

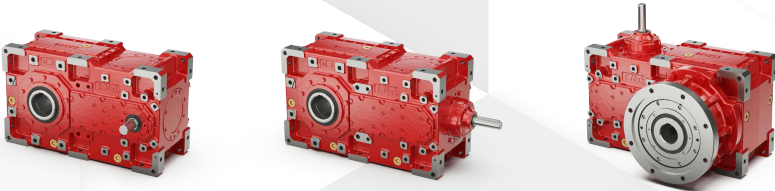


I.Mak®

REDÜKTÖR & VARYATÖR A.Ş.

Monoblok Ağır Hizmet Serisi

***Horizontal Helical Gear Unit
Réducteur hélicoïdal à usage industriel***



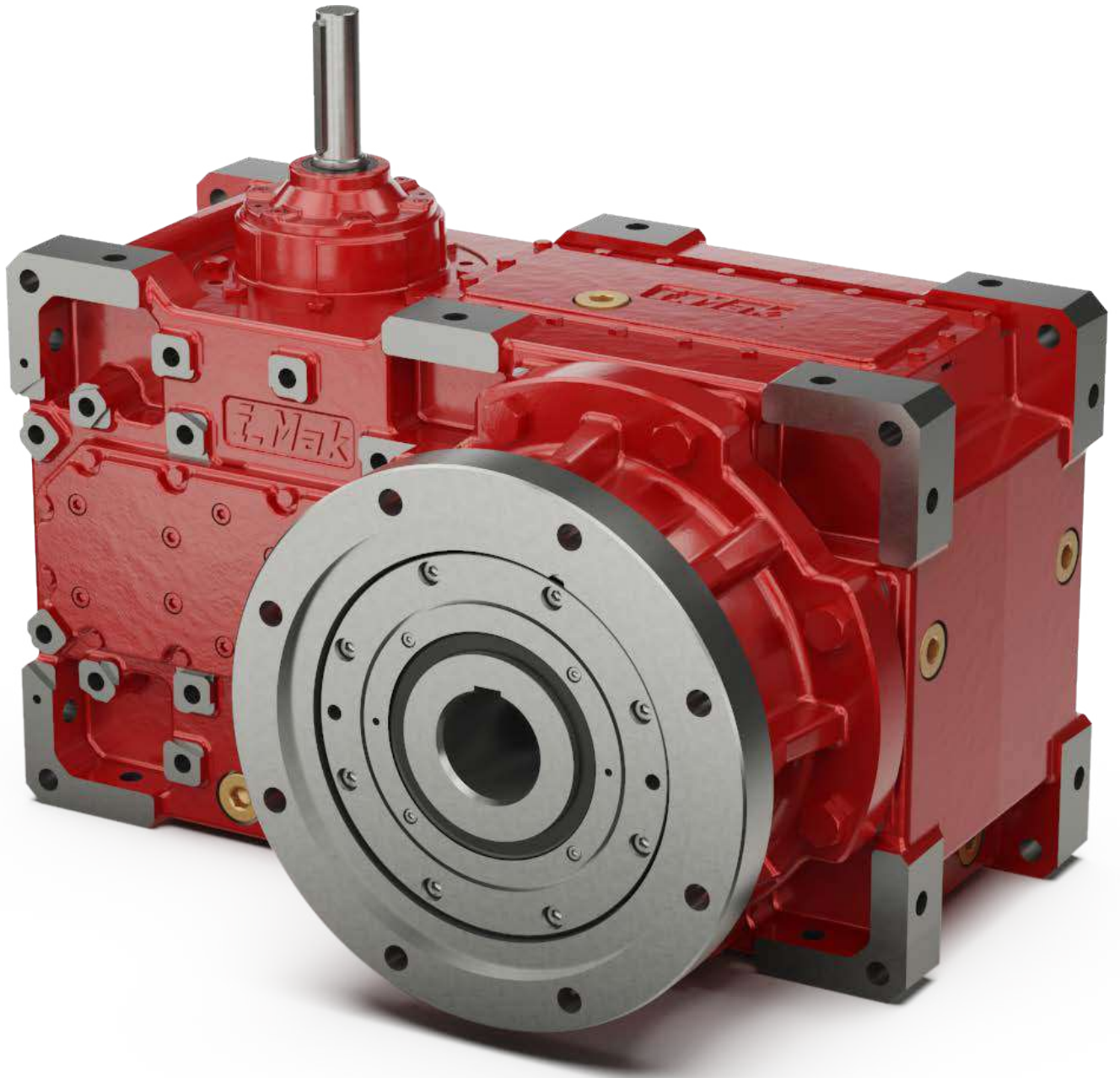
M03



SERIES
MA
MK
MKE

2022
TR | EN | FR

Gearboxes and Drives / Moto Réducteurs



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MA

SERİSİ / SERIES / SÉRIES



- Monoblok döküm gövdeli
- 6 farklı gövde büyüklüğü
- 10300 – 38800 Nm moment aralığı
- 6 – 512 Tahvil aralığı

- Cast iron monobloc housing
- 6 size of housing
- Torque range from 10300 to 38800 Nm
- Ratio range from 6 to 512

- *Carter monobloc en fonte*
- *6 tailles de carter*
- Couple allant de 10300 à 38800 Nm
- Rapport de réduction compris entre 6 et 512

MK

SERİSİ / SERIES / SÉRIES



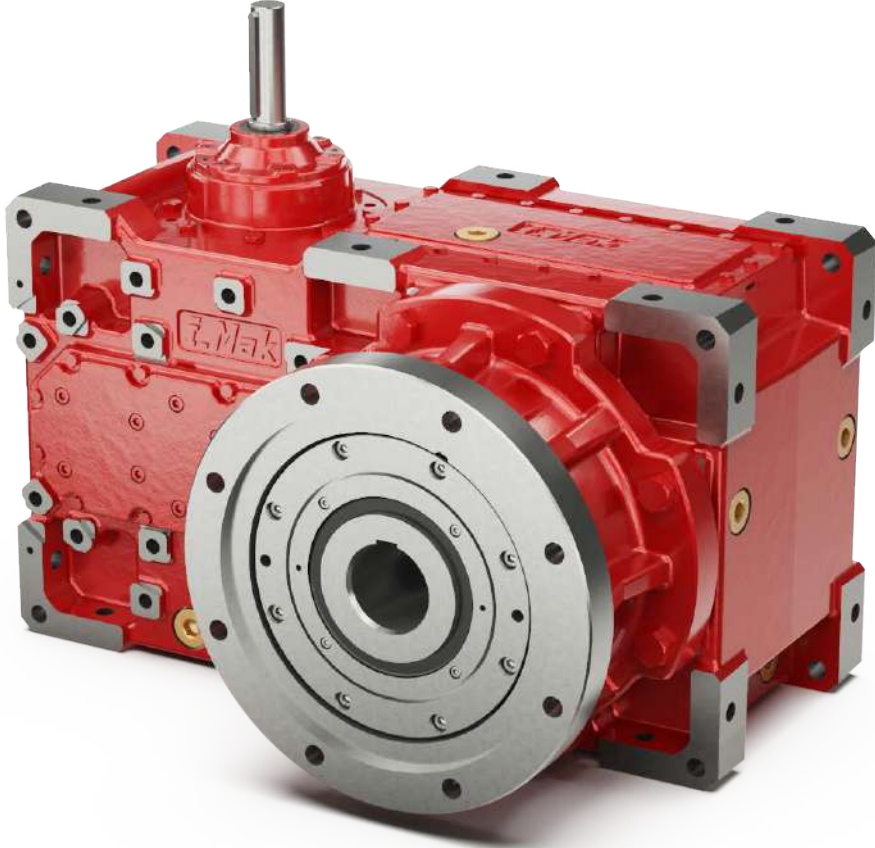
- Monoblok döküm gövdeli
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MKE

SERİSİ / SERIES / SÉRIES



- Monoblok döküm gövdeli
- 6 farklı gövde büyüklüğü
- 10300 – 38800 Nm moment aralığı
- 6 – 512 Tahvil aralığı

- Cast iron monobloc housing
- 6 size of housing
- Torque range from 10300 to 38800 Nm
- Ratio range from 6 to 512

- *Carter monobloc en fonte*
- *6 tailles de carter*
- Couple allant de 10300 à 38800 Nm
- Rapport de réduction compris entre 6 et 512

Genel Bilgiler

General Information
Informations g n rales

MA serisi redüktörlerin genel özellikleri

Helisel dişli, paralel milli MA serileri, devamlı yükleme altında ve ağır şartlarda çalışmaya elverişli olarak dizayn edilmiş redüktörlerimizdir.

Dişli malzemesi, bu redüktörlere uygun bir biçimde yüksek dereceli çelikten 16MnCr5 veya fiziksel olarak eşdeğer malzemelerden yapılmış ve taşlanmıştır. Dişli sertliği 57 HRC değerindedir.

Yüksek kalite döküm teknolojisi ile elde edilen gövde yapısı GG20 pik malzemesinden tekil gövde (monoblok) olarak yapılmıştır.

Bu redüktörlerimizi, delik milli, çıkış milli, çift yönlü çıkış milli, sıkma bilezikli ve flanşlı şekilde kullanabilirsiniz.

Descriptions and specifications of the MA series.

The MA Series gearboxes are designed for applications with heavy loads on continuous working cycle.

Gears are manufactured from high quality 16MnCr5 steel in I-MAK factory.

All our gears are heat treated (Gear hardness 57 HRC)ground and measured to insure the highest quality standard.

The robust monobloc housing is made of GG20 iron and is machined by state of art technology.

MA Series gearboxes are available with output shaft, hollow shaft, double output shaft, shrink disk and various flange configurations

Descriptions et spécifications de la série MA.

Spécialement conçus pour les applications à charges continue, les réducteurs de la Série MA garantissent une performance optimale.

Les pignons hélicoïdaux qui composent les réducteurs de cette série sont produits à partir d'acier 16MnCr5 avec une dureté de 57 HRC après traitement.

Le carter en monobloc offre une grande robustesse et résistance aux réducteurs de la série MA.

Les réducteurs MA sont disponibles avec une large gamme d'options et configurations (Arbre de sortie, bride, arbre creux, arbre double, frette de serrage...) lui permettant de s'adapter à de nombreuses applications.

MK serisi redüktörlerin genel özellikleri

Tek kademesi konik dişli diğer dişli kademeleri helisel olan MK serileri, devamlı yük altında ve ağır şartlarda çalışmaya elverişli olarak dizayn edilmiş redüktörlerimizdir.

Dişli malzemesi, bu redüktörlere uygun bir biçimde yüksek dereceli çelikten 16MnCr5 veya fiziksel olarak eşdeğer malzemelerden yapılmış ve taşlanmıştır. Dişli sertliği 57 HRC değerindedir.

Yüksek kalite döküm teknolojisi ile elde edilen gövde yapısı GG20 pik malzemesinden tekil gövde (monoblok) olarak yapılmıştır.

Bu redüktörümüzü, delik milli, çıkış milli, çift yönlü çıkış milli, sıkma bilezikli ve flanşlı şekilde kullanabilirsiniz.

Descriptions and specifications of the MK series.

Designed to work under heavy loads and in hard conditions, the bevel helical MK serie is perfectly adapted to a wide range of applications.

Gears are manufactured from high quality 16MnCr5 steel in I-MAK factory. All our gears are heat treated (Gear hardness 57 HRC)ground and measured to insure the highest quality standard.

The robust monobloc housing is made of GG20 iron and is machined by state of art technology.

MK Series gearboxes are available with output shaft, hollow shaft, double output shaft, shrink disk and various flange configurations

Descriptions et spécifications de la série MK.

Conçus pour résister à des charges importantes et fonctionner dans des conditions difficiles, les réducteurs à couple conique de la série MK sont parfaitement adaptés à tous types d'applications et configurations.

Les pignons hélicoïdaux qui composent les réducteurs de cette série sont produits à partir d'acier 16MnCr5 avec une dureté de 57 HRC après traitement.

Le carter en monobloc offre une grande robustesse et résistance aux réducteurs de la série MK.

Les réducteurs MK sont disponibles avec une large gamme d'options et configurations (Arbre de sortie, bride, arbre creux, arbre double, frette de serrage...) lui permettant de s'adapter à de nombreuses applications.

MA SERIES

Tip Type	Moment (Max) Torque (Max) Couple (Max)	Kovan Çapı Hollow Shaft Diamètre de l'arbre creux	Mil Çapı Shaft Diameter Diamètre de l'arbre de sortie
MA 502-503	10300 Nm	Ø95	Ø100
MA 602-603	12900 Nm	Ø105	Ø110
MA 702-703-704	19400 Nm	Ø115	Ø120
MA 802-803-804	24100 Nm	Ø125	Ø130
MA 902-903-904	29930 Nm	Ø135	Ø140
MA 1002-1003-1004	36000 Nm	Ø150	Ø160
Range of Ratios / Rapports de réduction			
6,028 423,479			
Applicable Motor Power / Puissance Moteur Applicable			
2,2 kW...560 kW			

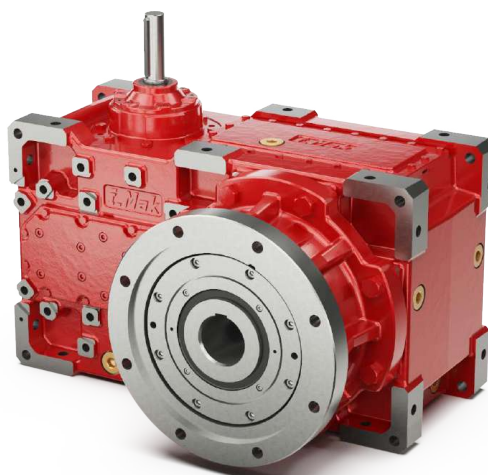
Monoblok Ağır Hizmet Serisi (Helisel Dişlili)
 Monobloc industrial gear unit
 Monobloc Réducteur hélicoïdal à usage industriel

Monoblok Ağır Hizmet Serisi (Konik Dişlili)
 Monobloc industrial gear unit
 Monobloc Réducteur hélicoïdal à usage industriel


Tip Type	Moment (Max) Torque (Max) Couple (Max)	Kovan Çapı Hollow Shaft Diamètre de l'arbre creux	Mil Çapı Shaft Diameter Diamètre de l'arbre de sortie
MK 503-504	10300 Nm	Ø95	Ø100
MK 603-604	12900 Nm	Ø105	Ø110
MK 703-704	19400 Nm	Ø115	Ø120
MK 803-804	22520 Nm	Ø125	Ø130
MK 903-904	29530 Nm	Ø135	Ø140
MK 1003-1004	37580 Nm	Ø150	Ø160
Range of Ratios / Rapports de réduction			
15,674 511,760			
Applicable Motor Power / Puissance Moteur Applicable			
0,55 kW...250 kW			

MK SERIES
MAE SERIES

Tip Type	Moment (Max) Torque (Max) Couple (Max)	Kovan Çapı Hollow Shaft Diamètre de l'arbre creux
MAE 502-503	10300 Nm	Ø70
MAE 602-603	12900 Nm	Ø80
MAE 702-703-704	19400 Nm	Ø90
MAE 802-803-804	24100 Nm	Ø100
MAE 902-903-904	29930 Nm	Ø110
MAE 1002-1003-1004	36000 Nm	Ø120
Range of Ratios / Rapports de réduction		
6,028 423,479		
Applicable Motor Power / Puissance Moteur Applicable		
2,2 kW ... 560 kW		

Monoblok Ağır Hizmet Serisi (Extruder)
 Monobloc extruder gear units
 Réducteur monobloc pour extrudeuse

MKE SERIES

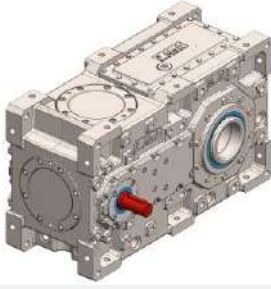
Tip Type	Moment (Max) Torque (Max) Couple (Max)	Kovan Çapı Hollow Shaft Diamètre de l'arbre creux
MKE 503-504	10300 Nm	Ø70
MKE 603-604	12900 Nm	Ø80
MKE 703-704	19400 Nm	Ø90
MKE 803-804	22520 Nm	Ø100
MKE 903-904	29530 Nm	Ø110
MKE 1003-1004	37580 Nm	Ø120
Range of Ratios / Rapports de réduction		
15,674 511,760		
Applicable Motor Power / Puissance Moteur Applicable		
0,55 kW ... 250 kW		



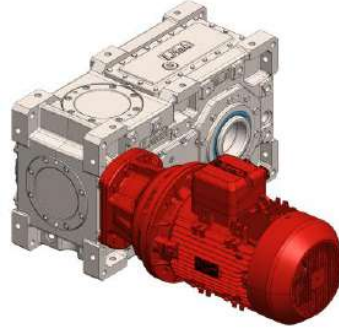
MA-MK Series

• Industrial Monobloc Gear Unit •

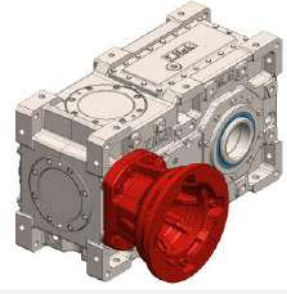




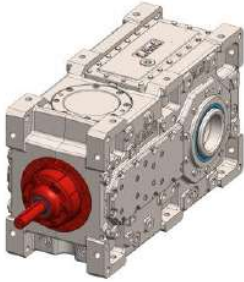
MA
Giriş Milli
Solid input shaft
Arbre d'entrée



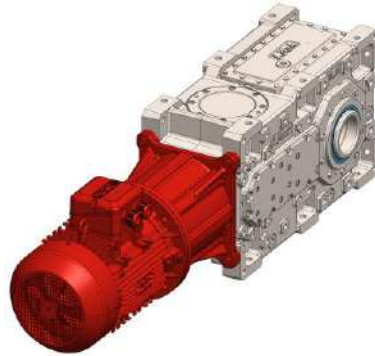
MAPM
IEC Pam Flanşlı Motorlu
IEC input flange with motor
Avec bride PAM-IEC et moteur



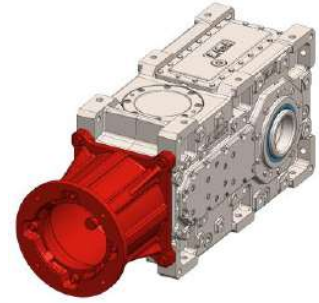
MAP
IEC Pam Flanşlı
IEC input flange
Avec bride PAM – IEC



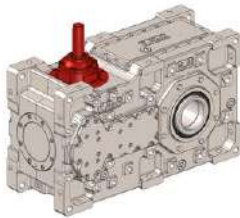
MK – G07
Giriş Milli
Solid input shaft
Arbre d'entrée



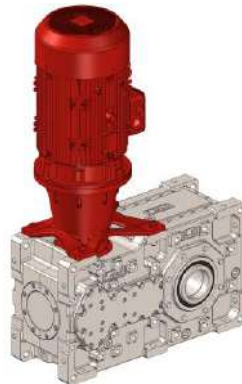
MKPM – G09
IEC Pam Flanşlı Motorlu
IEC input flange with motor
Avec bride PAM-IEC et moteur



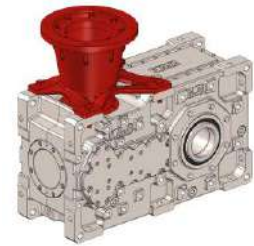
MKP – G09
IEC Pam Flanşlı
IEC input flange
Avec bride PAM – IEC



MK – G08
Giriş Milli
Solid input shaft
Arbre d'entrée



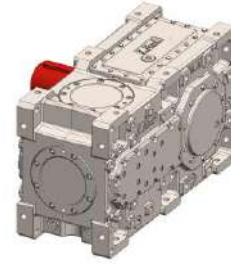
MKPM – G10
IEC Pam Flanşlı Motorlu
IEC input flange with motor
Avec bride PAM-IEC et moteur



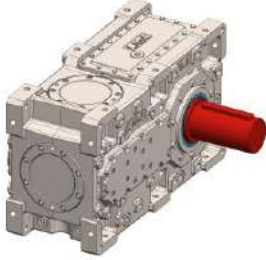
MKP – G10
IEC Pam Flanşlı
IEC input flange
Avec bride PAM – IEC



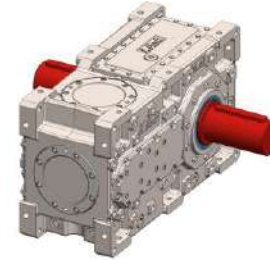
MA / MK
Output hollow shaft
Arbre creux



MA / MK SL
Output solid shaft (Left)
Arbre de sortie (Gauche)



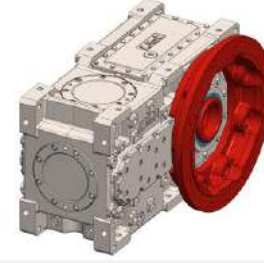
MA / MK SR
Output solid shaft (Right)
Arbre de sortie (Droite)



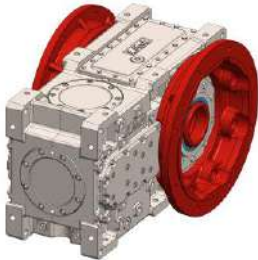
MA / MK SD
Double output solid shaft
Double arbre de sortie



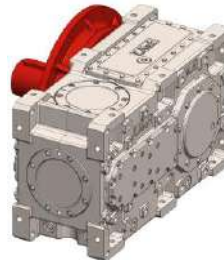
MA / MK FL
Output flange (Left)
Bride de sortie (Gauche)



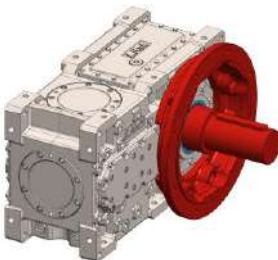
MA / MK FR
Output flange (Right)
Bride de sortie (Droite)



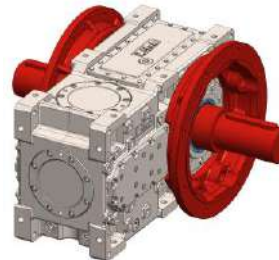
MA / MK FD
Double output flange
Bride de sortie (Double)



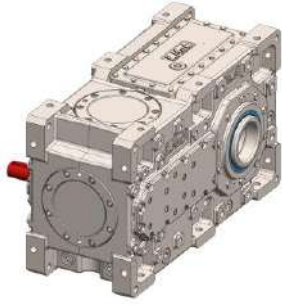
MA / MK FL-SL
Output flange-Output solid shaft (Left)
Arbre et bride de sortie (Gauche)



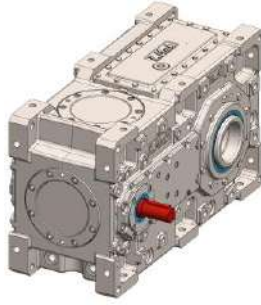
MA / MK FR-SR
Output flange-Output solid shaft (Right)
Arbre et bride de sortie (Droite)



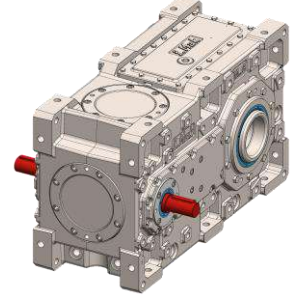
MA / MK FD-SD
Double output flange-Double output solid shaft
Bride de sortie double - Arbre de sortie double



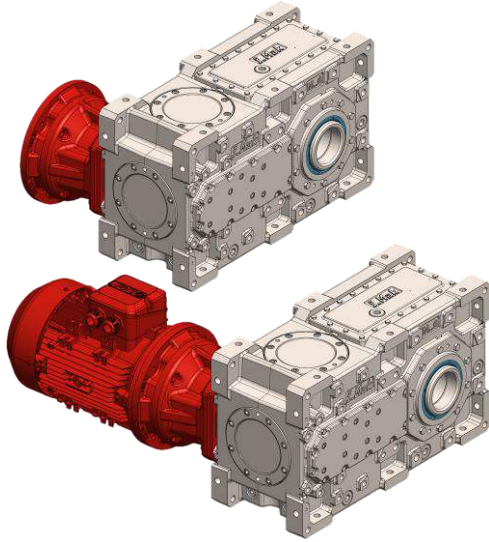
G00
Sol Giriş Milli
Solid input shaft (Left)
Arbre d'entrée (Gauche)



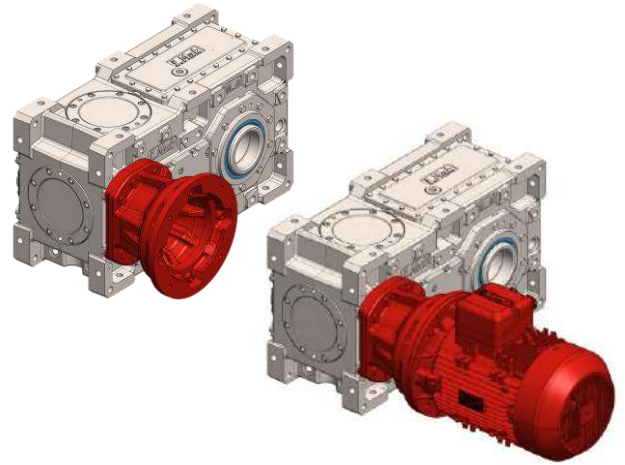
G01
Sağ Giriş Milli
Solid input shaft (Right)
Arbre d'entrée (Droite)



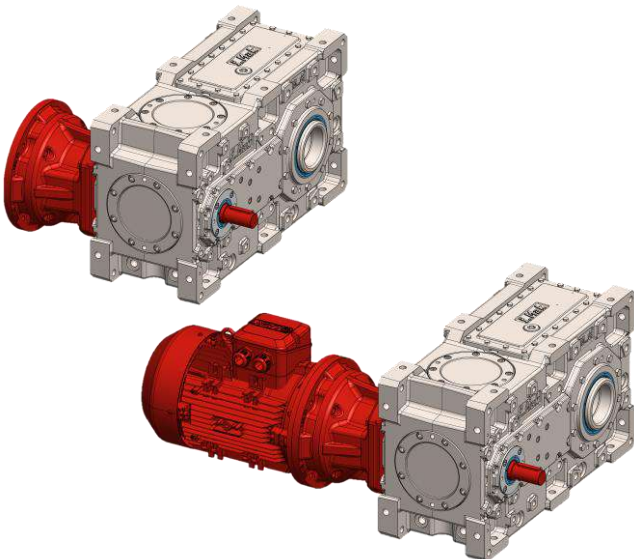
G02
Çift Giriş Milli
Double Solid input shaft
Double arbre d'entrée



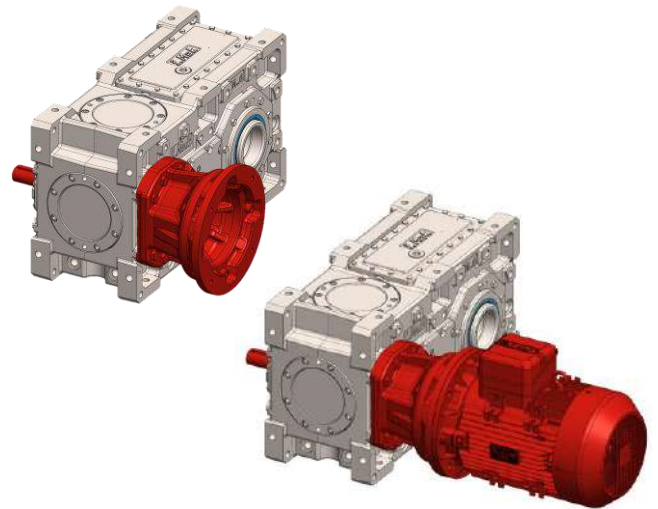
G03
Sol Pam Flanşlı veya Motorlu
IEC input flange or With motor (Left)
Avec bride PAM - IEC ou Moteur (Gauche)



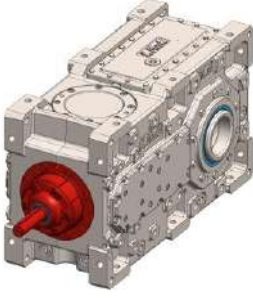
G04
Sağ Pam Flanşlı veya Motorlu
IEC input flange or With motor (Right)
Avec bride PAM - IEC ou Moteur (Droite)



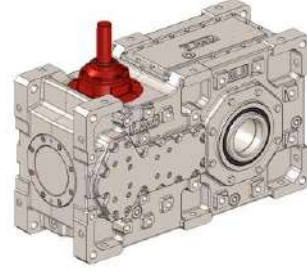
G05
Sol Pam Flanşlı veya Motorlu + Sağ Giriş Milli
IEC input flange or With motor (Left) + Solid input shaft (Right)
Avec bride PAM - IEC ou Moteur (Gauche) + Arbre d'entrée (Droite)



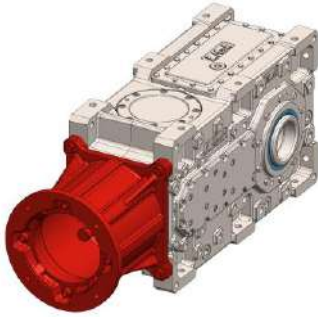
G06
Sağ Pam Flanşlı veya Motorlu + Sol Giriş Milli
IEC input flange or With motor (Right) + Solid input shaft (Left)
Avec bride PAM - IEC ou Moteur (Droite) + Arbre d'entrée (Gauche)



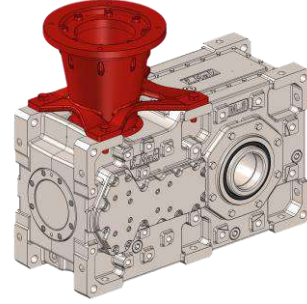
G07
Önden Giriş Milli
Input shaft from the front
Arbre d'entrée de face



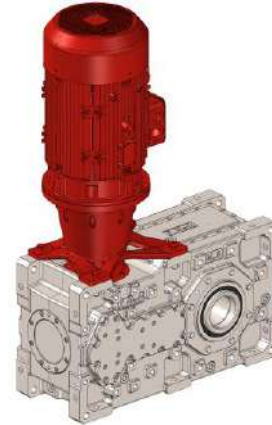
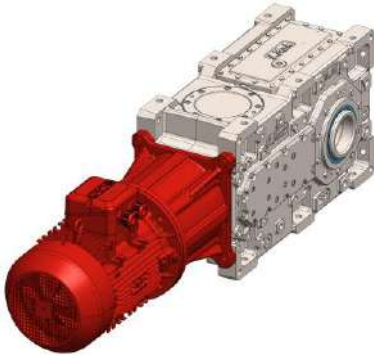
G08
Üstten Giriş Milli
Overhead input shaft
Arbre d'entrée supérieur



G09
Önden Pam Flanşlı veya Motorlu
IEC input flange or With motor from the front
Avec bride PAM - IEC ou Moteur de face



G10
Üstten Pam Flanşlı veya Motorlu
Overhead IEC input flange or With motor
Avec bride PAM - IEC ou Moteur supérieur



Giriş Yönlerine Göre Bağlanabilir Çıkış Opsiyonları / Output Options According to Entry Aspects / -

Giriş Yönleri Entry Aspects <i>Aspects d'entree</i>	Çıkış Opsiyonları / Output Options / <i>Options de sortie</i>									
	Kovanlı Hollow Shaft	SL	SR	SD	FL	FR	FD	FL-SL	FR-SR	FD-SD
G00										
G01										
G02										
G03										
G04										
G05										
G06										
G07										
G08										
G09										
G10										

Termal Güç Tablosu / Thermal Power Table / *Tableau de Puissance Thermique*

**SOĞUTMASIZ REDÜKTÖR
GEARBOX WITHOUT COOLING**

Termal Güç / Thermal Power / [kW]

	60X	70X	80X	90X	100X
MA_2	72	91	102	114	134
MA_3	48	61	69	77	90
MA_4	37	46	52	58	68
MK_3	48	61	69	77	90
MK_4	37	46	52	58	68

**RADYATÖR SOĞUTMALI REDÜKTÖR
GEARBOX WITH RADITAOTOR COOLING**

Termal Güç / Thermal Power / [kW]

	60X	70X	80X	90X	100X
MA_2	139	158	304	316	470
MA_3	94	106	204	212	315
MA_4	71	80	154	160	238
MK_3	94	106	204	212	315
MK_4	71	80	154	160	238

**SERPANTİN SOĞUTMALI REDÜKTÖR
GEARBOX WITH SERPENTINE COOLING**

Termal Güç / Thermal Power / [kW]

	60X	70X	80X	90X	100X
MA_2	160	200	225	246	277
MA_3	108	135	151	166	186
MA_4	81	102	114	125	140
MK_3	108	135	151	166	186
MK_4	81	102	114	125	140

**LEHİMLİ EŞANJÖR SOĞUTMALI REDÜKTÖR
GEARBOX WITH SOLDERED HEAT EXCHANGER COOLING**

Termal Güç / Thermal Power / [kW]

	60X	70X	80X	90X	100X
MA_2	139	158	304	316	470
MA_3	94	106	204	212	315
MA_4	71	80	154	160	238
MK_3	94	106	204	212	315
MK_4	71	80	154	160	238



Redüktör Opsiyonları / Gearboxes options / Options des motoréducteurs

Kod / Code	Opsiyon	Options	Options
FL	Sol çıkış flanşı	Output flange left	Bride de sortie (Gauche)
FR	Sağ çıkış flanşı	Output flange right	Bride de sortie (Droite)
FD	Çift çıkış flanşı	Double output flange	Bride de sortie (Double)
SL	Sol çıkış mili	Output shaft left	Arbre de sortie (Gauche)
SR	Sağ çıkış mili	Output shaft right	Arbre de sortie (Droite)
SD	Çift çıkış mili	Output shaft double	Arbre de sortie (Double)
TL	Sol tork kolu	Torque arm left	Bras de couple (Gauche)
TR	Sağ tork kolu	Torque arm right	Bras de couple (Droit)
H	Çektirme pulu	Retaining screw washer	Epaulement (vis de fixation)
SDL	Sol sıkma bileziği	Shrink disk left	Frette de serrage (Gauche)
SDR	Sağ sıkma bileziği	Shrink disk right	Frette de serrage (Droit)
OC	Çıkış koruma kapağı	Output cover	Bouchon (arbre creux)
EL	Sol ekstruder	Extruder left	Extruder (Gauche)
ER	Sağ ekstruder	Extruder right	Extruder (Droit)
BSL	Sol mekanik kilit	Backstop left	Antidévireur (Gauche)
BSR	Sağ mekanik kilit	Backstop light	Antidévireur (Droit)
TSL	Sol tork limitörü	Torque limiter left	Limiteur de couple (Gauche)
TSR	Sağ tork limitörü	Torque limiter right	Limiteur de couple (Droit)

Motor opsiyonları / Motor options / Options moteurs

Kod / Code	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	Encoder	Encoder	Encoder
BS	Mekanik kilit	Backstop	Roulement anti-retour
EMK	Elektromanyetik kavrama	Electromagnetic clutches	Disque electromagnetique
CF	Harici fan	External fan	Ventilation externe
FG	Kanopi	Canopy	Canopé
U	Fansız motor (güdüük)	Without fan	Sans ventilation
M	Monofaze motor	Mono phase motor	Moteur monophasé
DS	Çift çıkış milli motor	Double shaft motor	Doble Ejes

Çıkış Mili / Output shaft / Arbre de sortie

Kod / Code	Varyasyon	Options	Options
111	Özel mil ölçüsü	Special shaft dimensions	Dimensions de l'arbre spéciale
112	Özel mil malzemesi	Special shaft materials	Matériel de l'arbre spéciale
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 hollow shaft	Arbre creux spéciale
122	Özel kovan malzemesi	Material of special output hollow shaft	Arbre creux spéciale
123	Sertleştirilmiş kovan	Hardened steel hollow shaft	Arbre creux en acier trempé
124	Diş çekilmiş kovan	Hollow shaft with screw	Arbre creux a vis
125	Opsiyonel kovan	Optional output hollow shaft	Arbre creux optionnel
126	Çoklu kama uygulaması	Hollow shaft with splining	Arbre creux cannelé

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 spéciale
132	Özel mil malzemesi	Material of special shaft	Matériaux de l'arbre spéciale
133	Sertleştirilmiş mil	Hardened steel shaft	Arbre en acier trempé
134	Çoklu kama uygulaması	Hollow shaft with screw	Arbre creux a vis
136	Diş çekilmiş mil	Shaft with screw	Arbre de sortie avec vis

Çıkış Flanşı / Output flange / Bride de sortie

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

Giriş Flanşı / Input Flange / Bride d'entrée

Kod / Code	Varyasyon	Options	Options
151	Özel flanş ölçüsü	Dimension of 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 input flange*	Bride d'entrée spéciale*
157	NEMA Flanş	NEMA input flange	Bride d'entrée NEMA

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

Yağ / Oil / Huiles

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

Keçe - Tapa / Seal - Cover / Joint - Bouchon

Kod / Code	Varyasyon	Options	Options
221	Özel ölçü keçe	Dimensions of special seal	Dimensions du joint spéciale
222	Özel ölçü tapa	Dimensions of special cover	Dimensions du bouchon spéciale
223	Özel marka keçe	Special brand of seal	Marque du joint spéciale
224	Özel marka tapa	Special brand of cover	Marque du bouchon spéciale
225	Viton keçe	Viton seal	Joint en viton
226	Özel tip keçe uygulaması	Special configuration of seal	Configuration spéciale du joint

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 spéciale
234	Özel ölçü rulman	Special dimensions of bearing	Dimensions du roulement spéciale
235	Mekanik kilit CW*	Backstop bearing (CW)	Roulement anti-retour (CW)
236	Mekanik kilit CCW*	Backstop bearing (CCW)	Roulement anti-retour (CCW)

Gövde / Housing / Carter

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

Boya / Paint / Peinture

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

Dişli / Gears / Pignons

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

* 261 kodu, 262 kodunu 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 spéciale
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

Verim Sınıfı / Efficiency classifications / Classes d'efficacité énergétique

Kod / Code	Varyasyon	Options	Options
363	IE4	IE4	IE4

* IE3 verim sınıfı standart kabul edilir. / IE3 is the standard category / IE3 étant la norme standard

Koruma Sınıfı / IP Classification / Classification IP

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

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

İzolasyon Sınıfı / Isolation class / Classe d'isolations

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

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

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

Rulman / Bearing / Roulement

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

* 0 C° ile 40 C° aralığı dışındaki ortam sıcaklıkları için bilgi alınız. / 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

Kuyruk Milli Motor / Double shaft motor / Ejes con Doble Extensión

Kod / Code	Varyasyon	Options	Options
351	Standart kuyruk mili	Tail shaft	Arbre arrière
352	Özel mil ölçüsü	Dimensions of the shaft	Dimensions de l'arbre spéciale
353	Standart dışı mil*	Special output shaft*	Arbre de sortie spéciale*

* İstenilen değişiklik ürünün standart mili üzerinde yapılamayıp yeni bir mil tasarlanması durumudur. / The requested change cannot be made on the standard shaft of the product and a new shaft will be designed. /

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

Fren markası / Brake's brand / Marque du frein

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

Fren Tipi / Type of brake / Type de frein

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

* 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 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	Interrupteur bilame
443	Basınç 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

Özel Motorlar / Special motor / Moteur spécial

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

* Motorlar firmamız tarafından tedarik edilmemektedir / Our factory is not providing such motors / Moteur non fournis par notre usine

Özel motor kodları motorların fabrikamız tarafından takıldığı durumlarda uygulanır / Motors installed in our factory / Moteur installés dans notre usine

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

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

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

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

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

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

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

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

Service Factor (F_s)

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

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

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

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

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

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

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

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

Service facteur (F_s)

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

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

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

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

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

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

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

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

Ekskavatörler		Excavators		Excavateur	
Zincir kovalı ekskavatörler	H	Chain-Bucket excavators	H	Excavateurs à gaudets	H
Paletli yürüyüşler	H	Travelling gears (Caterpillar)	H	Convoyeur à étage	H
Ray üzerinde yürüyüşler	M	Travelling gears (Rails)	M	Convoyeur à rails	M
Manevra mekanizmaları	U	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 mekanizmalar	M	Slewing gears	M	Pignons rotatif	M

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Kağıt Endüstri Makinaları		Paper Industry Machines		Industrie Papetière	
Düzleme silindirleri	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 Makinaları		Stone and Clay Working Machines		Roches et Argiles	
Kırıcılar	H	Breakers	H	Broyeurs	H
Döner fırınlar	M	Rotary ovens	M	Four rotatifs	M
Çekiçli değirmenler	H	Hammer mills	H	Broyeux à marteaux	H
Bilyalı değirmenler	H	Ball mills	H	Broyeurs à billes	H
Çarpmalı öğütücüler	H	Beater mills	H	Broyeux à percussions	H
Tuğla presleri	H	Brick presses	H	Presse à pavès	H

Tekstil Makinaları		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

Silindirme ve Çekme Tesisleri		Metal Rolling Mills		Acieries	
Sac kesme makineleri	H	Sheet metal cutting machines	H	Découpeuses	H
Hız ayarlı silindirler	M	Roller adjustment drivers	M	Ajusteuse à presses	M
Çubuk kesme makinaları	H	Billet shears	H	Scies	H
Kabuk sıyırma makinaları	H	Descaling machines	H	Eplucheuse	H
Tel çekme tesisleri	M	Wire drawing machines	M	Enrouleuses	M
Soğuk çekme tesisleri	H	Cooling beds	H	Bande de refroidissements	H
Rulolu nakil (Hafif)	M	Roller tables (Lights)	M	Enrouleuses (légères)	M
Rulolu nakil (Ağır)	H	Roller tables (Heavy)	H	Enrouleuses (lourdes)	H
Silindir 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 / Hydraulic / Hydraulique	0....3	0.8	1	1.5
	3....10	1	1.25	1.75
	10...24	1.25	1.5	2
Pistonlu Makinalar (4....6 Silindir Piston Machines (4....6 Cylindir) Machine à pistons (4....6 Cylindres)	0....3	1	1.25	2
	3....10	1.25	1.5	2
	10...24	1.5	1.75	2
Pistonlu Makinalar (1....2 Silindir Piston Machines (1....2 Cylindir) Machine à pistons (1....2 Cylindres)	0....3	1.25	1.5	2
	3....10	1.5	1.75	2.25
	10...24	1.75	2	2.5

Radyal Yüklerin Belirlenmesi

Meydana gelen radyal yükün hesaplanabilmesi için redüktörün çıkış veya giriş miline bağlanan iletme elemanının tipi dikkate alınmalıdır. Aşağıdaki tabloda bazı iletme elemanları faktörleri (f_i) verilmiştir.

<u>İletme Elemanı</u>	<u>İletme Elemanı Faktörü (f_i)</u>	<u>Açıklama</u>
Dişli	1,15	< 17 diş
Zincir Dişli	1,40	< 13 diş
Zincir Dişli	1,25	< 20 diş
V-Kayış Kasnakları	1,75	Ön Gerilme Kuvveti
Düz Kayış Kasnakları	2,50	Ön Gerilme Kuvveti
Triger Kayış Kasnakları	1,50	Ön Gerilme Kuvveti

Mil üzerindeki radyal yük aşağıdaki formülle hesaplanır:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R [N]$ = Radyal Yük
 $M_d [Nm]$ = Döndürme Momenti
 $d_0 [mm]$ = İletme elemanının Ortalama Çapı
 f_i = İletme Elemanı Faktörü

Bu değerler gözönüne alınarak hesaplanan sonuçlar doğrultusunda, kataloğumuzda yer alan redüktörlere ait radyal yükleri görerek seçim yapabilirsiniz. Bu tablolarda verilen radyal yükler rulman ömrüne göre belirlenmiş olup $S_f = 1$ şartına ve yükün milin ortasını yüklediği durumlar için verilmiştir.

Determining of Overhung Loads

Type of transmission component mounting output or input shaft has to be consideration to find occurred overhung loads. Some transmission component factor (f_i) is given at the table below.

<u>Transmission Component</u>	<u>Transmission Component Factor (f_i)</u>	<u>Explanation</u>
Gear	1,15	< 17 teeth
Sprockets	1,40	< 13 teeth
Sprockets	1,25	< 20 teeth
V-Belt Pulleys	1,75	Pre-tension
Flat Belt Pulleys	2,50	Pre-tension
Trigger Belt Pulleys	1,50	Pre-tension

Overhung Loads on shaft is find by at the formula below:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R [N]$ = Overhung Load
 $M_d [Nm]$ = Torque
 $d_0 [mm]$ = Mean Diameter of Transmission Component
 f_i = Transmission Component Factor

You can Choose, by seeing overhung loads belong to gearboxes in our catalog according to determined results by considering these values. The given overhung loads on the tables are determined according to working life, on $S_f = 1$ and force which are applied to the midpoint of the shaft

Calcul des charges radiales

Afin de déterminer les charges radiales en bouts d'arbres il conviens de prendre en compte les paramètre et coefficients suivants. Le coefficient correcteur (f_i) est a appliquer en fonction du type de transmission

<u>Élément de transmission</u>	<u>Coefficient correcteur (f_i)</u>	<u>Remarques</u>
Pignons	1,15	< 17 dents
Roue a chaine	1,40	< 13 dents
Roue a chaine	1,25	< 20 dents
Poulies a gorges	1,75	En fonction de la précontrainte
Poulies plates	2,50	En fonction de la précontrainte
Poulies dentées	1,50	En fonction de la précontrainte

La charge radiale en bout d'arbre se calcule en utilisant la formule suivante:

$$F_R = \frac{Md \cdot 2000}{d_0} \cdot f_i$$

$F_R [N]$ = Charge appliquée en bout d'arbre(N)
 $M_d [Nm]$ = Couple en Nm
 $d_0 [mm]$ = Diamètre de l'élément de transmission(mm)
 f_i = Coefficient correcteur pour charge radiale

Les résultats sont définis en fonction de la durée de vie et d'utilisation des réducteurs. Les résultats se basent sur les charges radiales appliquées au centre de l'arbre.

Radyal Yükle Hesabı, Kovana etkiyen Durum için

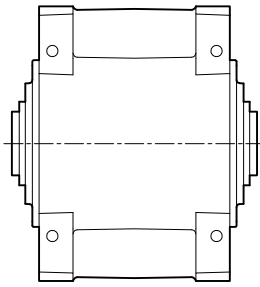
Calculation of Overhung Load for State Acting on Hollow Shaft

Calcul des charges radiales appliquées en configuration arbre creux

Radyal Yükle Hesabı için Sabit Değerler Tablosu

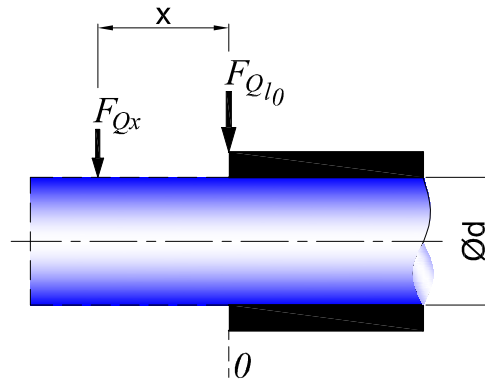
Tables of Fixed Values for Calculation of Overhung Load

Tableau des valeurs préétablies pour le calcul des charges radiales



M Serisi
M Series / M Série

M Serisi / M Series / M Série				
Tip / Type / Type	k	c	d	l
MA-MK 502 / 503 / 504	404	299	95	-
MA-MK 602 / 603 / 604	403	298	105	-
MA-MK 702 / 703 / 704	529	334	115	-
MA-MK 802 / 803 / 804	429	304	125	-
MA-MK 902 / 903 / 904	504	379	135	-
MA-MK 1002 / 1003 / 1004	535	321	150	-



Radyal yük, kovanın 0 noktasında değil ise $F_{Qx} = F_{Ql0} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

If overhung load is not applied at the zero point of hollow shaft; it is calculated by $F_{Qx} = F_{Ql0} \cdot \frac{k}{c+x}$

Si les charges radiales ne sont pas appliquées au point 0 de l'arbre creux, il convient d'appliquer la formule suivante $F_{Qx} = F_{Ql0} \cdot \frac{k}{c+x}$

Radyal Yük Hesabı, Çıkış Miline etkiyen Durum için

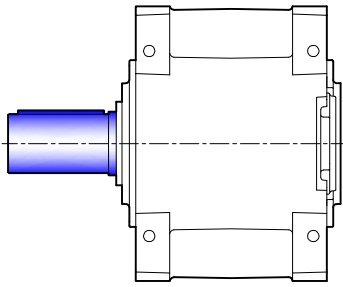
Calculation of Overhung Load for State Acting on Output Shaft

Calcul des charges radiales appliquées sur l'arbre de sortie

Radyal Yük Hesabı için Sabit Değerler Tablosu

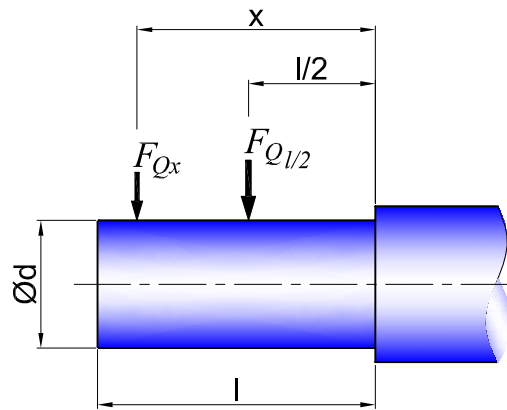
Tables of Fixed Values for Calculation of Overhung Load

Tableau des valeurs préétablies pour le calcul des charges radiales



M Serisi
M Series / M Série

M Serisi / M Series / M Série				
Tip / Type / Type	k	c	d	l
MA-MK 502 / 503 / 504	404	299	100	210
MA-MK 602 / 603 / 604	403	298	110	210
MA-MK 702 / 703 / 704	439	334	120	210
MA-MK 802 / 803 / 804	459	334	130	250
MA-MK 902 / 903 / 904	504	379	140	250
MA-MK 1002 / 1003 / 1004	531	381	160	300



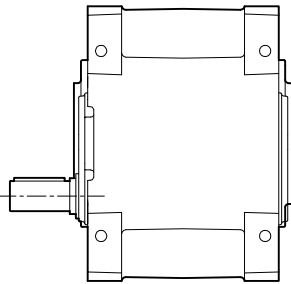
Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

If overhung load is not applied at the midpoint of output shaft; it is calculated by $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont pas appliquées au centre de l'arbre d'entrée, la formule à appliquer est $F_{Qx} = F_{Ql/2} \cdot \frac{k}{c+x}$

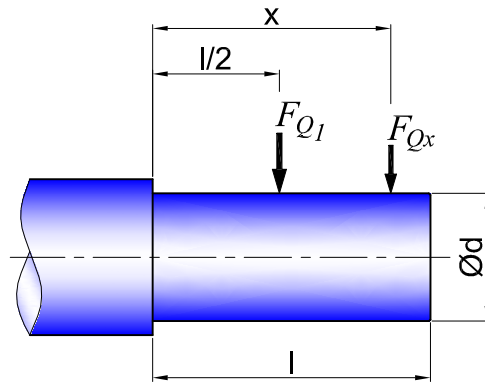
Radyal Yükle Hesabı, Giriş Miline etkiyen Durum için
Calculation of Overhung Load for State Acting on Input Shaft
Calcul des charges appliquées sur l'arbre d'entrée

Radyal Yükle Hesabı için Sabit Değerler Tablosu
Tables of Fixed Values for Calculation of Overhung Load
Tableau des valeurs préétablies pour le calcul des charges radiales



MA Serisi
MA Series / MA Série

MA Serisi / MA Series / MA Série				
Tip / Type / Type	k	c	d	l
MA 704	385	345	30	80
MA 804	385	345	30	80
MA 904	436	396	30	80
MA 1004	436	396	30	80



Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Q1} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

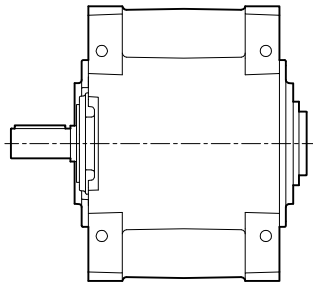
If overhung load is not applied at the midpoint of input shaft; it is calculated by $F_{Qx} = F_{Q1} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont appliquées au centre de l'arbre d'entrée, la formule à appliquer est

$$F_{Qx} = F_{Q1} \cdot \frac{k}{c+x}$$

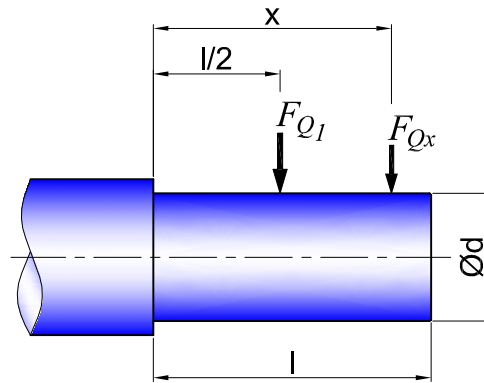
Radyal Yük Hesabı, Giriş Miline etkiyen Durum için
Calculation of Overhung Load for State Acting on Input Shaft
Calcul des charges appliquées sur l'arbre d'entrée

Radyal Yük Hesabı için Sabit Değerler Tablosu
Tables of Fixed Values for Calculation of Overhung Load
Tableau des valeurs préétablies pour le calcul des charges radiales



MA Serisi
MA Series / MA Série

MA Serisi / MA Series / MA Série				
Tip / Type / Type	k	c	d	l
MA 502	363.25	313.25	50	100
MA 503	353.25	313.25	40	80
MA 602	363.25	313.25	50	100
MA 603	353.25	313.25	40	80
MA 702	415	350.75	60	120
MA 703	400.75	350.75	45	100
MA 802	415	350.75	60	120
MA 803	400.75	350.75	45	100
MA 902	472.5	402.5	60	120
MA 903	466.5	406.5	45	120
MA 902	470.5	400.5	75	120
MA 903	466.5	406.5	55	120
MA 1002	472.5	402.5	60	120
MA 1003	466.5	406.5	45	120
MA 1002	470.5	400.5	75	120
MA 1003	466.5	406.5	55	120



Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

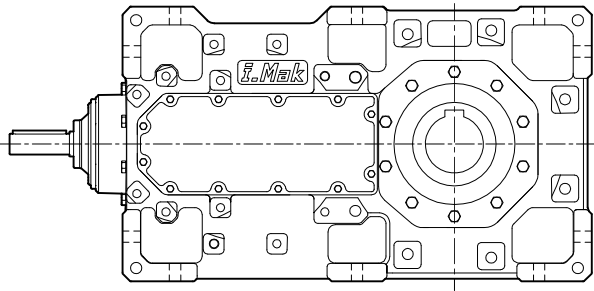
If overhung load is not applied at the midpoint of input shaft; it is calculated by $F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont appliquées au centre de l'arbre d'entrée, la formule à appliquer est

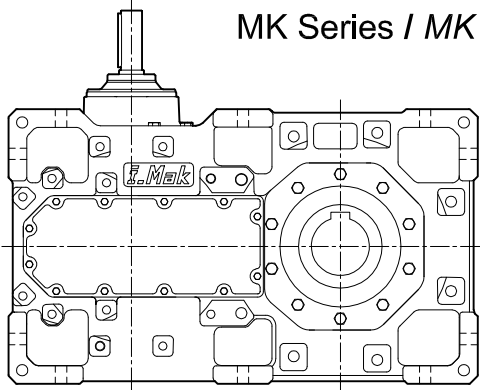
$$F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$$

Radyal Yük Hesabı, Giriş Miline etkiyen Durum için
Calculation of Overhung Load for State Acting on Input Shaft
Calcul des charges appliquées sur l'arbre d'entrée

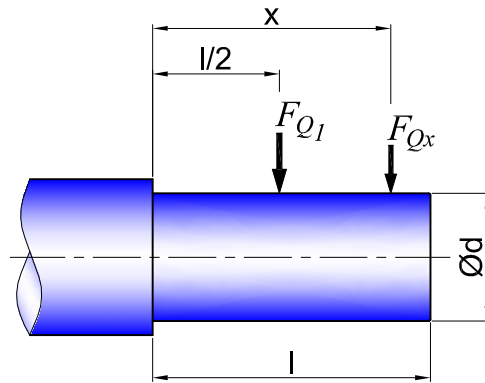
Radyal Yük Hesabı için Sabit Değerler Tablosu
Tables of Fixed Values for Calculation of Overhung Load
Tableau des valeurs préétablies pour le calcul des charges radiales



MK Serisi
MK Series / MK Série



MK Serisi / MK Series / MK Série				
Tip / Type / Type	k	c	d	l
MK 503	236.25	178.75	35	115
MK 504	170.75	120.75	28	100
MK 603	236.25	178.75	35	115
MK 604	170.75	120.75	28	100
MK 703	263.5	198.5	45	130
MK 704	188.25	130.75	30	115
MK 803	263.5	198.5	45	130
MK 804	188.25	130.75	30	115
MK 903	296	226	55	140
MK 904	207.25	155.75	35	115
MK 1003	296	226	55	140
MK 1004	207.25	155.75	35	115



Radyal yük, milin orta noktasında değil ise $F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$ formülü ile hesaplanır.

If overhung load is not applied at the midpoint of input shaft; it is calculated by $F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$

Dans le cas où les charges radiales ne sont appliquées au centre de l'arbre d'entrée, la formule à appliquer est

$$F_{Qx} = F_{Ql} \cdot \frac{k}{c+x}$$

Frenler

1) Pervanesiz frenler

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

2) Pervaneli frenler

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

3) Mikro anahtarlı frenler

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

Redüktörlerin ani veya gecikmeli frenlenmesi

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

Frenli redüktörleri teslim aldığınızda fren bağlantısının gecikmeli olarak yapıldığını unutmayınız.

Brakes

1) Brakes without cooling fan

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

2) Brakes with cooling fan

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

3) Brakes with micro switch

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

Non-delayed or delayed braking of geared motors

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

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

Freins

1) Freins sans hélices de refroidissements

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

2) Freins avec hélice de refroidissement

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

3) Frein à ouverture manuelle

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

Freins avec ou sans retardement d'arrêt.

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

Fren alıştırma voltajları

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

Frenli redüktörlerin elektrik motorlarına toprak hattı bağlantısı muhakkak yapılmalıdır.

Fren siparişlerinde belirtilmesi gereken hususlar

- 1) Fren momenti
- 2) Fren tipi
- 3) Fren voltajı

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

Fren bağlantı şemaları

Operating voltage of brakes

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

Geared brake motors must be earthed.

Required ordering data for brakes

- 1) Brake torque
- 2) Brake type
- 3) Brake operating voltage.

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

Brake connection types

Voltage et caractéristique des freins

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

Données Nécessaire à la Commande d'un Frein.

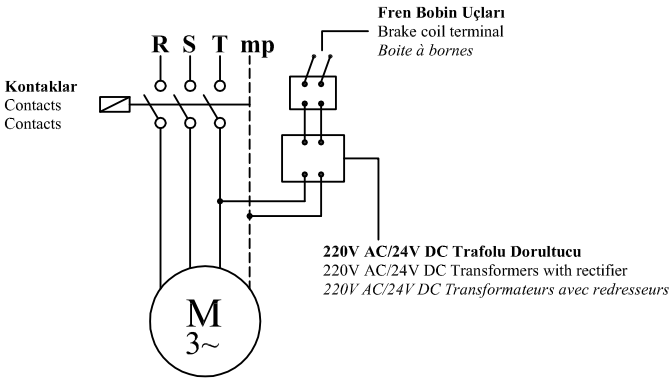
- 1) Couple des freins
- 2) Type de freins
- 3) Type de voltage

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

Type de connexion des freins

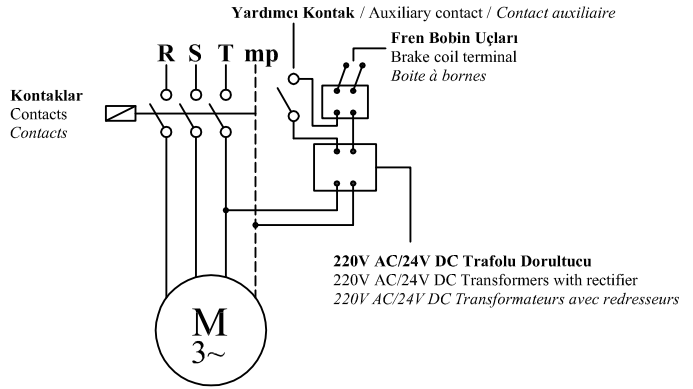
Gecikmeli Frenleme (24V)

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



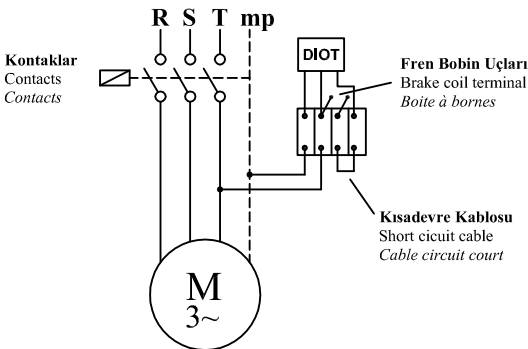
Ani Frenleme (24V)

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



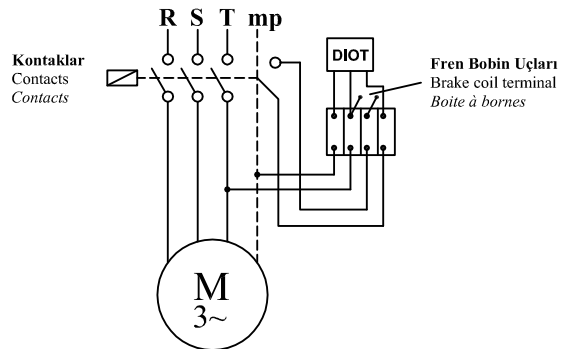
Gecikmeli Frenleme (220V)

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



Ani Frenleme (220V)

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



Tablo 1 / Table 1 / Tableau 1

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

Tablo 2 / Table 2 / Tableau 2

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

Bazı uygulamalarda redüktör kullanıcıları redüktör durduğunda sistemin ağırlıkla beraber geri kaymasını istemez.

Bu gibi durumlarda redüktörlerde kilitli rulman uygulaması yapılır. Buna göre aşağıda verilen tiplere göre dönüş yönü belirtilmelidir.

CCW : Saat Yönünün Tersi
CW : Saat Yönü

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

CCW : Counterclockwise
CW : Clockwise

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

CCW : Sens anti-horaire
CW : Sens horaire



Moment kolu

Redüktörünüzün sabitlendiği yüzeyle buluşturun, bağlantı noktaları zamanla aşınıp kırılmalara neden olabilir. Bu nedenle MA-MK serisi için özel olarak tasarladığımız tork kolu, içindeki lastik takoz sayesinde redüktörünüzü ani kalkışlara ve mil salgılarına karşı koruyup, sistem kaynaklı kasma ve gerilmeleri en aza indirir. İsteğinize bağlı olarak redüktörünüzle beraber gönderilecek olan tork kolu yardımıyla redüktörünüzün montajını kolayca gerçekleştirebilirsiniz.

Moment Kolunun Kullanılabilmesi için,

Konstruksiyonunuza ait bir çıkış mili olması gerekir. Bu çıkış miline, redüktörünüzü astıktan sonra , moment kolunu, redüktörün kendi eksenini etrafında dönmemesi için sabitlemeniz gerekiyor. Resimden de incelemeniz mümkün.

Moment Kollu Bağlantı ile,

- Kolay montaj ve demontaj imkanı
- Sistemsel kasmalara karşı redüktörünüzü koruma imkanı sağlanmış olmaktadır.



Torque arm

Lot of gearboxes failures and problems are due to the connection of the gearbox to the hosting structure or application. The vibration or weight are damaging the gearboxes housing, connection elements and shafts. In order to avoid such issues, we designed a special torque arm to connect the gearbox with the hosting structure. This special element is composed of steel and caoutchouc parts to support the weight and vibration generated by the application. In the same time the torque arm is making mounting and maintenance process faster and easier. Mounting and usage:

In order to use a torque arm, the structure of the application should have an output shaft. The gearbox should be connected to the shaft and the torque arm should be mounted of the down or side part of the gearbox using the specific holes on the housing design.

Advantages:

- Quick mounting
- Easy maintenance process
- Longer lifetime of the gearbox

Bras d'attraction

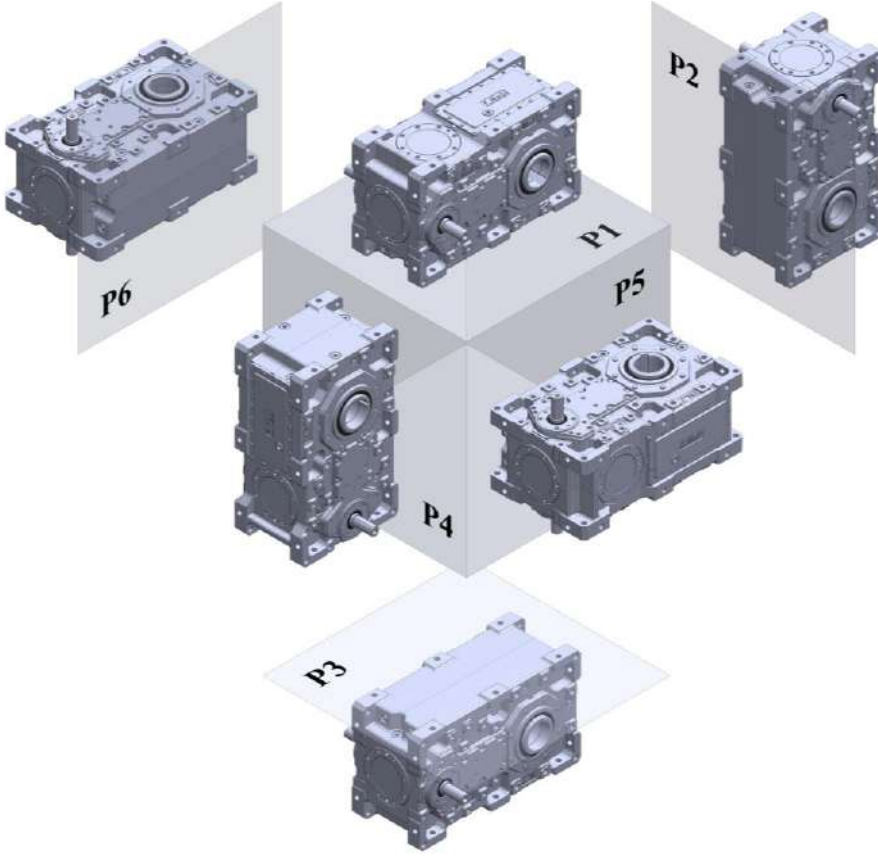
En cause de la majorité des pannes et défaillances, l'accouplement des réducteurs à la structure de l'application finale est un point essentiel au bon fonctionnement et au prolongement de la durée de vie des réducteurs. En effet, un accouplement défaillant ou mal adapté est souvent la cause de fissures, vibration excessives et déformation de l'arbre d'entrée. Pour pallier à ce problème, nous avons mis au point un bras d'attraction permettant d'absorber les chocs et vibration liés au fonctionnement et aux phases d'arrêt/démarrage de l'application. Ce bras d'attraction est composé d'une structure en fonte et de deux joints en caoutchouc. En plus de prolonger la durée de vie du motoréducteur et maintenir un bon fonctionnement de vos applications, le bras d'attraction rend les phases de montages et maintenance plus rapides et efficaces.

Montage et utilisation :

L'utilisation d'un bras d'attraction nécessite la présence d'un arbre de sortie sur la structure de l'application. Après avoir effectué l'accouplement du réducteur, le bras d'attraction doit être placé sur la face arrière ou basse du réducteur. La fixation s'effectue grave aux emplacements prévus sur le carter du réducteur.

Les avantages :

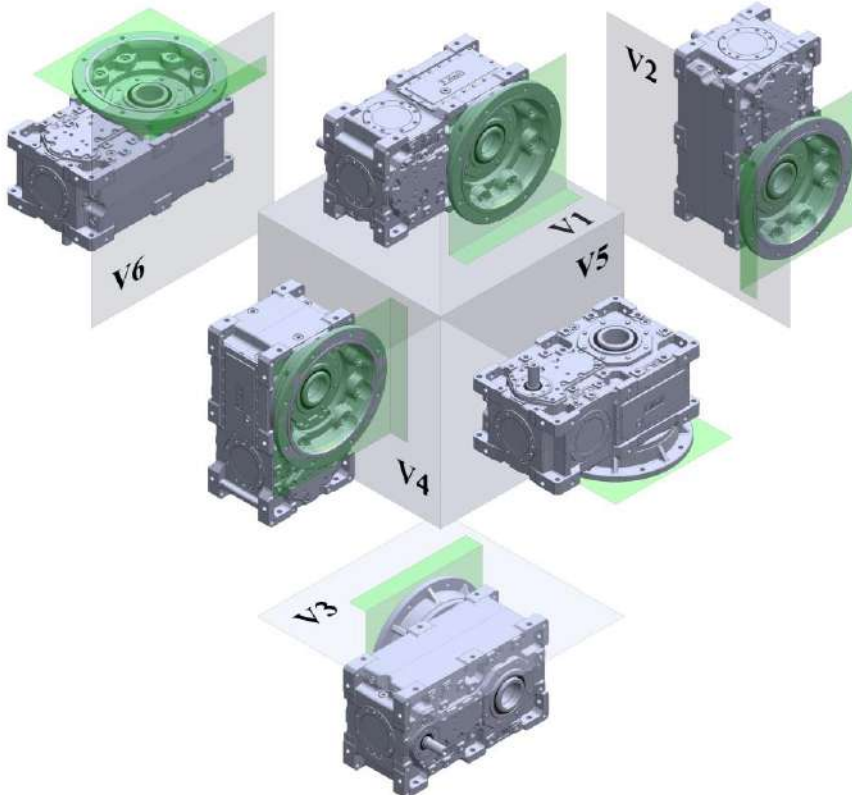
- Phase de montage facilitée
- Prolongement de la durée de vie
- Maintenance rapide



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.

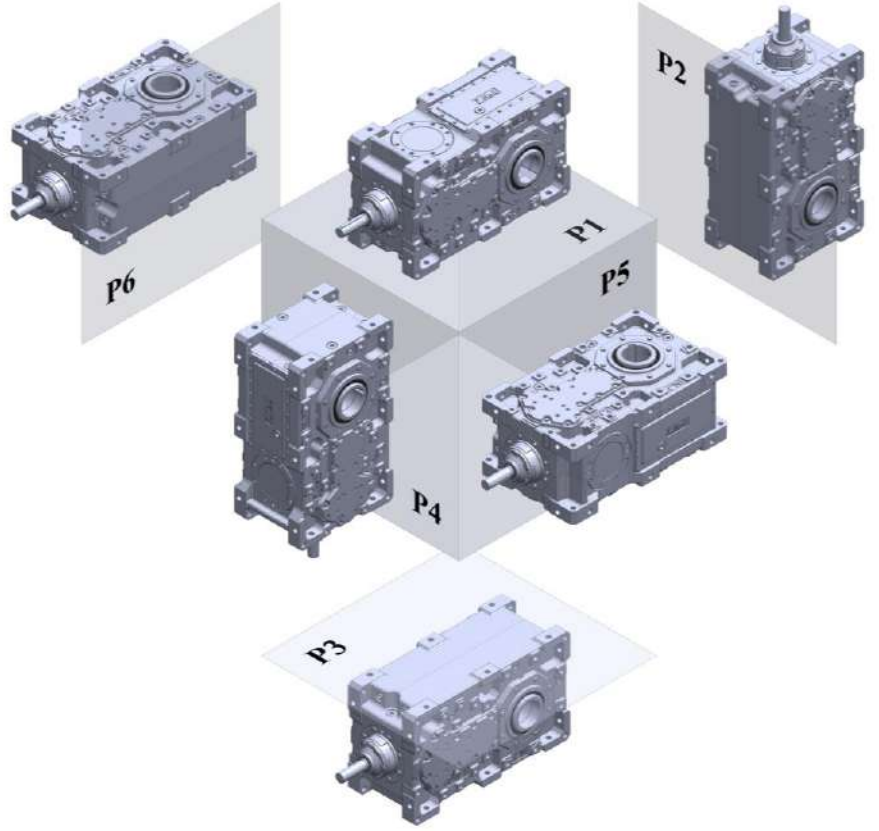
Flange mounted gearboxes position are defined as "V"

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

Ayak montajlı redüktörlerde montaj pozisyonu "P" ile gösterilir.

Foot mounted gearboxes position are defined as "P"

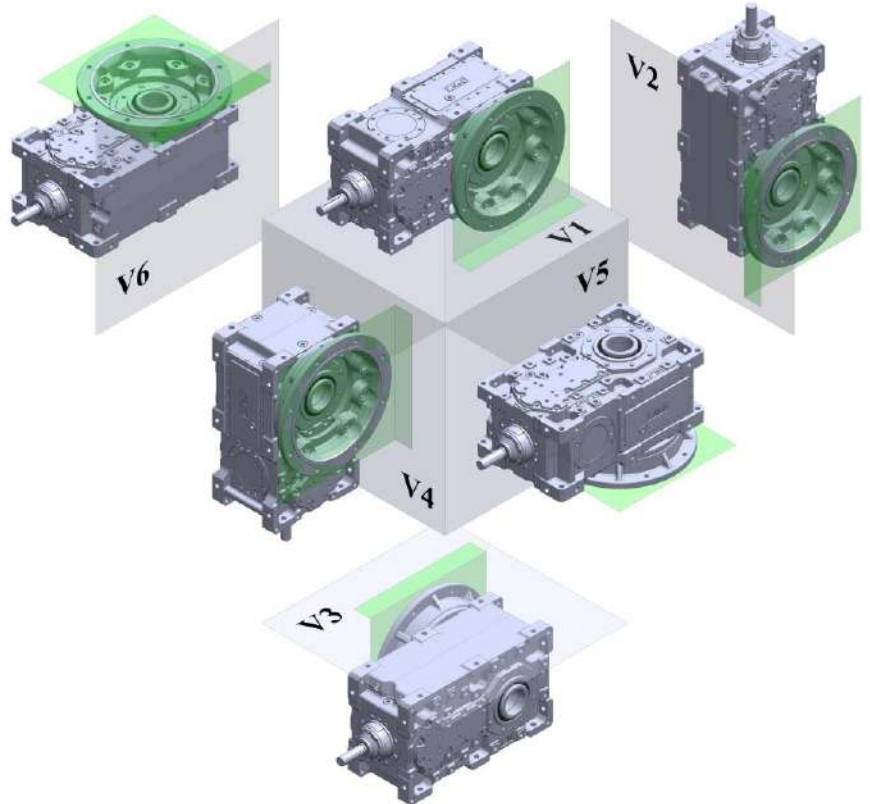
Les positions de montages des réducteurs à pattes sont définis par "P"

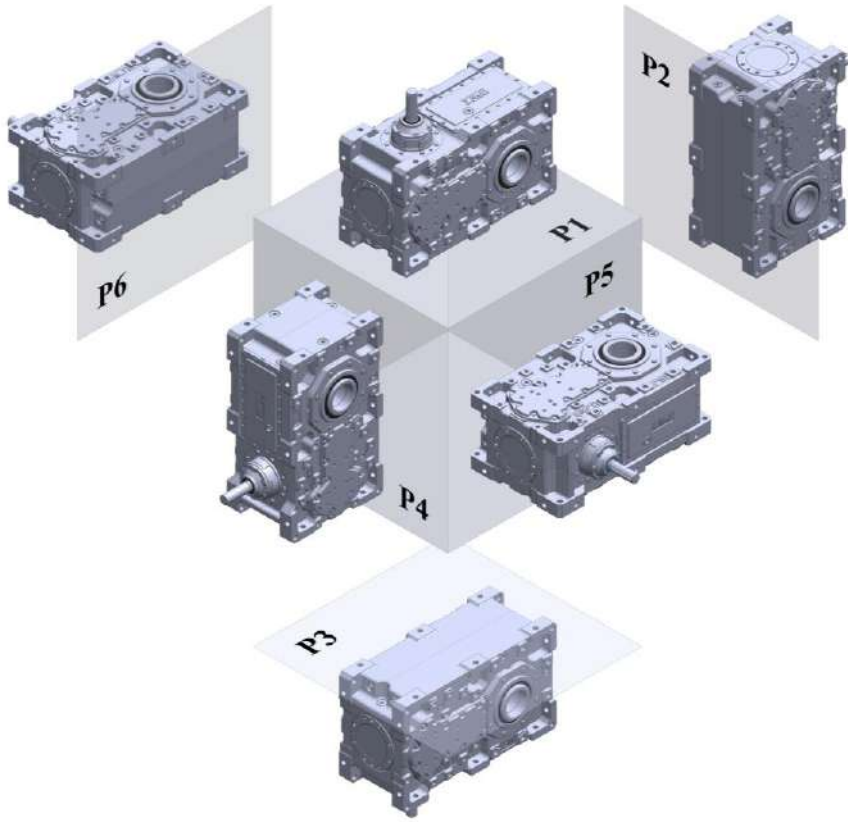


Flanş montajlı redüktörlerde montaj pozisyonu "V" ile gösterilir.

Flange mounted gearboxes position are defined as "V"

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

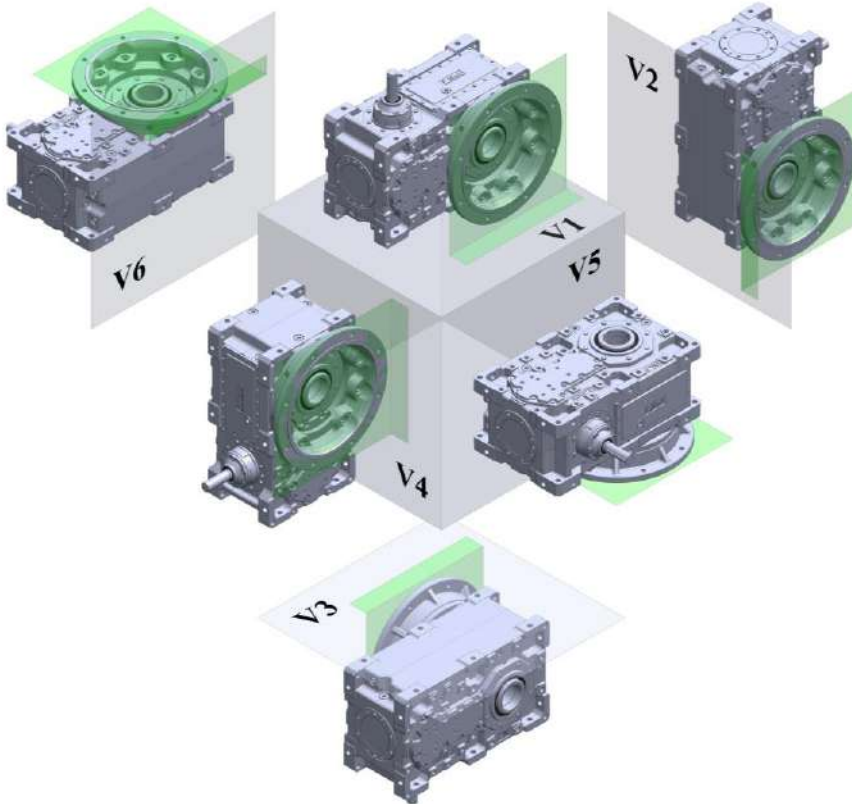




Ayak montajlı redüktörlerde montaj pozisyonu "P" ile gösterilir.

Foot mounted gearboxes position are defined as "P"

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

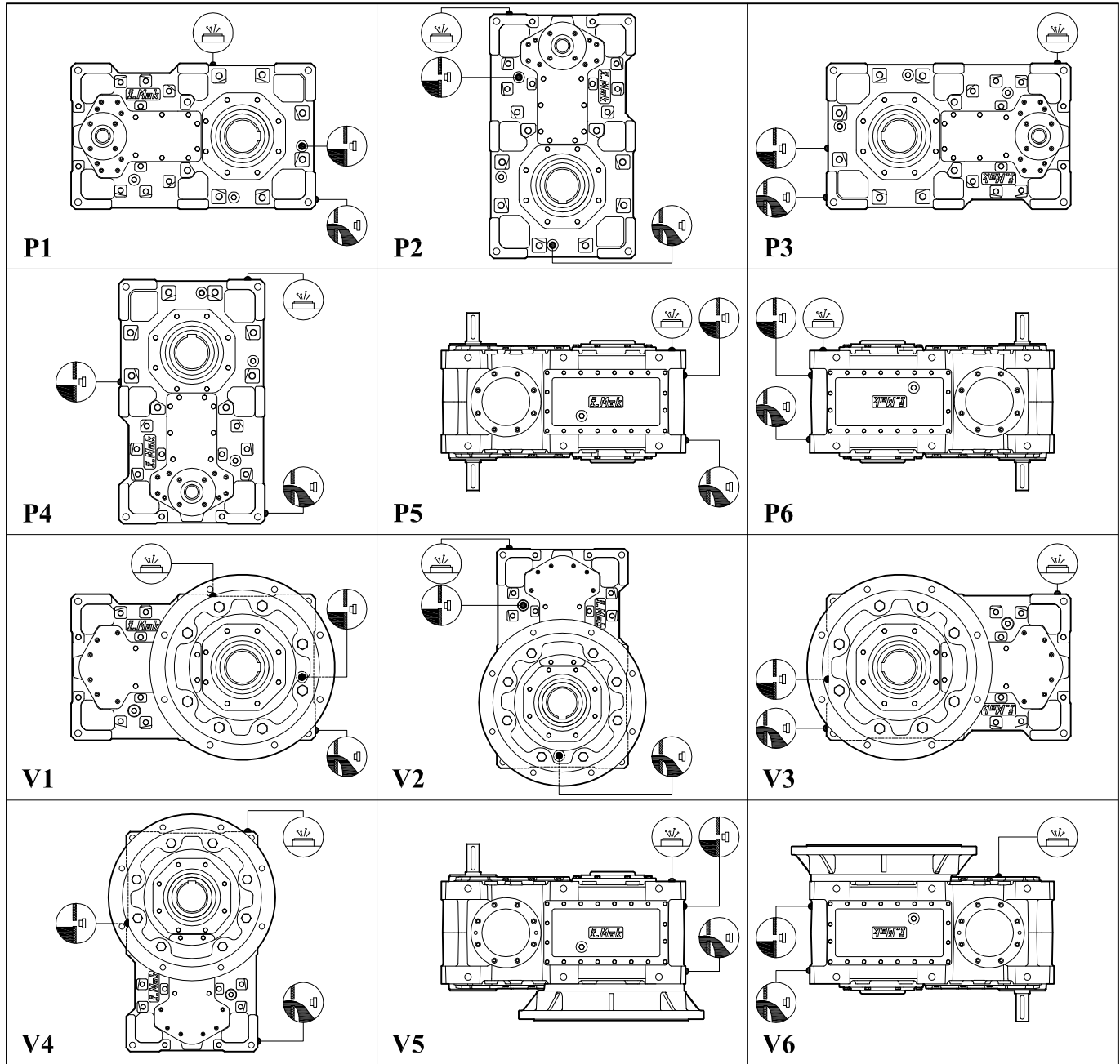


Flanş montajlı redüktörlerde montaj pozisyonu "V" ile gösterilir.

Flange mounted gearboxes position are defined as "V"

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

Yağ Cinsi Lubricant Art des Lubrifiant	ISO Viskozite sinifi Viscosity class Catégorie de viscosite	DIN 51517-3	Kullanım sicaklığı Usage temperature Gebrauchs temperatur d'usage C°	Firma Firm Marque						
				Mobil	ARAL	bp	Shell	Castrol	KLÜBER LUBRICATION	BELGiN
Mineral Yağ Mineral Oil Huile Minéral	ISO VG 320	CLP	-10.....+90	Mobilgear 600XP320	Degol BG 320	Energol GR-XP 320	OmalaS2 GX 320	Alpha SP 320	Klüberoil GEM 1 N 320	Recompound FL 320
	ISO VG 220	CLP	-10.....+90	Mobilgear 600 XP 220	Degol BG 220	Energol GR-XP 220	OmalaS2 GX 220	Alpha SP 220	Klüberoil GEM 1 N 220	Recompound FL 220
	ISO VG 150	CLP	-10.....+90	Mobilgear 600 XP 150	Degol BG 150	Energol GR-XP 150	OmalaS2 GX 150	Alpha SP 150	Klüberoil GEM 1 N 150	Recompound FL 150
	ISO VG 100	CLP	-15.....+90	Mobilgear 600 XP 100	-	-	OmalaS2 GX 100	Alpha SP 100	Klüberoil GEM 1 N 100	Recompound FL 100
Sentetik Yağ Synthetic Oil Huile Synthétique	ISO VG 320	CLP HC	-30.....+110	Mobil SHC Gear 320	Degol GS 320	Energol SG-XP320	OmalaS4 GX V 320	Optigear Synthetic PD 320 ES	Klübersynth GEM 4N 320	Recompound Syn 320
	ISO VG 220	CLP HC	-35.....+110	Mobil SHC Gear 220	Degol GS 220	Energol SG-XP220	OmalaS4 GX V 220	Optigear Synthetic PD 220 ES	Klübersynth GEM 4N 220	Recompound Syn 220
	ISO VG 150	CLP HC	-40.....+110	Mobil SHC Gear 150	Degol GS 150	Energol SG-XP150	OmalaS4 GX V 150	Optigear Synthetic PD 150 ES	Klübersynth GEM 4N 150	Recompound Syn 150
	ISO VG 100	CLP HC	-45.....+110	Mobil SHC 627	-	-	-	Optigear Synthetic PD 100 ES	Klübersynth GEM 4N 100	Recompound Syn 100



Semboller :

Symbols :

Symboles :



Yağ Doldurma ve Havalandırma

Oil Filling and Vent Plug

Valve d'aération



Yağ Seviye Tespit

Oil Level

Niveau d'huile

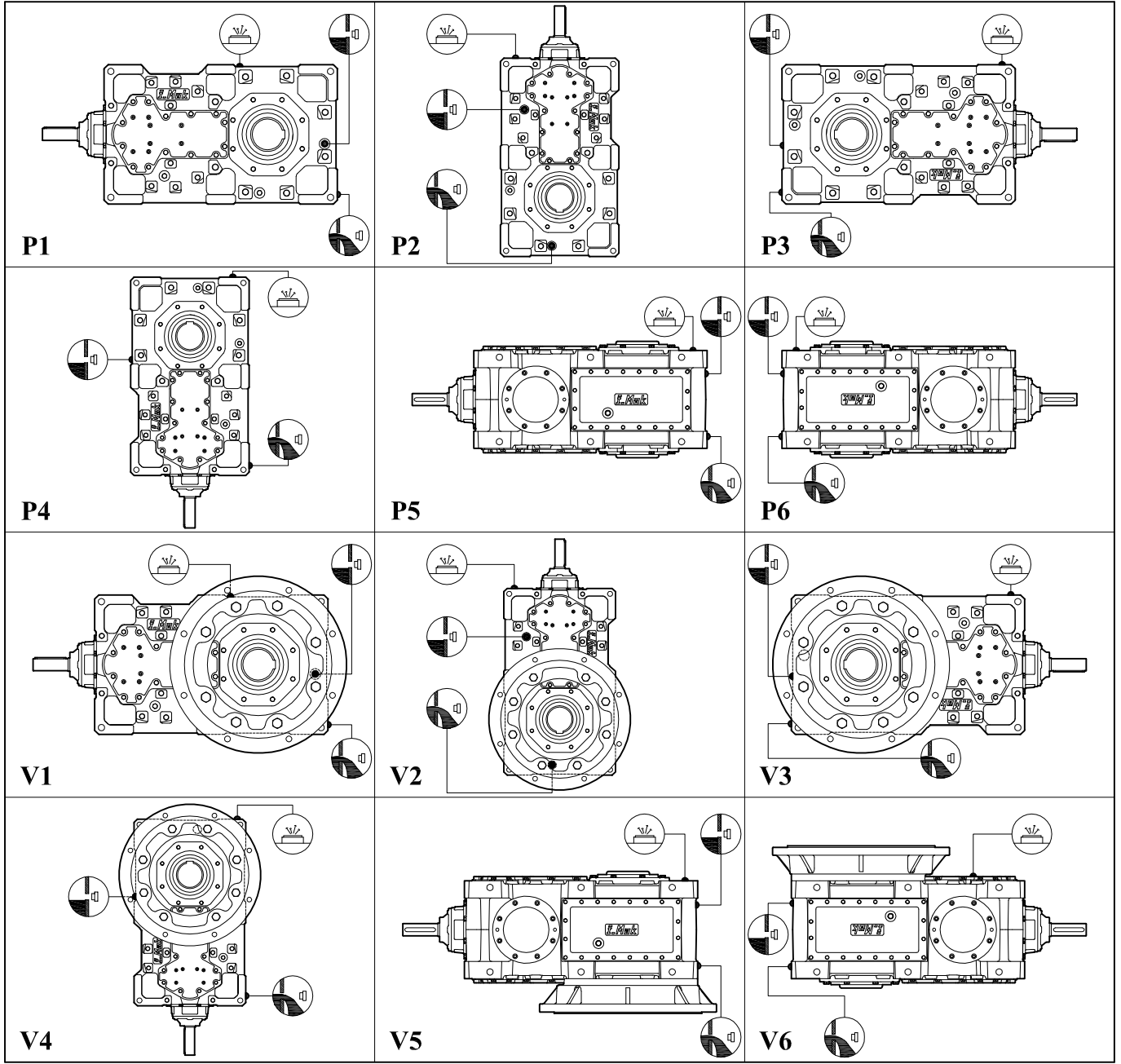


Yağ Boşaltma

Oil Drain Plug

Bouchon de drainage

TİP Type	Bağlantı Pozisyonları ve Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Quantités d'huiles en fonction de la position de montage (litres)											
	P1	V1	P2	V2	P3	V3	P4	V4	P5	V5	P6	V6
	MA.... 503-502	23		35		20		30		36		35
MA.... 603-602	26		39		22		33		40		39	
MA.... 704-703-702	38		55		32		48		58		55	
MA.... 804-803-802	42		65		36		53		66		63	
MA.... 904-903-902	51		81		45		74		82		78	
MA.... 1004-1003-1002	58		92		51		80		92		88	



Semboller :
Seymbols :
Seymboles :



Yağ Doldurma ve Havalandırma
Oil Filling and Vent Plug
Valve d'aération

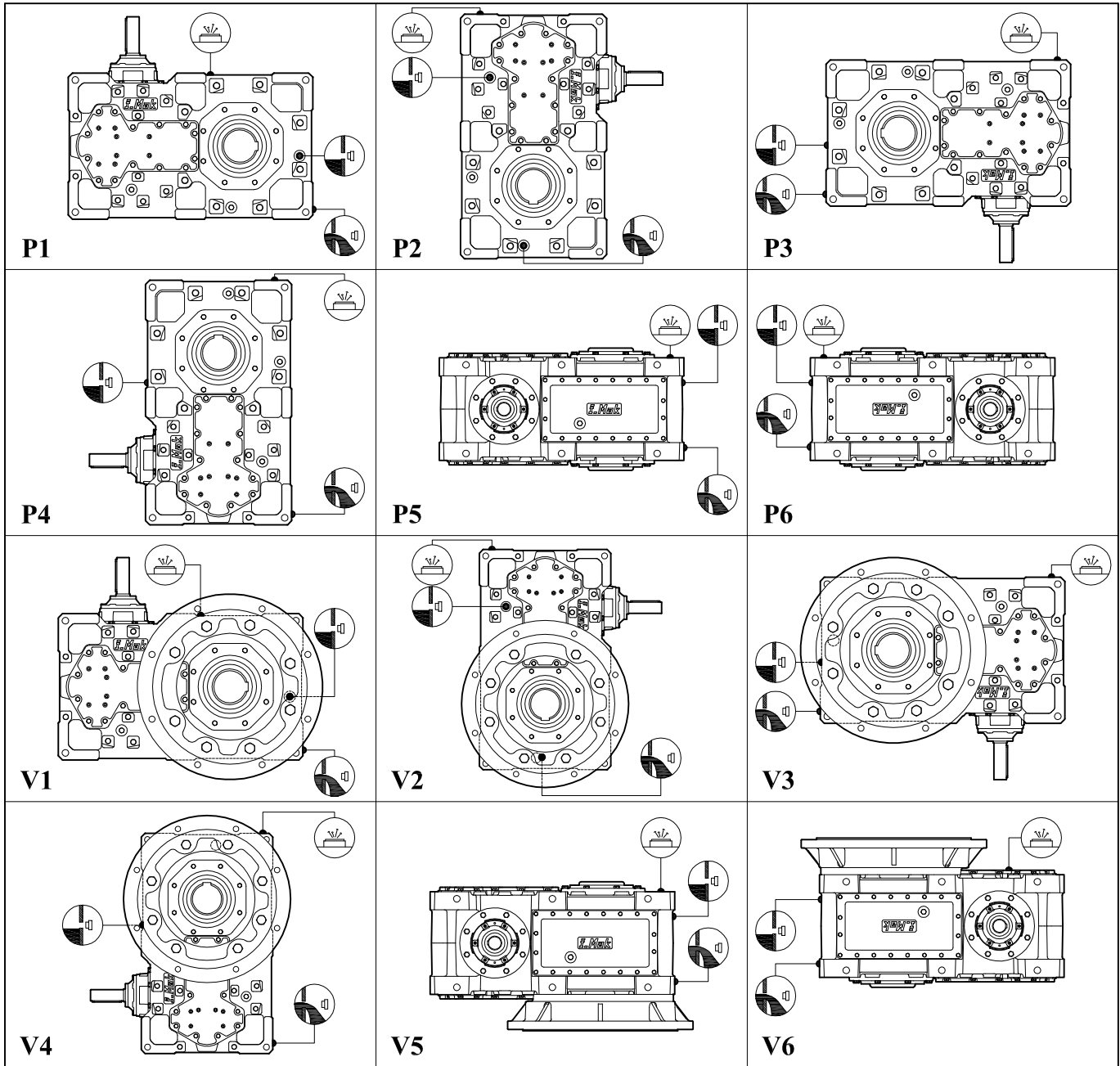


Yağ Seviye Tespit
Oil Level
Niveau d'huile



Yağ Boşaltma
Oil Drain Plug
Bouchon de drainage

TİP Type	Bağlantı Pozisyonları ve Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Quantités d'huiles en fonction da la position de montage (litres)											
	P1	V1	P2	V2	P3	V3	P4	V4	P5	V5	P6	V6
	MK.... 504-503 / G07-G09	23		35		20		31		37		36
MK.... 604-603 / G07-G09	26		39		22		34		41		40	
MK.... 704-703 / G07-G09	38		55		32		49		59		56	
MK.... 804-803 / G07-G09	42		65		36		54		67		64	
MK.... 904-903 / G07-G09	52		81		45		76		84		80	
MK.... 1004-1003 / G07-G09	59		92		51		82		94		90	



Semboller :

Symbols :

Symboles :



Yağ Doldurma ve Havalandırma

Oil Filling and Vent Plug

Valve d'aération



Yağ Seviye Tespit

Oil Level

Niveau d'huile



Yağ Boşaltma

Oil Drain Plug

Bouchon de drainage

TİP Type	Bağlantı Pozisyonları ve Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Quantités d'huiles en fonction de la position de montage (litres)											
	P1	V1	P2	V2	P3	V3	P4	V4	P5	V5	P6	V6
	MK.... 503 / G08-G10	23		35		21		31		37		36
MK.... 603 / G08-G10	25		39		23		34		41		40	
MK.... 703 / G08-G10	38		55		33		49		59		56	
MK.... 803 / G08-G10	42		65		37		54		67		64	
MK.... 903 / G08-G10	50		81		47		76		84		80	
MK.... 1003 / G08-G10	58		92		53		82		94		90	

1500 d/d Motorlar / 1500 r.p.m. Motors / Moteurs 1500 r.p.m.

Kod Code Code	Güç (kW) Power (kW) Puissance (kW)	Hız (d/d) Speed (r.p.m.) Vitesse (r.p.m.)	Anma Akımı Rated Current Ampère	Moment (Nm) Torque (Nm) Couple (Nm)	Verim		IE Sınıfı IE Class Classe IE	Çalışma Sınıfı Duny Type Classe d'utilisation
					100 Efficiency 100%	75 Efficiency 75%		
63M4a	0,12	1365	0,40	0,80	59,1	59,1	IE2	S1
63M4b	0,18	1340	0,55	1,30	64,7	64,7	IE2	S1
71M4a	0,25	1380	0,75	1,70	68,5	68,5	IE2	S1
71M4b	0,37	1390	1,10	2,50	72,7	72,7	IE2	S1
C71M4c	0,55	1385	1,60	3,80	68,6	68,6	IE2	S1
80M4a	0,55	1365	1,45	3,80	77,1	77,1	IE2	S1
80H4b	0,75	1425	1,85	5,00	82,5	82,5	IE3	S1
90S4a	1,1	1440	2,60	7,30	84,1	84,1	IE3	S1
90H4b	1,5	1435	3,30	10,0	85,3	85,3	IE3	S1
100L4a	2,2	1445	5,00	14,5	86,7	86,8	IE3	S1
100H4b	3	1445	6,60	19,8	87,7	87,8	IE3	S1
112M4a	4	1450	8,00	26,3	88,6	88,5	IE3	S1
132S4a	5,5	1450	11,0	36,2	89,6	89,6	IE3	S1
132M4b	7,5	1470	15,4	48,7	90,4	90,5	IE3	S1
C132M4c	9,2	1460	18,3	60,1	90,4	90,5	IE3	S1
160M4a	11	1470	21,1	71,5	91,4	91,3	IE3	S1
160L4b	15	1475	28,5	97,1	92,1	92,0	IE3	S1
180M4a	18,5	1475	34,0	119,8	92,6	92,6	IE3	S1
180L4b	22	1475	39,4	142,4	93,0	92,8	IE3	S1
200L4a	30	1475	52,8	194,2	93,6	93,5	IE3	S1
225S4a	37	1475	67,0	239,6	93,9	93,9	IE3	S1
225M4b	45	1475	80,0	291,4	94,2	94,2	IE3	S1
250M4a	55	1480	96,0	354,9	94,6	94,7	IE3	S1
280S4a	75	1485	133	482,3	95,0	94,9	IE3	S1
280M4b	90	1485	158	578,8	95,2	95,2	IE3	S1

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

1500 d/d Motorlar / 1500 r.p.m. Motors / Moteurs 1500 r.p.m.

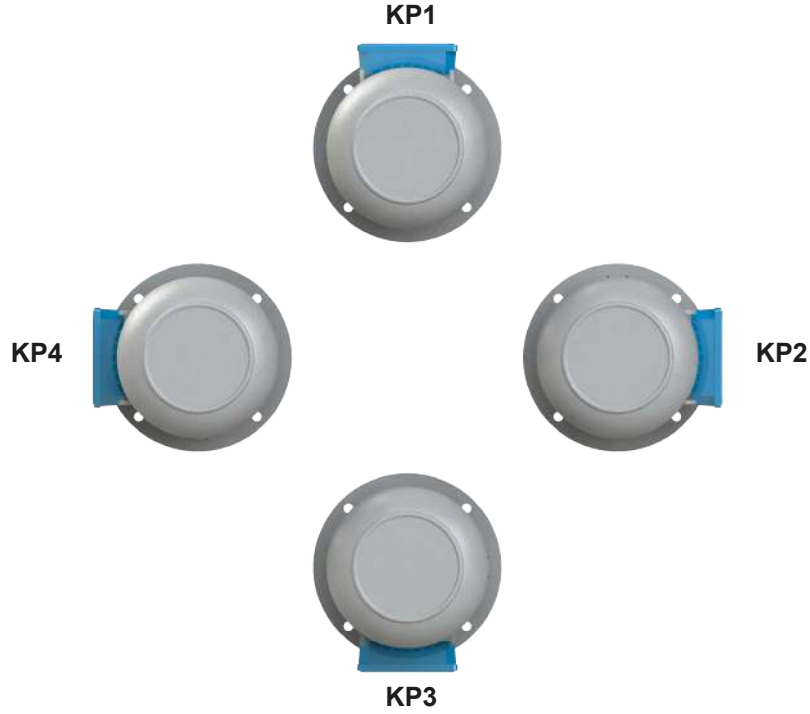
Kod Code Code	Güç (kW) Power (kW) Puissance (kW)	Hız (d/d) Speed (r.p.m.) Vitesse (r.p.m.)	Anma Akımı Rated Current Ampère	Moment (Nm) Torque (Nm) Couple (Nm)	Verim Efficiency Efficiency		IE Sınıfı IE Class Classe IE	Çalışma Sınıfı Duty Type Classe d'utilisation
					100 100%	75 75%		
315S4a	110	1490	194	705,0	95,4	95,2	IE3	S1
315M4b	132	1490	226	846,0	95,6	95,4	IE3	S1
315L4c	160	1490	275	1025,5	95,8	95,6	IE3	S1
315L4d	185	1490	321	1185,7	96,0	96,0	IE3	S1
315H4e	200	1490	350	1281,9	96,0	95,8	IE3	S1
315H4f	250	1490	435	1602,3	96,0	95,8	IE3	S1
355M4a	250	1490	430	1602,3	96,0	96,0	IE3	S1
355M4b	315	1490	540	2019,0	96,0	96,0	IE3	S1
355L4c	355	1490	610	2275,3	96,0	96,0	IE3	S1
355L4d	400	1490	690	2563,8	96,0	96,1	IE3	S1
400L4a	450	1490	760	2884,2	96,0	96,0	IE3	S1
400L4b	500	1490	845	3204,7	96,0	96,0	IE3	S1
400L4c	560	1490	957	3589,3	96,0	96,0	IE3	S1
400L4d	630	1490	1090	4037,9	96,0	96,0	IE3	S1
400L4e	710	1490	710	4550,7	96,0	96,0	IE3	S1
450L4a	800	1490	772	5127,5	96,0	96,0	IE3	S1
450H4b	900	1490	869	5768,5	96,0	96,0	IE3	S1
450H4c	1000	1490	965	6409,4	96,0	96,0	IE3	S1

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

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.



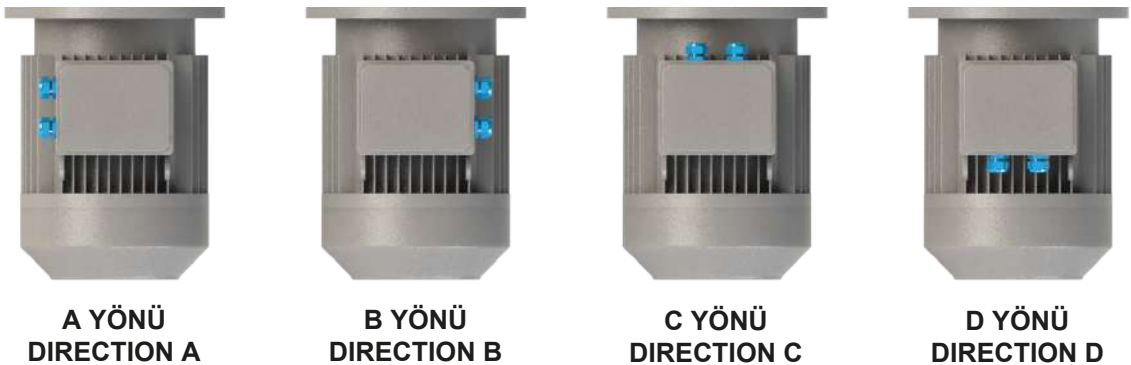
Rakor Yönleri

Cable Entry / Entrée des câbles

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

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

La configuration standard pour la position d'entrée des câbles est définie comme « A ». Si aucune position n'est définie lors de la commande, la position « A » sera automatiquement attribuée.



MA M 703 - 180 L 4 / G03 - FR SR E BR 353



Korozyon Sınıfı Corrosion Categories Catégories de corrosion	Uygulama Alanları Field of Applications Domaines d'applications	Boya Türü Type of Paint Type de Peinture	Boya Kalınlığı (µm) Paint Thickness (µm) Epaisseur des Peintures (µm)	Toplam Boya Kalınlığı (µm) Total Paint Thickness (µm) Epaisseur des Peintures Total (µm)
C2 EN 12944	Üstü kapalı olacak şekilde iç mekan ve dış mekan uygulamaları. Nem ve kir değerleri kontrol altında olan çevre koşulları.	Çinko fosfat pigmentli epoksi Epoxy including zinc phosphate pigment <i>Expozy au composants de zinc et pigment phosphates</i>	60	120
	Indoor installation and outdoor applications with protection roof. Environment with controlled humidity and low contamination. <i>Installation en intérieur, applications à l'extérieur avec une protection contre les intempéries. Environnement avec une humidité contrôlée et une faible contamination.</i>	Alifatik akrilik poliüretan Aliphatic acrylic polyurethane <i>Acrylique-polyuréthane aliphatique</i>	60	
C3 EN 12944	Olağan hava koşullarına maruz iç mekan ve dış mekan uygulamaları. Nemli ve kirli çevre koşulları.	Çinko fosfat pigmentli epoksi Epoxy including zinc phosphate pigment <i>Expozy au composants de zinc et pigment phosphates</i>	110	160
	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of humidity and contamination. <i>Installations en intérieur et extérieur soumises aux aléas climatiques. Environnement avec la présence d'humidité et de contamination.</i>	Alifatik akrilik poliüretan Aliphatic acrylic polyurethane <i>Acrylique-polyuréthane aliphatique</i>	50	
C4 EN 12944	Olağan hava koşullarına maruz iç mekan ve dış mekan uygulamaları. Yüksek nemli ve kimyasal kirlilik çevre koşulları.	Çinko fosfat pigmentli epoksi Epoxy including zinc phosphate pigment <i>Expozy au composants de zinc et pigment phosphates</i>	90	240
	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of high humidity and chemical contamination.	Yüksek yapılı epoksi High-volume epoxy <i>Epoxy haut volume</i>	100	
	<i>Installations en intérieur et extérieur soumises aux aléas climatiques. Environnement avec la présence d'une forte humidité et de contaminations chimiques.</i>	Alifatik akrilik poliüretan Aliphatic acrylic polyurethane <i>Acrylique-polyuréthane aliphatique</i>	50	
C5 EN 12944	Olağan hava koşullarına maruz iç mekan ve dış mekan uygulamaları. Yüksak oranda daimi neme maruz ve kirliliğe karşı kimyasal temizlik ürünü kullanılan çevre koşulları.	Çinko fosfat pigmentli epoksi Epoxy including zinc phosphate pigment <i>Expozy au composants de zinc et pigment phosphates</i>	80	500
	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of continuous high humidity and chemical cleaning contamination.	Yüksek yapılı MOI epoksi High-volume MOI epoxy <i>Epoxy MOI à haut volume</i>	160	
	<i>Installations en intérieur et extérieur soumises aux aléas climatiques. Environnement avec la présence d'une forte humidité et de contaminations chimiques.</i>	Alifatik akrilik poliüretan Aliphatic acrylic polyurethane <i>Acrylique-polyuréthane aliphatique</i>	60	

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

Redüktörlerin Kontrol ve Bakımları

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

Control and maintenance gearboxes

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



Contrôle et maintenance des réducteurs

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

MA Serisi Redüktörler Güç ve Devir Tabloları

MA Series - Performances Tables
Series MA - Table de performances



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
3 4	3,3	423	3,00	8158	326000	MA	804 / 100 H 4b	131 136	693
	3,7	377	3,30	7275	322000				
	4,1	339	3,70	6534	318000				
	4,6	306	4,10	5902	314000				
	4,2	333	3,00	6422	266000	MA	704 / 100 H 4b	113 118	607
	4,7	297	3,40	5727	262000				
	5,2	266	3,80	5143	258000				
4 5,5	3,9	357	3,80	9173	372000	MA	1004 / 112 M 4a	167 172	1086
	3,8	363	3,00	9344	286000	MA	904 / 112 M 4a	149 154	886
	4,2	330	3,40	8479	282000				
	4,9	287	3,80	7395	278000				
	3,3	423	2,20	10877	324000	MA	804 / 112 M 4a	131 136	699
	3,7	377	2,50	9700	319000				
	4,1	339	2,80	8712	315000				
	4,6	306	3,10	7870	311000				
	5,0	278	3,40	7144	307000				
	5,4	257	3,60	6615	303000				
	6,2	226	4,10	5809	299000				
	4,2	333	2,20	8562	264000	MA	704 / 112 M 4a	113 118	613
	4,7	297	2,50	7636	260000				
	5,2	266	2,80	6858	256000				
	5,8	241	3,10	6195	252000				
	6,5	214	3,60	5511	248000				
7,2	193	4,00	4978	244000	MA	503 / 112 M 4a	83 88	423	
5,5 7,5	3,9	357	2,80	12613	369000	MA	1004 / 132 S 4a	167 172	1098
	4,4	314	3,20	11115	366000				
	4,8	292	3,40	10344	363000				
	5,4	258	3,80	9116	360000				
	5,7	245	4,00	8680	357000				
	3,8	363	2,20	12849	284000	MA	904 / 132 S 4a	149 154	898
	4,2	330	2,40	11659	280000				
	4,9	287	2,80	10168	276000				
	5,5	253	3,20	8961	272000				
	5,8	239	3,30	8467	268000				
	6,6	211	3,70	7461	264000				
	3,3	423	1,61	14956	322000	MA	804 / 132 S 4a	131 136	711
	3,7	377	1,80	13338	316000				
	4,1	339	2,00	11979	312000				
	4,6	306	2,20	10821	308000				
	5,0	278	2,50	9823	304000				
	5,4	257	2,60	9096	300000				
	6,2	226	3,00	7988	296000				
	6,9	203	3,40	7174	292000				
	7,6	183	3,70	6480	288000				
	8,8	158	4,10	5603	284000				
	4,2	333	1,64	11773	262000				
	4,7	297	1,85	10499	258000				
	5,2	266	2,10	9429	254000				
	5,8	241	2,30	8518	250000				
	6,5	214	2,60	7578	246000				
7,2	193	2,90	6845	242000					
8,0	174	3,20	6160	238000					
8,9	157	3,50	5565	234000					
10	139	4,00	4942	230000					
11	127	4,30	4486	226000					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
5,5 7,5	16	89,19	3,50	3198	168000	MA	603 / 132 S 4a	95	443
	18	78,14	4,00	2802	164000			100	
	14	103	2,90	3706	144000	MA	503 / 132 S 4a	83	435
	15	92,73	3,30	3325	140000			88	
	17	80,56	3,80	2889	136000				
20	70,72	4,30	2536	132000					
7,5 10	3,9	357	2,00	17200	366000	MA	1004 / 132 M 4b	167 172	1106
	4,4	314	2,30	15157	363000				
	4,8	292	2,50	14106	360000				
	5,4	258	2,80	12431	357000				
	5,7	245	2,90	11837	354000				
	6,5	216	3,40	10431	351000	MA	904 / 132 M 4b	149 154	906
	3,8	363	1,64	17521	282000				
	4,2	330	1,80	15899	278000				
	4,9	287	2,00	13865	274000				
	5,5	253	2,30	12219	270000				
	5,8	239	2,40	11545	266000	MA	804 / 132 M 4b	131 136	719
	6,6	211	2,70	10174	262000				
	7,0	198	2,90	9564	258000				
	8,4	167	3,50	8043	254000				
	3,3	423	1,18	20395	320000				
	3,7	377	1,32	18188	313000	MA	704 / 132 M 4b	113 118	633
	4,1	339	1,48	16335	309000				
	4,6	306	1,64	14756	305000				
	5,0	278	1,80	13395	301000				
	5,4	257	1,92	12403	297000				
	6,2	226	2,20	10892	293000	MA	603 / 132 M 4b	95 100	451
	6,9	203	2,50	9782	289000				
	7,6	183	2,70	8837	285000				
	8,8	158	3,00	7640	281000				
	9,7	144	3,40	6935	277000				
	11	125	3,80	6026	273000	MA	503 / 132 M 4b	83 88	443
	4,2	333	1,20	16054	260000				
	4,7	297	1,36	14317	256000				
	5,2	266	1,52	12858	252000				
	5,8	241	1,68	11615	248000				
	6,5	214	1,92	10333	242000	MA	603 / 132 M 4b	95 100	451
	7,2	193	2,20	9334	240000				
	8,0	174	2,30	8401	236000				
	8,9	157	2,50	7589	232000				
	10	139	2,90	6739	228000				
11	127	3,10	6117	224000	MA	503 / 132 M 4b	83 88	443	
12	113	3,60	5469	220000					
14	102	4,00	4917	216000					
16	89,19	2,60	4361	166000					
18	78,14	3,00	3821	162000					
21	67,89	3,50	3319	158000	MA	503 / 132 M 4b	83 88	443	
23	59,59	4,00	2914	154000					
14	103	2,20	5054	142000					
15	92,73	2,40	4534	138000					
17	80,56	2,80	3939	134000					
20	70,72	3,20	3458	130000	MA	503 / 132 M 4b	83 88	443	
22	62,58	3,60	3060	126000					
25	55,74	4,00	2726	122000					
26	53,35	4,00	2609	118000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types				kg
						MA	Tip			
11 15	3,9	357	1,38	25226	363000	MA	1004 / 160 M 4a	167 172	1174	
	4,4	314	1,60	22231	360000					
	4,8	292	1,70	20688	357000					
	5,4	258	1,90	18232	354000					
	5,7	245	2,00	17361	351000					
	6,5	216	2,30	15299	348000					
	7,8	179	2,80	12651	345000					
	8,8	159	3,20	11231	342000					
	9,6	145	3,40	10301	339000					
	11	129	3,80	9144	336000					
	3,8	363	1,12	25697	280000	MA	904 / 160 M 4a	149 154	974	
	4,2	330	1,23	23319	276000					
	4,9	287	1,50	20336	272000					
	5,5	253	1,58	17921	268000					
	5,8	239	1,64	16933	264000					
	6,6	211	1,85	14923	260000					
	7,0	198	2,00	14027	256000					
	8,4	167	2,40	11797	252000					
	9,5	147	2,70	10406	248000					
	11	130	3,00	9238	244000					
	12	116	3,50	8207	240000	MA	804 / 160 M 4a	131 136	787	
	14	103	3,90	7286	236000					
	4,6	306	1,12	21642	302000					
	5,0	278	1,23	19645	298000					
	5,4	257	1,31	18191	294000					
	6,2	226	1,50	15975	290000					
	6,9	203	1,69	14347	286000					
	7,6	183	1,85	12961	282000					
	8,8	158	2,10	11205	278000					
	9,7	144	2,30	10172	274000					
	11	125	2,60	8837	270000	MA	803 / 160 M 4a	125 130	787	
	12	113	2,90	8022	269000					
	13	104	3,30	7482	248000					
	15	93,04	3,70	6672	244000					
	5,8	241	1,15	17036	246000					
	6,5	214	1,31	15155	240000					
	7,2	193	1,47	13690	238000					
	8,0	174	1,60	12321	234000					
	8,9	157	1,75	11130	230000					
	10	139	2,00	9884	226000					
	11	127	2,10	8972	222000	MA	704 / 160 M 4a	113 118	701	
	12	113	2,40	8022	218000					
14	102	2,70	7212	214000						
15	94,40	2,80	6668	210000						
16	84,88	3,10	5995	206000						
17	82,13	3,30	5890	228000						
19	73,24	3,80	5252	224000						
21	65,78	3,90	4717	220000						
16	89,19	1,77	6396	164000						
18	78,14	2,00	5604	160000						
21	67,89	2,30	4868	156000	MA	603 / 160 M 4a	95 100	519		
23	59,59	2,70	4273	152000						
25	56,88	3,40	4079	148000						
14	103	1,48	7412	140000						
15	92,73	1,66	6650	136000						
17	80,56	1,91	5778	132000						
20	70,72	2,20	5071	128000						
22	62,58	2,40	4488	124000						
17	80,56	1,91	5778	132000						
20	70,72	2,20	5071	128000						
22	62,58	2,40	4488	124000						





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg					
11 15	25	55,74	2,70	3998	120000	MA	503 / 160 M 4a	83 88	511				
	26	53,35	2,70	3826	116000								
	30	46,83	3,10	3358	112000								
	34	41,44	3,50	2972	108000								
	38	36,91	4,00	2647	104000								
15 20	3,9	357	1,01	34399	360000	MA	1004 / 160 L 4b	167 172	1201				
	4,4	314	1,17	30315	357000								
	4,8	292	1,25	28211	354000								
	5,4	258	1,39	24861	351000								
	5,7	245	1,47	23674	348000								
	6,5	216	1,69	20863	345000								
	7,8	179	2,00	17252	342000								
	8,8	159	2,30	15315	339000								
	9,6	145	2,50	14047	336000								
	11	129	2,80	12470	333000								
	13	108	3,30	10464	330000								
	4,2	330	0,90	31798	274000					MA	904 / 160 L 4b	149 154	1001
	4,9	287	1,10	27731	270000								
	5,5	253	1,16	24438	266000								
	5,8	239	1,20	23091	262000								
	6,6	211	1,36	20349	258000								
	7,0	198	1,46	19128	254000								
	8,4	167	1,76	16087	250000								
	9,5	147	2,00	14190	246000								
	11	130	2,20	12598	242000								
	12	116	2,50	11191	238000								
	14	103	2,90	9935	234000								
	15	92,07	3,20	8869	230000	MA	903 / 160 L 4b	143 148	1001				
	16	85,88	3,30	8273	226000								
	16	89,63	3,30	8765	190000								
	17	81,33	3,70	7954	186000								
	6,2	226	1,10	21785	287000					MA	804 / 160 L 4b	131 136	814
	6,9	203	1,24	19565	283000								
	7,6	183	1,35	17673	279000								
	8,8	158	1,50	15280	275000								
	9,7	144	1,69	13870	271000								
	11	125	1,91	12051	267000								
	12	113	2,10	10939	266000								
	13	104	2,40	10202	246000								
	15	93,04	2,70	9099	242000								
	17	83,56	3,00	8171	238000								
	19	75,48	3,30	7382	234000	MA	803 / 160 L 4b	125 130	814				
	20	68,52	3,70	6701	230000								
	10	139	1,47	13478	224000								
	11	127	1,58	12235	220000								
	12	113	1,80	10939	216000								
	14	102	1,98	9835	212000								
15	94,40	2,10	9093	208000									
16	84,88	2,30	8176	204000									
17	82,13	2,40	8031	226000									
19	73,24	2,80	7162	222000									
21	65,78	2,80	6432	218000	MA					704 / 160 L 4b	113 118	728	
24	59,42	3,20	5811	214000									
26	52,86	4,00	5169	210000									
18	78,14	1,50	7641	158000									
21	67,89	1,75	6639	154000									
23	59,59	2,00	5827	150000									
MA	603 / 160 L 4b	95 100	546										





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg				
15 20	25	56,88	2,50	5562	146000	MA	603 / 160 L 4b	95 100	546				
	32	44,14	3,20	4317	142000								
	36	38,40	3,50	3756	138000								
	42	33,71	4,00	3297	134000								
	46	30,49	4,40	2982	130000								
	15	92,73	1,22	9068	134000								
	18,5 25	17	80,56	1,40	7878	130000	MA	503 / 160 L 4b	83 88	538			
		20	70,72	1,60	6915	126000							
		22	62,58	1,81	6120	122000							
		25	55,74	2,00	5451	118000							
		26	53,35	2,00	5217	114000							
		30	46,83	2,30	4579	110000							
		34	41,44	2,60	4052	106000							
		38	36,91	3,00	3610	102000							
		43	32,46	3,40	3175	98000							
		49	28,63	3,80	2800	94000							
55		25,59	4,30	2503	90000								
18,5 25		4,4	314	0,95	37388	354000	MA	1004 / 180 M 4a	167 172	1244			
		4,8	292	1,01	34794	351000							
		5,4	258	1,13	30662	348000							
		5,7	245	1,19	29197	345000							
		6,5	216	1,37	25731	342000							
	7,8	179	1,66	21277	339000								
	8,8	159	1,87	18888	336000								
	9,6	145	1,99	17324	333000								
	11	129	2,20	15379	330000								
	13	108	2,70	12905	327000								
	18,5 25	12	115	2,80	13915	288000	MA	1003 / 180 M 4a	161 166	1244			
		14	101	3,20	12263	284000							
		15	94,62	3,40	11411	280000							
		17	83,39	3,90	10057	276000							
		5,8	239	0,97	28478	260000							
		6,6	211	1,10	25097	256000							
		18,5 25	7,0	198	1,19	23591	252000	MA	904 / 180 M 4a	149 154	1044		
			8,4	167	1,43	19840	248000						
			9,5	147	1,62	17501	244000						
			11	130	1,82	15537	240000						
			12	116	2,00	13803	236000						
			14	103	2,30	12253	232000						
			15	92,07	2,60	10938	228000						
			16	85,88	2,70	10203	224000						
			16	89,63	2,70	10810	188000						
			17	81,33	3,00	9809	184000						
			18,5 25	20	70,93	3,40	8555	180000	MA	903 / 180 M 4a	143 148	1044	
				22	62,51	3,90	7539	176000					
				24	59,06	3,90	7123	172000					
				7,6	183	1,10	21797	276000					
				8,8	158	1,22	18845	273000					
				9,7	144	1,36	17107	268000					
				18,5 25	11	125	1,55	14863	264000	MA	804 / 180 M 4a	131 136	857
					12	113	1,72	13492	263000				
13	104	1,95			12583	244000							
15	93,04	2,20			11222	240000							
18,5 25	17	83,56			2,40	10078	236000	MA	803 / 180 M 4a	125 130	857		
	19	75,48			2,70	9104	232000						



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
18,5 25	20	68,52	3,00	8264	228000	MA	803 / 180 M 4a	125 130	857
	22	63,45	3,20	7653	224000				
	25	55,72	3,60	6720	220000				
	12	113	1,45	13491	214000				
	14	102	1,60	12130	210000	MA	704 / 180 M 4a	113 118	771
	15	94,40	1,70	11215	206000				
	16	84,88	1,86	10083	202000				
	17	82,13	1,95	9905	224000				
	19	73,24	2,20	8833	220000	MA	703 / 180 M 4a	107 112	771
	21	65,78	2,30	7933	216000				
	24	59,42	2,60	7166	212000				
	26	52,86	3,20	6375	208000				
	29	47,75	3,60	5759	204000				
	33	42,97	3,80	5183	200000				
	36	38,82	4,00	4682	196000				
	18	78,14	1,21	9424	156000				
	21	67,89	1,41	8188	152000				
	23	59,59	1,62	7187	148000				
	25	56,88	2,00	6860	144000				
	32	44,14	2,60	5324	140000				
	36	38,40	2,80	4632	136000				
	42	33,71	3,20	4066	132000				
	46	30,49	3,50	3678	128000				
	52	26,76	4,10	3228	124000				
	55	25,38	4,40	3061	120000	MA	503 / 180 M 4a	83 88	581
	20	70,72	1,29	8529	124000				
	22	62,58	1,46	7548	120000				
	25	55,74	1,62	6723	116000				
26	53,35	1,62	6434	112000					
30	46,83	1,86	5648	108000					
34	41,44	2,10	4998	104000					
38	36,91	2,40	4452	100000					
43	32,46	2,70	3915	96000					
49	28,63	3,00	3454	92000					
55	25,59	3,40	3086	88000					
62	22,57	3,90	2723	84000	MA	1004 / 180 L 4b	167 172	1265	
5,4	258	0,95	36463	345000					
5,7	245	1,00	34721	341000					
6,5	216	1,15	30598	339000					
7,8	179	1,40	25302	336000					
8,8	159	1,58	22462	333000					
9,6	145	1,68	20602	330000					
11	129	1,88	18289	327000					
13	108	2,20	15347	324000					
12	115	2,30	16548	286000					MA
14	101	2,70	14583	282000					
15	94,62	2,90	13570	278000					
17	83,39	3,30	11960	274000					
18	79,4	3,40	11387	270000					
20	69,97	3,90	10035	266000	MA	904 / 180 L 4b	149 154	1065	
7,0	198	1,00	28055	250000					
8,4	167	1,20	23594	246000					
9,5	147	1,36	20812	242000					
11	130	1,53	18477	238000					
12	116	1,74	16414	234000					
14	103	1,94	14571	230000					
15	92,07	2,20	13007	226000					
16	85,88	2,30	12133	222000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			 kg
						MA	903 / 180 L 4b		
22 30	16	89,63	2,20	12855	186000	MA	903 / 180 L 4b	143 148	1065
	17	81,33	2,50	11665	182000				
	20	70,93	2,80	10173	178000				
	22	62,51	3,30	8965	174000				
	24	59,06	3,30	8471	170000				
	27	52,05	3,80	7465	166000	MA	804 / 180 L 4b	131 136	878
	9,7	144	1,15	20343	266000				
	11	125	1,30	17675	261000				
	12	113	1,45	16044	260000				
	13	104	1,64	14964	242000	MA	803 / 180 L 4b	125 130	878
	15	93,04	1,84	13345	238000				
	17	83,56	2,00	11985	234000				
	19	75,48	2,30	10826	230000				
	20	68,52	2,50	9828	226000				
	22	63,45	2,70	9100	222000				
	25	55,72	3,10	7992	218000				
	29	48,17	3,40	6909	214000				
	32	43,26	3,80	6205	210000	MA	703 / 180 L 4b	107 112	792
	17	82,13	1,64	11779	222000				
	19	73,24	1,88	10505	218000				
	21	65,78	1,95	9434	214000				
	24	59,42	2,20	8522	210000				
	26	52,86	2,70	7582	206000				
	29	47,75	3,00	6849	202000				
	33	42,97	3,20	6164	198000	MA	603 / 180 L 4b	95 100	610
	36	38,82	3,40	5568	194000				
	41	34,47	3,70	4944	190000				
	45	31,29	4,00	4488	186000				
	21	67,89	1,19	9737	150000				
	23	59,59	1,36	8546	146000				
	25	56,88	1,70	8158	142000				
	32	44,14	2,20	6331	138000				
	36	38,40	2,40	5508	134000				
42	33,71	2,70	4835	130000					
46	30,49	3,00	4374	126000	MA	503 / 180 L 4b	83 88	602	
52	26,76	3,40	3839	122000					
55	25,38	3,70	3640	118000					
62	22,61	3,90	3243	114000					
22	62,58	1,23	8976	118000					
25	55,74	1,36	7995	114000					
26	53,35	1,36	7652	110000					
30	46,83	1,56	6716	106000					
34	41,44	1,77	5944	102000					
38	36,91	2,00	5294	98000					
43	32,46	2,30	4656	94000	MA	502 / 180 L 4b	77 82	602	
49	28,63	2,50	4107	90000					
55	25,59	2,90	3670	86000					
62	22,57	3,30	3238	82000					
61	22,84	3,30	3327	108000					
70	19,92	3,80	2901	104000	MA	1004 / 200 L 4a	167 172	1323	
80	17,55	4,30	2557	100000					
7,8	179	1,03	34503	333000					
30 40	8,8	159	1,16	30629	330000	MA	1004 / 200 L 4a	167 172	1323
	9,6	145	1,23	28094	327000				
	11	129	1,37	24939	324000				
	13	108	1,65	20928	321000				





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg				
30 40	12	115	1,73	22565	284000	MA	1003 / 200 L 4a	161 166	1323				
	14	101	1,97	19886	280000								
	15	94,62	2,10	18505	276000								
	17	83,39	2,40	16309	272000								
	18	79,4	2,50	15528	268000								
	20	69,97	2,80	13684	264000								
	24	57,86	3,40	11316	260000								
	27	51,36	3,90	10045	256000								
	9,5	147	1,00	28380	240000	MA	904 / 200 L 4a	149 154	1123				
	11	130	1,12	25195	236000								
	12	116	1,28	22383	232000								
	14	103	1,42	19870	228000								
	15	92,07	1,60	17737	224000								
	16	85,88	1,67	16545	220000								
	16	89,63	1,66	17530	184000								
	17	81,33	1,83	15907	180000								
	20	70,93	2,10	13872	176000	MA	903 / 200 L 4a	143 148	1123				
	22	62,51	2,40	12225	172000								
	24	59,06	2,40	11551	168000								
	27	52,05	2,80	10180	164000								
	28	49,17	3,00	9617	160000								
	34	41,14	3,60	8047	156000								
	13	104	1,20	20405	240000					MA	803 / 200 L 4a	125 130	936
	15	93,04	1,35	18197	236000								
	17	83,56	1,50	16343	232000								
	19	75,48	1,65	14763	228000								
	20	68,52	1,85	13402	224000								
	22	63,45	2,00	12410	220000								
	25	55,72	2,30	10898	216000								
	29	48,17	2,50	9422	212000								
	32	43,26	2,80	8462	208000	MA	703 / 200 L 4a	107 112	850				
	36	39,08	3,10	7644	204000								
	41	34,12	3,50	6674	200000								
	17	82,13	1,20	16062	220000					MA	603 / 200 L 4a	95 100	668
	19	73,24	1,38	14324	216000								
	21	65,78	1,43	12865	212000								
	24	59,42	1,61	11621	208000								
	26	52,86	2,00	10338	204000								
	29	47,75	2,20	9339	200000								
	33	42,97	2,40	8405	196000								
36	38,82	2,50	7592	192000									
41	34,47	2,70	6742	188000	MA	603 / 200 L 4a	95 100	668					
45	31,29	3,00	6120	184000									
50	27,98	3,20	5472	180000									
56	25,15	3,40	4920	176000									
60	23,26	3,60	4549	172000									
67	20,91	3,70	4090	168000									
23	59,59	1,00	11654	144000					MA	603 / 200 L 4a	95 100	668	
25	56,88	1,25	11125	140000									
32	44,14	1,61	8634	136000									
36	38,40	1,76	7512	132000									
42	33,71	2,00	6593	128000									
46	30,49	2,20	5964	124000									
52	26,76	2,50	5235	120000									
55	25,38	2,70	4964	116000									
62	22,61	2,90	4422	112000	MA	603 / 200 L 4a	95 100	668					
70	20,01	3,30	3914	108000									
79	17,82	3,70	3486	104000									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			 kg
						MA	503 / 200 L 4a		
30 40	30	46,83	1,15	9159	104000	MA	503 / 200 L 4a	83 88	660
	34	41,44	1,30	8105	100000				
	38	36,91	1,50	7220	96000				
	43	32,46	1,70	6349	92000				
	49	28,63	1,90	5601	88000				
	55	25,59	2,10	5005	84000				
	62	22,57	2,40	4415	80000				
	61	22,84	2,40	4536	106000				
	70	19,92	2,80	3956	102000				
	80	17,55	3,20	3486	98000				
	93	15,12	3,60	3004	94000				
	105	13,33	4,00	2647	90000				
9,6	145	0,99	34649	324000					
11	129	1,11	30758	321000					
13	108	1,34	25811	318000					
12	115	1,40	27830	282000					
14	101	1,60	24526	278000					
15	94,62	1,70	22823	274000					
17	83,39	1,95	20114	270000					
18	79,4	2,10	19152	266000					
20	69,97	2,30	16877	262000					
24	57,86	2,80	13956	258000					
27	51,36	3,20	12388	254000					
30	47,11	3,30	11363	250000					
33	41,82	3,70	10087	246000					
12	116	1,03	27605	230000					
14	103	1,15	24506	226000					
15	92,07	1,29	21876	222000					
16	85,88	1,35	20406	218000					
16	89,63	1,35	21620	182000					
17	81,33	1,48	19619	178000					
20	70,93	1,70	17109	174000					
22	62,51	1,95	15078	170000					
24	59,06	1,95	14247	166000					
27	52,05	2,30	12555	162000					
28	49,17	2,40	11861	158000					
34	41,14	2,90	9925	154000					
39	36,29	3,30	8755	150000					
43	32,22	3,70	7772	146000					
15	93,04	1,09	22443	234000					
17	83,56	1,22	20156	230000					
19	75,48	1,35	18208	226000					
20	68,52	1,50	16529	222000					
22	63,45	1,62	15305	218000					
25	55,72	1,82	13441	214000					
29	48,17	2,00	11620	210000					
32	43,26	2,30	10436	206000					
36	39,08	2,50	9427	202000					
41	34,12	2,90	8231	198000					
45	30,82	3,20	7435	194000					
50	27,98	3,40	6749	190000					
55	25,47	3,80	6239	170000					
19	73,24	1,11	17667	214000					
21	65,78	1,16	15866	210000					
24	59,42	1,31	14333	206000					
26	52,86	1,62	12751	202000					
						MA	803 / 225 S 4a	125 130	1013
						MA	802 / 225 S 4a	119 124	1013
						MA	703 / 225 S 4a	107 112	927



