1,44	455	9900								
	3,4	62	267,58	1,51	428	9900								
	3,9	53	228,74	1,94	410	9900								
	4,3	62	210,26	1,87	328	9900								
	5,0	53	179,74	2,38	320	9900								
	4,9	62	285,89	2,10	288	9900					İRSDM İRSDFM	63 / 71 M 4a	155 156	33 36
	5,2	62	267,58	2,20	270	9900								
	6,1	53	228,74	2,80	262	9900								
	6,7	62	210,26	2,70	210	9900								
	7,8	53	179,74	3,40	205	9900								
	8,2	62	169,93	3,10	172	9900								
	3,8	82	238,19	0,77	345	6100	İRSDM İRSDFM	53 / 71 M 6b	153 154	17 19				
	4,4	62	205,58	0,98	295	6100								
	5,0	62	180,10	1,08	255	6100								
	5,4	50	165,79	1,32	283	6100								
	6,2	50	145,24	1,44	245	6100								
	7,0	39	129,32	2,70	215	6100								
	7,9		113,29	2,10	190	6100								
	9,0		100,04	2,30	170	6100								
	5,1	82	271,89	0,99	260	6100								
	5,9	62	238,19	1,11	220	6100								
	6,8		205,58	1,39	185	6100								
	7,8		180,10	1,51	160	6100								
	8,4		165,79	1,91	182	6100								
	9,6	50	145,24	2,10	160	6100					İRSDM İRSDFM	53 / 71 M 4a	153 154	15 17
	11	39	129,32	2,60	140	6100								
12	113,29		2,90	130	6100									
14	100,04		3,20	109	6100									
16	50	88,92	3,50	95	6100									
18		79,44	3,80	90	6100									
0,37 0,5	2,1	106	429,05	1,96	978	21000	İRSDM İRSDFM	83 / 80 M 6a	159 160	89 99				
	2,4		382,52	2,09	893	21000								
	2,6		343,44	2,30	790	21000								
	2,7	83	335,95	2,70	774	21000								
	3,0	65	299,52	2,84	696	21000								
	3,4		263,10	3,72	615	21000								
	3,8		234,57	4,01	550	21000								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
0,37 0,5	3,3	106	429,05	2,80	685	21000	İRSDPM İRSDFPM	83 / 71 M 4b	159 160	77 87
	3,7		382,52	3,00	609	21000				
	4,1		343,44	3,30	548	21000				
	4,2	83	335,95	3,80	514	21000	İRSDM İRSDFM	73 / 80 M 6a	157 158	58 63
	2,6	82	340,95	1,43	800	15250				
	3,0	82	300,67	1,59	695	15250				
	3,4	63	261,95	2,00	635	15250	İRSDM İRSDFM	73 / 71 M 4b	157 158	56 61
	3,9		231,00	2,20	550	15250				
	4,3	50	207,89	2,70	559	15250	İRSDM İRSDFM	73 / 71 M 4b	157 158	56 61
	4,1	82	340,95	2,00	510	15250				
	5,3	63	261,95	2,80	260	15250	İRSDPM İRSDFPM	63 / 80 M 6a	155 156	36 39
	3,1	62	285,89	0,97	674	9800				
	3,4	62	267,58	1,02	633	9800	İRSDM İRSDFM	63 / 80 M 6a	155 156	36 39
	3,9	53	228,74	1,31	607	9800				
	4,3	62	210,26	1,26	485	9800				
	5,0	53	179,74	1,61	474	9800	İRSDPM İRSDFPM	63 / 71 M 4b	155 156	33 36
	4,9	62	285,89	1,42	425	9800				
	5,2	62	267,58	1,49	400	9800	İRSDM İRSDFM	63 / 71 M 4b	155 156	33 36
	6,1	53	228,74	1,89	388	9800				
	6,7	62	210,26	1,82	303	9800				
	7,8	53	179,74	2,30	255	9800				
	8,2	62	169,93	2,09	245	9800				
	9,6	53	145,26	2,77	233	9800				
	10	40	135,57	3,18	215	9800				
	11	53	131,59	2,97	180	9800	İRSDM İRSDFM	53 / 80 M 6a	153 154	17 19
	13	40	109,63	3,72	165	9800				
	5,4	50	165,79	0,89	419	6040				
	6,2		145,24	0,97	365	6040				
	7,0	39	129,32	1,80	320	6040				
	7,9		113,29	1,41	285	6040				
	9,0		100,04	1,53	252	6040				
	6,8	62	205,58	0,94	275	6040	İRSDM İRSDFM	53 / 71 M 4b	153 154	16 18
7,8	180,10		1,02	180	6040					
8,4	50	165,79	1,29	269	6040					
9,6		145,24	1,41	235	6040					
11		129,32	1,80	205	6040					
12	39	113,29	1,99	190	6040					
14		100,04	2,20	162	6040					
16		88,92	2,40	140	6040					
18		79,44	2,60	130	6040					
20	30	68,40	2,90	120	6040					
23		61,11	3,20	100	6040					
26		54,83	3,40	90	6040					
28		49,35	3,70	85	6040					
0,55 0,75	2,1	106	429,05	1,32	1454	21000	İRSDM İRSDFM	83 / 80 M 6b	159 160	90 100
	2,4		382,52	1,41	1328	21001				
	2,6		343,44	1,55	1175	21002				
	2,7	83	335,95	1,82	1150	21003				
	3,0	83	299,52	1,91	1035	21004				
	3,4	65	263,10	2,50	913	21005				
	3,8		234,57	2,70	817	21006				
	4,3	52	210,48	3,40	843	21007				
	4,8		187,65	3,70	755	21008				



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg				
0,55 0,75	3,3	106	429,05	1,88	1019	21000	İRSDM İRSDFM	83 / 80 M 4a	159 160	88 98			
	3,7		382,52	2,02	906	21000							
	4,1		343,44	2,22	815	21000							
	4,2	83	335,95	2,56	764	21000							
	4,7		299,52	2,83	683	21000							
	5,3	65	263,10	3,43	635	21000							
	6,0		234,57	3,76	261	21000							
	2,6	82	340,95	0,96	1195	15170	İRSDM İRSDFM	73 / 80 M 6b	157 158	58 63			
	3,0		300,67	1,07	1135	15170							
	3,4	63	261,95	1,35	940	15170							
	3,9		231,00	1,48	820	15170							
	4,3	50	207,89	1,82	830	15170							
	4,1		340,95	1,35	755	15170							
	4,7	82	300,67	1,55	675	15170							
	5,3		63	261,95	1,88	505	15170						
	6,1	50		231,00	2,09	525	15170	İRSDM İRSDFM	73 / 80 M 4a	157 158	57 62		
	6,7		207,89	2,69	533	15170							
	7,6		183,33	2,96	470	15170							
	8,6		163,04	3,23	420	15170							
	9,6		145,24	3,48	370	15170							
	11		128,26	3,80	325	15170							
	3,9	53	228,74	0,88	902	9670	İRSDM İRSDFM	63 / 80 M 6b	155 156	36 39			
	4,3	62	210,26	0,85	720	9670							
	5,0	53	179,74	1,08	704	9670							
	4,9	62	285,89	0,95	630	9670	İRSDPM İRSDFPM	63 / 80 M 4a	155 156	36 39			
	5,2	62	267,58	1,00	595	9670	İRSDM İRSDFM	63 / 80 M 4a	155 156	36 39			
	6,1	53	228,74	1,27	577	9670							
	6,7	62	210,26	1,23	460	9670							
	7,8	53	179,74	1,55	450	9670							
	8,2	62	169,93	1,41	375	9670							
	9,6	53	145,26	1,86	365	9670							
	10	40	135,57	2,14	345	9670							
	11	53	131,59	2,00	320	9670							
	13	40	109,63	2,50	265	9670							
	14	30	101,74	3,12	265	9670							
	14	40	99,31	2,68	248	9670							
	16		90,32	2,86	216	9670							
	17	30	82,22	3,68	220	9670							
	19	40	75,43	3,22	183	9670							
	22		63,59	3,60	158	9670							
	23		60,74	3,70	150	9670							
	7,0	39	129,32	0,84	480	5890					İRSDM İRSDFM	53 / 80 M 6b	153 154
7,9	113,29		0,95	425	5890								
9,0	100,04		1,03	374	5890								
8,4	50	165,79	0,87	400	5890	İRSDM İRSDFM	53 / 80 M 4a	153 154	18 20				
9,6		145,24	0,95	350	5891								
11	39	129,32	1,21	305	5890								
12		113,29	1,34	280	5890								
14		100,04	1,47	240	5890								
16		88,92	1,60	210	5890								
18		79,44	1,73	195	5890								
18		30	76,96	1,86	195					5890			
20	68,40		1,99	175	5890								
23	61,11		2,10	150	5890								
26	54,83		2,30	135	5890								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	İ _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
0,55 0,75	28	30	49,35	2,50	125	5890	İRSDM İRSDFM	53 / 80 M 4a	153 154	18 20
	31		44,55	2,70	115	5890				
	35		40,29	2,80	100	5890				
	37		38,28	2,90	95	5890				
	41		33,87	3,10	85	5890				
	46	15	30,56	3,00	85	5890				
	51		27,41	3,30	80	5890				
	57		24,68	3,50	70	5890				
	63		22,27	3,80	65	5890				
0,75 1	2,5	87	370,90	2,49	1626	25200	İRSDPM İRSDFPM	161 / 90 S 6a	161 162	173 183
	2,9		327,29	2,79	1402	25200				
	3,6		291,26	3,28	1130	25200				
	2,1	106	429,05	0,97	1983	21000	İRSDM İRSDFM	83 / 90 S 6a	159 160	93 103
	2,4		382,52	1,03	1810	21001				
	2,6		343,44	1,13	1601	21002				
	2,7	83	335,95	1,33	1568	21003				
	3,0		299,52	1,40	1412	21004				
	3,4	65	263,10	1,83	1245	21005				
	3,8		234,57	1,98	1115	21006				
	4,3	52	210,48	2,49	1149	21007				
	4,8		187,65	2,71	1029	21008				
	3,3	106	429,05	1,38	1390	21000	İRSDM İRSDFM	83 / 80 M 4b	159 160	91 101
	3,7		382,52	1,48	1235	21001				
	4,1		343,44	1,63	1112	21002				
	4,2	83	335,95	1,87	1042	21003				
	4,7		299,52	2,07	931	21004				
	5,3	65	263,10	2,52	865	21005				
	6,0		234,57	2,76	765	21006				
	6,7	52	210,48	3,60	759	21007				
	7,5		187,65	3,88	678	21008				
	3,0	82	300,67	0,78	1410	15060	İRSDM İRSDFM	73 / 90 S 6a	157 158	61 66
	3,4		261,95	0,99	1285	15060				
	3,9	63	231,00	1,09	1120	15060				
	4,3	50	207,89	1,33	1133	15060	İRSDM İRSDFM	73 / 80 M 4b	157 158	58 63
	4,1		82	340,95	0,99	1030				
	4,7	300,67		1,13	920	15060				
	5,3	63	261,95	1,38	825	15060				
	6,1		231,00	1,53	717	15060				
	6,7	50	207,89	1,97	727	15060				
	7,6		183,33	2,17	641	15060				
	8,6		163,04	2,37	573	15060				
	9,6		145,24	2,55	505	15060				
	11		128,26	2,79	440	15060				
	12	40	116,19	3,43	425	15060				
	14		102,61	3,73	360	15060				
	6,1	62	228,74	0,93	785	9490	İRSDM İRSDFM	63 / 80 M 4b	155 156	37 40
	6,7		210,26	0,90	630	9491				
	7,8	53	179,74	1,13	615	9492				
	8,2	62	169,93	1,03	515	9493				
	9,6	53	145,26	1,37	500	9494				
	10	62	135,57	1,57	470	9495				
11	53	131,59	1,47	435	9496					
13	40	109,63	1,83	364	9497					
14	53	101,74	2,29	364	9498					
14	40	99,31	1,97	338	9499					
16		90,32	2,10	295	9500					
17	30	82,22	2,70	298	9501					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
0,75 1	19	40	75,43	2,36	245	9502	İRSDM İRSDFM	63 / 80 M 4b	155 156	37 40
	19	30	74,48	2,90	265	9503				
	21		67,74	3,08	240	9504				
	22	40	63,59	2,64	215	9505				
	23		60,74	2,71	205	9506				
	25	30	56,57	3,52	203	9507				
	26	40	53,79	2,90	180	9508				
	29	30	47,69	3,81	175	9509				
	11	39	129,32	0,89	420	5650				
	12		113,29	0,98	380	5650				
	14		100,04	1,08	328	5650				
	16		88,92	1,17	285	5650				
	18	30	79,44	1,27	270	5650				
	18		76,96	1,37	265	5650				
	20		68,40	1,46	240	5650				
	23		61,11	1,58	210	5650				
	26		54,83	1,70	185	5650				
	28		49,35	1,82	170	5650				
	31		44,55	1,97	155	5650				
	35		40,29	2,10	135	5650				
	37	15	38,28	2,10	130	5650				
	41		33,87	2,30	115	5650				
	46		30,56	2,20	120	5650				
	51		27,41	2,40	108	5650				
	57		24,68	2,60	95	5650				
	63		22,27	2,80	85	5650				
	70		20,14	2,90	78	5650				
	73		19,14	3,00	75	5650				
83		16,94	3,20	65	5650					
1,1 1,5	2,5	87	370,90	1,70	2386	25000	İRSDPM İRSDFPM	161 / 90 L 6b	161 162	168 178
	2,9		327,29	1,90	2056	25000				
	3,2		291,26	2,06	1863	25000				
	3,6		261,00	2,24	1657	25000				
	4,0	54	230,21	3,25	1808	25000				
	4,5		203,14	3,61	1573	25000				
	5,0		180,78	3,94	1392	25000				
	6,0		162,00	4,30	1247	25000				
	2,7	83	335,95	0,91	2300	20750	İRSDM İRSDFM	83 / 90 L 6b	159 160	95 105
	3,0		299,52	0,95	2070	20750				
	3,4	65	263,10	1,25	1827	20750				
	3,8		234,57	1,35	1635	20750				
	4,3	52	210,48	1,70	1685	20750				
	4,8		187,65	1,85	1510	20750				
	3,3	106	429,05	0,94	2038	20750	İRSDM İRSDFM	83 / 90 S 4a	159 160	93 103
	3,7		382,52	1,01	1812	20751				
	4,1		343,44	1,11	1631	20752				
	4,2		335,95	1,28	1530	20753				
	4,7	83	299,52	1,41	1366	20754				
	5,3		263,10	1,72	1270	20755				
	6,0	65	234,57	1,88	1121	20756				
	6,7		210,48	2,45	1113	20757				
	7,5	52	187,65	2,65	994	20758				
	8,6		161,90	3,40	891	20759				
	9,7		144,35	3,70	798	20760				
	4,7	82	300,67	0,77	1350	14750	İRSDM İRSDFM	73 / 90 S 4a	157 158	61 67
	5,3	63	261,95	0,94	1210	14750				
	6,1		231,00	1,04	1050	14750				



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
1,1 1,5	6,7	50	207,89	1,35	1066	14750	İRSDM İRSDFM	73 / 90 S 4a	157 158	61 67
	7,6		183,33	1,48	940	14750				
	8,6		163,04	1,61	840	14750				
	9,6		145,24	1,74	745	14750				
	11		128,26	1,90	650	14750				
	12	40	116,19	2,34	620	14750				
	14		102,61	2,54	530	14750				
	15		91,20	2,80	495	14750				
	16	30	87,14	3,20	480	14750				
	18		76,96	3,50	425	14750				
	20		68,40	3,80	380	14750				
	9,6	53	145,26	0,93	730	9250	İRSDM İRSDFM	63 / 90 S 4a	155 156	58 61
	10	62	135,57	1,07	690	9250				
	11	53	131,59	1,00	640	9250				
	13	40	109,63	1,25	530	9250				
	14	53	101,74	1,56	530	9250				
	14	40	99,31	1,34	495	9250				
	16		90,32	1,43	430	9250				
	17	30	82,22	1,84	438	9250				
	19	40	75,43	1,61	365	9250				
	19	30	74,48	1,98	390	9250				
	21		67,74	2,10	355	9250				
	22	40	63,59	1,80	315	9250				
	23		60,74	1,85	301	9250				
	25	30	56,57	2,40	298	9250				
	26	40	53,79	1,98	265	9250				
	29		47,69	2,60	255	9250				
	31	30	45,56	2,70	240	9250				
	35		40,34	2,90	213	9250				
	16	39	88,92	0,80	420	5400	İRSDM İRSDFM	53 / 90 S 4a	153 154	22 24
	18		79,44	0,86	395	5400				
	18	30	76,96	0,93	390	5400				
20	68,40		1,00	350	5400					
23	61,11		1,08	305	5400					
26	54,83		1,16	270	5400					
28	49,35		1,24	250	5400					
31	44,55		1,34	225	5400					
35	40,29		1,42	200	5400					
37		38,28	1,45	190	5400					
41		33,87	1,57	170	5400					
46	15	30,56	1,54	175	5400					
51		27,41	1,65	155	5400					
57		24,68	1,78	140	5400					
63		22,27	1,90	128	5400					
70		20,14	2,00	115	5400					
73		19,14	2,10	110	5400					
83		16,94	2,20	95	5400					
1,5 2	2,5	87	370,90	1,25	3252	24700	İRSDM İRSDFM	161 / 100 L 6a	161 162	168 178
	3,0		327,29	1,39	2804	24700				
	3,5		261,00	1,64	2259	24700				
	4,0		235,22	1,76	2034	24700				
	3,4	65	263,10	0,92	2491	20000	İRSDM İRSDFM	83 / 100 L 6a	159 160	98 108
	3,8		234,57	0,99	2229	20000				
	4,3	52	210,48	1,25	2298	20000	İRSDM İRSDFM	83 / 90 L 4a	159 160	96 106
	4,8		187,65	1,36	2059	20000				
	4,1	106	343,44	0,81	2223	20000	İRSDM			
	4,2	83	335,95	0,94	2084	20001	İRSDFM			



