

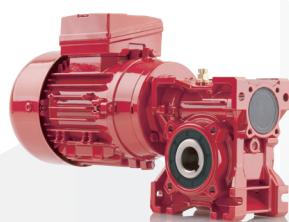


**i.Mak®**  
REDÜKTÖR & VARYATÖR A.Ş.

## **Sonsuz Vidalı Redüktörler**

**Worm Gearbox / Réducteurs à Roue et Vis Sans Fin**

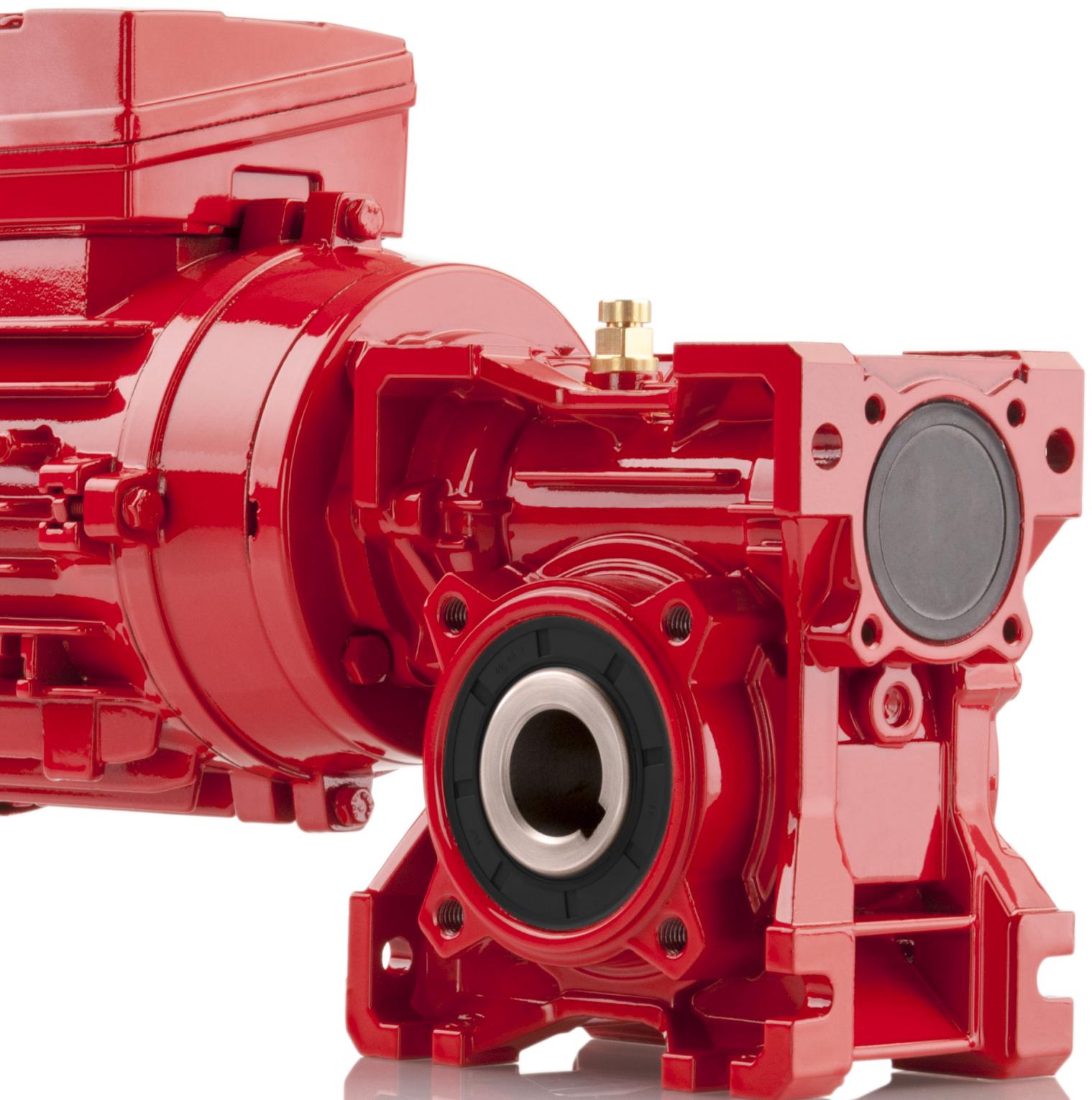
**S02**



SERIES  
S  
IRS  
IRSD

**2018**  
TR | EN | FR

Gearboxes and Drives / Moto Réducteurs

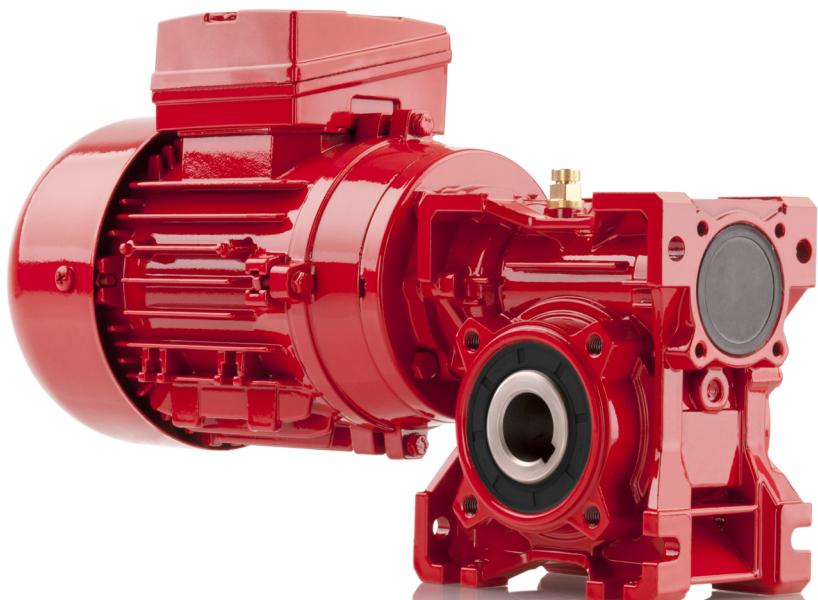


<b>Tip Tanımlamaları</b> Unit Designitation / <i>Types et designations</i>	8
<b>Giriş Opsiyonları</b> Input Options / <i>Options d'entrée</i>	9
<b>Opsiyonlar</b> Options / <i>Options</i>	10
<b>Çıkış Opsiyonları</b> Output Options / <i>Options de sortie</i>	11-13
<b>Redüktör Bağlantı Varyasyonları</b> Mounting Options and Variations / <i>Options de montage et d'accouplement</i>	14
<b>Redüktör Komponent Varyasyonları</b> Gearboxes Components Variations / <i>Options et variations</i>	15
<b>Motor Varyasyonları</b> Mounting Options and Variations / <i>Options de montage et d'accouplement</i>	16
<b>Motor komponent varyasyonları</b> Motor's Components Variations / <i>Composant et options moteurs</i>	17-18
<b>Redüktör Sipariş</b> Gearbox Ordering / <i>Commandez votre réducteur</i>	19
<b>Servis Faktörü</b> Service Factor / <i>Service facteur</i>	20
<b>Redüktör Yükleme Karakteristikleri</b> Load Charasteristics of Gearboxes / <i>Types de machines et applications</i>	21-24
<b>Kontrol ve Bakım Redüktörler</b> Control and Maintenance Gearboxes / <i>Contrôle et maintenance des réducteurs</i>	25
<b>Frenler</b> Brakes / <i>Freins</i>	26-27

<b>Fren Seçim Tablosu</b> Brake Selection Table / <i>Table de sélection des freins</i>	<b>28</b>
<b>Geri Dönüş Kilitli Redüktörlerde Dönme Yönü</b> Direction of Rotation of the Gearbox With a Backstop / <i>Sens de rotation des roulement anti-retour</i>	<b>29</b>
<b>Montaj Pozisyonları</b> Mounting Positions / <i>Position de montage</i>	<b>32-33</b>
<b>Montaj Pozisyonlarına Bağlı Olarak Yağ Miktarları</b> Oil Quantities Per Mounting Position / <i>Quantités d'huiles en fonction des positions de montage</i>	<b>34</b>
<b>Yag Tablosu</b> Lubricant Table / <i>Huiles et lubrifiants</i>	<b>35</b>
<b>Çift gövdeli redüktörler montaj şekilleri</b> Mounting Position of Dual Housing Gearboxes / <i>Position de montage des réducteurs à double carter</i>	<b>36</b>
<b>Klemens Pozisyonları</b> Position of Terminal Box / <i>Position de la boite à bornes</i>	<b>37</b>
<b>Motor İşletme Değerleri</b> Motor Performance / <i>Performance moteurs</i>	<b>38</b>
<b>Aluminyum Gövdeli Redüktörlerde Tahvil Oranlarına Bağlanabilecek Motor Büyüklükleri</b> List of Possible Combination of Ratio and Housing for Aluminium Worm Gearboxes / <i>Combinaisons rapports de réduction / puissance moteur (Roue et vis sans fin-Aluminium)</i>	<b>39</b>
<b>Sonsuz Vidali Motorlu Redüktörler Güç ve Devir Tablosu</b> Worm Geared Motors - Performances Tables / <i>Moto-réducteurs à roue et vis sans fin avec moteur - table de performances</i>	<b>42-81</b>
<b>Sonsuz Vidali Redüktörler</b> Worm Gearbox / <i>Réducteurs à roue et vis sans fin</i>	<b>84-135</b>
<b>Helisel Sonsuz Vidali Motorlu Redüktörler Güç ve Devir Tablosu</b> Helical Worm Geared Motors - Performances Tables / <i>Moto-réducteurs hélicoïdaux à roue et vis sans fin avec moteur - table de performances</i>	<b>136-163</b>
<b>Sonsuz Vidali, Helisel Dişlili Redüktörler</b> Helical, Worm Gearbox / <i>Réducteurs hélicoïdaux à roue et vis sans fin</i>	<b>166-175</b>

# S

## SERİSİ / SERIES / SÉRIES



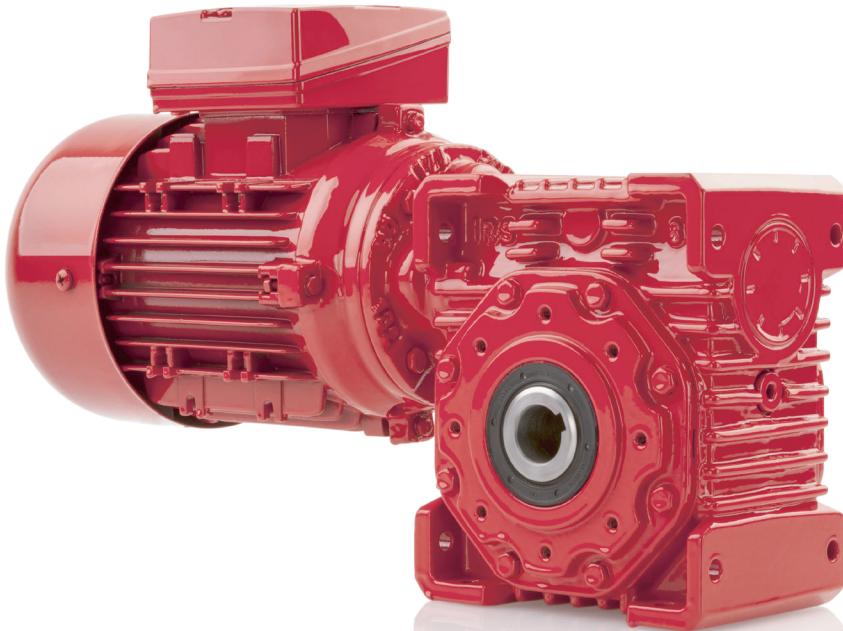
- Aluminyum gövdeli sonsuz vidalı redüktörler
- 5 Farklı gövde büyüğü
- 13 – 388 Nm moment aralığı
- 7,5 – 100 Tahvil aralığı

- Worm geared unit with aluminium housing
- 5 Size of housing
- Torque range from 13 to 388 Nm
- Ratio range from 7.5 to 100

- Réducteur à roue et vis sans fin avec carter en aluminium
- 5 tailles de carter
- Couple allant de 13 à 388 Nm
- Rapport de réduction compris entre 7.5 et 100

# iRS

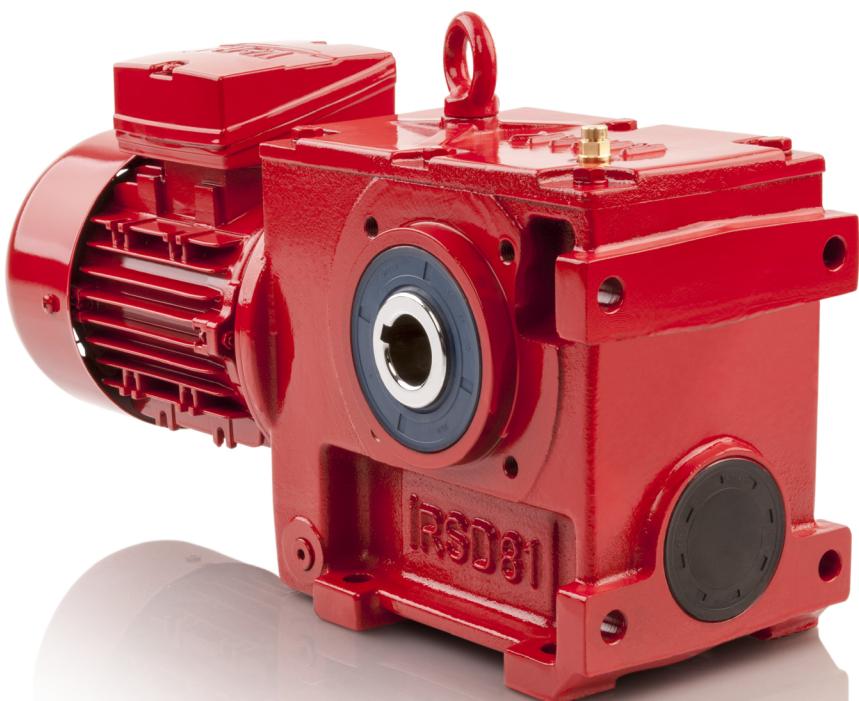
## SERİSİ / SERIES / SÉRIES



- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"><li>• Döküm gövdeli sonsuz vidalı redüktörler</li><li>• 8 Farklı gövde büyüğü</li><li>• 96 – 16876 Nm moment aralığı</li><li>• 7,25 – 115 Tahvil aralığı</li></ul> | <ul style="list-style-type: none"><li>• Worm geared unit with cast iron housing</li><li>• 8 Size of housing</li><li>• Torque range from 96 to 16876 Nm</li><li>• Ratio range from 7.25 to 115</li></ul> | <ul style="list-style-type: none"><li>• Réducteur à roue et vis sans fin avec carter en fonte</li><li>• 8 tailles de carter</li><li>• Couple allant de 96 à 16876 Nm</li><li>• Rapport de réduction compris entre 7.25 et 115</li></ul> |
|--|---|---|

# iRSD

SERİSİ / SERIES / SÉRIES



- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"><li>• Döküm gövdeli helisel sonsuz vidalı redüktörler</li><li>• 5 Farklı gövde büyüğü</li><li>• 211 – 4479 Nm moment aralığı</li><li>• 25 – 333 Tahvil aralığı</li></ul> | <ul style="list-style-type: none"><li>• Helical worm geared unit with cast iron housing</li><li>• 5 Size of housing</li><li>• Torque range from 211 to 4479 Nm</li><li>• Ratio range from 25 to 333</li></ul> | <ul style="list-style-type: none"><li>• Réducteur hélicoïdal à roue et vis sans fin avec carter en fonte</li><li>• 5 tailles de carter</li><li>• Couple allant de 211 à 4479 Nm</li><li>• Rapport de réduction compris entre 25 et 4479</li></ul> |
|--|---|---|

## **Genel Bilgiler**

---

General Information  
*Informations générales*

**Aluminyum 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**

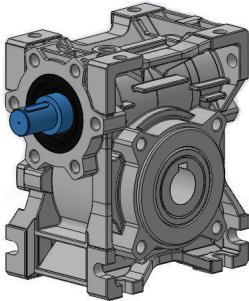
Cast iron housing worm gearbox / Réducteurs à roue et vis sans fin, carter en fonte

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

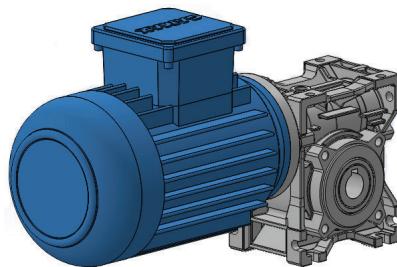
**Döküm gövdeli helisel - sonsuz vidalı redüktörler**

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

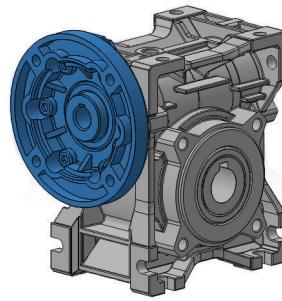
Kod	Tip tanımlama	Type designation	Spécifications des types
İRSD...	Giriş milli - ayak montajlı - delik milli	Input shaft - foot mounted - hollow shaft	Arbre d'entrée - a pattes - arbre creux
İRSDF...	Giriş milli - flanş montajlı - delik milli	Input shaft - flange mounted - hollow shaft	Arbre d'entrée - 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



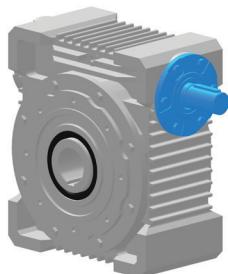
**S**  
**Giriş milli**  
Solid input shaft  
Avec arbre de sortie



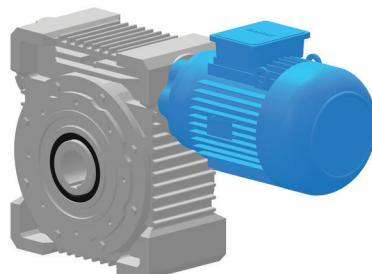
**SM**  
**Motorlu**  
With motor  
Avec moteur



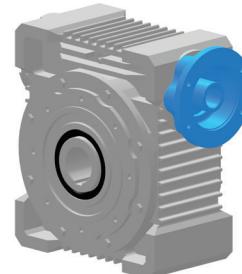
**SP**  
**IEC pam flanşlı**  
IEC input flange  
Avec bride PAM - IEC



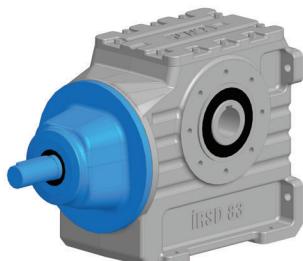
**İRSA**  
**Giriş milli**  
Solid input shaft  
Avec arbre de sortie



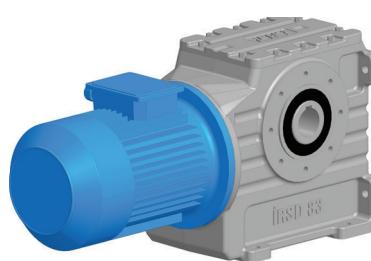
**İRSAM**  
**Motorlu**  
With motor  
Avec moteur



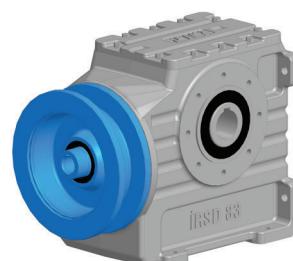
**İRSAP**  
**IEC pam flanşlı**  
IEC input flange  
Avec bride de sortie PAM - IEC



**İRSD**  
**Giriş milli**  
Solid input shaft  
Avec arbre de sortie



**İRSDM**  
**Motorlu**  
With motor  
Avec moteur



**İRSDP**  
**IEC pam flanşlı**  
IEC input flange  
Avec bride de sortie PAM - IEC

## Redüktör opsiyonları / Gearboxes options / Options des motoréducteurs

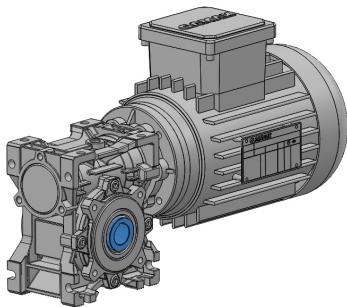
Kod	Opsiyon	Options	Options
FR	Sağ taraf çıkış flanşı	Output flange right	Bride de sortie ( Droite )
FL	Sol taraf çıkış flanşı	Output flange left	Bride de sortie ( Gauche )
FD	Çift çıkış flanşı	Double output flange	Bride de sortie ( Double )
SR	Sağ taraf çıkış mili	Output shaft right	Arbre de sortie ( 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 )

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

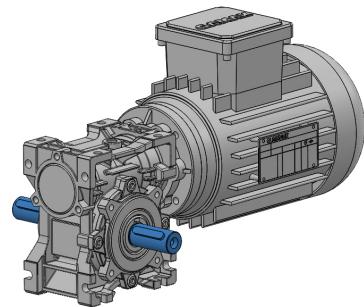
\*\* IRSD Redüktörler içindir / Only for IRSD Series / Uniquement pour la série IRSD

## Motor Opsiyonları / Motor's options / Options moteurs

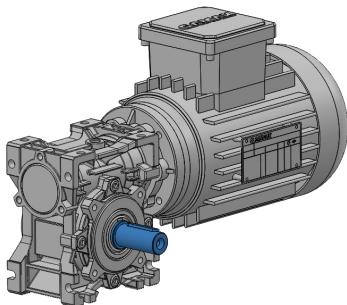
Kod	Opsiyon	Options	Options
BR	Fren	Brake	Frein
BRH	Manuel kollu fren	Brake with hand release	Frein avec ouverture manuel
BD	Çift fren	Double brake	Double frein
BDH	Manuel kollu çift fren	Double brake with hand release	Double frein avec ouverture manuel
E	Enkoder	Encoder	Encoder
EMK	Elektromanyetik kavrama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



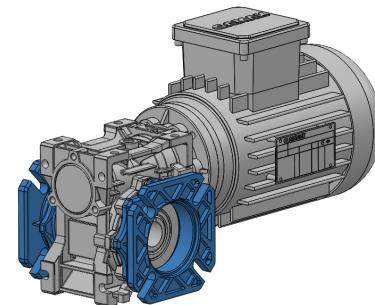
**S..  
Delik milli**  
Hollow output shaft  
*Arbre creux*



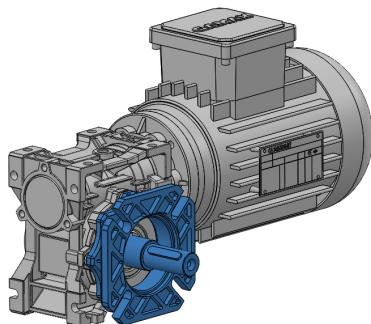
**S...SD  
Çift çıkış milli**  
Double output shaft  
*Double arbre de sortie*



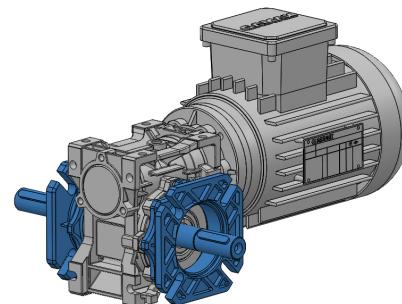
**S....SL  
Çıkış milli (sol)**  
Output shaft ( Left )  
*Arbre de sortie ( Gauche )*



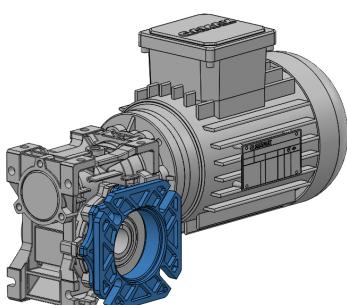
**S...FD  
Çift çıkış flanşlı**  
Double output flange  
*Double bride de sortie*



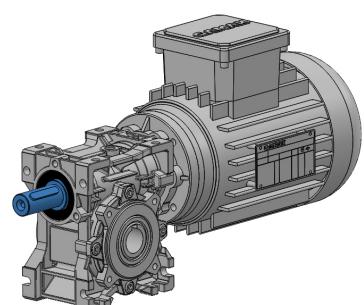
**S...FL-SL  
Çıkış milli - Çıkış flanşlı (sol)**  
Output shaft - Output flange ( Left )  
*Arbre et bride de sortie ( Gauche )*



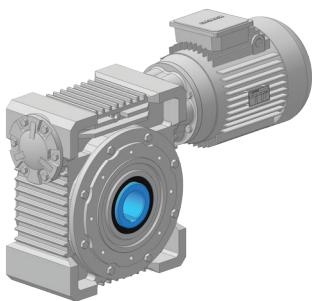
**S...FD-SD  
Çift çıkış flanşlı- Çift çıkış milli**  
Double output flange - Double output shaft  
*Bride de sortie double - Arbre de sortie double*



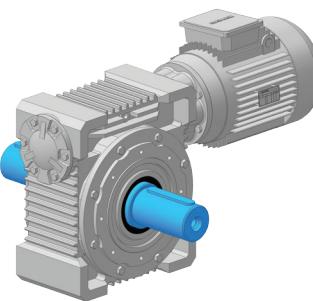
**S...FL  
Çıkış flanşlı (sol)**  
Output flange ( Left )  
*Bride de sortie ( Gauche )*



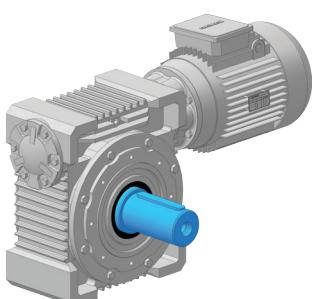
**S..C  
Alın milli**  
Input shaft  
*Arbre d'entrée*



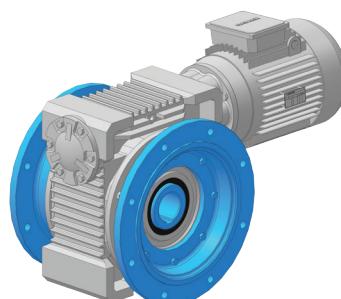
**İRS..**  
**Delik milli**  
Hollow output shaft  
*Arbre creux*



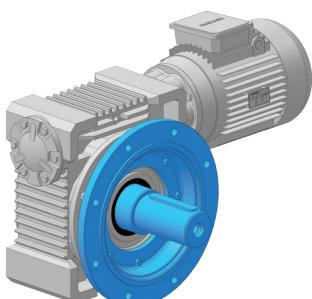
**İRS...SD**  
**Çift çıkış milli**  
Double output shaft  
*Double arbre de sortie*



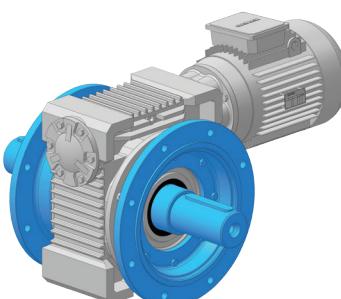
**İRS....SL**  
**Çıkış milli (sol)**  
Output shaft ( Left )  
*Arbre de sortie ( Gauche )*



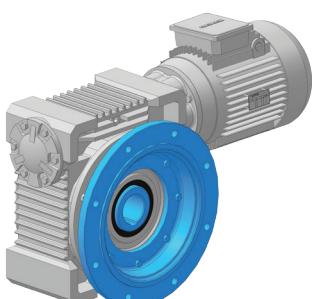
**İRSF...FD**  
**Delik milli - Çift çıkış flanşlı**  
Double output flange  
*Double bride de sortie*



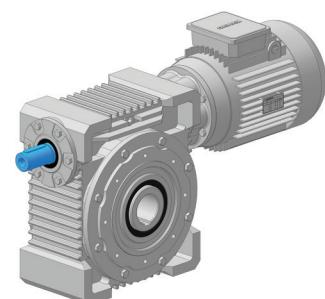
**İRSF...FL-SL**  
**Çıkış milli - Çıkış flanşlı (sol)**  
Output shaft - Output flange ( Left )  
*Arbre et bride de sortie ( Gauche )*



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



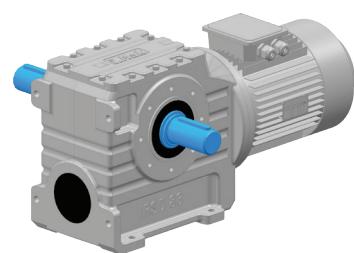
**İRSF...FL**  
**Delik milli - Çıkış flanşlı (sol)**  
Output flange ( Left )  
*Bride de sortie ( Gauche )*



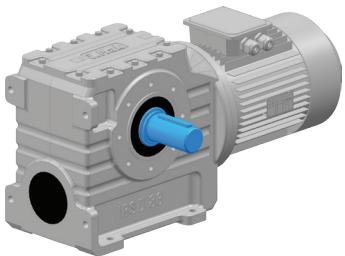
**İRSA ...C**  
**Alın milli**  
Input shaft  
*Arbre d'entrée*



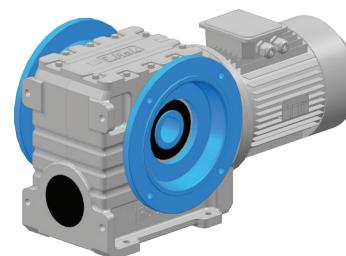
**İRSD..**  
**Delik milli**  
Hollow output shaft  
*Arbre creux*



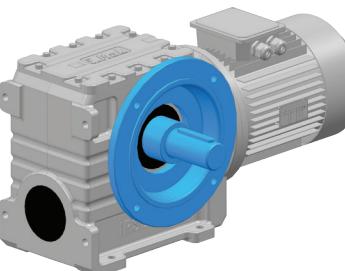
**İRSD...SD**  
**Çift çıkış milli**  
Double output shaft  
*Double arbre de sortie*



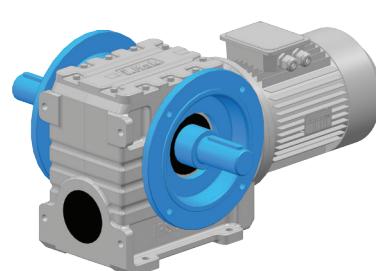
**İRSD....SL**  
**Çıkış milli (sol)**  
Output shaft ( Left )  
*Arbre de sortie ( Gauche )*



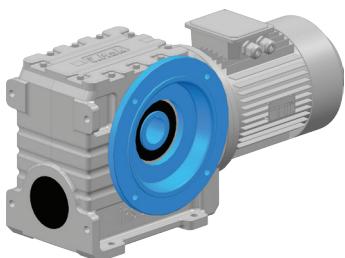
**İRSDF...FD**  
**Çift çıkış flanşlı**  
Double output flange  
*Double bride de sortie*



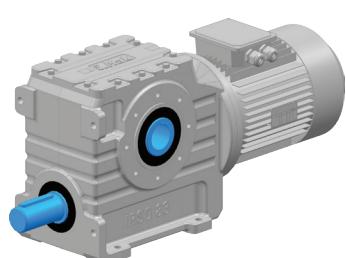
**İRSDF...FL-SL**  
**Çıkış milli - Çıkış flanşlı (sol)**  
Output shaft - Output flange ( Left )  
*Arbre et bride de sortie ( Gauche )*



**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 / Bride

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 *	Hardneed 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 IRS Series / Uniquement pour la série IRS

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

## Giriş mili - pam mili / Input shaft / Bride pam

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 flanşısı / 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 flanş üzerinde yapılamayıp yeni bir flanş tasarılanması 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 flanşısı / 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 flanş üzerinde yapılamayıp yeni bir flanş tasarılanması 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 yağı VG 220 (SHC 630)	Synthetic oil VG 220 ( SHC 630 )	Huile synthétique VG 220 ( SHC 630 )
212	Gıda uyumlu yağı VG 220 (CIBUS 220)	Food compatible oil VG 220 ( CIBUS 220 )	Huile pour industrie agroalimentaire VG 220 (CIBUS 220)
213	-40°C Uyumlu yağı VG 220 (SHC 630)	Cold resistant oil -40°C VG 220 ( SHC 630 )	Huile base température -40°C 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 )

\* IRO 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 équipées 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 boyası	Special paint color	Couleur spéciale
252	Özel tip boyası	Special paint type	Type de peinture spéciale
253	Epoksi boyası	Epoxy paint	Peinture epoxy
254	Akrilik boyası (dış ortam)	Acrylic paint	Peinture acrylique (Environnement extérieur)
255	Su bazlı boyası	Water based paint	Peinture à base d'eau
256	Antikorozif boyası	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 tahlil	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'isолations

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 sıcaklıklarını fabrikaya danışınızı. / 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 à températures élevées
342	Soğuk ortam rulmanı*	Bearing for cold environment	Roulement pour environnement à 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-retour ( CCW )

\* 0°C ile 40°C aralığı dışındaki ortam sıcaklıklarını fabrikaya danışınızı. / For outside environment with temperature out of 0°C and 40°C consult our technical team / Pour des environnements avec des température non comprises entre 0°C et 40°C consultez 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	IE 1	IE 1	IE 1
362	IE 3	IE 3	IE 3
363	IE 4	IE 4	IE 4

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

**Fren markası / Brake's brand / Marque du frein**

Kod / Code	Varyasyon	Options	Options
411	Nursan fren	Nursan brake	Frein - Nursan
412	EMF fren	EMF brake	Frein - EMF
413	Fatih fren	Fatih brake	Frein - Fatih
414	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 encoder çeşitleri için fabrikaya danışınız / For different type of encoder contact our sales team / Pour des type de codeurs différents contactez notre équipe technique

**Termistör - Isıtıcı / 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

S	Redüktör tipi / Gearbox type / Type de réducteur (S - IRS - IRS)	M	Giriş opsiyonu / Input option / Couple d'entrée (S - SM - SP)	63	Redüktör gövde büyütüğü / Housing size / Taille du carter du réducteur (30 - 40 - 50 - 63 - 75)	-	80	M	Motor gövde büyütüğü / Motor size / Taille du moteur (52 - 65 - 82 - 102 - 127 - 162 - 201 - 250)	83	Redüktör gövde büyütüğü / Housing size / Taille du carter du réducteur (52 - 65 - 82 - 102 - 127 - 162 - 201 - 250)	-	IEC	100	B14	/	FR	SR	C	BR	TM	
---	---	---	--	----	--	---	----	---	--	----	--	---	-----	-----	-----	---	----	----	---	----	----	--

IRS	A	M	102	IRS	52	-	71	M	100	IEC Giriş opsiyonu / Input options (IEC) / Options d'entrée (IEC) (71 B14 - 80 B14 - 90 B14 - 100 B14 - 112 B14)	B14	/	ST	C	SDR	
-----	---	---	-----	-----	----	---	----	---	-----	---	-----	---	----	---	-----	--

IRS	A	M	102	IRS	52	-	71	M	100	IEC Giriş opsiyonu / Input options (IEC) / Options d'entrée (IEC) (71 B14 - 80 B14 - 90 B14 - 100 B14 - 112 B14)	B14	/	ST	C	SDR		U
										Motor büyütüğü / Motor size / Taille du moteur (71 - 80 - 90 - 100 - 112)							

**Servis Faktörü ( $F_s$ )****Servis Faktörü = İşletme****Katsayısı = ( $F_s$ )**

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

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

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

Günlük çalışma saatı 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 yüze maruz kaldığı düşünülürse tehlikeli görülür. Müteakip çalışmalarda bu daha aşağıya düşer.

Katalogümüzda işletme katsayılarının nasıl kullanıldığına anlaşılması için bir misal ile belirtelim.

Önce tablo-1'den makinenin çalışma sahasına göre karakteristiğini belirleyelim. Makinemiz elektrik motor tahraklı ZİNCİR KOVALI ESKAVATÖR ise yükleme durumu AĞIR' dır. ( H ) Tablo 2'den makine 24 saat çalışacağına göre minimum işletme katsayı  $F_s = 2$  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 élévées (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/rédemarrage est donc à prendre en compte lors de l'analyse du service facteur.

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

L'application étudiée est un excavateur à godets (Tableau 1), le réducteur est actionné par un moteur électrique. La charge est "élévée" 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 (Caterpiller)	H	Convoyeur à étage	H
Ray üzerinde yürüyüşler	M	Travelling gears (Rails)	M	Convoyeur à rails	M
Manevra mekanizmaları	U	Manoevring winches	U	Grues à manœuvre	U
Emiş pompaları	M	Pumps	M	Pompes	M
Kovalı çarklar	H	Bucket wheels	H	Roue à gaudets	H
Dönüş mekanizmaları	M	Slewing gears	M	Pignons rotatif	M

İnşaat Makineleri		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 contruction 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	Elévateur à chaines	M
Kovalı elevatörler (Toz Malzeme)	U	Bucket elevators (Flour Goods)	U	Elévateur à godets (graviers)	U
Helezon konveyör	M	Screw conveyors	M	Vis d'Archimède	M
Kovalı elevatörler (Parçalı Malzeme)	M	Bucket elevators (Piece Goods)	M	Elévateurs 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 / 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 Makineler ( 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 Makineler ( 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

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
Sanrifüler	U	Centrifuges ( Lights )	U	Centrifugeuse (Légère)	U
Sanrifüler	H	Centrifuges ( Heavy )	H	Centrifugeuse (Lourde)	H

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

Vantilatör Ve Aspiratörler		Fans		Ventilations	
Pistonlu vantilatörler	M	Rotary piston blowers	M	Souffleurs rotatifs	M
Vantilatör (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
Silindirleme 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 / 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 Cylindr ) 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 Cylindr ) 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		Métalurgie 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 Tahrik )	M	Machines tools ( Main Drives )	M	Machine outil ( Axe principal )	M
Takım tezgahları ( Yardımcı Tahrik )	U	Machines tools ( Auxiliarly 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 kırcıları	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 ( Ağırlı Akışkan )	M	Turbin ( Semi - Liquids )	M	Turbine (Semi-liquide)	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 / 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 Makineleri		Paper Industry Machines		Indusrtie Papetière	
Düzleme silindirler	H	Glazing Cylinders	H	Cylindres appliniseurs	H
Holender	M	Hollenders	M	Holenders	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 Makineleri		Stone and Clay Working Machines		Roches et Argiles	
Kırıcılar	H	Breakers	H	Broyeurs	H
Döner fırınlar	M	Rotary ovens	M	Four rotatifs	M
Çekiçli dejirmenler	H	Hammer mills	H	Broyeux à marteaux	H
Bilyalı dejirmenler	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 Makineleri		Textile Machines		Industrie du Textile	
Sargı makinaları ( 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

Silindirleme ve Çekme Tesisleri		Metal Rolling Mills		Aciéries	
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 sıyırmaya makineleri	H	Descaling machines	H	Epluchuese	H
Tel çekme tesisleri	M	Wire drawing machines	M	Enrouleuses	M
Soğuk çekme tesisleri	H	Cooling beds	H	Bandé 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 haddeleme	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 / 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 Cylindr ) 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 Cylindr ) 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

## Kontrol ve bakım redüktörler

- Redüktörlerin yağ seviyesi ve miktarını kontrol ediniz. Yağın cinsini İ.MAK kataloğu yer alan yağ çizelgelerini kullanarak seçiniz.
- Havalanırma tapasının faal olup olmadığına bakınız. Hava tahliye deliği çalışmadı 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 sıkmak suretiyle tedbir alınız. Redüktör montajında meydana gelen eksen kaçıklığında zararlı sarsıntılarla dikkat ediniz.
- Redüktörün ilk çalışmadan 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, veillez à contacter votre revendeur ou le centre technique I-MAK le plus proche.

## 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 vasıtasyyla 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 aldiğinizda fren bağlantısının gecikmeli olarak yapıldığını unutmayın.*

## 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 refroidissement

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 frein doit être correctement connecté pour permettre un fonctionnement optimale de cette option.

### Fren alma Voltajları

Frenler 24V-DC veya 220V-AC ile çalışacak şekilde imal edilir. 220 voltlu 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.

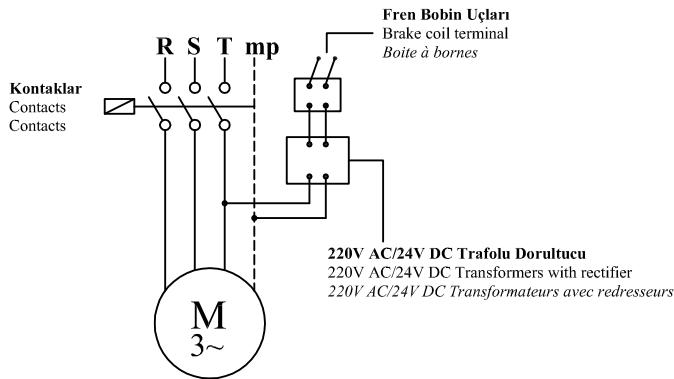
- 1) Couple des freins
- 2) Type de freins
- 3) Type de voltage

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

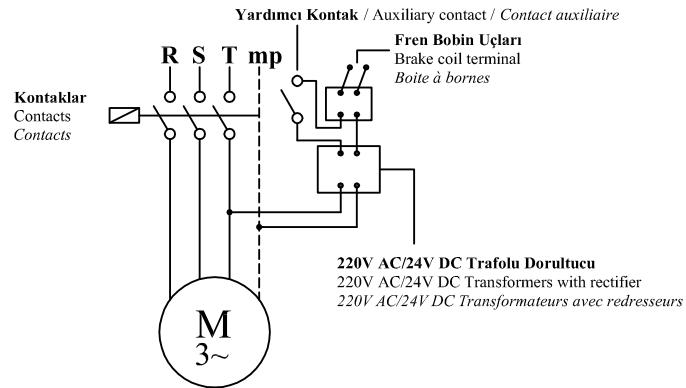
#### Gecikmeli Frenleme (24V)

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



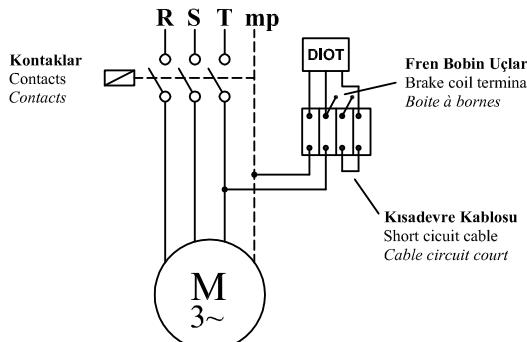
#### Ani Frenleme (24V)

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



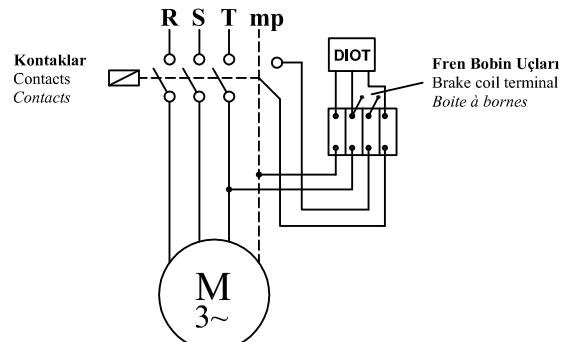
#### Gecikmeli Frenleme (220V)

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 <i>Dimensions du moteur</i>	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 <i>Dimensions du moteur</i>	Fren Momenti [kgm] Braking Torque [kgm] <i>Puissance de freinage [kgm]</i>																		
	Hafif Frenleme Light Braking <i>Freins légers</i>								Kuvvetli Frenleme Strong Braking <i>Freins lourds</i>										
	0,5	1	2,5	4	5	10	20	30	50	80	0,5	1	2,5	4	5	10	20	30	50
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																			

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.

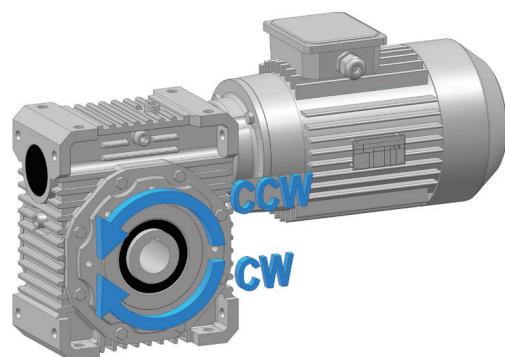
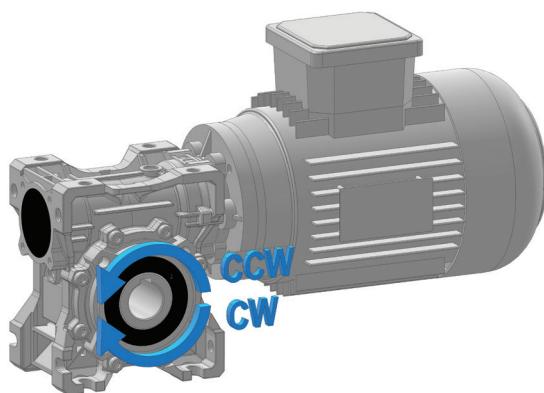
**Ccw : Saat Yönüne Tersi**  
**Cw : Saat Yönü**

In certain applications when the machinery stops, the operator would not like the gearbox to slip and loose 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.

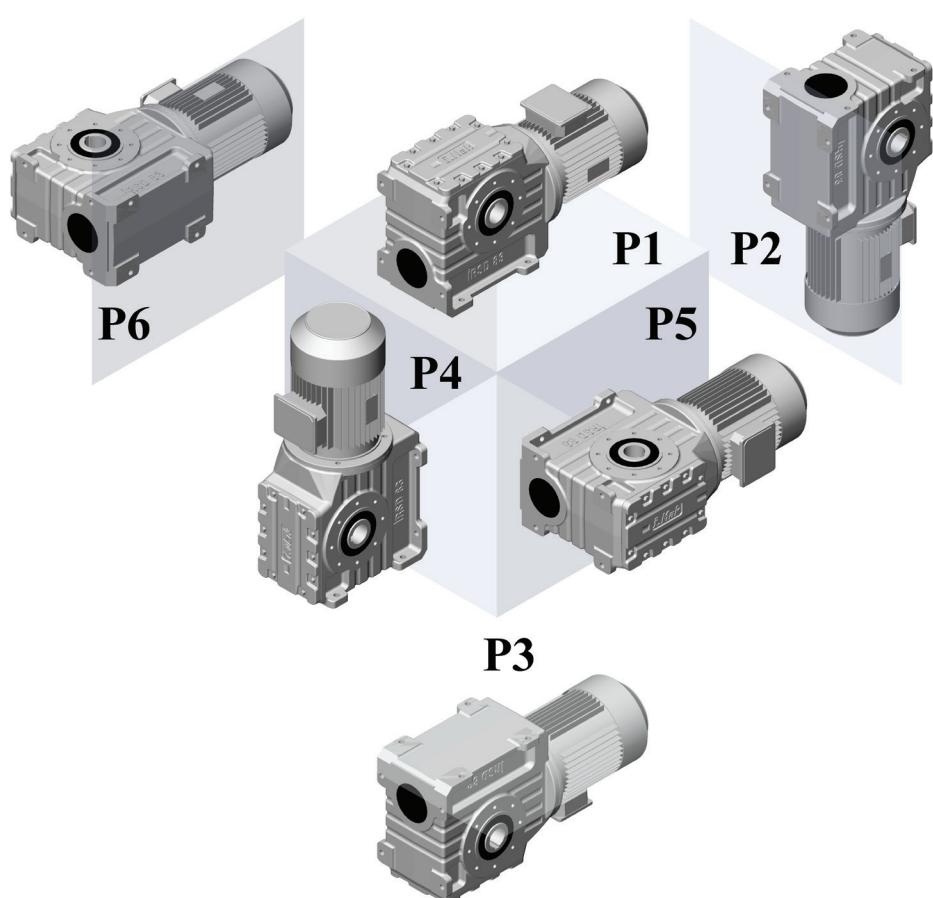
**Ccw : Sens anti-horaire**  
**Cw : Sens horaire**







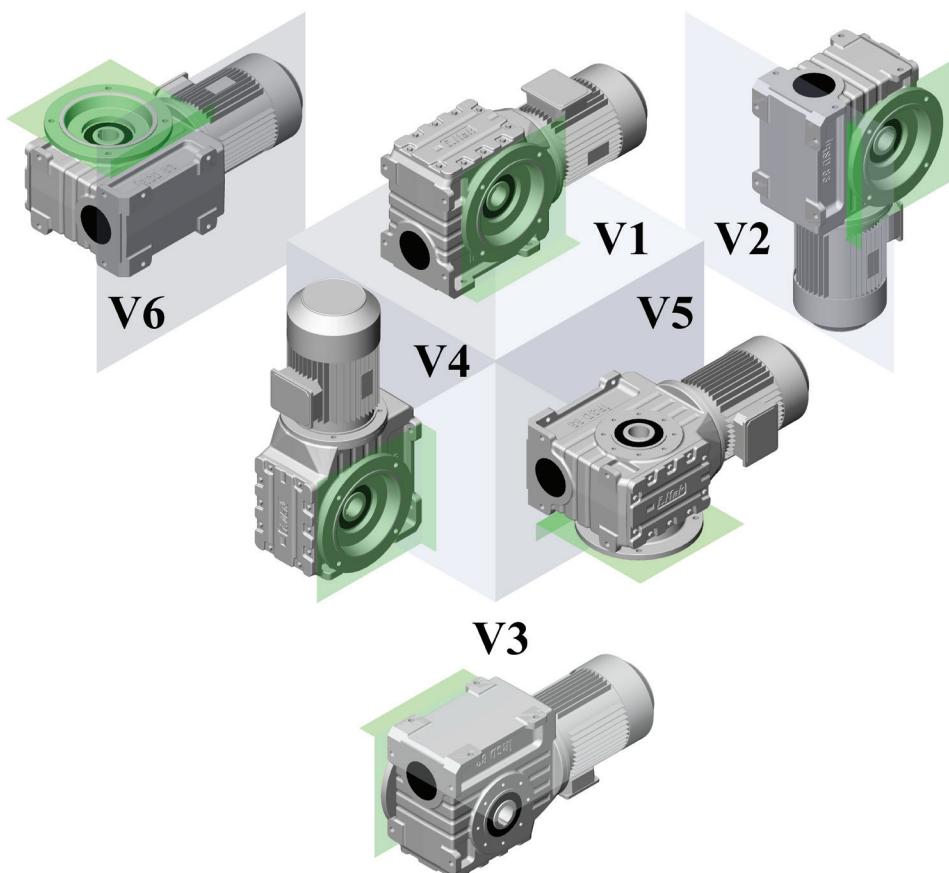
## İRSD



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"

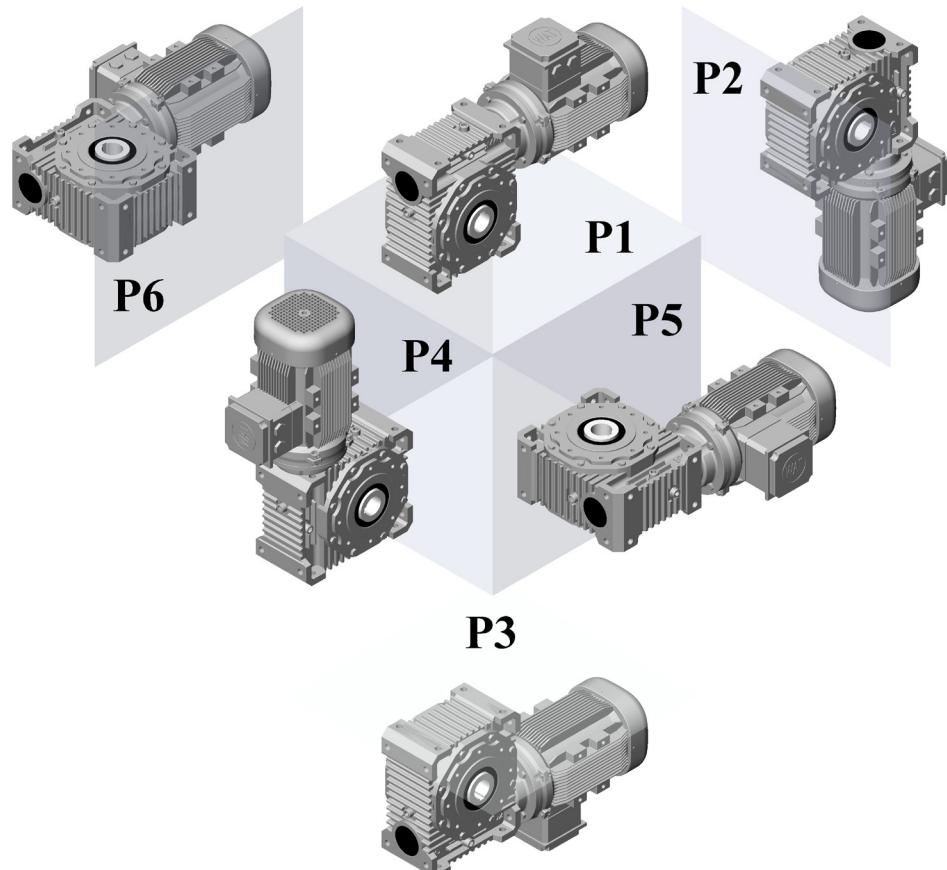
Les positions de montages des réducteurs à brides sont définis par "V"

**İRSA.... ,S....**

Ayak montajlı redüktörlerde montaj pozisyonu "P" ile gösterilir

Foot mounted gearboxes position are defined as "P"

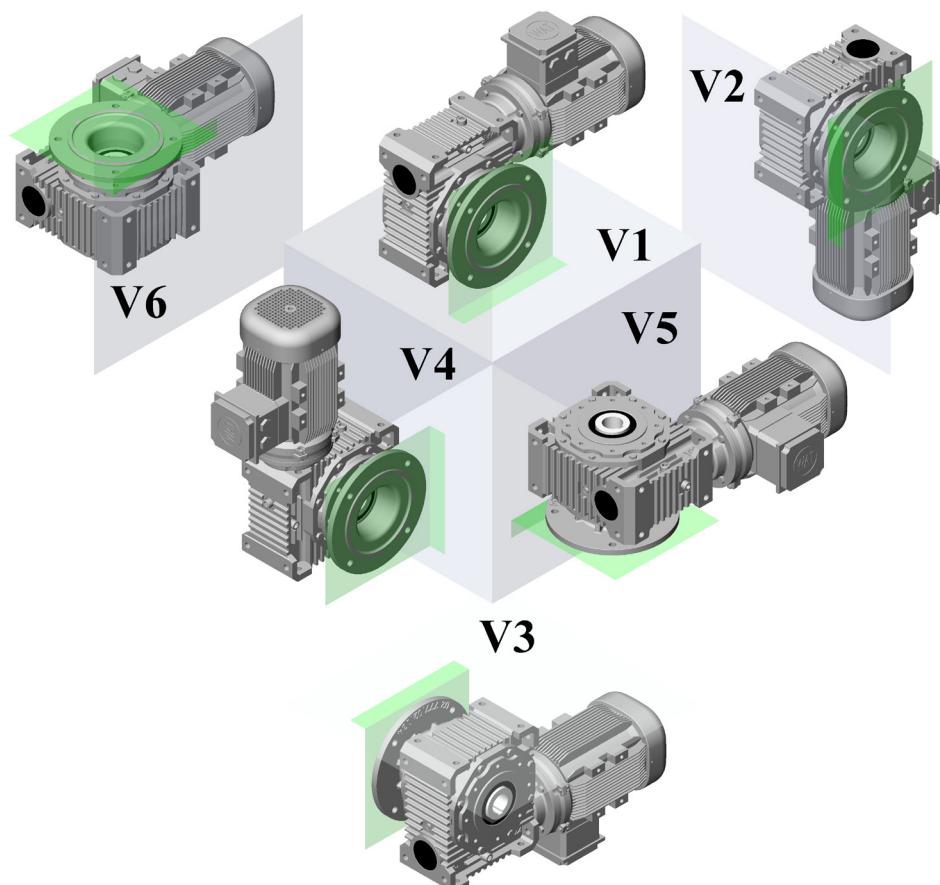
Les positions de montages des réducteurs à pattes sont définis par "P"



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"

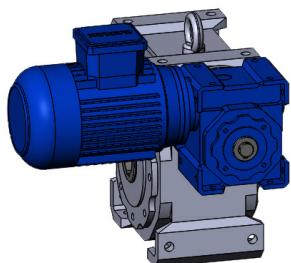


<b>Tip</b> <b>Type</b> <b>Type</b>	<b>Bağlanti pozisyonları için yağ miktarları ( litre )</b> Oil quantities per mounting positions ( liter ) Quantités d'huiles en fonction de la position de montage ( litres )										
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4
SM 30	0,04										
SM 40	0,08										
SM 50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

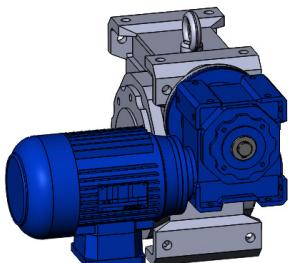
<b>Tip</b> <b>Type</b> <b>Type</b>	<b>Bağlanti pozisyonları için yağ miktarları ( litre )</b> Oil quantities per mounting positions ( liter ) Quantités d'huiles en fonction de la position de montage ( litres )											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İRS_M 52	0,6			0,65			0,3			0,5		
İRS_M 65	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		

<b>Tip</b> <b>Type</b> <b>Type</b>	<b>Bağlanti pozisyonları için yağ miktarları ( litre )</b> 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		

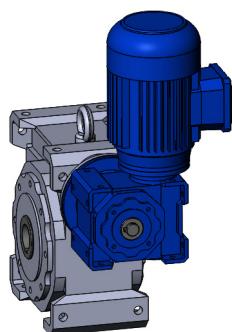
Yağ Cinsi Lubrificant Art des Lubrifiant	ISO Viskozite sınıfı Viscosity class Catégorie de viscosité	DIN 51517-3	Kullanım sıcaklığı Usage temperature Gebrauchs température d'usage C°	Firma Firm Marque							
				Mobil	ARAL	bp	Shell	Castrol	KLÜBER LUBRICATION	BELGiN	
Mineral Yağ Mineral Oil Huile Minéral	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	Enersyn SG-XP320	Tivela S 320	Alphasyn PG 320	Klübersynth GH 6-320	-	
	ISO VG 220	CLP PG	-25.....+140	-	Degol GS 220	Enersyn SG-XP220	Tivela S 220	Alphasyn PG 220	Klübersynth GH 6-220	-	
	ISO VG 150	CLP PG	-30.....+140	-	Degol GS 150	Enersyn SG-XP150	Tivela S 150	Alphasyn PG 150	Klübersynth GH 6-150	-	
	ISO VG 100	CLP PG	-30.....+140	-	-	-	-	-	Klübersynth GH 6-100	-	



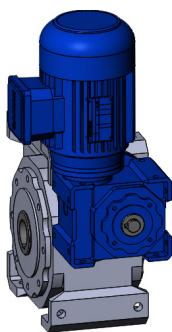
W1



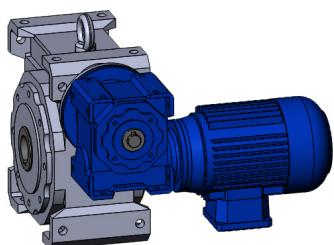
W2



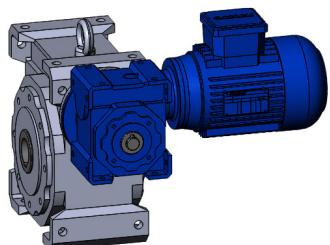
N1



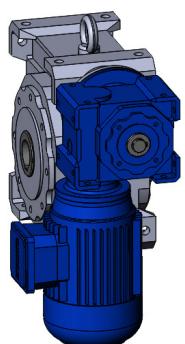
N2



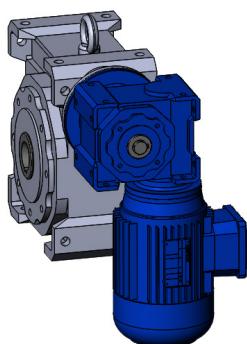
E1



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.