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types								
										kg				
37 50	29	47,75	1,78	11518	198000	MA	703 / 225 S 4a	107 112	927					
	33	42,97	1,90	10366	194000									
	36	38,82	2,00	9364	190000									
	41	34,47	2,20	8316	186000									
	45	31,29	2,40	7549	182000									
	50	27,98	2,60	6749	178000									
	56	25,15	2,80	6068	174000									
	60	23,26	2,90	5610	170000									
	67	20,91	3,00	5044	166000									
	98	14,27	4,30	3444	162000									
		32	44,14	1,30	10648	134000	MA	603 / 225 S 4a	95 100	745				
		42	33,71	1,62	8132	126000								
		52	26,76	2,00	6456	118000								
		55	25,38	2,20	6122	114000								
		62	22,61	2,30	5454	110000								
			70	20,01	2,60	4827	106000	MA	602 / 225 S 4a	89 94	745			
			79	17,82	3,00	4300	102000							
				87	16,11	3,60	3946	132000	MA	503 / 225 S 4a	83 88	737		
				98	14,31	4,00	3505	127000						
				38	36,91	1,21	8904	94000						
43	32,46	1,37		7831	90000									
49	28,63	1,54		6907	86000									
45 60	55	25,59	1,74	6173	82000	MA	502 / 225 S 4a	77 82	737					
	62	22,57	1,98	5445	78000									
	61	22,84	2,00	5595	104000									
	70	19,92	2,30	4879	100000									
	80	17,55	2,60	4300	96000									
		93	15,12	2,90	3705	92000	MA	1003 / 225 M 4b	161 166	1430				
		105	13,33	3,20	3265	88000								
		115	12,18	3,70	2984	84000								
		133	10,48	4,10	2568	80000								
		12	115	1,15	33848	280000								
		14	101	1,32	29829	276000								
		15	94,62	1,40	27757	272000								
		17	83,39	1,60	24463	268000								
18		79,4	1,69	23293	264000									
20		69,97	1,89	20526	260000									
	24	57,86	2,30	16974	256000	MA	904 / 225 M 4b	149 154	1230					
	27	51,36	2,60	15067	252000									
	30	47,11	2,70	13820	248000									
	33	41,82	3,10	12268	244000									
	35	39,53	3,30	11596	240000									
	40	35,09	3,70	10294	236000									
		16	85,88	1,11	24818					216000	MA	903 / 225 M 4b	143 148	1230
		16	89,63	1,10	26295					180000				
		17	81,33	1,22	23861					176000				
		20	70,93	1,40	20809					172000				
22		62,51	1,60	18338	168000									
24		59,06	1,60	17327	164000									
27		52,05	1,87	15270	160000									
28		49,17	2,00	14426	156000									
34		41,14	2,40	12071	152000									
39		36,29	2,70	10648	148000									
	43	32,22	3,10	9452	144000	MA								
	49	28,62	3,40	8398	140000									
	55	25,41	3,80	7455	136000									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types				kg
45 60	19	75,48	1,10	22145	224000	MA	803 / 225 M 4b	125 130	1043	
	20	68,52	1,23	20102	220000					
	22	63,45	1,33	18614	216000					
	25	55,72	1,50	16347	212000					
	29	48,17	1,64	14133	208000					
	32	43,26	1,84	12692	204000					
	36	39,08	2,10	11466	200000					
	41	34,12	2,30	10011	196000					
	45	30,82	2,60	9043	192000					
	50	27,98	2,80	8209	188000					
		55	25,47	3,10	7588	168000	MA	802 / 225 M 4b	119 124	1043
		67	20,80	3,70	6195	165000				
		24	59,42	1,08	17432	204000	MA	703 / 225 M 4b	107 112	957
		26	52,86	1,33	15508	200000				
		29	47,75	1,47	14009	196000				
		33	42,97	1,56	12607	192000				
		36	38,82	1,67	11389	188000				
		41	34,47	1,80	10113	184000				
		45	31,29	1,96	9181	180000				
		50	27,98	2,20	8208	176000				
		56	25,15	2,30	7380	172000				
		60	23,26	2,40	6823	168000				
		67	20,91	2,50	6135	164000	MA	702 / 225 M 4b	101 106	957
		98	14,27	3,50	4189	160000				
		70	20,05	3,50	5973	146000				
		79	17,80	4,00	5304	142000	MA	603 / 225 M 4b	95 100	775
		32	44,14	1,07	12951	132000				
		42	33,71	1,33	9890	124000				
		52	26,76	1,70	7852	116000				
		55	25,38	1,83	7446	112000				
		62	22,61	1,93	6634	108000				
		70	20,01	2,20	5870	104000				
		79	17,82	2,50	5229	100000				
	87	16,11	2,90	4800	130000					
	98	14,31	3,30	4262	125000					
	109	12,79	3,70	3811	120000	MA	602 / 225 M 4b	89 94	775	
	120	11,63	3,90	3465	115000					
	129	10,89	4,10	3244	110000					
	49	28,63	1,26	8401	84000	MA	503 / 225 M 4b	83 88	767	
	55	25,59	1,43	7508	80000					
	62	22,57	1,63	6623	76000					
	61	22,84	1,65	6805	100002	MA	502 / 225 M 4b	77 82	767	
	70	19,92	1,88	5934	98000					
	80	17,55	2,10	5229	94000					
	93	15,12	2,40	4506	90000					
	105	13,33	2,60	3971	86000					
	115	12,18	3,00	3629	82000					
	133	10,48	3,40	3124	78000					
	151	9,252	3,90	2755	74000					
55 75	14	101	1,07	36457	274000	MA	1003 / 250 M 4a	161 166	1495	
	15	94,62	1,14	33926	270000					
	17	83,39	1,31	29899	266000					
	18	79,4	1,38	28469	262000					
	20	69,97	1,55	25088	258000					
	24	57,86	1,88	20746	254000					
	27	51,36	2,10	18415	250000					
	30	47,11	2,20	16891	246000					
33	41,82	2,50	14994	242000						



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
55 75	35	39,53	2,70	14173	238000	MA	1003 / 250 M 4a	161 166	1495
	40	35,09	3,00	12581	234000				
	48	29,22	3,50	10477	228000				
	54	26,07	3,90	9347	224000				
	20	70,93	1,15	25433	170000	MA	903 / 250 M 4a	143 148	1295
	22	62,51	1,31	22413	166000				
	24	59,06	1,31	21177	162000				
	27	52,05	1,53	18663	158000				
	28	49,17	1,64	17631	154000				
	34	41,14	1,96	14754	150000				
	39	36,29	2,20	13014	146000				
	43	32,22	2,50	11553	142000				
	49	28,62	2,80	10264	138000				
	55	25,41	3,20	9111	134000				
	62	22,68	3,50	8134	130000				
	66	21,16	3,70	7587	126000				
	22	63,45	1,09	22751	214000				
	25	55,72	1,23	19979	210000				
	29	48,17	1,35	17273	206000				
	32	43,26	1,51	15513	202000				
	36	39,08	1,68	14013	198000				
	41	34,12	1,92	12235	194000				
	45	30,82	2,10	11052	190000				
	50	27,98	2,30	10033	186000	MA	802 / 250 M 4a	119 124	1108
	55	25,47	2,50	9274	166000				
	67	20,80	3,00	7572	163000				
	72	19,34	3,30	7042	160000				
	81	17,37	3,50	6324	157000	MA	703 / 250 M 4a	107 112	1022
	89	15,79	4,00	5749	154000				
	36	38,82	1,36	13920	186000				
	41	34,47	1,47	12361	182000				
	45	31,29	1,61	11221	178000				
	50	27,98	1,77	10032	174000				
	56	25,15	1,85	9020	170000				
	60	23,26	1,96	8340	166000				
	67	20,91	2,00	7498	162000	MA	702 / 250 M 4a	101 106	1022
	98	14,27	2,90	5120	158000				
	70	20,05	2,90	7300	144000				
	79	17,80	3,30	6483	140000				
	87	16,11	3,80	5866	136000	MA	603 / 250 M 4a	95 100	840
79	17,82	2,00	6391	98000					
87	16,11	2,40	5866	128000	MA	602 / 250 M 4a	89 94	840	
98	14,31	2,70	5210	123000					
109	12,79	3,00	4657	118000					
120	11,63	3,20	4235	113000					
129	10,89	3,30	3965	108000					
135	10,40	3,60	3787	103000					
145	9,672	3,80	3521	98000					
152	9,201	3,90	3349	93000					
55	25,59	1,17	9176	78000					
62	22,57	1,33	8094	74000					MA
61	22,84	1,35	8317	100000					
70	19,92	1,54	7253	96000	MA	502 / 250 M 4a	77 82	832	
80	17,55	1,75	6392	92000					
93	15,12	1,97	5507	88000					
105	13,33	2,20	4853	84000					
115	12,18	2,50	4435	80000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
55 75	133	10,48	2,80	3818	76000	MA	502 / 250 M 4a	77 82	832
	151	9,252	3,20	3368	72000				
	169	8,272	3,50	3011	68000				
	192	7,297	3,90	2656	64000				
75 100	20	69,97	1,13	34210	256000	MA	1003 / 280 S 4a	161 166	1655
	24	57,86	1,38	28289	252000				
	27	51,36	1,56	25111	248000				
	30	47,11	1,64	23033	244000				
	33	41,82	1,84	20447	240000				
	35	39,53	1,96	19327	236000				
	40	35,09	2,20	17156	232000				
	48	29,22	2,60	14286	226000				
	54	26,07	2,90	12746	222000				
	27	52,05	1,12	25449	156000				
	28	49,17	1,20	24043	152000				
	34	41,14	1,44	20118	148000				
	39	36,29	1,64	17746	144000				
	43	32,22	1,84	15754	140000				
	49	28,62	2,10	13997	136000				
	55	25,41	2,30	12425	132000				
	62	22,68	2,60	11091	128000				
	66	21,16	2,70	10346	124000				
	73	19,28	3,00	9574	132000	MA	902 / 280 S 4a	137 142	1455
	80	17,50	3,40	8688	128000				
	87	16,06	3,60	7972	124000				
	32	43,26	1,11	21154	200000				
	36	39,08	1,23	19109	196000				
	41	34,12	1,41	16684	192000				
	45	30,82	1,55	15071	188000				
	50	27,98	1,70	13681	184000				
	55	25,47	1,88	12646	164000	MA	802 / 280 S 4a	119 124	1268
	67	20,80	2,20	10325	161000				
	72	19,34	2,40	9602	158000				
	81	17,37	2,60	8623	155000				
	89	15,79	2,90	7840	152000				
	106	13,19	3,40	6548	149000				
	112	12,45	3,70	6183	146000				
	56	25,15	1,36	12300	168000				
	60	23,26	1,44	11372	164000				
	67	20,91	1,48	10224	160000				
	98	14,27	2,10	6981	156000				
	70	20,05	2,10	9954	142000				
	79	17,80	2,40	8840	138000	MA	702 / 280 S 4a	101 106	1182
	87	16,11	2,80	8000	134000				
98	14,31	3,10	7104	130000					
107	13,10	3,30	6503	126000					
120	11,63	3,70	5775	122000					
135	10,40	4,20	5164	118000					
87	16,11	1,78	8000	126000					
98	14,31	2,00	7104	121000	MA				
109	12,79	2,20	6351	116000					
120	11,63	2,30	5775	111000					
129	10,89	2,40	5407	106000					
135	10,40	2,70	5164	101000					
145	9,672	2,80	4801	96000					
152	9,201	2,90	4567	91000					
162	8,648	3,10	4293	86000					
171	8,171	3,20	4056	81000					
192	7,305	3,60	3626	76000					
260	5,388	4,80	2674	71000					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg	
75 100	80	17,55	1,28	8716	90000	MA	502 / 280 S 4a	77 82	992	
	93	15,12	1,44	7510	86000					
	105	13,33	1,61	6618	82000					
	115	12,18	1,83	6048	78000					
	133	10,48	2,00	5206	74000					
	151	9,252	2,30	4592	70000					
	169	8,272	2,60	4106	66000					
	192	7,297	2,90	3622	62000					
	216	6,477	3,20	3215	58000					
90 120	24	57,86	1,15	33947	250000	MA	1003 / 280 M 4b	161 166	1715	
	27	51,36	1,30	30134	246000					
	30	47,11	1,36	27640	242000					
	33	41,82	1,53	24536	238000					
	35	39,53	1,63	23193	234000					
	40	35,09	1,83	20588	230000					
	48	29,22	2,20	17144	224000					
	54	26,07	2,40	15296	220000					
	49	28,47	2,30	16958	188000					
		60	23,34	2,80	13902	185000	MA	1002 / 280 M 4b	155 160	1715
	71	19,59	3,40	11669	182000					
	84	16,72	3,90	9959	179000					
		34	41,14	1,20	24142	146000	MA	903 / 280 M 4b	143 148	1515
	39	36,29	1,37	21295	142000					
	43	32,22	1,53	18905	138000					
	49	28,62	1,73	16796	134000					
	55	25,41	1,93	14910	130000					
	62	22,68	2,20	13310	126000					
	66	21,16	2,20	12415	122000					
	73	19,28	2,50	11489	130000					
	80	17,50	2,80	10425	126000					
		87	16,06	3,00	9567	122000	MA	902 / 280 M 4b	137 142	1515
	96	14,64	3,30	8724	118000					
	115	12,19	3,90	7264	114000					
	41	34,12	1,17	20021	190000					
	45	30,82	1,30	18085	186000					
		50	27,98	1,42	16417	182000	MA	803 / 280 M 4b	125 130	1328
	55	25,47	1,56	15175	162000					
	67	20,80	1,86	12390	159000					
	72	19,34	2,00	11523	156000					
	81	17,37	2,20	10348	153000					
	89	15,79	2,50	9408	150000					
	106	13,19	2,90	7857	147000					
	112	12,45	3,10	7420	144000					
	135	10,40	3,60	6197	141000					
		139	10,07	3,90	6000	138000	MA	703 / 280 M 4b	107 112	1242
98	14,27	1,77	8378	154000						
70	20,05	1,78	11945	140000						
	79	17,80	2,00	10608	136000	MA	702 / 280 M 4b	101 106	1242	
87	16,11	2,30	9599	132000						
98	14,31	2,60	8525	128000						
107	13,10	2,70	7804	124000						
120	11,63	3,10	6930	120000						
135	10,40	3,50	6197	116000						
150	9,353	3,80	5571	112000						
162	8,648	4,00	5151	108000						





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg
90 120	87	16,11	1,48	9599	124000	MA 602 / 280 M 4b	89 94	1060
	98	14,31	1,66	8525	119000			
	109	12,79	1,86	7621	114000			
	120	11,63	1,97	6930	109000			
	129	10,89	2,00	6488	104000			
	135	10,40	2,20	6197	99000			
	145	9,672	2,30	5761	94000			
	152	9,201	2,40	5481	89000			
	162	8,648	2,60	5151	84000			
	171	8,171	2,70	4867	79000			
	192	7,305	3,00	4351	74000			
	260	5,388	4,00	3209	69000			
	105	13,33	1,34	7942	80000			
	115	12,18	1,52	7257	76000			
	133	10,48	1,71	6247	72000			
	151	9,252	1,95	5511	68000			
	169	8,272	2,10	4927	64000			
	192	7,297	2,40	4346	60000			
216	6,477	2,70	3858	56000				
370	3,786	4,40	2255	52000				
110 150	27	51,36	1,06	36830	244000	MA 1003 / 315 S 4a	161 166	1911
	30	47,11	1,12	33782	240000			
	33	41,82	1,25	29989	236000			
	35	39,53	1,34	28347	232000			
	40	35,09	1,50	25163	228000			
	48	29,22	1,77	20954	222000			
	54	26,07	1,99	18695	218000			
	49	28,47	1,88	20727	186000			
	MA 1002 / 315 S 4a	60	23,34	2,30	16992	183000	155 160	1911
		71	19,59	2,80	14262	180000		
		84	16,72	3,20	12172	177000		
		88	15,95	3,40	11612	174000		
		103	13,61	3,90	9908	171000		
		39	36,29	1,12	26028	140000		
		43	32,22	1,25	23106	136000		
		49	28,62	1,42	20528	132000		
		55	25,41	1,58	18223	128000		
		62	22,68	1,78	16267	124000		
	MA 903 / 315 S 4a	66	21,16	1,84	15174	120000	143 148	1711
		73	19,28	2,00	14042	128000		
		80	17,50	2,30	12742	124000		
		87	16,06	2,40	11693	120000		
		96	14,64	2,70	10663	116000		
		115	12,19	3,20	8878	112000		
		121	11,55	3,50	8409	108000		
		50	27,98	1,16	20066	180000		
	MA 803 / 315 S 4a	55	25,47	1,28	18548	160000	119 124	1524
		67	20,80	1,53	15143	157000		
72		19,34	1,66	14083	154000			
81		17,37	1,77	12647	151000			
89		15,79	2,00	11498	148000			
106		13,19	2,30	9603	145000			
112		12,45	2,50	9069	142000			
135		10,40	3,00	7574	139000			
139		10,07	3,20	7333	136000			
159		8,829	3,60	6428	133000			
180		7,784	4,10	5667	130000			



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg	
110 150	79	17,80	1,65	12965	134000	MA	702 / 315 S 4a	101 106	1438
	87	16,11	1,90	11733	130000				
	98	14,31	2,10	10419	126000				
	107	13,10	2,20	9538	122000				
	120	11,63	2,50	8470	118000				
	135	10,40	2,80	7574	114000				
	150	9,353	3,10	6809	110000				
	162	8,648	3,30	6296	106000				
	180	7,775	3,60	5660	102000				
	199	7,022	4,00	5112	100000				
	220	6,367	4,20	4635	96000				
	87	16,11	1,21	11733	122000				
	98	14,31	1,36	10419	117000				
	109	12,79	1,52	9315	112000				
	120	11,63	1,61	8470	107000				
	129	10,89	1,69	7930	102000				
	135	10,40	1,81	7574	97000				
	145	9,672	1,91	7041	92000				
	152	9,201	1,95	6698	87000				
	162	8,648	2,10	6296	82000				
	171	8,171	2,20	5949	77000				
	192	7,305	2,50	5318	72000				
	260	5,388	3,30	3923	67000				
	115	12,18	1,25	8870	74000				
	133	10,48	1,40	7635	70000				
	151	9,252	1,60	6736	66000				
	169	8,272	1,75	6022	62000				
	192	7,297	1,95	5312	58000				
216	6,477	2,20	4715	54000					
370	3,786	3,60	2756	50000					
132 175	33	41,82	1,05	35987	234000	MA	1003 / 315 M 4b	161 166	1932
	35	39,53	1,11	34016	230000				
	40	35,09	1,25	30195	226000				
	48	29,22	1,48	25144	220000				
	54	26,07	1,66	22434	216000				
	49	28,47	1,56	24872	184000				
	60	23,34	1,91	20390	181000				
	71	19,59	2,30	17114	178000				
	84	16,72	2,70	14607	175000				
	88	15,95	2,80	13934	172000				
	103	13,61	3,20	11890	169000				
	124	11,33	3,70	9898	166000				
	43	32,22	1,05	27727	134000				
	49	28,62	1,18	24634	130000				
	55	25,41	1,32	21867	126000				
	62	22,68	1,48	19521	122000				
	66	21,16	1,50	18208	118000				
	73	19,28	1,70	16850	126000				
	80	17,50	1,93	15290	122000				
	87	16,06	2,00	14031	118000				
	96	14,64	2,30	12795	114000				
	115	12,19	2,70	10654	110000				
	121	11,55	2,90	10091	106000				
	146	9,618	3,30	8402	102000				
	153	9,153	3,60	7996	102000				
	MA						902 / 315 M 4b	137 142	1732





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types							
						MA	802 / 315 M 4b						
132 175	67	20,80	1,27	18172	155000	MA	802 / 315 M 4b	119 124	1545				
	72	19,34	1,38	16900	152000								
	81	17,37	1,48	15176	149000								
	89	15,79	1,68	13798	146000								
	106	13,19	1,95	11524	143000								
	112	12,45	2,10	10883	140000								
	135	10,40	2,50	9088	137000								
	139	10,07	2,60	8800	134000								
	159	8,829	3,00	7713	131000								
	180	7,784	3,40	6800	128000								
	MA	702 / 315 M 4b	101 106	1459	87	16,11	1,58	14079	128000				
					98	14,31	1,78	12503	124000				
					107	13,10	1,89	11446	120000				
					120	11,63	2,10	10165	116000				
					135	10,40	2,30	9088	112000				
					150	9,353	2,60	8171	108000				
					162	8,648	2,80	7555	104000				
					180	7,775	3,00	6792	100000				
					199	7,022	3,33	6135	98000				
					220	6,367	3,50	5562	94000				
					242	5,791	3,80	5059	90000				
					MA	602 / 315 M 4b	89 94	1277	87	16,11	1,01	14079	120000
									98	14,31	1,13	12503	115000
									109	12,79	1,27	11178	110000
120	11,63	1,34	10165	105000									
129	10,89	1,41	9515	100000									
135	10,40	1,51	9088	95000									
145	9,672	1,59	8450	90000									
152	9,201	1,62	8038	85000									
162	8,648	1,78	7555	80000									
171	8,171	1,80	7138	75000									
192	7,305	2,00	6382	70000									
260	5,388	2,72	4707	65000									
MA	502 / 315 M 4b	77 82	1269	133					10,48	1,16	9163	68000	
				151					9,252	1,33	8083	64000	
				169	8,272	1,46	7227	60000					
				192	7,297	1,63	6375	56000					
				216	6,477	1,83	5658	52000					
				370	3,786	3,00	3308	48000					
				MA	1003 / 315 L 4c	161 166	1980	48	29,22	1,22	30478	218000	
								54	26,07	1,37	27192	214000	
								49	28,47	1,29	30148	182000	
								60	23,34	1,58	24715	179000	
71	19,59	1,91	20744					177000					
MA	1002 / 315 L 4c	155 160	1980					84	16,72	2,20	17705	173000	
								88	15,95	2,30	16890	170000	
								103	13,61	2,70	14412	167000	
								124	11,33	3,10	11998	164000	
								55	25,41	1,08	26506	124000	
MA	903 / 315 L 4c	143 148	1780					62	22,68	1,22	23662	120000	
								66	21,16	1,26	22071	116000	
								73	19,28	1,40	20425	124000	
								80	17,50	1,59	18533	120000	
MA	902 / 315 L 4c	137 142	1780					87	16,06	1,68	17007	116000	
				96	14,64	1,87	15509	112000					
				115	12,19	2,20	12914	108000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			 kg						
						MA	902 / 315 L 4c								
160 210	121	11,55	2,40	12232	104000	MA	902 / 315 L 4c	137 142	1780						
	146	9,618	2,70	10185	100000										
	153	9,153	3,00	9692	100000										
	175	8,016	3,40	8488	96000										
	184	7,622	3,50	8071	92000										
	185 250	198	7,061	3,90	7477	92000	MA	802 / 315 L 4c	119 124	1593					
		81	17,37	1,22	18396	147000									
		89	15,79	1,38	16725	144000									
		106	13,19	1,61	13968	141000									
		112	12,45	1,74	13191	138000									
		135	10,40	2,00	11016	135000									
		139	10,07	2,20	10667	132000									
		159	8,829	2,50	9349	129000									
		180	7,784	2,80	8243	126000									
		98	14,31	1,46	15155	122000									
		185 250	120	11,63	1,75	12321	114000	MA	702 / 315 L 4c	101 106	1507				
			135	10,40	1,96	11016	110000								
			150	9,353	2,10	9904	106000								
			162	8,648	2,20	9158	102000								
			180	7,775	2,50	8233	98000								
199			7,022	2,70	7436	96000									
220			6,367	2,80	6742	92000									
242			5,791	3,13	6132	88000									
135			10,40	1,25	11016	93000									
162			8,648	1,45	9158	78000									
185 250	192		7,305	1,67	7735	68000	MA	602 / 315 L 4c	89 94	1325					
	260		5,388	2,25	5706	63000									
	216		6,477	1,51	6859	50000									
	370		3,786	2,40	4009	46000									
	48		29,22	1,05	35240	216000									
	185 250		54	26,07	1,18	31441	212000	MA	1003 / 315 L 4d	161 166	2065				
			49	28,47	1,12	34858	180000								
			60	23,34	1,36	28577	177000								
			71	19,59	1,65	23986	175000								
			84	16,72	1,90	20472	171000								
		88	15,95	2,00	19529	168000									
		103	13,61	2,30	16664	165000									
		124	11,33	2,70	13872	162000									
		143	9,8	3,00	11999	159000									
		164	8,555	3,30	10475	156000									
		185 250	73	19,28	1,21	23616	122000	MA	1002 / 315 L 4d	155 160	2065				
			80	17,50	1,38	21429	118000								
			87	16,06	1,46	19665	114000								
			96	14,64	1,62	17932	110000								
			115	12,19	1,90	14931	106000								
121			11,55	2,10	14143	102000									
146			9,618	2,40	11776	98000									
153			9,153	2,60	11207	98000									
175			8,016	2,90	9815	94000									
184			7,622	3,00	9332	90000									
185 250	198		7,061	3,30	8645	90000	MA	902 / 315 L 4d	137 142	1865					
	210		6,675	3,50	8173	86000									
	238		5,88	3,90	7199	82000									
	89		15,79	1,20	19338	142000									
	106		13,19	1,39	16151	139000									
	112		12,45	1,51	15252	136000									
	135		10,40	1,77	12737	133000									
	185 250											MA	802 / 315 L 4d	119 124	1678



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types							
									kg				
185 250	139	10,07	1,87	12333	130000	MA	802 / 315 L 4d	119 124	1678				
	159	8,829	2,10	10810	127000								
	180	7,784	2,40	9531	124000	MA	702 / 315 L 4d	101 106	1592				
	135	10,40	1,71	12737	108000								
	150	9,353	1,88	11452	104000								
	162	8,648	1,97	10589	100000								
	180	7,775	2,10	9520	96000								
	199	7,022	2,30	8598	94000								
	220	6,367	2,50	7796	90000								
	242	5,791	2,71	7090	86000								
200 270	60	23,34	1,26	30894	175000	MA	1002 / 315 H 4e	155 160	2150				
	71	19,59	1,53	25931	173000								
	84	16,72	1,75	22132	169000								
	88	15,95	1,85	21112	166000								
	103	13,61	2,10	18015	163000								
	124	11,33	2,50	14997	160000								
	143	9,8	2,80	12972	157000								
	164	8,555	3,10	11324	154000								
	73	19,28	1,12	25531	120000	MA	902 / 315 H 4e	137 142	1950				
	80	17,50	1,27	23167	116000								
	87	16,06	1,35	21259	112000								
	96	14,64	1,50	19386	108000								
	115	12,19	1,76	16142	104000								
	121	11,55	1,93	15290	100000								
	146	9,618	2,20	12731	96000								
	153	9,153	2,40	12115	96000								
	175	8,016	2,70	10610	92000	MA	802 / 315 H 4e	119 124	1763				
	184	7,622	2,80	10089	88000								
	198	7,061	3,10	9346	88000								
	210	6,675	3,20	8835	84000								
	238	5,88	3,60	7783	80000								
	106	13,19	1,29	17460	137000					MA	702 / 315 H 4e	101 106	1677
	112	12,45	1,39	16489	134000								
	135	10,40	1,64	13770	131000								
	139	10,07	1,73	13333	128000								
	159	8,829	1,98	11687	125000								
	180	7,784	2,20	10303	122000								
	150	9,353	1,74	12380	102000								
180	7,775	2,00	10291	94000									
199	7,022	2,20	9295	92000	MA	1002 / 355 M 4a	155 160	2450					
220	6,367	2,30	8428	88000									
242	5,791	2,50	7665	84000									
71	19,59	1,22	32413	171000					MA	902 / 355 M 4a	137 142	2250	
84	16,72	1,40	27665	167000									
88	15,95	1,48	26391	164000									
103	13,61	1,72	22519	161000									
124	11,33	1,98	18746	158000									
143	9,8	2,20	16215	155000									
164	8,555	2,50	14155	152000									
96	14,64	1,20	24233	106000	MA	702 / 315 H 4e	101 106	1677					
115	12,19	1,40	20178	102000									
121	11,55	1,54	19112	98000									
146	9,618	1,76	15914	94000									
153	9,153	1,90	15144	94000									
175	8,016	2,20	13263	90000									
184	7,622	2,20	12611	86000									
198	7,061	2,50	11683	86000									
210	6,675	2,60	11044	82000	MA	802 / 315 H 4e	119 124	1763					
238	5,88	2,90	9729	78000									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types				kg					
						MA	802 / 355 M 4a								
250 340	135	10,40	1,31	17213	129000	MA	802 / 355 M 4a			2063					
	139	10,07	1,39	16667	126000										
	159	8,829	1,58	14608	123000										
	180	7,784	1,78	12879	120000										
	242	5,791	2,00	9582	82000										
315 430	84	16,72	1,11	34857	165000	MA	1002 / 355 M 4b			2488					
	88	15,95	1,17	33252	162000										
	103	13,61	1,36	28374	159000										
	124	11,33	1,57	23620	156000										
	143	9,8	1,73	20431	153000										
	164	8,555	1,93	17835	150000										
	329	4,256	4,10	8873	147000										
	121	11,55	1,22	24081	96000	MA	902 / 355 M 4b			2288					
	146	9,618	1,40	20051	92000										
	153	9,153	1,50	19082	92000										
	175	8,016	1,72	16712	88000										
	184	7,622	1,76	15890	84000										
	198	7,061	1,98	14721	84000										
	210	6,675	2,00	13916	80000										
	238	5,88	2,30	12258	76000										
	159	8,829	1,26	18406	121000						MA	802 / 355 M 4b			2101
	180	7,784	1,41	16228	118000						MA	702 / 355 M 4b			2015
355 485	103	13,61	1,21	31977	157000	MA	1002 / 355 L 4c			2540					
	124	11,33	1,39	26620	154000										
	143	9,8	1,53	23025	151000										
	164	8,555	1,74	20100	148000										
	329	4,256	3,60	9999	145000										
	153	9,153	1,33	21505	90000	MA	902 / 355 L 4c			2340					
	175	8,016	1,52	18834	78000										
	184	7,622	1,56	17908	82000										
	198	7,061	1,76	16590	82000										
	210	6,675	1,80	15683	78000										
238	5,88	2,00	13815	74000	MA	1002 / 355 L 4d			2770						
124	11,33	1,24	29994	152000											
143	9,8	1,36	25944	149000											
164	8,555	1,53	22648	146000											
329	4,256	3,20	11267	143000											
175	8,016	1,35	21221	76000											
184	7,622	1,38	20178	80000											
198	7,061	1,56	18693	80000											
210	6,675	1,60	17671	76000	MA	902 / 355 L 4d			2570						
238	5,88	1,80	15566	72000											
124	11,33	1,10	33744	150000											
143	9,8	1,20	29187	147000											
164	8,555	1,37	25479	144000											
329	4,256	2,90	12675	141000											
184	7,622	1,23	22700	78000											
198	7,061	1,38	21029	78000											
210	6,675	1,42	19880	74000	MA	1002 / 400 L 4a			3475						
238	5,88	1,60	17512	70000											
143	9,8	1,08	32430	145000											
164	8,555	1,23	28310	142000											
500 680	329	4,256	2,60	14084	139000	MA	1002 / 400 L 4b			3580					
	164	8,555	1,10	31707	140000										
560 750	329	4,256	2,30	15774	137000	MA	1002 / 400 L 4c			3850					
	164	8,555	1,10	31707	140000										



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types						
	GÜÇ Power Puissance [kW]	Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] ($n_1=1400$ rpm)	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie [Nm]	Rad. Yük Over Loads Charges radiales [N]	Rad. Yük Over Loads Charges radiales [N]				kg			
10300 Nm	15,3	14	103	10300	9400	140000	MA 503	83 88	387				
	17,0	15	92,74	10300	8900	135000							
	19,6	17	80,57	10300	9200	130000							
	22,3	20	70,72	10300	8900	125000							
	25,2	22	62,58	10300	8700	120000							
	28,3	25	55,75	10300	8900	115000							
	29,6	26	53,35	10300	8200	110000							
	33,7	30	46,83	10300	7400	105000							
	38,1	34	41,44	10300	7700	100000							
	42,8	38	36,92	10300	7300	95000							
	48,7	43	32,47	10300	6500	90000							
	55,2	49	28,64	10300	5500	85000							
	61,7	55	25,59	10300	5200	80000							
	70,0	62	22,58	10300	5300	75000							
10200 Nm	67,5	61	22,85	10200	12000	100000	MA 502	77 82	387				
	77,3	70	19,93	10200	12500	95000							
	87,8	80	17,56	10200	13000	90000							
	102	93	15,13	10200	14000	85000							
	116	105	13,33	10200	15000	80000							
	126	115	12,18	10200	14500	75000							
	147	133	10,49	10200	14000	70000							
	167	151	9,252	10200	12000	65000							
	186	169	8,272	10200	11000	60000							
	211	192	7,297	10200	10000	55000							
	238	216	6,477	10200	10000	50000							
	407	370	3,786	10200	9500	45000							
	11900 Nm	20,5	16	89,20	11900	9200				160000	MA 603	95 100	395
		23,4	18	78,14	11900	9400				155000			
26,9		21	67,89	11900	9500	150000							
30,6		23	59,59	11900	9800	145000							
32,1		25	56,88	11900	9000	140000							
41,3		32	44,15	11900	8800	135000							
47,5		36	38,41	11900	8700	130000							
54,1		42	33,71	11900	8400	125000							
59,9		46	30,50	11900	8800	120000							
68,2		52	26,77	11900	8400	115000							
71,9		55	25,38	11900	9200	110000							
80,7		62	22,61	11900	8400	105000							
91,2		70	20,01	11900	8800	100000							
102		79	17,83	11900	8100	95000							
12900 Nm	121	87	16,12	12900	12000	120000	MA 602	89 94	395				
	136	98	14,31	12900	12500	115000							
	152	109	12,80	12900	13500	110000							
	168	120	11,64	12900	14500	105000							
	179	129	10,89	12900	16000	100000							
	187	135	10,40	12900	15000	95000							
	202	145	9,672	12900	14500	90000							
	212	152	9,201	12900	12500	85000							
	225	162	8,648	12900	11000	80000							
	239	171	8,171	12900	10000	75000							
	267	192	7,305	12900	10000	70000							
	362	260	5,388	12900	9500	65000							
	19300 Nm	9,0	4,20	333	19300	6800				260000	MA 704	113 118	577
		10,1	4,71	297	19300	6800				255000			
11,3		5,24	267	19300	6800	250000							
12,5		5,80	241	19300	5900	245000							



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types			
	GÜÇ Power Puissance	Çıkış Devri Output Speeds Vitesse de sortie	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie	Rad. Yük Over Loads Charges radiales	Rad. Yük Over Loads Charges radiales				
	[kW]	[r.p.m] ($n_1=1400$ rpm)	[Nm]	[N]	[N]					
19300 Nm	14,0	6,52	215	19300	5900	240000	MA	704	113 118	577
	15,5	7,22	194	19300	5900	235000				
	17,2	8,03	174	19300	5900	230000				
	19,1	8,88	158	19300	5900	225000				
	21,5	10	140	19300	5100	220000				
	23,7	11	127	19300	5100	215000				
	26,5	12	114	19300	4600	210000				
	29,4	14	102	19300	4600	205000				
	31,8	15	94,41	19300	4600	200000				
	31,8	15	94,41	19300	4600	195000				
19000 Nm	35,5	17	82,13	19000	11000	220000	MA	703	107 112	577
	39,8	19	73,24	19000	10000	215000				
	44,3	21	65,78	19000	11000	210000				
	49,0	24	59,42	19000	10000	205000				
	55,1	26	52,86	19000	10500	200000				
	61,0	29	47,75	19000	10500	195000				
	67,8	33	42,98	19000	11000	190000				
	75,1	36	38,82	19000	10200	185000				
	84,5	41	34,48	19000	10200	180000				
	93,1	45	31,30	19000	9800	175000				
	104	50	27,98	19000	9800	170000				
	116	56	25,16	19000	8600	165000				
	125	60	23,26	19000	8600	160000				
	139	67	20,91	19000	8600	155000				
204	98	14,28	19000	7500	150000					
19400 Nm	146	70	20,05	19400	17000	140000	MA	702	101 106	577
	165	79	17,81	19400	17000	135000				
	182	87	16,12	19400	16500	130000				
	205	98	14,31	19400	16000	125000				
	224	107	13,10	19400	16000	120000				
	252	120	11,64	19400	15500	115000				
	282	135	10,40	19400	15500	110000				
	313	150	9,353	19400	15500	105000				
	339	162	8,648	19400	15500	100000				
	377	180	7,775	19400	15500	95000				
	417	199	7,022	19400	15500	90000				
	460	220	6,367	19400	16500	85000				
	506	242	5,791	19400	15500	80000				
	24100 Nm	8,9	3,31	423	24100	7000				
9,9		3,71	378	24100	7000	315000				
11,1		4,13	339	24100	7000	310000				
12,2		4,57	306	24100	6200	305000				
13,5		5,03	278	24100	6200	300000				
14,6		5,44	258	24100	6200	295000				
16,6		6,19	226	24100	5500	290000				
18,5		6,89	203	24100	5500	285000				
20,5		7,63	183	24100	4800	280000				
23,7		8,83	159	24100	4800	275000				
26,1		9,72	144	24100	4200	270000				
30,0		11	125	24100	4200	265000				
33,0		12	114	24100	4200	260000				
23500 Nm	34,6	13	104	23500	12000	240000	MA	803	125 130	663
	38,7	15	93,05	23500	11500	235000				
	43,1	17	83,57	23500	12000	230000				
	47,8	19	75,49	23500	11500	225000				
	52,6	20	68,53	23500	11500	220000				
	56,8	22	63,45	23500	10500	215000				
	64,7	25	55,72	23500	10000	210000				



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types			
	GÜÇ Power Puissance [kW]	Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] ($n_1=1400$ rpm)	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie [Nm]	Rad. Yük Over Loads Charges radiales [N]	Rad. Yük Over Loads Charges radiales [N]				
23500 Nm	74,8	29	48,18	23500	10000	205000	MA	803	125	663
	83,3	32	43,27	23500	9500	200000				
	92,2	36	39,08	23500	9500	195000				
	106	41	34,12	23500	8000	190000				
	117	45	30,83	23500	7500	185000				
	129	50	27,98	23500	6000	180000				
22300 Nm	132	55	25,48	22300	18000	160000	MA	802	119	663
	162	67	20,80	22300	17500	155000				
	174	72	19,35	22300	18000	150000				
	194	81	17,37	22300	17000	145000				
	213	89	15,79	22300	17000	140000				
	255	106	13,19	22300	17000	135000				
	270	112	12,46	22300	17500	130000				
	324	135	10,40	22300	16500	125000				
	335	139	10,07	22300	17000	120000				
	382	159	8,829	22300	16000	115000				
	433	180	7,784	22300	17000	110000				
	28750 Nm	12,3	3,85	364	28750	8000				
13,6		4,24	330	28750	8400	275000				
15,6		4,86	288	28750	8800	270000				
17,6		5,52	254	28750	9000	265000				
18,7		5,84	240	28750	9200	260000				
21,2		6,63	211	28750	9500	255000				
22,5		7,05	199	28750	8200	250000				
26,8		8,38	167	28750	8000	245000				
30,4		9,50	147	28750	8000	240000				
34,2		11	131	28750	7000	235000				
38,5		12	116	28750	6500	230000				
43,4		14	103	28750	6000	225000				
48,6		15	92,08	28750	6000	220000				
52,1		16	85,89	28750	6000	215000				
29930 Nm	51,2	16	89,63	29930	14000	180000	MA	903	143	850
	56,4	17	81,34	29930	14000	175000				
	64,7	20	70,93	29930	13000	170000				
	73,4	22	62,51	29930	13000	165000				
	77,7	24	59,06	29930	14000	160000				
	88,2	27	52,05	29930	14000	155000				
	93,4	28	49,17	29930	12000	150000				
	112	34	41,15	29930	12000	145000				
	126	39	36,30	29930	12000	140000				
	142	43	32,22	29930	11500	135000				
	160	49	28,63	29930	11000	130000				
	181	55	25,41	29930	11000	125000				
	202	62	22,69	29930	11000	120000				
	217	66	21,16	29930	11000	115000				
29850 Nm	234	73	19,29	29850	25000	120000	MA	902	137	850
	258	80	17,50	29850	24000	115000				
	281	87	16,06	29850	23000	110000				
	308	96	14,65	29850	22000	105000				
	370	115	12,20	29850	21000	105000				
	390	121	11,55	29850	20000	100000				
	469	146	9,618	29850	19000	95000				
	493	153	9,153	29850	18000	90000				
	563	175	8,016	29850	17000	85000				
	592	184	7,622	29850	16000	80000				
	639	198	7,061	29850	15000	75000				
	676	210	6,675	29850	14000	70000				
	767	238	5,880	29850	13000	65000				
	1098	341	4,109	29850	12000	60000				



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types		
	GÜÇ Power Puissance [kW]	Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] ($n_1=1400$ rpm)	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie [Nm]	Rad. Yük Over Loads Charges radiales [N]	Rad. Yük Over Loads Charges radiales [N]			
36000 Nm	15,7	3,92	357	36000	9300	360000	MA	167 172	1050
	17,8	4,45	315	36000	9300	355000			
	19,1	4,78	293	36000	9300	350000			
	21,7	5,42	258	36000	8500	345000			
	22,8	5,70	246	36000	8500	340000			
	25,9	6,46	217	36000	8500	335000			
	31,3	7,82	179	36000	7000	330000			
	35,3	8,81	159	36000	7000	325000			
	38,4	9,60	146	36000	5000	320000			
	43,3	11	129	36000	5000	315000			
	51,6	13	109	36000	5000	310000			
35500 Nm	47,2	12	115	35500	18500	280000	MA	161 166	1050
	53,6	14	102	35500	18000	275000			
	57,6	15	94,62	35500	17000	270000			
	65,3	17	83,39	35500	17500	265000			
	68,6	18	79,40	35500	17000	260000			
	77,8	20	69,97	35500	14500	255000			
	94,1	24	57,86	35500	16000	250000			
	106	27	51,36	35500	14500	245000			
	116	30	47,11	35500	14000	240000			
	130	33	41,82	35500	13500	235000			
	138	35	39,53	35500	13000	230000			
	155	40	35,09	35500	12000	225000			
	186	48	29,22	35500	11000	220000			
	209	54	26,07	35500	10000	215000			
34500 Nm	183	49	28,47	34500	26000	180000	MA	155 160	1050
	223	60	23,34	34500	24500	175000			
	266	71	19,59	34500	23000	170000			
	312	84	16,72	34500	21500	165000			
	327	88	15,95	34500	20000	160000			
	383	103	13,61	34500	18500	155000			
	460	124	11,33	34500	17000	150000			
	532	143	9,800	34500	15500	145000			
	609	164	8,555	34500	14000	140000			
	1225	329	4,256	34500	12500	135000			

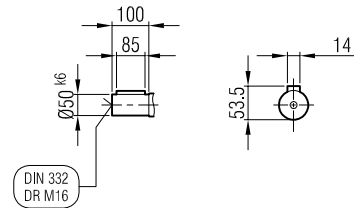
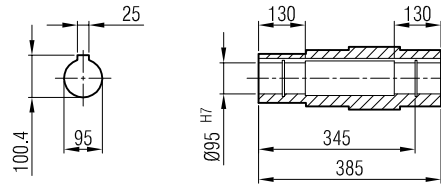
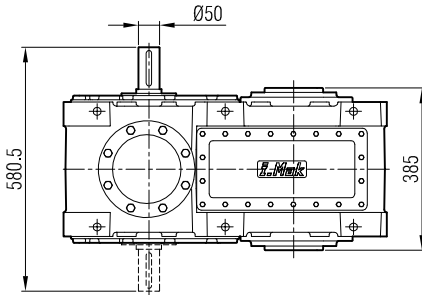
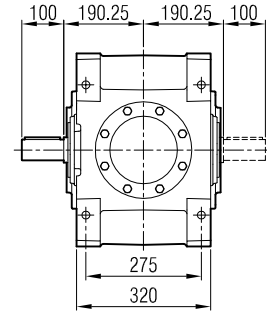
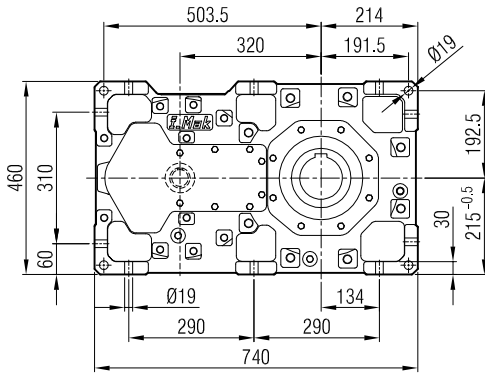
MA Serisi Redüktörler Ölçü Sayfaları

Dimensions Pages

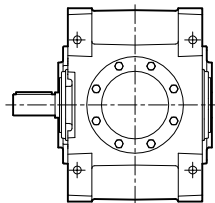
Dimensions



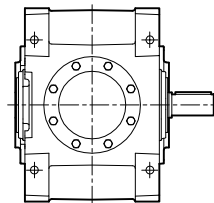
MA 502



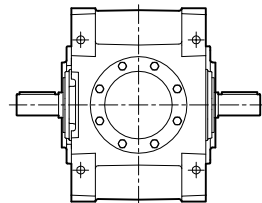
Giriş Seçenekleri / Input Options / Option d'entree



G00



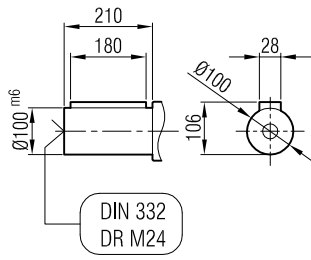
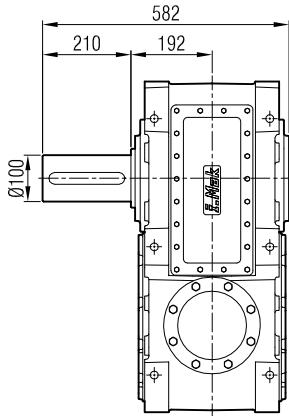
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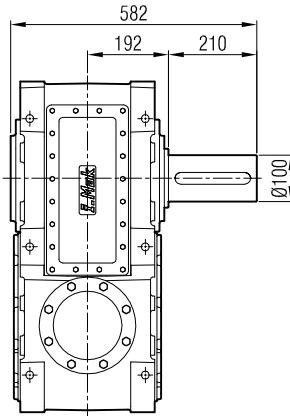
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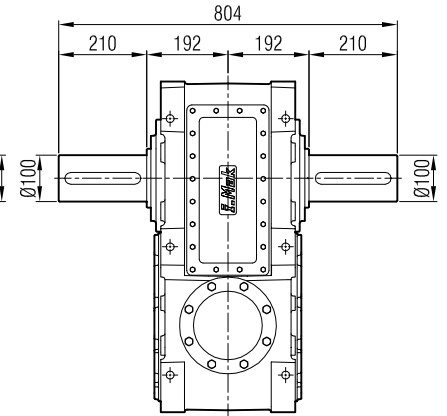
MA / MK 50_
...-SL



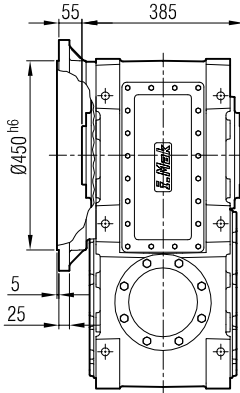
...-SR



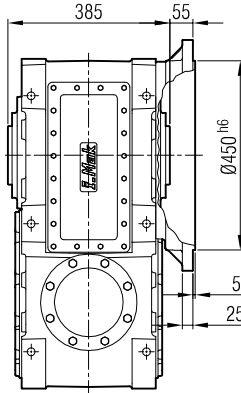
...-SD



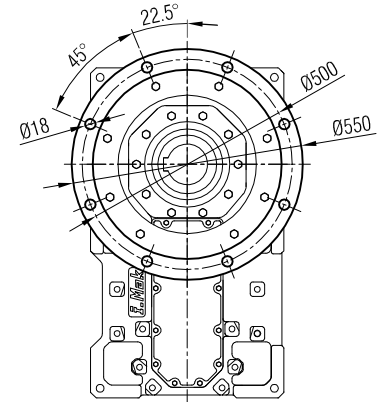
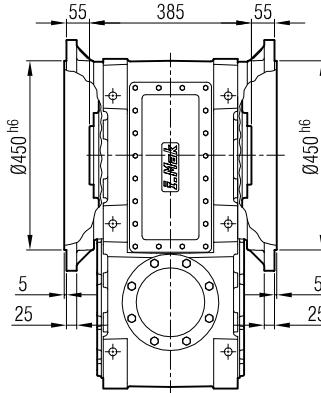
...-FL



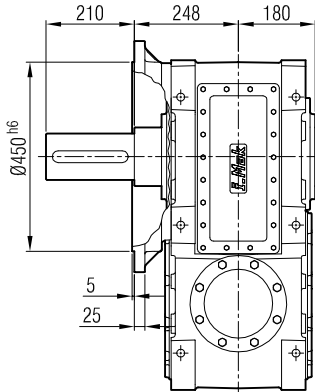
...-FR



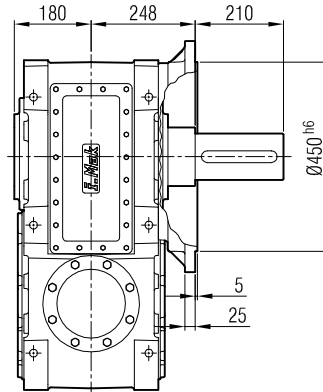
...-FD



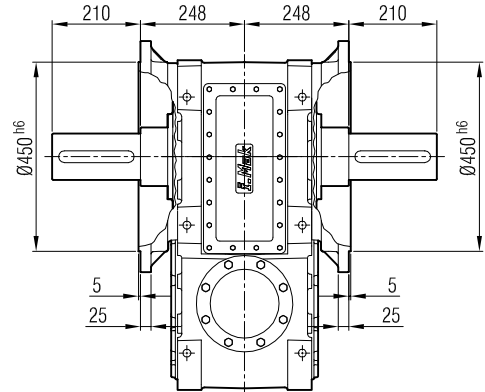
...-FL-SL



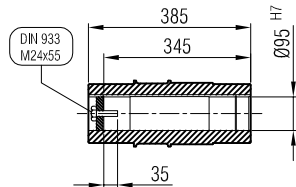
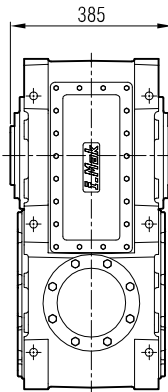
...-FR-SR



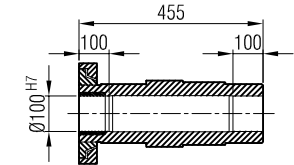
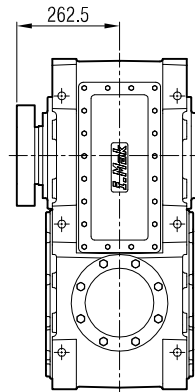
...-FD-SD



...-H



...-SDL / SDR



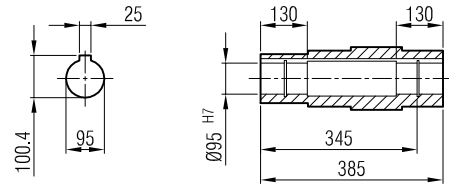
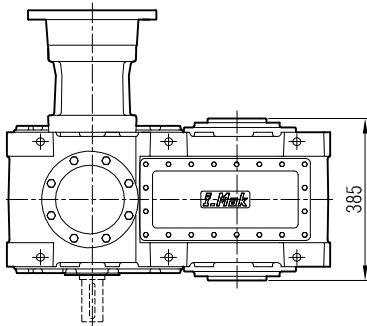
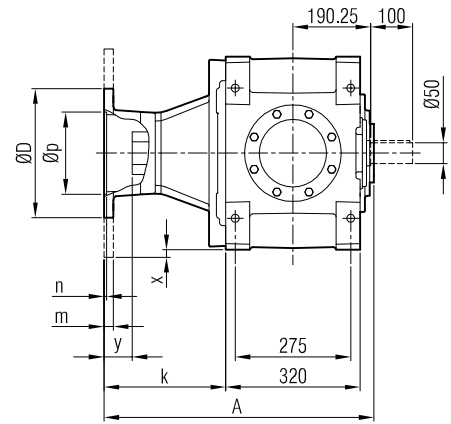
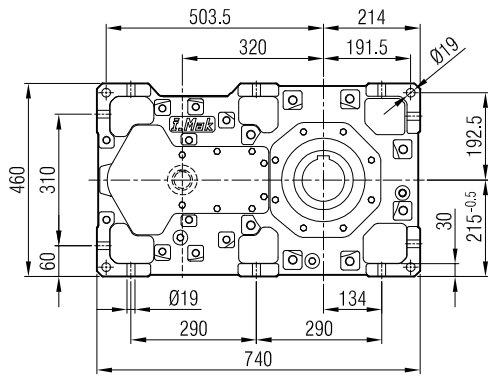
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

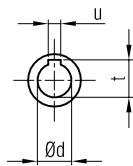
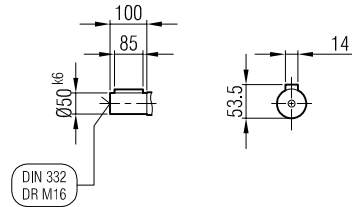
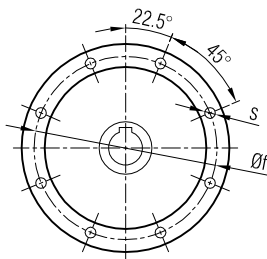
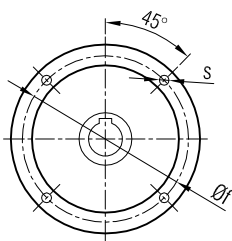


MAP 502



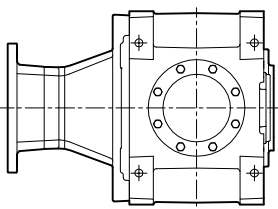
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ

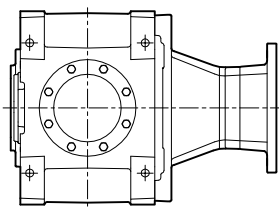


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
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200/B5	597	300	350	400	M16	244	22	6	55	59.3	16	-	40
225/B5	640	350	400	450	M16	287	22	6	60	64.4	18	10	75
250/B5	640	450	500	550	M16	287	25	6.5	65	69.4	18	60	75
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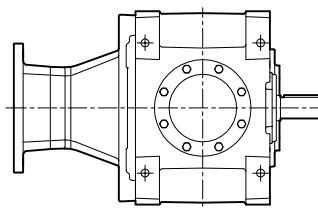
Giriş Seçenekleri / Input Options / Option d'entree



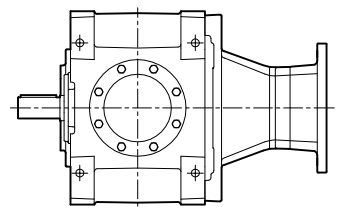
G03



G04



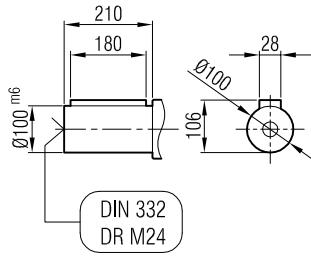
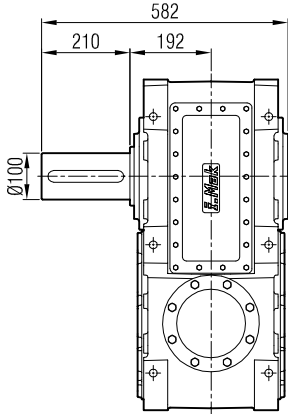
G05



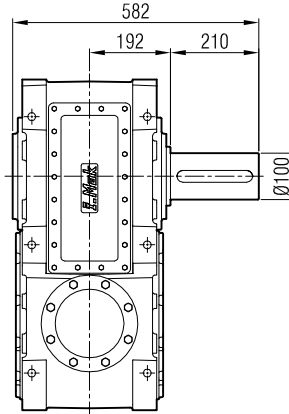
G06



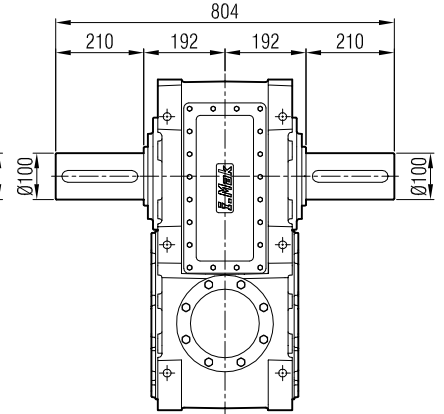
MA / MK 50_
...-SL



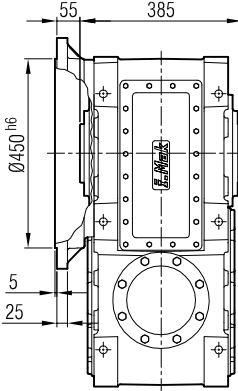
...-SR



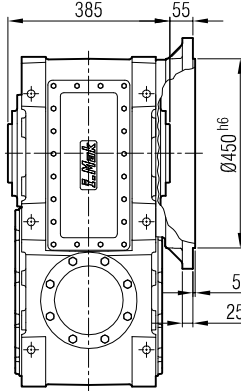
...-SD



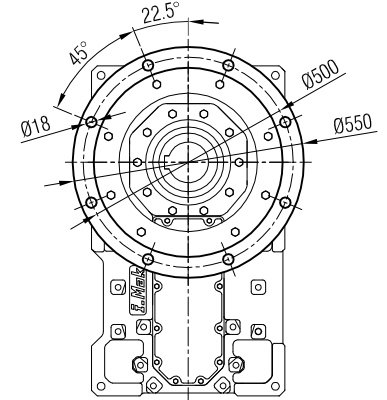
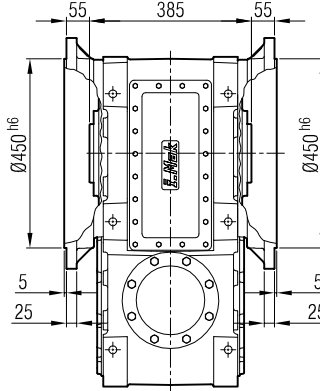
...-FL



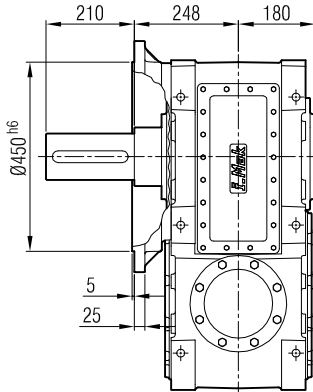
...-FR



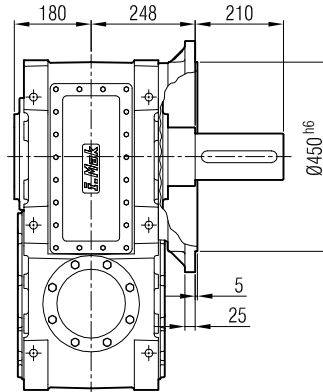
...-FD



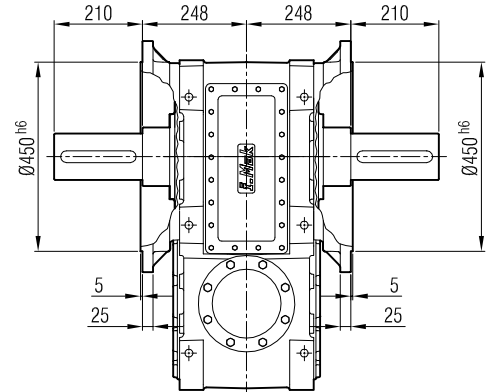
...-FL-SL



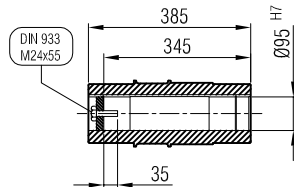
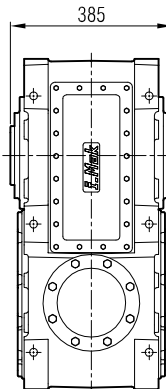
...-FR-SR



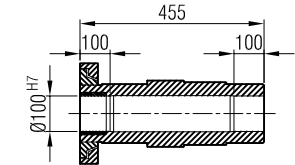
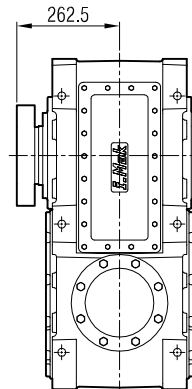
...-FD-SD



...-H



...-SDL / SDR



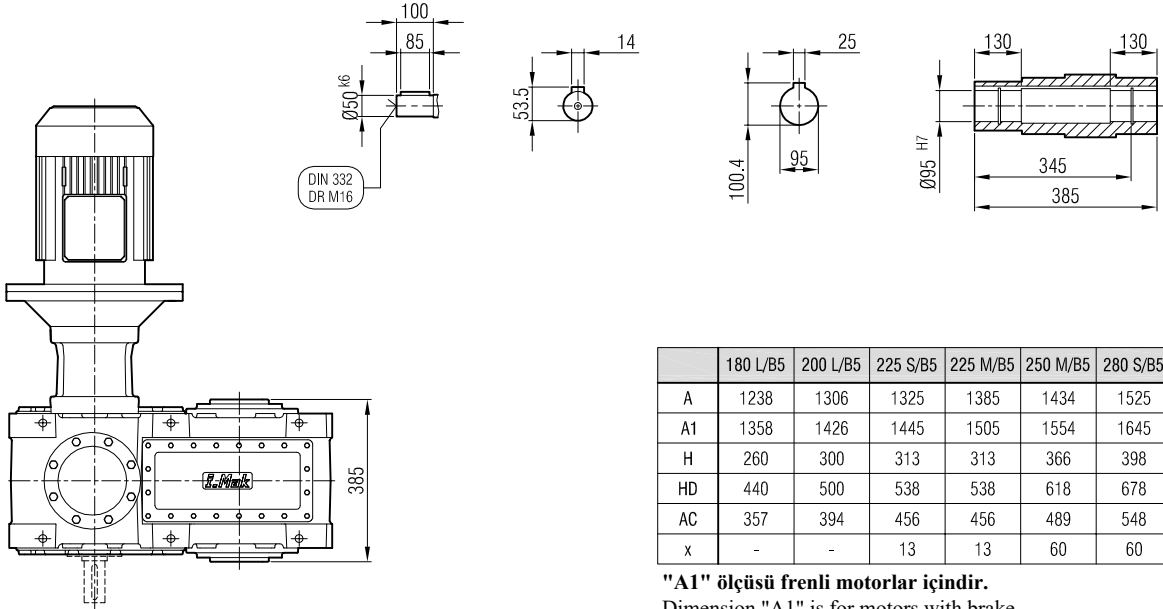
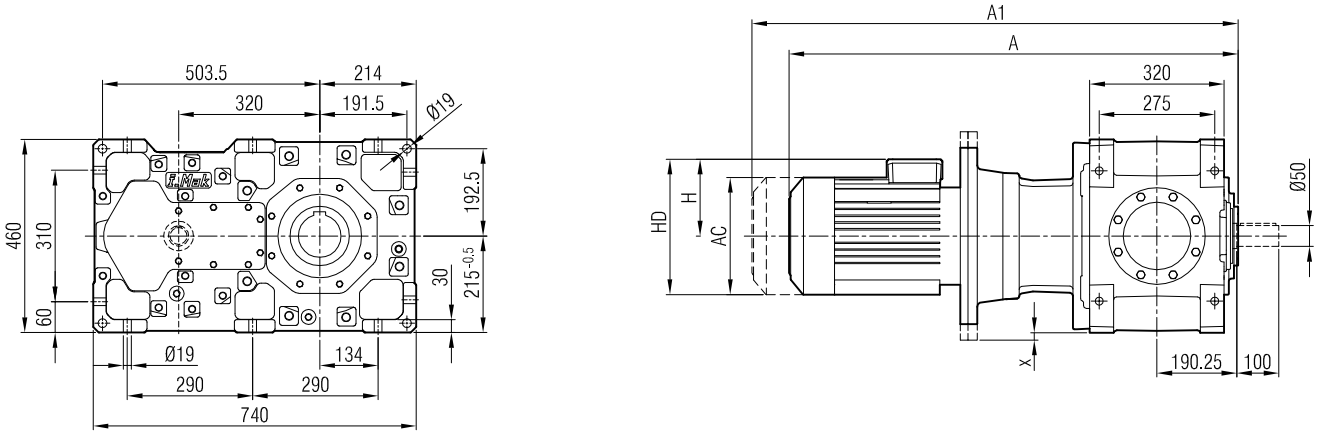
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 502



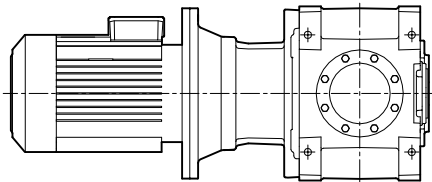
	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5
A	1238	1306	1325	1385	1434	1525	1525
A1	1358	1426	1445	1505	1554	1645	1725
H	260	300	313	313	366	398	398
HD	440	500	538	538	618	678	678
AC	357	394	456	456	489	548	548
x	-	-	13	13	60	60	60

"A1" ölçüsü frenli motorlar içindir.

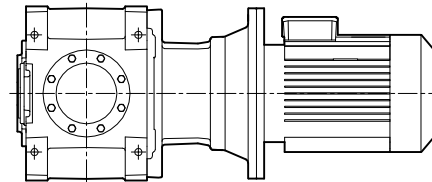
Dimension "A1" is for motors with brake.

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

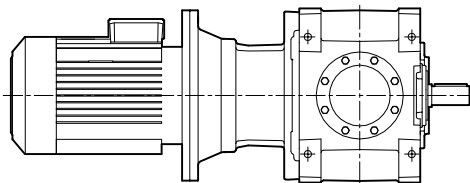
Giriş Seçenekleri / Input Options / Option d'entree



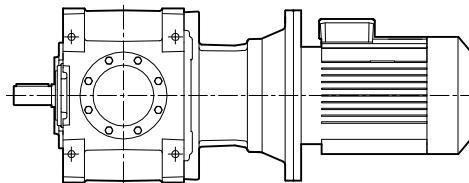
G03



G04



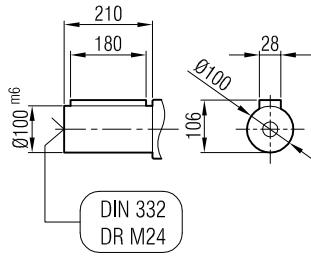
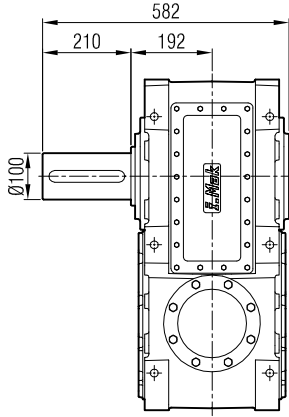
G05



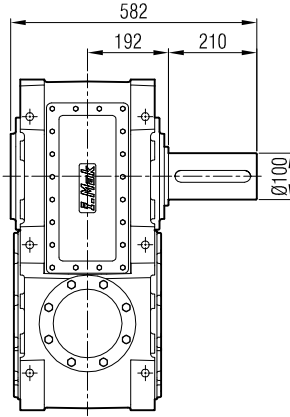
G06



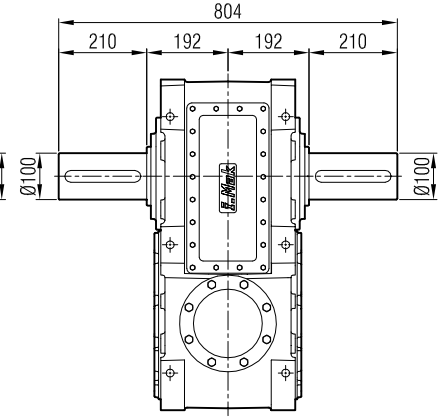
MA / MK 50_
...-SL



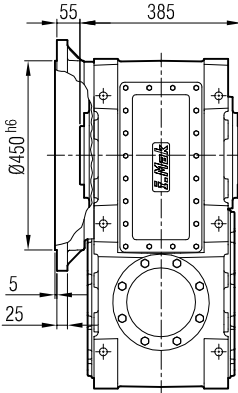
...-SR



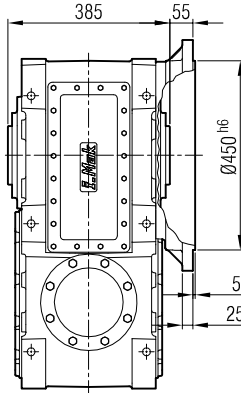
...-SD



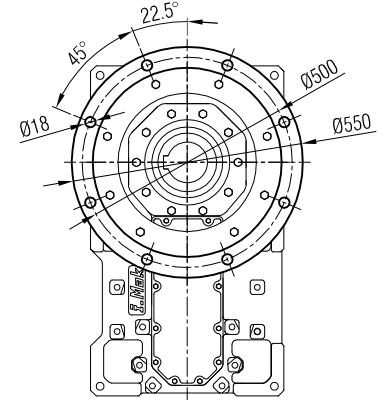
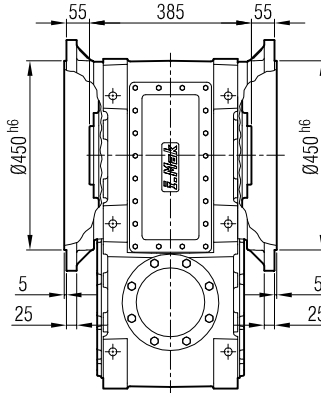
...-FL



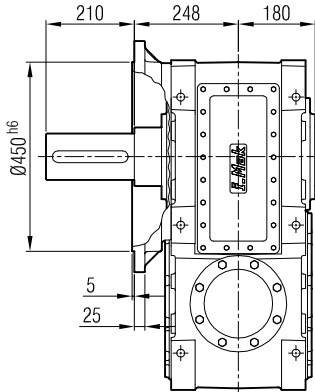
...-FR



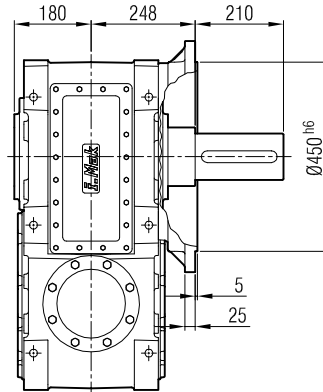
...-FD



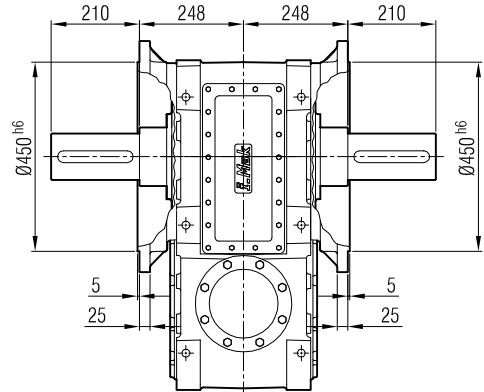
...-FL-SL



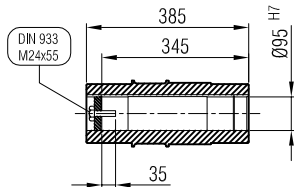
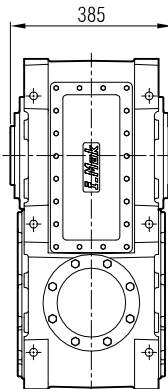
...-FR-SR



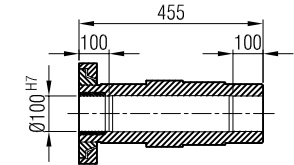
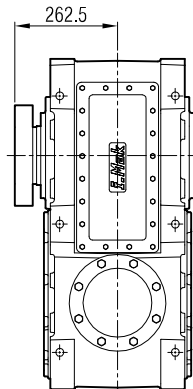
...-FD-SD



...-H



...-SDL / SDR



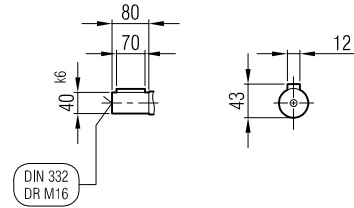
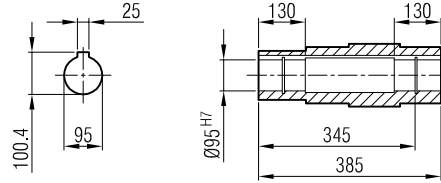
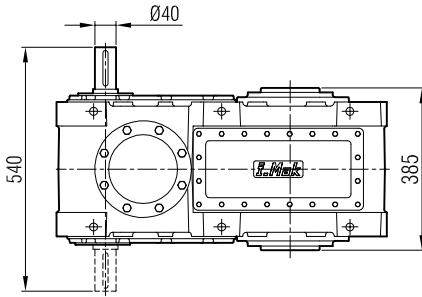
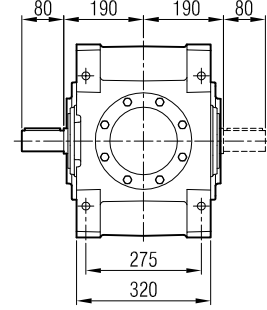
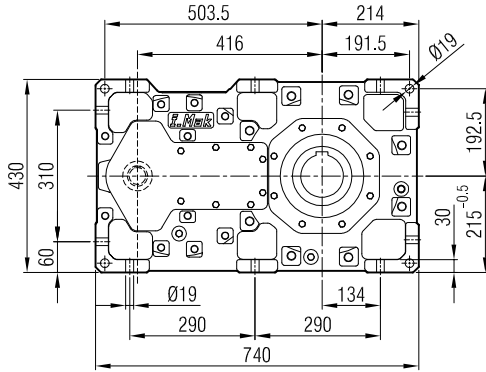
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

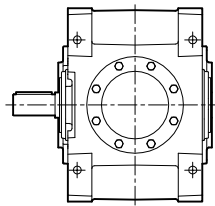
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



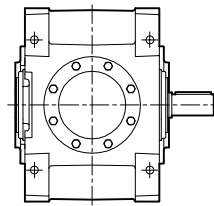
MA 503



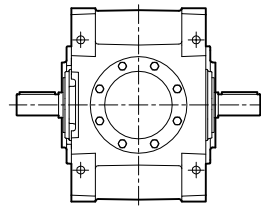
Giriş Seçenekleri / Input Options / Option d'entree



G00



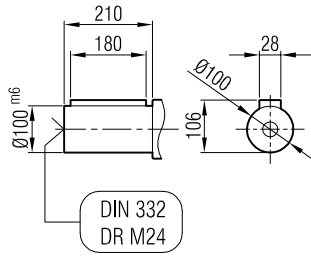
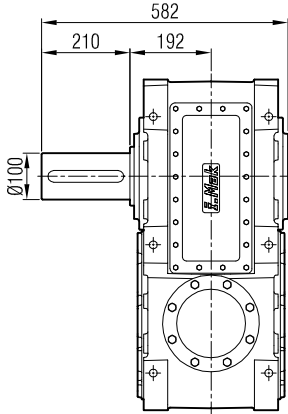
G01



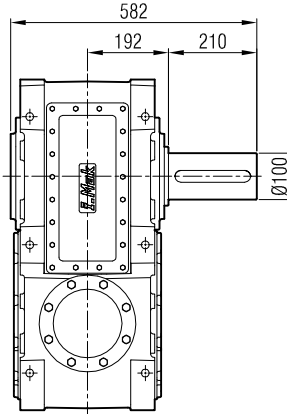
G02



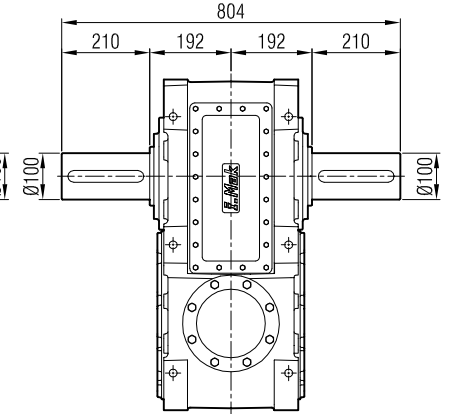
MA / MK 50_
...-SL



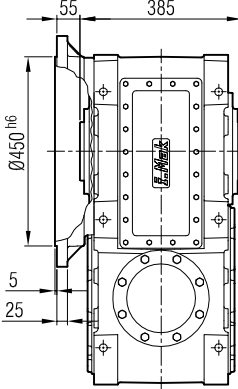
...-SR



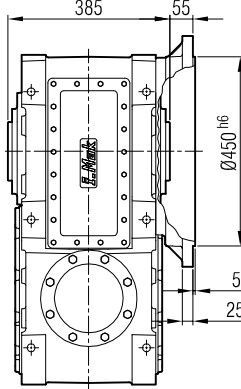
...-SD



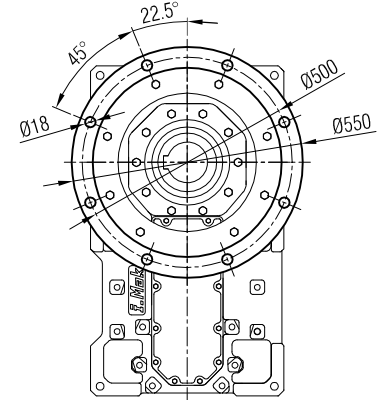
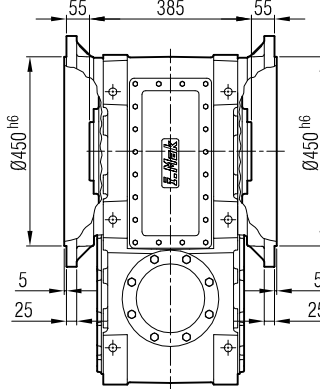
...-FL



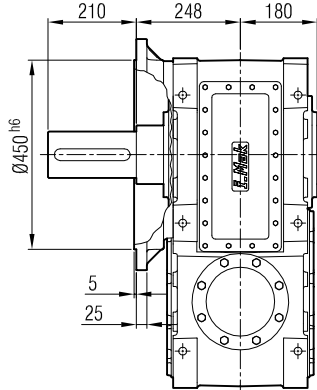
...-FR



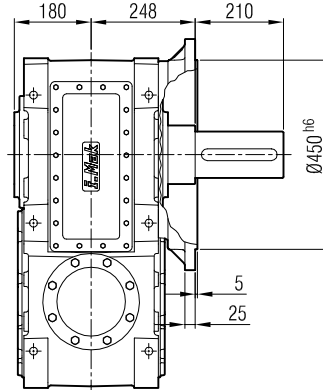
...-FD



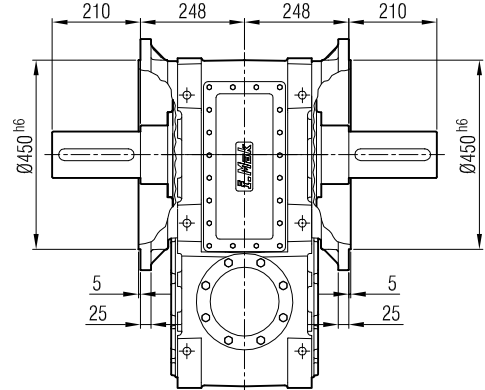
...-FL-SL



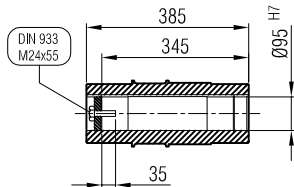
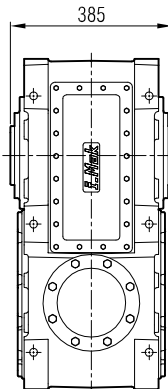
...-FR-SR



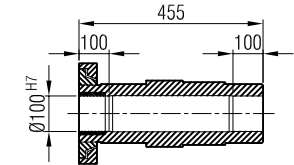
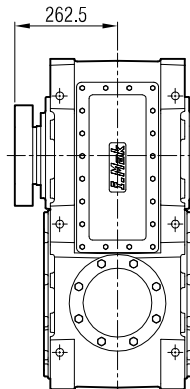
...-FD-SD



...-H



...-SDL / SDR



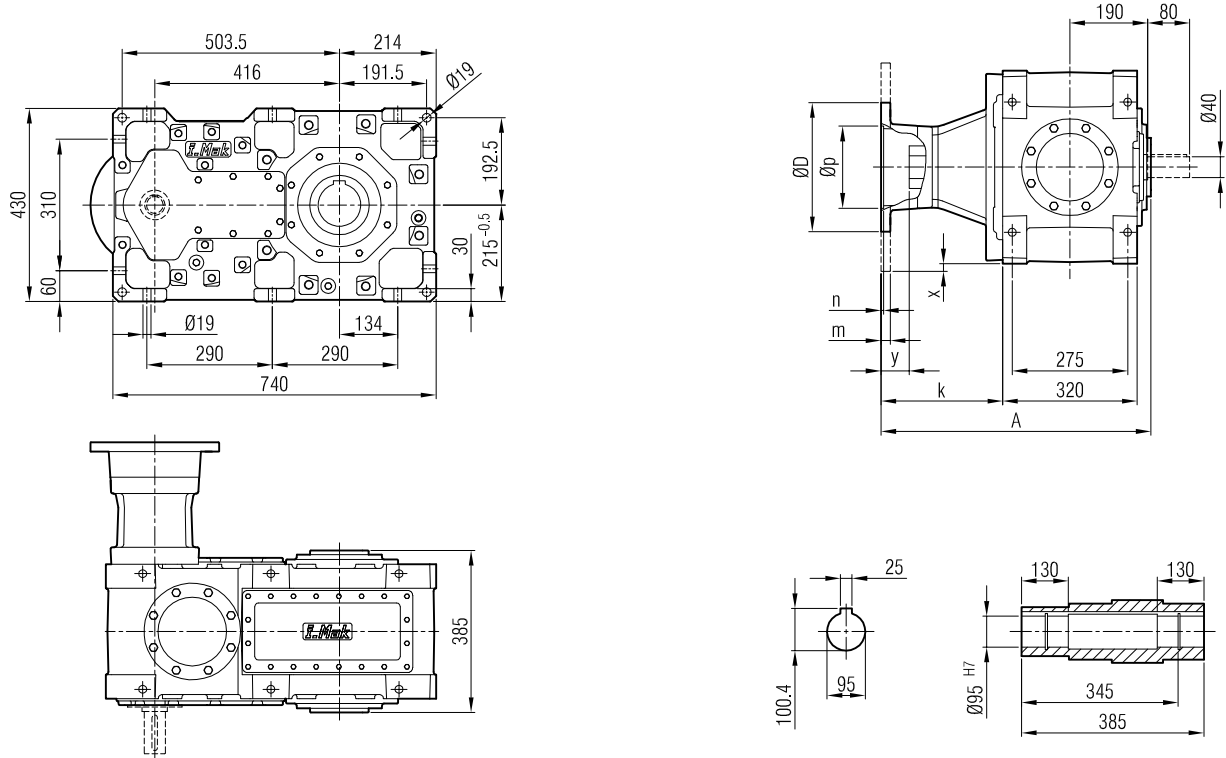
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

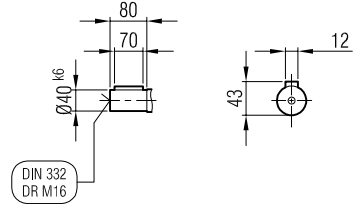
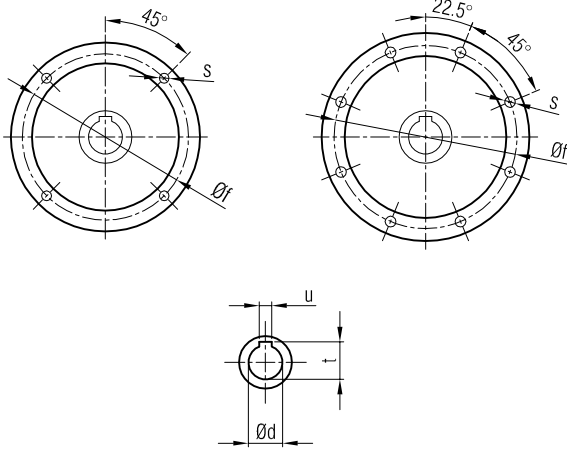


MAP 503



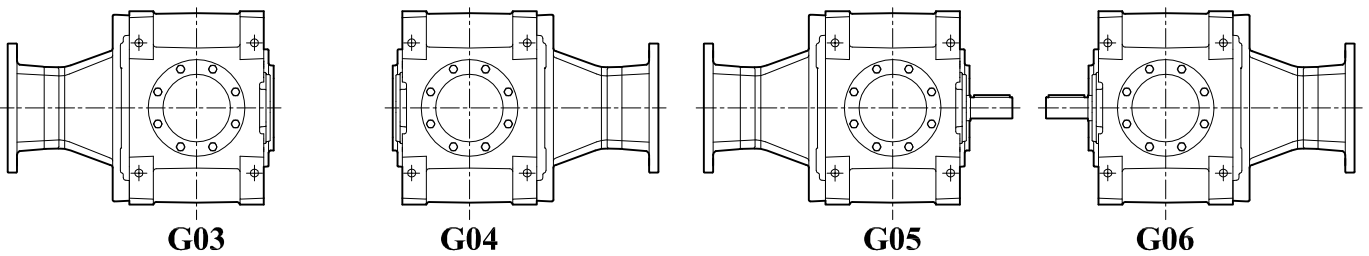
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ



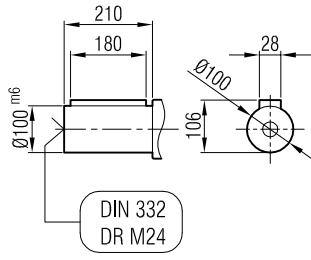
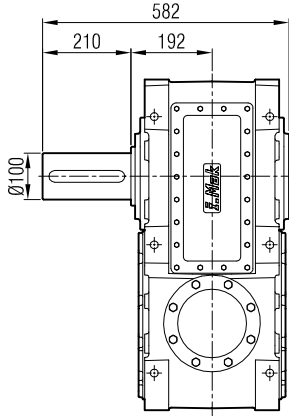
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	541	180	215	250	M12	188	15	5	28	31.3	8	-	17
132/B5	561	230	265	300	M12	208	18	6	38	41.3	10	-	37
160/B5	578	250	300	350	M14	225	20	6	42	45.3	12	-	60
180/B5	578	250	300	350	M14	225	20	6	48	51.8	14	-	60
200/B5	578	300	350	400	M16	225	22	6	55	59.3	16	-	60
225/B5	621	350	400	450	M16	268	22	6	60	64.4	18	10	80
250/B5	621	450	500	550	M16	268	25	6.5	65	69.4	18	60	75

Giriş Seçenekleri / Input Options / Option d'entree

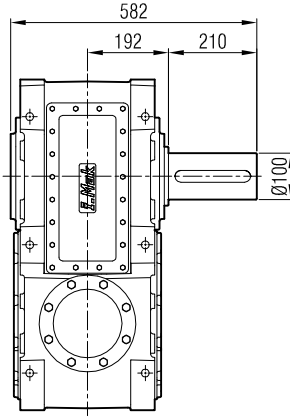




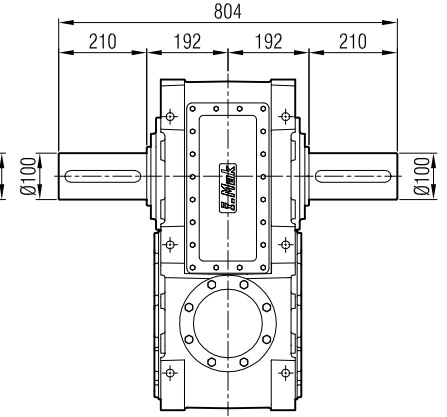
MA / MK 50_
...-SL



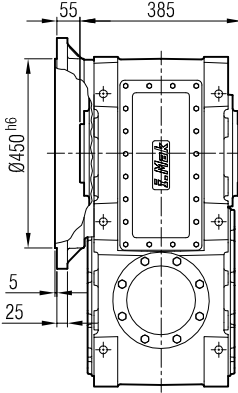
...-SR



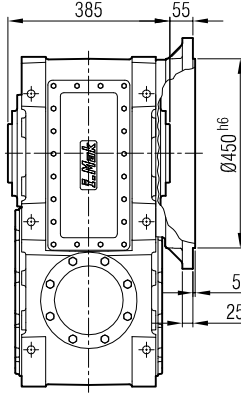
...-SD



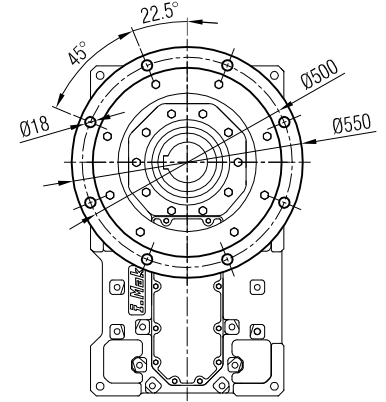
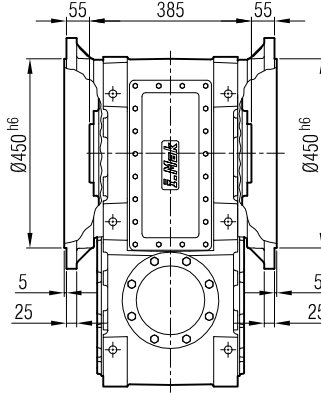
...-FL



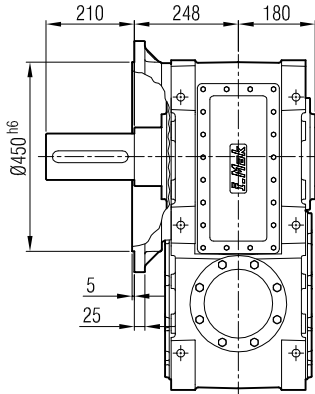
...-FR



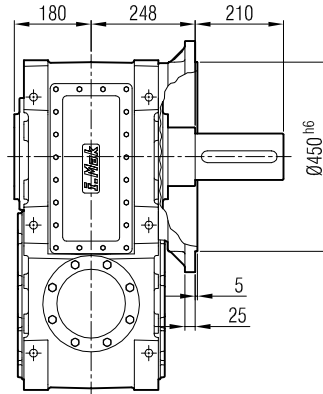
...-FD



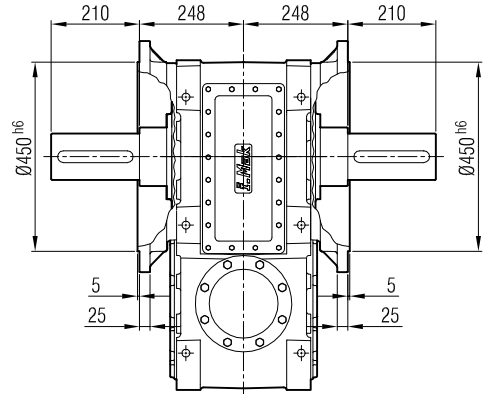
...-FL-SL



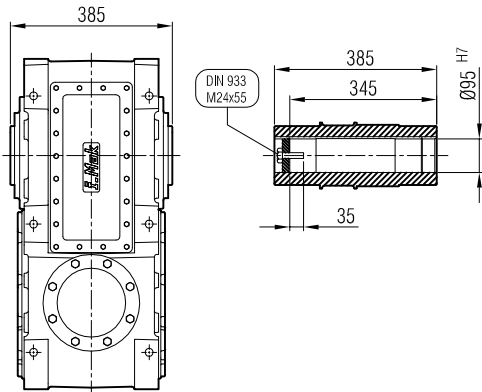
...-FR-SR



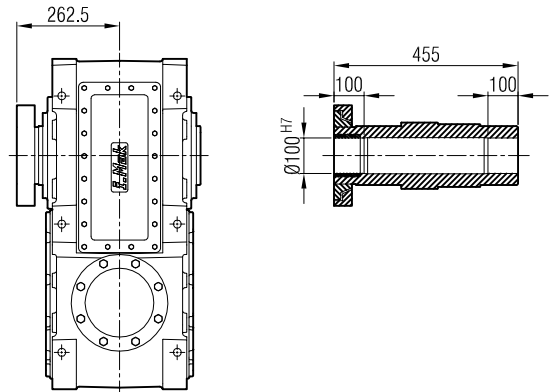
...-FD-SD



...-H



...-SDL / SDR



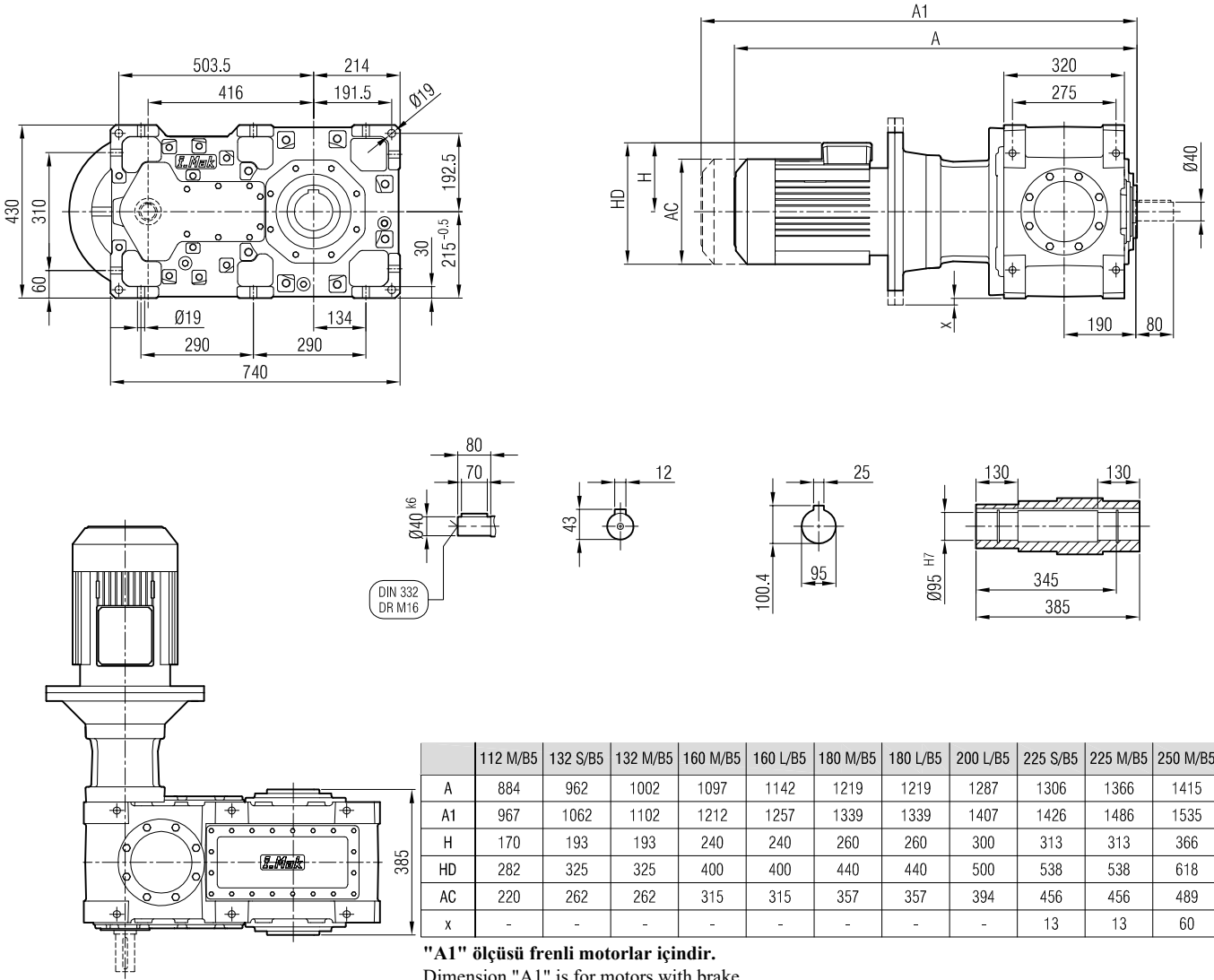
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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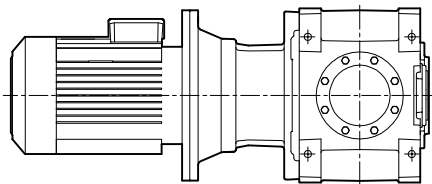


MAM 503

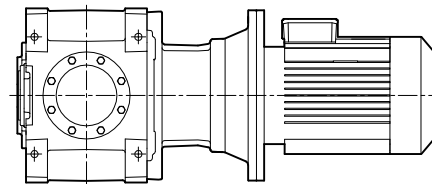


"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

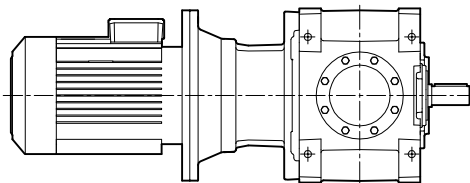
Giriş Seçenekleri / Input Options / Option d'entree



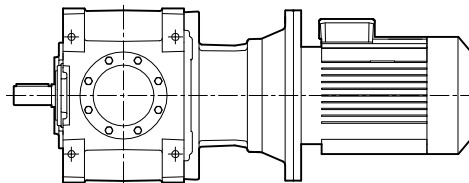
G03



G04



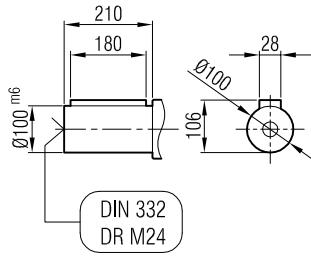
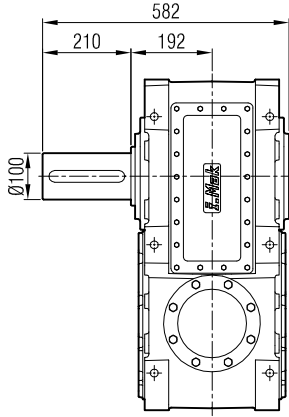
G05



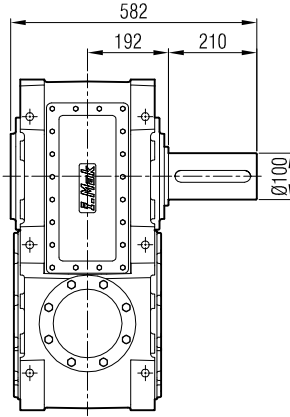
G06



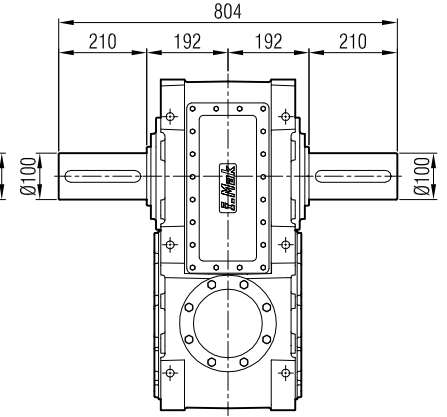
MA / MK 50_
...-SL



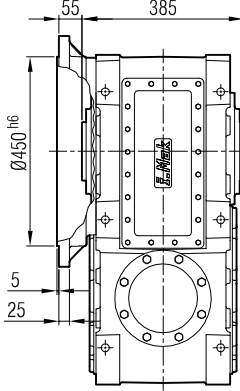
...-SR



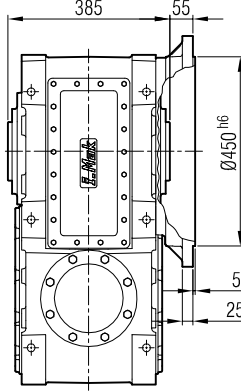
...-SD



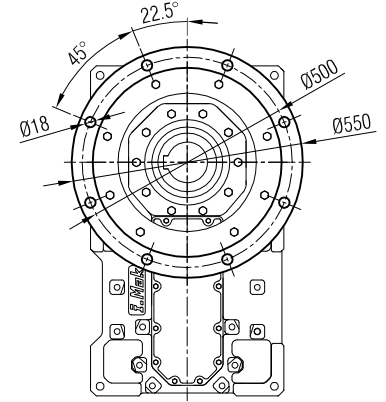
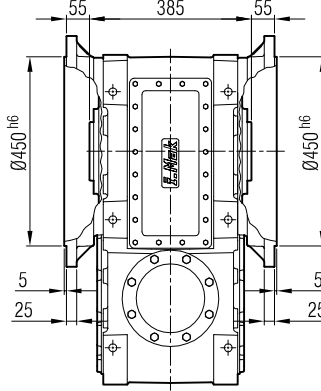
...-FL



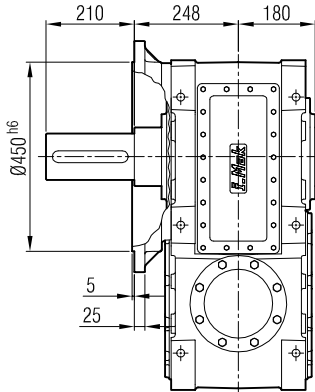
...-FR



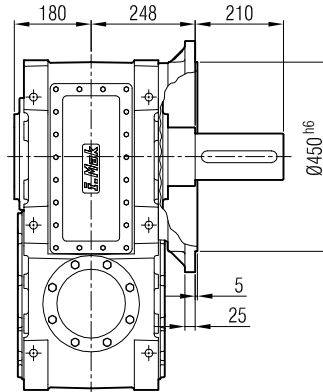
...-FD



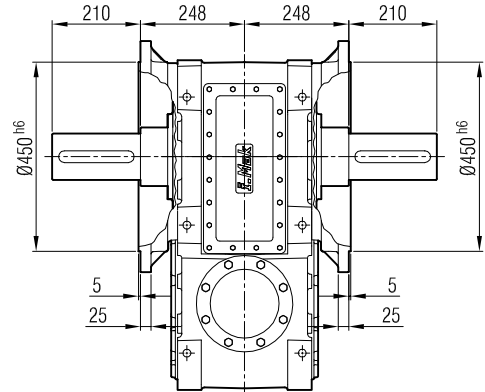
...-FL-SL



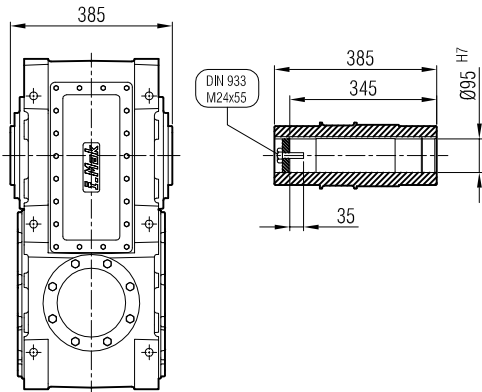
...-FR-SR



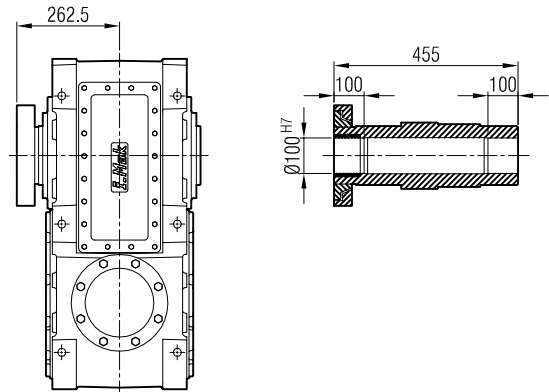
...-FD-SD



...-H



...-SDL / SDR



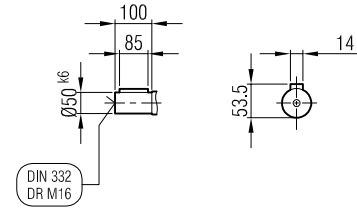
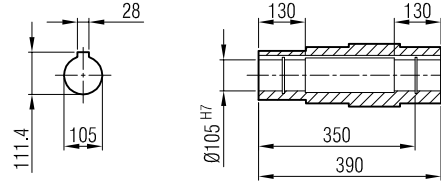
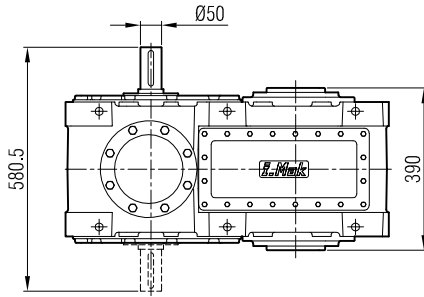
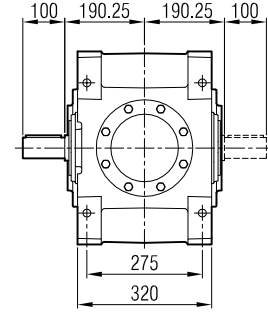
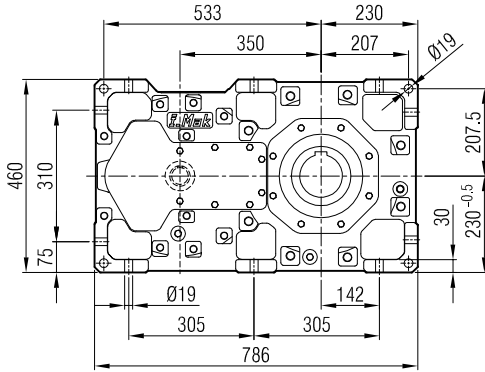
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

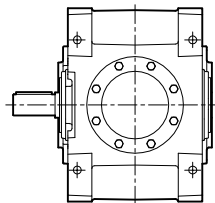
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



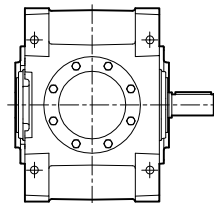
MA 602



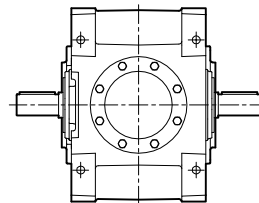
Giriş Seçenekleri / Input Options / Option d'entree



G00



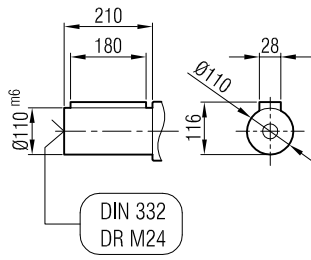
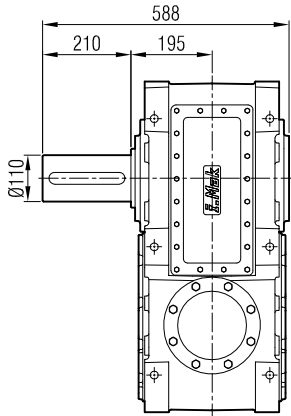
G01



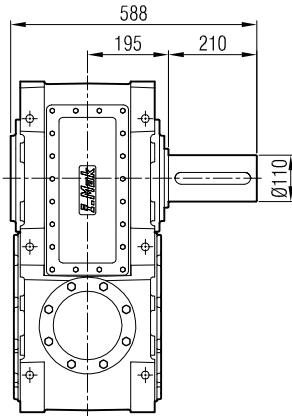
G02



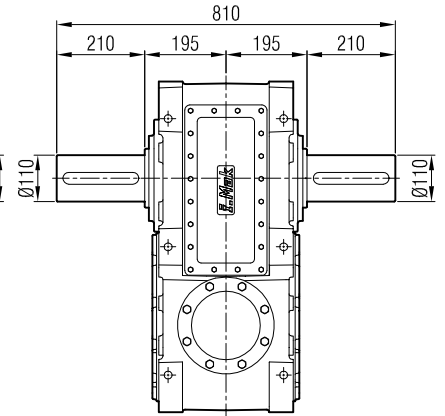
MA / MK 60_
...-SL



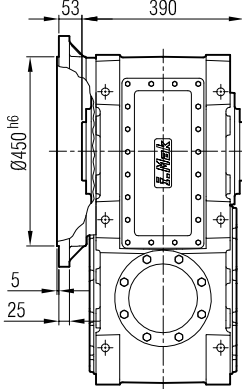
...-SR



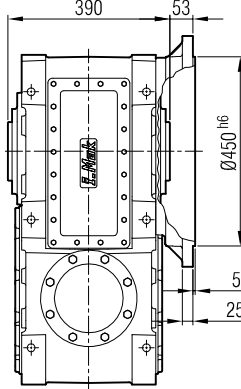
...-SD



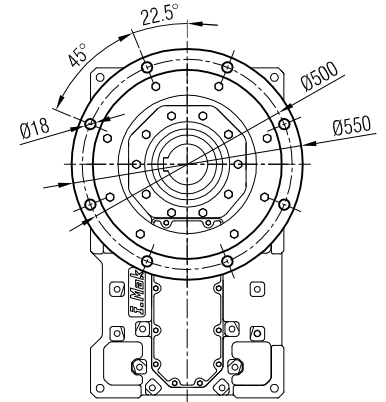
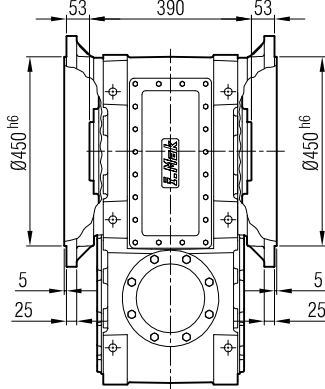
...-FL



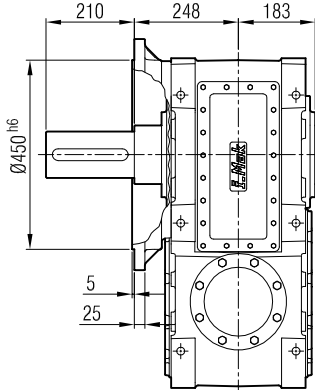
...-FR



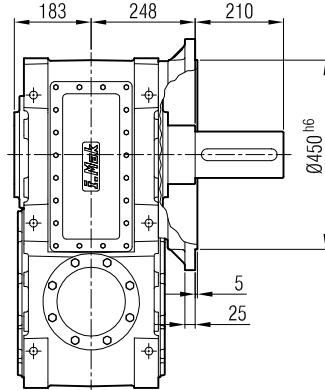
...-FD



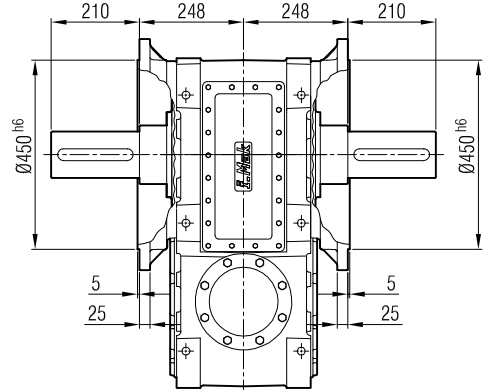
...-FL-SL



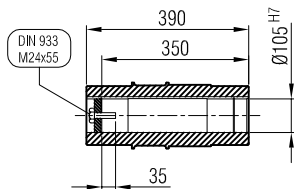
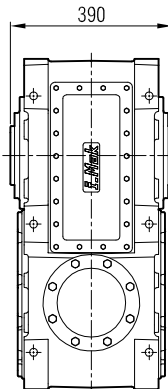
...-FR-SR



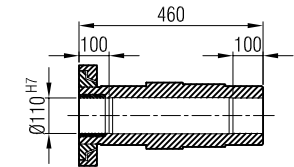
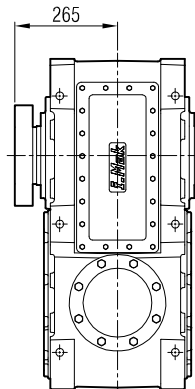
...-FD-SD



...-H



...-SDL / SDR



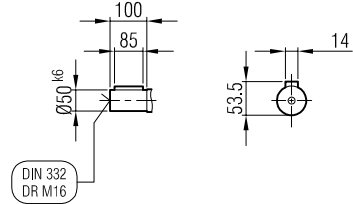
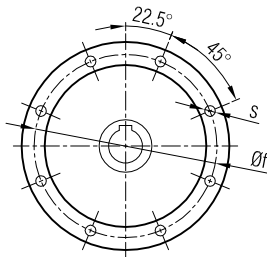
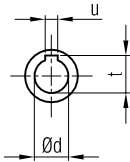
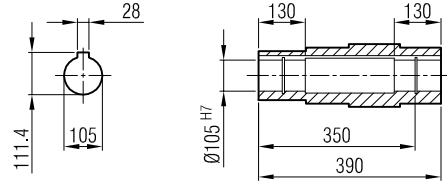
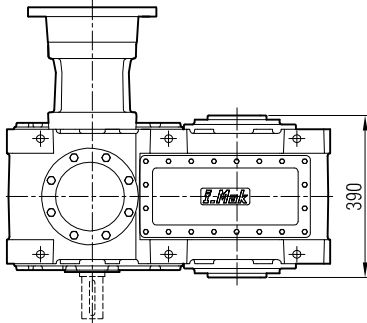
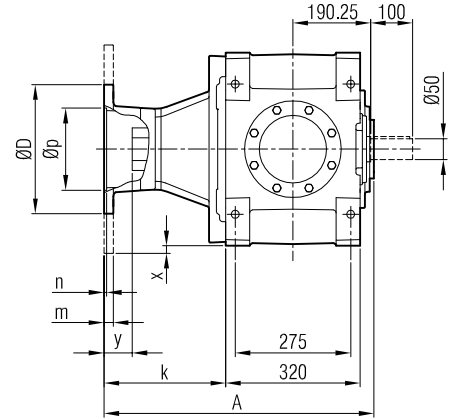
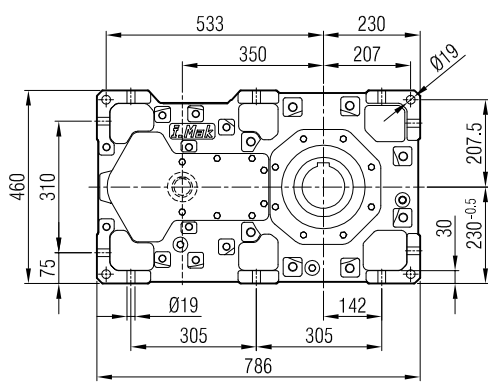
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

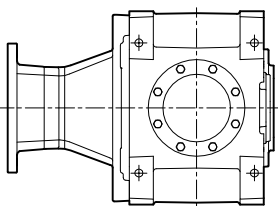


MAP 602

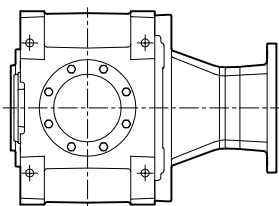


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
225/B5	642	350	400	450	M16	284	22	6	60	64.4	18	-	75
250/B5	642	450	500	550	M16	284	25	6.5	65	69.4	18	45	75
280/B5	642	450	500	550	M16	284	25	6.5	75	75.9	20	45	65

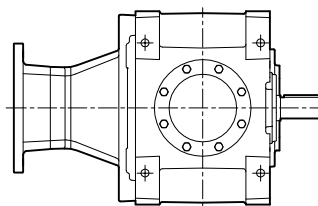
Giriş Seçenekleri / Input Options / Option d'entree



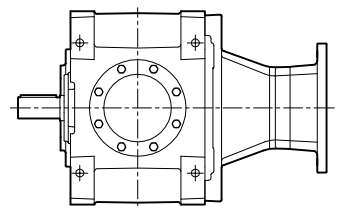
G03



G04



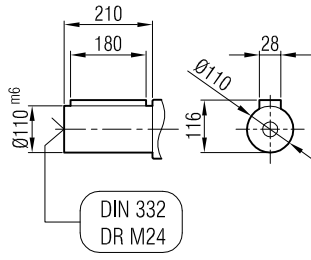
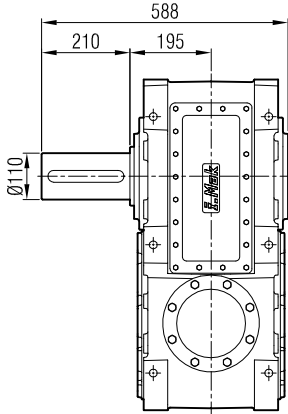
G05



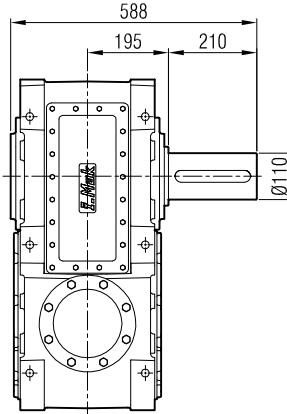
G06



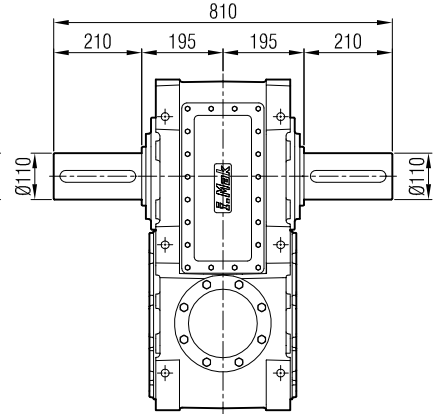
MA / MK 60_
...-SL



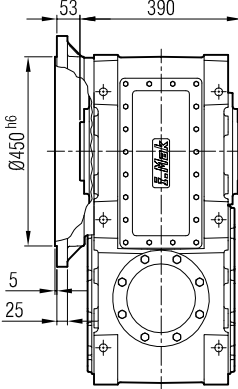
...-SR



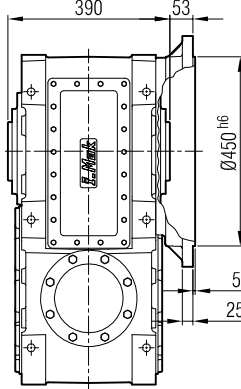
...-SD



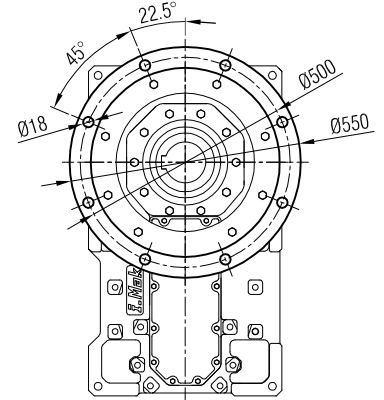
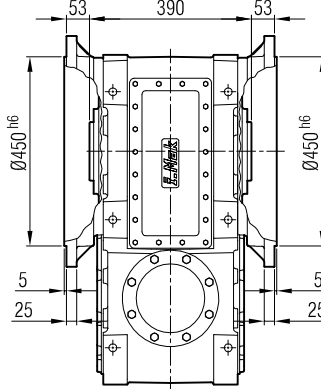
...-FL



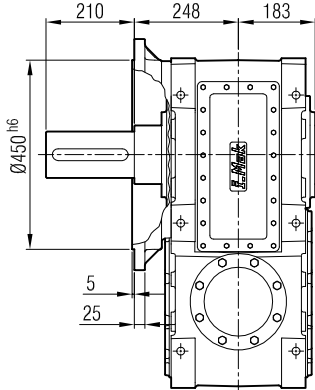
...-FR



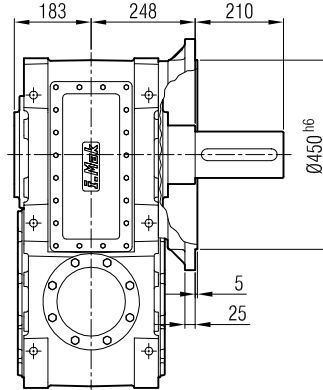
...-FD



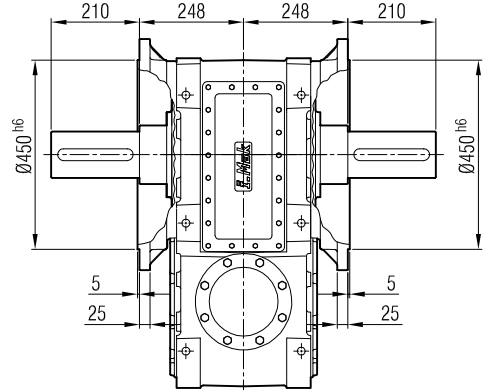
...-FL-SL



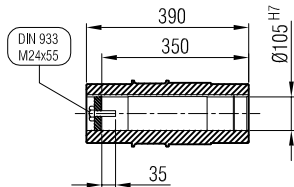
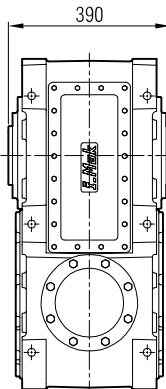
...-FR-SR



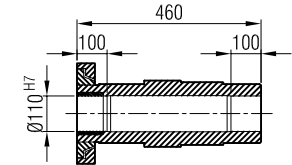
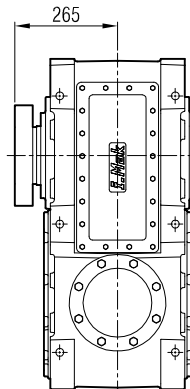
...-FD-SD



...-H



...-SDL / SDR



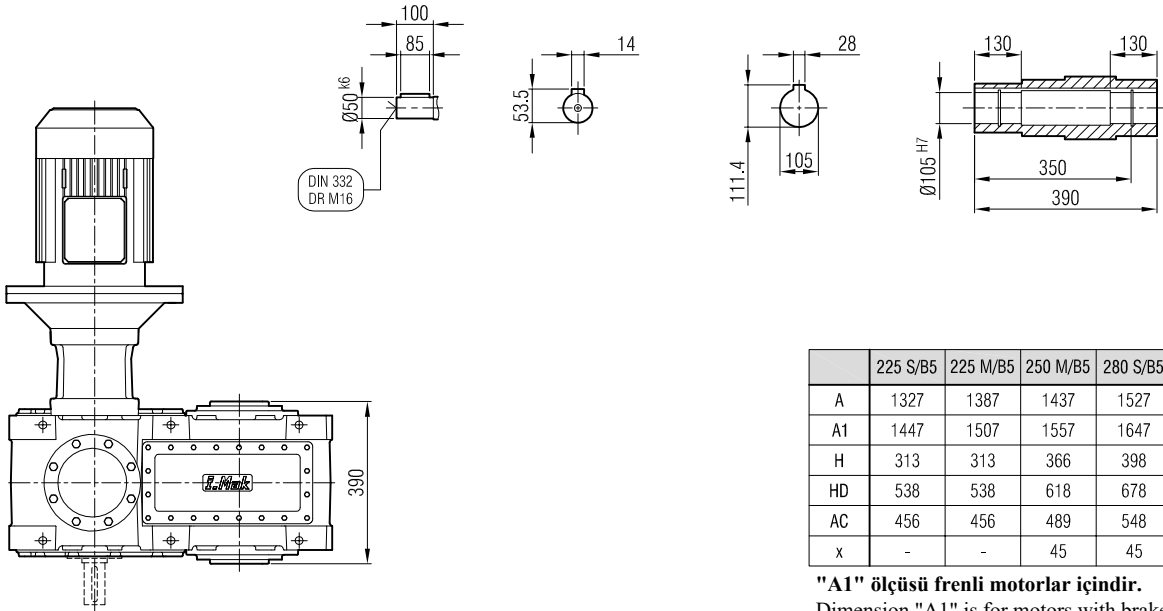
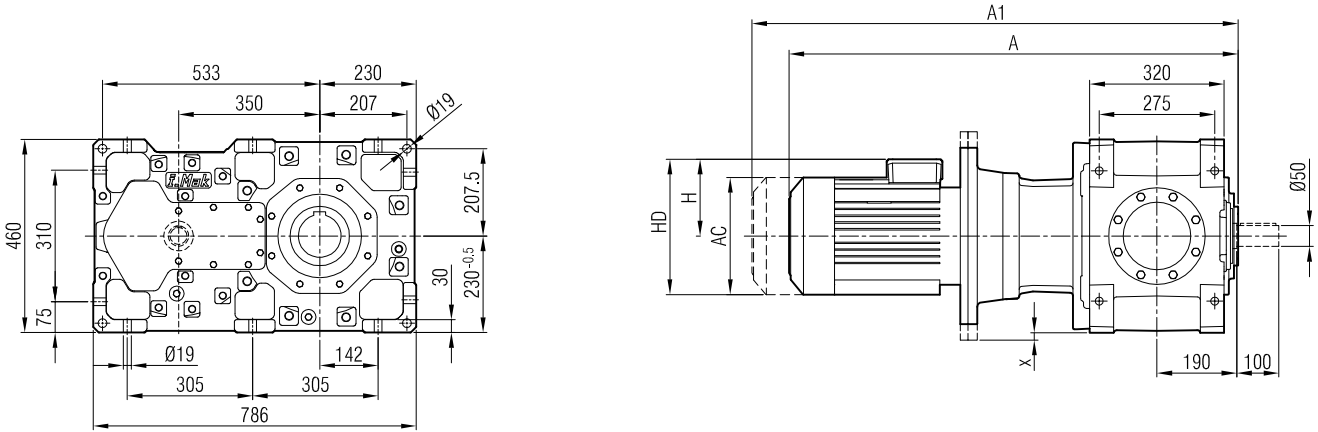
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



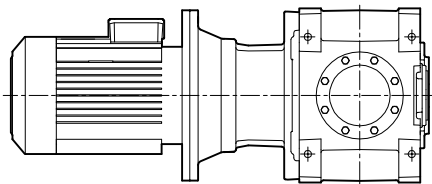
MAM 602



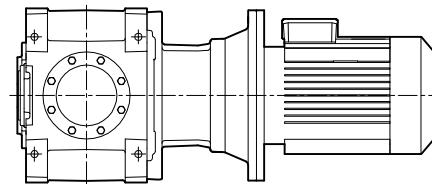
	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5
A	1327	1387	1437	1527	1527
A1	1447	1507	1557	1647	1727
H	313	313	366	398	398
HD	538	538	618	678	678
AC	456	456	489	548	548
x	-	-	45	45	45

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

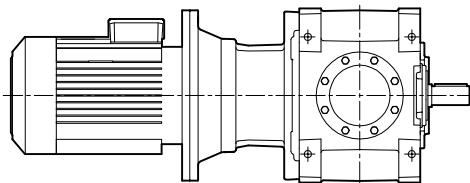
Giriş Seçenekleri / Input Options / Option d'entree



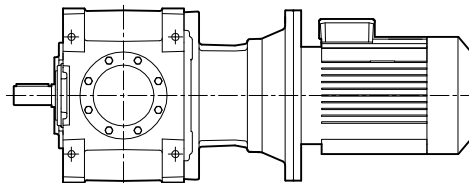
G03



G04



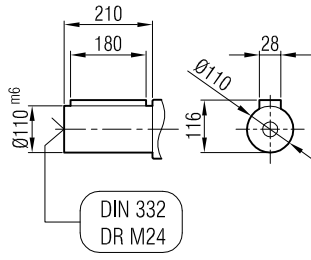
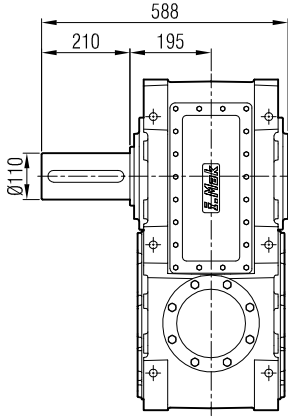
G05



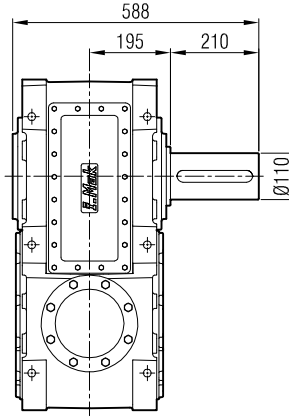
G06



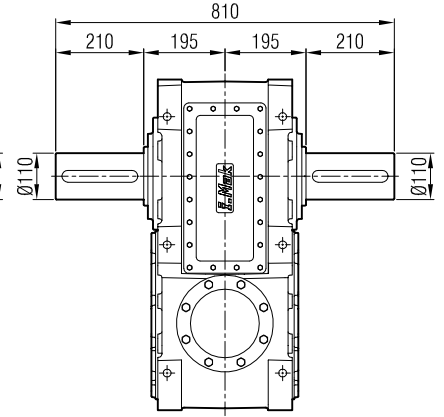
MA / MK 60_
...-SL



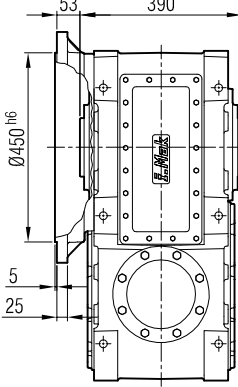
...-SR



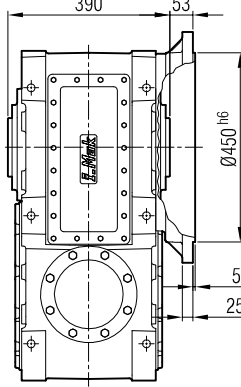
...-SD



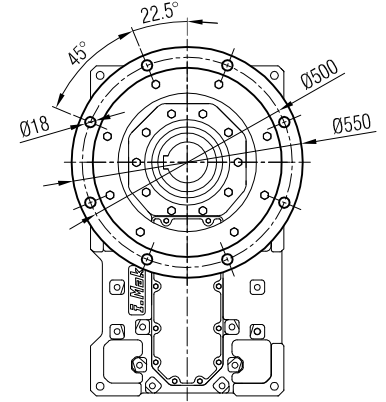
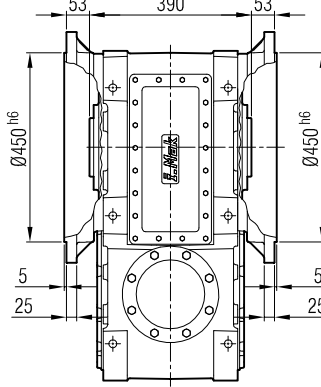
...-FL



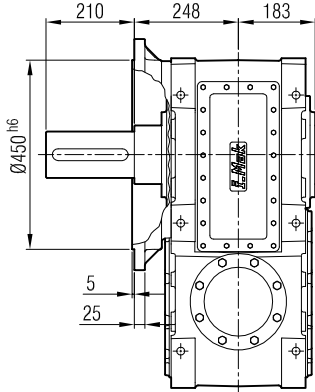
...-FR



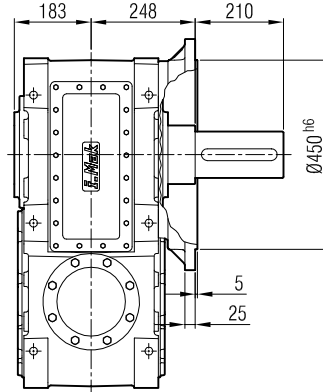
...-FD



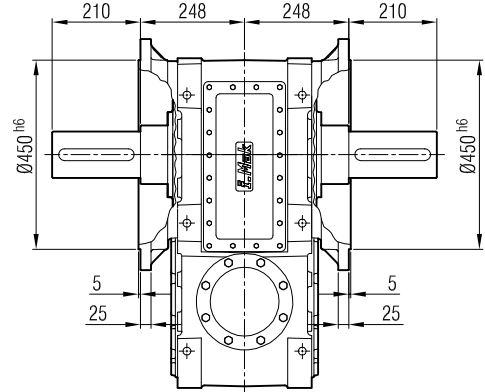
...-FL-SL



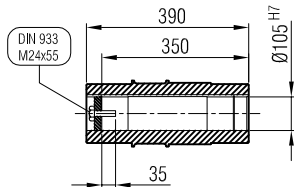
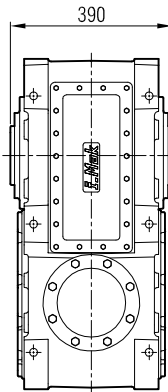
...-FR-SR



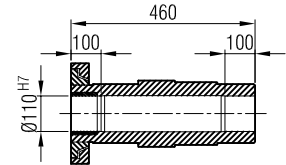
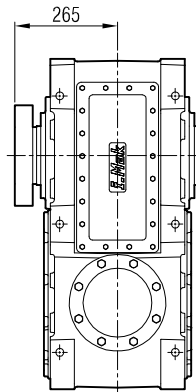
...-FD-SD



...-H



...-SDL / SDR



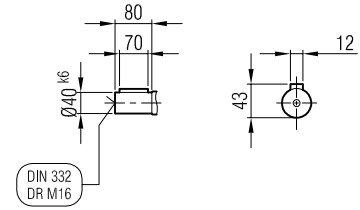
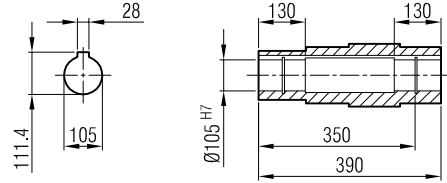
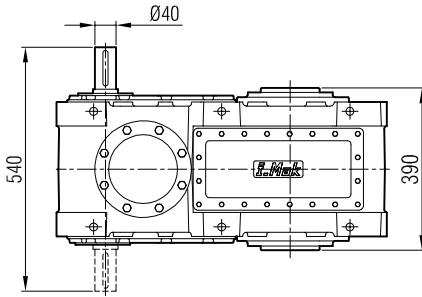
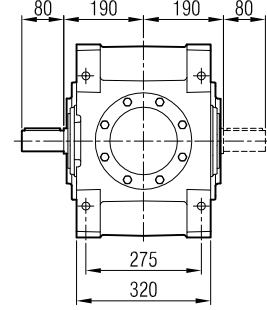
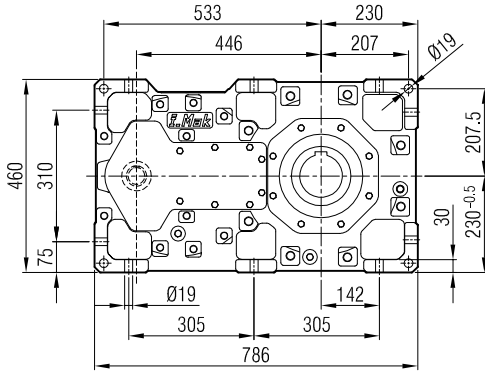
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

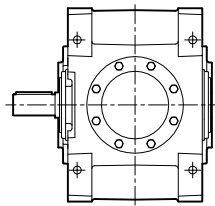
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



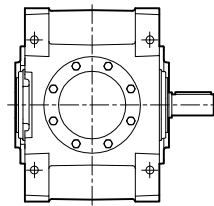
MA 603



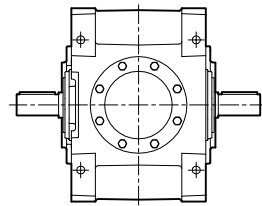
Giriş Seçenekleri / Input Options / Option d'entree