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
1,5 2	4,7	83	299,52	1,04	1862	20000	İRSDM İRSDFM	83 / 90 L 4a	159 160	96 106
	5,3	65	263,10	1,26	1731	20000				
	6,0		234,57	1,38	1529	20000				
	6,7		210,48	1,80	1517	20000				
	7,5	52	187,65	1,94	1355	20000				
	8,6		161,90	2,50	1215	20000				
	9,7		144,35	2,70	1088	20000				
	11	40	129,60	2,94	950	20000				
	12		117,04	3,16	871	20000				
	13		104,00	3,38	804	20000				
	6,7	50	207,89	0,99	1454	14440	İRSDM İRSDFM	73 / 90 L 4a	157 158	69 74
	7,6		183,33	1,09	1282	14440				
	8,6		163,04	1,18	1146	14440				
	9,6		145,24	1,28	1015	14440				
	11		128,26	1,39	885	14440				
	12		116,19	1,72	845	14440				
	14		102,61	1,86	725	14440				
	15	91,20	2,05	675	14440					
	16	30	87,14	2,35	650	14440				
	18		76,96	2,57	580	14440				
	20		68,40	2,79	520	14440				
	23		61,11	3,08	454	14440				
	26		54,83	3,23	400	14440				
	28		49,35	3,37	370	14440				
	31		44,55	3,52	335	14440				
	35	40,29	3,81	298	14440					
	38	36,49	3,96	275	14440					
	13	40	109,63	0,92	725	8900	İRSDM İRSDFM	63 / 90 L 4a	155 156	40 43
	14	53	101,74	1,14	725	8900				
	14	40	99,31	0,98	675	8900				
	16	40	90,32	1,05	590	8900				
	17	30	82,22	1,35	598	8900				
	19	40	75,43	1,18	495	8900				
	19	30	74,48	1,45	535	8900				
	21	30	67,74	1,54	485	8900				
	22	40	63,59	1,32	430	8900				
	23		60,74	1,36	410	8900				
	25	30	56,57	1,76	405	8900				
	26	40	53,79	1,45	360	8900				
	29	30	47,69	1,91	350	8900				
	31		45,56	1,98	325	8900				
	35		40,34	2,13	290	8900				
23	30		61,11	0,79	415	5400				
26		54,83	0,85	370	5400					
28		49,35	0,91	340	5400					
31		44,55	0,98	310	5400					
35		40,29	1,04	275	5400					
37		38,28	1,07	260	5400					
41		33,87	1,15	235	5400					
46	15	30,56	1,13	240	5400					
51		27,41	1,21	215	5400					
57		24,68	1,30	190	5400					
63		22,27	1,39	175	5400					
70		20,14	1,47	155	5400					
73		19,14	1,52	150	5400					
83		16,94	1,63	130	5400					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg	
2,2 3	5,0	87	291,26	1,38	2687	24350	İRSDM İRSDFM	161 / 100 L 4a	161 162	175 185
	5,5		261,00	1,49	2393	24350				
	6,0		235,22	1,59	2194	24350				
	7,0	54	203,14	2,47	2186	24350				
	8,0		180,78	2,68	1937	24350				
	9,0		162,00	2,90	1738	24350				
	10,0	52	146,00	3,10	1561	24350				
	4,3		210,48	0,85	3370	19450	İRSDM İRSDFM	83 / 112 M 6a	159 160	111 121
	4,8	187,65	0,93	3020	19450					
	5,3	65	263,10	0,86	2539	19450	İRSDM İRSDFM	83 / 100 L 4a	159 160	98 108
	6,0		234,57	0,94	2243	19450				
	6,7		210,48	1,23	2225	19450				
	7,5	52	187,65	1,32	1988	19450				
	8,6		161,90	1,70	1782	19450				
	9,7		144,35	1,85	1596	19450				
	11	40	129,60	2,00	1393	19450				
	12		117,04	2,15	1277	19450				
	13		104,00	2,30	1179	19450				
	15	32	93,63	2,80	1049	19450				
	17		83,20	3,00	926	19450				
	19		74,67	3,14	828	19450				
	21	50	67,31	3,41	749	19450				
	23		59,83	3,55	684	19450				
	25		55,73	3,82	629	19450				
	8,6	40	163,04	0,81	1681	14100	İRSDM İRSDFM	73 / 100 L 4a	157 158	67 73
	9,6		145,24	0,87	1485	14100				
	11		128,26	0,95	1300	14100				
	12	40	116,19	1,17	1240	14100				
	14		102,61	1,27	1065	14100				
	15		91,20	1,40	990	14100				
	16	30	87,14	1,60	955	14100				
	18		76,96	1,75	850	14100				
	20		68,40	1,90	765	14100				
	23		61,11	2,10	655	14100				
	26		54,83	2,20	590	14100				
	28		49,35	2,30	545	14100				
	31	15	44,55	2,40	495	14100				
	35		40,29	2,60	435	14100				
	38		36,49	2,70	403	14100				
	42		33,08	2,90	365	14100				
	46		30,66	3,00	369	14100				
	51		27,41	3,20	330	14100				
57	30	24,68	3,40	300	14100					
63		22,27	3,60	270	14100					
70		20,14	3,80	240	14100					
17	30	82,22	0,92	877	8700	İRSDM İRSDFM	63 / 100 L 4a	155 156	42 45	
19	40	75,43	0,81	730	8700					
19	30	74,48	0,99	785	8700					
21		67,74	1,05	710	8700					
22	40	63,59	0,90	630	8700					
23		60,74	0,93	603	8700					
25	30	56,57	1,20	595	8700					
26	40	53,79	0,99	530	8700					
29	30	47,69	1,30	515	8700					
31		45,56	1,35	480	8700					
35		40,34	1,45	425	8700					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg		
2,2 3	41	30	33,87	0,78	340	5400	İRSDM İRSDFM	53 / 100 L 4a	153 154	28 30	
	46		30,56	0,77	350	5400					
	51	15	27,41	0,82	215	5400					
	57		24,68	0,89	280	5400					
	63		22,27	0,95	255	5400					
	70		20,14	1,00	230	5400					
	73		19,14	1,04	220	5400					
	83		16,94	1,11	195	5400					
3 4	5,5	87	261,00	1,09	3263	24100	İRSDM İRSDFM	161 / 100 L 4b	161 162	174 184	
	6,0		235,22	1,17	2991	24100					
	6,5		213,00	1,24	2678	24100					
	7,5	54	193,65	1,31	2425	24100					
	9,0		162,00	2,13	2370	24100					
	10,0		146,00	2,27	2119	24100					
	11		132,21	2,43	1932	24100					
	12		120,19	2,58	1753	24100					
	6,7		52	210,48	0,90	3034					19100
	7,5	187,65		0,97	2710	19100					
	8,6	161,90		1,25	2430	19100					
	9,7	40	144,35	1,35	2175	19100					
	11		129,60	1,47	1899	19100					
	12		117,04	1,58	1741	19100					
	13		104,00	1,69	1607	19100					
	15		93,63	2,00	1430	19100					
	17		83,20	2,20	1262	19100					
	19	74,67	2,30	1129	19100						
	21	32	67,31	2,50	1022	19100					
	23		59,83	2,60	933	19100					
	25		55,73	2,80	858	19100					
	28		50,29	2,90	766	19100					
	31		45,84	3,10	692	19100					
	33		41,85	3,20	650	19100					
	37	40	38,24	3,40	580	19100					
	41		33,94	3,60	523	19100					
	12		30	116,19	0,86	1695					13700
	14			102,61	0,93	1450					13700
	15			91,20	1,03	1355					13700
	16			87,14	1,17	1305					13700
	18	76,96		1,28	1160	13700					
	20	68,40		1,39	1045	13700					
	23	15	61,11	1,54	908	13700					
	26		54,83	1,61	800	13700					
	28		49,35	1,69	745	13700					
	31		44,55	1,76	675	13700					
35	40,29		1,91	596	13700						
38	36,49		1,98	550	13700						
42	30	33,08	2,13	495	13700						
46		30,66	2,20	500	13700						
51		27,41	2,35	450	13700						
57		24,68	2,49	405	13700						
63		22,27	2,64	365	13700						
70		20,14	2,79	330	13700						
77	15	18,24	2,93	300	13700						
85		16,54	3,08	270	13700						
25		30	56,57	0,88	810	8700					
29			47,69	0,95	700	8700					
31			45,56	0,99	655	8700					
35			40,34	1,06	580	8700					



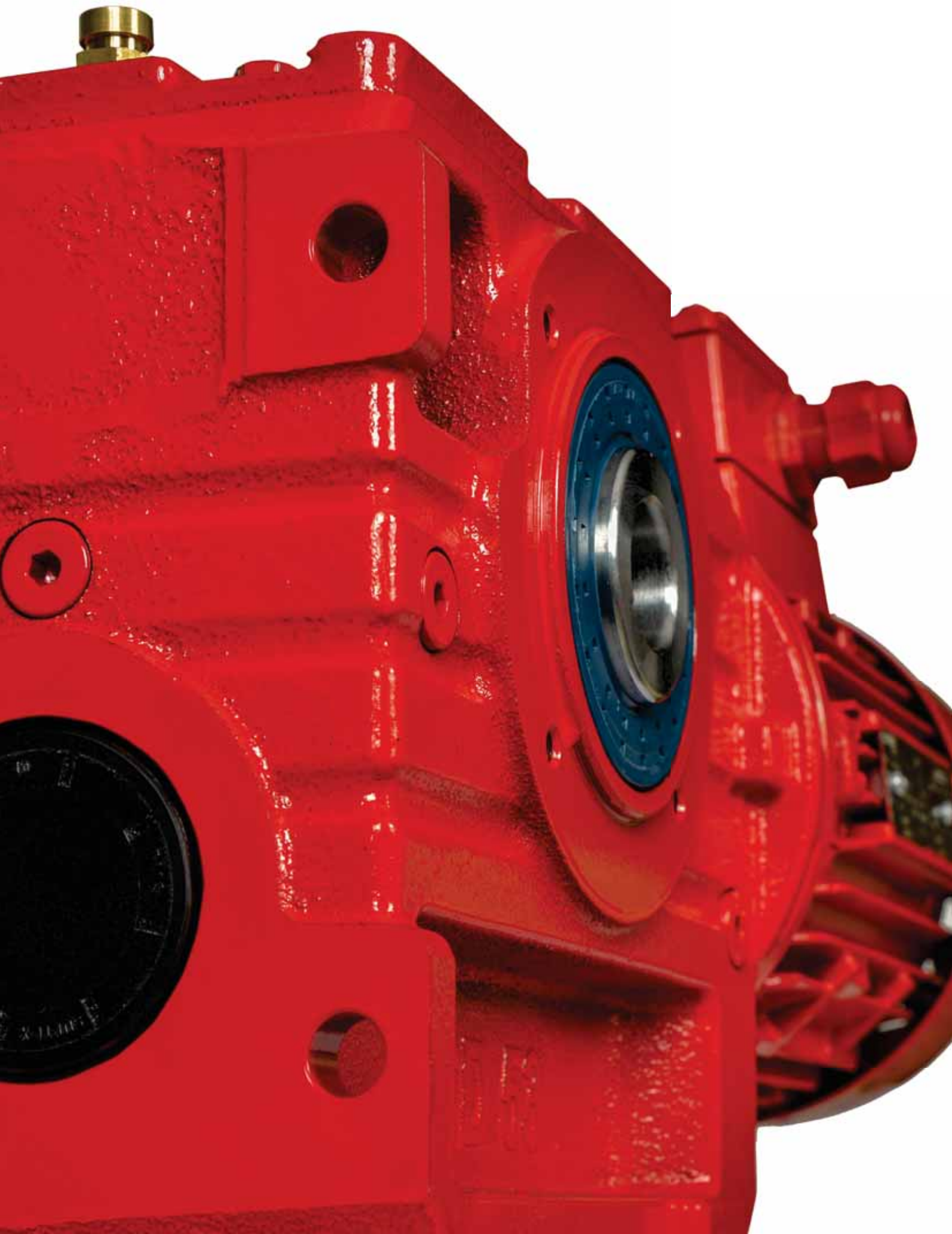
P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg		
4 5,5	5,5	87	261,00	0,82	4351	23500	İRSDM İRSDFM	161 / 112 M 4b	161 162	184 194	
	6,0		235,22	0,88	3989	23500					
	6,7		213,00	0,93	3521	23500					
	7,0	54	203,14	1,36	3974	23500					
	8,0		180,78	1,48	3523	23500					
	9,0		162,00	1,60	3160	23500					
	10,0		146,00	1,70	2839	23500					
	11		132,21	1,82	2577	23500					
	12	42	126,00	2,10	2495	23500					
	11		120,19	1,93	2338	23500					
	13		113,56	2,25	2236	23500					
	14		102,83	2,39	2027	23500					
	15		93,48	2,52	1844	23500					
	8,6	52	161,90	0,94	3240	18500	İRSDM İRSDFM	83 / 112 M 4b	159 160	111 121	
	9,7		144,35	0,98	2900	18500					
	11	40	129,60	1,10	2533	18500					
	12		117,04	1,19	2322	18500					
	13		104,00	1,27	2143	18500					
	15	32	93,63	1,47	1907	18500					
	17		83,20	1,65	1683	18500					
	19		74,67	1,73	1506	18500					
	21		67,31	1,88	1362	18500					
	23		59,83	1,95	1244	18500					
	25		55,73	2,10	1144	18500					
	28		50,29	2,18	1022	18500					
	31		45,84	2,33	923	18500					
	33	41,85	2,40	867	18500						
	37	40	38,24	2,55	773	18500	İRSDM İRSDFM	73 / 112 M 4b	157 158	73 78	
	41		33,94	2,70	698	18500					
	15		91,20	0,77	1805	13200					
	16		30	87,14	0,88	1740					13200
	18			76,96	0,96	1545					13200
20	68,40			1,05	1390	13200					
23	61,11			1,16	1210	13200					
26	54,83			1,21	1070	13200					
28	49,35			1,27	995	13200					
31	44,55			1,32	898	13200					
35	40,29			1,43	795	13200					
38	36,49			1,49	730	13200					
42	33,08	1,60		660	13200						
46	15	30,66	1,65	670	13200						
51		27,41	1,76	605	13200						
57		24,68	1,87	540	13200						
63		22,27	1,98	490	13200						
70		20,14	2,09	440	13200						
77		18,24	2,20	400	13200						
85		16,54	2,31	360	13200						
9,0		87	161,57	0,80	3740	23500	İRSDM İRSDFM	161 / 132 S 4c	161 162	193 203	
9,5	148,13		0,84	3427	23500						
11	136,07		0,88	3136	23500						
13	54	109,63	1,48	2942	23000						
14		100,28	1,57	2675	23000						
16		91,95	1,65	2450	23000						
17	42	85,27	1,94	2322	23000						
18		78,00	2,25	2116	23000						
20		71,51	2,14	1937	23000						
24		30	60,91	2,76	1634	23000					
24			60,91	2,76	1634	23000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
5,5 7,5	26	30	55,71	2,89	1495	23000	İRSDM İRSDFM	161 / 132 S 4c	161 162	193 203
	28		51,08	3,03	1372	23000				
	31		46,92	3,15	1260	23000				
	42		33,66	3,66	903	23000				
	11	40	129,60	0,80	3482	17250	İRSDM İRSDFM	83 / 132 S 4c	159 160	122 132
	12		117,04	0,86	3192	17250				
	13		104,00	0,92	2947	17250				
	15	32	93,63	1,07	2623	17250				
	17		83,20	1,20	2314	17250				
	19		74,67	1,25	2070	17250				
	21		67,31	1,36	1873	17250				
	23		59,83	1,42	1710	17250				
	25		55,73	1,53	1574	17250				
	28	30	50,29	1,58	1405	17250				
	31		45,84	1,69	1269	17250				
	33		41,85	1,75	1192	17250				
	37		38,24	1,85	1063	17250				
	41		33,94	1,96	960	17250				
	20		15	68,40	0,76	1915	13200			
	23			61,11	0,84	1665	13200			
	26			54,83	0,88	1470	13200			
	28			49,35	0,92	1365	13200			
	31			44,55	0,96	1235	13200			
	35	40,29		1,04	1095	13200				
	38	36,49		1,08	1008	13200				
	42	33,08		1,16	910	13200				
	46	30,66		1,20	920	13200				
	51	27,41		1,28	830	13200				
57	24,68	1,36	745	13200						
63	22,27	1,44	670	13200						
70	20,14	1,52	605	13200						
77	18,24	1,60	550	13200						
85	16,54	1,68	500	13200						
7,5 10	13	54	109,63	1,08	4012	22440	İRSDM İRSDFM	161 / 132 M 4b	161 162	201 211
	14		100,28	1,15	3648	22440				
	16		91,95	1,21	3342	22440				
	17	42	85,27	1,42	3166	22440				
	18		78,00	1,65	2885	22440				
	20		71,51	1,57	2642	22440				
	22	30	65,69	1,64	2437	22440				
	24		60,91	2,02	2228	22440				
	26		55,71	2,12	2039	22440				
	28		51,08	2,22	1869	22440				
	31		46,92	2,31	1718	22440				
	43		33,66	2,68	1232	22440				
	15	32	93,63	0,79	3576	17000				
	17		83,20	0,88	3156	17000				
	19		74,67	0,92	2824	17000				
	21		67,31	1,00	2555	17000				
	23		59,83	1,04	2333	17000				
	25		55,73	1,12	2146	17000				
	28		50,29	1,16	1916	17000				
	31		45,84	1,24	1731	17000				
	33		41,85	1,28	1626	17000				
	37		38,24	1,36	1450	17000				
	41		33,94	1,44	1308	17000				