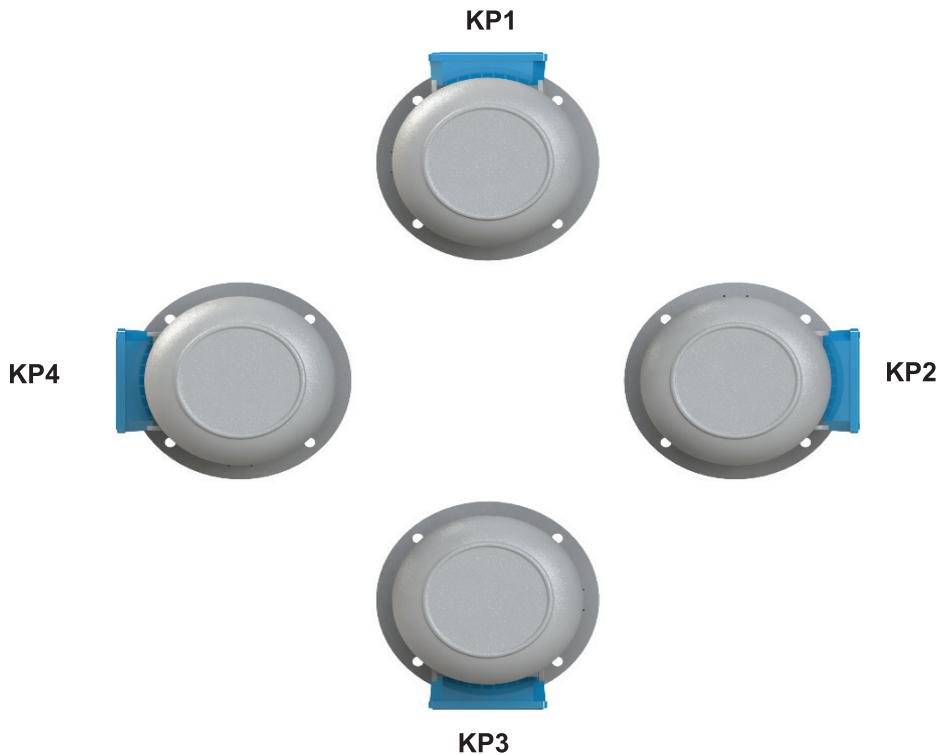
The first column is defining the mounting position of the second gearbox when on the left side. The second column is defining the mounting position of the second gearbox when on the left side.

*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.



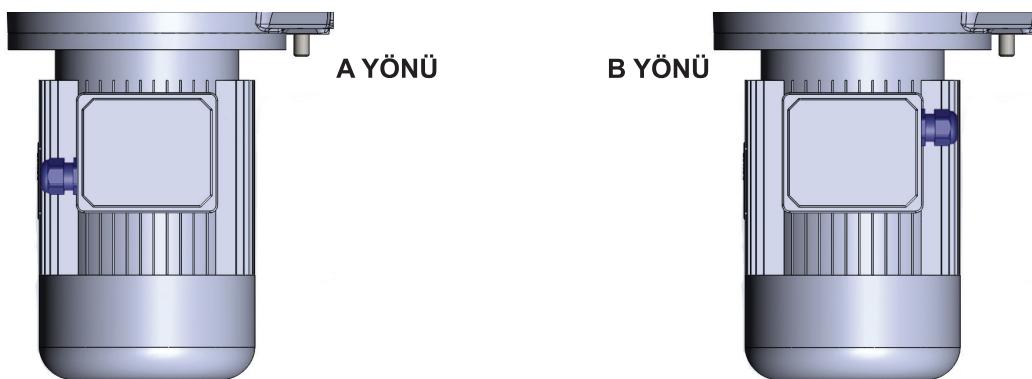
#### Rakor Yönleri

#### Cable Entry / Entrée des câbles

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

The standard position of the cable entry is "A", if the position is not defined during the order, the mounting position is always "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.



**1500 d/d Motorlar / Motors / Moteurs**

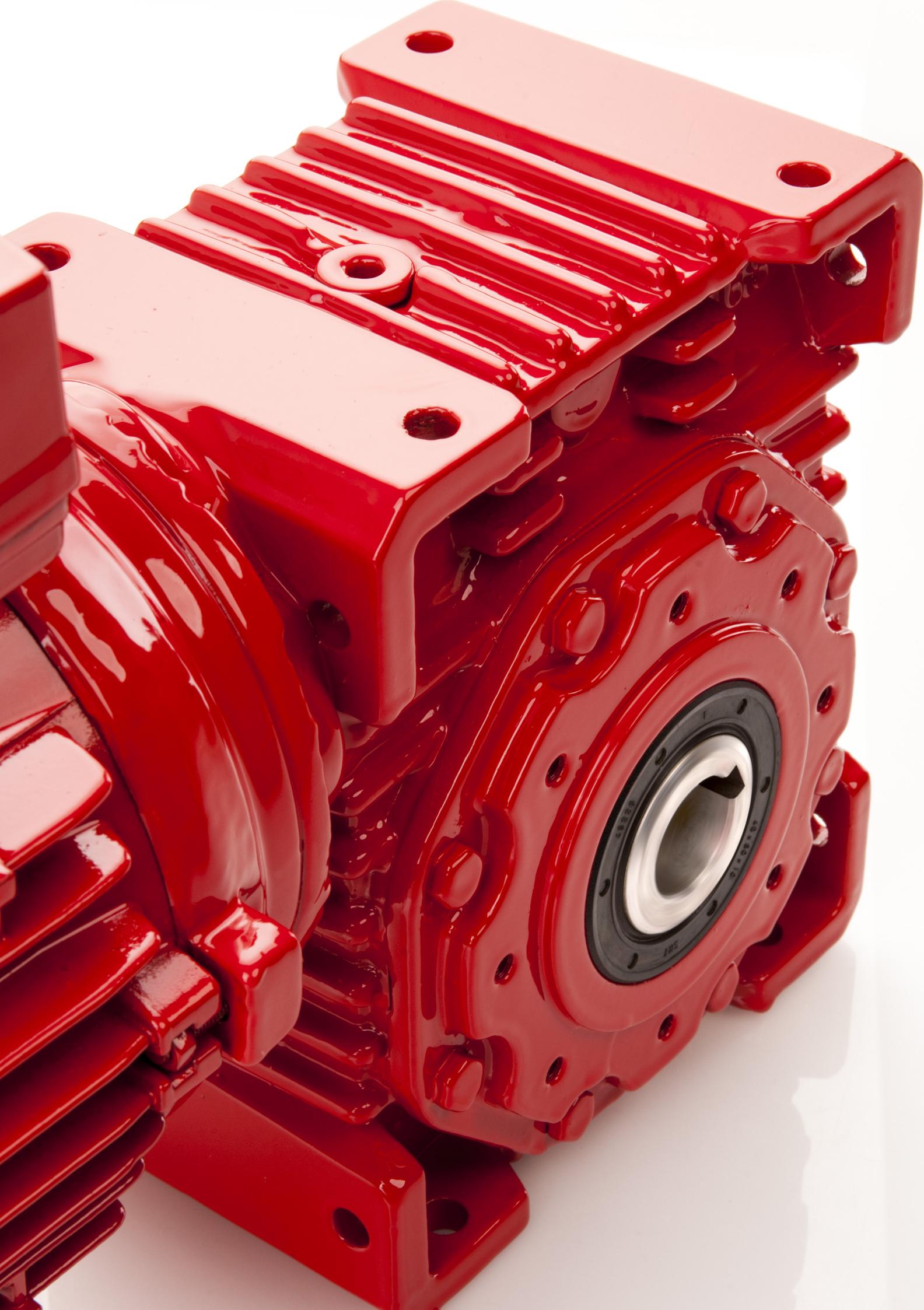
Kod	Güç (KW)	Hız (d/d)	Anma Akımı	Moment (Nm)	Verim		IE Sınıfı	Çalışma Sınıfı
					100%	75%		
Code	Power (KW)	Speed (r.p.m.)	Rated Current	Torque (Nm)	Efficiency		IE Class	Duty Type
					100%	75%		
Code	Puissance (kW)	Vitesse (r.p.m.)	Ampère	Couple (Nm)	Efficiency		Classe IE	Classe d'utilisation
					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)	Efficiency		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.

Tip Type	Tahvil / Ratio / Rapport de réduction	Motor büyüğü / Motor frame size / Dimensions du moteur				
		IEC 63 B14	IEC 71 B14	IEC 80 B14	IEC 90 B14	IEC 100 B14
S 30	7,5					
	10					
	15					
	20					
	25					
	30					
	40					
	50					
	60					
	80					
S 40	7,5					
	10					
	15					
	20					
	25					
	30					
	40					
	50					
	60					
	80					
S 50	100					
	7,5					
	10					
	15					
	20					
	25					
	30					
	40					
	50					
	60					
S 63	80					
	100					
	7,5					
	10					
	15					
	20					
	25					
	30					
	40					
	50					
S 75	60					
	80					
	100					
	7,5					
	10					
	15					
	20					
	25					
	30					
	40					



# 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 <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,12 0,16	0,9	1500	1,01	553	8300	İRSAM İRSFM	82 S 40 / 63 M 4a	116	30 32
	1,1	1200	1,19	472	8300				
	1,5	900	1,51	370	8300				
	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				
	0,9	1500	0,90	495	7380				
	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				
	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	SM	75 S 40 / 63 M 4a	98	15
	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	170	4840				
	3,4	400	0,80	147	4840				
	4,6	300	1,20	122	4840				
	5,5	250	1,00	110	4840				
	6,8	200	1,30	94	4788				
	9,1	150	1,80	74	4350				
	13,7	100	2,60	54	3800				
	13,7	100	1,30	41	4280				
	17,1	80	1,80	35	3973				
	13,7	100	0,70	39	3118				
	17,1	80	1,00	35	2895	SM	40 / 63 M 4a	86	5,6
	22,8	60	1,30	29	2630				
	27,3	50	1,60	26	2475				
	34,1	40	2,10	22	2298				
	45,5	30	2,80	17	2087				
	54,6	25	2,50	16	1964				
	68,3	20	3,30	13	1824				
	27,3	50	0,80	23	1286				
	34,1	40	1,00	20	1194				
	45,5	30	1,30	16	1085				
	54,6	25	1,60	14	1021	SM	30 / 63 M 4a	84	4,7
	68,3	20	1,50	12	948				
	91,0	15	2,00	10	861				
	136,5	10	2,80	7	752				
	182,0	7,5	3,20	5	750				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg		
[kW] Hp	[r.p.m]			[Nm]	[N]					
0,18 0,25	1,0	1409	0,79	1257	11800	İRSAM İRSM	102 İR 43 / 63 M 4b	124	52 56	
	1,2	1091	1,03	974	11800					
	1,6	842	1,33	751	11800					
	2,0	685	1,63	611	11800					
	1,5	900	0,99	565	7700					
	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	98	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					
	3,4	400	1,10	228	6245					
	4,5	300	1,50	175	6245	SM	63 S 30 / 63 M 4b	96	11	
	5,4	250	1,40	171	6110					
	8,9	150	1,90	113	5650					
	13,4	100	1,90	81	4950					
	4,5	300	0,80	183	4800					
	6,7	200	0,90	141	4700		SM	50 S 30 / 63 M 4b	94	8,8
	8,9	150	1,20	112	4400					
	9,2	100	1,40	92	6250					
	11,4	80	1,70	71	6030					
	15,3	60	2,30	68	5450		SM	63 / 71 M 6a	90	11
	18,3	50	2,70	59	5100					
	22,9	40	3,40	50	4750					
	11,4	80	0,90	76	4521					
	15,3	60	1,20	64	4156					
	18,3	50	1,40	57	3920		SM	50 / 71 M 6a	88	8,1
	22,9	40	1,80	49	3708					
	30,5	30	2,40	40	3350					
	36,6	25	2,10	35	3215					
	45,8	20	2,80	29	3100					
	13,4	100	0,90	61	4310	SM	50 / 63 M 4b	88	7,5	
	16,8	80	1,20	53	3944					
	22,9	40	1,00	48	2662					
	30,5	30	1,40	38	2516					
	36,6	25	1,30	35	2405					
	45,8	20	1,70	29	2200		SM	40 / 71 M 6a	86	6,9
	61,0	15	2,20	23	2105					
	91,5	10	3,00	16	2043					



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,18 0,25	22,3	60	0,90	43	2545	SM	40 / 63 M 4b	86	6,3
	26,8	50	1,10	39	2426				
	33,5	40	1,40	32	2271				
	44,7	30	1,80	26	2116				
	53,6	25	1,70	23	2078				
	67,0	20	2,20	19	2010				
	89,3	15	2,90	15	1987				
	44,7	30	0,90	24	1056	SM	30 / 63 M 4b	84	5,4
	53,6	25	1,00	21	1041				
	67,0	20	1,00	18	955				
	89,3	15	1,30	14	920				
	134,0	10	1,90	10	853				
	178,7	7,5	2,40	8	706				
	0,7	1984	1,27	1409	16500				
0,25 0,34	0,9	1600	1,31	1367	16500	İRSAM İRŞFM	127 İRS 65 / 71 M 4a	120	85 89
	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				
	0,9	1503	0,96	1858	16500	İRSAM İRŞFM	127 İR 43 / 71 M 4a	126	83 87
	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				
	3,0	467	3,10	578	16500				
	3,3	416	3,49	514	16500	İRSAM İRŞFM	102 İRS 52 / 71 M 4a	118	56 60
	0,9	1500	0,90	1114	10500				
	1,2	1140	1,04	963	10500				
	1,6	870	1,32	757	10500				
	1,8	750	1,45	691	10500				
	2,4	570	1,78	562	10500				
	3,2	435	2,30	434	10500	İRSAM İRŞFM	102 İR 43 / 71 M 4a	124	53 57
	2,2	633	1,31	762	10500				
	2,6	533	1,56	641	10500				
	3,1	438	1,89	527	10500				
	3,5	390	2,13	469	10500				
	4,1	337	2,46	406	10500				
0,34	5,3	260	3,19	313	10500	İRSAM İRŞFM	102 İR 42 / 71 M 4a	124	52 56
	7,6	182	4,55	220	10500				
	9,4	147	5,65	177	10500				
	1,7	795	0,85	664	7600				
	2,3	600	1,01	553	7600	İRSAM İRŞFM	82 S 40 / 71 M 4a	116	32 34
	3,1	450	1,26	443	7600				
	4,6	300	1,83	306	7600				
	6,1	225	2,35	238	7600				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			
[kW] Hp	[r.p.m]			[Nm]	[N]			kg	
0,25 0,34	2,8	500	0,90	391	7420	SM	75 S 40 / 71 M 4a	98	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				
	13,8	100	3,00	116	5813				
	11,2	82	1,76	118	6450				
	14,8	62	2,36	83	6325	İRSAM İRSM	65 / 71 M 6b	102	20 21
	18,3	50	3,36	82	6123				
	23,5	39	4,64	67	5841	SM	63 / 71 M 6b	90	12
	9,2	100	1,00	127	6225				
	11,4	80	1,20	113	6026				
	15,3	60	1,60	94	5410				
	18,3	50	2,00	82	5093				
	22,9	40	2,40	70	4711				
	13,8	100	1,30	89	5590				
	17,3	80	1,50	79	5187				
	23,0	60	2,10	64	4705				
	27,6	50	2,50	57	4432				
	34,5	40	3,10	48	4109	SM	63 / 71 M 4a	90	11
	14,8	62	1,32	89	4252				
	18,3	50	1,68	78	4160				
	24,1	38	2,52	64	4112				
	31,6	29	3,41	50	4064				
	36,6	25	2,52	46	4016				
	48,2	19	3,60	38	3975				
	63,1	14,5	4,93	29	3920				
	15,3	60	0,90	89	4180				
	18,3	50	1,00	80	3940	SM	50 / 71 M 6b	88	9
	22,9	40	1,30	68	3623				
	30,5	30	1,70	55	3453				
	36,6	25	1,50	49	3369				
	45,8	20	2,00	41	3298				
	61,0	15	2,90	32	3156				
	22,3	62	1,76	60	4356				
	27,6	50	2,24	50	4269				
	36,3	38	3,39	43	4122	İRSAM İRSM	52 / 71 M 4a	100	15 17
	47,6	29	4,52	34	4063				
	55,2	25	3,36	31	4023				
	72,6	19	4,85	25	3987				
	95,2	14,5	6,58	20	3850				
	17,3	80	0,90	74	4264				
	23,0	60	1,20	61	4019				
	27,6	50	1,40	55	3695				
	34,5	40	1,80	46	3522				
	46,0	30	2,40	37	3436				
	55,2	25	2,20	33	3364	SM	50 / 71 M 4a	88	8,3
	69,0	20	2,90	27	3219				



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,25 0,34	30,5	30	1,00	53	2440	SM	40 / 71 M 6b	86	7,8
	36,6	25	0,90	48	2285				
	45,8	20	1,20	40	2193				
	61,0	15	1,60	31	1945				
	91,5	10	2,20	22	1820				
	122,0	7,5	2,70	17	1785				
	34,5	40	1,00	45	2489	SM	40 / 71 M 4a	86	7,1
	46,0	30	1,30	36	2331				
	55,2	25	1,20	32	2237				
	69,0	20	1,60	27	1984				
	92,0	15	2,10	21	1856				
	138,0	10	3,00	15	1821				
	69,0	20	0,70	25	965	SM	30 / C 63 M 4	84	6,2
	92,0	15	1,00	20	865				
	138,0	10	1,30	14	795				
	184,0	7,5	1,70	11	744				
0,37 0,5	0,9	1600	1,00	1793	17300	İRSAM İRŞFM	127 İRS 65 / 71 M 4b	120	91 97
	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				
	2,5	568	1,74	1032	17300	İRSAM İRŞFM	127 İR 43 / 71 M 4b	126	84 90
	3,0	467	2,11	849	17300				
0,37 0,5	3,3	416	2,37	755	17300				
	1,6	870	0,90	1113	9600	İRSAM İRŞFM	102 İRS 52 / 71 M 4b	118	57 61
	1,9	750	0,98	1016	9600				
	2,4	570	1,21	826	9600				
	3,2	435	1,57	638	9600				
	2,2	633	0,89	1120	9600	İRSAM İRŞFM	102 İR 43 / 71 M 4b	124	54 58
	2,6	533	1,06	942	9600				
	3,2	438	1,29	775	9600				
	3,6	390	1,45	689	9600				
	4,1	337	1,68	596	9600	İRSAM İRŞFM	102 İR 42 / 71 M 4b	124	53 57
	5,3	260	2,17	460	9600				
	7,6	182	3,10	323	9600				
	9,5	147	3,84	260	9600				
	3,1	450	0,86	651	7550	İRSAM İRŞFM	82 S 40 / 71 M 4b	116	33 35
	4,6	300	1,24	450	7550				
	6,2	225	1,60	350	7550				
	3,5	400	0,80	506	7400	SM	75 S 40 / 71 M 4b	98	17
	4,6	300	1,10	412	7400				
	5,6	250	1,00	370	7400				
	7,0	200	1,40	309	7400				
	9,3	150	1,70	245	6852				
	13,9	100	2,10	172	6455				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
0,37	9,1	100	1,00	200	7380	SM	75 / 80 M 6a	92
	11,4	80	1,30	176	7123			
	15,2	60	1,70	146	6350			
	18,2	50	2,00	126	6241			
	22,8	40	2,60	108	6112			
	30,3	30	3,30	87	6053			
	36,4	25	3,10	77	5987			
	11,1	82	1,2	175	6320			
	14,7	62	1,6	123	6285			
	18,2	50	2,3	122	6124			
	23,3	39	3,1	100	6098			
	30,3	30	3,9	76	6025	İRSAM İRSFM	65 / 80 M 6a	102
	36,4	25	3,2	73	5963			
	46,7	20	4,5	58	5951			
	60,7	15	5,5	44	5820			
	93,3	9,75	6,7	32	5750			
	11,4	80	0,80	167	5237			
	15,2	60	1,10	139	5156			
	18,2	50	1,30	122	5111			
	22,8	40	1,70	104	5091			
	30,3	30	2,10	84	5012			
	36,4	25	2,00	75	4863			
	45,5	20	2,70	61	4765			
	13,9	100	0,90	131	5595	SM	63 / 71 M 4b	90
	17,4	80	1,00	117	5525			
	23,2	60	1,40	95	5123			
	27,8	50	1,70	85	4982			
	34,8	40	2,10	72	4713			
	14,7	62	0,89	132	3850			
	18,2	50	1,14	116	3810			
	23,9	38	1,70	96	3756			
	31,4	29	2,30	74	3701			
	36,4	25	1,70	68	3640	İRSAM İRSFM	52 / 80 M 6a	100
	47,9	19	2,43	56	3562			
	62,8	14,5	3,33	43	3502			
	95,8	9,5	3,55	31	3427			
	125,5	7,25	4,89	21	3326			
	30,3	30	1,20	81	3353			
	36,4	25	1,00	73	3186			
	45,5	20	1,40	60	2987			
	60,7	15	2,00	47	2740			
	91,0	10	2,80	33	2417			



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,37	22,4	62	1,19	88	3927	İRSAM İRSFM	52 / 71 M 4b	100	16 18
	27,8	50	1,52	74	3848				
	36,6	38	2,29	64	3831				
	47,9	29	3,05	50	3738				
	55,6	25	2,27	46	3676				
	73,2	19	3,28	37	3633				
	95,9	14,5	4,45	29	3607				
	146,3	9,5	4,77	20	3496				
	191,7	7,25	6,49	16	3359				
0,5	23,2	60	0,80	91	3646	SM	50 / 71 M 4b	88	9,3
	27,8	50	1,00	81	3465				
	34,8	40	1,20	69	3248				
	46,3	30	1,60	55	2980				
	55,6	25	1,50	49	2831				
	69,5	20	1,90	40	2653				
	92,7	15	2,60	31	2433				
	46,3	30	0,90	54	2108	SM	40 / 71 M 4b	86	8,1
	55,6	25	0,80	48	2003				
0,55	69,5	20	1,10	40	1879				
	92,7	15	1,40	31	1723				
	139,0	10	2,10	21	1519				
	185,3	7,5	2,50	16	1394				
0,75	1,1	1248	0,74	2409	12980	İRSAM İRSFM	127 İRS 65 / 80 M 4a	120	92 98
	1,4	960	0,94	1909	12980				
	1,7	800	1,06	1685	12980				
	2,2	624	1,28	1405	12980				
	2,8	480	1,64	1095	12980				
	4,4	312	2,34	766	12980				
	5,7	240	3,00	597	12980				
	2,5	550	1,19	1511	12980	İRSAM İRSFM	127 İR 52 / 80 M 4a	128	91 97
	2,8	482	135,00	1324	12980				
0,75	3,6	378	1,72	1039	12980				
	4,5	303	2,15	833	12980	İRSAM İRSFM	102 İRS 52 / 80 M 4a	118	59 63
	2,4	570	0,80	1250	8470				
	3,1	435	1,03	966	8470				
	4,8	285	1,60	625	8470				
	6,3	218	2,07	483	8470				
	5,3	260	1,43	696	8470	İRSAM İRSFM	102 İR 42 / 80 M 4a	124	34 38
	7,5	182	2,05	488	8470				
	9,3	147	2,54	394	8470				
14,4	14,4	62	2,11	205	7900	İRSAM İRSFM	82 / 80 M 6b	104	32 36
	16,8	53	2,80	206	7850				
	22,3	40	3,63	151	7721				
	29,7	30	5,36	122	7516				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type					
[kW] Hp	[r.p.m]			[Nm]	[N]			kg			
0,55 0,75	11,1	80	0,80	262	7033	SM	75 / 80 M 6b	92	18		
	14,8	60	1,10	217	6326						
	17,8	50	1,40	187	5896	SM	75 / 80 M 4a	92	16		
	22,3	40	1,70	161	5420						
	13,9	100	0,90	210	6538	İRSAM İRSFM	65 / 80 M 6b	102	27 28		
	17,3	80	1,10	183	6010						
	23,1	60	1,40	149	5407	SM	63 / 80 M 6b	90	16		
	27,7	50	1,70	131	5039						
	34,6	40	2,20	110	4633	İRSAM İRSFM	65 / 80 M 4a	102	25 26		
	10,9	82	0,80	266,2	5715						
	14,4	62	1,07	186,6	5682	SM	63 / 80 M 4a	90	13		
	17,8	50	1,53	185,9	5601						
	22,8	39	2,11	152	5496	SM	52 / 80 M 6b	100	20 21		
	29,7	30	2,60	115	5326						
	14,8	60	0,70	207	5257	İRSAM İRSFM	52 / 80 M 4a	88	13		
	17,8	50	0,90	181	4995						
	22,3	40	1,10	154	4682	SM	50 / 80 M 6b	88	13		
	29,7	30	1,40	124	4296						
	16,9	82	1,09	174	5823	SM	50 / 80 M 4a	88	13		
	22,3	62	1,40	127	5741						
	27,7	50	2,06	123	5703	SM	50 / 80 M 4a	88	13		
	35,5	39	2,81	101	5620						
	46,2	30	3,38	77	5573	SM	50 / 80 M 4a	88	13		
	55,4	25	2,91	71	5403						
	71,0	20	4,05	58	5362	SM	50 / 80 M 4a	88	13		
	92,3	15	4,78	44	5250						
	142,1	9,75	6,14	31	5123	SM	50 / 80 M 4a				
	17,3	80	0,70	174	4808						
	23,1	60	0,90	142	4410	SM	50 / 80 M 4a				
	27,7	50	1,10	126	4189						
	34,6	40	1,40	107	3926	SM	50 / 80 M 4a				
	46,2	30	1,90	84	3601						
	55,4	25	1,80	74	3421	SM	50 / 80 M 4a				
	69,3	20	2,40	62	3208						
	92,3	15	3,20	47	2944	SM	50 / 80 M 4a				
	23,4	38	1,14	146	3305						
	30,7	29	1,55	113	3245	SM	50 / 80 M 4a				
	35,6	25	1,15	103	3200						
	46,8	19	1,64	85	3158	SM	50 / 80 M 4a				
	61,4	14,5	2,24	66	3091						
	93,7	9,5	2,39	47	2980	SM	50 / 80 M 4a				
	122,8	7,25	3,29	32	2880						
	29,7	30	0,80	121	3453	SM	50 / 80 M 4a				
	35,6	25	0,70	108	3218						
	44,5	20	0,90	90	2958	SM	50 / 80 M 4a				
	59,3	15	1,30	70	2661						



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,55 0,75	22,3	62	0,80	132	3320	İRSAM İRSPM	52 / 80 M 4a	100	19 20
	0,75	50	1,02	110	3245				
	36,4	38	1,54	95	3215				
	47,8	29	2,05	75	3158				
	55,4	25	1,53	68	3112				
	72,9	19	2,20	55	2980				
	95,5	14,5	2,99	43	2885				
	145,8	9,5	3,21	30	2756				
	191,0	7,25	4,37	23	2641				
	46,2	30	1,10	82	2703	SM	50 / 80 M 4a	88	11
	55,4	25	1,00	72	2568				
	69,3	20	1,30	60	2407				
	92,3	15	1,70	47	2208				
	138,5	10	2,40	33	1948	SM	40 / C 71 M 4	86	9,6
	184,7	7,5	3,10	25	1787				
	69,3	20	0,70	59	1754				
	92,3	15	0,90	47	1609				
	138,5	10	1,40	32	1419	0,75 1	162 İRS 82 / 80 M 4b 127 İRS 65 / 80 M 4b 127 İR 52 / 80 M 4b 102 İRS 52 / 80 M 4b 82 / 90 S 6	122	199 222 93 99 92 98 60 64 38 40
	184,7	7,5	1,70	24	1302				
	0,9	1590	0,82	4095	21500				
	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 İRSPM	127 İRS 65 / 80 M 4b	120	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	İRSAM İRSPM	127 İR 52 / 80 M 4b	128	92 98
	2,9	482	1,03	1748	11610				
	3,7	378	1,31	1372	11610				
	4,7	303	1,63	1100	11610				
	6,2	229	2,15	833	11610	İRSAM İRSPM	102 İRS 52 / 80 M 4b	118	60 64
	7,2	186	2,65	676	11610				
	3,2	435	0,78	1275	8100				
	5,0	285	1,21	825	8100				
	6,5	218	1,57	638	8100	İRSAM İRSPM	82 / 90 S 6	104	38 40
	9,9	143	1,76	457	8100				
	13,0	9	2,28	353	8100				
	14,8	62	1,55	270	7700				
	17,4	53	2,05	272	7700				
	23,0	40	2,67	199	7700				
	30,7	30	3,93	161	7700				
	34,7	26,5	2,93	159	7700				
	46,0	20	3,73	121	7700				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,75 1	15,3	60	0,80	296	6088	SM	75 / 90 S 6	92	20
	18,4	50	1,00	255	5784				
	23,0	40	1,30	220	5420				
	30,7	30	1,60	177	4973				
	36,8	25	1,60	155	4725				
	46,0	20	2,10	127	4430				
	61,3	15	2,70	99	4065				
	17,6	80	0,80	250	5783				
	23,5	60	1,10	203	5304				
	28,2	50	1,30	179	5039				
	35,3	40	1,60	149	4723				
	47,0	30	2,10	118	4334				
	56,4	25	2,10	104	4119				
	70,5	20	2,80	85	3862				
	18,4	50	1,12	245	5423	İRSAM İRSFM	65 / 90 S 6	102	28 29
	23,6	39	1,55	200	5263				
	30,7	30	1,91	152	5123				
	36,8	25	1,60	146	5050				
	47,2	19,5	2,24	117	4950				
	61,3	15	2,71	89	4812				
	94,4	9,75	3,30	64	4756				
	23,0	40	0,80	210	4506				
	30,7	30	1,00	170	4132				
	36,8	25	1,00	151	3927				
	46,0	20	1,30	124	3681	SM	63 / 90 S 6	90	17
	61,3	15	1,70	98	3376				
	92,0	10	2,30	68	2979				
	122,7	7,5	2,90	53	2734				
	17,2	82	0,80	233	5127				
	22,7	62	1,03	170	5296				
	28,2	50	1,51	165	5200				
	36,2	39	2,06	135	5055				
	47,0	30	2,48	104	4955				
	56,4	25	2,14	95	4957				
	72,3	19,5	2,97	77	4856	İRSAM İRSFM	65 / 80 M 4b	102	26 27
	94,0	15	3,51	59	4744				
	144,6	9,75	4,50	42	4701				
	188,0	7,5	5,49	32	4635				
	28,2	50	0,80	171	4189				
	35,3	40	1,00	145	3926				
	47,0	30	1,40	115	3601				
	56,4	25	1,30	101	3421				
	70,5	20	1,70	84	3208				
	94,0	15	2,30	64	2944				



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
0,75 1	28,2	50	0,75	147	2608	İRSAM İRSM	52 / 80 M 4b	100	20 21
	37,1	38	1,13	127	2554				
	48,6	29	1,51	100	2501				
	56,4	25	1,12	91	2478				
	74,2	19	1,62	74	2435				
	97,2	14,5	2,19	57	2397				
	148,4	9,5	2,35	41	2359				
	194,5	7,25	3,20	31	2321	SM	50 / 80 M 4b	88	12
	47,0	30	0,80	112	2703				
	56,4	25	0,70	99	2568				
	70,5	20	1,00	82	2407				
	94,0	15	1,30	64	2208				
	141,0	10	1,80	45	1948				
	188,0	7,5	2,30	34	1787				
1,1 1,5	1,6	900	0,90	3739	20700	İRSAM İRSM	162 İRS 82 / 90 S 4	122	201 224
	1,8	795	0,96	3486	20700				
	2,4	600	1,24	2700	20700				
	3,2	450	1,59	2103	20700				
	4,7	300	2,28	1471	20700				
	1,9	755	0,82	4094	20700	İRSAM İRSM	162 İR 63 / 90 S 4	130	206
	2,2	645	0,96	3498	20700				
	2,6	545	1,13	2958	20700				
	3,0	480	0,85	2105	10800	İRSAM İRSM	127 İRS 65 / 90 S 4	120	96 102
	4,6	312	12,00	1491	10800				
	5,9	240	1,56	1147	10800				
	3,8	378	0,90	1997	10800				
	4,7	303	1,12	1601	10800				
	6,2	229	1,48	1213	10800	İRSAM İRSM	127 İR 52 / 90 S 4	128	95 101
	7,6	186	1,82	984	10800				
	8,8	161	2,11	851	10800				
	10,9	130	2,61	687	10800				
	11,3	82	1,44	519	7900	İRSAM İRSM	102 / 90 L 6	106	56 60
	14,8	63	1,86	399	7900				
	18,6	50	2,69	378	7900				
	15,0	62	1,05	392	6852	İRSAM İRSM	82 / 90 L 6	104	40 42
	17,5	53	1,40	395	6700				
	23,3	40	1,82	289	6623				
	31,0	30	2,68	234	6496				
	35,1	27	2,00	230	6382				
	46,5	20	2,54	176	6267				
	62,0	15	3,91	134	6153				
	93,0	10	3,95	94	6038				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
[kW] Hp	[r.p.m]			[Nm]	[N]				
1,1 1,5	22,9	62	1,36	275	6623	İRSAM İRSFM	82 / 90 S 4	104	38 40
	26,8	53	2,09	267	6470				
	35,5	40	2,34	198	6382				
	47,3	30	3,46	160	6247				
	53,6	27	2,65	149	6153				
	71,0	20	3,29	115	6057				
	94,7	15	5,00	90	5960				
	142,0	10	5,10	63	5800				
	23,3	40	0,90	322	5318				
1,1 1,5	31,0	30	1,10	259	4878	SM	75 / 90 S 6	92	23
	37,2	25	1,10	228	4635				
	46,5	20	1,40	187	4344				
	62,0	15	1,80	145	3985				
	93,0	10	2,30	100	3516				
	124,0	7,5	2,80	77	3195				
	23,7	60	0,70	297	5254				
	28,4	50	0,90	263	4991				
	35,5	40	1,10	219	4678				
1,1 1,5	47,3	30	1,40	173	4292	SM	75 / 90 S 4	92	20
	56,8	25	1,40	152	4078				
	71,0	20	1,90	125	3824				
	94,7	15	2,40	97	3474				
	23,8	39	1,06	291	4865	İRSAM İRSFM	65 / 90 L 6	92	29 30
	31,0	30	1,30	220	4801				
	37,2	25	1,09	212	4723				
	47,7	19,5	1,53	170	4650				
	62,0	15	1,85	129	4555				
	95,4	9,75	2,25	93	4489				
	124,0	7,5	2,90	71	4321				
	46,5	20	0,90	182	3791				
	62,0	15	1,20	144	3444				
	93,0	10	1,50	99	3009				
	124,0	7,5	2,00	77	2734				
1,1 1,5	28,4	50	1,03	240	4910	İRSAM İRSFM	65 / 90 S 4	102	26 28
	36,4	39	1,41	196	4801				
	47,3	30	1,69	151	4723				
	56,8	25	1,46	139	4650				
	72,8	19,5	2,02	113	4555				
	94,7	15	2,39	87	4489				
	145,6	9,75	3,07	61	4321				
	189,3	7,5	3,74	47	4259				
	47,3	30	0,90	169	3533	SM	63 / 90 S 4	90	17
	56,8	25	0,90	148	3356				
	71,0	20	1,20	123	3146				
	94,7	15	1,60	95	2886				
	142,0	10	2,10	65	2546				
	189,3	7,5	2,60	50	2336				



	P <sub>1</sub> GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg
	[kW] Hp	[r.p.m]			[Nm]	[N]			
Güç Devir Tabloları / Performans Tables / Table de Performances	1,5 2	2,4	600	0,99	3376	19950	İRSAM İRSM	162 İRS 82 / 90 L 4	122
		3,2	450	1,28	2629	19950			
		4,7	300	1,82	1839	19950	İRSAM İRSM	127 İR 52 / 90 L 4	128
		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			
		11,0	130	1,93	632	9650			
		11,4	83	1,80	705	9650	İRSAM İRSM	127 / 100 L 6	108
		14,5	65	2,33	581	9650			
		18,2	52	3,47	544	9650			
		23,6	40	4,67	437	9650			
		11,5	82	1,05	696	7750	İRSAM İRSM	102 / 100 L 6	106
		15,0	63	1,37	535	7750			
		18,9	50	1,97	508	7750			
		23,6	40	2,61	418	7720			
		31,5	30	3,50	318	7690	İRSAM İRSM	82 / 100 L 6	104
		37,8	25	2,87	296	7520			
		47,3	20	3,80	240	7300			
		17,8	53	1,03	530	6650			
		23,6	40	1,33	388	6450	İRSAM İRSM	82 / 90 L 4	104
		31,5	30	1,97	314	6420			
		35,7	26,5	1,47	309	6380			
		47,3	20	1,86	236	6190			
		63,0	15	2,87	180	6050	SM	75 / 100 L 6	92
		94,5	10	2,90	126	5960			
		23,1	62	1,00	373	6450			
		27,0	53	1,53	361	6420			
		35,8	40	1,71	268	6380	SM	75 / 90 L 4	92
		47,7	30	2,53	216	6190			
		54,0	26,5	1,95	202	6050			
		71,5	20	2,41	156	5960			
		95,3	15	3,67	122	5800	SM	29	22
		143,0	10	3,74	85	5680			
		47,3	20	1,10	255	4181			
		63,0	15	1,30	198	3835			
		94,5	10	1,70	137	3382			
		126,0	7,5	2,00	105	3103			
		35,8	40	0,80	299	4547			
		47,7	30	1,00	236	4171			
		57,2	25	1,00	207	3962			
		71,5	20	1,40	170	3713			
		95,3	15	1,70	132	3407			
		143,0	10	2,20	90	3005			
		190,7	7,5	2,70	68	2757			



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
1,5 2	28,6	50	0,75	325,6	4817	İRSAM İRSFM	65 / 90 L 4	102	28 29
	36,7	39	1,03	265,7	4707				
	47,7	30	1,24	204,4	4676				
	57,2	25	1,07	187,8	4559				
	73,3	19,5	1,48	152,4	4466				
	95,3	15	1,75	117,2	4445				
	146,7	9,75	2,25	83,0	4195				
	190,7	7,5	2,74	63,9	4112				
	71,5	20	1,10	255	4181				
	95,3	15	1,30	198	3835				
2,2 3	143,0	10	1,70	137	3382	SM	63 / 90 L 4	90	19
	190,7	7,5	2,00	105	3103				
	3,9	366	0,91	3627	19800	İRSAM İRSFM	162 İR 62 / 100 L 4a	130	207 230
	4,8	302	1,10	2993	19800				
	5,6	255	1,30	2530	19800				
	6,7	213	1,56	2110	19800				
	8,0	180	1,85	1781	19800				
	9,0	160	2,08	1582	19800				
	10,7	135	2,47	1335	19800				
	12,9	111	2,99	1103	19800				
2,2 3	10,9	87	2,14	1116	19800	İRSAM İRSFM	162 / 112 M 6	110	190 213
	17,6	54	4,27	836	19800				
	22,6	42	5,54	659	19800				
	11,4	83	1,23	1028	9500				
	14,6	65	1,59	848	9500				
	18,3	52	2,36	794	9500				
	23,8	40	3,18	637	9420				
	29,7	32	3,96	531	9300				
	17,3	83	1,58	753	9500				
	22,1	65	2,00	619	9450				
2,2 3	27,6	52	3,05	548	9300	İRSAM İRSFM	127 / 100 L 4a	108	88 92
	35,9	40	4,00	433	9220				
	17,5	82	1,00	720	7730				
	22,8	63	1,20	572	7620				
	28,7	50	1,75	505	7590				
	35,9	40	2,27	422	7540				
	47,8	30	3,00	325	7420				
	57,4	25	2,52	289	7360				
	71,8	20	3,32	237	7250				
	95,7	15	4,36	180	7100				
2,2 3	143,5	10	4,87	126	7030				
	191,3	7,5	6,36	96	6950				



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
2,2 3	27,1	53	1,04	528	6320	İRSAM İRSM	82 / 100 L 4	104	43 45
	35,9	40	1,17	392	6250				
	47,8	30	1,73	316	6125				
	54,2	26,5	1,33	295	6050				
	71,8	20	1,64	228	5975				
	95,7	15	2,50	178	5950	SM	75 / 100 L 4a	92	26
	143,5	10	2,55	124	5900				
	71,8	20	0,90	249	3609				
	95,7	15	1,20	194	3310				
	143,5	10	1,50	132	2919				
3 4	191,3	7,5	1,80	100	2678				
	5,1	280	1,10	4150	28460	İRSAM İRSM	201 İR 72 / 100 L 4	132	355 367
	6,4	224	1,40	3323	28460				
	7,9	182	1,70	2700	28460				
	9,6	150	2,00	2220	28460				
	11,8	122	2,50	1801	28460				
	14,4	100	3,10	1477	28460				
	11,0	87	1,57	1506	19800	İRSAM İRSM	162 / 132 S 6	110	201 224
	17,8	54	3,13	1128	19800				
	22,9	42	4,07	890	19800				
	32,0	30	5,73	663	19800				
	17,3	83	1,16	1027	9500	İRSAM İRSM	127 / 100 L 4b	108	91 95
	22,1	65	1,47	844	9400				
	27,6	52	2,23	747	9320				
	35,9	40	2,93	591	9240				
	44,8	32	3,60	486	9520				
	55,2	26	3,23	420	9360				
	71,8	20	4,27	327	9210				
	89,7	16	5,40	268	9180				
	110,4	13	4,73	223	8930				
	22,8	63	0,88	780	7620	İRSAM İRSM	102 / 100 L 4b	106	62 66
	28,7	50	1,28	689	7590				
	35,9	40	1,67	575	7480				
	47,8	30	2,20	443	7620				
	57,4	25	1,85	394	7530				
	71,8	20	2,43	323	7450				
	95,7	15	3,20	246	7360				
	143,5	10	3,57	172	7290				
	191,3	7,5	4,67	130	7130				
	35,9	40	0,86	535	6250	İRSAM İRSM	82 / 100 L 4b	104	45 47
	47,8	30	1,27	431	6125				
	54,2	26,5	0,97	402	6050				
	71,8	20	1,21	311	5975				
	95,7	15	1,83	243	5950				
	143,5	10	1,87	170	5900				
	191,3	7,5	2,70	129	5860				



P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
[kW] Hp	[r.p.m]			[Nm]	[N]				
4 5,5	5,2	280	0,83	5457	28460	İRSAM İRSMF	201 İR 72 / 112 M 4	132	342 374
	6,5	224	1,04	4369	28460				
	8,0	182	1,28	3550	28460				
	9,7	150	1,55	2918	28460				
	12,0	122	1,91	2369	28460				
	14,6	100	2,33	1941	28460				
	11,6	83	2,25	2081	28460				
	15,2	63	3,27	1780	28460				
	17,5	55	4,00	1620	28460				
	24,0	40	4,31	1210	28460				
	11,0	87	1,18	2008	19800	İRSAM İRSMF	162 / 132 M 6a	110	209 232
	17,8	54	2,35	1504	19800				
	22,9	42	3,05	1187	19800				
	32,0	30	4,30	883	19800				
	45,7	21	4,38	669	19800				
	17,5	83	0,87	1351	9406				
	22,4	65	1,10	1109	9216				
	28,0	52	1,67	983	9228				
	36,4	40	2,20	777	9059				
	45,5	32	2,70	639	9333				
5,5 7,5	56,0	26	2,42	553	9267	İRSAM İRSMF	127 / 112 M 4b	108	100 104
	72,8	20	3,20	431	8942				
	90,9	16	4,05	353	9089				
	111,9	13	3,55	294	9020				
	29,1	50	0,96	906	7545				
	36,4	40	1,25	756	7441				
	48,5	30	1,65	583	7406				
	58,2	25	1,39	519	7471				
	72,8	20	1,83	425	7382				
	97,0	15	2,40	323	7376				
	145,5	10	2,68	226	7146				
	194,0	7,5	3,50	171	7218				
	47,8	30	0,95	575	6127				
	54,2	26,5	0,73	536	6005				
	71,8	20	0,90	415	5990	İRSAM İRSMF	82 / C 100 L 4	104	52 54
	95,7	15	1,38	323	5858				
	143,5	10	1,40	226	5833				
	191,3	7,5	2,02	172	5842				
5,5 7,5	11,6	83	1,68	2909	28100				
	15,2	63	2,22	2246	28100	İRSAM İRSMF	201 / 132 M 6b	112	351 383
	17,5	55	2,93	2193	28100				
	24,0	40	4,28	1647	28100				
	11,0	87	0,85	2761	19800				
	17,8	54	1,71	2068	19800	İRSAM İRSMF	162 / 132 M 6b	110	216 251
	22,9	42	2,22	1632	19800				
	32,0	30	3,13	1215	19800				
	45,7	21	3,18	919	19800				
	64,0	15	4,55	681	19800				



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
5,5 7,5	16,8	87	1,07	1996	19800	İRSAM İRSMF	162 / 132 S 4c	110	202 227
	27,1	54	2,16	1433	19800				
	34,9	42	2,75	1129	19800				
	48,8	30	3,82	839	19800				
	54,3	27	3,16	794	19800				
	69,8	21	3,95	625	19800				
	97,7	15	5,55	457	19800				
	22,5	65	0,80	1515	9560				
	28,2	52	1,22	1342	9520				
	36,6	40	1,60	1061	9410				
	45,8	32	1,96	872	9630				
	56,3	26	1,76	755	9350				
	73,3	20	2,33	588	9260				
	91,6	16	2,95	482	9450				
	112,7	13	2,58	401	9210				
	146,5	10	3,42	312	8960				
7,5 10	11,6	83	1,20	3901	27500	İRSAM İRSMF	201 / 160 M 6b	112	415 447
	15,2	63	1,75	3337	27500				
	17,5	55	2,13	3037	27500				
	24,0	40	2,30	2268	27500				
	17,8	54	1,25	2820	19800				
	22,9	42	1,63	2225	19800				
	32,0	30	2,29	1656	19800				
	45,7	21	2,33	1253	19800				
	64,0	15	3,33	929	19800				
	16,8	87	0,79	2722	19800				
	27,1	54	1,59	1954	19800				
	34,9	42	2,01	1540	19800				
	48,8	30	2,80	1144	19800				
	69,8	21	2,89	852	19800				
	97,7	15	4,07	623	19800				
11 15	36,6	40	1,17	1447	9373	İRSAM İRSMF	162 / 132 M 4b	110	212 235
	45,8	32	1,44	1189	9333				
	56,3	26	1,29	1030	9317				
	73,3	20	1,71	802	9441				
	91,6	16	2,16	657	9167				
	112,7	13	1,89	547	9168				
	146,5	10	2,51	425	9175				
	183,1	8	3,17	344	9119				
	18,6	52	2,09	4492	33000	İRSAM İRSMF	250 / 160 L 6b	114	626 656
	24,1	40	3,55	3547	33000				
	37,1	26	5,73	2910	33000				
	48,3	20	6,20	1962	33000				



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
[kW] Hp	[r.p.m]			[Nm]	[N]				
11 15	15,3	63	1,00	4526	25850	İRSAM İRSFM	201 / 160 L 6b	112	430 462
	17,5	55	1,36	4251	25850				
	24,1	40	2,00	3222	25850				
	32,2	30	2,09	2482	25850				
	17,9	54	0,85	4115	23250				
	23,0	42	1,11	3246	23250				
	32,2	30	1,56	2417	23250				
	46,0	21	1,59	1829	23250				
	64,3	15	2,27	1355	23250				
	27,1	54	1,08	2865	23250				
15 20	34,9	42	1,37	2259	23250	İRSAM İRSFM	162 / 160 L 6b	110	296 319
	48,8	30	1,91	1678	23250				
	69,8	21	1,97	1250	23250				
	97,7	15	2,77	914	23250				
	139,5	10,5	2,86	625	23250				
	195,3	7,5	4,00	479	23250				
	36,6	40	0,80	2123	9465				
	45,8	32	0,98	1744	9333				
	56,3	26	0,88	1510	9317				
	73,3	20	1,16	1176	9441				
15 20	91,6	16	1,47	964	9167	İRSAM İRSFM	127 / C132 M 4	108	124 132
	112,7	13	1,29	802	9168				
	146,5	10	1,71	624	9175				
	183,1	8	2,16	505	9119				
	15,3	63	1,27	5424	32700	İRSAM İRSFM	250 / 180 L 6a	114	684 704
	18,6	52	2,00	5712	32700				
	24,1	40	2,73	4513	32700				
	31,1	31	2,93	3589	32700				
	37,1	26	3,33	3203	32700				
	48,3	20	4,00	2494	32700				
	28,2	52	2,47	3966	32700				
	36,6	40	3,27	3090	32700				
	47,3	31	3,93	2395	32700				
	56,3	26	3,53	2161	32700				
15 20	73,3	20	4,80	1682	32700	İRSAM İRSFM	250 / 160 L 4a	114	637 667
	94,5	15,5	5,73	1303	32700				
	146,5	10	6,93	870	32700				
	26,6	55	1,33	4033	25100				
	36,6	40	1,88	3051	25100				
	48,8	30	1,95	2317	25100				
	53,3	27,5	2,58	2232	25100				
	73,3	20	2,79	1662	25100				
	97,7	15	2,79	1261	25100				
	106,5	13,75	3,77	1183	25100				
15	146,5	10	4,05	870	25100	İRSAM İRSFM	201 / 160 L 4a	112	442 474
	195,3	7,5	5,51	653	25100				



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	f <sub>s</sub> Servis Faktörü Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[Nm]	[N]				
15 20	34,9	42	1,01	3114	22400	İRSAM İRSM	162 / 160 L 4a	110	298 318
	48,8	30	1,42	2312	22400				
	69,8	21	1,48	1723	22400				
	97,7	15	2,06	1260	22400				
	139,5	10,5	2,11	892	22400				
	195,3	7,5	2,95	681	22400				
18,5 25	28,3	52	2,00	4875	32450	İRSAM İRSM	250 / 180 M 4b	114	657 687
	36,8	40	2,65	3798	32450				
	47,4	31	3,19	2943	32450				
	56,5	26	2,86	2656	32450				
	73,5	20	3,89	2067	32450				
	94,8	15,5	4,65	1602	32450				
	147,0	10	5,62	1070	32450				
	189,7	7,75	6,76	829	32450				
	26,7	55	1,06	4958	24650				
	36,8	40	1,54	3750	24650				
	49,0	30	2,04	2848	24650				
	53,5	28	1,52	2743	24650				
	73,5	20	2,23	2043	24650				
	98,0	15	2,99	1550	24650				
	106,9	13,75	2,21	1454	24650				
	147,0	10	3,25	1070	24650				
	196,0	7,5	4,35	802	24650				
	35,0	42	0,82	3786	21200	İRSAM İRSM	201 / 180 M 4b	112	462 494
	49,0	30	1,14	2812	21200				
	70,0	21	1,17	2095	21200				
	98,0	15	1,65	1532	21200				
	140,0	10,5	1,70	1047	21200				
	196,0	7,5	2,38	802	21200				
22 30	28,3	52	1,68	5797	32200	İRSAM İRSM	250 / 180 L 4b	114	682 702
	36,8	40	2,23	4516	32200				
	47,4	31	2,68	3500	32200				
	73,5	20	3,27	2458	32200				
	94,8	15,5	3,91	1905	32200				
	147,0	10	4,73	1272	32200				
	189,7	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



$n_1 = 1400$  d/d

Servis Faktörü Service Factor Service Facteur $Sf = 1$	P1 GÜÇ Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
13-21 Nm	0,05	18	80	48	13	190	1250	S	30	84	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	86	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				
50-71 Nm	0,85	187	7,5	85	37	330	2100	S	50	88	3,3
	0,16	14	100	46	50	450	3000				
	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				
96-152 Nm	1,11	140	10	82	62	450	3000	İRSA İRSF	52	100	9 11
	1,54	187	7,5	85	67	450	3000				
	0,44	23	62	56	104	490	3400				
	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	İRSA İRSF	52	100	9 11	
	1,77	147	9,5	84	96	490					
	2,40	193	7,25	85	101	490					


*n<sub>1</sub> = 1400 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P <sub>1</sub> GÜC Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
114-145 Nm	0,32	14	100	52	114	650	4200	S	63	90	5,8
	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				
176-280 Nm	2,81	187	7,5	85	122	650	4200				
	0,60	17	82	56	188	670	4900	İRSA İRŞF	65	102	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				
	1,60	56	25	75	205	670	4900				
	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				
172-221 Nm	4,11	187	7,5	85	179	670	4900				
	0,48	14	100	53	174	700	5800	S	75	92	8,6
	0,56	18	80	58	177	700	5800				
	0,75	23	60	60	184	700	5800				
	0,85	28	50	63	183	700	5800				
	1,10	35	40	67	201	700	5800				
	1,50	47	30	72	221	700	5800				
	1,50	56	25	76	194	700	5800				
	1,80	70	20	78	192	700	5800				
	2,20	93	15	80	180	700	5800				
325-560 Nm	3,00	140	10	84	172	700	5800				
	4,00	187	7,5	86	176	700	5800				
	1,50	23	62	60	381	850	6900	İRSA İRŞF	82	104	24 26
	2,30	26	53	68	565	850	6900				
	2,57	35	40	67	470	850	6900				
	3,80	47	30	72	560	850	6900				
	2,92	53	26,5	76	401	850	6900				
	3,62	70	20	78	385	850	6900				
	5,50	93	15	81	456	850	6900				
	5,60	140	10	85	325	850	6900				
	8,10	187	7,5	86	356	850	6900				



$n_1 = 1400$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i Tahvil Ratio	η Verim efficiency	M <sub>2</sub> Çıkış Momenti [Nm]	F <sub>Q1</sub> Rad. Yük [N]	F <sub>Qlo</sub> Rad. Yük [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur <i>Sf = 1</i>	Puissance	Vitesse de sortie	Rapport de réduction	efficience	Couple de sortie	Charges radiales	Charges radiales				
623-999 Nm	2,20	17	82	60	738	1450	10000	İRSA İRŞF	102	106	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 İRŞF	127	108	69 73
	4,40	22	65	65	1268	2300	17000				
	6,70	27	52	72	1711	2300	17000				
	8,80	35	40	74	1777	2300	17000				
	10,80	44	32	76	1792	2300	17000				
	9,70	54	26	81	1393	2300	17000				
	12,80	70	20	82	1432	2300	17000				
	16,20	88	16	84	1485	2300	17000				
	14,20	108	13	86	1083	2300	17000				
	18,80	140	10	87	1116	2300	17000				
1873-3352 Nm	4,60	13	111	62	2159	2900	21500	İRSA İRŞF	162	110	163 186
	5,90	16	87	64	2241	2900	21500				
	11,90	26	54	74	3244	2900	21500				
	15,10	33	42	75	3245	2900	21500				
	21,00	47	30	78	3352	2900	21500				
	17,40	52	27	82	2628	2900	21500				
	21,70	67	21	83	2580	2900	21500				
	30,50	93	15	85	2653	2900	21500				
	31,50	133	10,5	83	1873	2900	21500				
	44,00	187	7,5	89	2003	2900	21500				
3521-5746 Nm	7,5	12	115	65	3824	3250	24750	İRSA İRŞF	201	112	300 332
	11,0	17	83	68	4235	3250	24750				
	14,0	22	63	70	4212	3250	24750				
	19,0	25	55	75	5346	3250	24750				
	27,0	35	40	78	5746	3250	24750				
	28,0	47	30	79	4527	3250	24750				
	37,0	51	27,5	83	5761	3250	24750				
	40,0	70	20	85	4639	3250	24750				
	40,0	93	15	86	3520	3250	24750				
	54,0	102	13,75	88	4457	3250	24750				
	58,0	140	10	89	3521	3250	24750				
	79,0	187	7,5	89	3597	3250	24750				



$n_1 = 1400$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i Tahvil Ratio	η Verim efficiency	M <sub>2</sub> Çıkış Momenti [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads	F <sub>Qlo</sub> Rad. Yük Over Loads	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Charges radiales	Charges radiales				
Service Facteur $S_f = 1$	Puissance	Vitesse de sortie	Rapport de réduction	[ % ]	Couple de sortie	[N]	[N]				
5791-13370 Nm	23,0	22	63	58	5791	3750	29000	İRSA İRŞF	250	114	493 513
	37,0	27	52	78	10237	3750	29000				
	49,0	35	40	79	13370	3750	29000				
	59,0	45	31	79	9856	3750	29000				
	53,0	54	26	85	7990	3750	29000				
	72,0	70	20	86	8448	3750	29000				
	86,0	90	15,5	86	7820	3750	29000				
	104,0	140	10	89	6314	3750	29000				
	125,0	181	7,75	89	5881	3750	29000				

n<sub>1</sub> = 900 d/d

Servis Faktörü Service Factor Service Facteur Sf = 1	P <sub>1</sub> GÜC Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type		kg
15-22 Nm	0,04	11	80	43	15	190	1300	S	30	84
	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	86
	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			
49-80 Nm	0,64	120	7,5	82	42	330	2250			
	0,11	9	100	42	49	450	3300	S	50	88
	0,15	11	80	46	59	450	3300			
	0,20	15	60	52	66	450	3300			
	0,25	18	50	55	73	450	3300			
	0,30	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			
103-173 Nm	0,90	90	10	80	76	450	3300	İRSA İRŞF	52	100
	1,11	120	7,5	84	74	450	3300			
	0,33	15	62	55	119	490	3550			
	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			


*n<sub>1</sub> = 900 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P <sub>1</sub> GÜC Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
119-162 Nm	0,25	9	100	45	119	650	4350	S	63	90	5,8
	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				
198-317 Nm	2,20	120	7,5	84	147	650	4350	İRSA İRSF	65	102	14 15
	0,44	11	82	55	211	670	4900				
	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				
	1,20	36	25	75	239	670	4900				
	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				
	2,20	120	7,5	84	147	650	4350				
178-242 Nm	0,35	9	100	48	178	700	6000	S	75	92	8,6
	0,40	11	80	54	183	700	6000				
	0,52	15	60	56	185	700	6000				
	0,62	18	50	59	194	700	6000				
	0,80	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				
	2,50	90	10	81	215	700	6000				
	3,00	120	7,5	85	203	700	6000				
383-648 Nm	1,16	15	62	56	427	850	7100	İRSA İRSF	82	104	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				
	2,0	45	20	78	463	850	7100				
	4,30	60	15	79	541	850	7100				
	4,35	90	10	83	383	850	7100				
	6,30	120	7,5	85	426	850	7100				

 $n_1 = 900$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i Tahvil Ratio	η Verim efficiency	M <sub>2</sub> Çıkış Momenti [Nm]	F <sub>Q1</sub> Rad. Yük [N]	F <sub>Qlo</sub> Rad. Yük [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur <i>Sf = 1</i>	<i>Puissance</i>	<i>Vitesse de sortie</i>	<i>Rapport de réduction</i>	<i>efficience</i>	<i>Couple de sortie</i>	<i>Charges radiales</i>	<i>Charges radiales</i>				
				[ % ]	[Nm]	[N]	[N]				
758-1170 Nm	1,58	11	82	56	770	1450	10400	İRSA İRŞF	102	106	39 43
	2,05	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	2,70	11	83	56	1332	2300	17000	İRSA İRŞF	127	108	69 73
	3,50	14	65	59	1424	2300	17000				
	5,20	17	52	69	1980	2300	17000				
	7,00	23	40	72	2139	2300	17000				
	8,70	28	32	75	2216	2300	17000				
	7,60	35	26	79	1656	2300	17000				
	10,20	45	20	80	1732	2300	17000				
	13,00	56	16	81	1788	2300	17000				
	11,20	69	13	85	1313	2300	17000				
	15,00	90	10	85	1353	2300	17000				
2443-3860 Nm	4,70	10	87	58	2517	2900	21500	İRSA İRŞF	162	110	163 186
	9,40	17	54	70	3770	2900	21500				
	12,20	21	42	71	3860	2900	21500				
	17,20	30	30	74	4052	2900	21500				
	13,70	33	27	80	3140	2900	21500				
	17,50	43	21	80	3120	2900	21500				
	25,00	60	15	83	3303	2900	21500				
	25,50	86	10,5	86	2443	2900	21500				
	36,00	120	7,5	87	2493	2900	21500				
4392-7237 Nm	6,1	8	115	59	4392	3250	24750	İRSA İRŞF	201	112	300 332
	9,0	11	83	63	4994	3250	24750				
	11,0	14	63	66	4853	3250	24750				
	15,0	16	55	71	6215	3250	24750				
	22,0	23	40	74	6759	3250	24750				
	23,0	30	30	76	5564	3250	24750				
	31,0	33	27,5	80	7237	3250	24750				
	32,0	45	20	83	5637	3250	24750				
	33,0	60	15	84	4412	3250	24750				
	45,0	65	13,75	86	5646	3250	24750				
	48,0	90	10	87	4431	3250	24750				
	65,0	120	7,5	88	4552	3250	24750				