G00



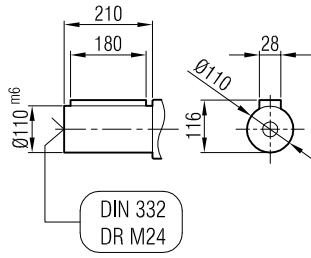
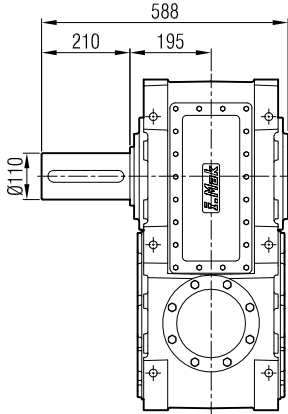
G01



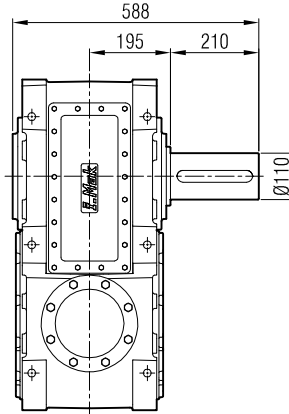
G02



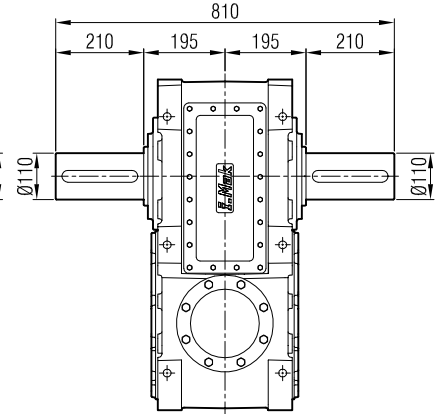
MA / MK 60_
...-SL



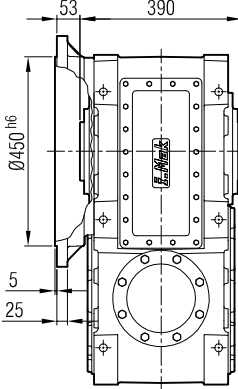
...-SR



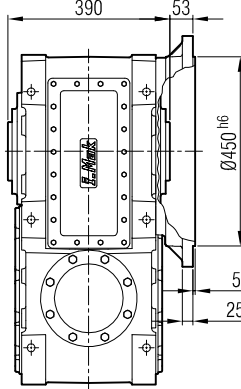
...-SD



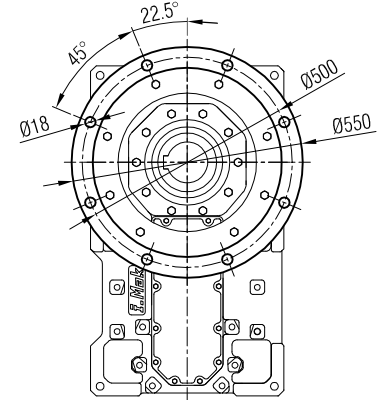
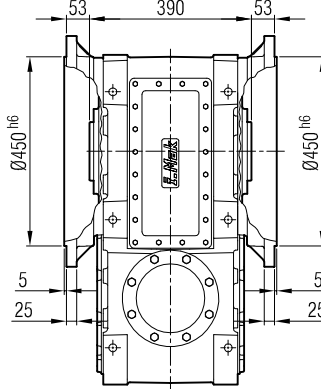
...-FL



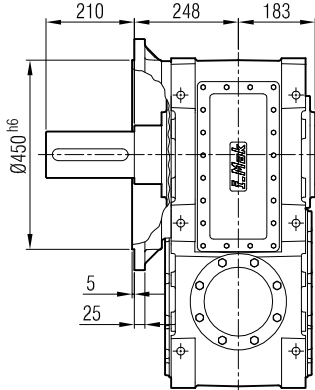
...-FR



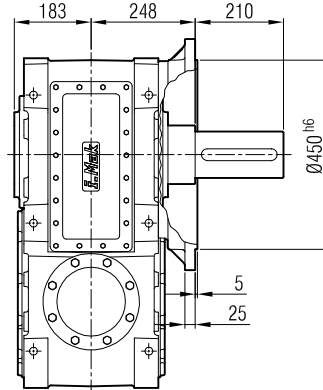
...-FD



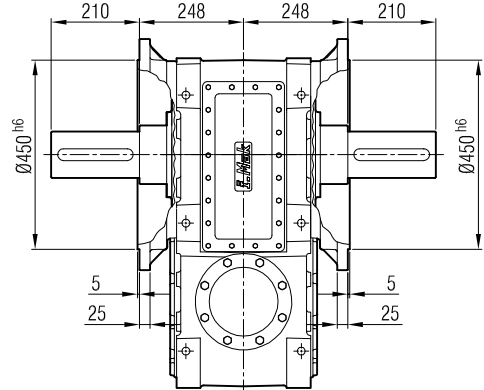
...-FL-SL



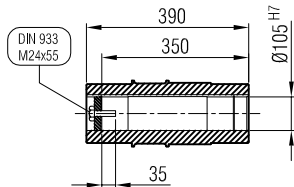
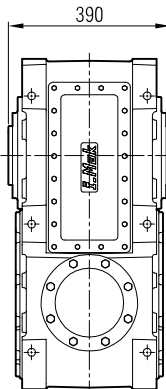
...-FR-SR



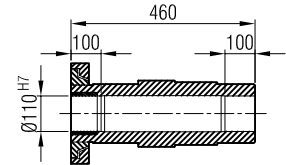
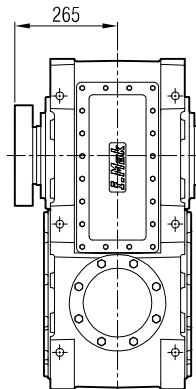
...-FD-SD



...-H



...-SDL / SDR



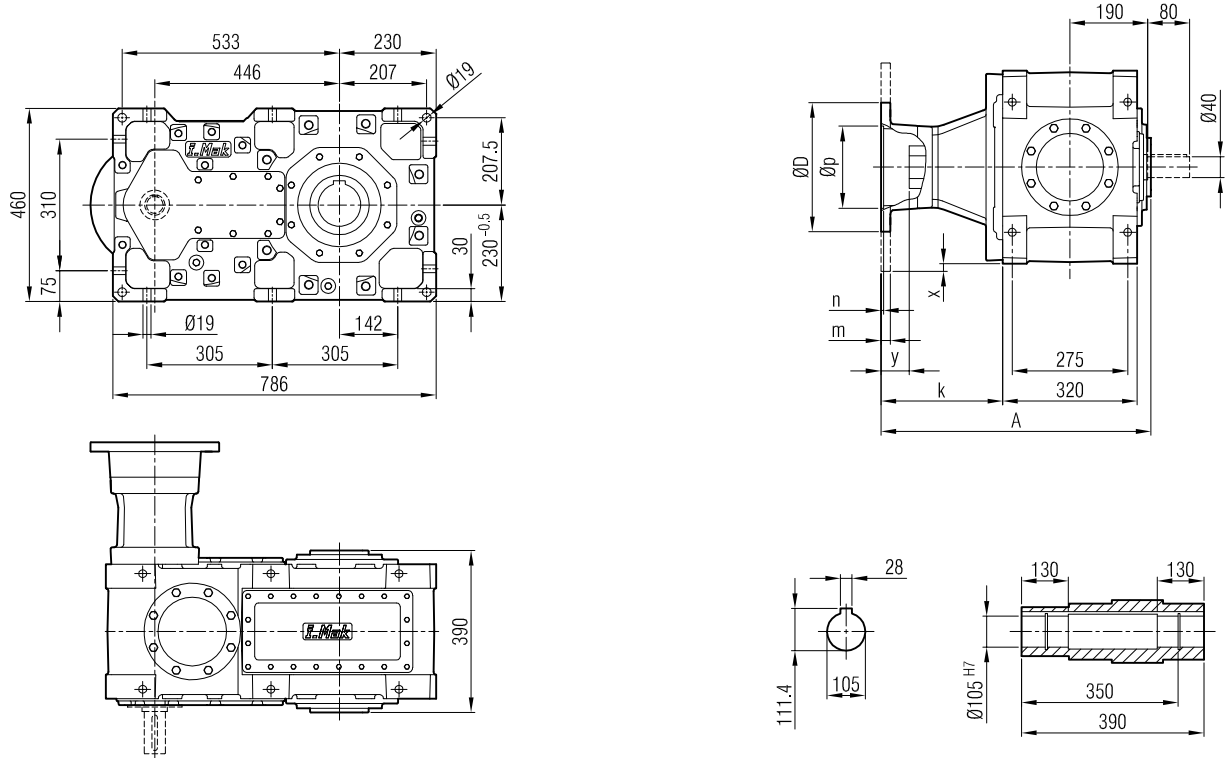
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

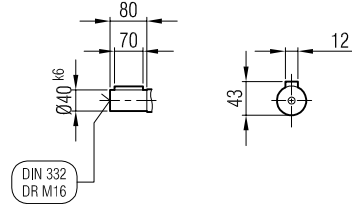
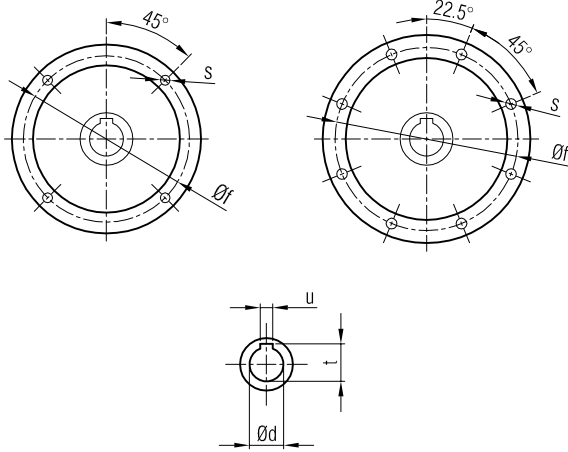


MAP 603



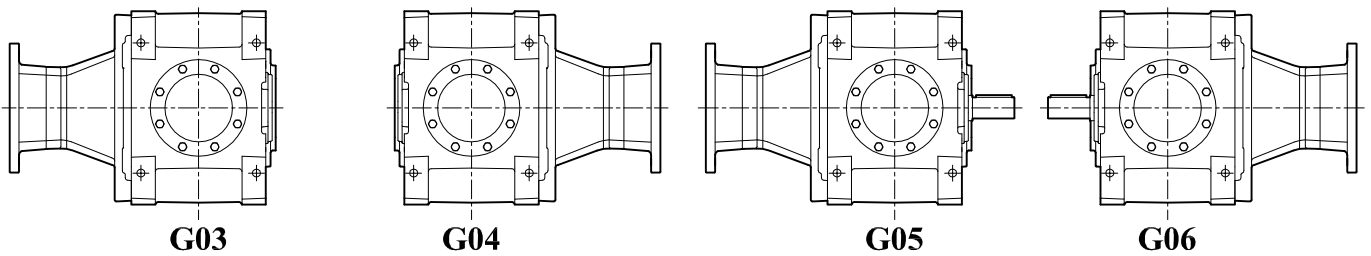
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ



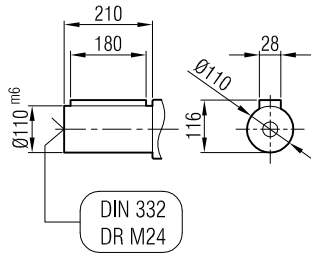
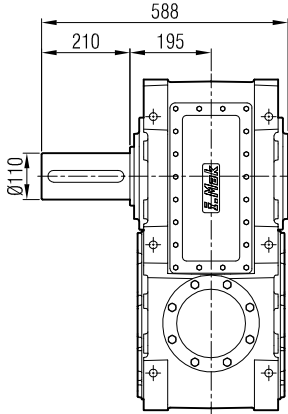
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
132/B5	563	230	265	300	M12	208	18	6	38	41.3	10	-	37
160/B5	580	250	300	350	M14	225	20	6	42	45.3	12	-	60
180/B5	580	250	300	350	M14	225	20	6	48	51.8	14	-	60
200/B5	580	300	350	400	M16	225	22	6	55	59.3	16	-	60
225/B5	623	350	400	450	M16	268	22	6	60	64.4	18	-	80
250/B5	623	450	500	550	M16	268	25	6.5	65	69.4	18	45	75

Giriş Seçenekleri / Input Options / Option d'entree

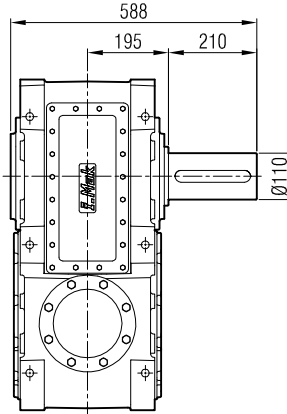




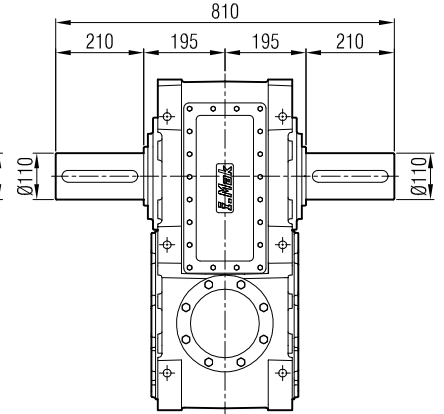
MA / MK 60_
...-SL



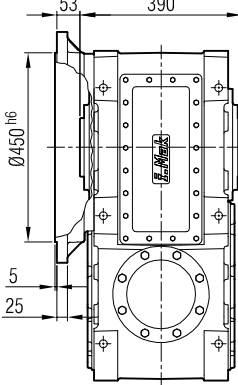
...-SR



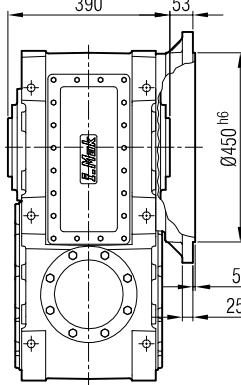
...-SD



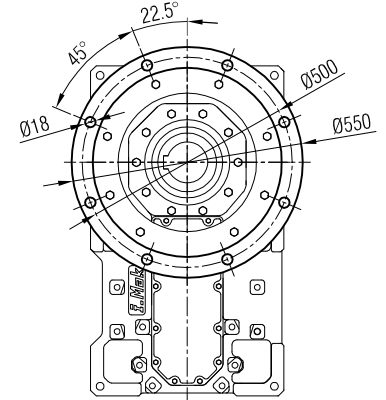
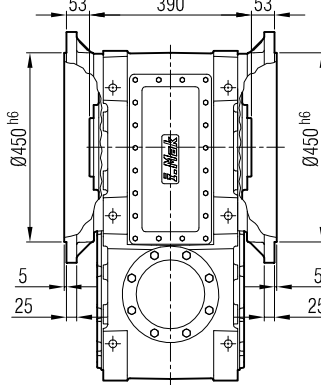
...-FL



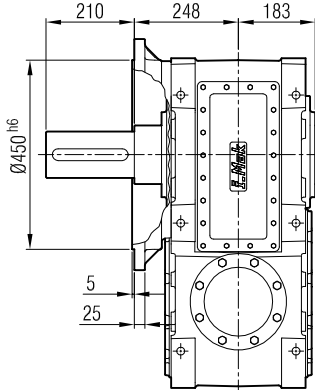
...-FR



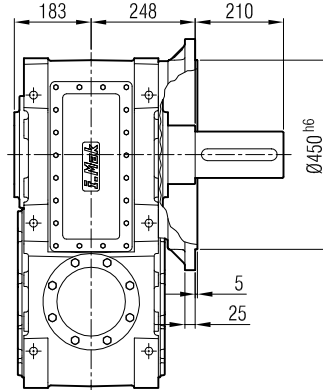
...-FD



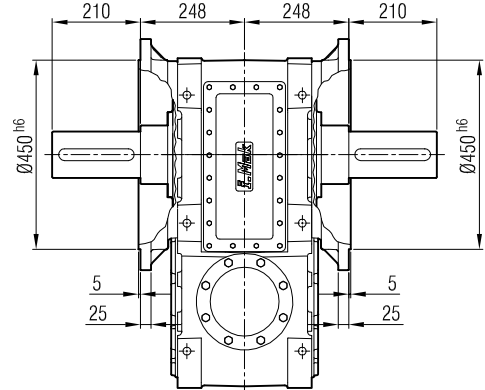
...-FL-SL



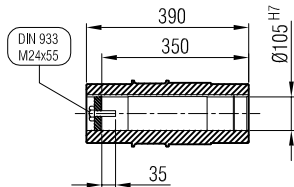
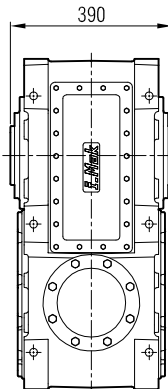
...-FR-SR



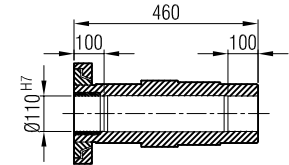
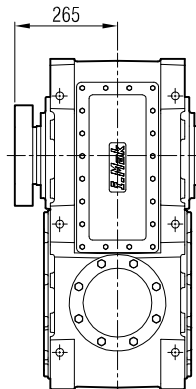
...-FD-SD



...-H



...-SDL / SDR



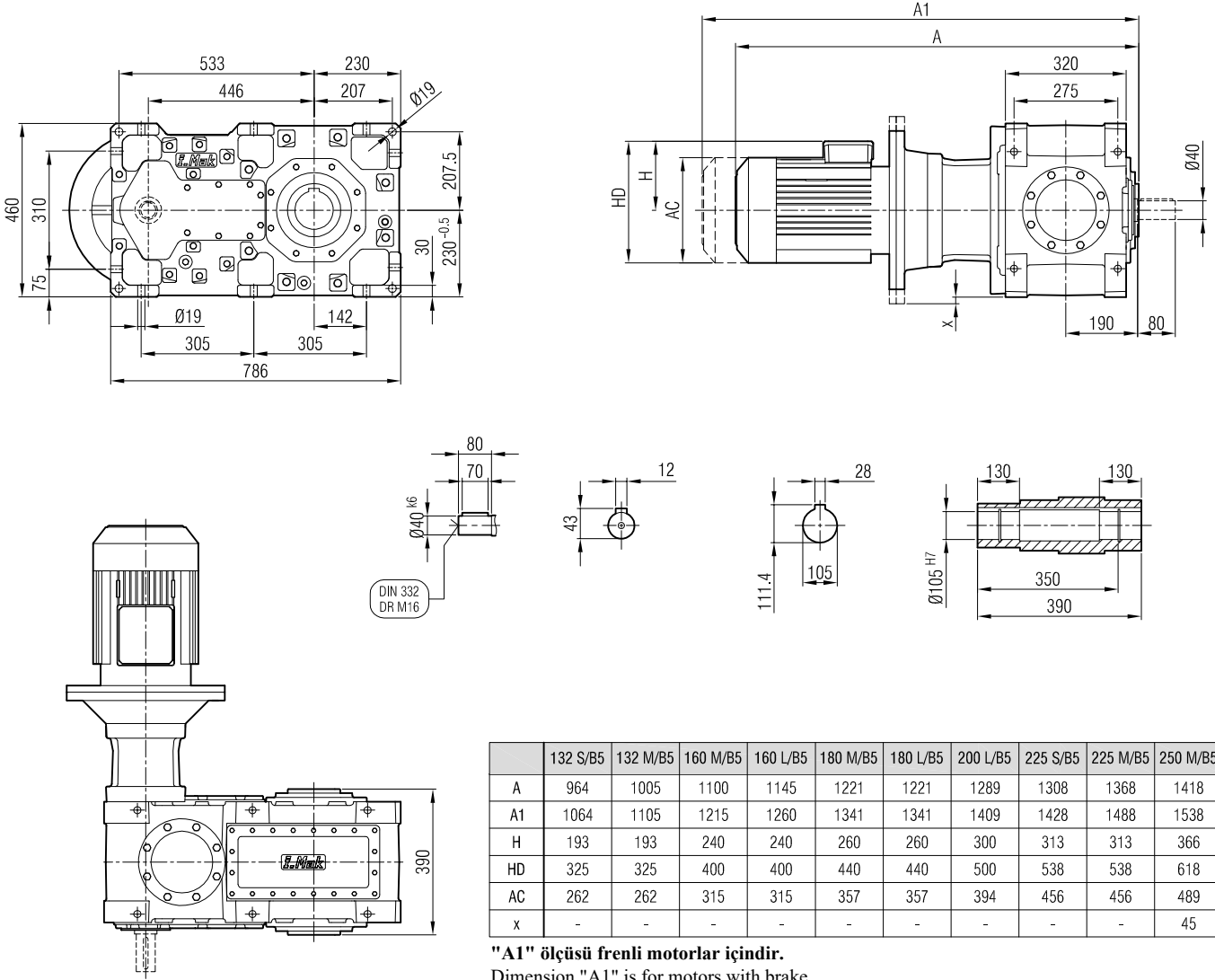
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

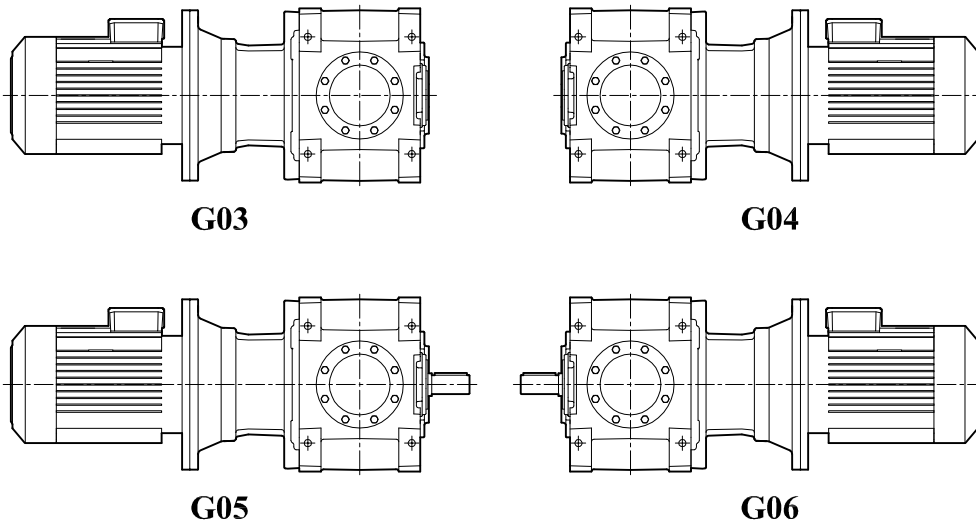


MAM 603



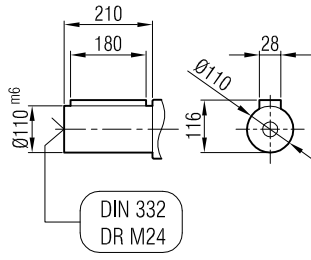
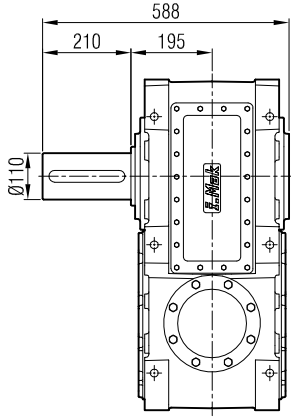
"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

Giriş Seçenekleri / Input Options / Option d'entree

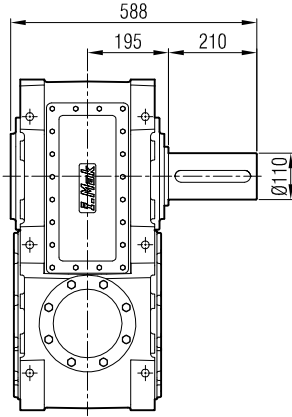




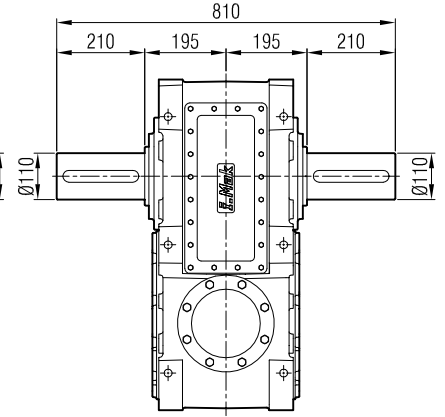
MA / MK 60_
...-SL



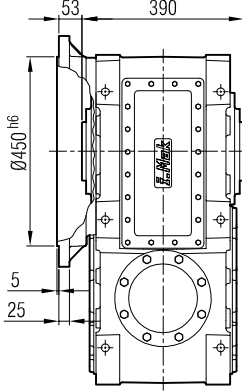
...-SR



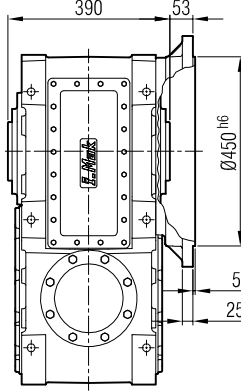
...-SD



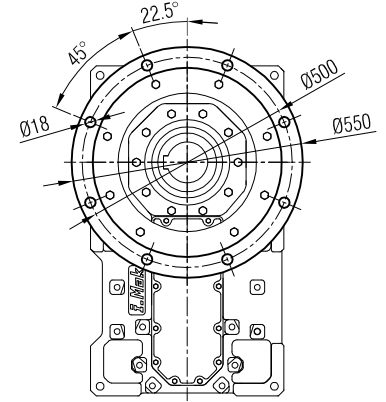
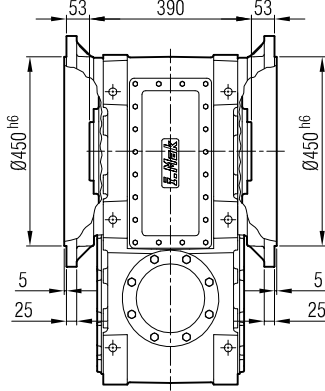
...-FL



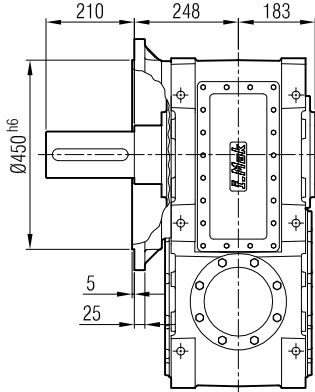
...-FR



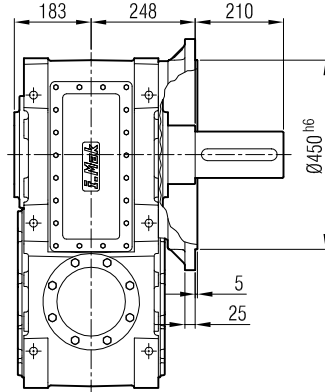
...-FD



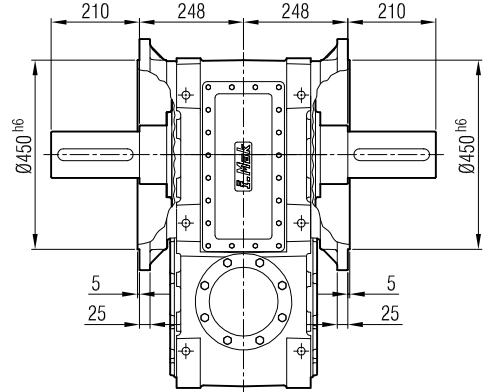
...-FL-SL



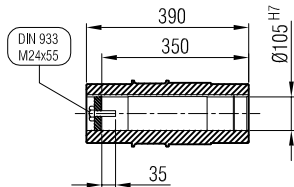
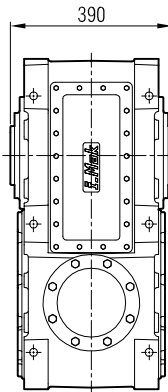
...-FR-SR



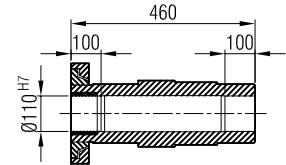
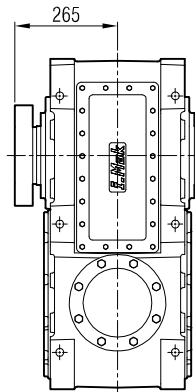
...-FD-SD



...-H



...-SDL / SDR



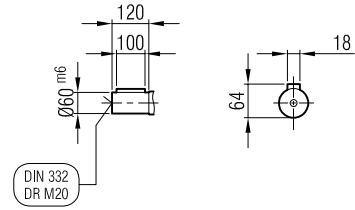
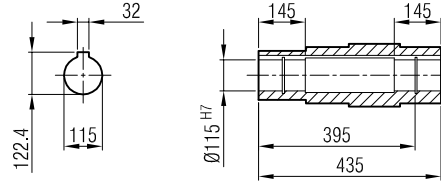
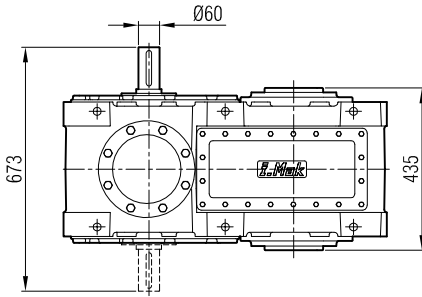
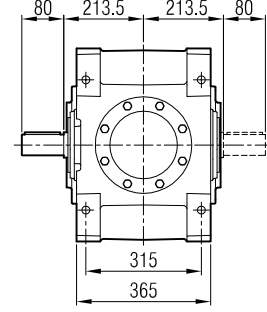
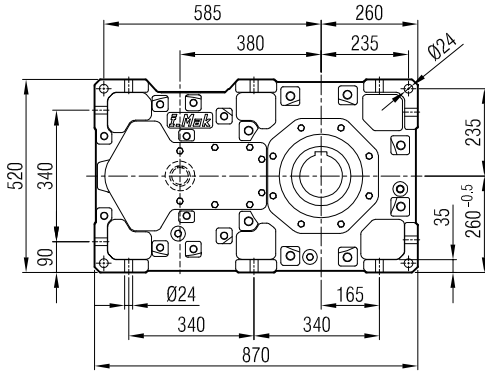
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

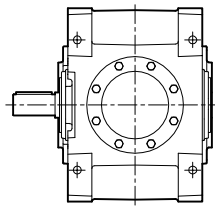
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



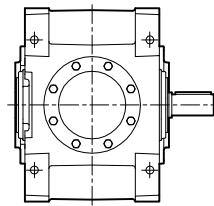
MA 702



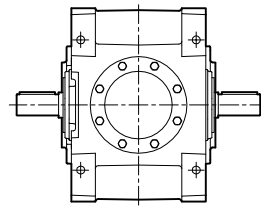
Giriş Seçenekleri / Input Options / Option d'entree



G00



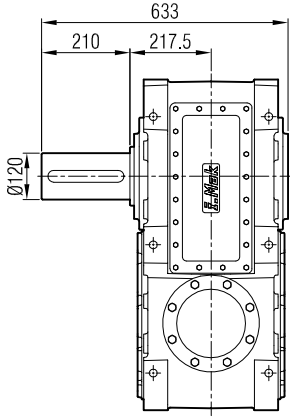
G01



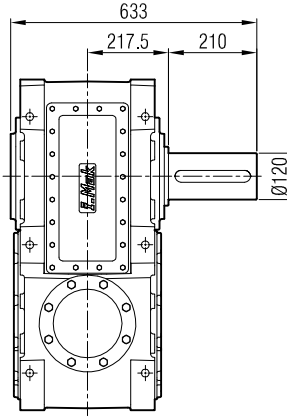
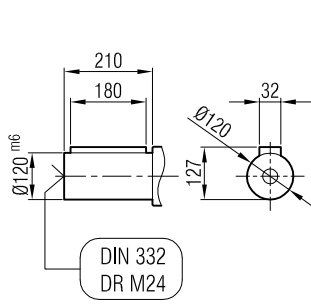
G02



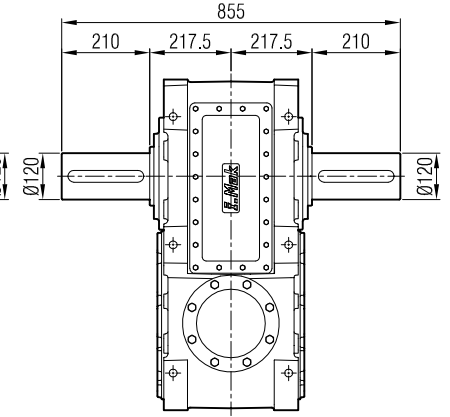
MA / MK 70_
...-SL



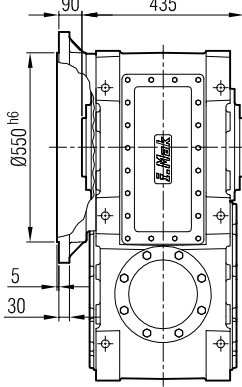
...-SR



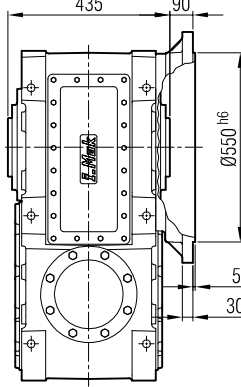
...-SD



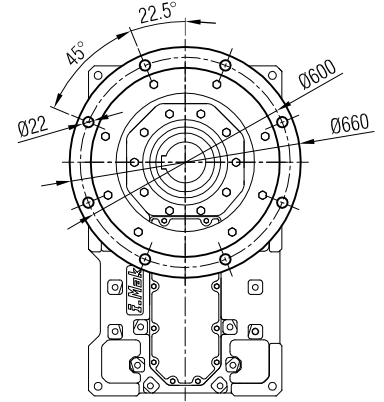
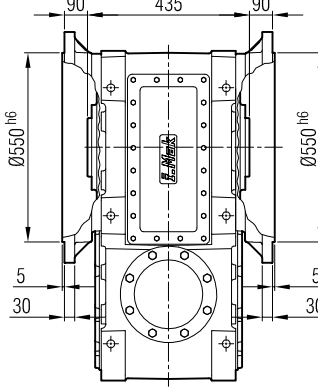
...-FL



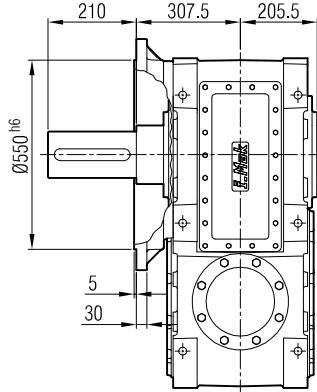
...-FR



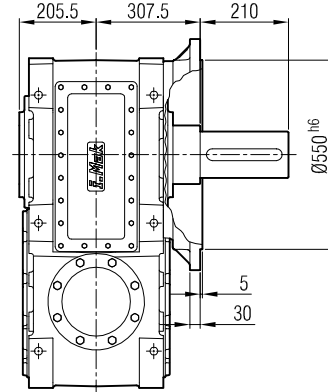
...-FD



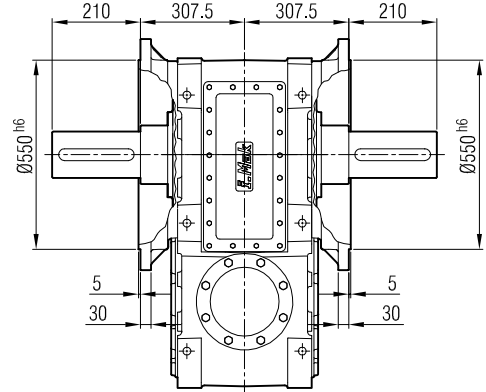
...-FL-SL



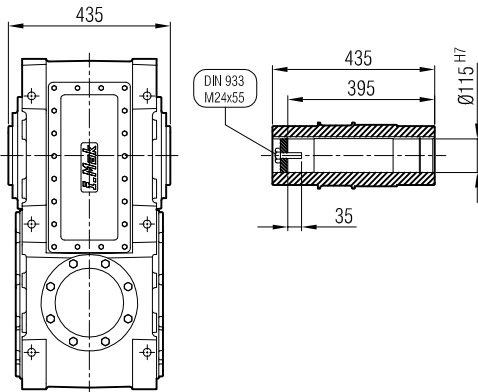
...-FR-SR



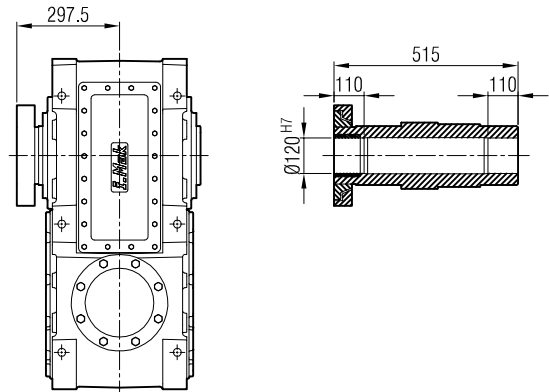
...-FD-SD



...-H



...-SDL / SDR



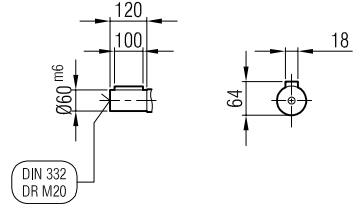
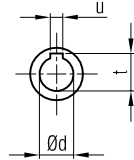
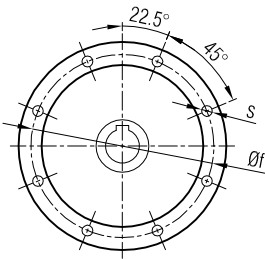
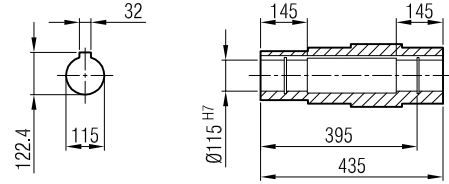
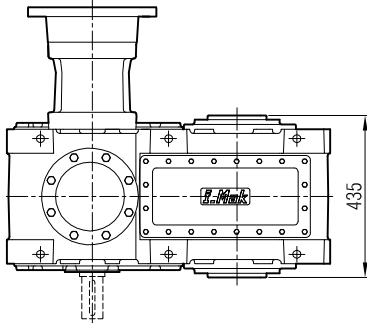
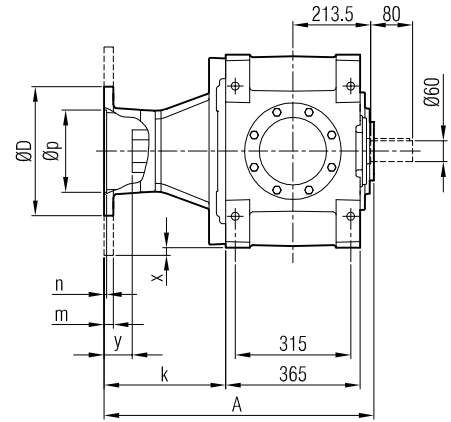
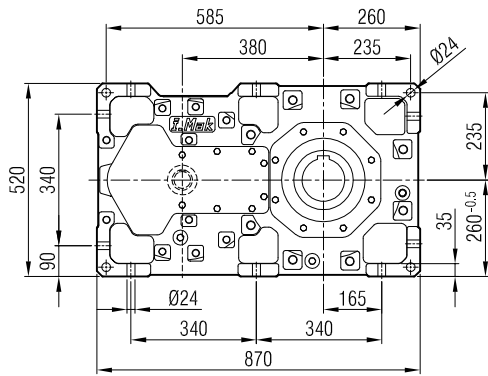
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

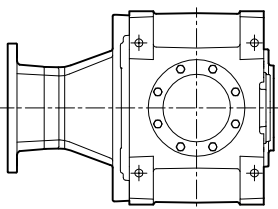


MAP 702

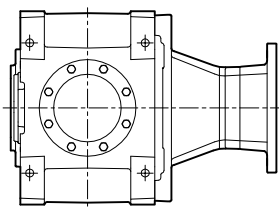


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
225/B5	717	350	400	450	M16	317	22	6	60	64.4	18	-	65
250/B5	717	450	500	550	M16	317	25	6.5	65	69.4	18	15	65
280/B5	717	450	500	550	M16	317	25	6.5	75	75.9	20	15	65
315/B5	747	550	600	660	M24	347	30	7	85	90.4	22	70	90

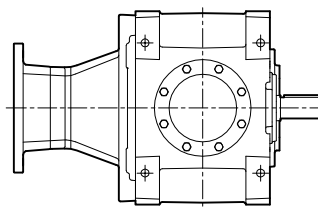
Giriş Seçenekleri / Input Options / Option d'entree



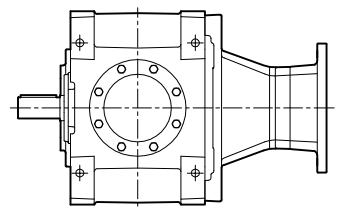
G03



G04



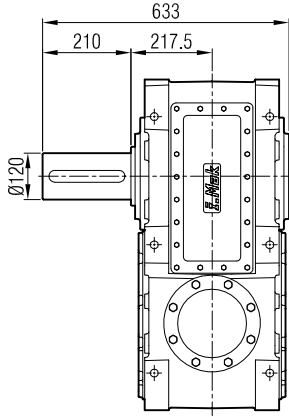
G05



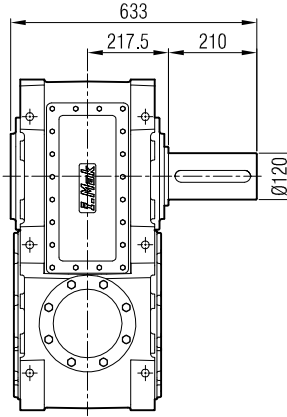
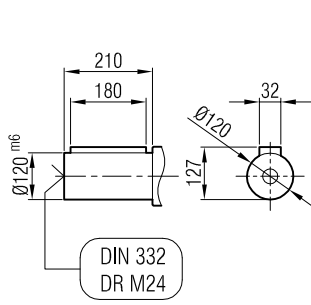
G06



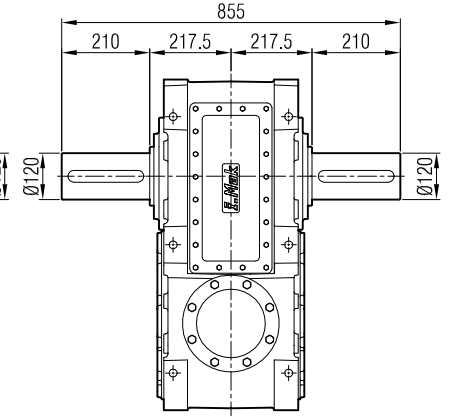
MA / MK 70_
...-SL



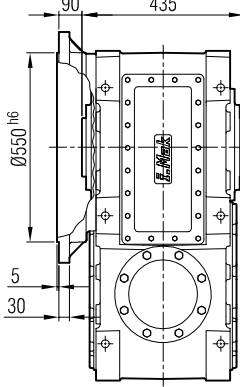
...-SR



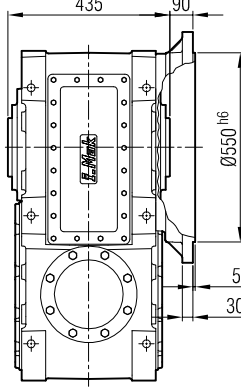
...-SD



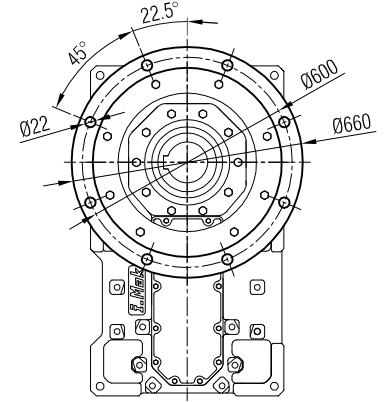
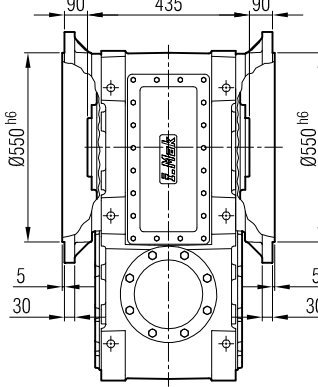
...-FL



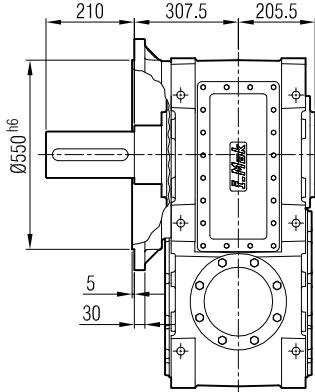
...-FR



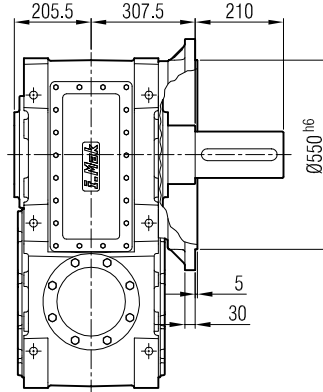
...-FD



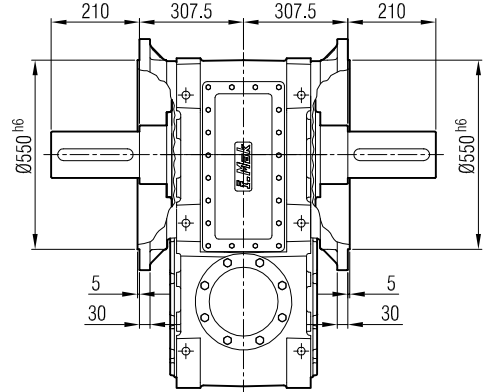
...-FL-SL



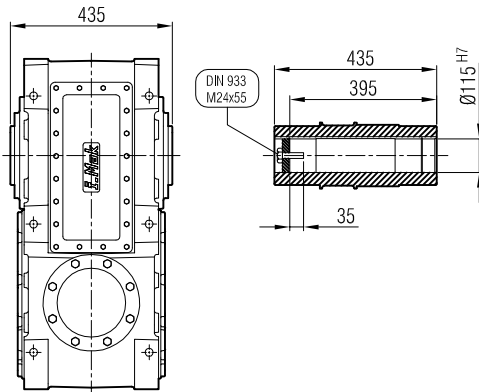
...-FR-SR



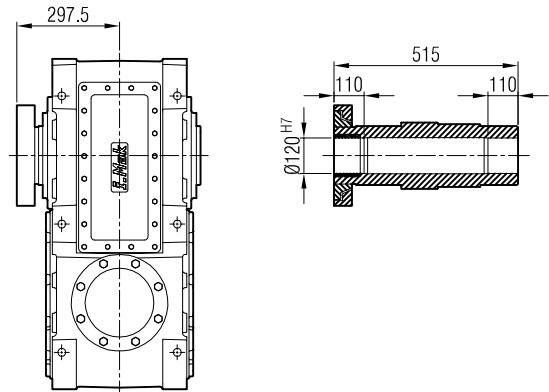
...-FD-SD



...-H



...-SDL / SDR



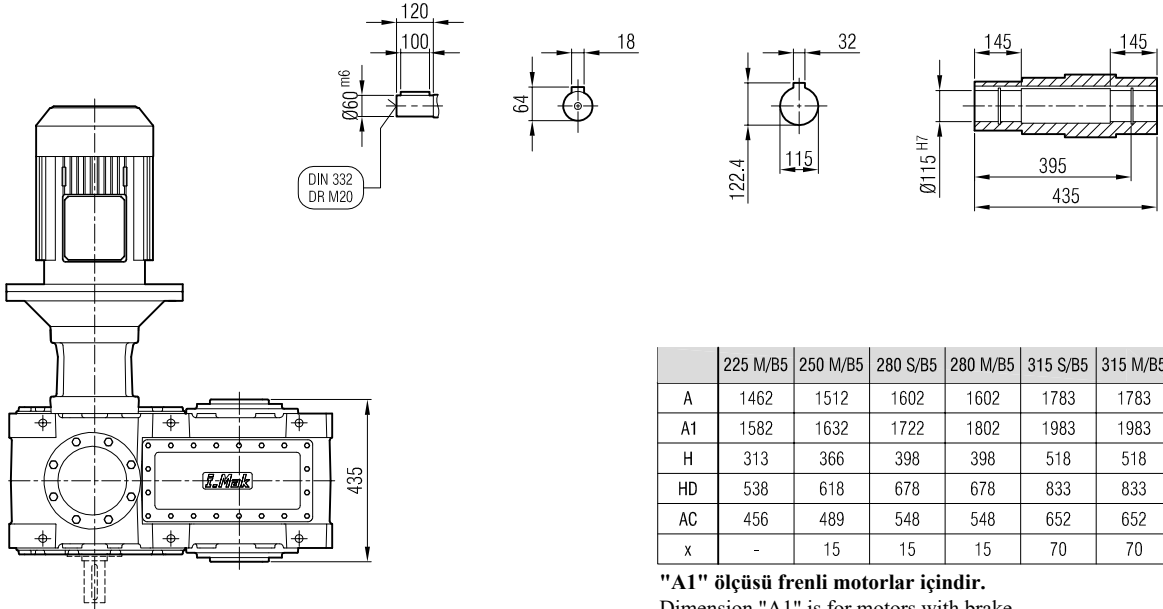
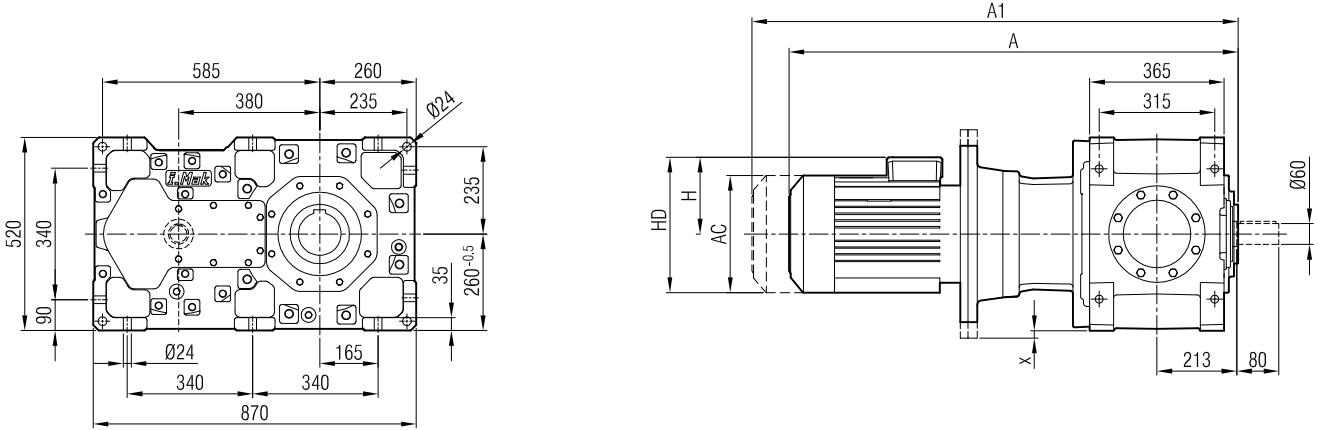
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

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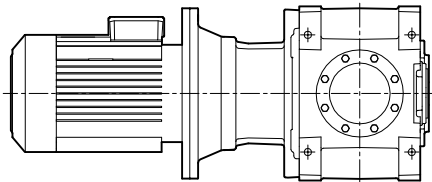
MAM 702



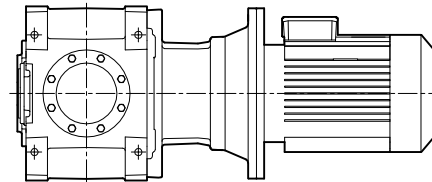
	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5	315 L/B5
A	1462	1512	1602	1602	1783	1783	1894
A1	1582	1632	1722	1802	1983	1983	2094
H	313	366	398	398	518	518	518
HD	538	618	678	678	833	833	833
AC	456	489	548	548	652	652	652
x	-	15	15	15	70	70	70

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspondent aux moteurs équipés de freins.

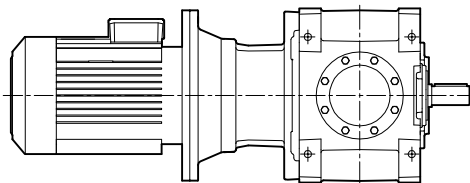
Giriş Seçenekleri / Input Options / Option d'entree



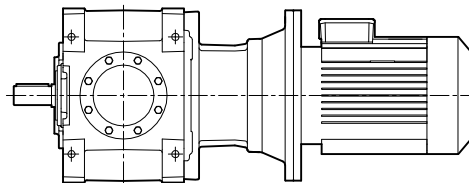
G03



G04



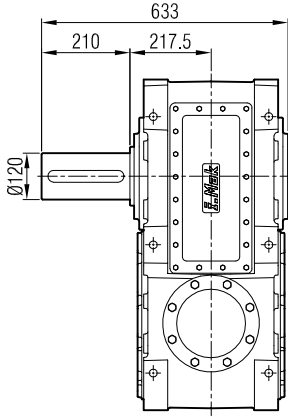
G05



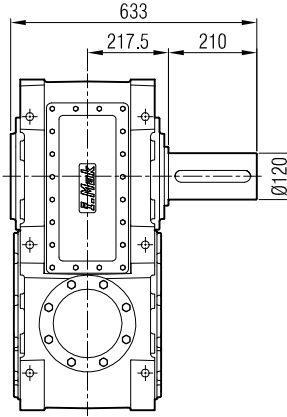
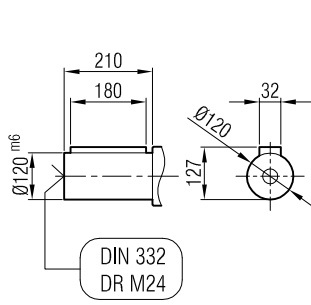
G06



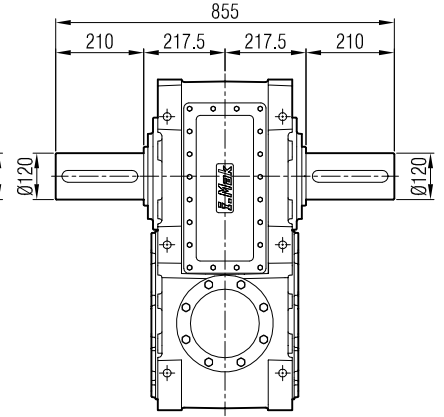
MA / MK 70_
...-SL



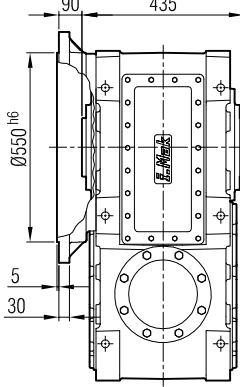
...-SR



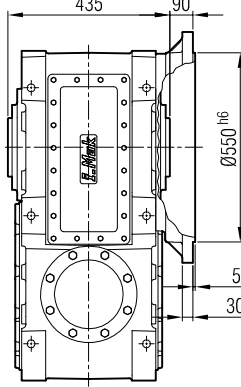
...-SD



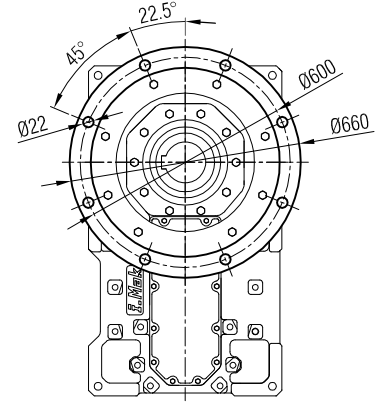
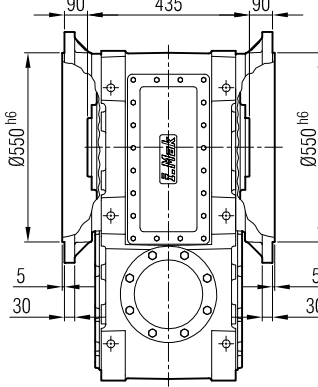
...-FL



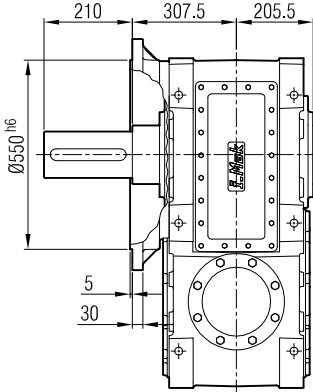
...-FR



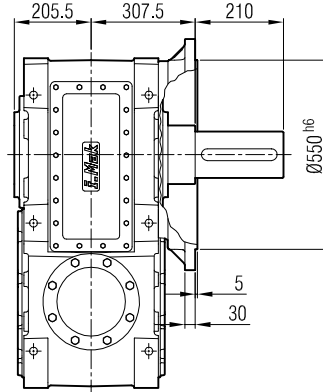
...-FD



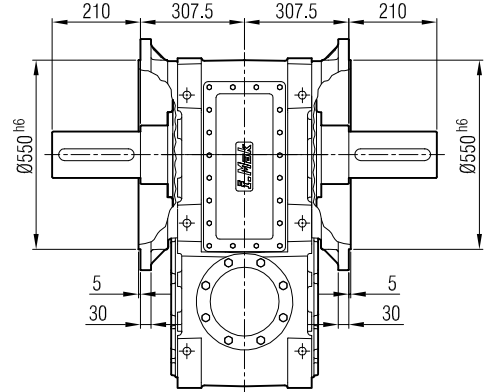
...-FL-SL



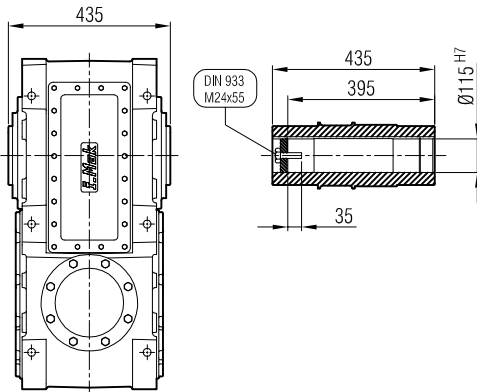
...-FR-SR



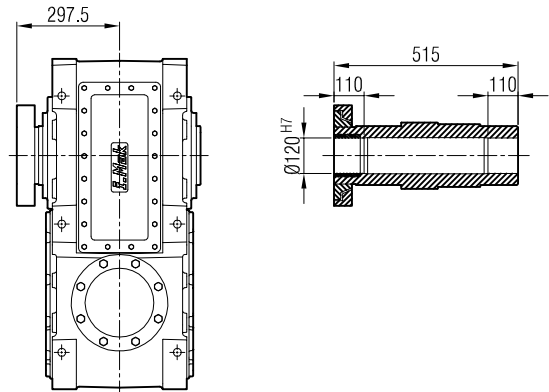
...-FD-SD



...-H



...-SDL / SDR



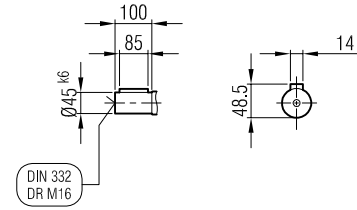
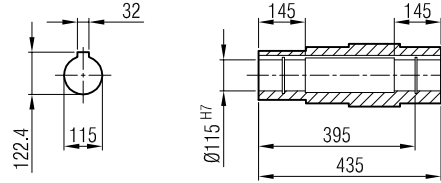
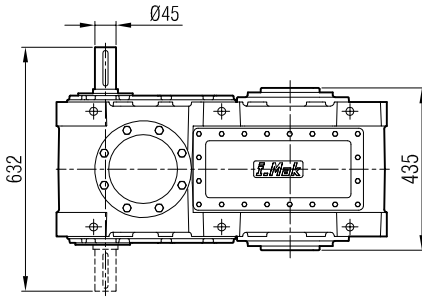
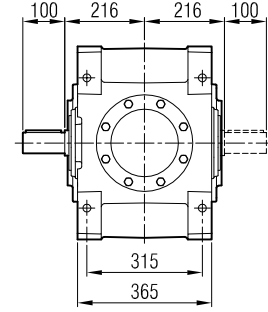
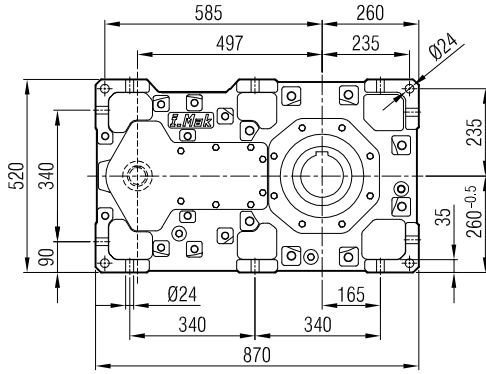
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

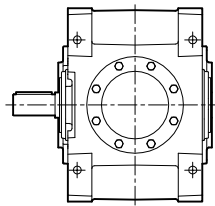
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



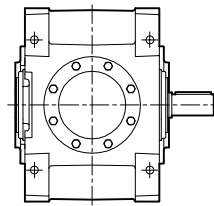
MA 703



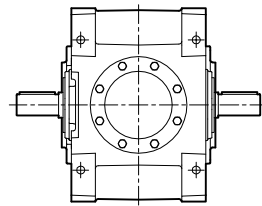
Giriş Seçenekleri / Input Options / Option d'entree



G00



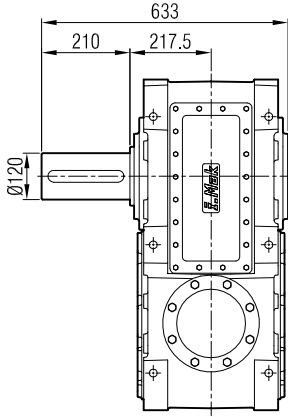
G01



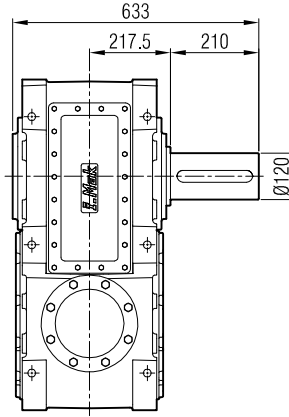
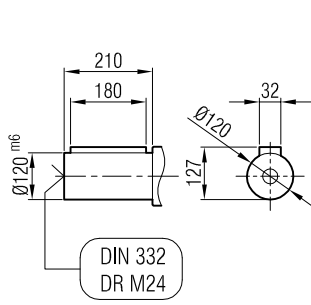
G02



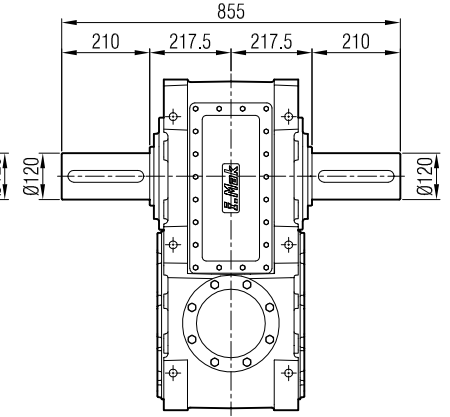
MA / MK 70_
...-SL



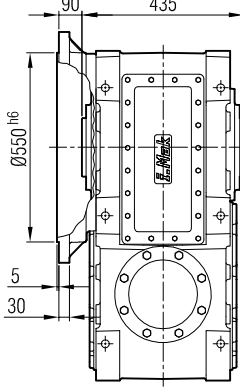
...-SR



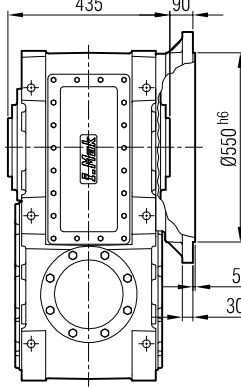
...-SD



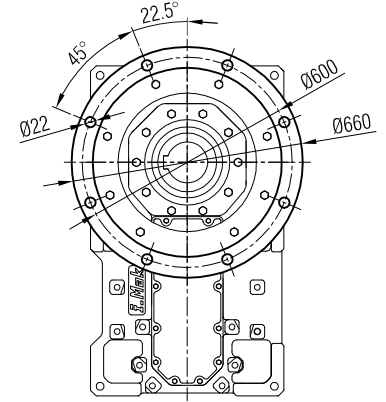
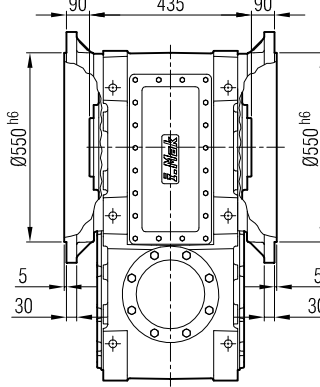
...-FL



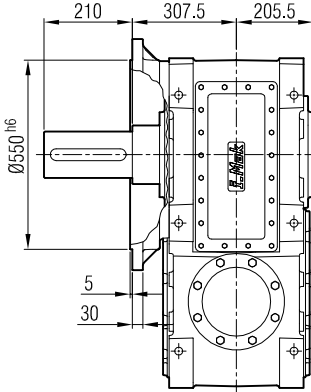
...-FR



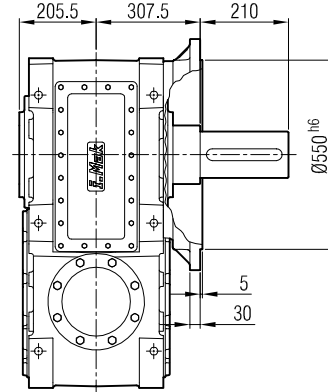
...-FD



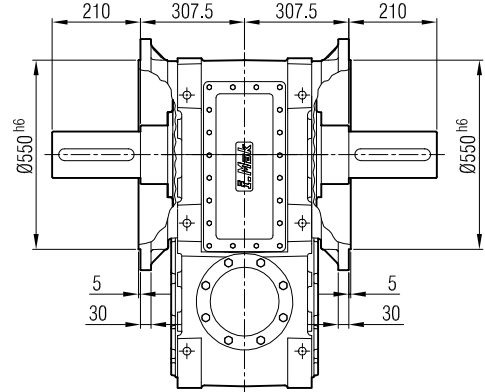
...-FL-SL



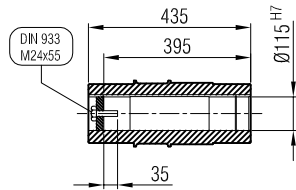
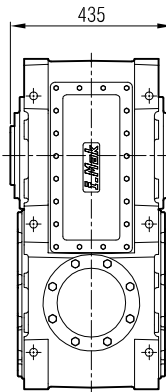
...-FR-SR



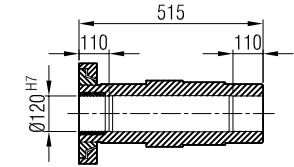
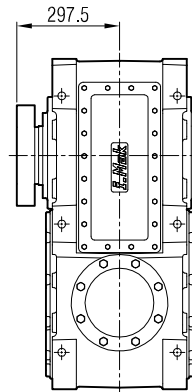
...-FD-SD



...-H



...-SDL / SDR



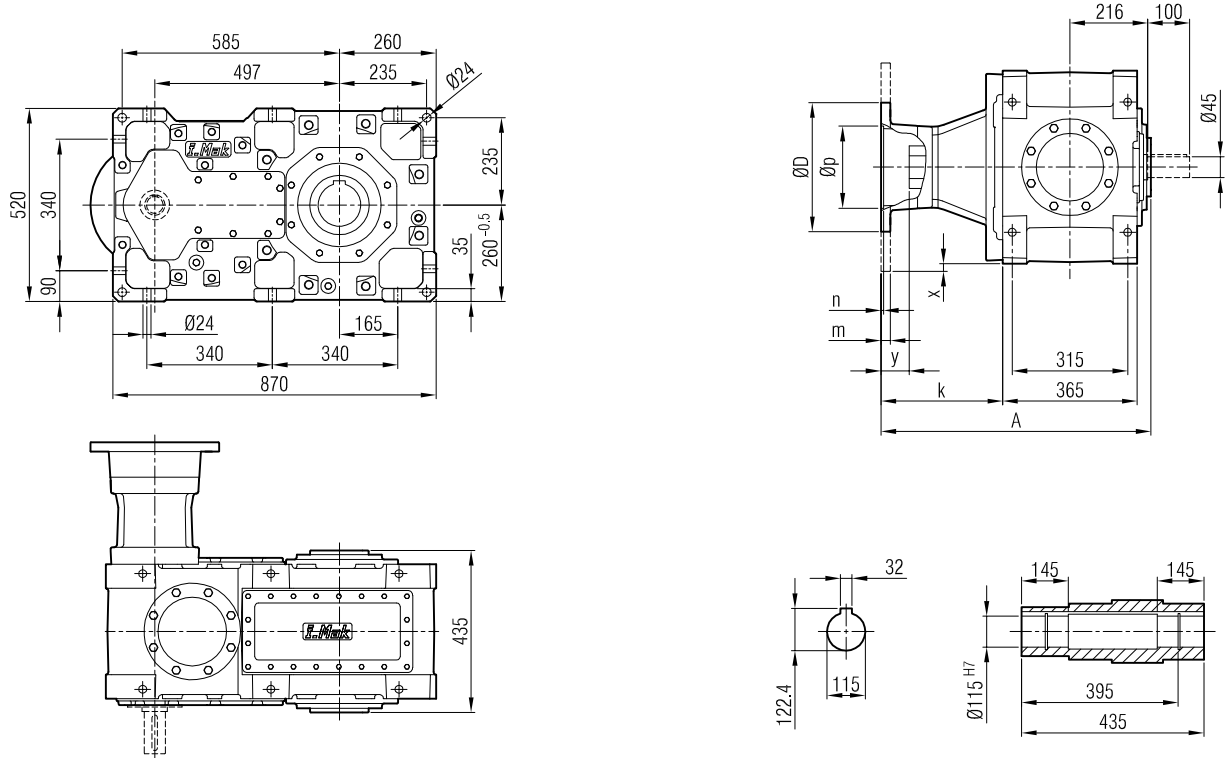
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

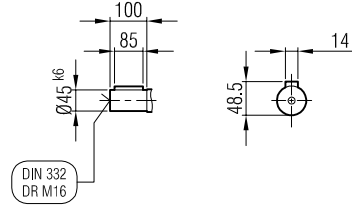
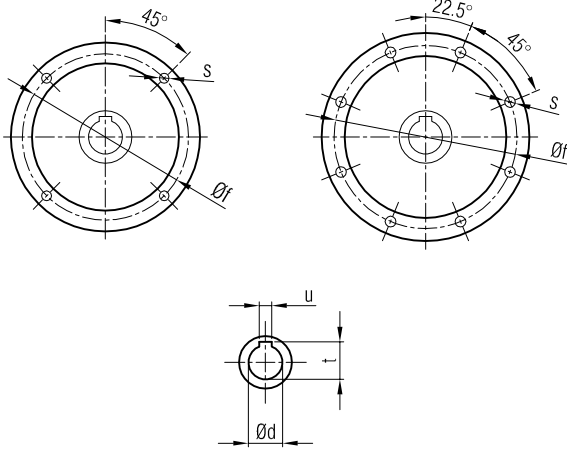


MAP 703



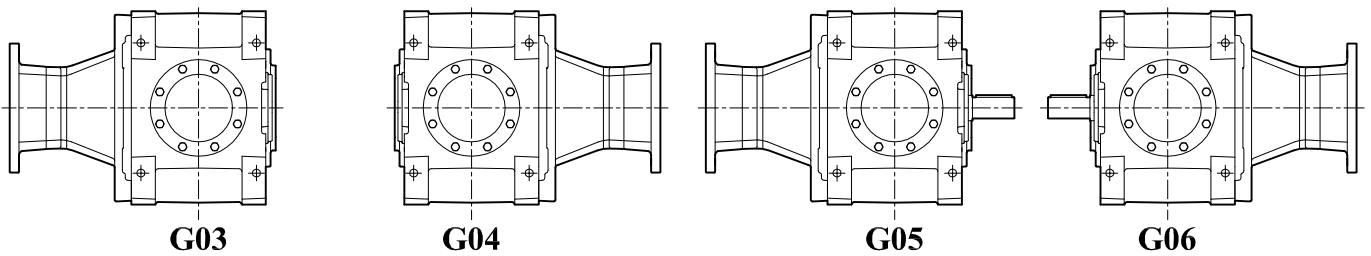
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ



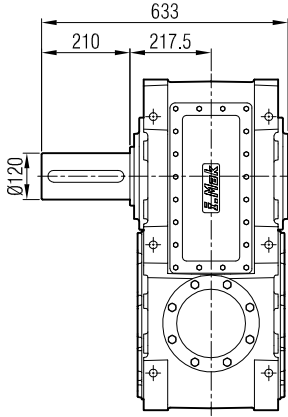
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	647	250	300	350	M14	247	20	6	42	45.3	12	-	50
180/B5	647	250	300	350	M14	247	20	6	48	51.8	14	-	50
200/B5	647	300	350	400	M16	247	22	6	55	59.3	16	-	50
225/B5	690	350	400	450	M16	290	22	6	60	64.4	18	-	79
250/B5	690	450	500	550	M16	290	25	6.5	65	69.4	18	15	75
280/B5	690	450	500	550	M16	290	25	6.5	75	79.9	20	15	65

Giriş Seçenekleri / Input Options / Option d'entree

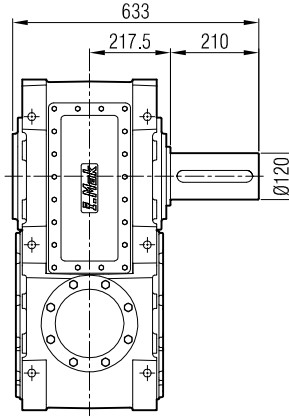
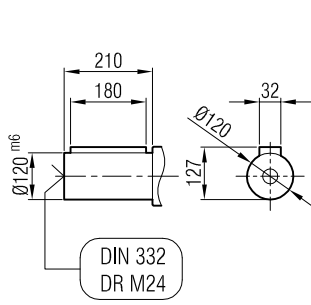




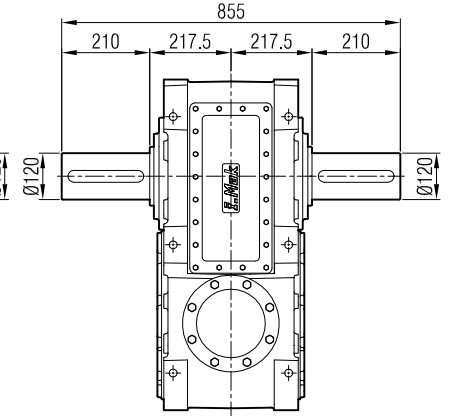
MA / MK 70_
...-SL



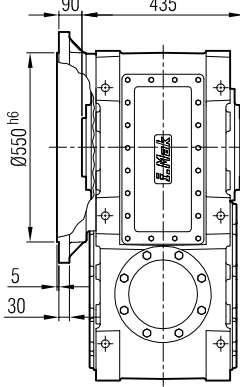
...-SR



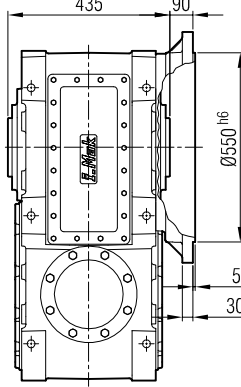
...-SD



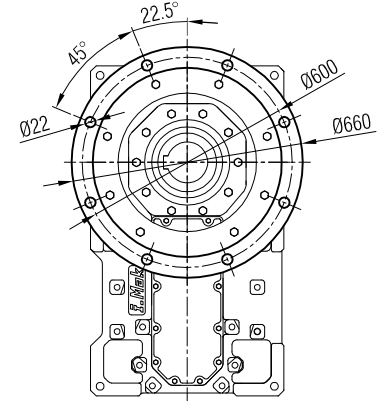
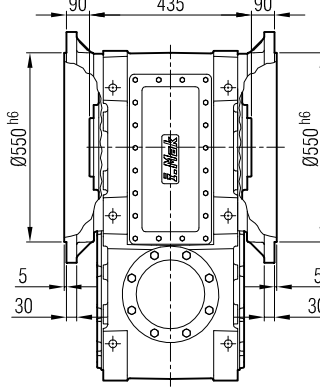
...-FL



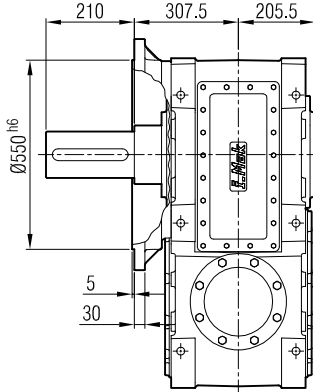
...-FR



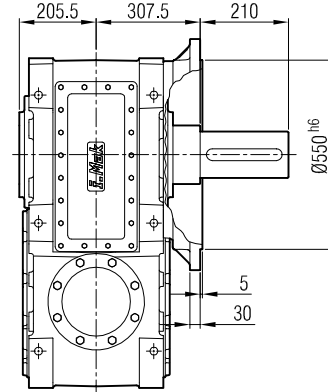
...-FD



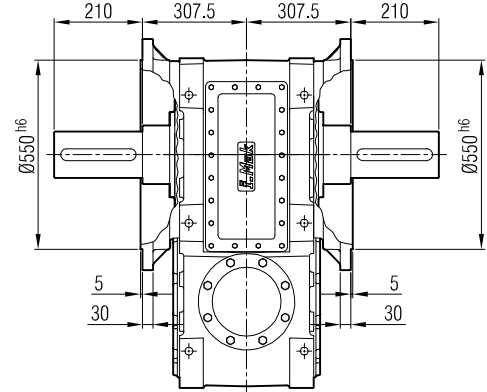
...-FL-SL



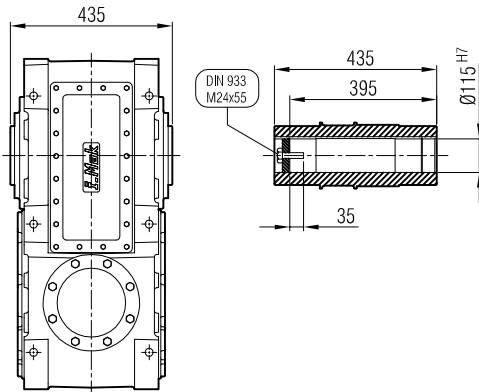
...-FR-SR



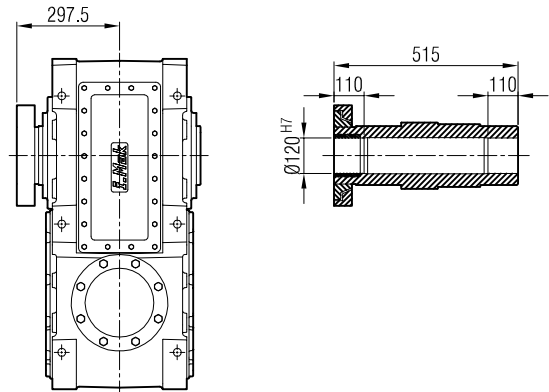
...-FD-SD



...-H



...-SDL / SDR



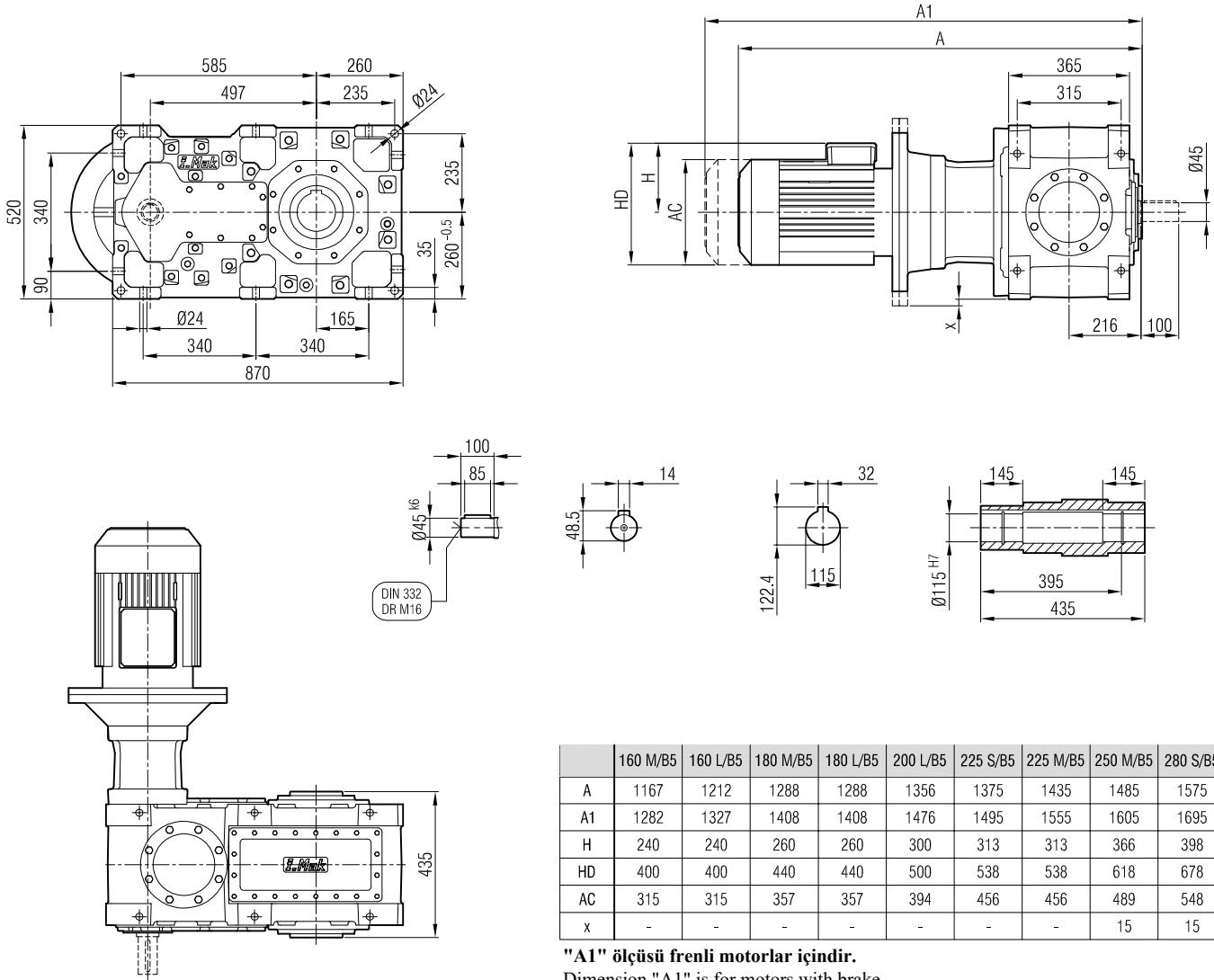
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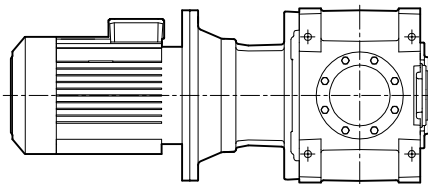
MAM 703



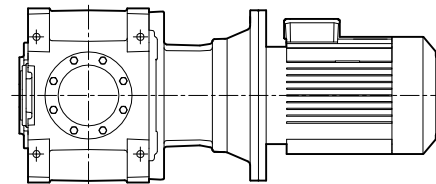
	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5
A	1167	1212	1288	1288	1356	1375	1435	1485	1575
A1	1282	1327	1408	1408	1476	1495	1555	1605	1695
H	240	240	260	260	300	313	313	366	398
HD	400	400	440	440	500	538	538	618	678
AC	315	315	357	357	394	456	456	489	548
x	-	-	-	-	-	-	-	15	15

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspondent aux moteurs équipés de freins.

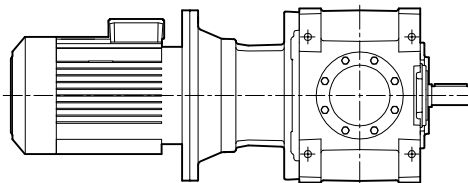
Giriş Seçenekleri / Input Options / Option d'entree



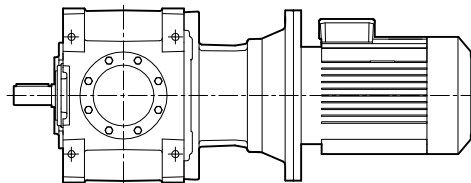
G03



G04



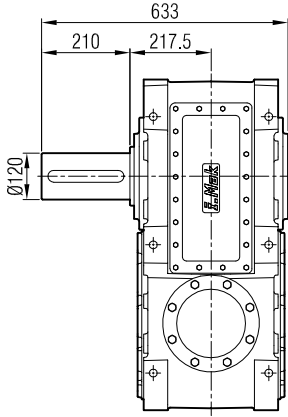
G05



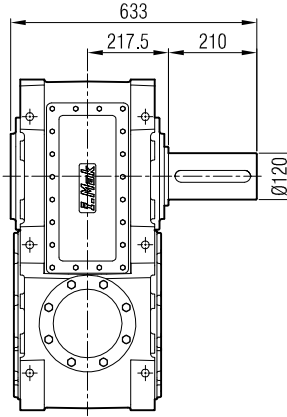
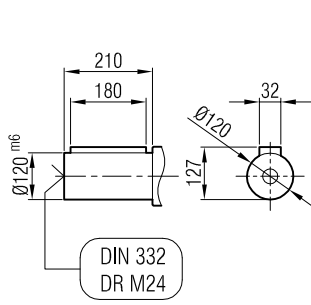
G06



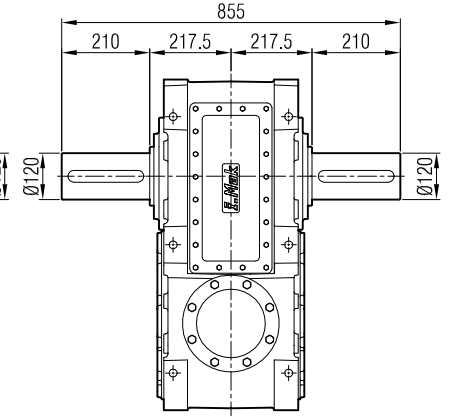
MA / MK 70_
...-SL



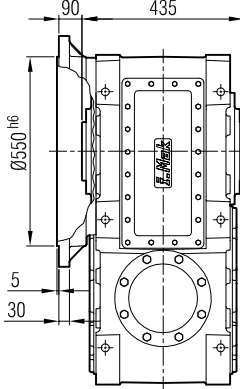
...-SR



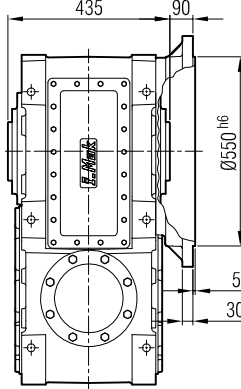
...-SD



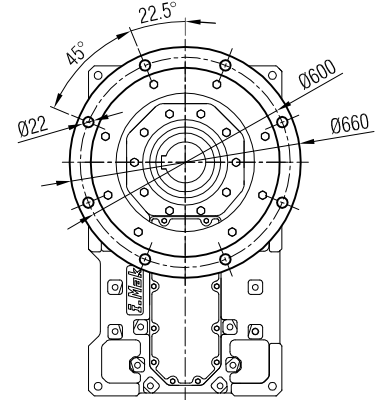
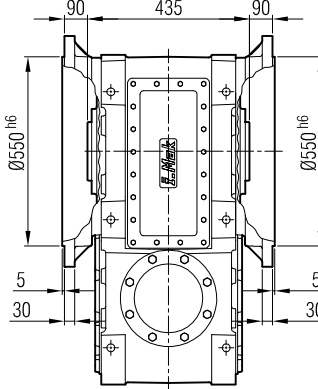
...-FL



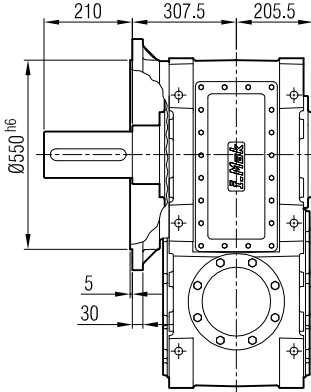
...-FR



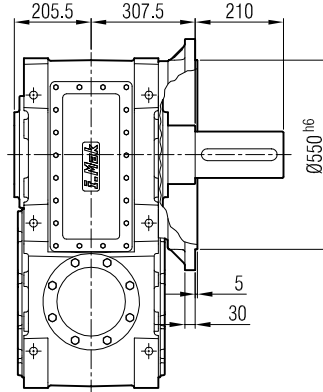
...-FD



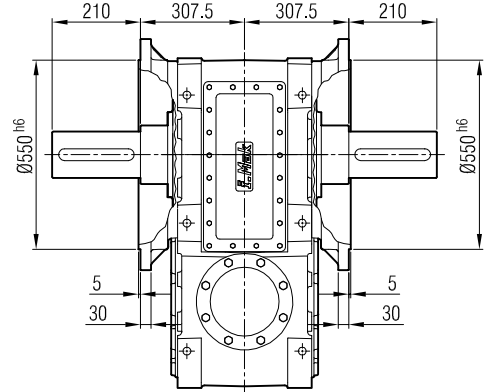
...-FL-SL



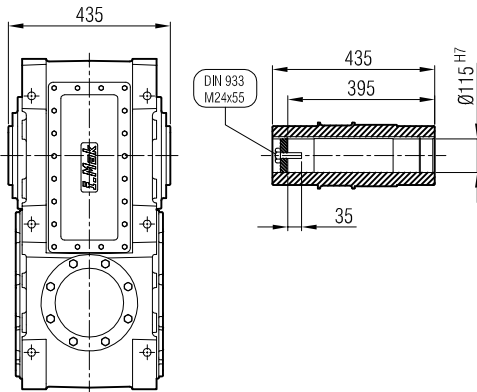
...-FR-SR



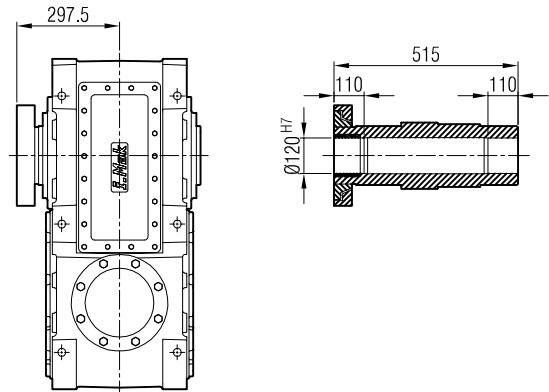
...-FD-SD



...-H



...-SDL / SDR



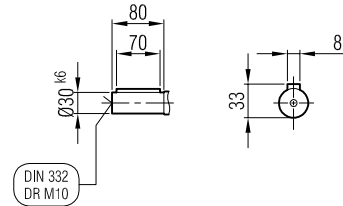
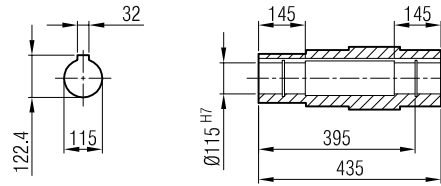
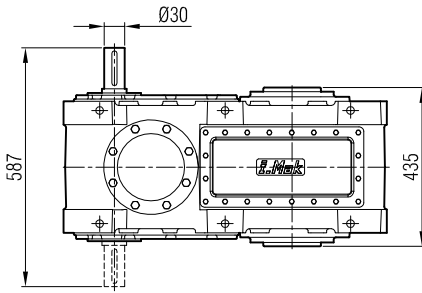
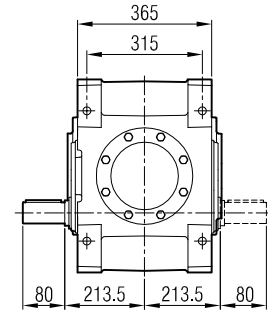
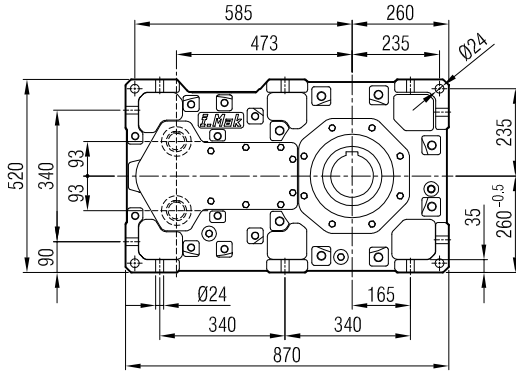
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

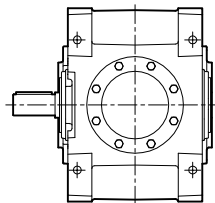
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



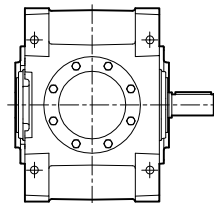
MA 704



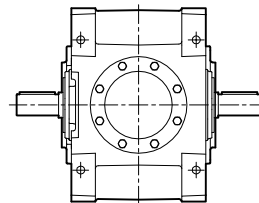
Giriş Seçenekleri / Input Options / Option d'entree



G00



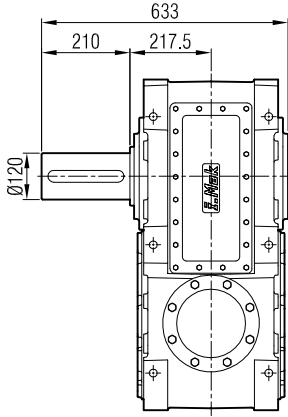
G01



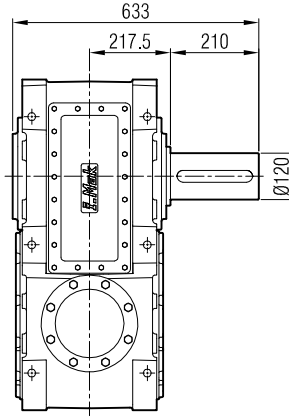
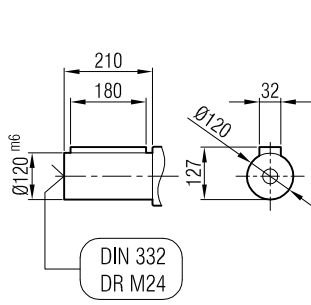
G02



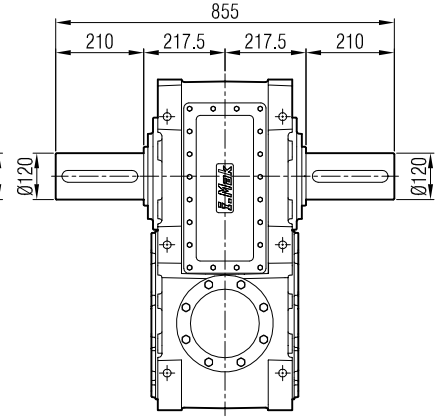
MA / MK 70_
...-SL



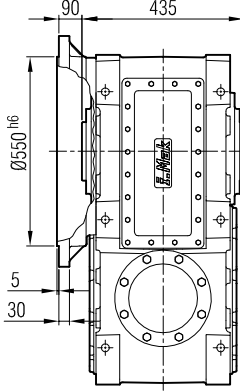
...-SR



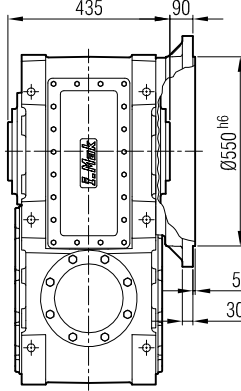
...-SD



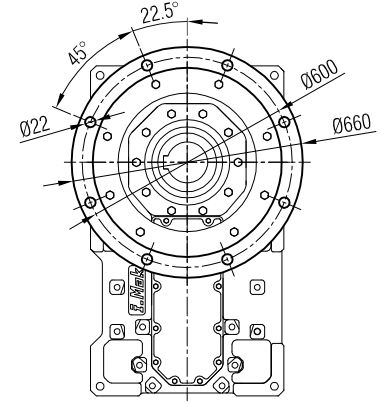
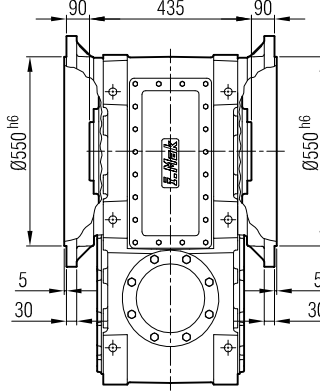
...-FL



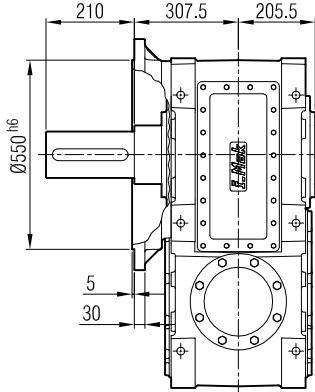
...-FR



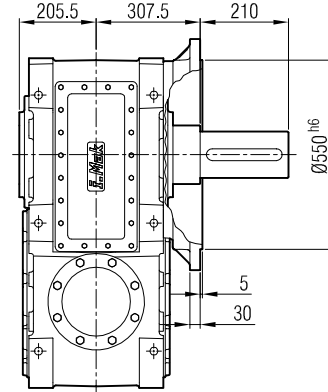
...-FD



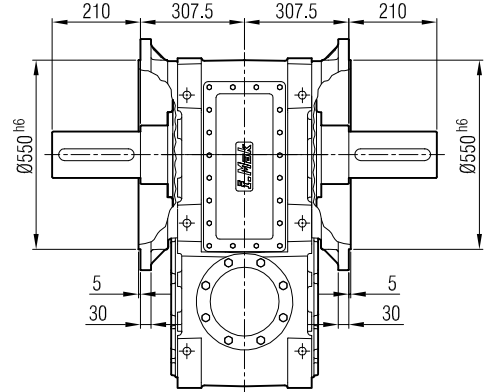
...-FL-SL



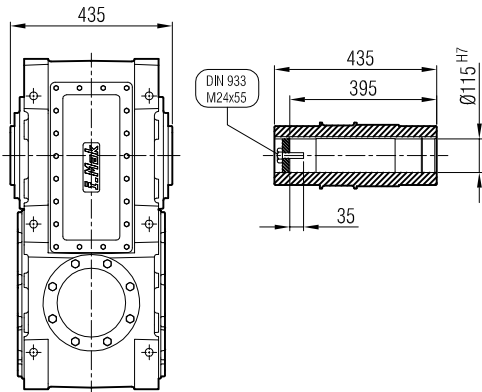
...-FR-SR



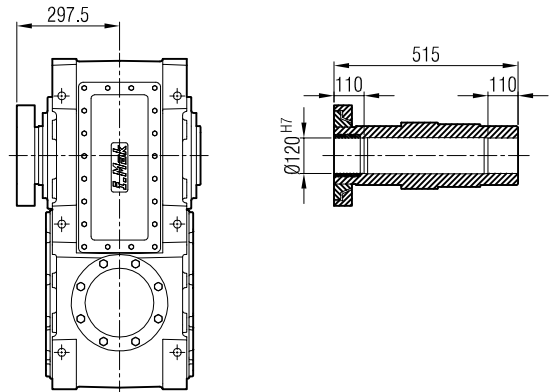
...-FD-SD



...-H



...-SDL / SDR



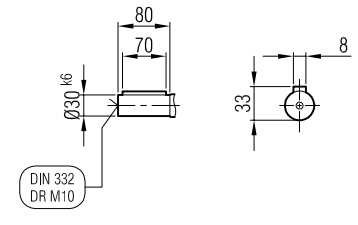
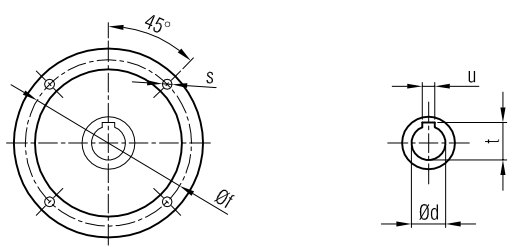
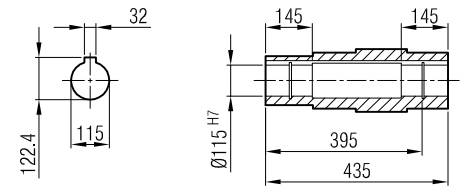
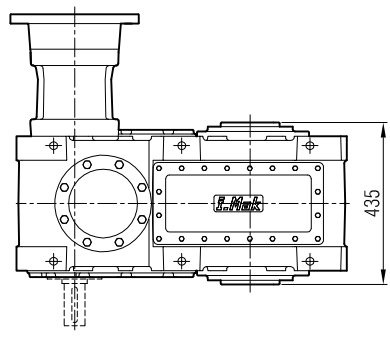
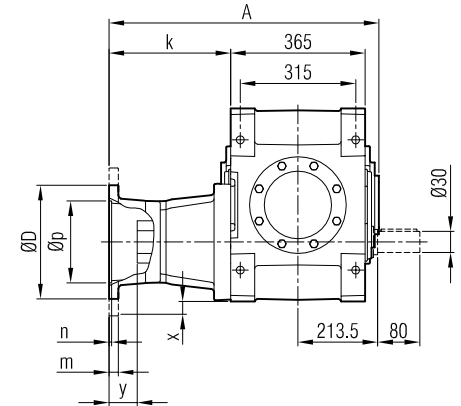
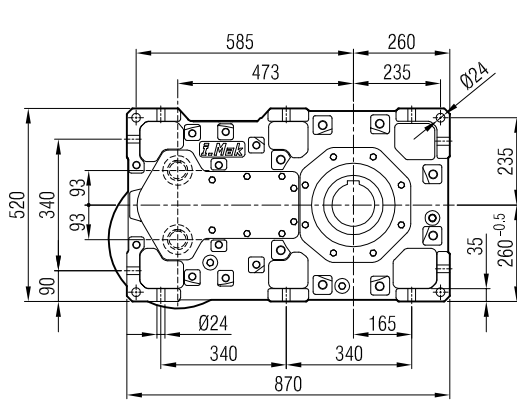
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

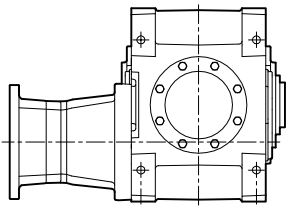


MAP 704

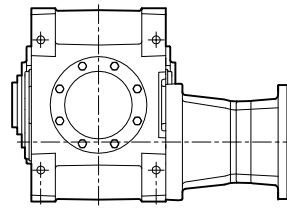


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
100/B5	588	180	215	250	M12	188	15	5	28	31.3	8	-	31
112/B5	588	180	215	250	M12	188	15	5	28	31.3	8	-	31
132/B5	608	230	265	300	M12	208	18	6	38	41.3	10	-	45
160/B5	625	250	300	350	M14	225	20	6	42	45.3	12	8	70
180/B5	625	250	300	350	M14	225	20	6	48	51.8	14	8	60

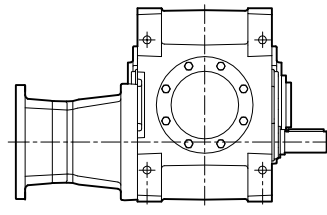
Giriş Seçenekleri / Input Options / Option d'entree



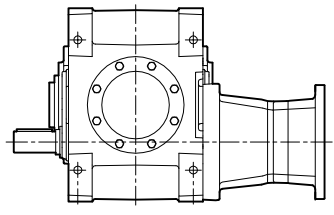
G03



G04



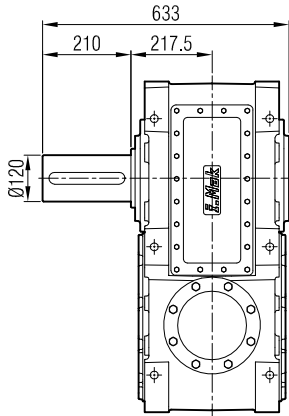
G05



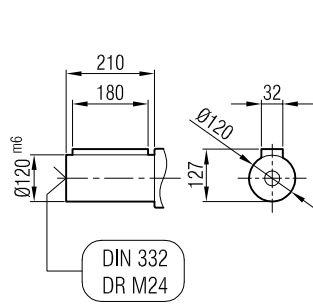
G06



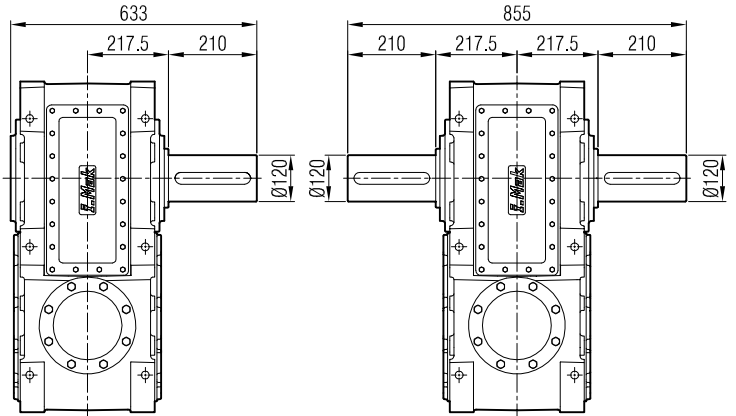
MA / MK 70_
...-SL



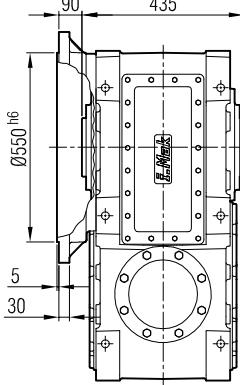
...-SR



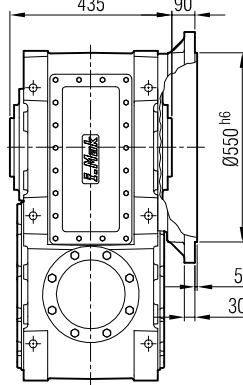
...-SD



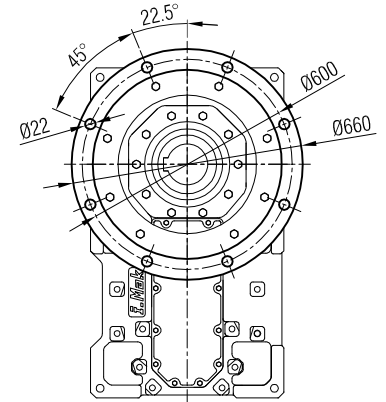
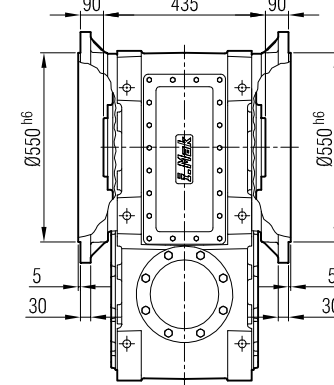
...-FL



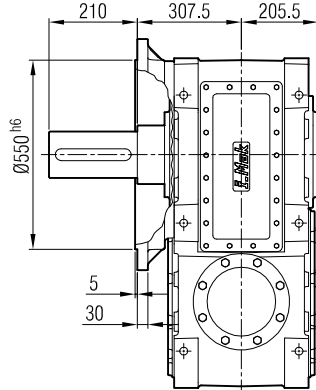
...-FR



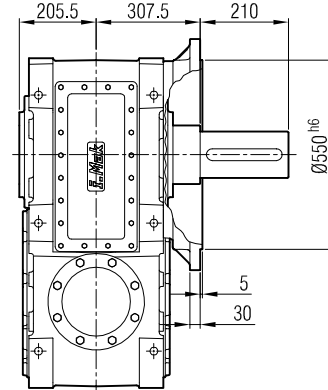
...-FD



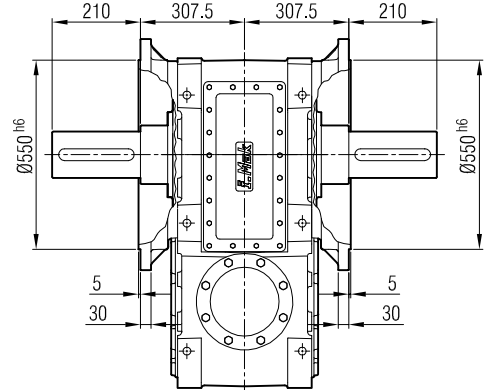
...-FL-SL



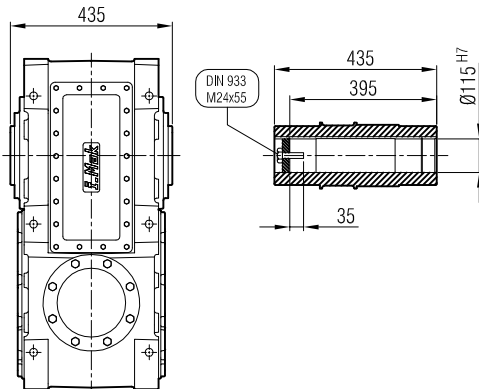
...-FR-SR



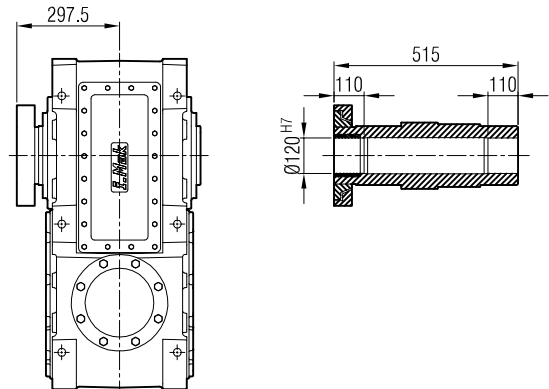
...-FD-SD



...-H



...-SDL / SDR



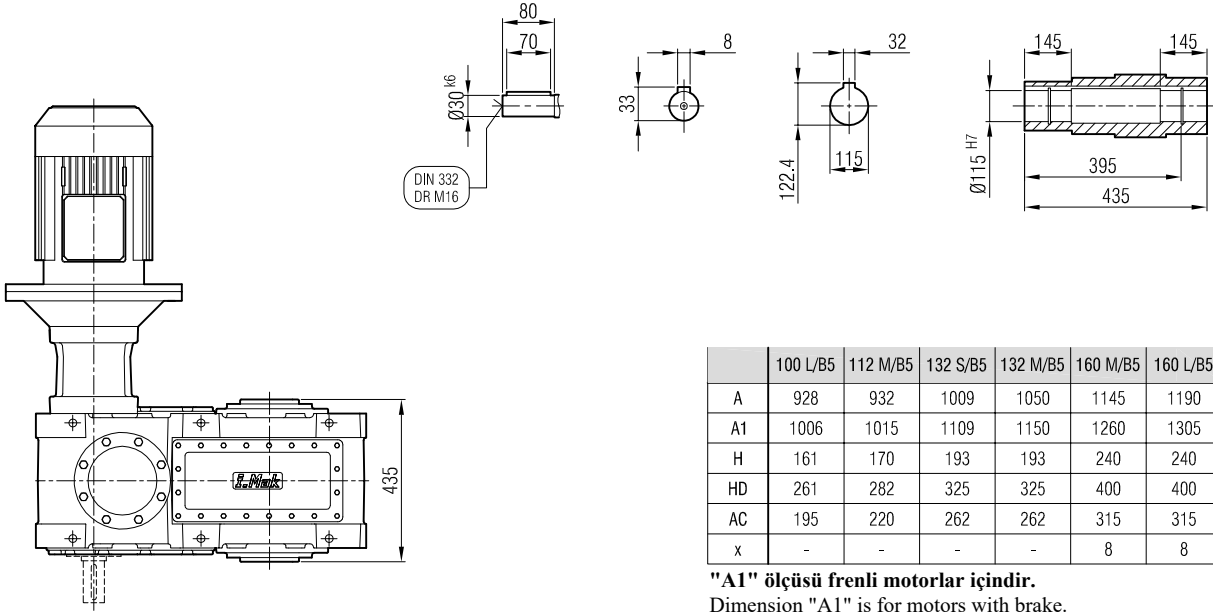
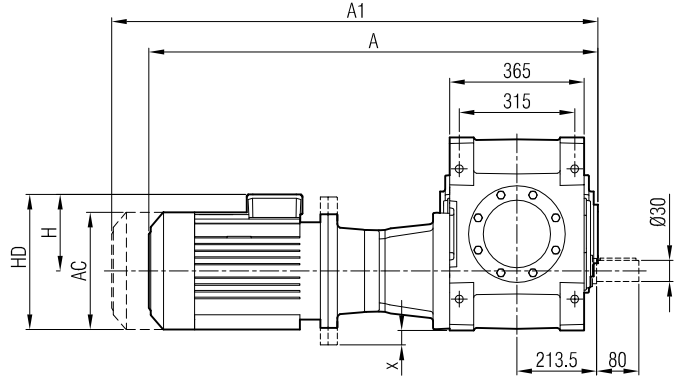
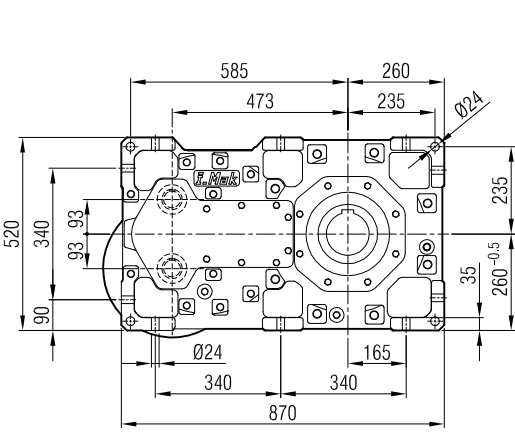
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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MAM 704



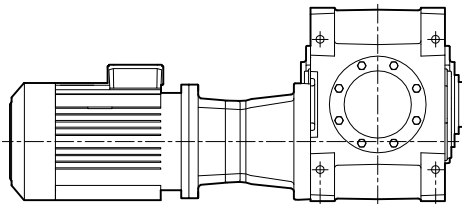
	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5
A	928	932	1009	1050	1145	1190	1266
A1	1006	1015	1109	1150	1260	1305	1386
H	161	170	193	193	240	240	260
HD	261	282	325	325	400	400	440
AC	195	220	262	262	315	315	357
x	-	-	-	-	8	8	12

"A1" ölçüsü frenli motorlar içindir.

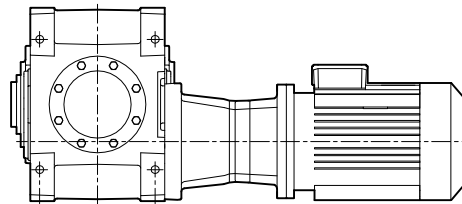
Dimension "A1" is for motors with brake.

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

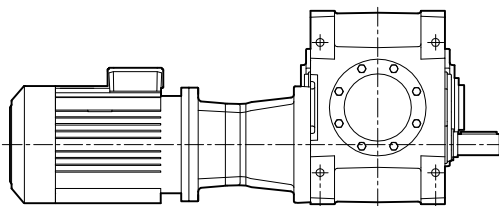
Giriş Seçenekleri / Input Options / Option d'entree



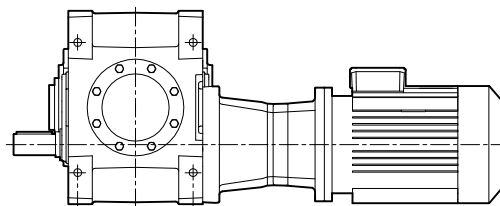
G03



G04



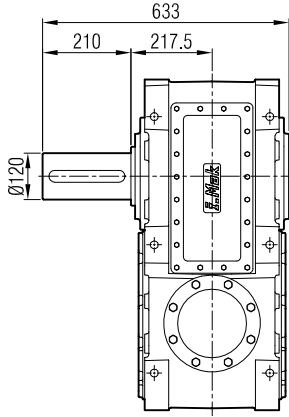
G05



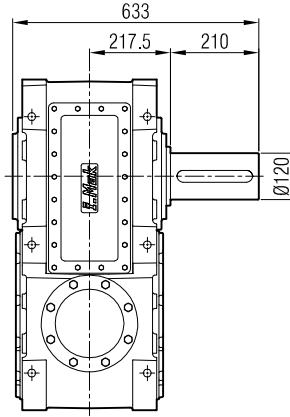
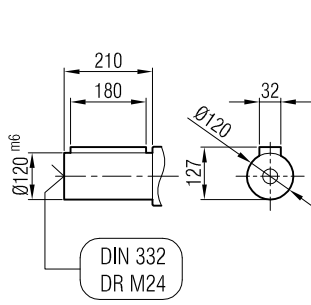
G06



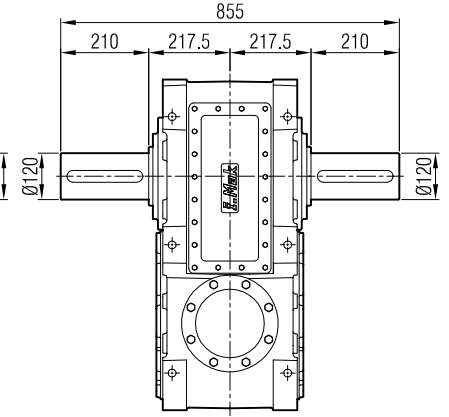
MA / MK 70_
...-SL



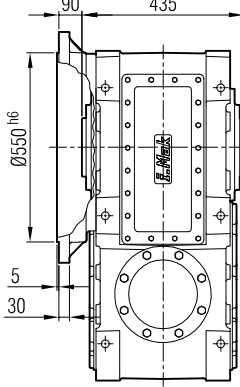
...-SR



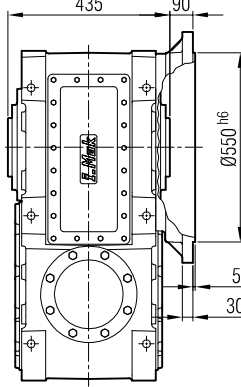
...-SD



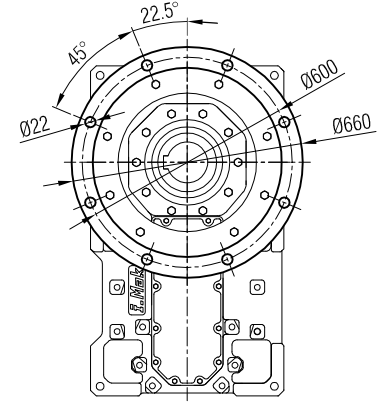
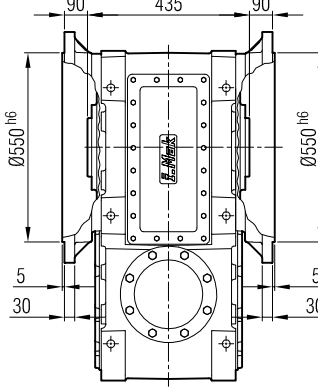
...-FL



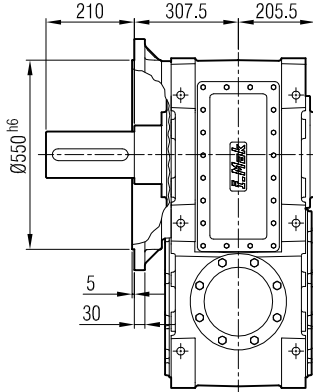
...-FR



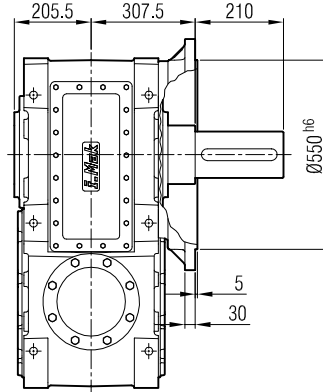
...-FD



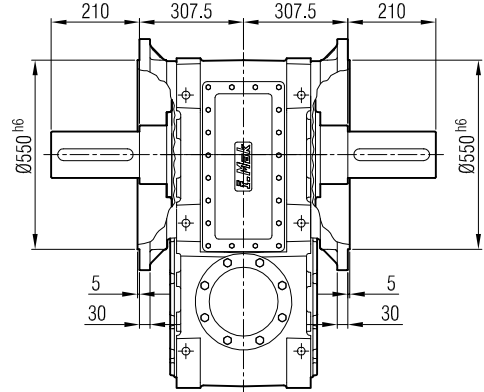
...-FL-SL



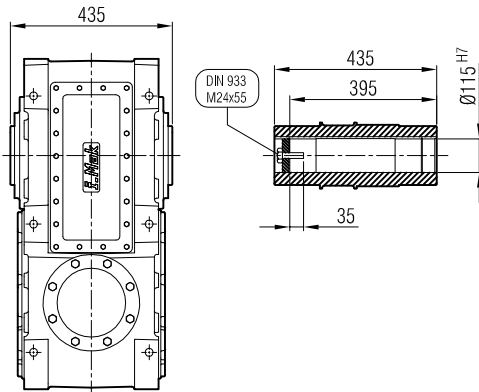
...-FR-SR



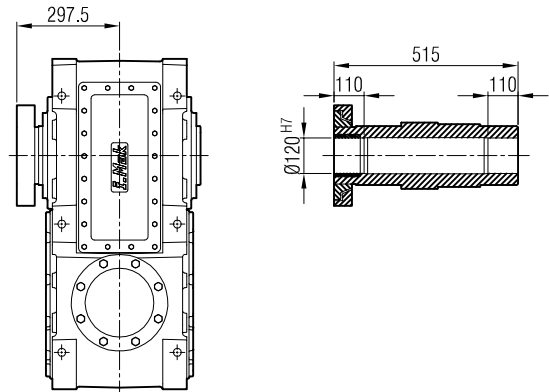
...-FD-SD



...-H



...-SDL / SDR



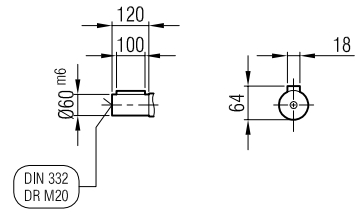
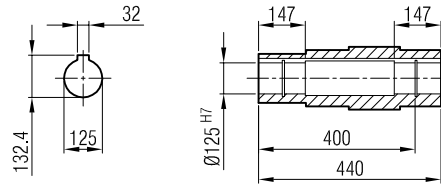
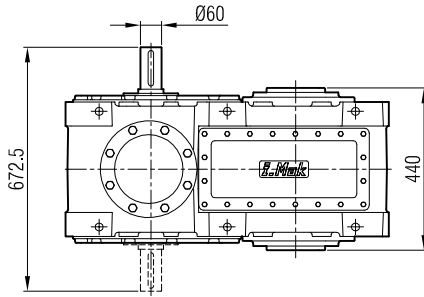
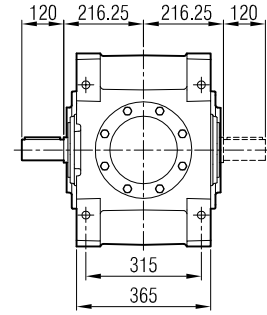
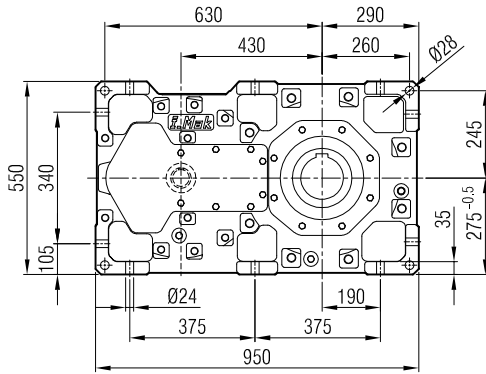
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

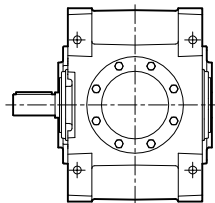
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



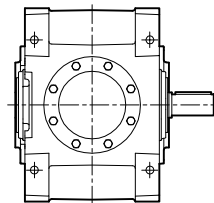
MA 802



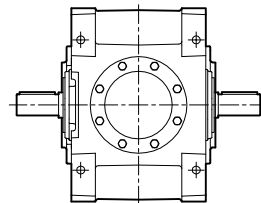
Giriş Seçenekleri / Input Options / Option d'entree



G00



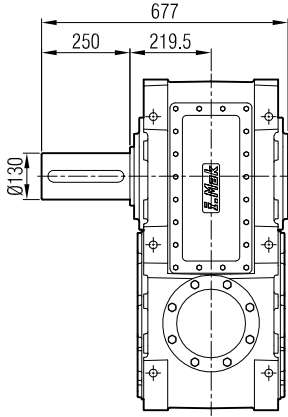
G01



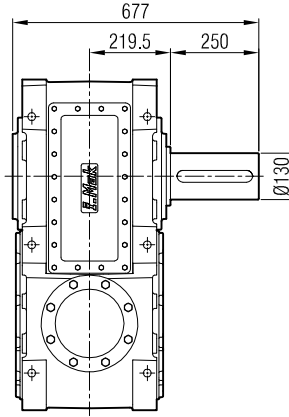
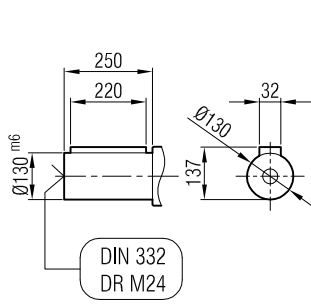
G02



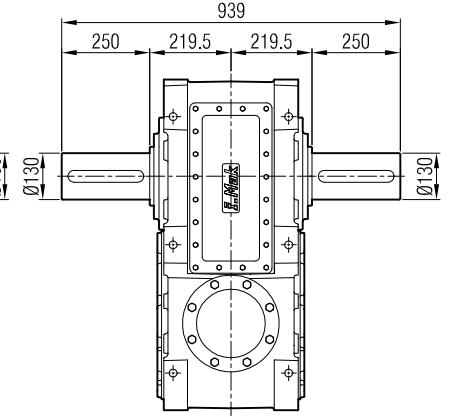
MA / MK 80_
...-SL



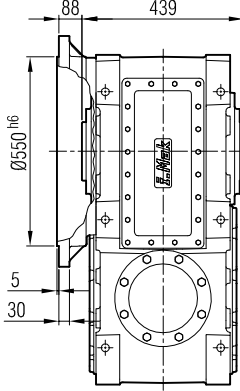
...-SR



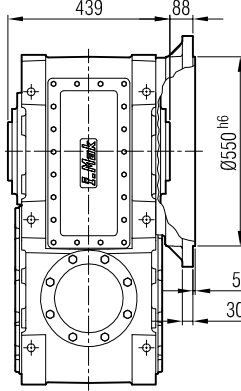
...-SD



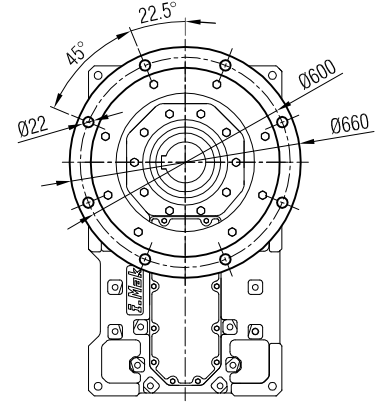
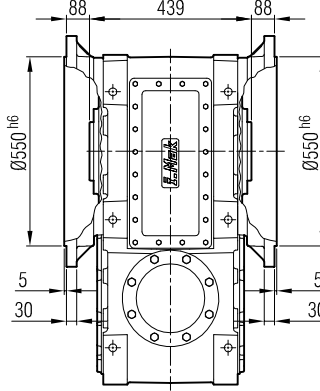
...-FL



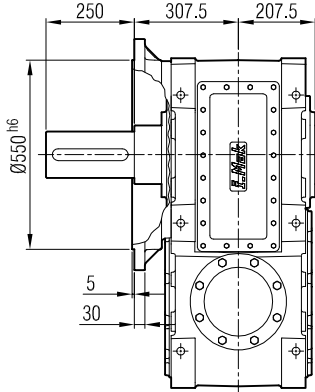
...-FR



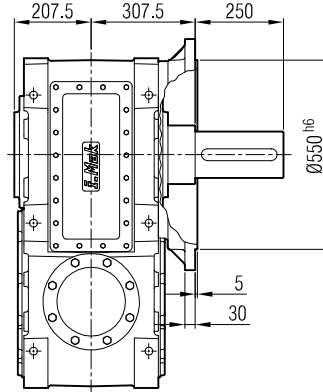
...-FD



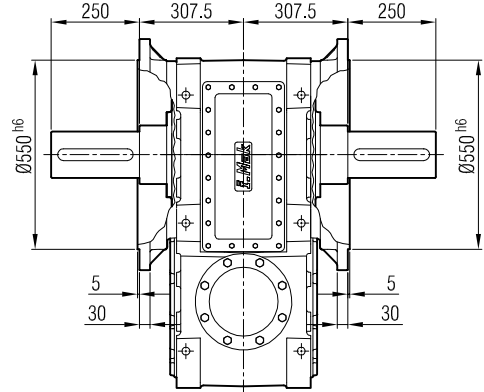
...-FL-SL



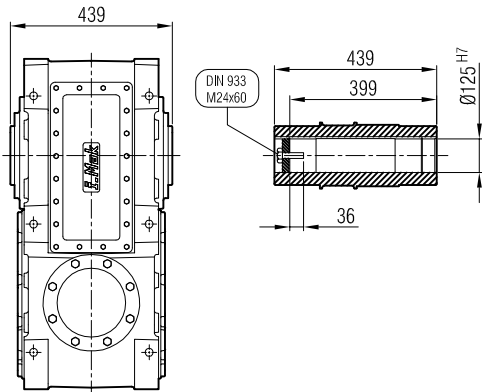
...-FR-SR



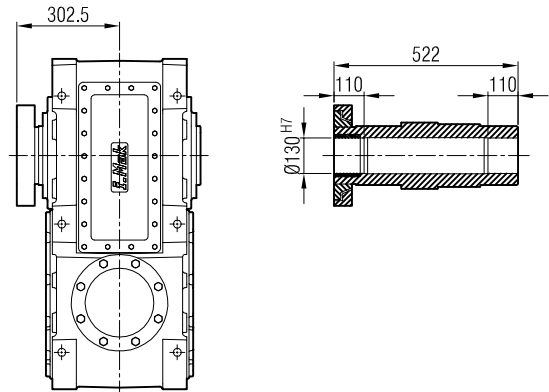
...-FD-SD



...-H



...-SDL / SDR



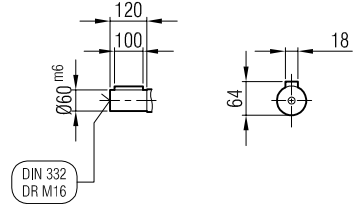
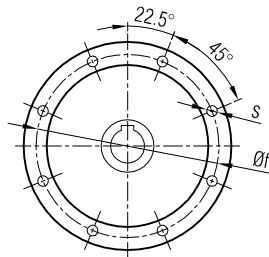
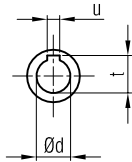
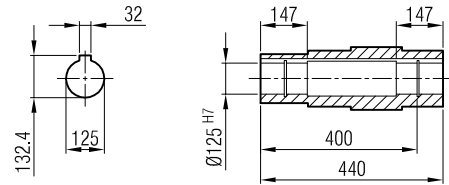
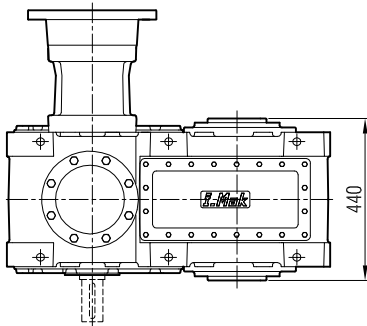
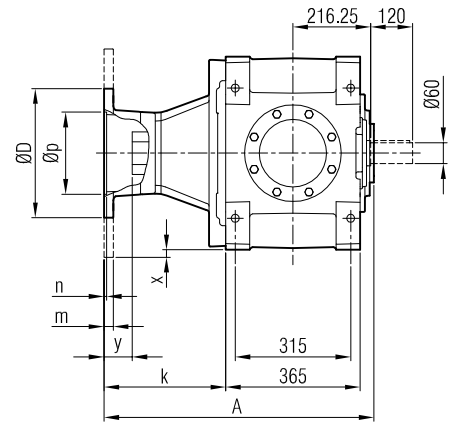
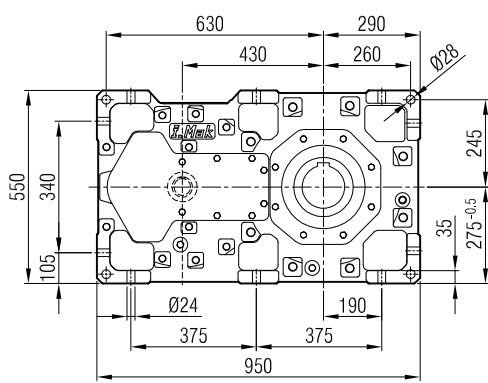
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

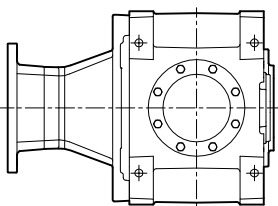


MAP 802

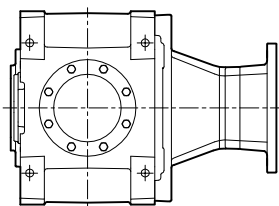


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
225/B5	719	350	400	450	M16	317	22	6	60	64.4	18	-	65
250/B5	719	450	500	550	M16	317	25	6.5	65	69.4	18	0	65
280/B5	719	450	500	550	M16	317	25	6.5	75	75.9	20	0	65
315/B5	749	550	600	660	M24	347	30	7	85	90.4	22	55	90

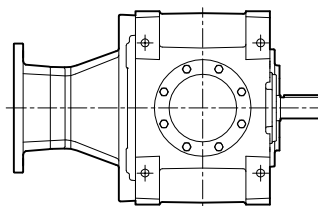
Giriş Seçenekleri / Input Options / Option d'entree



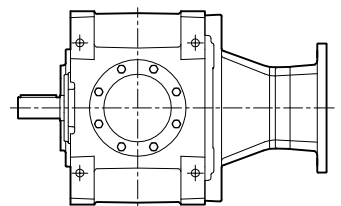
G03



G04



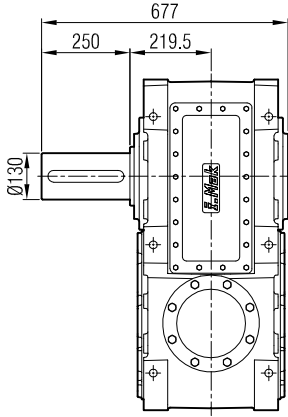
G05



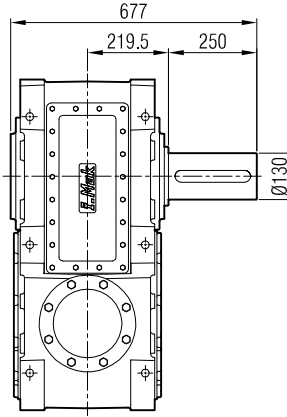
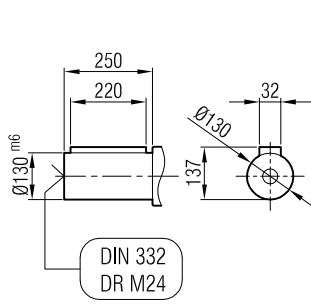
G06



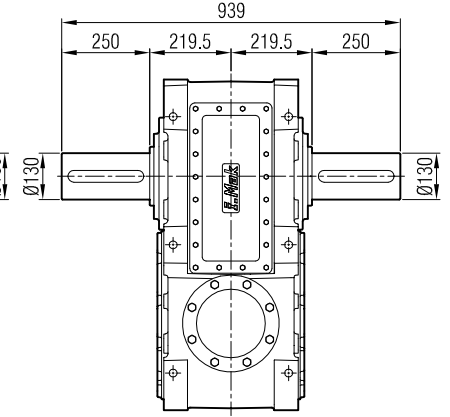
MA / MK 80_
...-SL



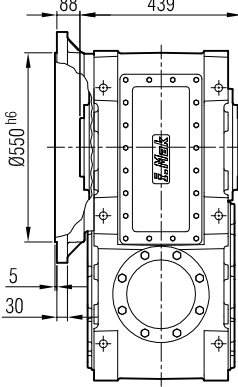
...-SR



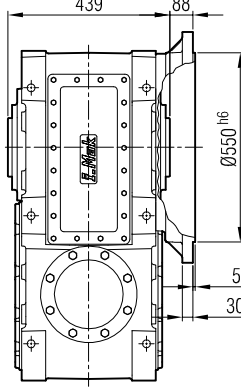
...-SD



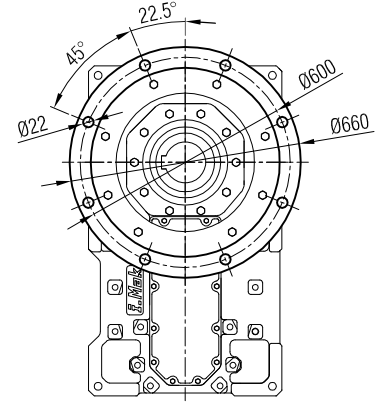
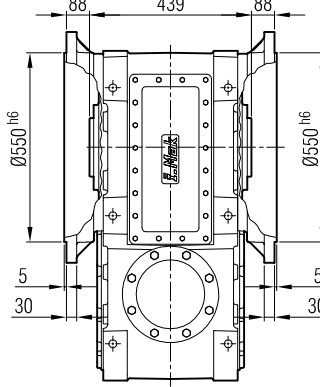
...-FL



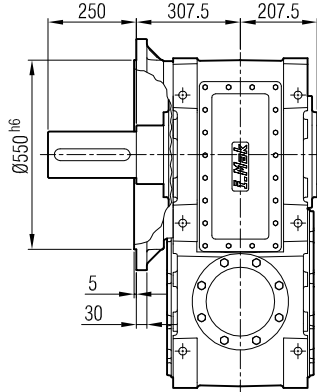
...-FR



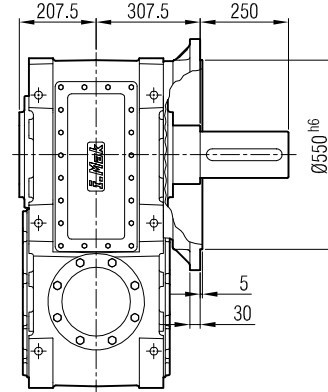
...-FD



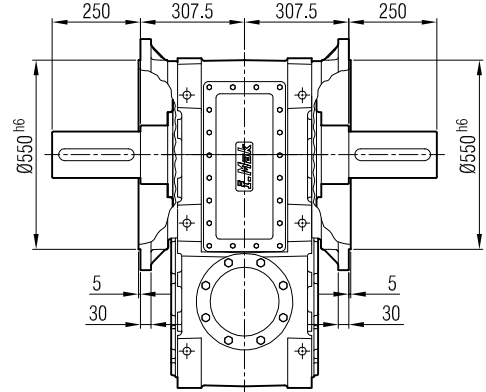
...-FL-SL



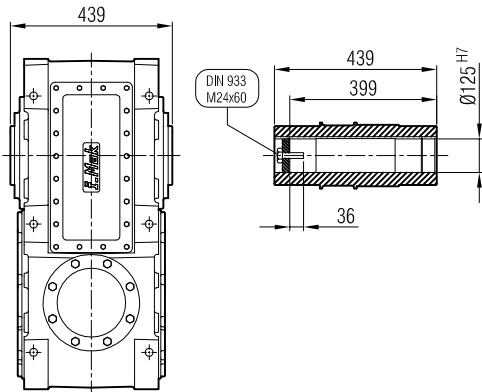
...-FR-SR



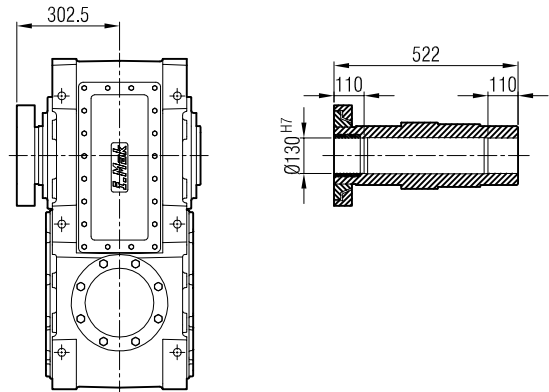
...-FD-SD



...-H



...-SDL / SDR



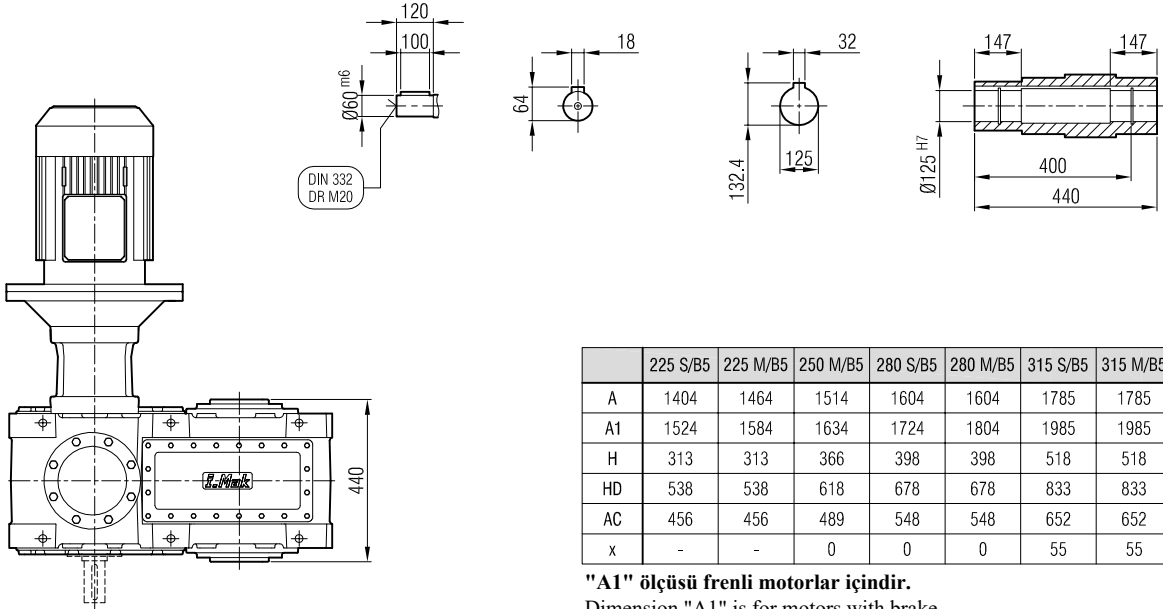
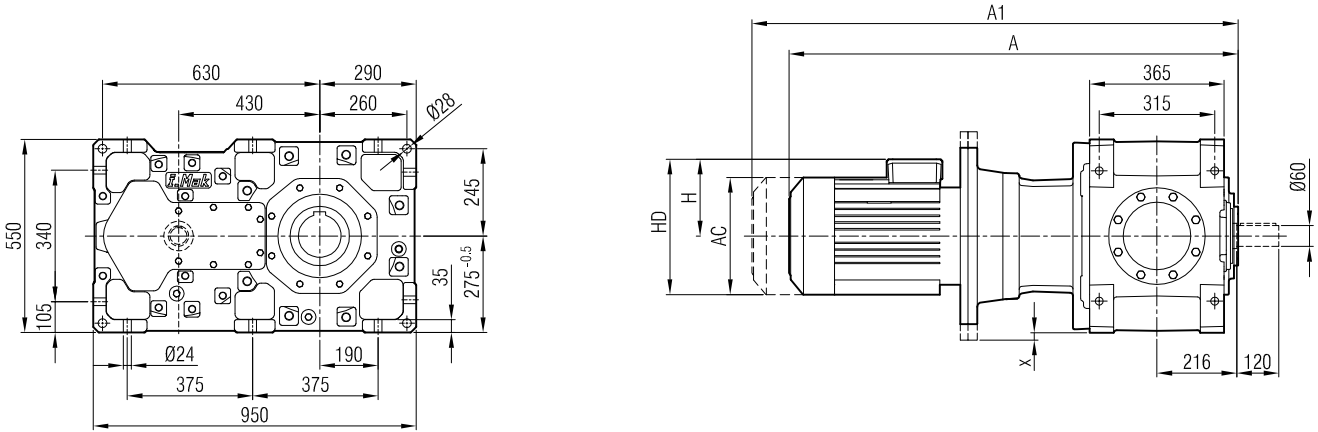
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



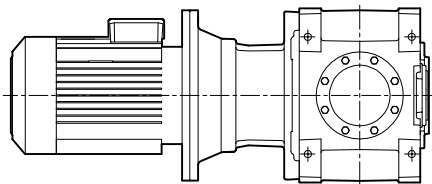
MAM 802



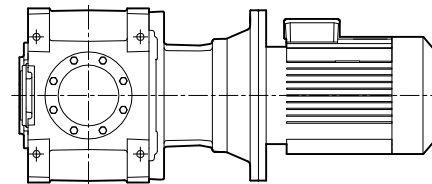
	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5	315 L/B5
A	1404	1464	1514	1604	1604	1785	1785	1896
A1	1524	1584	1634	1724	1804	1985	1985	2096
H	313	313	366	398	398	518	518	518
HD	538	538	618	678	678	833	833	833
AC	456	456	489	548	548	652	652	652
x	-	-	0	0	0	55	55	55

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Les dimensions "A1" correspondent aux moteurs équipés de freins.