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i _s Sonsuz Vida Tahvili Worm Ratio Rapport de réduction	i _t Toplam Tahvil Total Ratio Raapport de réduction total	S _r Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type		 kg					
7,5 10	35	30	40,29	0,76	1490	13200	İRSDM İRSDFM	73 / 132 M 4b	157 158	91 96				
	38		36,49	0,79	1375	13200								
	42		33,08	0,85	1245	13200								
	46	15	30,66	0,88	1255	13200								
	51		27,41	0,94	1135	13200								
	57		24,68	1,00	1015	13200								
	63		22,27	1,06	920	13200								
	70		20,14	1,11	825	13200								
	77		18,24	1,17	750	13200								
	85		16,54	1,23	680	13200								
11 15	17	42	85,27	0,97	4573	22440	İRSDM İRSDFM	161 / C132 M 4	161 162	210 220				
	19		78,00	1,13	4202	22440								
	20		71,51	1,07	3887	22440								
	22		65,69	1,12	3534	22440								
	24	30	60,91	1,38	3397	22440								
	26		55,71	1,45	3071	22440								
	28		51,08	1,52	2851	22440								
	31		46,92	1,57	2575	22440								
	43		33,66	1,83	1857	22440								
	47	15	30,45	2,01	1855	22440								
	51		27,86	2,11	1710	22440								
	56		25,54	2,20	1557	22440								
	61		23,46	2,28	1429	22440								
	85		16,83	2,66	1026	22440								
	28	32	50,29	0,79	2810	17000					İRSDM İRSDFM	83 / 160 M 4b	159 160	166 171
	31		45,84	0,85	2538	17000								
	33		41,85	0,87	2384	17000								
	37		38,24	0,93	2126	17000								
41	33,94		0,98	1919	17000									



Helisel Sonsuz Vidalı Redüktörler Güç ve Devir Tabloları

Helical Worm Gear Unit - Performances Tables

Réducteurs Hélicoïdaux à roue et vis sans fin - Table de performances



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=1400$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
270-420 Nm	0,26	5,15	82	272	56	270	420	6000	İRSDF	53	153 154	13 15
	0,30	5,88		238		270	420	6000				
	0,36	6,81	62	206	54	270	420	6000				
	0,41	7,77		180		270	420	6000				
	0,37	8,44	50	166	65	270	420	6000				
	0,46	9,64		145		290	420	6000				
	0,74	10,83	39	129	68	420	420	6000				
	0,85	12,36		113		420	420	6000				
	0,66	13,99	30	100	78	290	420	6000				
	1,1	15,74		88,92		420	420	6000				
	1,2	17,62	15	79,44	60	420	420	6000				
	1,2	18,19		76,96		410	420	6000				
	1,3	20,47	62	68,40	60	410	420	6000				
	1,5	22,91		61,11		410	420	6000				
	1,6	25,53	53	54,83	68	410	420	6000				
	1,8	28,37		49,35		410	420	6000				
	2,0	31,43	40	44,55	67	410	420	6000				
	2,2	34,75		40,29		410	420	6000				
	2,3	36,58	30	38,28	72	410	420	6000				
	2,6	41,33		33,87		410	420	6000				
2,6	45,82	62	30,56	60	410	420	6000					
2,9	51,07		27,41		410	420	6000					
3,2	56,73	53	24,68	68	410	420	6000					
3,5	62,86		22,27		410	420	6000					
3,9	69,51	40	20,14	67	410	420	6000					
4,1	73,16		19,14		410	420	6000					
4,6	82,67	30	16,94	72	410	420	6000					
0,55	4,90		62		286	60	634	700	8700			
0,55	5,23	268		594	700		8700					
0,66	6,12	53	229	68	692	700	8700					
0,75	6,66	62	210	60	636	700	8700					
0,77	7,79	53	180	68	636	700	8700					
0,75	8,24	62	170	60	514	700	8700					
1,1	9,64	53	145	68	730	700	8700					
1,1	10,33	40	136	67	662	700	8700					
1,0	10,64	53	132	68	602	700	8700					
1,5	12,77	40	110	67	741	700	8700					
1,4	13,76	30	102	72	698	700	8700					
1,5	14,10	40	99,31	67	671	700	8700					
1,5	15,50		90,32		610	700	8700					
2,2	17,03	30	82,22	72	876	700	8700					
2,2	18,56	40	75,43	67	747	700	8700					
2,4	18,80	30	74,48		793	700	8700					
2,4	20,67		67,74	721	700	8700						
2,2	22,02	40	63,59	72	630	700	8700					
2,2	23,05		60,74		602	700	8700					
2,2	24,75	30	56,57	72	602	700	8700					
3,4	26,03	40	53,79	67	821	700	8700					
3,0	29,36	30	47,69	72	693	700	8700					
3,0	30,73		45,56		662	700	8700					
4,5	34,70	40,34	871	700	8700							



Servis Faktörü Service Factor Betriebsfaktor S _f = 1	P ₁	n ₂	i _s	i _t	η	M ₂	F _{Q1}	F _{Q10}	Tip Type Typ			
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] (n ₁ =1400rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
680-1870 Nm	0,75	4,11	82	341	60	1031	1100	13300	İRSDF	73	157 158	55 60
	1,1	4,66		301		1334	1100	13300				
	1,1	5,34	63	262	62	1201	1100	13300				
	1,1	6,06		231		1059	1100	13300				
	1,5	6,73	50	208	69	1284	1100	13300				
	1,5	7,64		183		1150	1100	13300				
	1,5	8,59		163		1033	1100	13300				
	2,2	9,64		145		1482	1100	13300				
	2,2	10,92	40	128	72	1309	1100	13300				
	3,0	12,05		116		1687	1100	13300				
	3,0	13,64		103		1490	1100	13300				
	4,0	15,35		91,20		1766	1100	13300				
	4,0	16,07	30	87,14	74	1734	1100	13300				
	4,0	18,19		76,96		1531	1100	13300				
	5,5	20,47		68,40		1872	1100	13300				
	5,5	22,91		61,11		1672	1100	13300				
	5,5	25,53		54,83		1500	1100	13300				
	5,5	28,37		49,35		1350	1100	13300				
	5,5	31,43		44,55		1219	1100	13300				
	7,5	34,75		40,29		1503	1100	13300				
	7,5	38,37	36,49	1361	1100	13300						
	7,5	42,33	33,08	1234	1100	13300						
	7,5	45,67	30,66	1267	1100	13300						
	7,5	51,07	27,41	1133	1100	13300						
	7,5	56,73	24,68	1020	1100	13300						
	7,5	62,86	15	22,27	82	921	1100	13300				
	7,5	69,51		20,14		833	1100	13300				
	7,5	76,74		18,24		754	1100	13300				
7,5	84,65	16,54		684		1100	13300					
1670-3540 Nm	1,2	3,26	106	429	63	2038	1550	18800	İRSDF	83	159 160	97 107
	1,2	3,66		383		1812	1550	18800				
	1,2	4,08		343		1631	1550	18800				
	1,3	4,17	83	336	62	1873	1550	18800				
	1,5	4,67		300		1873	1550	18800				
	2,2	5,32	65	263	65	2529	1550	18800				
	2,2	5,97		235		2255	1550	18800				
	3,0	6,65	52	210	72	3056	1550	18800				
	3,0	7,46		188		2725	1550	18800				
	3,1	8,65		162		2447	1550	18800				
	3,2	9,70		144		2209	1550	18800				
	5,5	10,80	40	130	74	3546	1550	18800				
	5,5	11,96		117		3202	1550	18800				
	5,5	13,46		104		2846	1550	18800				
	5,5	14,95	32	93,63	76	2554	1550	18800				
	7,5	16,83		83,20		3188	1550	18800				
	7,5	18,75		74,67		2861	1550	18800				
	7,5	20,80		67,31		2579	1550	18800				
	7,5	23,40		59,83		2293	1550	18800				
	7,5	25,12		55,73		2135	1550	18800				
	11,0	27,84		50,29		2826	1550	18800				
	11,0	30,54		45,84		2576	1550	18800				
	11,0	33,46		41,85		2352	1550	18800				
	11,0	36,61		38,24		2149	1550	18800				
	11,0	41,25	33,94	1907	1550	18800						



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=1400$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
3400-6000 Nm	2,6	5,36	54	261	73	3274	2120	22000	İRSDF	161	161 162	160 170
	3,0	5,95		235		3430	2120	22000				
	3,2	6,57		213		3317	2120	22000				
	3,4	7,23		194		3186	2120	22000				
	6,3	6,89	87	203	63	5380	2120	22000				
	6,8	7,74		181		5213	2120	22000				
	7,4	8,64		162		5045	2120	22000				
	7,8	9,59	87	146	63	4834	2120	22000				
	8,4	10,59		132		4687	2120	22000				
	8,9	11,65		120		4518	2120	22000				
	8,3	11,11	42	126	74	5222	2120	22000				
	8,9	12,33		114		5039	2120	22000				
	9,1	13,62		103		4652	2120	22000				
	10,0	14,98		93,48		4652	2120	22000				
	10,6	16,42		85,27		4481	2120	22000				
	12,3	17,95		78,00		4756	2120	22000				
	11,7	19,58		71,51		4153	2120	22000				
	12,2	21,31		65,69		3988	2120	22000				
	14,3	22,99	30	60,90	77	4518	2120	22000				
	15,0	25,13		55,71		4330	2120	22000				
15,7	27,41	51,08		4162		2120	22000					
16,4	29,84	46,92		3976		2120	22000					
18,8	41,60	33,65		3270		2120	22000					



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=900$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
270-420 Nm	0,17	3,31	82	272	56	270	420	6000	İRSDF	53	153 154	13 15
	0,19	3,78		238		270	420	6000				
	0,23	4,38	62	206	54	270	420	6000				
	0,27	5,00		180		270	420	6000				
	0,24	5,43	50	166	65	270	420	6000				
	0,29	6,20		145		290	420	6000				
	0,48	6,96	39	129	68	420	420	6000				
	0,55	7,94		113		420	420	6000				
	0,43	9,00	30	100	78	290	420	6000				
	0,69	10,12		88,92		420	420	6000				
	0,78	11,33	15	79,44	67	420	420	6000				
	0,75	11,69		76,96		410	420	6000				
	0,84	13,16	40	68,40	67	410	420	6000				
	0,94	14,73		61,11		410	420	6000				
	1,1	16,42	30	54,83	68	410	420	6000				
	1,2	18,24		49,35		410	420	6000				
	1,3	20,20	15	44,55	78	410	420	6000				
	1,4	22,34		40,29		410	420	6000				
	1,5	23,51	40	38,28	67	410	420	6000				
	1,7	26,57		33,87		410	420	6000				
	1,6	29,46	30	30,56	67	410	420	6000				
	1,8	32,83		27,41		410	420	6000				
	2,0	36,47	15	24,68	78	410	420	6000				
2,3	40,41	22,27		410		420	6000					
2,5	44,68	40	20,14	67	410	420	6000					
2,6	47,03		19,14		410	420	6000					
3,0	53,14	62	16,94	60	410	420	6000					
0,35	3,15		286		634	700	8700					
0,35	3,36	53	268	68	594	700	8700					
0,43	3,93		229		692	700	8700					
0,48	4,28	62	210	60	636	700	8700					
0,50	5,01	53	180	68	636	700	8700					
0,48	5,30	62	170	60	514	700	8700					
0,71	6,20	53	145	68	730	700	8700					
0,70	6,64	40	136	67	662	700	8700					
0,64	6,84	53	132	68	602	700	8700					
0,96	8,21	40	110	67	741	700	8700					
0,91	8,85	30	102	72	698	700	8700					
0,96	9,06	40	99,31	67	671	700	8700					
0,96	9,96		90,32		610	700	8700					
1,4	10,95	30	82,22	72	876	700	8700					
1,4	11,93	40	75,43	67	747	700	8700					
1,5	12,08	30	74,48		793	700	8700					
1,5	13,29		67,74	721	700	8700						
1,4	14,15	40	63,59	72	630	700	8700					
1,4	14,82		60,74		602	700	8700					
1,4	15,91	30	56,57	67	602	700	8700					
2,2	16,73	40	53,79	67	821	700	8700					
1,9	18,87	30	47,69	72	693	700	8700					
1,9	19,76		45,56		662	700	8700					
2,9	22,31		40,34		871	700	8700					



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg		
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=900$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]						
680-1870 Nm	0,48	2,64	82	341	60	1031	1100	13300	İRSD İRSDF	73			157 158	55 60
	0,71	2,99		301		1334	1100	13300						
	0,71	3,44	63	262	62	1201	1100	13300						
	0,71	3,90		231		1059	1100	13300						
	0,95	4,33	50	208	69	1284	1100	13300						
	0,97	4,91		183		1150	1100	13300						
	0,98	5,52		163		1033	1100	13300						
	1,4	6,20		145		1482	1100	13300						
	1,4	7,02	40	128	72	1309	1100	13300						
	1,9	7,75		116		1687	1100	13300						
	1,9	8,77		103		1490	1100	13300						
	2,6	9,87		91,20		1766	1100	13300						
	2,6	10,33	30	87,14	74	1734	1100	13300						
	2,6	11,69		76,96		1531	1100	13300						
	3,5	13,16		68,40		1872	1100	13300						
	3,5	14,73		61,11		1672	1100	13300						
	3,5	16,42		54,83		1500	1100	13300						
	3,5	18,24		49,35		1350	1100	13300						
	3,5	20,20		44,55		1219	1100	13300						
	4,8	22,34		40,29		1503	1100	13300						
	4,8	24,67		36,49		1361	1100	13300						
	4,8	27,21		33,08		1234	1100	13300						
	4,8	29,36		30,66		1267	1100	13300						
	4,8	32,83		27,41		1133	1100	13300						
	4,8	36,47	24,68	1020	1100	13300								
	4,8	40,41	15	22,27	82	921	1100	13300						
	4,8	44,68		20,14		833	1100	13300						
	4,8	49,33		18,24		754	1100	13300						
4,8	54,42	16,54		684		1100	13300							
0,77	2,10	106		429		63	2038	1550	18800					
0,77	2,35			383			1812	1550	18800					
0,77	2,62		343	1631	1550		18800							
0,86	2,68	83	336	62	1873	1550	18800							
0,96	3,00		300		1873	1550	18800							
1,4	3,42	65	263	65	2529	1550	18800							
1,4	3,84		235		2255	1550	18800							
1,9	4,28	52	210	72	3056	1550	18800							
1,9	4,80		188		2725	1550	18800							
2,0	5,56		162		2447	1550	18800							
2,0	6,23		144		2209	1550	18800							
3,5	6,94	40	130	74	3546	1550	18800							
3,5	7,69		117		3202	1550	18800							
3,5	8,65		104		2846	1550	18800							
3,5	9,61		93,63		2554	1550	18800							
4,8	10,82		32		83,20	76	3188	1550	18800					
4,8	12,05				74,67		2861	1550	18800					
4,8	13,37	67,31		2579	1550		18800							
4,8	15,04	59,83		2293	1550		18800							
4,8	16,15	55,73		2135	1550		18800							
7,1	17,90	50,29		2826	1550		18800							
7,1	19,63	45,84		2576	1550		18800							
7,1	21,51	41,85		2352	1550		18800							
7,1	23,53	38,24		2149	1550		18800							
7,1	26,52	33,94		1907	1550		18800							



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=900$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
3400-6000 Nm	1,6	3,45	54	261	73	3274	2120	22000	İRSDF	161	162	160
	1,9	3,83		235		3430	2120	22000				
	2,0	4,23		213		3317	2120	22000				
	2,2	4,65		194		3186	2120	22000				
	4,0	4,43	87	203	63	5380	2120	22000				
	4,4	4,98		181		5213	2120	22000				
	4,7	5,56		162		5045	2120	22000				
	5,0	6,16	87	146	63	4834	2120	22000				
	5,4	6,81		132		4687	2120	22000				
	5,7	7,49		120		4518	2120	22000				
	5,4	7,14	42	126	74	5222	2120	22000				
	5,7	7,93		114		5039	2120	22000				
	5,8	8,75		103		4652	2120	22000				
	6,4	9,63		93,48		4652	2120	22000				
	6,8	10,55		85,27		4481	2120	22000				
	7,9	11,54		78,00		4756	2120	22000				
	7,5	12,59		71,51		4153	2120	22000				
	7,8	13,70		65,69		3988	2120	22000				
	9,2	14,78	30	60,90	77	4518	2120	22000				
	9,7	16,16		55,71		4330	2120	22000				
10,1	17,62	51,08		4162		2120	22000					
10,5	19,18	46,92		3976		2120	22000					
12,1	26,75		33,65		3270	2120	22000					



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=700$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
270-420 Nm	0,13	2,57	82	272	56	270	420	6000	İRSDF	53	153 154	13 15
	0,15	2,94		238		270	420	6000				
	0,18	3,41	62	206	54	270	420	6000				
	0,21	3,89		180		270	420	6000				
	0,19	4,22	50	166	65	270	420	6000				
	0,23	4,82		145		290	420	6000				
	0,37	5,41	39	129	68	420	420	6000				
	0,42	6,18		113		420	420	6000				
	0,33	7,00	30	100	78	290	420	6000				
	0,54	7,87		88,92		420	420	6000				
	0,60	8,81	15	79,44	60	420	420	6000				
	0,58	9,10		76,96		410	420	6000				
	0,66	10,23	53	68,40	67	410	420	6000				
	0,73	11,45		61,11		410	420	6000				
	0,82	12,77	40	54,83	67	410	420	6000				
	0,91	14,18		49,35		410	420	6000				
	1,0	15,71	30	44,55	67	410	420	6000				
	1,1	17,38		40,29		410	420	6000				
	1,2	18,29	30	38,28	67	410	420	6000				
	1,3	20,67		33,87		410	420	6000				
	1,3	22,91	40	30,56	67	410	420	6000				
	1,4	25,54		27,41		410	420	6000				
	1,6	28,37	30	24,68	67	410	420	6000				
1,8	31,43	22,27		410		420	6000					
1,9	34,75	40	20,14	67	410	420	6000					
2,0	36,58		19,14		410	420	6000					
2,3	41,33	30	16,94	67	410	420	6000					
0,27	2,45		62		286	60	634	700	8700			
0,28	2,62	268		594	700		8700					
0,33	3,06	53	229	68	692	700	8700					
0,37	3,33	62	210	60	636	700	8700					
0,39	3,89	53	180	68	636	700	8700					
0,37	4,12	62	170	60	514	700	8700					
0,55	4,82	53	145	68	730	700	8700					
0,54	5,16	40	136	67	662	700	8700					
0,50	5,32	53	132	68	602	700	8700					
0,75	6,39	40	110	67	741	700	8700					
0,71	6,88	30	102	72	698	700	8700					
0,75	7,05	40	99,31	67	671	700	8700					
0,75	7,75		90,32		610	700	8700					
1,1	8,51	30	82,22	72	876	700	8700					
1,1	9,28	40	75,43	67	747	700	8700					
1,2	9,40	30	74,48		793	700	8700					
1,2	10,33		67,74	721	700	8700						
1,1	11,01	40	63,59	67	630	700	8700					
1,1	11,52		60,74		602	700	8700					
1,1	12,37	30	56,57	72	602	700	8700					
1,7	13,01	40	53,79	67	821	700	8700					
1,5	14,68	30	47,69	72	693	700	8700					
1,5	15,37		45,56		662	700	8700					
2,2	17,35	30	40,34	72	871	700	8700					