 $n_1 = 900 \text{ d/d}$ 

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds [r.p.m]	i Tahvil Ratio	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads	F <sub>Qlo</sub> Rad. Yük Over Loads	Tip Type			kg
Service Factor	Power	Output Speeds [r.p.m]	Ratio	Efficiency	Output Torque [Nm]	Charges radiales	Charges radiales				
Service Facteur Sf = 1	Puissance	Vitesse de sortie [r.p.m]	Rapport de réduction	[ % ]	Couple de sortie	[N]	[N]				
	19,0	14	63	58	7367	3750	29000				
	30,0	17	52	74	12249	3750	29000				
	41,0	23	40	76	13226	3750	29000				
	44,0	29	31	78	11289	3750	29000				
	50,0	35	26	83	11449	3750	29000				
	60,0	45	20	84	10696	3750	29000				
	72,0	70	15,5	85	10066	3750	29000				
	8,0	90	10	88	8124	3750	29750				
	106,0	116	7,75	89	7758	3750	29750				
7367-13226 Nm								İRSA İRSF	250	114	493 513


*n<sub>1</sub> = 700 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type				kg
	[kW] Hp	[r.p.m]		[ % ]	[Nm]	[N]	[N]					
16-25 Nm	0,04	9	80	41	16	190	1350	S	30	84	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					
	0,20	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	86	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					
57-87 Nm	0,56	93	7,5	81	46	330	2300					
	0,10	7	100	40	57	450	3450	S	50	88	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					
119-210 Nm	0,80	70	10	78	85	450	3450	IRSA IRSF	52	100	9 11	
	1,02	93	7,5	82	85	450	3450					
	0,27	11	62	52	119	490	3850					
	0,35	14	50	55	131	490	3850					
	0,53	189	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					


*n<sub>1</sub> = 700 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P <sub>1</sub> GÜC Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
120-168 Nm	0,20	7	100	44	120	650	4470	S	63	90	5,8
	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				
215-335 Nm	1,90	93	7,5	82	159	650	4470				
	0,37	9	82	52	215	670	5750	İRSA İRŞF	65	102	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				
	1,00	28	25	74	252	670	5750				
	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				
182-248 Nm	2,71	93	7,5	83	230	670	5750				
	0,29	7	100	46	182	700	6150	S	75	92	8,6
	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				
418-701 Nm	2,17	70	10	78	231	700	6150				
	2,65	93	7,5	82	222	700	6150				
	0,98	11	62	55	456	850	7300	İRSA İRŞF	82	104	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				

 $n_1 = 700$  d/d

Servis Faktörü Service Factor Service Facteur $Sf = 1$	P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
	[kW] Hp	[r.p.m]		[ % ]	[Nm]	[N]	[N]				
825-1271 Nm	1,35	9	82	55	831	1450	11600	İRSA İRŞF	102	106	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 İRŞF	127	108	69 75
	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				
	11,30	44	16	80	1973	2300	19000				
	9,50	54	13	84	1415	2300	19000				
	12,90	70	10	85	1496	2300	19000				
2676-4479 Nm	3,1	6	111	57	2676	2900	23500	İRSA İRŞF	162	110	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				
	22,0	47	15	81	3647	2900	23500				
	22,5	67	10,5	84	2707	2900	23500				
	32,0	93	7,5	86	2816	2900	23500				
4740-8003 Nm	5,3	6	115	57	4740	3250	27300	İRSA İRŞF	201	112	300 332
	7,0	8	83	60	4756	3250	27300				
	10,0	11	63	62	5329	3250	27300				
	13,0	13	55	68	6633	3250	27300				
	19,0	18	40	72	7465	3250	27300				
	20,0	23	30	74	6057	3250	27300				
	27,0	25	27,5	79	8003	3250	27300				
	28,0	35	20	81	6188	3250	27300				
	29,0	47	15	82	4866	3250	27300				
	40,0	51	13,75	85	6378	3250	27300				
	43,0	70	10	86	5045	3250	27300				
	59,0	93	7,5	87	5252	3250	27300				



$n_1 = 700$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds [r.p.m]	i Tahvil Ratio	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur <i>Sf = 1</i>	<i>Puissance</i>	<i>Vitesse de sortie</i>	<i>Rapport de réduction</i>	<i>efficience</i>	<i>Couple de sortie</i>	<i>Charges radiales</i>	<i>Charges radiales</i>				
8839-14538 Nm	18,0	11	63	58	8973	3750	31000	İRSA İRŞF	250	114	493 513
	26,0	13	52	72	13281	3750	31000				
	36,0	18	40	74	14538	3750	31000				
	39,0	23	31	76	12536	3750	31000				
	45,0	27	26	81	12929	3750	31000				
	53,0	35	20	82	11858	3750	31000				
	65,0	45	15,5	83	11408	3750	31000				
	78,0	70	10	87	9258	3750	31000				
	95,0	90	7,75	88	8839	3750	31000				

 $n_1 = 450$  d/d

Servis Faktörü Service Factor Service Facteur $Sf = 1$	P1 GÜC Power Puissance	$n_2$ Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	$\eta$ Verim Efficiency efficience	$M_2$ Çıkış Momenti Output Torque Couple de sortie	$F_{Q1}$ Rad. Yük Over Loads Charges radiales	$F_{Qlo}$ Rad. Yük Over Loads Charges radiales	Tip Type		kg
	[kW] Hp	[r.p.m]		[ % ]	[Nm]	[N]	[N]			
17-28 Nm	0,03	6	80	38	17	190	1400	S	30	84
	0,04	8	60	40	18	190	1400			
	0,04	9	50	45	21	190	1400			
	0,05	11	40	53	24	190	1400			
	0,06	15	30	58	23	190	1400			
	0,08	18	25	64	28	190	1400			
	0,08	23	20	66	23	190	1400			
	0,11	30	15	70	24	190	1400			
	0,14	45	10	75	23	190	1400			
	0,19	60	7,5	79	24	190	1400			
35-53 Nm	0,04	5	100	37	35	330	2370	S	40	86
	0,05	6	80	40	37	330	2370			
	0,07	8	60	45	41	330	2370			
	0,09	9	50	49	47	330	2370			
	0,10	11	40	58	49	330	2370			
	0,13	15	30	62	53	330	2370			
	0,13	18	25	66	47	330	2370			
	0,16	23	20	70	48	330	2370			
	0,23	30	15	72	52	330	2370			
	0,31	45	10	67	50	330	2370			
64-99 Nm	0,40	60	7,5	63	50	330	2370			
	0,08	5	100	37	64	450	3600	S	50	88
	0,10	6	80	41	69	450	3600			
	0,13	8	60	46	74	450	3600			
	0,14	9	50	53	81	450	3600			
	0,19	11	40	58	93	450	3600			
	0,25	15	30	62	99	450	3600			
	0,25	18	25	66	88	450	3600			
	0,29	23	20	70	86	450	3600			
	0,41	30	15	72	93	450	3600			
112-195 Nm	0,58	45	10	75	93	450	3600			
	0,76	60	7,5	79	96	450	3600			
112-195 Nm	0,19	7	62	49	112	490	4050	İRSA İRSF	52	100
	0,25	9	50	51	135	490	4050			
	0,37	12	38	59	176	490	4050			
	0,51	16	29	62	195	490	4050			
	0,37	18	25	66	130	490	4050			
	0,53	24	19	72	154	490	4050			
	0,74	31	14,5	77	175	490	4050			
	0,78	47	9,5	81	127	490	4050			
	1,1	62	7,25	82	139	490	4050			


*n<sub>1</sub> = 450 d/d*

Servis Faktörü	P <sub>1</sub> GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur Sf = 1	Puissance	Vitesse de sortie	Rapport de réduction	efficience	Couple de sortie	Charges radiales	Charges radiales				
	[kW] Hp	[r.p.m]		[ % ]	[Nm]	[N]	[N]				
120-177 Nm	0,13	5	100	42	120	650	5200	S	63	90	5,8
	0,16	6	80	48	132	650	5200				
	0,22	8	60	50	143	650	5200				
	0,27	9	50	54	155	650	5200				
	0,26	11	40	58	177	650	5200				
	0,43	15	30	63	173	650	5200				
	0,43	18	25	68	156	650	5200				
	0,54	23	20	70	160	650	5200				
	0,72	30	15	72	165	650	5200				
	1,08	45	10	76	174	650	5200				
111-400 Nm	1,35	60	7,5	79	170	650	5200				
	0,26	5	82	49	222	670	6250	İRSA İRZF	65	102	14 15
	0,54	7	62	48	341	670	6250				
	0,65	9	50	58	400	670	6250				
	0,65	12	39	62	334	670	6250				
	0,68	15	30	62	268	670	6250				
	0,68	18	25	72	260	670	6250				
	0,76	23	19,5	74	233	670	6250				
	0,78	30	15	74	184	670	6250				
	0,85	46	9,75	82	144	670	6250				
185-257 Nm	0,85	60	7,5	82	111	670	6250				
	0,20	5	100	44	185	700	6500	S	75	92	8,6
	0,25	6	80	48	205	700	6500				
	0,32	8	60	50	201	700	6500				
	0,38	9	50	55	221	700	6500				
	0,52	11	40	58	257	700	6500				
	0,63	15	30	63	253	700	6500				
	0,63	18	25	68	227	700	6500				
	0,85	23	20	70	254	700	6500				
	1,08	30	15	73	251	700	6500				
502-1202 Nm	1,55	45	10	75	247	700	6500				
	1,89	60	7,5	80	241	700	6500				
	0,72	7	62	53	502	850	8500	İRSA İRZF	82	104	24 26
	0,92	8	53	62	642	850	8500				
	1,25	11	40	62	658	850	8500				
	2,86	15	30	66	1202	850	8500				
	1,33	17	26,5	74	554	850	8500				
	1,75	23	20	74	550	850	8500				
	2,70	30	15	77	662	850	8500				
	2,75	45	10	82	479	850	8500				
	4,00	60	7,5	84	535	850	8500				



$n_1 = 450$  d/d

Servis Faktörü Service Factor Service Facteur $Sf = 1$	P1 GÜC Power	$n_2$ Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio	$\eta$ Verim Efficiency efficience	$M_2$ Çıkış Momenti Output Torque Couple de sortie	$F_{Q1}$ Rad. Yük Over Loads Charges radiales	$F_{Qlo}$ Rad. Yük Over Loads Charges radiales	Tip Type				kg
	[kW] Hp	[r.p.m]	Rapport de réduction	[ % ]	[Nm]	[N]	[N]					
922-1450 Nm	1,00	5	82	53	922	1450	12500	İRSA İRŞF	102	106	39 43	
	1,30	7	63	56	973	1450	12500					
	1,84	9	50	64	1250	1450	12500					
	2,47	11	40	66	1384	1450	12500					
	3,40	15	30	67	1450	1450	12500					
	2,65	18	25	76	1069	1450	12500					
	3,60	23	20	77	1177	1450	12500					
	4,95	30	15	78	1229	1450	12500					
	5,35	45	10	84	954	1450	12500					
	7,30	60	7,5	84	976	1450	12500					
1645-2678 Nm	1,72	5	83	56	1697	2300	20000	İRSA İRŞF	127	108	69 75	
	2,28	7	65	55	1730	2300	20000					
	3,20	9	52	66	2331	2300	20000					
	4,50	11	40	67	2559	2300	20000					
	5,80	14	32	68	2678	2300	20000					
	4,80	17	26	77	2039	2300	20000					
	6,60	23	20	78	2185	2300	20000					
	8,60	28	16	79	2307	2300	20000					
	7,10	35	13	84	1645	2300	20000					
	9,70	45	10	84	1729	2300	20000					
3034-5184 Nm	2,3	4	111	56	3034	2900	25000	İRSA İRŞF	162	110	163 186	
	3,1	5	87	54	3091	2900	25000					
	6,1	8	54	67	4684	2900	25000					
	8,1	11	42	67	4837	2900	25000					
	11,8	15	30	69	5184	2900	25000					
	8,9	17	27	78	3978	2900	25000					
	11,7	21	21	78	4067	2900	25000					
	17,2	30	15	79	4326	2900	25000					
	17,3	43	10,5	84	3238	2900	25000					
	25,0	60	7,5	85	3382	2900	25000					
5369-9437 Nm	4,0	4	115	55	5369	3250	29000	İRSA İRŞF	201	112	300 332	
	6,0	5	83	58	6130	3250	29000					
	8,0	7	63	59	6311	3250	29000					
	10,0	8	55	66	7704	3250	29000					
	15,0	11	40	69	8786	3250	29000					
	15,0	15	30	71	6781	3250	29000					
	21,0	16	24,5	77	9437	3250	29000					
	22,0	23	20	79	7377	3250	29000					
	22,0	30	15	81	5673	3250	29000					
	31,0	33	13,75	84	7599	3250	29000					
	33,0	45	10	85	5953	3250	29000					
	46,0	60	7,5	86	6367	3250	29000					



$n_1 = 450$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds [r.p.m]	i Tahvil Ratio	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Ratio	Efficiency	Output Torque	Over Loads Charges radiales	Over Loads Charges radiales				
Service Facteur $S_f = 1$	Puissance	Vitesse de sortie	Rapport de réduction	[ % ]	Couple de sortie	[Nm]	[N]				
10856-16876 Nm	14,0	7	63	58	10856	3750	33000	İRSA İRSF	250	114	493 513
	21,0	9	52	69	15991	3750	33000				
	28,0	11	40	71	16876	3750	33000				
	30,0	15	31	74	14605	3750	33000				
	36,0	17	26	79	15693	3750	33000				
	42,0	23	20	81	14440	3750	33000				
	52,0	29	15,5	81	13855	3750	33000				
	62,0	45	10	86	11316	3750	33000				
	77,0	58	7,75	86	10891	3750	33000				


*n<sub>1</sub> = 1400 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P1 GÜÇ Power	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
	[kW] Hp	[r.p.m]	Rapport de réduction	[ % ]	[Nm]	[N]	[N]				
69 - 142 Nm	0,01	0,35	4000	25	69	4820	195	S	50 S 30	94	4,6
	0,02	0,47	3000	26	105	4820	195				
	0,03	0,58	2400	28	136	4820	195				
	0,03	0,78	1800	30	112	4820	195				
	0,04	0,93	1500	35	143	4820	195				
	0,04	1,17	1200	38	125	4820	195				
	0,05	1,56	900	41	126	4820	195				
	0,06	1,87	750	44	134	4820	195				
	0,07	2,33	600	46	132	4820	195				
	0,08	2,80	500	42	115	4820	195				
	0,10	3,50	400	45	123	4820	195				
	0,14	4,67	300	50	142	4820	195				
	0,12	5,60	250	53	109	4820	195				
	0,15	7,00	200	56	115	4820	195				
	0,22	9,33	150	59	132	4820	195				
	0,31	14,00	100	60	127	4820	195				
132 - 262 Nm	0,03	0,35	4000	22	177	6200	195	S	63 S 30	96	7,1
	0,04	0,47	3000	23	184	6200	195				
	0,05	0,58	2400	27	217	6200	195				
	0,07	0,78	1800	29	249	6200	195				
	0,08	0,93	1500	31	256	6200	195				
	0,08	1,17	1200	34	220	6200	195				
	0,11	1,56	900	37	247	6200	195				
	0,13	1,87	750	39	262	6200	195				
	0,15	2,33	600	41	249	6200	195				
	0,16	2,80	500	34	187	6200	195				
	0,2	3,50	400	40	220	6200	195				
	0,26	4,67	300	42	223	6200	195				
	0,24	5,60	250	49	199	6200	195				
	0,32	7,00	200	50	219	6200	195				
	0,34	9,33	150	53	185	6200	195				
	0,34	14,00	100	57	132	6200	195				
221 - 388 Nm	0,03	0,28	5000	22	221	7300	340	S	75 S 40	98	11
	0,04	0,35	4000	24	257	7300	340				
	0,06	0,47	3000	25	301	7300	340				
	0,07	0,58	2400	29	332	7300	340				
	0,10	0,78	1800	31	381	7300	340				
	0,11	0,93	1500	34	384	7300	340				
	0,12	1,17	1200	36	353	7300	340				
	0,16	1,56	900	39	384	7300	340				
	0,18	1,87	750	42	388	7300	340				
	0,21	2,33	600	43	373	7300	340				
	0,24	2,80	500	37	305	7300	340				
	0,30	3,50	400	44	361	7300	340				
	0,40	4,67	300	47	386	7300	340				
	0,38	5,60	250	50	325	7300	340				
	0,50	7,00	200	53	363	7300	340				
	0,64	9,33	150	55	358	7300	340				
	0,76	14,00	100	57	296	7300	340				


*n<sub>1</sub> = 1400 d/d*

Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P <sub>1</sub> GÜÇ Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
325 - 565 Nm	0,04	0,28	4960	29	381	7400	340	İRSAM İRŞFM	82 S 40	116	27 29
	0,05	0,38	3720	33	381	7400	340				
	0,07	0,44	3180	37	565	7400	340				
	0,08	0,53	2650	41	565	7400	340				
	0,09	0,66	2120	44	565	7400	340				
	0,10	0,88	1600	44	470	7400	340				
	0,12	0,93	1500	44	560	7400	340				
	0,15	1,17	1200	47	560	7400	340				
	0,19	1,56	900	49	560	7400	340				
	0,21	1,87	750	51	560	7400	340				
	0,26	2,33	600	53	560	7400	340				
	0,32	3,11	450	57	560	7400	340				
	0,46	4,67	300	59	560	7400	340				
	0,60	6,22	225	61	560	7400	340				
	0,67	9,33	150	66	456	7400	340				
	0,68	14,00	100	70	325	7400	340				
703 - 999 Nm	0,06	0,28	5084	34	738	8100	410	İRSAM İRŞFM	102 İRS 52	118	51 55
	0,08	0,34	4100	35	738	8100	410				
	0,09	0,44	3150	36	703	8100	410				
	0,11	0,58	2394	41	703	8100	410				
	0,15	0,74	1900	46	906	8100	410				
	0,23	0,93	1500	43	999	8100	410				
	0,26	1,23	1140	49	999	8100	410				
	0,33	1,61	870	50	999	8100	410				
	0,37	1,87	750	53	999	8100	410				
	0,45	2,46	570	57	999	8100	410				
	0,58	3,22	435	58	999	8100	410				
	0,83	4,91	285	62	999	8100	410				
	1,07	6,44	218	63	999	8100	410				
	1,20	9,82	143	69	805	8100	410				
	1,56	12,87	109	70	805	8100	410				
1218 - 1792 Nm	0,10	0,27	5146	33	1218	10800	410	İRSAM İRŞFM	127 İRS 65	120	85 91
	0,11	0,34	4150	40	1218	10800	410				
	0,14	0,43	3250	42	1268	10800	410				
	0,17	0,55	2535	44	1268	10800	410				
	0,32	0,71	1984	41	1792	10800	410				
	0,33	0,88	1600	49	1792	10800	410				
	0,41	1,12	1248	52	1792	10800	410				
	0,53	1,46	960	52	1792	10800	410				
	0,58	1,75	800	57	1792	10800	410				
	0,71	2,24	624	59	1792	10800	410				
	0,92	2,92	480	59	1792	10800	410				
	1,30	4,49	312	65	1792	10800	410				
	1,69	5,83	240	65	1792	10800	410				
	1,95	8,97	156	71	1485	10800	410				
	2,54	11,67	120	71	1485	10800	410				

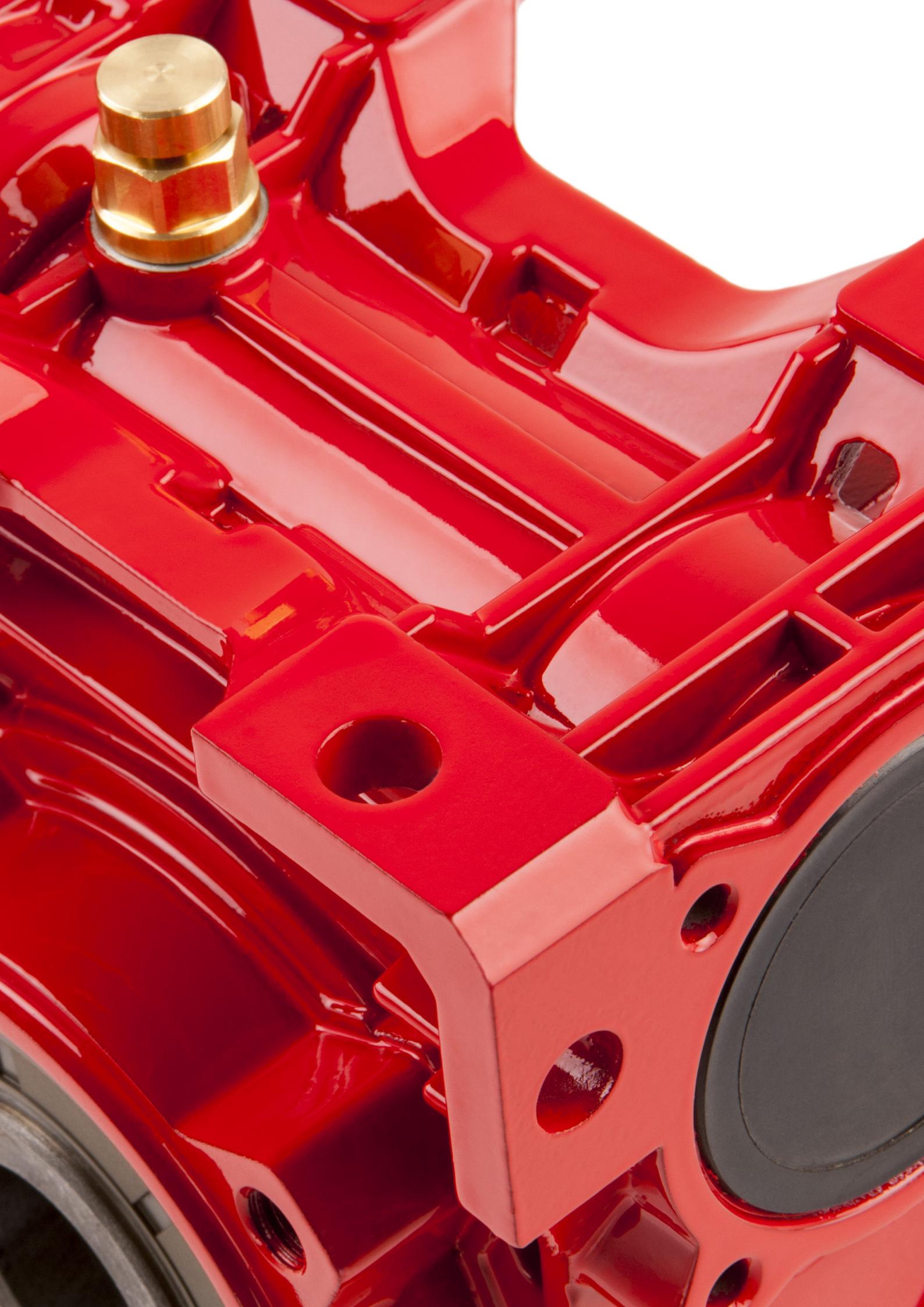


$n_1 = 1400$  d/d

Servis Faktörü Service Factor Service Facteur $Sf = 1$	P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg
2241 - 3352 Nm	0,16	0,26	5394	38	2241	19800	850	İRSAM İRSM	162 İRS 82	190 213
	0,16	0,30	4611	44	2241	19800	850			
	0,32	0,42	3348	44	3244	19800	850			
	0,33	0,49	2862	50	3244	19800	850			
	0,42	0,63	2226	51	3245	19800	850			
	0,56	0,83	1680	50	3245	19800	850			
	0,70	1,11	1260	54	3245	19800	850			
	0,97	1,56	900	56	3352	19800	850			
	1,04	1,76	795	59	3352	19800	850			
	1,35	2,33	600	61	3352	19800	850			
	1,73	3,11	450	63	3352	19800	850			
	2,47	4,67	300	66	3352	19800	850			
	3,26	6,22	225	67	3352	19800	850			
	3,59	9,33	150	72	2653	19800	850			
	4,73	12,44	113	73	2653	19800	850			


*n<sub>1</sub> = 1400 d/d*

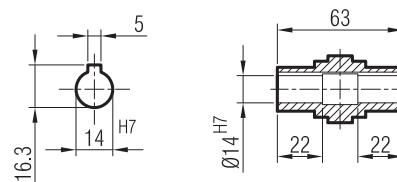
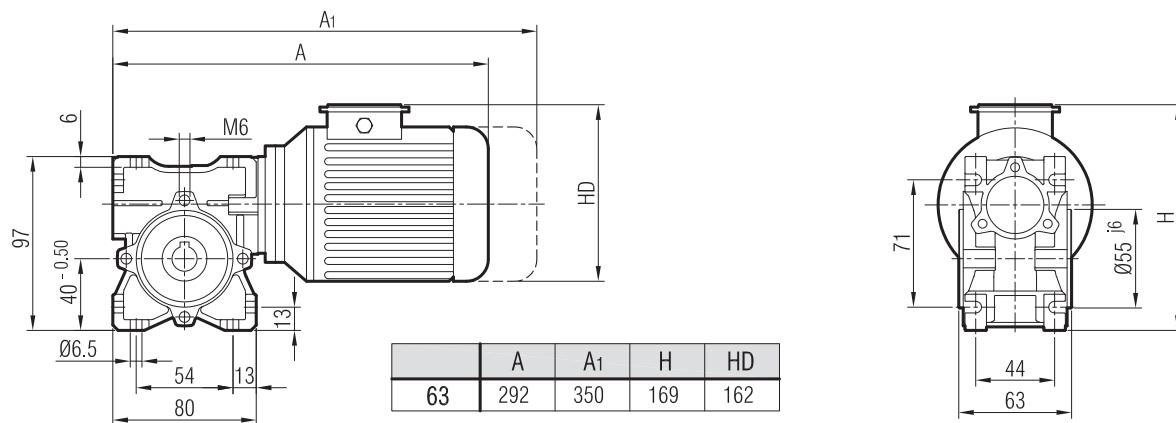
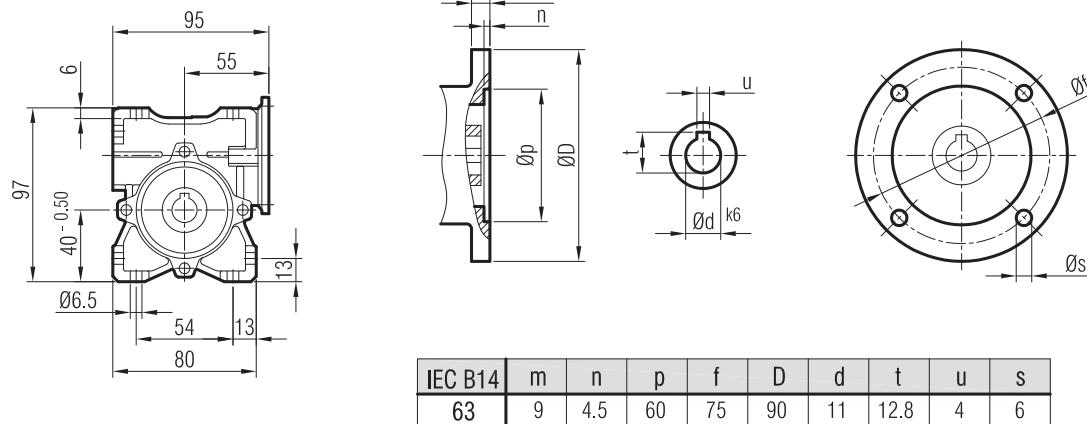
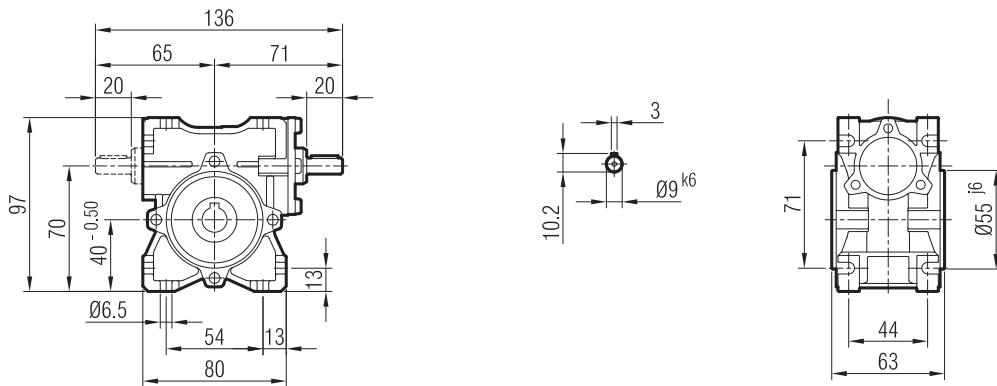
Servis Faktörü Service Factor Service Facteur <i>Sf = 1</i>	P <sub>1</sub> GÜÇ Power Puissance [kW] Hp	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	i Tahvil Ratio Rapport de réduction	η Verim Efficiency efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type	kg
957 - 992 Nm	0,14	0,99	1409	70	957	7000	390	İRSAM İRŞFM	50 54
	0,19	1,28	1091	70	966	7000	390		
	0,24	1,66	841	70	962	7000	390		
	0,29	2,04	685	70	959	7000	390		
	0,33	2,21	633	70	990	7000	390		
	0,39	2,63	533	70	992	7000	390		
	0,47	3,20	438	70	988	7000	390		
	0,53	3,59	390	70	991	7000	390		
	0,62	4,15	337	70	990	7000	390		
	0,80	5,38	260	70	991	7000	390		
1732 - 1809 Nm	1,14	7,68	182	70	991	7000	390	İRSAM İRŞFM	49 53
	1,41	9,52	147	70	991	7000	390		
	0,24	0,93	1503	71	1747	9650	390		
	0,36	1,37	1019	71	1753	9650	390		
	0,43	1,67	838	71	1756	9650	390		
	0,54	2,07	675	71	1758	9650	390		
	0,64	2,46	568	71	1755	9650	390		
	0,78	3,00	467	71	1754	9650	390		
	0,87	3,37	416	71	1757	9650	390		
	0,65	2,55	550	71	1743	9650	475		
	0,74	2,91	482	71	1732	9650	475		
	0,95	3,70	378	71	1732	9650	475		
	1,18	4,61	303	71	1738	9650	475		
	1,61	6,10	229	71	1792	9650	475		
	1,99	7,52	186	71	1793	9650	475		
	2,32	8,70	161	71	1809	9650	475		
	2,87	10,78	130	71	1807	9650	475		
3411 - 3436 Nm	2,02	3,83	366	68	3436	19800	590	İRSAM İRŞFM	292 313
	2,44	4,63	302	68	3422	19800	590		
	2,88	5,48	255	68	3413	19800	590		
	3,45	6,57	213	68	3413	19800	590		
	4,09	7,79	180	68	3411	19800	590		
	4,62	8,77	160	68	3420	19800	590		
	5,48	10,39	135	68	3423	19800	590		
	6,62	12,58	111	68	3419	19800	590		
4241 - 4257 Nm	3,27	5,00	280	68	4246	25100	1200	İRSAM İRŞFM	338 370
	4,08	6,25	224	68	4241	25100	1200		
	5,04	7,69	182	68	4257	25100	1200		
	6,12	9,35	150	68	4250	25100	1200		
	7,53	11,52	122	68	4244	25100	1200		
	9,21	14,06	100	68	4255	25100	1200		



# Sonsuz Vidalı Redüktörler Ölçü Sayfaları

---

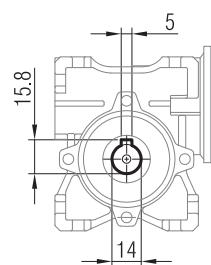
Worm Gearbox Dimension Pages  
*Réducteurs à roue et vis sans fin dimensions*

**SM 30****SP 30****S 30**

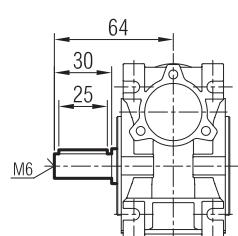
"A<sub>1</sub>" Ölçüsü Frenli Motorlar içindir.  
Dimension "A<sub>1</sub>" is for motors with brake.  
Le dimensions "A<sub>1</sub>" correspond aux moteurs équipés de freins.



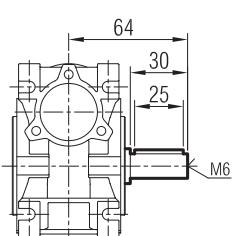
**SM / SP / S**



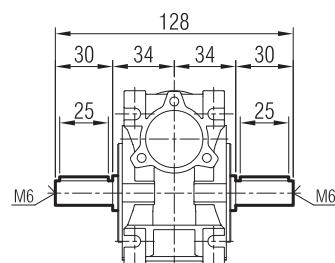
**- SR**



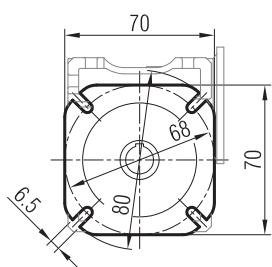
**- SL**



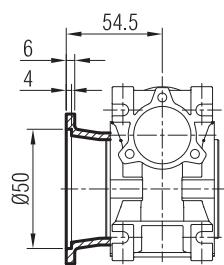
**- SD**



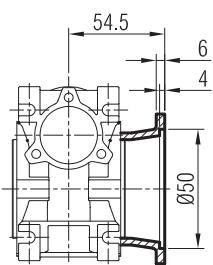
**SM / SP / S**



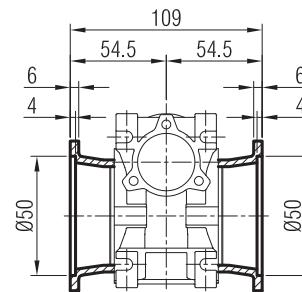
**- FR**



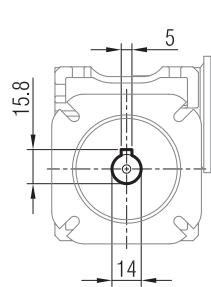
**- FL**



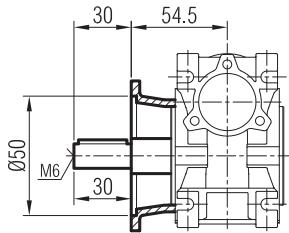
**- FD**



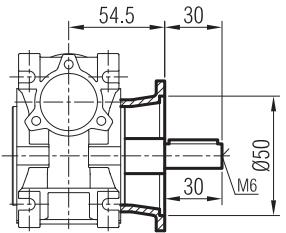
**SM / SP / S**



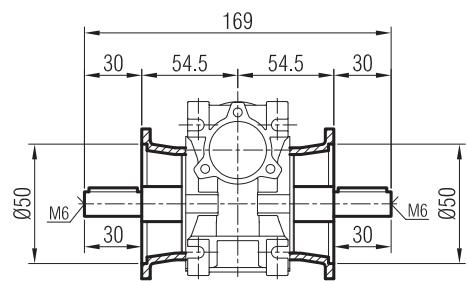
**- FR - SR**



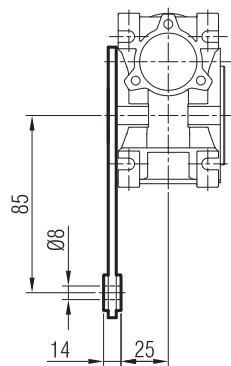
**- FL - SL**



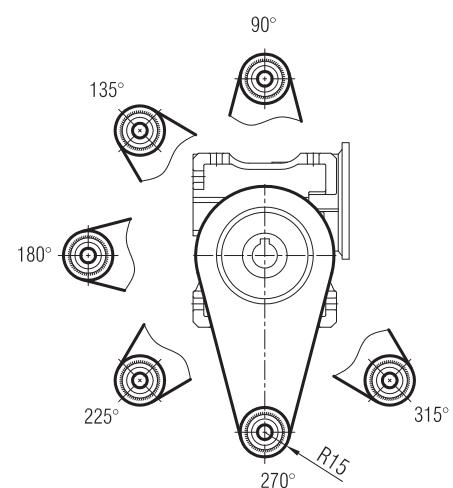
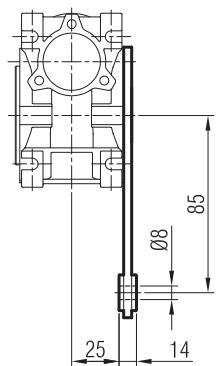
**- FD - SD**



**- TR**

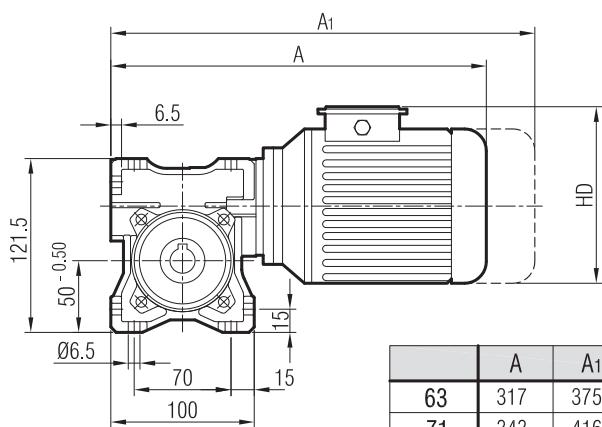


**- TL**

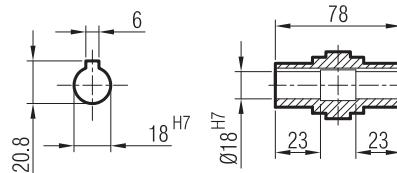
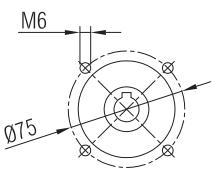
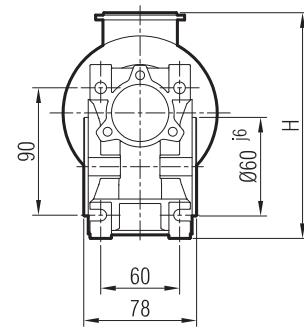




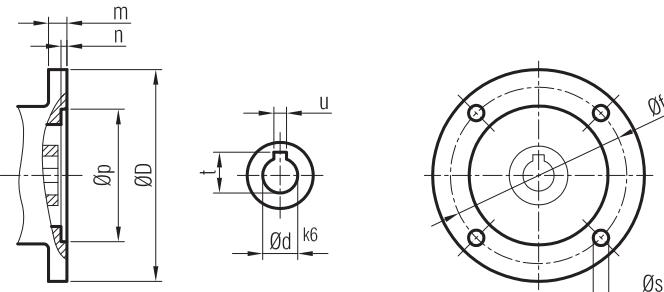
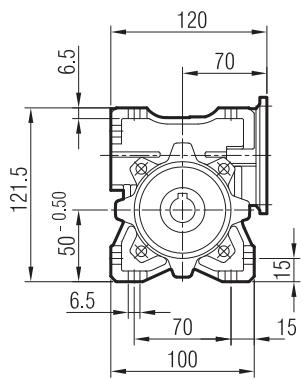
## SM 40



	A	A1	H	HD
63	317	375	189	162
71	343	416	201	182

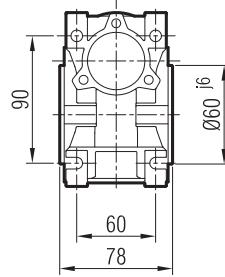
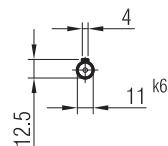
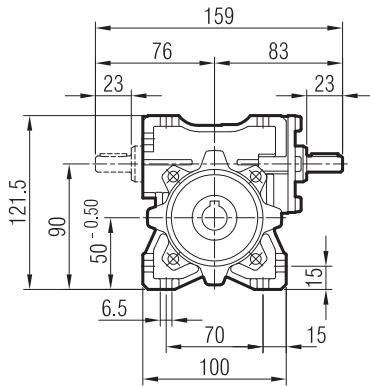


## SP 40



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 40



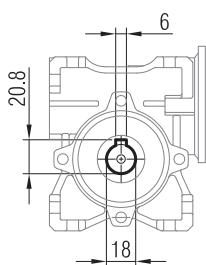
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

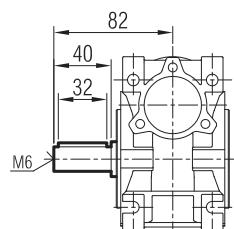
Le dimensions "A1" correspondent aux moteurs équipés de freins.



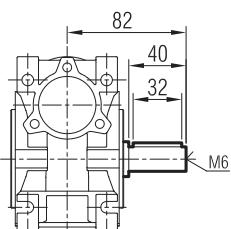
**SM / SP / S**



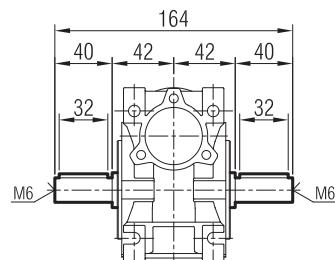
**- SR**



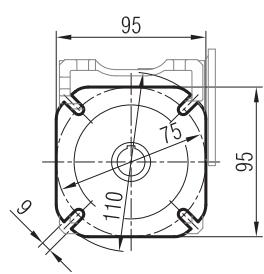
**- SL**



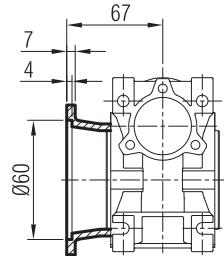
**- SD**



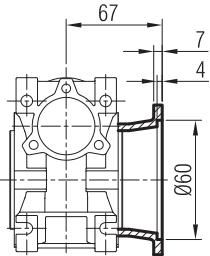
**SM / SP / S**



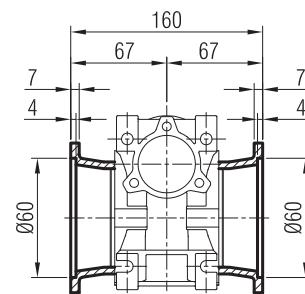
**- FR**



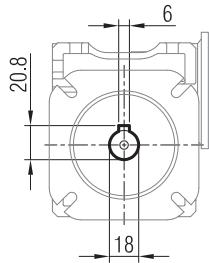
**- FL**



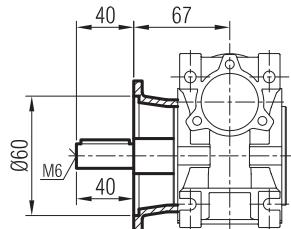
**- FD**



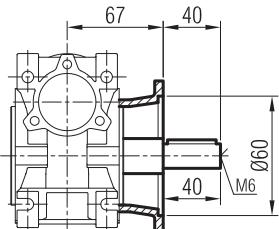
**SM / SP / S**



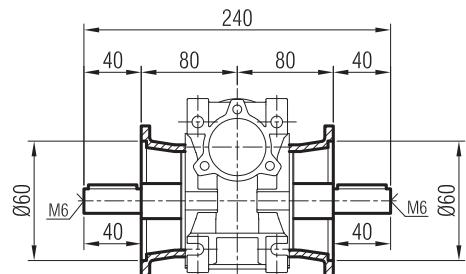
**- FR - SR**



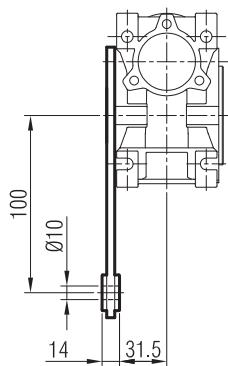
**- FL - SL**



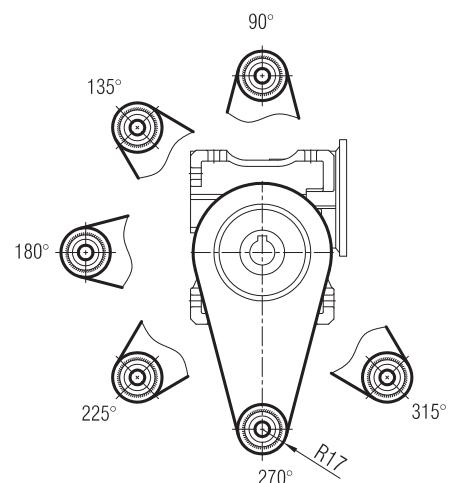
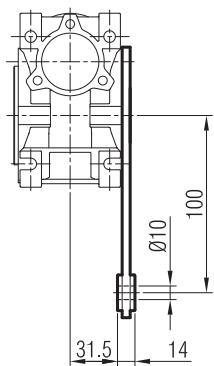
**- FD - SD**

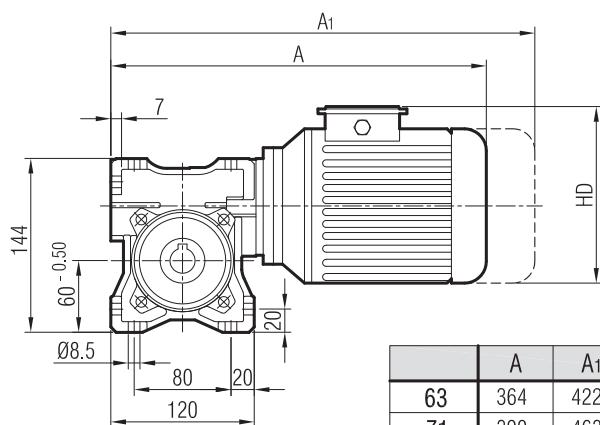


**- TR**

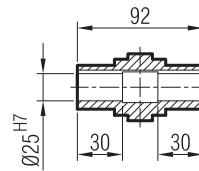
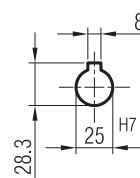
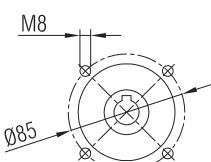
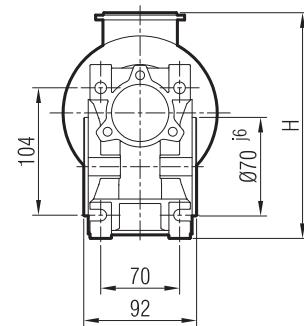
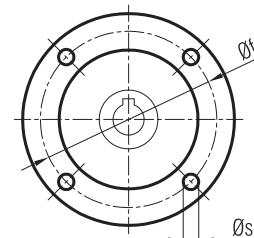
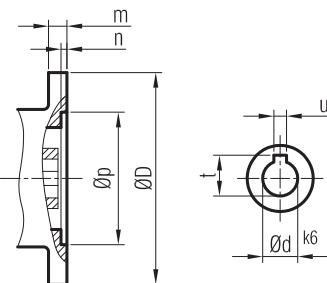
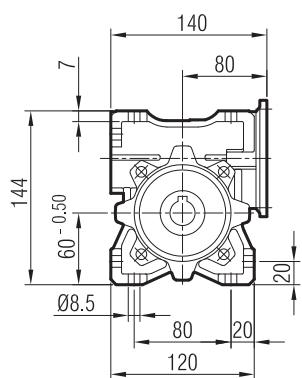


**- TL**

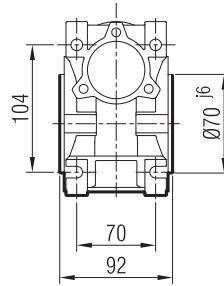
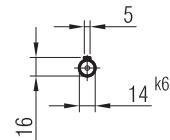
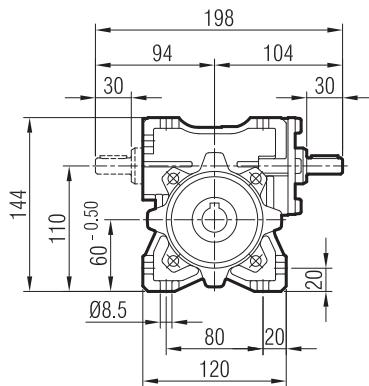


**SM 50**

	A	A1	H	HD
63	364	422	209	162
71	390	463	221	182
80	411	494	228	198

**SP 50**

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
80	10	4.5	80	100	120	19	21.8	6	7

**S 50**

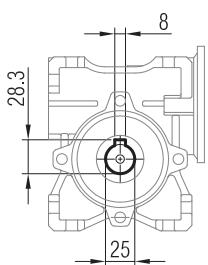
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

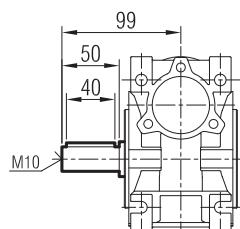
Le dimensions "A1" correspondent aux moteurs équipés de freins.



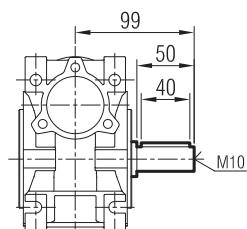
**SM / SP / S**



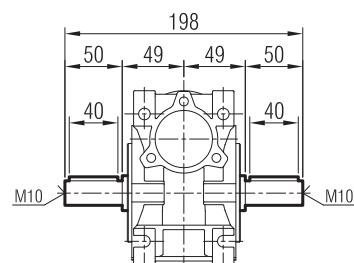
**- SR**



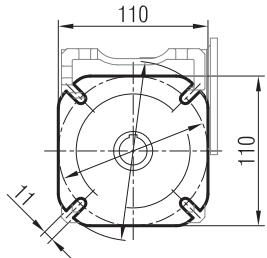
**- SL**



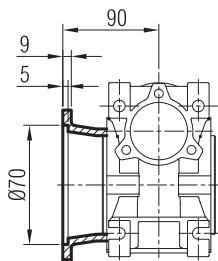
**- SD**



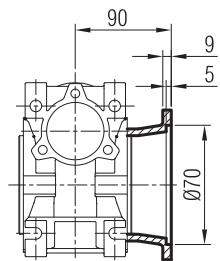
**SM / SP / S**



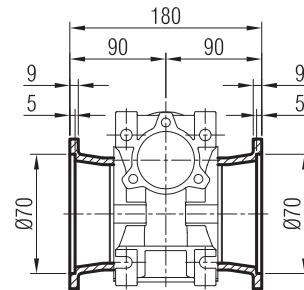
**- FR**



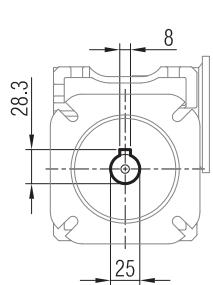
**- FL**



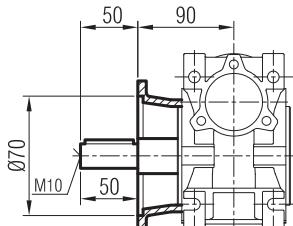
**- FD**



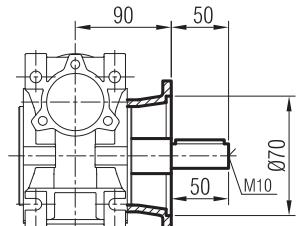
**SM / SP / S**



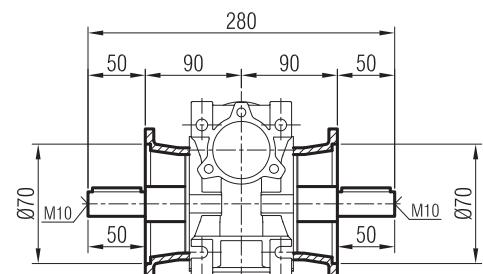
**- FR - SR**



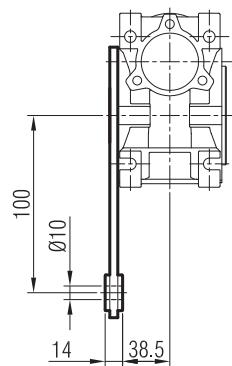
**- FL - SL**



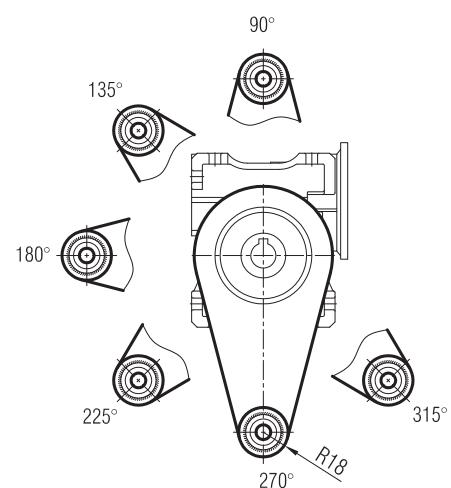
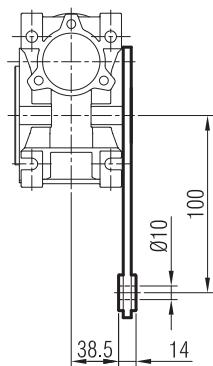
**- FD - SD**

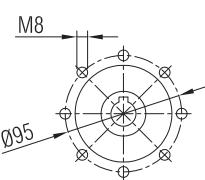
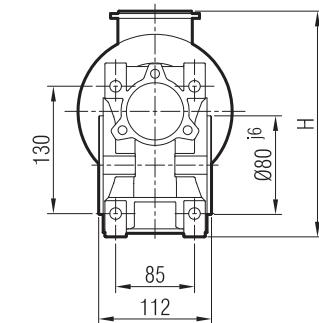
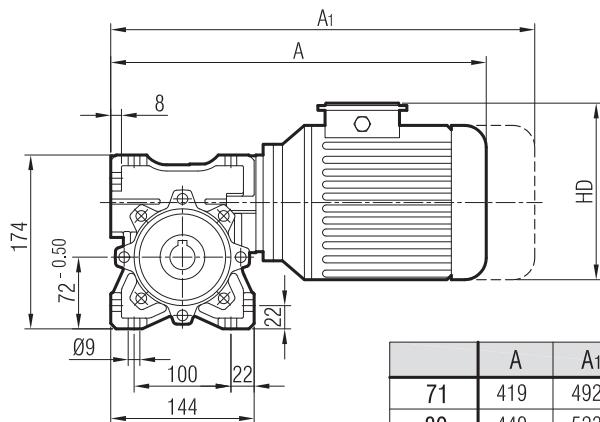


**- TR**

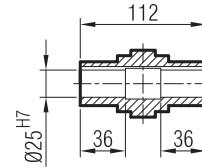
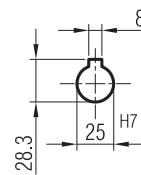
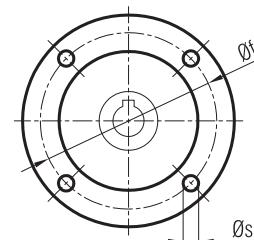
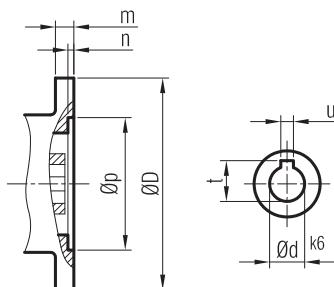
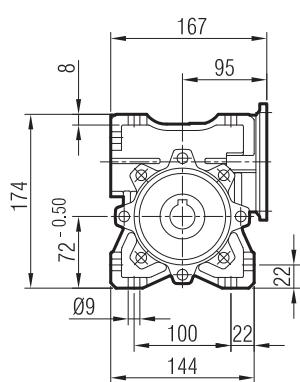


**- TL**

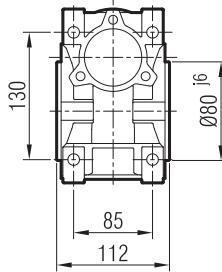
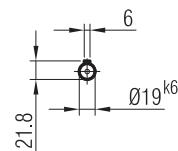
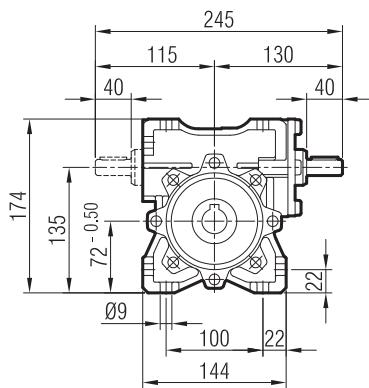


**SM 63**

	A	A <sub>1</sub>	H	HD
71	419	492	246	182
80	440	523	253	198
90 S	455	540	267	222
90 L	480	565	267	241

**SP 63**

IEC B14	m	n	p	f	D	d	t	u	s
71	10	4.5	70	85	105	14	16.3	5	7
80	10	4.5	80	100	120	19	21.8	6	7
90	11	5	95	115	140	24	27.3	8	9

**S 63**

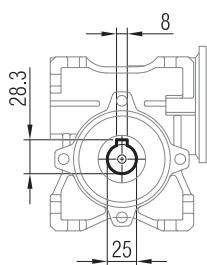
"A<sub>1</sub>" Ölçüsü Frenli Motorlar içindir.

Dimension "A<sub>1</sub>" is for motors with brake.

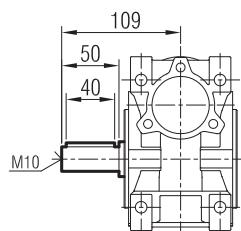
Le dimensions "A<sub>1</sub>" correspondent aux moteurs équipés de freins.