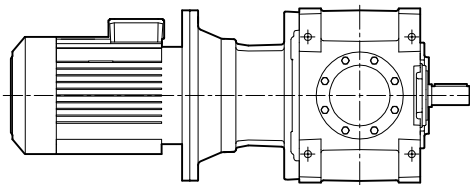
Giriş Seçenekleri / Input Options / Option d'entree



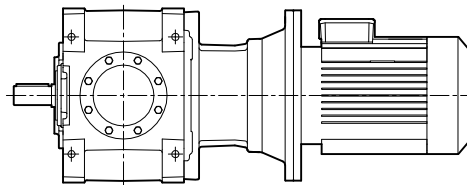
G03



G04



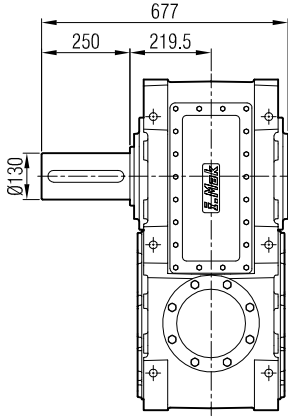
G05



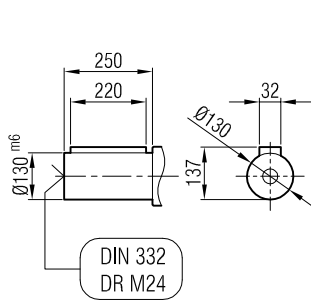
G06



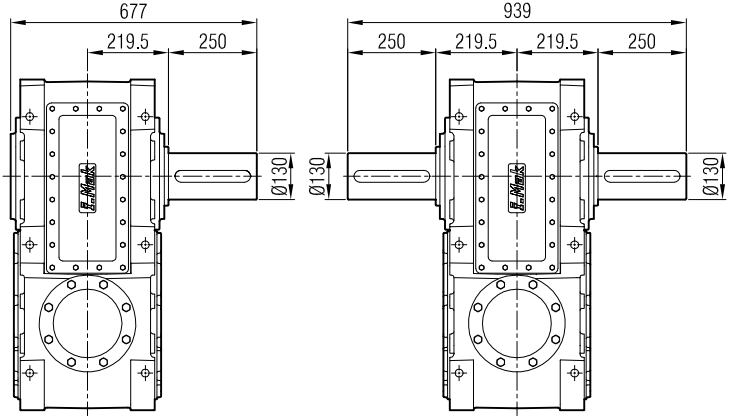
MA / MK 80_
...-SL



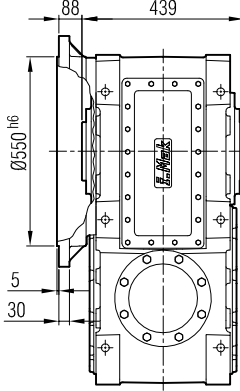
...-SR



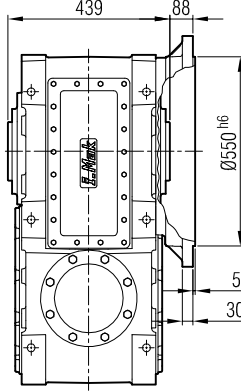
...-SD



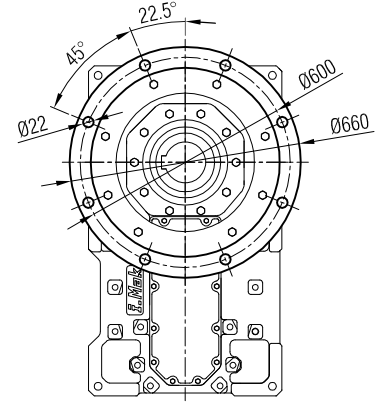
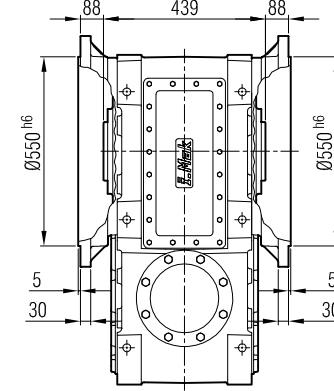
...-FL



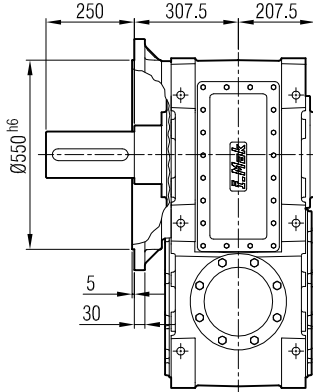
...-FR



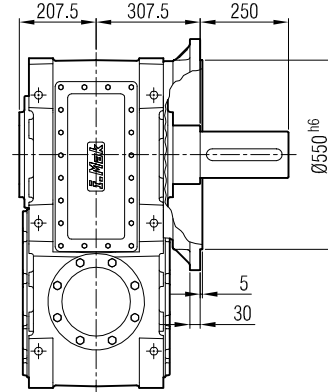
...-FD



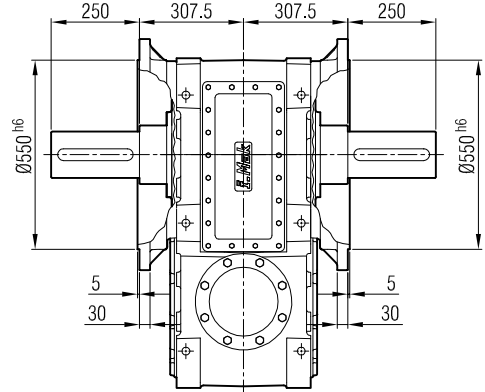
...-FL-SL



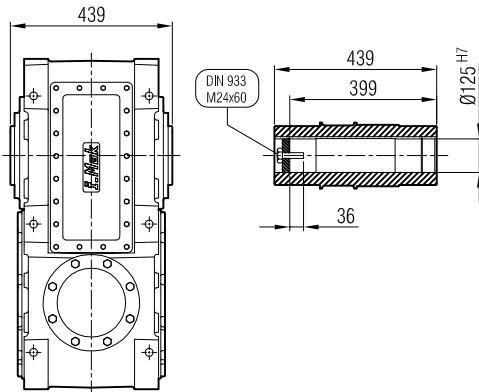
...-FR-SR



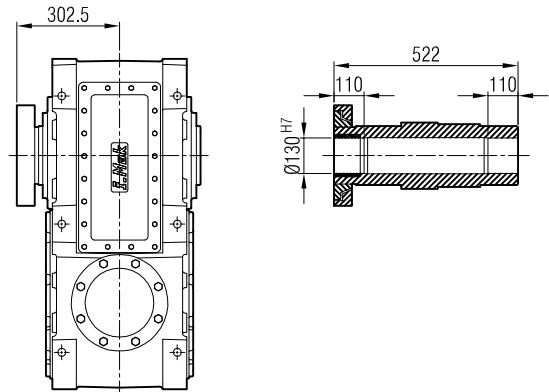
...-FD-SD



...-H



...-SDL / SDR



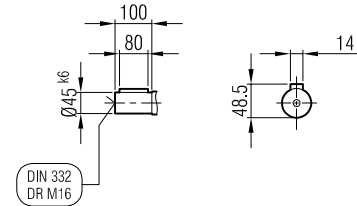
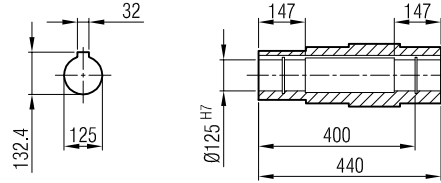
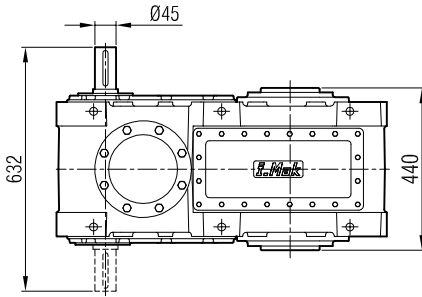
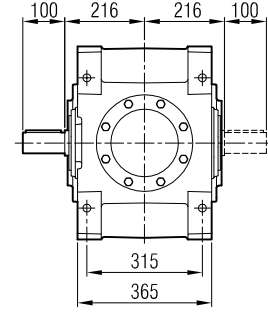
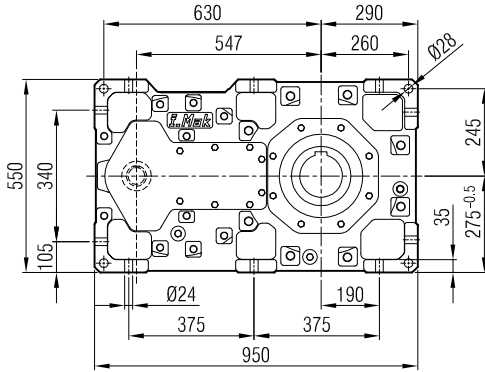
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

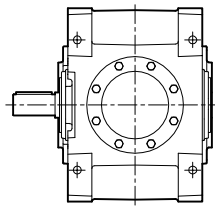
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



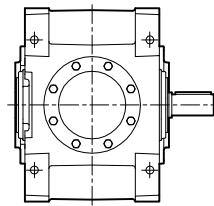
MA 803



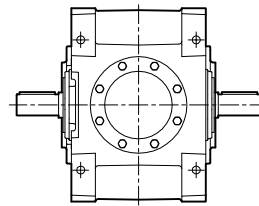
Giriş Seçenekleri / Input Options / Option D'Entree



G00



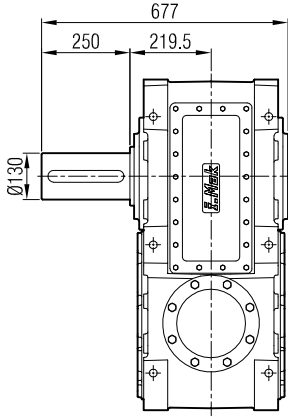
G01



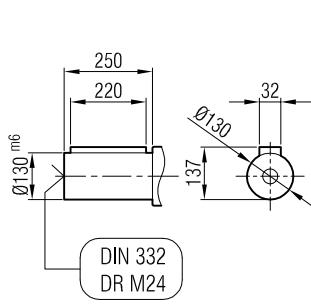
G02



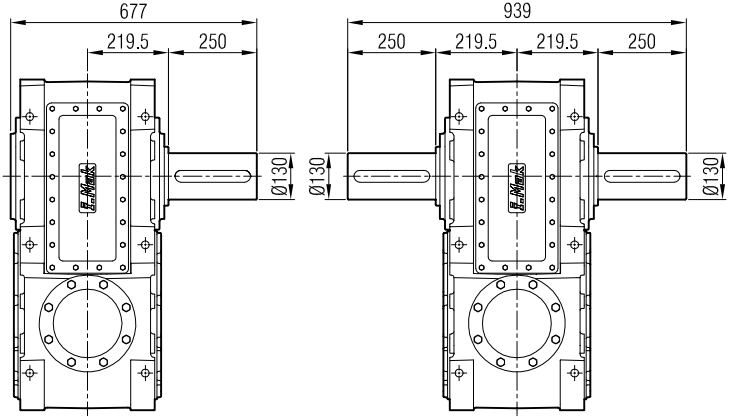
MA / MK 80_
...-SL



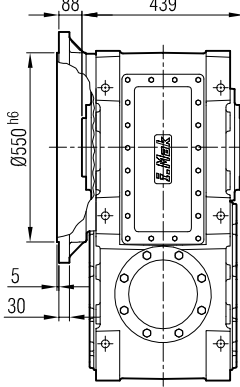
...-SR



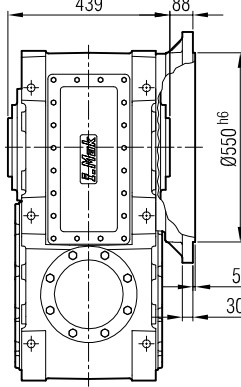
...-SD



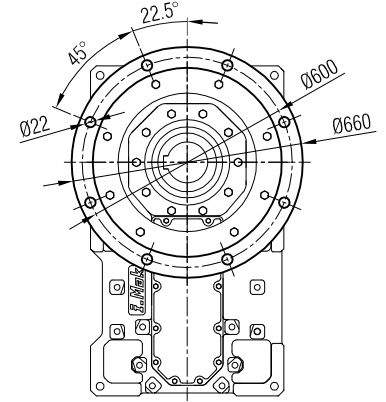
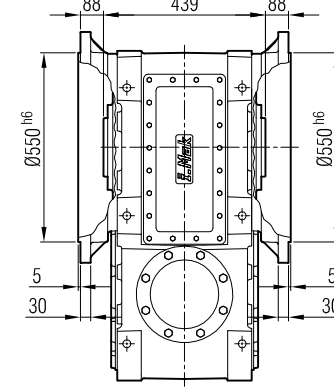
...-FL



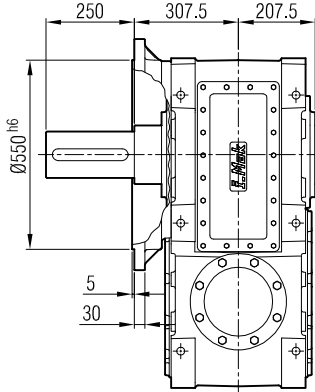
...-FR



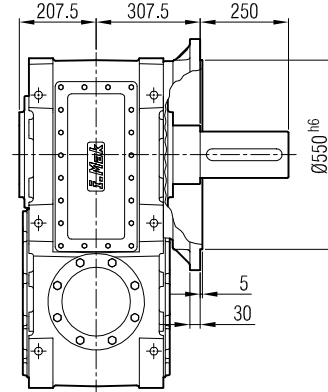
...-FD



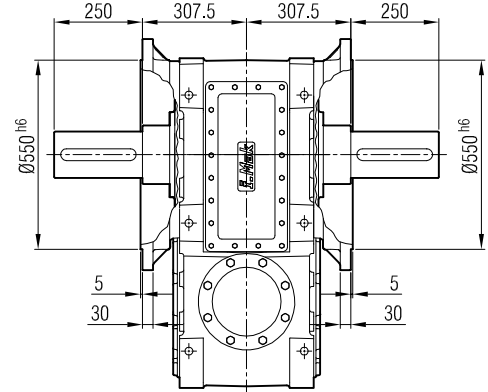
...-FL-SL



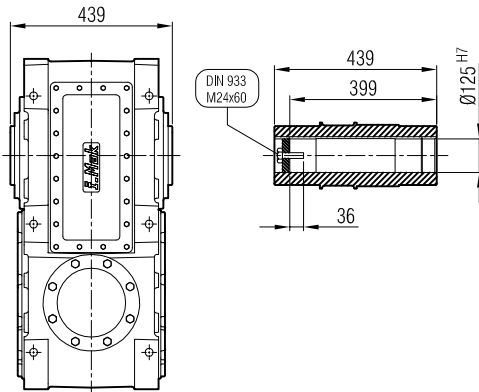
...-FR-SR



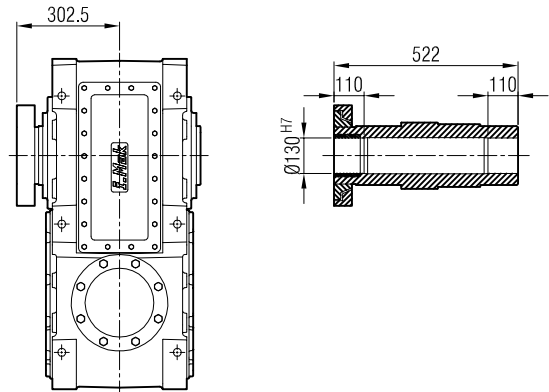
...-FD-SD



...-H



...-SDL / SDR



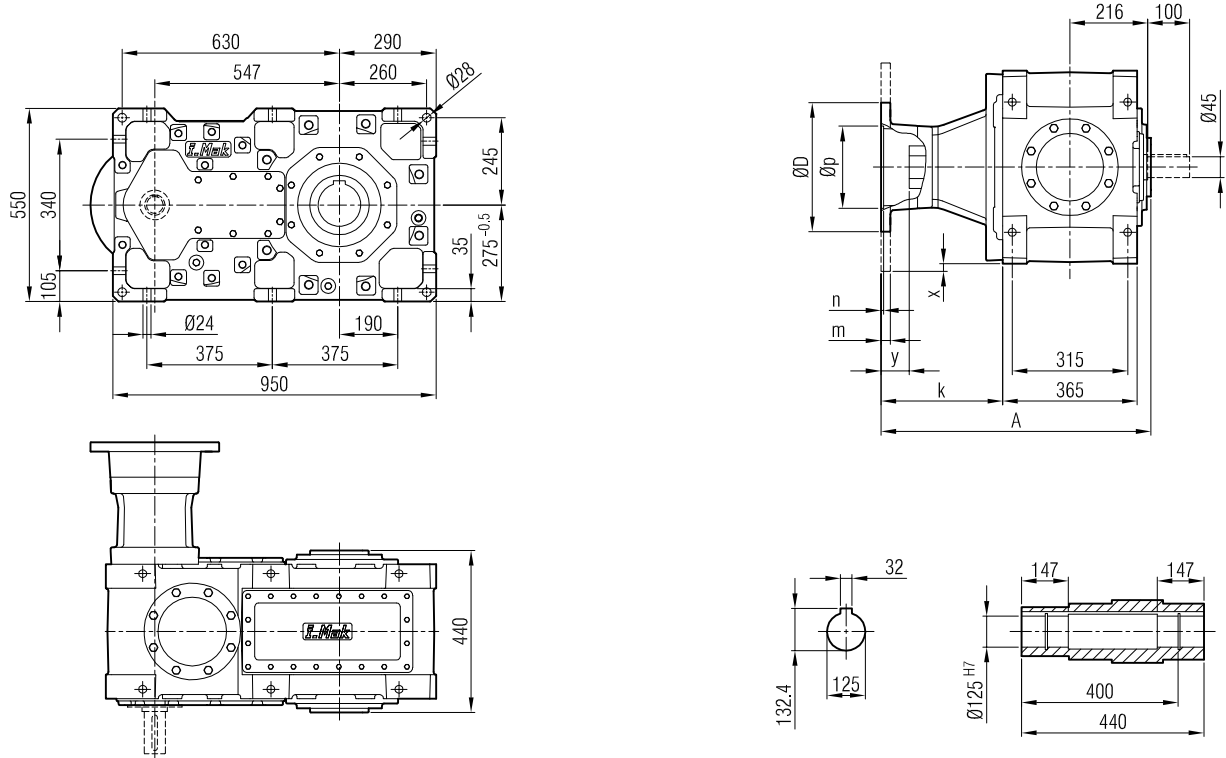
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Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

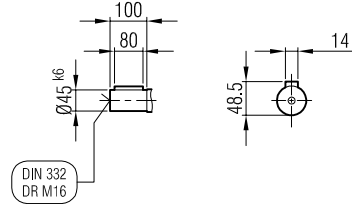
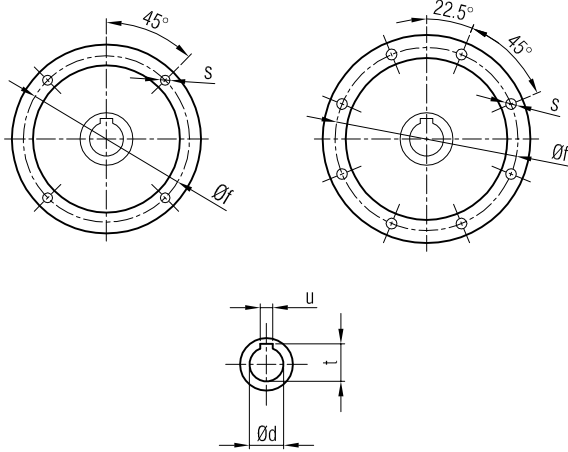


MAP 803



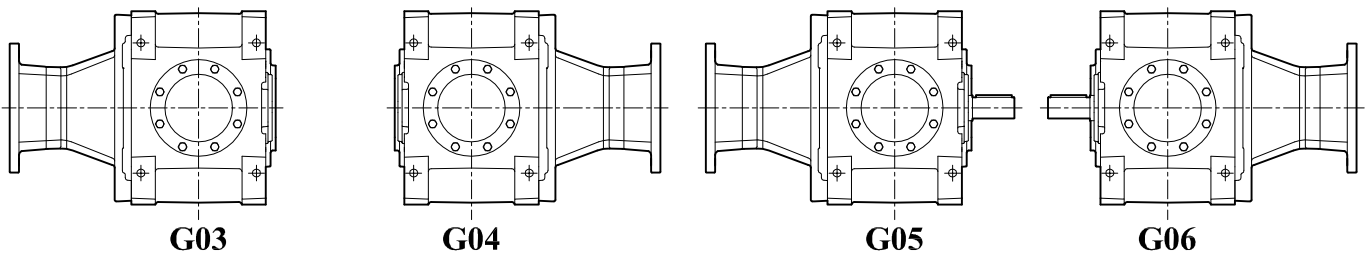
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ



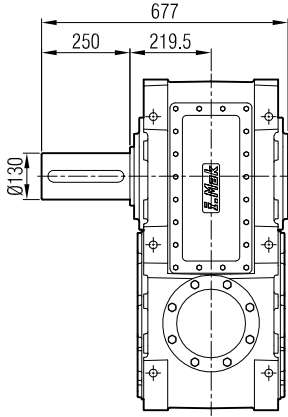
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	649	250	300	350	M14	247	20	6	42	45.3	12	-	50
180/B5	649	250	300	350	M14	247	20	6	48	51.8	14	-	50
200/B5	649	300	350	400	M16	247	22	6	55	59.3	16	-	50
225/B5	692	350	400	450	M16	290	22	6	60	64.4	18	-	79
250/B5	692	450	500	550	M16	290	25	6.5	65	69.4	18	0	75
280/B5	692	450	500	550	M16	290	25	6.5	75	75.9	20	0	65

Giriş Seçenekleri / Input Options / Option d'entree

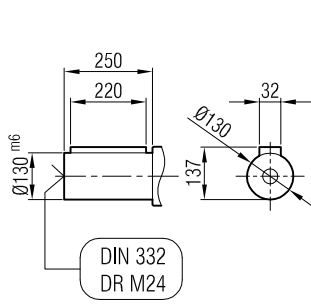




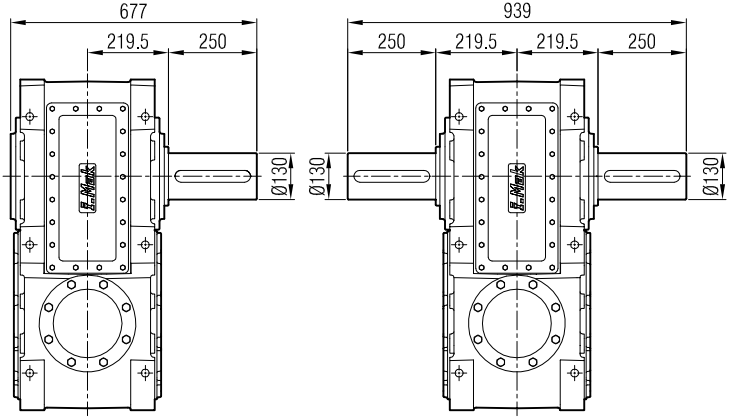
MA / MK 80_
...-SL



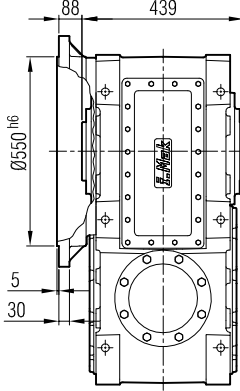
...-SR



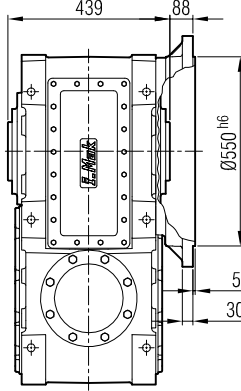
...-SD



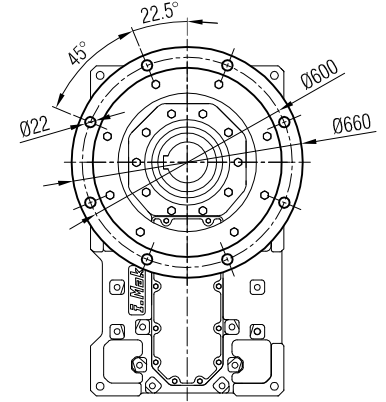
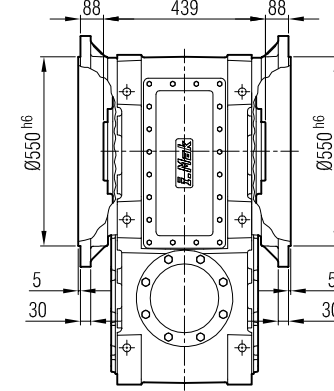
...-FL



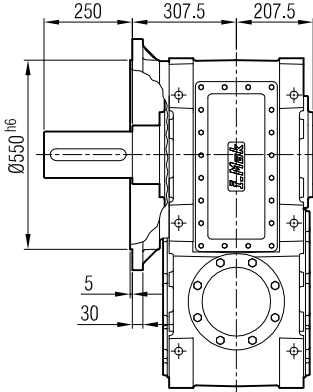
...-FR



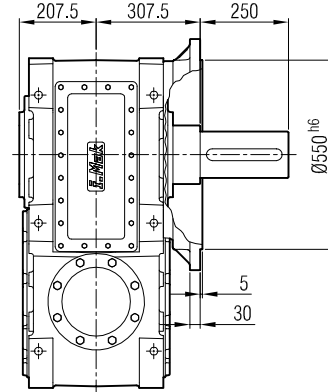
...-FD



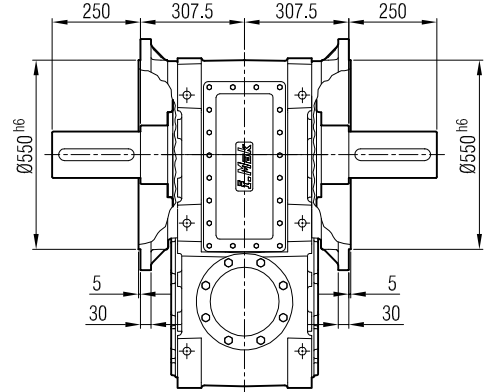
...-FL-SL



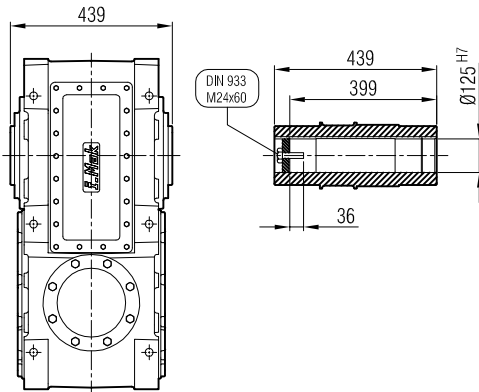
...-FR-SR



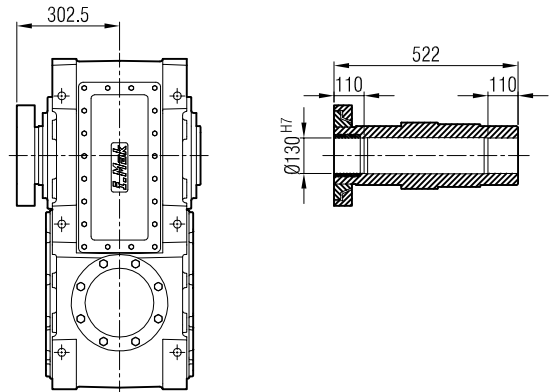
...-FD-SD



...-H



...-SDL / SDR



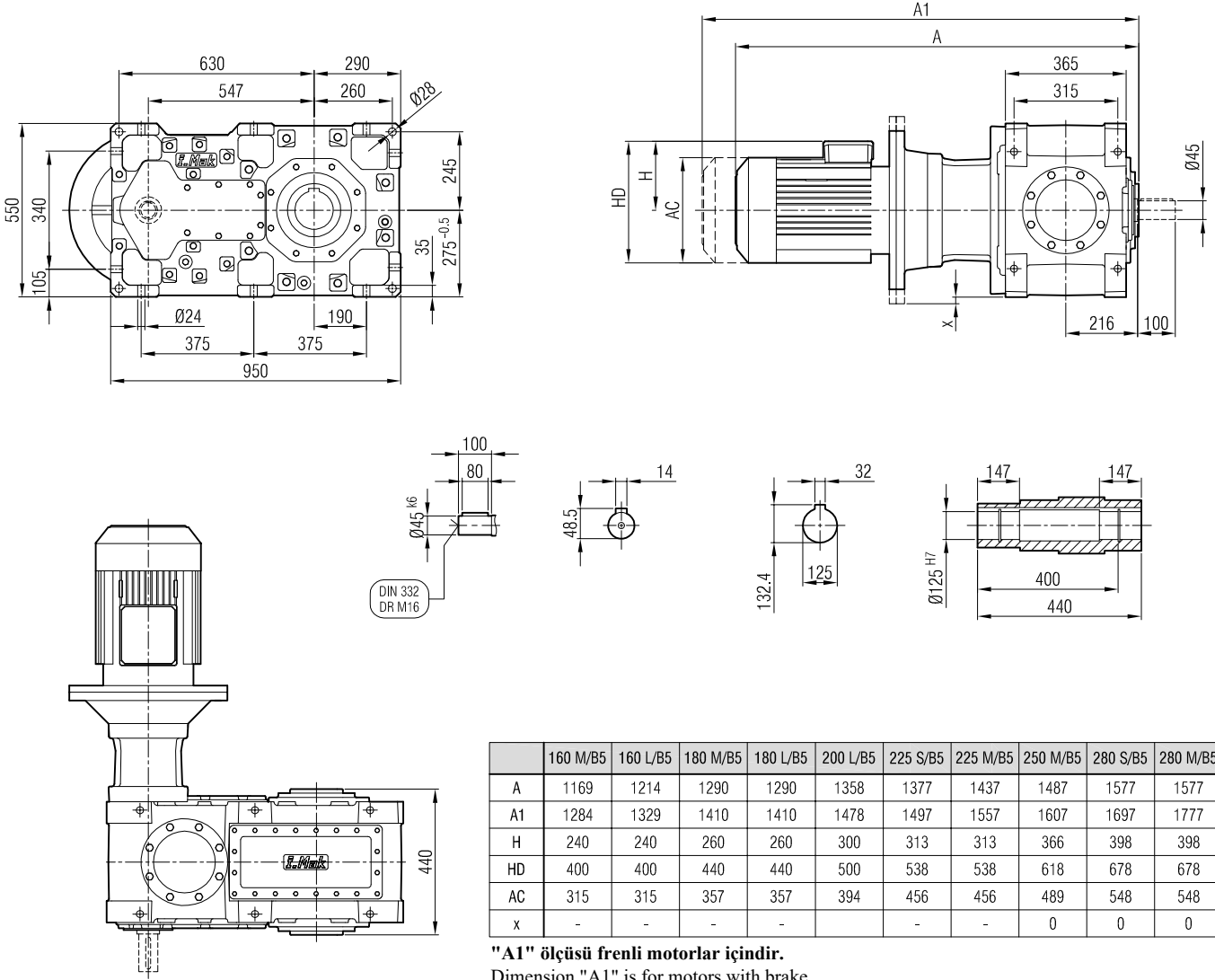
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

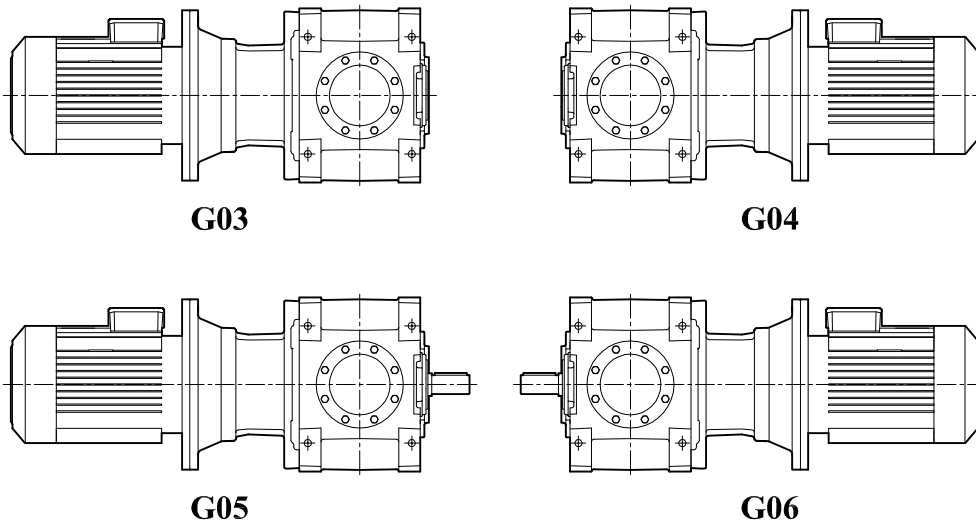
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 803

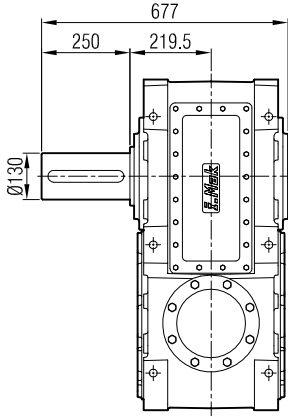


Giriş Seçenekleri / Input Options / Option d'entree

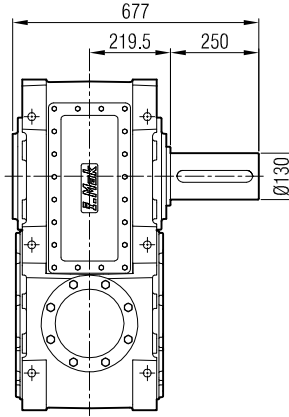
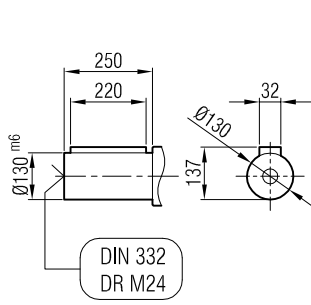




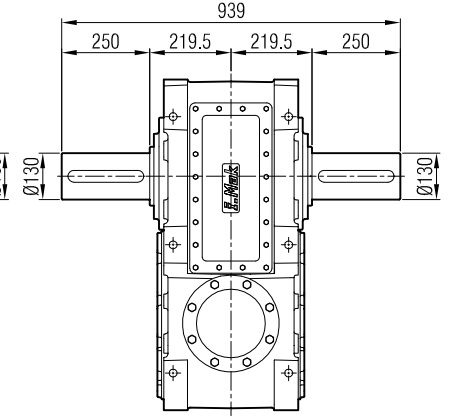
MA / MK 80_
...-SL



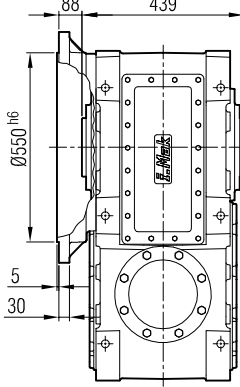
...-SR



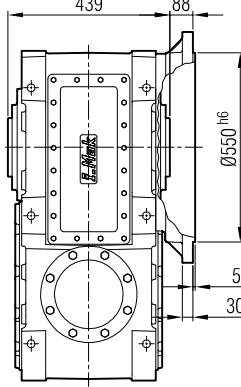
...-SD



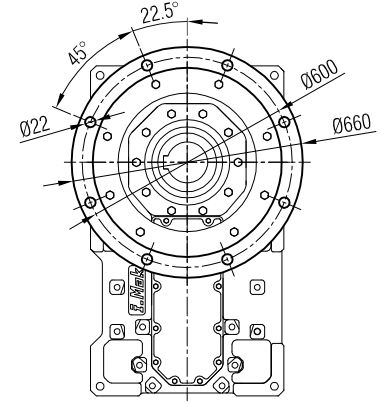
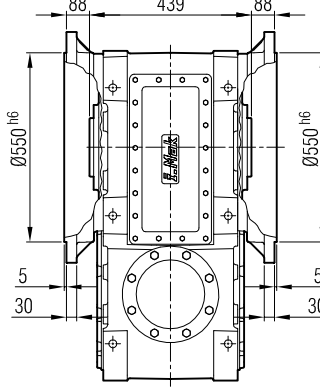
...-FL



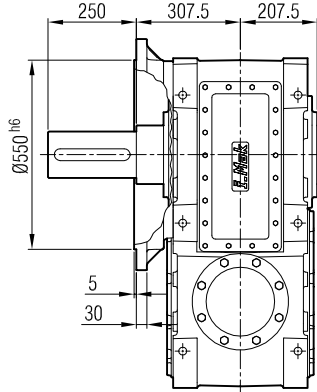
...-FR



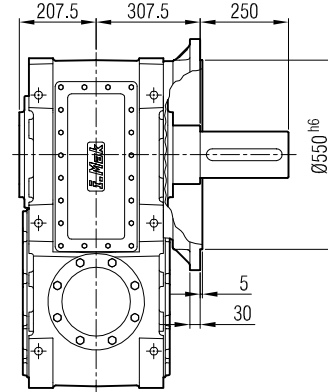
...-FD



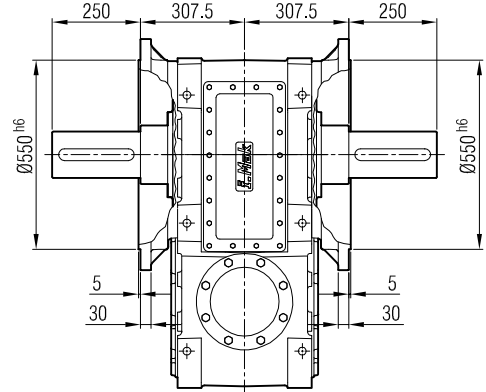
...-FL-SL



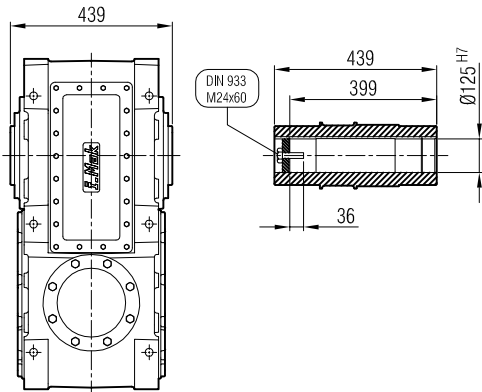
...-FR-SR



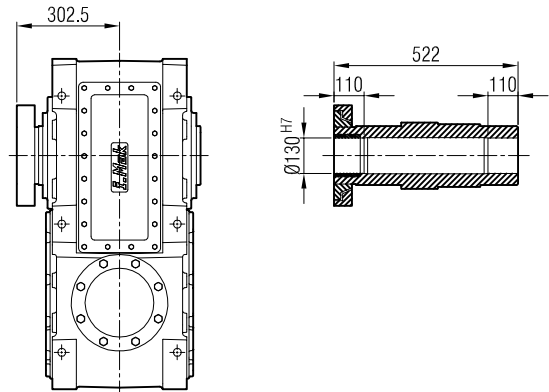
...-FD-SD



...-H



...-SDL / SDR



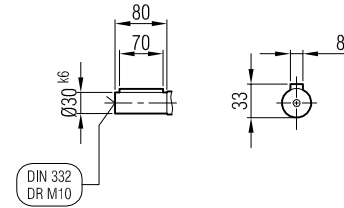
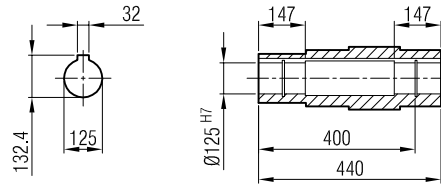
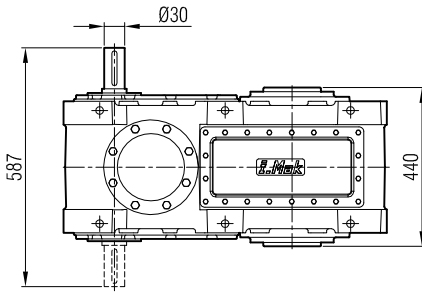
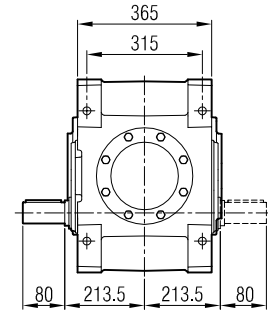
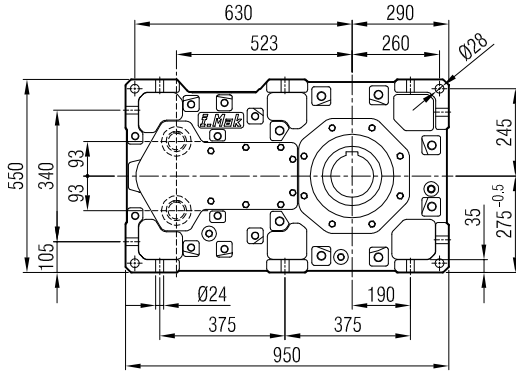
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

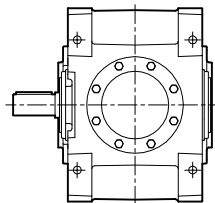
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



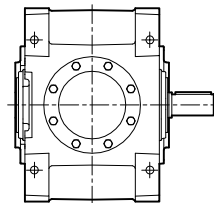
MA 804



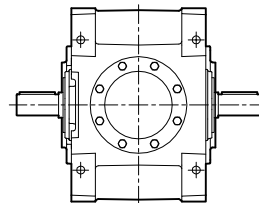
Giriş Seçenekleri / Input Options / Option d'entree



G00



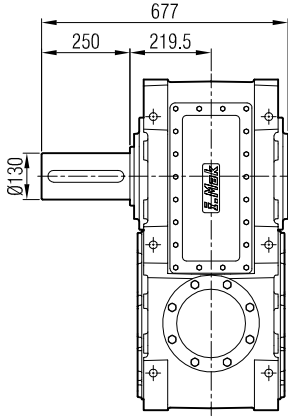
G01



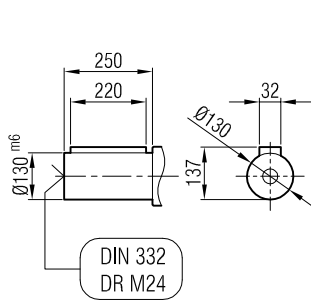
G02



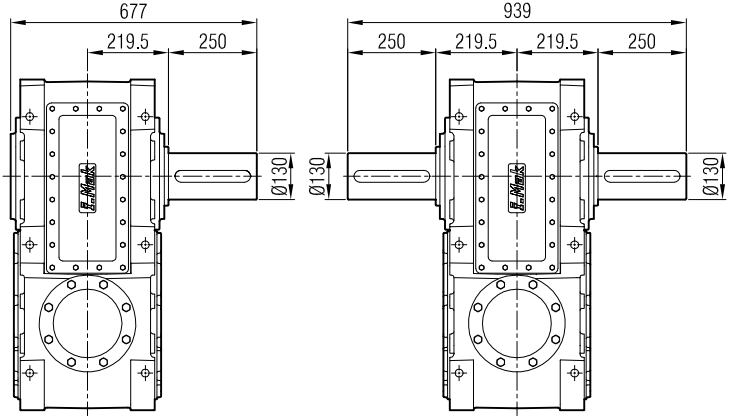
MA / MK 80_
...-SL



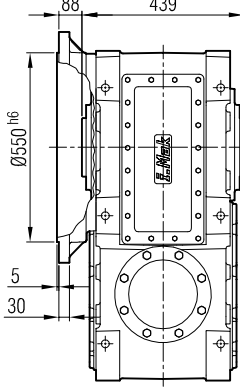
...-SR



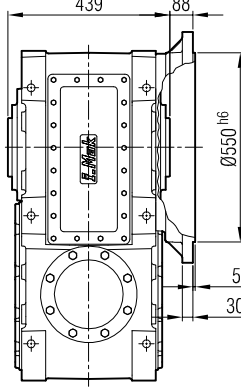
...-SD



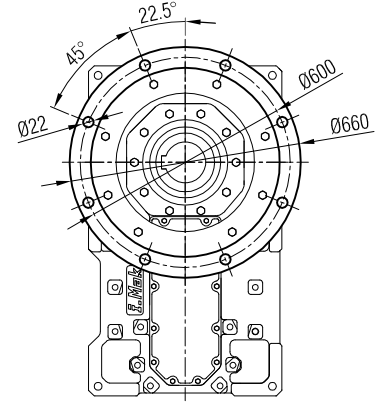
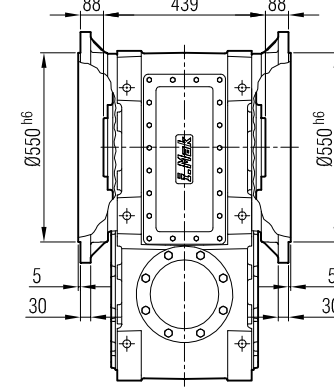
...-FL



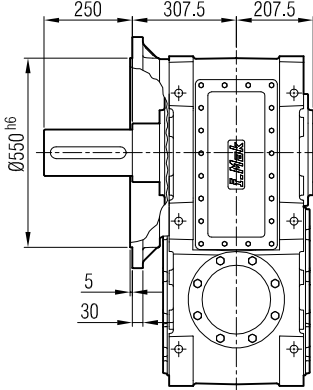
...-FR



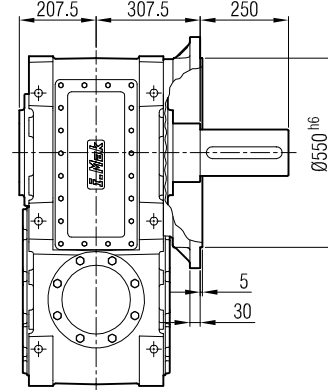
...-FD



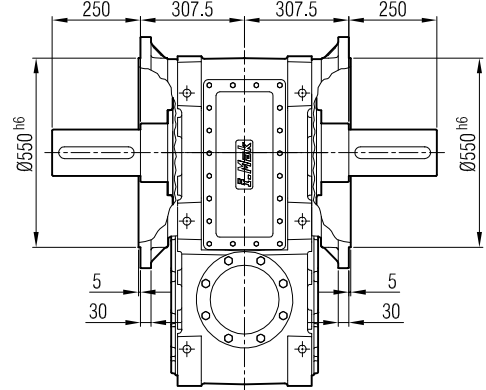
...-FL-SL



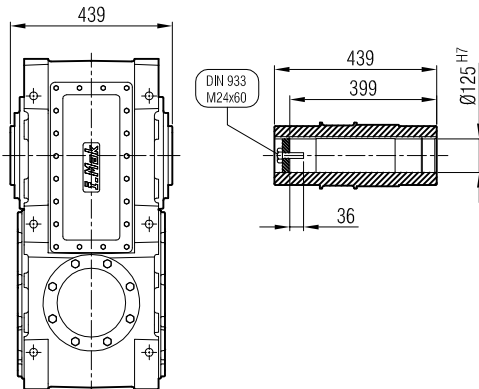
...-FR-SR



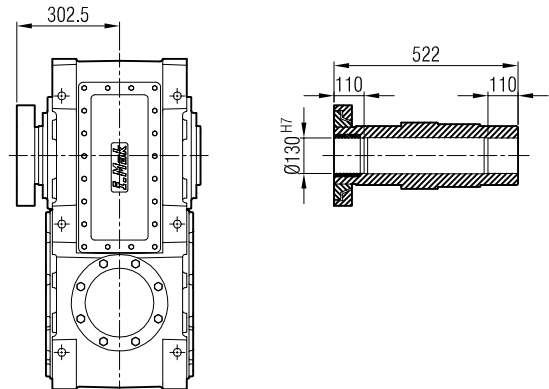
...-FD-SD



...-H



...-SDL / SDR



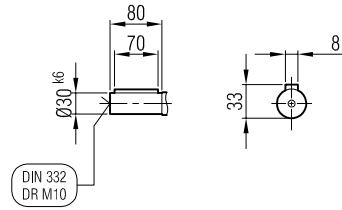
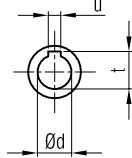
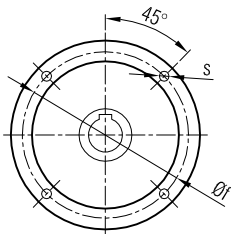
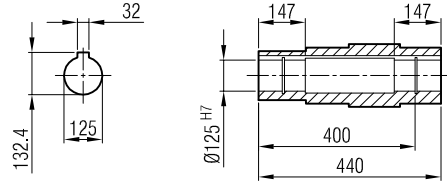
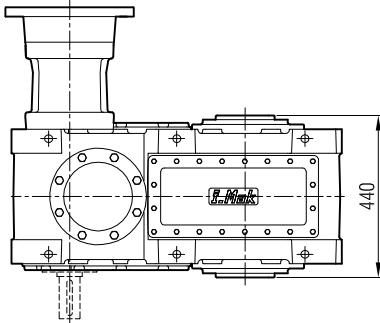
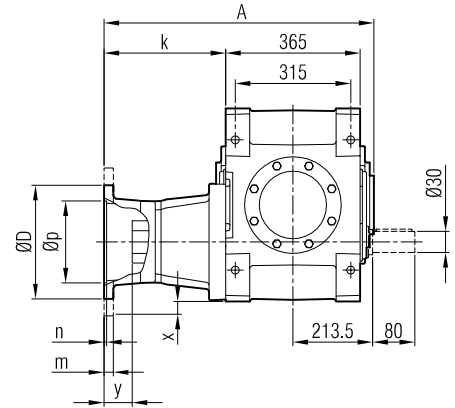
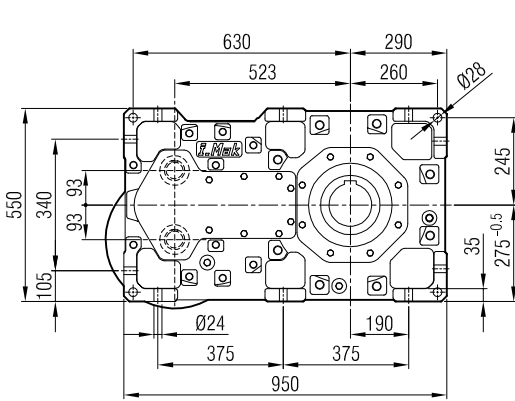
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

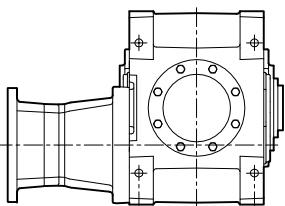


MAP 804

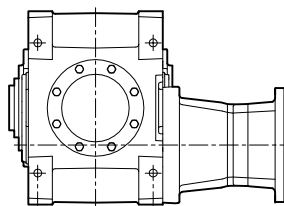


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
100/B5	590	180	215	250	M12	188	15	5	28	31.3	8	-	31
112/B5	590	180	215	250	M12	188	15	5	28	31.3	8	-	31
132/B5	610	230	265	300	M12	208	18	6	38	41.3	10	-	45
160/B5	627	250	300	350	M14	225	20	6	42	45.3	12	-	70
180/B5	627	250	300	350	M14	225	20	6	48	51.8	14	-	60

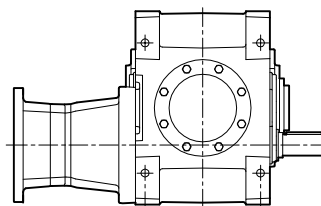
Giriş Seçenekleri / Input Options / Option d'entree



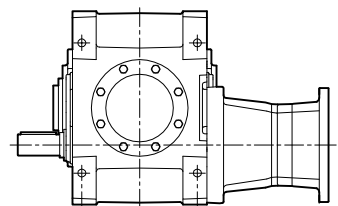
G03



G04



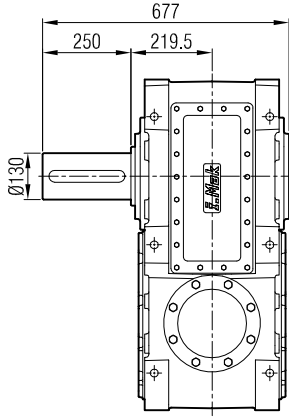
G05



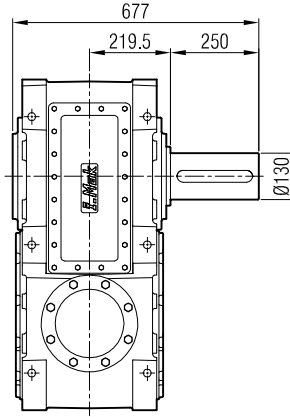
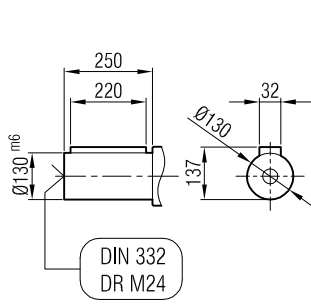
G06



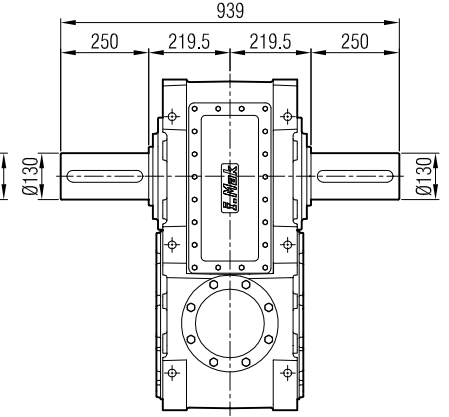
MA / MK 80_
...-SL



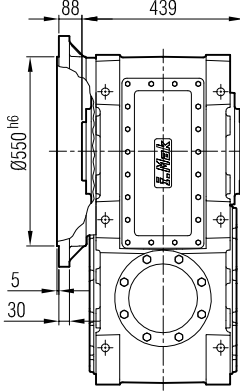
...-SR



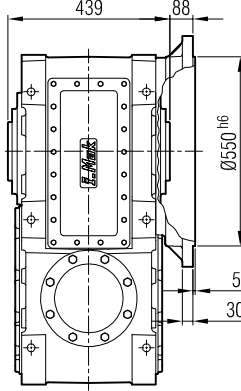
...-SD



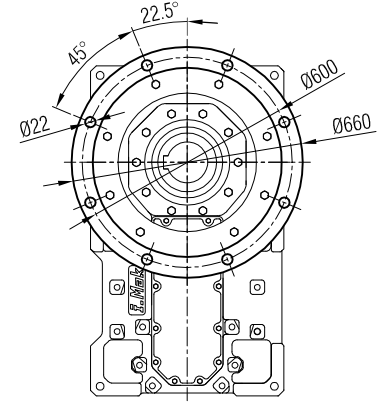
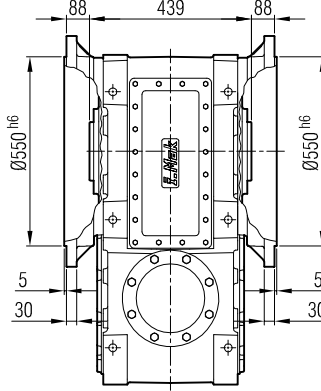
...-FL



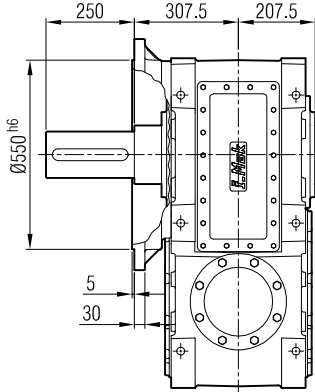
...-FR



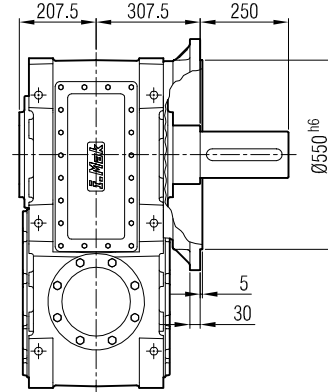
...-FD



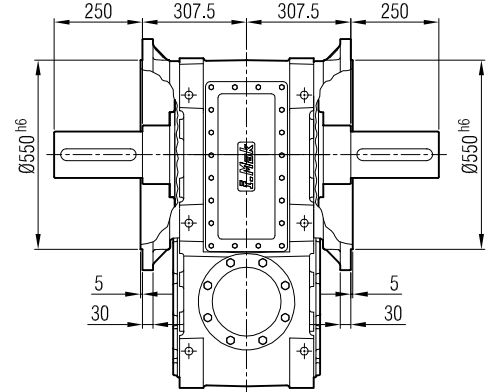
...-FL-SL



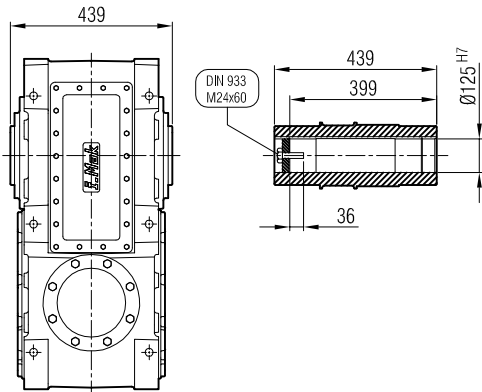
...-FR-SR



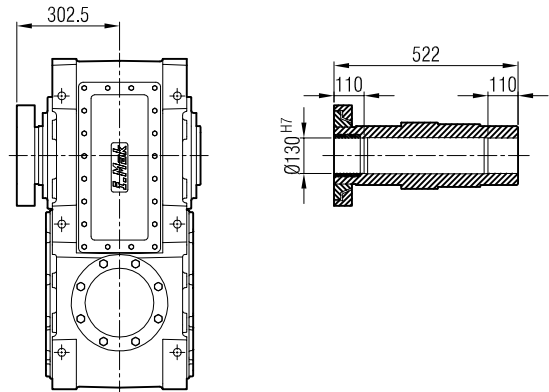
...-FD-SD



...-H



...-SDL / SDR



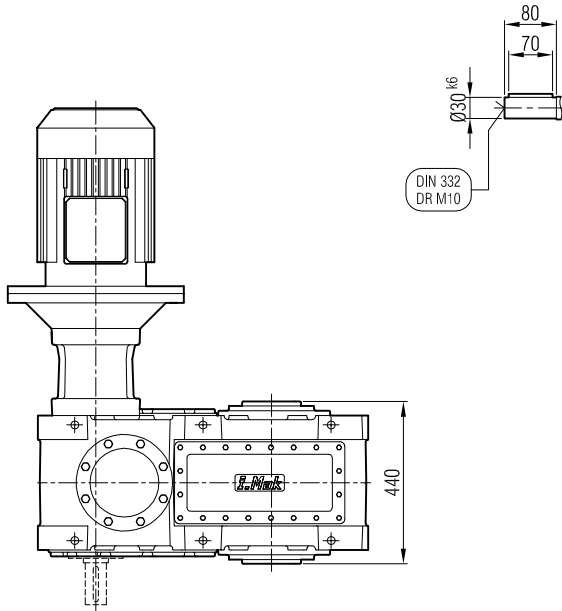
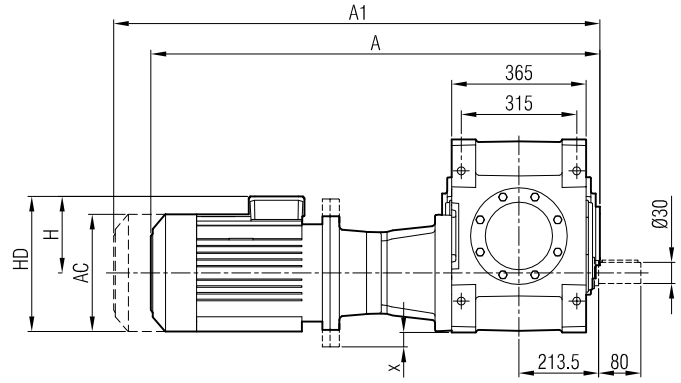
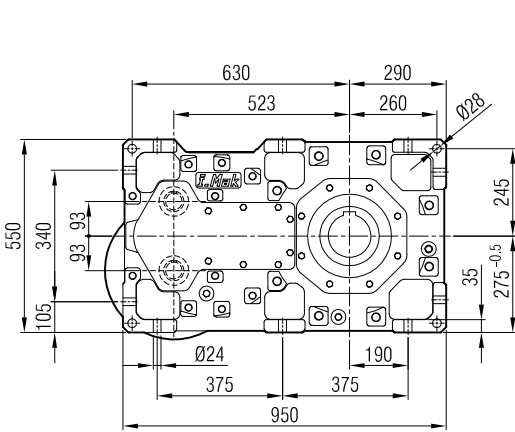
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 804



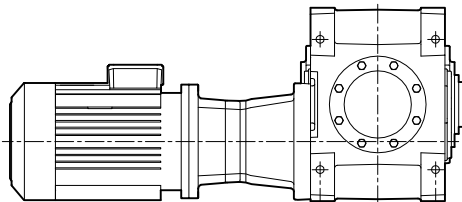
	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5
A	930	934	1011	1052	1147	1192	1268	1268
A1	1008	1017	1111	1152	1262	1307	1388	1388
H	161	170	193	193	240	240	260	260
HD	261	282	325	325	400	400	440	440
AC	195	220	262	262	315	315	357	357
X	-	-	-	-	-	-	-	-

"A1" ölçüsü frenli motorlar içindir.

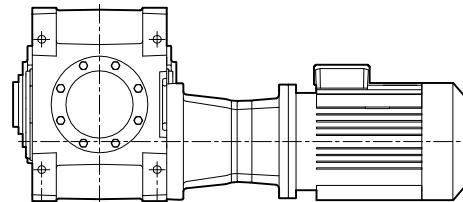
Dimension "A1" is for motors with brake.

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

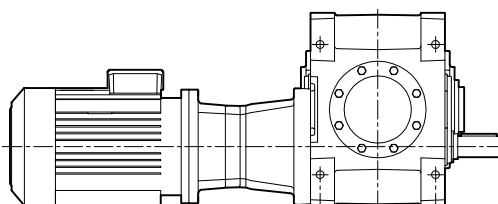
Giriş Seçenekleri / Input Options / Option d'entree



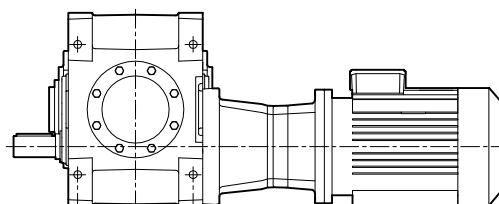
G03



G04



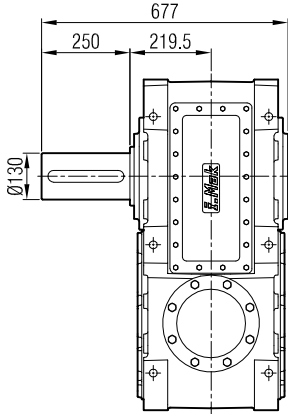
G05



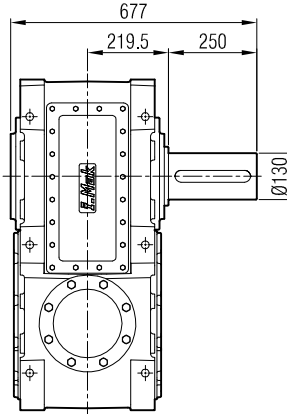
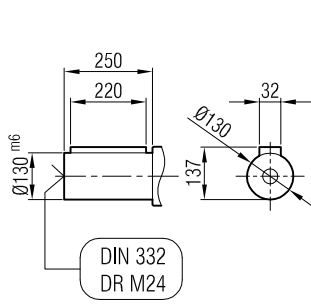
G06



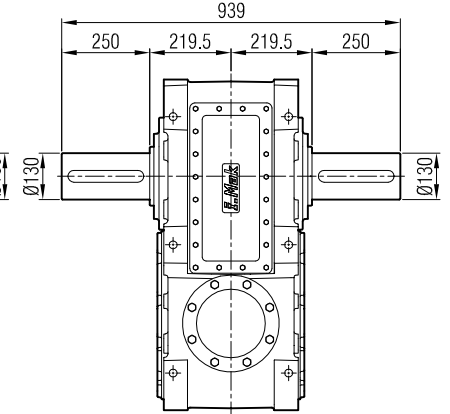
MA / MK 80_
...-SL



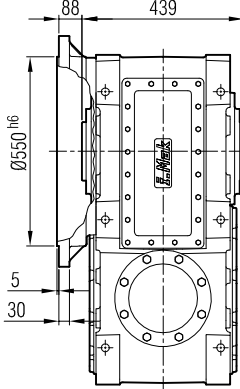
...-SR



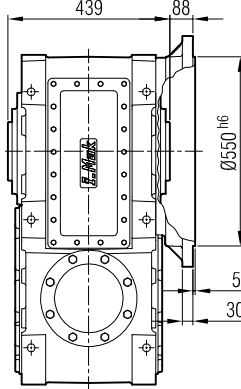
...-SD



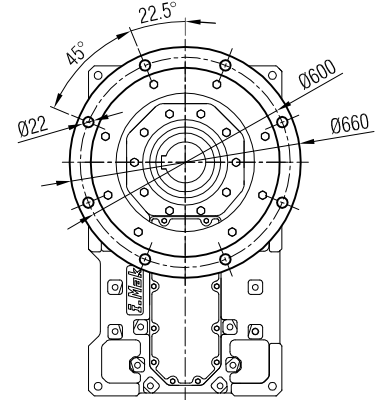
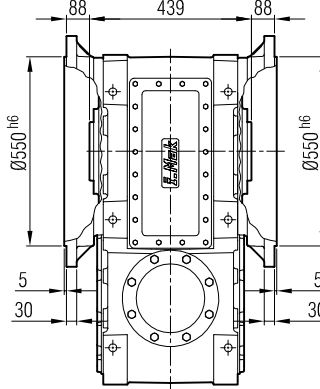
...-FL



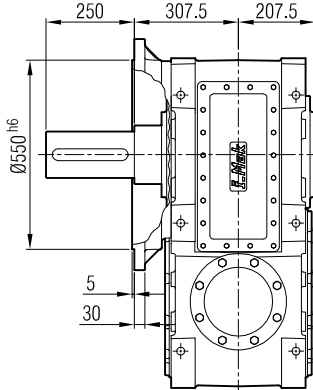
...-FR



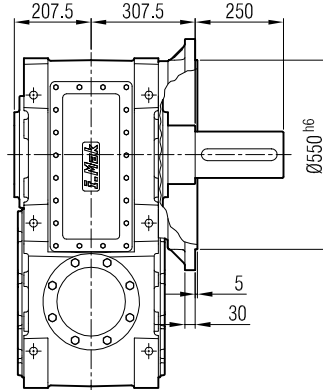
...-FD



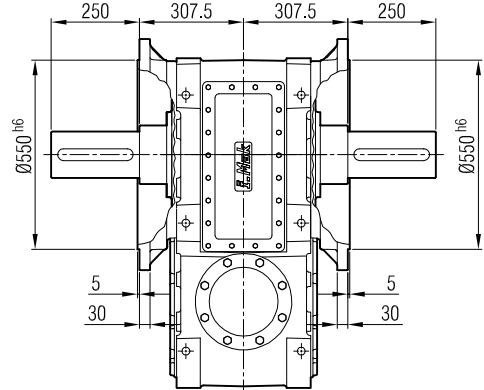
...-FL-SL



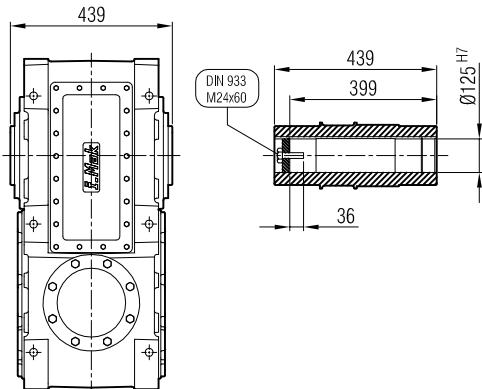
...-FR-SR



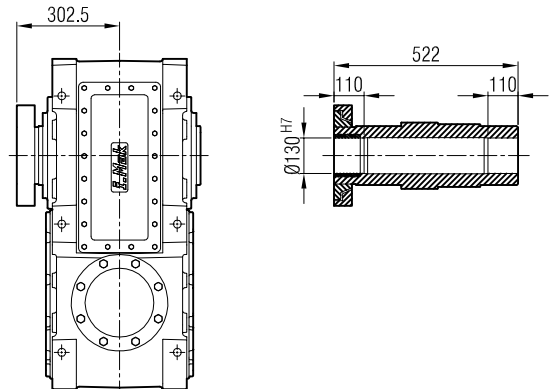
...-FD-SD



...-H



...-SDL / SDR



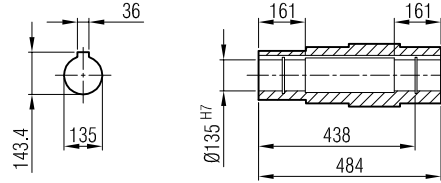
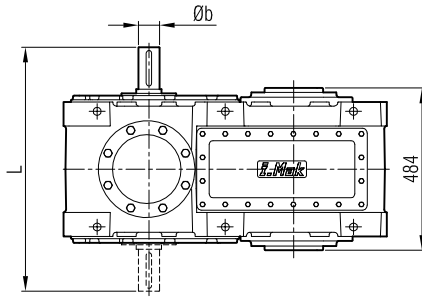
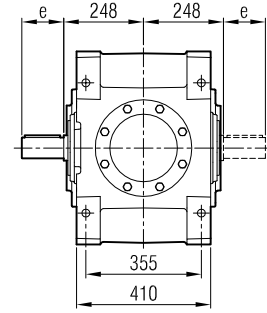
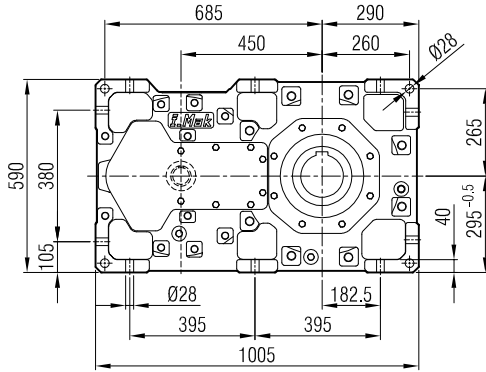
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

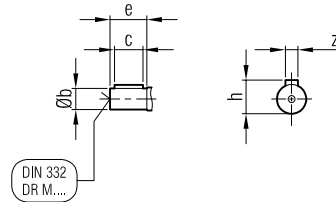
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



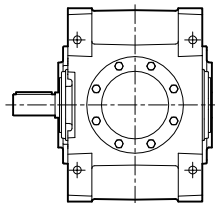
MA 902



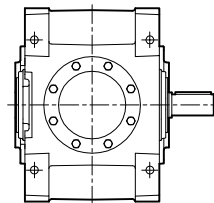
Tahvil / Ratio	Øb	e	z	c	h	M	L
i: 19,29 ... 12,20	60 ^{m6}	140	18	100	64	M16	776
i: 11,55 ... 5,88	75 ^{m6}	140	20	125	79.5	M20	776



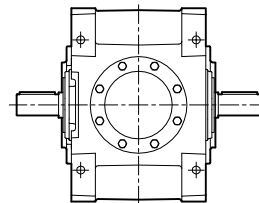
Giriş Seçenekleri / Input Options / Option d'entree



G00



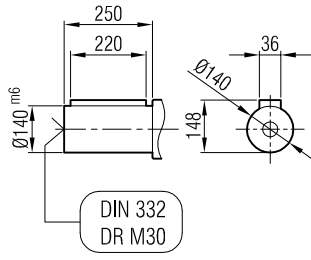
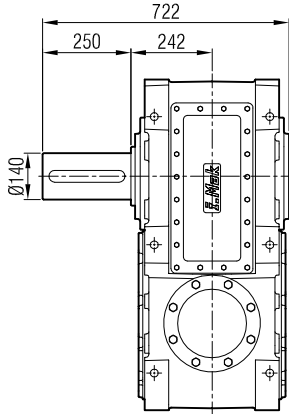
G01



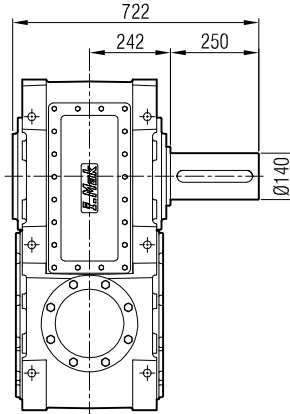
G02



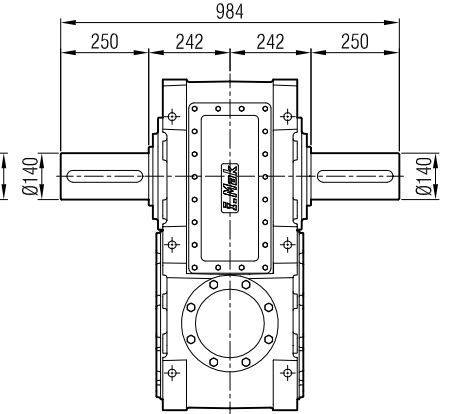
MA / MK 90_
...-SL



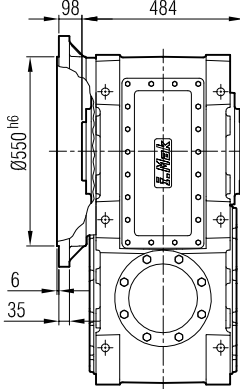
...-SR



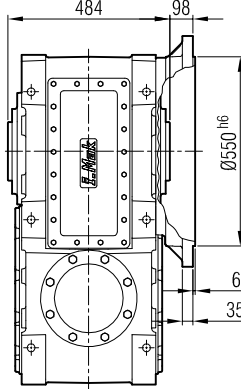
...-SD



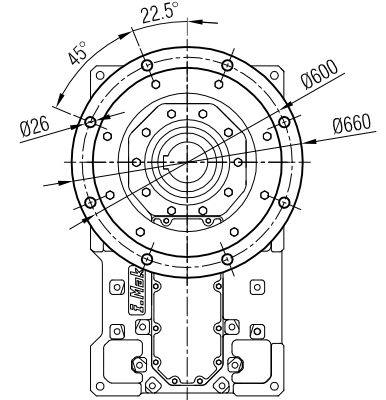
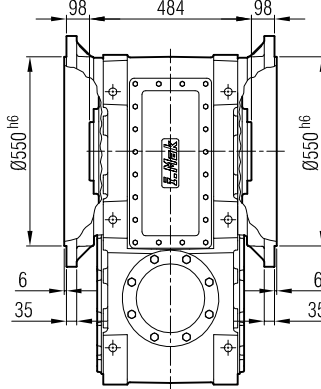
...-FL



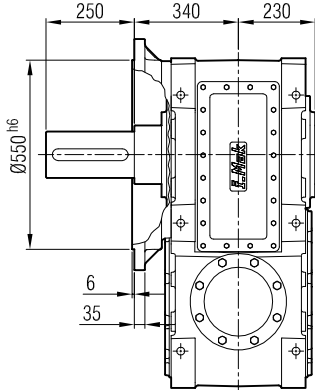
...-FR



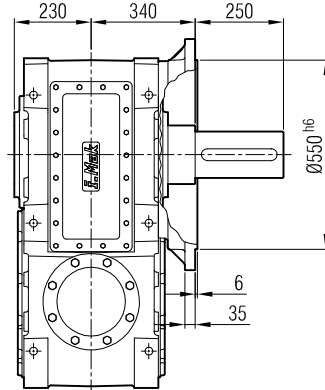
...-FD



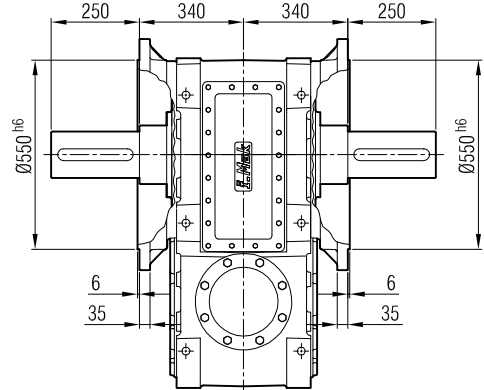
...-FL-SL



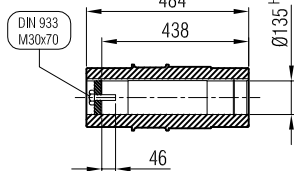
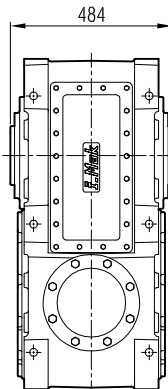
...-FR-SR



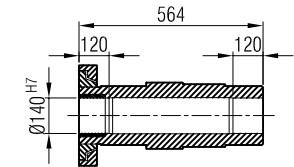
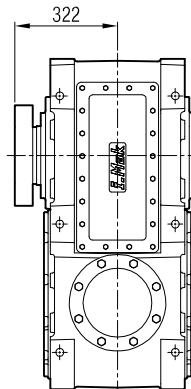
...-FD-SD



...-H



...-SDL / SDR



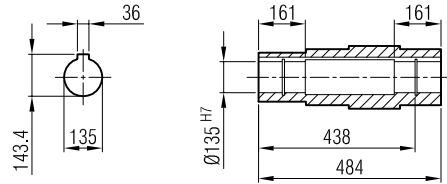
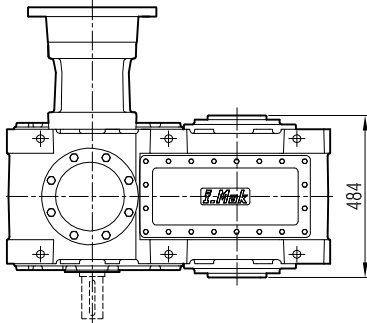
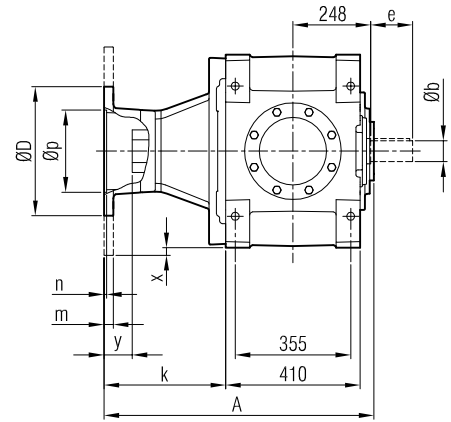
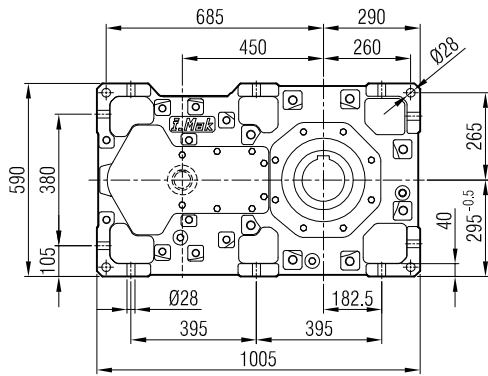
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

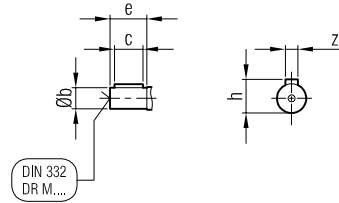
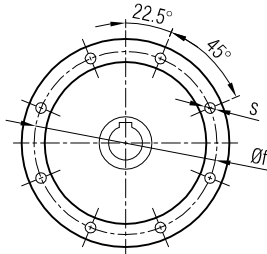
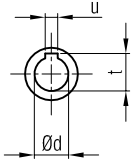
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAP 902

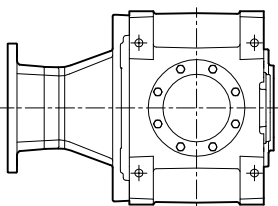


Tahvil / Ratio	Øb	e	z	c	h	M
i: 19,29 ... 12,20	60 m6	140	18	100	64	M16
i: 11,55 ... 5,88	75 m6	140	20	125	79.5	M20

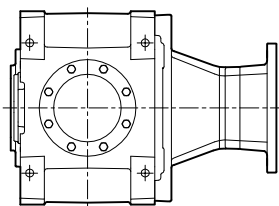


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y (i: ≥12,20)	y (i: ≤11,55)
280/B5	783	450	500	550	M16	336	25	6.5	75	79.9	20	-	65	44
315/B5	813	550	600	660	M24	366	30	7	85	90.4	22	35	90	74

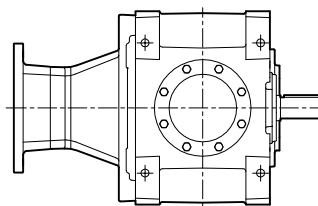
Giriş Seçenekleri / Input Options / Option d'entree



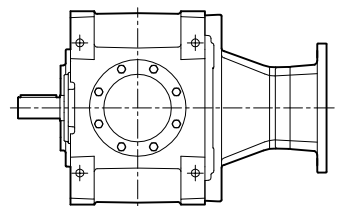
G03



G04



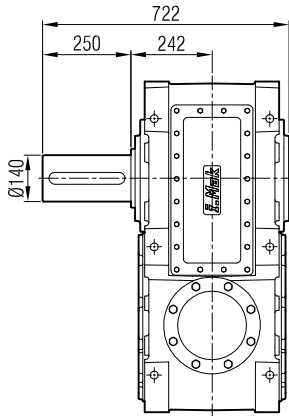
G05



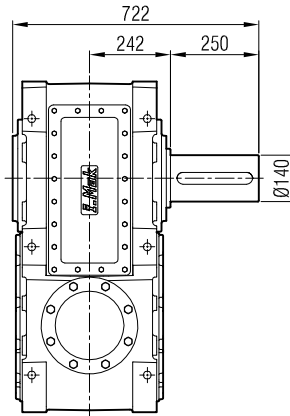
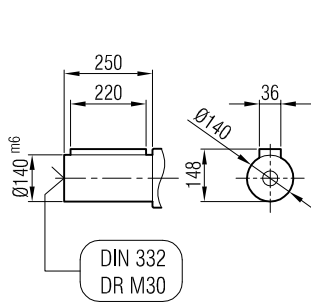
G06



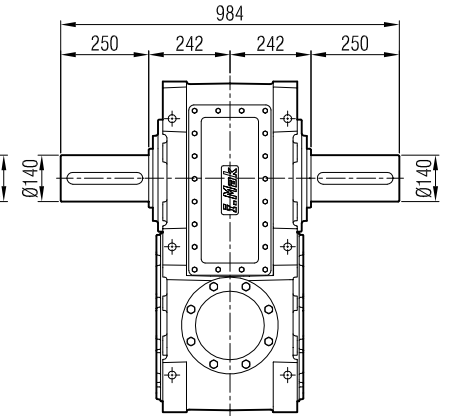
MA / MK 90_
...-SL



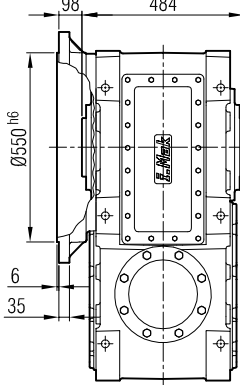
...-SR



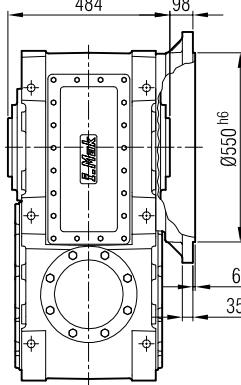
...-SD



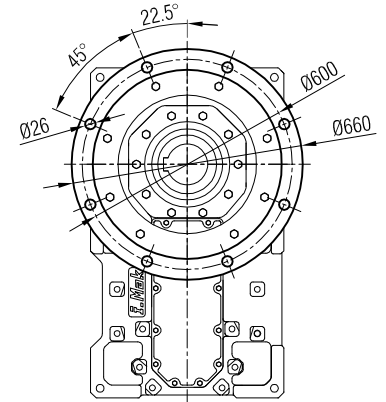
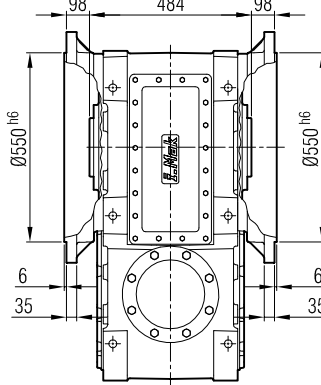
...-FL



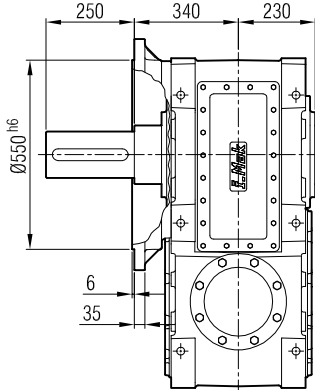
...-FR



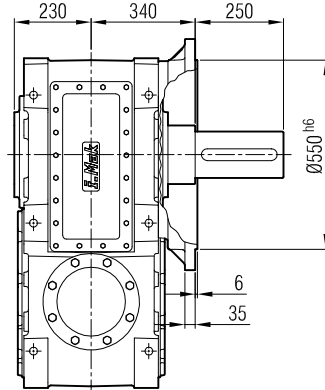
...-FD



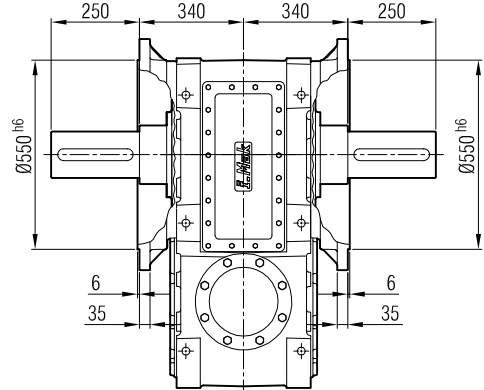
...-FL-SL



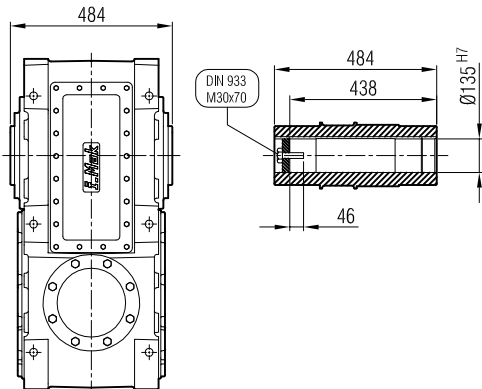
...-FR-SR



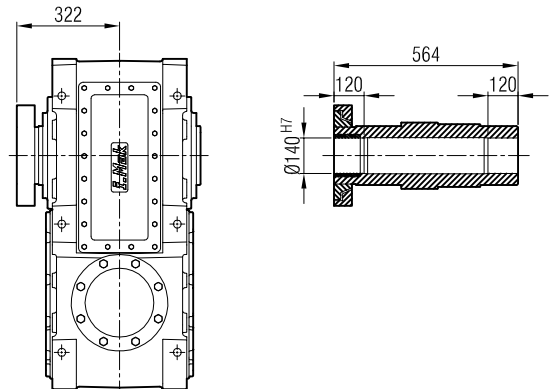
...-FD-SD



...-H



...-SDL / SDR



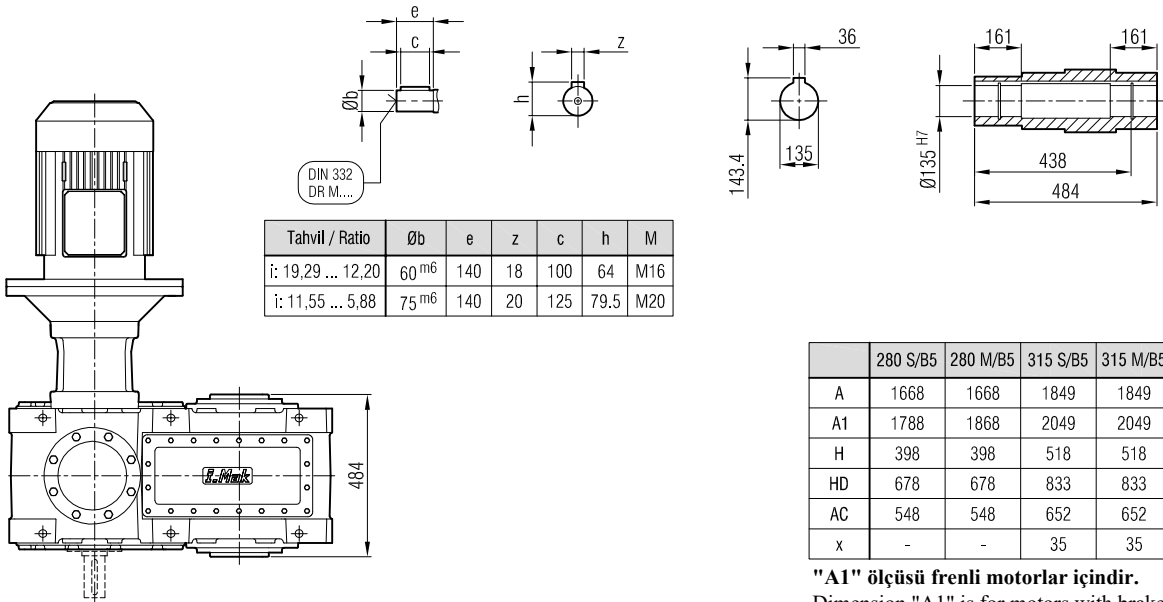
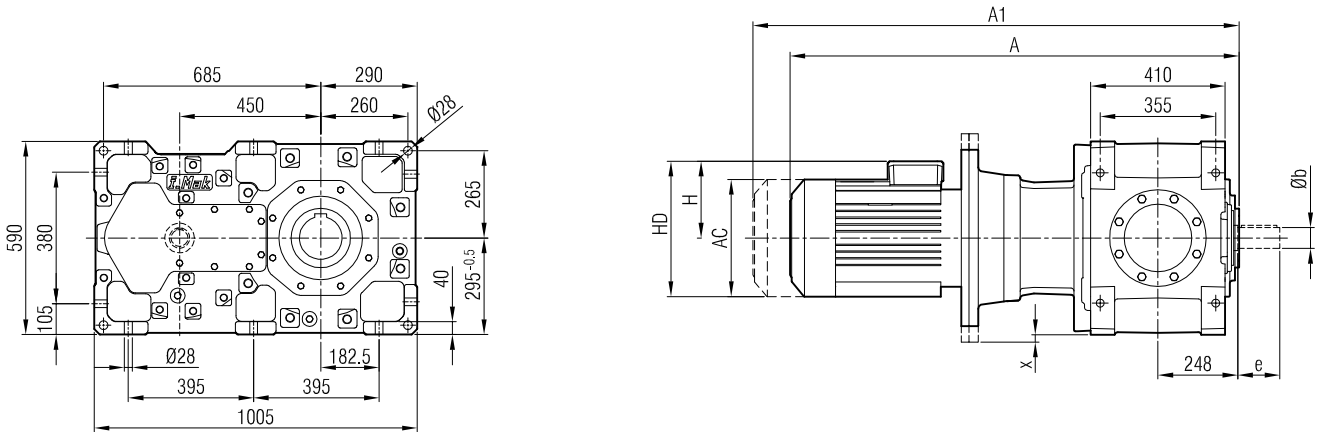
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 902

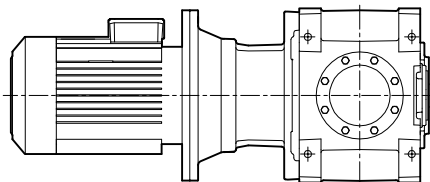


Tahvil / Ratio	Øb	e	z	c	h	M
i: 19,29 ... 12,20	60 ^{m6}	140	18	100	64	M16
i: 11,55 ... 5,88	75 ^{m6}	140	20	125	79.5	M20

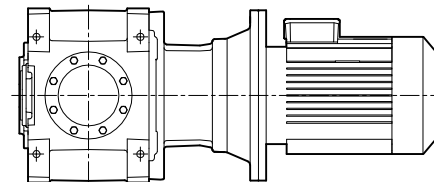
	280 S/B5	280 M/B5	315 S/B5	315 M/B5	315 L/B5
A	1668	1668	1849	1849	1960
A1	1788	1868	2049	2049	2160
H	398	398	518	518	518
HD	678	678	833	833	833
AC	548	548	652	652	652
x	-	-	35	35	35

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

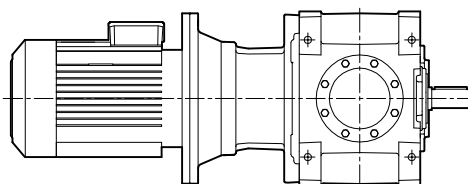
Giriş Seçenekleri / Input Options / Option d'entree



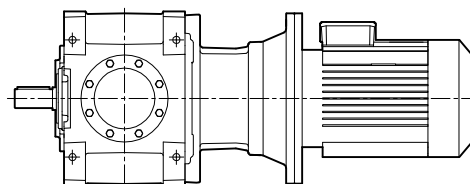
G03



G04



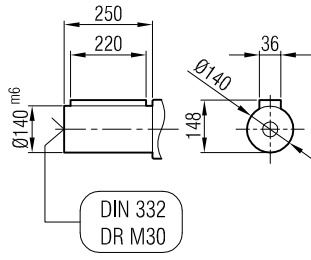
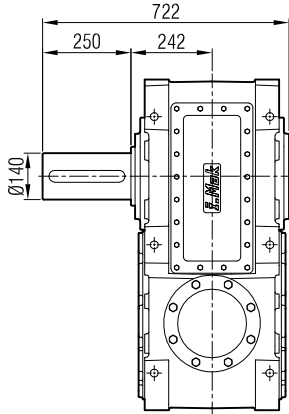
G05



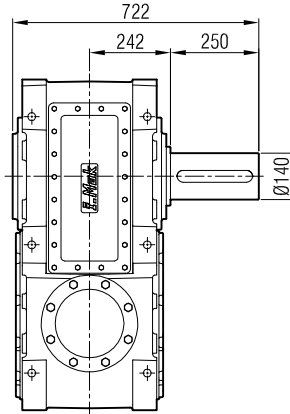
G06



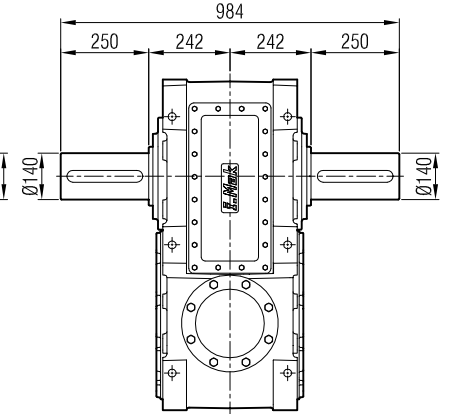
MA / MK 90_
...-SL



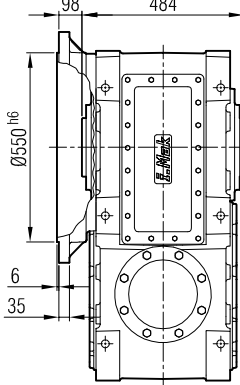
...-SR



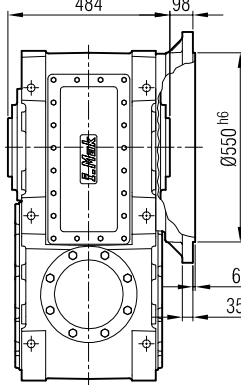
...-SD



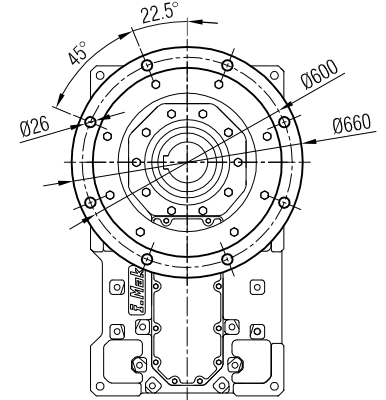
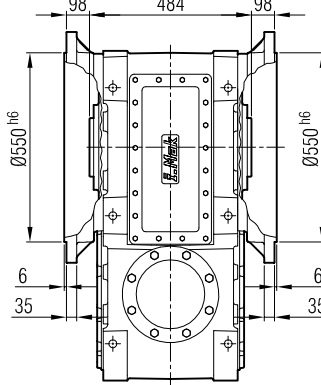
...-FL



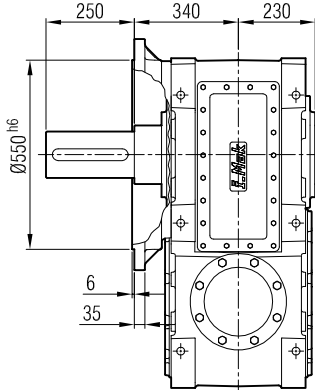
...-FR



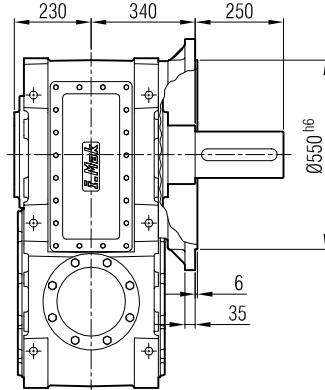
...-FD



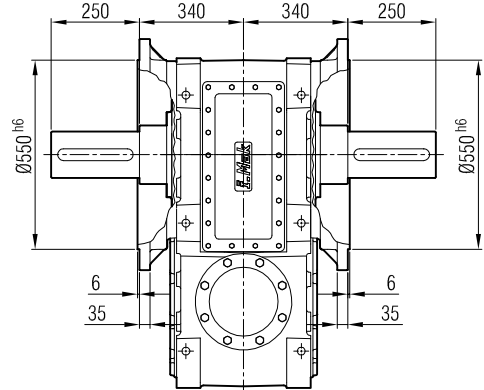
...-FL-SL



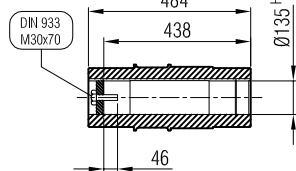
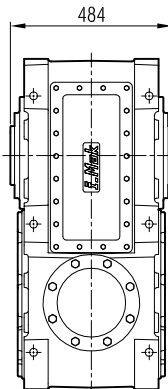
...-FR-SR



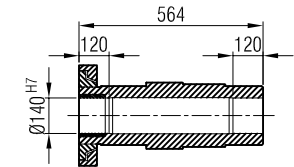
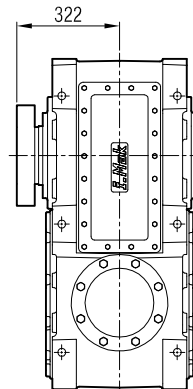
...-FD-SD



...-H



...-SDL / SDR



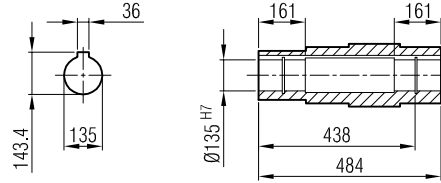
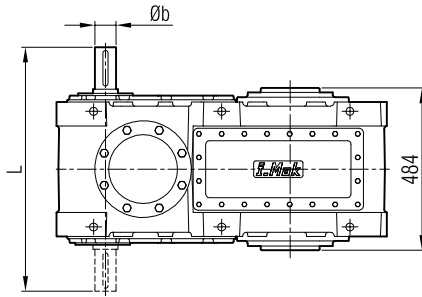
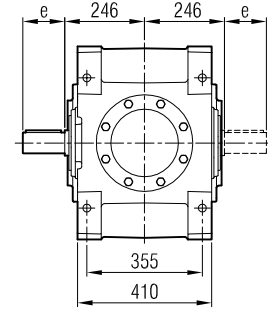
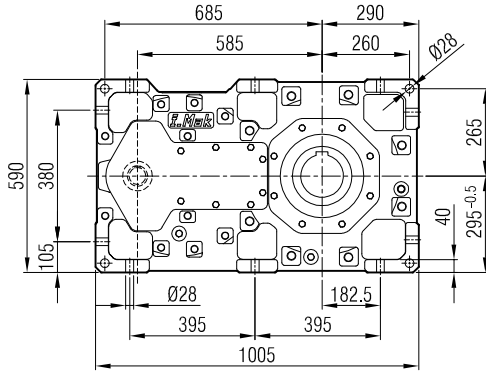
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

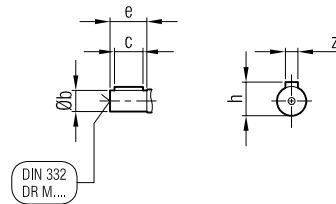
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



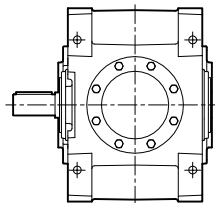
MA 903



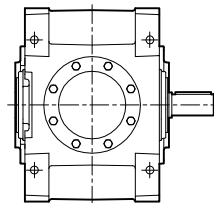
Tahvil / Ratio	Øb	e	z	c	h	M	L
i: 89,63 ... 52,05	45 ^{k6}	120	14	100	48,5	M16	733
i: 49,17 ... 21,16	55 ^{m6}	120	16	110	59	M20	733



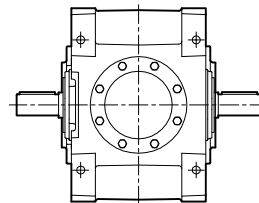
Giriş Seçenekleri / Input Options / Option d'entree



G00



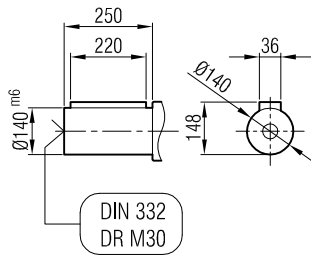
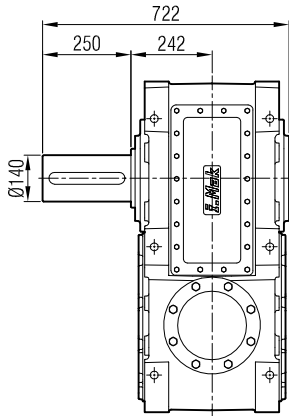
G01



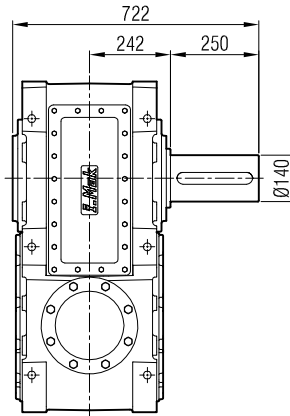
G02



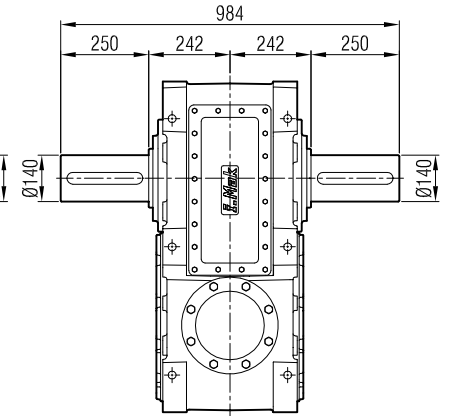
MA / MK 90_
...-SL



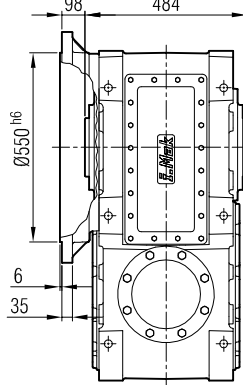
...-SR



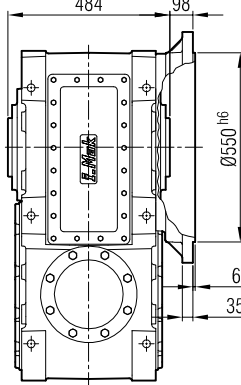
...-SD



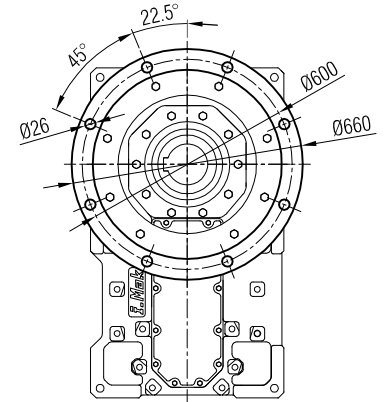
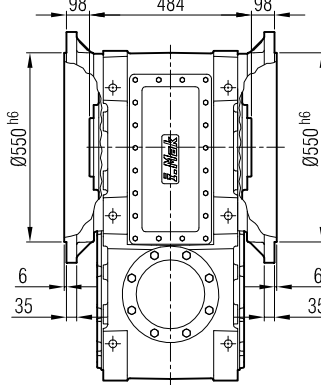
...-FL



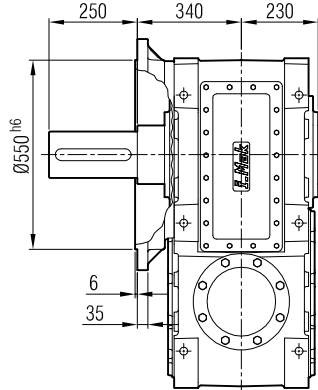
...-FR



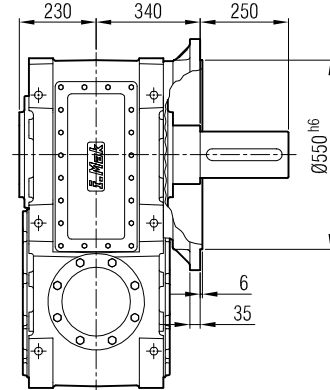
...-FD



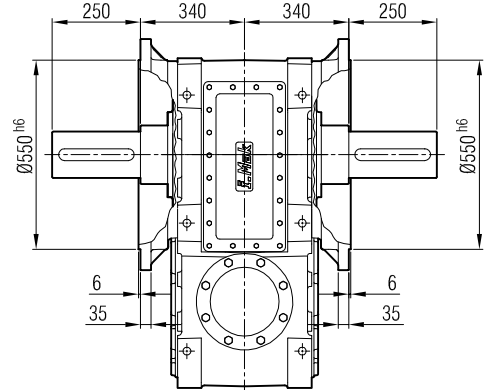
...-FL-SL



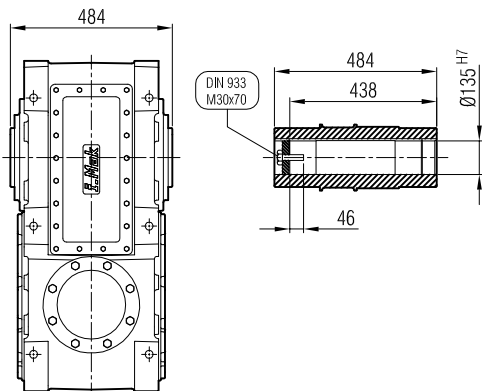
...-FR-SR



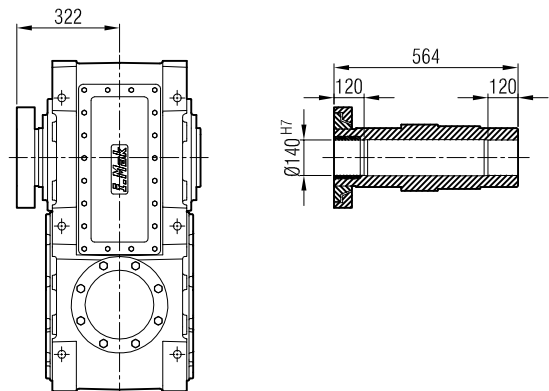
...-FD-SD



...-H



...-SDL / SDR



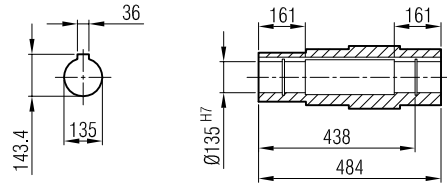
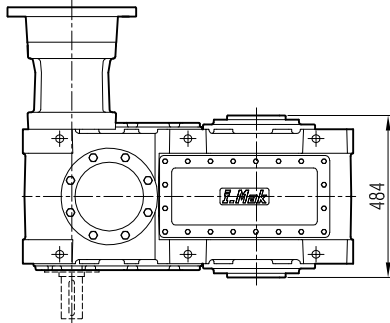
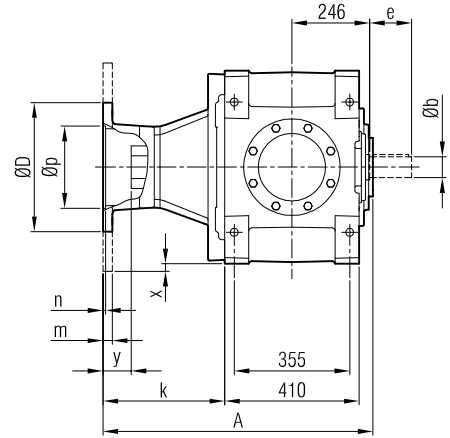
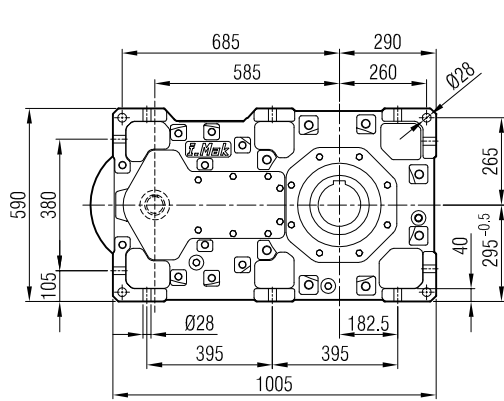
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



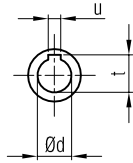
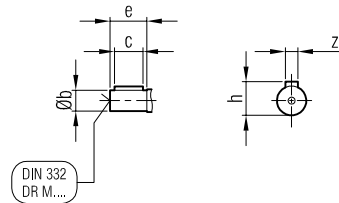
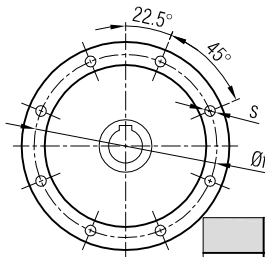
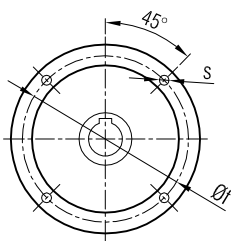
MAP 903



≤ 200 B5 Tip/Type/Typ

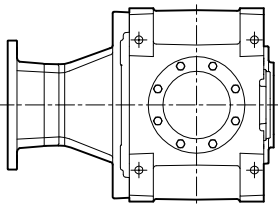
≥ 225 B5 Tip/Type/Typ

Tahvil / Ratio	Øb	e	z	c	h	M
i: 89,63 ... 52,05	45 ^{k6}	120	14	100	48,5	M16
i: 49,17 ... 21,16	55 ^{m6}	120	16	110	59	M20

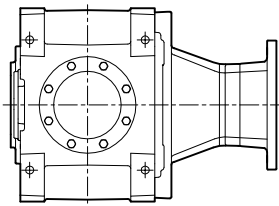


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y (i: ≥ 52,05)	y (i: ≤ 49,17)
160/B5	727	250	300	350	M14	280	20	6	42	45.3	12	-	49.5	-
180/B5	727	250	300	350	M14	280	20	6	48	51.8	14	-	49.5	-
200/B5	727	300	350	400	M16	280	22	6	55	59.3	16	-	49.5	39.5
225/B5	770	350	400	450	M16	323	22	6	60	64.4	18	-	78.5	72.5
250/B5	770	450	500	550	M16	323	25	6.5	65	69.4	18	-	74.5	72.5
280/B5	770	450	500	550	M16	323	25	6.5	75	75.9	20	-	64.5	64.5
315/B5	800	550	600	660	M24	353	30	7	85	90.4	22	35	-	89.5

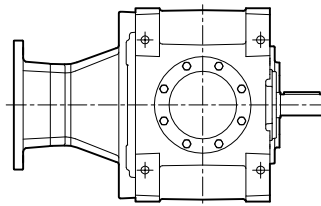
Giriş Seçenekleri / Input Options / Option d'entree



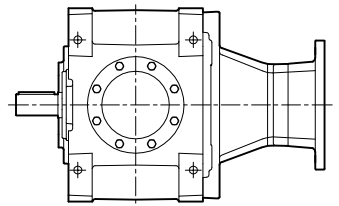
G03



G04



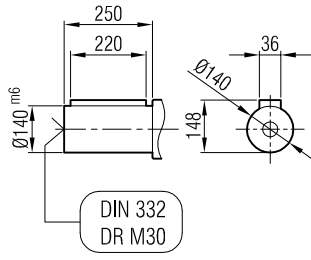
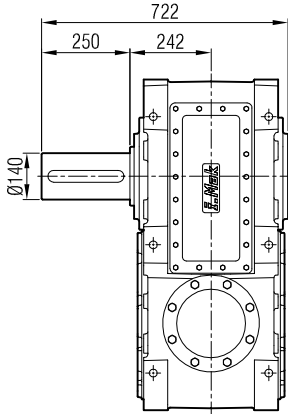
G05



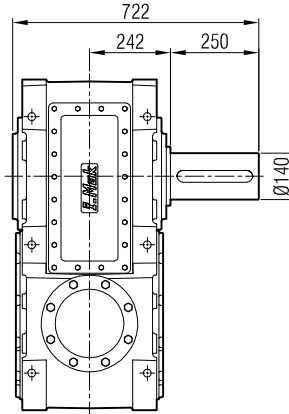
G06



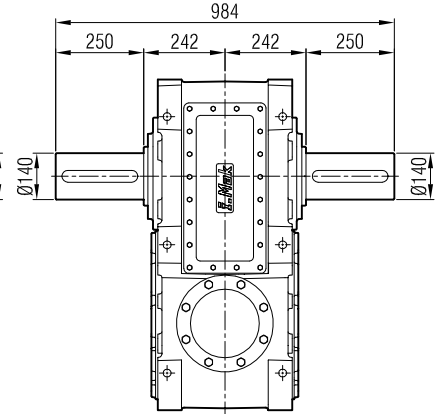
MA / MK 90_
...-SL



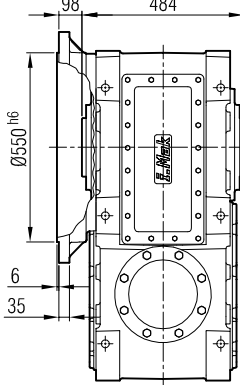
...-SR



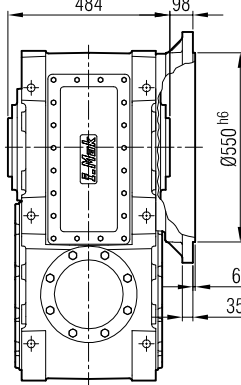
...-SD



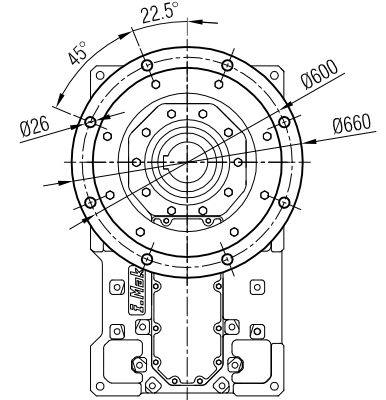
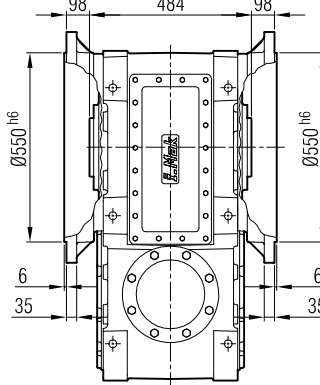
...-FL



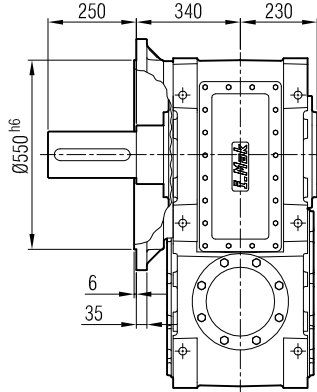
...-FR



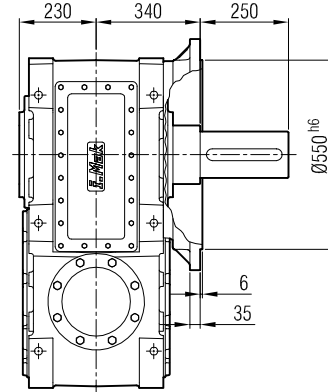
...-FD



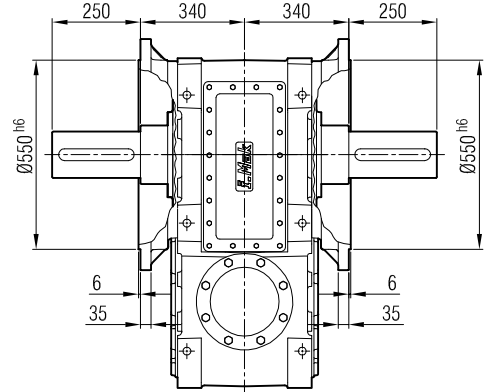
...-FL-SL



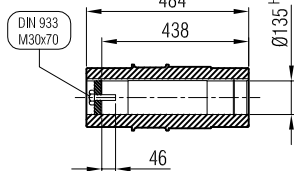
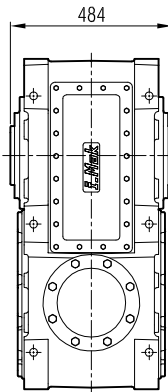
...-FR-SR



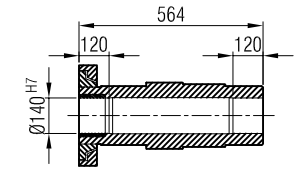
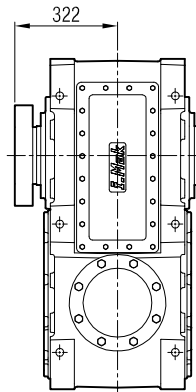
...-FD-SD



...-H



...-SDL / SDR



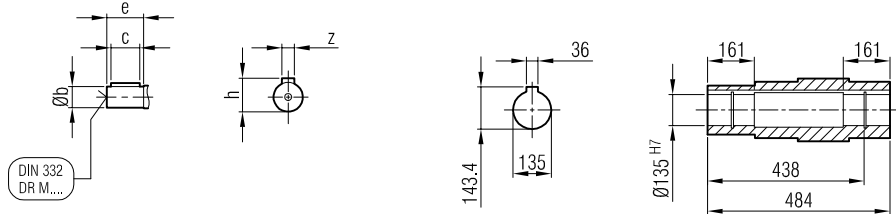
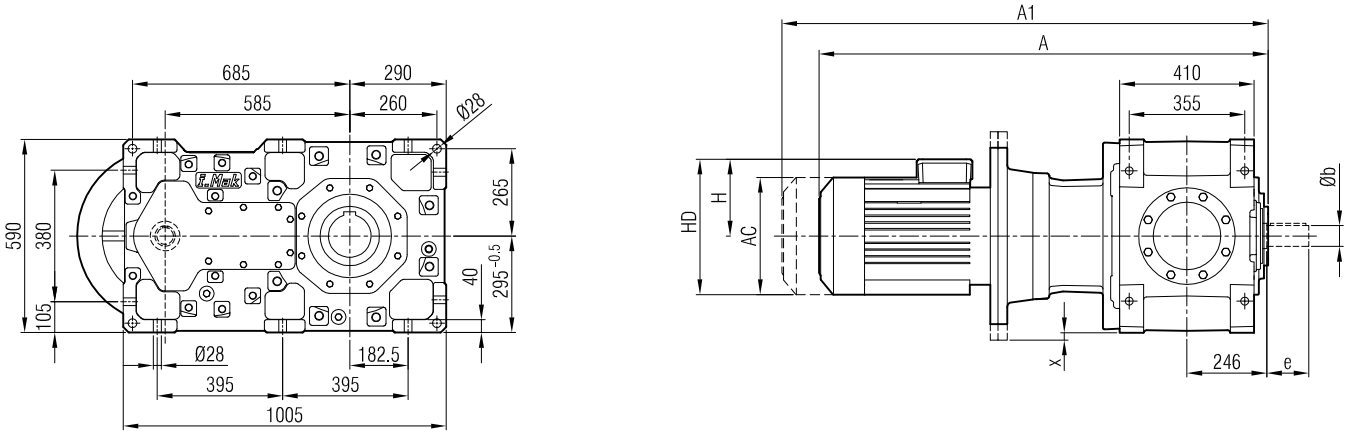
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

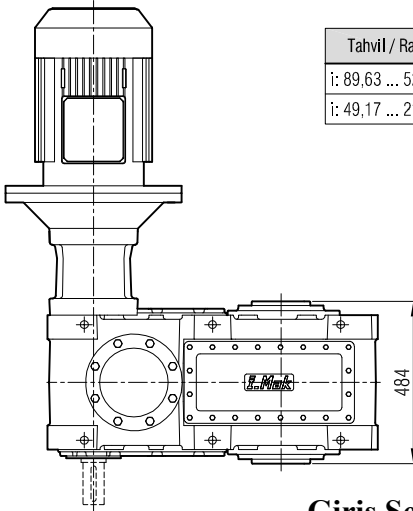
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 903



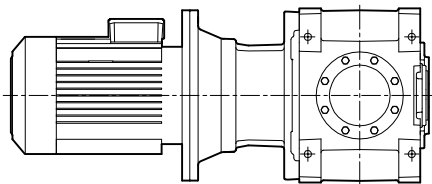
Tahvil / Ratio	Øb	e	z	c	h	M
i: 89,63 ... 52,05	45 ^{k6}	120	14	100	48,5	M16
i: 49,17 ... 21,16	55 ^{m6}	120	16	110	59	M20



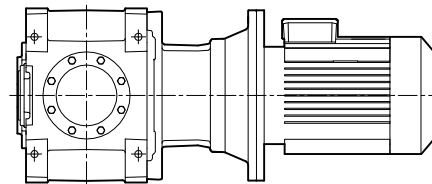
	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5
A	1292	1368	1368	1436	1455	1515	1565	1655	1655	1836	1836
A1	1407	1488	1488	1556	1575	1635	1685	1775	1855	2036	2036
H	240	260	260	300	313	313	366	398	398	518	518
HD	400	440	440	500	538	538	618	678	678	833	833
AC	315	357	357	394	456	456	489	548	548	652	652
x	-	-	-	-	-	-	-	-	-	35	35