Servis Faktörü Service Factor Betriebsfaktor S _f = 1	P ₁	n ₂	İ _s	İ _t	η	M ₂	F _{Q1}	F _{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] (n ₁ =700rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
680-1870 Nm	0,37	2,05	82	341	60	1031	1100	13300	İRSDF	73	157 158	55 60
	0,55	2,33		301		1334	1100	13300				
	0,55	2,67	63	262	62	1201	1100	13300				
	0,55	3,03		231		1059	1100	13300				
	0,74	3,37	50	208	69	1284	1100	13300				
	0,75	3,82		183		1150	1100	13300				
	0,76	4,29		163		1033	1100	13300				
	1,1	4,82		145		1482	1100	13300				
	1,1	5,46	40	128	72	1309	1100	13300				
	1,5	6,02		116		1687	1100	13300				
	1,5	6,82		103		1490	1100	13300				
	2,0	7,68		91,20		1766	1100	13300				
	2,0	8,03	30	87,14	74	1734	1100	13300				
	2,0	9,10		76,96		1531	1100	13300				
	2,8	10,23		68,40		1872	1100	13300				
	2,7	11,45		61,11		1672	1100	13300				
	2,7	12,77		54,83		1500	1100	13300				
	2,7	14,18		49,35		1350	1100	13300				
	2,8	15,71		44,55		1219	1100	13300				
	3,7	17,38		40,29		1503	1100	13300				
	3,7	19,19		36,49		1361	1100	13300				
	3,7	21,16		33,08		1234	1100	13300				
	3,7	22,83	15	30,66	82	1267	1100	13300				
	3,7	25,54		27,41		1133	1100	13300				
	3,7	28,37		24,68		1020	1100	13300				
	3,8	31,43		22,27		921	1100	13300				
	3,8	34,75		20,14		833	1100	13300				
	3,7	38,37		18,24		754	1100	13300				
	3,8	42,33		16,54		684	1100	13300				
	0,60	1,63		106		429	63	2038				
0,60	1,83	383	1812		1550	18800						
0,60	2,04	343	1631		1550	18800						
0,67	2,08	83	336	62	1873	1550	18800					
0,75	2,34		300		1873	1550	18800					
1,1	2,66	65	263	65	2529	1550	18800					
1,1	2,98		235		2255	1550	18800					
1,5	3,33	52	210	72	3056	1550	18800					
1,5	3,73		188		2725	1550	18800					
1,6	4,32		162		2447	1550	18800					
1,6	4,85		144		2209	1550	18800					
2,7	5,40	40	130	74	3546	1550	18800					
2,7	5,98		117		3202	1550	18800					
2,8	6,73		104		2846	1550	18800					
2,7	7,48	32	93,63	76	2554	1550	18800					
3,7	8,41		83,20		3188	1550	18800					
3,7	9,38		74,67		2861	1550	18800					
3,7	10,40		67,31		2579	1550	18800					
3,8	11,70		59,83		2293	1550	18800					
3,7	12,56		55,73		2135	1550	18800					
5,5	13,92		50,29		2826	1550	18800					
5,5	15,27		45,84		2576	1550	18800					
5,5	16,73		41,85		2352	1550	18800					
5,5	18,30		38,24		2149	1550	18800					
5,5	20,63	33,94	1907	1550	18800							



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P ₁	n ₂	i _s	i _t	η	M ₂	F _{Q1}	F _{Q10}	Tip Type Typ			
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] (n ₁ =700rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
3400-6000 Nm	1,3	2,68	54	261	73	3274	2120	22000	İRSDF	161	161 162	160 170
	1,5	2,98		235		3430	2120	22000				
	1,6	3,29		213		3317	2120	22000				
	1,7	3,61		194		3186	2120	22000				
	3,1	3,45	87	203	63	5380	2120	22000				
	3,4	3,87		181		5213	2120	22000				
	3,7	4,32		162		5045	2120	22000				
	3,9	4,79	87	146	63	4834	2120	22000				
	4,2	5,30		132		4687	2120	22000				
	4,4	5,82	42	120	74	4518	2120	22000				
	4,2	5,56		126		5222	2120	22000				
	4,5	6,16		114		5039	2120	22000				
	4,5	6,81		103		4652	2120	22000				
	5,0	7,49		93,48		4652	2120	22000				
	5,3	8,21		85,27		4481	2120	22000				
	6,1	8,97		78,00		4756	2120	22000				
	5,8	9,79		71,51		4153	2120	22000				
	6,1	10,66		65,69		3988	2120	22000				
	7,2	11,49		60,90		4518	2120	22000				
	7,5	12,57	55,71	4330	2120	22000						
7,9	13,70	51,08	4162	2120	22000							
8,2	14,92	46,92	3976	2120	22000							
9,4	20,80	33,65	3270	2120	22000							



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=500$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
270-420 Nm	0,09	1,84	82	272	56	270	420	6000	İRSDF	53		
	0,11	2,10		238		270	420	6000				
	0,13	2,43	62	206	54	270	420	6000				
	0,15	2,78		180		270	420	6000				
	0,13	3,02	50	166	65	270	420	6000				
	0,16	3,44		145		290	420	6000				
	0,27	3,87	39	129	68	420	420	6000				
	0,30	4,41		113		420	420	6000				
	0,24	5,00	30	100	78	290	420	6000				
	0,39	5,62		88,92		420	420	6000				
	0,43	6,29	15	79,44	72	420	420	6000				
	0,42	6,50		76,96		410	420	6000				
	0,47	7,31	15	68,40	78	410	420	6000				
	0,52	8,18		61,11		410	420	6000				
	0,58	9,12	15	54,83	78	410	420	6000				
	0,65	10,13		49,35		410	420	6000				
	0,72	11,22	15	44,55	78	410	420	6000				
	0,80	12,41		40,29		410	420	6000				
	0,84	13,06	15	38,28	78	410	420	6000				
	0,95	14,76		33,87		410	420	6000				
	0,91	16,36	15	30,56	78	410	420	6000				
	1,0	18,24		27,41		410	420	6000				
	1,1	20,26	15	24,68	78	410	420	6000				
	1,3	22,45		22,27		410	420	6000				
1,4	24,82	15	20,14	78	410	420	6000					
1,5	26,13		19,14		410	420	6000					
1,6	29,52	16,94	410	420	6000							
510-870 Nm	0,20	1,75	62	286	60	634	700	8700	İRSDF	63		
	0,20	1,87		268		594	700	8700				
	0,24	2,19	53	229	68	692	700	8700				
	0,27	2,38	62	210	60	636	700	8700				
	0,28	2,78	53	180	68	636	700	8700				
	0,27	2,94	62	170	60	514	700	8700				
	0,39	3,44	53	145	68	730	700	8700				
	0,39	3,69	40	136	67	662	700	8700				
	0,36	3,80	53	132	68	602	700	8700				
	0,54	4,56	40	110	67	741	700	8700				
	0,51	4,91	30	102	72	698	700	8700				
	0,54	5,03	40	99,31	67	671	700	8700				
	0,54	5,54		90,32		610	700	8700				
	0,79	6,08	30	82,22	72	876	700	8700				
	0,79	6,63	40	75,43	67	747	700	8700				
	0,84	6,71	30	74,48		793	700	8700				
	0,84	7,38		67,74	721	700	8700					
	0,79	7,86	40	63,59	72	630	700	8700				
	0,79	8,23		60,74		602	700	8700				
	0,79	8,84	30	56,57	72	602	700	8700				
	1,2	9,29	40	53,79	67	821	700	8700				
	1,1	10,48	30	47,69	72	693	700	8700				
	1,1	10,98		45,56		662	700	8700				
	1,6	12,39	40,34	871	700	8700						



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg				
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=500$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]								
680-1870 Nm	0,27	1,47	82	341	60	1031	1100	13300	İRSDF	73			157	55		
	0,39	1,66		301		1334	1100	13300								
	0,39	1,91	63	262	62	1201	1100	13300								
	0,39	2,16		231		1059	1100	13300								
	0,53	2,41	50	208	69	1284	1100	13300								
	0,54	2,73		183		1150	1100	13300								
	0,54	3,07		163		1033	1100	13300								
	0,79	3,44		145		1482	1100	13300								
	0,79	3,90	40	128	72	1309	1100	13300								
	1,1	4,30		116		1687	1100	13300								
	1,1	4,87		103		1490	1100	13300								
	1,4	5,48		91,20		1766	1100	13300								
	1,4	5,74		87,14		1734	1100	13300								
	1,4	6,50		76,96		1531	1100	13300								
	2,0	7,31		68,40		1872	1100	13300								
	2,0	8,18		61,11		1672	1100	13300								
	2,0	9,12		30		54,83	74	1500							1100	13300
	2,0	10,13				49,35		1350							1100	13300
	2,0	11,22	44,55		1219	1100		13300								
	2,7	12,41	40,29		1503	1100		13300								
	2,7	13,70	36,49		1361	1100		13300								
	2,7	15,12	33,08		1234	1100		13300								
	2,7	16,31	30,66		1267	1100		13300								
	2,7	18,24	27,41		1133	1100		13300								
	2,7	20,26	24,68		1020	1100		13300								
	2,7	22,45	15		22,27	82		921							1100	13300
	2,7	24,82		20,14	833		1100	13300								
	2,7	27,41		18,24	754		1100	13300								
2,7	30,23	16,54		684	1100		13300									
0,43	1,17	106		429	63		2038	1550	18800							
0,43	1,31			383			1812	1550	18800							
0,43	1,46			343			1631	1550	18800							
0,48	1,49	83		336	62		1873	1550	18800							
0,54	1,67		300	1873		1550	18800									
0,79	1,90	65	263	65	2529	1550	18800									
0,79	2,13		235		2255	1550	18800									
1,1	2,38	52	210	72	3056	1550	18800									
1,1	2,66		188		2725	1550	18800									
1,1	3,09		162		2447	1550	18800									
1,1	3,46		144		2209	1550	18800									
2,0	3,86	40	130	74	3546	1550	18800									
2,0	4,27		117		3202	1550	18800									
2,0	4,81		104		2846	1550	18800									
2,0	5,34		93,63		2554	1550	18800									
2,7	6,01	32	83,20	76	3188	1550	18800									
2,7	6,70		74,67		2861	1550	18800									
2,7	7,43		67,31		2579	1550	18800									
2,7	8,36		59,83		2293	1550	18800									
2,7	8,97		55,73		2135	1550	18800									
3,9	9,94		50,29		2826	1550	18800									
3,9	10,91		45,84		2576	1550	18800									
3,9	11,95		41,85		2352	1550	18800									
3,9	13,07		38,24		2149	1550	18800									
3,9	14,73		33,94		1907	1550	18800									



Servis Faktörü Service Factor Betriebsfaktor $S_f = 1$	P_1	n_2	i_s	i_t	η	M_2	F_{Q1}	F_{Q10}	Tip Type Typ			kg
	GÜÇ Power Leistung [kW]	Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m] ($n_1=500$ rpm)	Sonsuz Vida Tahvili Worm Ratio Schnecken Übersetzung	Toplam Tahvil Total Ratio Gesamt Übersetzung	Verim Efficiency Wirkungsgrad [%]	Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	Rad. Yük Over Loads Querkräfte [N]	Rad. Yük Over Loads Querkräfte [N]				
3400-6000 Nm	0,91	1,92	54	261	73	3274	2120	22000	İRSDF	161	162	160
	1,1	2,13		235		3430	2120	22000				
	1,1	2,35		213		3317	2120	22000				
	1,2	2,58		194		3186	2120	22000				
	2,2	2,46	87	203	63	5380	2120	22000				
	2,4	2,77		181		5213	2120	22000				
	2,6	3,09		162		5045	2120	22000				
	2,8	3,42	87	146	63	4834	2120	22000				
	3,0	3,78		132		4687	2120	22000				
	3,2	4,16		120		4518	2120	22000				
	3,0	3,97	42	126	74	5222	2120	22000				
	3,2	4,40		114		5039	2120	22000				
	3,2	4,86		103		4652	2120	22000				
	3,6	5,35		93,48		4652	2120	22000				
	3,8	5,86		85,27		4481	2120	22000				
	4,4	6,41		78,00		4756	2120	22000				
	4,2	6,99		71,51		4153	2120	22000				
	4,4	7,61		65,69		3988	2120	22000				
	5,1	8,21	30	60,90	77	4518	2120	22000				
	5,4	8,98		55,71		4330	2120	22000				
5,6	9,79	51,08		4162		2120	22000					
5,8	10,66	46,92		3976		2120	22000					
6,7	14,86	33,65		3270		2120	22000					



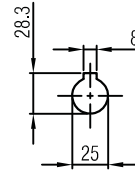
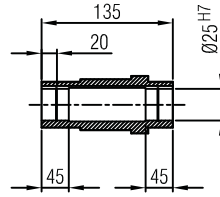
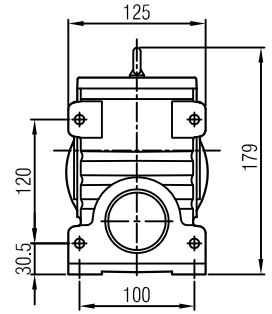
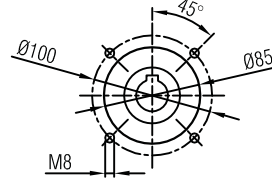
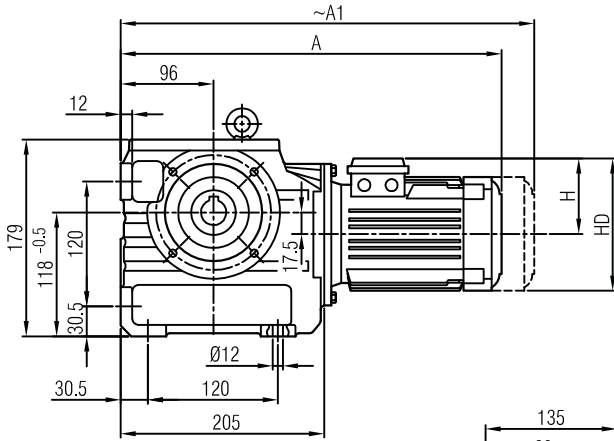
Helisel Sonsuz Vidalı Redüktörler Ölçü Sayfaları

Helical, Worm Gearbox

Réducteurs hélicoïdaux à roue et vis sans fin

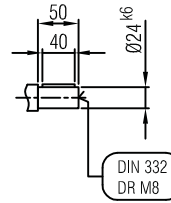
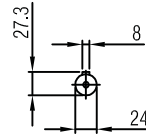
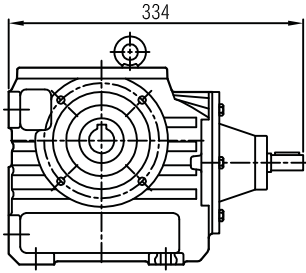


İRSDM 53



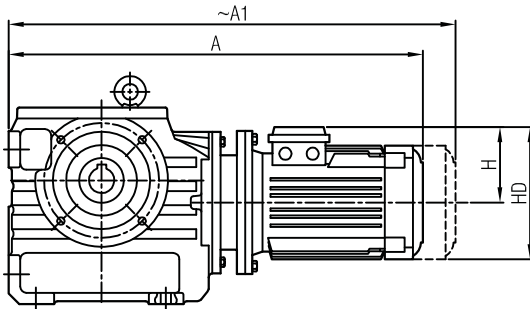
	71	80	90 S	90 L	100
A	423	450	479	504	544
A ₁	474	519	545	570	622
H	111	118	126	126	134
HD	182	198	216	216	234
AC	138	156	176	176	194

İRSD 53



"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

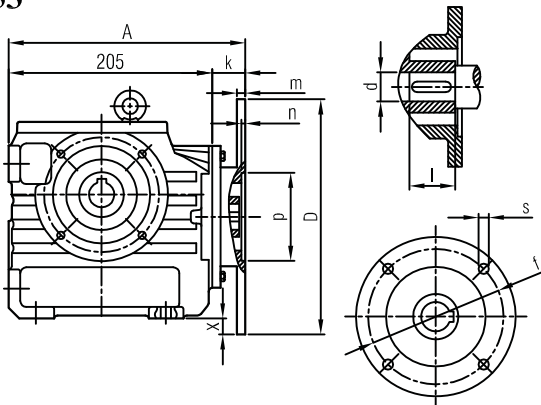
İRSDPM 53



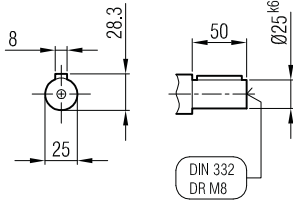
	71/B5	80/B5	90 S/B5	90 L/B5	100/B5
A	472	495	510	535	581
A ₁	523	564	576	601	659
H	111	118	126	126	134
HD	182	198	216	216	234
AC	138	156	176	176	194