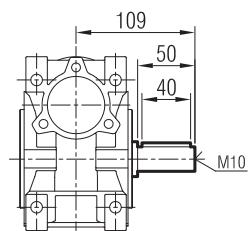
**SM / SP / S**



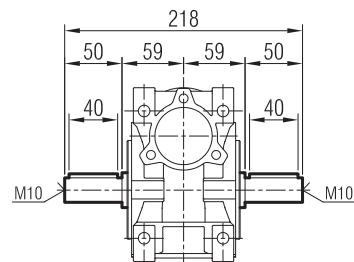
**- SR**



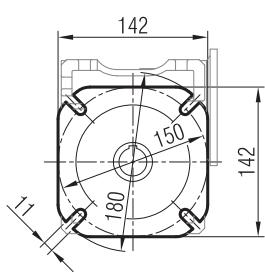
**- SL**



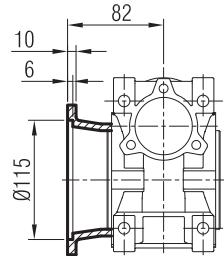
**- SD**



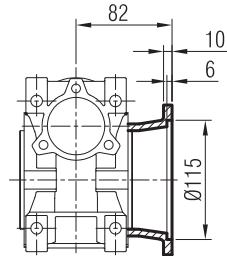
**SM / SP / S**



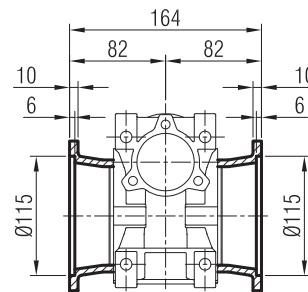
**- FR**



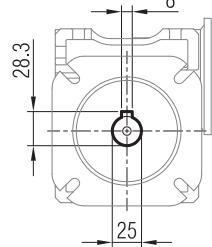
**- FL**



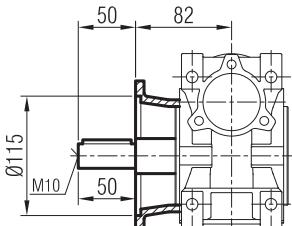
**- FD**



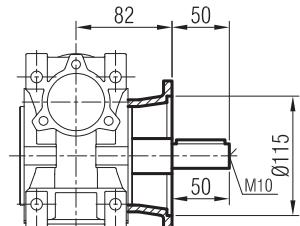
**SM / SP / S**



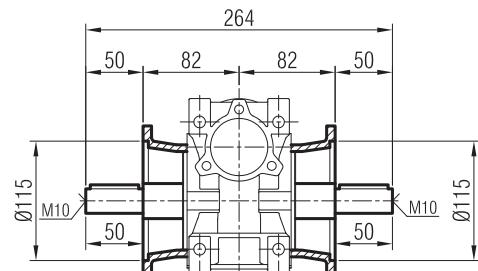
**- FR - SR**



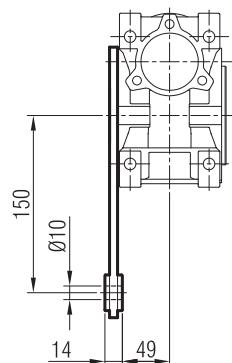
**- FL - SL**



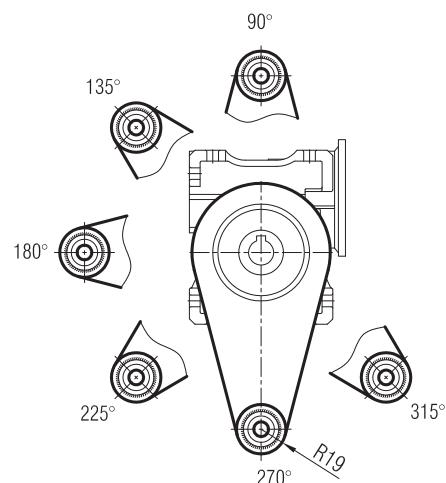
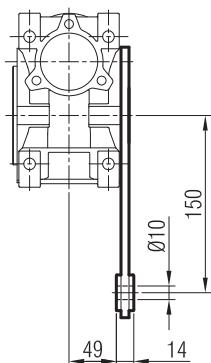
**- FD - SD**



**- TR**

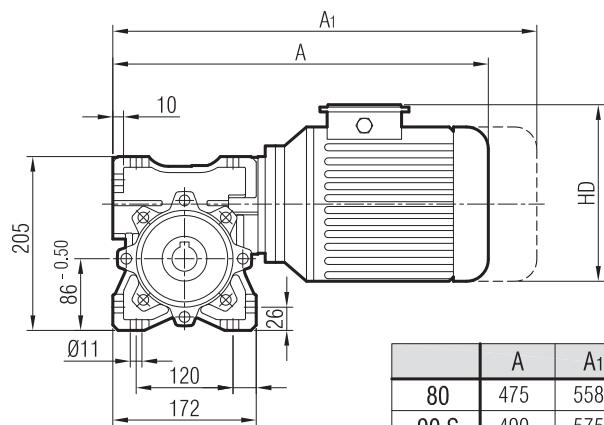


**- TL**

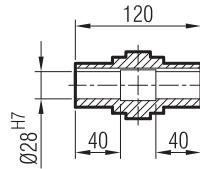
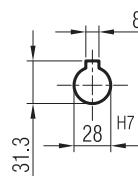
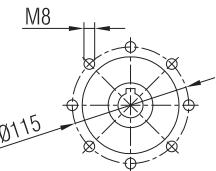
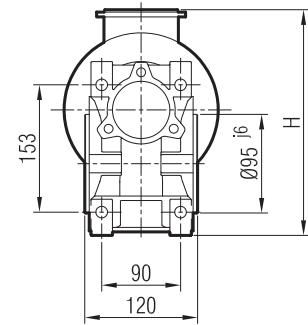




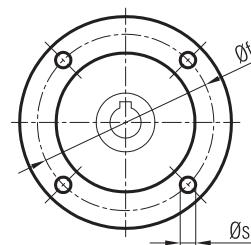
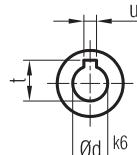
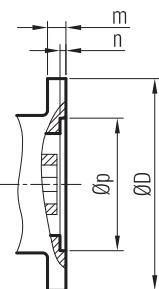
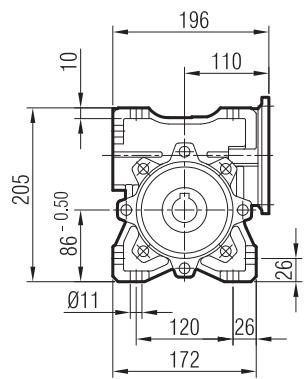
SM 75



	A	A1	H	HD
80	475	558	279	198
90 S	490	575	293	222
90 L	515	600	293	222
100	547	649	302	241

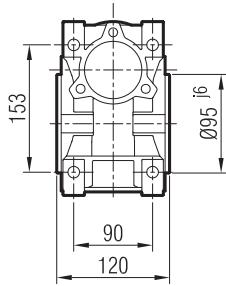
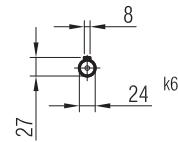
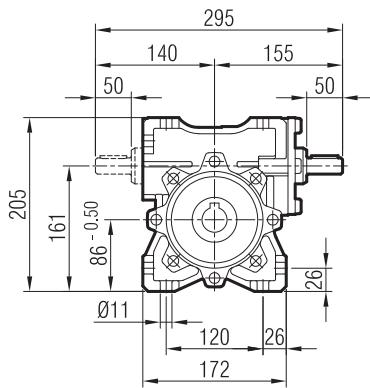


SP 75



IEC B14	m	n	p	f	D	d	t	u	s
71	10	4.5	70	85	105	14	16.3	5	7
80	10	4.5	80	100	120	19	21.8	6	7
90	11	5	95	115	140	24	27.3	8	10
100	11	5	110	130	160	28	31.3	8	10

S 75



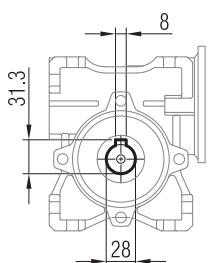
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

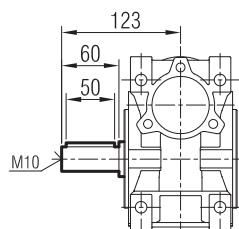
*Le dimensions "A1" correspond aux moteurs équipés de freins.*



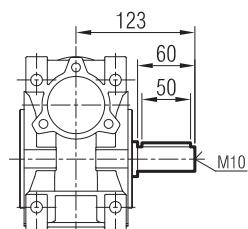
**SM / SP / S**



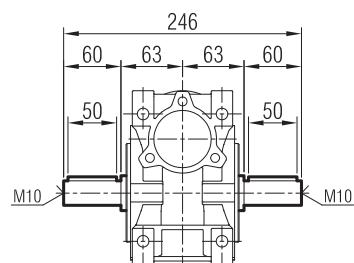
**- SR**



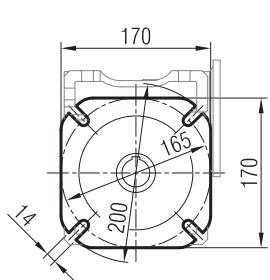
**- SL**



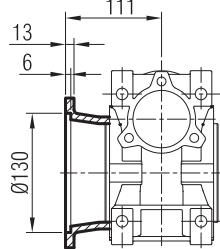
**- SD**



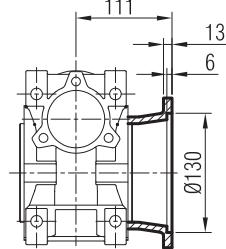
**SM / SP / S**



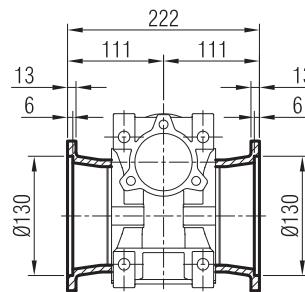
**- FR**



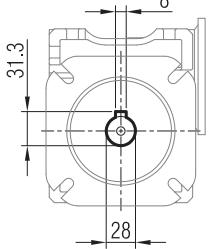
**- FL**



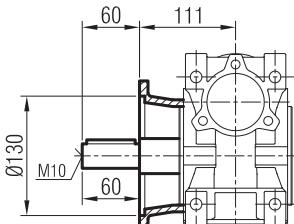
**- FD**



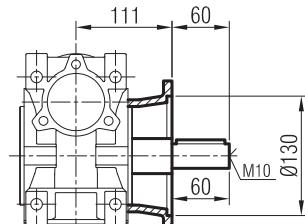
**SM / SP / S**



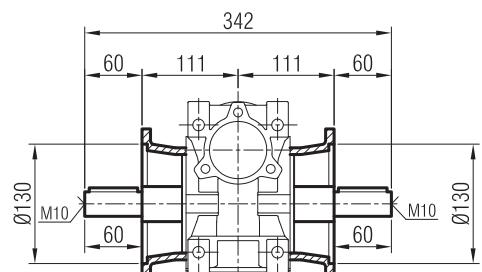
**- FR - SR**



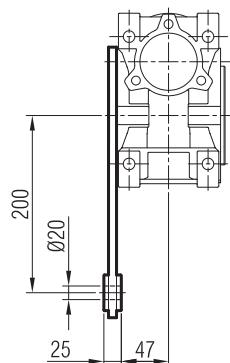
**- FL - SL**



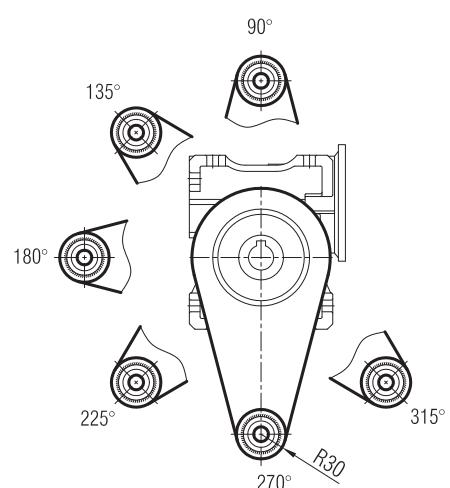
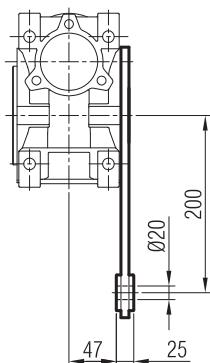
**- FD - SD**

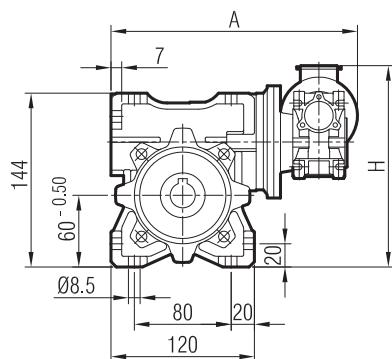


**- TR**

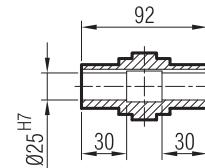
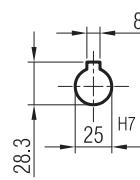
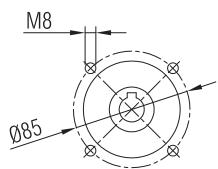
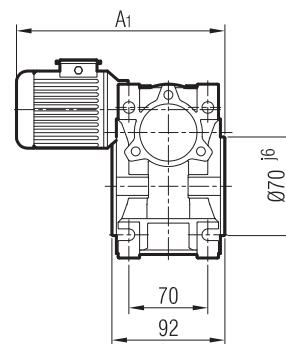
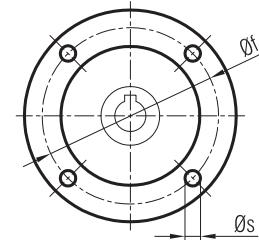
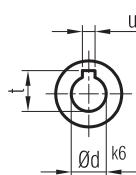
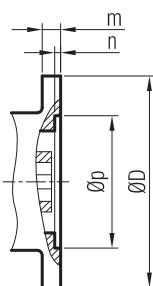
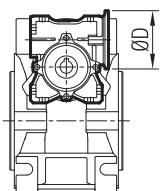


**- TL**

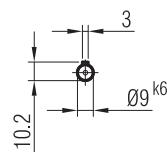
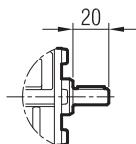
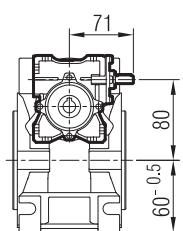


**SM 50 S 30**

	A	A <sub>1</sub>	H
63	256	298	210

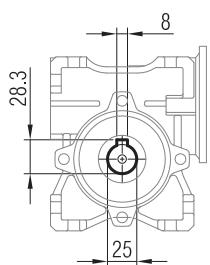
**SP 50 S 30**

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

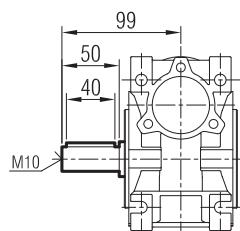
**S 50 S 30**



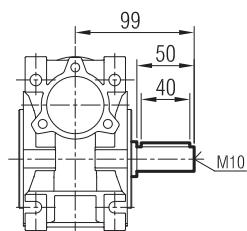
**SM / SP / S**



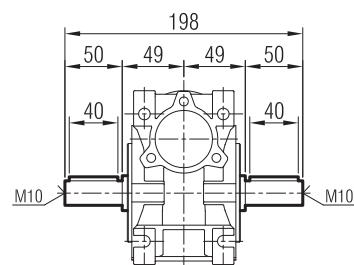
**- SR**



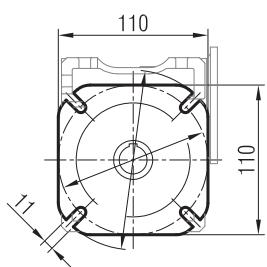
**- SL**



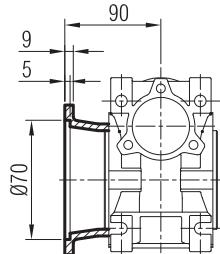
**- SD**



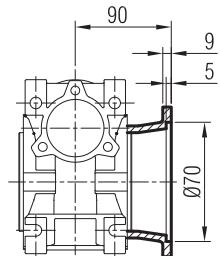
**SM / SP / S**



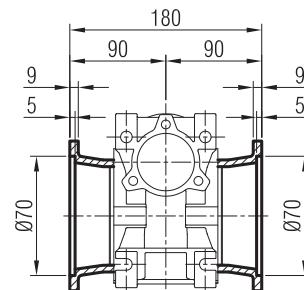
**- FR**



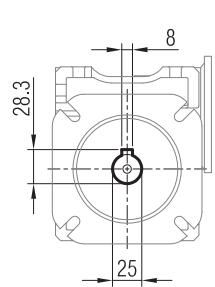
**- FL**



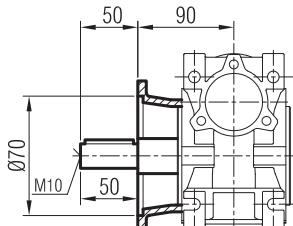
**- FD**



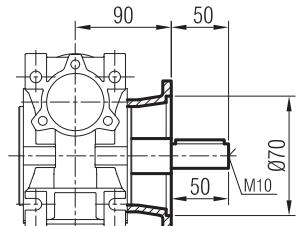
**SM / SP / S**



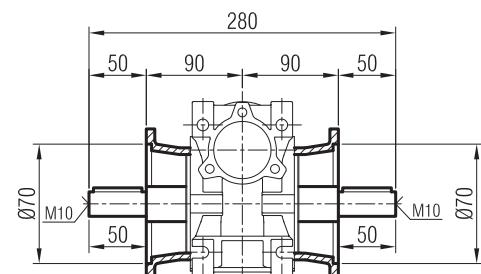
**- FR - SR**



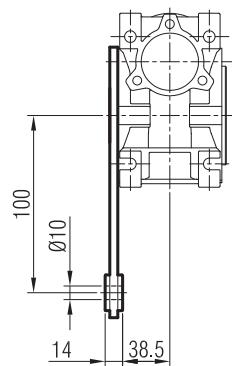
**- FL - SL**



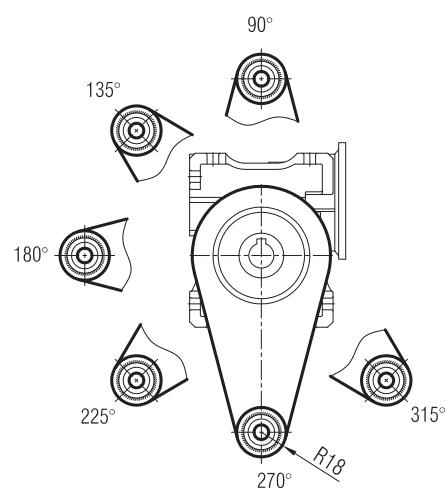
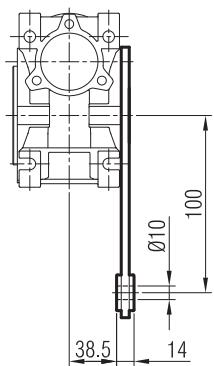
**- FD - SD**

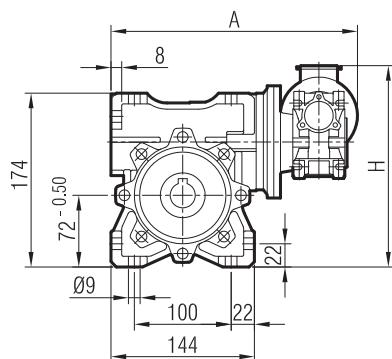


**- TR**

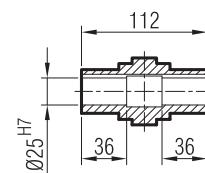
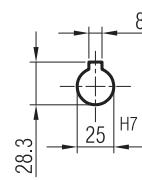
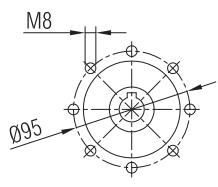
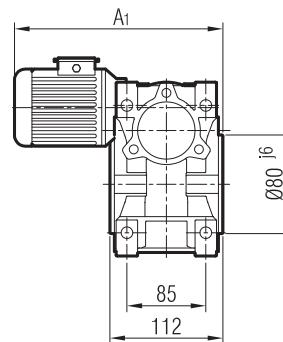
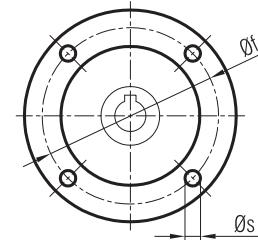
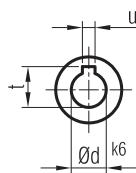
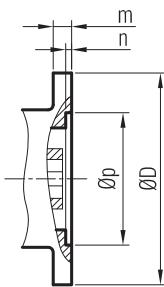
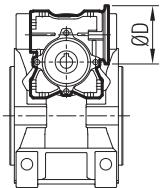


**- TL**

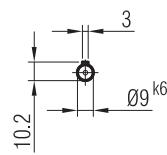
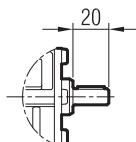
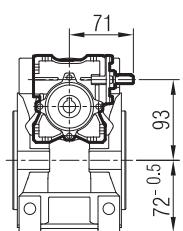



**SM 63 S 30**


	A	A <sub>1</sub>	H
63	283	308	264

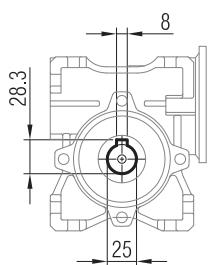

**SP 63 S 30**


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

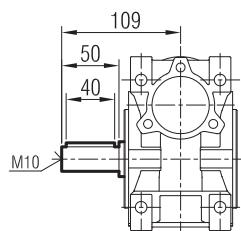
**S 63 S 30**




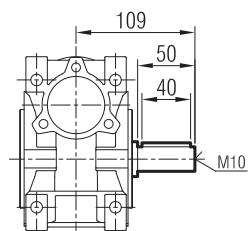
**SM / SP / S**



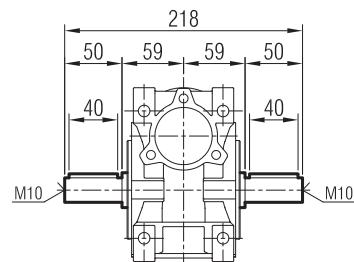
**- SR**



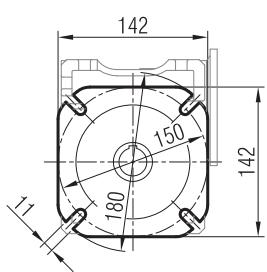
**- SL**



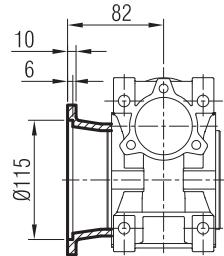
**- SD**



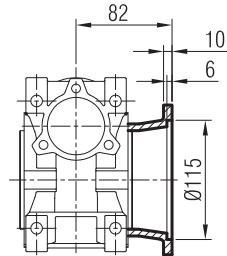
**SM / SP / S**



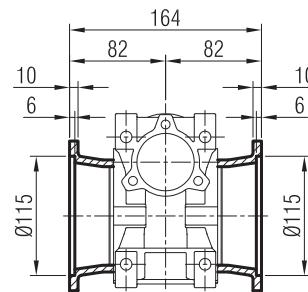
**- FR**



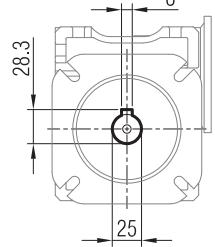
**- FL**



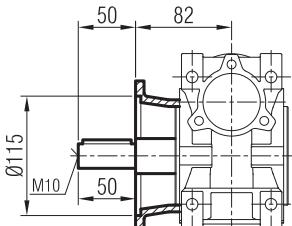
**- FD**



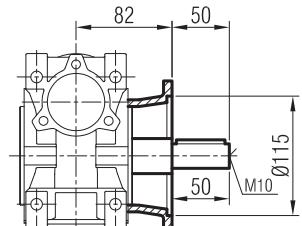
**SM / SP / S**



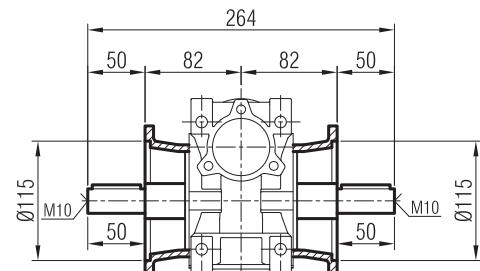
**- FR - SR**



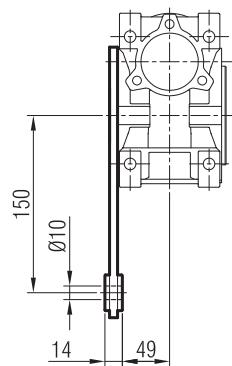
**- FL - SL**



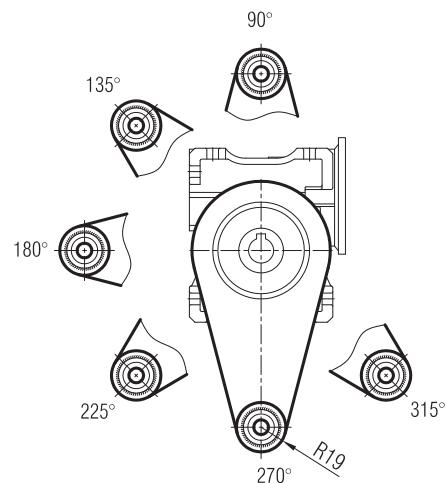
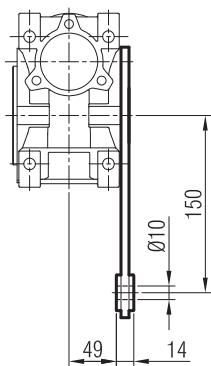
**- FD - SD**

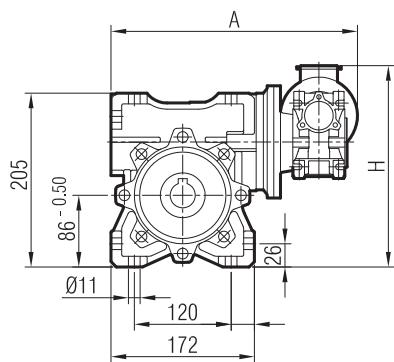


**- TR**

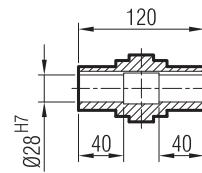
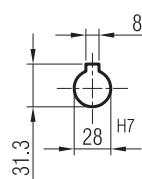
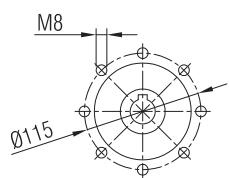
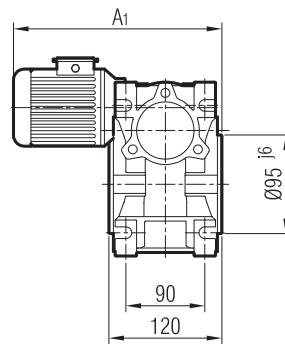
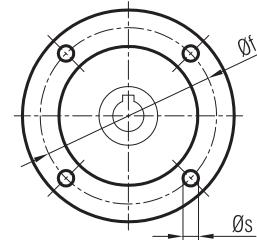
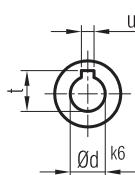
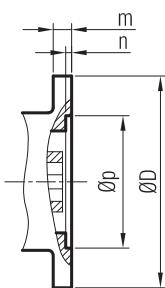
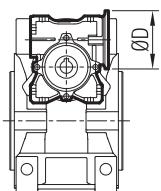


**- TL**

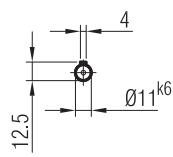
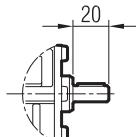
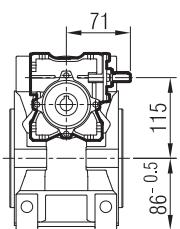


**SM 75 S 40**

	A	A <sub>1</sub>	H
63	312	385	300
71	320	426	312

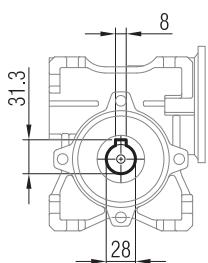
**SP 75 S 40**

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

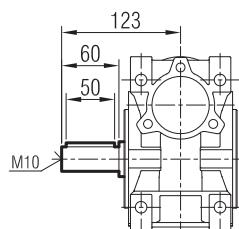
**S 75 S 40**



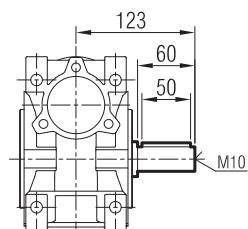
**SM / SP / S**



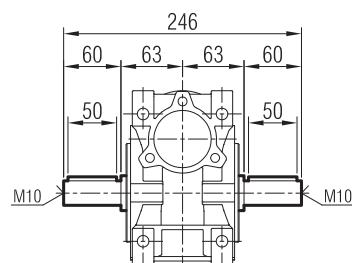
**- SR**



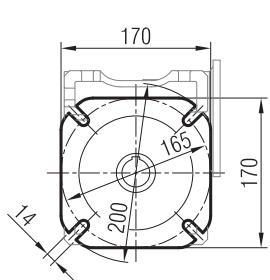
**- SL**



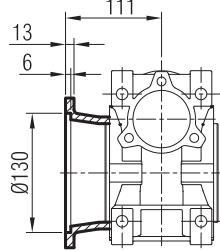
**- SD**



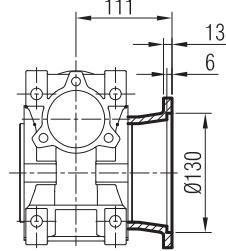
**SM / SP / S**



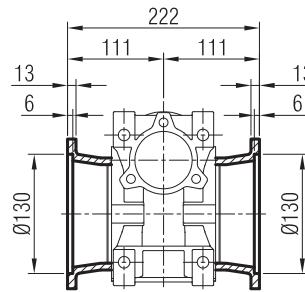
**- FR**



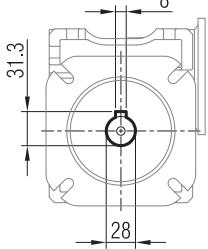
**- FL**



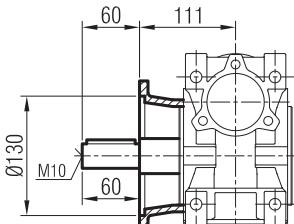
**- FD**



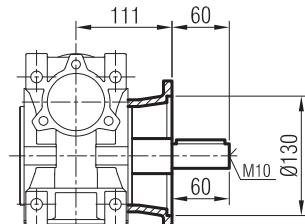
**SM / SP / S**



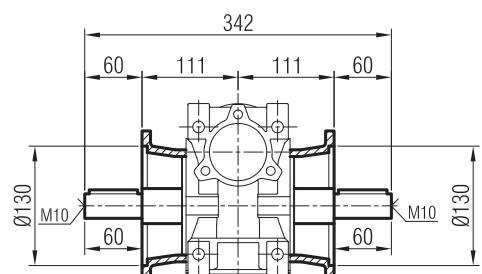
**- FR - SR**



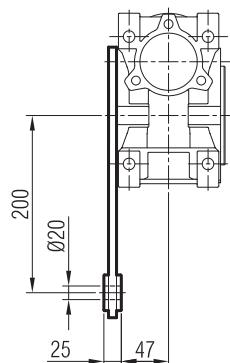
**- FL - SL**



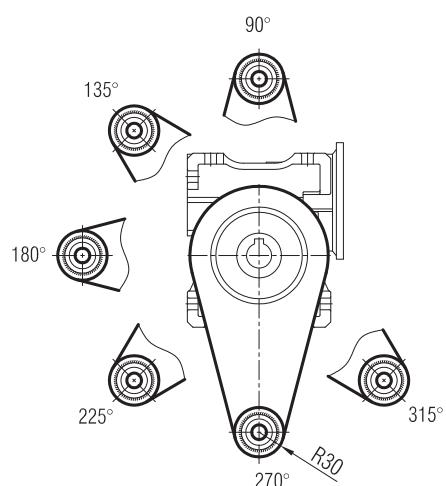
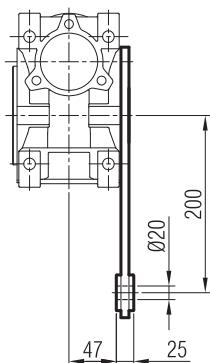
**- FD - SD**



**- TR**

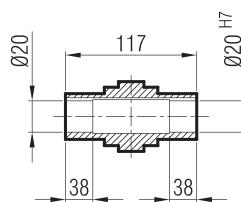
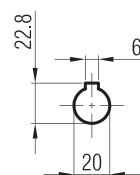
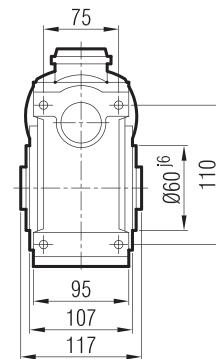
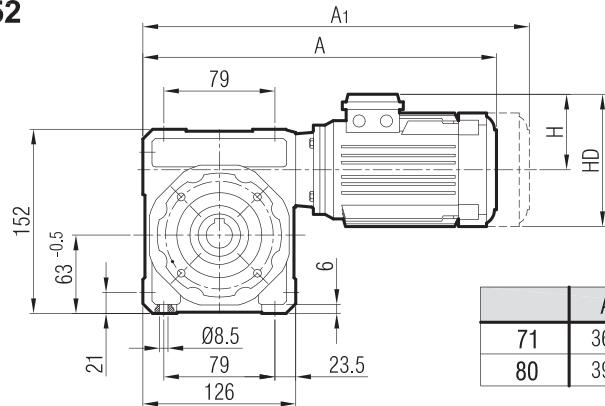


**- TL**

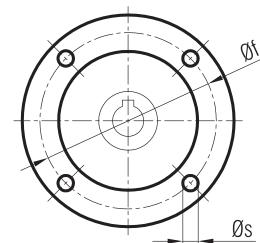
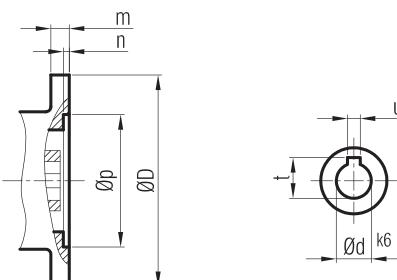
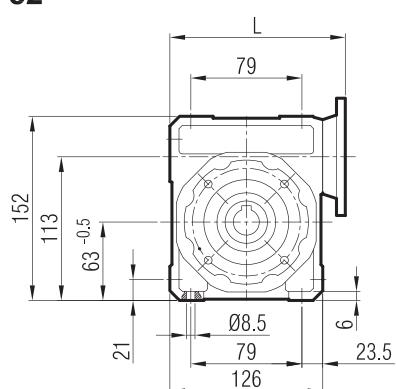




## İRSAM 52

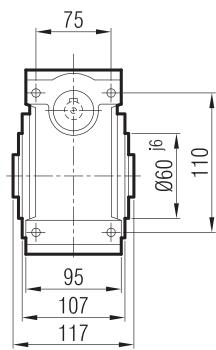
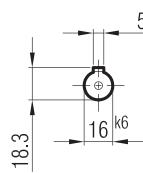
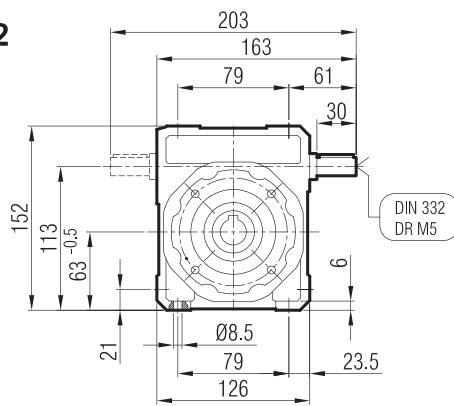


## İRSAF 52



IEC B14	L	m	n	p	f	D	d	t	u	s
71	145	8	3.5	70	85	105	14	16.3	5	7
80	146	8	4	80	100	120	19	21.8	6	7

## İRSA 52



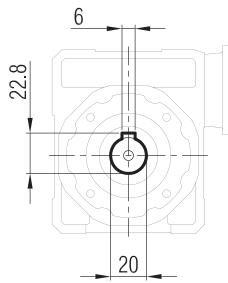
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

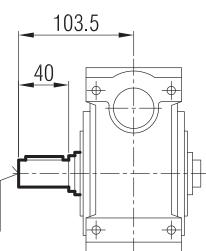
Le dimensions "A1" correspondent aux moteurs équipés de freins.



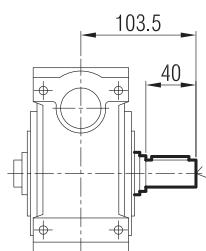
### İRSAM / İRSAP / İRSA



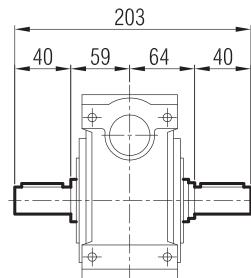
### - SR



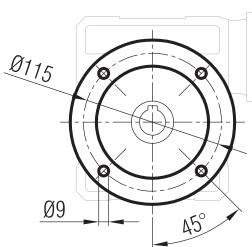
### - SL



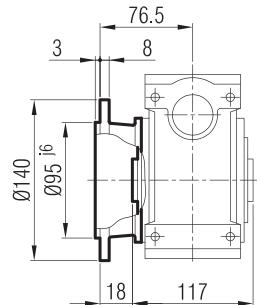
### - SD



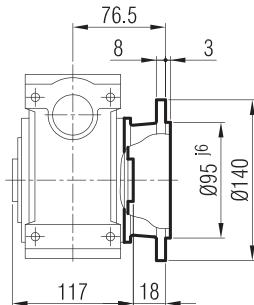
### İRSFM / İRSFP / İRSF



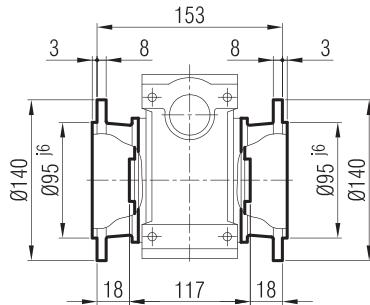
### - FR



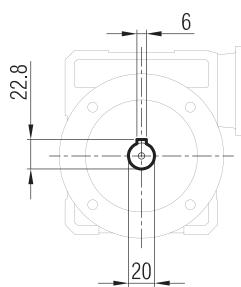
### - FL



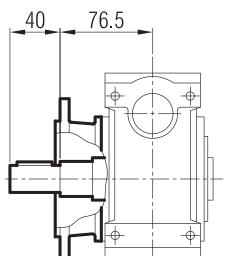
### - FD



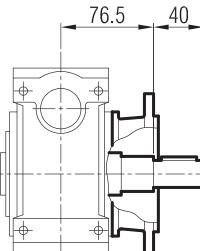
### İRSFM / İRSFP / İRSF



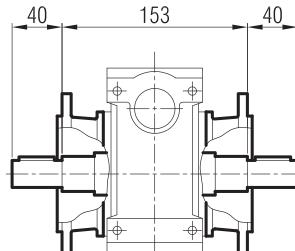
### - FR - SR



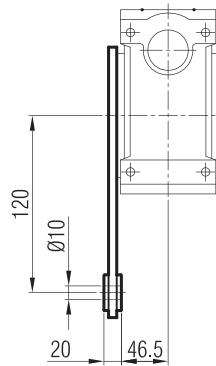
### - FL - SL



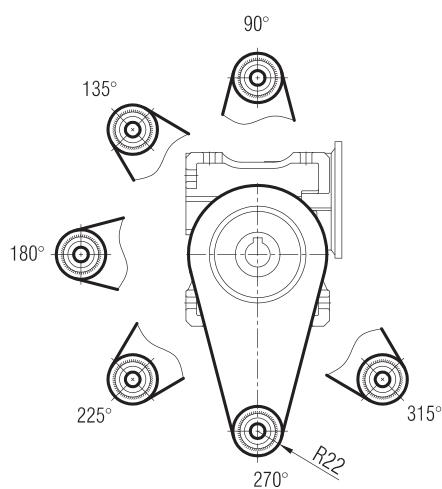
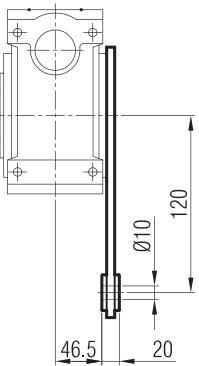
### - FD - SD



### - TR

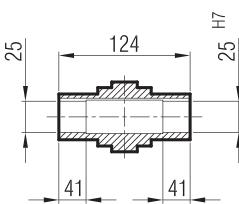
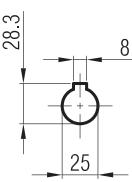
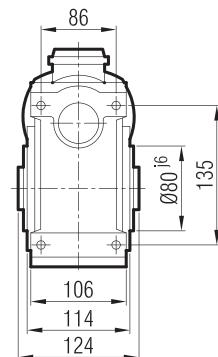
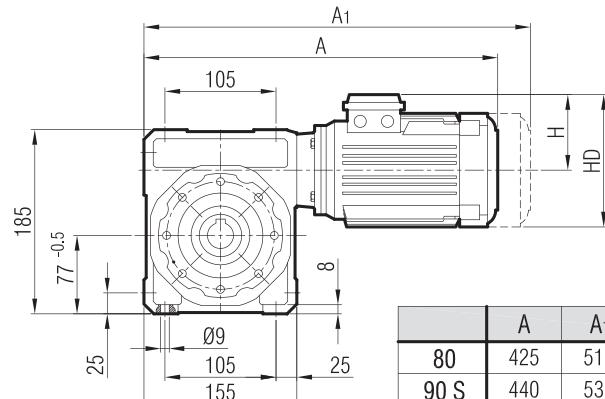
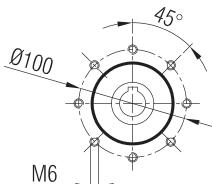


### - TL

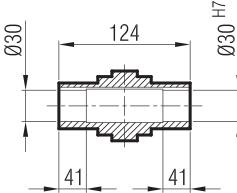
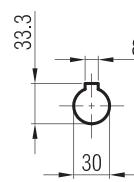




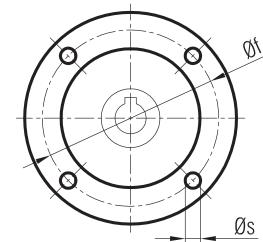
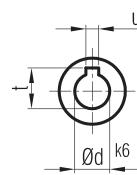
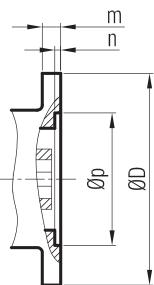
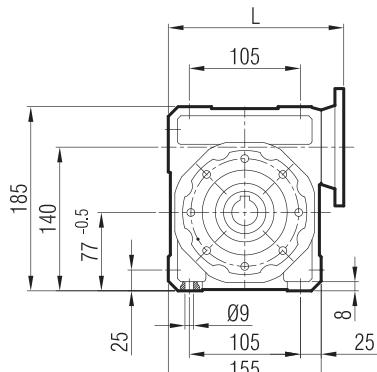
## IRSAM 65



Opsiyonel  
Optional  
Optional

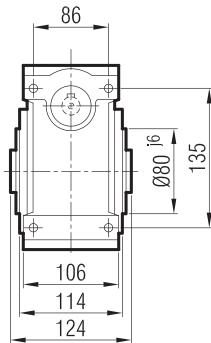
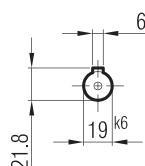
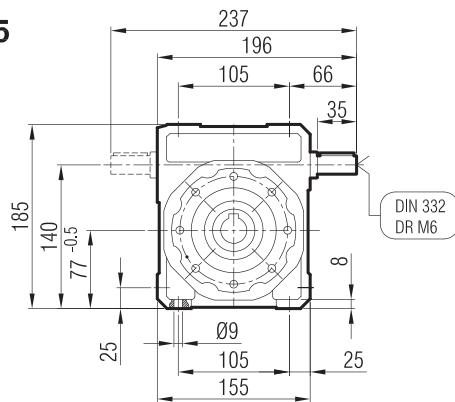


## IRSAP 65



IEC B14	L	m	n	p	f	D	d	t	u	s
80	181	8	5	80	100	120	19	21.8	6	7
90	181	10	5	95	115	140	24	27.3	8	9

## IRSA 65



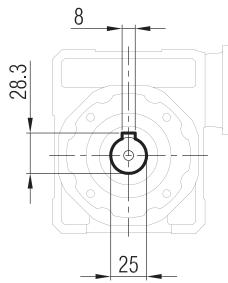
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

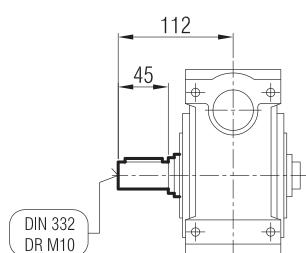
Le dimensions "A1" correspondent aux moteurs équipés de freins.



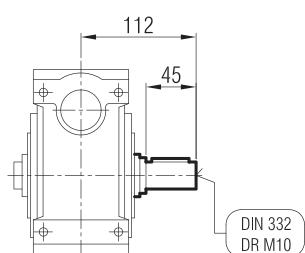
**İRSAM / İRSAP / İRSA**



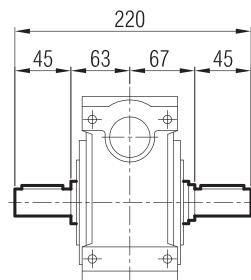
**- SR**



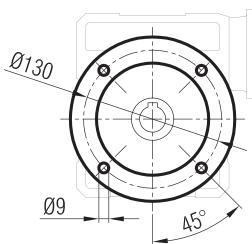
**- SL**



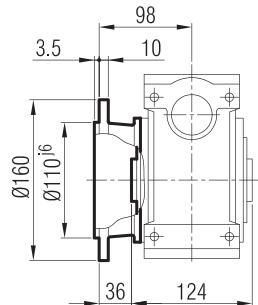
**- SD**



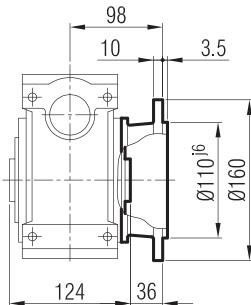
**İRSFM / İRSFP / İRSF**



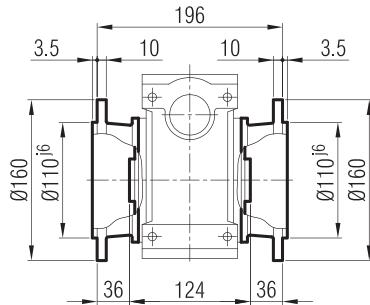
**- FR**



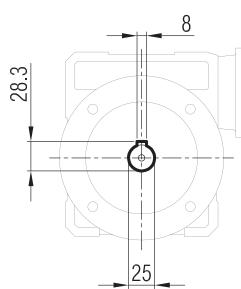
**- FL**



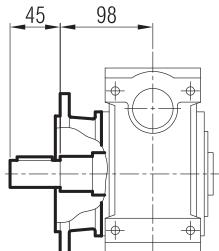
**- FD**



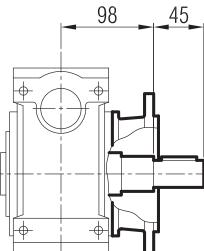
**İRSFM / İRSFP / İRSF**



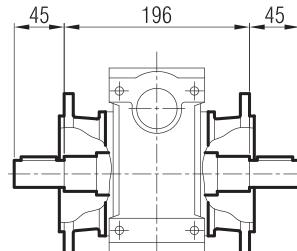
**- FR - SR**



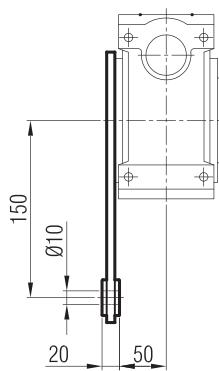
**- FL - SL**



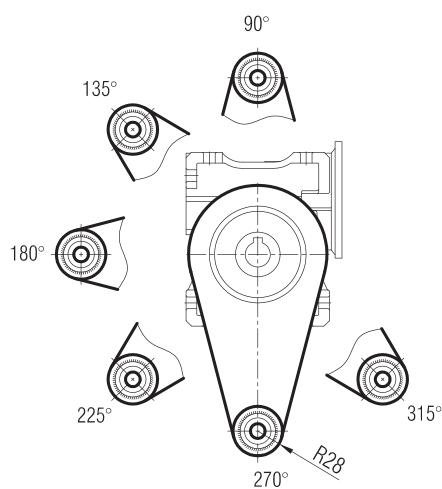
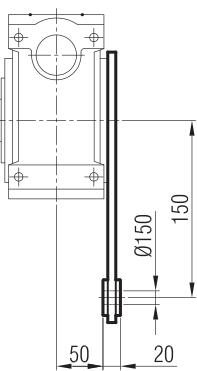
**- FD - SD**



**- TR**

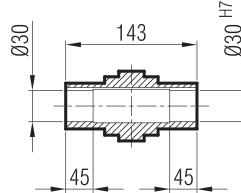
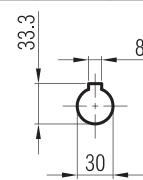
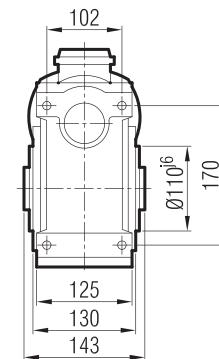
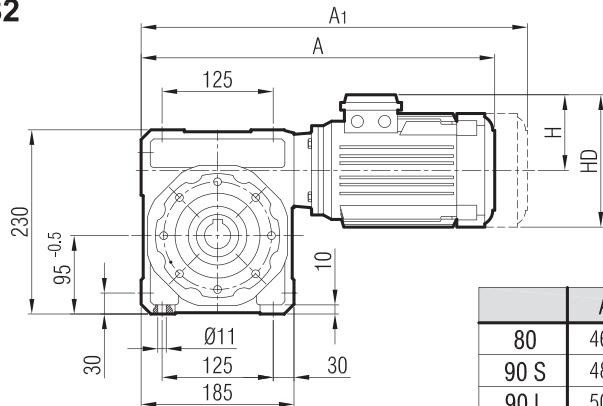


**- TL**

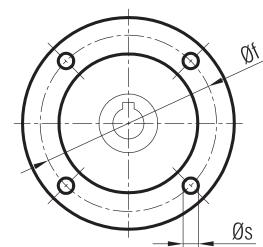
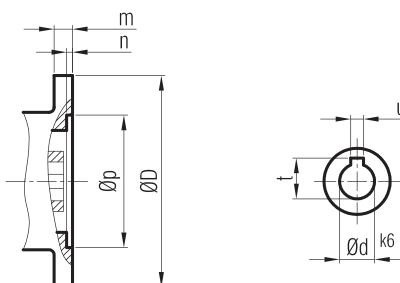
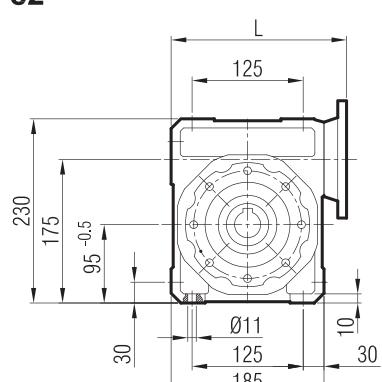




## İRSAM 82

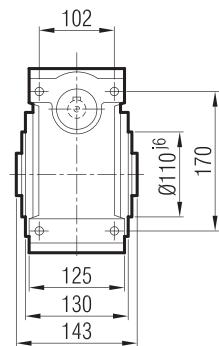
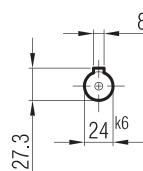
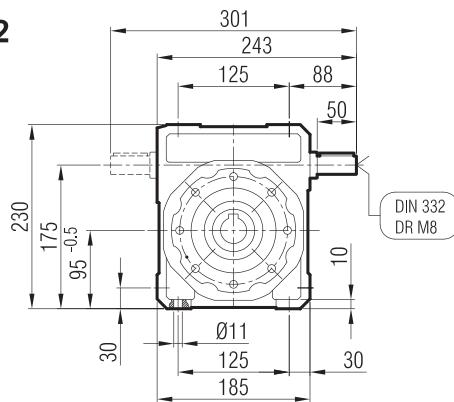


## İR SAP 82



IEC B14	L	m	n	p	f	D	d	t	u	s
80	222	9	5	80	100	120	19	21.8	6	9
90	222	10	5	95	115	140	24	27.3	8	9

## İR SA 82



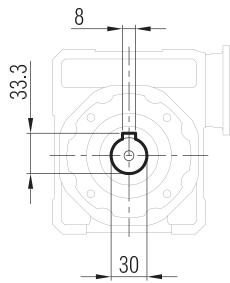
"A<sub>1</sub>" Ölçüsü Frenli Motorlar içindir.

Dimension "A<sub>1</sub>" is for motors with brake.

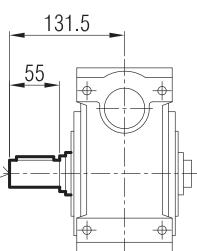
Le dimensions "A<sub>1</sub>" correspondent aux moteurs équipés de freins.



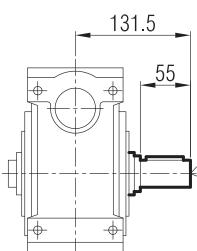
**İRSAM / İRSAP / İRSA**



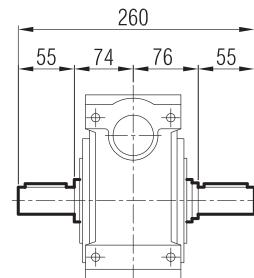
**- SR**



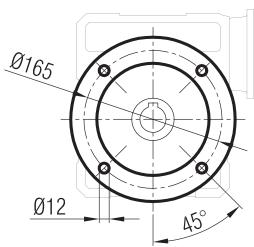
**- SL**



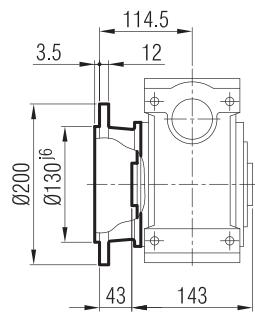
**- SD**



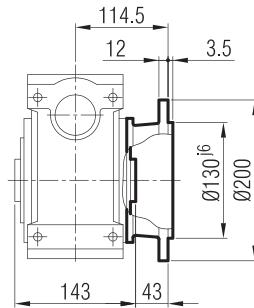
**İRSFM / İRSFP / İRSF**



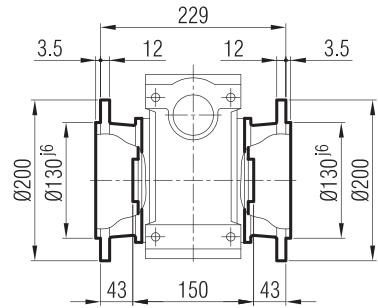
**- FR**



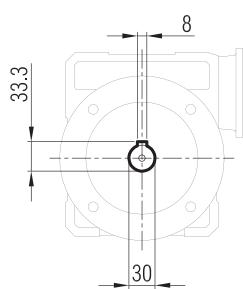
**- FL**



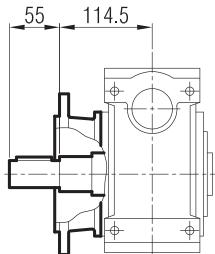
**- FD**



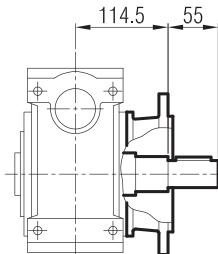
**İRSFM / İRSFP / İRSF**



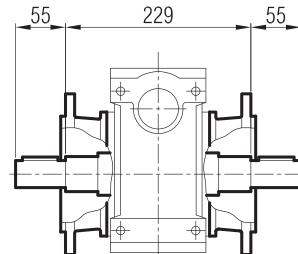
**- FR - SR**



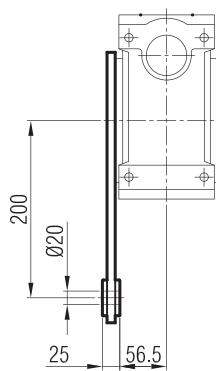
**- FL - SL**



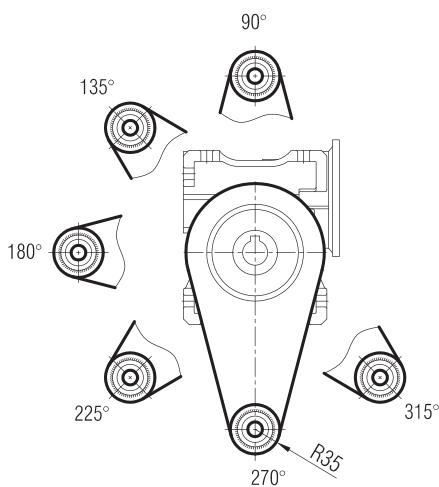
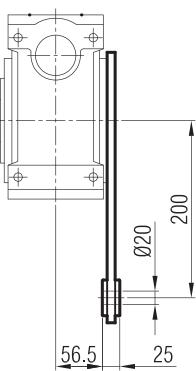
**- FD - SD**



**- TR**

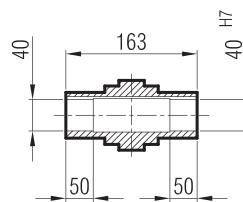
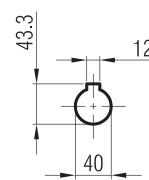
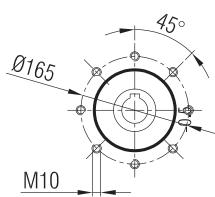
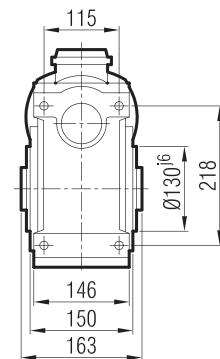
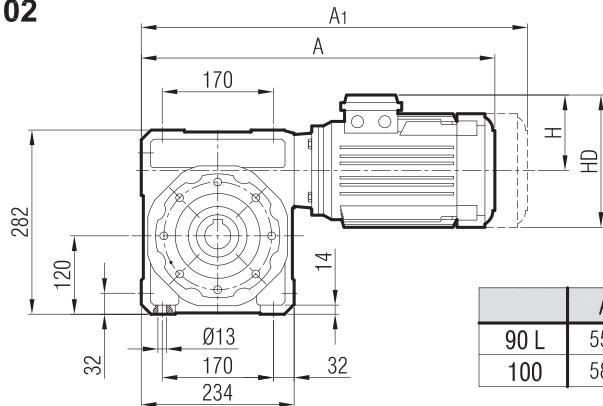


**- TL**

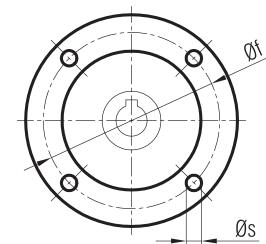
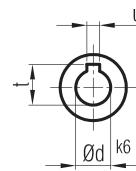
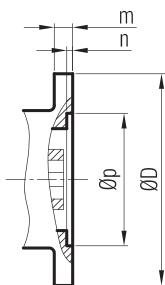
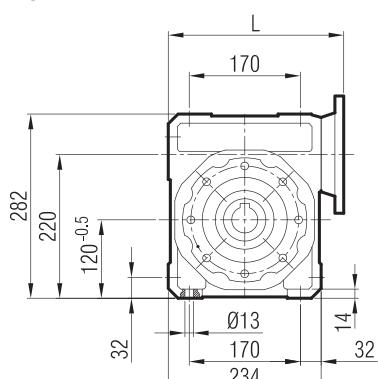




## İRSAM 102

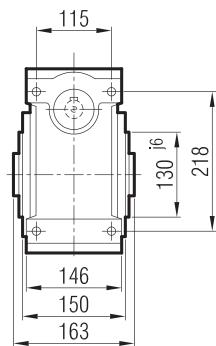
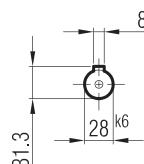
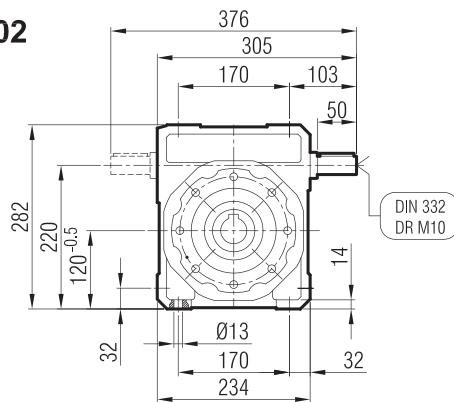


## İRSAP 102



IEC B14	L	m	n	p	f	D	d	t	u	s
90	271	10	5	95	115	140	24	27.3	8	9
100	271	10	5	110	130	160	28	31.3	8	9

## İRSA 102



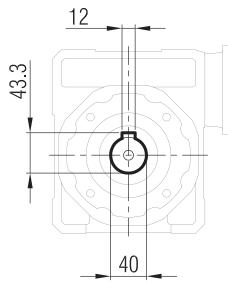
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

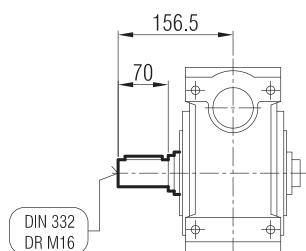
Le dimensions "A1" correspondent aux moteurs équipés de freins.