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

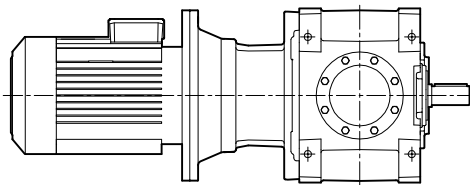
Giriş Seçenekleri / Input Options / Option d'entree



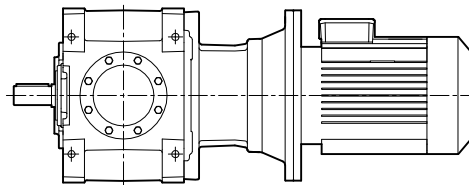
G03



G04



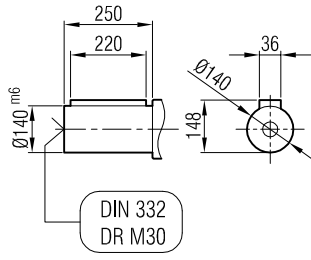
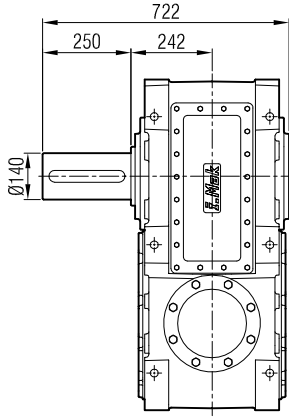
G05



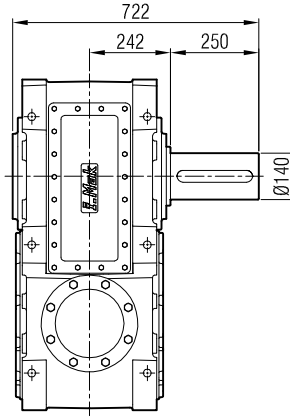
G06



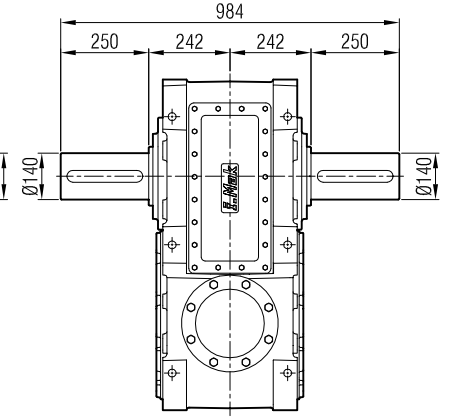
MA / MK 90_
...-SL



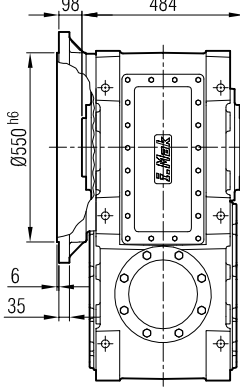
...-SR



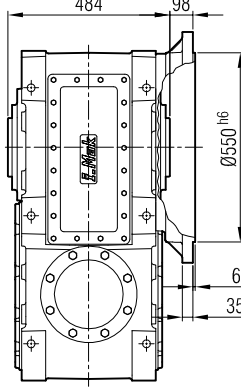
...-SD



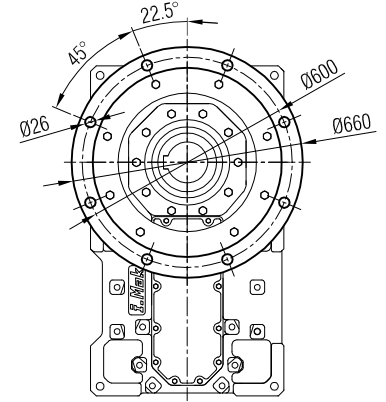
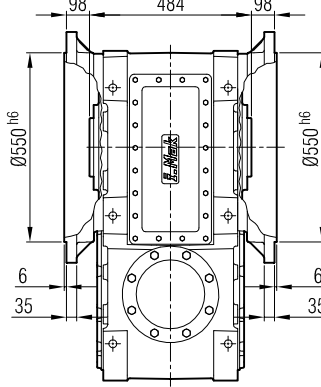
...-FL



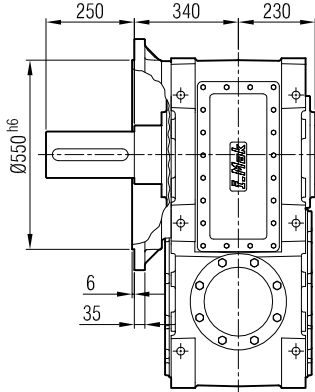
...-FR



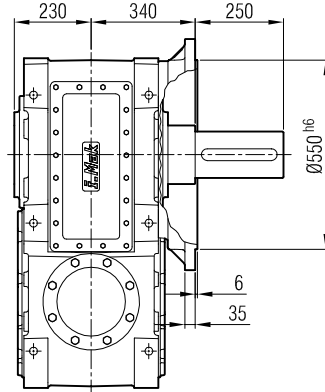
...-FD



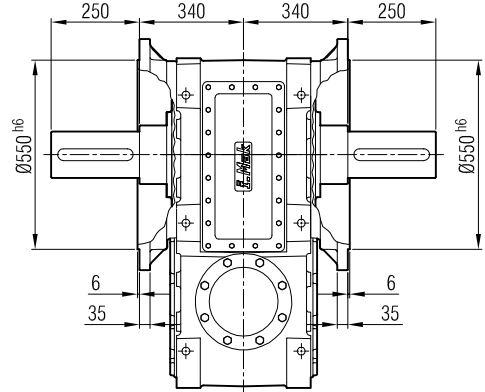
...-FL-SL



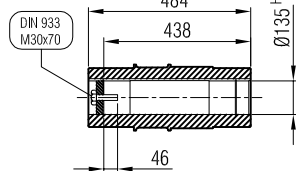
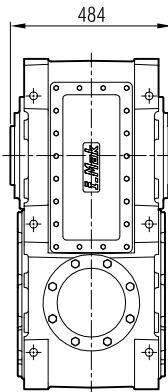
...-FR-SR



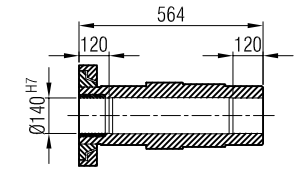
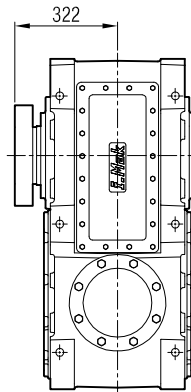
...-FD-SD



...-H



...-SDL / SDR



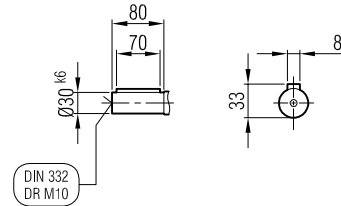
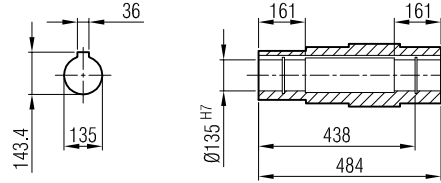
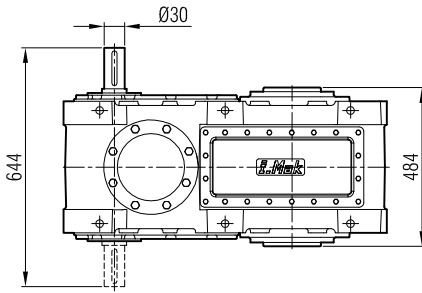
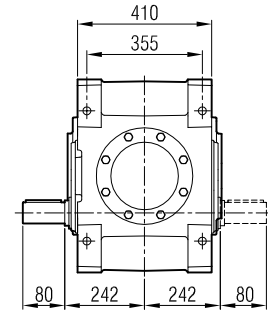
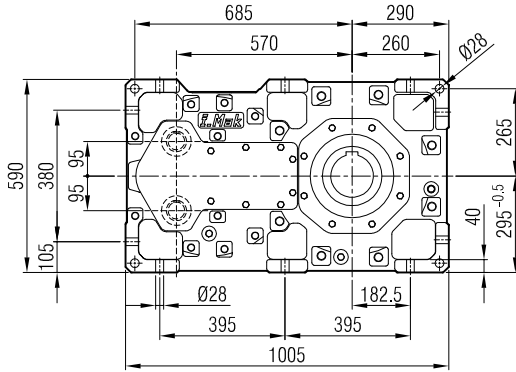
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

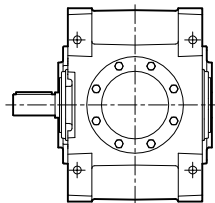
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



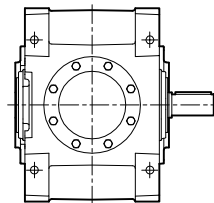
MA 904



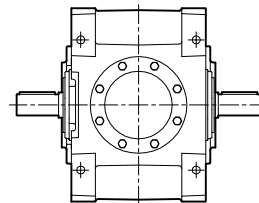
Giriş Seçenekleri / Input Options / Option d'entree



G00



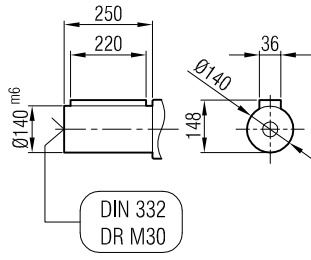
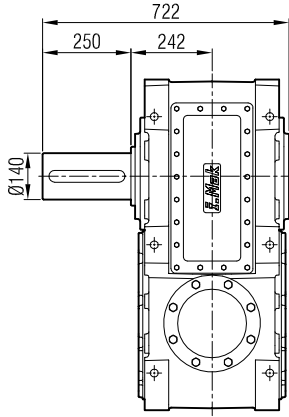
G01



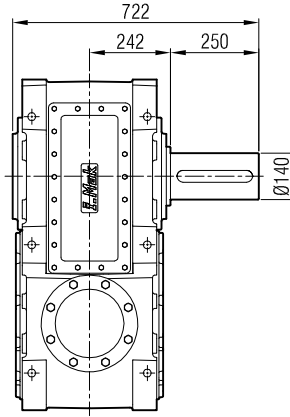
G02



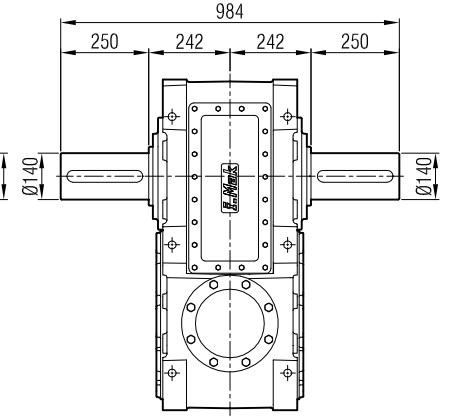
MA / MK 90_
...-SL



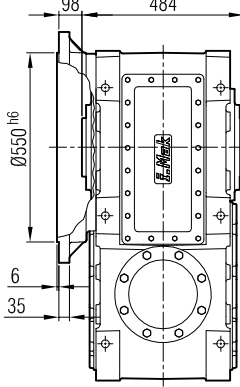
...-SR



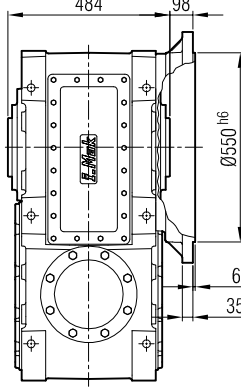
...-SD



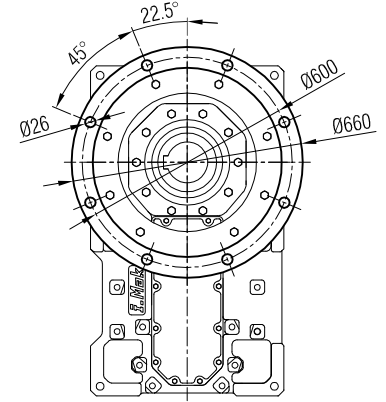
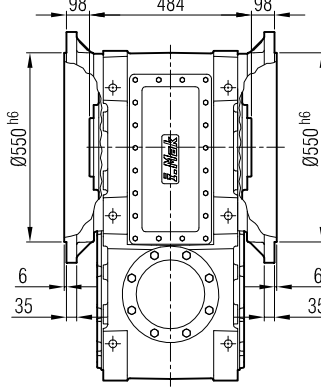
...-FL



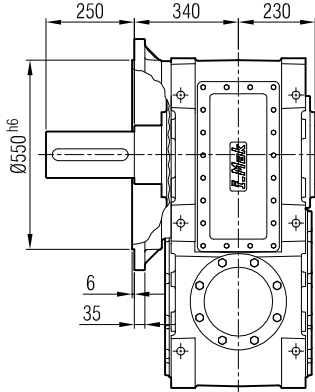
...-FR



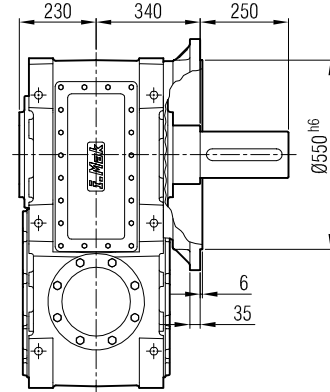
...-FD



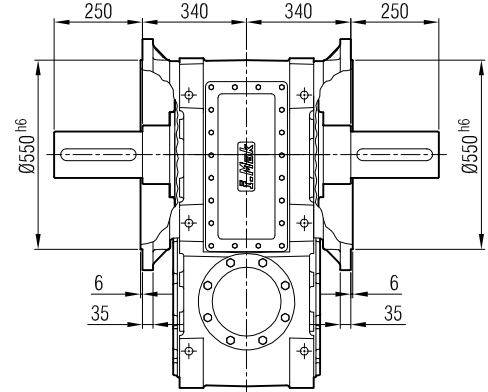
...-FL-SL



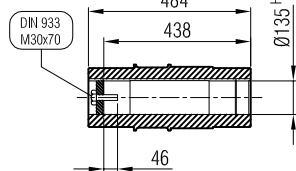
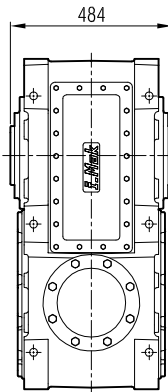
...-FR-SR



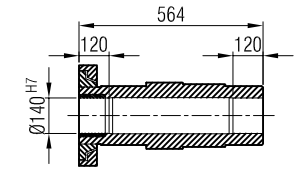
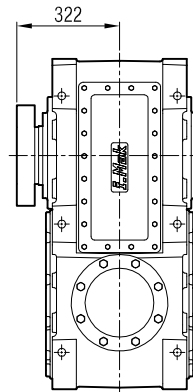
...-FD-SD



...-H



...-SDL / SDR



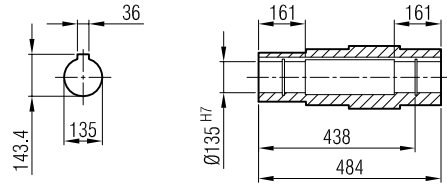
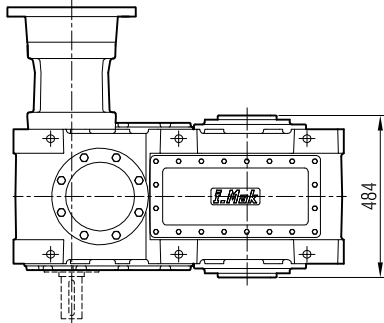
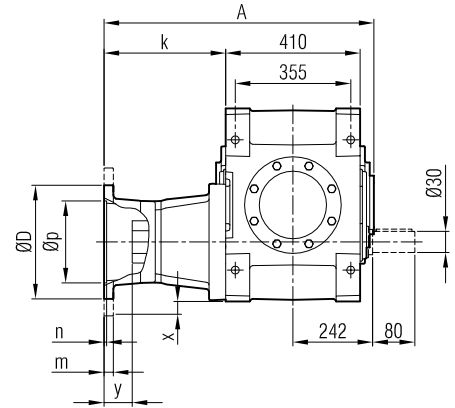
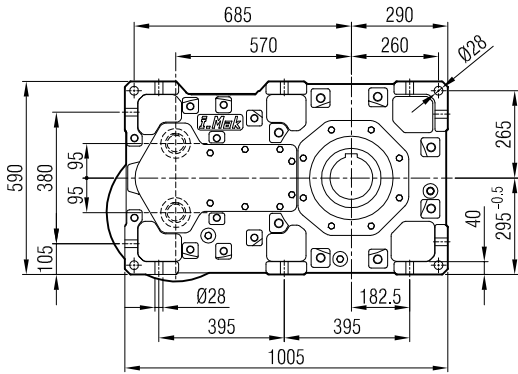
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

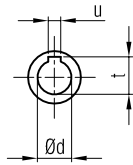
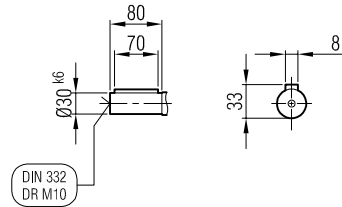
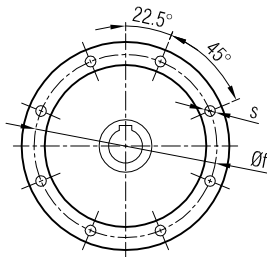
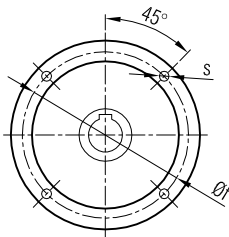


MAP 904



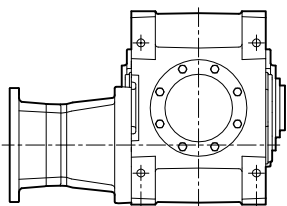
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ

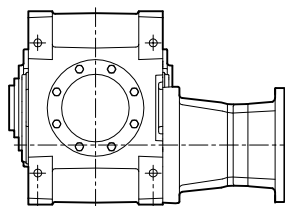


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	641	180	215	250	M12	194	15	5	28	31.3	8	-	31
132/B5	661	230	265	300	M12	214	18	6	38	41.3	10	-	45
160/B5	678	250	300	350	M14	231	20	6	42	45.3	12	-	70
180/B5	678	250	300	350	M14	231	20	6	48	51.8	14	-	60
200/B5	678	300	350	400	M16	231	22	6	55	59.3	16	0	60
225/B5	721	350	400	450	M16	274	22	6	60	64.4	18	25	80

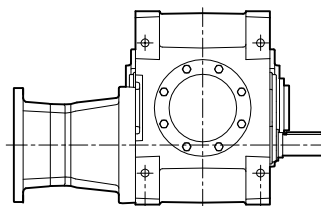
Giriş Seçenekleri / Input Options / Option d'entree



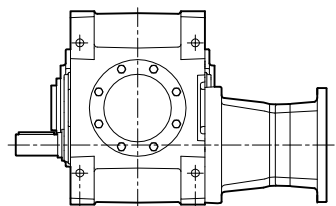
G03



G04



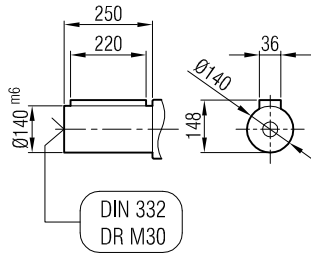
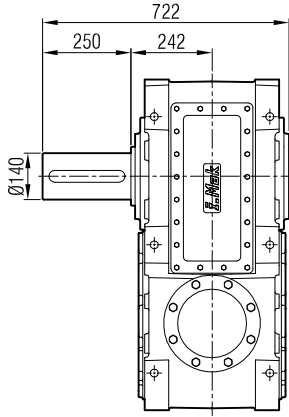
G05



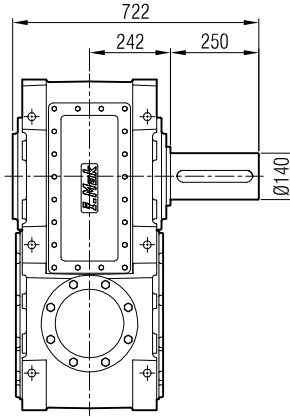
G06



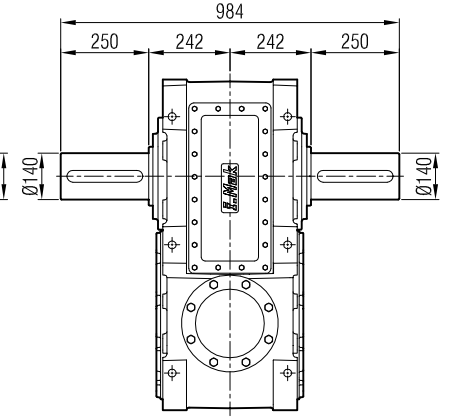
MA / MK 90_
...-SL



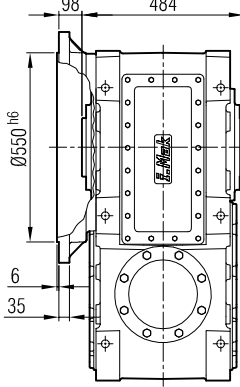
...-SR



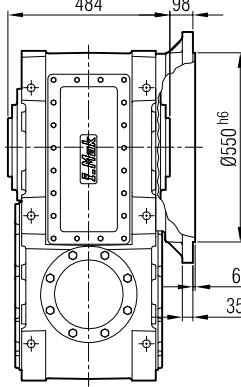
...-SD



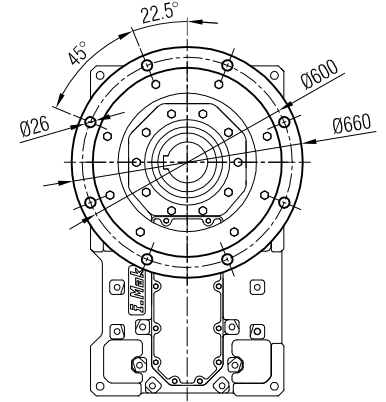
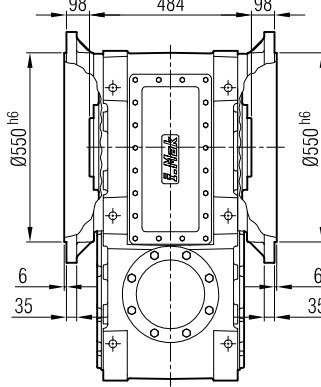
...-FL



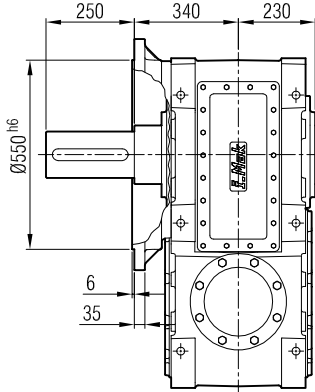
...-FR



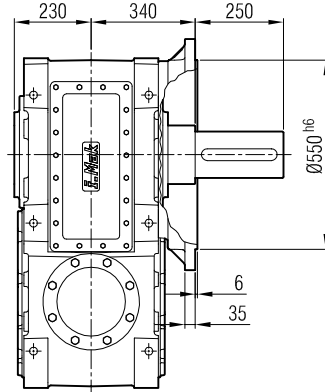
...-FD



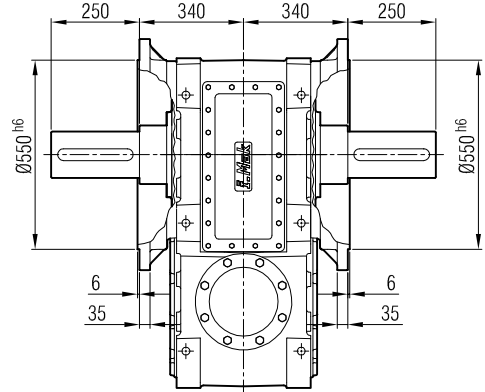
...-FL-SL



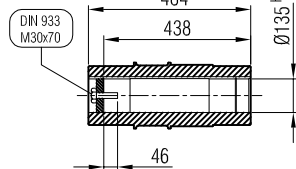
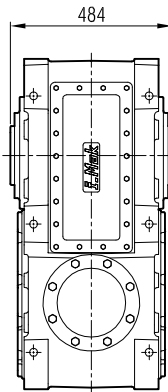
...-FR-SR



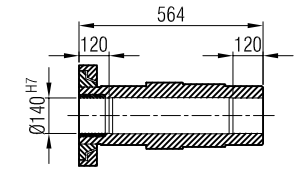
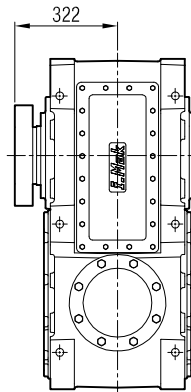
...-FD-SD



...-H



...-SDL / SDR



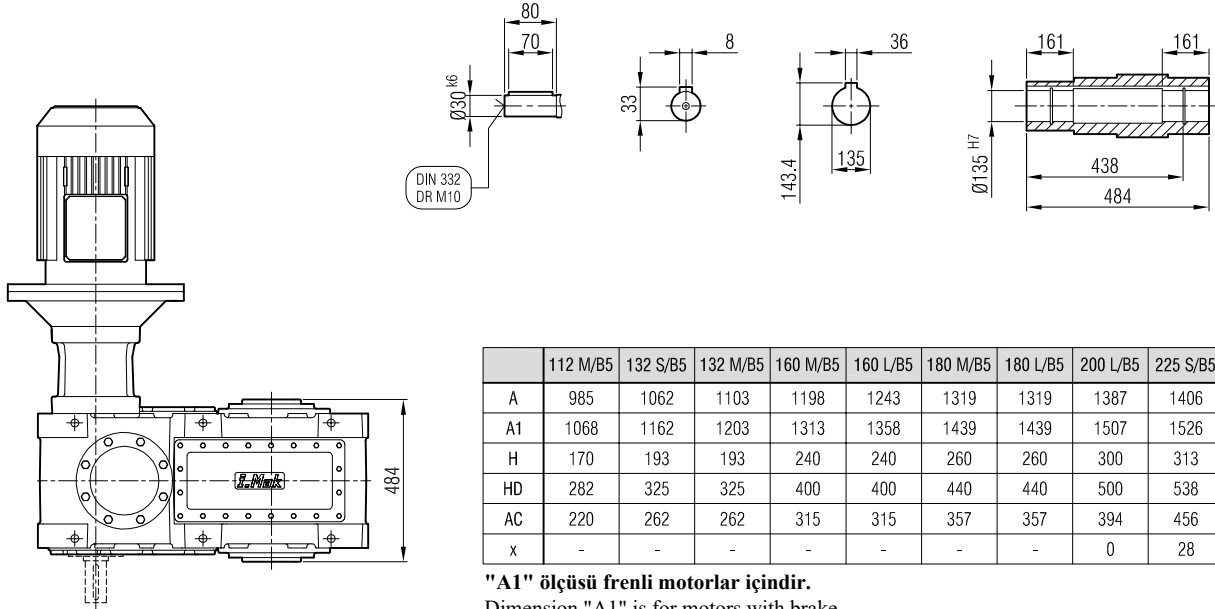
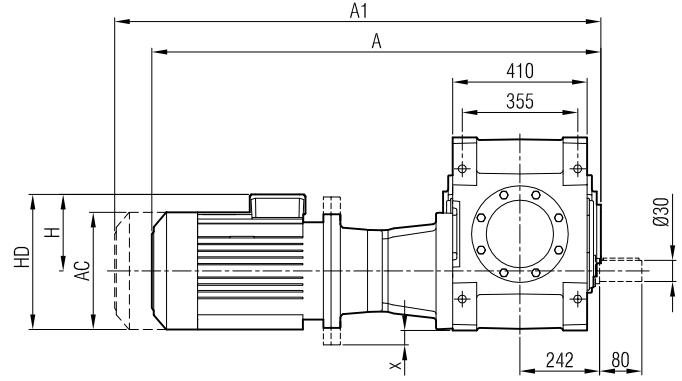
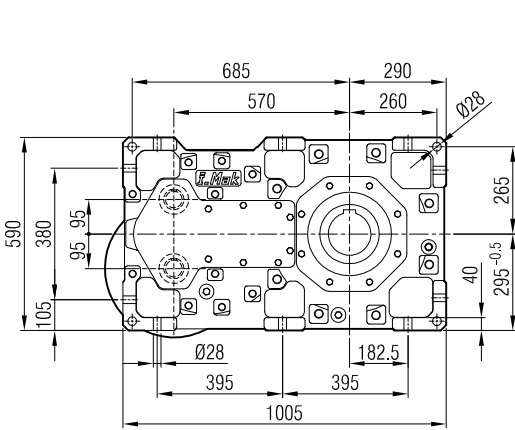
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



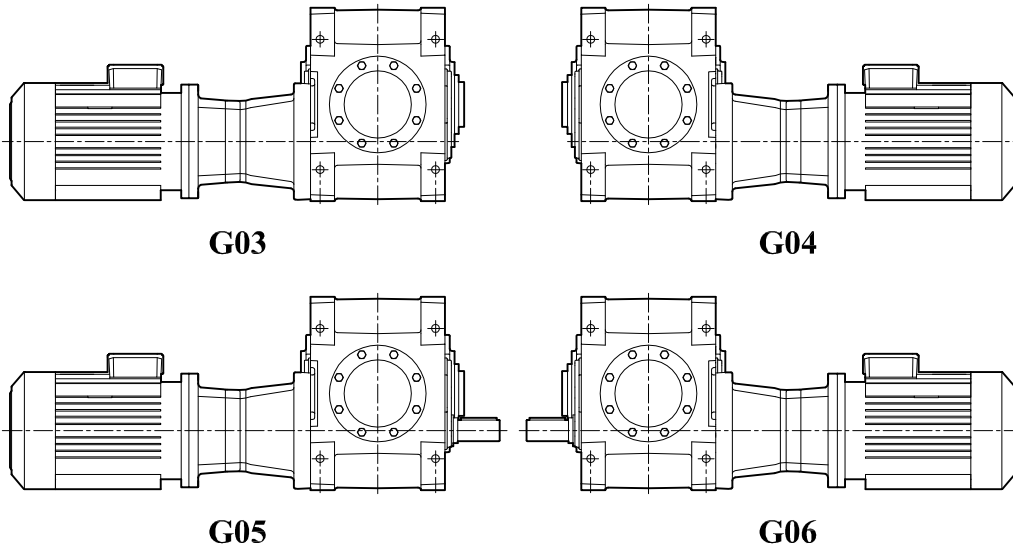
MAM 904



	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5
A	985	1062	1103	1198	1243	1319	1319	1387	1406	1466
A1	1068	1162	1203	1313	1358	1439	1439	1507	1526	1586
H	170	193	193	240	240	260	260	300	313	313
HD	282	325	325	400	400	440	440	500	538	538
AC	220	262	262	315	315	357	357	394	456	456
x	-	-	-	-	-	-	-	0	28	28

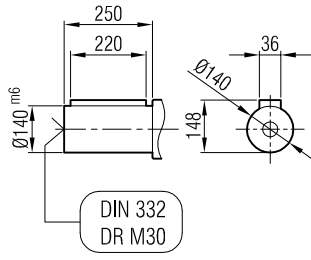
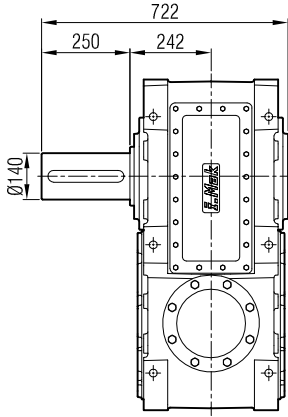
"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

Giriş Seçenekleri / Input Options / Option d'entree

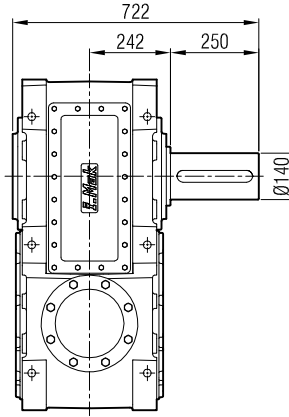




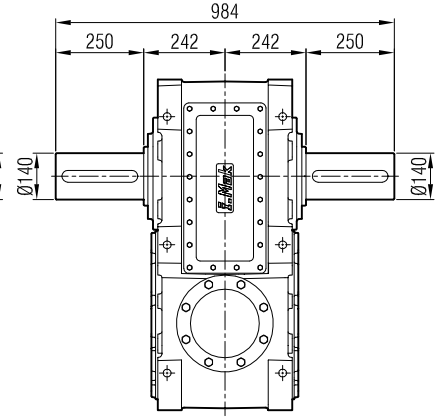
MA / MK 90_
...-SL



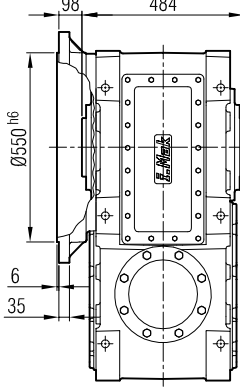
...-SR



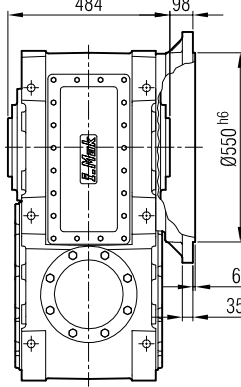
...-SD



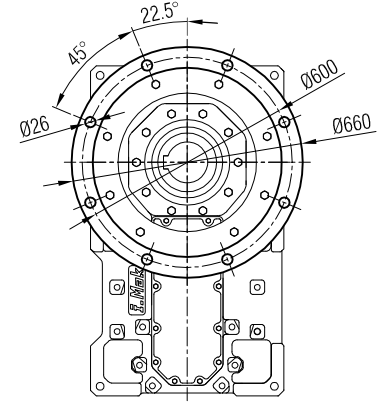
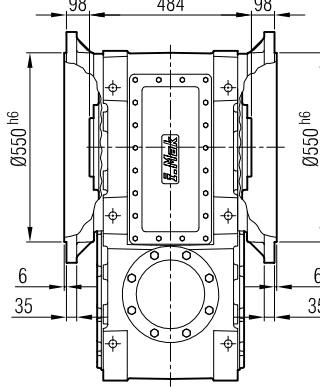
...-FL



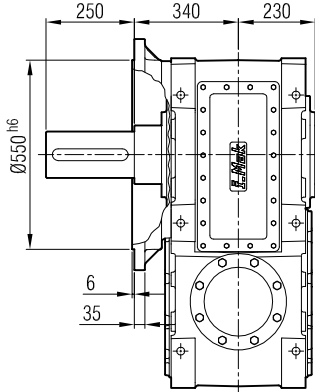
...-FR



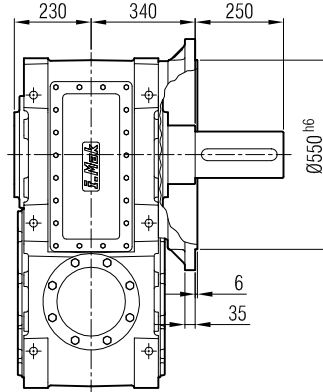
...-FD



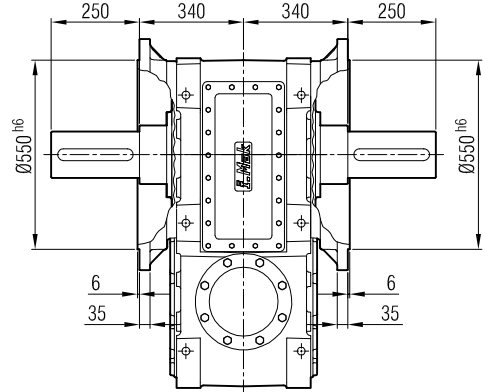
...-FL-SL



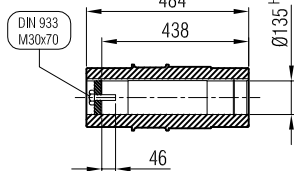
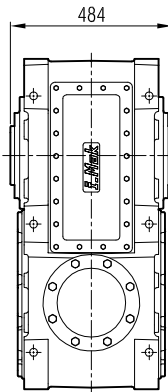
...-FR-SR



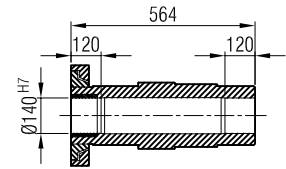
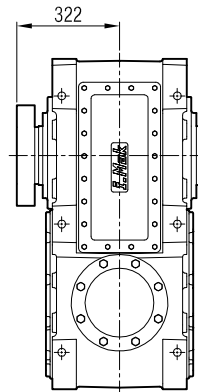
...-FD-SD



...-H



...-SDL / SDR



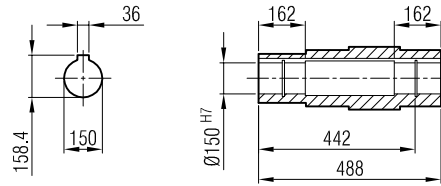
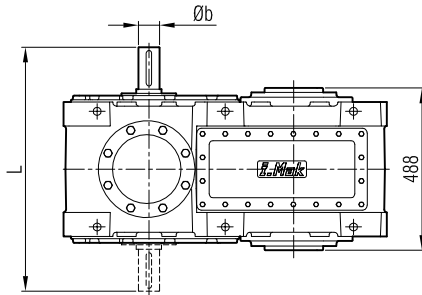
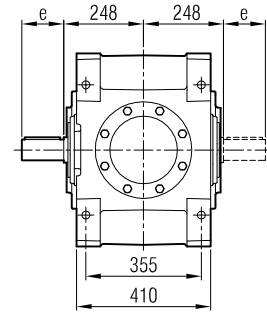
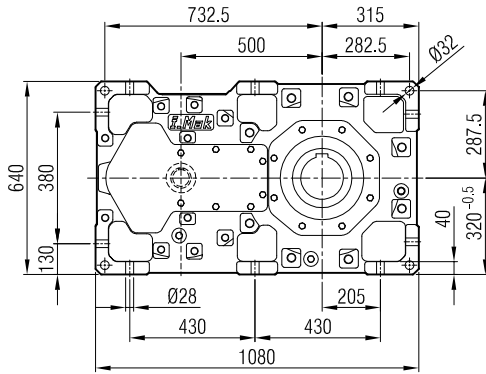
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

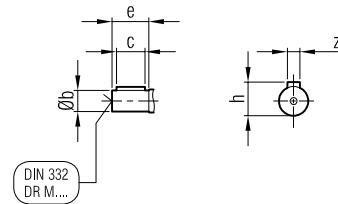
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



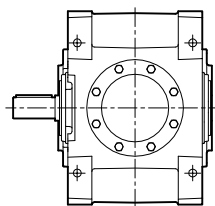
MA 1002



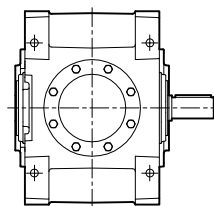
Tahvil / Ratio	Øb	e	z	c	h	M	L
i: 28,47 ... 23,34	60 ^{m6}	140	18	100	64	M16	776
i: 19,59 ... 8,55	75 ^{m6}	140	20	125	79.5	M20	776



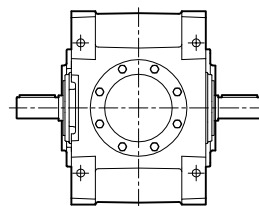
Giriş Seçenekleri / Input Options / Option d'entree



G00



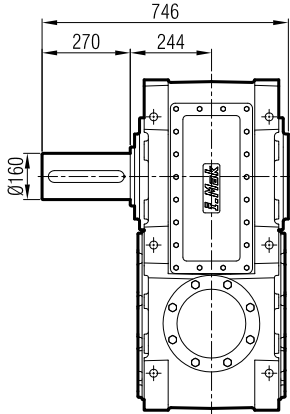
G01



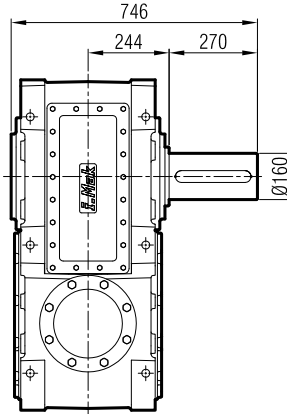
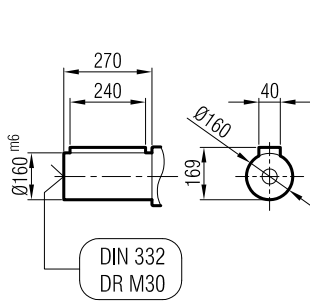
G02



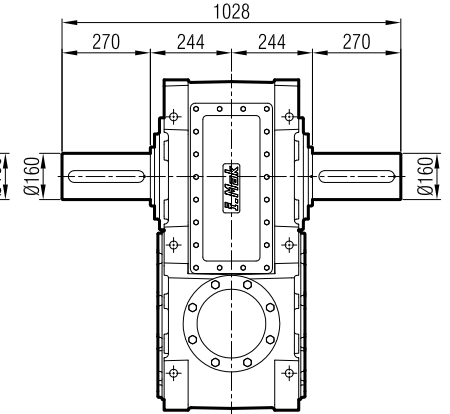
MA / MK 100_
...-SL



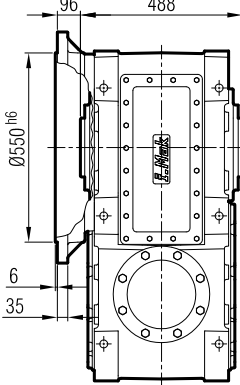
...-SR



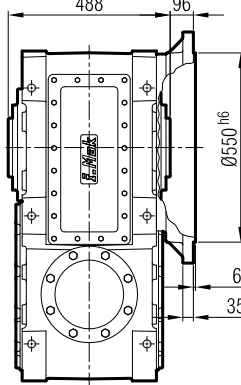
...-SD



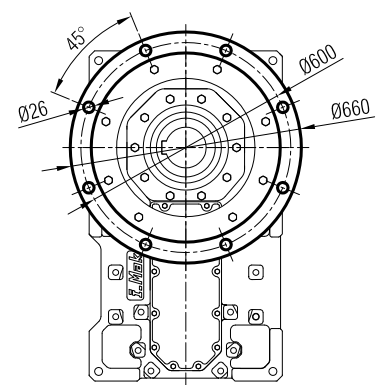
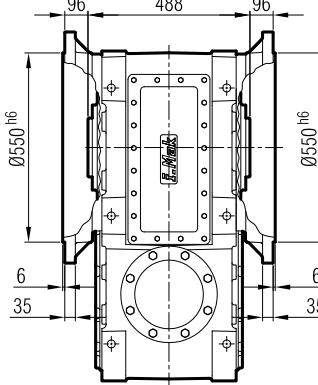
...-FL



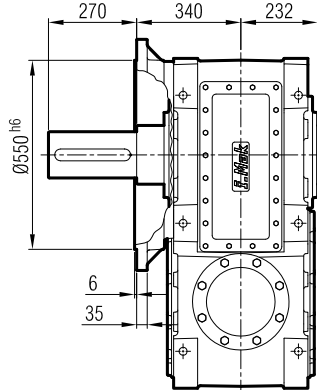
...-FR



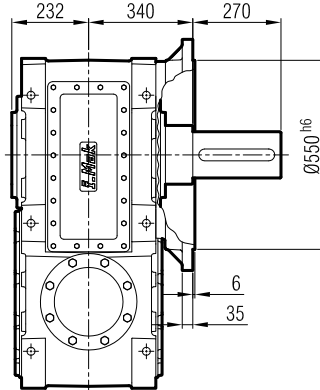
...-FD



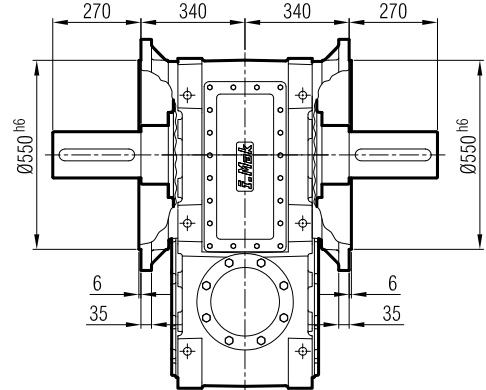
...-FL-SL



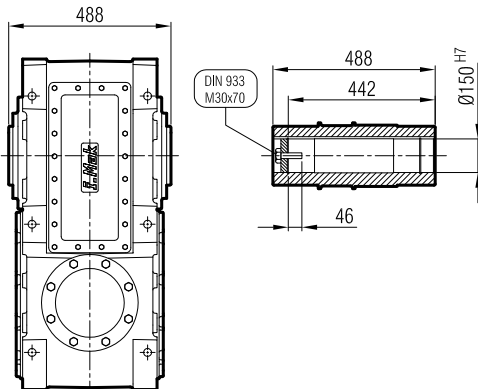
...-FR-SR



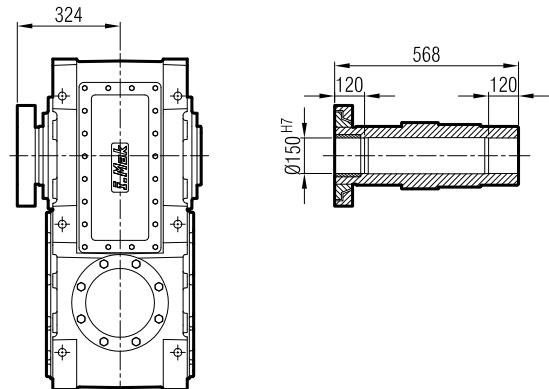
...-FD-SD



...-H



...-SDL / SDR



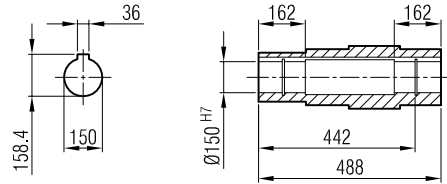
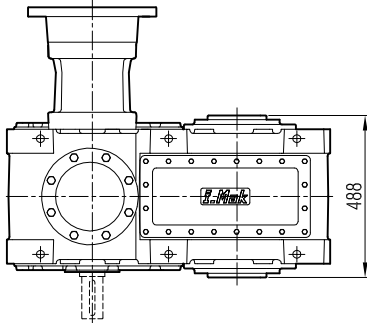
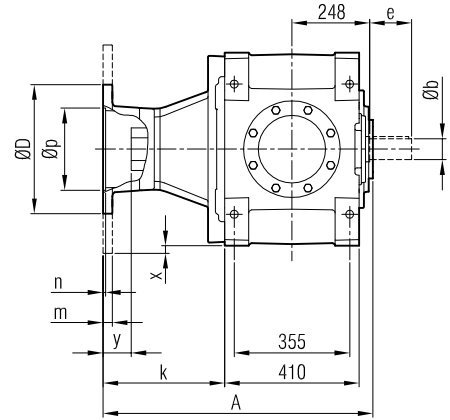
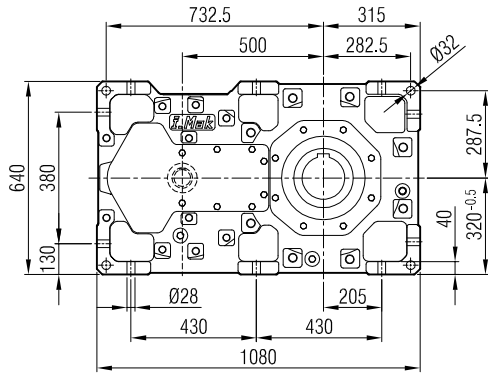
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

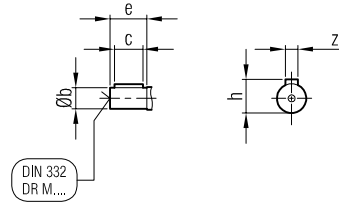
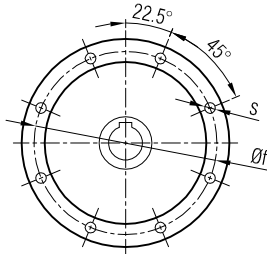
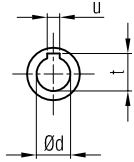
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAP 1002

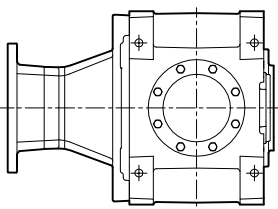


Tahvil / Ratio	Øb	e	z	c	h	M
i: 28,47 ... 23,34	60 m6	140	18	100	64	M16
i: 19,59 ... 8,55	75 m6	140	20	125	79,5	M20

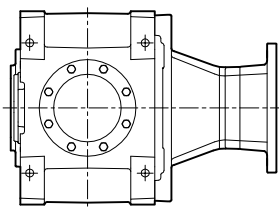


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y (i: ≥12,20)	y (i: ≤11,55)
280/B5	785	450	500	550	M16	336	25	6.5	75	79.9	20	-	65	44
315/B5	815	550	600	660	M24	366	30	7	85	90.4	22	10	90	74

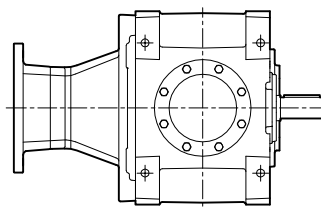
Giriş Seçenekleri / Input Options / Option d'entree



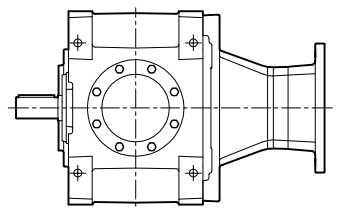
G03



G04



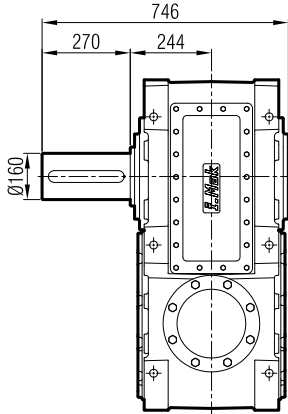
G05



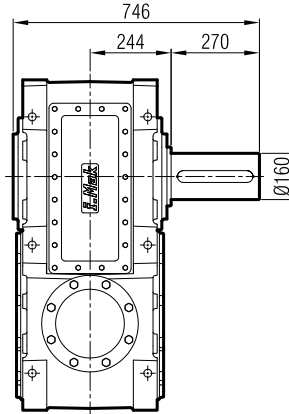
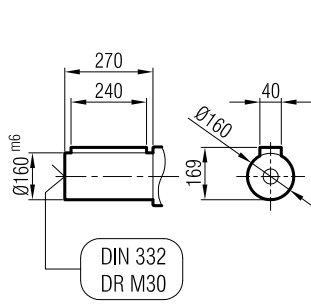
G06



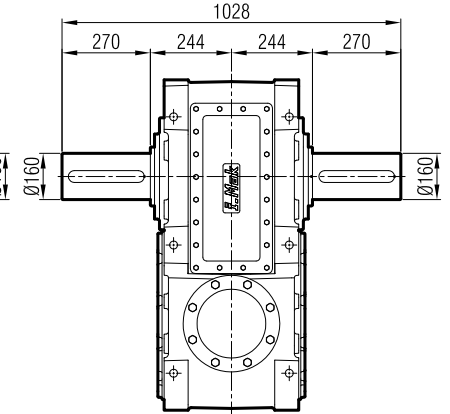
MA / MK 100_
...-SL



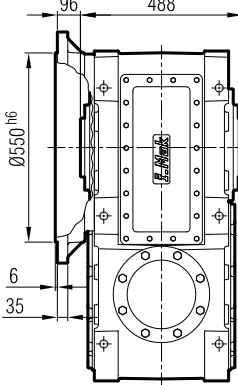
...-SR



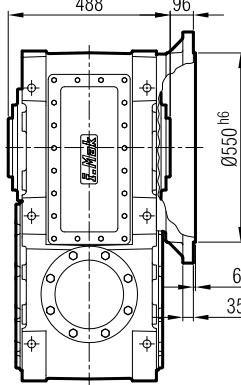
...-SD



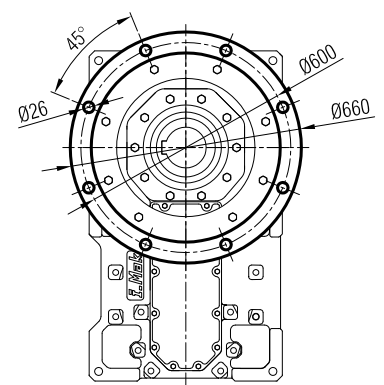
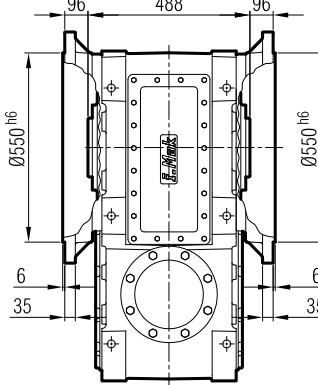
...-FL



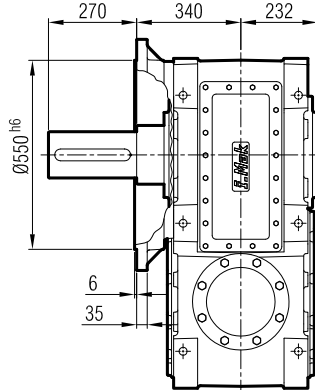
...-FR



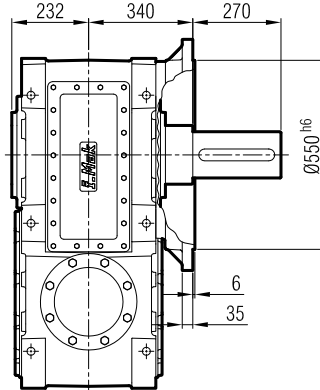
...-FD



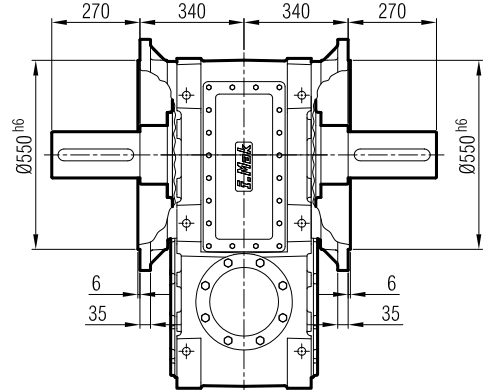
...-FL-SL



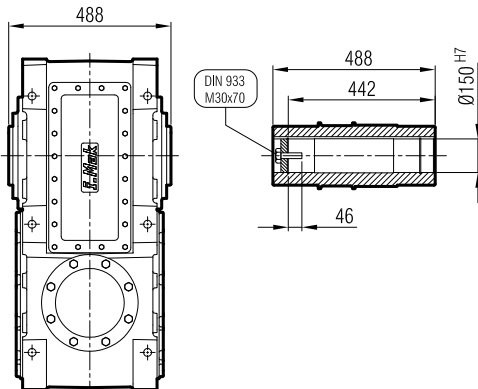
...-FR-SR



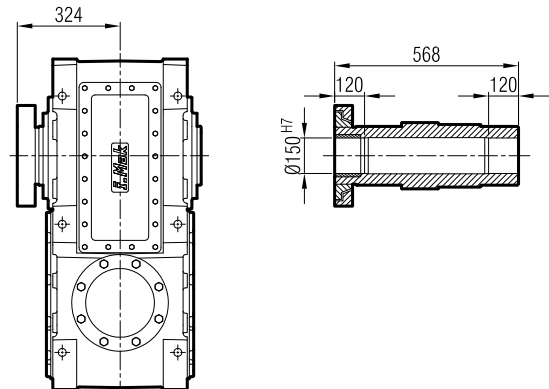
...-FD-SD



...-H



...-SDL / SDR



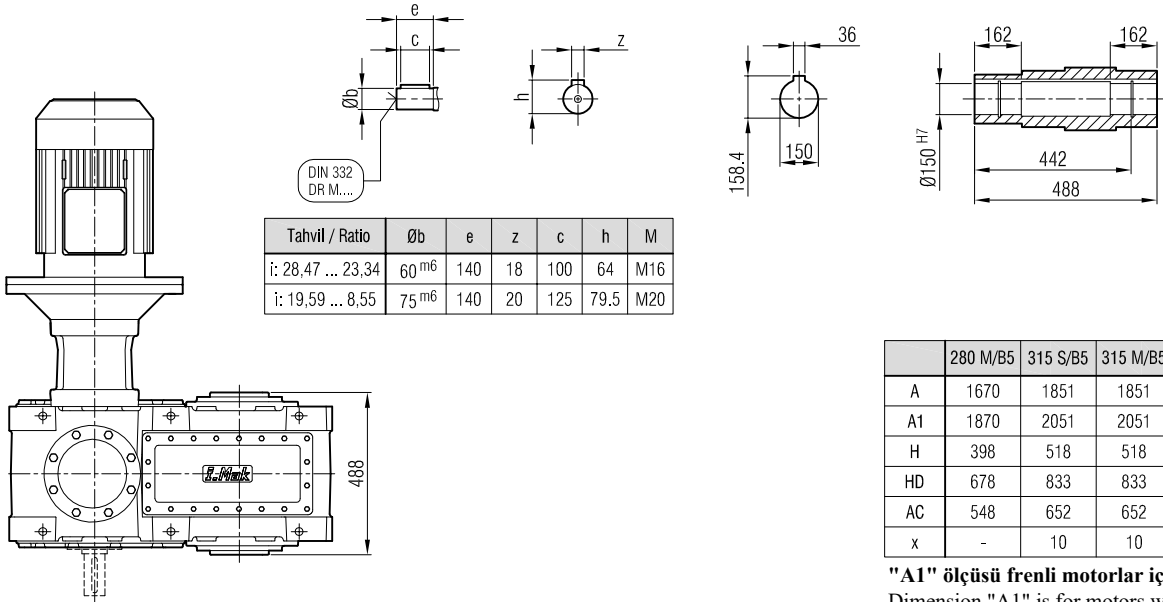
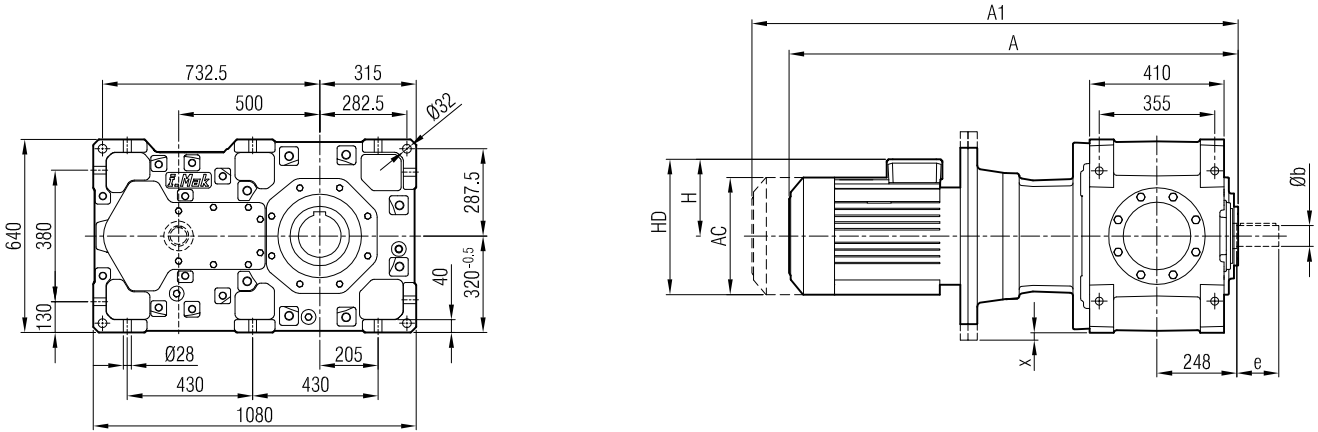
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 1002

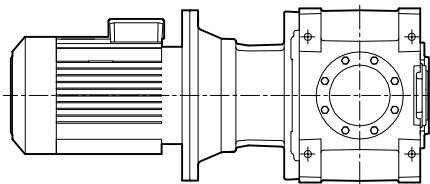


Tahvil / Ratio	Øb	e	z	c	h	M
i: 28,47 ... 23,34	60 ^{m6}	140	18	100	64	M16
i: 19,59 ... 8,55	75 ^{m6}	140	20	125	79.5	M20

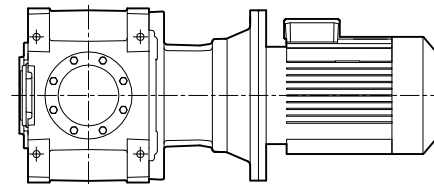
	280 M/B5	315 S/B5	315 M/B5	315 L/B5
A	1670	1851	1851	1962
A1	1870	2051	2051	2162
H	398	518	518	518
HD	678	833	833	833
AC	548	652	652	652
x	-	10	10	10

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspondent aux moteurs équipés de freins.

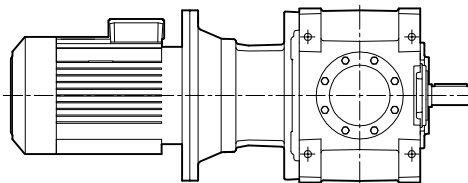
Giriş Seçenekleri / Input Options / Option d'entree



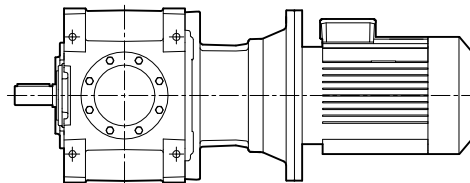
G03



G04



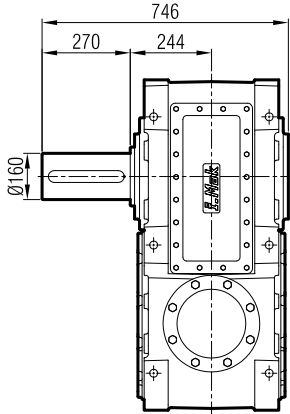
G05



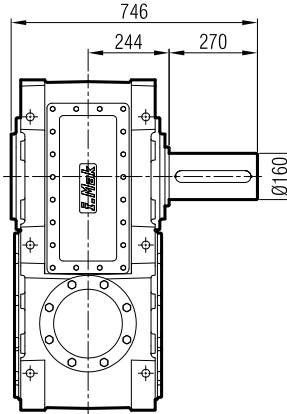
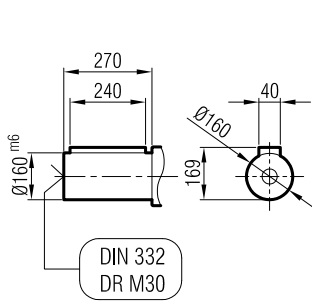
G06



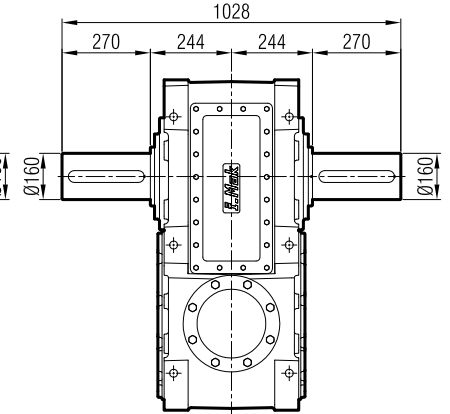
MA / MK 100_
...-SL



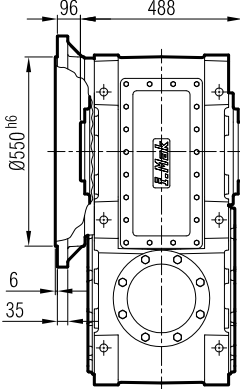
...-SR



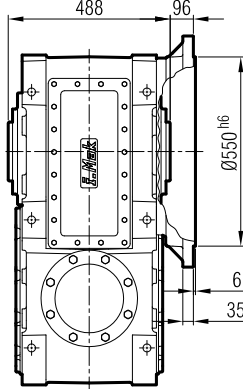
...-SD



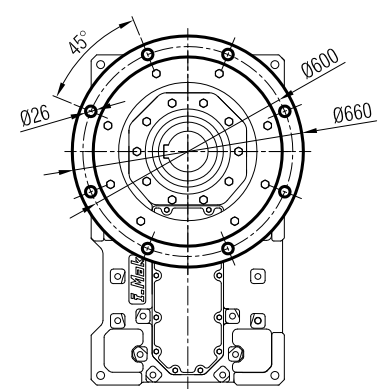
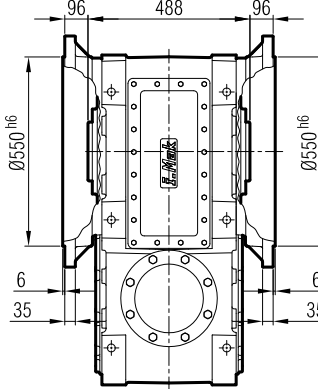
...-FL



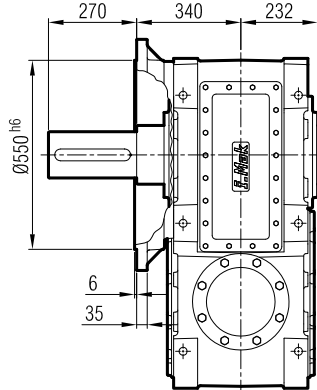
...-FR



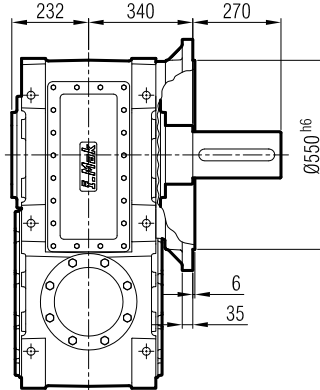
...-FD



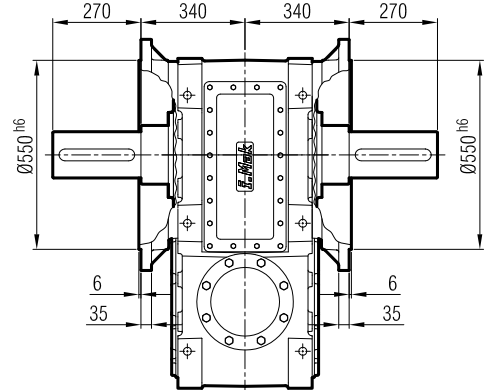
...-FL-SL



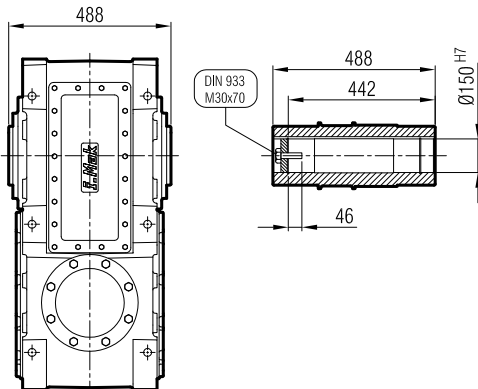
...-FR-SR



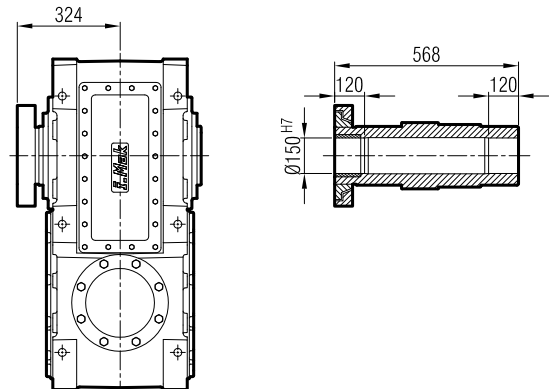
...-FD-SD



...-H



...-SDL / SDR



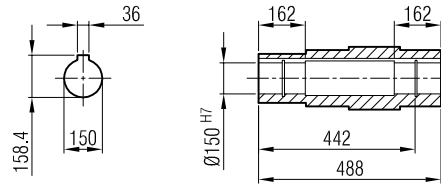
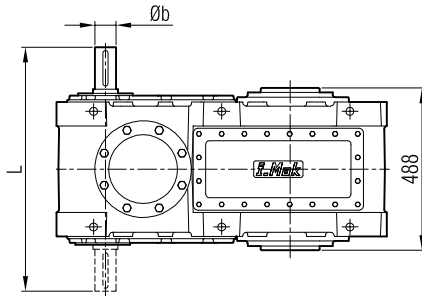
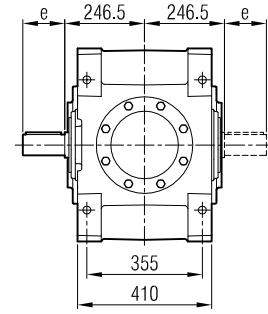
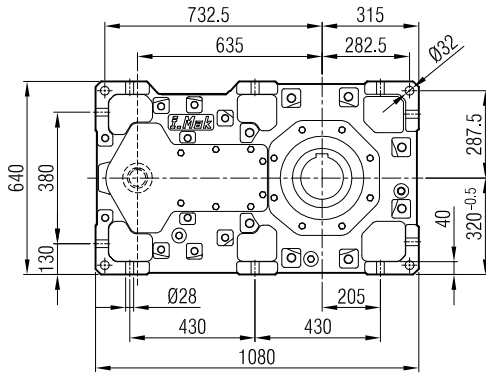
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

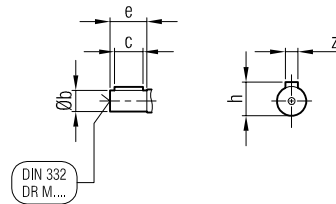
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



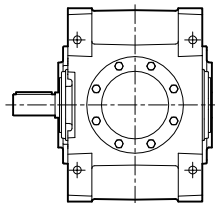
MA 1003



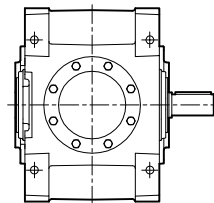
Tahvil / Ratio	Øb	e	z	c	h	M	L
i: 115,38...69,97	45 k6	120	14	100	48,5	M16	733
i: 57,86 ... 26,07	55 m6	120	16	110	59	M20	733



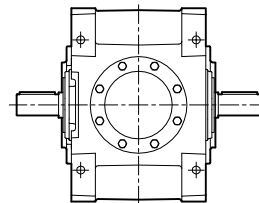
Giriş Seçenekleri / Input Options / Option d'entree



G00



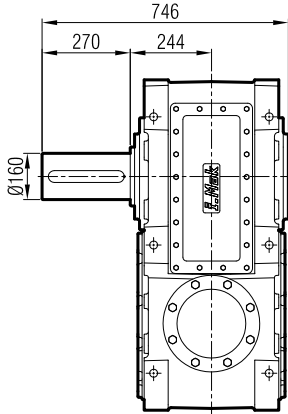
G01



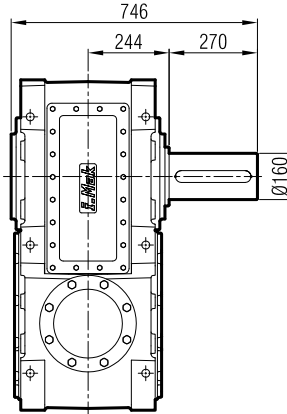
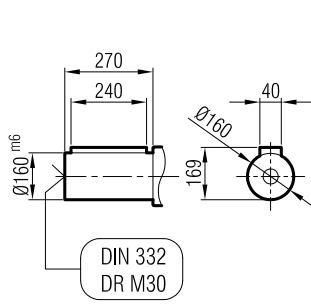
G02



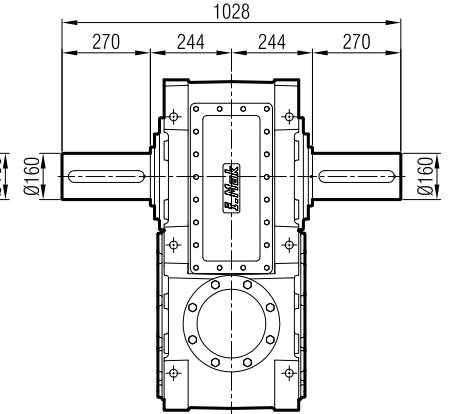
MA / MK 100_
...-SL



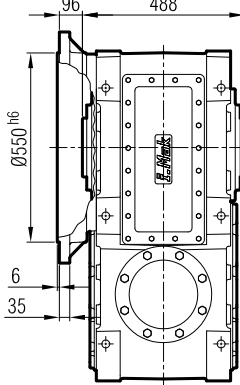
...-SR



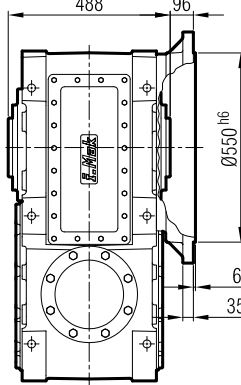
...-SD



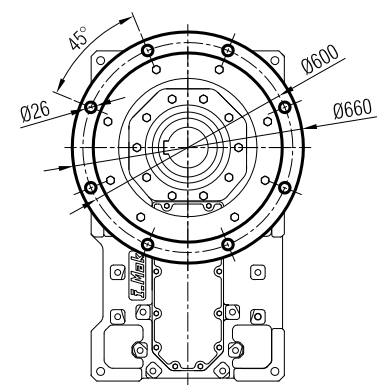
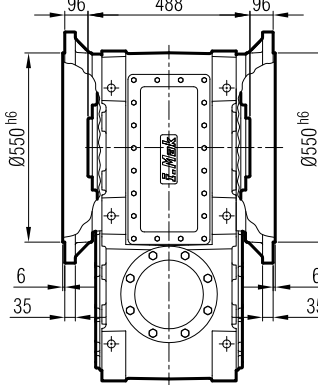
...-FL



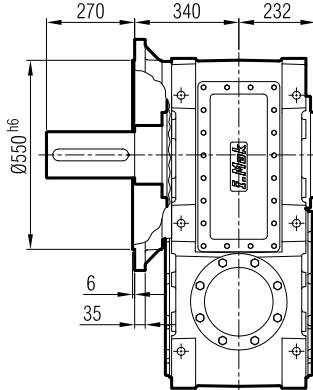
...-FR



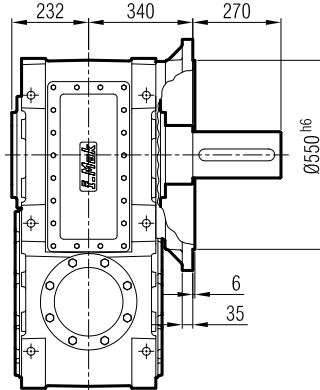
...-FD



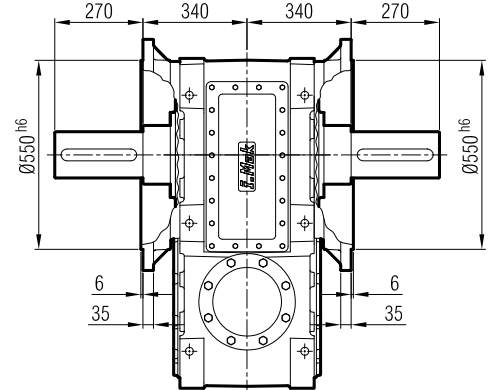
...-FL-SL



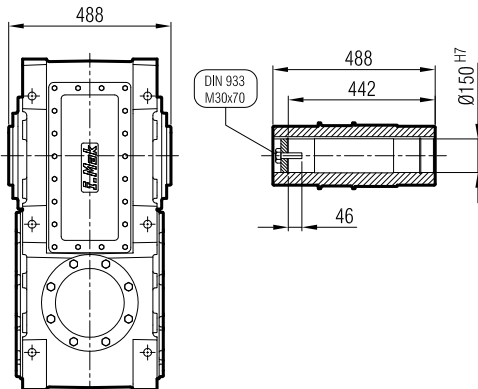
...-FR-SR



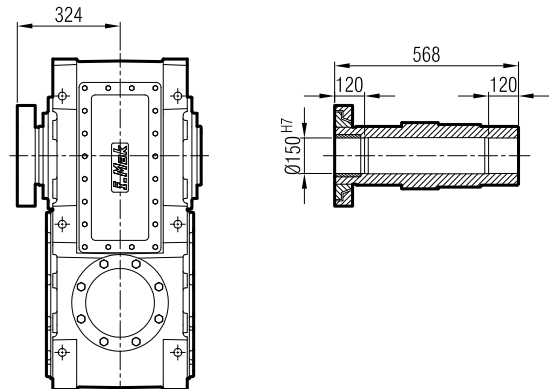
...-FD-SD



...-H



...-SDL / SDR



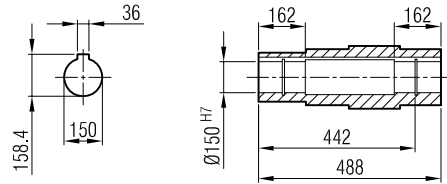
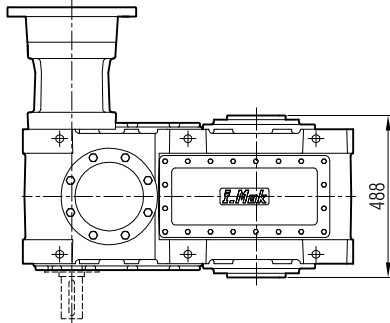
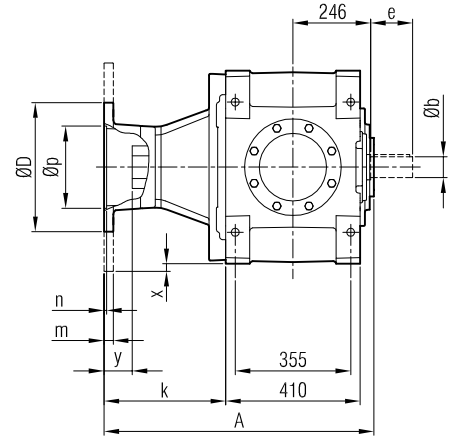
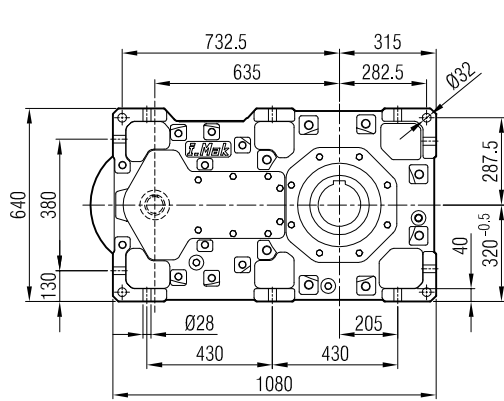
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



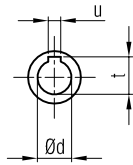
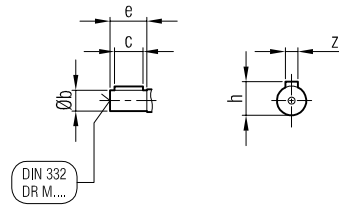
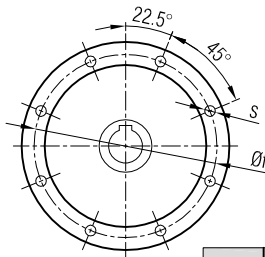
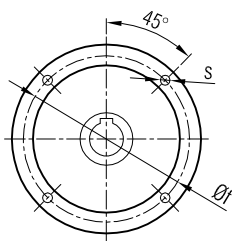
MAP 1003



≤ 200 B5 Tip/Type/Typ

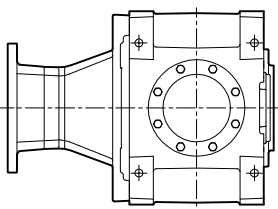
≥ 225 B5 Tip/Type/Typ

Tahvil / Ratio	Øb	e	z	c	h	M
i: 115,38...69,97	45 ^{k6}	120	14	100	48,5	M16
i: 57,86...26,07	55 ^{m6}	120	16	110	59	M20

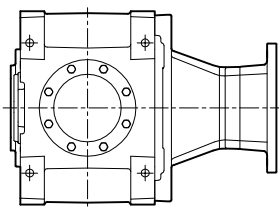


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y (i: ≥ 69,97)	y (i: ≤ 57,86)
180/B5	729	250	300	350	M14	280	20	6	48	51.8	14	-	49.5	-
200/B5	729	300	350	400	M16	280	22	6	55	59.3	16	-	49.5	39.5
225/B5	772	350	400	450	M16	323	22	6	60	64.4	18	-	78.5	72.5
250/B5	772	450	500	550	M16	323	25	6.5	65	69.4	18	-	74.5	72.5
280/B5	772	450	500	550	M16	323	25	6.5	75	75.9	20	-	64.5	64.5
315/B5	802	550	600	660	M24	353	30	7	85	90.4	22	10	-	89.5

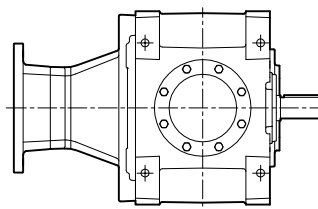
Giriş Seçenekleri / Input Options / Option d'entree



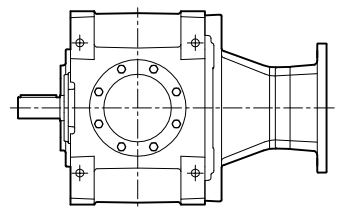
G03



G04



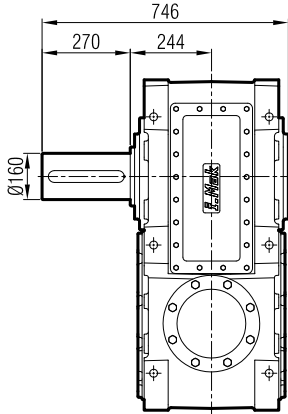
G05



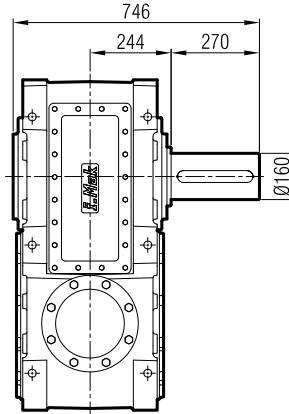
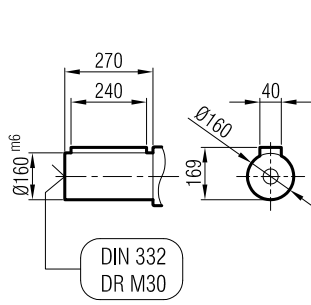
G06



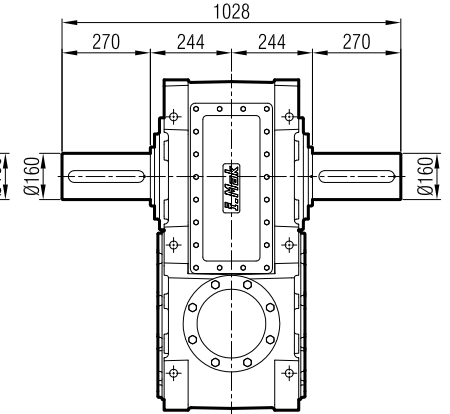
MA / MK 100_
...-SL



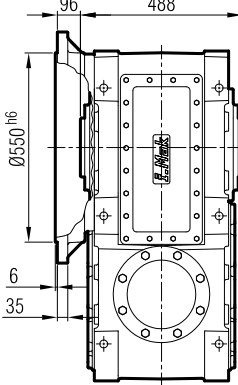
...-SR



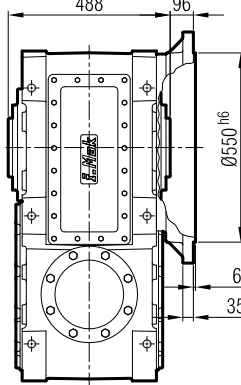
...-SD



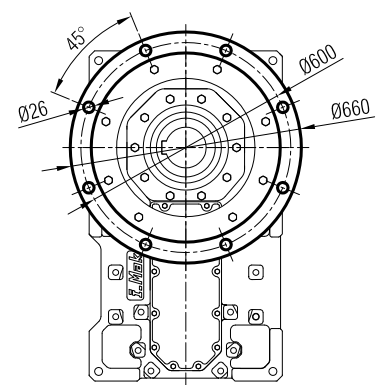
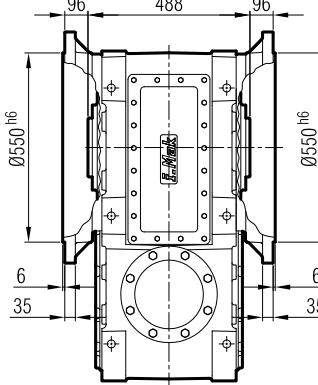
...-FL



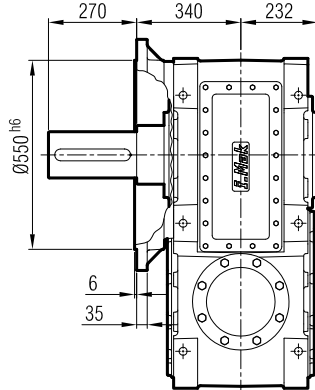
...-FR



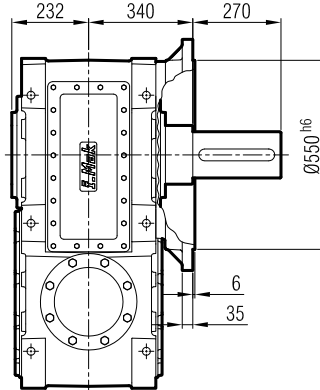
...-FD



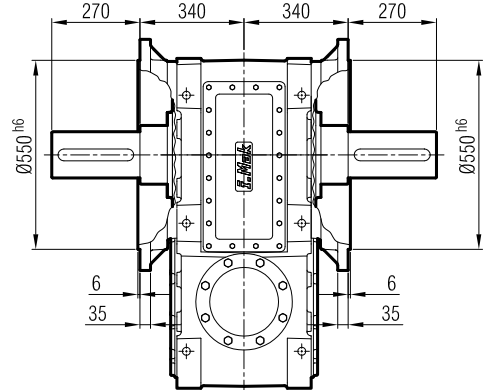
...-FL-SL



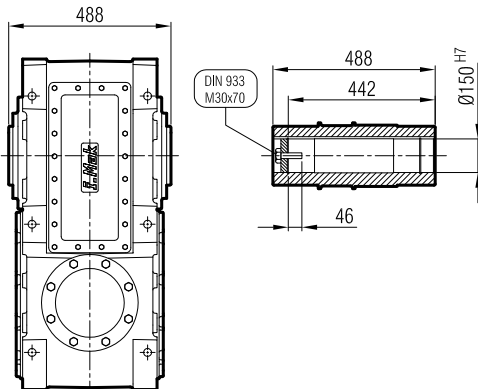
...-FR-SR



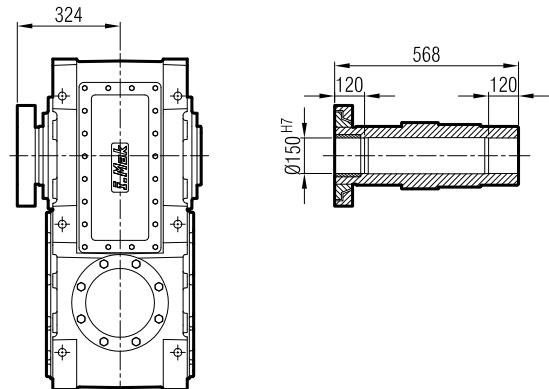
...-FD-SD



...-H



...-SDL / SDR



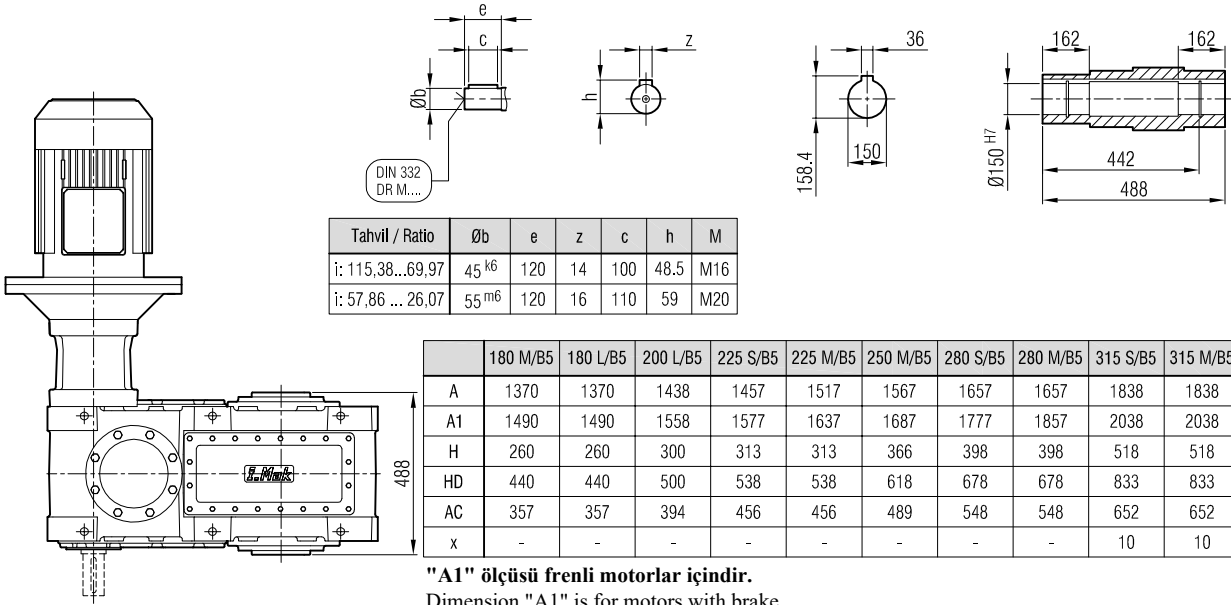
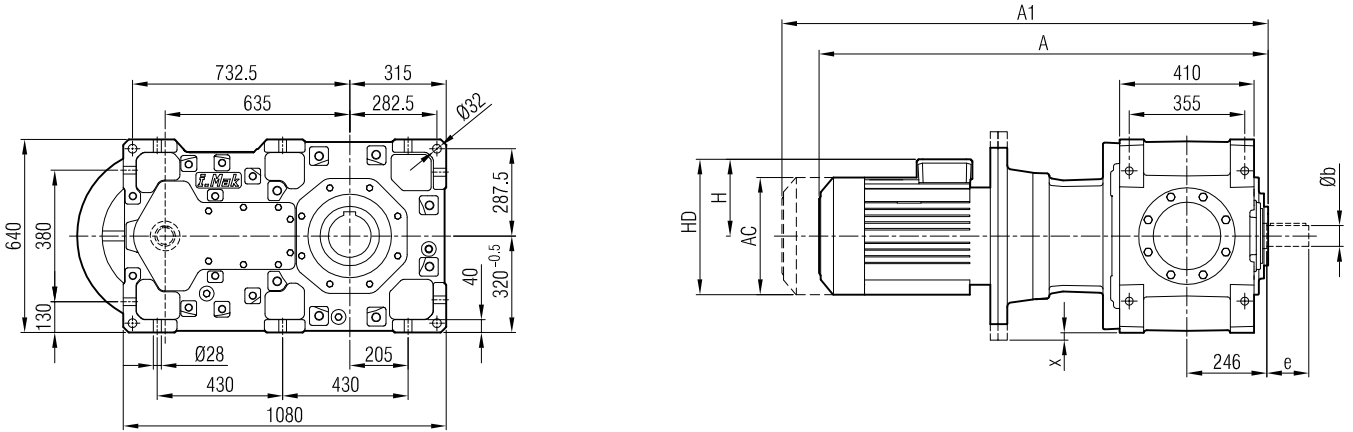
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MAM 1003

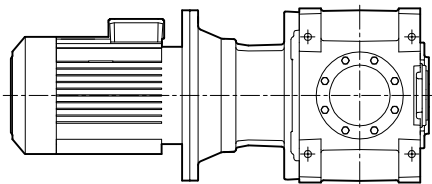


Tahvil / Ratio	Øb	e	z	c	h	M
i: 115,38...69,97	45 ^{k6}	120	14	100	48,5	M16
i: 57,86 ... 26,07	55 ^{m6}	120	16	110	59	M20

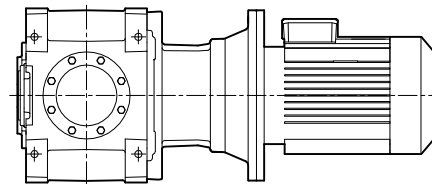
	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5	315 L/B5
A	1370	1370	1438	1457	1517	1567	1657	1657	1838	1838	1949
A1	1490	1490	1558	1577	1637	1687	1777	1857	2038	2038	2149
H	260	260	300	313	313	366	398	398	518	518	518
HD	440	440	500	538	538	618	678	678	833	833	833
AC	357	357	394	456	456	489	548	548	652	652	652
x	-	-	-	-	-	-	-	-	10	10	10

"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspondent aux moteurs équipés de freins.

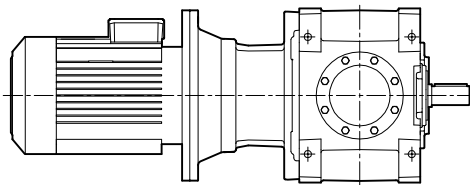
Giriş Seçenekleri / Input Options / Option d'entree



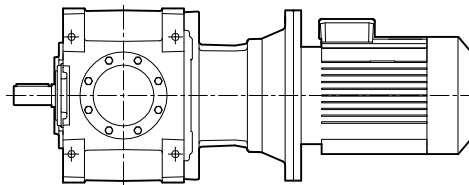
G03



G04



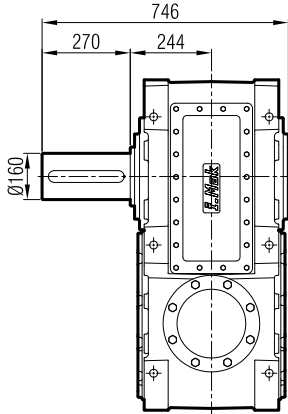
G05



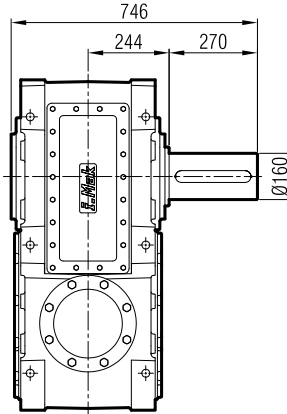
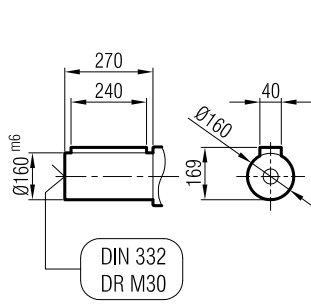
G06



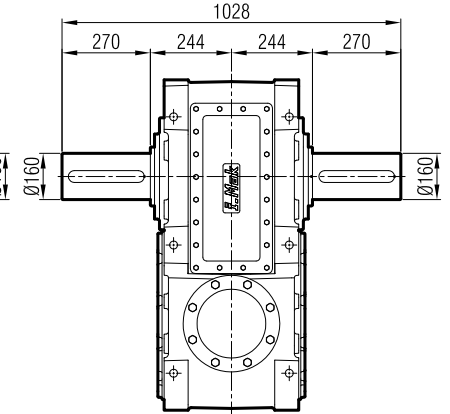
MA / MK 100_
...-SL



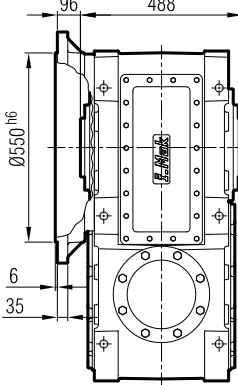
...-SR



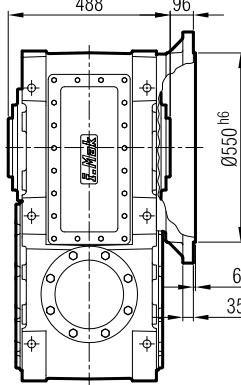
...-SD



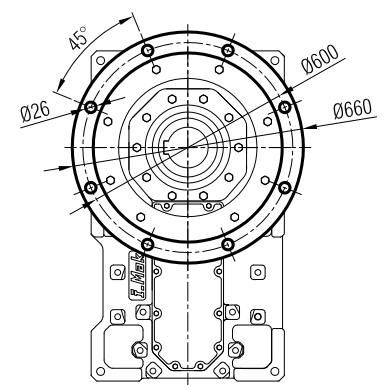
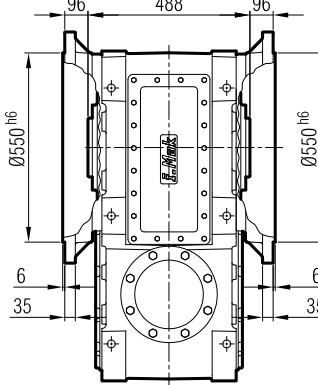
...-FL



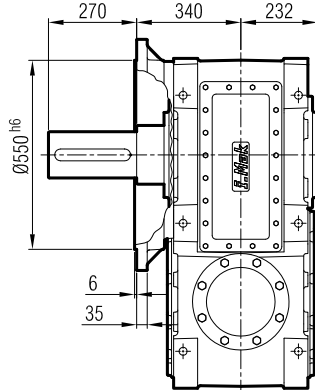
...-FR



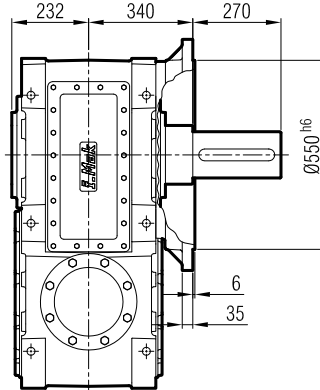
...-FD



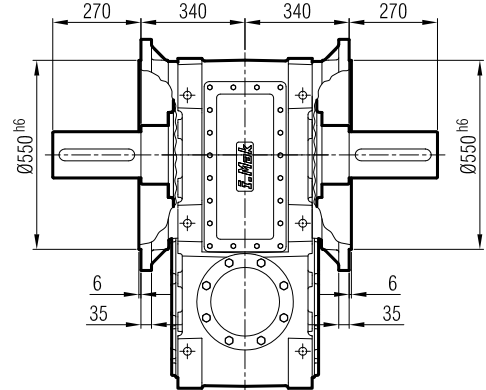
...-FL-SL



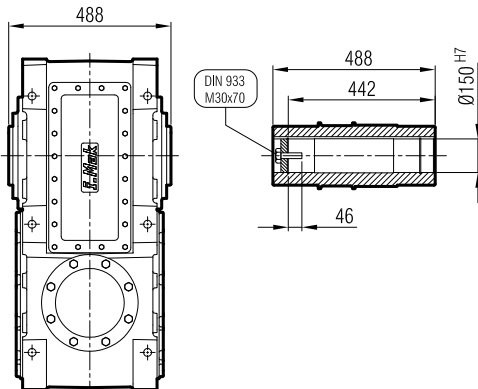
...-FR-SR



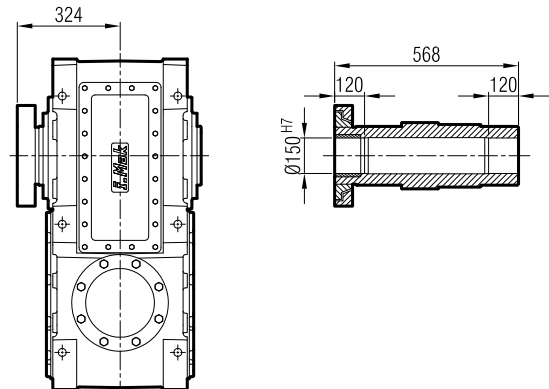
...-FD-SD



...-H



...-SDL / SDR



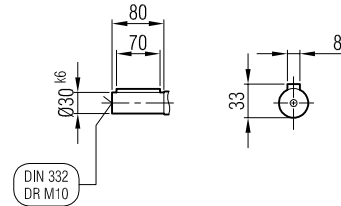
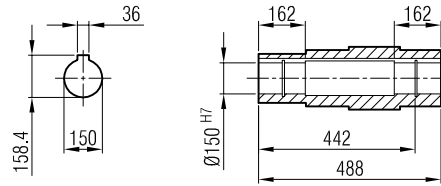
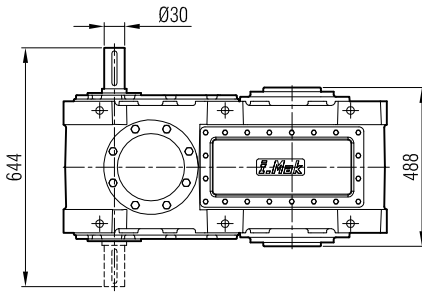
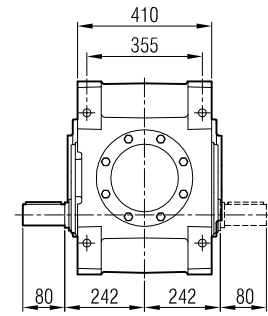
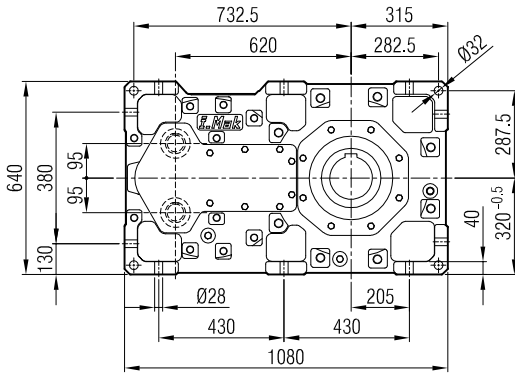
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

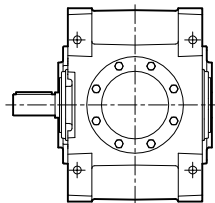
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



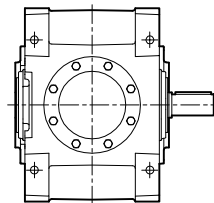
MA 1004



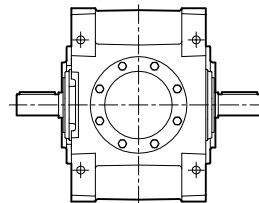
Giriş Seçenekleri / Input Options / Option D'Entree



G00



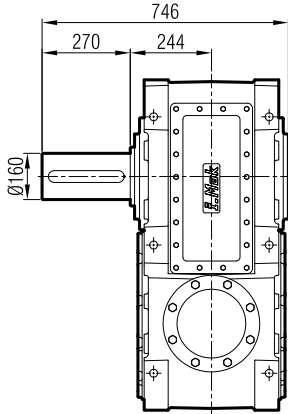
G01



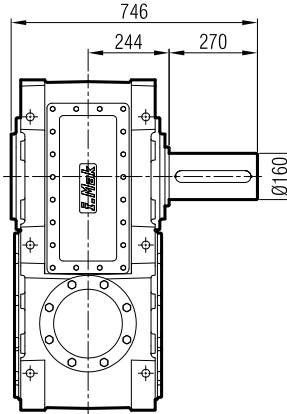
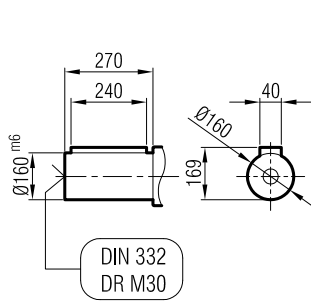
G02



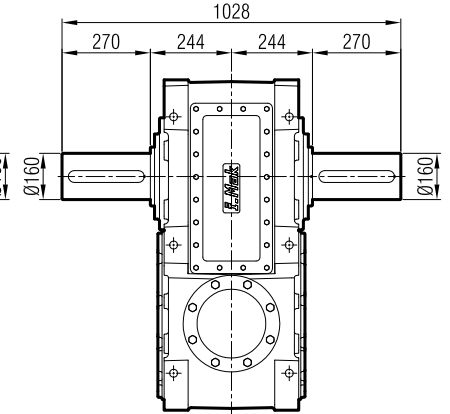
MA / MK 100_
...-SL



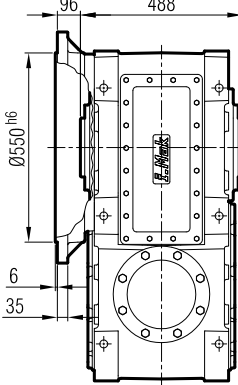
...-SR



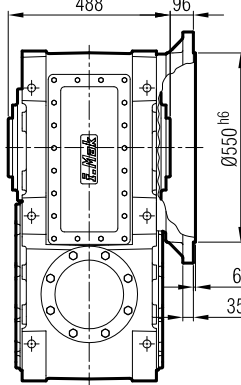
...-SD



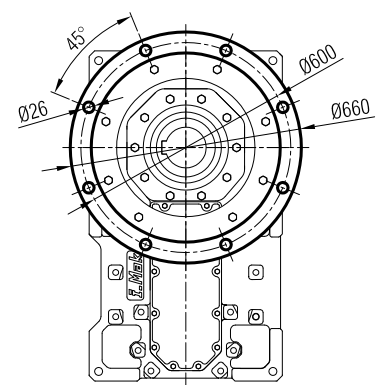
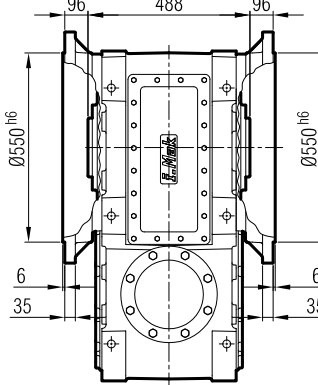
...-FL



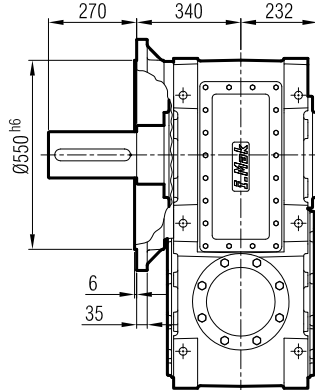
...-FR



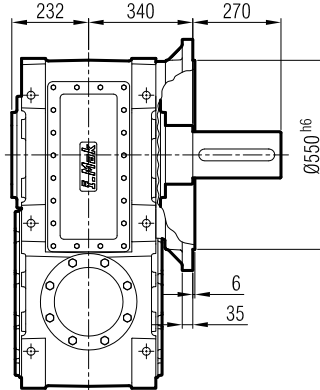
...-FD



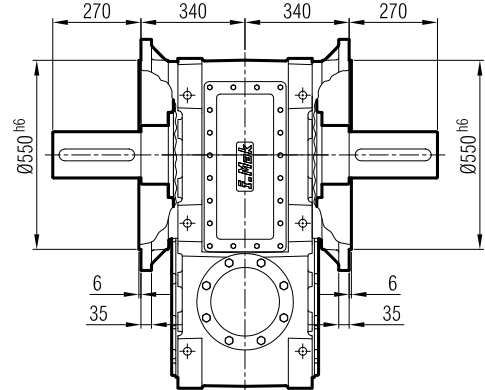
...-FL-SL



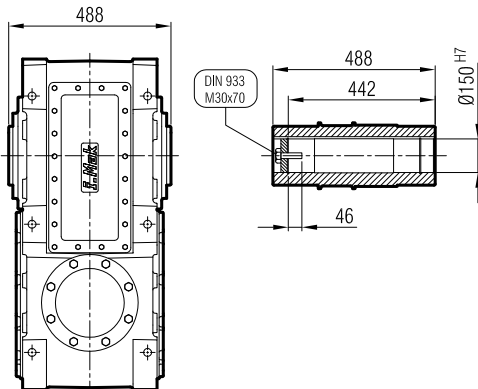
...-FR-SR



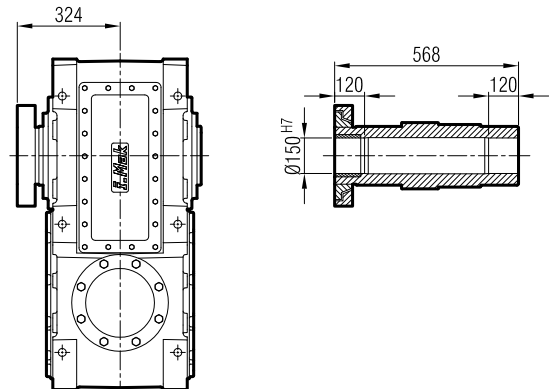
...-FD-SD



...-H



...-SDL / SDR



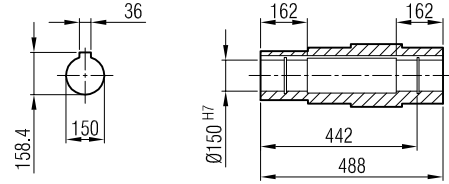
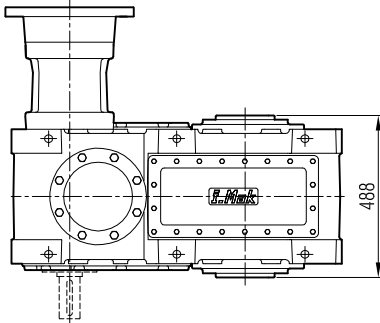
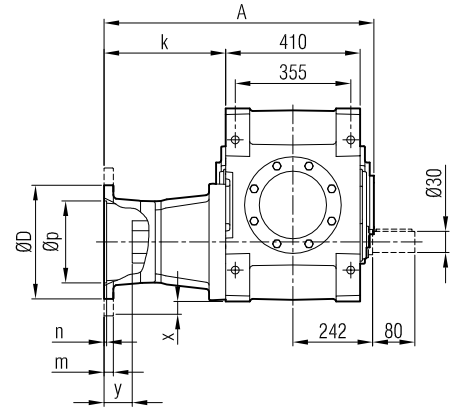
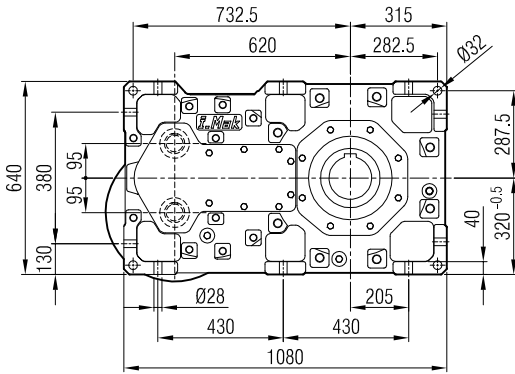
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

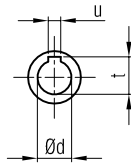
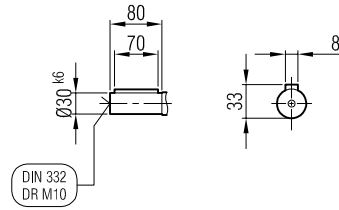
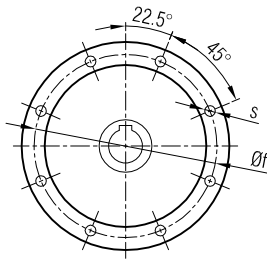
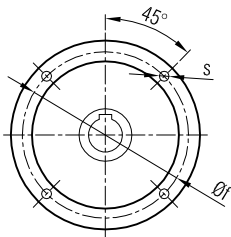


MAP 1004



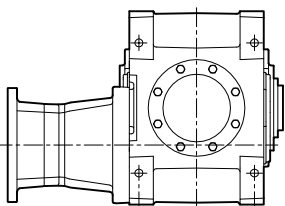
≤ 200 B5 Tip/Type/Typ

≥ 225 B5 Tip/Type/Typ

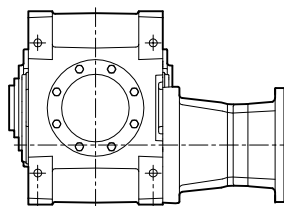


	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	643	180	215	250	M12	194	15	5	28	31.3	8	-	31
132/B5	663	230	265	300	M12	214	18	6	38	41.3	10	-	45
160/B5	680	250	300	350	M14	231	20	6	42	45.3	12	-	70
180/B5	680	250	300	350	M14	231	20	6	48	51.8	14	-	60
200/B5	680	300	350	400	M16	231	22	6	55	59.3	16	-	60
225/B5	723	350	400	450	M16	274	22	6	60	64.4	18	0	80

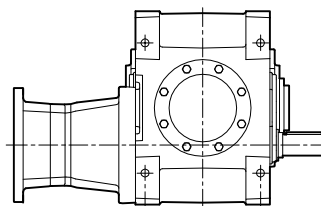
Giriş Seçenekleri / Input Options / Option d'entree



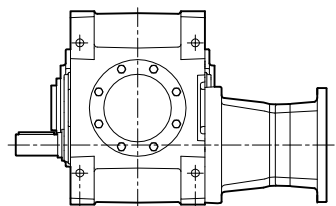
G03



G04



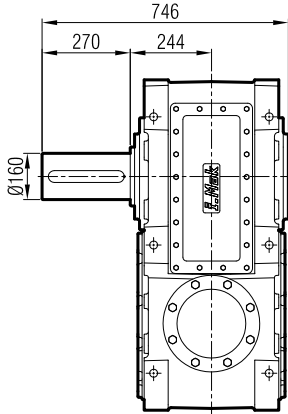
G05



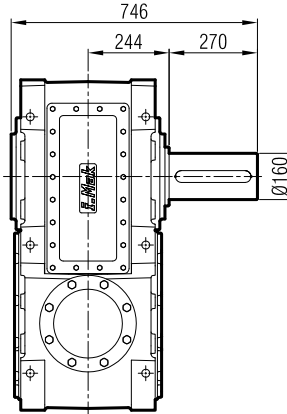
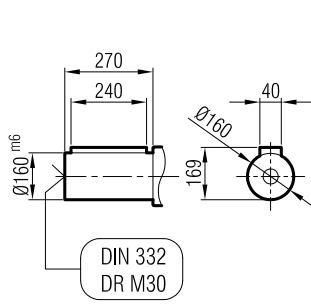
G06



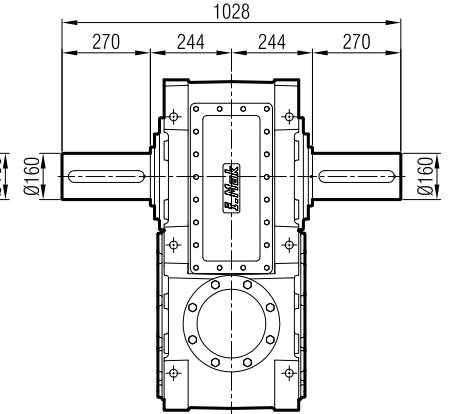
MA / MK 100_
...-SL



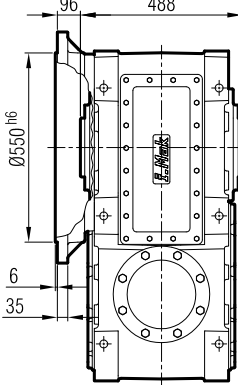
...-SR



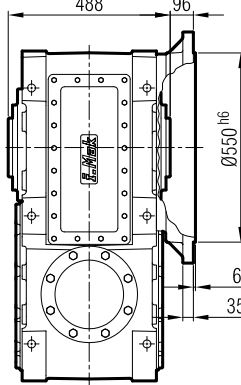
...-SD



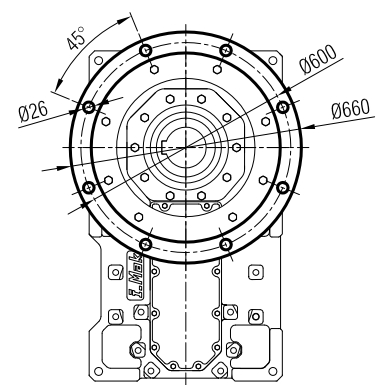
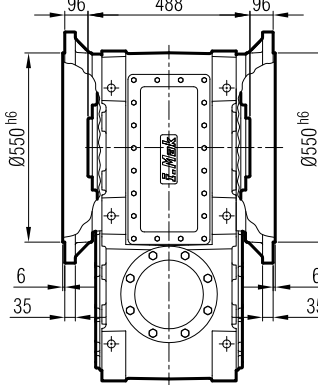
...-FL



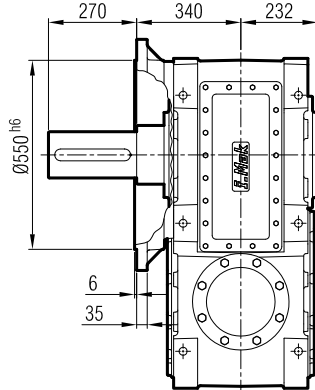
...-FR



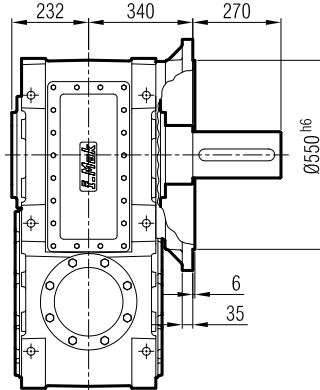
...-FD



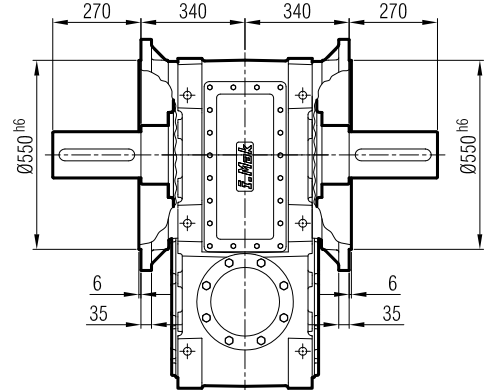
...-FL-SL



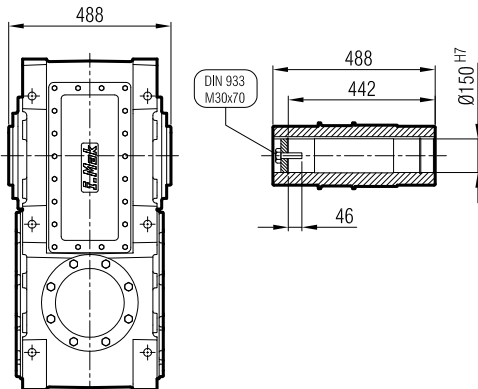
...-FR-SR



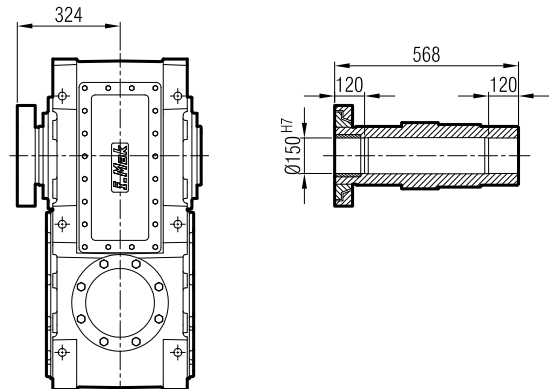
...-FD-SD



...-H



...-SDL / SDR



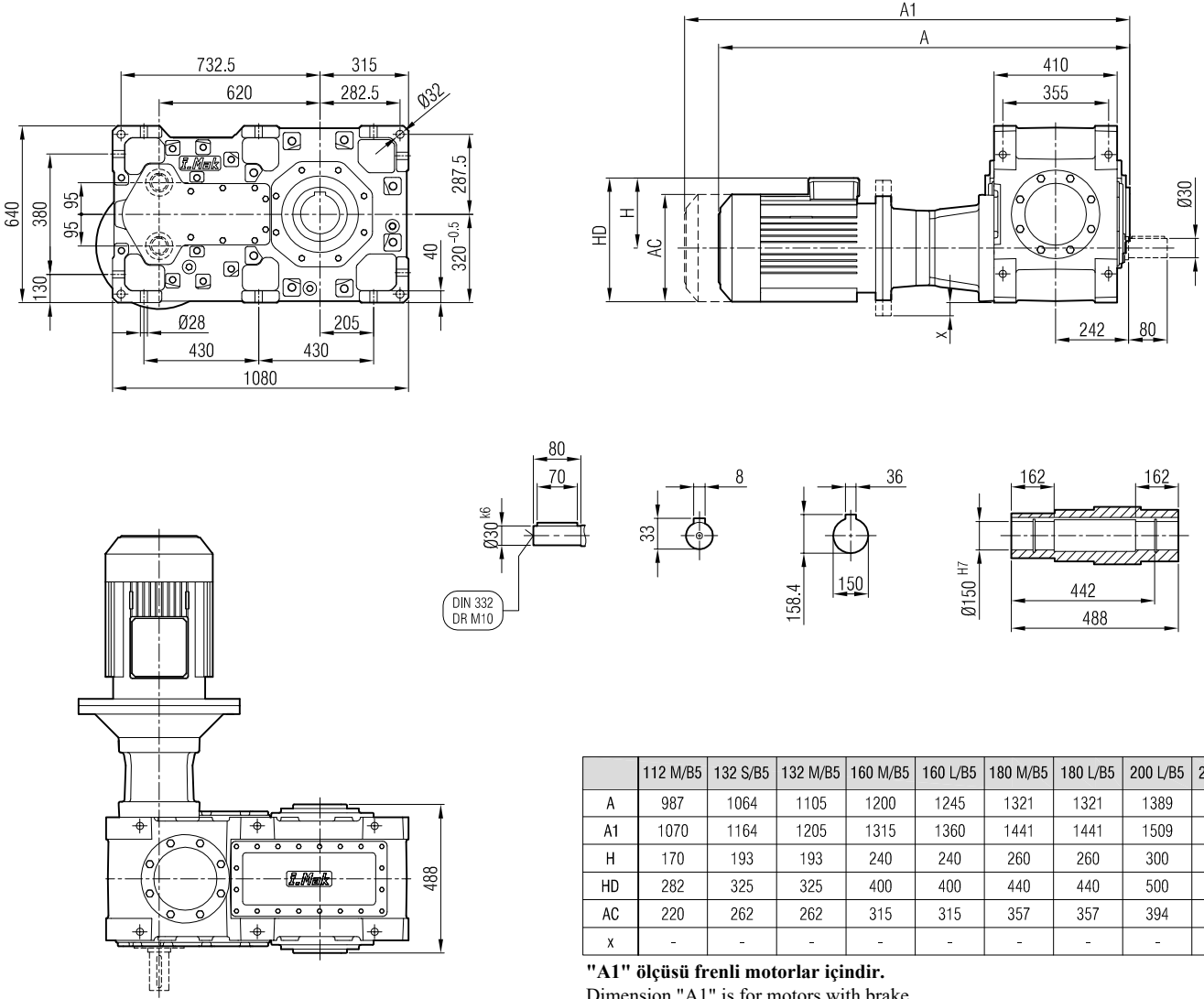
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

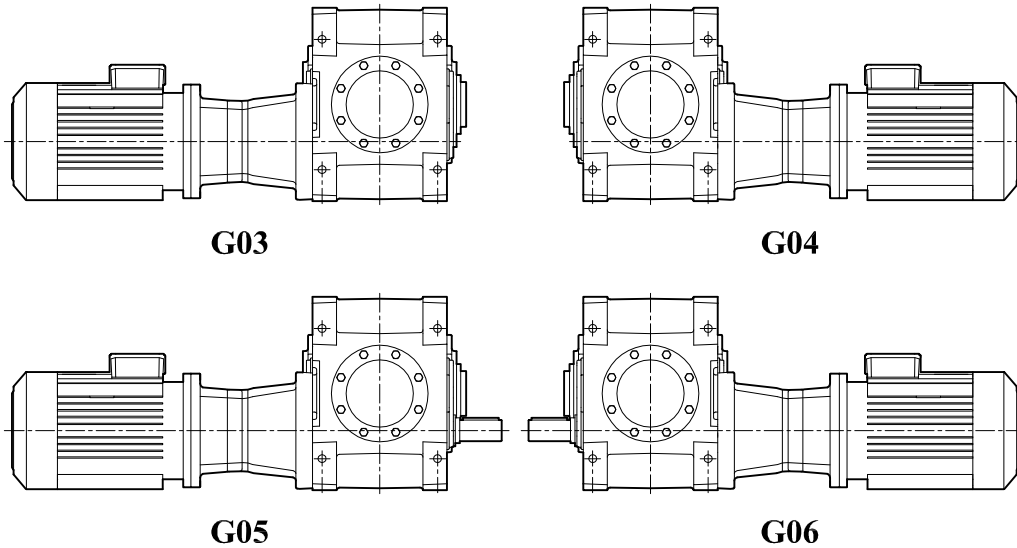


MAM 1004



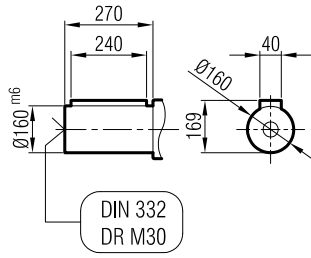
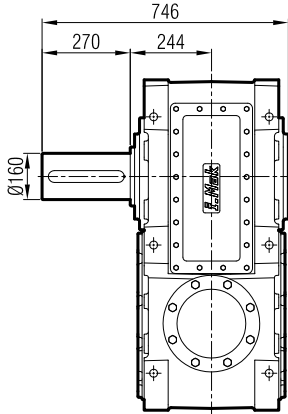
"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

Giriş Seçenekleri / Input Options / Option d'entree

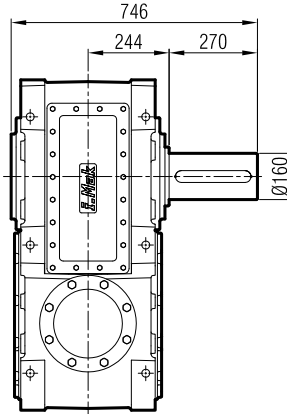




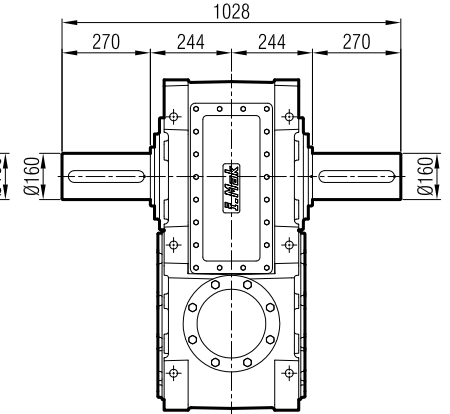
MA / MK 100_
...-SL



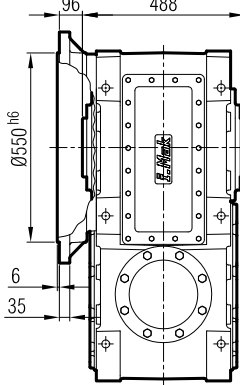
...-SR



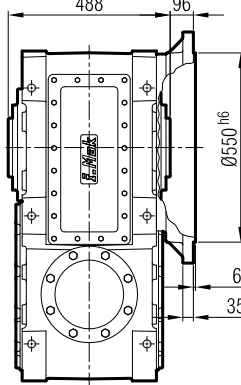
...-SD



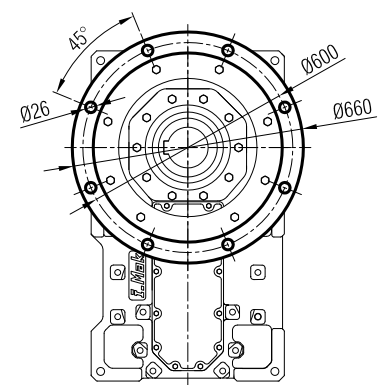
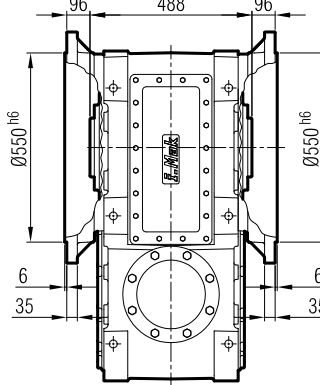
...-FL



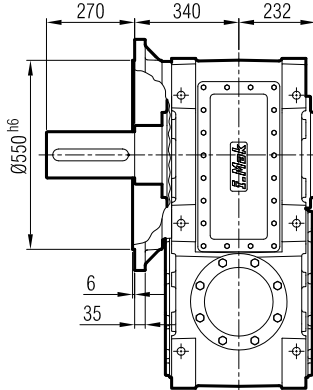
...-FR



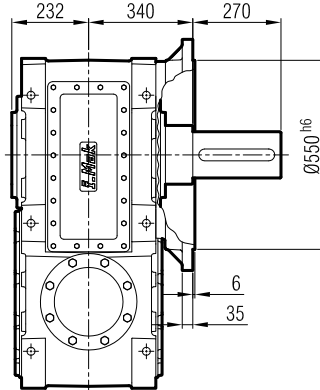
...-FD



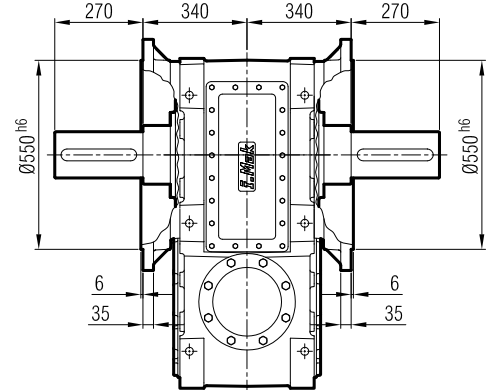
...-FL-SL



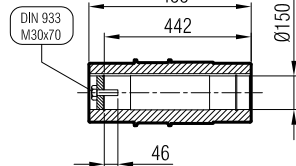
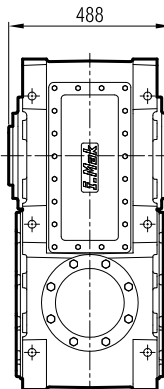
...-FR-SR



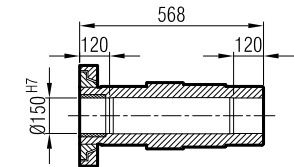
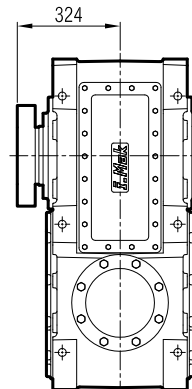
...-FD-SD



...-H



...-SDL / SDR



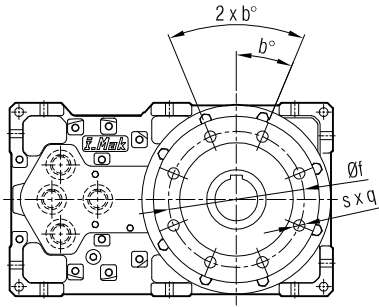
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

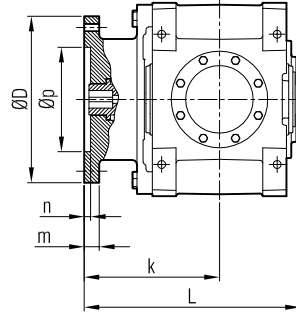
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



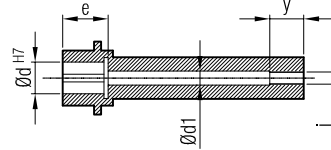
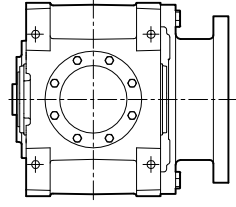
MAE



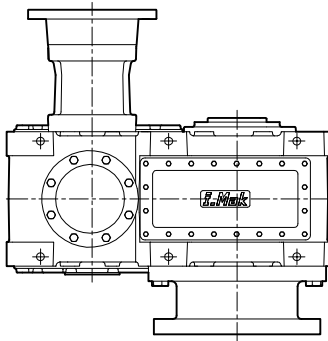
.... / EL



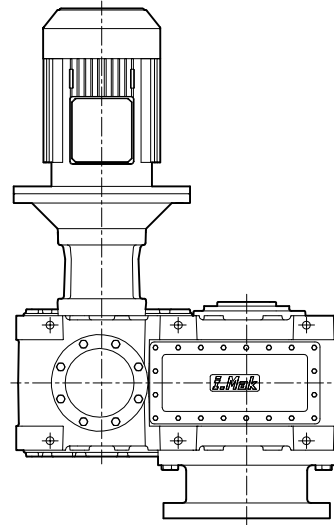
.... / ER



MAEP



MAEM



q: Adet / Quantity / quantité

	Øp	Øf	ØD	m	n	s	q	b°	Ød	Ød1	e	u	t	j	y	k	L
MAE... 503-502	290	325	370	30	10	M20	8	22.5°	Ø70	Ø40	140	20	74.9	M36	75	360	552.5
MAE... 603-602	340	375	420	44	10	M20	8	22.5°	Ø80	Ø40	145	22	85.4	M36	75	376	571
MAE... 704-703-702	355	400	450	35	10	M24	8	22.5°	Ø90	Ø40	145	25	95.4	M36	75	402.5	620
MAE... 804-803-802	395	440	490	35	10	M24	8	22.5°	Ø100	Ø40	155	28	106.4	M36	75	427.5	647.5
MAE... 904-903-902	425	480	540	45	15	M30	8	22.5°	Ø110	Ø40	155	28	116.4	M36	75	460	702
MAE... 1004-1003-1002	455	500	560	45	15	M30	8	22.5°	Ø120	Ø40	175	32	127.4	M36	75	475	719

Redüktör gövde ölçüleri için standart ölçü sayfasına bakınız.

For gearbox housing dimensions please refer to the standart dimension pages.