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

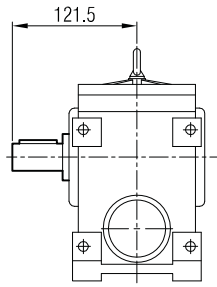
İRSDP 53



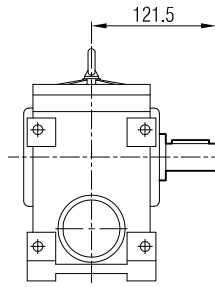
	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x
71/B5	249	110	130	160	M8	44	9	4	14	30	16.3	5	-
80/B5	251	130	165	200	M10	46	12	5	19	40	21.8	6	-
90/B5	251	130	165	200	M10	46	12	5	24	50	27.3	8	-
100/B5	265	180	215	250	M12	60	14	5	28	60	31.3	8	24.5



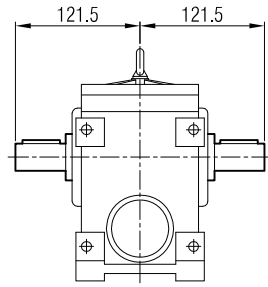
... -SR



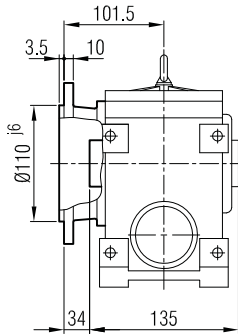
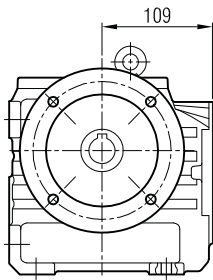
... -SL



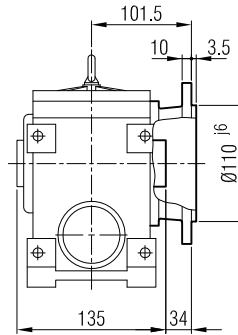
... -SD



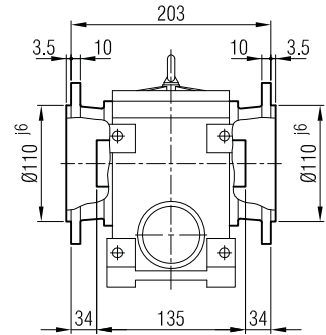
... -FR



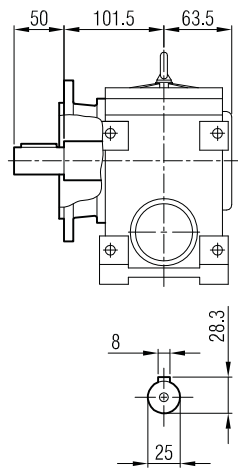
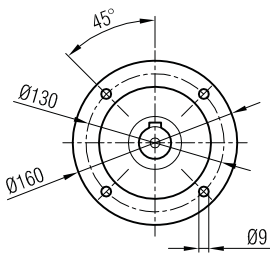
... -FL



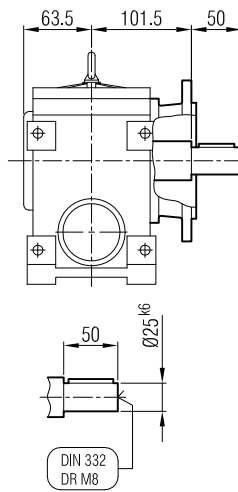
... -FD



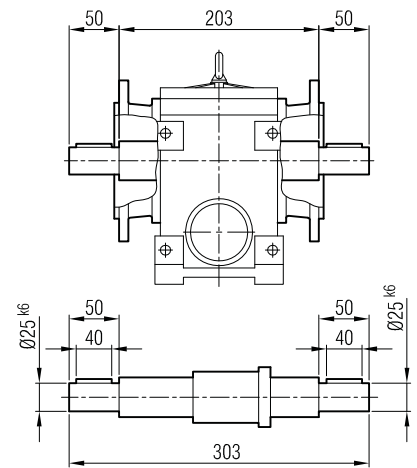
... -FR -SR



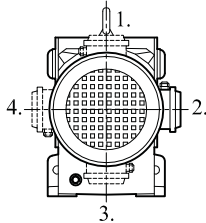
... -FL -SL



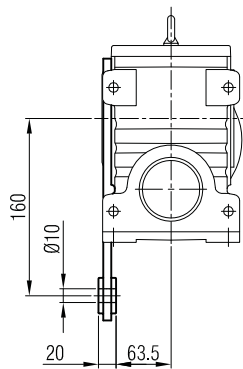
... -FD -SD



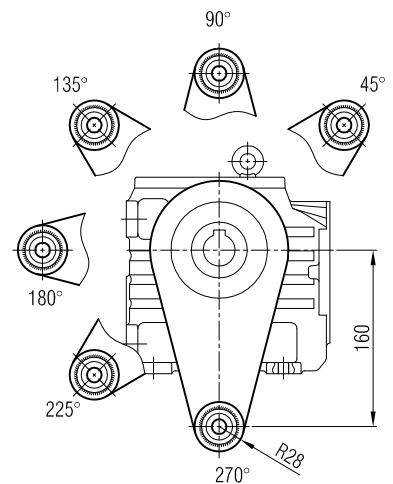
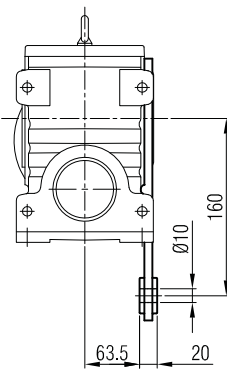
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



-TR

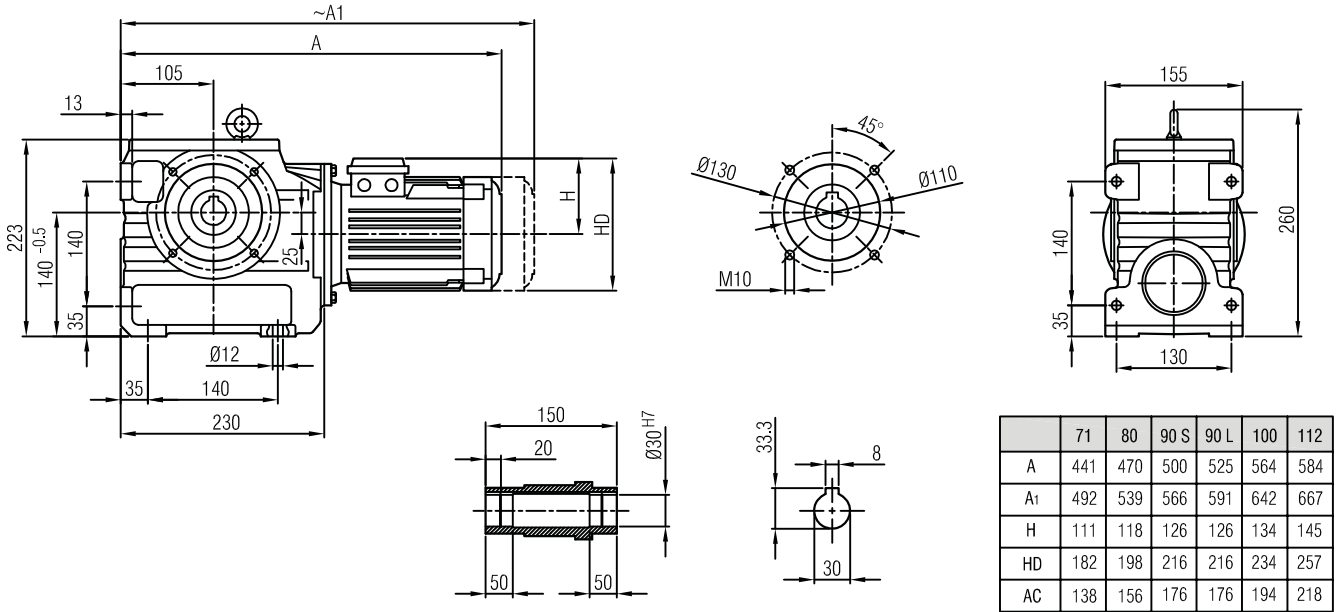


-TL

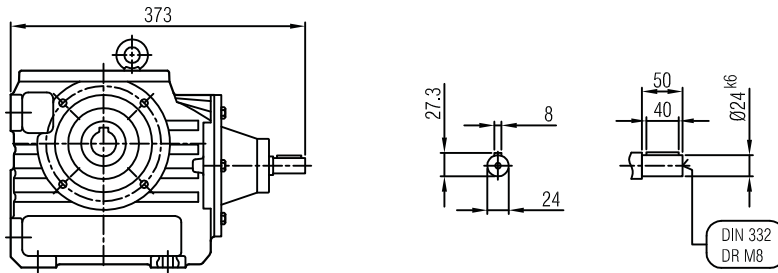




İRSDM 63

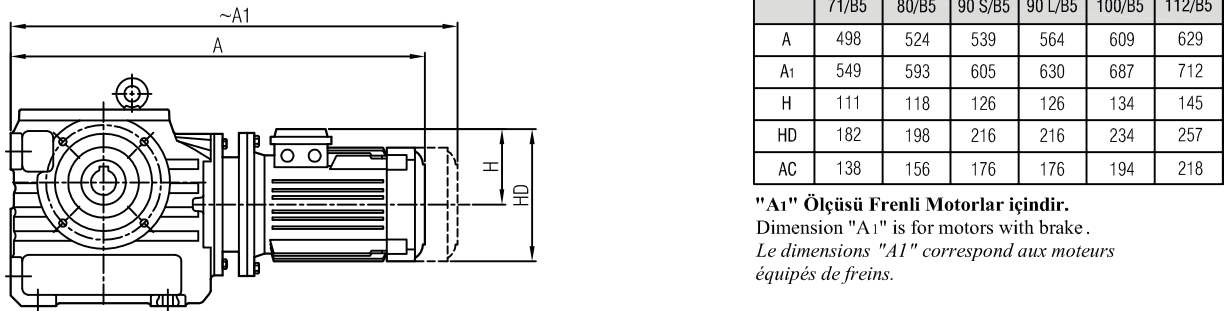


İRSD 63



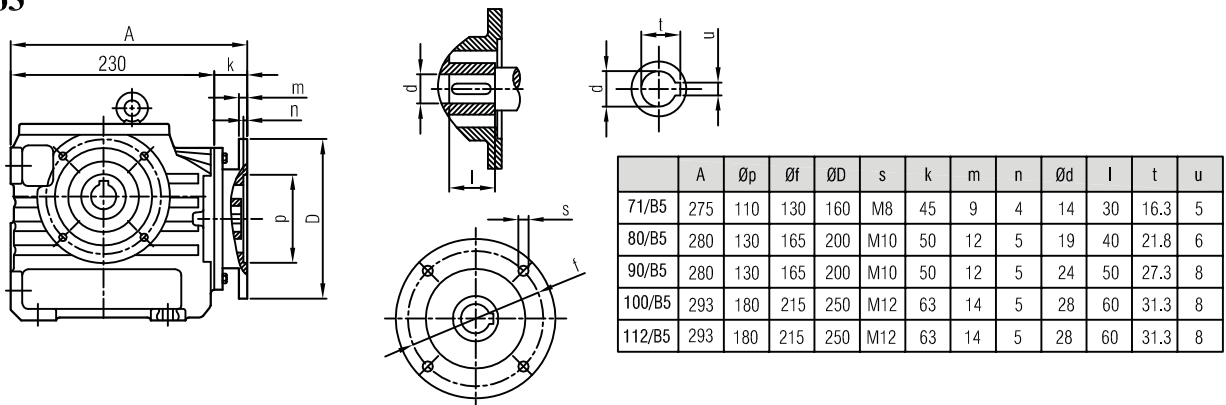
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

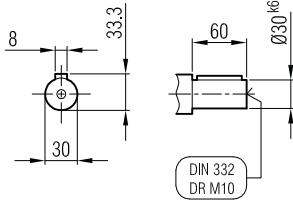
İRSDPM 63



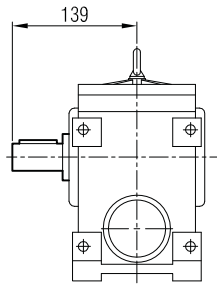
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

İRSDP 63

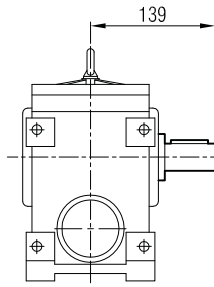




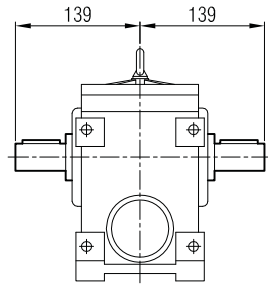
... -SR



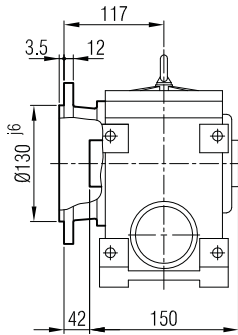
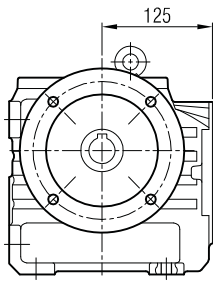
... -SL



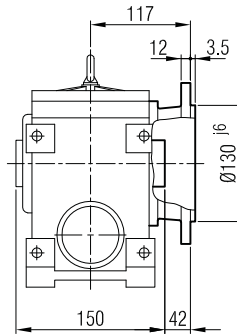
... -SD



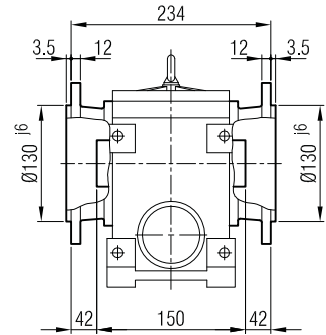
... -FR



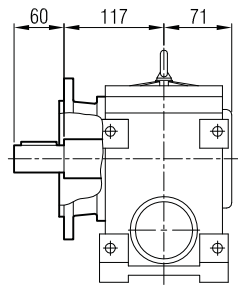
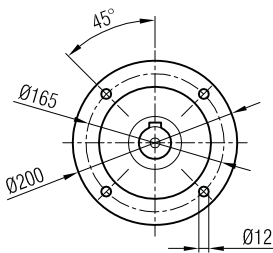
... -FL



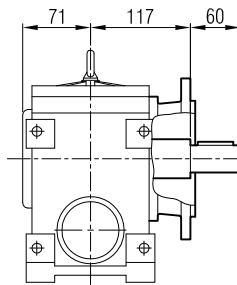
... -FD



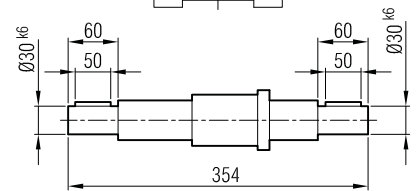
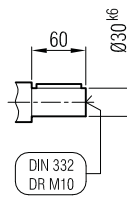
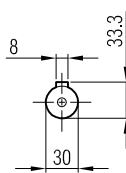
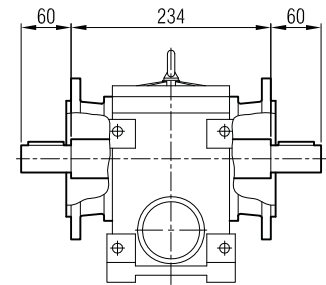
... -FR -SR



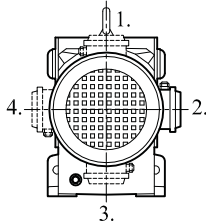
... -FL -SL



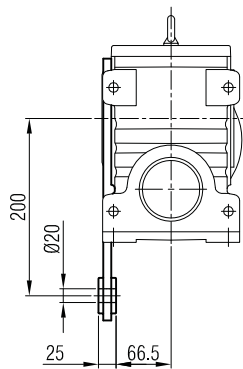
... -FD -SD



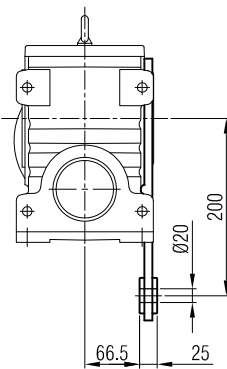
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



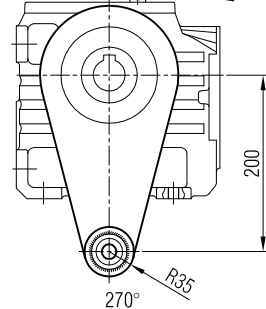
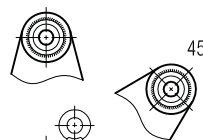
-TR