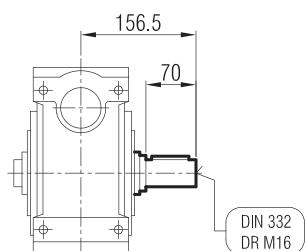
**IRSAM / IRSAP / IRSA**



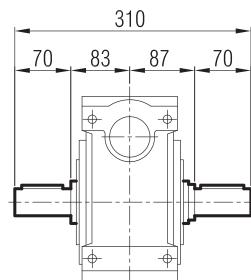
**- SR**



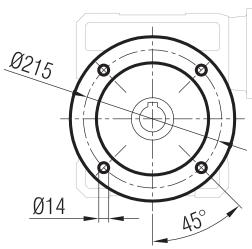
**- SL**



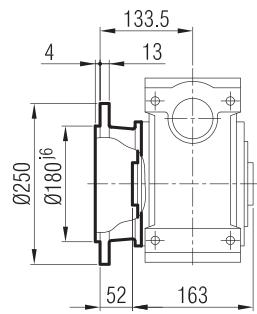
**- SD**



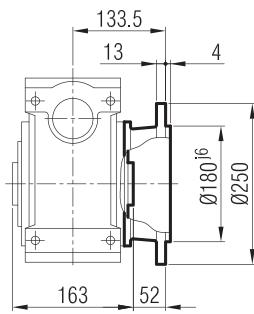
**IRSFM / IRSFP / IRSF**



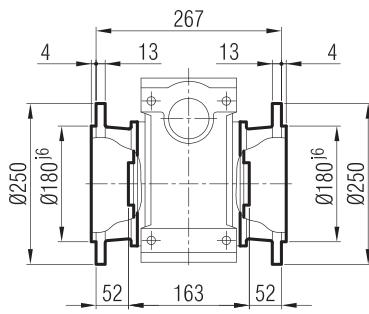
**- FR**



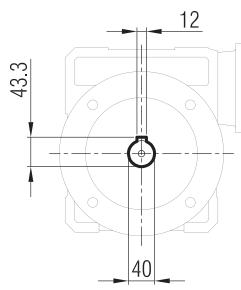
**- FL**



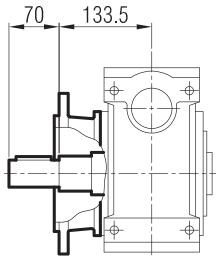
**- FD**



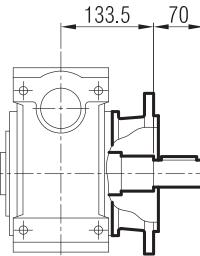
**IRSFM / IRSFP / IRSF**



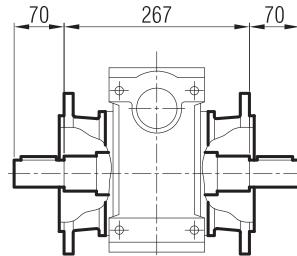
**- FR - SR**



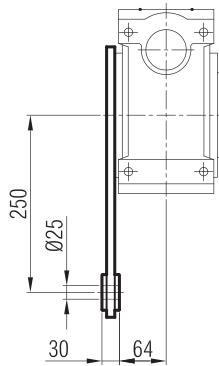
**- FL - SL**



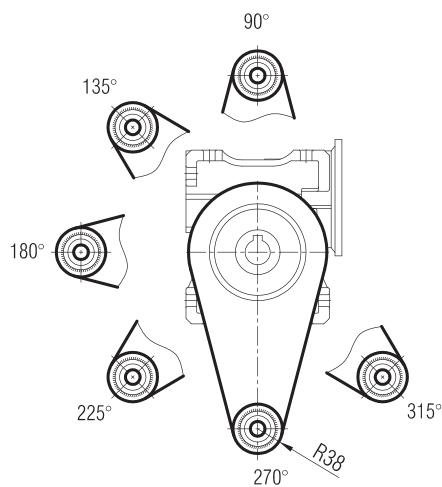
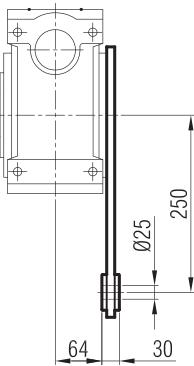
**- FD - SD**



**- TR**

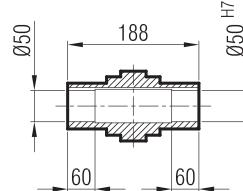
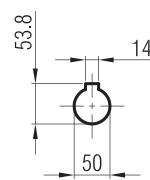
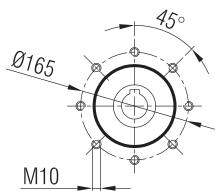
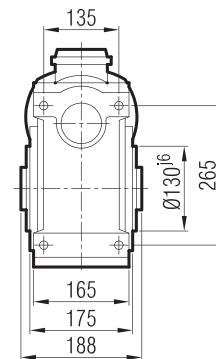
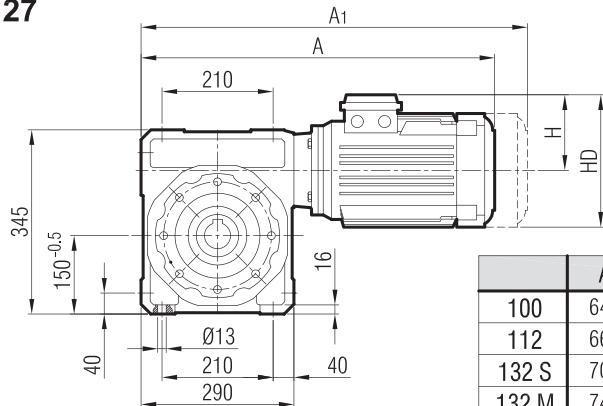


**- TL**

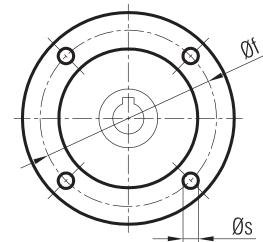
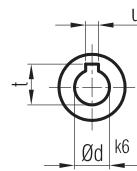
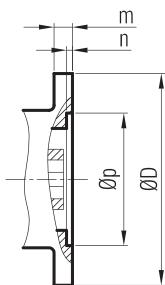
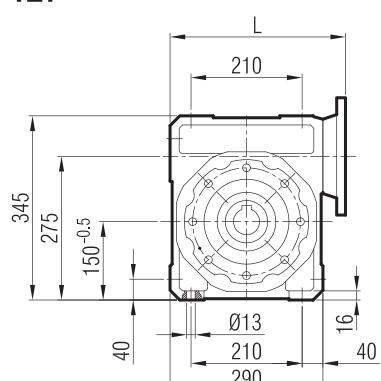




## İRSAM 127

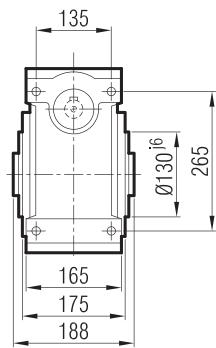
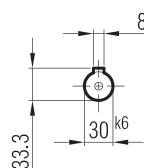
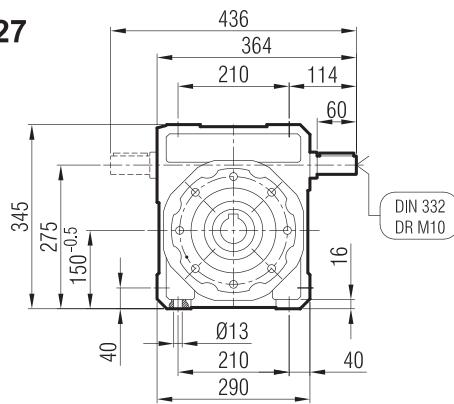


## İRSAF 127



IEC B14	L	m	n	p	f	D	d	t	u	s
100	328	11	5	95	115	140	28	27.3	8	9
112	328	11	5	110	130	160	28	31.3	8	9
132	327	11	5	110	130	160	38	31.3	10	11

## İRSA 127



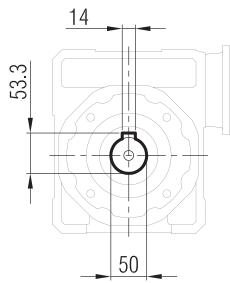
"A<sub>1</sub>" Ölçüsü Frenli Motorlar içindir.

Dimension "A<sub>1</sub>" is for motors with brake.

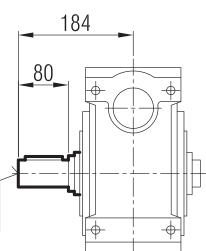
Le dimensions "A<sub>1</sub>" correspondent aux moteurs équipés de freins.



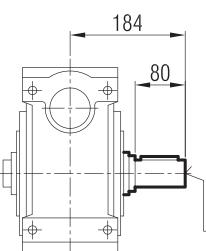
**İRSAM / İRSAP / İRSA**



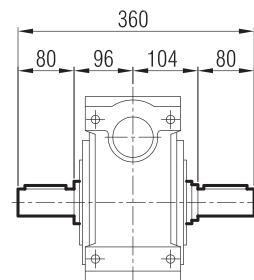
**- SR**



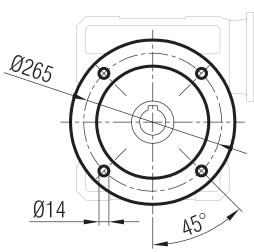
**- SL**



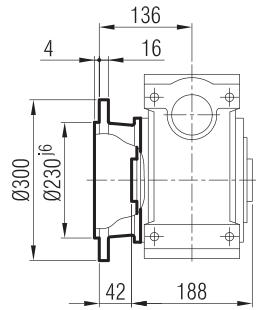
**- SD**



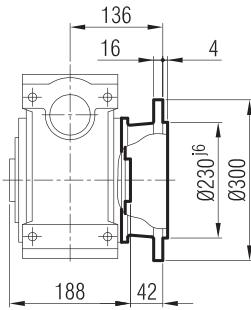
**İRSFM / İRSFP / İRSF**



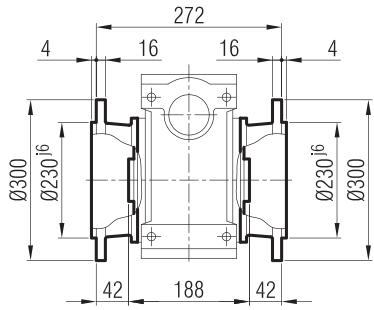
**- FR**



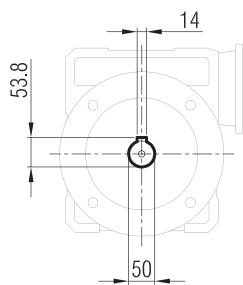
**- FL**



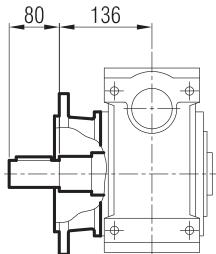
**- FD**



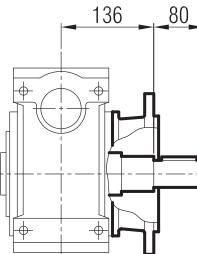
**İRSFM / İRSFP / İRSF**



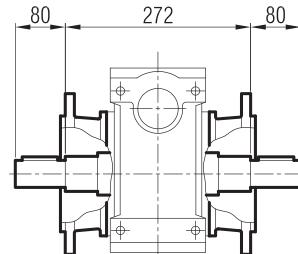
**- FR - SR**



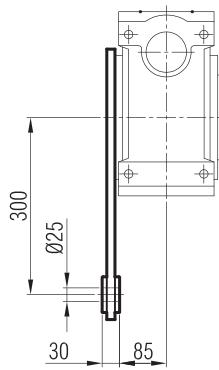
**- FL - SL**



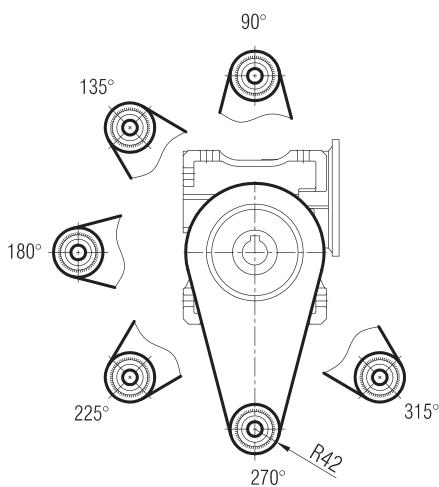
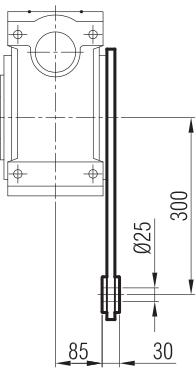
**- FD - SD**



**- TR**

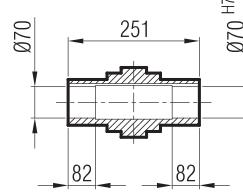
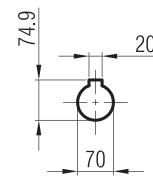
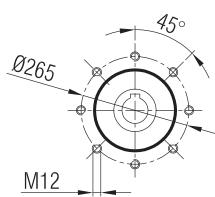
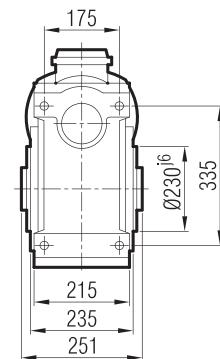
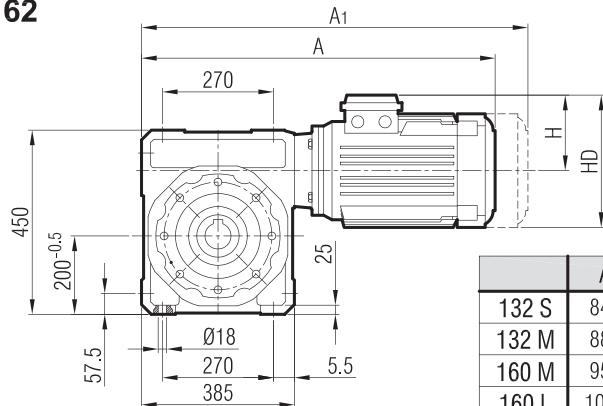


**- TL**

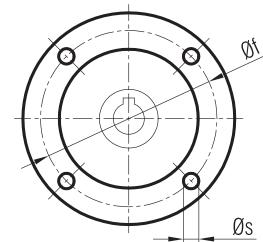
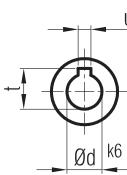
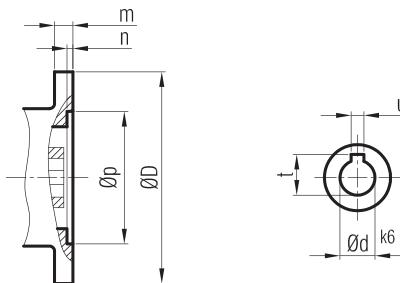
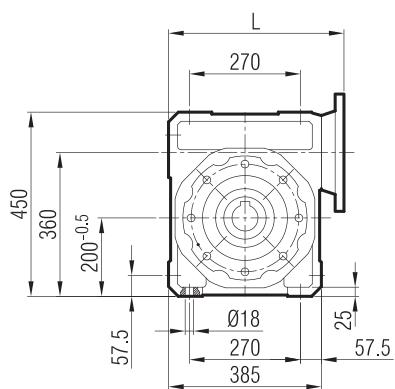




## İRSAM 162

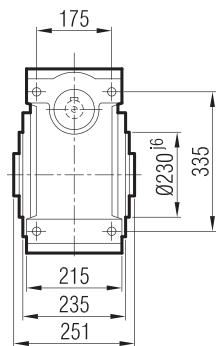
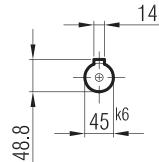
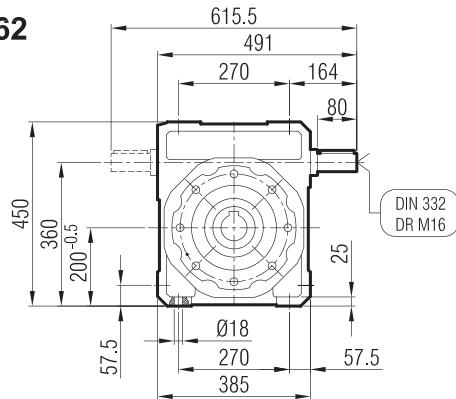


## İRSAP 162



IEC B14	L	m	n	p	f	D	d	t	u	s
132	446	23	5	130	165	200	38	41.3	10	11
160	446	17	5	180	215	250	42	45.3	12	13

## İRSA 162



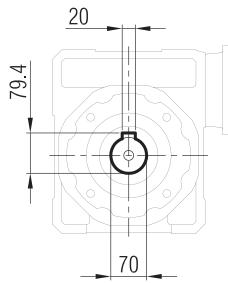
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

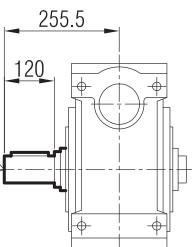
Le dimensions "A1" correspondent aux moteurs équipés de freins.



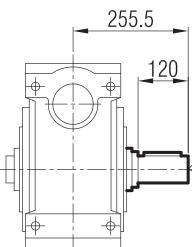
**IRSAM / IRSAP / IRSA**



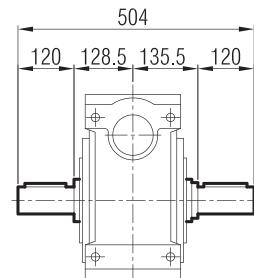
**- SR**



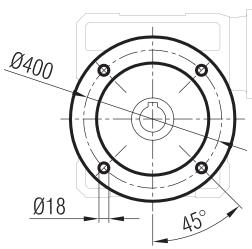
**- SL**



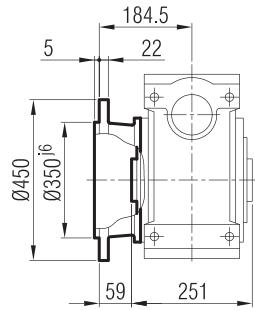
**- SD**



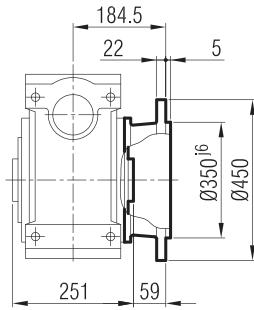
**IRSFM / IRSFP / IRSF**



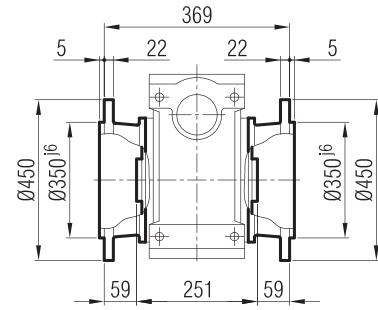
**- FR**



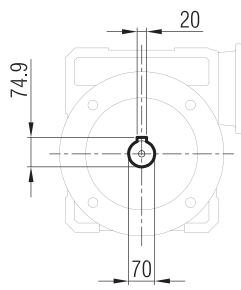
**- FL**



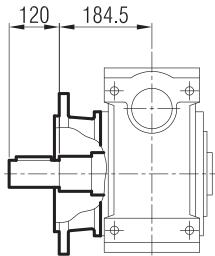
**- FD**



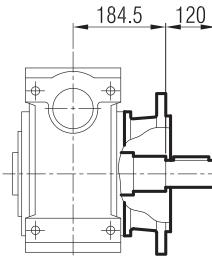
**IRSFM / IRSFP / IRSF**



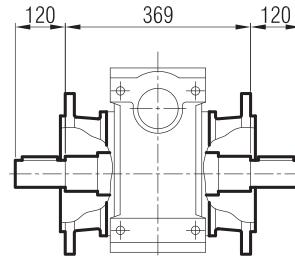
**- FR - SR**



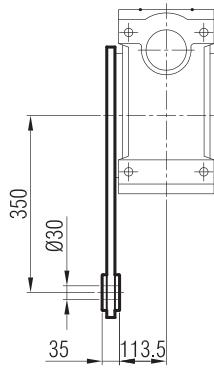
**- FL - SL**



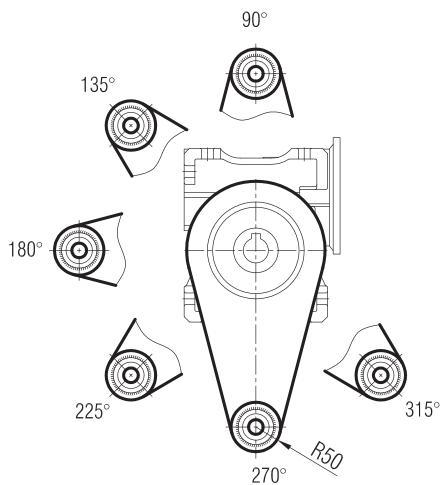
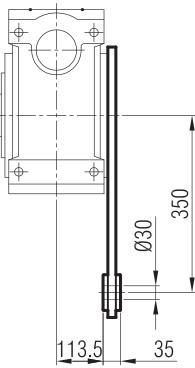
**- FD - SD**



**- TR**

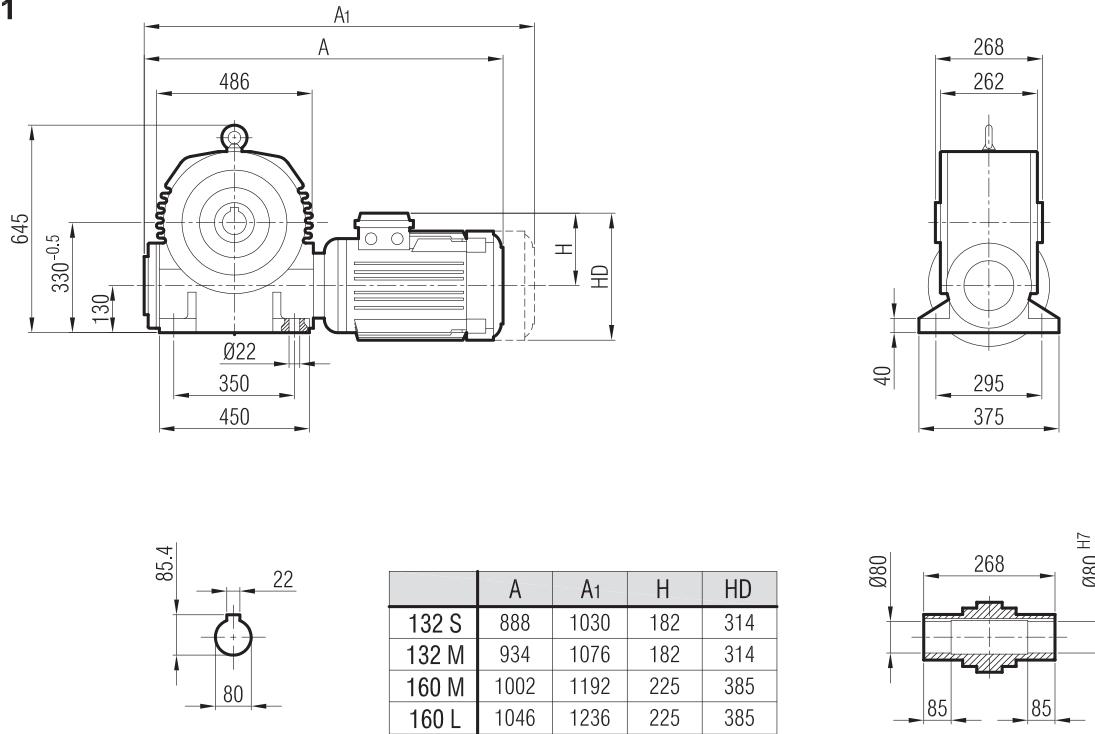


**- TL**

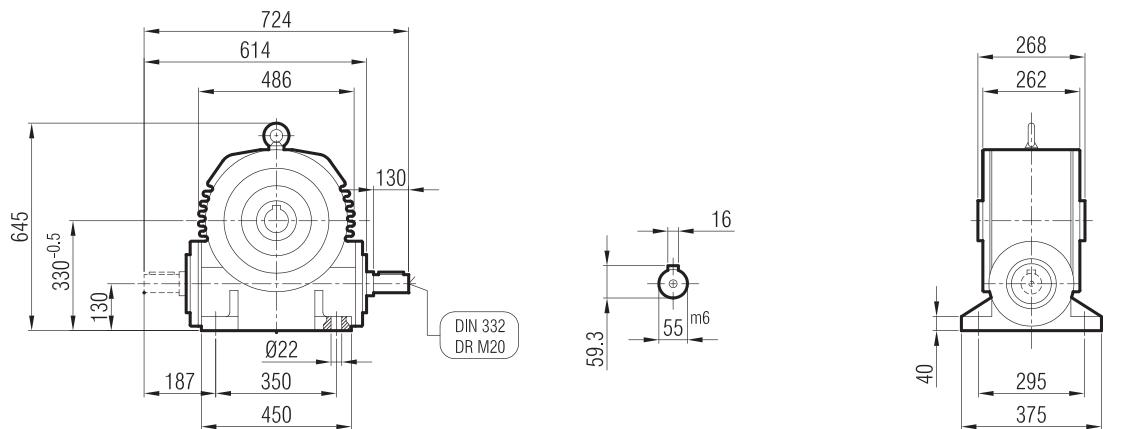




## IRSAM 201



## IRSA 201



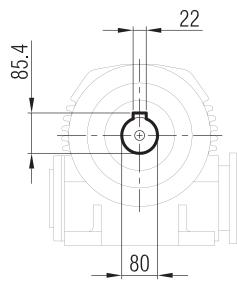
**"A<sub>1</sub>" Ölçüsü Frenli Motorlar İçindir.**

Dimension "A<sub>1</sub>" is for motors with brake.

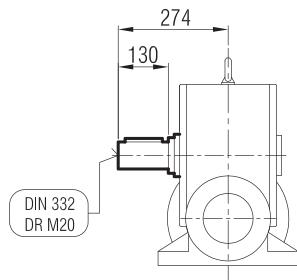
Le dimensions "A<sub>1</sub>" correspondent aux moteurs équipés de freins.



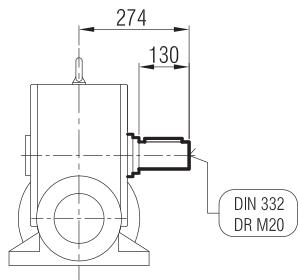
### IRSAM / IRSA



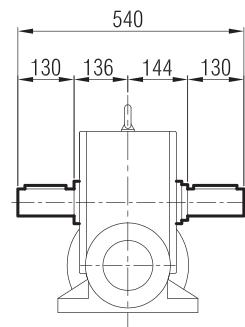
### - SR



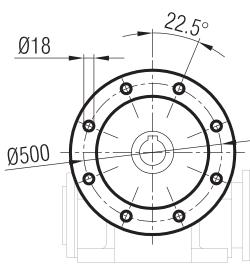
### - SL



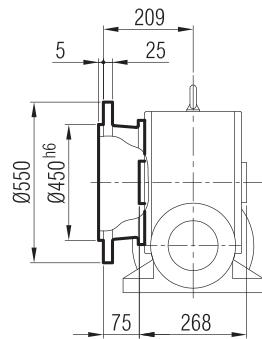
### - SD



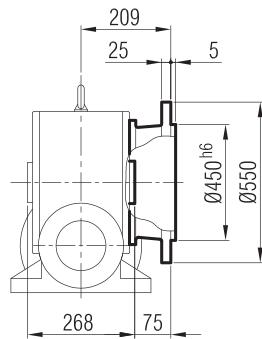
### IRSFM / IRSF



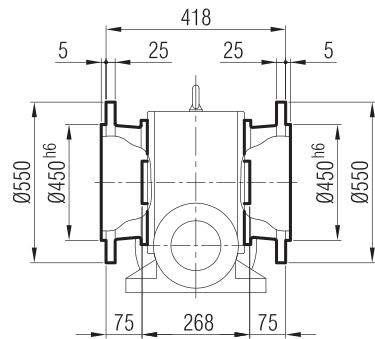
### - FR



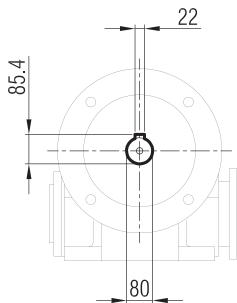
### - FL



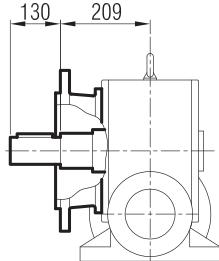
### - FD



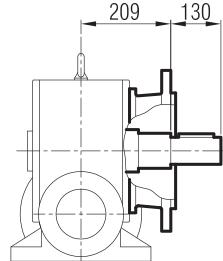
### IRSFM / IRSF



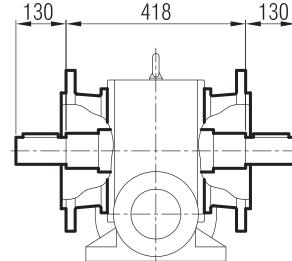
### - FR - SR



### - FL - SL

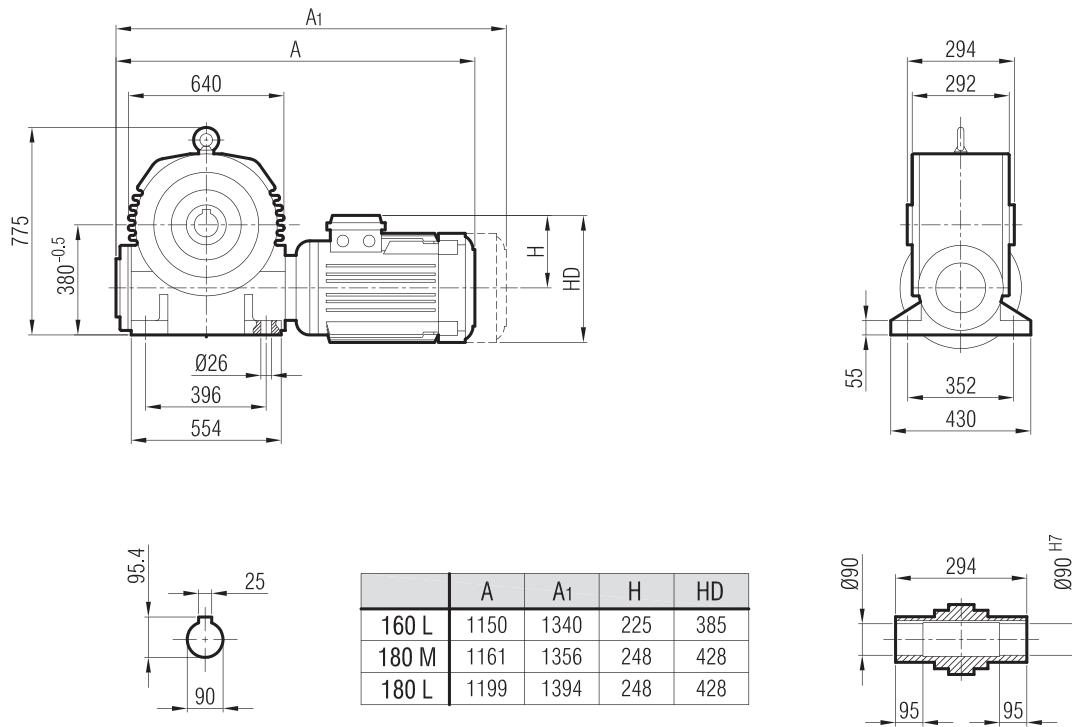


### - FD - SD

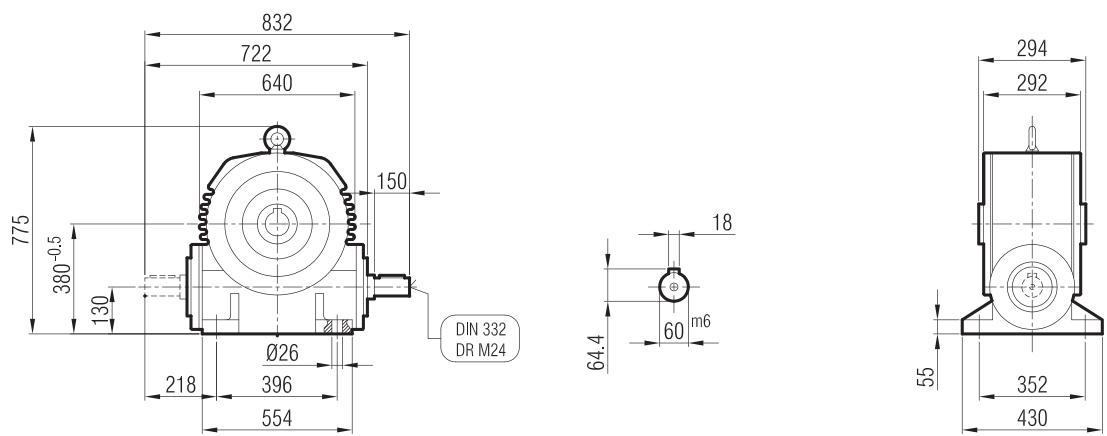




## İRSAM 250



## İRSA 250



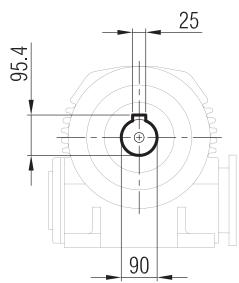
**"A<sub>1</sub>" Ölçüsü Frenli Motorlar İçindir.**

Dimension "A<sub>1</sub>" is for motors with brake.

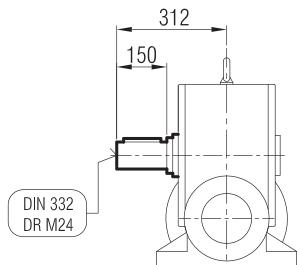
Le dimensions "A<sub>1</sub>" correspondent aux moteurs équipés de freins.



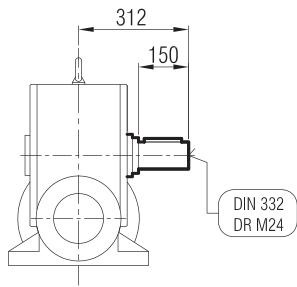
**İRSAM / İRSA**



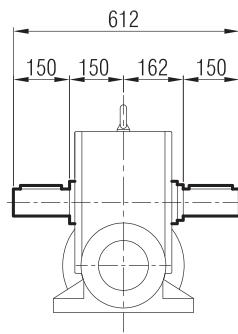
**- SR**



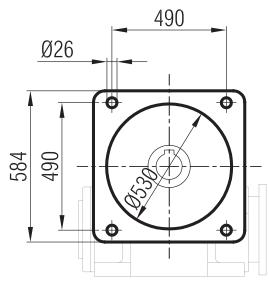
**- SL**



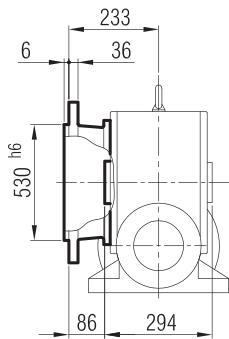
**- SD**



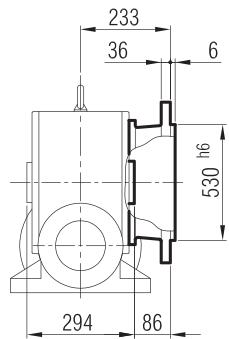
**İRSFM / İRSF**



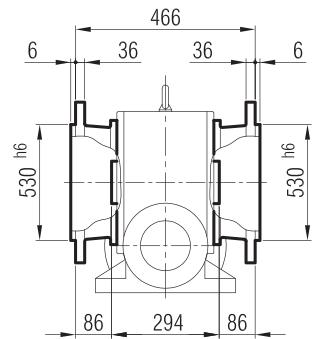
**- FR**



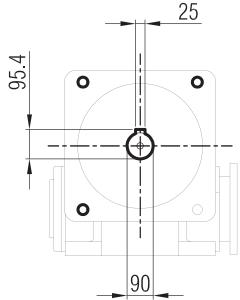
**- FL**



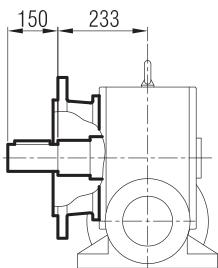
**- FD**



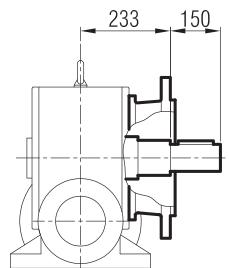
**İRSFM / İRSF**



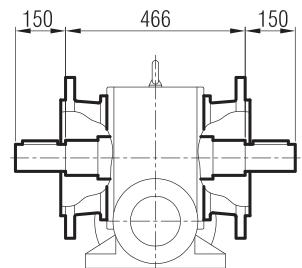
**- FR - SR**

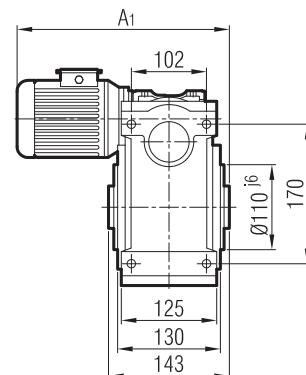
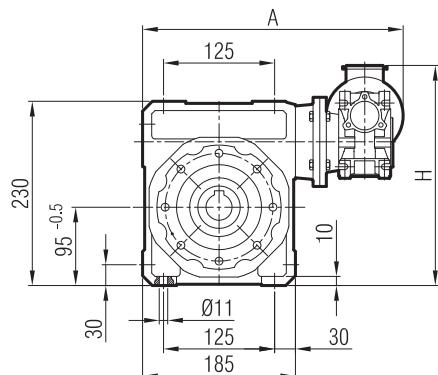
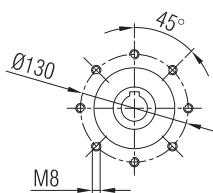


**- FL - SL**

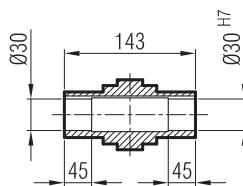
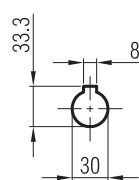
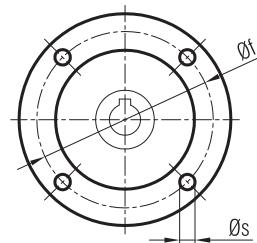
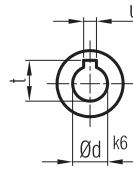
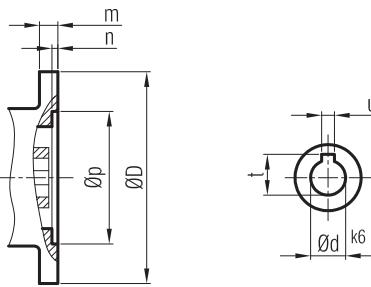
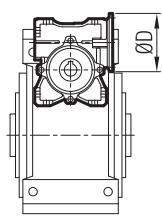


**- FD - SD**

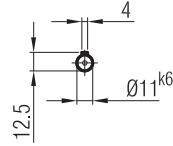
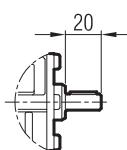
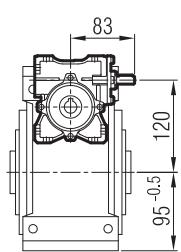



**IRSAM 82 S 40**


	A	A <sub>1</sub>	H
63	423	339	377
71	440	365	397

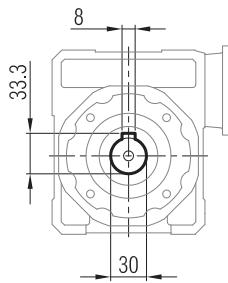

**IRSAP 82 S 40**


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

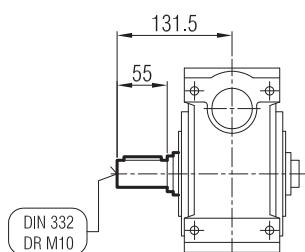
**IRSA 82 S 40**




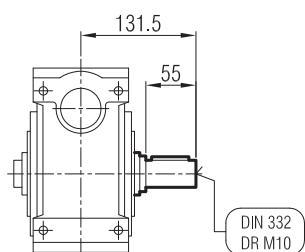
**İRSAM / İRSAP / İRSA**



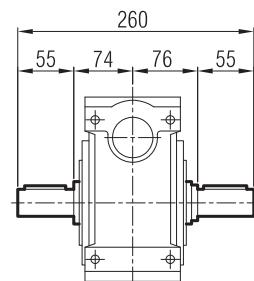
**- SR**



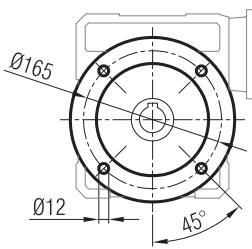
**- SL**



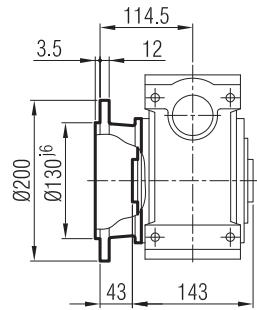
**- SD**



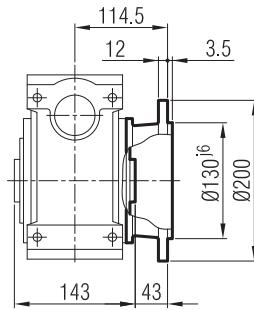
**İRSFM / İRSFP / İRSF**



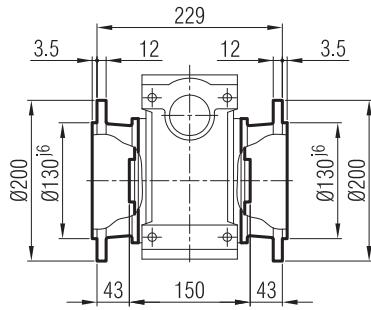
**- FR**



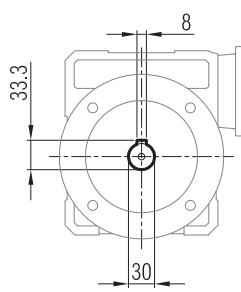
**- FL**



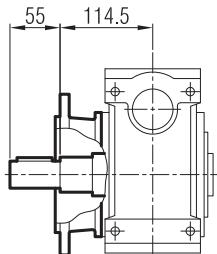
**- FD**



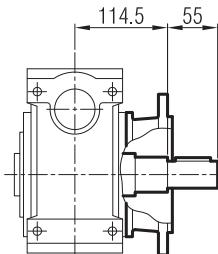
**İRSFM / İRSFP / İRSF**



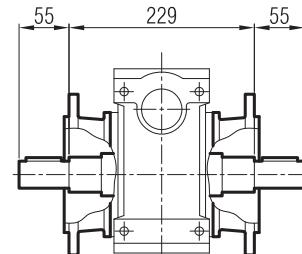
**- FR - SR**



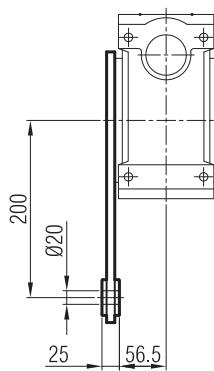
**- FL - SL**



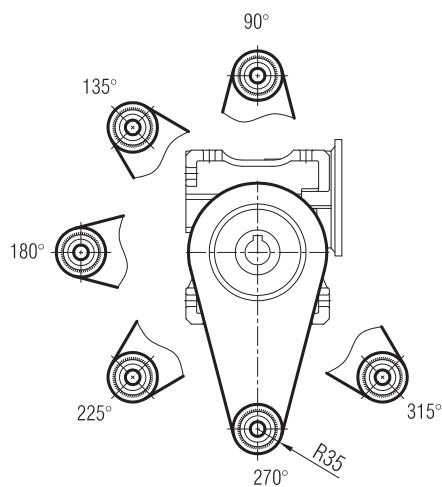
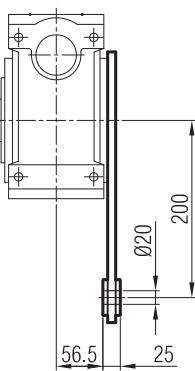
**- FD - SD**

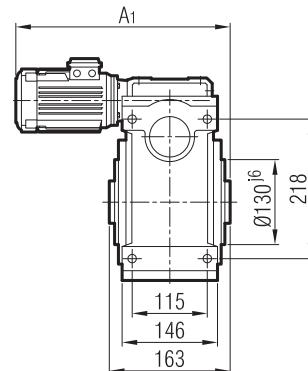
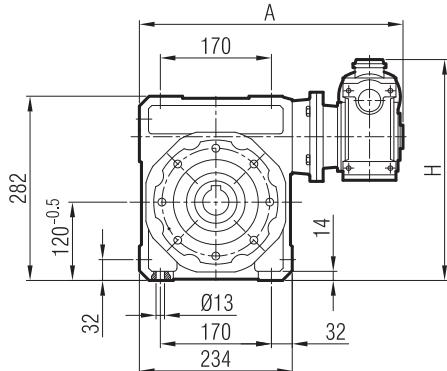
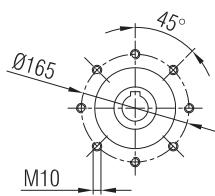


**- TR**

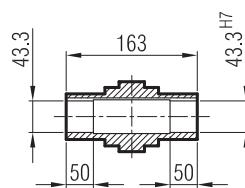
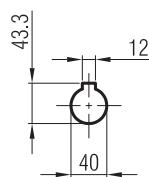
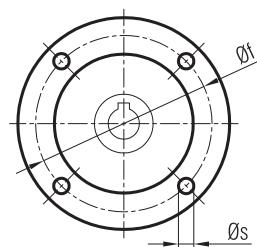
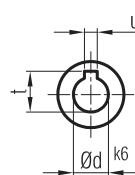
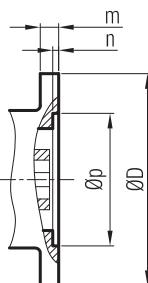
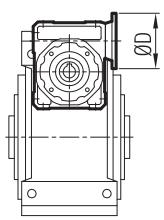


**- TL**

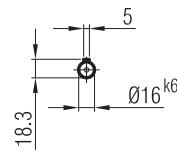
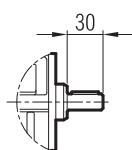
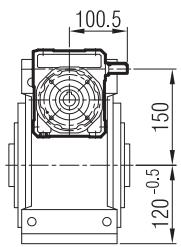



**İRSAM 102 İRS 52**


	A	A <sub>1</sub>	H
71	406	387	336
80	406	409	343

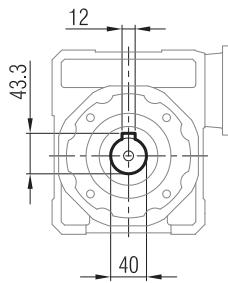

**İRSAP 102 İRS 52**


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

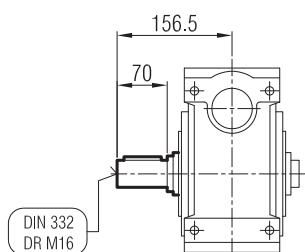
**İRSA 102 İRS 52**




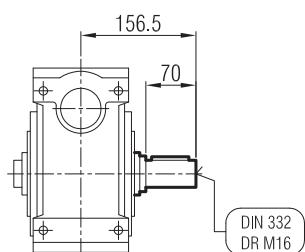
**İRSAM / İRSAP / İRSA**



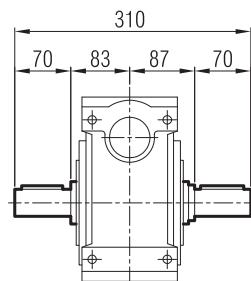
**- SR**



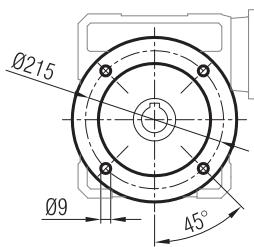
**- SL**



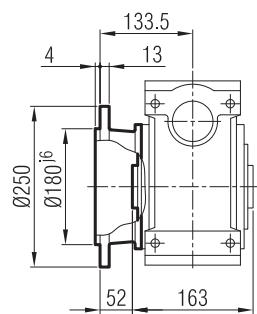
**- SD**



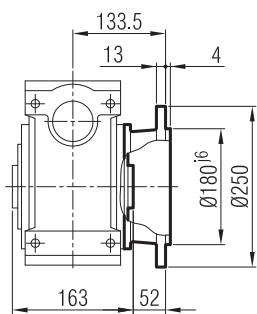
**İRSFM / İRSFP / İRSF**



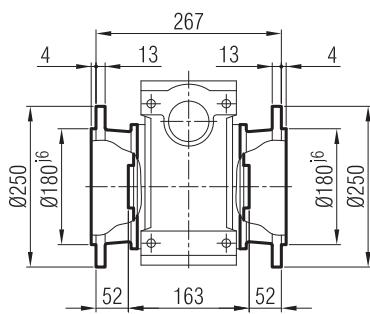
**- FR**



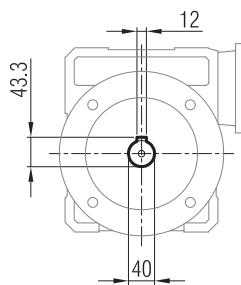
**- FL**



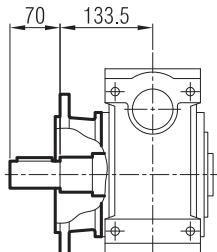
**- FD**



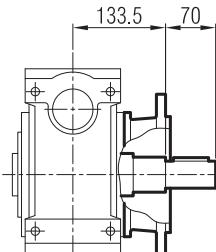
**İRSFM / İRSFP / İRSF**



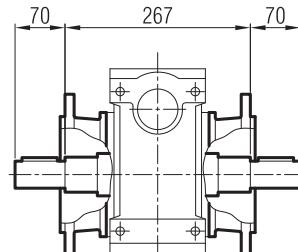
**- FR - SR**



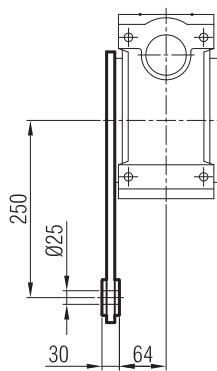
**- FL - SL**



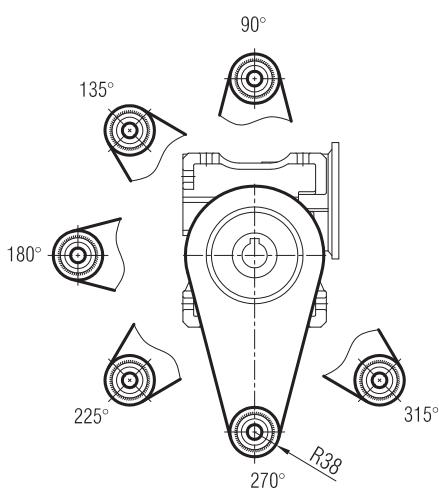
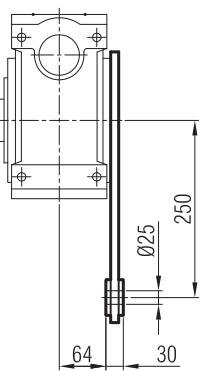
**- FD - SD**

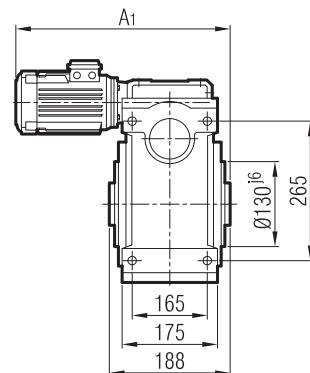
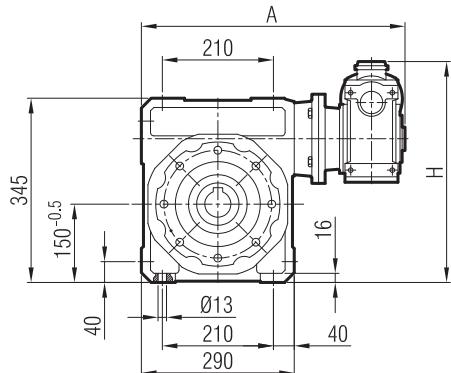
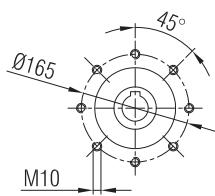


**- TR**

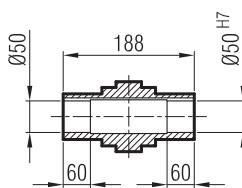
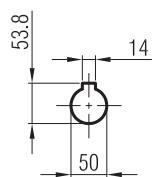
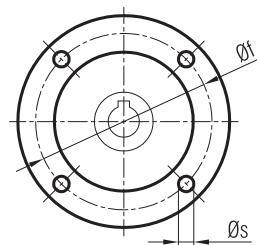
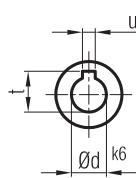
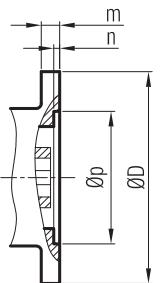
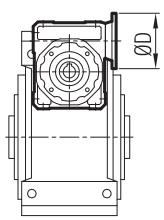


**- TL**

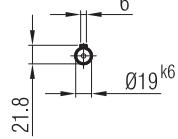
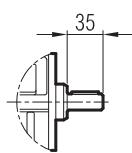
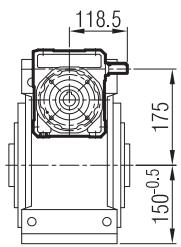



**IRSAM 127 IRS 65**


	A	A <sub>1</sub>	H
90 S	488	457	470
90 L	488	482	470

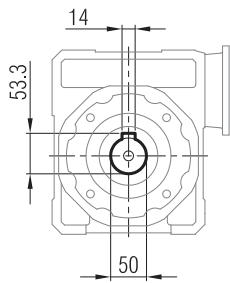

**IRSAP 127 IRS 65**


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

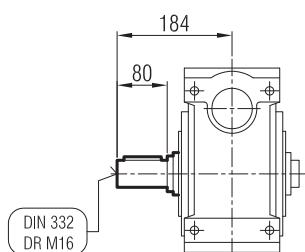
**IRSA 127 IRS 65**




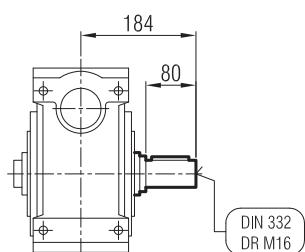
**İRSAM / İRSAP / İRSA**



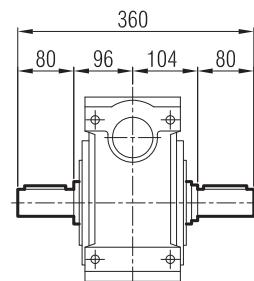
**- SR**



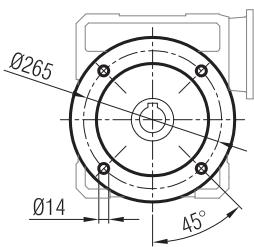
**- SL**



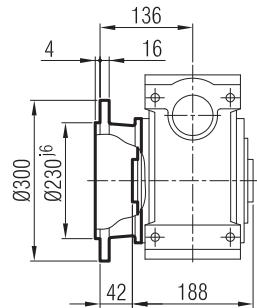
**- SD**



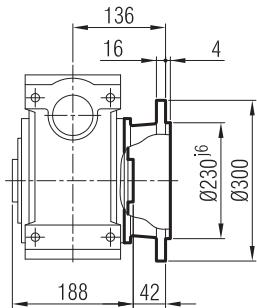
**İRSFM / İRSFP / İRSF**



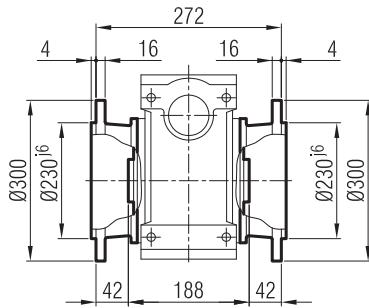
**- FR**



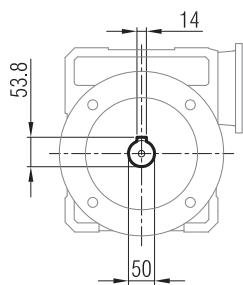
**- FL**



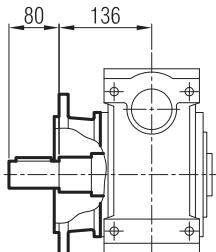
**- FD**



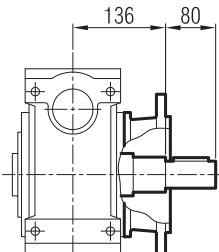
**İRSFM / İRSFP / İRSF**



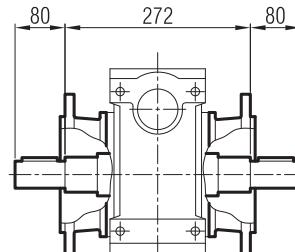
**- FR - SR**



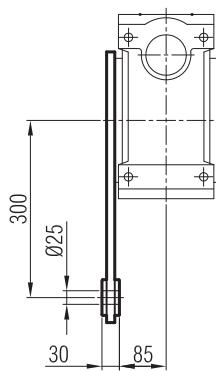
**- FL - SL**



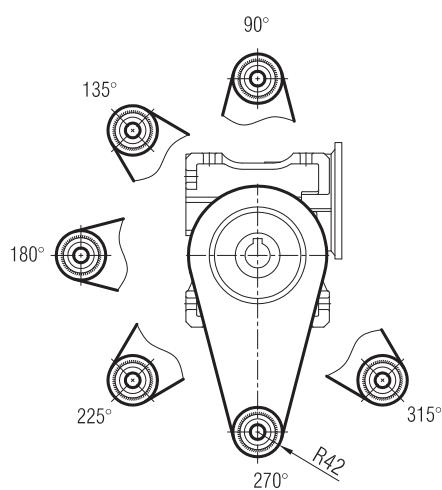
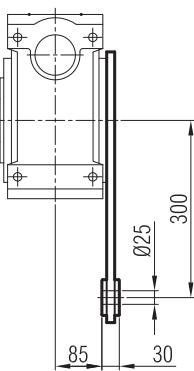
**- FD - SD**

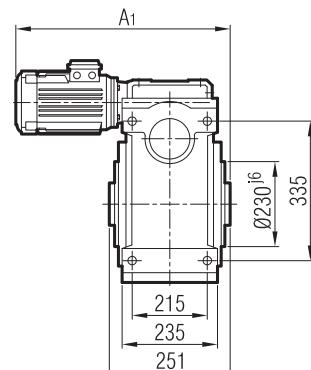
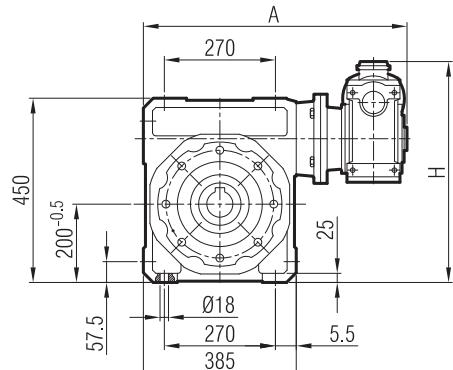
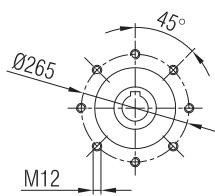