Consultez la page de dimensions standard pour plus d'informations sur la taille du carter

MK Serisi Redüktörler Güç ve Devir Tabloları

MK Series - Performances Tables

Series MK - Table de performances



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg		
1,5 2	3,6	386	3,30	3716	171000	MK	604 / 90 H 4b	227 232	412		
	4,7	295	3,80	2845	136000	MK	504 / 90 H 4b	209 214	404		
2,2 3	2,7	511	3,40	7219	336000	MK	804 / 100 L 4a	263 268	689		
	3,1	459	3,70	6484	333000						
	3,1	451	3,00	6371	266000						
		3,5	402	3,40	5679	264000	MK	704 / 100 L 4a	245 250	603	
		3,9	363	3,70	5128	262000					
		3,6	385	2,20	5439	169000	MK	604 / 100 L 4a	227 232	421	
		4,5	314	2,50	4436	166000					
		5,6	248	3,30	3503	163000					
		6,4	218	4,00	3080	160000					
			4,7	295	2,60	4167	134000	MK	504 / 100 L 4a	209 214	413
			5,4	259	3,00	3659	132000				
6,1			229	3,40	3235	130000	MK	804 / 100 H 4b	263 268	693	
6,9			204	3,80	2882	128000					
2,7	511		2,50	9844	334000						
3,1	459		2,70	8842	331000						
3,4	415		3,00	7994	328000						
3,7	376		3,30	7243	325000						
4,0	348		3,60	6704	322000						
3,1	451		2,20	8688	264000						
3 4	3,5	402	2,50	7744	262000	MK	704 / 100 H 4b	245 250	607		
	3,9	363	2,70	6993	260000						
	4,3	324	3,10	6241	258000	MK	604 / 100 H 4b	227 232	425		
	4,8	291	3,40	5606	256000						
	3,6	385	1,67	7417	167000						
	4,5	314	1,89	6049	164000						
		5,6	248	2,40	4777	161000	MK	504 / 100 H 4b	209 214	417	
		6,4	218	2,90	4200	158000					
		6,7	208	3,50	4007	155000	MK	1004 / 112 M 4a	299 304	1086	
		4,7	295	1,92	5683	132000					
5,4		259	2,20	4989	130000						
6,1		229	2,50	4411	128000						
6,9		204	2,80	3930	126000						
8,2		171	3,20	3294	124000						
9,3		151	3,60	2909	122000						
4 5,5		2,8	504	2,90	12945	286000					MK
	3,2	444	3,30	11404	283000						
	3,4	413	3,50	10608	280000						
	3,6	394	3,60	10120	277000						
		4,6	306	3,40	7860	286000	MK	804 / 112 M 4a	263 268	699	
		5,2	267	3,90	6858	282000					
		2,7	511	1,88	13125	332000	MK	704 / 112 M 4a	245 250	613	
		3,1	459	2,00	11789	329000					
		3,4	415	2,30	10659	326000					
		3,7	376	2,50	9658	323000					
			4,0	348	2,70	8938	320000	MK	504 / 112 M 4a	209 214	417
			4,6	306	3,10	7860	317000				
			5,3	264	3,40	6781	314000	MK	1004 / 112 M 4a	299 304	1086
			5,9	237	3,80	6087	311000				
	3,1		451	1,65	11584	262000					
	3,5		402	1,87	10325	260000					
	3,9		363	2,00	9324	258000					
	4,3		324	2,30	8322	256000					
	4,8		291	2,60	7474	254000					
	5,3		263	2,80	6755	252000					
	6,0	234	3,30	6010	250000	MK	704 / 112 M 4a	245 250	613		
	6,6	211	3,70	5420	248000						





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg				
4 5,5	3,6	385	1,25	9889	165000	MK	604 / 112 M 4a	227 232	431				
	4,5	314	1,42	8065	162000								
	5,6	248	1,80	6370	159000								
	6,4	218	2,00	5599	156000								
	6,7	208	2,60	5342	153000								
	8,7	161	3,30	4135	150000								
	10,0	140	3,60	3596	147000								
	11	123	4,10	3159	144000								
	13	105	4,30	2738	133000	MK	603 / 112 M 4a	215 226	431				
	4,7	295	1,44	7577	130000	MK	504 / 112 M 4a	209 214	423				
	5,4	259	1,65	6652	128000								
	6,1	229	1,88	5882	126000								
	6,9	204	2,10	5240	124000								
	8,2	171	2,40	4392	122000								
	9,3	151	2,70	3878	120000								
	10,4	135	3,10	3467	118000								
11,8	119	3,50	3057	116000									
13,9	101	4,10	2634	96000	MK	503 / 112 M 4a	197 208	423					
5,5 7,5	2,8	504	2,10	17800	284000	MK	1004 / 132 S 4a	299 304	1098				
	3,2	444	2,40	15681	280000								
	3,4	413	2,50	14586	276000								
	3,6	394	2,60	13915	275000								
	4,0	347	3,00	12255	272000								
	4,3	323	3,20	11407	269000								
	4,9	284	3,60	10030	266000								
	5,2	271	3,90	9571	263000								
	4,6	306	2,50	10807	284000	MK	904 / 132 S 4a	281 286	898				
	5,2	267	2,90	9430	280000								
	6,0	235	3,30	8299	276000								
	6,3	222	3,40	7840	272000								
	7,2	195	3,90	6887	268000								
	2,7	511	1,36	18047	330000					MK	804 / 132 S 4a	263 268	711
	3,1	459	1,47	16210	327000								
	3,4	415	1,64	14657	324000								
	3,7	376	1,80	13279	321000								
	4,0	348	1,96	12290	318000								
	4,6	306	2,20	10807	315000								
	5,3	264	2,50	9324	312000								
	5,9	237	2,70	8370	309000								
	6,5	214	3,10	7558	305000	MK	704 / 132 S 4a	245 250	625				
	7,3	191	3,40	6746	302000								
	8,1	173	3,80	6110	299000								
	3,1	451	1,20	15928	260000								
	3,5	402	1,36	14197	258000								
	3,9	363	1,48	12820	256000								
	4,3	324	1,68	11443	254000								
	4,8	291	1,88	10277	252000								
	5,3	263	2,10	9288	250000								
	6,0	234	2,40	8264	248000								
	6,6	211	2,70	7452	246000								
7,4	190	2,90	6710	244000									
8,2	171	3,30	6039	242000									
9,2	152	3,60	5368	240000									
10	138	4,00	4874	238000									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
5,5 7,5	4,5	314	1,03	11090	160000	MK	604 / 132 S 4a	227 232	443
	5,6	248	1,31	8759	157000				
	6,4	218	1,60	7699	154000				
	6,7	208	1,89	7346	151000				
	8,7	161	2,40	5686	148000				
	10,0	140	2,60	4944	145000				
	11	123	3,00	4344	142000				
	13	111	3,30	3920	139000				
	14	98,14	3,80	3466	136000				
	15	93,07	4,10	3287	133000				
	13	105	3,10	3765	131000	MK	603 / 132 S 4a	215 226	443
	15	94,03	3,50	3371	129000				
	16	88,64	4,40	3178	127000	MK	504 / 132 S 4a	209 214	435
	5,4	259	1,21	9147	126000				
	6,1	229	1,36	8088	124000				
	6,9	204	1,53	7205	122000				
	8,2	171	1,75	6039	120000				
	9,3	151	1,96	5333	118000				
	10	135	2,20	4768	116000				
	12	119	2,60	4203	114000				
13	105	2,90	3708	112000					
15	93,84	3,20	3314	110000					
17	82,77	3,60	2923	108000	MK	503 / 132 S 4a	197 208	435	
14	101	3,00	3621	94000					
16	88,24	3,50	3164	92000	MK	1004 / 132 M 4b	299 304	1106	
18	77,76	4,00	2788	90000					
2,8	504	1,56	24272	282000					
3,2	444	1,76	21383	278000					
3,4	413	1,88	19890	274000					
3,6	394	1,92	18975	270000					
4,0	347	2,20	16711	266000					
4,3	323	2,30	15556	262000					
4,9	284	2,60	13677	258000					
5,2	271	2,80	13051	261000					
5,9	239	3,20	11510	258000					
7,1	197	3,90	9487	255000					
4,6	306	1,83	14737	282000					
5,2	267	2,10	12859	278000					
6,0	235	2,40	11317	274000	MK	904 / 132 M 4b	281 286	906	
6,3	222	2,50	10691	270000					
7,2	195	2,90	9391	266000					
7,6	185	3,10	8909	262000					
8,6	163	3,50	7850	258000					
3,1	459	1,08	22105	325000	MK	804 / 132 M 4b	263 268	719	
3,4	415	1,20	19986	322000					
3,7	376	1,32	18108	319000					
4,0	348	1,44	16759	316000					
4,6	306	1,64	14737	313000					
5,3	264	1,80	12714	310000					
5,9	237	2,00	11414	307000					
6,5	214	2,20	10306	303000					
7,3	191	2,50	9198	300000					
8,1	173	2,80	8332	297000					
9,3	151	3,10	7272	294000					
10	136	3,50	6550	291000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg				
7,5 10	4,3	324	1,23	15604	252000	MK	704 / 132 M 4b	245 250	633			
	4,8	291	1,38	14014	250000							
	5,3	263	1,52	12666	248000							
	6,0	234	1,76	11269	246000							
	6,6	211	1,96	10162	244000							
	7,4	190	2,10	9150	242000							
	8,2	171	2,40	8235	240000							
	9,2	152	2,70	7320	238000							
	10	138	2,90	6646	236000							
	11	123	3,30	5924	234000							
	13	111	3,60	5346	232000	MK	604 / 132 M 4b	227 232	451			
	6,4	218	1,17	10499	152000							
	6,7	208	1,39	10017	149000							
	8,7	161	1,76	7754	146000							
	10,0	140	1,92	6742	143000							
	11	123	2,20	5924	140000							
	13	111	2,50	5346	137000							
	14	98,14	2,80	4726	134000							
	15	93,07	3,00	4482	131000							
	17	82,91	3,20	3993	128000							
	19	73,37	3,60	3533	125000	MK	603 / 132 M 4b	215 226	451			
	21	65,36	4,10	3148	122000							
	13	105	2,30	5134	129000							
	15	94,03	2,50	4597	127000							
	16	88,64	3,30	4334	125000							
	18	78,71	3,70	3848	123000							
	20	71,37	4,00	3489	121000							
	6,9	204	1,12	9825	120000							
	8,2	171	1,28	8235	118000							
	9,3	151	1,44	7272	116000					MK	504 / 132 M 4b	209 214
10	135	1,64	6502	114000								
12	119	1,88	5731	112000								
13	105	2,10	5057	110000								
15	93,84	2,40	4519	108000								
17	82,77	2,70	3986	106000								
14	101	2,20	4938	92000								
16	88,24	2,60	4314	90000								
18	77,76	2,90	3802	88000								
21	67,00	3,30	3276	86000	MK	503 / 132 M 4b	197 208	443				
24	59,40	3,70	2904	84000								
27	51,80	4,30	2533	82000								
2,8	504	1,06	35599	280000					MK	1004 / 160 M 4a	299 304	1174
3,2	444	1,20	31361	276000								
3,4	413	1,28	29172	272000								
3,6	394	1,31	27830	268000								
4,0	347	1,50	24510	264000								
4,3	323	1,60	22815	260000								
4,9	284	1,80	20060	256000								
5,2	271	1,95	19142	252000								
5,9	239	2,20	16881	248000								
7,1	197	2,60	13915	252000								
8,0	175	3,00	12361	249000								
8,8	160	3,20	11301	246000								
9,9	142	3,60	10030	243000								
10	135	3,80	9536	240000								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types				kg										
											11	15	MK	904 / 160 M 4a	281 286	974				
																	MK	804 / 160 M 4a	263 268	787
MK	604 / 160 M 4a	227 232	519																	
				MK	603 / 160 M 4a	215 226	519													
								MK	504 / 160 M 4a	209 214	511									
MK	503 / 160 M 4a	197 208	511																	
				4,6	306	1,25	21614					280000	MK	904 / 160 M 4a	281 286	974				
				5,2	267	1,45	18859	276000												
6,0	235	1,65	16599	272000																
6,3	222	1,70	15681	268000																
7,2	195	1,95	13774	264000																
7,6	185	2,10	13067	260000																
8,6	163	2,40	11513	256000																
10,0	140	2,80	9889	252000																
11	124	3,10	8759	248000																
13	110	3,50	7770	244000																
4,6	306	1,12	21614	311000	MK	804 / 160 M 4a	263 268	787												
5,3	264	1,22	18647	308000																
5,9	237	1,36	16740	305000																
6,5	214	1,53	15116	301000																
7,3	191	1,70	13491	298000																
8,1	173	1,90	12220	295000																
9,3	151	2,20	10666	292000																
10	136	2,40	9606	289000																
11	123	2,70	8688	285000																
13	111	2,90	7840	282000																
14	100	3,20	7063	279000	MK	704 / 160 M 4a	245 250	701												
16	88,15	3,70	6226	276000																
6,6	211	1,33	14904	242000																
8,2	171	1,64	12078	238000																
9,2	152	1,82	10736	236000																
10	138	2,00	9747	234000																
11	123	2,20	8688	232000																
13	111	2,50	7840	230000																
14	100	2,70	7063	228000																
16	89,06	3,10	6291	226000																
17	80,84	3,40	5710	224000	MK	604 / 160 M 4a	227 232	519												
19	72,28	3,80	5105	222000																
22	64,98	4,20	4590	220000																
8,7	161	1,20	11372	144000																
10,0	140	1,31	9889	141000																
11	123	1,49	8688	138000																
13	111	1,67	7840	135000																
14	98,14	1,89	6932	132000																
15	93,07	2,10	6574	129000																
17	82,91	2,20	5856	126000																
19	73,37	2,50	5182	123000	MK	603 / 160 M 4a	215 226	519												
21	65,36	2,80	4617	120000																
13	105	1,54	7529	127000																
15	94,03	1,73	6743	125000																
16	88,64	2,20	6356	123000																
18	78,71	2,50	5644	121000																
20	71,37	2,70	5118	119000																
22	63,38	3,10	4545	117000																
25	56,66	3,40	4063	115000																
27	51,52	3,70	3694	113000																
12	119	1,28	8405	110000	MK	504 / 160 M 4a	209 214	511												
13	105	1,45	7417	108000																
15	93,84	1,61	6628	106000																
17	82,77	1,83	5846	104000	MK	503 / 160 M 4a	197 208	511												
14	101	1,50	7243	90000																
16	88,24	1,77	6328	88000																
18	77,76	1,98	5576	86000																
21	67,00	2,30	4805	84000																



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
11	24	59,40	2,50	4260	82000	MK	503 / 160 M 4a	197 208	511
	27	51,80	2,90	3715	80000				
	31	45,65	3,30	3274	78000				
	36	39,33	3,80	2820	76000				
	40	34,66	4,30	2485	74000				
15	4,0	347	1,10	33423	262000	MK	1004 / 160 L 4b	299 304	1201
	4,3	323	1,17	31111	258000				
	4,9	284	1,32	27355	254000				
	5,2	271	1,43	26102	250000				
	5,9	239	1,60	23020	246000				
	7,1	197	1,95	18975	242000				
	8,0	175	2,20	16856	238000				
	8,8	160	2,30	15411	234000				
	9,9	142	2,60	13677	230000				
	10	135	2,80	13003	238000				
	12	119	3,10	11462	235000	MK	904 / 160 L 4b	281 286	1001
	14	99,85	3,60	9617	232000				
	5,2	267	1,06	25717	274000				
	6,0	235	1,21	22635	270000				
	6,3	222	1,25	21383	266000				
	7,2	195	1,43	18782	262000				
	7,6	185	1,54	17819	258000				
	8,6	163	1,76	15700	254000				
	10,0	140	2,00	13485	250000				
	11	124	2,30	11944	246000				
	13	110	2,60	10595	242000	MK	804 / 160 L 4b	263 268	814
	14	103	2,90	9921	238000				
	15	91,66	3,30	8829	234000				
	17	81,79	3,70	7878	230000				
	6,5	214	1,12	20612	299000				
	7,3	191	1,25	18397	296000				
	8,1	173	1,39	16663	293000				
	9,3	151	1,58	14544	290000				
	10	136	1,76	13099	287000				
	11	123	1,94	11847	283000				
	13	111	2,10	10691	280000	MK	803 / 160 L 4b	251 262	814
	14	100	2,30	9632	277000				
	16	88,15	2,70	8491	274000				
	18	79,63	3,00	7670	271000				
	19	72,28	3,30	6962	268000				
18	76,43	3,30	7474	258000					
22	62,40	4,00	6102	255000					
11	123	1,63	11847	230000					
13	111	1,81	10691	228000					
14	100	2,00	9632	226000	MK				
16	89,06	2,20	8578	224000					
17	80,84	2,50	7786	222000					
19	72,28	2,80	6962	220000					
22	64,98	3,10	6259	218000					
23	60,08	3,30	5787	216000					
23	60,16	3,30	5883	228000					
26	53,42	3,70	5224	224000					
29	47,76	4,20	4670	220000					
13	111	1,23	10691	133000		MK	604 / 160 L 4b	227 232	546
14	98,14	1,39	9453	130000					
15	93,07	1,52	8964	127000					
17	82,91	1,60	7986	124000					
19	73,37	1,81	7067	121000					
21	65,36	2,00	6295	118000					





P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
15 20	13	105	1,13	10267	125000	MK	603 / 160 L 4b	215 226	546
	15	94,03	1,27	9195	123000				
	16	88,64	1,63	8668	121000				
	18	78,71	1,83	7697	119000				
	20	71,37	2,00	6979	117000				
	22	63,38	2,30	6198	115000				
	25	56,66	2,50	5541	113000				
	27	51,52	2,70	5038	111000				
	33	41,90	3,30	4097	109000				
	38	37,21	3,80	3639	107000				
	15	93,84	1,18	9039	104000	MK	504 / 160 L 4b	209 214	538
	17	82,77	1,34	7972	102000				
	16	88,24	1,30	8629	86000	MK	503 / 160 L 4b	197 208	538
	18	77,76	1,45	7604	84000				
	21	67,00	1,65	6552	82000				
	24	59,40	1,85	5808	80000				
	27	51,80	2,20	5065	78000				
	31	45,65	2,50	4464	76000				
	36	39,33	2,80	3846	74000				
	40	34,66	3,20	3389	72000				
44	31,68	3,60	3098	70000					
51	27,27	4,00	2667	68000					
18,5 25	4,9	284	1,07	33737	252000	MK	1004 / 180 M 4a	299 304	1244
	5,2	271	1,16	32193	248000				
	5,9	239	1,30	28392	244000				
	7,1	197	1,58	23402	240000				
	8,0	175	1,78	20789	236000				
	8,8	160	1,90	19007	232000				
	9,9	142	2,10	16869	228000				
	10	135	2,20	16037	236000				
	12	119	2,50	14136	233000				
	14	99,85	2,90	11862	230000				
	6,3	222	1,01	26372	264000	MK	904 / 180 M 4a	281 286	1044
	7,2	195	1,16	23165	260000				
	7,6	185	1,25	21977	256000				
	8,6	163	1,43	19363	252000				
	10,0	140	1,63	16631	248000				
	11	124	1,87	14730	244000				
	13	110	2,10	13067	240000				
	14	103	2,30	12236	236000				
	15	91,66	2,60	10889	232000				
	17	81,79	3,00	9716	228000				
	20	70,72	3,40	8529	190000	MK	903 / 180 M 4a	269 280	1044
	22	64,17	3,70	7739	186000				
	8,1	173	1,13	20551	291000	MK	804 / 180 M 4a	263 268	857
	10	136	1,43	16156	285000				
	11	123	1,58	14612	281000				
	13	111	1,72	13186	2780000				
	14	100	1,90	11879	275000				
	16	88,15	2,20	10472	272000				
	18	79,63	2,40	9460	269000				
	19	72,28	2,70	8586	266000				
18	76,43	2,70	9218	256000					
22	62,40	3,20	7526	253000	MK				
24	58,03	3,50	6999	250000					
27	52,11	3,70	6285	247000					
30	47,38	4,20	5714	244000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg				
18,5 25	14	100	1,63	11879	224000	MK	704 / 180 M 4a	245 250	771				
	16	89,06	1,84	10580	222000								
	17	80,84	2,00	9603	220000								
	19	72,28	2,30	8586	218000								
	22	64,98	2,50	7719	216000								
	23	60,08	2,60	7137	214000	MK	703 / 180 M 4a	233 244	771				
	23	60,16	2,70	7255	226000								
	26	53,42	3,00	6443	222000								
	29	47,76	3,40	5760	218000								
	15	93,07	1,23	11056	125000					MK	604 / 180 M 4a	227 232	589
	19	73,37	1,47	8716	119000								
	21	65,36	1,64	7764	116000								
	22	63,38	1,86	7644	113000								
	25	56,66	2,00	6833	111000	MK	603 / 180 M 4a	215 226	589				
	27	51,52	2,20	6213	109000								
	33	41,90	2,70	5053	107000								
	38	37,21	3,10	4488	105000								
	42	33,27	3,40	4012	103000					MK	503 / 180 M 4a	197 208	581
	46	30,25	3,70	3648	101000								
	49	28,31	3,90	3414	99000								
52	27,04	4,10	3261	97000									
21	67,00	1,34	8080	80000	MK	503 / 180 M 4a	197 208	581					
24	59,40	1,50	7164	78000									
27	51,80	1,74	6247	76000									
31	45,65	1,99	5505	74000									
36	39,33	2,20	4743	72000					MK	503 / 180 M 4a	197 208	581	
40	34,66	2,60	4180	70000									
44	31,68	2,90	3821	68000									
51	27,27	3,20	3289	66000									
58	24,05	3,70	2900	64000	MK	503 / 180 M 4a	197 208	581					
65	21,50	3,90	2593	62000									
22 30	5,9	239	1,09	33763					242000	MK	1004 / 180 L 4b	299 304	1265
	7,1	197	1,33	27830					238000				
	8,0	175	1,50	24722					234000				
	8,8	160	1,60	22603	230000								
	9,9	142	1,80	20060	226000								
	10	135	1,90	19071	234000								
	12	119	2,10	16811	231000								
	14	99,85	2,50	14106	228000								
	14	100	2,60	14342	186000	MK	1003 / 180 L 4b	287 298	1265				
	17	82,78	3,10	11872	183000								
	20	69,46	3,70	9962	180000								
	7,6	185	1,05	26135	254000					MK	904 / 180 L 4b	281 286	1065
	8,6	163	1,20	23027	250000								
	10,0	140	1,38	19777	246000								
	11	124	1,57	17517	242000								
	13	110	1,77	15539	238000	MK	904 / 180 L 4b	281 286	1065				
	14	103	2,00	14551	234000								
	15	91,66	2,20	12949	230000								
	17	81,79	2,50	11554	226000								
	20	70,72	2,80	10143	188000					MK	903 / 180 L 4b	269 280	1065
22	64,17	3,10	9203	184000									
24	58,89	3,30	8446	180000									
26	53,70	3,80	7702	176000									
11	123	1,32	17376	279000	MK	804 / 180 L 4b	263 268	878					
13	111	1,45	15681	276000									
14	100	1,60	14127	273000									



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
22 30	16	88,15	1,85	12453	270000	MK	804 / 180 L 4b	263 268	878
	18	79,63	2,10	11249	267000				
	19	72,28	2,30	10211	264000				
	18	76,43	2,30	10962	254000	MK	803 / 180 L 4b	251 262	878
	22	62,40	2,70	8949	251000				
	24	58,03	2,90	8323	248000				
	27	52,11	3,10	7474	245000				
	30	47,38	3,50	6795	242000				
	35	39,57	4,10	5675	239000	MK	704 / 180 L 4b	245 250	792
	16	89,06	1,55	12581	220000				
	17	80,84	1,70	11420	218000				
	19	72,28	1,90	10211	216000				
	22	64,98	2,10	9180	214000				
	23	60,08	2,20	8487	212000				
	23	60,16	2,20	8628	224000				
	26	53,42	2,50	7661	220000	MK	703 / 180 L 4b	233 244	792
	29	47,76	2,90	6850	216000				
	33	42,94	3,20	6158	212000				
	36	38,79	3,50	5563	208000				
	38	36,43	3,70	5225	204000				
	43	32,57	3,90	4671	200000	MK	603 / 180 L 4b	215 226	610
	22	63,38	1,57	9090	111000				
	25	56,66	1,70	8126	109000				
	27	51,52	1,84	7389	107000				
	33	41,90	2,30	6009	105000				
	38	37,21	2,60	5337	103000				
	42	33,27	2,80	4772	101000				
	46	30,25	3,10	4338	99000				
	49	28,31	3,30	4060	97000				
	52	27,04	3,50	3878	95000				
	56	25,14	3,60	3606	93000	MK	503 / 180 L 4b	197 208	602
	24	59,40	1,26	8519	76000				
	27	51,80	1,46	7429	74000				
31	45,65	1,67	6547	72000					
36	39,33	1,88	5641	70000					
40	34,66	2,10	4971	68000					
44	31,68	2,40	4544	66000					
51	27,27	2,70	3911	64000					
58	24,05	3,10	3449	62000					
65	21,50	3,30	3084	60000					
74	18,97	3,80	2721	58000	MK	1004 / 200 L 4a	299 304	1323	
83	16,84	4,10	2415	56000					
93	15,02	4,50	2154	54000					
8,0	175	1,10	33712	232000					
8,8	160	1,17	30822	228000					
9,9	142	1,32	27355	224000	MK	1003 / 200 L 4a	287 298	1323	
10	135	1,39	26006	232000					
12	119	1,57	22924	229000					
14	99,85	1,83	19235	226000					
14	100	1,92	19557	184000					
17	82,78	2,30	16189	181000	MK	1003 / 200 L 4a	287 298	1323	
20	69,46	2,70	13584	178000					
24	59,28	3,20	11593	175000					
25	56,56	3,30	11062	172000					
29	48,27	3,80	9440	169000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
30 40	10,0	140	1,01	26969	244000	MK	904 / 200 L 4a	281 286	1123
	11	124	1,15	23887	240000				
	13	110	1,30	21190	236000				
	14	103	1,47	19842	232000				
	15	91,66	1,65	17657	228000				
	17	81,79	1,85	15756	224000				
	20	70,72	2,10	13831	186000	MK	903 / 200 L 4a	269 280	1123
	22	64,17	2,30	12550	182000				
	24	58,89	2,40	11517	178000				
	26	53,70	2,80	10502	174000				
	31	44,71	3,20	8744	170000				
	33	42,35	3,50	8282	166000				
	14	100	1,17	19264	271000	MK	804 / 200 L 4a	263 268	936
	16	88,15	1,36	16981	268000				
	18	79,63	1,50	15340	265000				
	19	72,28	1,65	13924	262000				
	18	76,43	1,65	14948	252000				
	22	62,40	1,98	12204	249000				
	24	58,03	2,20	11349	246000	MK	803 / 200 L 4a	251 262	936
	27	52,11	2,30	10191	243000				
	30	47,38	2,60	9266	240000				
	35	39,57	3,00	7739	237000				
	37	37,37	3,30	7309	234000				
	42	33,48	3,60	6548	231000				
	46	30,21	4,10	5908	228000	MK	704 / 200 L 4a	245 250	850
	22	64,98	1,54	12518	212000				
	23	60,16	1,65	11766	222000				
	26	53,42	1,88	10447	218000				
	29	47,76	2,10	9340	214000				
	33	42,94	2,30	8398	210000				
	36	38,79	2,60	7586	206000	MK	703 / 200 L 4a	233 244	850
	38	36,43	2,70	7125	202000				
	43	32,57	2,90	6370	198000				
	48	29,28	3,00	5726	194000				
	53	26,48	3,10	5179	190000				
	59	23,80	3,20	4655	186000				
65	21,50	3,50	4205	182000	MK	603 / 200 L 4a	215 226	668	
71	19,79	3,70	3870	178000					
22	63,38	1,15	12395	109000					
25	56,66	1,25	11081	107000					
27	51,52	1,35	10076	105000					
33	41,90	1,65	8194	103000					
38	37,21	1,90	7277	101000	MK	503 / 200 L 4a	197 208	660	
42	33,27	2,10	6507	99000					
46	30,25	2,30	5916	97000					
49	28,31	2,40	5537	95000					
52	27,04	2,60	5288	93000					
56	25,14	2,70	4917	91000					
62	22,48	3,00	4396	89000	MK	503 / 200 L 4a	197 208	660	
66	21,24	3,10	4154	87000					
74	18,99	3,50	3714	85000					
31	45,65	1,23	8928	70000					
36	39,33	1,38	7692	68000					
40	34,66	1,58	6779	66000					
44	31,68	1,78	6196	64000	MK	503 / 200 L 4a	197 208	660	
51	27,27	2,00	5333	62000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
30 40	58	24,05	2,30	4703	60000	MK	503 / 200 L 4a	197 208	660
	65	21,50	2,40	4205	58000				
	74	18,97	2,80	3710	56000				
	83	16,84	3,00	3293	54000				
	93	15,02	3,30	2937	52000				
37 50	9,9	142	1,07	33737	222000	MK	1004 / 225 S 4a	299 304	1400
	10	135	1,13	32074	230000				
	12	119	1,28	28273	227000				
	14	99,85	1,48	23723	224000				
	14	100	1,56	24120	182000				
	17	82,78	1,88	19967	179000	MK	1003 / 225 S 4a	287 298	1400
	20	69,46	2,20	16754	176000				
	24	59,28	2,60	14299	173000				
	25	56,56	2,70	13643	170000				
	29	48,27	3,10	11643	167000				
	32	44,36	3,70	10700	164000	MK	904 / 225 S 4a	281 286	1200
	13	110	1,05	26135	234000				
	14	103	1,19	24471	230000				
	15	91,66	1,35	21777	226000				
	17	81,79	1,50	19432	222000				
	20	70,72	1,70	17058	184000	MK	903 / 225 S 4a	251 262	1200
	22	64,17	1,86	15478	180000				
	24	58,89	1,95	14205	176000				
	26	53,70	2,30	12953	172000				
	31	44,71	2,60	10784	168000				
	33	42,35	2,80	10215	164000	MK	804 / 225 S 4a	263 268	1013
	40	35,26	3,30	8505	160000				
	42	33,56	3,50	8095	156000				
	19	72,28	1,34	17173	260000				
	18	76,43	1,34	18435	250000				
	22	62,40	1,61	15051	247000	MK	803 / 225 S 4a	251 262	1013
	24	58,03	1,75	13997	244000				
	27	52,11	1,85	12569	241000				
	30	47,38	2,10	11428	238000				
	35	39,57	2,40	9544	235000				
	37	37,37	2,70	9014	232000				
	42	33,48	2,90	8076	229000				
	46	30,21	3,30	7287	226000				
	55	25,57	3,90	6168	223000				
	23	60,16	1,33	14511	220000				
26	53,42	1,52	12885	216000					
29	47,76	1,70	11520	212000					
33	42,94	1,89	10357	208000					
36	38,79	2,10	9356	204000					
38	36,43	2,20	8787	200000					
43	32,57	2,30	7856	196000					
48	29,28	2,40	7062	192000					
53	26,48	2,50	6387	188000					
59	23,80	2,60	5741	184000					
65	21,50	2,80	5186	180000					
71	19,79	3,00	4773	176000					
78	17,87	3,20	4310	170000					
86	16,20	3,30	3908	166000					
95	14,74	4,40	3555	162000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg
37 50	33	41,90	1,34	10106	101000	MK	603 / 225 S 4a	215 226	745
	38	37,21	1,54	8975	99000				
	42	33,27	1,70	8025	97000				
	46	30,25	1,86	7296	95000				
	49	28,31	1,95	6829	93000				
	52	27,04	2,10	6522	91000				
	56	25,14	2,20	6064	89000				
	62	22,48	2,40	5422	87000				
	66	21,24	2,50	5123	85000				
	74	18,99	2,80	4580	83000				
	40	34,66	1,28	8360	64000				
	44	31,68	1,44	7641	62000				
	51	27,27	1,62	6578	60000				
	58	24,05	1,84	5801	58000				
	65	21,50	1,97	5186	56000				
	74	18,97	2,20	4576	54000				
83	16,84	2,50	4062	52000					
93	15,02	2,70	3623	50000					
45 60	12	119	1,05	34386	225000	MK	1004 / 225 M 4b	299 304	1430
	14	99,85	1,22	28852	222000				
	14	100	1,28	29336	180000				
	17	82,78	1,55	24284	177000				
	20	69,46	1,85	20377	174000				
	24	59,28	2,10	17390	171000				
	25	56,56	2,20	16592	168000				
	29	48,27	2,50	14160	165000				
	32	44,36	3,00	13013	162000				
	38	37,22	3,30	10919	159000				
	44	31,76	3,90	9317	156000				
	15	91,66	1,11	26486	224000				
	17	81,79	1,23	23634	220000				
	20	70,72	1,40	20746	182000				
	22	64,17	1,53	18825	178000				
	24	58,89	1,60	17276	174000				
	26	53,70	1,87	15753	170000				
	31	44,71	2,10	13116	166000				
	33	42,35	2,30	12424	162000				
	40	35,26	2,70	10344	158000				
	42	33,56	2,90	9845	154000				
	48	29,39	3,30	8622	150000				
	50	27,94	3,50	8196	146000				
	54	25,89	3,80	7595	142000				
	22	62,40	1,32	18305	245000				
	24	58,03	1,44	17024	242000				
	27	52,11	1,52	15287	239000				
	30	47,38	1,73	13899	236000				
	35	39,57	2,00	11608	233000				
	37	37,37	2,20	10963	230000				
	42	33,48	2,40	9822	227000				
	46	30,21	2,70	8862	224000				
	55	25,57	3,20	7501	221000				
	62	22,41	3,60	6574	218000				
	71	19,76	4,10	5797	215000				
	100	14,01	5,20	4110	212000				
26	53,42	1,25	15671	214000					
29	47,76	1,40	14011	210000					
33	42,94	1,55	12597	206000					
36	38,79	1,72	11379	202000					
45 60	26	53,42	1,25	15671	214000	MK	803 / 225 M 4b	251 262	1043
	29	47,76	1,40	14011	210000				
	33	42,94	1,55	12597	206000				
	36	38,79	1,72	11379	202000				
	26	53,42	1,25	15671	214000				
	29	47,76	1,40	14011	210000				
	33	42,94	1,55	12597	206000				
	36	38,79	1,72	11379	202000				
	26	53,42	1,25	15671	214000				
	29	47,76	1,40	14011	210000				
33	42,94	1,55	12597	206000					
45 60	26	53,42	1,25	15671	214000	MK	703 / 225 M 4b	233 244	957
	29	47,76	1,40	14011	210000				
	33	42,94	1,55	12597	206000				
	36	38,79	1,72	11379	202000				
	26	53,42	1,25	15671	214000				
	29	47,76	1,40	14011	210000				
	33	42,94	1,55	12597	206000				
	36	38,79	1,72	11379	202000				
	26	53,42	1,25	15671	214000				
	29	47,76	1,40	14011	210000				
33	42,94	1,55	12597	206000					




P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg	
45 60	38	36,43	1,80	10687	198000	MK	703 / 225 M 4b	233 244	957
	43	32,57	1,90	9555	194000				
	48	29,28	1,90	8589	190000				
	53	26,48	2,00	7768	186000				
	59	23,80	2,20	6982	182000				
	65	21,50	2,30	6307	178000				
	71	19,79	2,40	5806	174000				
	78	17,87	2,60	5242	168000				
	86	16,20	2,70	4752	164000				
	95	14,74	3,60	4324	160000				
	33	41,90	1,10	12292	99000	MK	603 / 225 M 4b	215 226	775
	38	37,21	1,27	10916	97000				
	42	33,27	1,40	9760	95000				
	46	30,25	1,53	8874	93000				
	49	28,31	1,60	8305	91000				
	52	27,04	1,70	7932	89000				
	56	25,14	1,77	7375	87000				
	62	22,48	2,00	6595	85000				
	66	21,24	2,00	6231	83000				
	74	18,99	2,30	5571	81000				
44	31,68	1,18	9294	60000	MK	503 / 225 M 4b	197 208	767	
51	27,27	1,33	8000	58000					
58	24,05	1,52	7055	56000					
65	21,50	1,62	6307	54000					
74	18,97	1,83	5565	52000					
83	16,84	2,00	4940	50000	MK	1003 / 250 M 4a	287 298	1495	
93	15,02	2,20	4406	48000					
17	82,78	1,27	29681	175000					
20	69,46	1,51	24905	172000					
24	59,28	1,78	21255	169000					
25	56,56	1,82	20279	166000					
29	48,27	2,10	17307	163000					
32	44,36	2,50	15905	160000					
38	37,22	2,70	13345	157000					
44	31,76	3,20	11387	154000					
51	27,46	3,70	9846	151000					
55 75	20	70,72	1,15	25356	180000	MK	903 / 250 M 4a	269 280	1295
	22	64,17	1,25	23008	176000				
	24	58,89	1,31	21115	172000				
	26	53,70	1,53	19254	168000				
	31	44,71	1,75	16031	164000				
	33	42,35	1,91	15184	160000				
	40	35,26	2,20	12642	156000				
	42	33,56	2,40	12033	152000				
	48	29,39	2,70	10538	148000				
	50	27,94	2,80	10018	144000				
	54	25,89	3,10	9283	140000				
	58	24,27	3,20	8702	136000				
	65	21,56	3,70	7730	132000				
	24	58,03	1,18	20807	240000	MK	803 / 250 M 4a	251 262	1108
	27	52,11	1,24	18684	237000				
	30	47,38	1,41	16988	234000				
	35	39,57	1,65	14188	231000				
	37	37,37	1,78	13399	228000				
42	33,48	1,95	12004	225000					
46	30,21	2,20	10832	222000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types			kg			
55 75	55	25,57	2,60	9168	219000	MK	803 / 250 M 4a	251 262	1108			
	62	22,41	3,00	8035	216000							
	71	19,76	3,40	7085	213000							
	100	14,01	4,20	5023	210000							
	29	47,76	1,15	17124	208000	MK	703 / 250 M 4a	233 244	1022			
	33	42,94	1,27	15396	204000							
	36	38,79	1,40	13908	200000							
	38	36,43	1,47	13062	196000							
	43	32,57	1,55	11678	192000							
	48	29,28	1,61	10498	188000							
	53	26,48	1,66	9494	184000							
	59	23,80	1,77	8533	180000							
	65	21,50	1,88	7709	176000							
	71	19,79	1,99	7096	172000							
	78	17,87	2,10	6407	166000	MK	603 / 250 M 4a	215 226	840			
	86	16,20	2,20	5808	162000							
	95	14,74	3,00	5285	158000							
	38	37,21	1,04	13342	95000							
	42	33,27	1,15	11929	93000							
	46	30,25	1,25	10846	91000							
49	28,31	1,31	10150	89000								
52	27,04	1,39	9695	87000								
56	25,14	1,45	9014	85000	MK	503 / 250 M 4a	233 244	832				
62	22,48	1,64	8060	83000								
66	21,24	1,66	7616	81000								
74	18,99	1,88	6809	79000								
58	24,05	1,24	8623	54000	MK	1003 / 280 S 4a	287 298	1655				
74	18,97	1,50	6802	50000								
83	16,84	1,66	6038	48000								
93	15,02	1,83	5385	46000								
20	69,46	1,23	33961	170000								
24	59,28	1,45	28984	167000								
25	56,56	1,49	27654	164000								
29	48,27	1,72	23601	161000								
32	44,36	2,00	21689	158000								
38	37,22	2,20	18198	155000								
44	31,76	2,60	15528	152000								
51	27,46	2,70	13426	149000								
61	22,86	3,20	11177	146000								
70	19,96	3,70	9759	143000								
26	53,70	1,12	26255	166000					MK	903 / 280 S 4a	269 280	1455
31	44,71	1,28	21860	162000								
33	42,35	1,40	20706	158000								
40	35,26	1,84	17240	154000								
42	33,56	1,76	16408	150000								
48	29,39	2,00	14370	146000								
50	27,94	2,10	13661	142000								
54	25,89	2,30	12658	138000								
58	24,27	2,40	11866	134000								
65	21,56	2,70	10541	130000	MK	803 / 280 S 4a	251 262	1268				
35	39,57	1,21	19347	229000								
37	37,37	1,31	18271	226000								
42	33,48	1,43	16369	223000								
46	30,21	1,63	14771	220000								
55	25,57	1,92	12502	217000								
62	22,41	2,20	10957	214000								
71	19,76	2,50	9661	211000								
100	14,01	3,10	6850	208000								



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg	
75 100	48	29,28	1,18	14316	186000	MK	703 / 280 S 4a	233 244	1182
	59	23,80	1,30	11636	178000				
	65	21,50	1,38	10512	174000				
	71	19,79	1,46	9676	170000				
	78	17,87	1,56	8737	164000				
	86	16,20	1,64	7921	160000				
90 120	95	14,74	2,20	7207	156000	MK	1003 / 280 M 4b	287 298	1715
	24	59,28	1,21	34780	165000				
	25	56,56	1,24	33185	162000				
	29	48,27	1,43	28321	159000				
	32	44,36	1,70	26027	156000				
	38	37,22	1,84	21837	153000				
	44	31,76	2,20	18634	150000				
	51	27,46	2,30	16111	147000				
	61	22,86	2,70	13412	144000				
	70	19,96	3,10	11711	141000				
	90	15,54	4,00	9118	138000	MK	903 / 280 M 4b	269 280	1515
	31	44,71	1,07	26232	160000				
	33	42,35	1,17	24847	156000				
	40	35,26	1,37	20688	152000				
	42	33,56	1,47	19690	148000				
	48	29,39	1,67	17244	144000				
	50	27,94	1,73	16393	140000				
	54	25,89	1,90	15190	136000				
	58	24,27	1,97	14240	132000				
	65	21,56	2,20	12650	128000				
42	33,48	1,19	19643	221000					
55	25,57	1,60	15002	215000					
62	22,41	1,80	13148	212000					
71	19,76	2,10	11593	209000					
100	14,01	2,60	8220	206000	MK	703 / 280 M 4b	233 244	1242	
95	14,74	1,83	8648	154000					
110 150	29	48,27	1,17	34614	157000	MK	1003 / 315 S 4a	287 298	1911
	32	44,36	1,39	31810	154000				
	38	37,22	1,50	26690	151000				
	44	31,76	1,78	22775	148000				
	51	27,46	1,86	19691	145000				
	61	22,86	2,20	16393	142000				
	70	19,96	2,50	14313	139000				
	90	15,54	3,30	11144	136000	MK	903 / 315 S 4a	269 280	1711
	40	35,26	1,12	25285	150000				
	42	33,56	1,20	24066	146000				
	48	29,39	1,36	21075	142000				
	50	27,94	1,44	20036	138000				
	54	25,89	1,55	18566	134000				
	58	24,27	1,61	17404	130000				
65	21,56	1,83	15461	126000	MK	1003 / 315 M 4b	287 298	1932	
32	44,36	1,16	38172	152000					
38	37,22	1,25	32028	149000					
44	31,76	1,49	27330	146000					
51	27,46	1,55	23630	143000					
61	22,86	1,84	19671	140000					
70	19,96	2,10	17176	137000					
90	15,54	2,70	13372	134000					



P ₁ GÜÇ Power Puissance [kW] Hp	n ₂ Çıkış Devri Output Speeds Vitesse de sortie [r.p.m]	İ Tahvil Ratio Rapport de réduction	S _f Servis Faktörü Service Factor Service facteur	M ₂ Çıkış Momenti Output Torque Couple de sortie [Nm]	F _{Q10} Rad. Yük Over Loads Charges radiales [N]	Tip Type Types		 kg	
132 175	42	33,56	1,00	28879	144000	MK	903 / 315 M 4b	269 280	1732
	48	29,39	1,13	25291	140000				
	50	27,94	1,20	24043	136000				
	54	25,89	1,30	22279	132000				
	58	24,27	1,34	20885	128000				
	65	21,56	1,52	18553	124000				
160 210	44	31,76	1,23	33127	144000	MK	1003 / 315 L 4c	287 298	1980
	51	27,46	1,28	28642	141000				
	61	22,86	1,52	23844	138000				
	70	19,96	1,75	20819	135000				
	90	15,54	2,20	16209	132000				
185 250	61	22,86	1,31	27570	136000	MK	1003 / 315 L 4d	287 298	2065
	70	19,96	1,51	24072	133000				
	90	15,54	1,94	18742	130000				
200 270	70	19,96	1,40	26024	131000	MK	1003 / 315 H 4e	287 298	2150
	90	15,54	1,80	20261	128000				
250 340	90	15,54	1,43	25326	126000	MK	1003 / 355 M 4a	287 298	2450



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types			kg
	GÜÇ Power Puissance	Çıkış Devri Output Speeds Vitesse de sortie	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie	Rad. Yük Over Loads Charges radiales	Rad. Yük Over Loads Charges radiales				
	[kW]	[r.p.m] ($n_1=1400$ rpm)		[Nm]	[N]	[N]				
10230 Nm	5,2	4,74	295	10230	6000	130000	MK	504	209 214	387
	6,4	5,40	259	10230	6000	127000				
	6,8	6,10	229	10230	6000	124000				
	7,7	6,85	204	10230	6000	121000				
	8,9	8,15	172	10230	6000	118000				
	10,8	9,21	152	10230	6000	115000				
	11,2	10	135	10230	6000	112000				
	13,4	12	119	10230	6000	109000				
	15,2	13	105	10230	6000	106000				
	17,0	15	93,84	10230	6000	103000				
	19,8	17	82,78	10230	6000	100000				
10300 Nm	15,9	14	101	10300	11600	90000	MK	503	197 208	387
	17,4	16	88,24	10300	11600	87000				
	20,3	18	77,76	10300	11600	84000				
	23,6	21	67,00	10300	11600	81000				
	27,0	24	59,40	10300	11000	78000				
	31,9	27	51,81	10300	11000	75000				
	35,1	31	45,65	10300	11000	72000				
	42,7	36	39,34	10300	11000	69000				
	47,7	40	34,67	10300	11000	66000				
	53,8	44	31,68	10300	11000	63000				
	56,2	51	27,27	10300	11000	60000				
	67,7	58	24,06	10300	11000	57000				
	79,2	65	21,51	10300	11000	54000				
	82,0	74	18,97	10300	11000	51000				
	92,4	83	16,84	10300	11000	48000				
104	93	15,02	10300	11000	45000					
11900 Nm	4,7	3,63	386	11900	7200	165000	MK	604	227 232	395
	6,0	4,44	315	11900	7200	161000				
	7,4	5,62	249	11900	6000	157000				
	8,4	6,41	219	11900	6000	153000				
	9,4	6,72	208	11900	6000	149000				
	12,3	8,65	162	11900	6000	145000				
	12,8	9,94	141	11900	6000	141000				
	15,5	11	124	11900	6000	137000				
	17,3	13	112	11900	6000	133000				
	19,8	14	98,15	11900	6000	129000				
	19,3	15	93,07	11900	6000	125000				
	22,7	17	82,92	11900	6000	121000				
	26,0	19	73,38	11900	6000	117000				
	27,9	21	65,36	11900	6000	113000				
12900 Nm	20,5	13	106	12900	12800	125000	MK	603	215 226	395
	21,0	15	94,03	12900	12800	122000				
	22,0	16	88,64	12900	12800	119000				
	26,7	18	78,72	12900	12800	116000				
	28,1	20	71,37	12900	11600	113000				
	30,8	22	63,38	12900	11600	110000				
	38,2	25	56,67	12900	11600	107000				
	41,4	27	51,53	12900	11600	104000				
	47,2	33	41,90	12900	11600	101000				
	51,6	38	37,21	12900	11000	98000				
	63,2	42	33,27	12900	11000	95000				
	64,4	46	30,25	12900	11000	92000				
	76,5	49	28,32	12900	11000	89000				
	78,9	52	27,05	12900	11000	86000				
	84,9	56	25,15	12900	11000	83000				
	86,7	62	22,48	12900	11000	80000				
	96,0	66	21,25	12900	11000	77000				
	107	74	19,00	12900	11000	74000				





Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types			
	GÜÇ Power Puissance	Çıkış Devri Output Speeds Vitesse de sortie	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie	Rad. Yük Over Loads Charges radiales	Rad. Yük Over Loads Charges radiales				
	[kW]	[r.p.m] ($n_1=1400$ rpm)	[Nm]	[N]	[N]					
18900 Nm	6,4	3,10	452	18900	9500	260000	MK	704	245 250	577
	7,1	3,48	403	18900	9500	257000				
	8,5	3,85	364	18900	8300	254000				
	9,4	4,32	324	18900	8300	251000				
	9,8	4,81	291	18900	8300	248000				
	11,2	5,32	263	18900	8300	245000				
	13,6	5,98	234	18900	8300	242000				
	14,8	6,62	211	18900	8300	239000				
	15,5	7,36	190	18900	8300	236000				
	17,9	8,14	172	18900	8300	233000				
	19,9	9,17	153	18900	8300	230000				
	20,9	10	139	18900	8300	227000				
	23,8	11	124	18900	8300	224000				
	25,7	13	111	18900	6400	221000				
	28,0	14	100	18900	6400	218000				
	31,6	16	89,06	18900	6400	215000				
	37,5	17	80,85	18900	6400	212000				
	40,1	19	72,28	18900	6400	209000				
48,8	22	64,99	18900	6400	206000					
52,0	23	60,09	18900	6400	203000					
19400 Nm	50,2	23	60,16	19400	18000	220000	MK	703	233 244	577
	60,1	26	53,43	19400	18000	215000				
	68,2	29	47,77	19400	18000	210000				
	74,7	33	42,95	19400	18000	205000				
	76,7	36	38,79	19400	18000	200000				
	79,3	38	36,43	19400	14000	195000				
	90,0	43	32,57	19400	14000	190000				
	105	48	29,29	19400	14000	185000				
	121	53	26,48	19400	14000	180000				
	135	59	23,81	19400	14000	175000				
	140	65	21,50	19400	14000	170000				
	146	71	19,79	19400	14000	165000				
	174	78	17,88	19400	14000	160000				
	198	86	16,21	19400	14000	155000				
	202	95	14,74	19400	14000	150000				
22520 Nm	7,1	2,74	512	22520	9800	330000	MK	804	263 268	663
	7,3	3,05	460	22520	9800	326000				
	8,6	3,37	415	22520	9800	322000				
	9,7	3,71	377	22520	9800	318000				
	9,8	4,01	349	22520	9800	314000				
	12,2	4,57	306	22520	9800	310000				
	14,3	5,28	265	22520	9800	306000				
	15,4	5,88	238	22520	9800	302000				
	16,8	6,51	215	22520	9800	298000				
	17,5	7,31	192	22520	8500	294000				
	21,9	8,09	173	22520	8500	290000				
	22,2	9,26	151	22520	8500	286000				
	25,7	10	137	22520	8500	282000				
	27,0	11	124	22520	8500	278000				
	30,4	13	112	22520	5800	274000				
	36,9	14	101	22520	5800	270000				
	39,8	16	88,15	22520	5800	266000				
	43,4	18	79,63	22520	5800	262000				
50,8	19	72,29	22520	5800	258000					



Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types		
	GÜÇ Power Puissance [kW]	Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] ($n_1=1400$ rpm)	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie [Nm]	Rad. Yük Over Loads Charges radiales [N]	Rad. Yük Over Loads Charges radiales [N]			
22300 Nm	43,4	18	76,43	22300	18000	250000	MK	251 262	663
	54,8	22	62,40	22300	18000	246000			
	61,7	24	58,04	22300	18000	242000			
	68,7	27	52,12	22300	18000	238000			
	73,3	30	47,38	22300	18000	234000			
	86,4	35	39,57	22300	18000	230000			
	88,8	37	37,37	22300	18000	226000			
	105	42	33,49	22300	15000	222000			
	124	46	30,22	22300	18000	218000			
	142	55	25,57	22300	15000	214000			
	153	62	22,41	22300	15000	210000			
	181	71	19,76	22300	15000	206000			
240	100	14,01	22300	15000	202000				
28830 Nm	14,9	4,57	306	28830	13200	280000	MK	281 286	850
	17,6	5,24	267	28830	13200	275000			
	19,7	5,95	235	28830	13200	270000			
	20,5	6,30	222	28830	13200	265000			
	24,3	7,14	196	28830	13200	260000			
	24,6	7,56	185	28830	13200	255000			
	26,7	8,57	163	28830	13200	250000			
	34,4	9,96	141	28830	13200	245000			
	34,6	11	124	28830	13200	240000			
	44,0	13	110	28830	13200	235000			
	44,8	14	103	28830	13200	230000			
	50,5	15	91,66	28830	13200	225000			
59,2	17	81,79	28830	13200	220000				
29530 Nm	65,0	20	70,72	29530	22000	180000	MK	269 280	850
	75,0	22	64,18	29530	22000	175000			
	84,2	24	58,89	29530	22000	170000			
	83,1	26	53,70	29530	22000	165000			
	108	31	44,72	29530	22000	160000			
	109	33	42,35	29530	22000	155000			
	136	40	35,27	29530	22000	150000			
	137	42	33,56	29530	22000	145000			
	156	48	29,39	29530	22000	135000			
	175	50	27,95	29530	22000	130000			
	172	54	25,89	29530	22000	125000			
	195	58	24,28	29530	22000	120000			
220	65	21,56	29530	22000	120000				
37580 Nm	12,3	2,77	505	37580	14600	280000	MK	299 304	1050
	13,6	3,15	445	37580	14600	276000			
	15,2	3,38	414	37580	14600	272000			
	14,4	3,55	394	37580	14600	268000			
	16,1	4,03	347	37580	14600	264000			
	17,3	4,33	323	37580	14600	260000			
	19,9	4,91	285	37580	14600	256000			
	21,2	5,16	271	37580	14600	252000			
	26,4	5,86	239	37580	14600	248000			
	28,3	7,08	198	37580	14600	244000			
	31,9	7,98	176	37580	14600	240000			
	38,6	8,70	161	37580	14600	236000			
	44,2	9,80	143	37580	14600	232000			
	46,0	10	135	37580	14600	228000			
	46,6	12	120	37580	14600	224000			
	59,5	14	99,85	37580	14600	220000			



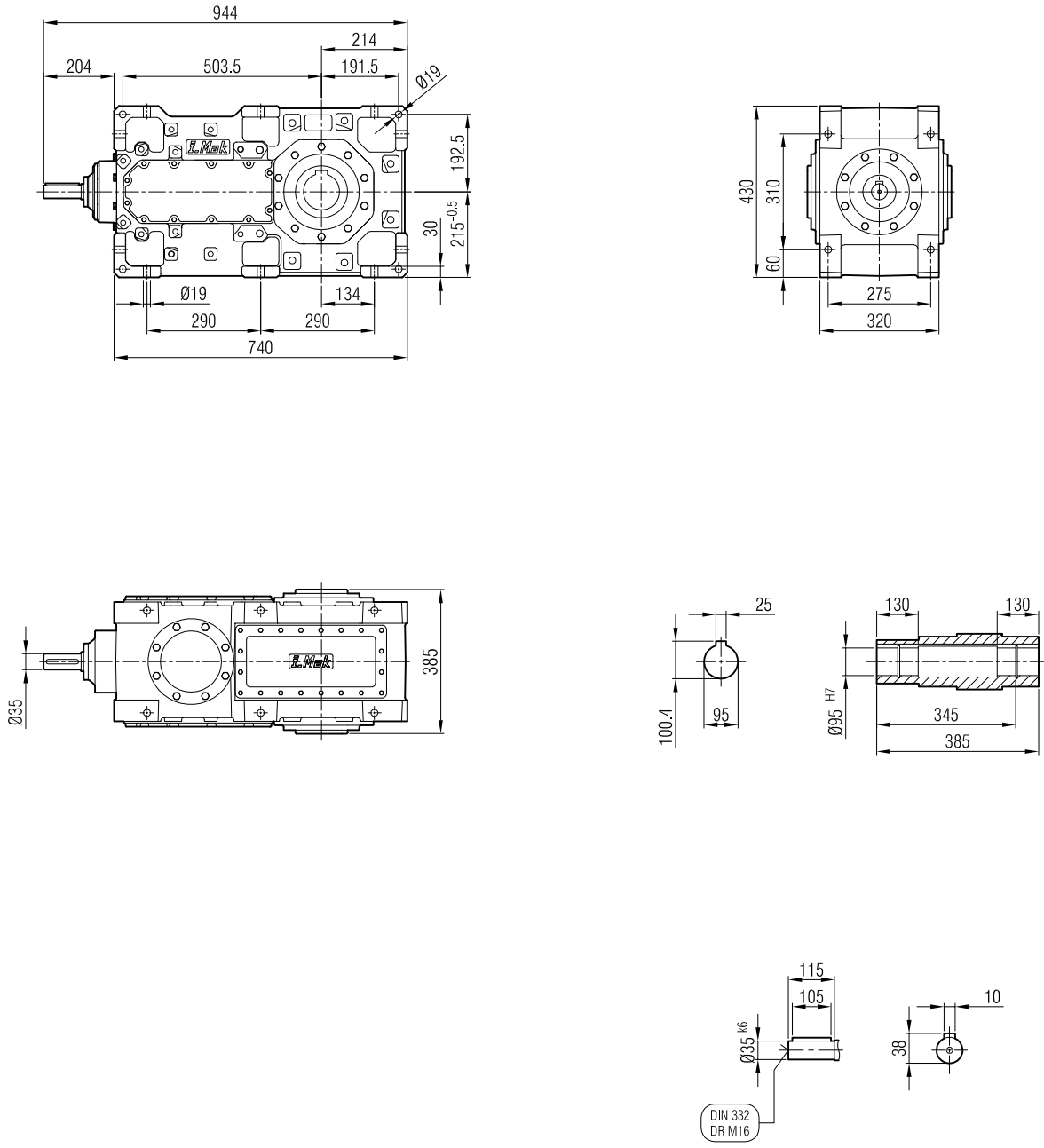
Servis Faktörü $S_f=1$ Service Factor $S_f=1$ Service facteur $S_f=1$	P_1	n_2	i	M_2	F_{Q1}	F_{Q10}	Tip Type Types		
	GÜÇ Power Puissance [kW]	Çıkış Devri Output Speeds Vitesse de sortie [r.p.m] ($n_1=1400$ rpm)	Tahvil Ratio Rapport de réduction	Çıkış Momenti Output Torque Couple de sortie [Nm]	Rad. Yük Over Loads Charges radiales [N]	Rad. Yük Over Loads Charges radiales [N]			
36700 Nm	54,9	14	101	36700	26000	180000	MK	287 298	1050
	70,1	17	82,79	36700	26000	175000			
	88,7	20	69,47	36700	24000	170000			
	99,4	24	59,29	36700	24000	165000			
	99,5	25	56,56	36700	24000	160000			
	115	29	48,27	36700	24000	155000			
	133	32	44,36	36700	24000	150000			
	156	38	37,23	36700	24000	145000			
	194	44	31,77	36700	24000	140000			
	199	51	27,46	36700	24000	135000			
	258	61	22,87	36700	24000	130000			
	278	70	19,96	36700	24000	125000			
	396	90	15,55	36700	24000	120000			

MK Serisi Redüktörler Ölçü Sayfaları

Dimensions Pages
Dimensions

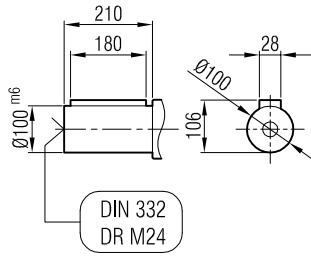
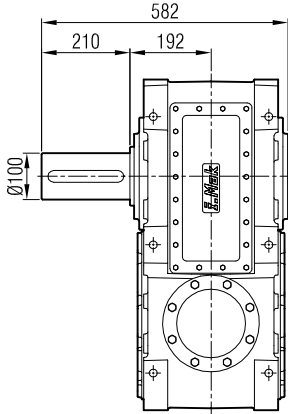


MK 503-G07

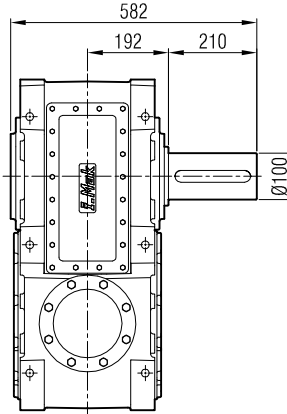




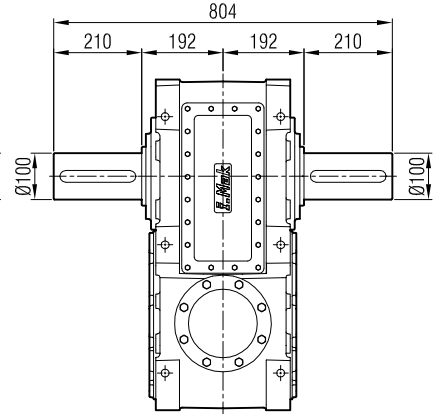
MA / MK 50_
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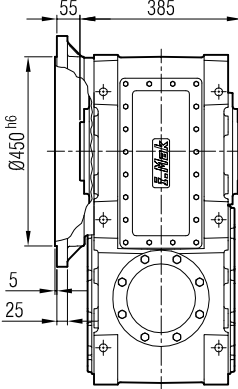
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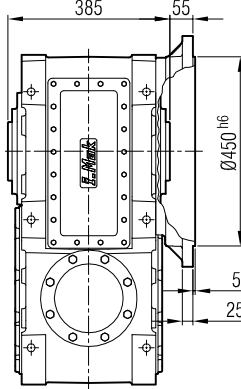
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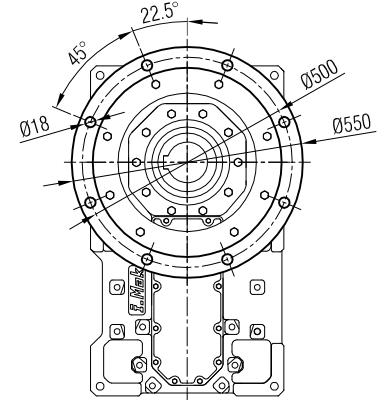
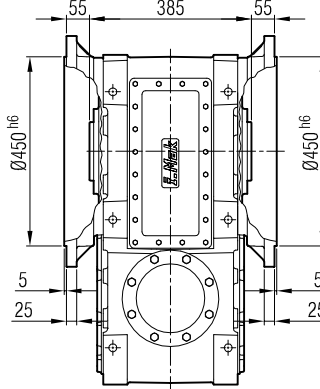
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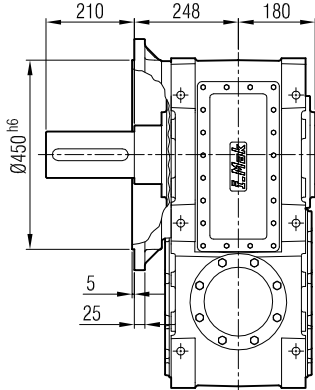
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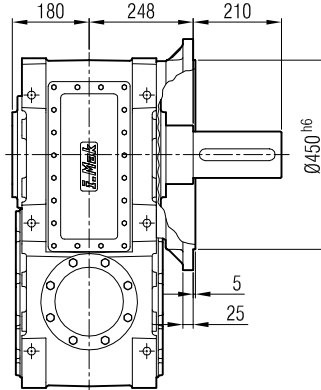
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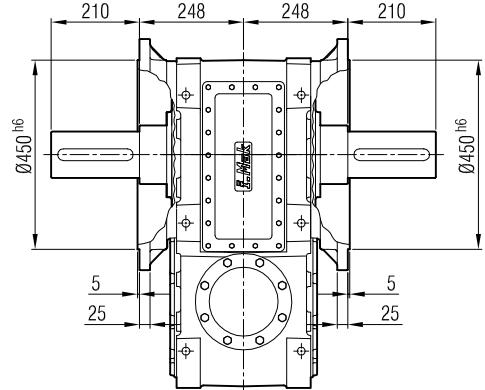
...-FL-SL



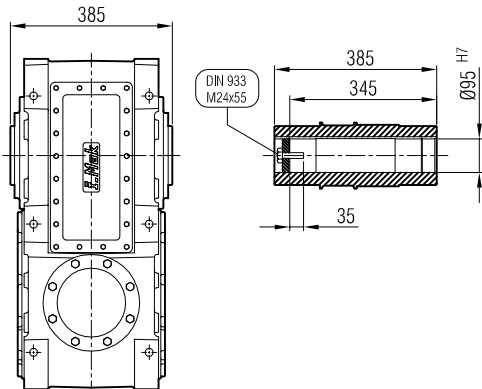
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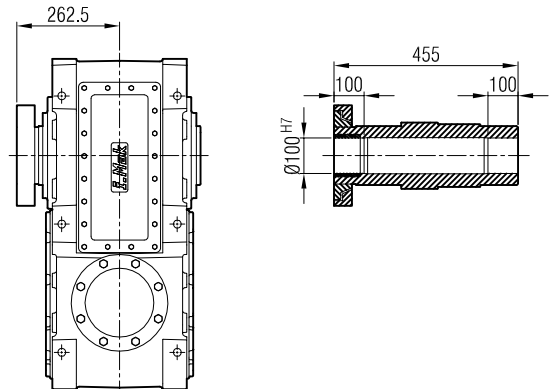
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...-H



...-SDL / SDR



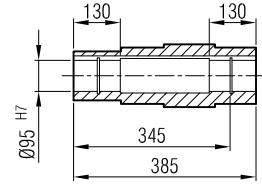
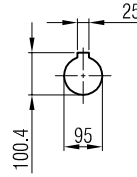
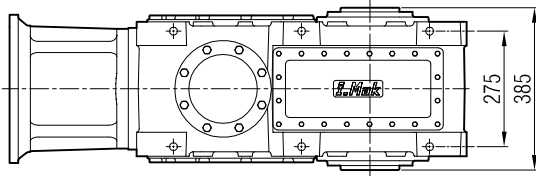
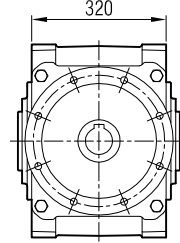
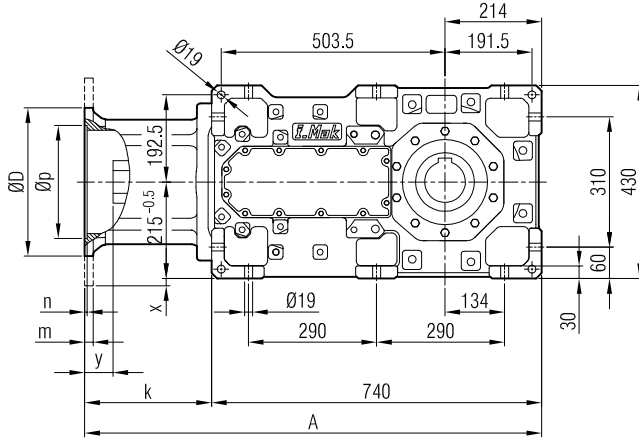
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

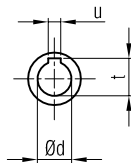
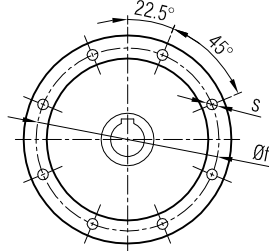
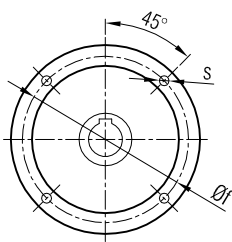


MKP 503-G09



≤ 200 B5 **Tip/Type/Typ**

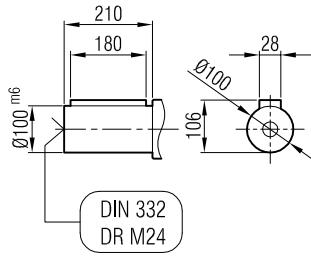
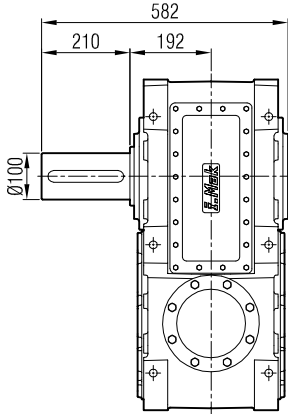
≥ 225 B5 **Tip/Type/Typ**



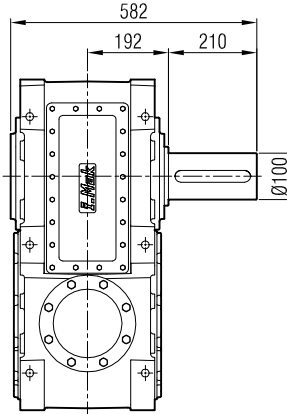
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112/B5	1007	180	215	250	M12	273	15	5	28	31.3	8	-	15
132/B5	1027	230	265	300	M12	293	18	6	38	41.3	10	-	20
160/B5	1057	250	300	350	M14	317	20	6	42	45.3	12	-	60
180/B5	1057	250	300	350	M14	317	20	6	48	51.8	14	-	60
200/B5	1057	300	350	400	M16	317	22	6	55	59.3	16	-	60
225/B5	1100	350	400	450	M16	360	22	6	60	64.4	18	10	80
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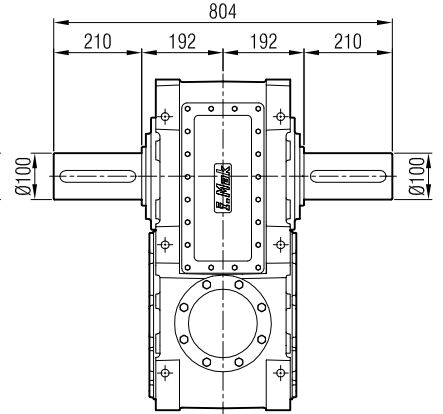
MA / MK 50_
...-SL



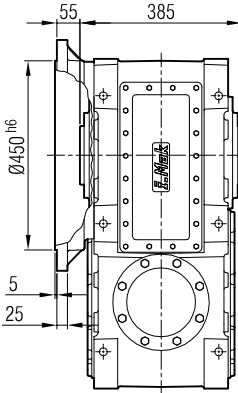
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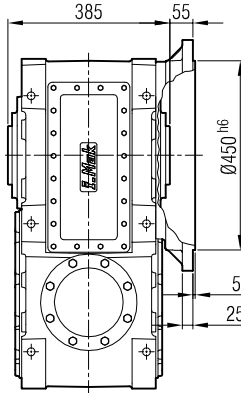
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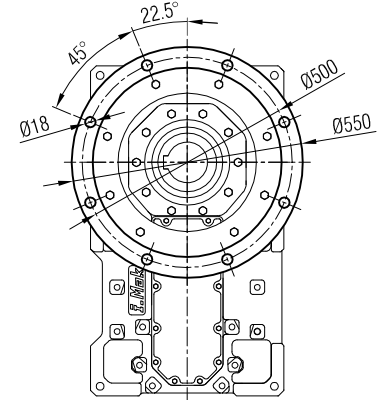
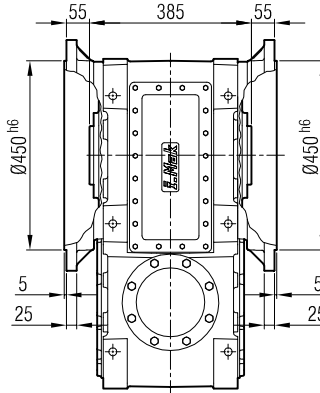
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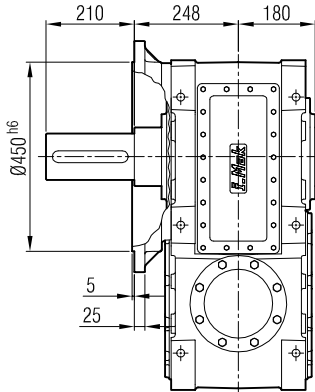
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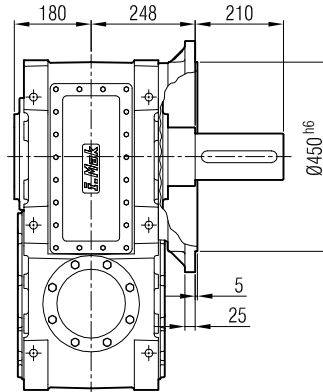
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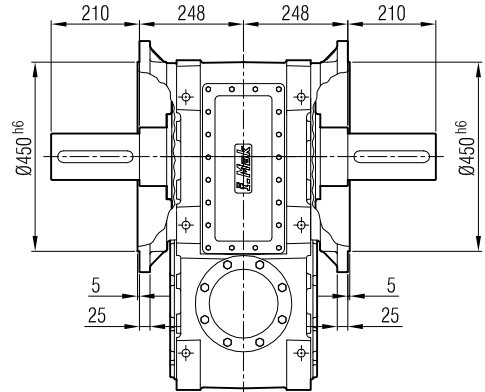
...-FL-SL



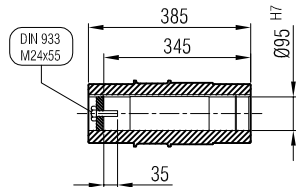
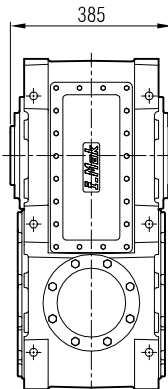
...-FR-SR



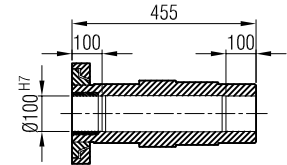
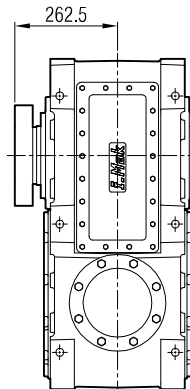
...-FD-SD



...-H



...-SDL / SDR



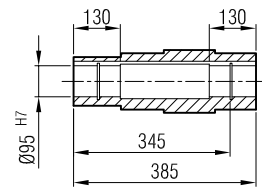
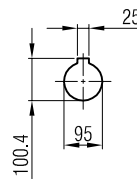
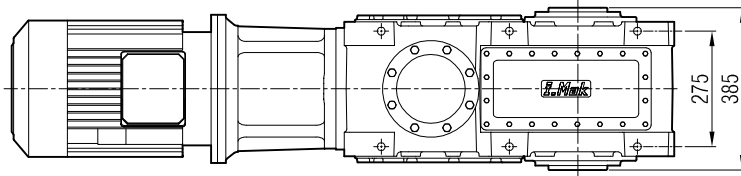
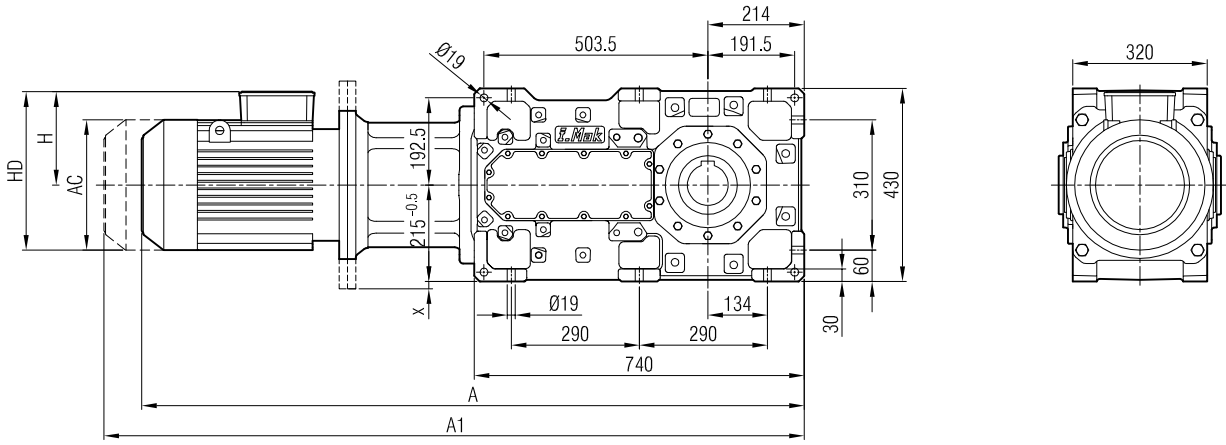
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	112 M/B5	132 S/B5	132 M/B5	160 L/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5
A	1351	1428	1469	1577	1622	1698	1698	1766	1785	1845	1895
A1	1434	1528	1569	1692	1737	1818	1818	1886	1905	1965	2015
H	170	193	193	240	240	260	260	300	313	313	366
HD	282	325	325	400	400	440	440	500	538	538	618
AC	220	262	262	315	315	357	357	394	456	456	489
x	-	-	-	-	-	-	-	-	13	13	60

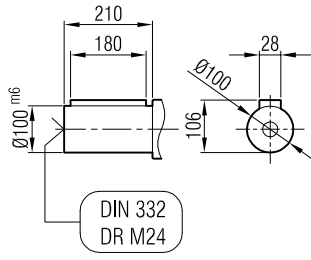
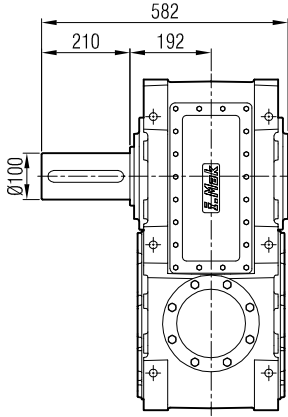
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

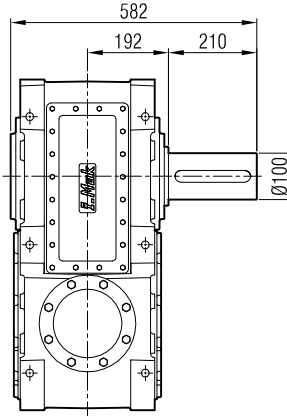
Le dimensions "A1" correspond aux moteurs équipés de freins.



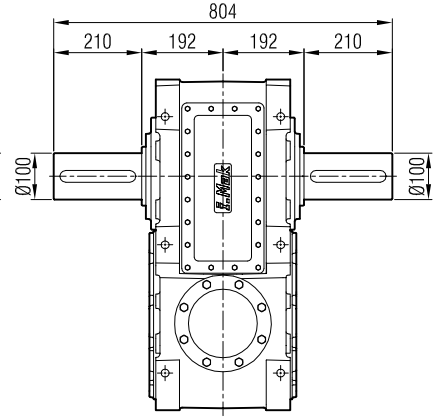
MA / MK 50_
...-SL



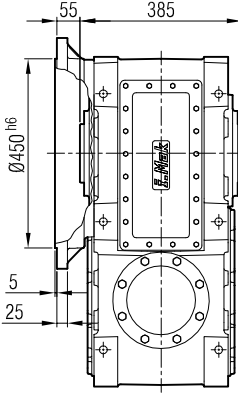
...-SR



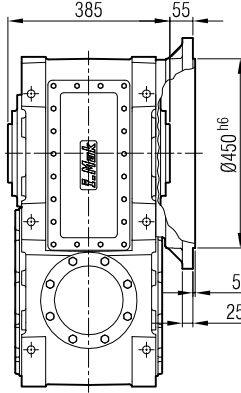
...-SD



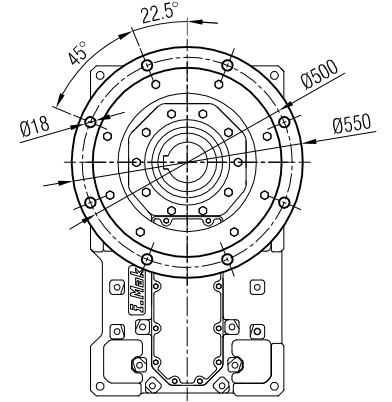
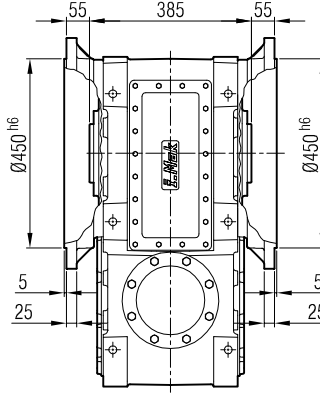
...-FL



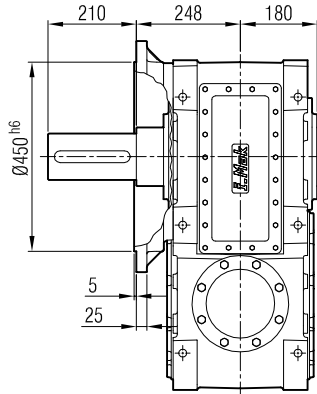
...-FR



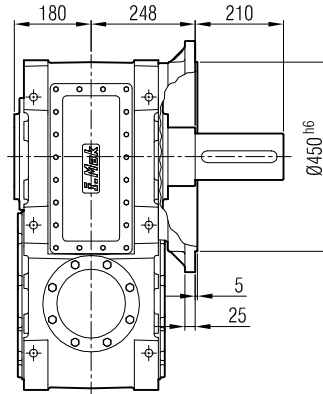
...-FD



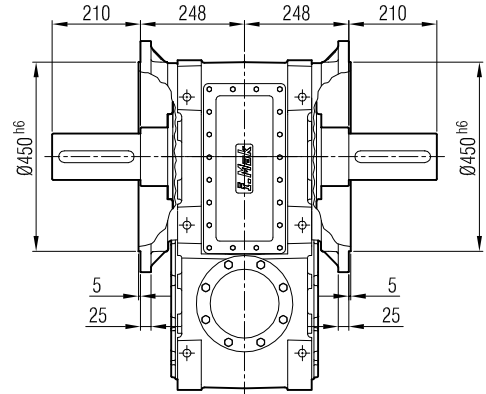
...-FL-SL



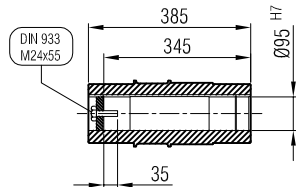
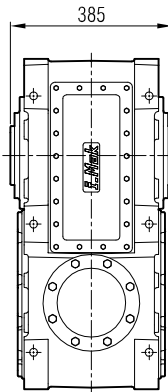
...-FR-SR



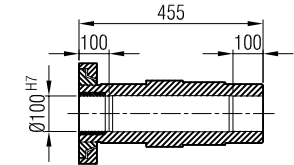
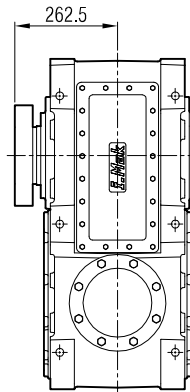
...-FD-SD



...-H



...-SDL / SDR



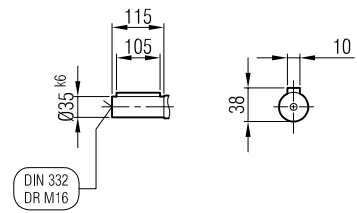
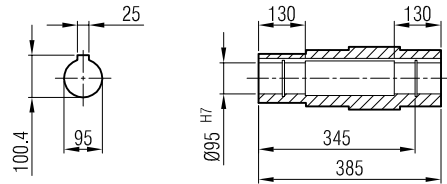
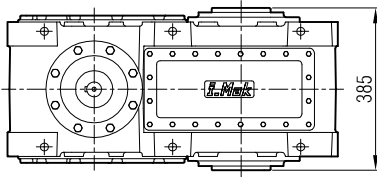
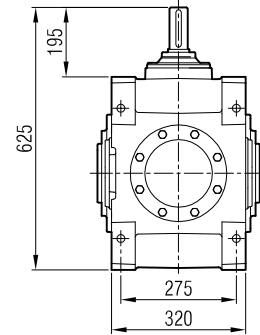
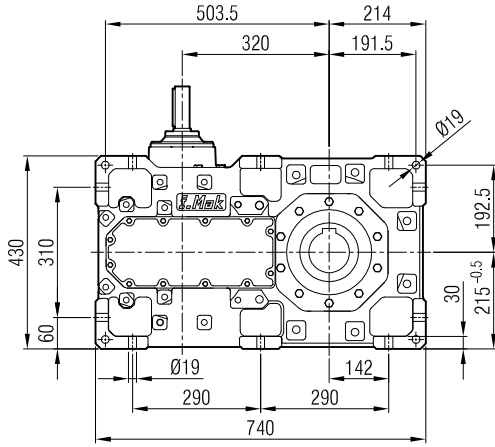
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

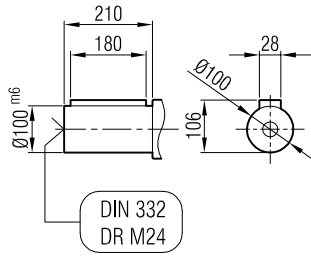
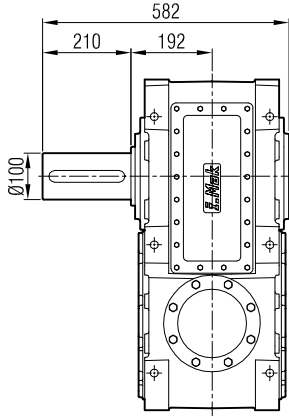


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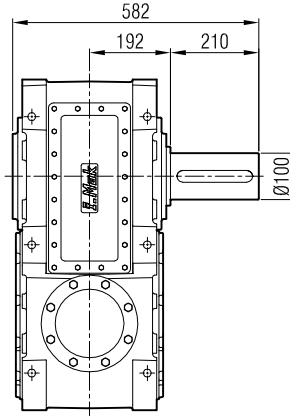




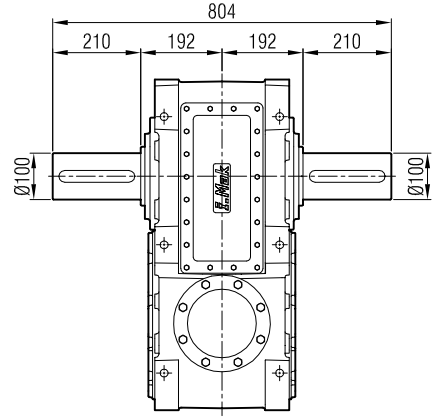
MA / MK 50_
...-SL



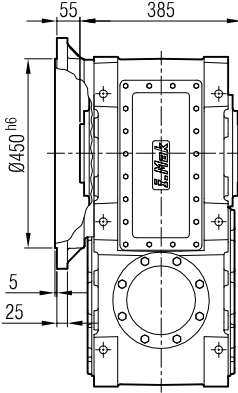
...-SR



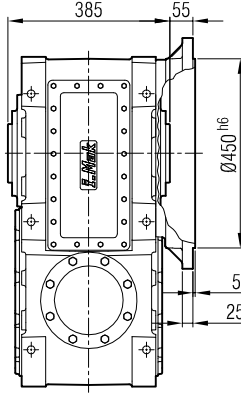
...-SD



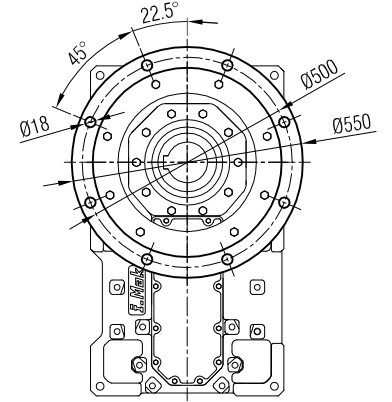
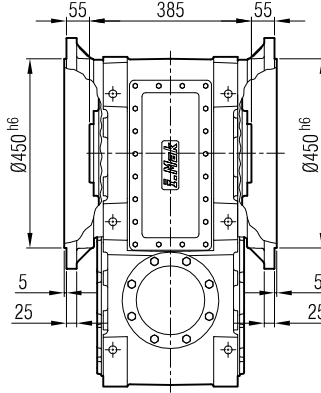
...-FL



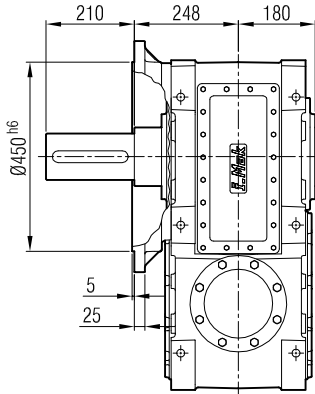
...-FR



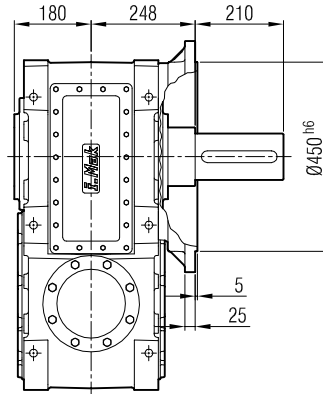
...-FD



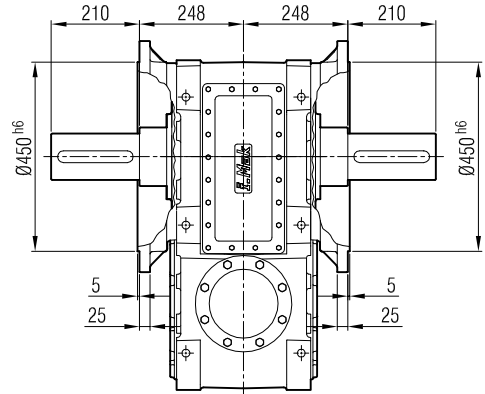
...-FL-SL



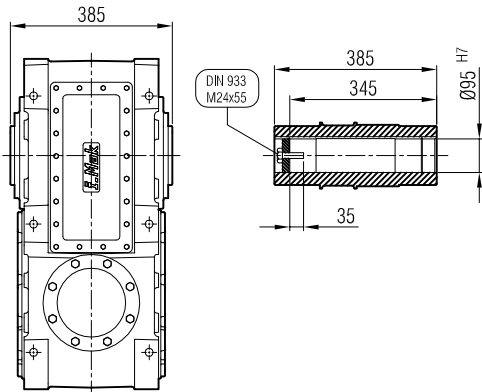
...-FR-SR



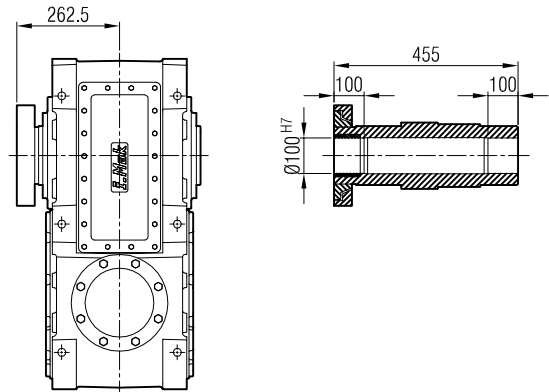
...-FD-SD



...-H



...-SDL / SDR



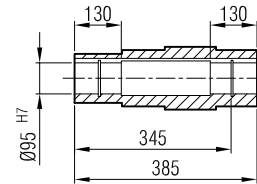
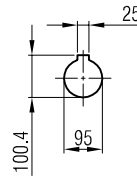
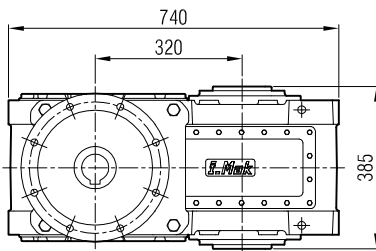
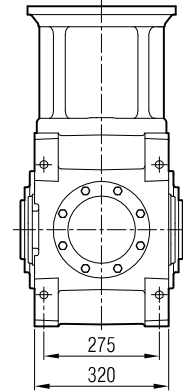
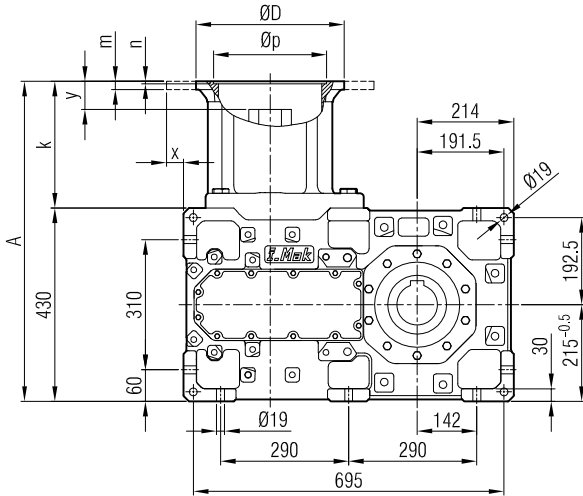
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

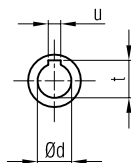
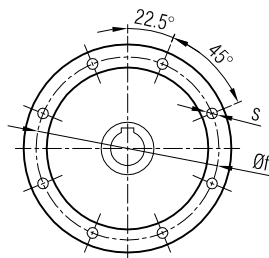
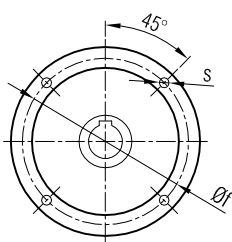


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≤ 200 B5 **Tip/Type/Typ**

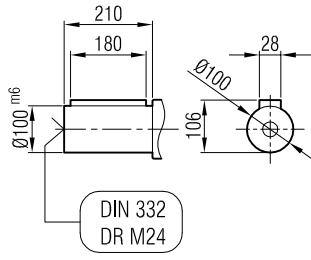
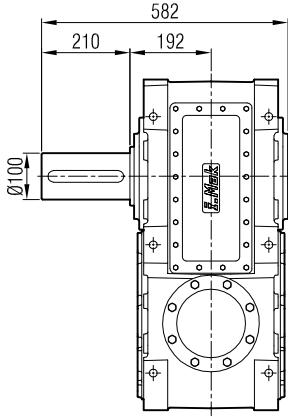
≥ 225 B5 **Tip/Type/Typ**



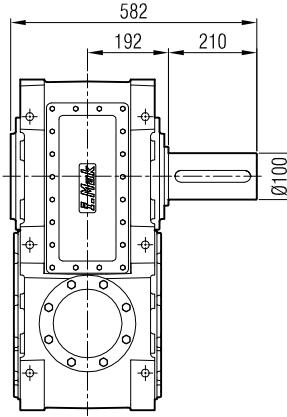
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	688	180	215	250	M12	273	15	5	28	31.3	8	-	15
132/B5	708	230	265	300	M12	293	18	6	38	41.3	10	-	20
160/B5	738	250	300	350	M14	308	20	6	42	45.3	12	-	60
180/B5	738	250	300	350	M14	308	20	6	48	51.8	14	-	60
200/B5	738	300	350	400	M16	308	22	6	55	59.3	16	-	60
225/B5	781	350	400	450	M16	351	22	6	60	64.4	18	19	80
250/B5	781	450	500	550	M16	351	25	6.5	65	69.4	18	69	75



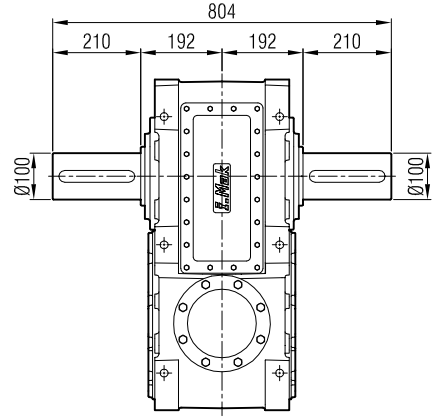
MA / MK 50_
...-SL



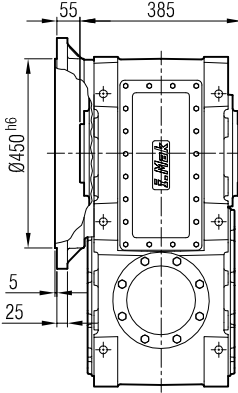
...-SR



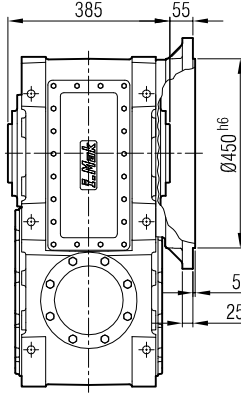
...-SD



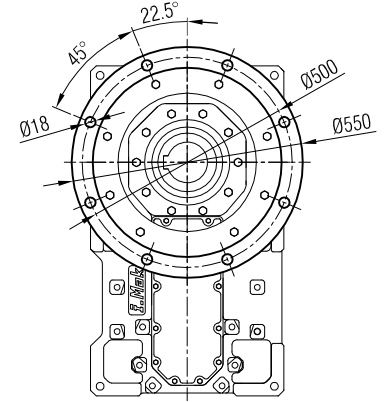
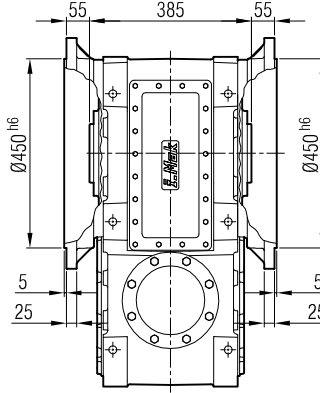
...-FL



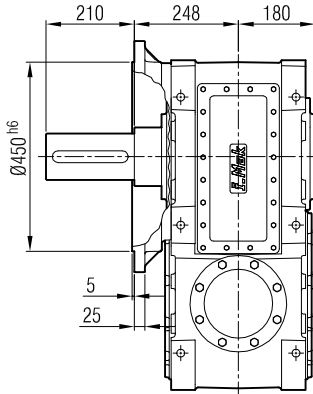
...-FR



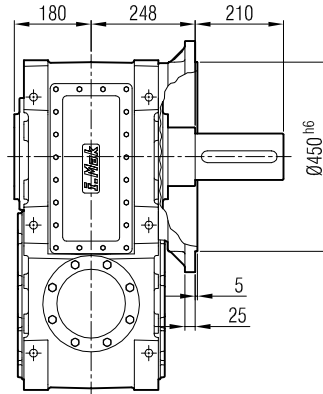
...-FD



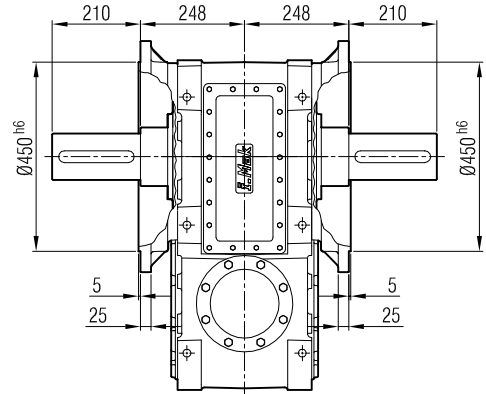
...-FL-SL



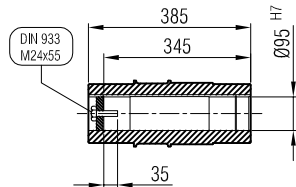
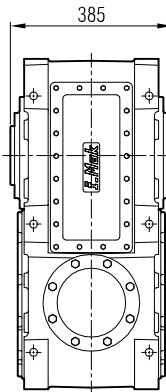
...-FR-SR



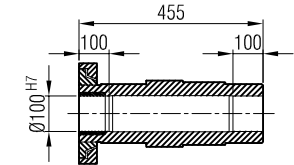
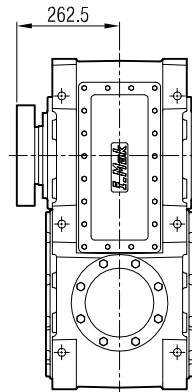
...-FD-SD



...-H



...-SDL / SDR



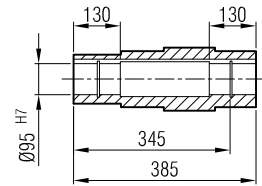
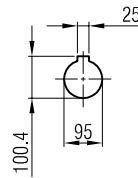
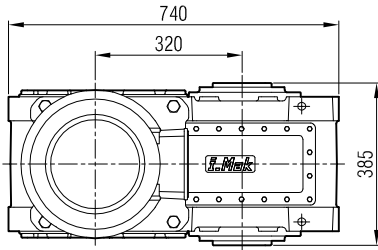
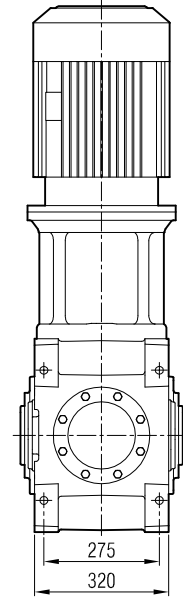
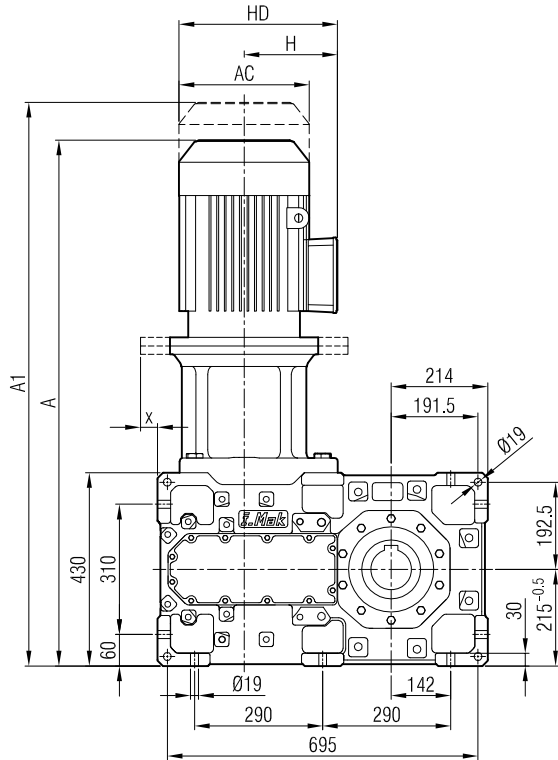
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

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	112 M/B5	132 S/B5	132 M/B5	160 L/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5
A	1032	1109	1150	1258	1303	1379	1379	1447	1466	1526	1576
A1	1115	1209	1250	1373	1418	1499	1499	1567	1586	1646	1696
H	170	193	193	240	240	260	260	300	313	313	366
HD	282	325	325	400	400	440	440	500	538	538	618
AC	220	262	262	315	315	357	357	394	456	456	489
x	-	-	-	-	-	-	-	-	22	22	69

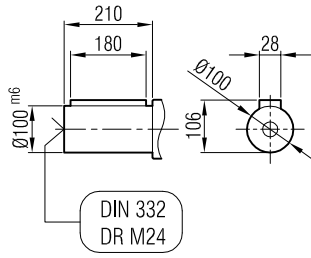
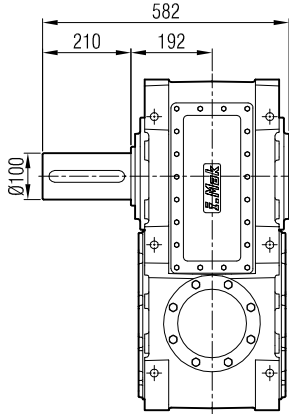
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

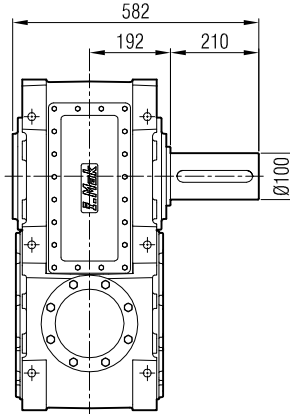
Le dimensions "A1" correspond aux moteurs équipés de freins.



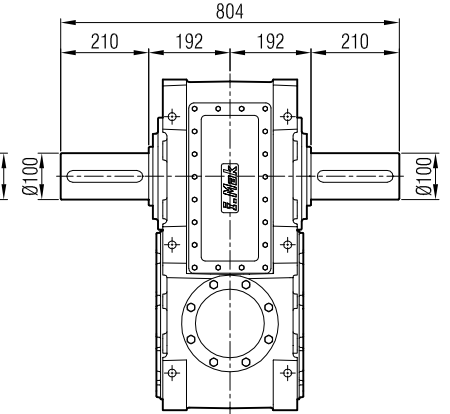
MA / MK 50_
...-SL



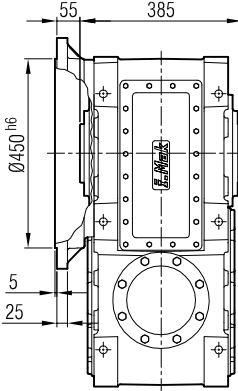
...-SR



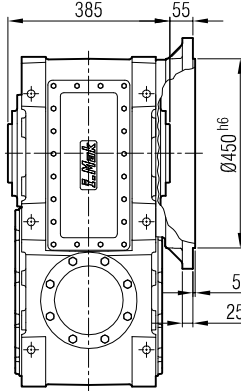
...-SD



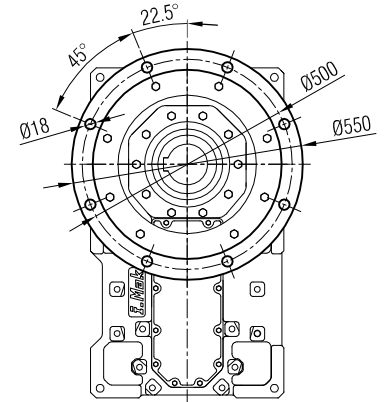
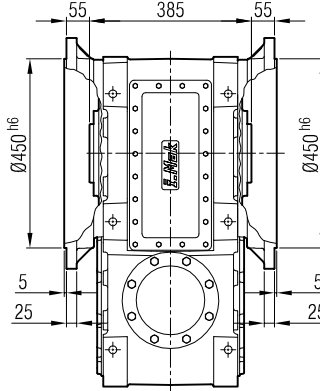
...-FL



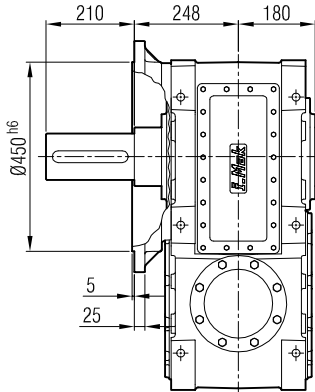
...-FR



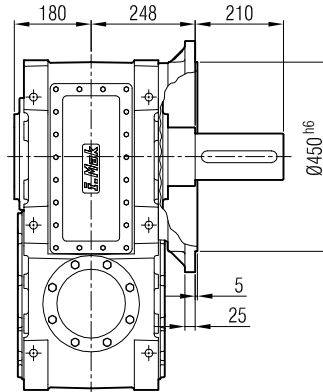
...-FD



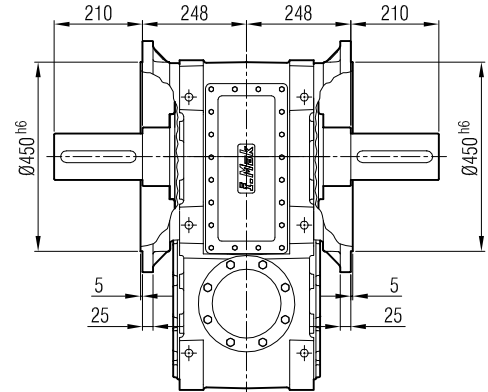
...-FL-SL



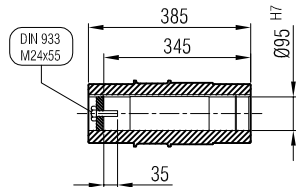
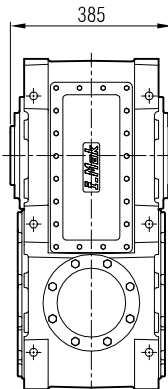
...-FR-SR



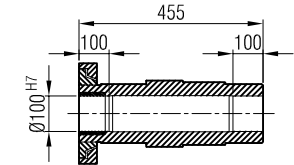
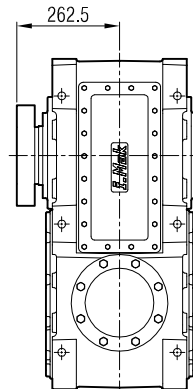
...-FD-SD



...-H



...-SDL / SDR



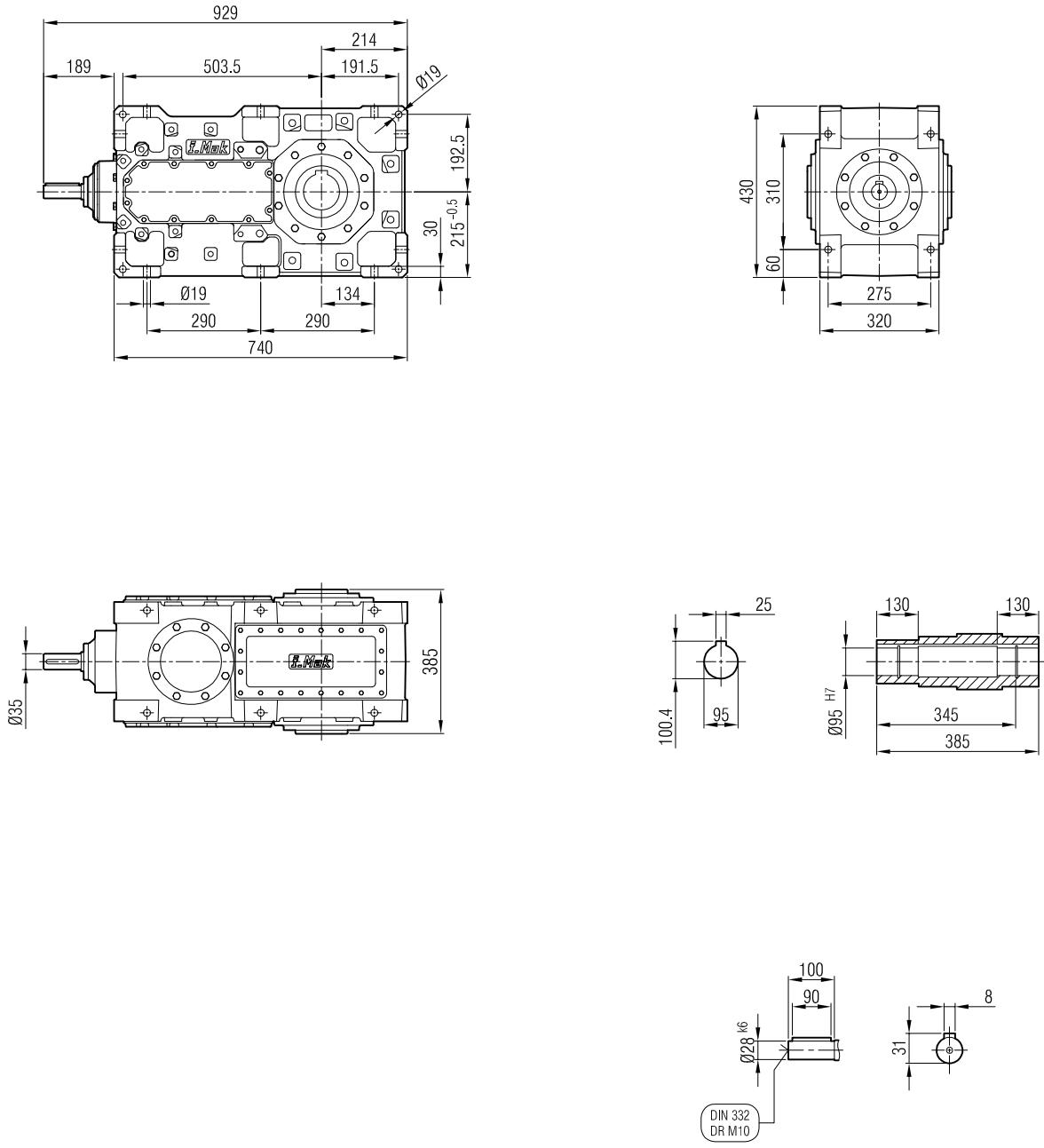
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

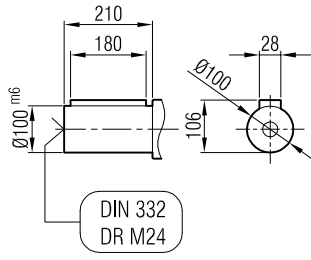
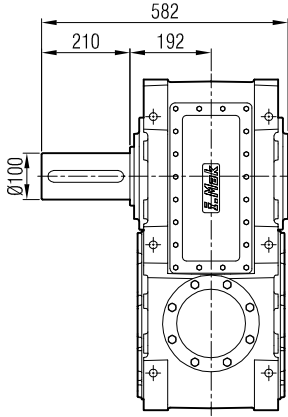


MK 504-G07

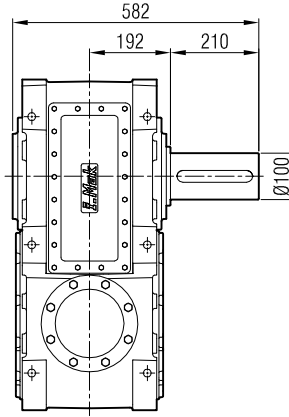




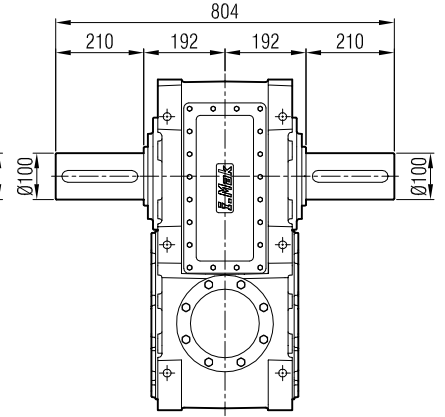
MA / MK 50_
...-SL



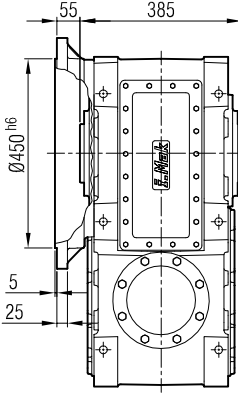
...-SR



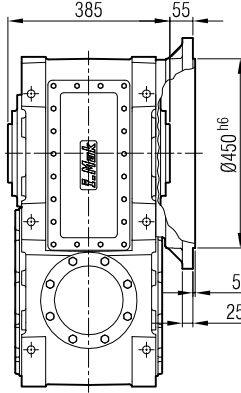
...-SD



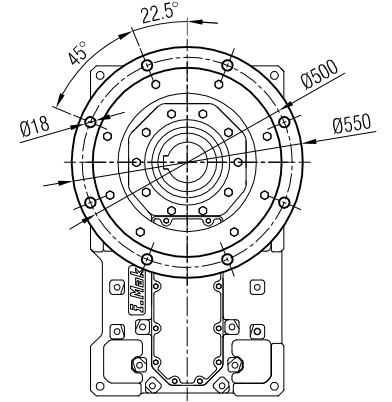
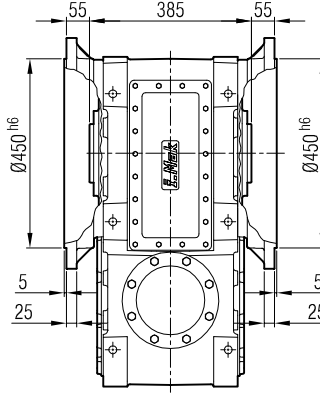
...-FL



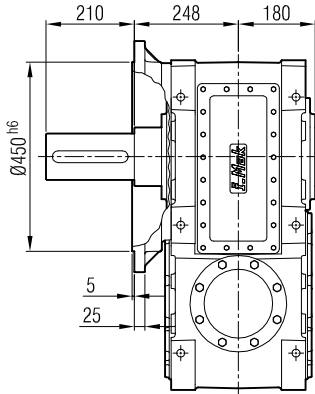
...-FR



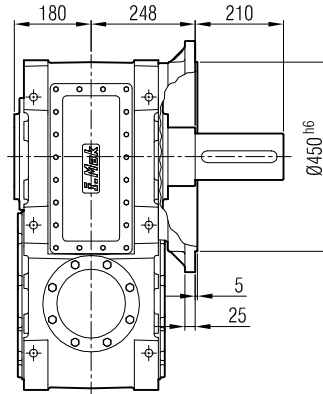
...-FD



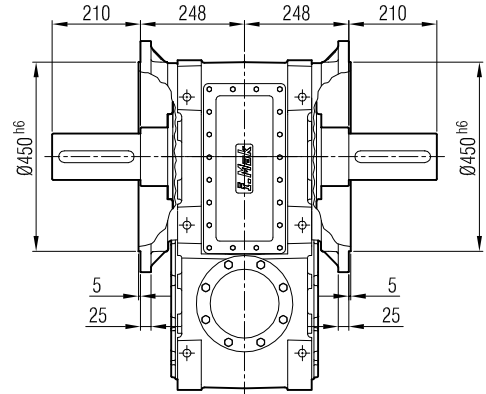
...-FL-SL



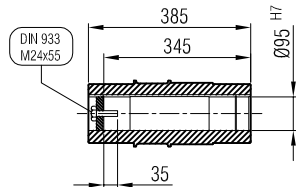
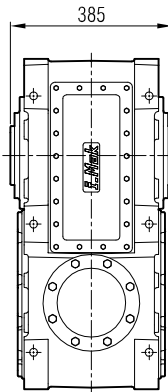
...-FR-SR



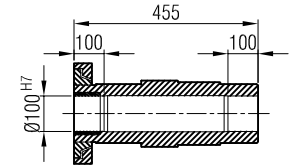
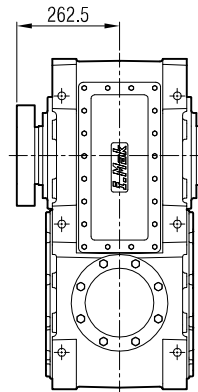
...-FD-SD



...-H



...-SDL / SDR



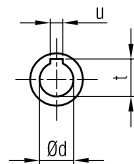
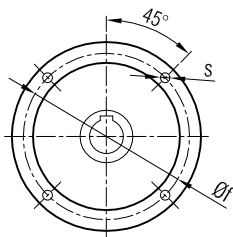
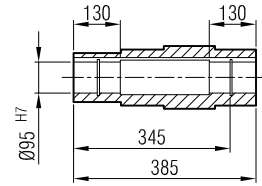
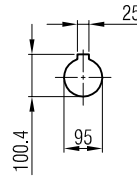
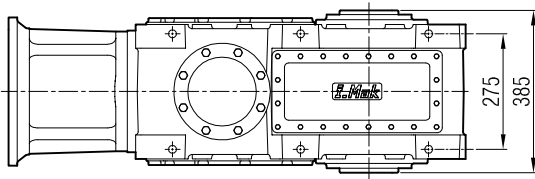
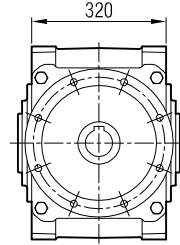
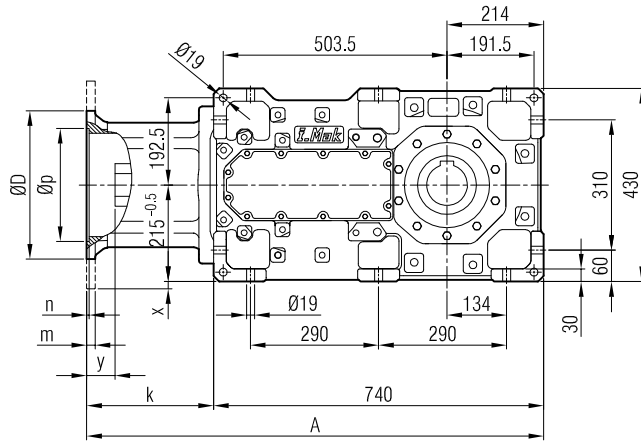
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



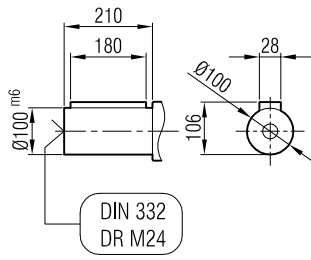
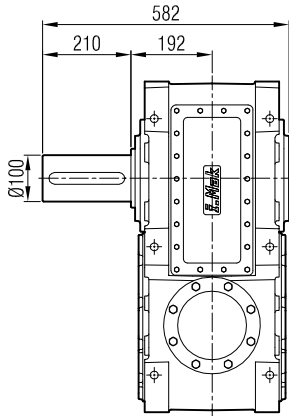
MKP 504-G09



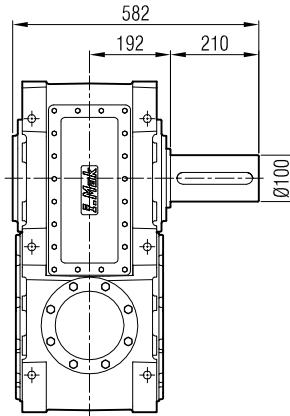
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
90/B5	982	130	168	200	M10	248	12	5	24	27.3	8	-	0
100/B5	1007	180	215	250	M12	273	15	5	28	31.3	8	-	25
112/B5	1007	180	215	250	M12	273	15	5	28	31.3	8	-	25
132/B5	1027	230	265	300	M12	293	18	6	38	41.3	10	-	45
160/B5	1057	250	300	350	M14	317	20	6	42	45.3	12	-	70



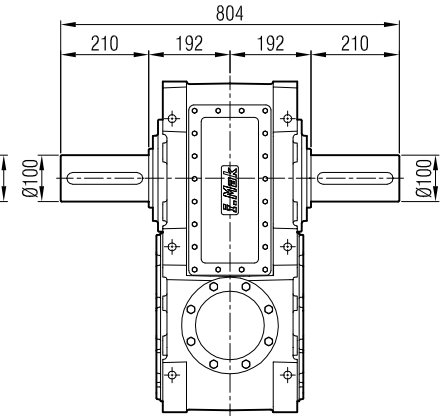
MA / MK 50_
...-SL



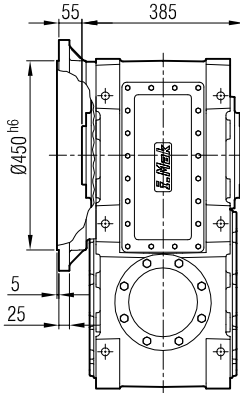
...-SR



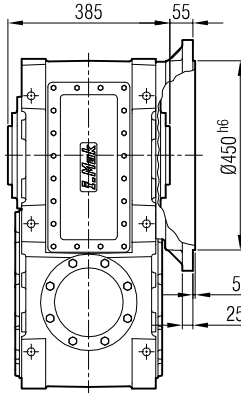
...-SD



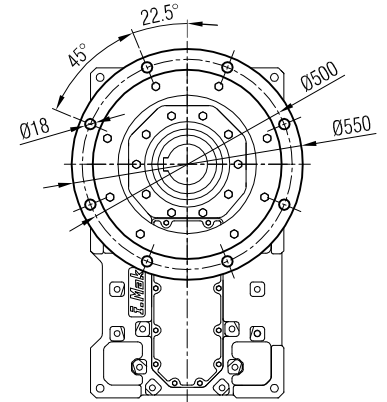
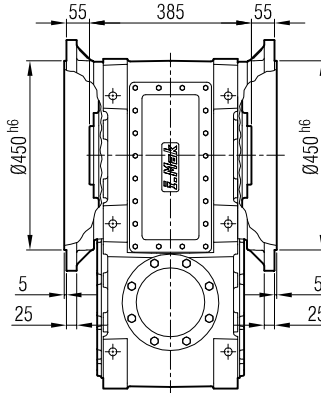
...-FL



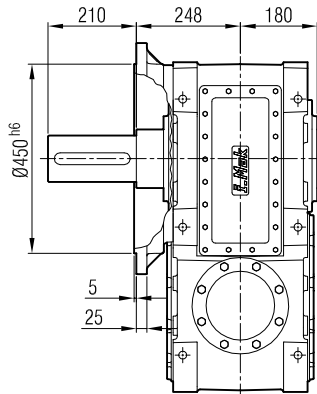
...-FR



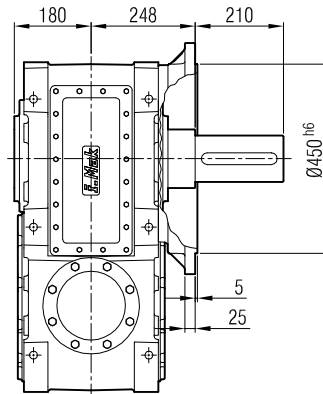
...-FD



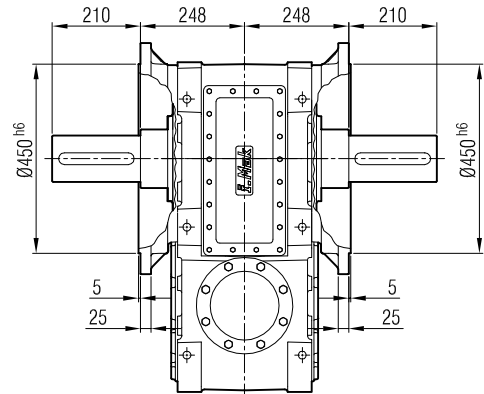
...-FL-SL



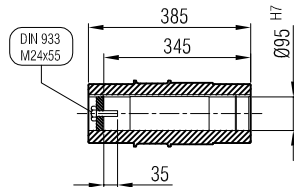
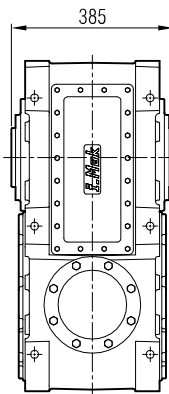
...-FR-SR



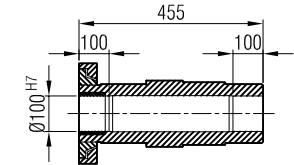
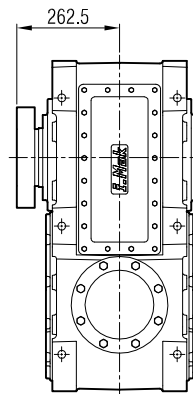
...-FD-SD



...-H

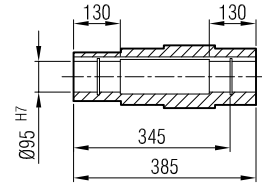
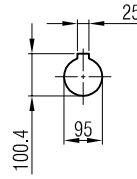
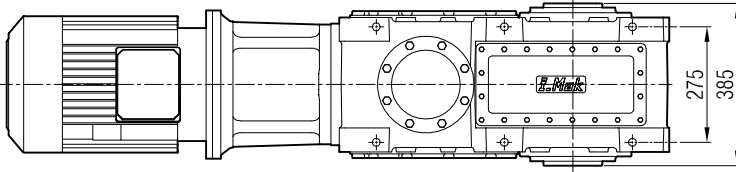
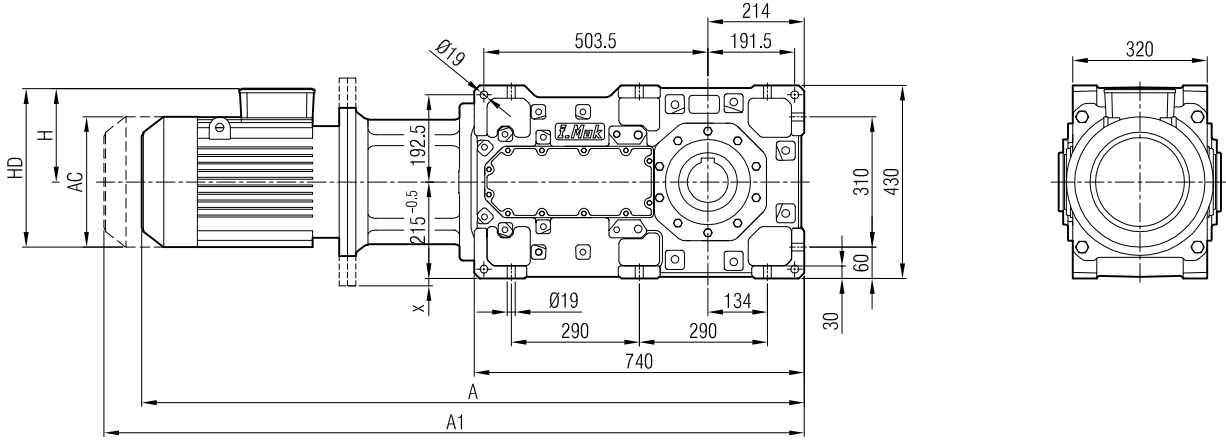


...-SDL / SDR





MKM 504-G09

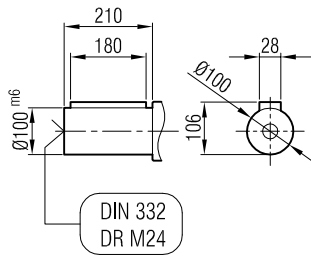
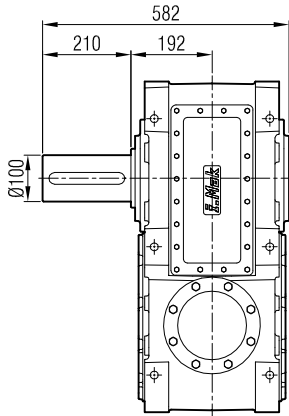


	90 L/B5	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5
A	1293	1347	1351	1428	1469	1577	1622
A1	1359	1425	1434	1528	1569	1692	1737
H	141	161	170	193	193	240	240
HD	231	261	282	325	325	400	400
AC	176	195	220	262	262	315	315
x	-	-	-	-	-	-	-

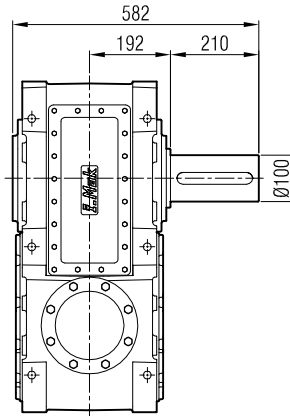
"A1" ölçüsü frenli motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.