-TL

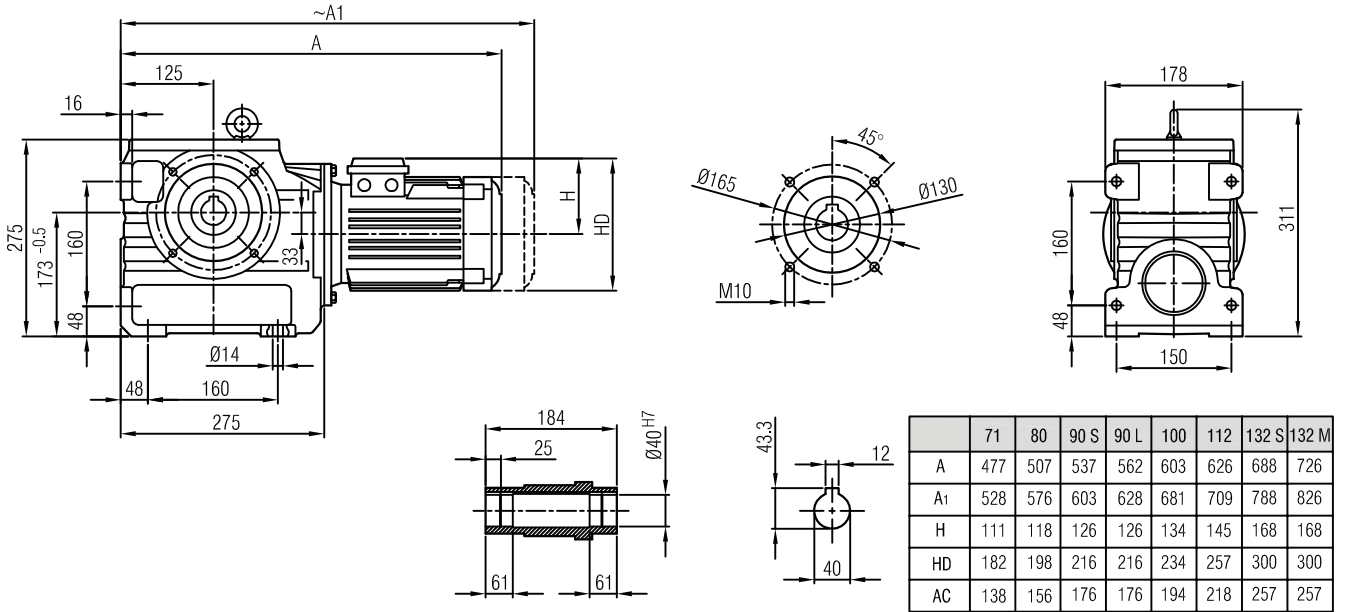


90°

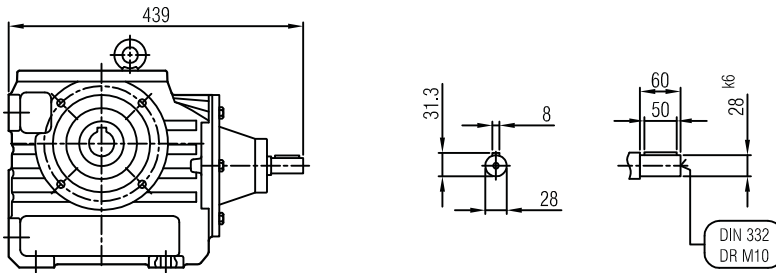




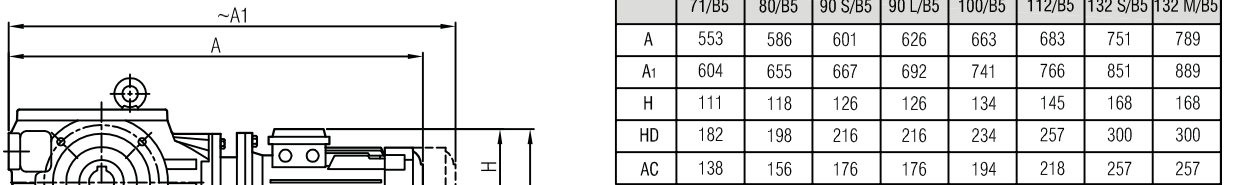
İRSDM 73



İRSD 73

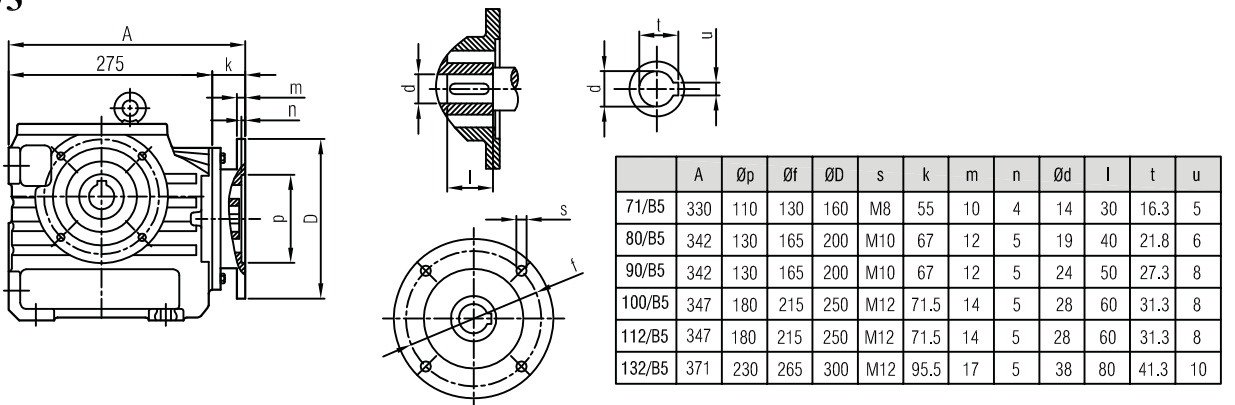


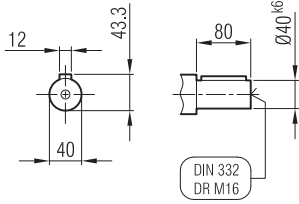
İRSDPM 73



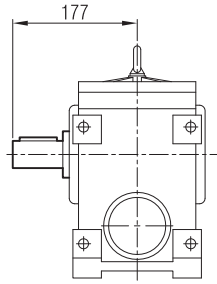
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspond aux moteurs équipés de freins.

İRSDP 73

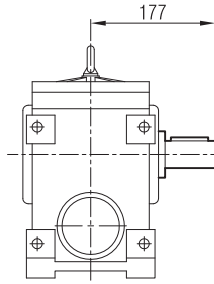




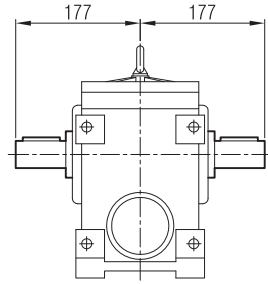
... -SR



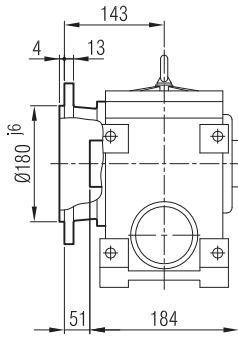
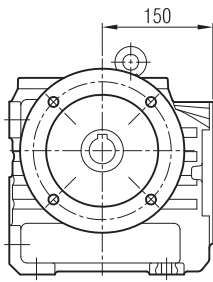
... -SL



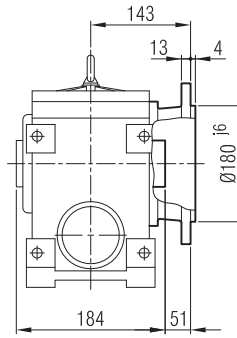
... -SD



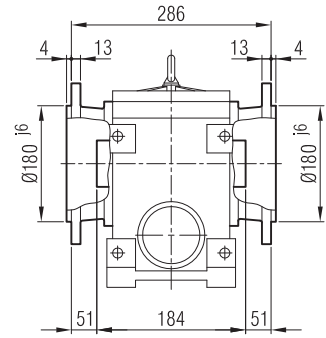
... -FR



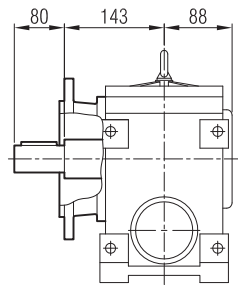
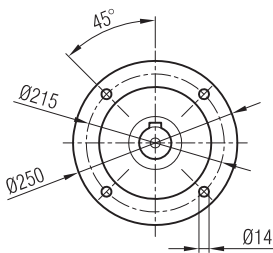
... -FL



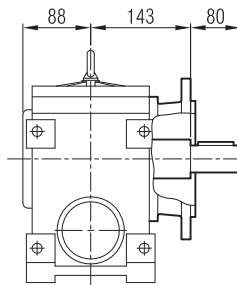
... -FD



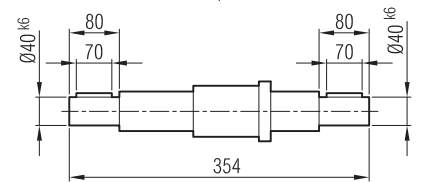
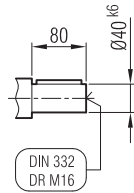
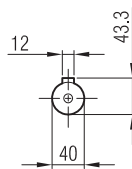
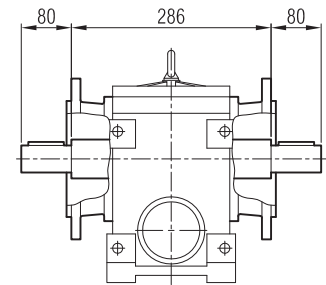
... -FR -SR



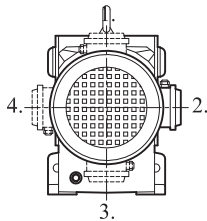
... -FL -SL



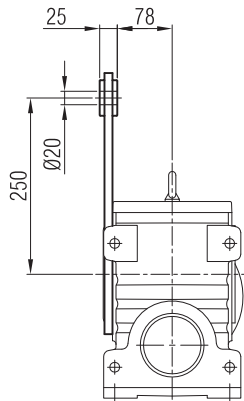
... -FD -SD



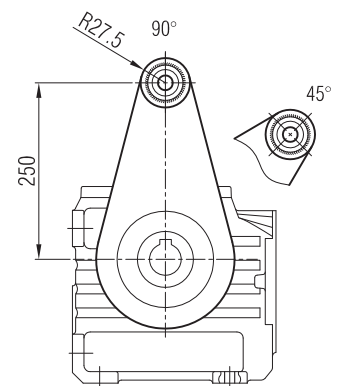
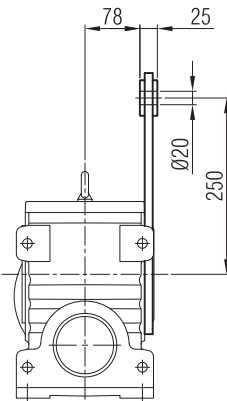
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



-TR

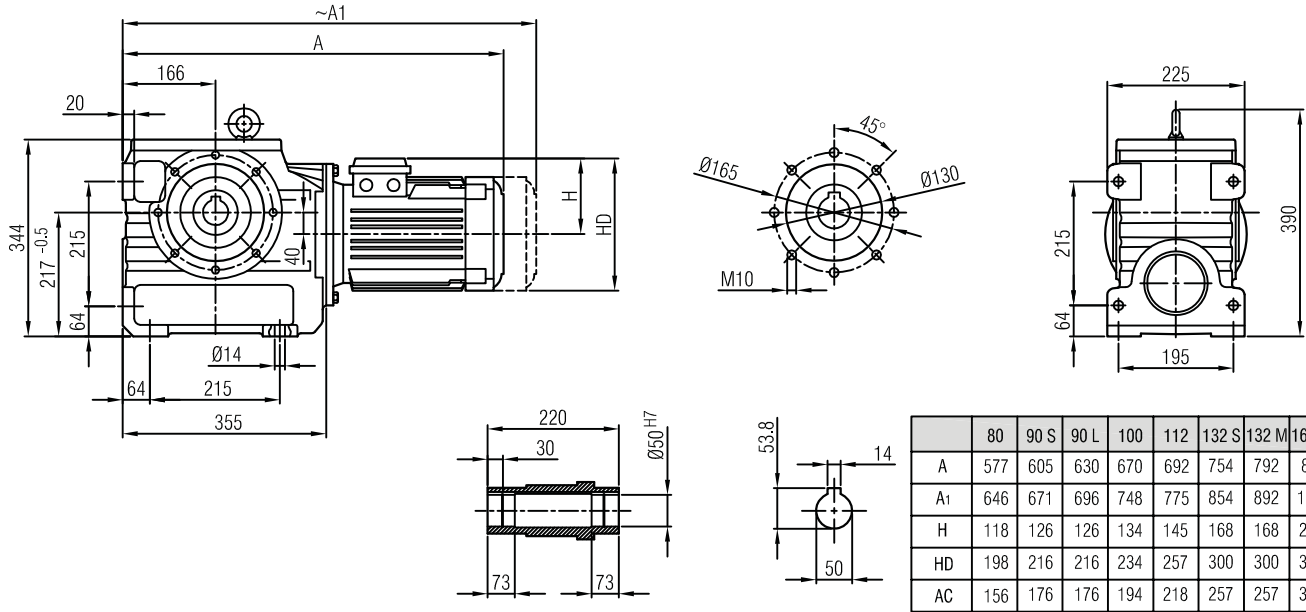


-TL

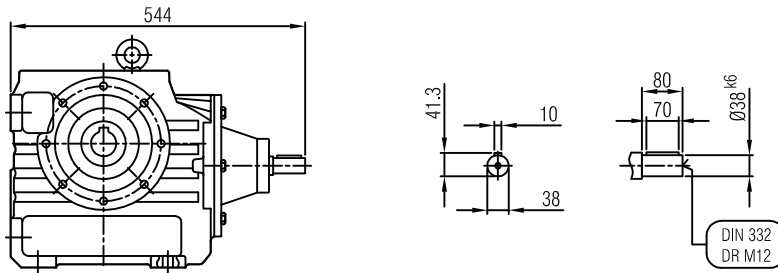




İRSDM 83

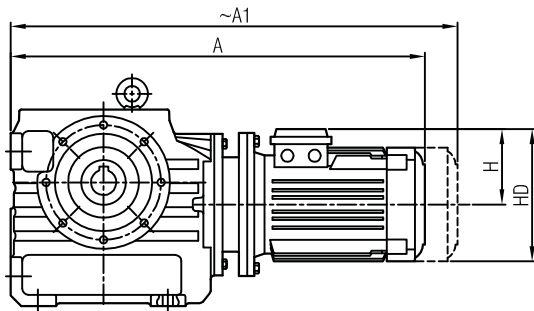


İRSD 83



"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspond aux moteurs équipés de freins.

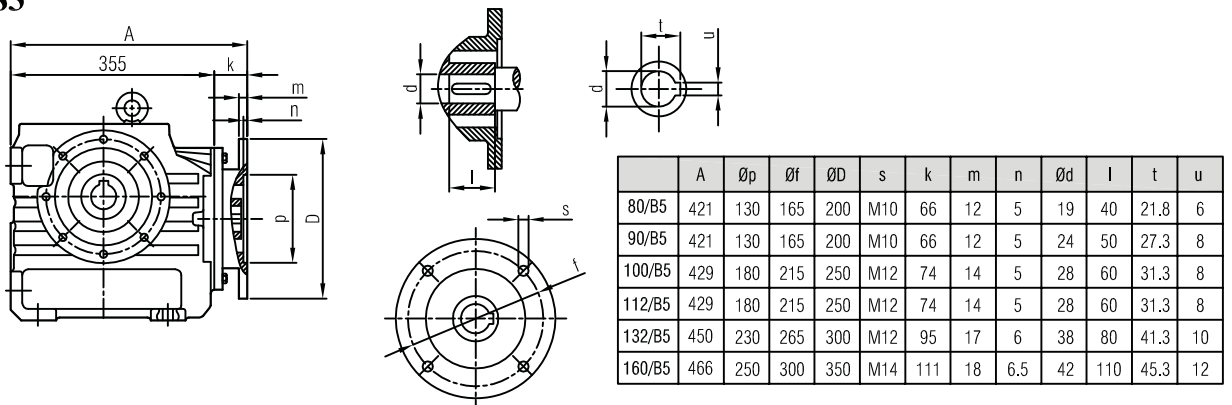
İRSDPM 83

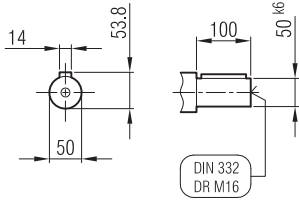


	80/B5	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5	160 M/B5
A	665	680	705	745	765	830	868	956
A ₁	734	746	771	823	848	930	968	1071
H	118	126	126	134	145	168	168	220
HD	198	216	216	234	257	300	300	380
AC	156	176	176	194	218	257	257	310

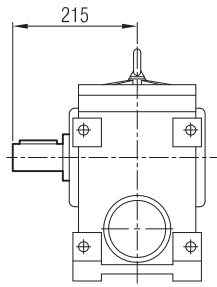
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspond aux moteurs équipés de freins.