**- TR**

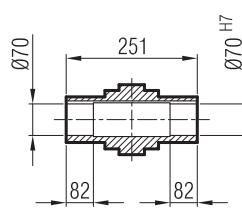
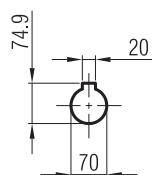
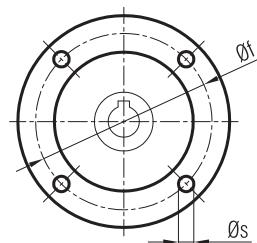
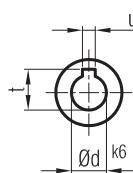
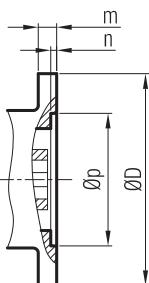
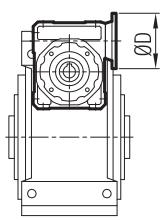


**- TL**

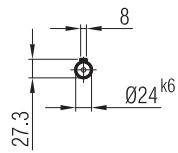
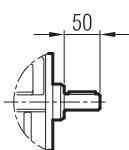
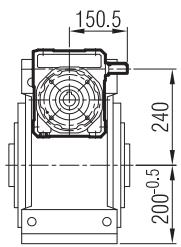



**IRSAM 162 IRS 82**


	A	A <sub>1</sub>	H
80	632	374	653

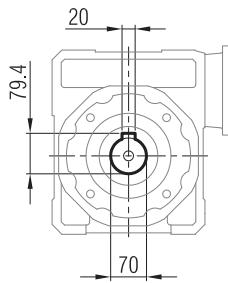

**IRSAP 162 IRS 82**


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

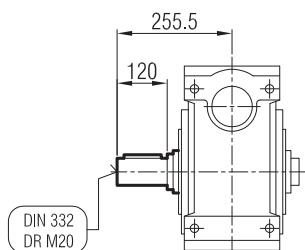
**IRSA 162 IRS 82**




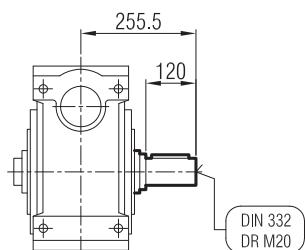
**İRSAM / İRSAP / İRSA**



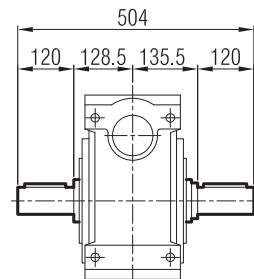
**- SR**



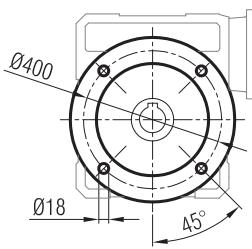
**- SL**



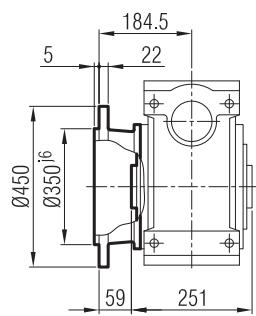
**- SD**



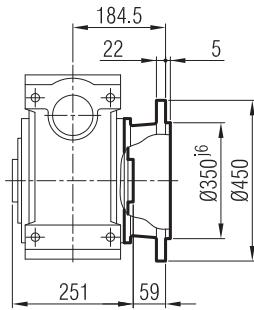
**İRSFM / İRSFP / İRSF**



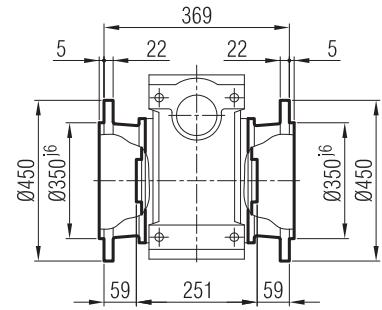
**- FR**



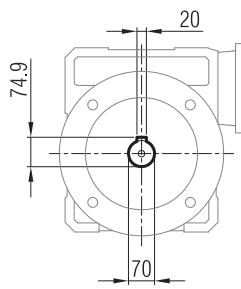
**- FL**



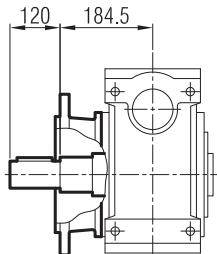
**- FD**



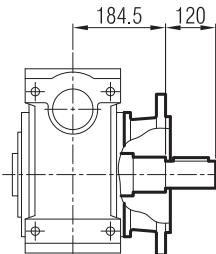
**İRSFM / İRSFP / İRSF**



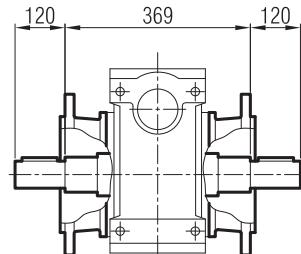
**- FR - SR**



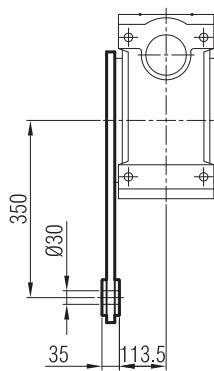
**- FL - SL**



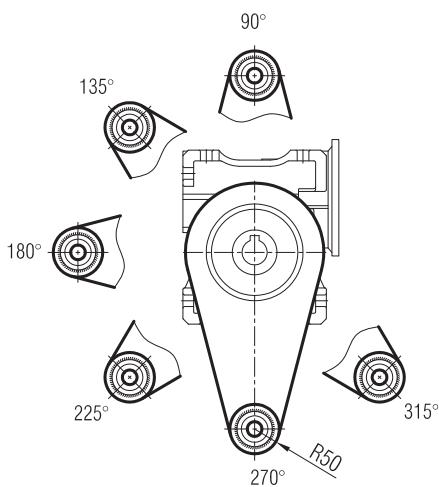
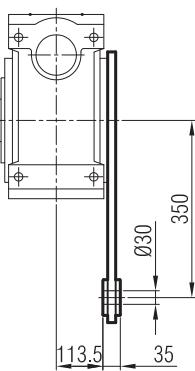
**- FD - SD**



**- TR**

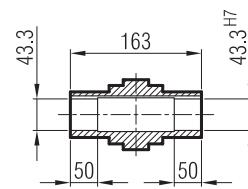
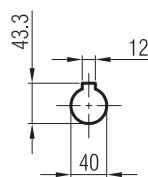
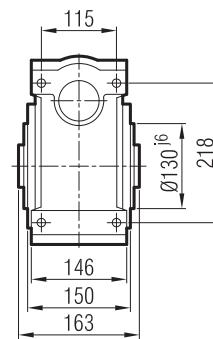
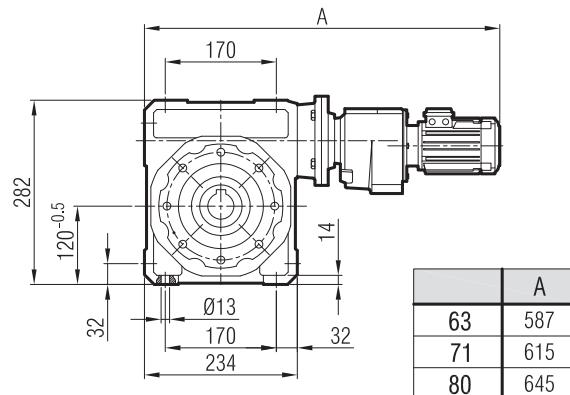
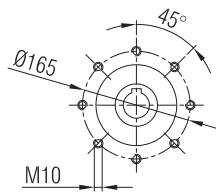


**- TL**

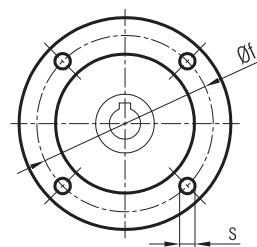
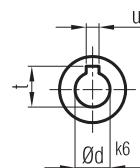
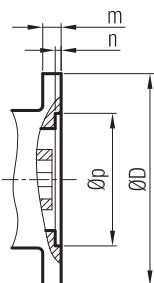
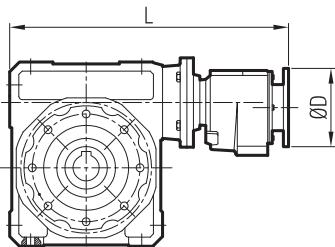




**İRSAM 102 İR 43**  
**İRSAM 102 İR 42**

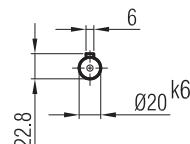
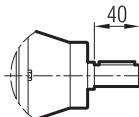
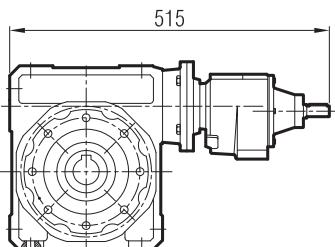


**İRSAP 102 İR 43**  
**İRSAP 102 İR 42**



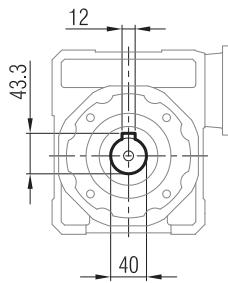
IEC B5	L	m	n	p	f	D	d	t	u	s
63	432	8	4	95	115	140	11	12.8	4	M8
71	440	9	4	110	130	160	14	16.3	5	M8
80	442	12	5	130	165	200	19	21.8	6	M10

**IRSA 102 İR 43**  
**IRSA 102 İR 42**

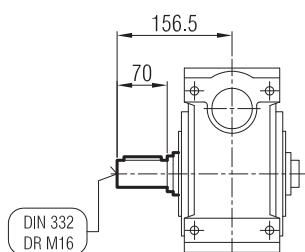




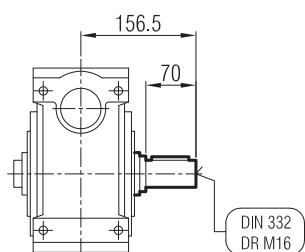
**İRSAM / İRSAP / İRSA**



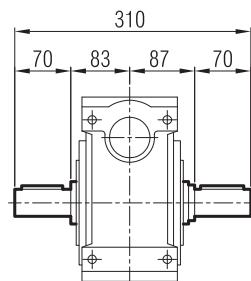
**- SR**



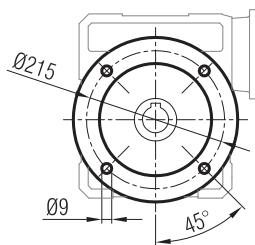
**- SL**



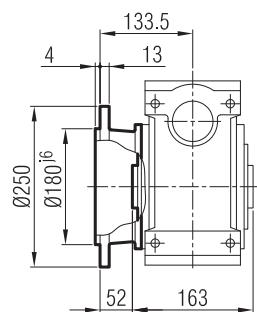
**- SD**



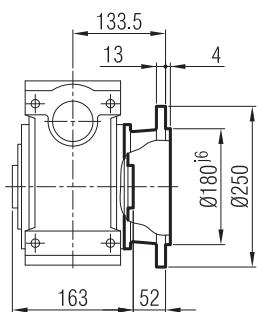
**İRSFM / İRSFP / İRSF**



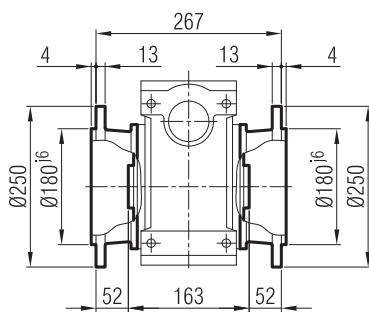
**- FR**



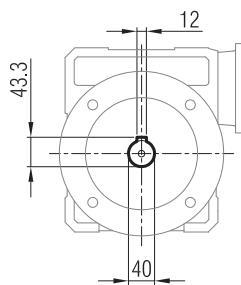
**- FL**



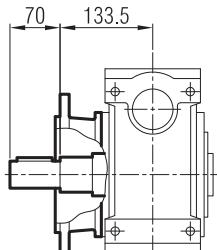
**- FD**



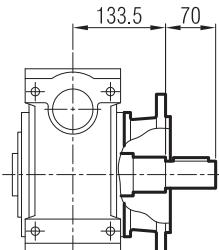
**İRSFM / İRSFP / İRSF**



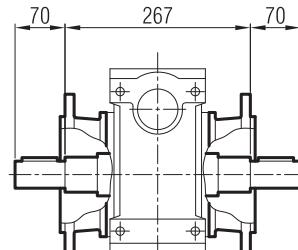
**- FR - SR**



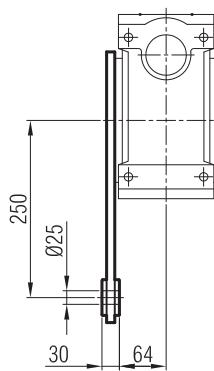
**- FL - SL**



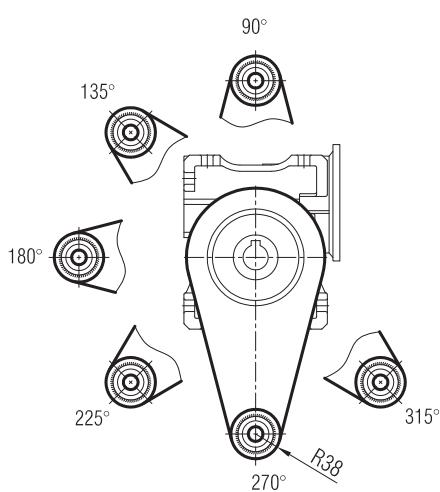
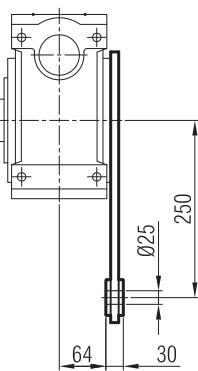
**- FD - SD**



**- TR**

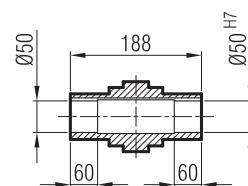
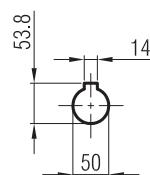
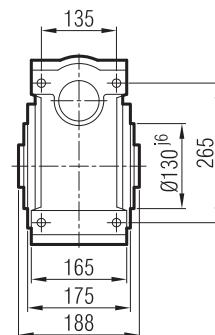
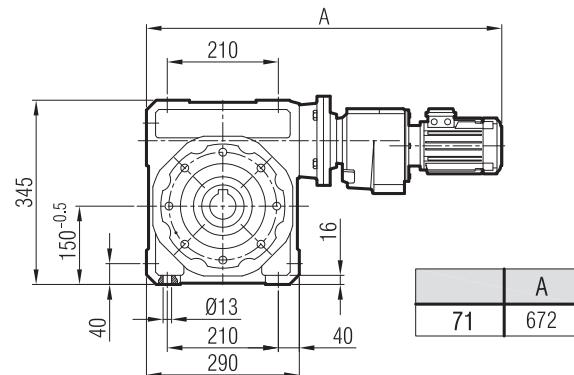
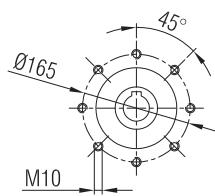


**- TL**

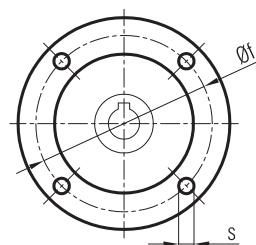
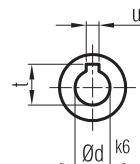
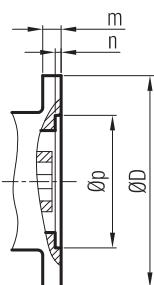
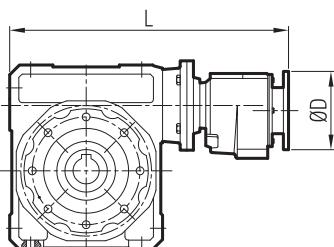




### İRSAM 127 İR 43

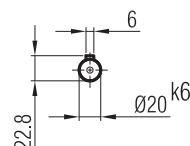
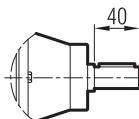
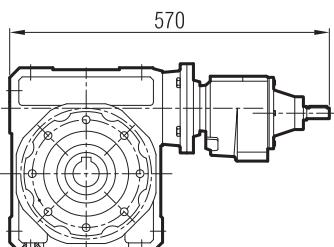


### İRSAP 127 İR 43



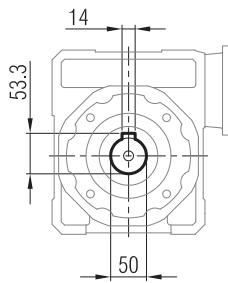
IEC B5	L	m	n	p	f	D	d	t	u	s
71	497	9	4	110	130	160	14	16.3	5	M8

### İRSA 127 İR 43

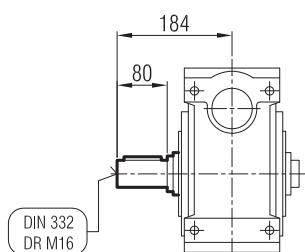




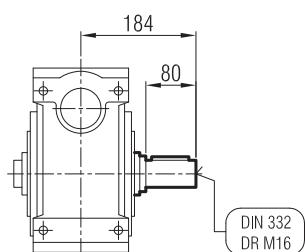
**İRSAM / İRSAP / İRSA**



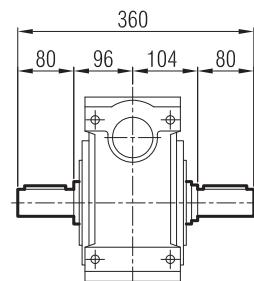
**- SR**



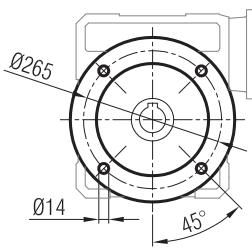
**- SL**



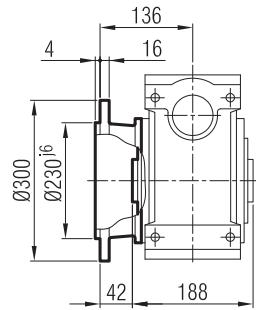
**- SD**



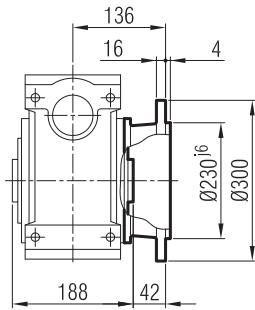
**İRSFM / İRSFP / İRSF**



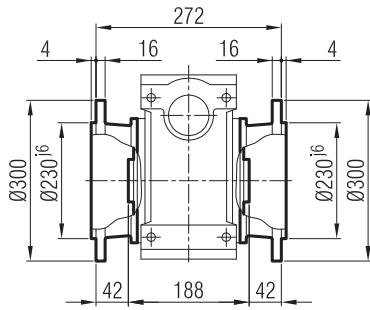
**- FR**



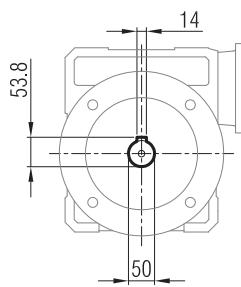
**- FL**



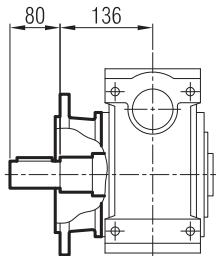
**- FD**



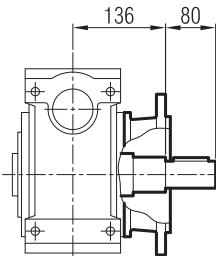
**İRSFM / İRSFP / İRSF**



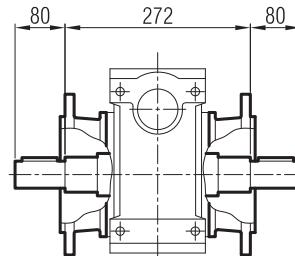
**- FR - SR**



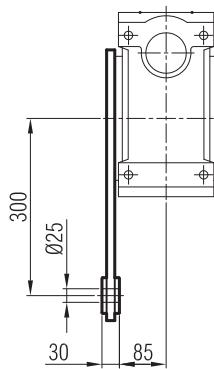
**- FL - SL**



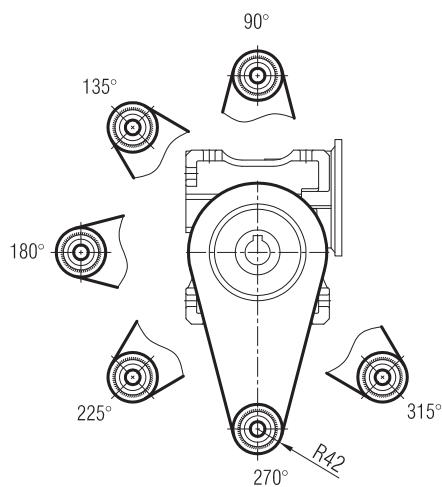
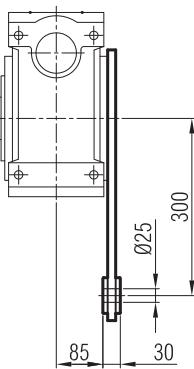
**- FD - SD**

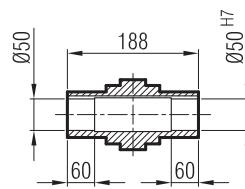
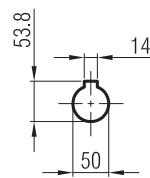
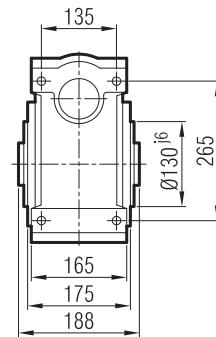
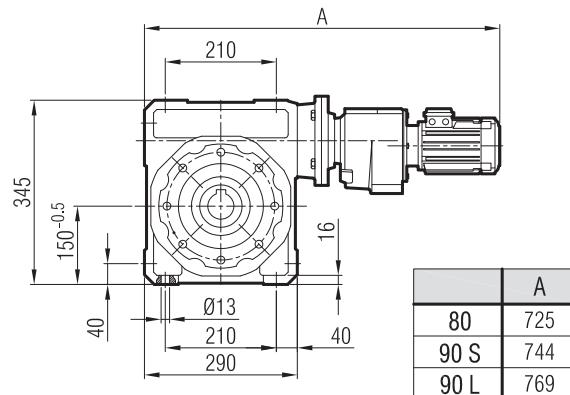
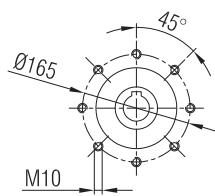
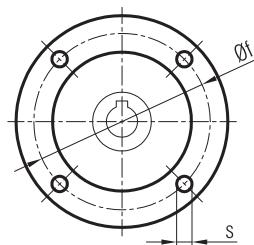
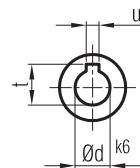
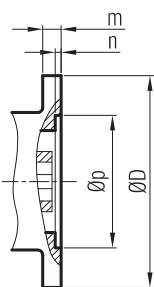
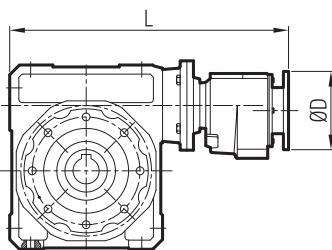


**- TR**

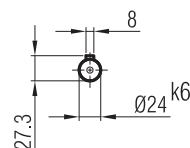
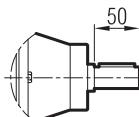
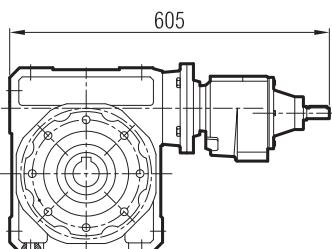


**- TL**



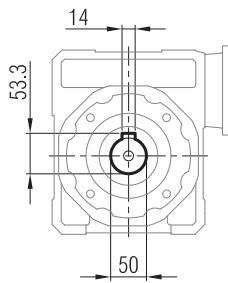

**İRSAM 127 İR 52**

**İRSAP 127 İR 52**


IEC B5	L	m	n	p	f	D	d	t	u	s
80	572	12	5	130	165	200	19	21.8	6	M10
90	572	12	5	130	165	200	24	27.3	8	M10

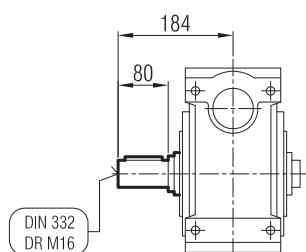
**İRSA 127 İR 52**




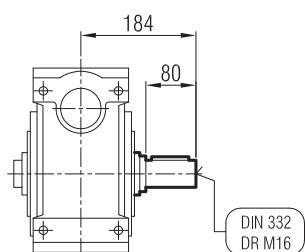
**İRSAM / İRSAP / İRSA**



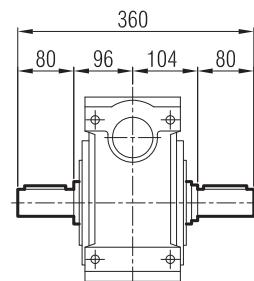
**- SR**



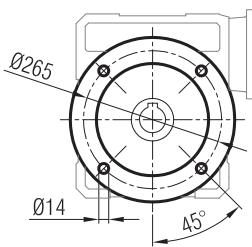
**- SL**



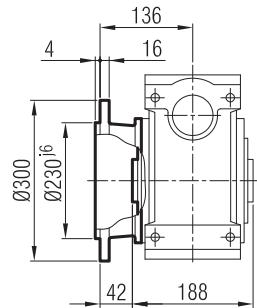
**- SD**



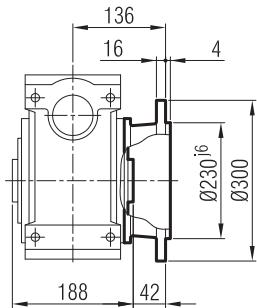
**İRSFM / İRSFP / İRSF**



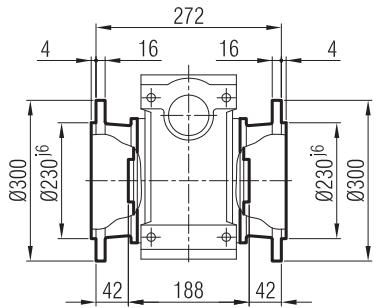
**- FR**



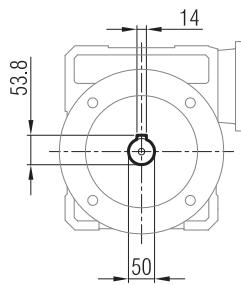
**- FL**



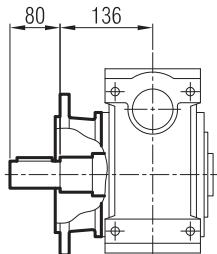
**- FD**



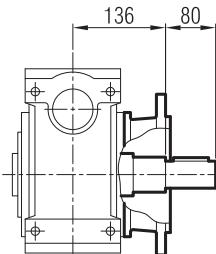
**İRSFM / İRSFP / İRSF**



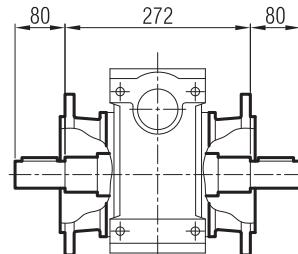
**- FR - SR**



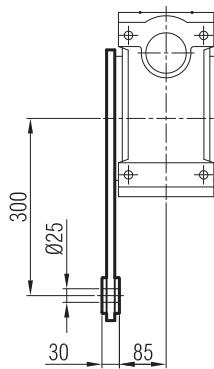
**- FL - SL**



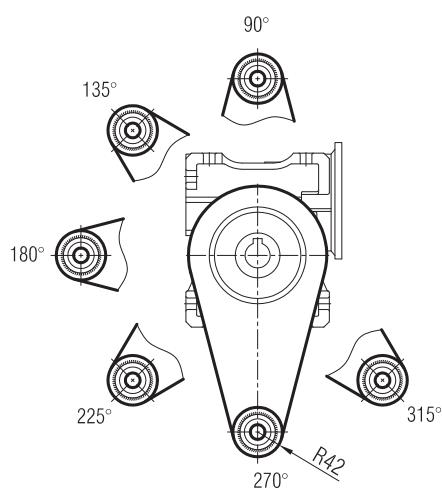
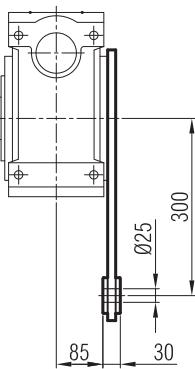
**- FD - SD**



**- TR**

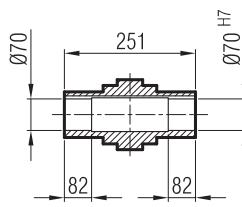
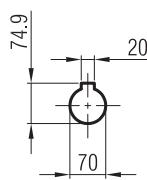
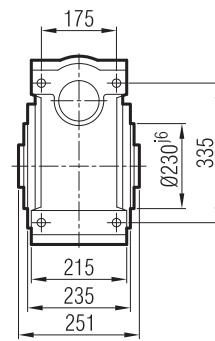
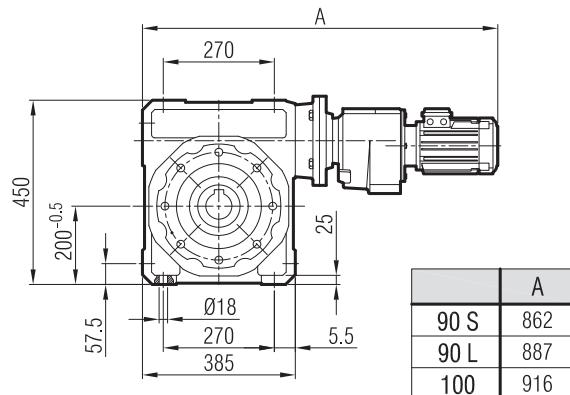
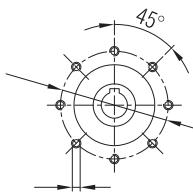


**- TL**

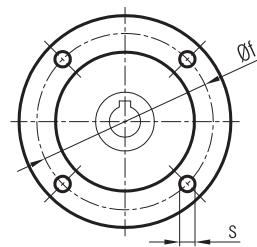
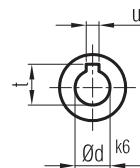
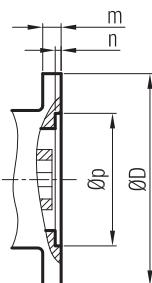
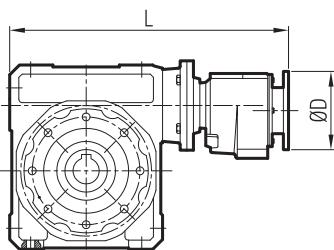




**İRSAM 162 İR 63**  
**İRSAM 162 İR 62**

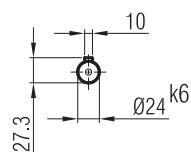
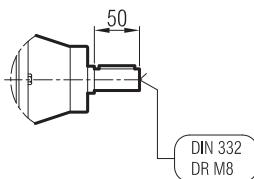
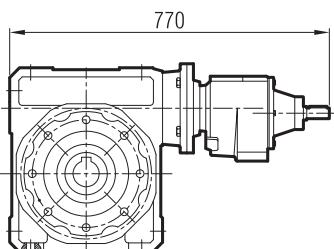


**İRSAP 162 İR 63**  
**İRSAP 162 İR 62**



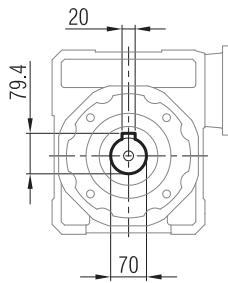
IEC B5	L	m	n	p	f	D	d	t	u	s
90	677	12	5	130	165	200	24	27.3	8	M10
100	690	14	5	180	215	250	28	31.3	8	M12

**İRSA 162 İR 63**  
**İRSA 162 İR 62**

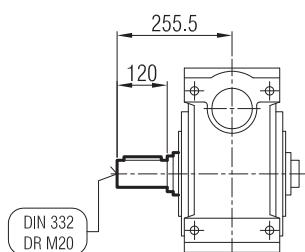




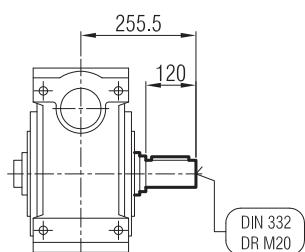
**İRSAM / İRSAP / İRSA**



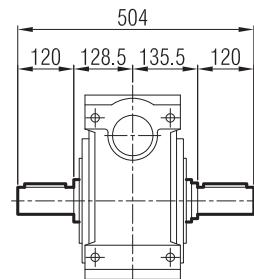
**- SR**



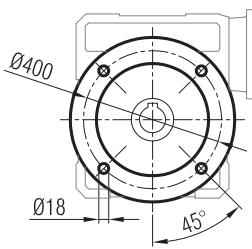
**- SL**



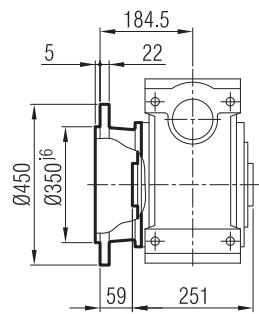
**- SD**



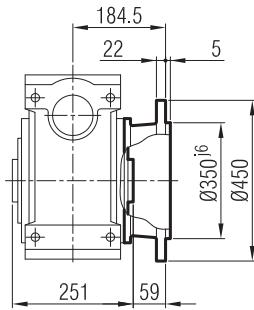
**İRSFM / İRSFP / İRSF**



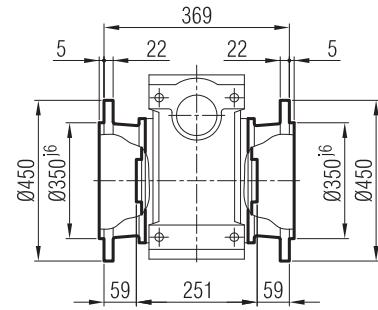
**- FR**



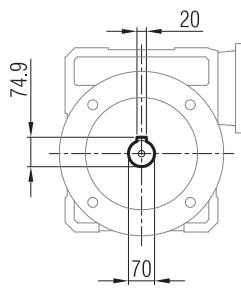
**- FL**



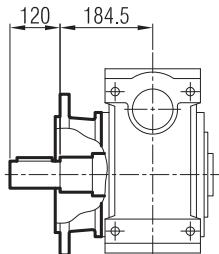
**- FD**



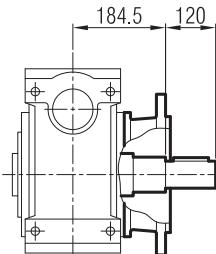
**İRSFM / İRSFP / İRSF**



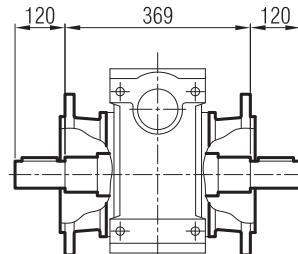
**- FR - SR**



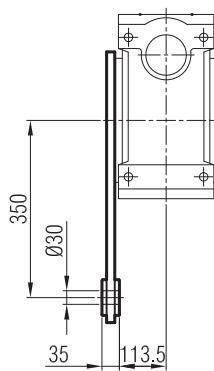
**- FL - SL**



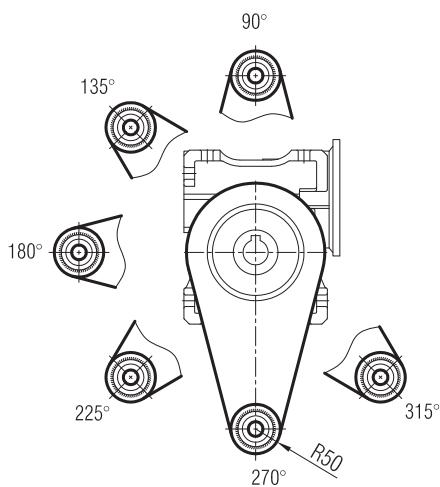
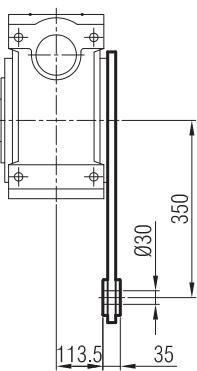
**- FD - SD**

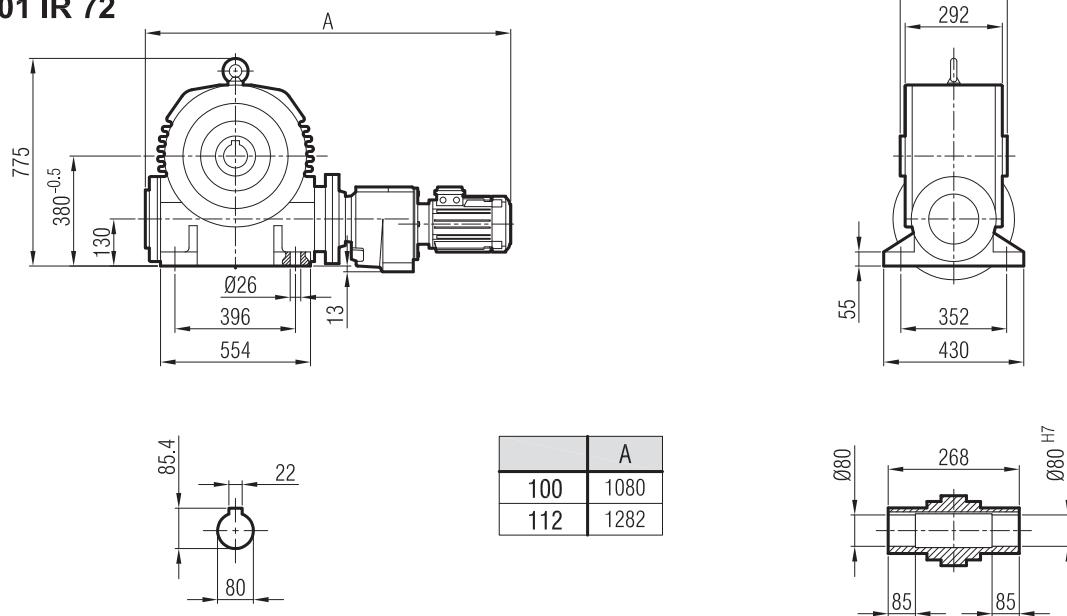
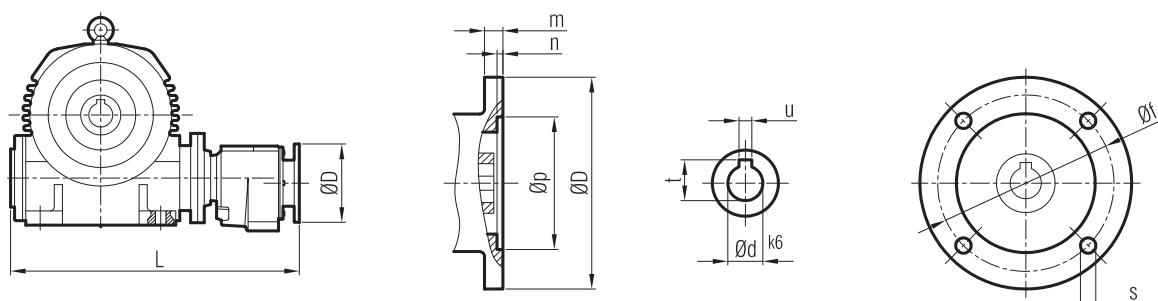


**- TR**

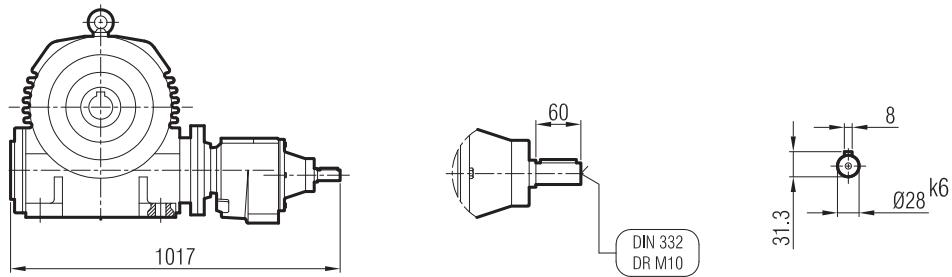


**- TL**



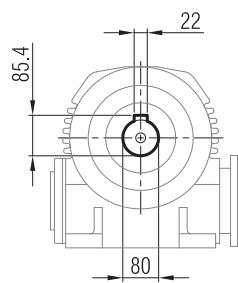

**IRSAM 201 IR 72**

**IRSAP 201 IR 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

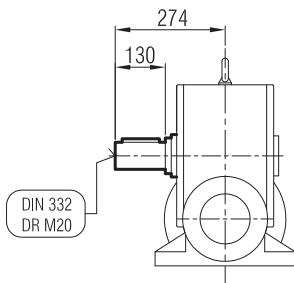
**IRSA 201 IR 72**




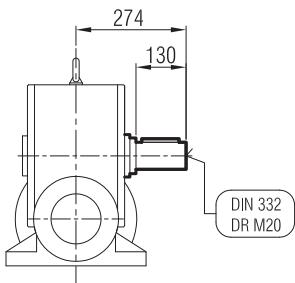
### İRSAM / İRSA



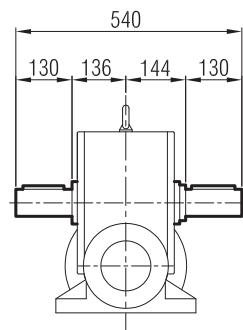
### - SR



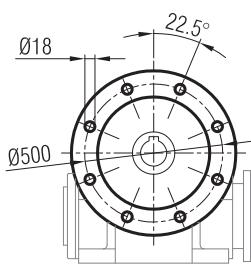
### - SL



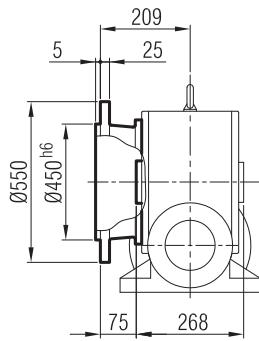
### - SD



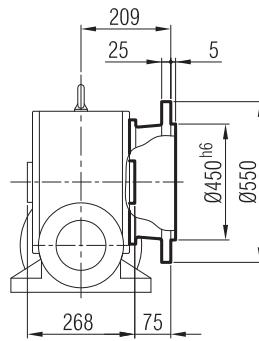
### İRSFM / İRSF



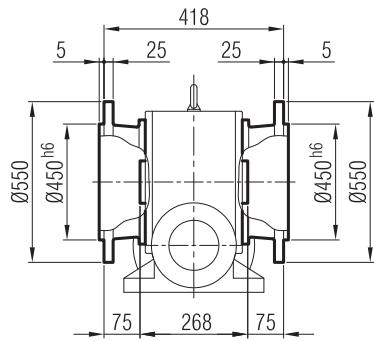
### - FR



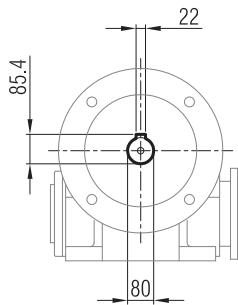
### - FL



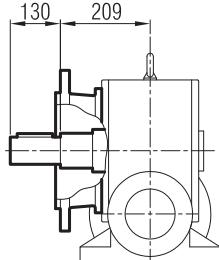
### - FD



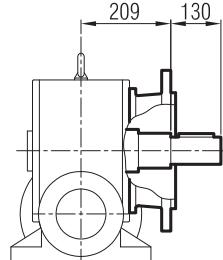
### İRSFM / İRSF



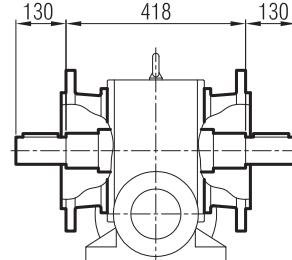
### - FR - SR



### - FL - SL



### - FD - SD





# **Helisel Sonsuz Vidalı 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*



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]			[Nm]	[N]			
0,12 0,16	5,1	82	272	2,06	123	6100	İRSDPM İRSDFPM	53 / 63 M 4a
	5,9		238	2,31	108	6100		
	6,8		206	2,90	90	6100		
	7,8		180	3,15	78	6100		
	8,4		166	4,05	87	6100		
0,18 0,25	3,4	62	268	2,10	302	9900	İRSDM İRSDFM	63 / 71 M 6a
	3,9	53	229	2,70	293	9900		
	4,3	62	210	2,60	237	9900		
	5,0	53	180	3,30	230	9900		
	3,3	82	272	0,95	287	6150		
	3,8		238	1,07	251	6150		
	4,4	62	206	1,36	209	6150	İRSDM İRSDFM	53 / 71 M 6a
	5,0		180	1,51	183	6150		
	5,4	50	166	1,83	203	6150		
	6,2		145	2,00	178	6150		
	5,1	82	272	1,38	184	6100		
	5,9		238	1,54	161	6100		
	6,8	62	206	1,93	134	6100	İRSDPM İRSDFPM	53 / 63 M 4a
	7,8		180	2,10	118	6100		
	8,4	50	166	2,70	130	6100		
	9,6		145	2,92	114	6100		
0,25 0,34	11	39	129	3,61	102	6100		
	3,4	62	268	1,51	420	9900	İRSDM İRSDFM	63 / 71 M 6b
	3,9	53	229	1,94	407	9900		
	4,3	62	210	1,87	330	9900		
	5,0	53	180	2,38	320	9900		
	5,2	62	268	2,20	270	9900	İRSDM İRSDFM	63 / 71 M 4a
	6,1	53	229	2,80	261	9900		
	6,7	62	210	2,70	212	9900		
	7,8	53	180	3,40	205	9900		
	8,2	62	170	3,10	171	9900		
	3,8	82	238	0,77	349	6100	İRSDM İRSDFM	53 / 71 M 6b
	4,4		206	0,98	290	6100		
	5,0	50	180	1,08	254	9900		
	5,4		166	1,32	282	6100		
	6,2	50	145	1,44	247	6100		
	7,0		129	2,70	220	6100		
	7,9	39	113	2,10	193	6100	İRSDM İRSDFM	53 / 71 M 4a
	9,0		100	2,30	170	6100		
	5,1	82	272	0,99	256	6100		
	5,9		238	1,11	224	6100		
	6,8	62	206	1,39	187	6100		
	7,8		180	1,51	163	6100		
	8,4	50	166	1,91	181	6100		
	9,6		145	2,10	159	6100		



P1 GÜC Power Puissance	n2 Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i_t Toplam Tahvil Total Ratio Rapport de réduction total	f_s Servis Faktörü Service Factor Service facteur	M2 Çıkış Momenti Output Torque Couple de sortie	F_Qlo Rad. Yük Over Loads Charges radiales	Tip Type			
[kW] Hp	[r.p.m]				[Nm]	[N]			kg	
0,25 0,34	11	39	129	2,60	141	6100	İRSDM İRSDFM	53 / 71 M 4a	166	15 17
	12		113	2,90	124	6100				
	14		100	3,20	109	6100				
	16	50	89	3,50	97	6100				
	18		79	3,80	87	6100				
0,37 0,5	2,7	83	336	2,70	806	21000	İRSDM İRSDFM	83 / 80 M 6a	172	89 99
	3,0		300	2,84	719	21000				
	3,4	65	263	3,72	662	21000				
	3,8		235	4,01	590	21000				
	2,6	82	341	1,43	792	15250				
	3,0		301	1,59	698	15250				
	3,4		262	2,00	628	15250				
	3,9	63	231	2,20	554	15250				
	4,3		208	2,70	555	15250				
	4,1	82	341	2,00	509	15250	İRSDM İRSDFM	73 / 71 M 4b	168	56 61
	5,3	63	262	2,80	404	15250				
	3,4	62	268	1,02	621	9800	İRSDM İRSDFM	63 / 80 M 6a	168	36 39
	3,9	53	229	1,31	602	9800				
	4,3	62	210	1,26	488	9800				
	5,0	53	180	1,61	473	9800				
	5,2	62	268	1,49	399	9800				
	6,1	53	229	1,89	387	9800				
	6,7	62	210	1,82	314	9800				
	7,8	53	180	2,30	304	9800				
	8,2	62	170	2,09	254	9800				
	9,6	53	145	2,77	246	9800				
	10	40	136	3,18	226	9800				
	11	53	132	2,97	223	9800				
	13	40	110	3,72	183	9800	İRSDM İRSDFM	63 / 71 M 4b	168	33 36
	5,4	50	166	0,89	417	6040				
	6,2		145	0,97	365	6040				
	7,0	39	129	1,80	325	6040				
	7,9		113	1,41	285	6040				
	9,0		100	1,53	252	6040				
	6,8	50	206	0,94	276	6040				
	7,8		180	1,02	242	6040				
	8,4		166	1,29	268	6040	İRSDM İRSDFM	53 / 71 M 4b	166	16 18
	9,6		145	1,41	235	6040				
	11		129	1,80	209	6040				
	12	39	113	1,99	183	6040				
	14		100	2,20	162	6040				
	16		89	2,40	144	6040				
	18		79	2,60	134	6040				
	20	30	69	2,90	116	6040				
	23		61	3,20	103	6040				
	26		55	3,40	93	6040				
	28		49	3,70	83	6040				

Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales		Tip Type			kg
[kW] Hp	[r.p.m]			[Nm]	[N]						
0,55 0,75	2,7	83	336	1,82	1198	21000	İRSDM İRSDFM	83 / 80 M 6b	172	90 100	
	3,0		300	1,91	1068	21000					
	3,4	65	263	2,50	984	21000					
	3,8		235	2,70	877	21000					
	4,3	52	210	3,40	872	21000					
	4,8		188	3,70	777	21000					
	4,2	83	336	2,56	770	21000	İRSDM İRSDFM	83 / 80 M 4a	172	88 98	
	4,7		300	2,83	687	21000					
	5,3	65	263	3,43	603	21000					
	6,0		235	3,76	564	21000					
	2,6	82	341	0,96	1177	15170	İRSDM İRSDFM	73 / 80 M 6b	170	58 63	
	3,0		301	1,07	1038	15170					
	3,4	63	262	1,35	934	15170					
	3,9		231	1,48	824	15170					
	4,3	50	208	1,82	825	15170					
	4,1		341	1,35	756	15170					
	4,7	63	301	1,55	667	15170					
	5,3		262	1,88	601	15170					
	6,1	63	231	2,09	530	15170	İRSDM İRSDFM	73 / 80 M 4a	170	57 62	
	6,7		208	2,69	530	15170					
	7,6	50	183	2,96	468	15170					
	8,6		163	3,23	416	15170					
	9,6	50	145	3,48	371	15170					
	11		128	3,80	327	15170					
	3,9	53	229	0,88	895	9670	İRSDM İRSDFM	63 / 80 M 6b	168	36 39	
	4,3	62	210	0,85	726	9670					
	5,0	53	180	1,08	703	9670					
	5,2	62	268	1,00	594	9670					
	6,1	53	228	1,27	575	9670					
	6,7	62	210	1,23	466	9670					
	7,8	53	180	1,55	452	9670	İRSDM İRSDFM	63 / 80 M 4a	168	36 39	
	8,2	62	170	1,41	377	9670					
	9,6	53	145	1,86	365	9670					
	10	40	136	2,14	336	9670					
	11	53	132	2,00	331	9670					
	13	40	110	2,50	272	9670					
	14	30	99	3,12	271	9670	İRSDM İRSDFM	53 / 80 M 6b	166	19 21	
	14	40	90	2,68	246	9670					
	16		82	2,86	224	9670					
	17	40	75	3,68	219	9670					
	19		64	3,22	187	9670					
	22	40	61	3,60	158	9670					
	23		129	3,70	150	9670					
	7,0	39	113	1,21	483	5890	İRSDM İRSDFM	53 / 80 M 6b	166	19 21	
	7,9		100	0,95	424	5890					
	9,0	50	145	1,03	374	5890					
	9,6		129	0,95	349	5890					



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
[kW] Hp	[r.p.m]				[Nm]	[N]				
0,55 0,75	11	39	129	1,21	311	5890	İRSDM İRSDFM	53 / 80 M 4a	166	18 20
	12		113	1,34	272	5890				
	14		100	1,47	240	5890				
	16		89	1,60	214	5890				
	18		79	1,73	191	5890				
	18	30	77	1,86	193	5890				
	20		68	1,99	172	5890				
	23		61	2,10	154	5890				
	26		55	2,30	138	5890				
	28		49	2,50	124	5890				
	31	15	45	2,70	112	5890				
	35		40	2,80	101	5890				
	37		38	2,90	96	5890				
	41		34	3,10	85	5890				
	46		31	3,00	88	5890				
	51		27	3,30	79	5890				
	57		25	3,50	71	5890				
	63		22	3,80	64	5890				
0,75 1	2,5	87	371	2,49	1779	25200	İRSDM İRSDFM	161 / 90 S 6a	174	173 183
	2,9		327	2,79	1534	25200				
	3,6		261	3,28	1235	25200				
	2,7	83	336	1,33	1634	21000	İRSDM İRSDFM	83 / 90 S 6a	172	93 103
	3,0		300	1,40	1457	21000				
	3,4	65	263	1,83	1341	21000				
	3,8		235	1,98	1196	21000				
	4,3	52	210	2,49	1189	21000				
	4,8		188	2,71	1060	21000				
	4,2	83	336	1,87	1050	21000				
	4,7		300	2,07	936	21000				
	5,3	65	263	2,52	862	21000				
	6,0		235	2,76	769	21000				
	6,7	52	210	3,60	764	21000				
	7,5		188	3,88	681	21000				
	3,0	82	301	0,78	1415	15060	İRSDM İRSDFM	83 / 80 M 4b	172	91 101
	3,4		262	0,99	1274	15060				
	3,9	63	231	1,09	1123	15060				
	4,3		208	1,33	1125	15060				
	4,1	82	341	0,99	1031	15060				
	4,7		301	1,13	910	15060				
	5,3	63	262	1,38	819	15060				
	6,1		231	1,53	722	15060				
	6,7	50	208	1,97	723	15060				
	7,6		183	2,17	638	15060				
	8,6	50	163	2,37	567	15060				
	9,6		145	2,55	505	15060				
	11	40	128	2,79	446	15060				
	12		116	3,43	422	15060				

Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
0,75 1	14	40	103	3,73	373	15060	İRS DM İRSDFM	73 / 80 M 4b 170 58 63
	6,7	62	210	0,90	636	9490		
	7,8	53	180	1,13	616	9490		
	8,2	62	170	1,03	514	9490		
	9,6	53	145	1,37	498	9490		
	10	62	136	1,57	410	9490		
	11	53	132	1,47	451	9490		
	13	40	110	1,83	370	9490		
	14	53	102	2,29	349	9490		
	14	40	99	1,97	335	9490		
	16		90	2,10	305	9490		
	17	30	82	2,70	298	9490		
	19	40	75	2,36	255	9490		
	19	30	74	2,90	270	9490		
	21		68	3,08	246	9490		
	22	40	64	2,64	215	9490		
	23		61	2,71	205	9490		
	25	30	57	3,52	205	9490		
	26	40	54	2,90	182	9490		
	29	30	48	3,81	173	9490		
	11		129	0,89	424	5650		
	12	39	113	0,98	371	5650		
	14		100	1,08	328	5650		
	16		89	1,17	291	5650		
	18		79	1,27	260	5650		
	18		77	1,37	264	5650		
	20	30	68	1,46	235	5650		
	23		61	1,58	210	5650		
	26		55	1,70	188	5650		
	28		49	1,82	169	5650		
	31		45	1,97	153	5650	İRS DM İRSDFM	53 / 80 M 4b 166 19 21
	35		40	2,10	138	5650		
	37		38	2,10	131	5650		
	41		34	2,30	116	5650		
	46		31	2,20	120	5650		
	51		27	2,40	108	5650		
	57	15	25	2,60	97	5650		
	63		22	2,80	88	5650		
	70		20	2,90	79	5650		
	73		19	3,00	75	5650		
	83		17	3,20	67	5650		
1,1 1,5	2,5	87	371	1,70	2609	25000	İRS DM İRSDFM	161 / 90 L 6b 174 168 178
	2,9		327	1,90	2249	25000		
	3,2		291	2,06	2038	25000		
	3,6		261	2,24	1812	25000		
	4,0		230	3,25	1889	25000		



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
4,5		54	203	3,61	1680	25000	İRSDM İRSDFM	161 / 90 L 6b
5,0			181	3,94	1512	25000		
6,0			162	4,30	1260	25000		
2,7		83	336	0,91	2396	20750	İRSDM İRSDFM	83 / 90 L 6b
3,0			300	0,95	2136	20700		
3,4		65	263	1,25	1967	20750	İRSDM İRSDFM	172
3,8			235	1,35	1754	20750		
4,3		52	210	1,70	1743	20750	İRSDM İRSDFM	95 105
4,8			188	1,85	1554	20750		
4,2		83	336	1,28	1540	20750	İRSDM İRSDFM	83 / 90 S 4a
4,7			300	1,41	1373	20750		
5,3		65	263	1,72	1265	20750	İRSDM İRSDFM	172
6,0			235	1,88	1128	20750		
6,7		52	210	2,45	1121	20750	İRSDM İRSDFM	93 103
7,5			188	2,65	999	20750		
8,6		52	162	3,40	862	20750	İRSDM İRSDFM	73 / 90 S 4a
9,7			144	3,70	769	20750		
4,7		82	301	0,77	1334	14750	İRSDM İRSDFM	170
5,3			262	0,94	1201	14750		
6,1		63	231	1,04	1059	14750	İRSDM İRSDFM	61 67
6,7			208	1,35	1061	14750		
7,6		50	183	1,48	935	14750	İRSDM İRSDFM	170
8,6			163	1,61	832	14750		
9,6		50	145	1,74	741	14750	İRSDM İRSDFM	63 / 90 S 4a
11			128	1,90	654	14750		
12		40	116	2,34	619	14750	İRSDM İRSDFM	168
14			103	2,54	546	14750		
15		40	91	2,80	486	14750	İRSDM İRSDFM	58 61
16			87	3,20	477	14750		
18		30	77	3,50	421	14750	İRSDM İRSDFM	58 61
20			68	3,80	374	14750		
9,6	53	145	0,93	730	9250			
10	62	136	1,07	602	9250			
11	53	132	1,00	662	9250			
13	40	110	1,25	543	9250			
14	53	102	1,56	512	9250			
14	40	99	1,34	492	9250			
16		90	1,43	448	9250			
17	30	82	1,84	438	9250			
19	40	75	1,61	374	9250			
19	30	74	1,98	397	9250			
21		68	2,10	361	9250			
22	40	64	1,80	315	9250			
23		61	1,85	301	9520			
25	30	57	2,40	301	9520			
26	40	54	1,98	267	9520			
29		48	2,60	254	9520			

Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
1,1 1,5	31	30	45	2,70	243	9250	İRSDM İRSDFM	63 / 90 S 4a
	35		40	2,90	215	9250		
	16		89	0,80	427	5400		
	18		79	0,86	382	5400		
	18		77	0,93	387	5400		
	20		68	1,00	344	5400		
	23		61	1,08	307	5400		
	26		55	1,16	276	5400		
	28		49	1,24	248	5400		
	31		45	1,34	224	5400		
	35		40	1,42	203	5400	İRSDM İRSDFM	53 / 90 S 4a
	37		38	1,45	192	5400		
	41		34	1,57	170	5400		
	46		31	1,54	176	5400		
	51		27	1,65	158	5400		
	57		25	1,78	142	5400		
	63	15	22	1,90	128	5400		
	70		20	2,00	116	5400		
	73		19	2,10	110	5400		
	83		17	2,20	98	5400		
1,5 2	2,5	87	371	1,25	3558	24700	İRSDM İRSDFM	161 / 100 L 6a
	3,0		327	1,39	2965	24700		
	3,5		261	1,64	2541	24700		
	4,0		235	1,76	2224	24700		
	3,4	65	263	0,92	2683	20000	İRSDM İRSDFM	83 / 100 L 6a
	3,8		235	0,99	2392	20000		
	4,3		210	1,25	2377	20000		
	4,8	52	188	1,36	2119	20000	İRSDM İRSDFM	83 / 90 L 4a
	4,2		336	0,94	2100	20000		
	4,7		300	1,04	1873	20000		
	5,3	65	263	1,26	1725	20000		
	6,0		235	1,38	1538	20000		
	6,7	52	210	1,80	1528	20000		
	7,5		188	1,94	1362	20000		
	8,6		162	2,50	1176	20000		
	9,7		144	2,70	1048	20000		
	11	40	130	2,94	967	20000	İRSDM İRSDFM	73 / 90 L 4a
	12		117	3,16	873	20000		
	13		104	3,38	776	20000		
	6,7	50	208	0,99	1447	14440		
	7,6		183	1,09	1276	14440		
	8,6		163	1,18	1134	14440		
	9,6		145	1,28	1011	14440		
	11		128	1,39	892	14440		
	12	40	116	1,72	844	14440		
	14		103	1,86	745	14440		



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
1,5 2	15	30	91	2,05	662	14400	İRSDM İRSDFM	73 / 90 L 4a
	16		87	2,35	650	14400		
	18		77	2,57	574	14400		
	20		68	2,79	510	14400		
	23		61	3,08	456	14440		
	26		55	3,23	409	14440		
	28		49	3,37	368	14440		
	31		45	3,52	332	14440		
	35		40	3,81	301	14440		
	38		36	3,96	272	14440		
	13	40	110	0,92	741	8900	İRSDM İRSDFM	63/ 90 L 4a
	14	53	102	1,14	698	8900		
	14	40	99	0,98	671	8900		
	16	30	90	1,05	610	8900		
	17	40	82	1,35	597	8900		
	19	40	75	1,18	510	8900		
	19	30	74	1,45	541	8900		
	21	30	68	1,54	492	8900		
	22	40	64	1,32	430	8900		
	23	30	61	1,36	410	8900		
	25	40	57	1,76	411	8900	İRSDM İRSDFM	53 / 90 L 4a
	26	30	54	1,45	363	8900		
	29	40	48	1,91	346	8900		
	31	30	46	1,98	331	8900		
	35	40	40	2,13	293	8900		
	23	30	61	0,79	419	5400		
	26		55	0,85	376	5400		
	28		49	0,91	338	5400		
	31		45	0,98	305	5400		
	35		40	1,04	276	5400		
	37		38	1,07	262	5400		
	41		34	1,15	232	5400		
	46		31	1,13	240	5400		
	51		27	1,21	216	5400		
	57		25	1,30	194	5400		
2,2 3	63	15	22	1,39	175	5400	İRSDM İRSDFM	161 / 100 L 4a
	70		20	1,47	158	5400		
	73		19	1,52	151	5400		
	83		17	1,63	133	5400		
	5,0	87	291	1,38	2609	24350		
	5,5		261	1,49	2372	24350		
	6,0		235	1,59	2174	24350		
	7,0	54	203	2,47	2159	24350		
	8,0		181	2,68	1889	24350		
	9,0		162	2,90	1680	24350		
	10,0		146	3,10	1512	24350		

Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
2,2 3	4,3	52	210	0,85	3487	19450	İRSDM İRSDFM	83 / 112 M 6a
	4,8		188	0,93	3108	19450		
	5,3	65	263	0,86	2529	19450		
	6,0		235	0,94	2255	19450		
	6,7	52	210	1,23	2241	19450		
	7,5		188	1,32	1998	19450		
	8,6		162	1,70	1724	19450		
	9,7		144	1,85	1537	19450		
	11		130	2,00	1418	19450	İRSDM İRSDFM	83 / 100 L 4a
	12	40	117	2,15	1281	19450		
	13		104	2,30	1138	19450		
	15	32	94	2,80	1052	19450		
	17		83	3,00	935	19450		
	19		75	3,14	839	19450		
	21		67	3,41	757	19450		
	23		60	3,55	672	19450		
	25		56	3,82	626	19450		
	8,6		163	0,81	1664	14100		
	9,6	50	145	0,87	1482	14100		
	11		128	0,95	1309	14100		
	12	40	116	1,17	1237	14100		
	14		103	1,27	1093	14100		
	15		91	1,40	971	14100		
	16	30	87	1,60	954	14100		
	18		77	1,75	842	14100		
	20		68	1,90	749	14100		
	23		61	2,10	669	14100		
	26		55	2,20	600	14100	İRSDM İRSDFM	73 / 100 L 4a
	28		49	2,30	540	14100		
	31		45	2,40	488	14100		
	35		40	2,60	441	14100		
	38		36	2,70	399	14100		
	42		33	2,90	362	14100		
	46	15	31	3,00	372	14100		
	51		27	3,20	332	14100		
	57		25	3,40	299	14100		
	63		22	3,60	270	14100		
	70		20	3,80	244	14100		
	17	30	82	0,92	876	8700	İRSDM İRSDFM	63 / 100 L 4a
	19	40	75	0,81	747	8700		
	19	30	74	0,99	793	8700		
	21		68	1,05	721	8700		
	22	40	64	0,90	630	8700		
	23		61	0,93	602	8700		
	25	30	57	1,20	602	8700		
	26	40	54	0,99	533	8700		
	29	30	48	1,30	508	8700		



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			kg
2,2 3	31	30	46	1,35	485	8700	İRSDM İRSDFM	63 / 100 L 4a	168	42 45
	35		40	1,45	430	8700				
	41	30	34	0,78	341	5400				
	46	15	31	0,77	352	5400				
	51		27	0,82	316	5400				
	57		25	0,89	285	5400		53 / 100 L 4a	166	28 30
	63		22	0,95	257	5400				
	70		20	1,00	232	5400				
	73		19	1,04	221	5400				
	83		17	1,11	195	5400				
3 4	5,5	87	261	1,09	3234	24100	İRSDM İRSDFM	161 / 100 L 4b	174	174 184
	6,0		235	1,17	2965	24100				
	6,5		213	1,24	2737	24100				
	7,5		194	1,31	2372	24100				
	9,0		162	2,13	2290	24100				
	10,0	54	146	2,27	2061	24100				
	11		132	2,43	1874	24100				
	12		120	2,58	1718	24100				
	6,7	52	210	0,90	3056	19100				
	7,5		188	0,97	2725	19100				
	8,6		162	1,25	2351	19100				
	9,7		144	1,35	2096	19100				
	11		130	1,47	1934	19100				
	12	40	117	1,58	1747	19100				
	13		104	1,69	1552	19100				
	15		94	2,00	1435	19100		83 / 100 L 4b	172	105 115
	17		83	2,20	1275	19100				
	19		75	2,30	1144	19100				
	21		67	2,50	1032	19100				
	23		60	2,60	917	19100				
	25	32	56	2,80	854	19100				
	28		50	2,90	771	19100				
	31		46	3,10	703	19100				
	33		42	3,20	641	19100				
	37		38	3,40	586	19100				
	41		34	3,60	520	19100				
	12	40	116	0,86	1687	13700	İRSDM İRSDFM	73 / 100 L 4b	170	69 74
	14		103	0,93	1490	13700				
	15		91	1,03	1324	13700				
	16	30	87	1,17	1301	13700				
	18		77	1,28	1149	13700				
	20		68	1,39	1021	13700				
	23		61	1,54	912	13700				
	26		55	1,61	818	13700				
	28		49	1,69	737	13700				
	31		44	1,76	665	13700				

Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜÇ Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
	35		40	1,91	601	13700		
	38		30	1,98	545	13700		
	42		30	2,13	494	13700		
	46		15	2,20	507	13700	İRSDFM	
	51		15	2,35	453	13700	İRSDFM	69
3	57		15	2,49	408	13700	73 / 100 L 4b	74
	63		15	2,64	368	13700		
	70		15	2,79	333	13700		
	25		30	0,88	821	8700	İRSDFM	
	29		30	0,95	693	8700	İRSDFM	42
	31		30	0,99	662	8700	63 / 100 L 4b	45
	35		30	1,06	586	8700		
	5,5		87	261	0,82	4312	23500	
	6,0		87	235	0,88	3953	23500	
	6,7		87	213	0,93	3540	23500	
	7,0		54	203	1,36	3926	23500	
	8,0		54	181	1,48	3435	23500	
	9,0		54	162	1,60	3054	23500	
	10,0		54	146	1,70	2748	23500	
	11		54	132	1,82	2498	23500	
	12		54	120	1,93	2290	23500	
	11		42	126	2,10	2533	23500	
	13		42	114	2,25	2229	23500	
	14		42	103	2,39	1990	23500	
	15		42	93	2,52	1857	23500	
	8,6		52	162	0,94	3135	18500	
	9,7		52	144	0,98	2795	18500	
	11		40	130	1,10	2579	18500	
4	12		40	117	1,19	2329	18500	
5,5	13		40	104	1,27	2070	18500	
	15		32	94	1,47	1914	18500	
	17		32	83	1,65	1700	18500	
	19		32	75	1,73	1526	18500	
	21		32	67	1,88	1376	18500	
	23		32	60	1,95	1223	18500	
	25		32	56	2,10	1139	18500	
	28		32	50	2,18	1028	18500	
	31		32	46	2,33	937	18500	
	33		32	42	2,40	855	18500	
	37		32	38	2,55	782	18500	
	41		32	34	2,70	694	18500	
	15		40	91	0,77	1766	13200	
	16		40	87	0,88	1734	13200	
	18		30	77	0,96	1531	13200	
	20		30	68	1,05	1361	13200	
	23		30	61	1,16	1216	13200	



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type	kg
[kW] Hp	[r.p.m]				[Nm]	[N]		
4 5,5	26	30	55	1,21	1091	13200	İRSDM İRSDFM	73 / 112 M 4b
	28		49	1,27	982	13200		
	31		45	1,32	886	13200		
	35		40	1,43	802	13200		
	38		36	1,49	726	13200		
	42		33	1,60	658	13200		
	46	15	31	1,65	676	13200		
	51		27	1,76	604	13200		
	57		25	1,87	544	13200		
	63		22	1,98	491	13200		
	70		20	2,09	444	13200		
	77		18	2,20	402	13200		
	85		17	2,31	365	13200		
	9,0	87	162	0,80	3624	23500	İRSDM İRSDFM	161 / 132 S 4c
5,5 7,5	9,5		148	0,84	3433	23500		
	11		136	0,88	3106	23500		
	13		110	1,48	2907	23000		
	14		100	1,57	2699	23000		
	16		92	1,65	2438	23000		
	17	42	85	1,94	2322	23000		
	18		78	2,25	2128	23000		
	20		72	2,14	1915	23000		
	24		61	2,76	1696	23000		
	26		56	2,89	1533	23000		
	28		51	3,03	1424	23000		
	31	30	47	3,15	1286	23000	İRSDM İRSDFM	83 / 132 S 4c
	42		34	3,66	949	23000		
	11		130	0,80	3546	17250		
	12		117	0,86	3202	17250		
	13		104	0,92	2846	17250		
	15		94	1,07	2631	17250		
	17	40	83	1,20	2338	17250		
	19		75	1,25	2098	17250		
	21		67	1,36	1892	17250		
	23		60	1,42	1681	17250		
	25		56	1,53	1566	17250		
	28		50	1,58	1413	17250		
	31		46	1,69	1288	17250		
	33		42	1,75	1176	17250		
	37		38	1,85	1075	17250		
	41		34	1,96	954	17250		
	20	30	68	0,76	1872	13200	İRSDM İRSDFM	73 / 132 S 4c
	23		61	0,84	1672	13200		
	26		55	0,88	1500	13200		
	28		49	0,92	1350	13200		
	31		45	0,96	1219	13200		

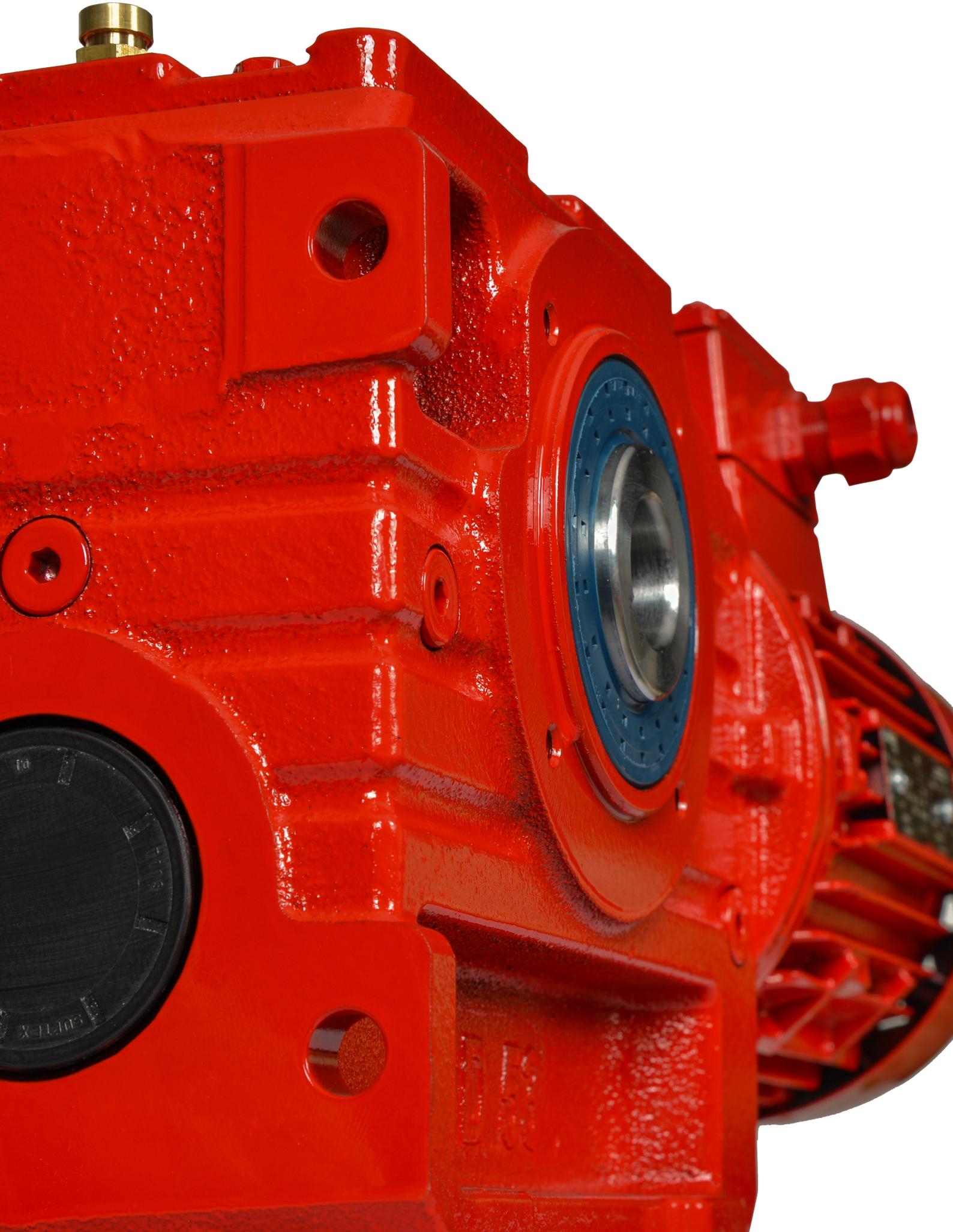
Redüktör Yükleme Karakteristikleri / Load Characteristics of Gearboxes / Types de machines et applications



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type		kg	
5,5 7,5	35	30	40	1,04	1102	13200	İRSMD İRSDFM	73 / 132 S 4c	170	84 89
	38		36	1,08	998	13200				
	42		33	1,16	905	13200				
	46		31	1,20	929	13200				
	51		27	1,28	831	13200				
	57		25	1,36	748	13200				
	63		22	1,44	675	13200				
	70		20	1,52	611	13200				
	77		18	1,60	553	13200				
	85		17	1,68	501	13200				
7,5 10	13	54	110	1,08	3964	22440	İRSDM İRSDFM	161 / 132 M 4b	174	201 211
	14		100	1,15	3604	22440				
	16		92	1,21	3303	22440				
	17		85	1,42	3166	22440				
	18		78	1,65	2902	22440				
	20		72	1,57	2612	22440				
	22		66	1,64	2374	22440				
	24		61	2,02	2313	22440				
	26		56	2,12	2091	22440				
	28		51	2,22	1941	22440				
7,5 10	31		47	2,31	1753	22440				
	43		34	2,68	1264	22440				
	15	32	94	0,79	3588	17000	İRSDM İRSDFM	83 / 132 M 4b	172	129 139
	17		83	0,88	3188	17000				
	19		75	0,92	2861	17000				
	21		67	1,00	2579	17000				
	23		60	1,04	2293	17000				
	25		56	1,12	2135	17000				
	28		50	1,16	1927	17000				
	31		46	1,24	1756	17000				
	33		42	1,28	1604	17000				
	37		38	1,36	1465	17000				
11 15	41		34	1,44	1301	17000				
	35	30	40	0,76	1503	13200	İRSDM İRSDFM	73 / 132 M 4b	170	91 96
	38		36	0,79	1361	13200				
	42		33	0,85	1234	13200				
	46		31	0,88	1267	13200				
	51		27	0,94	1133	13200				
	57		25	1,00	1020	13200				
	63		22	1,06	921	13200				
	70		20	1,11	833	13200				
	77		18	1,17	754	13200				
11 15	85		17	1,23	684	13200				
	17	42	85	0,97	4507	22440	İRSDM İRSDFM	161 / C132 M 4	174	210 220
	19		78	1,13	4141	22440				
	20		72	1,07	3831	22440				



P1 GÜC Power Puissance	n <sub>2</sub> Çıkış Devri Output Speeds Vitesse de sortie	i Sonsuz V. Tahvili Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	f <sub>s</sub> Servis Faktörü Service Factor Service facteur	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales	Tip Type			
11 15	22	42 24 26 28 31 43 47 51 56 61 85 28 31 33 37 41	30 30 30 30 30 34 30 28 26 23 17 50 46 42 38 34	66 61 56 51 47 34 30 28 26 23 17 50 46 42 38 34	1,12 1,38 1,45 1,52 1,57 1,83 2,01 2,11 2,20 2,28 2,66 0,79 0,85 0,87 0,93 0,98	3482 3392 3066 2847 2572 1854 1850 1705 1553 1426 1023 2826 2576 2352 2149 1907	22440 22440 22440 22440 22440 22440 22440 22440 22440 22440 22440 17000 17000 17000 17000 17000	İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM İRSDM İRSDFM	161 / C132 M 4 174	210 220 174 166 171



# **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


 $n_1 = 1400$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficience	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]				
Service Facteur <i>Sf = 1</i>	[kW] Hp	[r.p.m]			[ % ]							
270-420 Nm	0,26	5,1	82	271,89	56	270	420	6000	İRSD İRSDF	53	166	13 15
	0,30	5,8		238,19		270	420	6000				
	0,36	6,8	62	205,58	54	270	420	6000				
	0,41	7,7		180,10		270	420	6000				
	0,37	8,4	50	166,04	65	270	420	6000				
	0,46	9,6		145,24		290	420	6000				
	0,74	10,8	39	129,32	65	420	420	6000				
	0,85	12,3		113,29		420	420	6000				
	0,66	13,9	39	100,85	65	290	420	6000				
	1,1	15,7		88,92		420	420	6000				
	1,2	17,6	30	79,44	68	420	420	6000				
	1,2	18,1		76,96		410	420	6000				
	1,3	20,4	30	68,40	68	410	420	6000				
	1,5	22,9		61,11		410	420	6000				
	1,6	25,5	30	54,83	68	410	420	6000				
	1,8	28,3		49,35		410	420	6000				
	2,0	31,4	30	44,55	68	410	420	6000				
	2,2	34,7		40,29		410	420	6000				
	2,3	36,5	15	38,28	78	410	420	6000				
	2,6	41,3		33,87		410	420	6000				
	2,6	45,8	15	30,56	78	410	420	6000				
	2,9	51,0		27,41		410	420	6000				
	3,2	56,7	15	24,68	78	410	420	6000				
	3,5	62,8		22,27		410	420	6000				
	3,9	69,5	15	20,14	78	410	420	6000				
	4,1	73,1		19,14		410	420	6000				
	4,6	82,6		16,94		410	420	6000				
510-870 Nm	0,55	4,9	62	285,89	60	634	700	8700	İRSD İRSDF	63	168	22 25
	0,55	5,2		267,58		594	700	8700				
	0,66	6,1	53	228,74	68	692	700	8700				
	0,75	6,6	62	210,26	60	636	700	8700				
	0,77	7,7	53	179,74	68	636	700	8700				
	0,75	8,2	62	169,93	60	514	700	8700				
	1,1	9,6	53	145,26	68	730	700	8700				
	1,1	10	40	135,57	67	662	700	8700				
	1,0	11	53	131,59	68	602	700	8700				
	1,5	13	40	109,63	67	741	700	8700				
	1,4	14	30	101,74	72	698	700	8700				
	1,5	14	40	99,31	67	671	700	8700				
	1,5	16		90,32		610	700	8700				
	2,2	17	30	82,22	72	876	700	8700				
	2,2	19	40	75,43	67	747	700	8700				
	2,4	19	30	74,48		793	700	8700				
	2,4	21		67,74		721	700	8700				
	2,2	22	40	63,59		630	700	8700				



$$n_1 = 1400 \quad d/d$$

Servis Faktörü	P <sub>1</sub> GÜÇ	n <sub>2</sub> Çıkış Devri	i <sub>s</sub> Sonsuz V. Tahvili	i <sub>t</sub> Toplam Tahvil	η Verim	M <sub>2</sub> Çıkış Momenti	F <sub>Q1</sub> Rad. Yük	F <sub>Qlo</sub> Rad. Yük	Tip Type		
Service Factor	Power	Output Speeds	Worm Ratio	Total Ratio	Efficiency	Output Torque	Over Loads	Over Loads	Tip Type		kg
Service Facteur Sf = 1	Puissance	Vitesse de sortie	Rapport de réduction	Rapport de réduction total	efficiency	Couple de sortie	Charges radiales	Charges radiales			
510-870 Nm	2,20	23	40	60,74	67	602	700	8700	İRSDF İRSDF	63	22 25
	2,20	25	30	56,57	72	602	700	8700			
	3,39	26	40	53,79	67	821	700	8700			
	3,00	29	30	47,69	72	693	700	8700			
	3,00	31		45,56		662	700	8700			
	4,46	35		40,34		871	700	8700			

1670-3540 Nm	1,50	4,2	83	335,95	62	2100	1550	18800	iRSDF	83	172	97 107
	1,50	4,7		299,52		1873	1550	18800				
	2,20	5,3	65	263,10	65	2529	1550	18800				
	2,20	6		234,57		2255	1550	18800				
	3,00	7	52	210,48	72	3056	1550	18800				
	3,00	7		187,65		2725	1550	18800				
	3,10	9		168,48		2447	1550	18800				
	3,20	10		152,15		2209	1550	18800				
	5,50	11	40	129,60	74	3546	1550	18800				


 $n_1 = 1400$  d/d

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvili	i <sub>t</sub> Toplam Tahvil	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti [Nm]	F <sub>Q1</sub> Rad. Yük [N]	F <sub>Qlo</sub> Rad. Yük [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Worm Ratio	Total Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur <i>Sf = 1</i>	<i>Puissance</i>	<i>Vitesse de sortie</i>	<i>Rapport de réduction</i>	<i>Rapport de réduction total</i>	<i>efficience</i>	<i>Couple de sortie</i>	<i>Charges radiales</i>	<i>Charges radiales</i>				
1670-3540 Nm	5,50	12	40	117,04	74	3202	1550	18800	İRSD İRSDF	83	172	97 107
	5,50	13		104,00		2846	1550	18800				
	5,50	15		93,33		2554	1550	18800				
	7,50	17	32	83,20	76	3188	1550	18800				
	7,50	19		74,67		2861	1550	18800				
	7,50	21		67,31		2579	1550	18800				
	7,50	23		59,83		2293	1550	18800				
	7,50	25		55,73		2135	1550	18800				
	11,00	28		50,29		2826	1550	18800				
	11,00	31		45,84		2576	1550	18800				
	11,00	33		41,85		2352	1550	18800				
	11,00	37		38,24		2149	1550	18800				
	11,00	41		33,94		1907	1550	18800				
3400-6000 Nm	2,56	5,4	54	261,00	73	3274	2120	22000	İRSD İRSDF	161	174	160 170
	2,97	6,0		235,22		3430	2120	22000				
	3,17	6,6		213,00		3317	2120	22000				
	3,35	7,2		193,64		3186	2120	22000				
	6,25	6,9	87	203,14	63	5380	2120	22000				
	6,81	7,7		180,78		5213	2120	22000				
	7,35	8,6		162,00		5045	2120	22000				
	7,82	10		146,00		4834	2120	22000				
	8,37	11		132,20		4687	2120	22000				
	8,88	12		120,19		4518	2120	22000				
	8,33	11		126,00		5222	2120	22000				
	8,92	12	42	113,55	74	5039	2120	22000				
	9,09	14		102,82		4652	2120	22000				
	10,00	15		93,48		4652	2120	22000				
	10,56	16		85,27		4481	2120	22000				
	12,26	18		78,00		4756	2120	22000				
	11,67	20		71,51		4153	2120	22000				
	12,20	21		65,69		3988	2120	22000				
	14,33	23	30	60,90	77	4518	2120	22000				
	15,01	25		55,71		4330	2120	22000				
	15,74	27		51,08		4162	2120	22000				
	16,37	30		46,92		3976	2120	22000				
	18,77	42		33,65		3270	2120	22000				

 $n_1 = 900 \text{ d/d}$ 

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type	—	kg
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficience	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]			
Service Facteur <i>Sf = 1</i>	[kW] Hp	[r.p.m]			[ % ]						
270-420 Nm	0,17	3,3	82	271,89	56	270	420	6000	İRSD İRSDF	53	166
	0,19	3,8		238,19		270	420	6000			
	0,23	4,4	62	205,58	54	270	420	6000			
	0,27	5,0		180,10		270	420	6000			
	0,28	5,4	50	167,04		270	420	6000			
	0,29	6,2		145,24		290	420	6000			
	0,48	7,0	39	129,32	65	420	420	6000			
	0,55	7,9		113,29		420	420	6000			
	0,42	8,8	39	101,85		290	420	6000			
	0,69	10,1		88,92		420	420	6000			
	0,78	11,3	39	79,44		420	420	6000			
	0,75	11,7		76,96		410	420	6000			
	0,84	13,2	30	68,40	68	410	420	6000			
	0,94	14,7		61,11		410	420	6000			
	1,05	16,4	30	54,83		410	420	6000			
	1,17	18,2		49,35		410	420	6000			
	1,29	20,2	30	44,55	78	410	420	6000			
	1,43	22,3		40,29		410	420	6000			
	1,51	23,5	30	38,28		410	420	6000			
	1,70	26,6		33,87		410	420	6000			
	1,65	29,5	15	30,56	78	410	420	6000			
	1,83	32,8		27,41		410	420	6000			
	2,04	36,5	15	24,68		410	420	6000			
	2,26	40,4		22,27		410	420	6000			
	2,50	44,7	15	20,14		410	420	6000			
	2,63	47,0		19,14		410	420	6000			
	2,97	53,1		16,94		410	420	6000			
510-870 Nm	0,35	3,1	62	285,89	60	634	700	8700	İRSD İRSDF	63	168
	0,35	3,4		267,58		594	700	8700			
	0,43	3,9	53	228,74	68	692	700	8700			
	0,48	4,3		210,26		636	700	8700			
	0,50	5,0	53	179,74	68	636	700	8700			
	0,48	5,3		169,93		514	700	8700			
	0,71	6,2	53	145,26	68	730	700	8700			
	0,70	7		135,57		662	700	8700			
	0,64	7	53	131,59	68	602	700	8700			
	0,96	8		109,63		741	700	8700			
	0,91	9	40	101,74	72	698	700	8700			
	0,96	9		99,31		671	700	8700			
	0,96	10		90,32	72	610	700	8700			
	1,41	11	30	82,22		876	700	8700			
	1,41	12	40	75,43	72	747	700	8700			
	1,52	12	30	74,48		793	700	8700			
	1,52	13		67,74	67	721	700	8700			
	1,41	14		63,59		630	700	8700			

n<sub>1</sub> = 900 d/d

Servis Faktörü	P <sub>1</sub> GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficiency	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]				
Service Facteur Sf = 1	[kW] Hp	[r.p.m]			[ % ]							
510-870 Nm	1,41	15	40	60,74	67	602	700	8700	İRSD İRSDF	63	168	22 25
	1,41	16	30	56,57	72	602	700	8700				
	2,18	17	40	53,79	67	821	700	8700				
	1,93	19		47,69		693	700	8700				
	1,93	20		45,56	72	662	700	8700				
	2,87	22		40,34		871	700	8700				
680-1870 Nm	0,48	2,6	82	340,95	60	1031	1100	13300	İRSD İRSDF	73	170	55 60
	0,71	3,0		300,67		1334	1100	13300				
	0,71	3,4	63	261,95		1201	1100	13300				
	0,71	3,9		231,00		1059	1100	13300				
	0,96	4,4		205,43	62	1284	1100	13300				
	0,96	4,9		183,96		1150	1100	13300				
	0,96	5,4		165,24		1033	1100	13300				
	1,41	6	50	145,24	69	1482	1100	13300				
	1,41	7		128,26		1309	1100	13300				
	1,93	8	40	116,19	72	1687	1100	13300				
	1,93	9		102,61		1490	1100	13300				
	2,57	10		91,20		1766	1100	13300				
	2,57	10		87,14		1734	1100	13300	İRSD İRSDF	73	170	55 60
	2,57	12		76,96		1531	1100	13300				
	3,54	13		68,40		1872	1100	13300				
	3,54	15		61,11		1672	1100	13300				
	3,54	16		54,83		1500	1100	13300				
	3,53	18		49,35		1350	1100	13300				
	3,54	20		44,55		1219	1100	13300				
	4,82	22		40,29		1503	1100	13300				
	4,82	25		36,49		1361	1100	13300				
	4,82	27		33,08		1234	1100	13300				
1670-3540 Nm	4,82	29	15	30,66	82	1267	1100	13300	İRSD İRSDF	83	172	97 107
	4,82	33		27,41		1133	1100	13300				
	4,82	36		24,68		1020	1100	13300				
	4,82	40		22,27		921	1100	13300				
	4,82	45		20,14		833	1100	13300				
	4,82	49	52	18,24	72	754	1100	13300				
	4,82	54		16,54		684	1100	13300				


 $n_1 = 900 \text{ d/d}$ 

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvili	i <sub>t</sub> Toplam Tahvil	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti [Nm]	F <sub>Q1</sub> Rad. Yük [N]	F <sub>Qlo</sub> Rad. Yük [N]	Tip Type	—	kg
Service Factor	Power	Output Speeds	Worm Ratio	Total Ratio	Efficiency	Output Torque	Over Loads	Over Loads			
Service Facteur Sf = 1	Puissance	Vitesse de sortie	Rapport de réduction	Rapport de réduction total	efficience	Couple de sortie	Charges radiales	Charges radiales			
	3,54	8	40	117,04	74	3202	1550	18800	İRSD İRSDF	83	172
	3,54	9		104,00		2846	1550	18800			
	3,54	10		93,33		2554	1550	18800			
1670-3540 Nm	4,82	11	32	83,20	76	3188	1550	18800			
	4,82	12		74,67		2861	1550	18800			
	4,82	13		67,31		2579	1550	18800			
	4,82	15		59,83		2293	1550	18800			
	4,82	16		55,73		2135	1550	18800			
	7,07	18		50,29		2826	1550	18800			
	7,07	20		45,84		2576	1550	18800			
	7,07	22		41,85		2352	1550	18800			
	7,07	24		38,24		2149	1550	18800			
	7,07	27		33,94		1907	1550	18800			
3400-6000 Nm	1,64	3,4	54	261,00	73	3274	2120	22000	İRSD İRSDF	161	174
	1,91	3,8		235,22		3430	2120	22000			
	2,04	4,2		213,00		3317	2120	22000			
	2,16	4,6		193,64		3186	2120	22000			
	4,02	4,4	87	203,14	63	5380	2120	22000			
	4,38	5,0		180,78		5213	2120	22000			
	4,73	5,6		162,00		5045	2120	22000			
	5,03	6		146,00		4834	2120	22000			
	5,38	7		132,20		4687	2120	22000			
	5,71	7		120,19		4518	2120	22000			
	5,36	7		126,00		5222	2120	22000			
	5,73	8	42	113,55	74	5039	2120	22000			
	5,85	9		102,82		4652	2120	22000			
	6,43	10		93,48		4652	2120	22000			
	6,79	11		85,27		4481	2120	22000			
	7,88	12		78,00		4756	2120	22000			
	7,50	13		71,51		4153	2120	22000			
	7,84	14		65,69		3988	2120	22000			
9,21 9,65 10,12 10,52 12,07	9,21	15	30	60,90	77	4518	2120	22000	İRSD İRSDF	161	174
	9,65	16		55,71		4330	2120	22000			
	10,12	18		51,08		4162	2120	22000			
	10,52	19		46,92		3976	2120	22000			
	12,07	27		33,65		3270	2120	22000			


 $n_1 = 700 \text{ d/d}$ 

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power	Output Speeds	Worm Ratio	Total Ratio	Efficiency	Output Torque	Over Loads	Over Loads				
Service Facteur $S_f = 1$	Puissance [kW] Hp	Vitesse de sortie [r.p.m]	Rapport de réduction	Rapport de réduction total	efficience [ % ]	Couple de sortie [Nm]	Charges radiales [N]	Charges radiales [N]	Type			
270-420 Nm	0,13	2,6	82	271,89	56	270	420	6000	İRSDF	53	166	13 15
	0,15	2,9		238,19		270	420	6000				
	0,18	3,4	62	205,58	54	270	420	6000				
	0,21	3,9		180,10		270	420	6000				
	0,21	4,2	50	167,04		270	420	6000				
	0,23	4,8		145,24		290	420	6000				
	0,37	5,4	39	129,32	65	420	420	6000				
	0,42	6,2		113,29		420	420	6000				
	0,33	6,9	39	101,85		290	420	6000				
	0,54	7,9		88,92		420	420	6000				
	0,60	8,8	39	79,44		420	420	6000				
	0,58	9,1		76,96		410	420	6000				
	0,66	10,2	30	68,40	68	410	420	6000				
	0,73	11,5		61,11		410	420	6000				
	0,82	12,8	30	54,83		410	420	6000				
	0,91	14,2		49,35		410	420	6000				
	1,01	15,7	30	44,55	78	410	420	6000				
	1,11	17,4		40,29		410	420	6000				
	1,17	18,3	30	38,28		410	420	6000				
	1,32	20,7		33,87		410	420	6000				
	1,28	22,9	30	30,56	78	410	420	6000				
	1,43	25,5		27,41		410	420	6000				
	1,58	28,4	15	24,68	78	410	420	6000				
	1,76	31,4		22,27		410	420	6000				
	1,94	34,8	15	20,14	78	410	420	6000				
	2,04	36,6		19,14		410	420	6000				
	2,31	41,3	15	16,94		410	420	6000				
510-870 Nm	0,27	2,4	62	285,89	60	634	700	8700	İRSDF	63	168	22 25
	0,28	2,6		267,58		594	700	8700				
	0,33	3,1	53	228,74	68	692	700	8700				
	0,37	3,3	62	210,26	60	636	700	8700				
	0,39	3,9	53	179,74	68	636	700	8700				
	0,37	4,1	62	169,93	60	514	700	8700				
	0,55	4,8	53	145,26	68	730	700	8700				
	0,54	5	40	135,57	67	662	700	8700				
	0,50	5	53	131,59	68	602	700	8700				
	0,75	6	40	109,63	67	741	700	8700				
	0,71	7	30	101,74	72	698	700	8700				
	0,75	7	40	99,31	67	671	700	8700				
	0,75	8		90,32		610	700	8700				
	1,10	9	30	82,22	72	876	700	8700				
	1,10	9	40	75,43	67	747	700	8700				
	1,18	9	30	74,48		793	700	8700				
	1,18	10		67,74		721	700	8700				
	1,10	11	40	63,59		630	700	8700				



$$n_1 = 700 \text{ d/d}$$

Servis Faktörü	P <sub>1</sub>	n <sub>2</sub>	i <sub>s</sub>	i <sub>t</sub>	η	M <sub>2</sub>	F <sub>Q1</sub>	F <sub>Qlo</sub>	Tip		
Service Factor	GÜÇ	Çıkış Devri	Sonsuz V. Tahvili	Toplam Tahvil	Verim	Çıkış Momenti	Rad. Yük	Rad. Yük	Type		
Service Facteur Sf = 1	Power	Output Speeds	Worm Ratio	Total Ratio	Efficiency	Output Torque	Over Loads	Over Loads			
	Puissance	Vitesse de sortie	Rapport de réduction	Rapport de réduction total	efficience	Couple de sortie	Charges radiales	Charges radiales			
	[kW]	[r.p.m]			[ % ]	[Nm]	[N]	[N]			
510-870 Nm	1,10	12	40	60,74	67	602	700	8700	İRSD İRSDF	63	168
	1,10	12	30	56,57	72	602	700	8700			
	1,69	13	40	53,79	67	821	700	8700			
	1,50	15	30	47,69	72	693	700	8700			
	1,50	15		45,56		662	700	8700			
	2,23	17		40,34		871	700	8700			
680-1870 Nm	0,37	2,1	82	340,95	60	1031	1100	13300	İRSD İRSDF	73	170
	0,55	2,3		300,67		1334	1100	13300			
	0,55	2,7	63	261,95	62	1201	1100	13300			
	0,55	3,0		231,00		1059	1100	13300			
	0,75	3,4		205,43		1284	1100	13300			
	0,75	3,8		183,96		1150	1100	13300			
	0,75	4,2		165,24		1033	1100	13300			
	1,10	5	50	145,24	69	1482	1100	13300			
	1,10	5		128,26		1309	1100	13300			
	1,50	6	40	116,19	72	1687	1100	13300			
	1,50	7		102,61		1490	1100	13300			
	2,00	8		91,20		1766	1100	13300			
	2,00	8	30	87,14	74	1734	1100	13300	İRSD İRSDF	73	170
	2,00	9		76,96		1531	1100	13300			
	2,75	10		68,40		1872	1100	13300			
	2,75	11		61,11		1672	1100	13300			
	2,75	13		54,83		1500	1100	13300			
	2,75	14	15	49,35	82	1350	1100	13300	İRSD İRSDF	83	172
	2,75	16		44,55		1219	1100	13300			
	3,75	17		40,29		1503	1100	13300			
	3,75	19		36,49		1361	1100	13300			
	3,75	21		33,08		1234	1100	13300			
	3,75	23	15	30,66	82	1267	1100	13300	İRSD İRSDF	83	172
	3,75	26		27,41		1133	1100	13300			
	3,75	28		24,68		1020	1100	13300			
	3,75	31		22,27		921	1100	13300			
	3,75	35		20,14		833	1100	13300			
	3,75	38	40	18,24	74	754	1100	13300	İRSD İRSDF	83	172
	3,75	42		16,54		684	1100	13300			
1670-3510 Nm	0,75	2,1	83	335,95	62	2100	1550	18800	İRSD İRSDF	83	172
	0,75	2,3		299,52		1873	1550	18800			
	1,10	2,7	65	263,10	65	2529	1550	18800			
	1,10	3,0		234,57		2255	1550	18800			
	1,50	3	52	210,48	72	3056	1550	18800			
	1,50	4		187,65		2725	1550	18800			
	1,50	4		168,48		2447	1550	18800			
	1,50	5		152,15		2209	1550	18800			
	2,75	5	40	129,60	74	3546	1550	18800			

n<sub>1</sub> = 700 d/d

Servis Faktörü	P <sub>1</sub> GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type	—	kg	
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficience	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]		—		
Service Facteur Sf = 1	[kW] Hp	[r.p.m]			[ % ]							
1670-3510 Nm	2,75	6	40	117,04	74	3202	1550	18800	İRSD İRSDF	83	172	97 107
	2,75	7		104,00		2846	1550	18800				
	2,75	8		93,33		2554	1550	18800				
	3,75	8	32	83,20	76	3188	1550	18800				
	3,75	9		74,67		2861	1550	18800				
	3,75	10		67,31		2579	1550	18800				
	3,75	12		59,83		2293	1550	18800				
	3,75	13		55,73		2135	1550	18800				
	5,50	14		50,29		2826	1550	18800				
	5,50	15		45,84		2576	1550	18800				
	5,50	17		41,85		2352	1550	18800				
	5,50	18		38,24		2149	1550	18800				
	5,50	21		33,94		1907	1550	18800				
3400-6000 Nm	1,28	2,7	54	261,00	73	3274	2120	22000	İRSD İRSDF	161	174	160 170
	1,49	3,0		235,22		3430	2120	22000				
	1,59	3,3		213,00		3317	2120	22000				
	1,68	3,6		193,64		3186	2120	22000				
	3,13	3,4	87	203,14	63	5380	2120	22000				
	3,40	3,9		180,78		5213	2120	22000				
	3,68	4,3		162,00		5045	2120	22000				
	3,91	5		146,00		4834	2120	22000				
	4,19	5		132,20		4687	2120	22000				
	4,44	6		120,19		4518	2120	22000				
	4,17	6	42	126,00	74	5222	2120	22000				
	4,46	6		113,55		5039	2120	22000				
	4,55	7		102,82		4652	2120	22000				
	5,00	7		93,48		4652	2120	22000				
	5,28	8		85,27		4481	2120	22000				
	6,13	9		78,00		4756	2120	22000				
	5,84	10	30	71,51	77	4153	2120	22000				
	6,10	11		65,69		3988	2120	22000				
	7,17	11		60,90		4518	2120	22000				
	7,51	13		55,71		4330	2120	22000				
	7,87	14		51,08		4162	2120	22000				
	8,18	15		46,92		3976	2120	22000				
	9,39	21		33,65		3270	2120	22000				


 $n_1 = 500 \text{ d/d}$ 

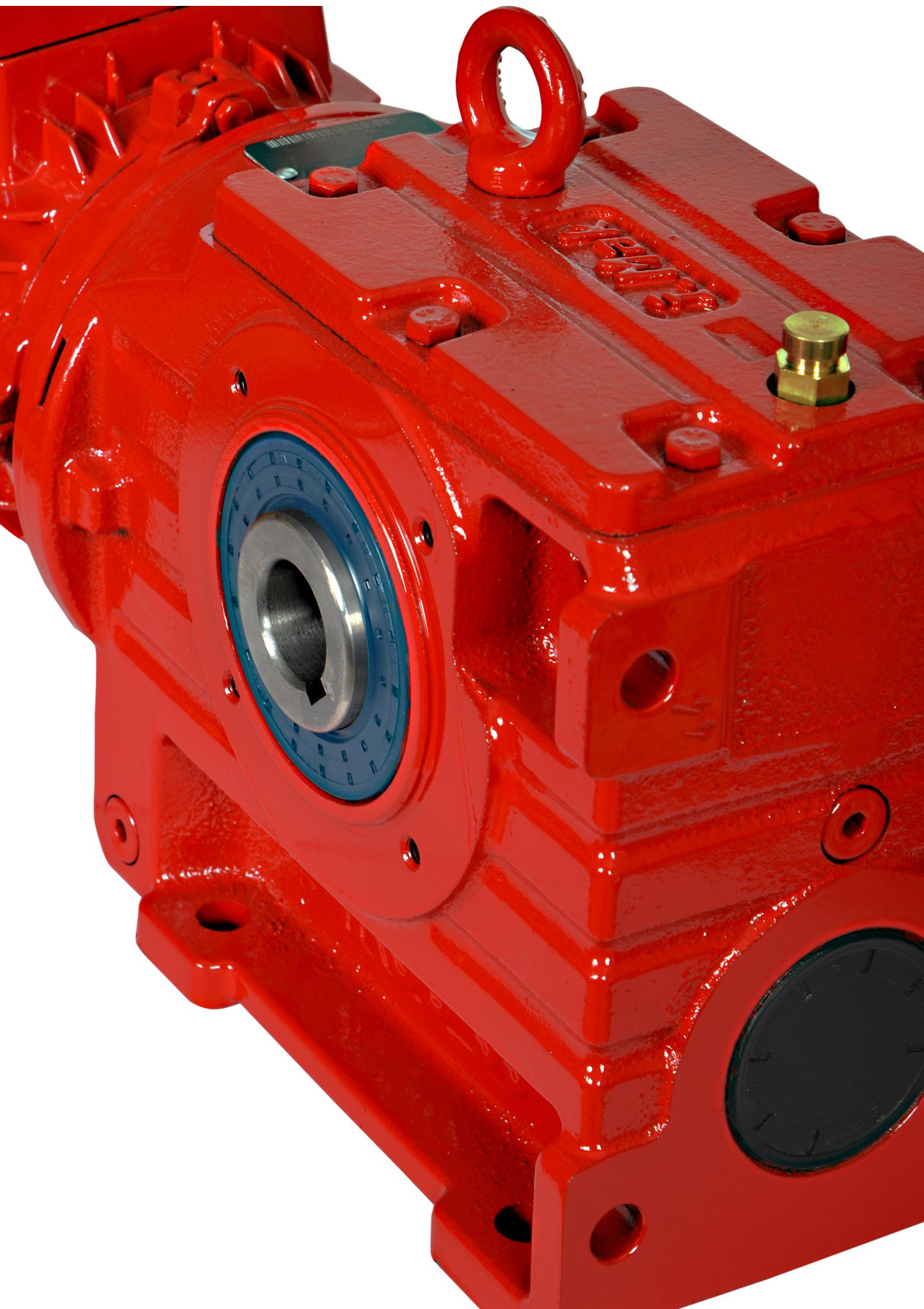
Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficience	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]				
Service Facteur <i>Sf = 1</i>	[kW] Hp	[r.p.m]			[ % ]							
270-420 Nm	0,09	1,8	82	271,89	56	270	420	6000	İRSDF	53	166	13 15
	0,11	2,1		238,19		270	420	6000				
	0,13	2,4	62	205,58	54	270	420	6000				
	0,15	2,8		180,10		270	420	6000				
	0,15	3,0	50	167,04		270	420	6000				
	0,16	3,4		145,24		290	420	6000				
	0,27	3,9	39	129,32	65	420	420	6000				
	0,30	4,4		113,29		420	420	6000				
	0,23	4,9	39	101,85		290	420	6000				
	0,39	5,6		88,92		420	420	6000				
	0,43	6,3	39	79,44		420	420	6000				
	0,42	6,5		76,96		410	420	6000				
	0,47	7,3	30	68,40	68	410	420	6000				
	0,52	8,2		61,11		410	420	6000				
	0,58	9,1	30	54,83		410	420	6000				
	0,65	10,1		49,35		410	420	6000				
	0,72	11,2	30	44,55	78	410	420	6000				
	0,80	12,4		40,29		410	420	6000				
	0,84	13,1	15	38,28		410	420	6000				
	0,95	14,8		33,87		410	420	6000				
	0,91	16,4	15	30,56	78	410	420	6000				
	1,02	18,2		27,41		410	420	6000				
	1,13	20,3	15	24,68		410	420	6000				
	1,25	22,4		22,27		410	420	6000				
	1,39	24,8	15	20,14	78	410	420	6000				
	1,46	26,1		19,14		410	420	6000				
	1,65	29,5		16,94		410	420	6000				
510-870 Nm	0,20	1,7	62	285,89	60	634	700	8700	İRSDF	63	168	22 25
	0,20	1,9		267,58		594	700	8700				
	0,24	2,2	53	228,74	68	692	700	8700				
	0,27	2,4	62	210,26	60	636	700	8700				
	0,28	2,8	53	179,74	68	636	700	8700				
	0,27	2,9	62	169,93	60	514	700	8700				
	0,39	3,4	53	145,26	68	730	700	8700				
	0,39	4	40	135,57	67	662	700	8700				
	0,36	4	53	131,59	68	602	700	8700				
	0,54	5	40	109,63	67	741	700	8700				
	0,51	5	30	101,74	72	698	700	8700				
	0,54	5	40	99,31	67	671	700	8700				
	0,54	6		90,32		610	700	8700				
	0,79	6	30	82,22	72	876	700	8700				
	0,79	7	40	75,43	67	747	700	8700				
	0,84	7	30	74,48		793	700	8700				
	0,84	7		67,74		721	700	8700				
	0,79	8	40	63,59		630	700	8700				

n<sub>1</sub> = 500 d/d

Servis Faktörü	P <sub>1</sub> GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficiency [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type	—	kg	
Service Factor	Power Puissance	Output Speeds Vitesse de sortie	Worm Ratio Rapport de réduction	Total Ratio Rapport de réduction total	Efficiency efficience	Output Torque Couple de sortie [Nm]	Over Loads Charges radiales [N]	Over Loads Charges radiales [N]				
Service Facteur Sf = 1	[kW] Hp	[r.p.m]			[ % ]							
510-870 Nm	0,79	8	40	60,74	67	602	700	8700	İRSD İRSDF	63	168	22 25
	0,79	9	30	56,57	72	602	700	8700				
	1,21	9	40	53,79	67	821	700	8700				
	1,07	10		47,69		693	700	8700				
	1,07	11		45,56	72	662	700	8700				
	1,59	12		40,34		871	700	8700				
680-1870 Nm	0,27	1,5	82	340,95	60	1031	1100	13300	İRSD İRSDF	73	170	55 60
	0,39	1,7		300,67		1334	1100	13300				
	0,39	1,9	63	261,95	62	1201	1100	13300				
	0,39	2,2		231,00		1059	1100	13300				
	0,54	2,4		205,43		1284	1100	13300				
	0,54	2,7		183,96		1150	1100	13300				
	0,54	3,0		165,24		1033	1100	13300				
	0,79	3	50	145,24	69	1482	1100	13300				
	0,79	4		128,26		1309	1100	13300				
	1,07	4	40	116,19	72	1687	1100	13300				
	1,07	5		102,61		1490	1100	13300				
	1,43	5		91,20		1766	1100	13300				
	1,43	6		87,14		1734	1100	13300				
	1,43	6	30	76,96	74	1531	1100	13300				
	1,96	7		68,40		1872	1100	13300				
	1,96	8		61,11		1672	1100	13300				
	1,96	9		54,83		1500	1100	13300				
	1,96	10		49,35		1350	1100	13300				
	1,96	11		44,55		1219	1100	13300				
1670-3540 Nm	2,68	12	15	40,29	82	1503	1100	13300	İRSD İRSDF	83	172	97 107
	2,68	14		36,49		1361	1100	13300				
	2,68	15		33,08		1234	1100	13300				
	2,68	16		30,66		1267	1100	13300				
	2,68	18		27,41		1133	1100	13300				
	2,68	20		24,68		1020	1100	13300				
	2,68	22	52	22,27	72	921	1100	13300				
	2,68	25		20,14		833	1100	13300				
	2,68	27		18,24		754	1100	13300				
	2,68	30		16,54		684	1100	13300				


 $n_1 = 500 \text{ d/d}$ 

Servis Faktörü	P1 GÜÇ [kW] Hp	n <sub>2</sub> Çıkış Devri [r.p.m]	i <sub>s</sub> Sonsuz V. Tahvilii Worm Ratio Rapport de réduction	i <sub>t</sub> Toplam Tahvil Total Ratio Rapport de réduction total	η Verim efficience [ % ]	M <sub>2</sub> Çıkış Momenti Output Torque Couple de sortie [Nm]	F <sub>Q1</sub> Rad. Yük Over Loads Charges radiales [N]	F <sub>Qlo</sub> Rad. Yük Over Loads Charges radiales [N]	Tip Type			kg
Service Factor	Power Puissance	Output Speeds Vitesse de sortie										
Service Facteur <i>Sf = 1</i>	[kW] Hp	[r.p.m]										
1670-3540 Nm	1,96	4	40	117,04	74	3202	1550	18800	İRSD İRSDF	83	172	97 107
	1,96	5		104,00		2846	1550	18800				
	1,96	5		93,33		2554	1550	18800				
	2,68	6	32	83,20	76	3188	1550	18800				
	2,68	7		74,67		2861	1550	18800				
	2,68	7		67,31		2579	1550	18800				
	2,68	8		59,83		2293	1550	18800				
	2,68	9		55,73		2135	1550	18800				
	3,93	10		50,29		2826	1550	18800				
	3,93	11		45,84		2576	1550	18800				
	3,93	12		41,85		2352	1550	18800				
	3,93	13		38,24		2149	1550	18800				
	3,93	15		33,94		1907	1550	18800				
3400-6000 Nm	0,91	1,9	54	261,00	73	3274	2120	22000	İRSD İRSDF	161	174	160 170
	1,06	2,1		235,22		3430	2120	22000				
	1,13	2,3		213,00		3317	2120	22000				
	1,20	2,6		193,64		3186	2120	22000				
	2,23	2,5	87	203,14	63	5380	2120	22000				
	2,43	2,8		180,78		5213	2120	22000				
	2,63	3,1		162,00		5045	2120	22000				
	2,79	3		146,00		4834	2120	22000				
	2,99	4		132,20		4687	2120	22000				
	3,17	4		120,19		4518	2120	22000				
	2,98	4	42	126,00	74	5222	2120	22000				
	3,19	4		113,55		5039	2120	22000				
	3,25	5		102,82		4652	2120	22000				
	3,57	5		93,48		4652	2120	22000				
	3,77	6		85,27		4481	2120	22000				
	4,38	6		78,00		4756	2120	22000				
	4,17	7	30	71,51	77	4153	2120	22000				
	4,36	8		65,69		3988	2120	22000				
	5,12	8		60,90		4518	2120	22000				
	5,36	9		55,71		4330	2120	22000				
	5,62	10		51,08		4162	2120	22000				
	5,85	11		46,92		3976	2120	22000				
	6,70	15		33,65		3270	2120	22000				



# **Helisel Sonsuz Vidalı Redüktörler Ölçü Sayfaları**

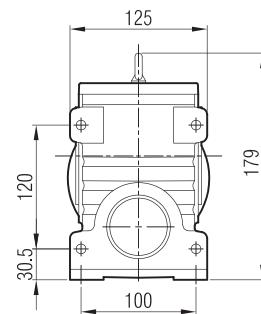
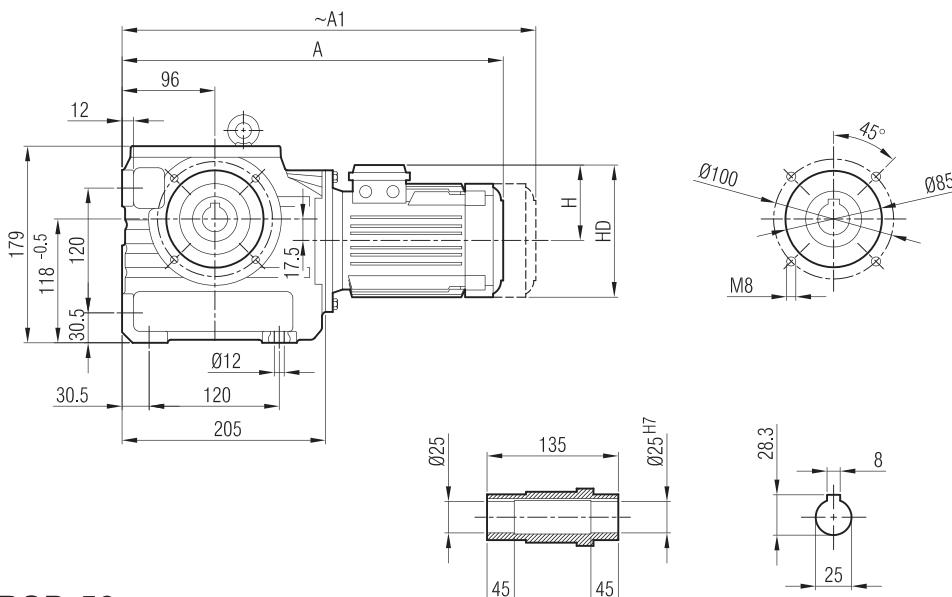
---

Helical,Worm Gearbox

*Réducteurs hélicoïdaux à roue et vis sans fin*



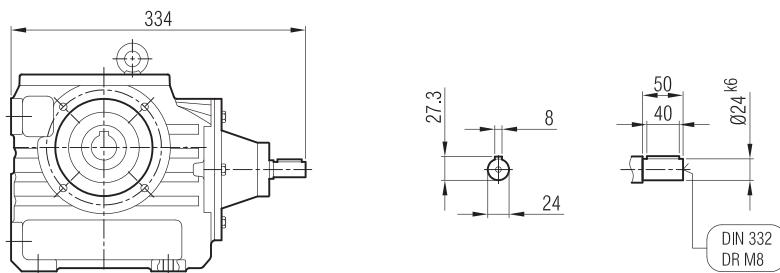
## İRSDM 53



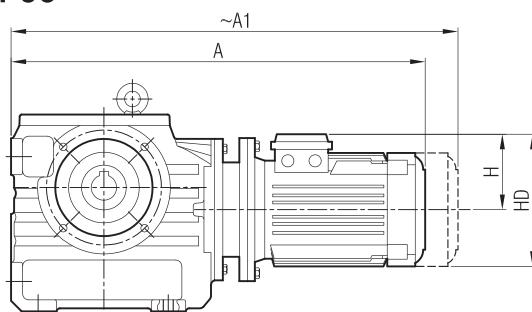
	71	80	90 S	90 L	100
A	423	450	479	504	544
A1	474	519	545	570	622
H	111	118	126	126	134
HD	182	198	216	216	234
AC	138	156	176	176	194

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

## İRSD 53



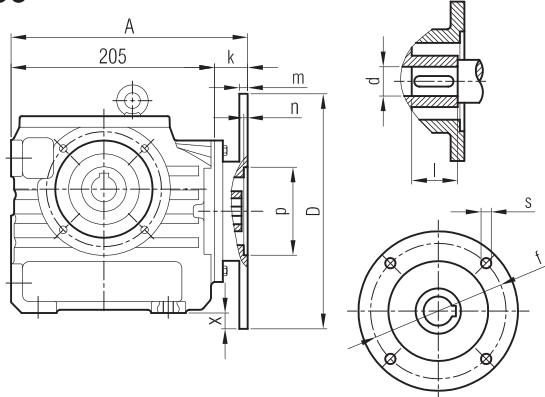
## İRSDPM 53



	71/B5	80/B5	90 S/B5	90 L/B5	100/B5
A	472	495	510	535	581
A1	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" correspond aux moteurs équipés de freins.

## İRSDP 53

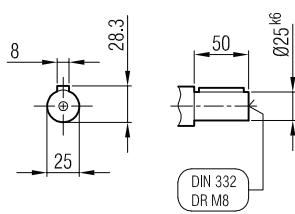


	A	Øp	Øf	ØD	s	k	m	n	Ød	I	t	u	x
71/B5	249	110	130	160	M8	44	9	4	14	30	16.3	5	-
80/B5	251	130	165	200	M10	46	12	5	19	40	21.8	6	-
90/B5	251	130	165	200	M10	46	12	5	24	50	27.3	8	-
100/B5	265	180	215	250	M12	60	14	5	28	60	31.3	8	24.5

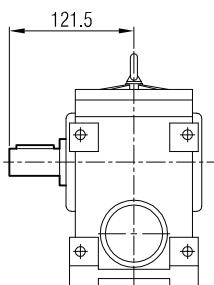
"A1" Ölçüsü Frenli Motorlar içindir.  
Dimension "A1" is for motors with brake.  
Le dimensions "A1" correspond aux moteurs équipés de freins.