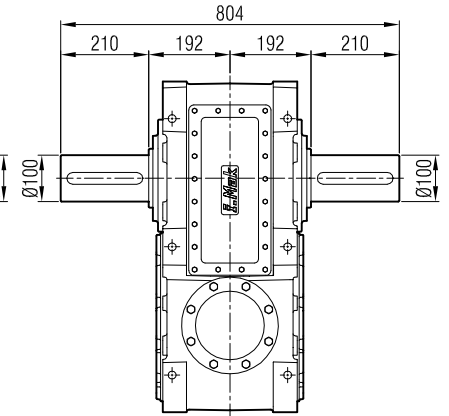
MA / MK 50_
...-SL



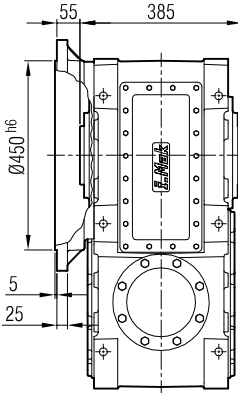
...-SR



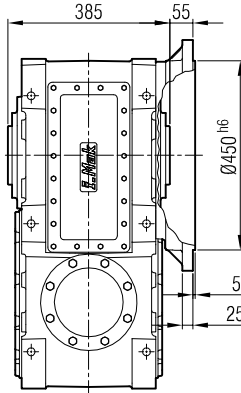
...-SD



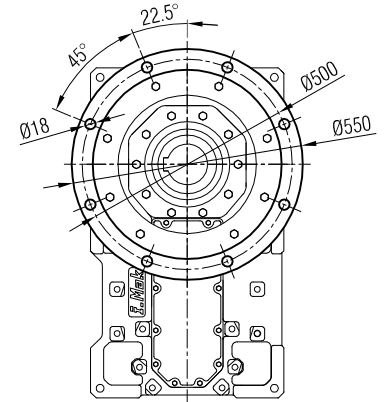
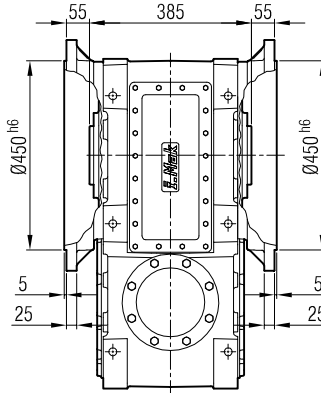
...-FL



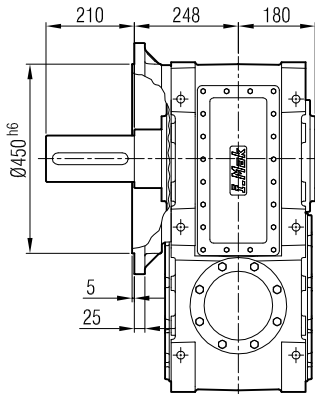
...-FR



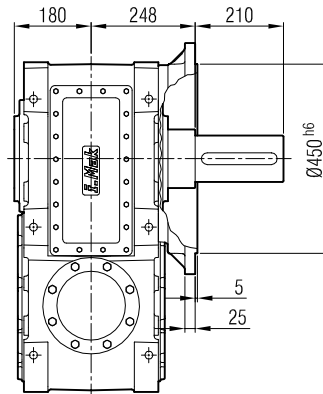
...-FD



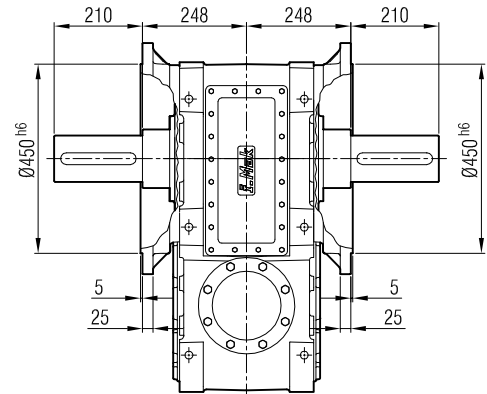
...-FL-SL



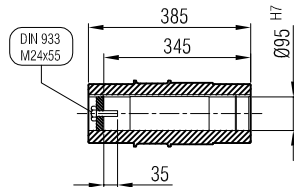
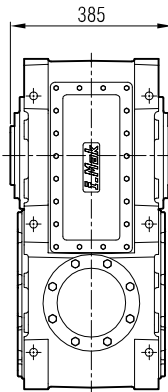
...-FR-SR



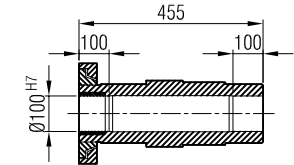
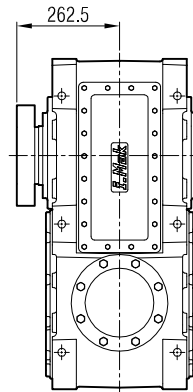
...-FD-SD



...-H

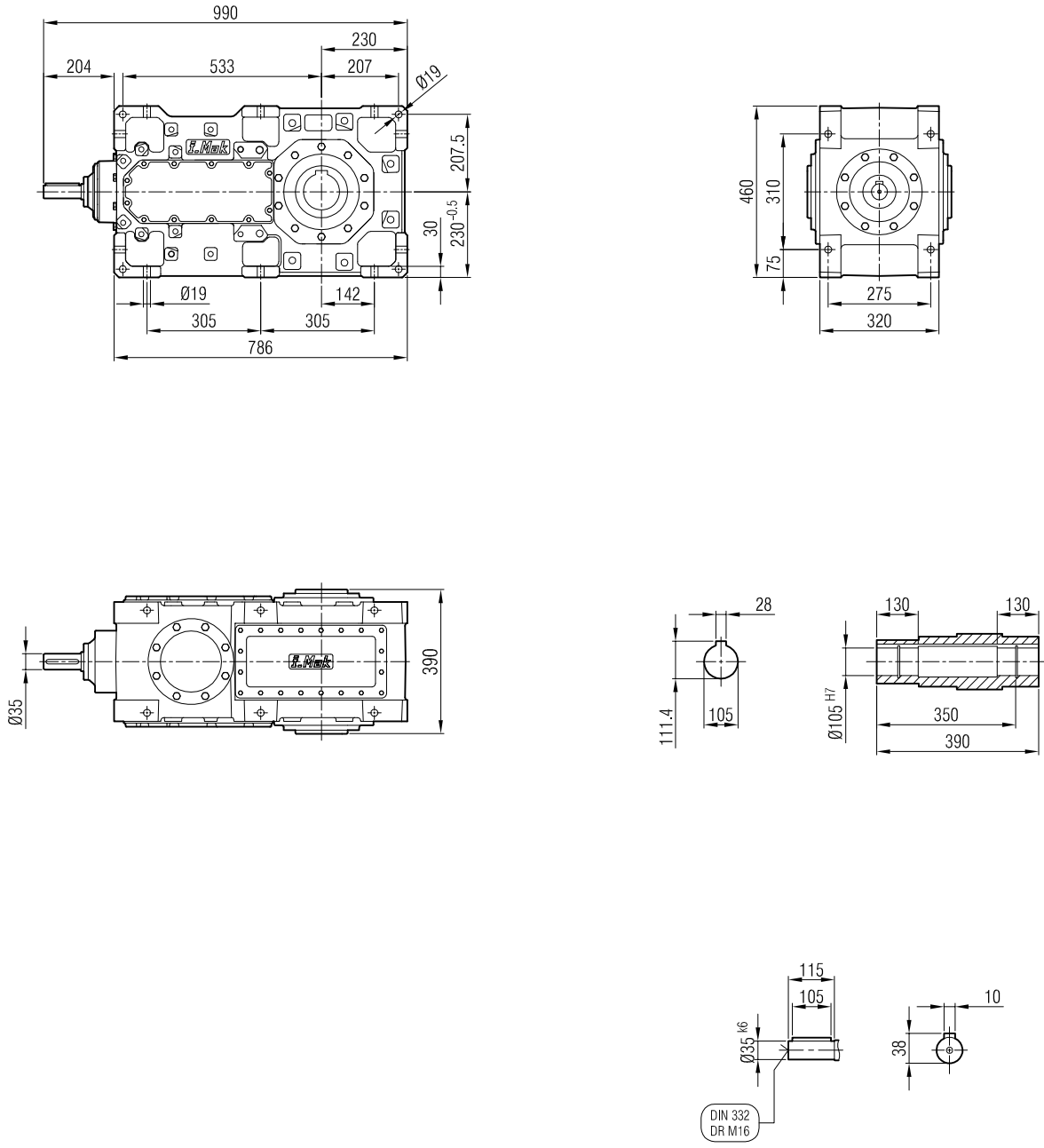


...-SDL / SDR



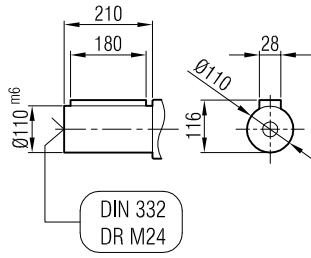
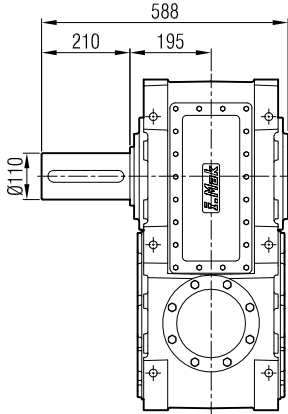


MK 603-G07

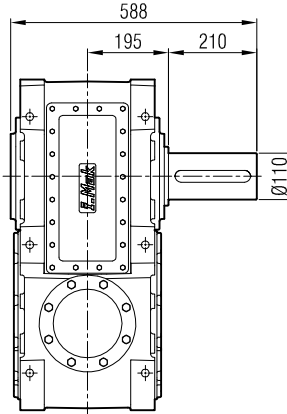




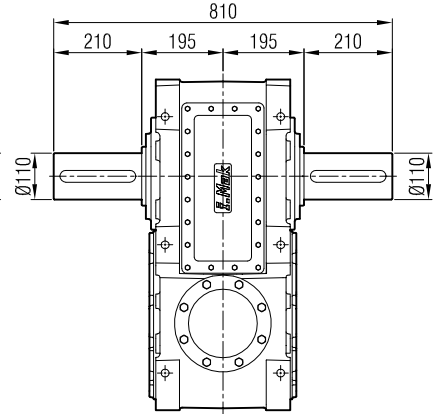
MA / MK 60_
...-SL



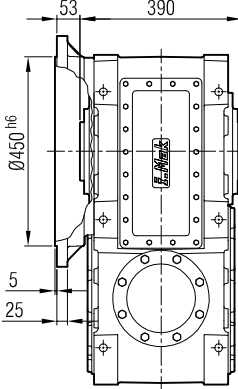
...-SR



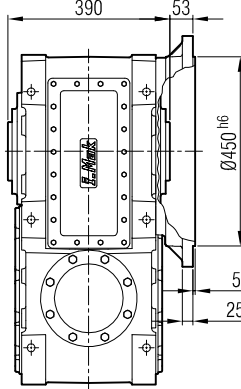
...-SD



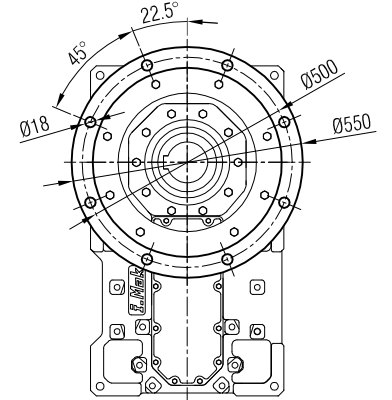
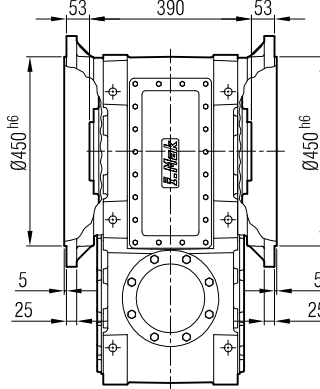
...-FL



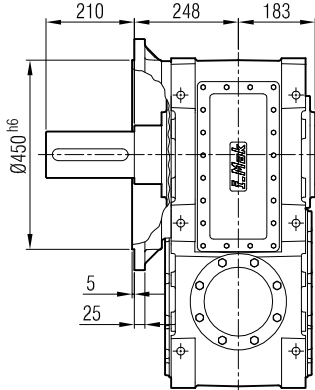
...-FR



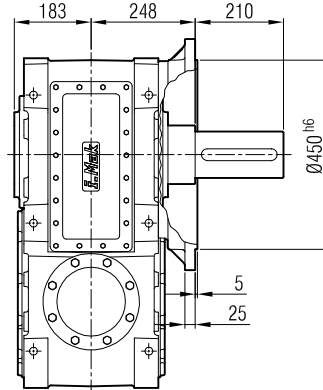
...-FD



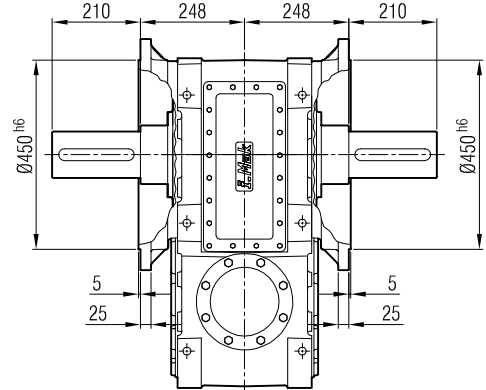
...-FL-SL



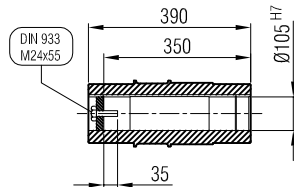
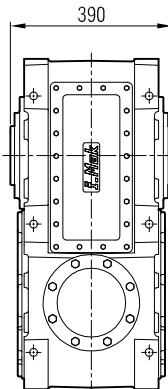
...-FR-SR



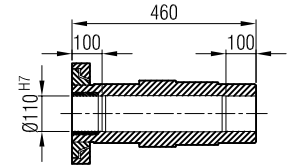
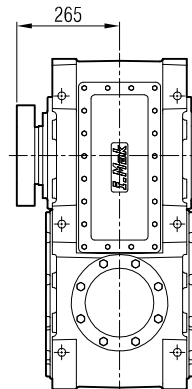
...-FD-SD



...-H



...-SDL / SDR



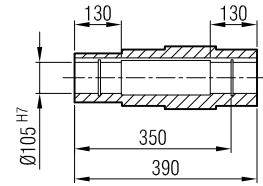
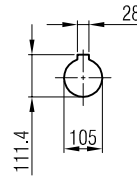
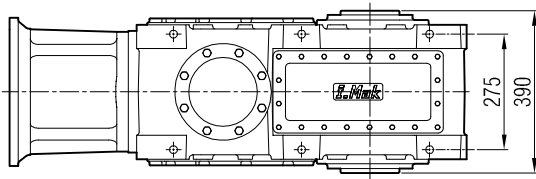
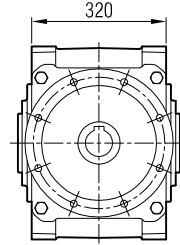
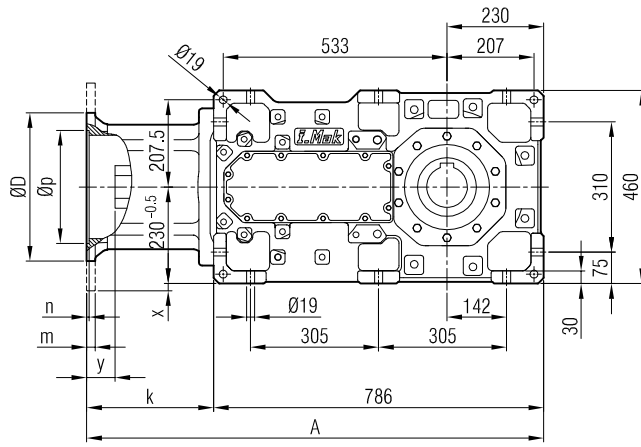
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

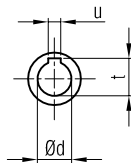
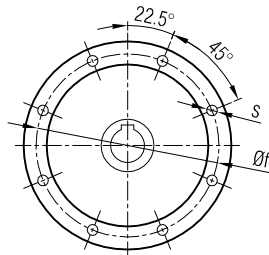
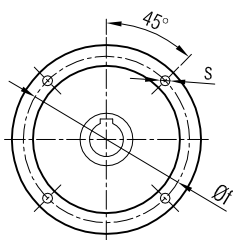


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≤ 200 B5 **Tip/Type/Typ**

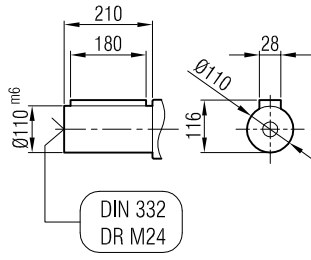
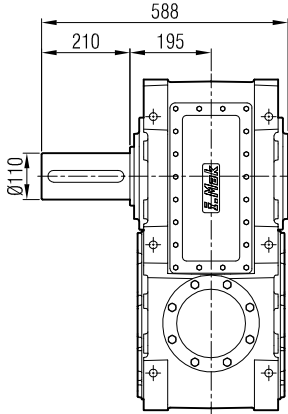
≥ 225 B5 **Tip/Type/Typ**



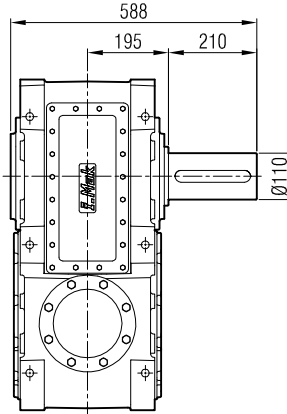
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	1053	180	215	250	M12	273	15	5	28	31.3	8	-	15
132/B5	1073	230	265	300	M12	293	18	6	38	41.3	10	-	20
160/B5	1103	250	300	350	M14	317	20	6	42	45.3	12	-	60
180/B5	1103	250	300	350	M14	317	20	6	48	51.8	14	-	60
200/B5	1103	300	350	400	M16	317	22	6	55	59.3	16	-	60
225/B5	1146	350	400	450	M16	360	22	6	60	64.4	18	19	80
250/B5	1146	450	500	550	M16	360	25	6.5	65	69.4	18	69	75



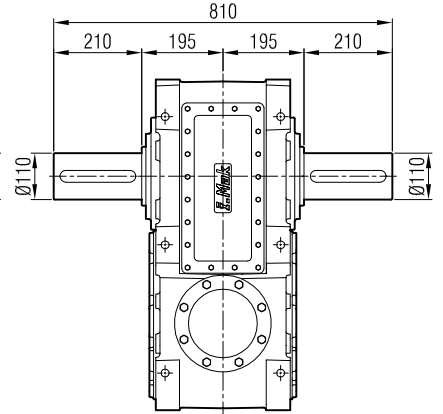
MA / MK 60_
...-SL



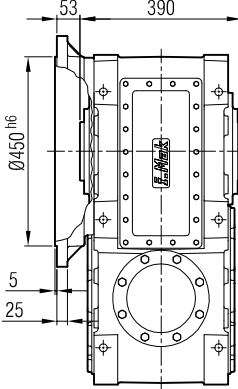
...-SR



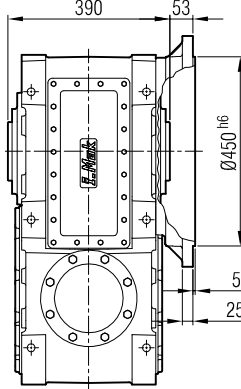
...-SD



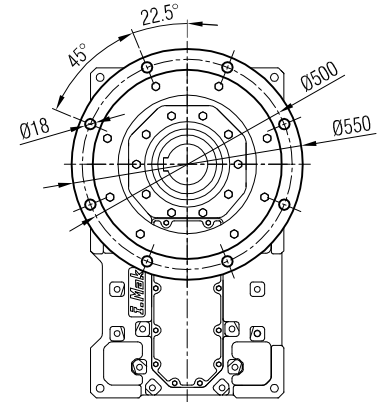
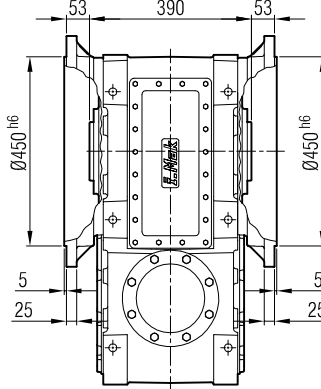
...-FL



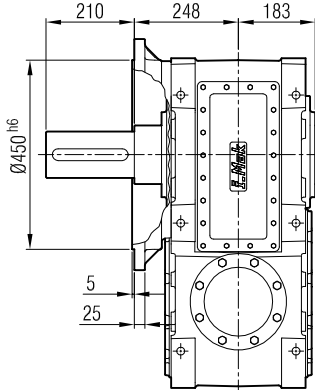
...-FR



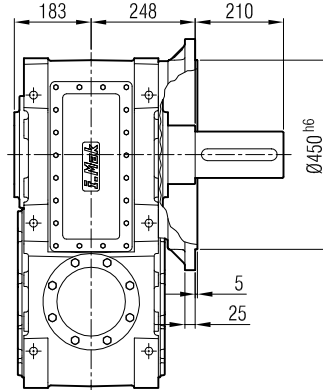
...-FD



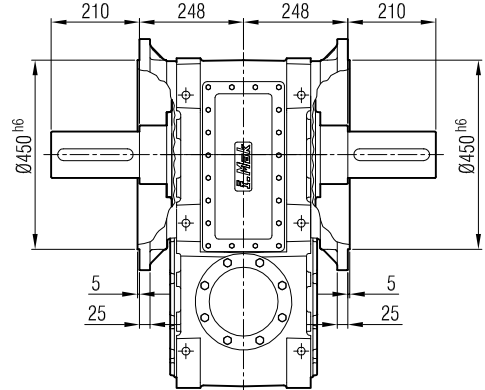
...-FL-SL



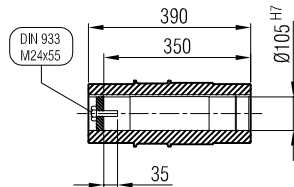
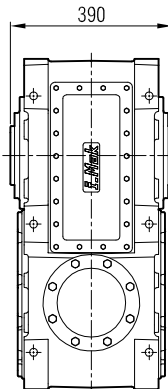
...-FR-SR



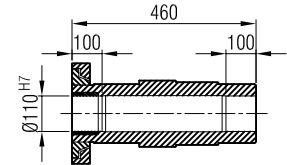
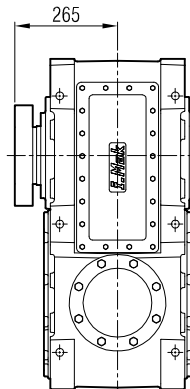
...-FD-SD



...-H



...-SDL / SDR



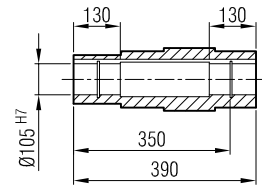
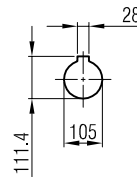
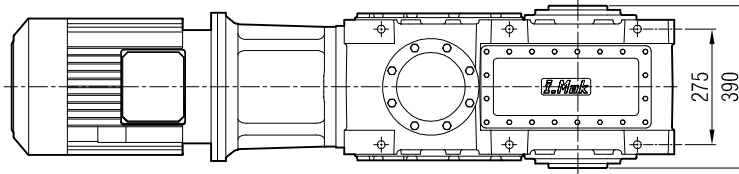
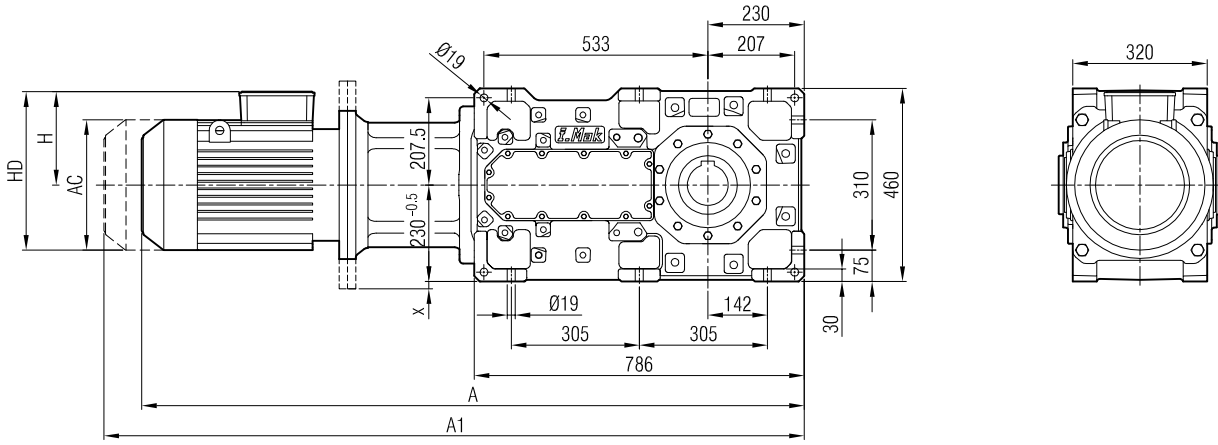
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	112 M/B5	132 S/B5	132 M/B5	160 L/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5
A	1397	1474	1515	1623	1668	1744	1744	1812	1831	1891	1941
A1	1480	1574	1615	1738	1783	1864	1864	1932	1951	2011	2061
H	170	193	193	240	240	260	260	300	313	313	366
HD	282	325	325	400	400	440	440	500	538	538	618
AC	220	262	262	315	315	357	357	394	456	456	489
x	-	-	-	-	-	-	-	-	-	-	45

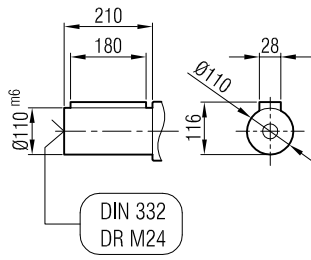
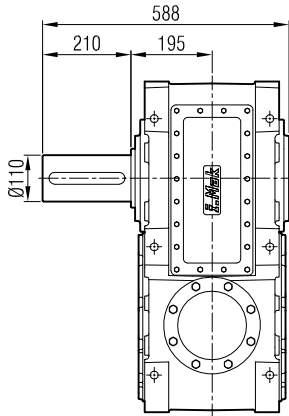
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

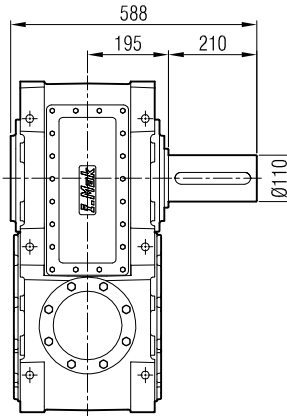
Le dimensions "A1" correspond aux moteurs équipés de freins.



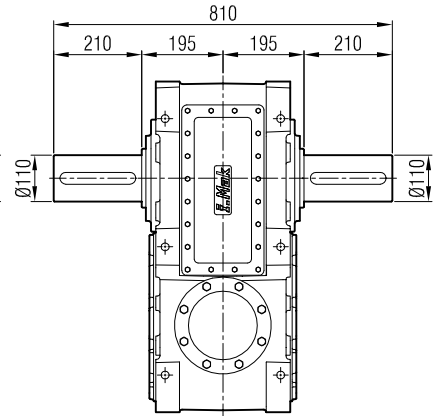
MA / MK 60_
...-SL



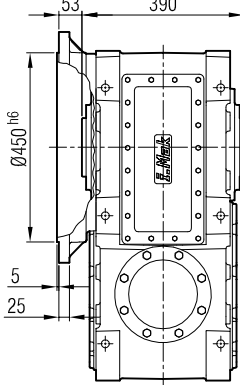
...-SR



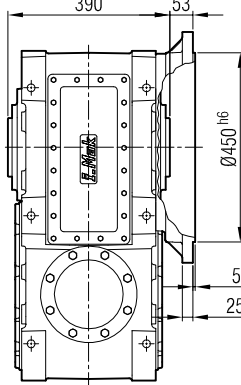
...-SD



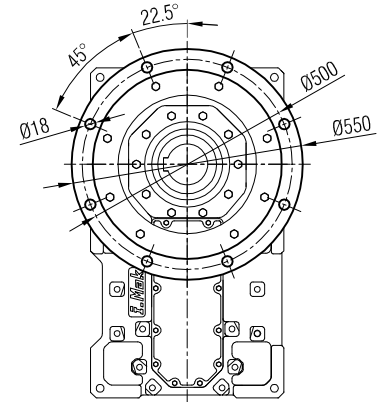
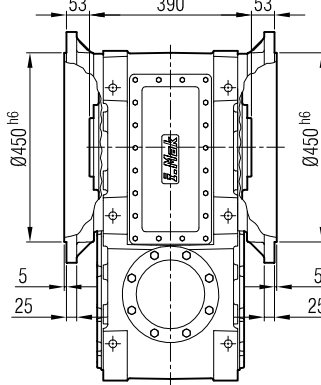
...-FL



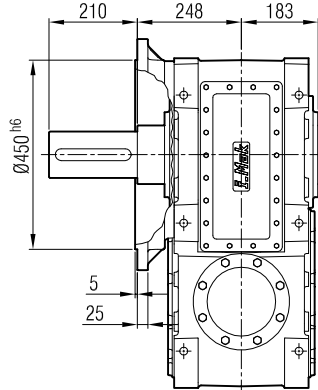
...-FR



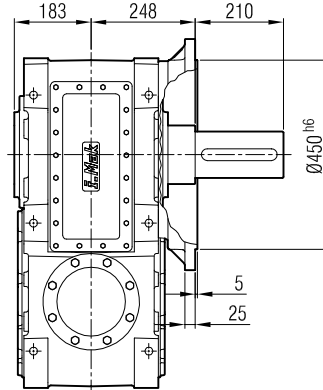
...-FD



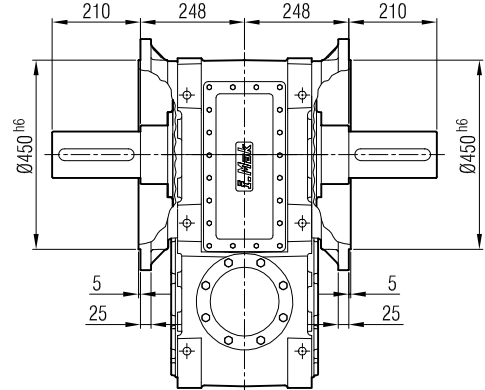
...-FL-SL



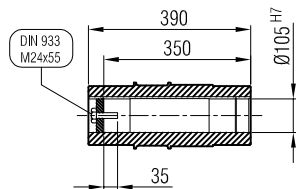
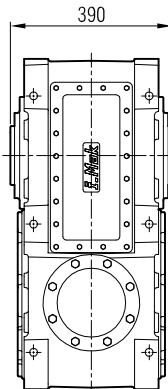
...-FR-SR



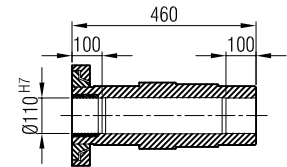
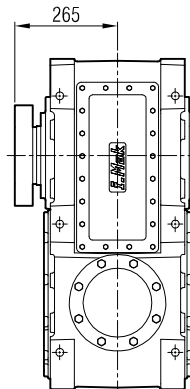
...-FD-SD



...-H



...-SDL / SDR



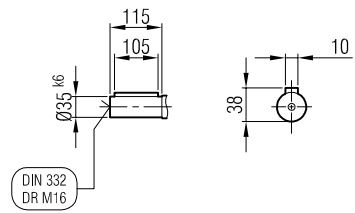
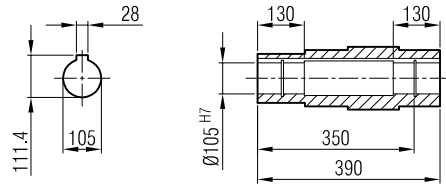
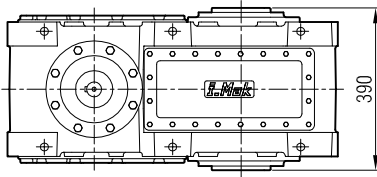
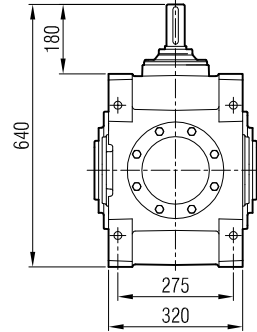
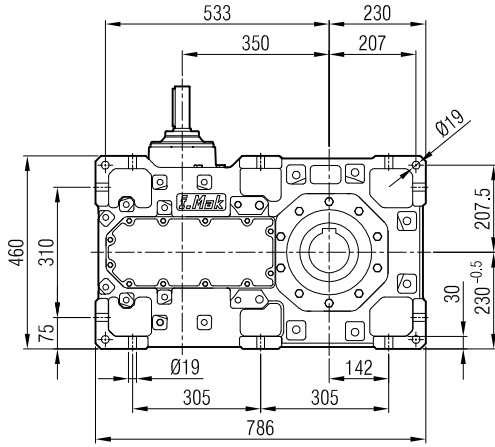
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

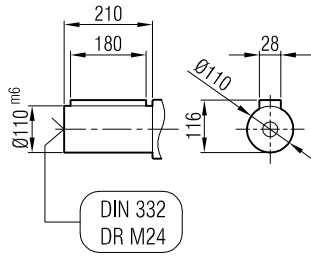
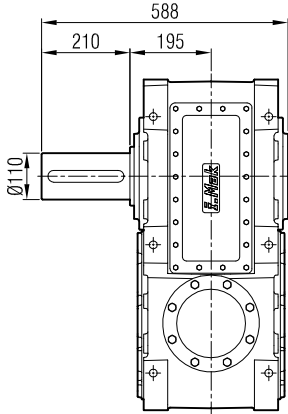


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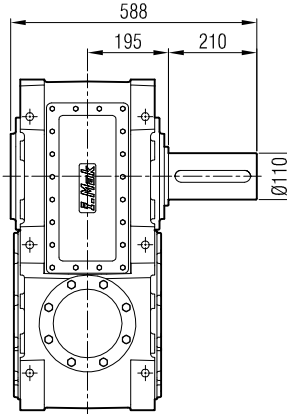




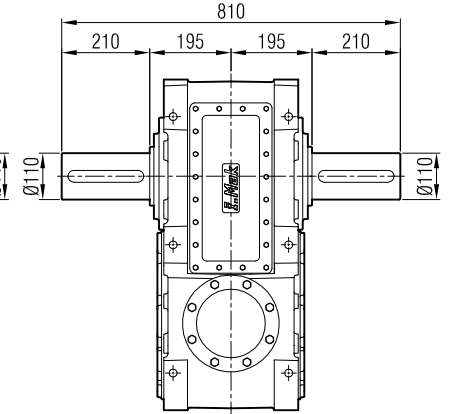
MA / MK 60_
...-SL



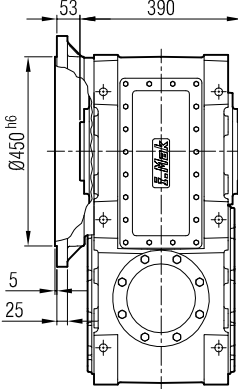
...-SR



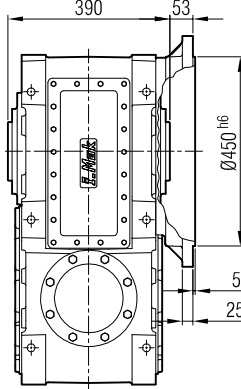
...-SD



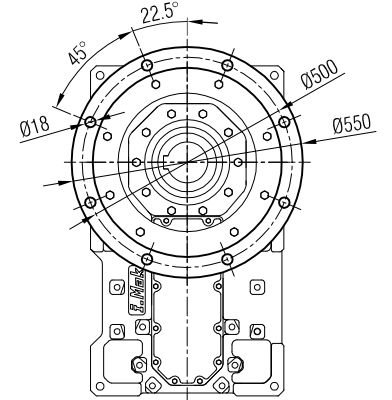
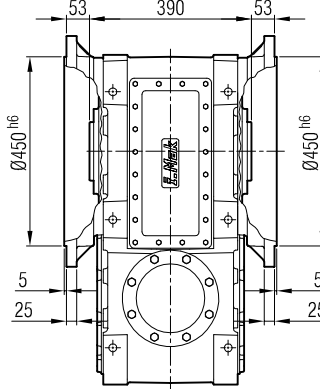
...-FL



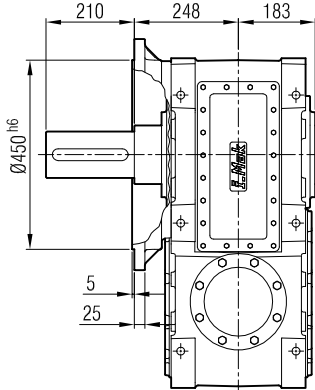
...-FR



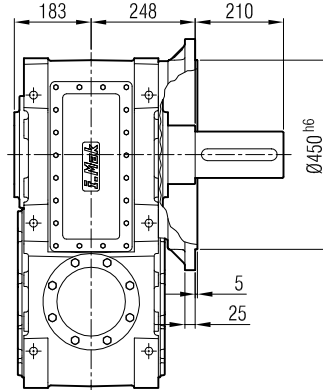
...-FD



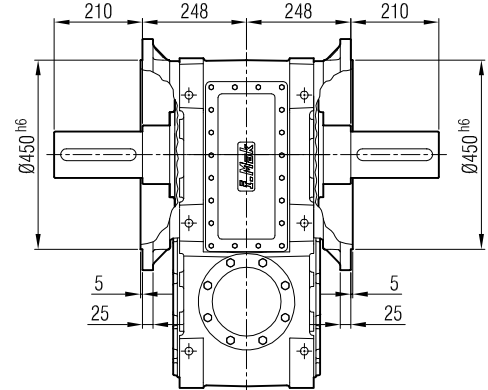
...-FL-SL



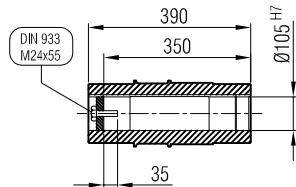
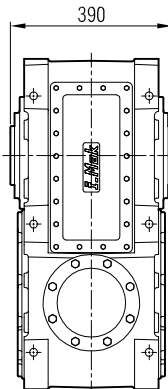
...-FR-SR



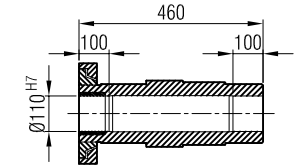
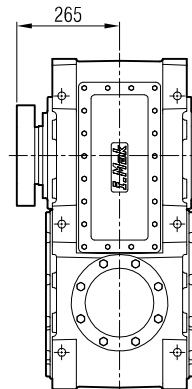
...-FD-SD



...-H



...-SDL / SDR



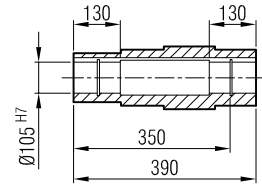
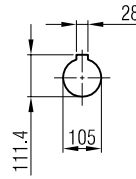
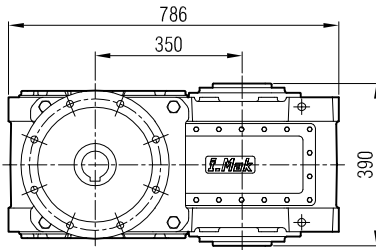
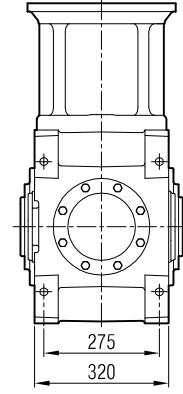
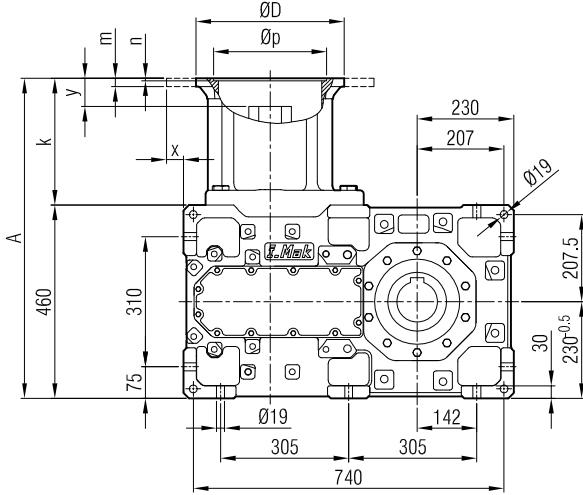
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

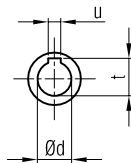
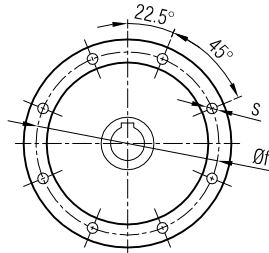
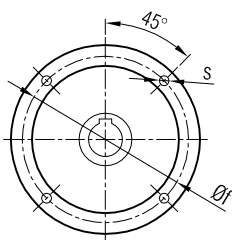


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≤ 200 B5 **Tip/Type/Typ**

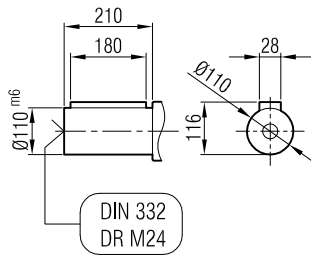
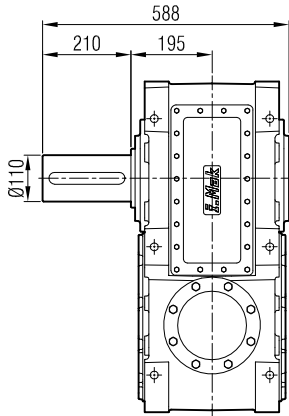
≥ 225 B5 **Tip/Type/Typ**



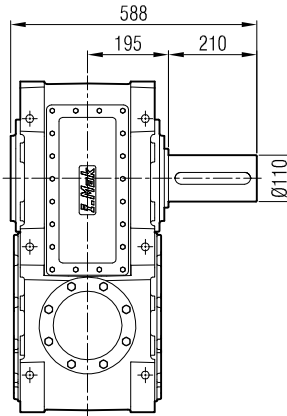
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	703	180	215	250	M12	273	15	5	28	31.3	8	-	15
132/B5	723	230	265	300	M12	293	18	6	38	41.3	10	-	20
160/B5	753	250	300	350	M14	293	20	6	42	45.3	12	-	60
180/B5	753	250	300	350	M14	293	20	6	48	51.8	14	-	60
200/B5	753	300	350	400	M16	293	22	6	55	59.3	16	-	60
225/B5	796	350	400	450	M16	336	22	6	60	64.4	18	19	80
250/B5	796	450	500	550	M16	336	25	6.5	65	69.4	18	69	75



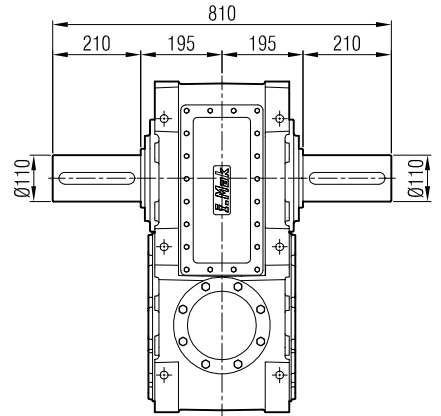
MA / MK 60_
...-SL



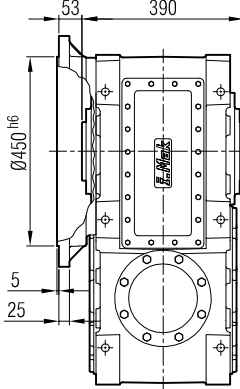
...-SR



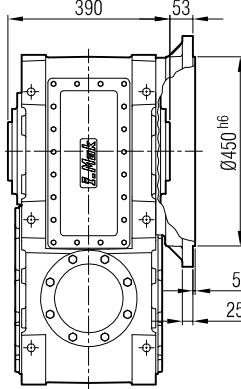
...-SD



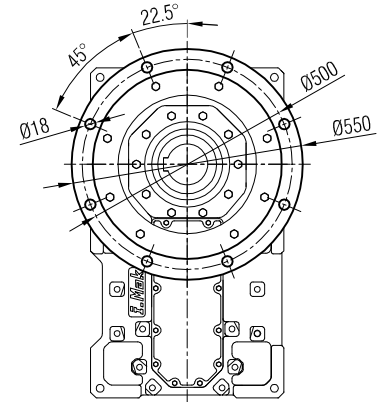
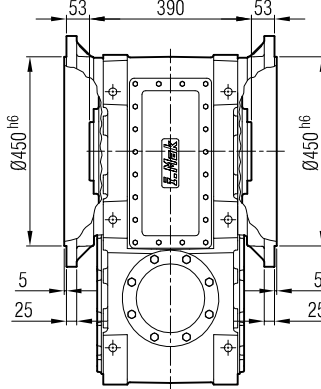
...-FL



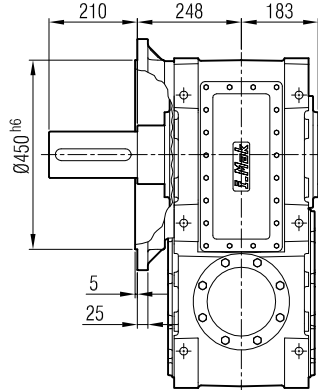
...-FR



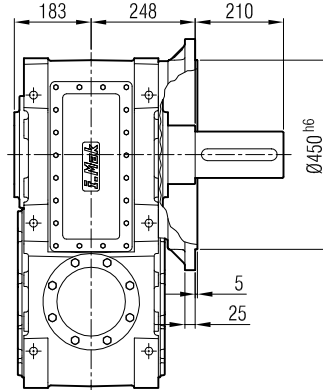
...-FD



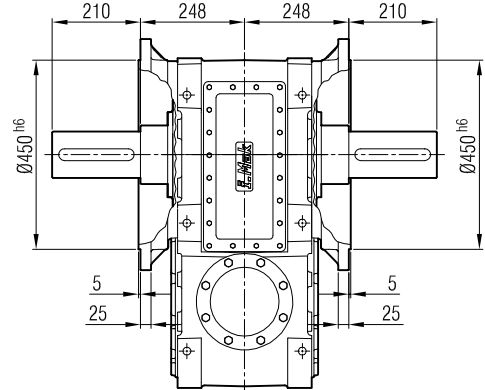
...-FL-SL



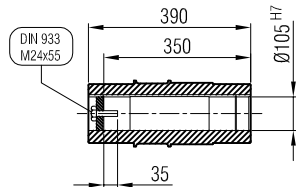
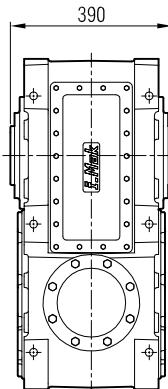
...-FR-SR



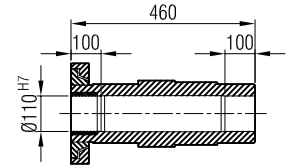
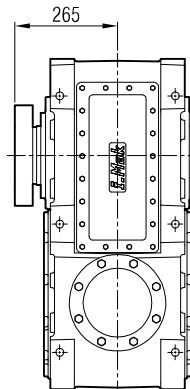
...-FD-SD



...-H



...-SDL / SDR



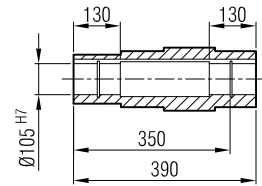
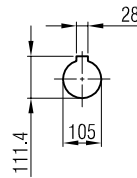
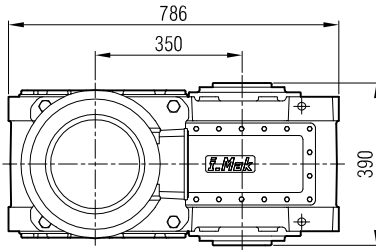
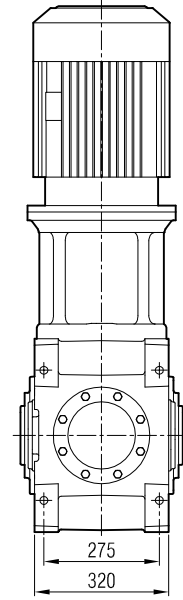
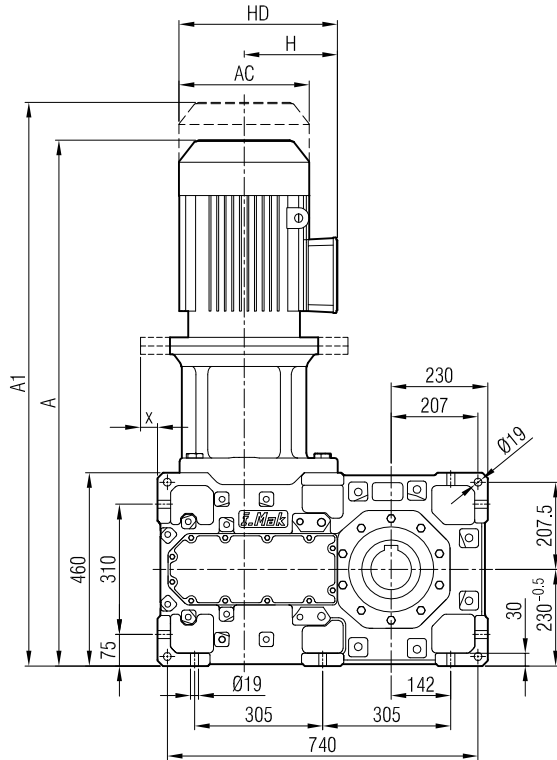
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	112 M/B5	132 S/B5	132 M/B5	160 L/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5
A	1047	1124	1165	1273	1318	1394	1394	1462	1481	1541	1591
A1	1130	1224	1265	1388	1433	1514	1514	1582	1601	1661	1711
H	170	193	193	240	240	260	260	300	313	313	366
HD	282	325	325	400	400	440	440	500	538	538	618
AC	220	262	262	315	315	357	357	394	456	456	489
x	-	-	-	-	-	-	-	-	22	22	69

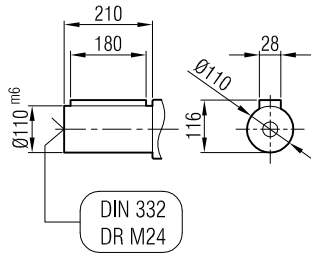
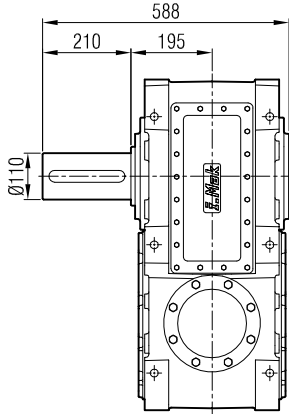
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

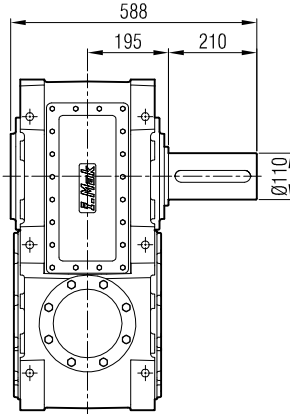
Le dimensions "A1" correspond aux moteurs équipés de freins.



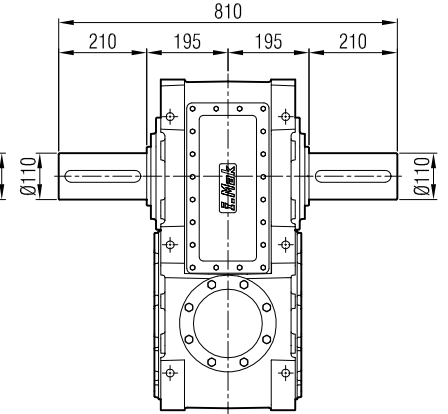
MA / MK 60_
...-SL



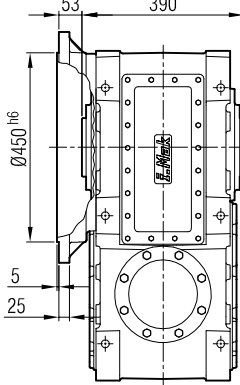
...-SR



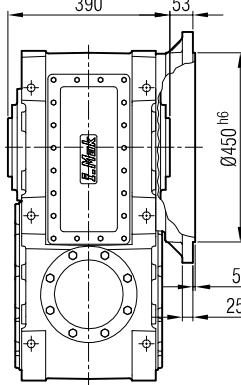
...-SD



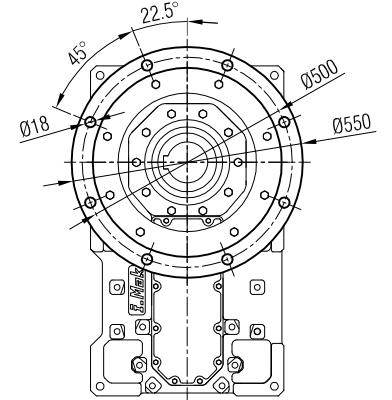
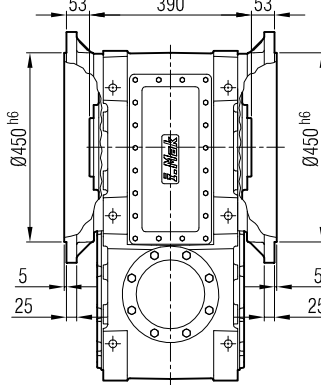
...-FL



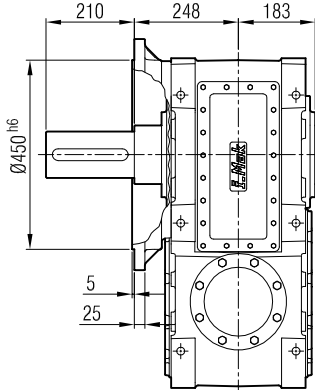
...-FR



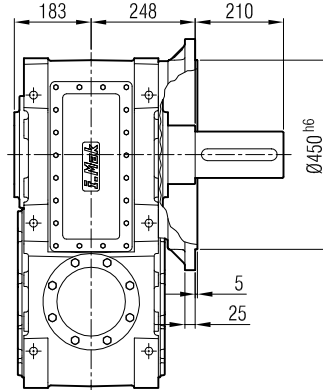
...-FD



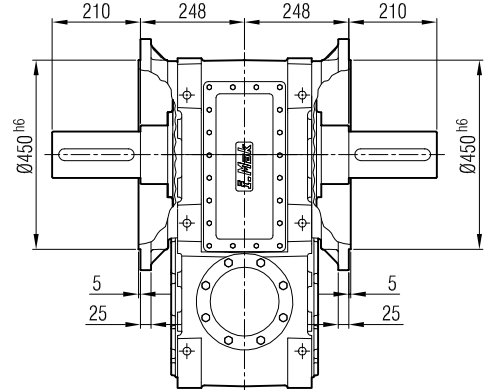
...-FL-SL



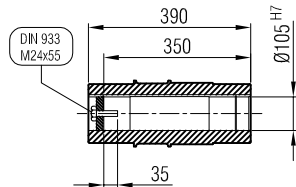
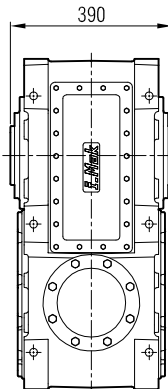
...-FR-SR



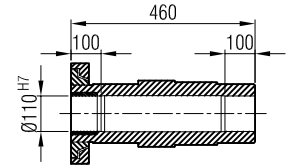
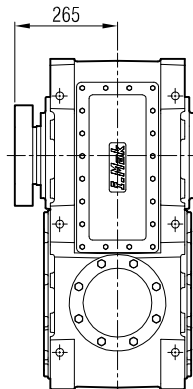
...-FD-SD



...-H



...-SDL / SDR



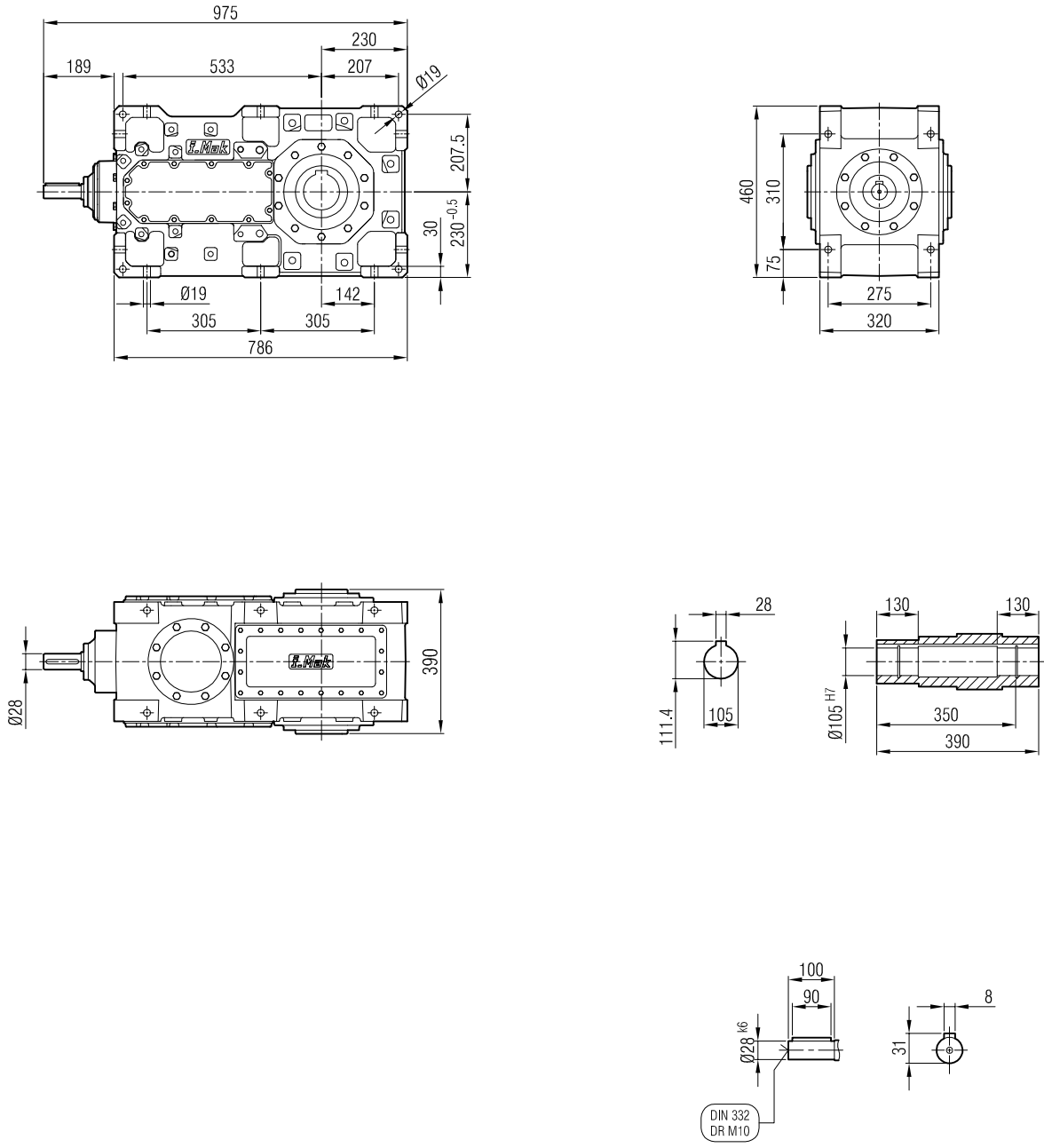
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

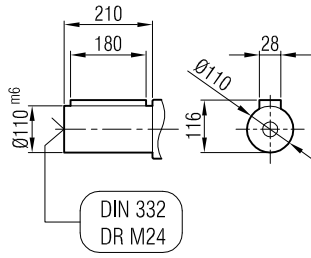
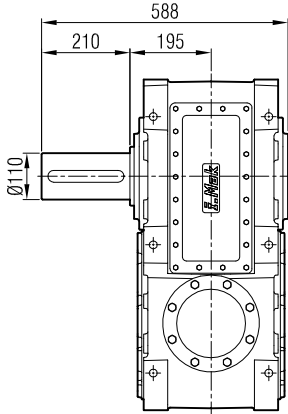


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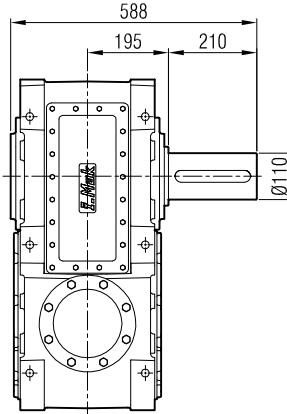




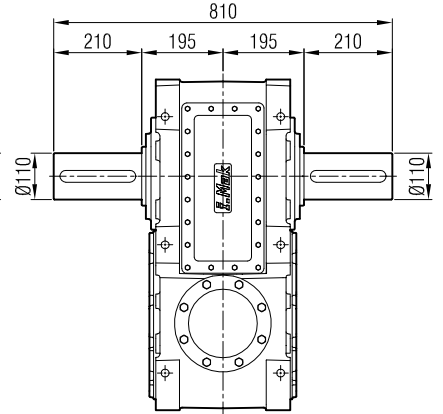
MA / MK 60_
...-SL



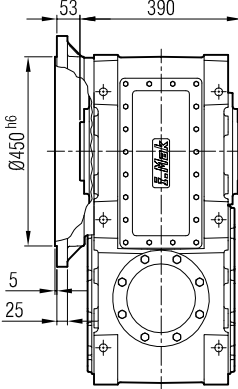
...-SR



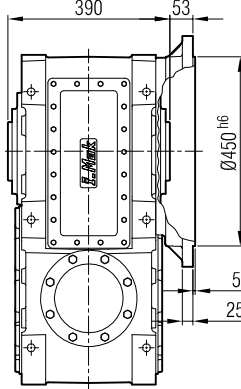
...-SD



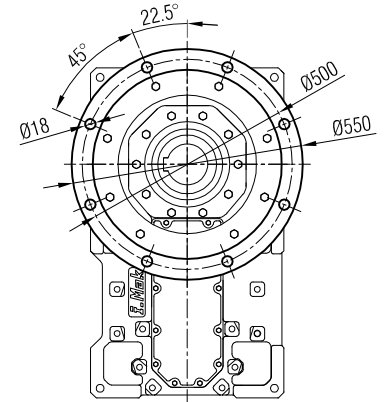
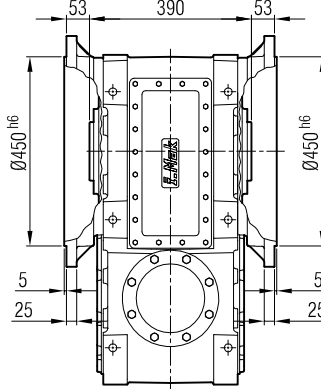
...-FL



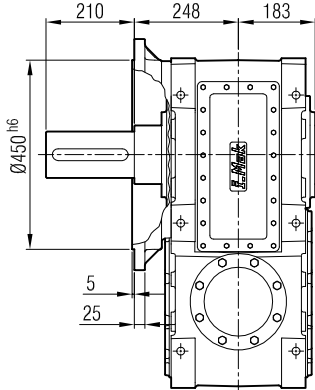
...-FR



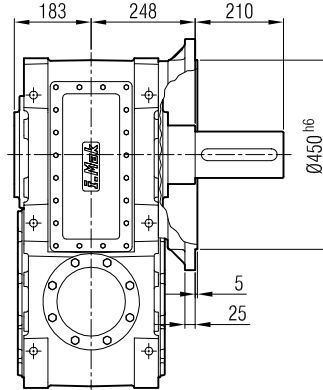
...-FD



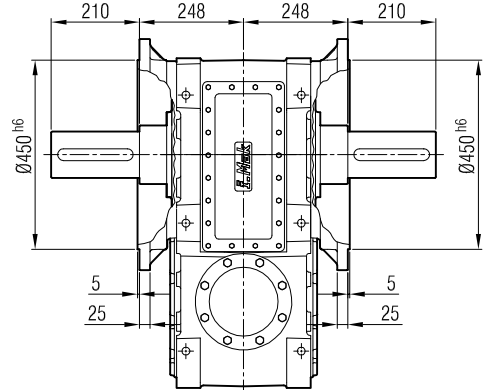
...-FL-SL



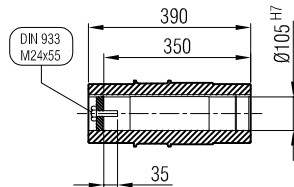
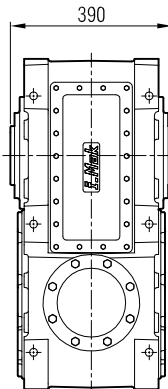
...-FR-SR



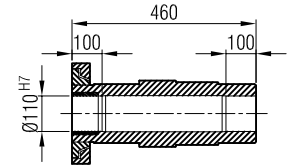
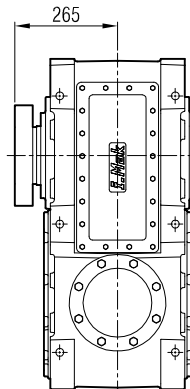
...-FD-SD



...-H



...-SDL / SDR



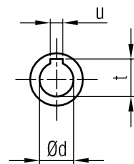
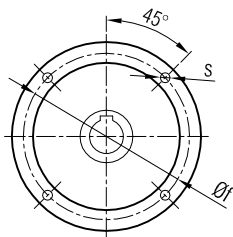
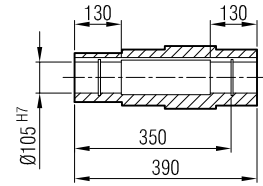
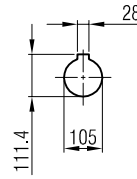
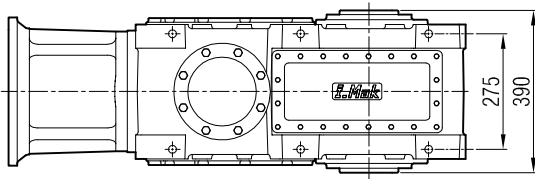
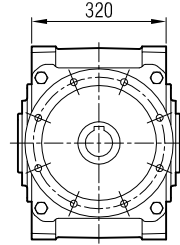
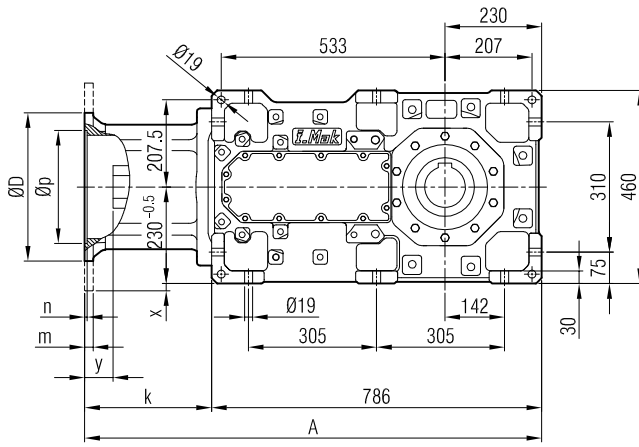
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



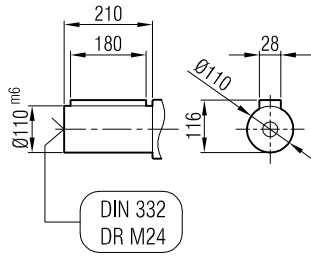
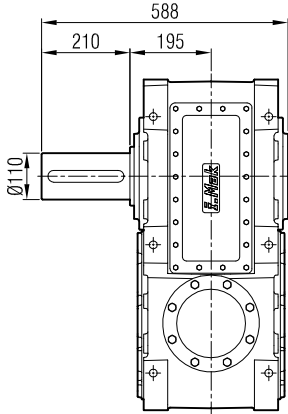
MKP 604-G09



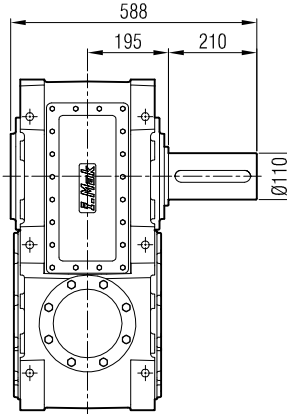
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
90/B5	1028	130	168	200	M10	248	12	5	24	27.3	8	-	0
100/B5	1053	180	215	250	M12	273	15	5	28	31.3	8	-	25
112/B5	1053	180	215	250	M12	273	15	5	28	31.3	8	-	25
132/B5	1073	230	265	300	M12	293	18	6	38	41.3	10	-	45
160/B5	1103	250	300	350	M14	317	20	6	42	45.3	12	-	70
180/B5	1103	250	300	350	M14	317	20	6	48	51.8	14	-	59



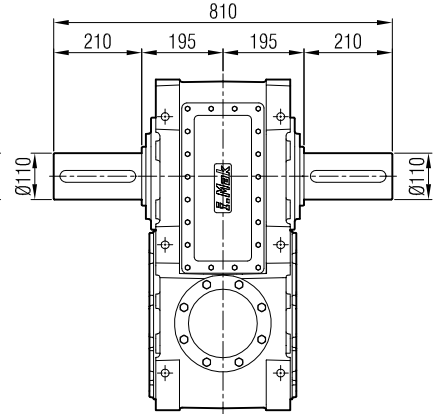
MA / MK 60_
...-SL



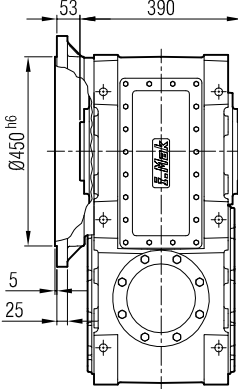
...-SR



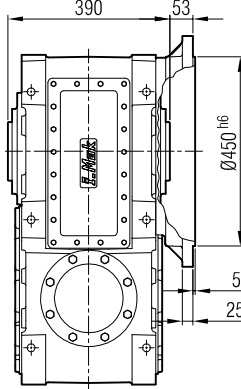
...-SD



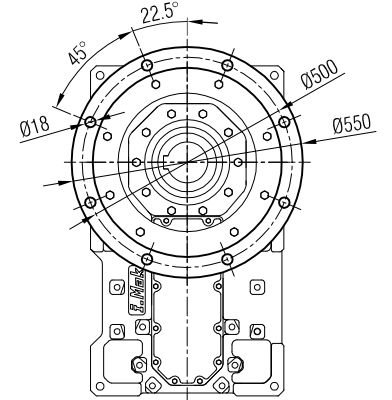
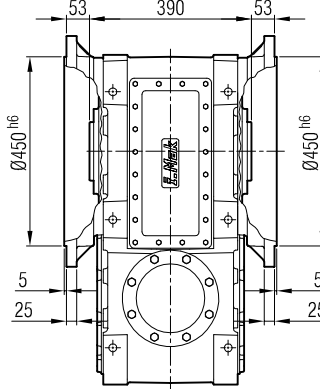
...-FL



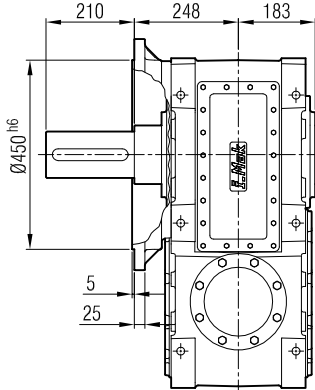
...-FR



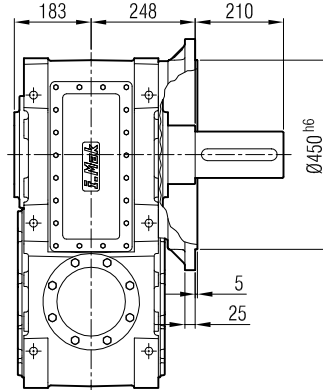
...-FD



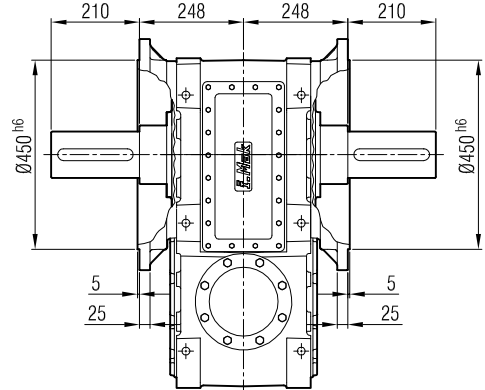
...-FL-SL



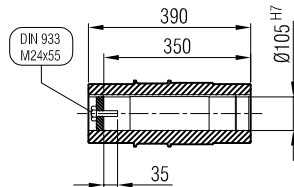
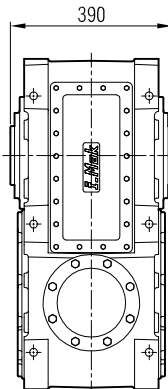
...-FR-SR



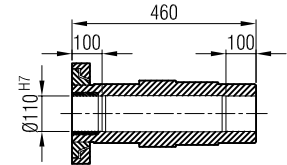
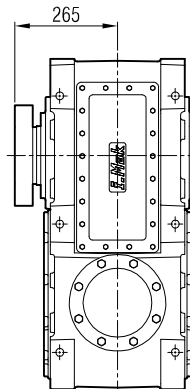
...-FD-SD



...-H



...-SDL / SDR



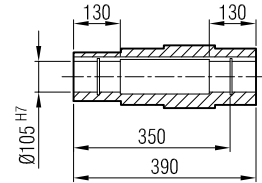
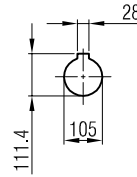
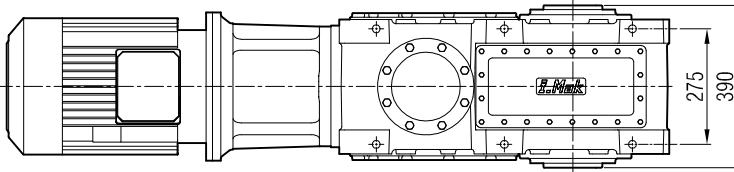
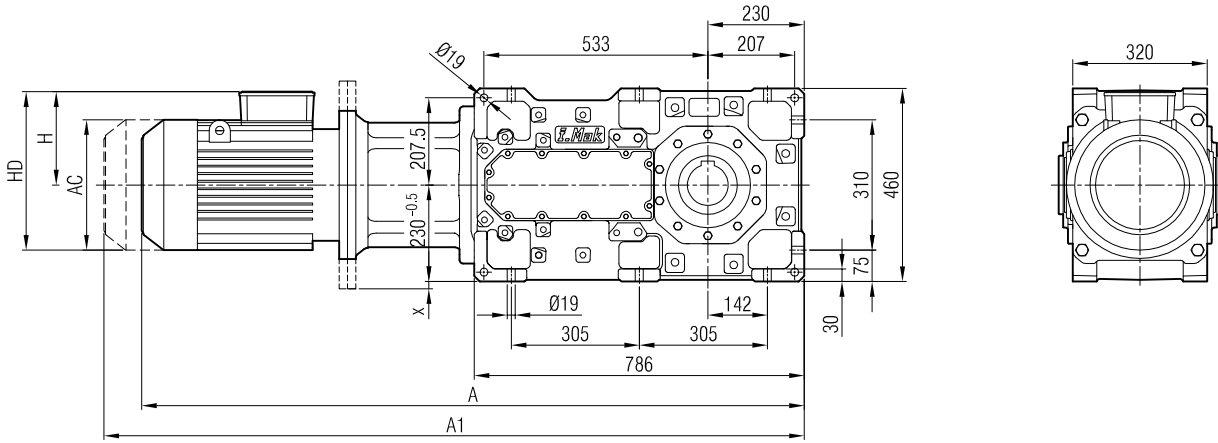
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	90 L/B5	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5
A	1339	1393	1397	1474	1515	1623	1668	1744
A1	1405	1471	1480	1574	1615	1738	1783	1864
H	141	161	170	193	193	240	240	260
HD	231	261	282	325	325	400	400	440
AC	176	195	220	262	262	315	315	357
x	-	-	-	-	-	-	-	-

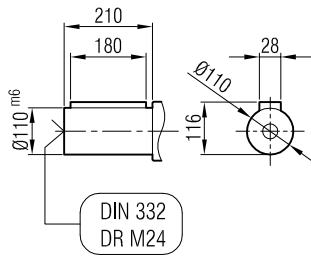
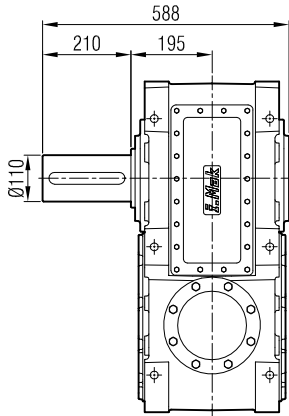
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

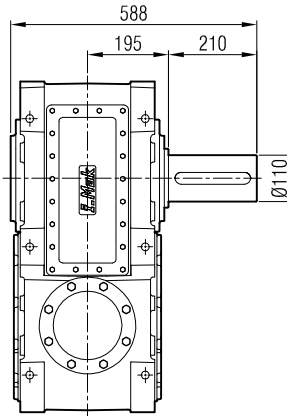
Le dimensions "A1" correspond aux moteurs équipés de freins.



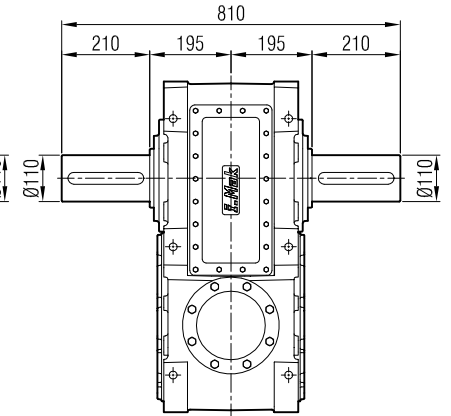
MA / MK 60_
...-SL



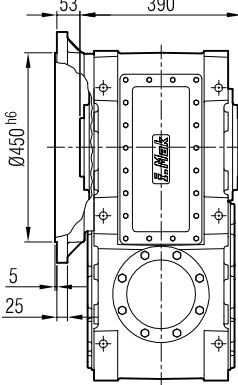
...-SR



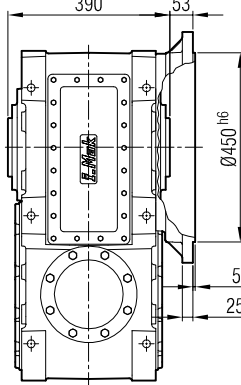
...-SD



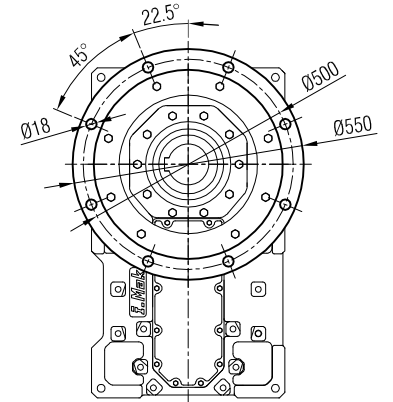
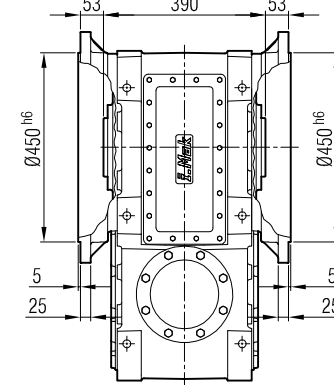
...-FL



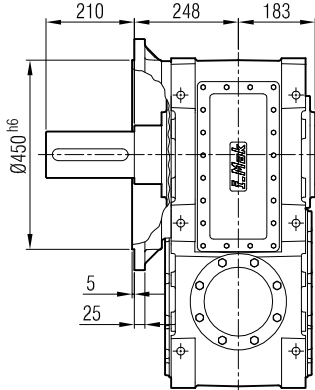
...-FR



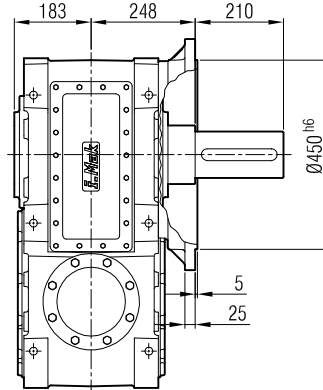
...-FD



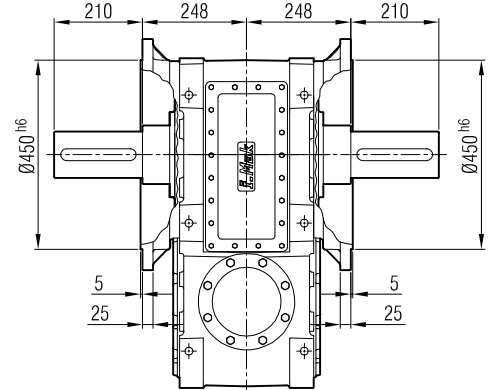
...-FL-SL



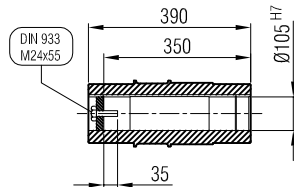
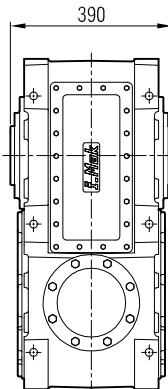
...-FR-SR



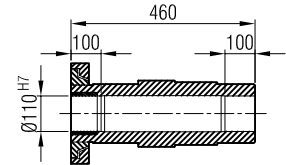
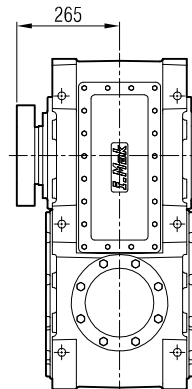
...-FD-SD



...-H



...-SDL / SDR



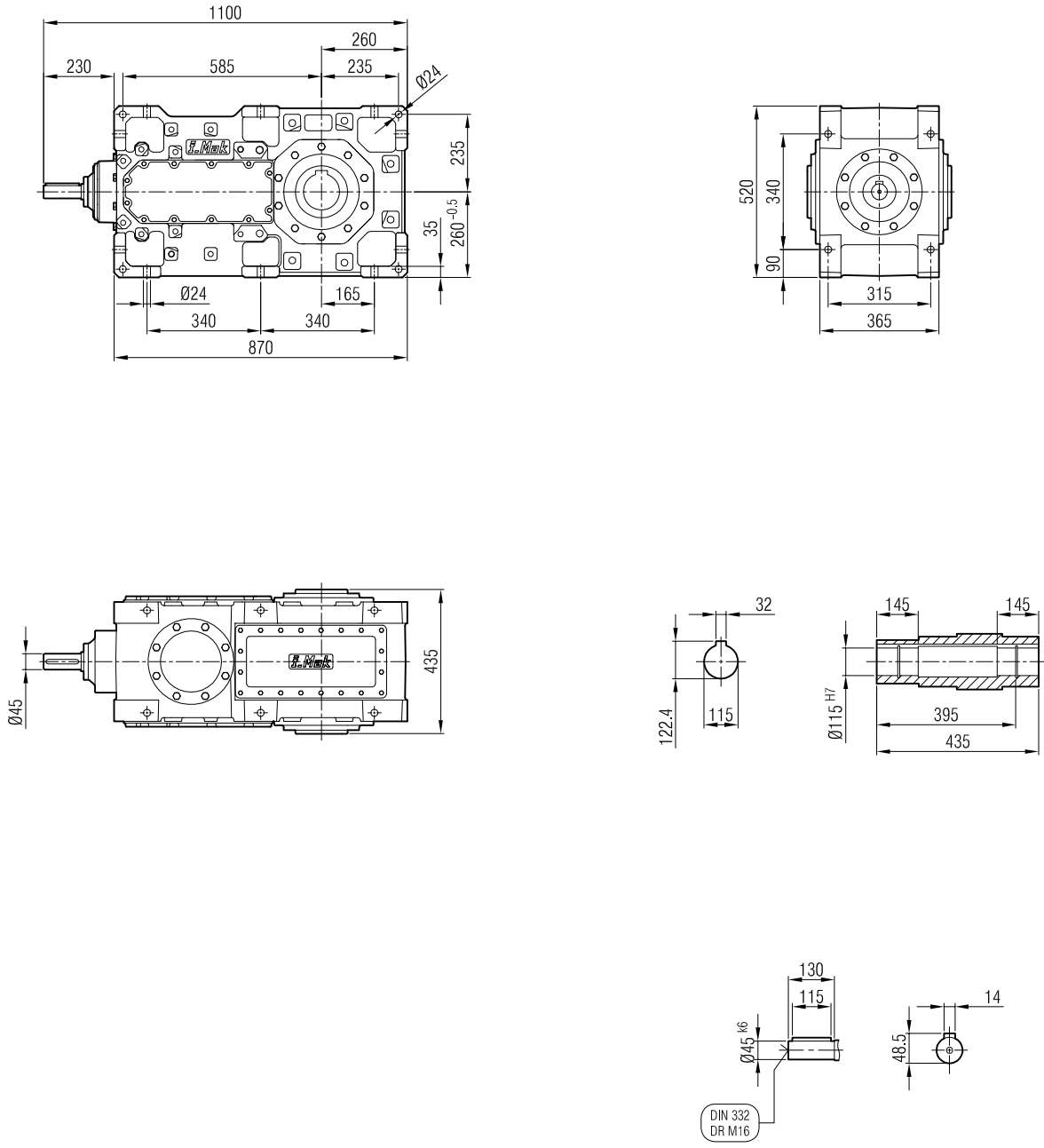
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

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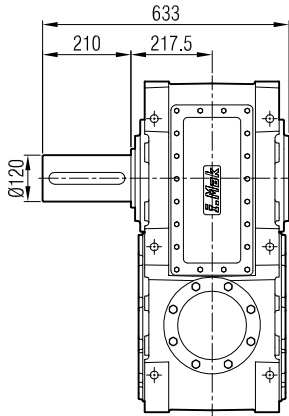


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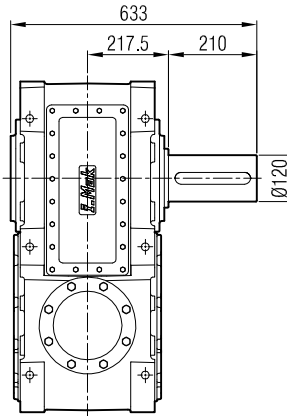
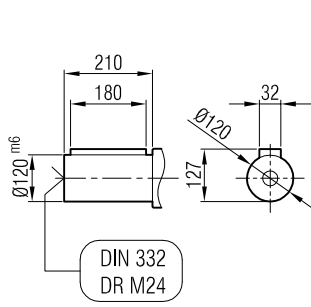




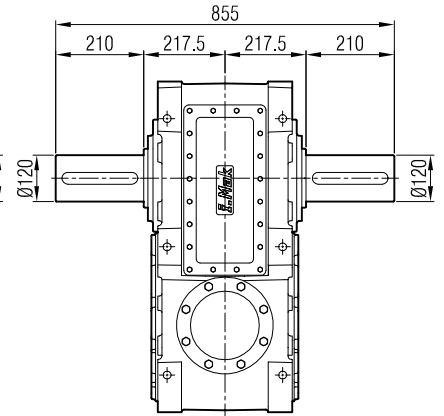
MA / MK 70_
...-SL



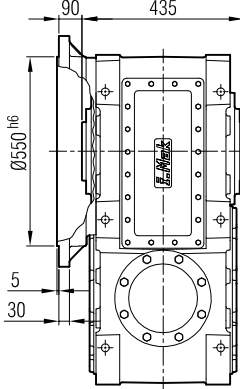
...-SR



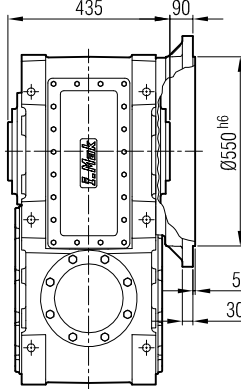
...-SD



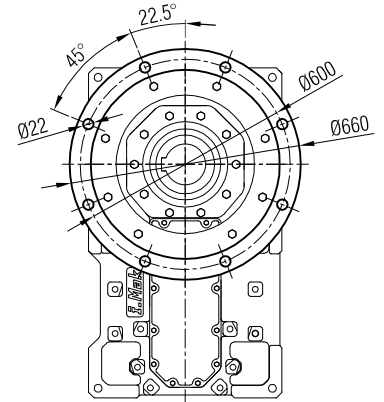
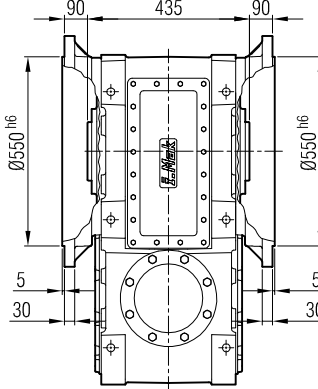
...-FL



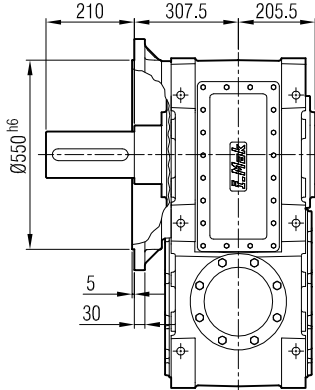
...-FR



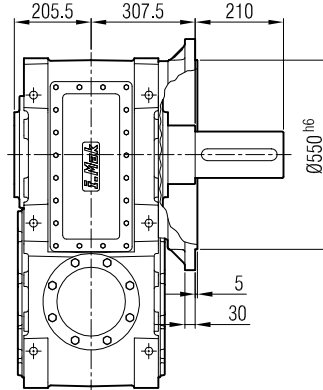
...-FD



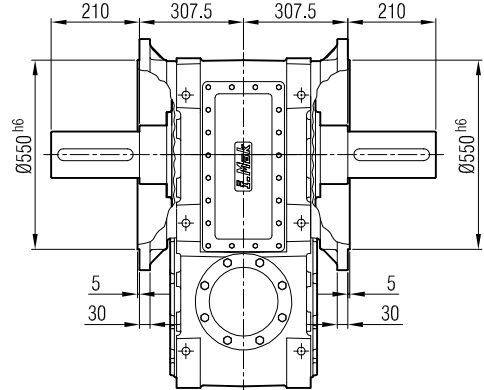
...-FL-SL



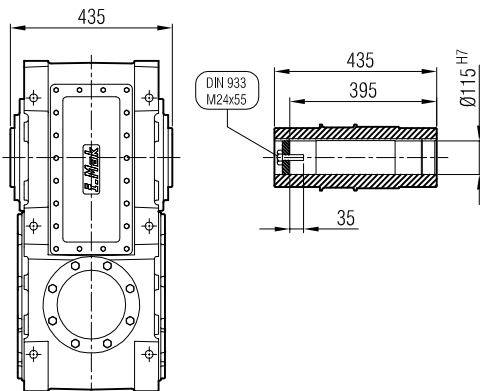
...-FR-SR



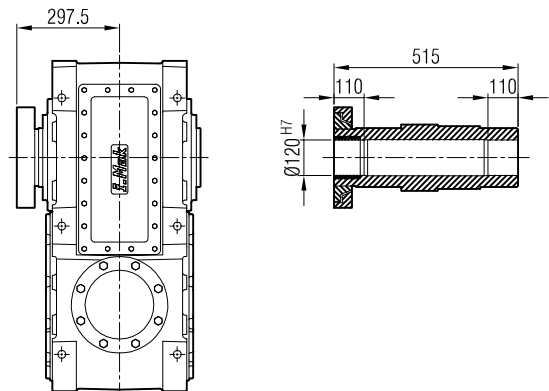
...-FD-SD



...-H



...-SDL / SDR



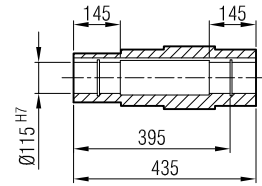
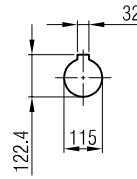
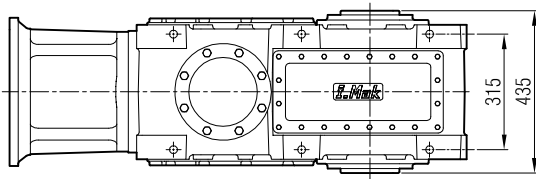
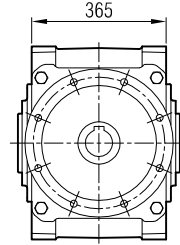
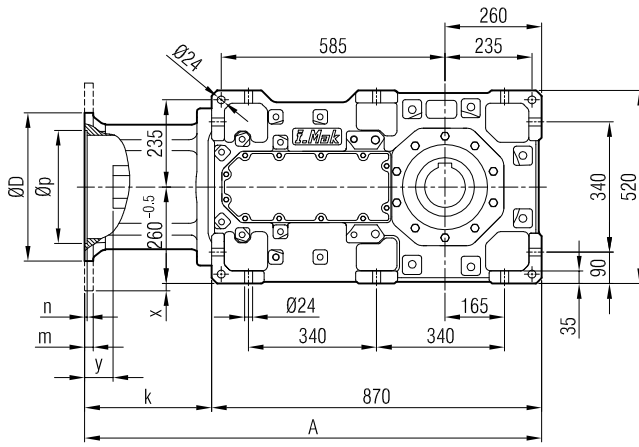
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

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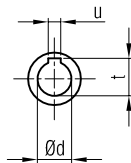
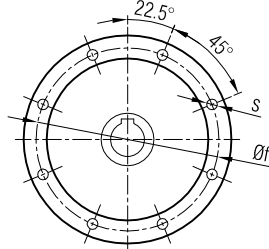
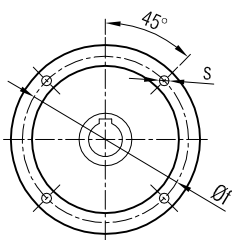


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≤ 200 B5 **Tip/Type/Typ**

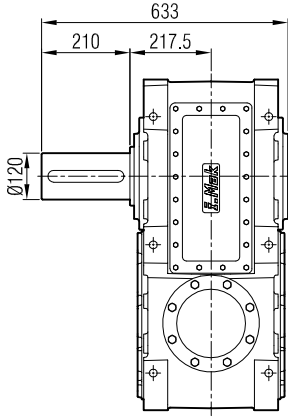
≥ 225 B5 **Tip/Type/Typ**



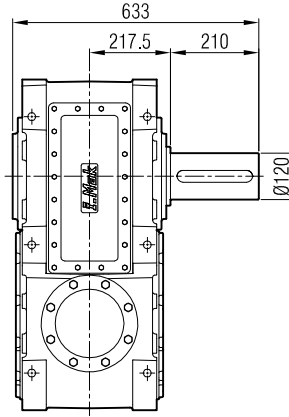
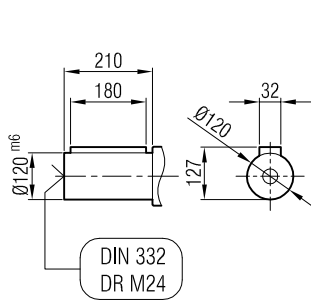
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	1215	250	300	350	M14	345	20	6	42	45.3	12	-	48
180/B5	1215	250	300	350	M14	345	20	6	48	51.8	14	-	48
200/B5	1215	300	350	400	M16	345	22	6	55	59.3	16	-	48
225/B5	1258	350	400	450	M16	388	22	6	60	64.4	18	-	80
250/B5	1258	450	500	550	M16	388	25	6.5	65	69.4	18	15	75
280/B5	1258	450	500	550	M16	388	25	6.5	75	75.9	20	15	65



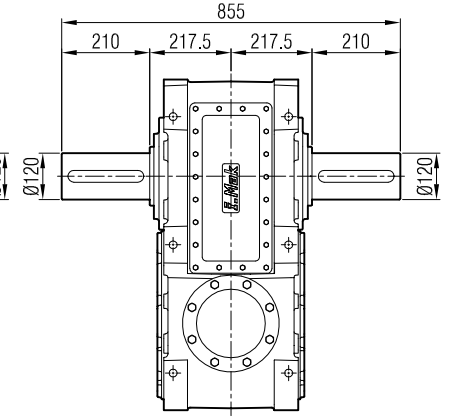
MA / MK 70_
...-SL



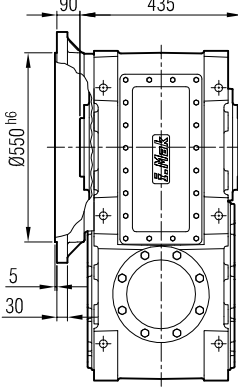
...-SR



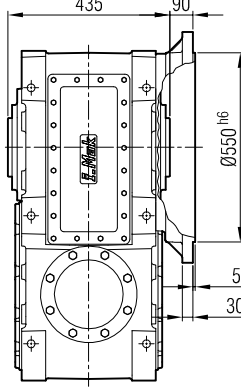
...-SD



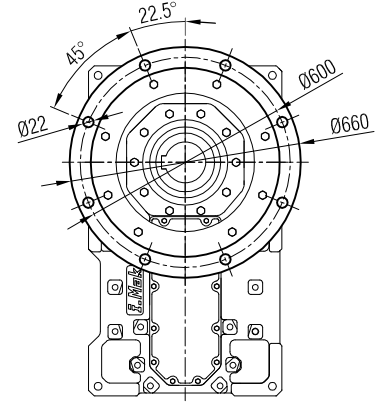
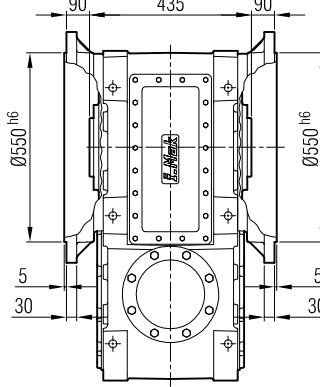
...-FL



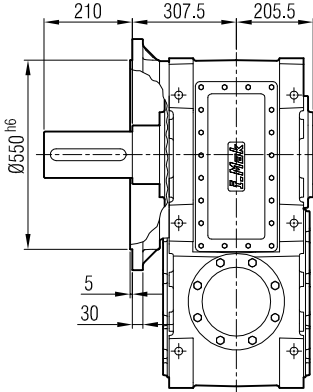
...-FR



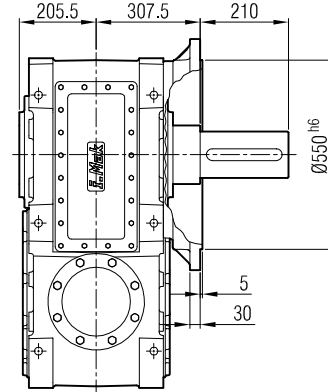
...-FD



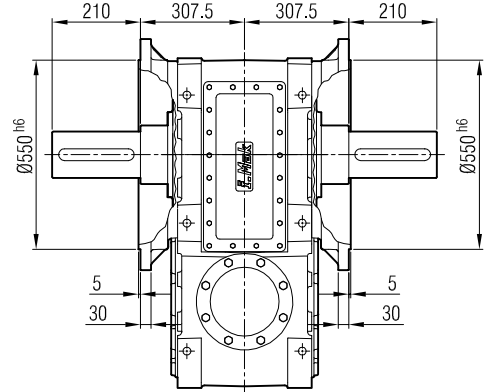
...-FL-SL



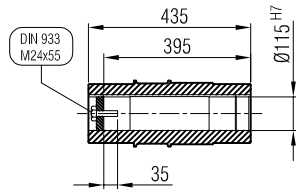
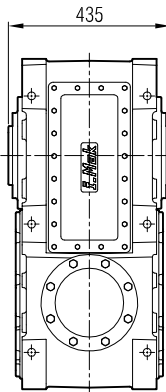
...-FR-SR



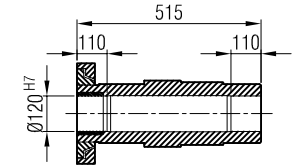
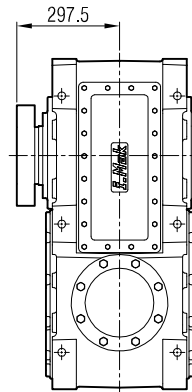
...-FD-SD



...-H



...-SDL / SDR



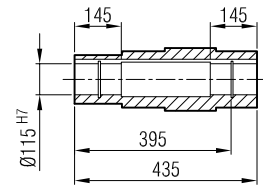
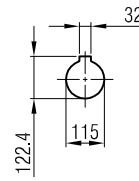
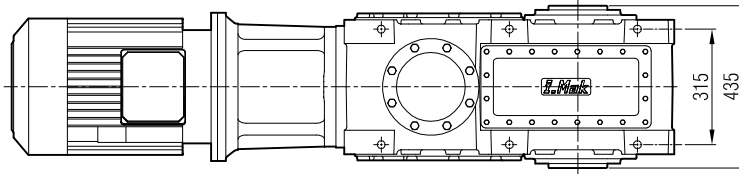
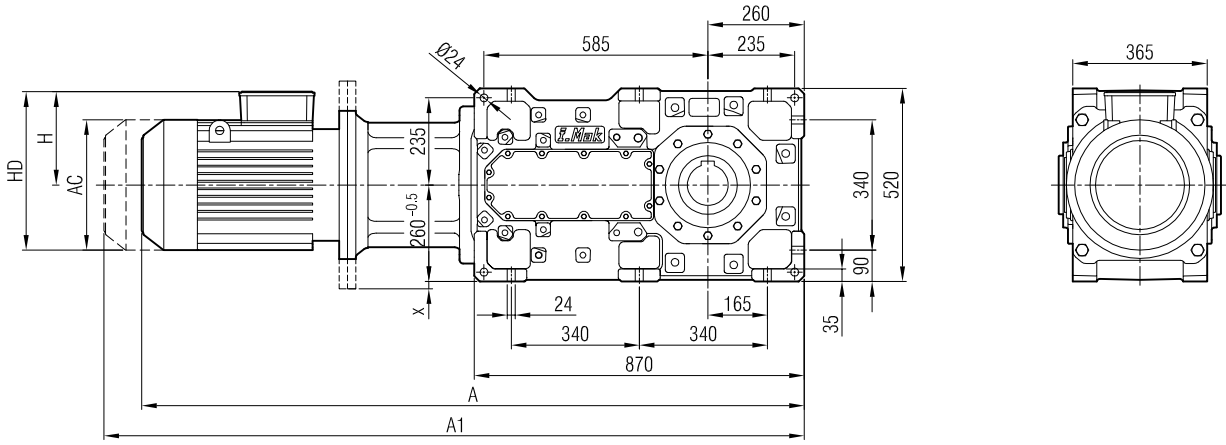
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5
A	1780	1856	1856	1924	1943	2003	2053	2143
A1	1895	1976	1976	2044	2063	2123	2173	2263
H	240	260	260	300	313	313	366	398
HD	400	440	440	500	538	538	618	678
AC	315	357	357	394	456	456	489	548
x	-	-	-	-	-	-	15	15

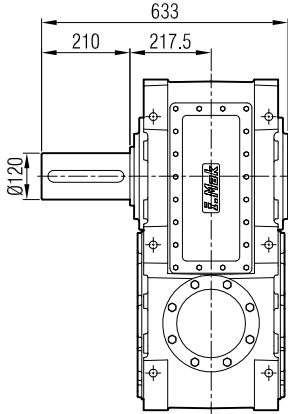
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

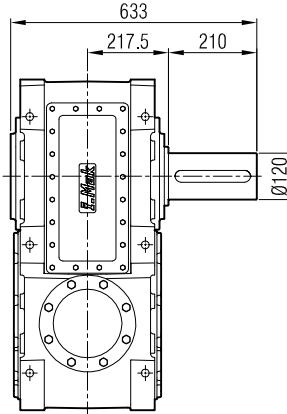
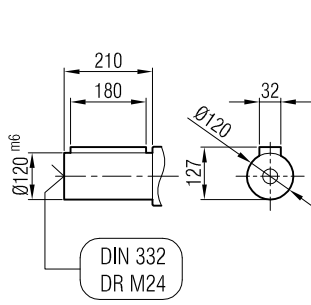
Le dimensions "A1" correspond aux moteurs équipés de freins.



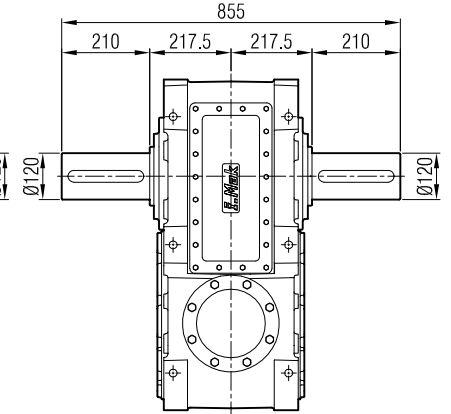
MA / MK 70_
...-SL



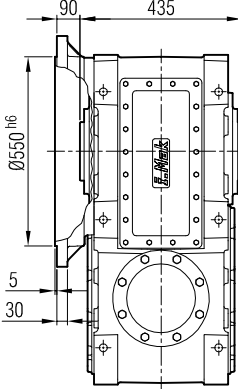
...-SR



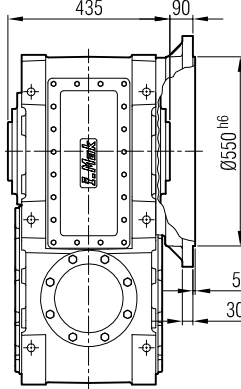
...-SD



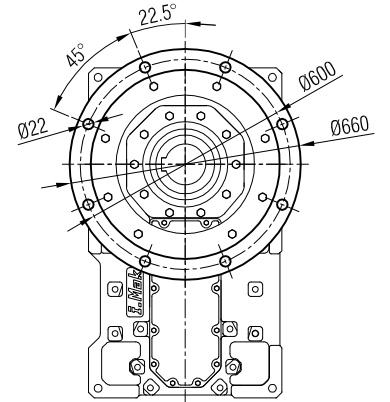
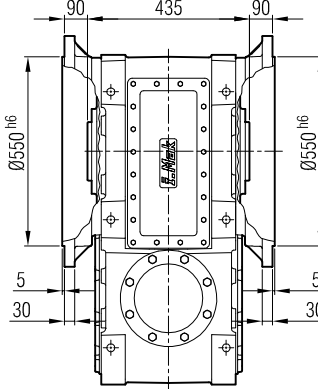
...-FL



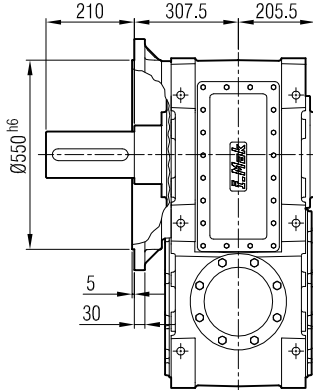
...-FR



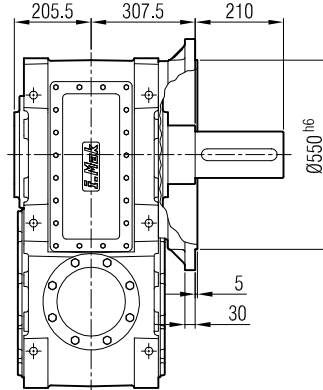
...-FD



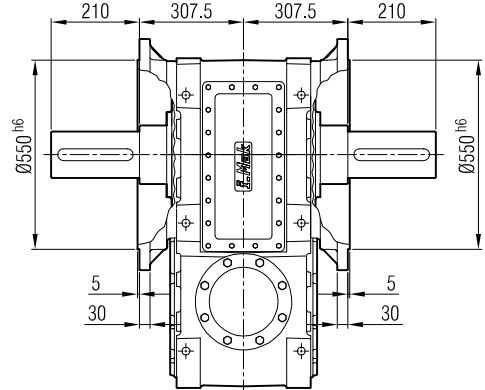
...-FL-SL



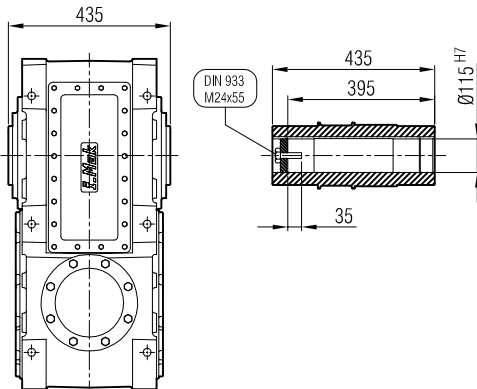
...-FR-SR



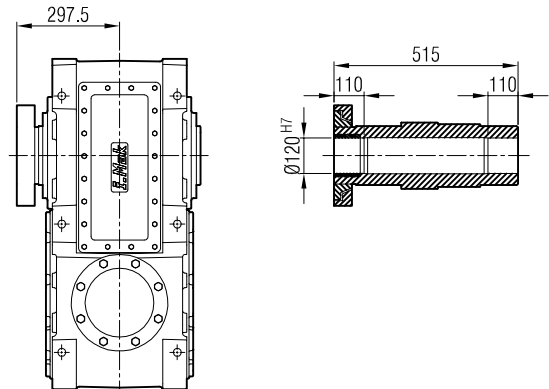
...-FD-SD



...-H



...-SDL / SDR



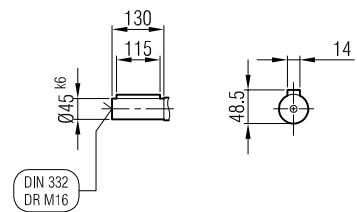
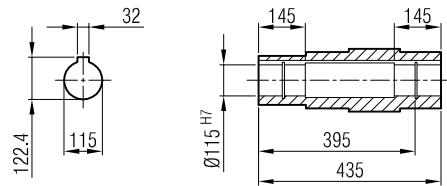
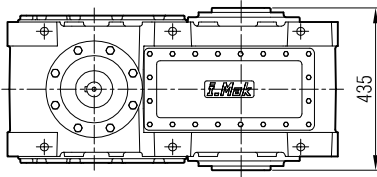
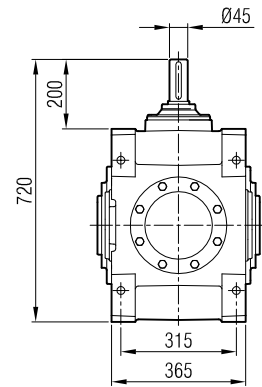
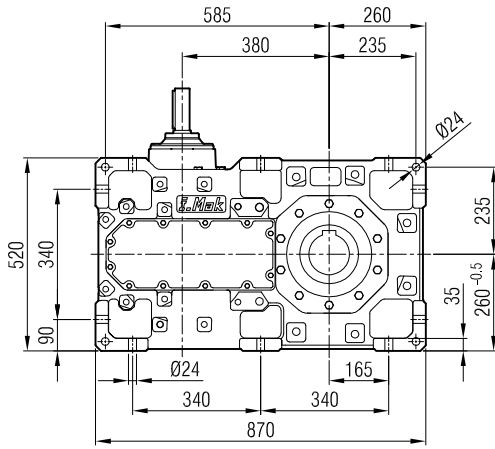
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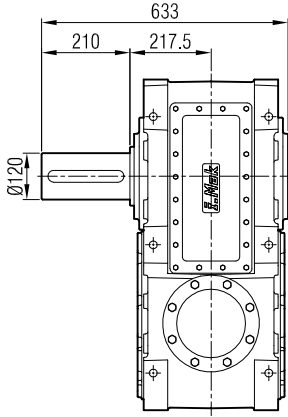


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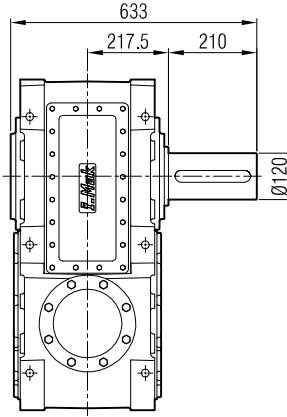
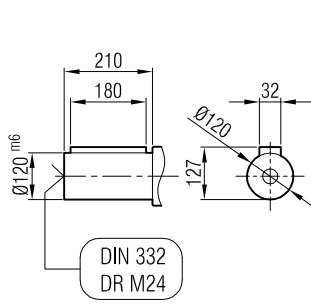




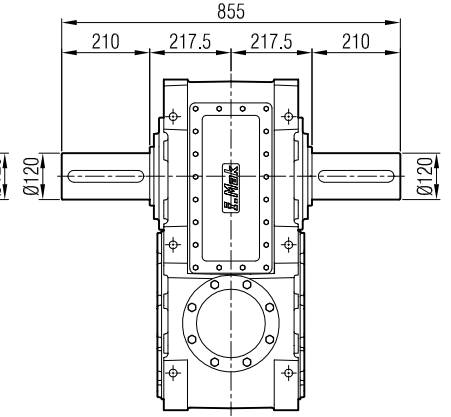
MA / MK 70_
...-SL



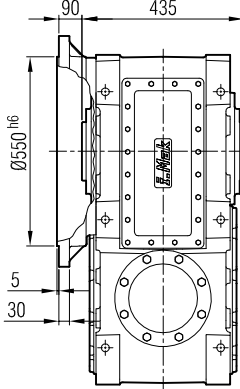
...-SR



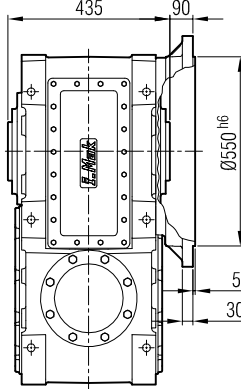
...-SD



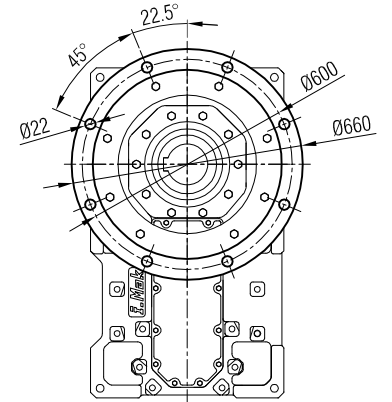
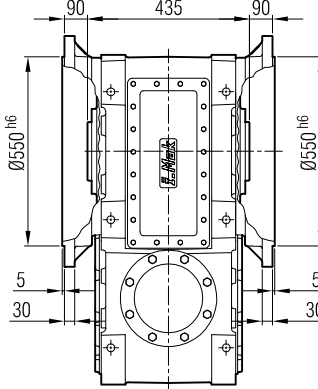
...-FL



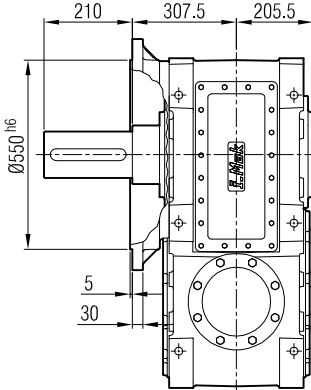
...-FR



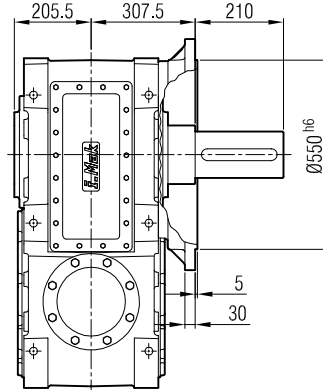
...-FD



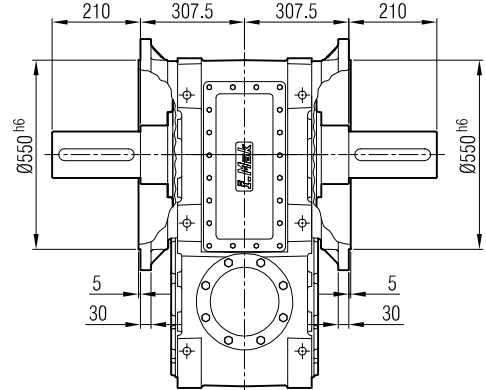
...-FL-SL



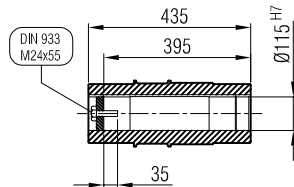
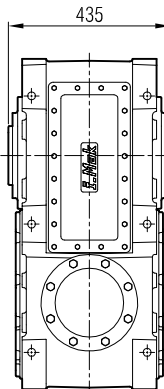
...-FR-SR



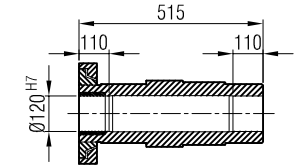
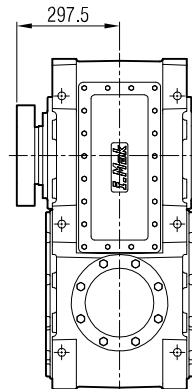
...-FD-SD



...-H



...-SDL / SDR



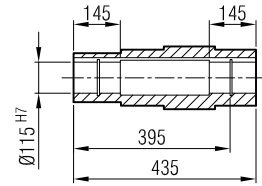
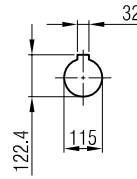
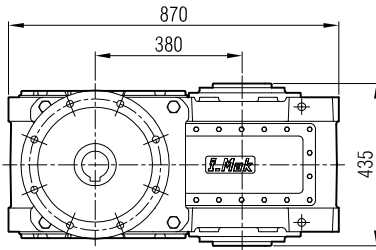
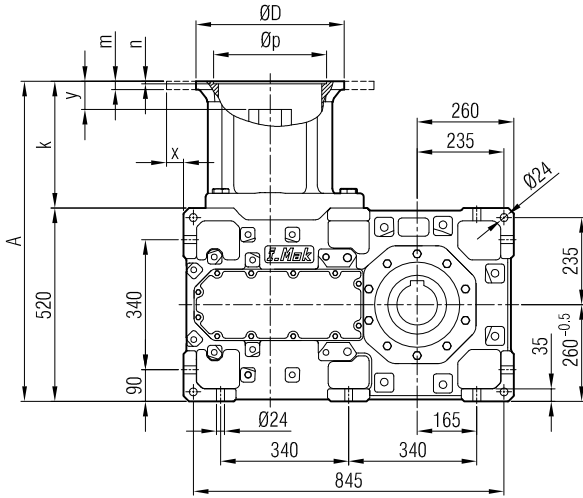
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

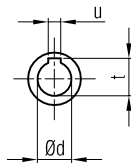
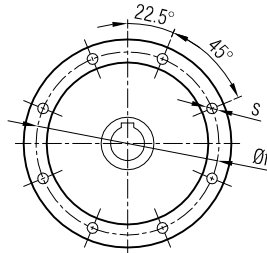
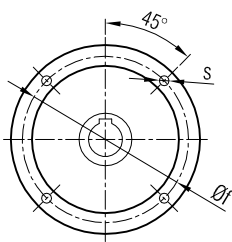


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≤ 200 B5 **Tip/Type/Typ**

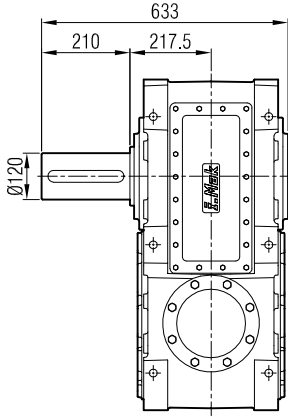
≥ 225 B5 **Tip/Type/Typ**



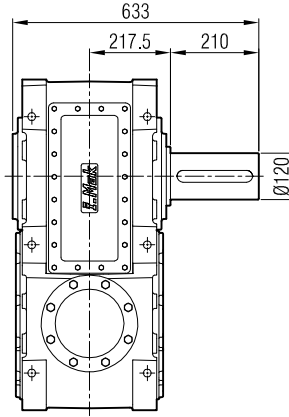
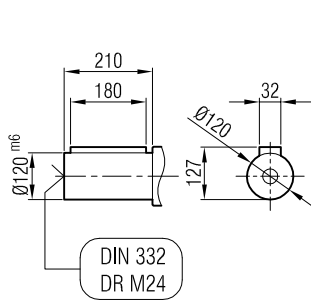
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	835	250	300	350	M14	315	20	6	42	45.3	12	-	48
180/B5	835	250	300	350	M14	315	20	6	48	51.8	14	-	48
200/B5	835	300	350	400	M16	315	22	6	55	59.3	16	-	48
225/B5	878	350	400	450	M16	358	22	6	60	64.4	18	-	80
250/B5	878	450	500	550	M16	358	25	6.5	65	69.4	18	45	75
280/B5	878	450	500	550	M16	358	25	6.5	75	75.9	20	45	65



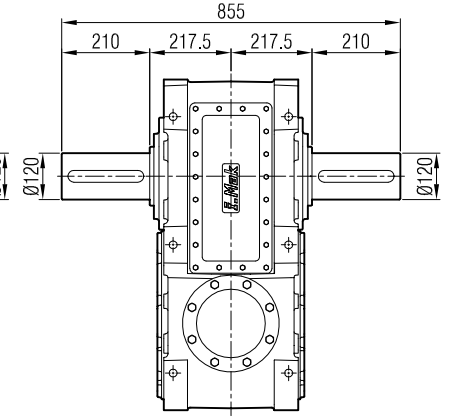
MA / MK 70_
...-SL



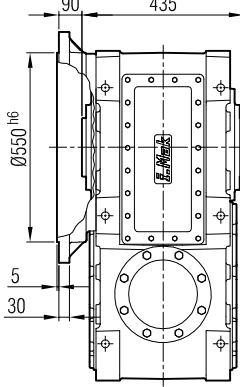
...-SR



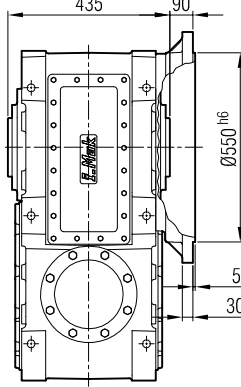
...-SD



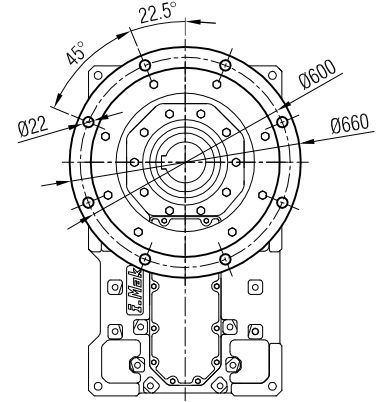
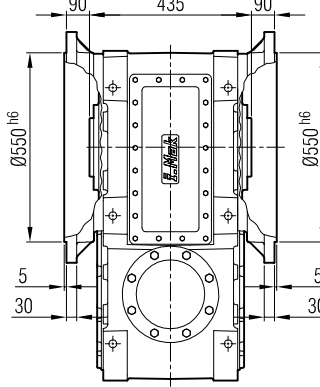
...-FL



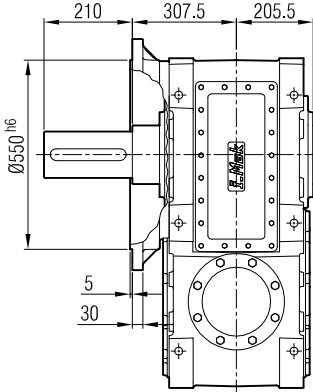
...-FR



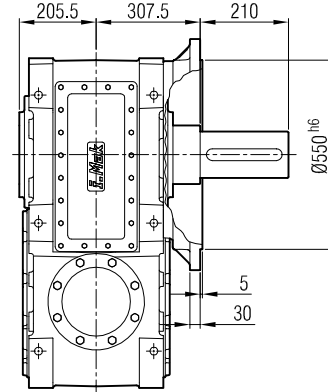
...-FD



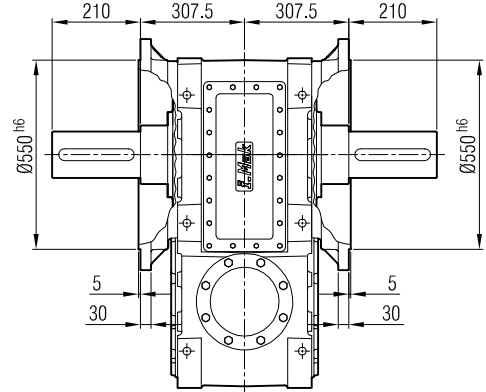
...-FL-SL



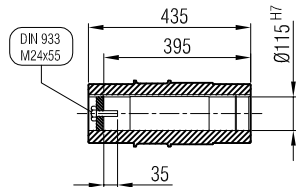
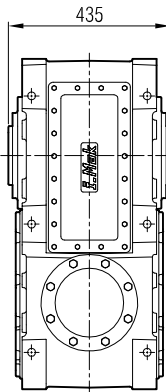
...-FR-SR



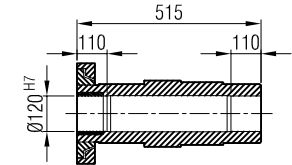
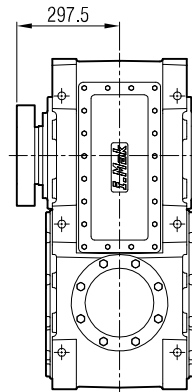
...-FD-SD



...-H



...-SDL / SDR



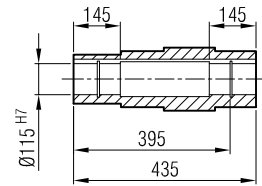
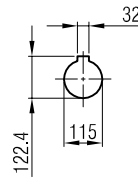
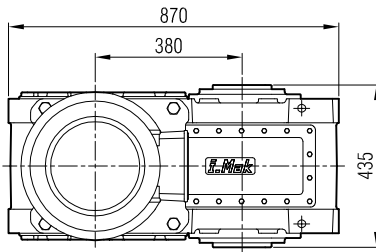
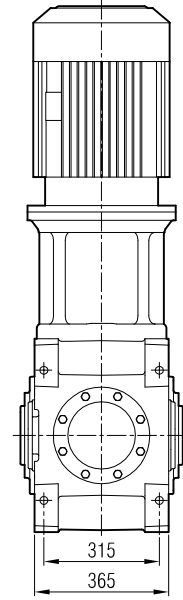
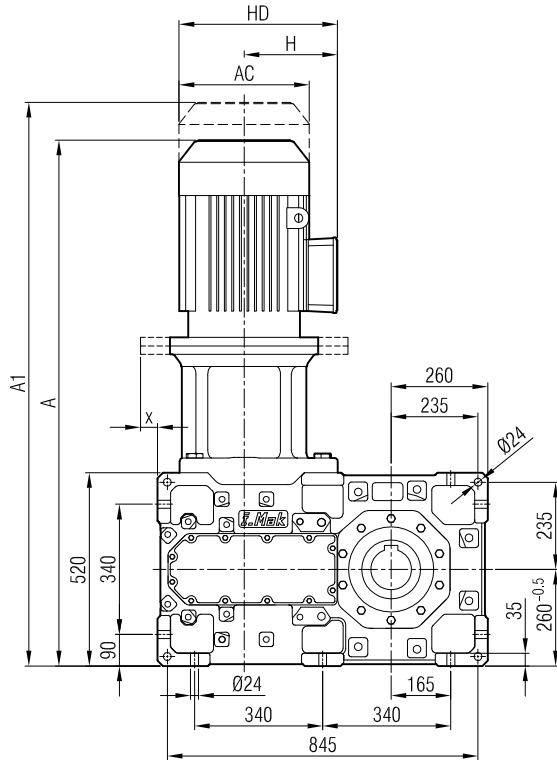
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5
A	1400	1476	1476	1544	1563	1623	1673	1763
A1	1515	1596	1596	1664	1683	1743	1793	1883
H	240	260	260	300	313	313	366	398
HD	400	440	440	500	538	538	618	678
AC	315	357	357	394	456	456	489	548
x	-	-	-	-	-	-	45	45

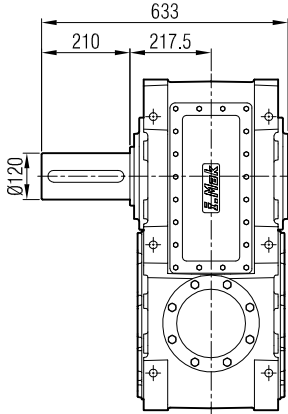
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

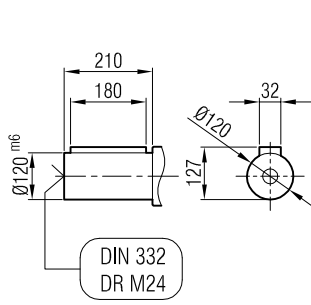
Le dimensions "A1" correspond aux moteurs équipés de freins.