İRSDP 83

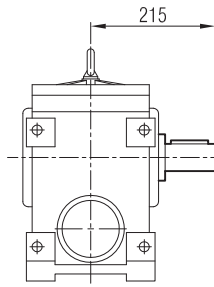




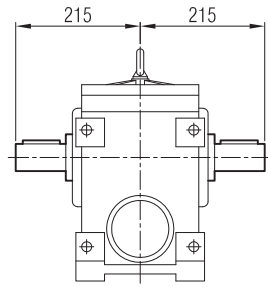
... -SR



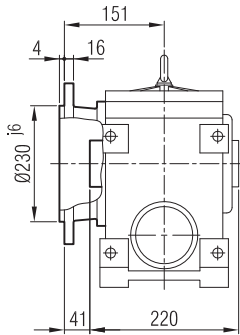
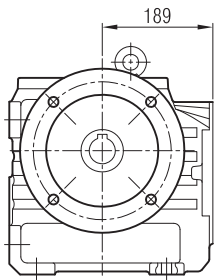
... -SL



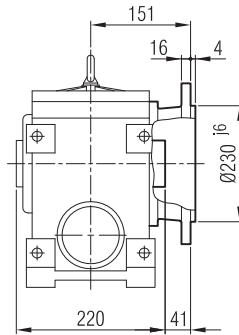
... -SD



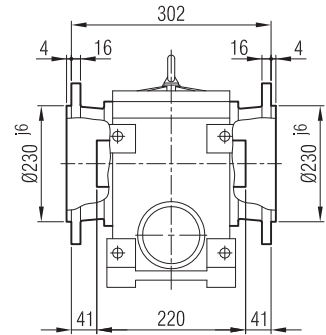
... -FR



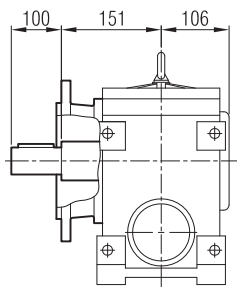
... -FL



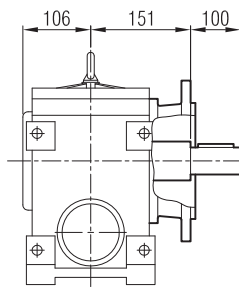
... -FD



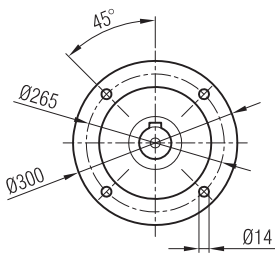
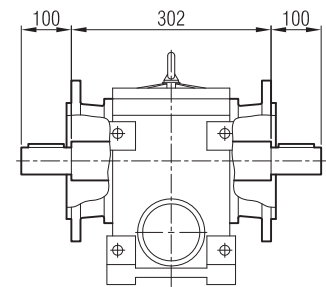
... -FR -SR



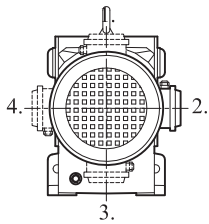
... -FL -SL



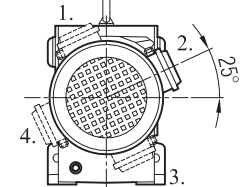
... -FD -SD



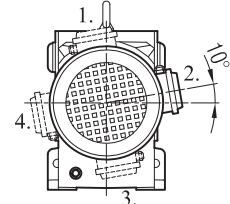
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



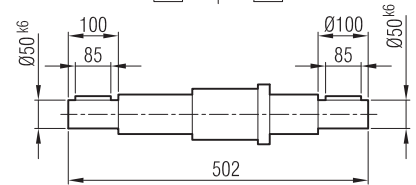
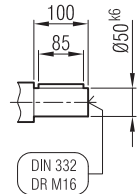
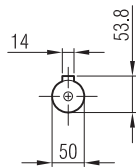
90, 100, 132, 160 Tip/Type/Typ



80 Tip/Type/Typ

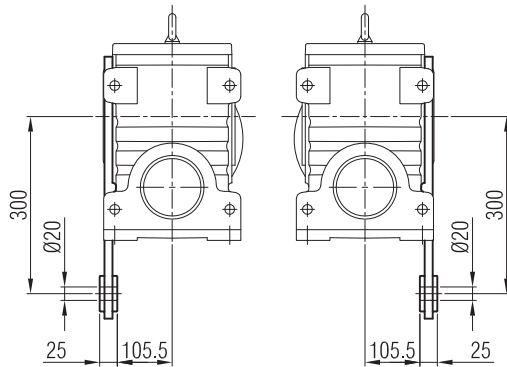


112 Tip/Type/Typ

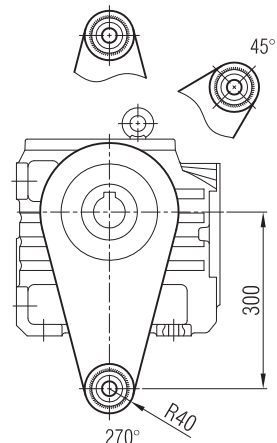


-TR

-TL

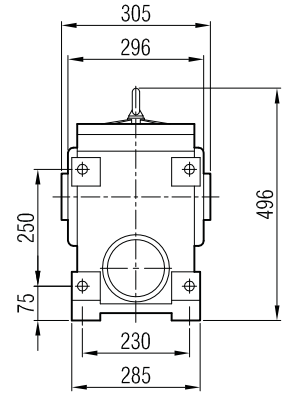
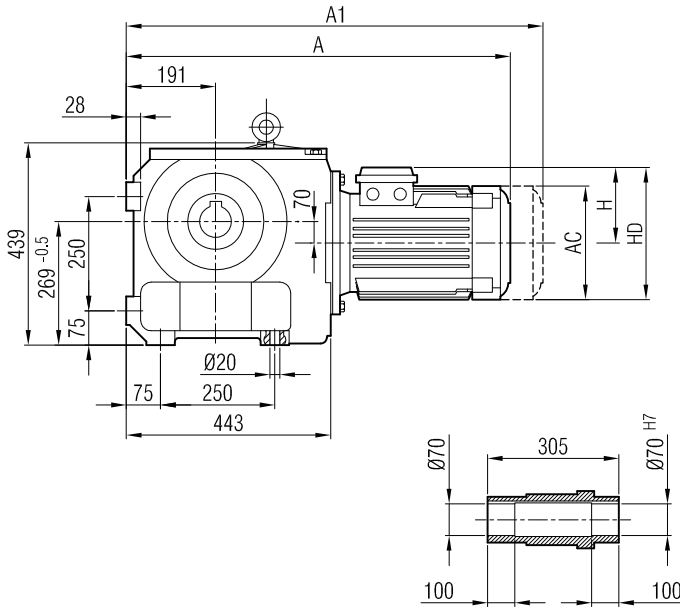


90°





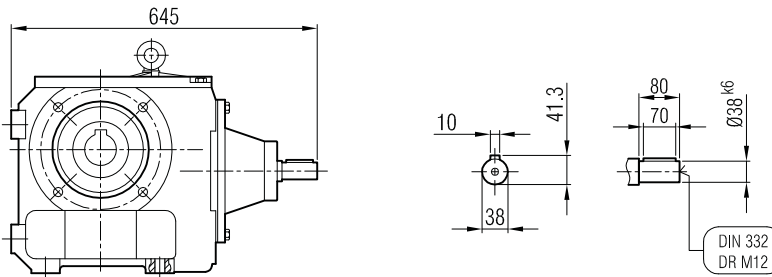
İRSDM 161



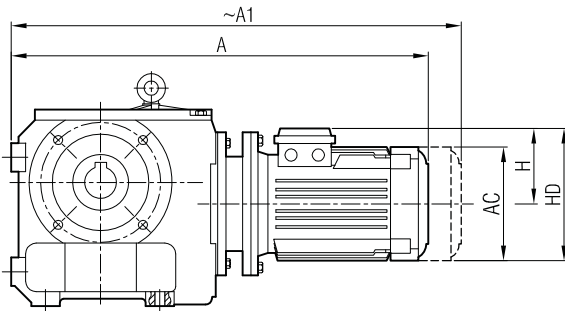
	90 S	90 L	100	112	132 S	132 M
A	784	810	755	778	825	871
A ₁	879	905	870	903	980	1030
H	126	126	134	145	168	168
HD	216	216	234	257	300	300
AC	176	176	194	218	257	257

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

İRSD 161



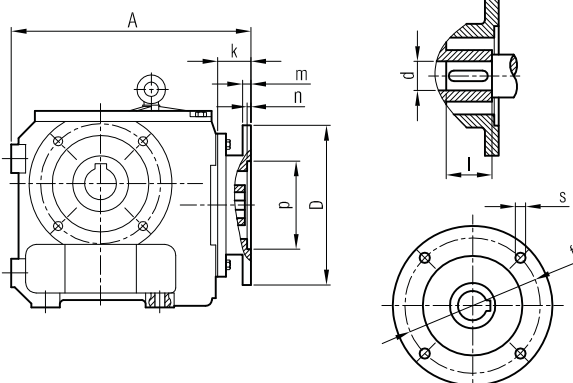
İRSDPM 161



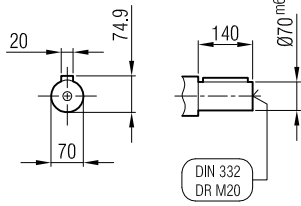
	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5
A	751	776	817	837	918	956
A ₁	817	842	895	920	1018	1056
H	126	126	134	145	168	168
HD	216	216	234	257	300	300
AC	176	176	194	218	257	257

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake.
Le dimensions "A₁" correspondent aux moteurs équipés de freins.

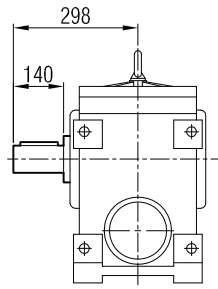
İRSDP 161



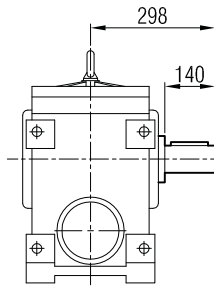
	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u
90/B5	492	130	165	200	M10	49	12	5	24	50	27.3	8
100/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
112/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
132/B5	538	230	265	300	M12	95	17	6	38	80	41.3	10



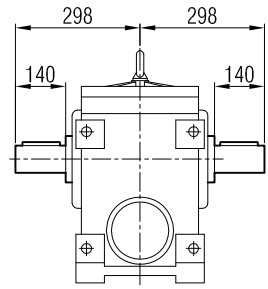
... -SR



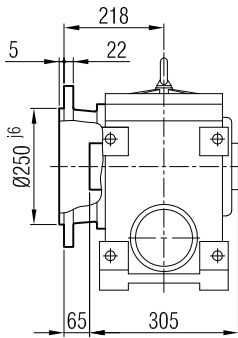
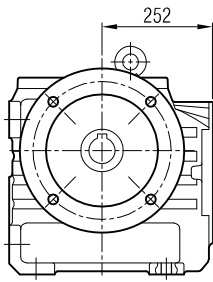
... -SL



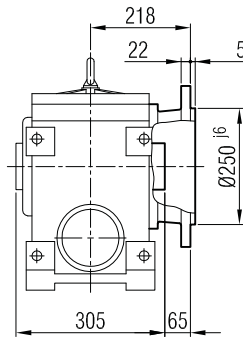
... -SD



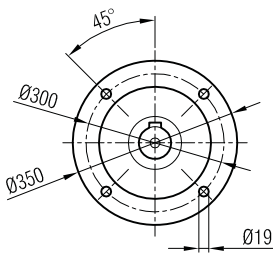
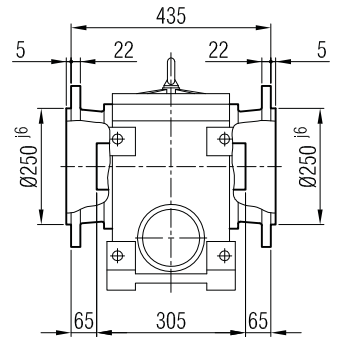
... -FR



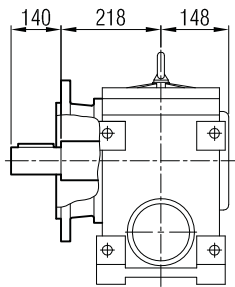
... -FL



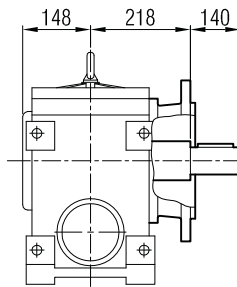
... -FD



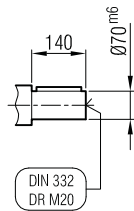
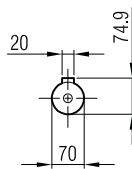
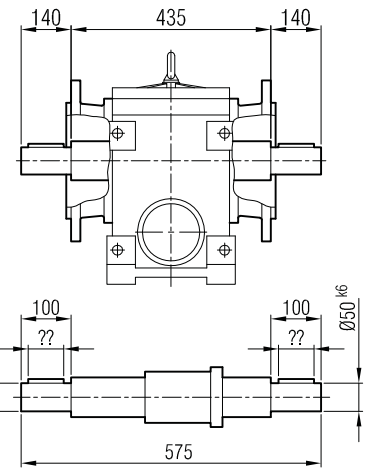
... -FR -SR



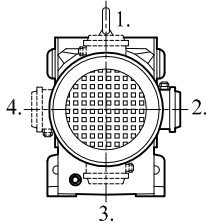
... -FL -SL



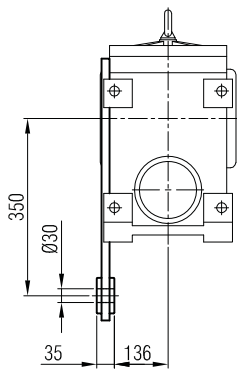
... -FD -SD



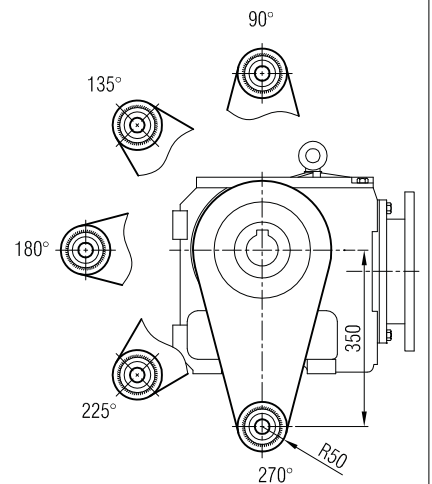
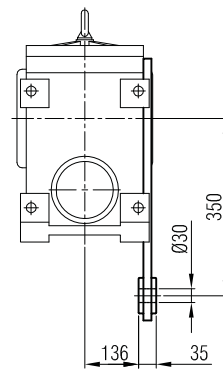
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