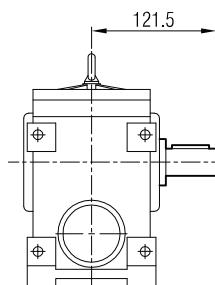
**IRSMD 53**



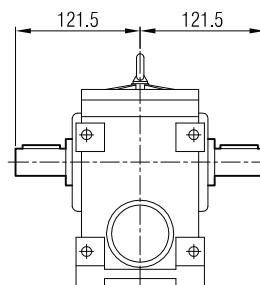
**... -SR**



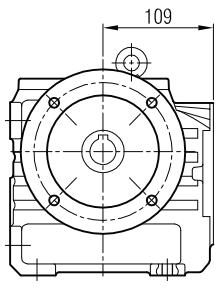
**... -SL**



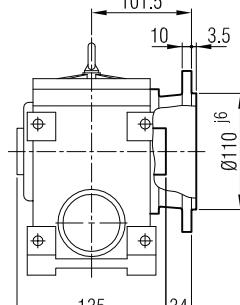
**... -SD**



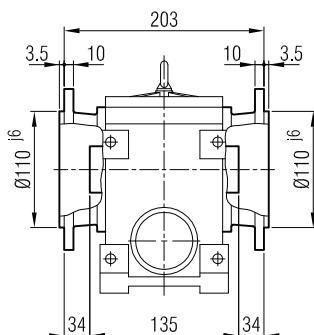
**... -FR**



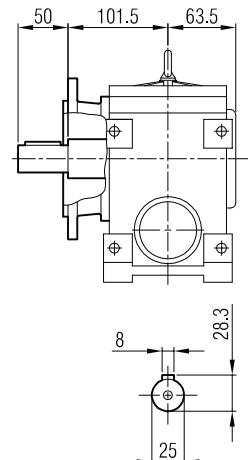
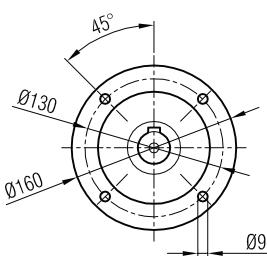
**... -FL**



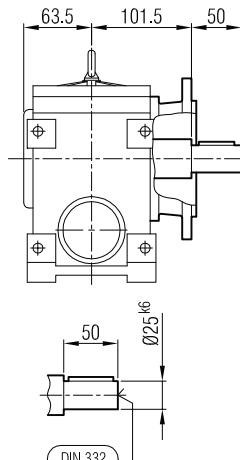
**... -FD**



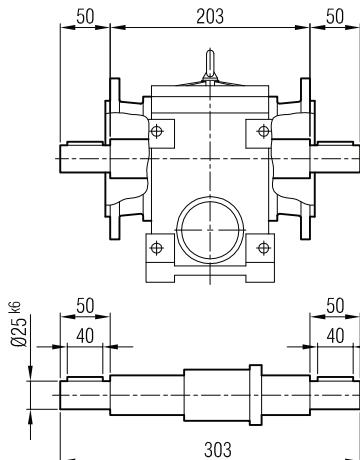
**... -FR -SR**



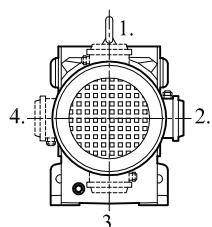
**... -FL -SL**



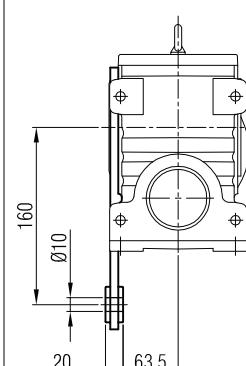
**... -FD -SD**



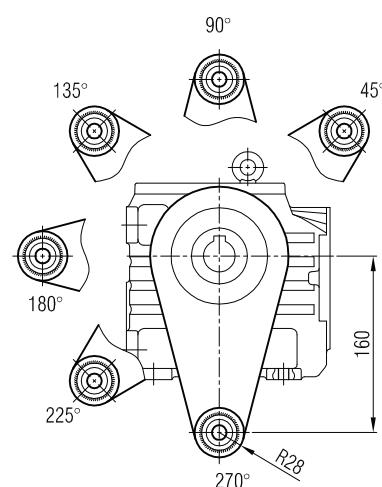
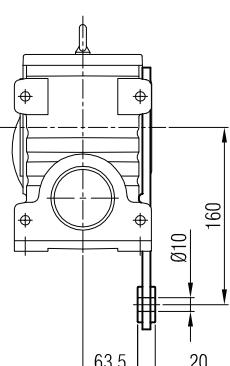
**Klemens Pozisyonları**  
Terminal Box Positions  
Klemenskasten Positionen



**-TR**

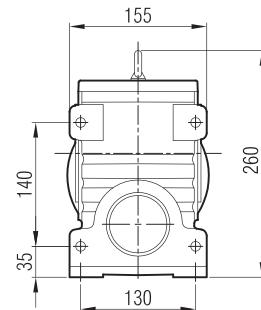
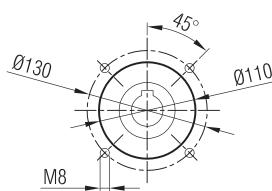
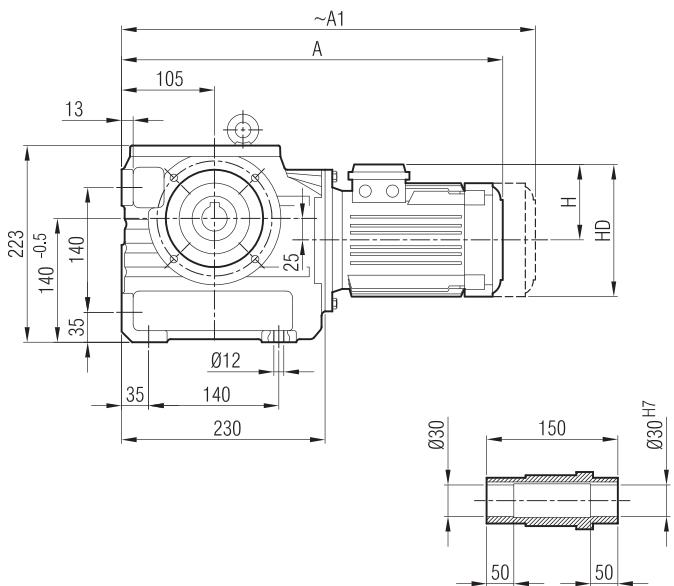


**-TL**





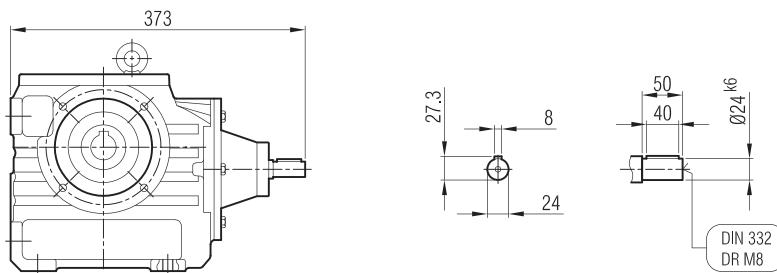
## İRSDM 63



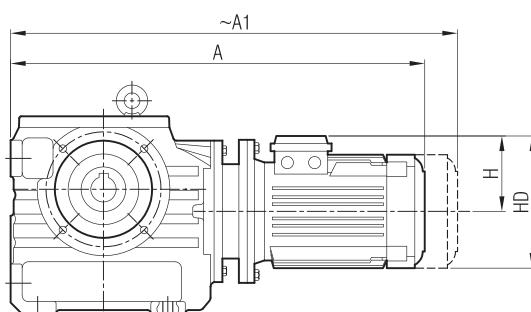
	71	80	90 S	90 L	100	112
A	441	470	500	525	564	584
A1	492	539	566	591	642	667
H	111	118	126	126	134	145
HD	182	198	216	216	234	257
AC	138	156	176	176	194	218

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

## İRSD 63



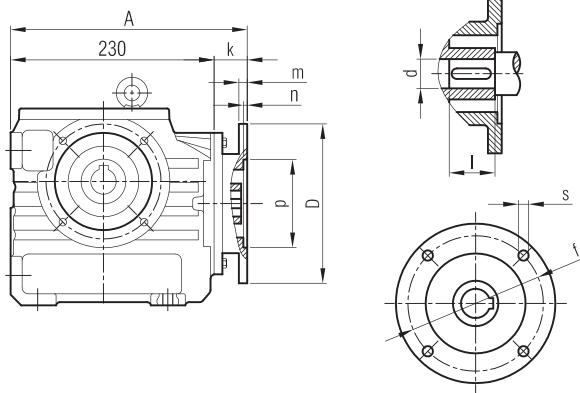
## İRSDPM 63



	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/B5
A	498	524	539	564	609	629
A1	549	593	605	630	687	712
H	111	118	126	126	134	145
HD	182	198	216	216	234	257
AC	138	156	176	176	194	218

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

## İRSDP 63

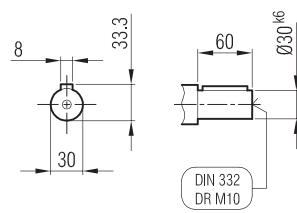


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u
71/B5	275	110	130	160	M8	45	9	4	14	30	16.3	5
80/B5	280	130	165	200	M10	50	12	5	19	40	21.8	6
90/B5	280	130	165	200	M10	50	12	5	24	50	27.3	8
100/B5	293	180	215	250	M12	63	14	5	28	60	31.3	8
112/B5	293	180	215	250	M12	63	14	5	28	60	31.3	8

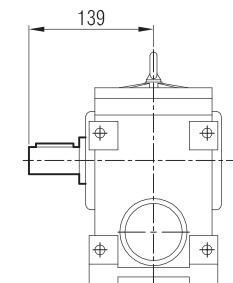
"A1" Ölçüsü Frenli Motorlar içindir.  
Dimension "A1" is for motors with brake.  
Le dimensions "A1" correspond aux moteurs équipés de freins.



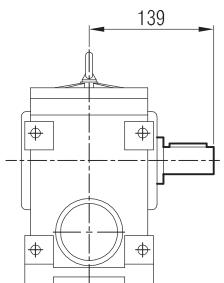
### İRSDM 63



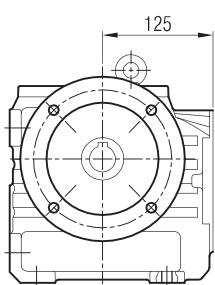
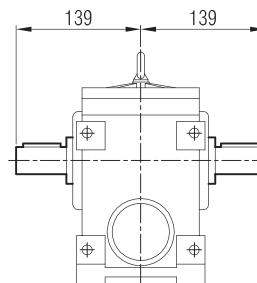
### -SR



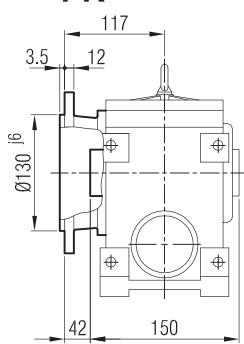
### -SL



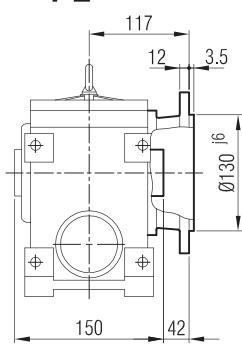
### -SD



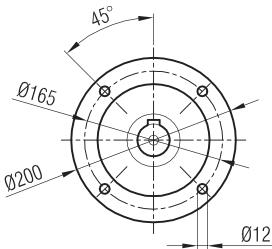
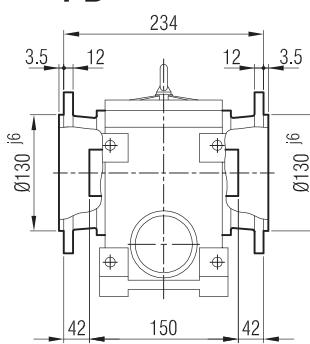
### -FR



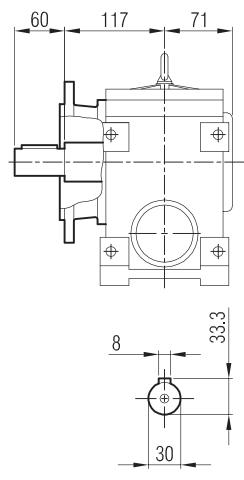
### -FL



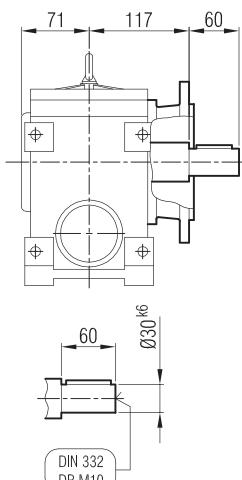
### -FD



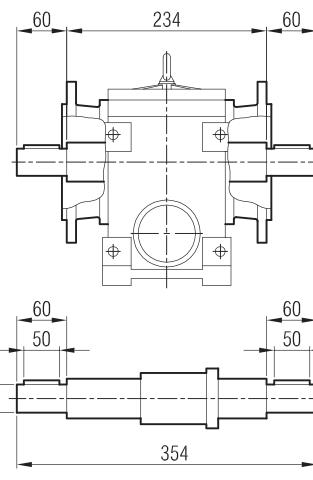
### -FR -SR



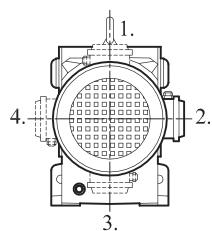
### -FL -SL



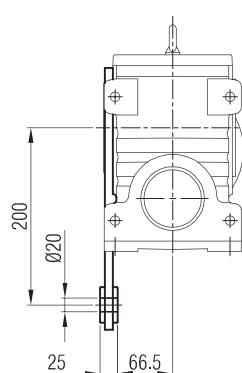
### -FD -SD



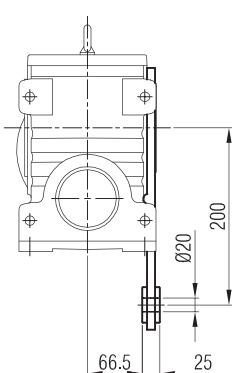
Klemens Pozisyonları  
Terminal Box Positions  
Klemmkkasten Positionen



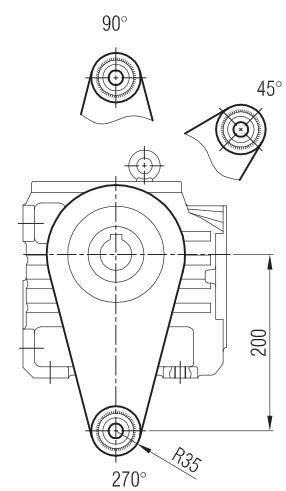
### -TR



### -TL

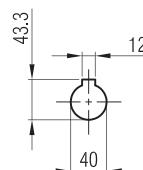
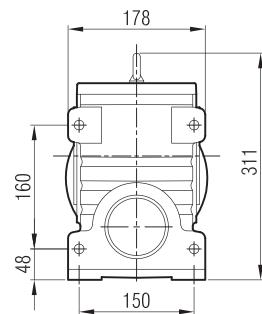
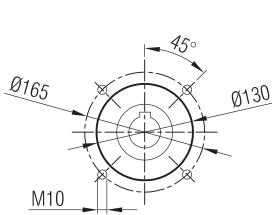
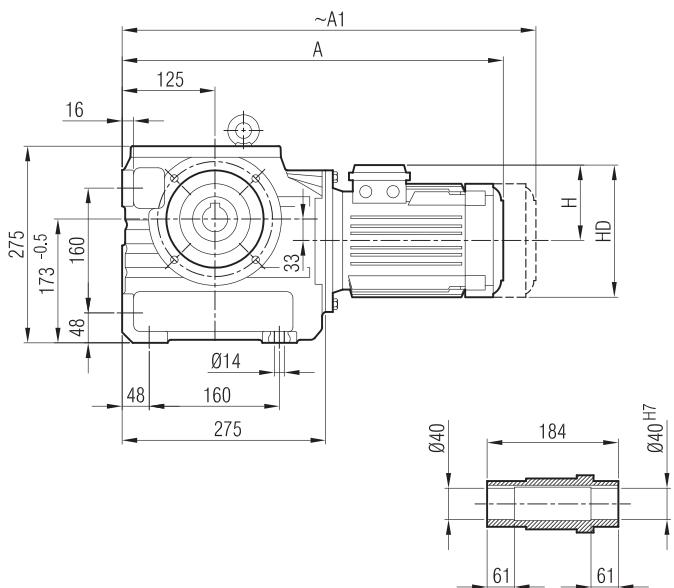


90°





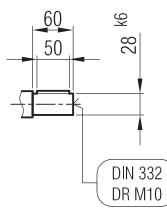
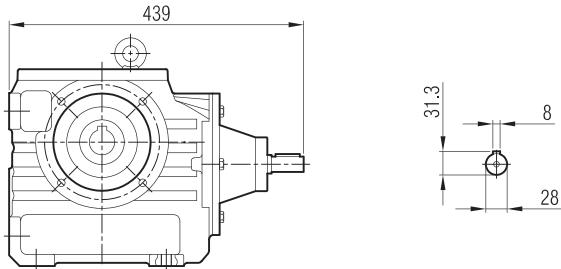
## İRSDM 73



	71	80	90 S	90 L	100	112	132 S	132 M
A	477	507	537	562	603	626	688	726
A1	528	576	603	628	681	709	788	826
H	111	118	126	126	134	145	168	168
HD	182	198	216	216	234	257	300	300
AC	138	156	176	176	194	218	257	257

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

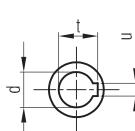
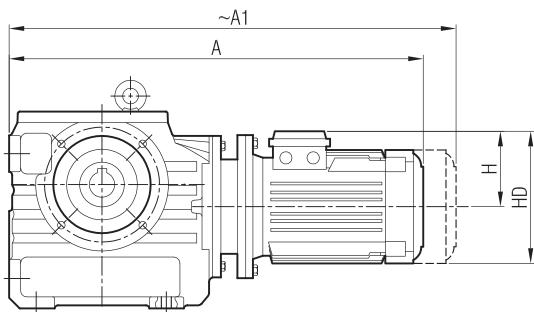
## İRSD 73



	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5
A	553	586	601	626	663	683	751	789
A1	604	655	667	692	741	766	851	889
H	111	118	126	126	134	145	168	168
HD	182	198	216	216	234	257	300	300
AC	138	156	176	176	194	218	257	257

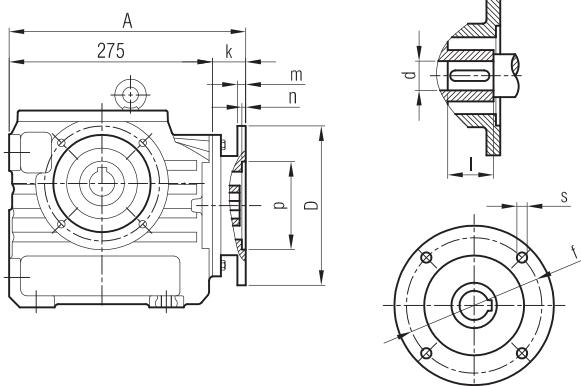
"A1" Ölçüsü Frenli Motorlar içindir.  
Dimension "A1" is for motors with brake.  
Le dimensions "A1" correspond aux moteurs équipés de freins.

## İRSDPM 73

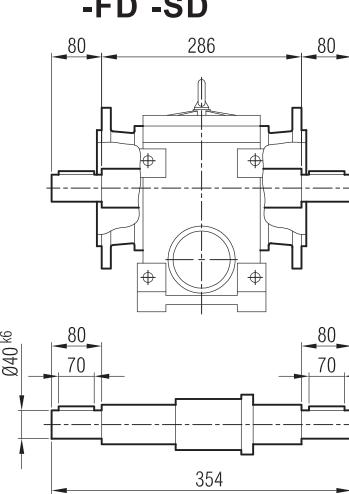
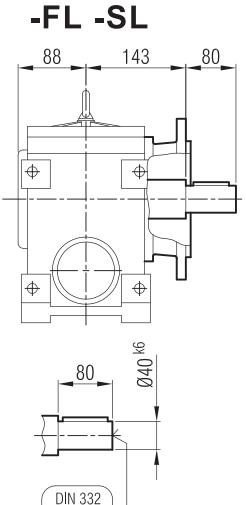
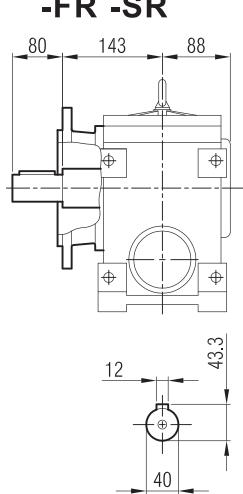
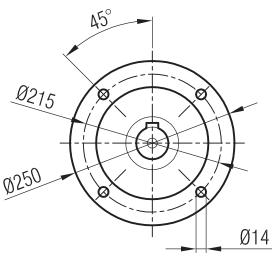
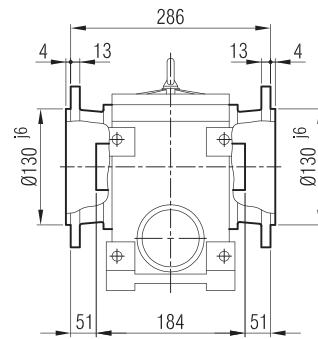
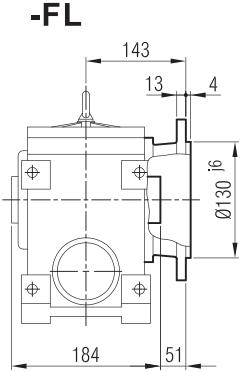
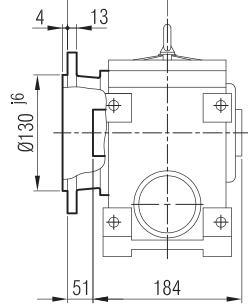
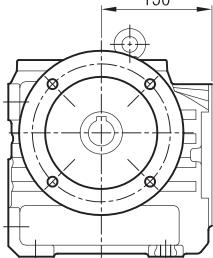
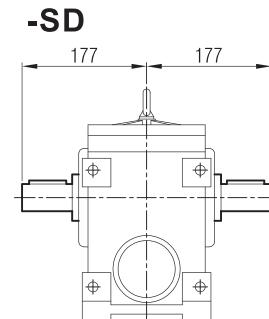
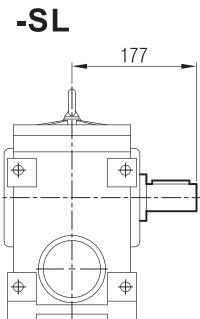
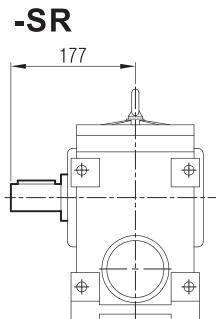
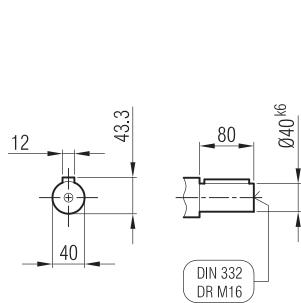


	A	$\emptyset p$	$\emptyset f$	$\emptyset D$	s	k	m	n	$\emptyset d$	I	t	u
71/B5	330	110	130	160	M8	55	10	4	14	30	16.3	5
80/B5	342	130	165	200	M10	67	12	5	19	40	21.8	6
90/B5	342	130	165	200	M10	67	12	5	24	50	27.3	8
100/B5	347	180	215	250	M12	71.5	14	5	28	60	31.3	8
112/B5	347	180	215	250	M12	71.5	14	5	28	60	31.3	8
132/B5	371	230	265	300	M12	95.5	17	5	38	80	41.3	10

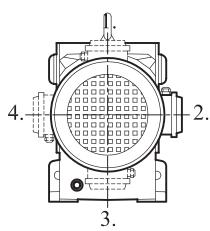
## İRSDP 73



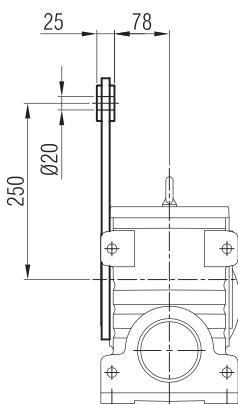
"A1" Ölçüsü Frenli Motorlar içindir.  
Dimension "A1" is for motors with brake.  
Le dimensions "A1" correspond aux moteurs équipés de freins.



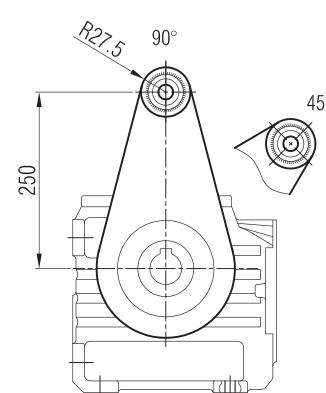
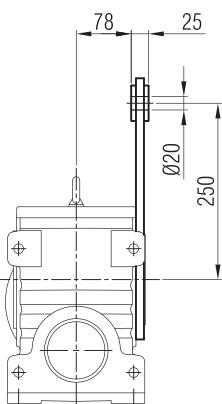
**Klemens Pozisyonları**  
Terminal Box Positions  
Klemenskästen Positionen



**-TR**

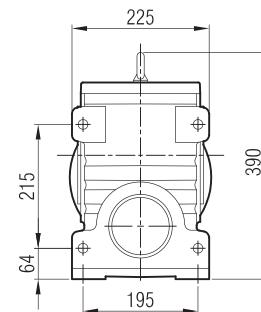
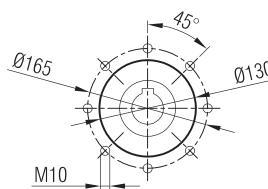
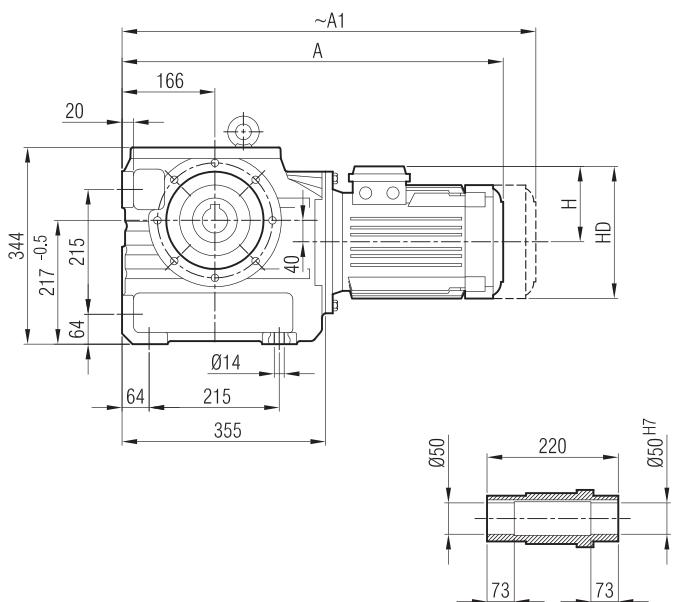


**-TL**





## İRSDM 83



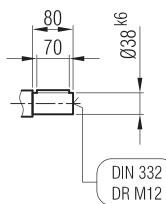
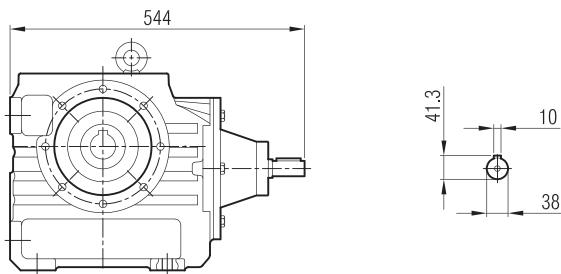
	80	90 S	90 L	100	112	132 S	132 M	160 M
A	577	605	630	670	692	754	792	894
A1	646	671	696	748	775	854	892	1009
H	118	126	126	134	145	168	168	220
HD	198	216	216	234	257	300	300	380
AC	156	176	176	194	218	257	257	310

"A1" Ölçüsü Frenli Motorlar içindir.

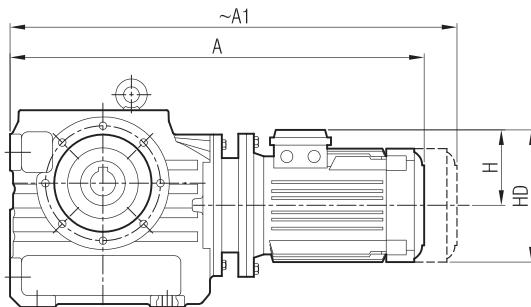
Dimension "A1" is for motors with brake.

Le dimensions "A1" correspond aux moteurs équipés de freins.

## İRSD 83



## İRSDPM 83



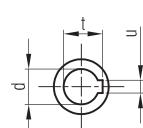
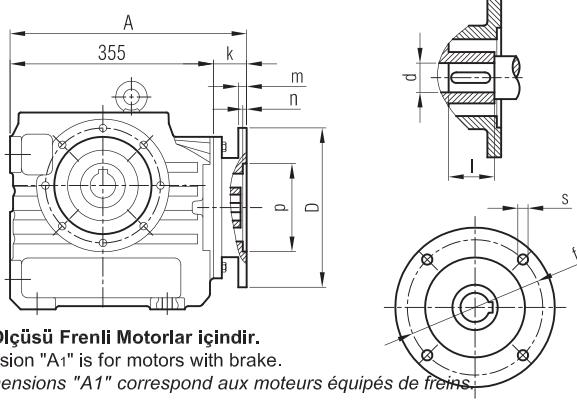
	80/B5	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5	160 M/B5
A	665	680	705	745	765	830	868	956
A1	734	746	771	823	848	930	968	1071
H	118	126	126	134	145	168	168	220
HD	198	216	216	234	257	300	300	380
AC	156	176	176	194	218	257	257	310

"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

Le dimensions "A1" correspond aux moteurs équipés de freins.

## İRSDP 83



	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u
80/B5	421	130	165	200	M10	66	12	5	19	40	21.8	6
90/B5	421	130	165	200	M10	66	12	5	24	50	27.3	8
100/B5	429	180	215	250	M12	74	14	5	28	60	31.3	8
112/B5	429	180	215	250	M12	74	14	5	28	60	31.3	8
132/B5	450	230	265	300	M12	95	17	6	38	80	41.3	10
160/B5	466	250	300	350	M14	111	18	6.5	42	110	45.3	12

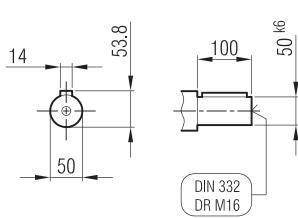
"A1" Ölçüsü Frenli Motorlar içindir.

Dimension "A1" is for motors with brake.

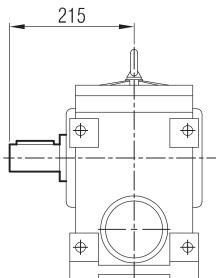
Le dimensions "A1" correspond aux moteurs équipés de freins.



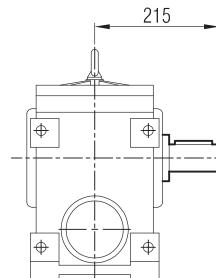
**İRSDM 83**



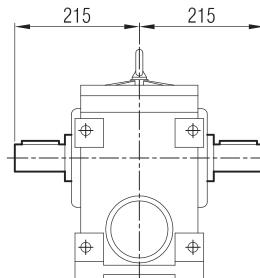
**... -SR**



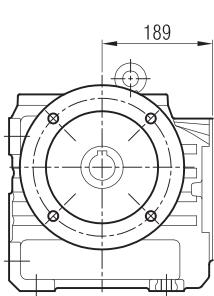
**... -SL**



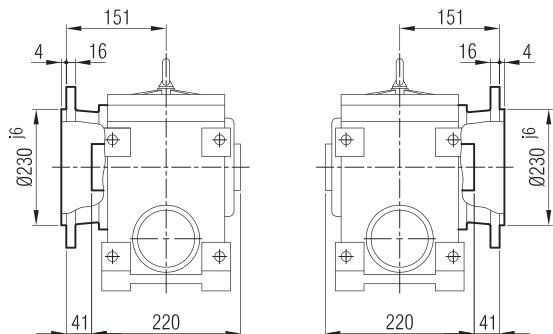
**... -SD**



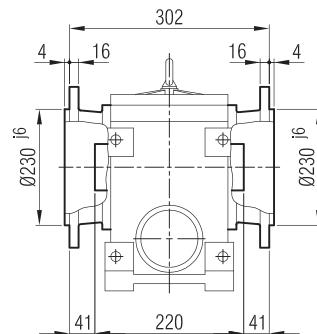
**... -FR**



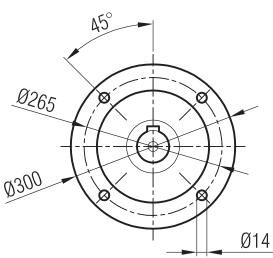
**... -FL**



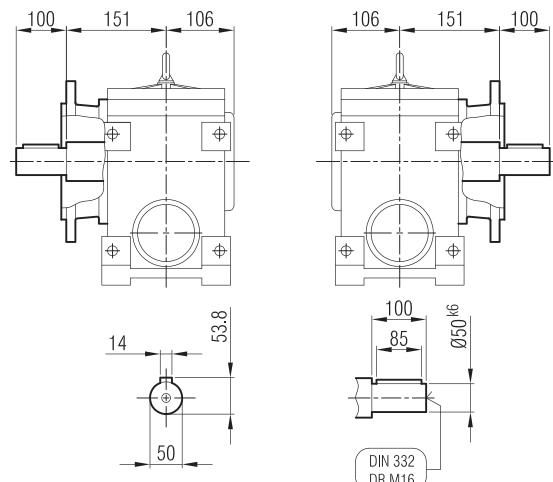
**... -FD**



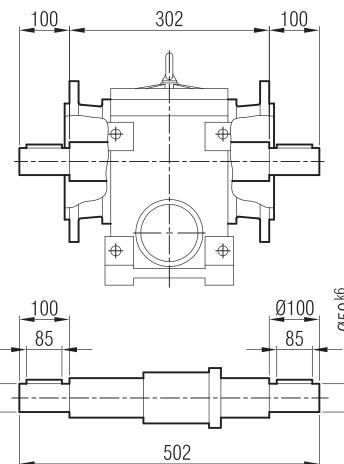
**... -FR -SR**



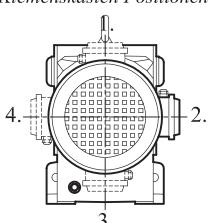
**... -FL -SL**



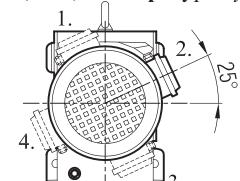
**... -FD -SD**



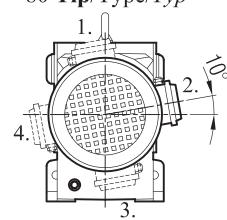
**Klemens Pozisyonları**  
Terminal Box Positions  
Klemmenkasten Positionen



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

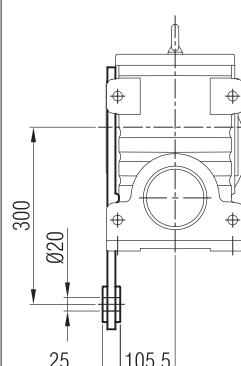


80 Tip/Type/Typ

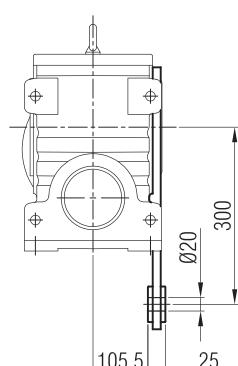


112 Tip/Type/Typ

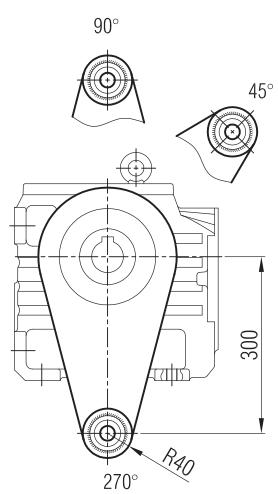
**-TR**



**-TL**

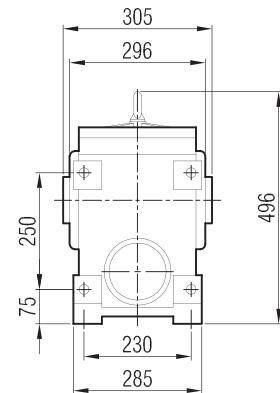
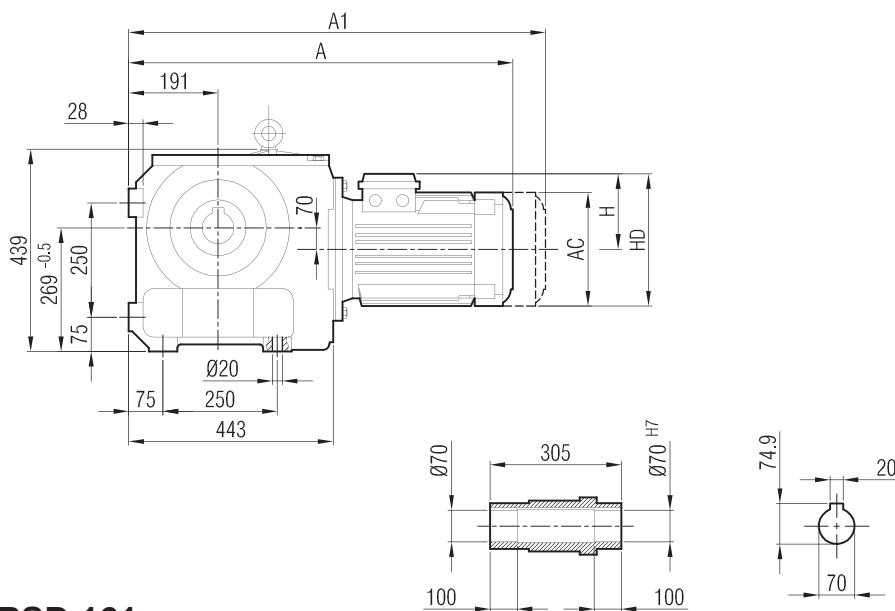


90°





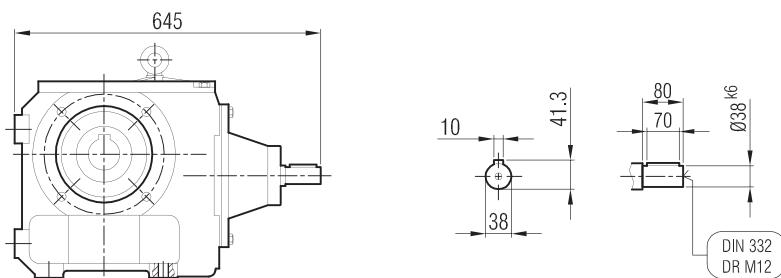
## İRSDM 161



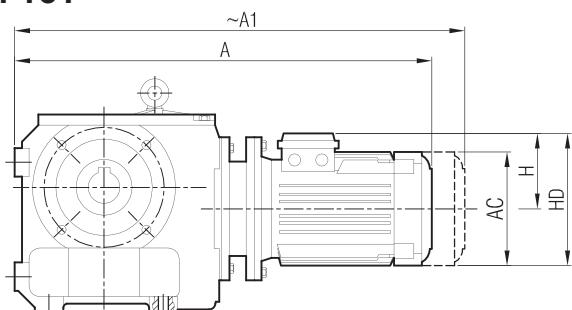
	90 S	90 L	100	112	132 S	132 M
A	784	810	755	778	825	871
A1	879	905	870	903	980	1030
H	126	126	134	145	168	168
HD	216	216	234	257	300	300
AC	176	176	194	218	257	257

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

## İRSD 161



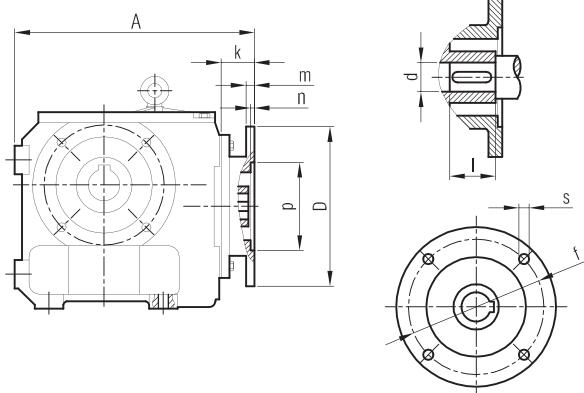
## İRSDPM 161



	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5
A	751	776	817	837	918	956
A1	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" correspond aux moteurs équipés de freins.

## İRSDP 161

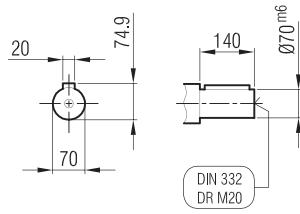


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u
90/B5	492	130	165	200	M10	49	12	5	24	50	27.3	8
100/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
112/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
132/B5	538	230	265	300	M12	95	17	6	38	80	41.3	10

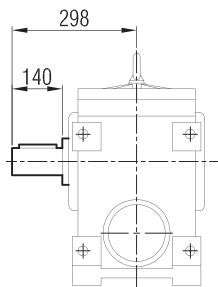
"A1" Ölçüsü Frenli Motorlar içindir.  
Dimension "A1" is for motors with brake.  
Le dimensions "A1" correspond aux moteurs équipés de freins.



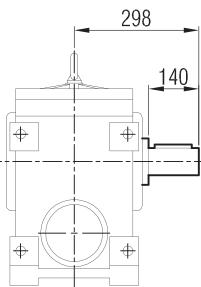
## iRSDM 161



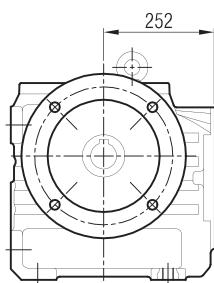
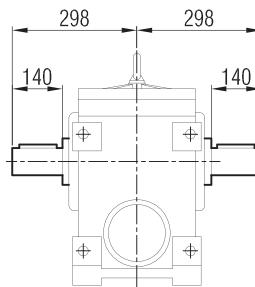
... -SR



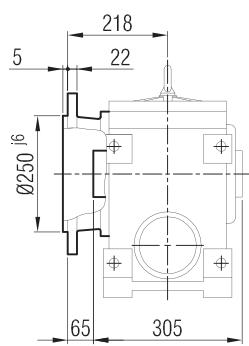
... -SL



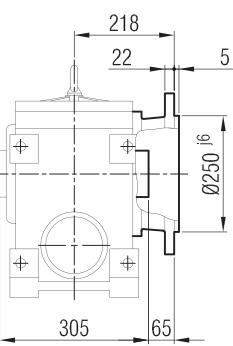
... -SD



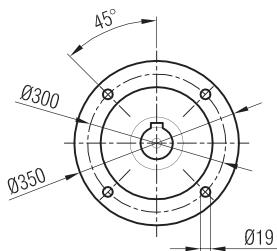
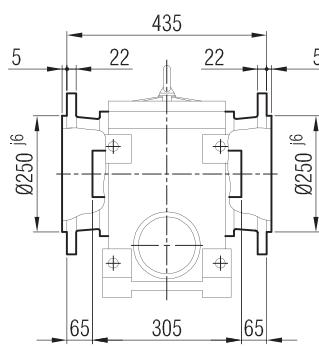
... -FR



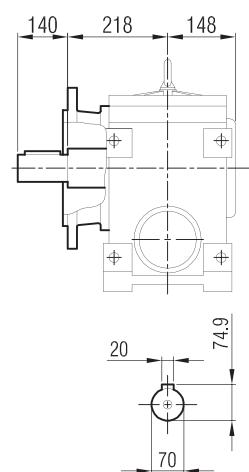
... -FL



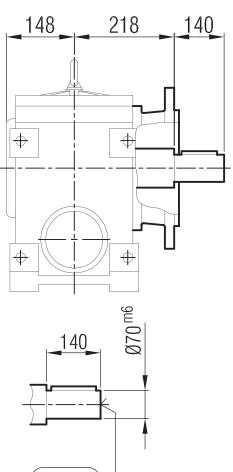
... -FD



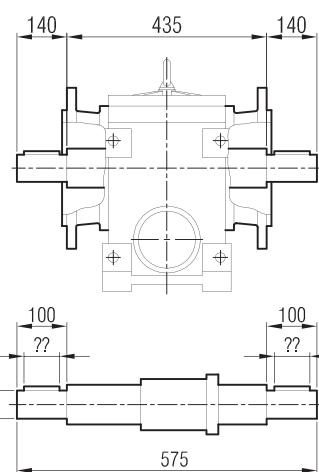
... -FR -SR



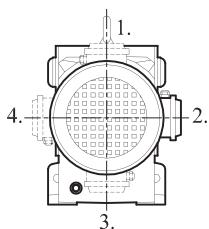
... -FL -SL



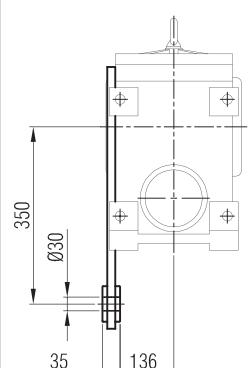
... -FD -SD



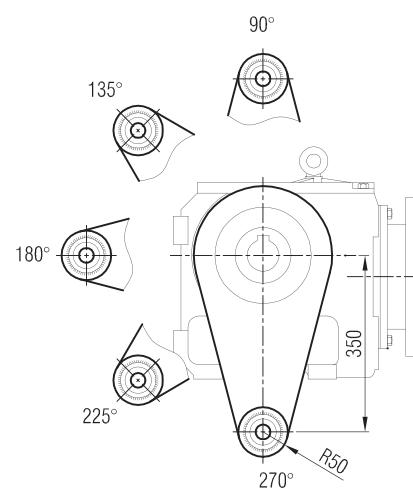
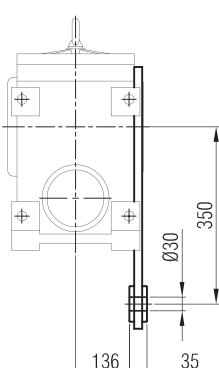
Klemens Pozisyonları  
Terminal Box Positions  
Klemenskästen Positionen



-TR



-TL





## **Yedek Parça Listeleri**

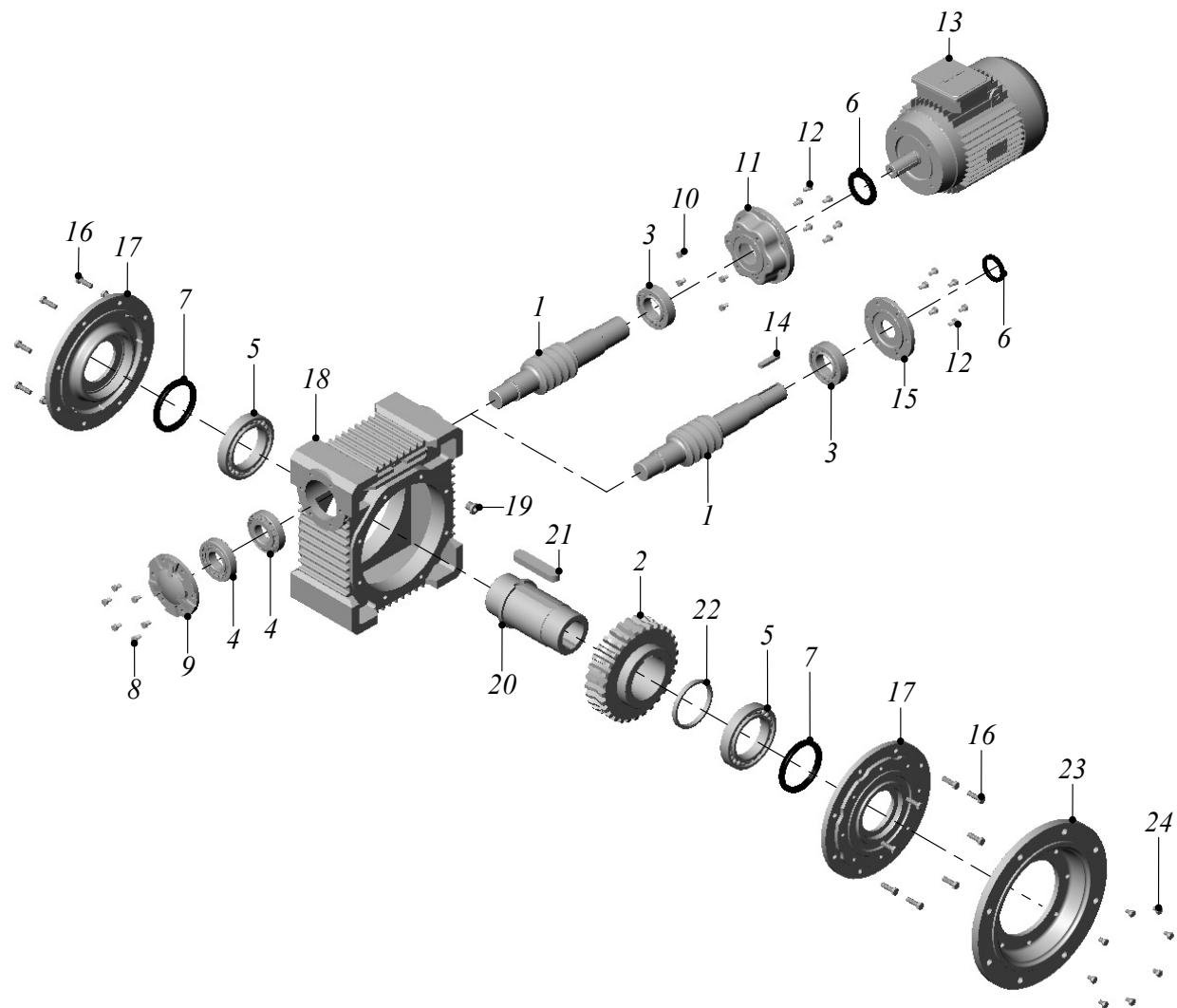
---

General Parts List

*Liste des composants*

## TİP / TYPE

İRSAM - İRSAP - İRSA      }  
İRSFM - İRSFP - İRSF      } 52-65-82-102-127-162

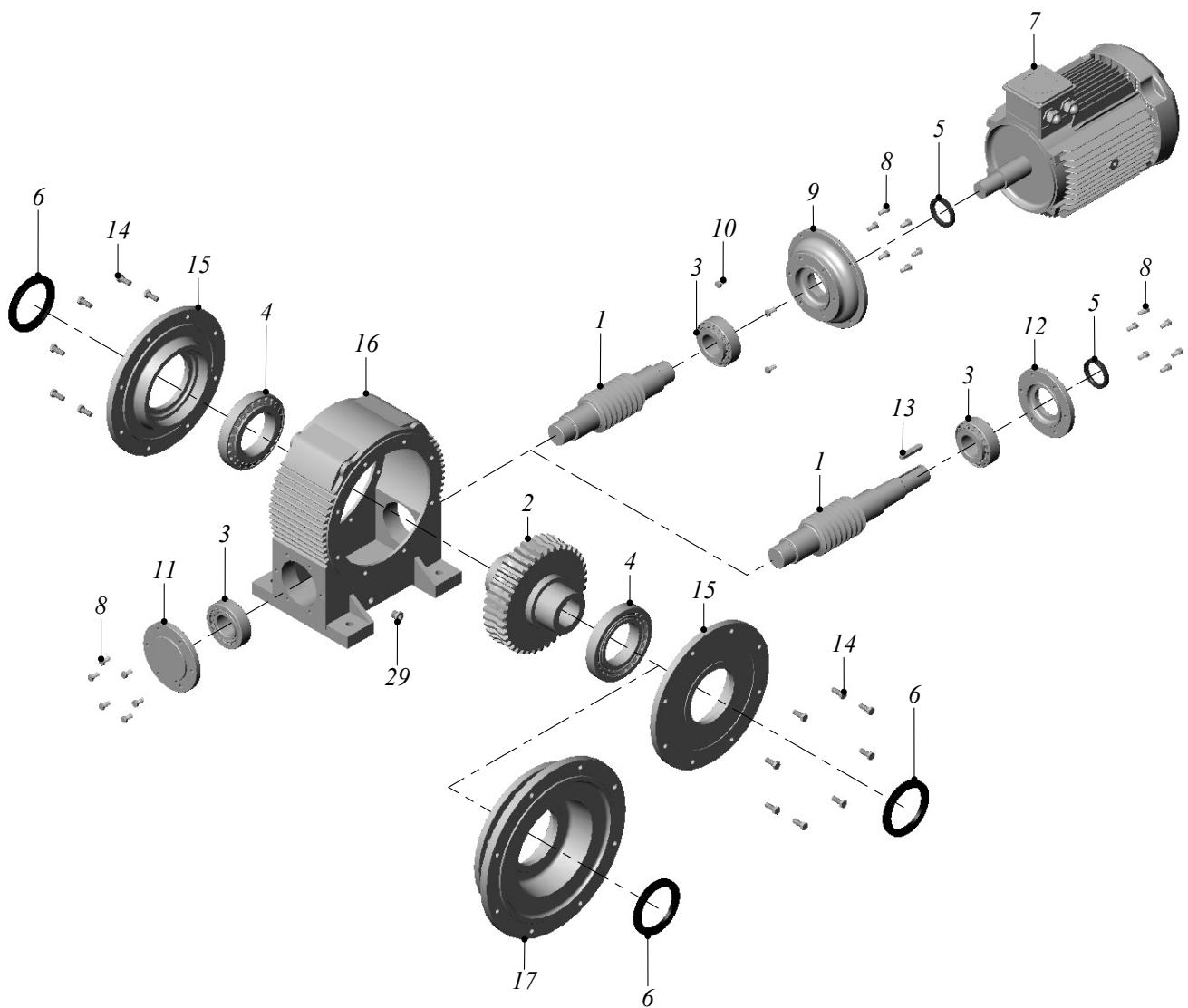


**TİP / TYPE**

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

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

TİP / TYPE  
İRSAM - İRSA }  
İRSFM - İRSF } 201 - 250



## TİP / TYPE

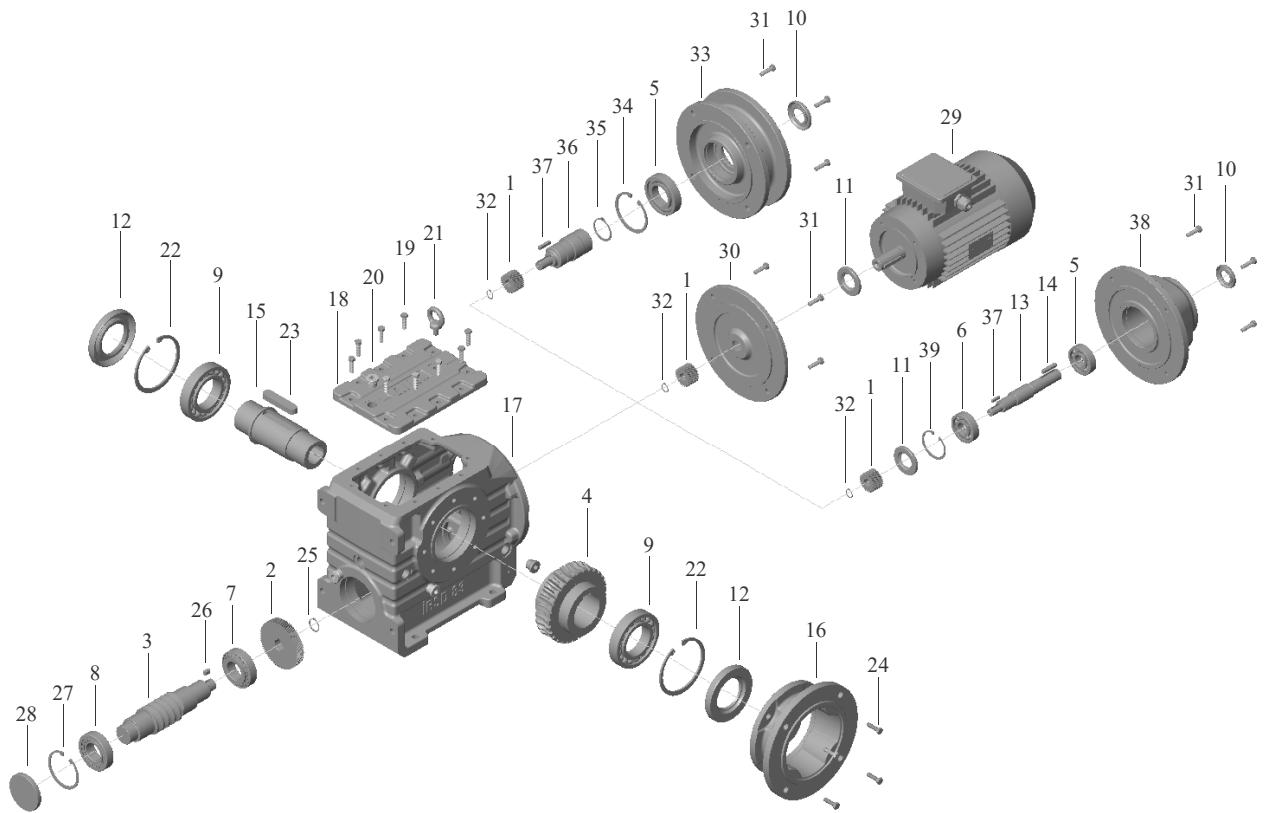
İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 201-250

<b>1 - Sonsuz Vida</b>	1 - Worm	<i>1 - Roue</i>
<b>2 - Sonsuz Vida Çarkı</b>	2 - Worm Wheel	<i>2 - Vis sans fin</i>
<b>3 - Rulman</b>	3 - Bearing	<i>3 - Roulement</i>
<b>4 - Rulman</b>	4 - Bearing	<i>4 - Roulement</i>
<b>5 - Keçe</b>	5 - Seal	<i>5 - Joint</i>
<b>6 - Keçe</b>	6 - Seal	<i>6 - Joint</i>
<b>7 - Motor</b>	7 - Electric Motor	<i>7 - Moteur électrique</i>
<b>8 - Cıvata</b>	8 - Bolt	<i>8 - Vis</i>
<b>9 - Pam Flanş (IEC)</b>	9 - IEC Flange	<i>9 - Bride IEC</i>
<b>10 - Cıvata</b>	10 - Bolt	<i>10 - Vis</i>
<b>11 - Rulman Baskı Kapağı</b>	11 - Bearing Cover	<i>11 - Couvercle</i>
<b>12 - Keçe Kapağı</b>	12 - Seal Cover	<i>12 - Joint</i>
<b>13 - Kama</b>	13 - Key	<i>13 - Clavette</i>
<b>14 - Cıvata</b>	14 - Bolt	<i>14 - Vis</i>
<b>15 - Keçe Kapağı</b>	15 - Seal Cover	<i>15 - Joint</i>
<b>16 - Gövde</b>	16 - Gear Case	<i>16 - Carter</i>
<b>17 - Flanş</b>	17 - Flange	<i>17 - Bride</i>

## TİP / TYPE

İRSD - İRS DP - İRSD M      }  
İRSD F - İRS DF P - İRSD F M      }

53-63-73-83



**TİP / TYPE****İRSD / İRSDF / İRSDP / İRSDFP / İRSDM / İRSDFM } 53-63-73-83-161**

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





REDÜKTÖR & VARYATÖR SAN. VE TİC. A.Ş.

**Fabrika - Merkez Satış**

Seyhli 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](http://www.imakreduktor.com)