-TR



-TL

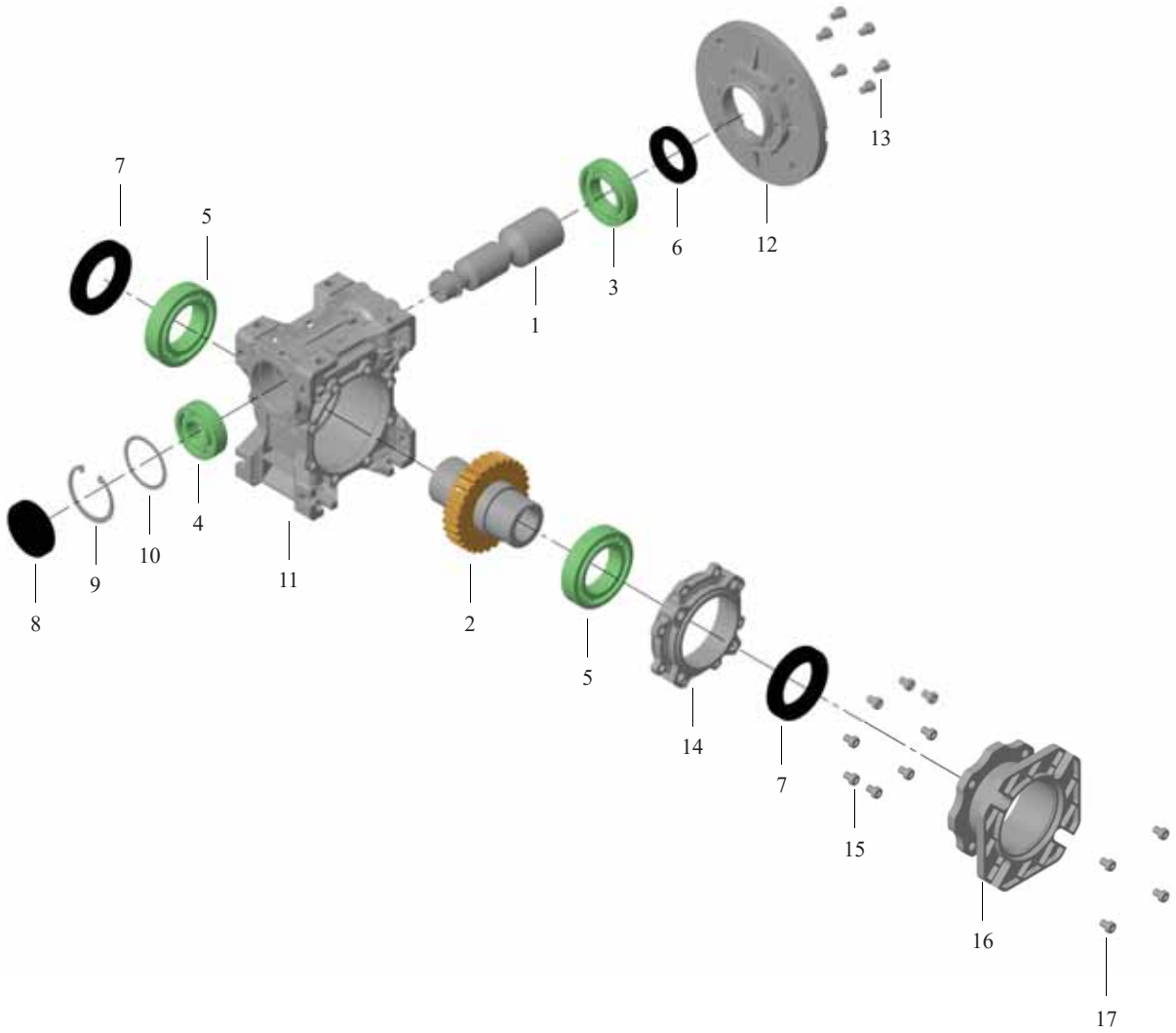




Yedek Parça Listeleri

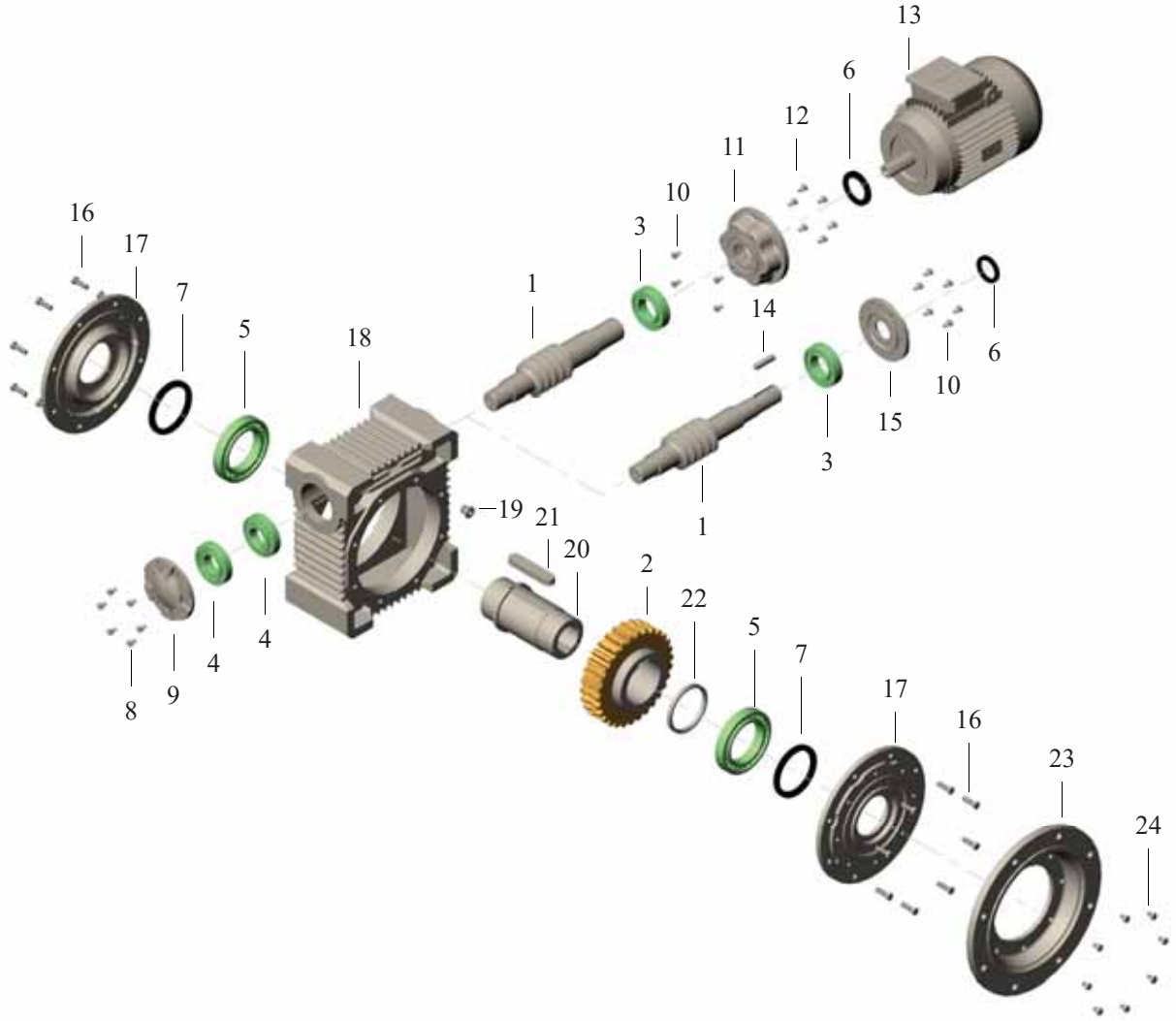
General Parts List

Liste des composants

TİP / TYPE**SM / SP / S } 30-40-50-63-75-90**

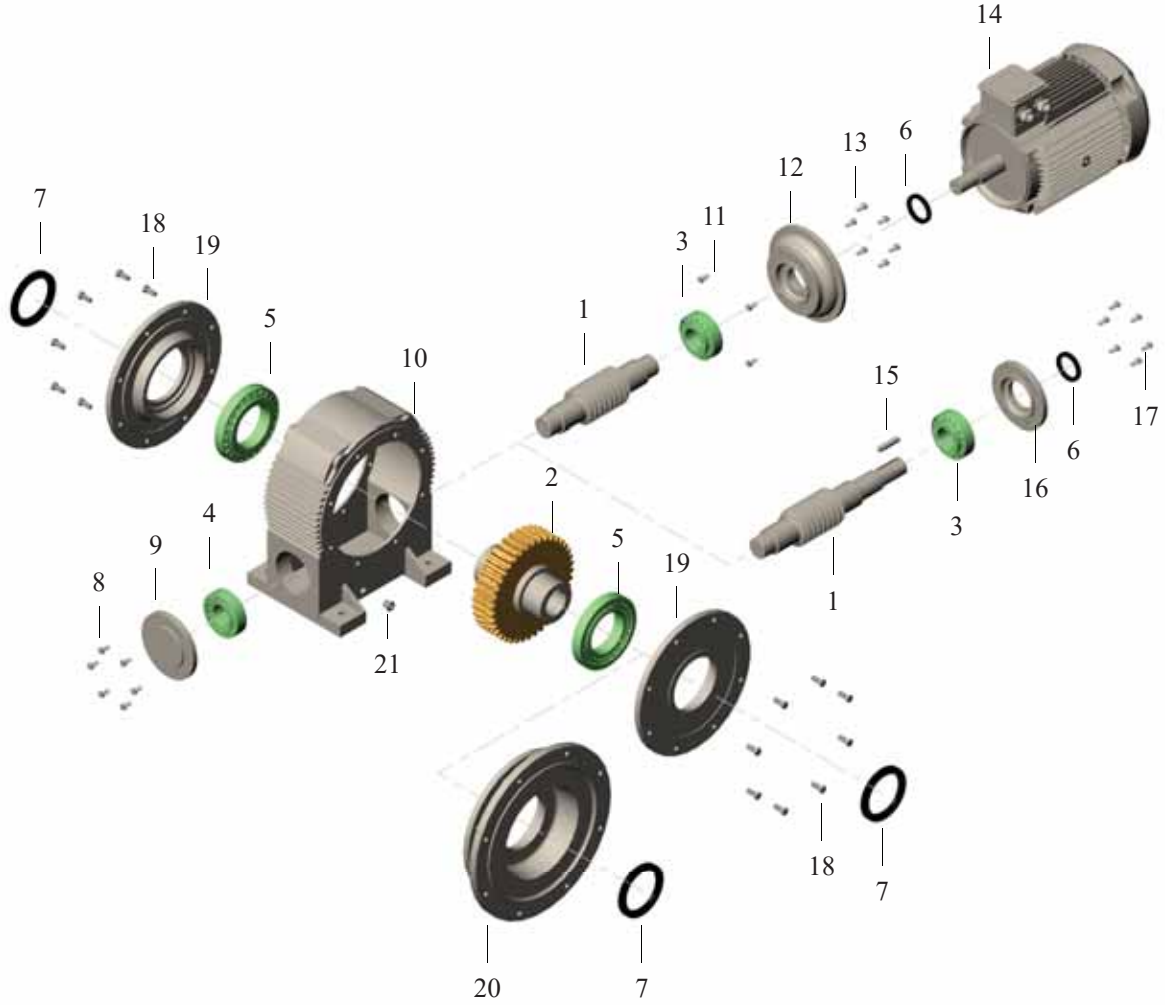
TİP / TYPE**SM / SP / S } 30-40-50-63-75-90**

1 - Sonsuz Vida	1 - Worm	1 - Roue
2 - Sonsuz Vida Çarkı	2 - Worm Wheel	2 - Vis sans fin
3 - Rulman	3 - Bearing	3 - Roulement
4 - Rulman	4 - Bearing	4 - Roulement
5 - Rulman	5 - Bearing	5 - Roulement
6 - Keçe	6 - Seal	6 - Joint
7 - Keçe	7 - Seal	7 - Joint
8 - Tapa	8 - Locking Cover	8 - Bouchon
9 - Segman	9 - Circlip	9 - Circlip
10 - Pul	10 - Washer	10 - Joint
11 - Gövde	11 - Gear Case	11 - Carter
12 - Pam Flanş (IEC)	12 - IEC Flange	12 - Bride IEC
13 - Cıvata	13 - Bolt	13 - Vis
14 - Kapak	14 - Cover	14 - Couvercle
15 - Cıvata	15 - Bolt	15 - Vis
16 - Flanş	16 - Flange	16 - Bride
17 - Cıvata	17 - Bolt	17 - Vis

TİP / TYPE**İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 52-65-82-102-127-162**

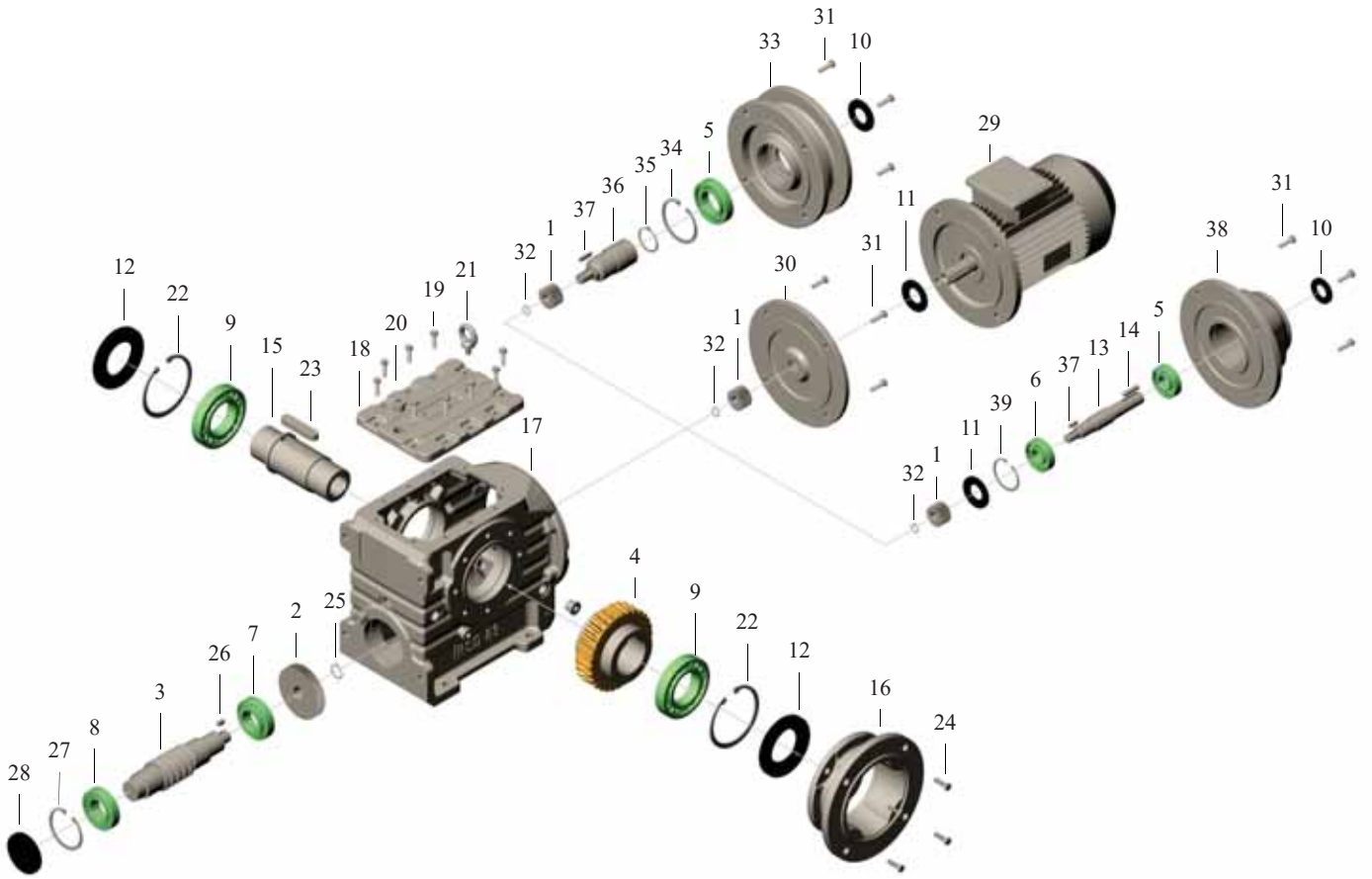
TİP / TYPE**İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 52-65-82-102-127-162**

1 - Sonsuz Vida	1 - Worm	<i>1 - Roue</i>
2 - Sonsuz Vida Çarkı	2 - Worm Wheel	<i>2 - Vis sans fin</i>
3 - Rulman	3 - Bearing	<i>3 - Roulement</i>
4 - Rulman	4 - Bearing	<i>4 - Roulement</i>
5 - Rulman	5 - Bearing	<i>5 - Roulement</i>
6 - Keçe	6 - Seal	<i>6 - Joint</i>
7 - Keçe	7 - Seal	<i>7 - Joint</i>
8 - Cıvata	8 - Bolt	<i>8 - Vis</i>
9 - Rulman Baskı Kapağı	9 - Bearing Cover	<i>9 - Couverture</i>
10 - Cıvata	10 - Bolt	<i>10 - Vis</i>
11 - Pam Flanş (IEC)	11 - IEC Flange	<i>11 - Bride IEC</i>
12 - Cıvata	12 - Bolt	<i>12 - Vis</i>
13 - Motor	13 - Electric Motor	<i>13 - Moteur électrique</i>
14 - Kama	14 - Key	<i>14 - Clavette</i>
15 - Keçe Kapağı	15 - Seal Cover	<i>15 - Joint</i>
16 - Cıvata	16 - Bolt	<i>16 - Vis</i>
17 - Keçe Kapağı	17 - Seal Cover	<i>17 - Joint</i>
18 - Gövde	18 - Gear Case	<i>18 - Carter</i>
29 - Yağ Tapası	29 - Oil Plug	<i>29 - Bouchon d'huile</i>
20 - Kovan	20 - Hollow Shaft	<i>20 - Arbre creux</i>
21 - Kama	21 - Key	<i>21 - Clavette</i>
22 - Burç	22 - Spacer	<i>22 - Anneau d'espacement</i>
23 - Flanş	23 - Flange	<i>23 - Bride</i>
24 - Cıvata	24 - Bolt	<i>24 - Vis</i>

TİP / TYPE**İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSEFM } 201-250**

TİP / TYPE**İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 201-250**

1 - Sonsuz Vida	1 - Worm	1 - Roue
2 - Sonsuz Vida Çarkı	2 - Worm Wheel	2 - Vis sans fin
3 - Rulman	3 - Bearing	3 - Roulement
4 - Rulman	4 - Bearing	4 - Roulement
5 - Rulman	5 - Bearing	5 - Roulement
6 - Keçe	6 - Seal	6 - Joint
7 - Keçe	7 - Seal	7 - Joint
8 - Cıvata	8 - Bolt	8 - Vis
9 - Rulman Baskı Kapağı	9 - Bearing Cover	9 - Couvercle
10 - Gövde	10 - Gear Case	10 - Carter
11 - Cıvata	11 - Bolt	11 - Vis
12 - Motor Bağlantı Kapağı	12 - Motor Mounting Adapter	12 - Motoranschlussflansch
13 - Cıvata	13 - Bolt	13 - Vis
14 - Motor	14 - Electric Motor	14 - Moteur électrique
15 - Kama	15 - Key	15 - Clavette
16 - Keçe Kapağı	16 - Seal Cover	16 - Joint
17 - Cıvata	17 - Bolt	17 - Vis
18 - Cıvata	18 - Bolt	18 - Vis
19 - Keçe Kapağı	19 - Seal Cover	19 - Joint
20 - Flanş	20 - Flange	20 - Bride
21 - Yağ Tapası	21 - Oil Plug	21 - Bouchon d'huile

TİP / TYPE**İRSD / İRSDF / İRSDP / İRSDFP / İRSDM / İRSDFM } 53-63-73-83**

TİP / TYPE**İRSDF / İRSDF / İRSDF / İRSDF / İRSDF / İRSDF } 53-63-73-83**

1 - Dişli Z1	1 - Gear Z1	1 - Pignon Z1
2 - Dişli Z2	2 - Gear Z2	2 - Pignon Z2
3 - Sonsuz Vida	3 - Worm	3 - Roue
4 - Sonsuz Vida Çarkı	4 - Worm Wheel	4 - Vis sans fin
5 - Rulman	5 - Bearing	5 - Roulement
6 - Rulman	6 - Bearing	6 - Roulement
7 - Rulman	7 - Bearing	7 - Roulement
8 - Rulman	8 - Bearing	8 - Roulement
9 - Rulman	9 - Bearing	9 - Roulement
10 - Keçe	10 - Seal	10 - Joint
11 - Keçe	11 - Seal	11 - Joint
12 - Keçe	12 - Seal	12 - Joint
13 - Giriş Mili	13 - Input Shaft	13 - Arbre d'entrée
14 - Kama	14 - Key	14 - Clavette
15 - Kovan	15 - Hollow Shalt	15 - Arbre creux
16 - Flanş	16 - Flange	16 - Bride
17 - Gövde	17 - Gear Case	17 - Carter
18 - Kapak	18 - Cover	18 - Couvercle
19 - Cıvata	19 - Bolt	19 - Vis
20 - Yağ Tapası	20 - Oil Plug	20 - Bouchon d'huile
21 - Taşıma Kancası	21 - Lifting Eye Bolt	21 - Anneau de levage
22 - Segman	22 - Circlip	22 - Circlip
23 - Kama	23 - Key	23 - Clavette
24 - Cıvata	24 - Bolt	24 - Vis
25 - Segman	25 - Circlip	25 - Circlip
26 - Kama	26 - Key	26 - Clavette
27 - Segman	27 - Circlip	27 - Circlip
28 - Tapa	28 - Locking Cover	28 - Bouchon
29 - Motor	29 - Electric Motor	29 - Moteur électrique
30 - Motor Bağlantı Kapağı	30 - Motor Mounting Adapter	30 - Bride moteur
31 - Cıvata	31 - Bolt	31 - Vis
32 - Segman	32 - Circlip	32 - Circlip
33 - Pam Flanş	33 - IEC Flange	33 - Bride IEC
34 - Segman	34 - Circlip	34 - Circlip
35 - Segman	35 - Circlip	35 - Circlip
36 - Ara Bağlantı Mili	36 - Connection Shaft	36 - Arbre connecteur
37 - Kama	37 - Key	37 - Clavette
38 - Motorsuz Kapak	38 - Input cover	38 - Bride d'entrée
39 - Segman	39 - Circlip	39 - Circlip



REDÜKTÖR & VARYATÖR SAN. VE TİC. A.Ş.

Fabrika - Merkez Satış

Şeyhli Sanayi Caddesi No:1 Pendik / İSTANBUL - TÜRKİYE
Tel. +90 216 378 03 26 (Pbx) - Fax. +90 216 378 06 86

Satış Ofisi

Demirkapı Mah. Keresteciler Sit. Rıza Uzun Sk. No:5 Topçular / İSTANBUL - TÜRKİYE
Tel. +90 212 567 87 32/33 - Fax. +90 212 612 61 17

imak@imakreduktor.com

www.imakreduktor.com