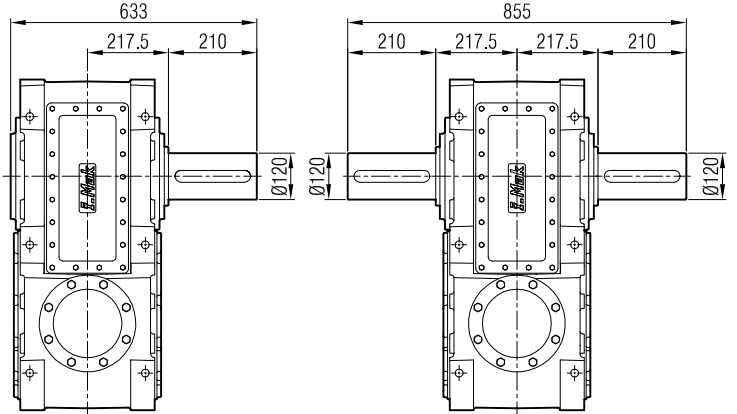
MA / MK 70_
...-SL



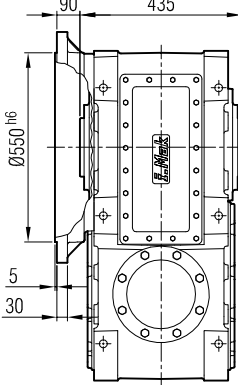
...-SR



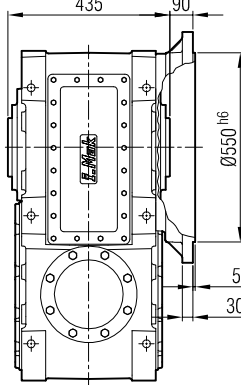
...-SD



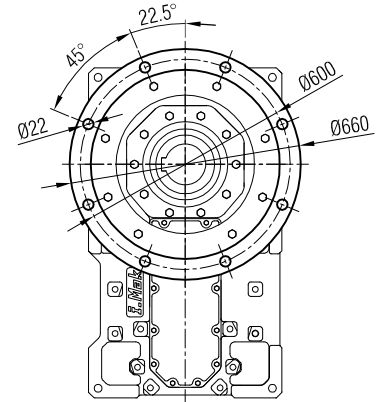
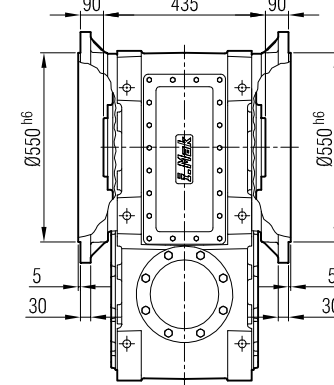
...-FL



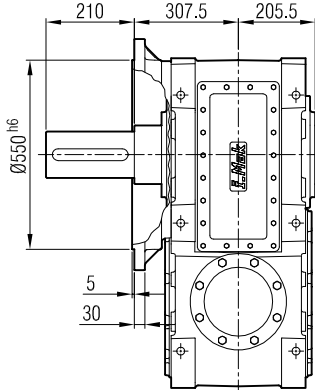
...-FR



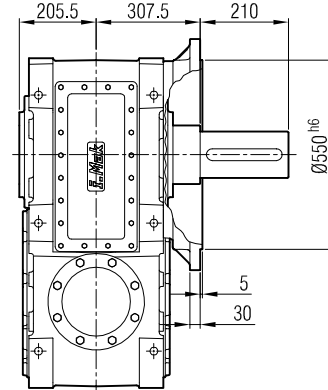
...-FD



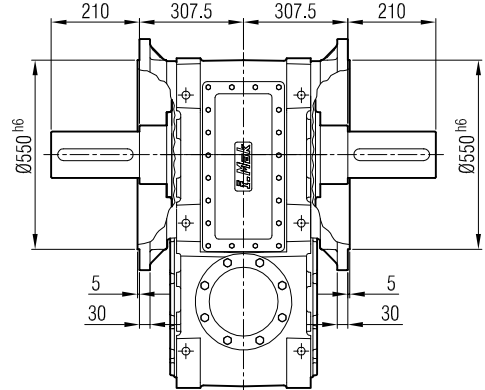
...-FL-SL



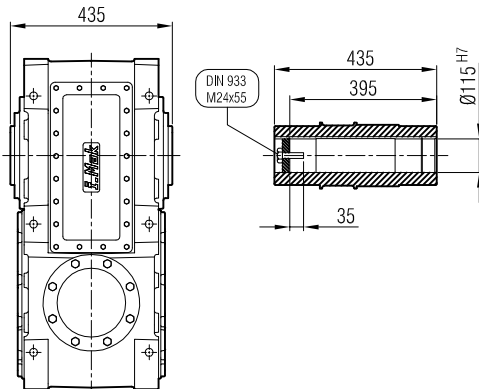
...-FR-SR



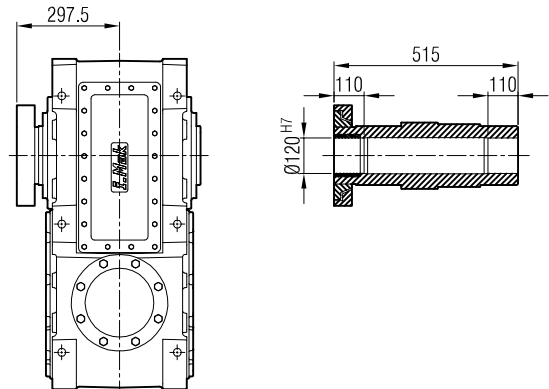
...-FD-SD



...-H



...-SDL / SDR



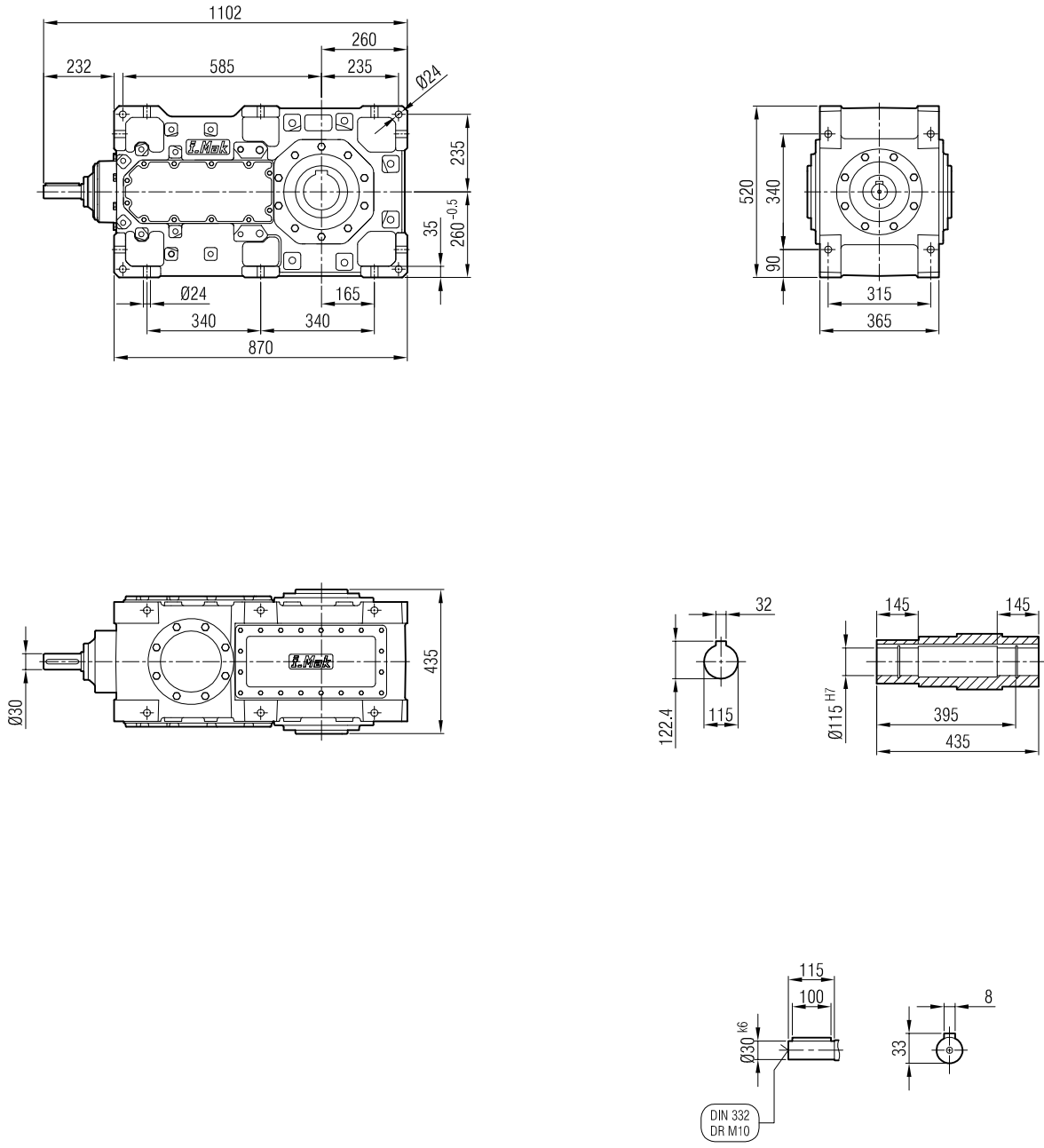
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

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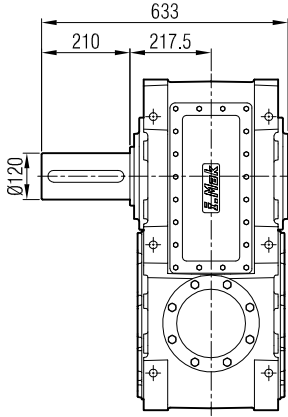


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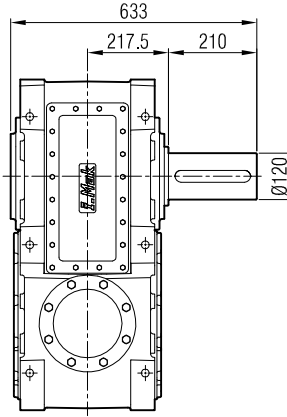
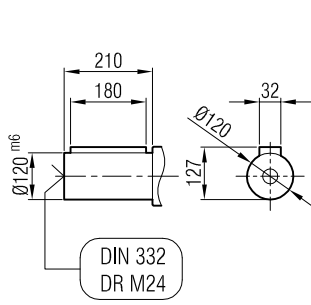




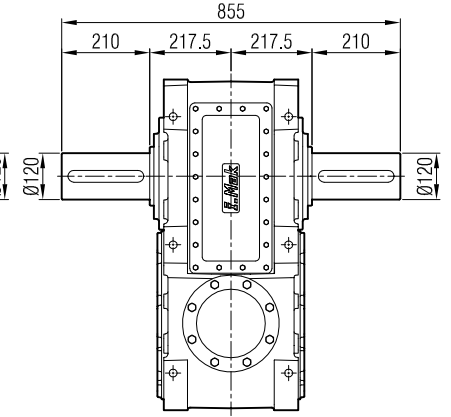
MA / MK 70_
...-SL



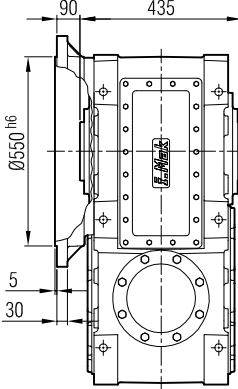
...-SR



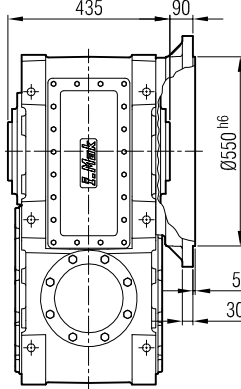
...-SD



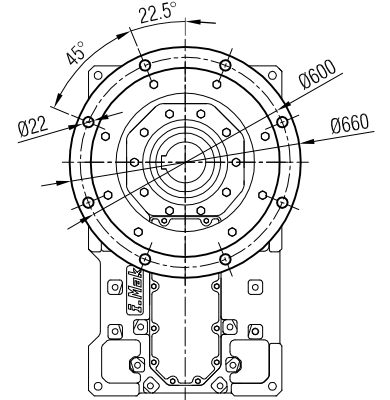
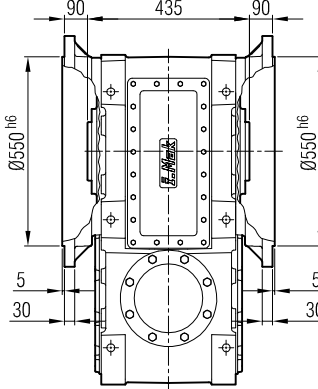
...-FL



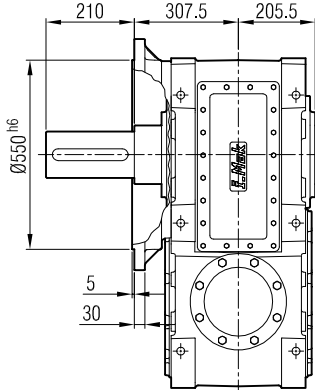
...-FR



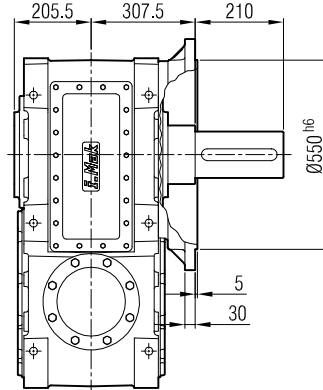
...-FD



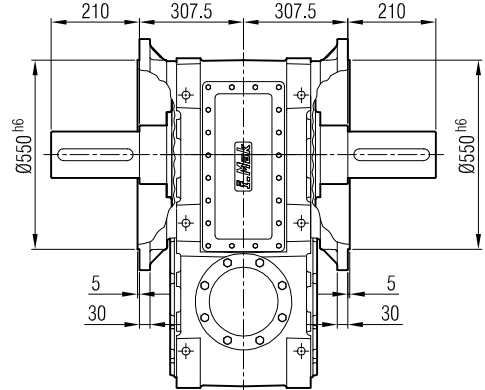
...-FL-SL



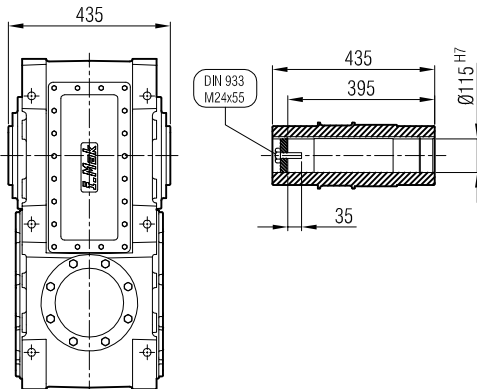
...-FR-SR



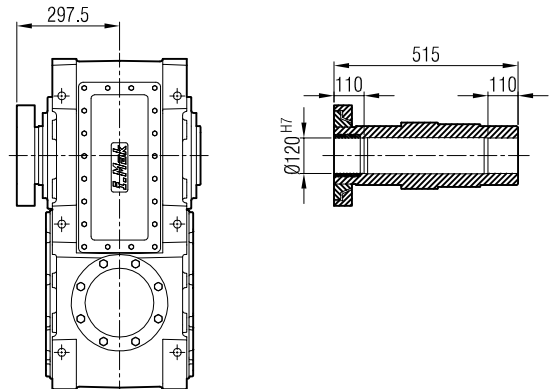
...-FD-SD



...-H



...-SDL / SDR



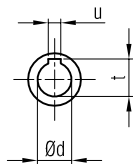
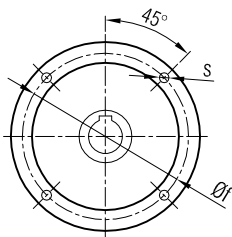
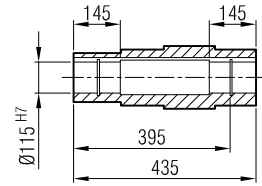
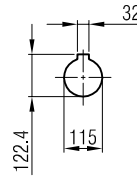
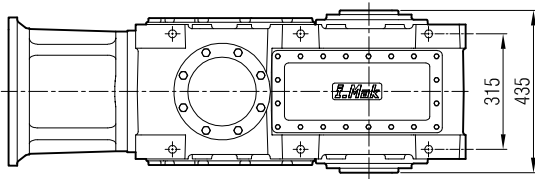
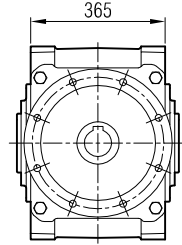
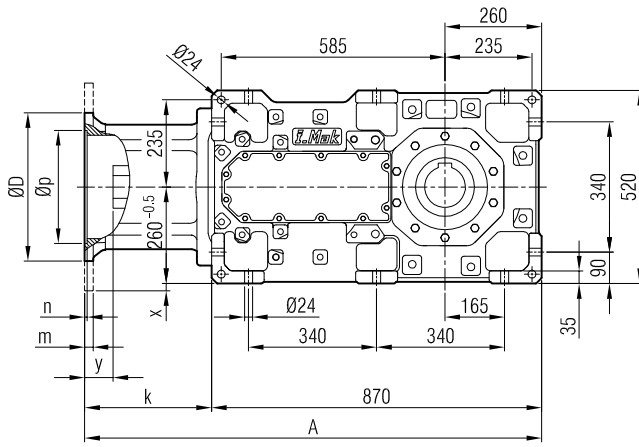
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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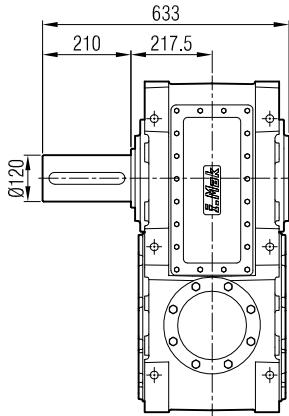
MKP 704-G09



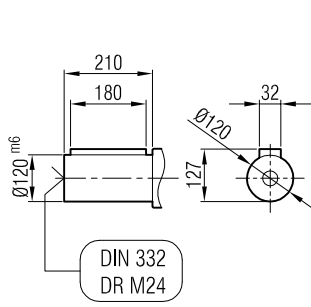
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
100/B5	1178	180	215	250	M12	314	15	5	28	31.3	8	-	30
112/B5	1178	180	215	250	M12	314	15	5	28	31.3	8	-	30
132/B5	1198	230	265	300	M12	334	18	6	38	41.3	10	-	45
160/B5	1215	250	300	350	M14	345	20	6	42	45.3	12	-	70
180/B5	1215	250	300	350	M14	345	20	6	48	51.8	14	-	60
200/B5	1215	300	350	400	M16	345	22	6	55	59.3	16	-	60



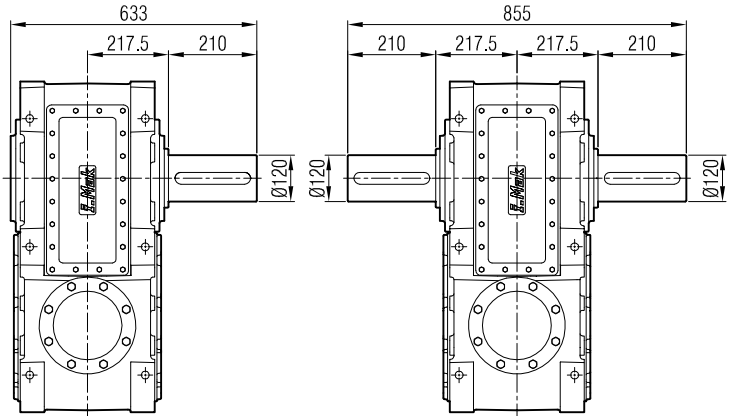
MA / MK 70_
...-SL



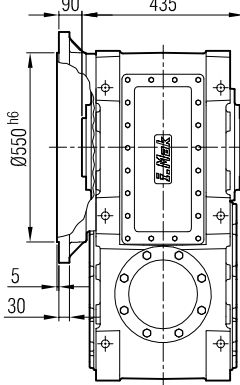
...-SR



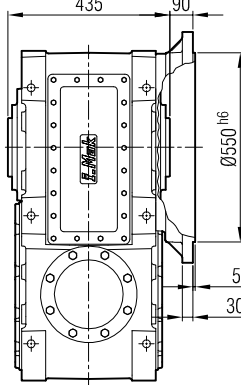
...-SD



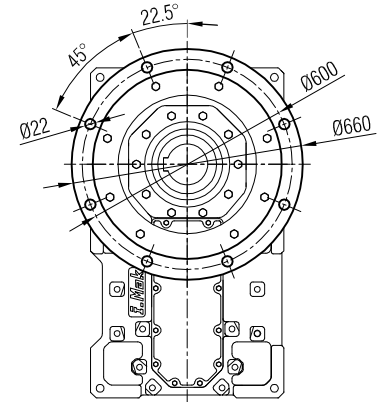
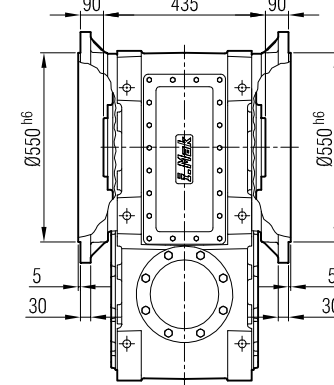
...-FL



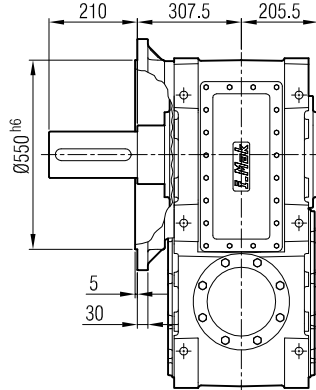
...-FR



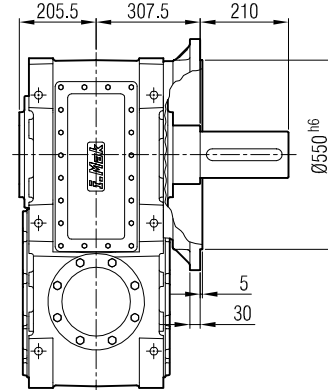
...-FD



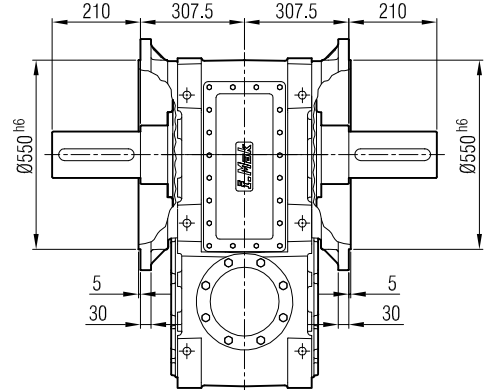
...-FL-SL



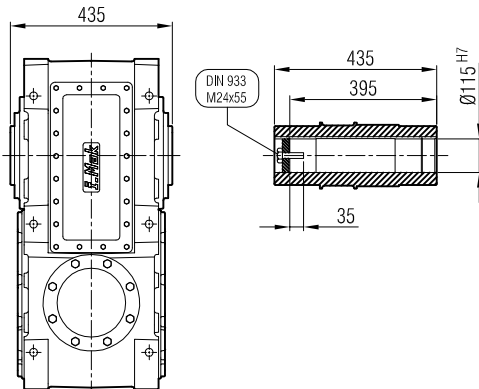
...-FR-SR



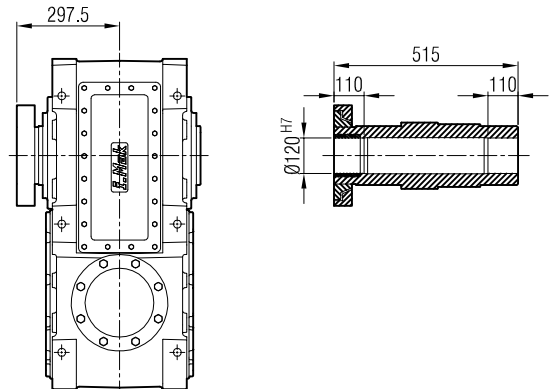
...-FD-SD



...-H



...-SDL / SDR



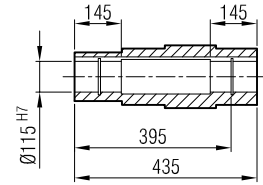
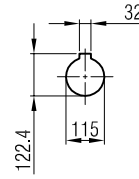
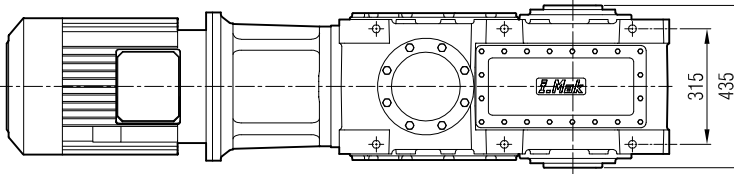
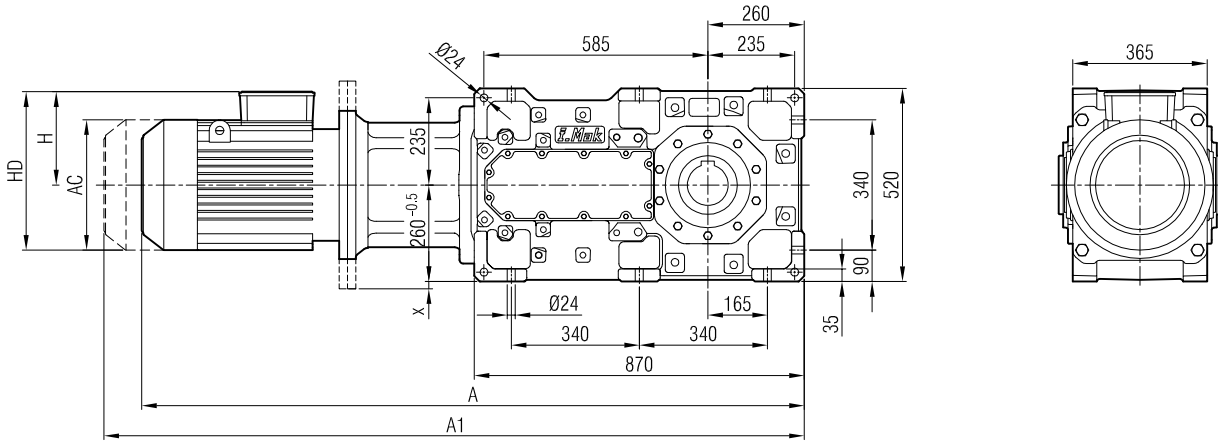
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5
A	1518	1522	1599	1640	1735	1780	1856	1856	1924
A1	1596	1605	1699	1740	1850	1895	1976	1976	2044
H	161	170	193	193	240	240	260	260	300
HD	261	282	325	325	400	400	440	440	500
AC	195	220	262	262	315	315	357	357	394
x	-	-	-	-	-	-	-	-	-

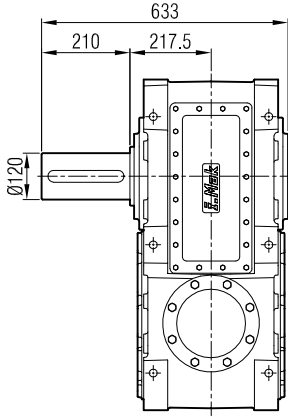
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

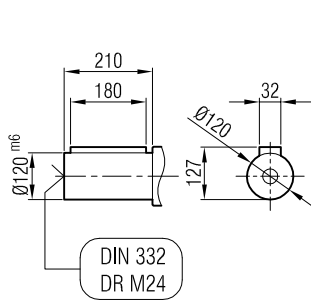
Le dimensions "A1" correspond aux moteurs équipés de freins.



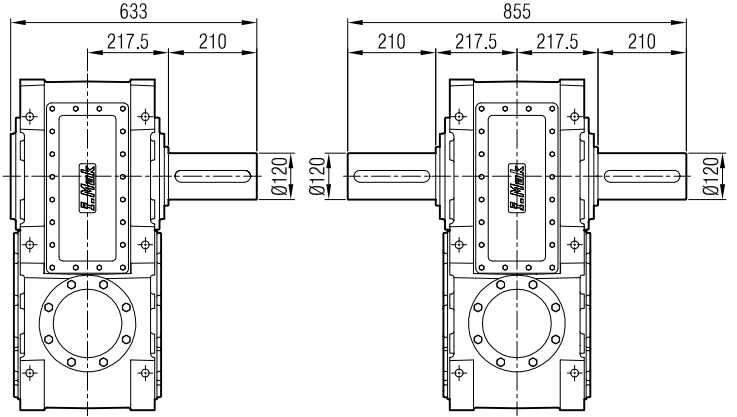
MA / MK 70_
...-SL



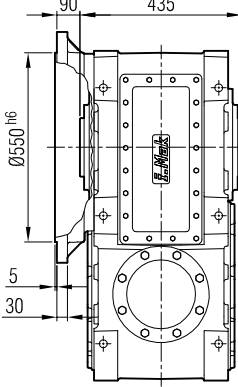
...-SR



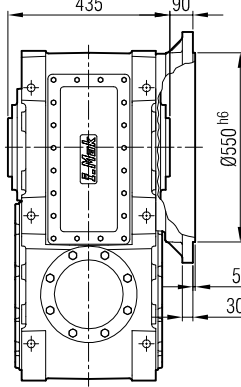
...-SD



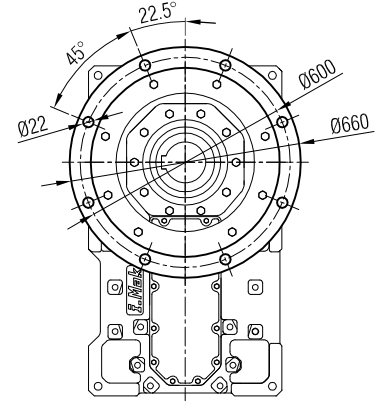
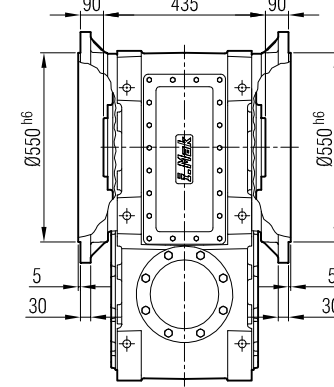
...-FL



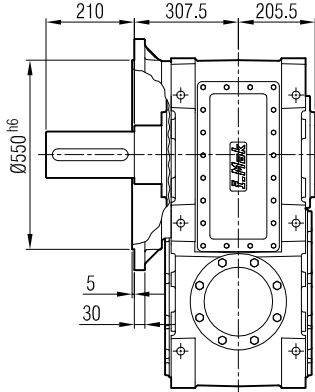
...-FR



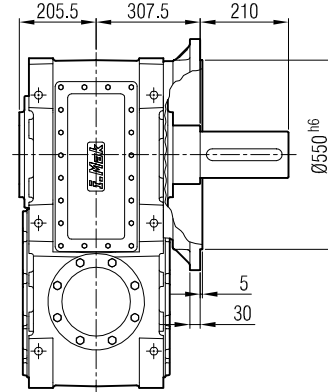
...-FD



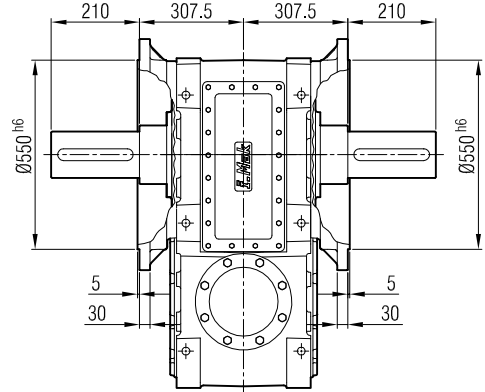
...-FL-SL



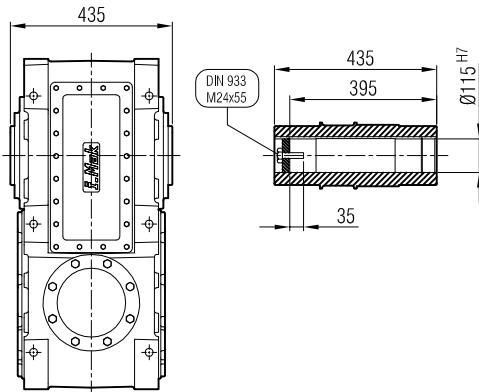
...-FR-SR



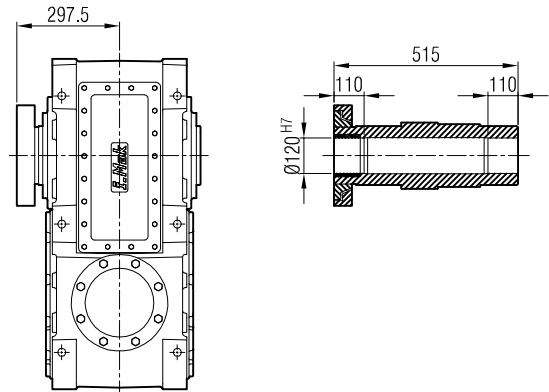
...-FD-SD



...-H



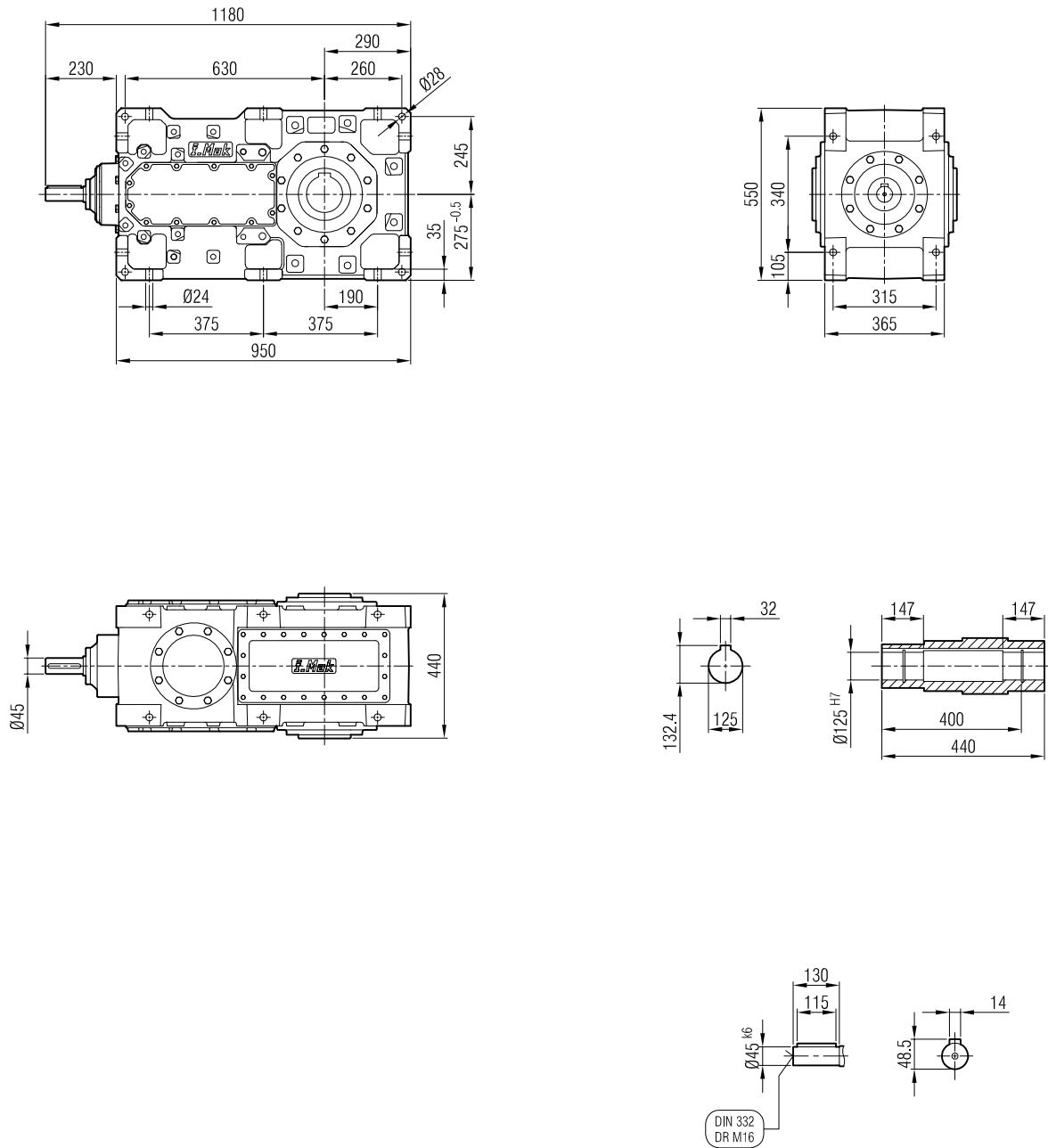
...-SDL / SDR



Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

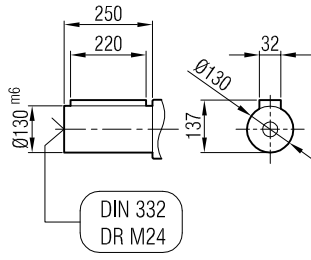
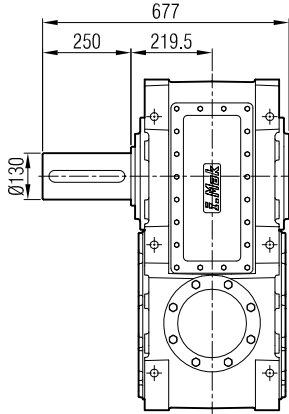
There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

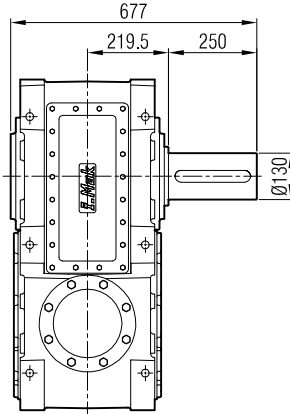
**MK 803-G07**



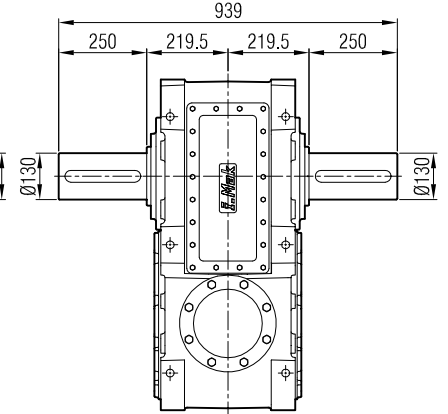
MA / MK 80_
...-SL



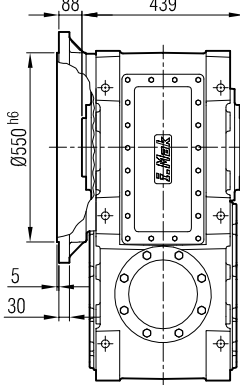
...-SR



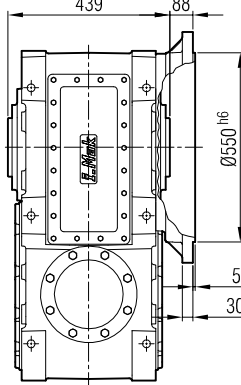
...-SD



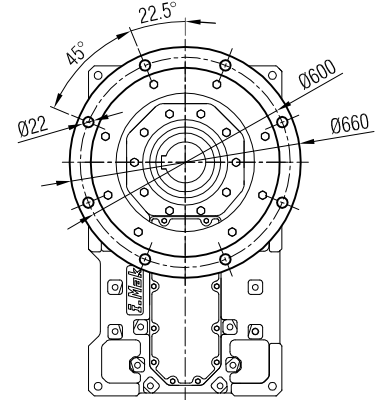
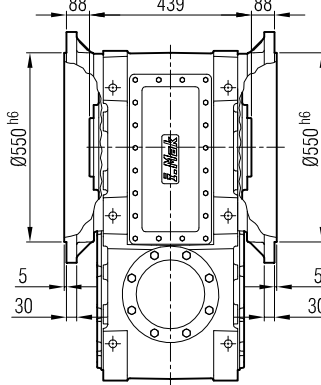
...-FL



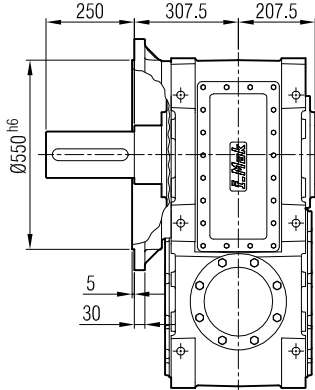
...-FR



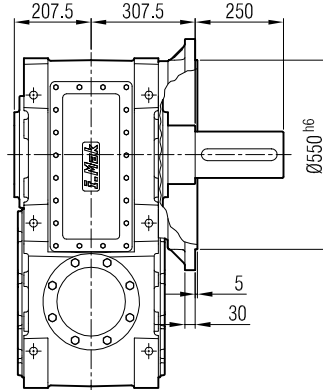
...-FD



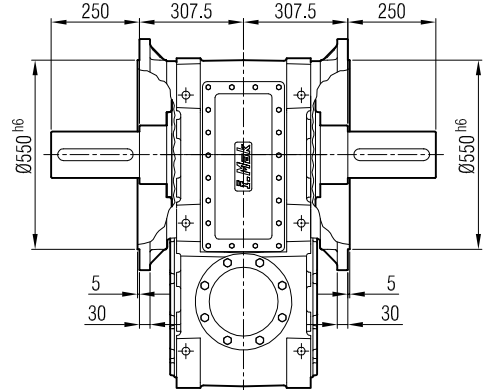
...-FL-SL



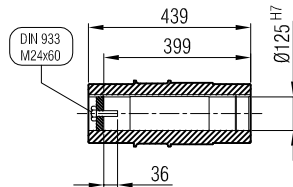
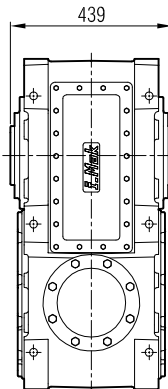
...-FR-SR



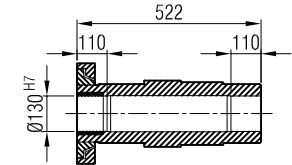
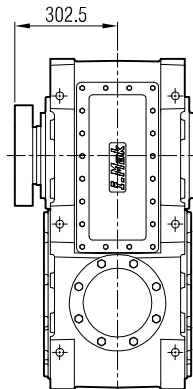
...-FD-SD



...-H



...-SDL / SDR



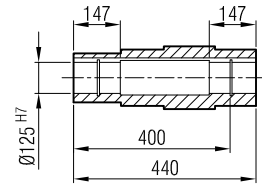
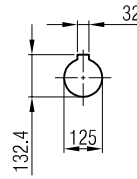
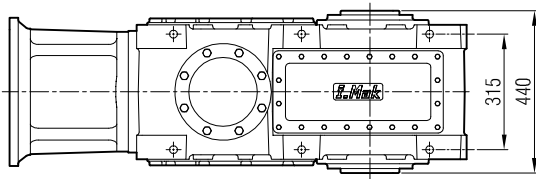
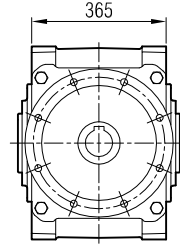
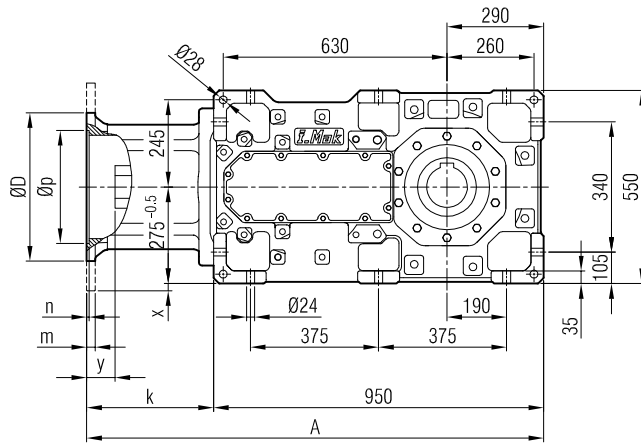
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

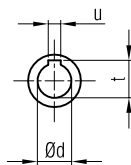
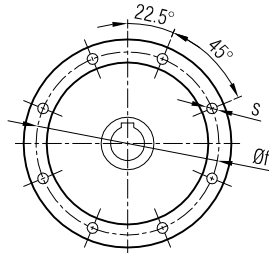
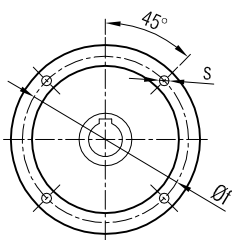


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≤ 200 B5 **Tip/Type/Typ**

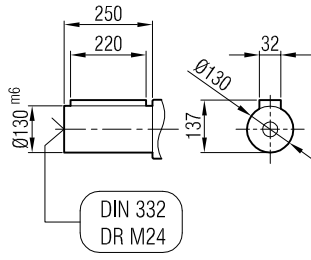
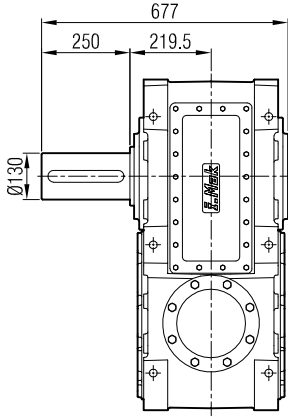
≥ 225 B5 **Tip/Type/Typ**



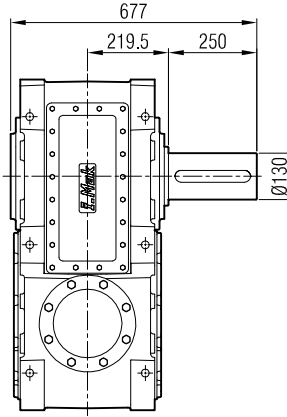
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	1275	250	300	350	M14	345	20	6	42	45.3	12	-	48
180/B5	1275	250	300	350	M14	345	20	6	48	51.8	14	-	48
200/B5	1275	300	350	400	M16	345	22	6	55	59.3	16	-	48
225/B5	1318	350	400	450	M16	388	22	6	60	64.4	18	-	80
250/B5	1318	450	500	550	M16	388	25	6.5	65	69.4	18	0	75
280/B5	1318	450	500	550	M16	388	25	6.5	75	75.9	20	0	65



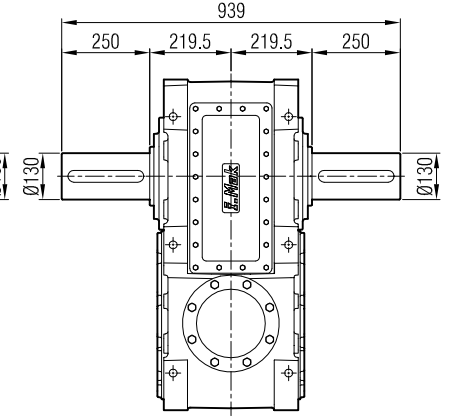
MA / MK 80_
...-SL



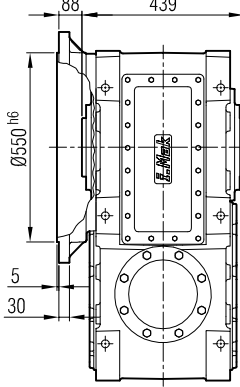
...-SR



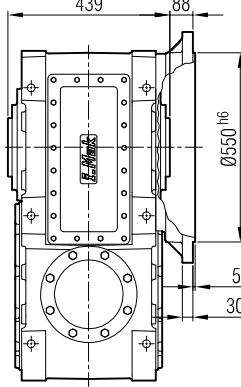
...-SD



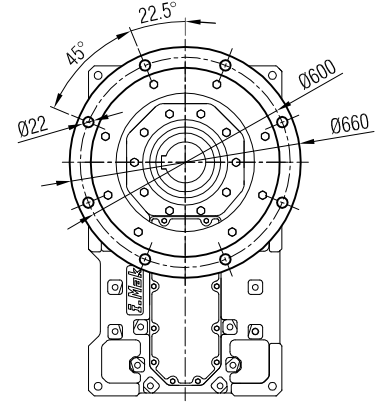
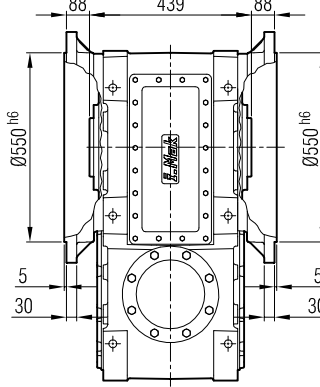
...-FL



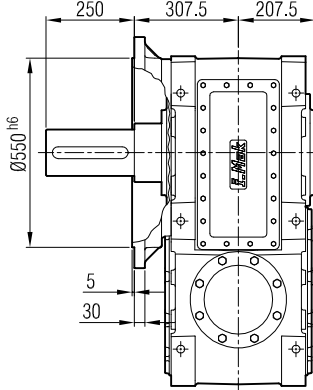
...-FR



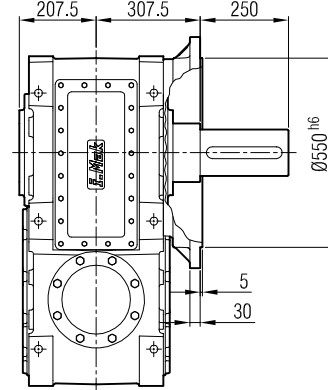
...-FD



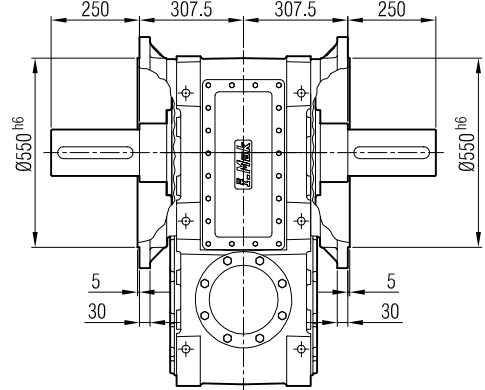
...-FL-SL



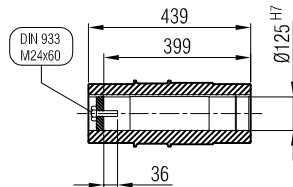
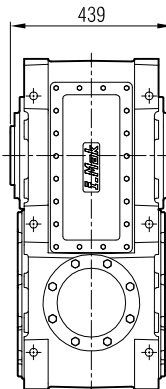
...-FR-SR



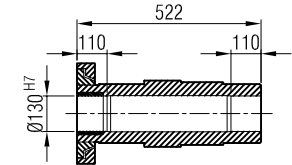
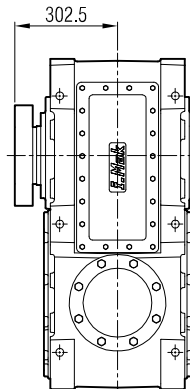
...-FD-SD



...-H



...-SDL / SDR



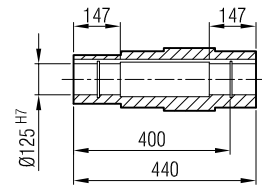
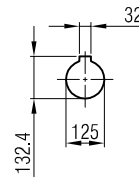
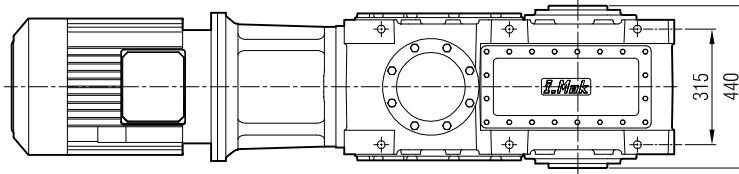
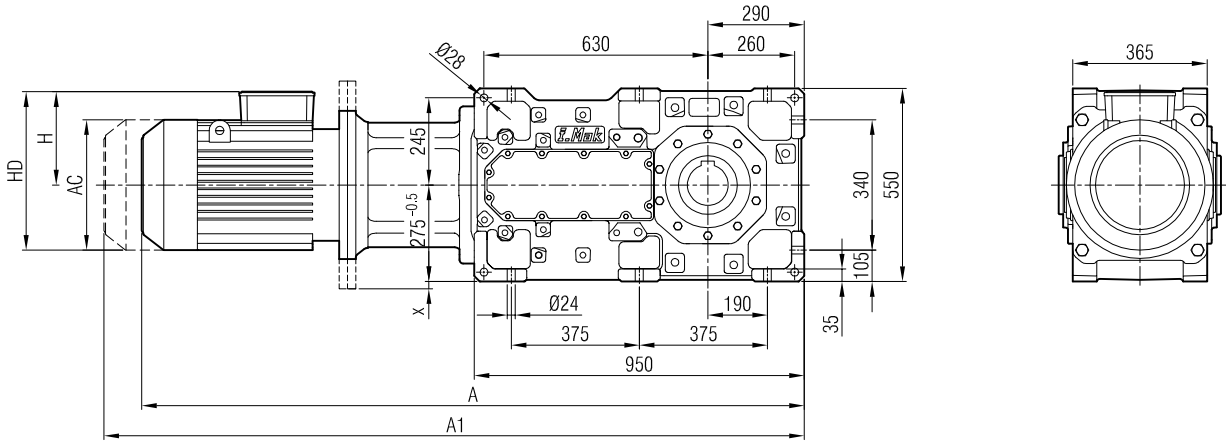
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MKM 803-G09



	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5
A	1840	1916	1916	1984	2003	2063	2113	2203	2203
A1	1955	2036	2036	2104	2123	2183	2233	2323	2403
H	240	260	260	300	313	313	366	398	398
HD	400	440	440	500	538	538	618	678	678
AC	315	357	357	394	456	456	489	548	548
x	-	-	-	-	-	-	0	0	0

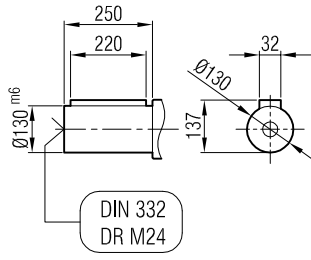
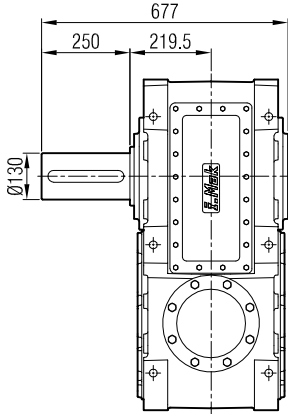
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

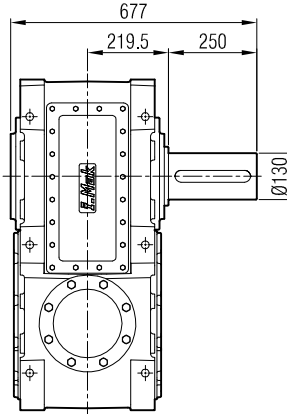
Le dimensions "A1" correspond aux moteurs équipés de freins.



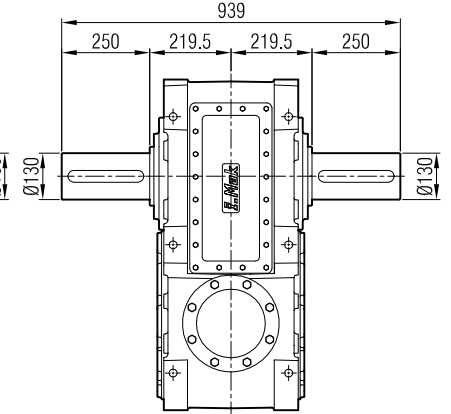
MA / MK 80_
...-SL



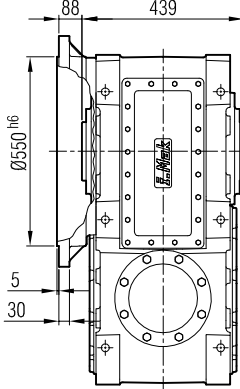
...-SR



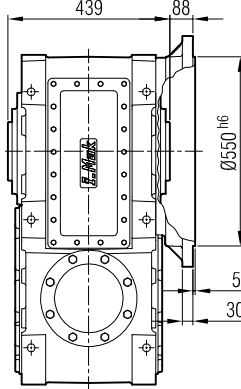
...-SD



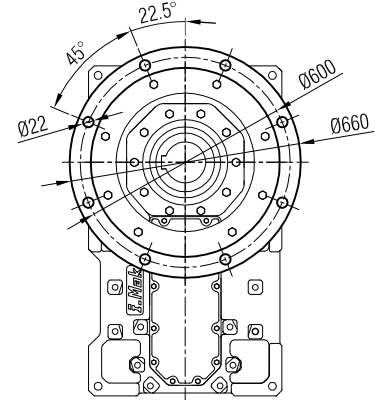
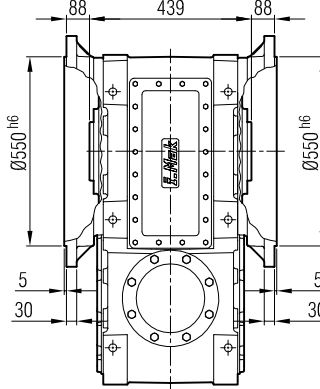
...-FL



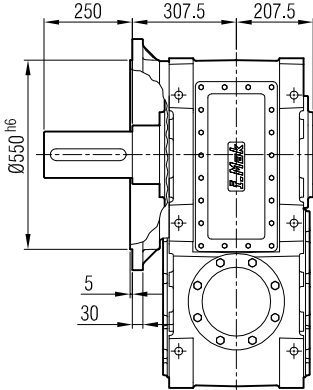
...-FR



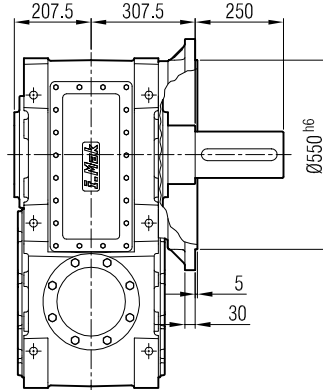
...-FD



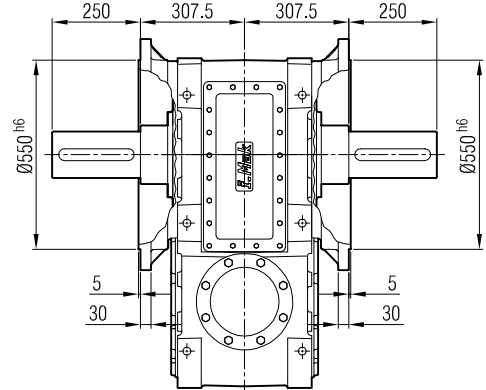
...-FL-SL



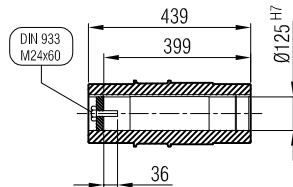
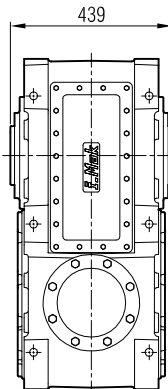
...-FR-SR



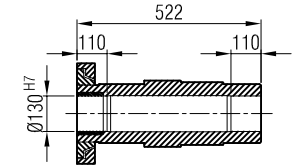
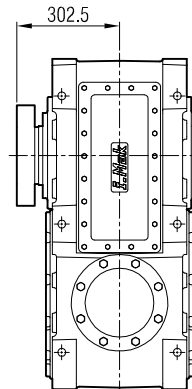
...-FD-SD



...-H



...-SDL / SDR



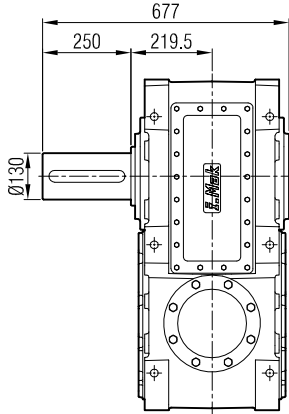
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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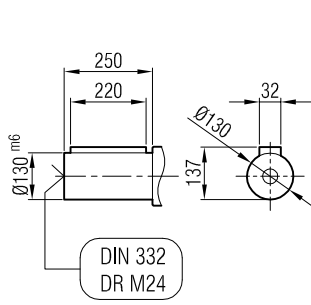
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



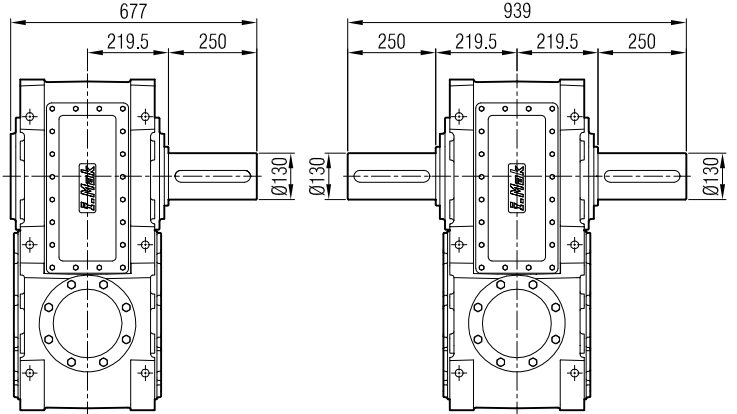
MA / MK 80_
...-SL



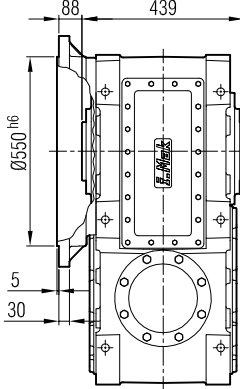
...-SR



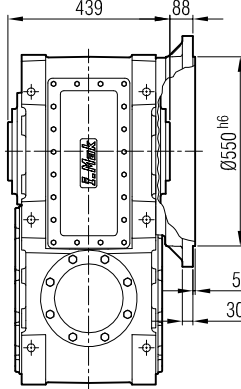
...-SD



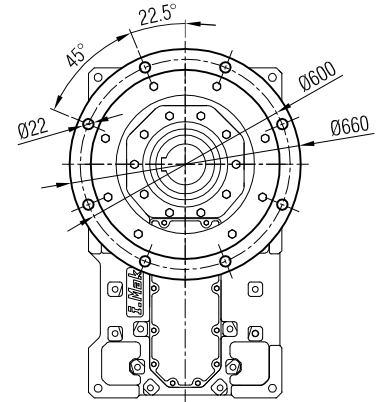
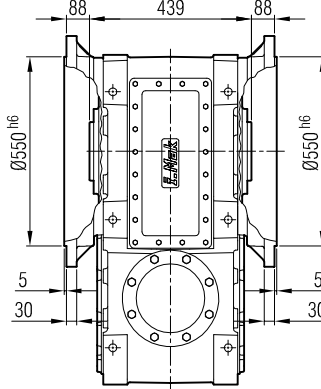
...-FL



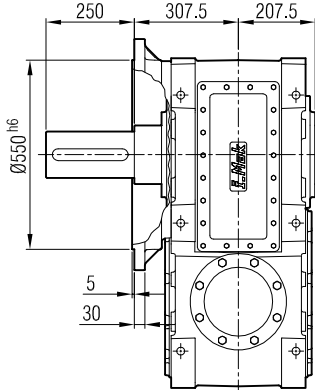
...-FR



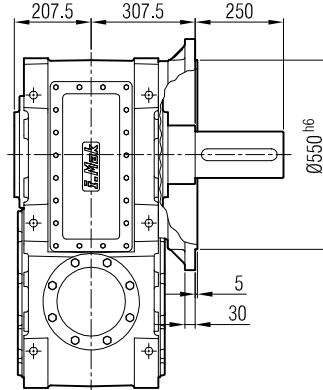
...-FD



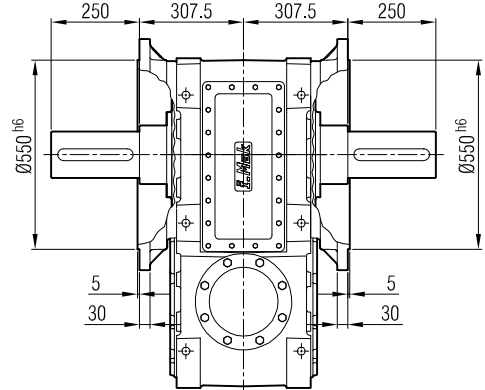
...-FL-SL



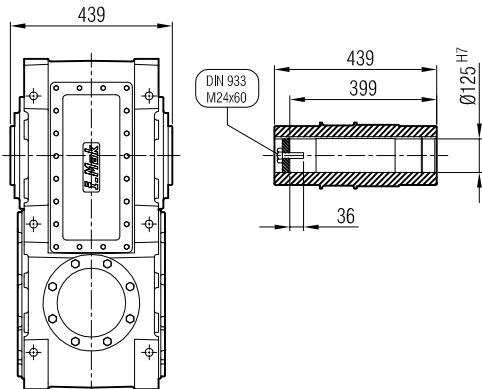
...-FR-SR



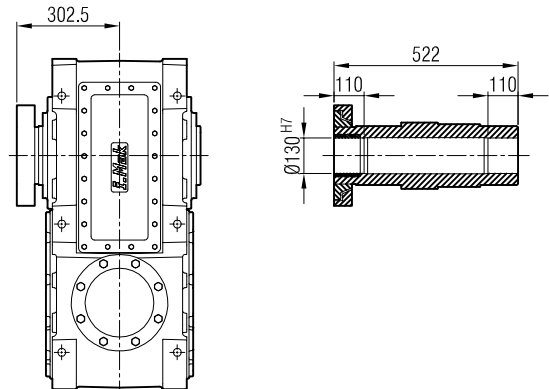
...-FD-SD



...-H



...-SDL / SDR



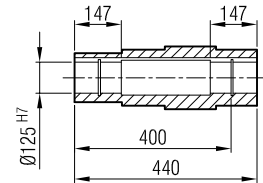
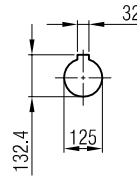
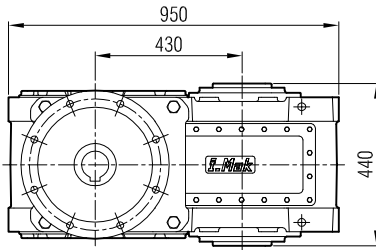
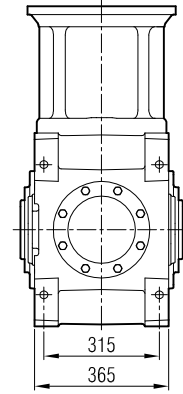
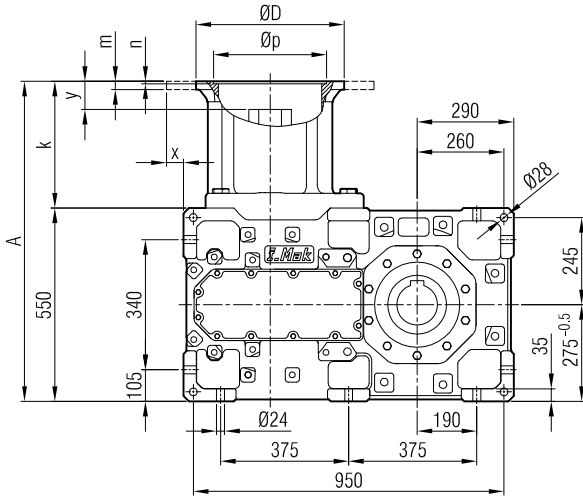
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

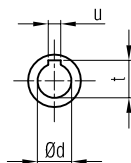
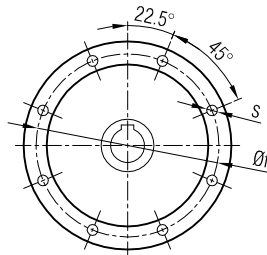
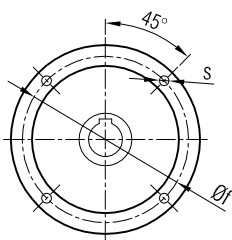


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≤ 200 B5 **Tip/Type/Typ**

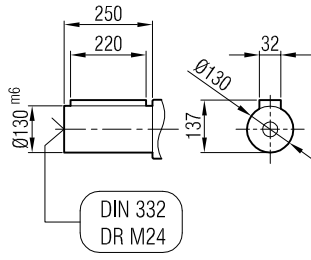
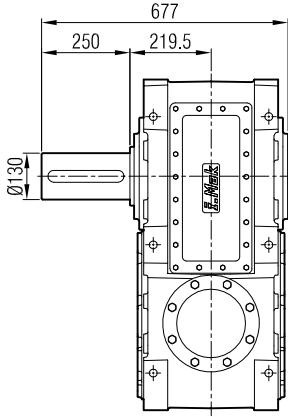
≥ 225 B5 **Tip/Type/Typ**



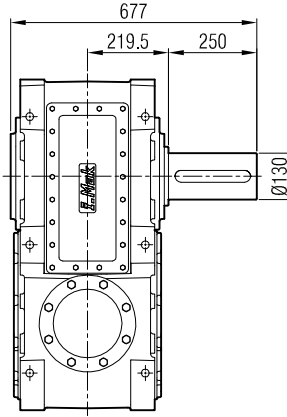
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
160/B5	850	250	300	350	M14	300	20	6	42	45.3	12	-	48
180/B5	850	250	300	350	M14	300	20	6	48	51.8	14	-	48
200/B5	850	300	350	400	M16	300	22	6	55	59.3	16	-	48
225/B5	893	350	400	450	M16	343	22	6	60	64.4	18	-	80
250/B5	893	450	500	550	M16	343	25	6.5	65	69.4	18	45	75
280/B5	893	450	500	550	M16	343	25	6.5	75	75.9	20	45	65



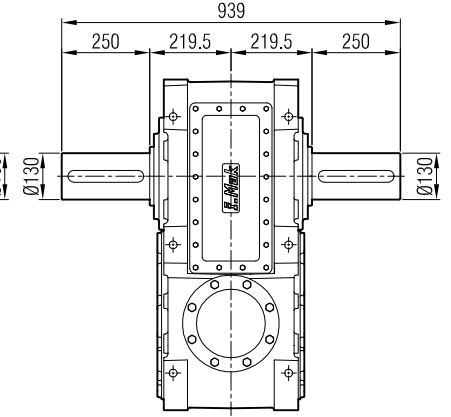
MA / MK 80_
...-SL



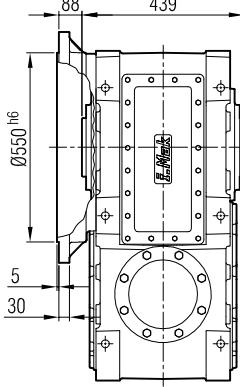
...-SR



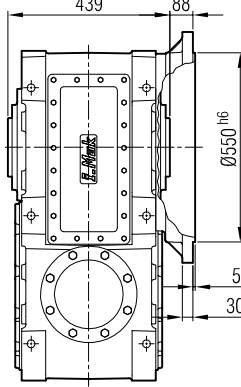
...-SD



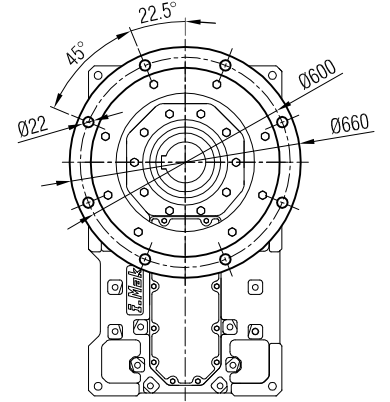
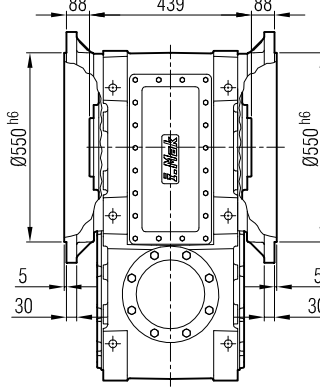
...-FL



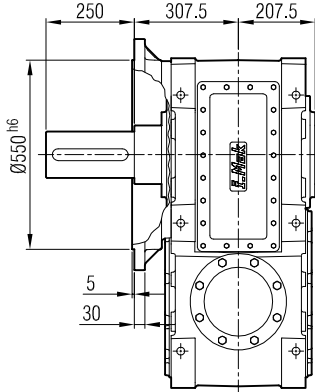
...-FR



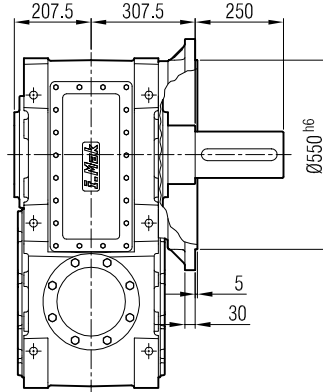
...-FD



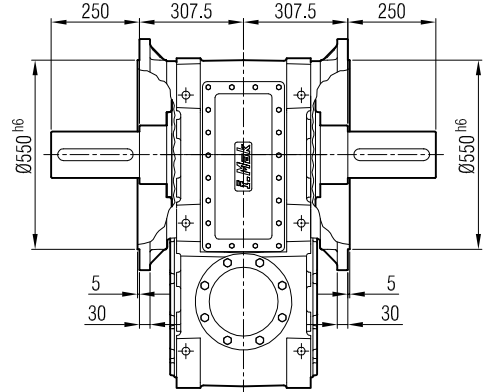
...-FL-SL



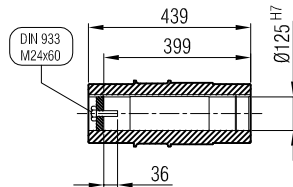
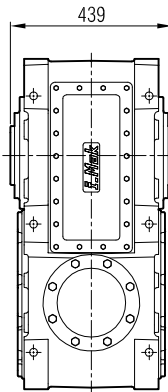
...-FR-SR



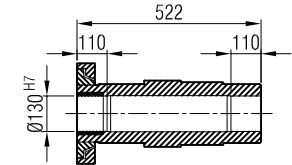
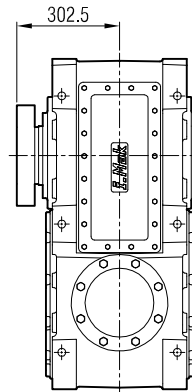
...-FD-SD



...-H



...-SDL / SDR



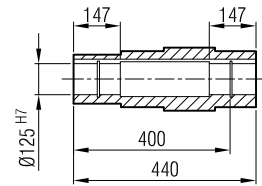
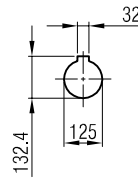
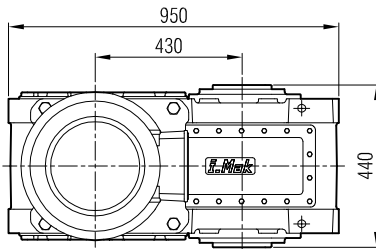
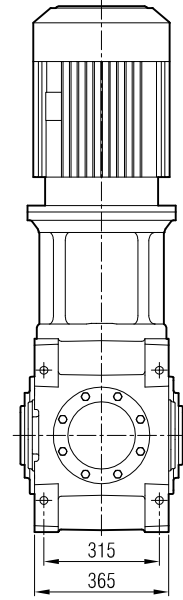
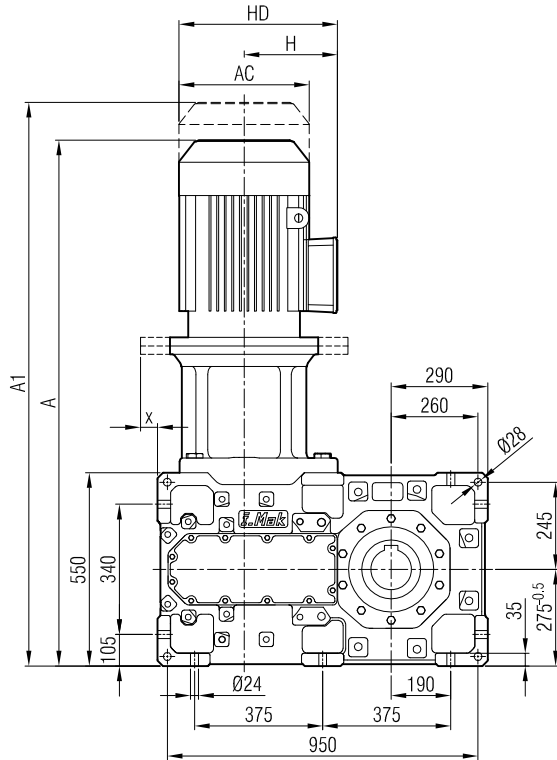
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MKM 803-G10



	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5
A	1415	1491	1491	1559	1578	1638	1688	1778	1778
A1	1530	1611	1611	1679	1698	1758	1808	1898	1978
H	240	260	260	300	313	313	366	398	398
HD	400	440	440	500	538	538	618	678	678
AC	315	357	357	394	456	456	489	548	548
x	-	-	-	-	-	-	45	45	45

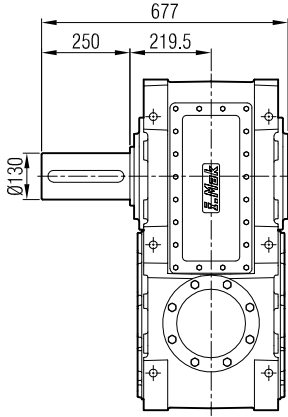
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

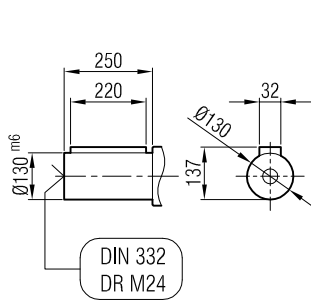
Le dimensions "A1" correspond aux moteurs équipés de freins.



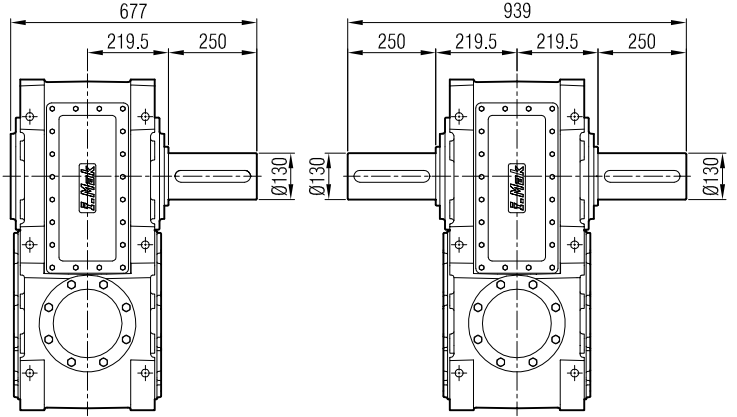
MA / MK 80_
...-SL



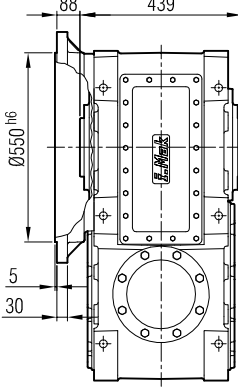
...-SR



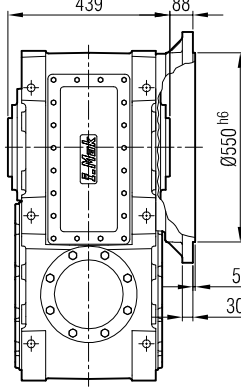
...-SD



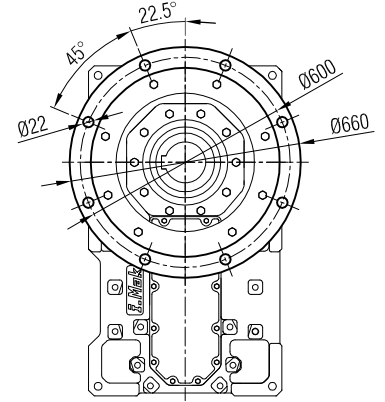
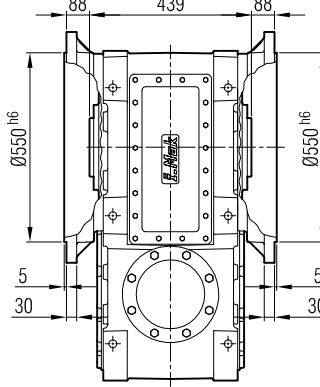
...-FL



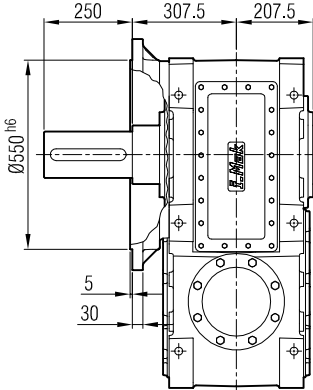
...-FR



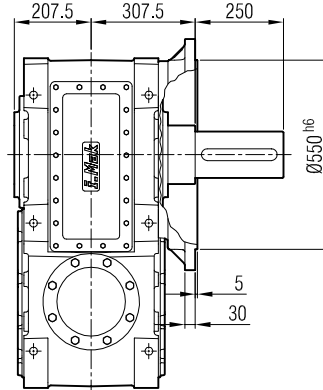
...-FD



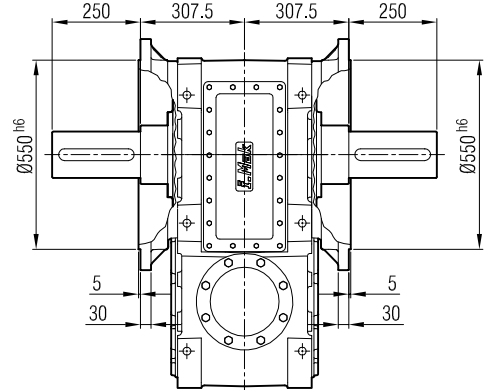
...-FL-SL



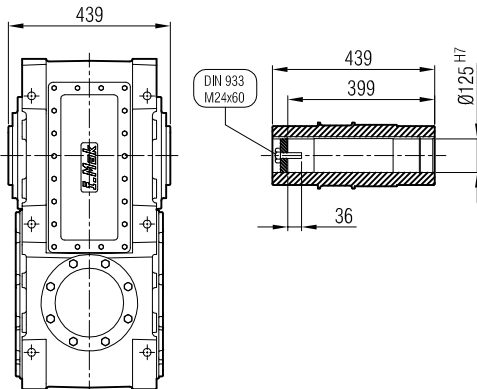
...-FR-SR



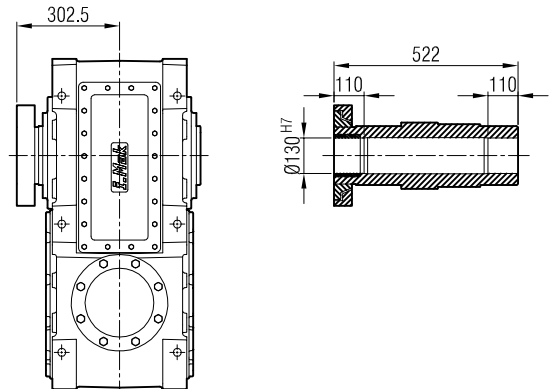
...-FD-SD



...-H



...-SDL / SDR



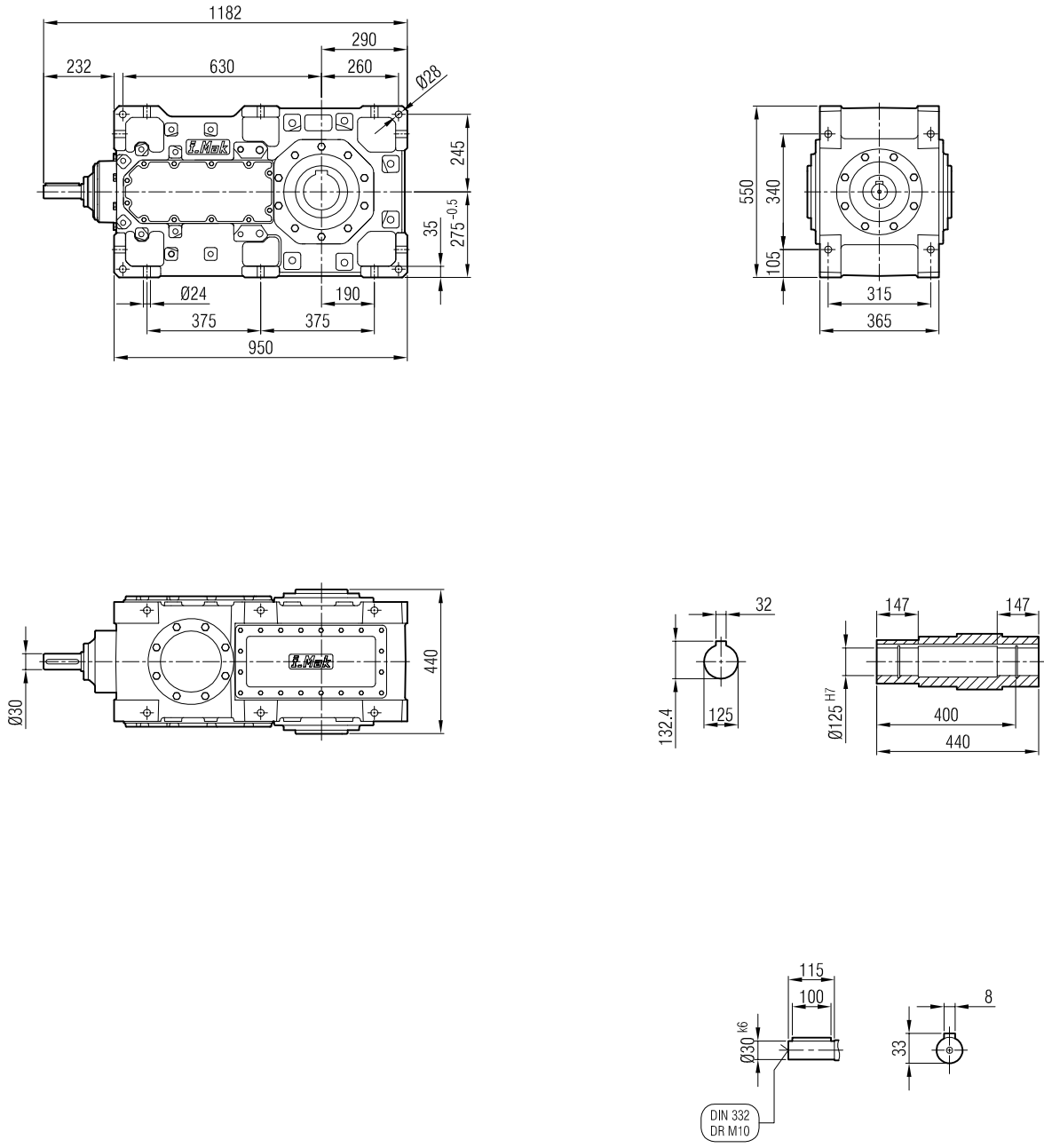
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

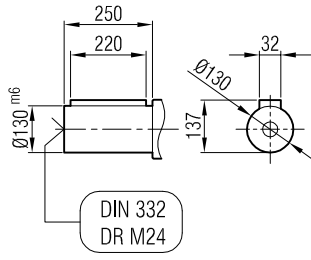
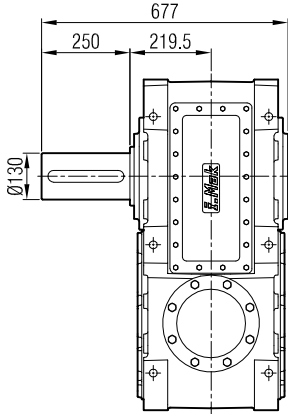


MK 804-G07

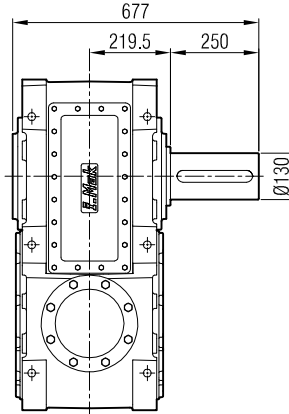




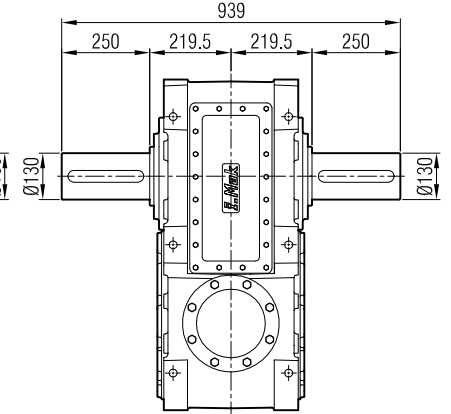
MA / MK 80_
...-SL



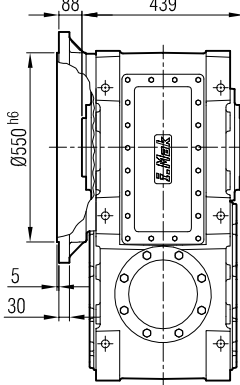
...-SR



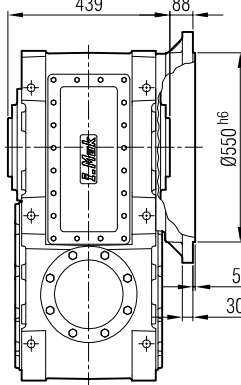
...-SD



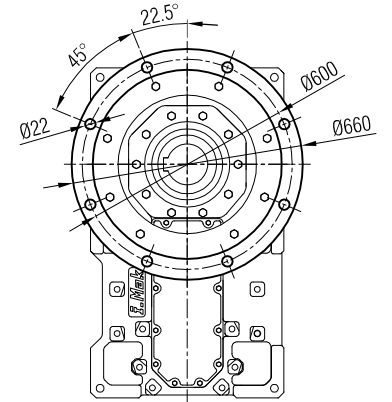
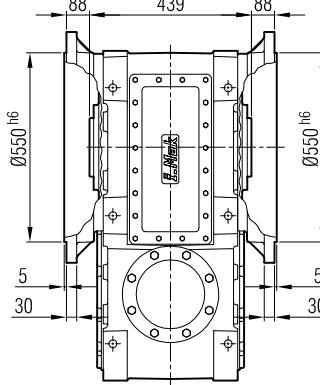
...-FL



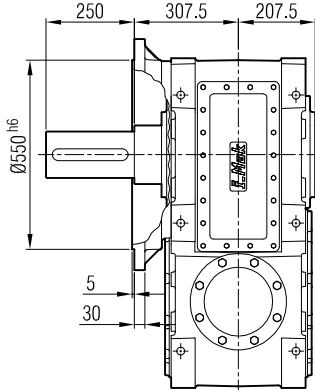
...-FR



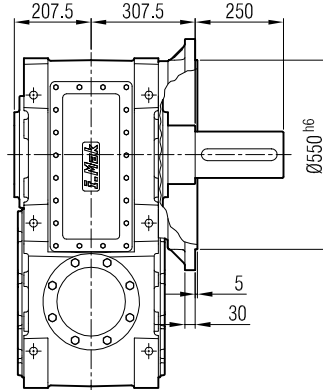
...-FD



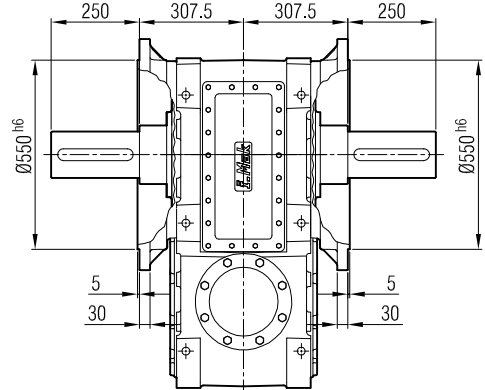
...-FL-SL



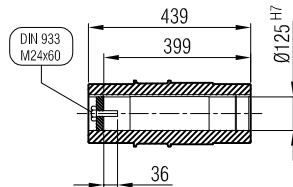
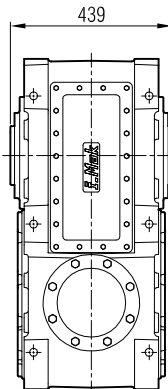
...-FR-SR



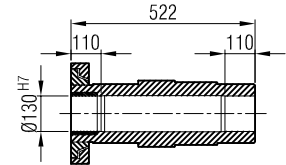
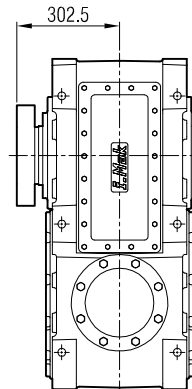
...-FD-SD



...-H



...-SDL / SDR



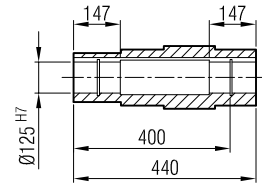
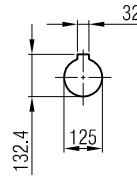
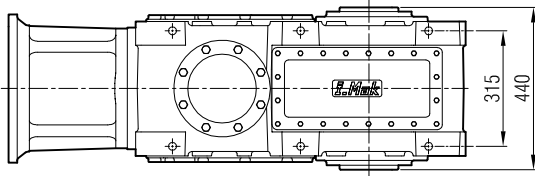
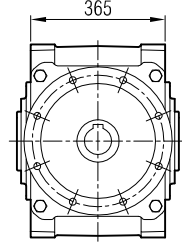
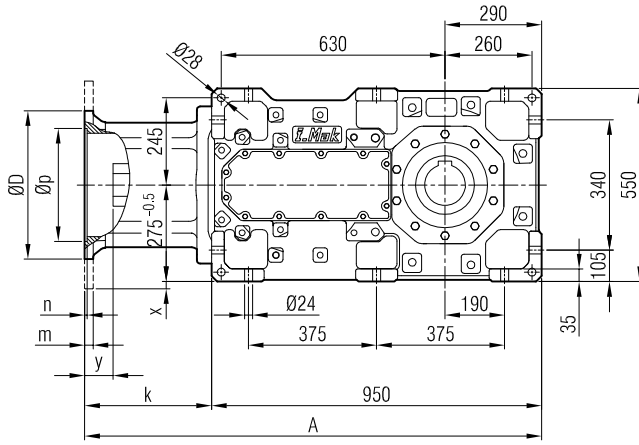
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

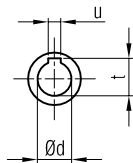
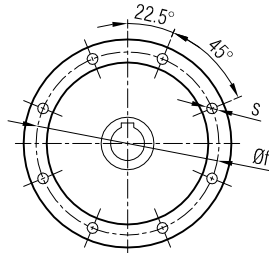
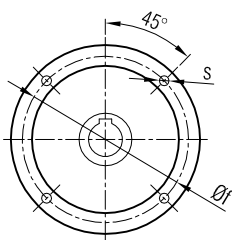


MKP 804-G09



≤ 200 B5 Tip/Type/Typ

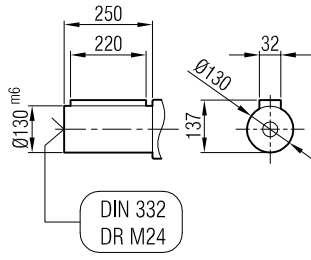
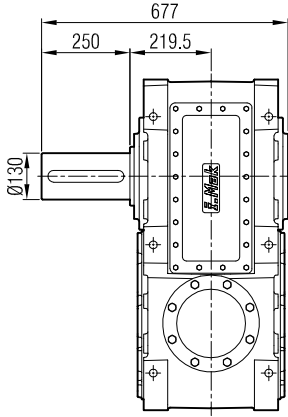
≥ 225 B5 Tip/Type/Typ



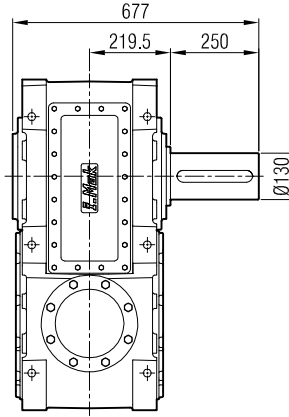
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
100/B5	1238	180	215	250	M12	314	15	5	28	31.3	8	-	30
112/B5	1238	180	215	250	M12	314	15	5	28	31.3	8	-	30
132/B5	1258	230	265	300	M12	334	18	6	38	41.3	10	-	45
160/B5	1275	250	300	350	M14	345	20	6	42	45.3	12	-	70
180/B5	1275	250	300	350	M14	345	20	6	48	51.8	14	-	60
200/B5	1275	300	350	400	M16	345	22	6	55	59.3	16	-	60
225/B5	1318	350	400	450	M16	388	22	6	60	64.4	18	-	80



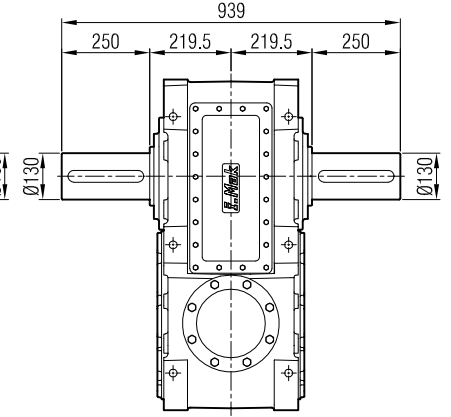
MA / MK 80_
...-SL



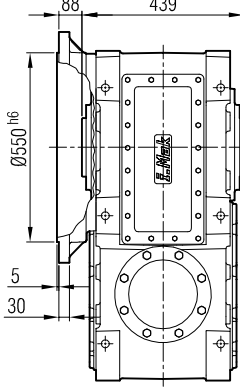
...-SR



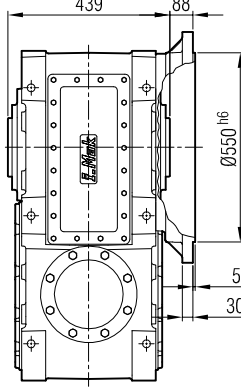
...-SD



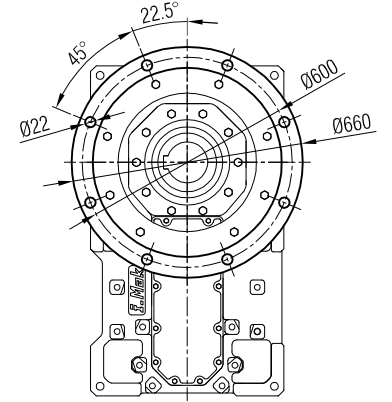
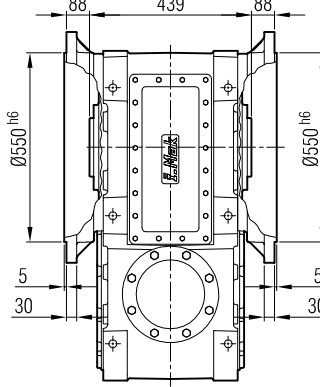
...-FL



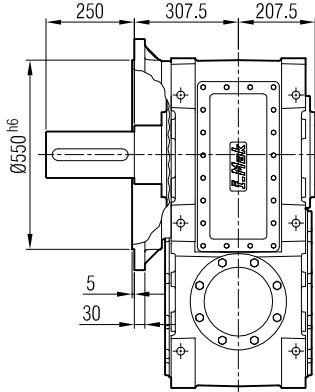
...-FR



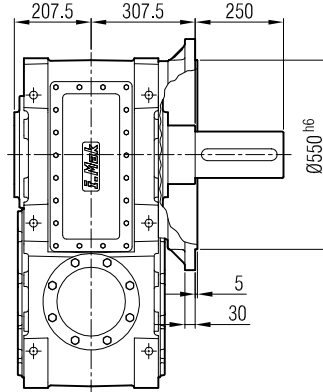
...-FD



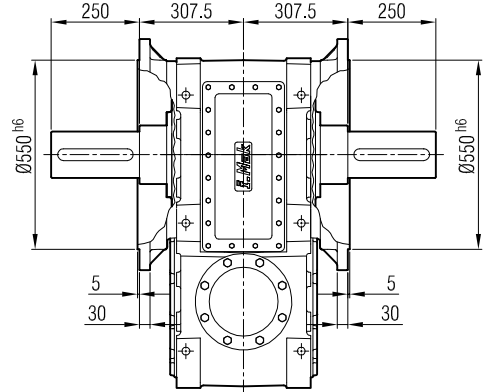
...-FL-SL



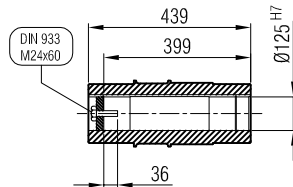
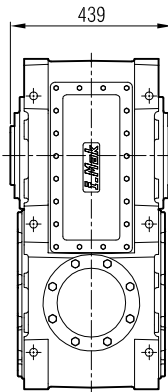
...-FR-SR



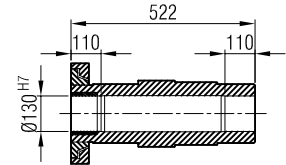
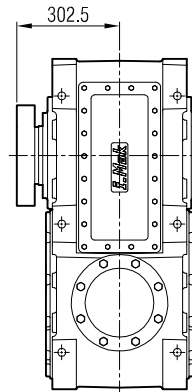
...-FD-SD



...-H



...-SDL / SDR



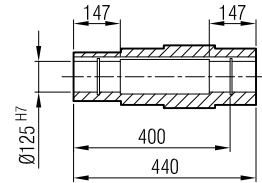
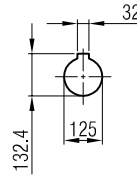
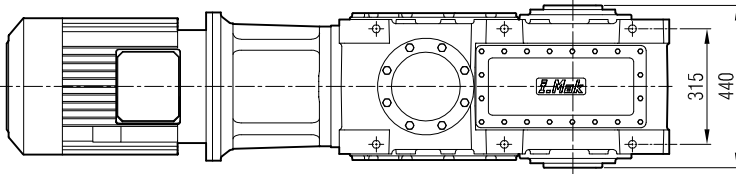
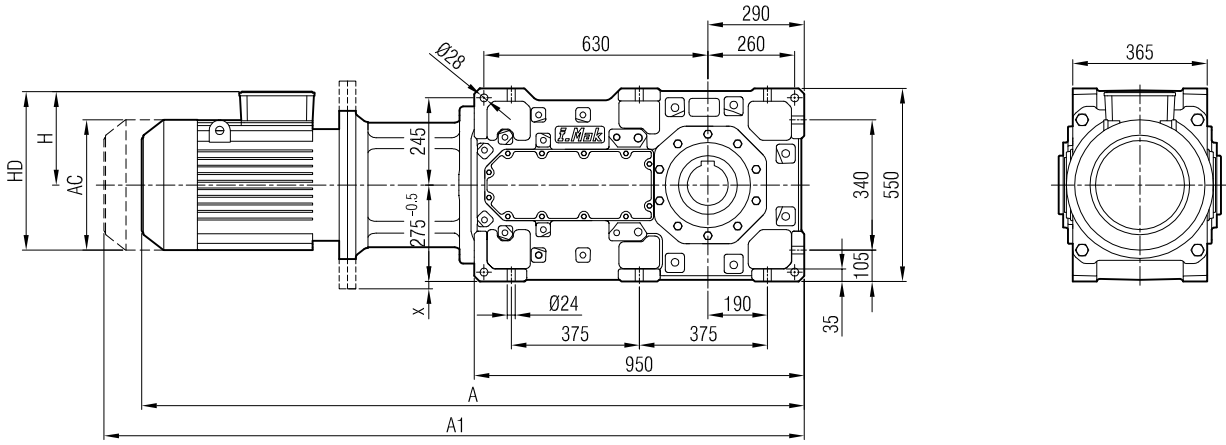
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	100 L/B5	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5
A	1578	1582	1659	1700	1795	1840	1916	1916	1984	2003
A1	1656	1665	1759	1800	1910	1955	2036	2036	2104	2123
H	161	170	193	193	240	240	260	260	300	313
HD	261	282	325	325	400	400	440	440	500	538
AC	195	220	262	262	315	315	357	357	394	456
x	-	-	-	-	-	-	-	-	-	-

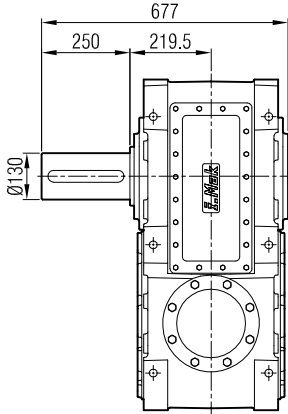
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

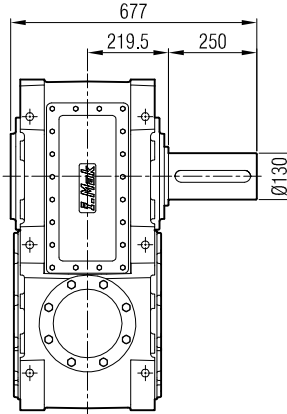
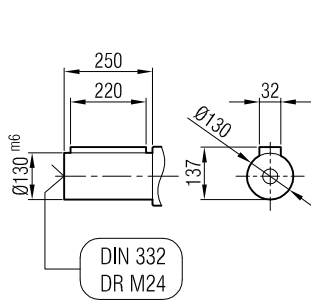
Le dimensions "A1" correspond aux moteurs équipés de freins.



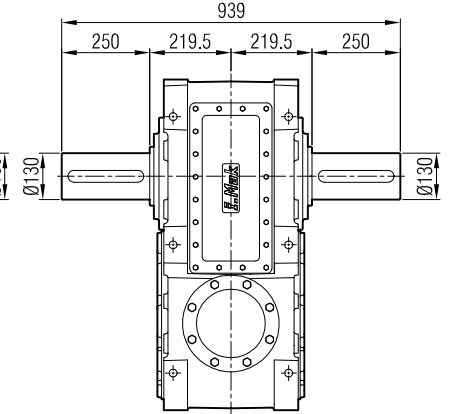
MA / MK 80_
...-SL



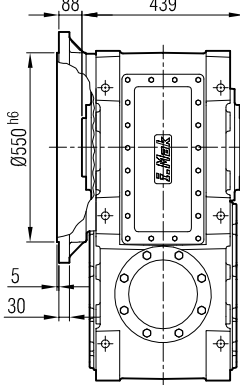
...-SR



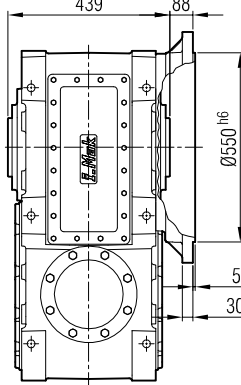
...-SD



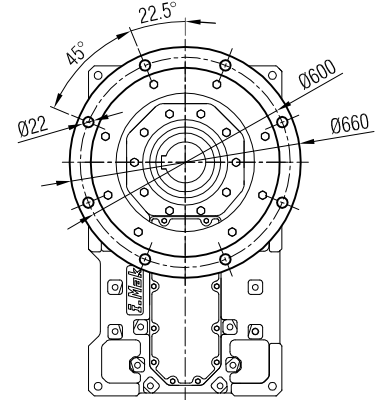
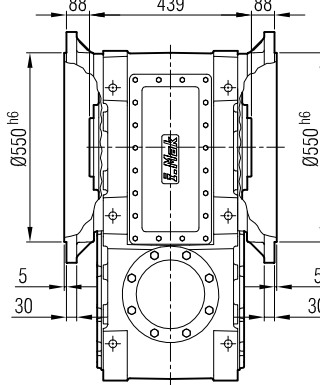
...-FL



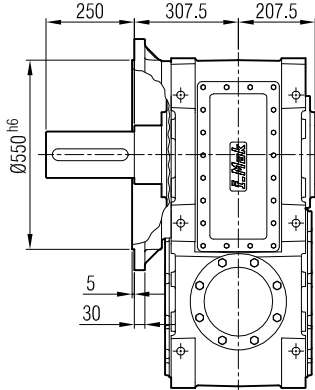
...-FR



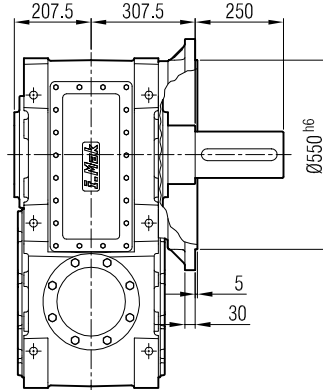
...-FD



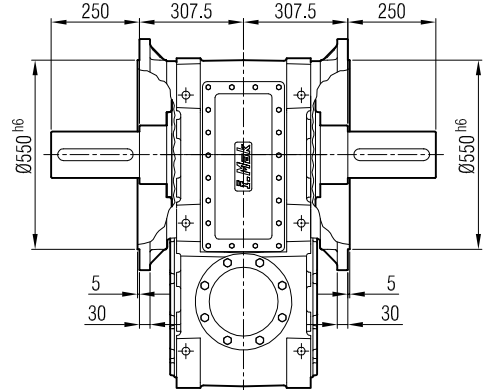
...-FL-SL



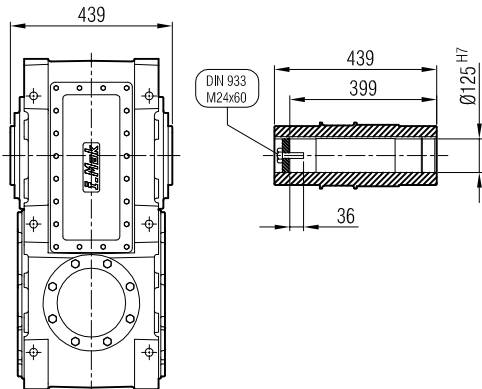
...-FR-SR



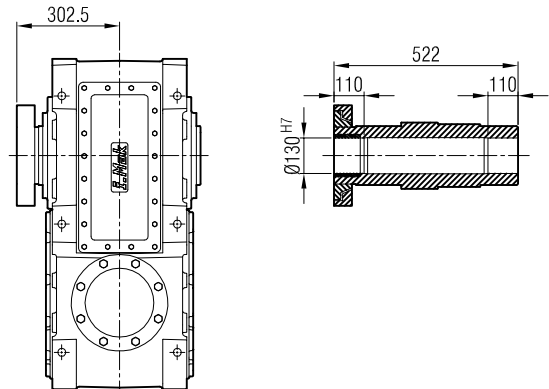
...-FD-SD



...-H



...-SDL / SDR



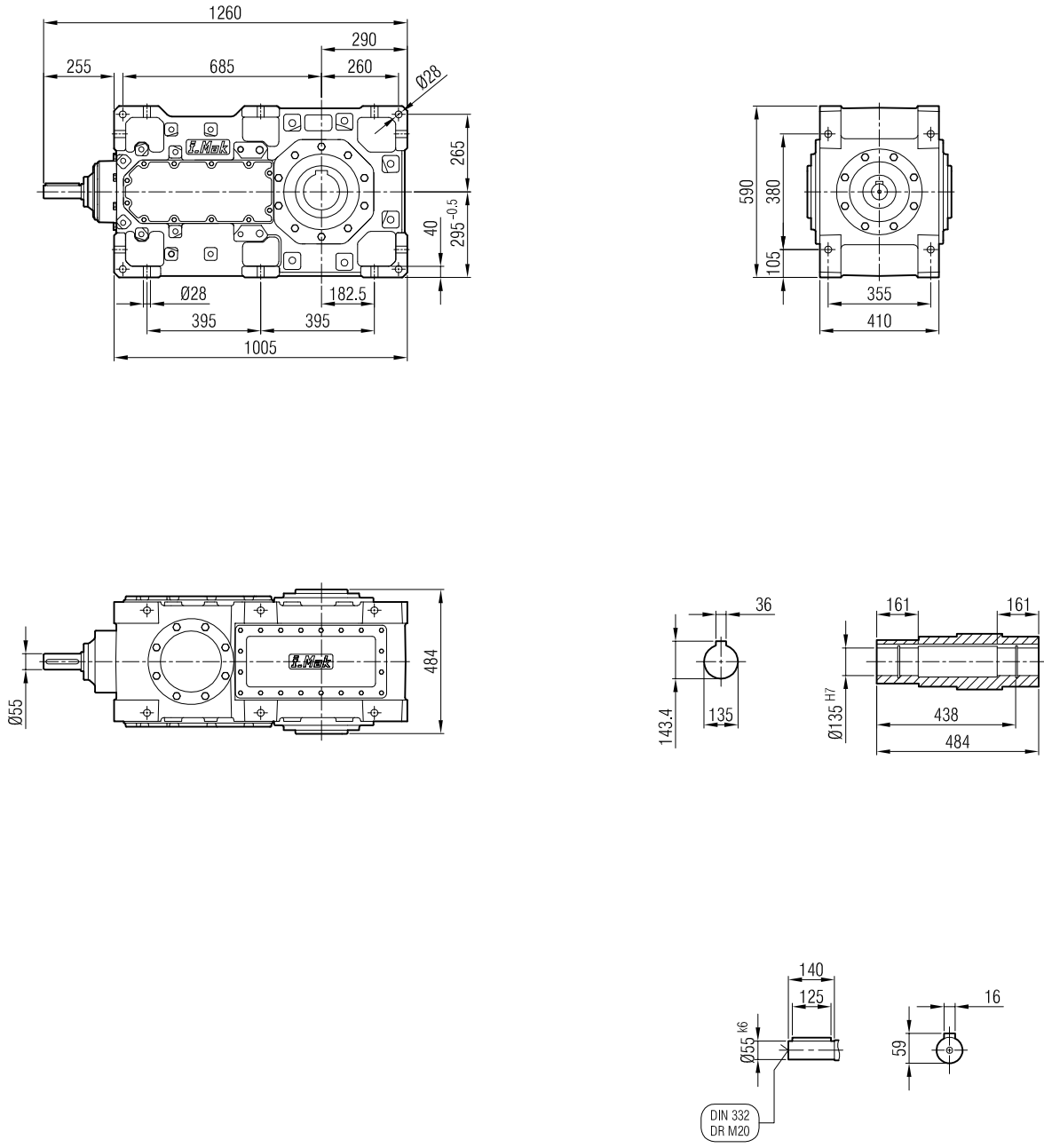
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

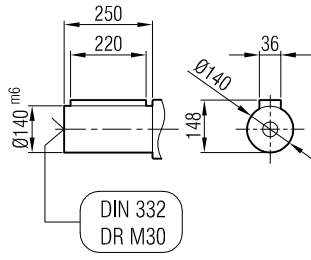
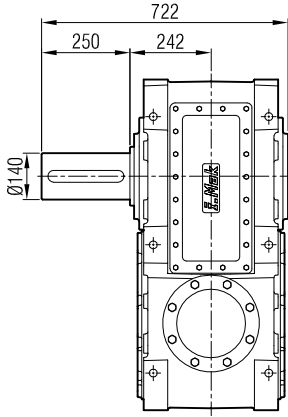


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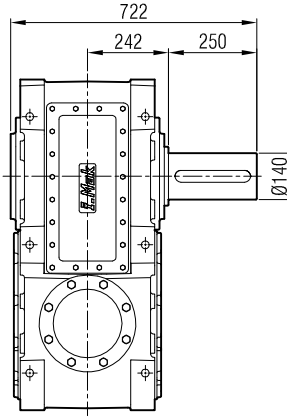




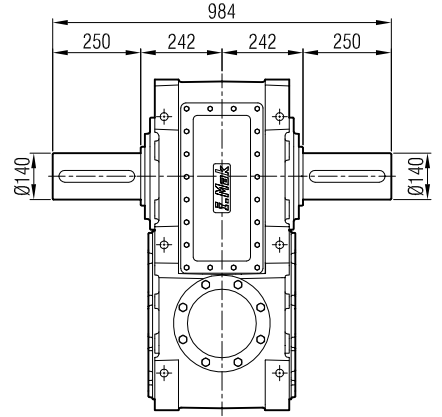
MA / MK 90_
...-SL



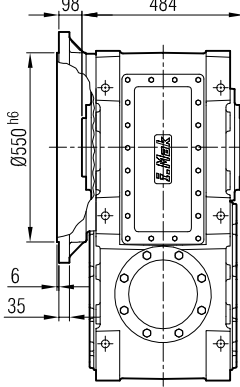
...-SR



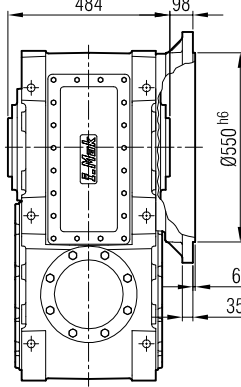
...-SD



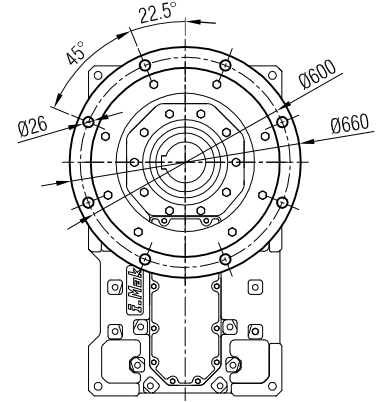
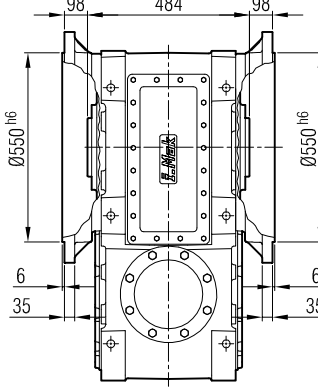
...-FL



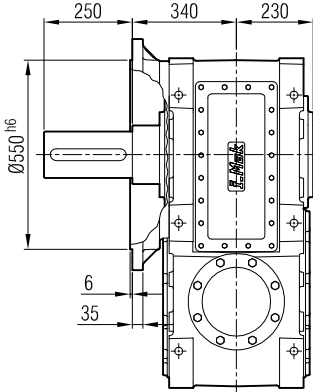
...-FR



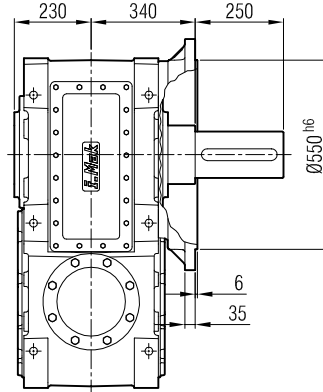
...-FD



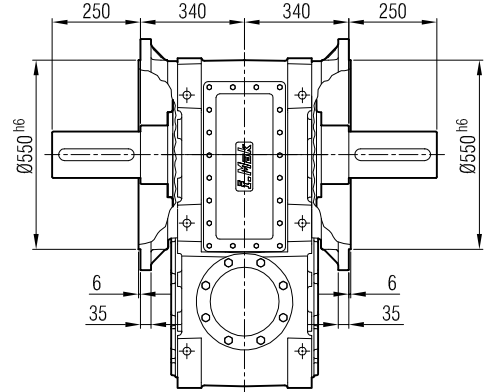
...-FL-SL



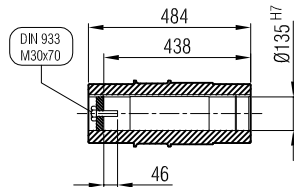
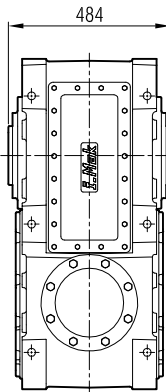
...-FR-SR



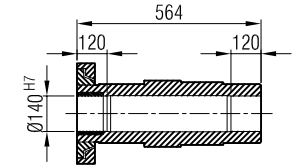
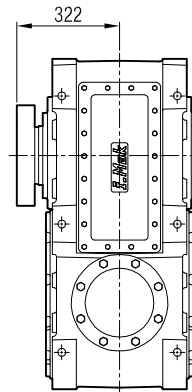
...-FD-SD



...-H



...-SDL / SDR



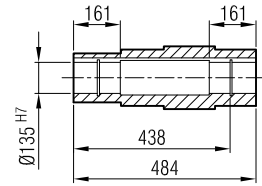
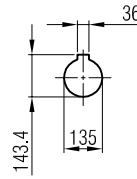
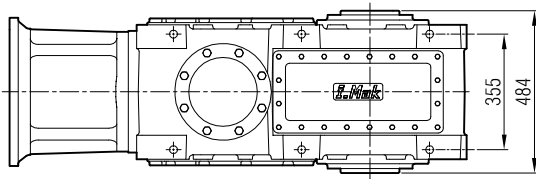
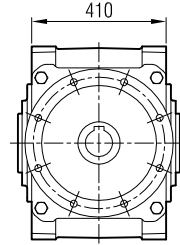
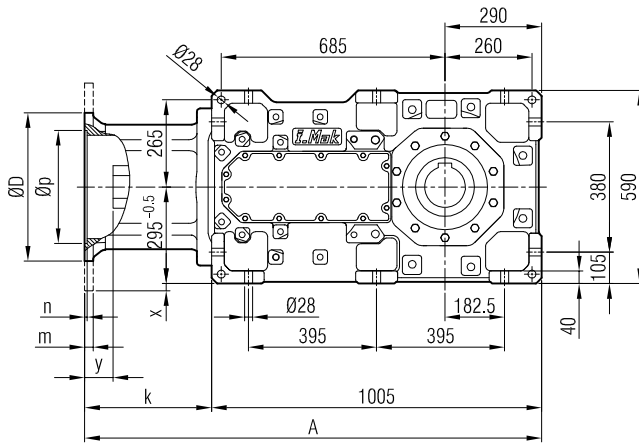
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

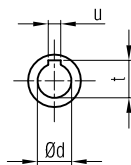
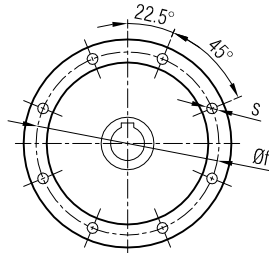
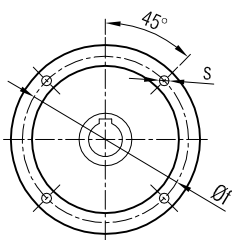


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≤ 200 B5 **Tip/Type/Typ**

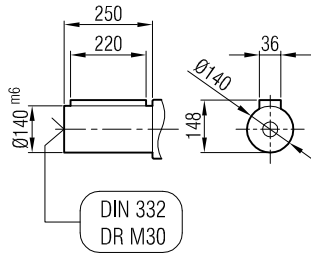
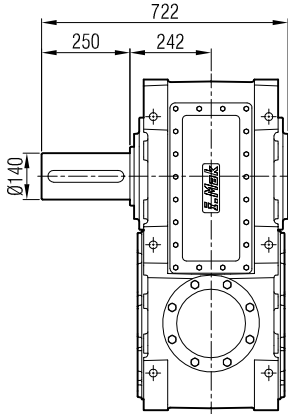
≥ 225 B5 **Tip/Type/Typ**



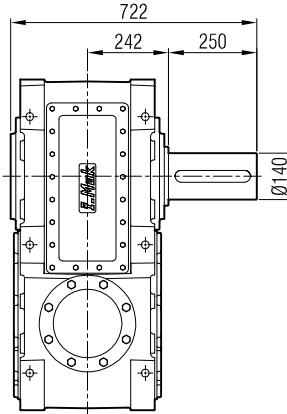
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
180/B5	1380	250	300	350	M14	370	20	6	48	51.8	14	-	38
200/B5	1380	300	350	400	M16	370	22	6	55	59.3	16	-	38
225/B5	1423	350	400	450	M16	413	22	6	60	64.4	18	-	75
250/B5	1423	450	500	550	M16	413	25	6.5	65	69.4	18	-	75
280/B5	1423	450	500	550	M16	413	25	6.5	75	75.9	20	-	65
315/B5	1453	550	600	660	M24	443	30	7	85	90.4	22	35	90



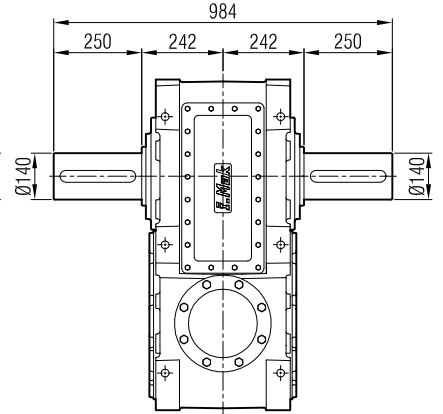
MA / MK 90_
...-SL



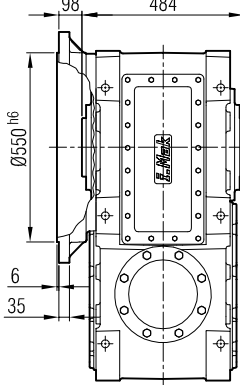
...-SR



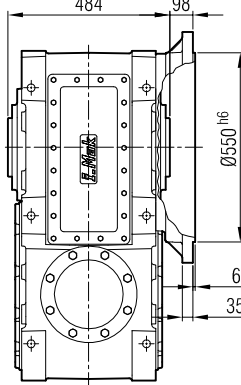
...-SD



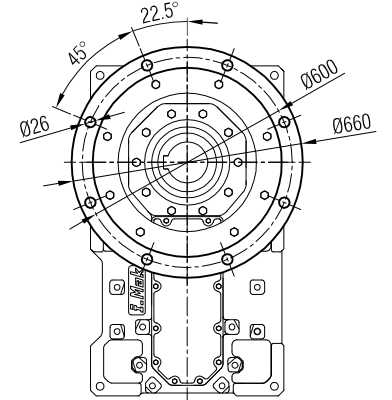
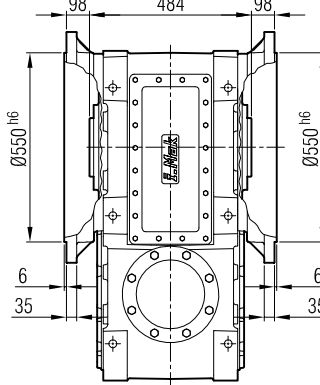
...-FL



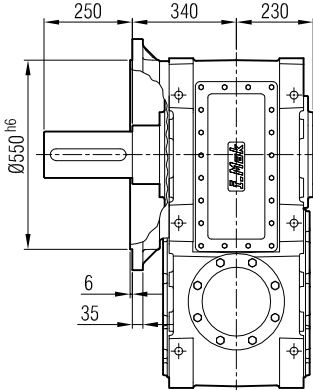
...-FR



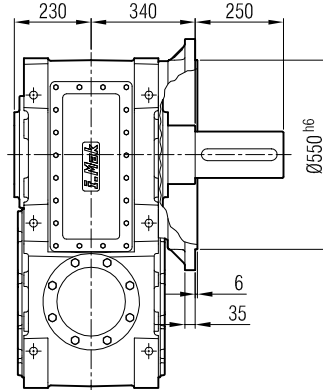
...-FD



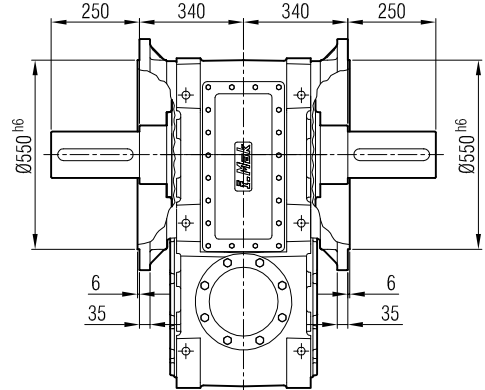
...-FL-SL



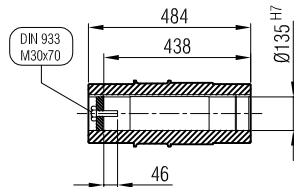
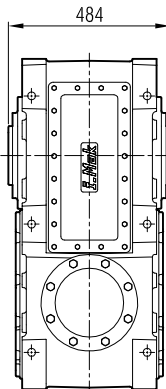
...-FR-SR



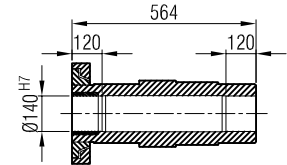
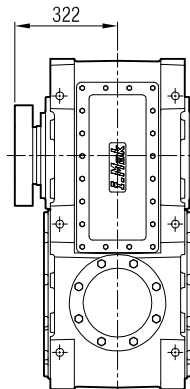
...-FD-SD



...-H



...-SDL / SDR



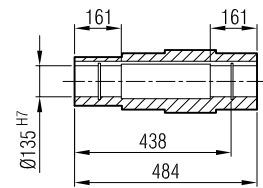
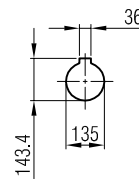
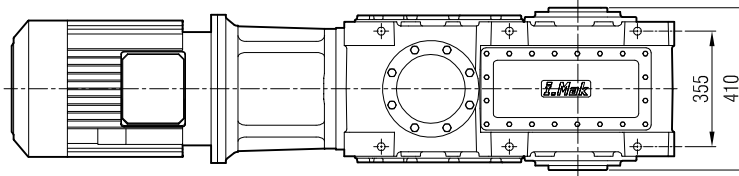
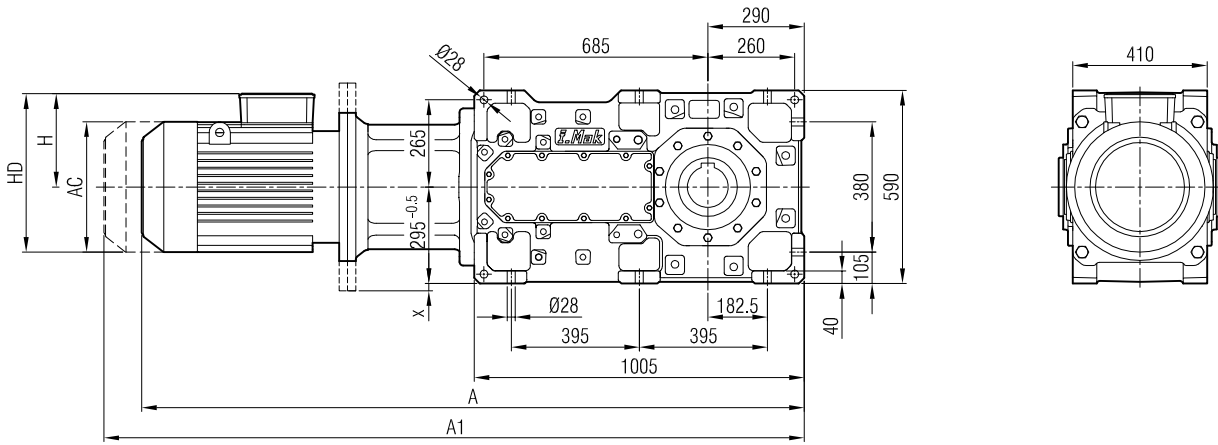
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5
A	2021	2021	2089	2108	2168	2218	2308	2308	2489	2489
A1	2141	2141	2209	2228	2288	2338	2428	2508	2689	2689
H	260	260	300	313	313	366	398	398	518	518
HD	440	440	500	538	538	618	678	678	833	833
AC	357	357	394	456	456	489	548	548	652	652
x	-	-	-	-	-	-	-	-	35	35

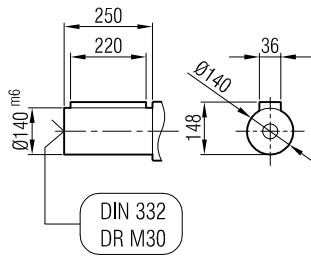
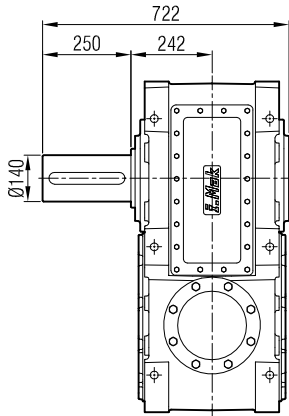
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

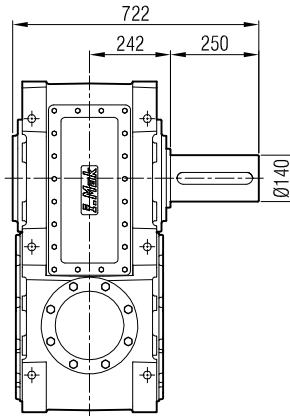
Le dimensions "A1" correspond aux moteurs équipés de freins.



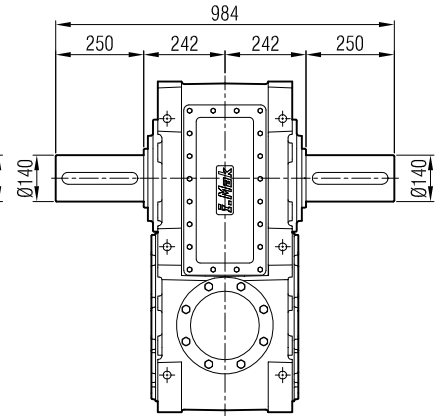
MA / MK 90_
...-SL



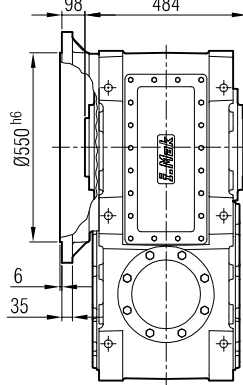
...-SR



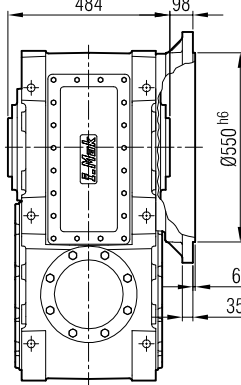
...-SD



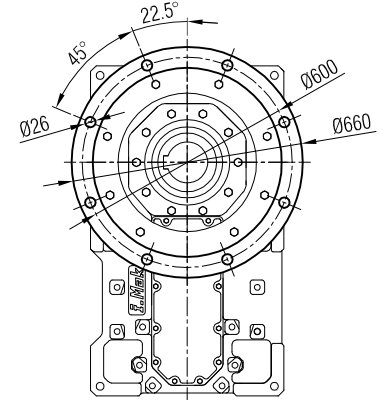
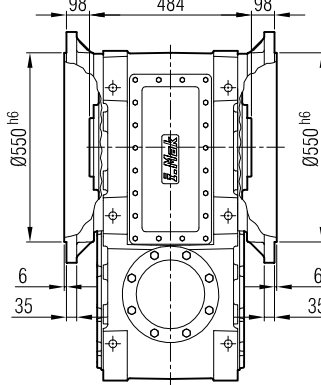
...-FL



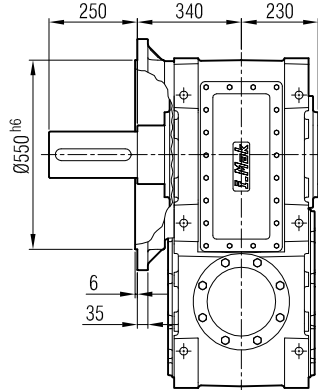
...-FR



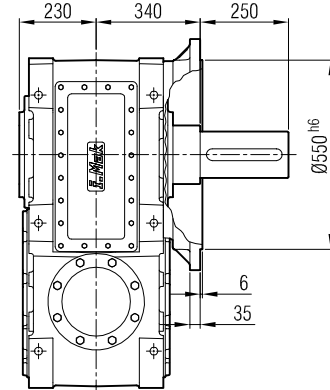
...-FD



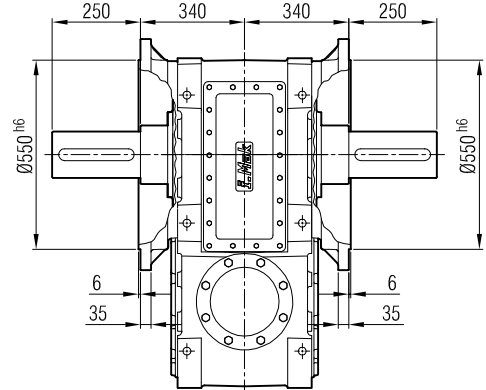
...-FL-SL



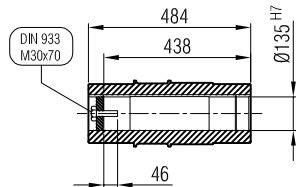
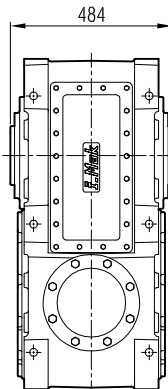
...-FR-SR



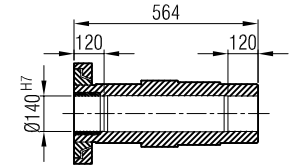
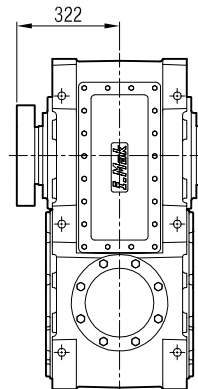
...-FD-SD



...-H



...-SDL / SDR



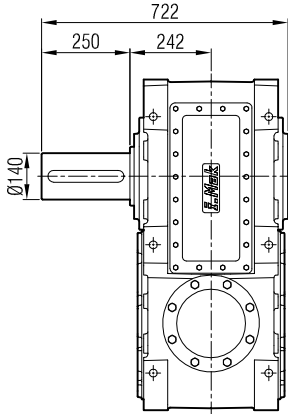
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

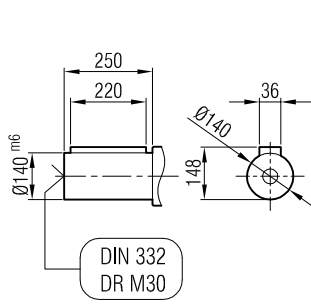
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



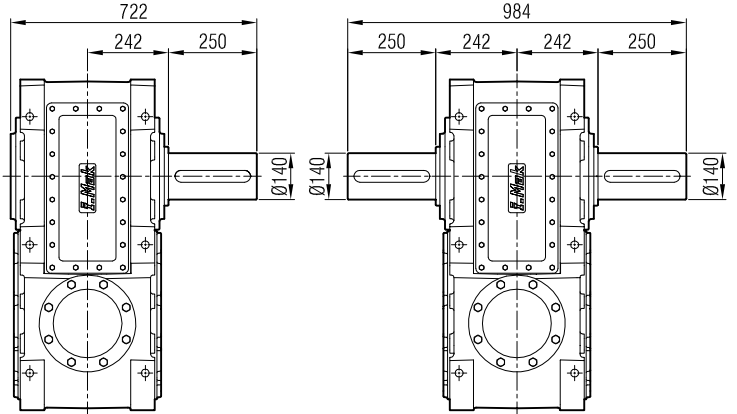
MA / MK 90_
...-SL



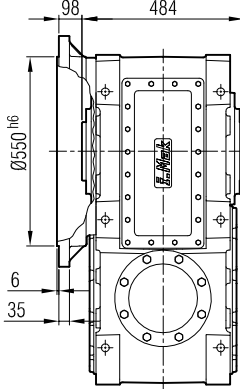
...-SR



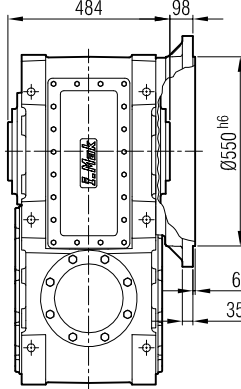
...-SD



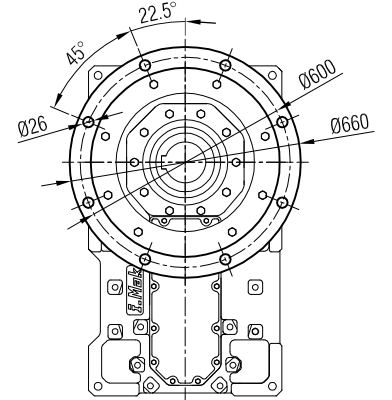
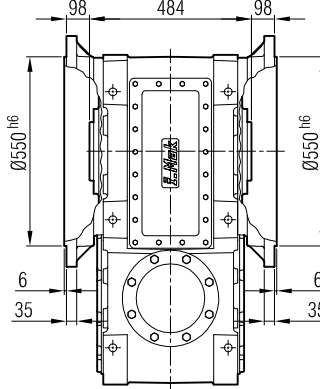
...-FL



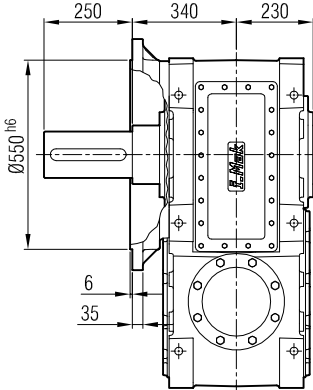
...-FR



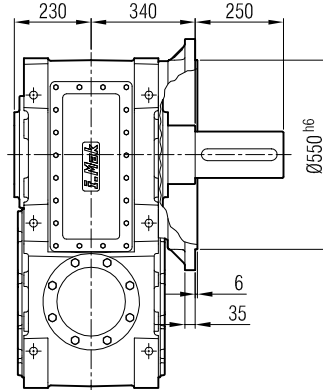
...-FD



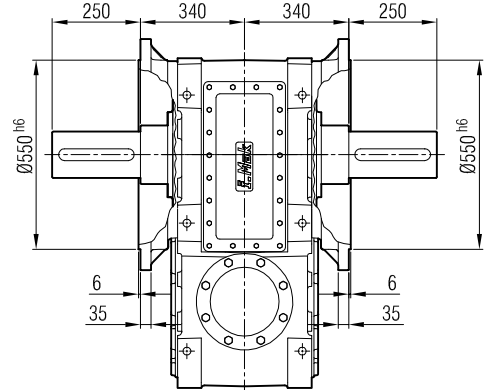
...-FL-SL



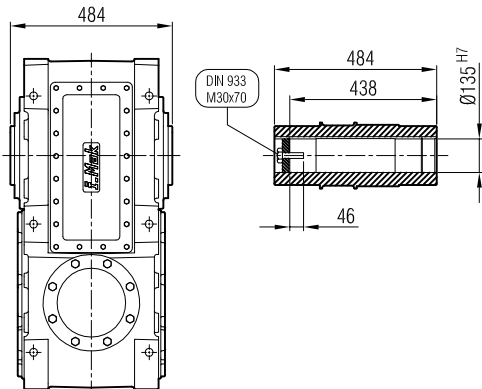
...-FR-SR



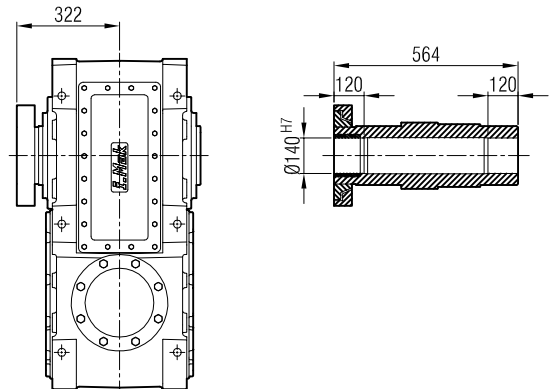
...-FD-SD



...-H



...-SDL / SDR



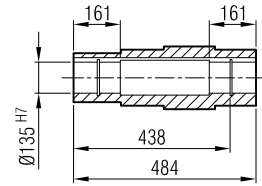
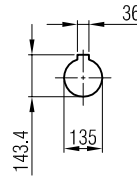
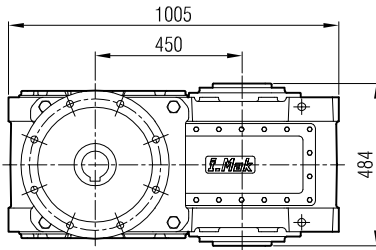
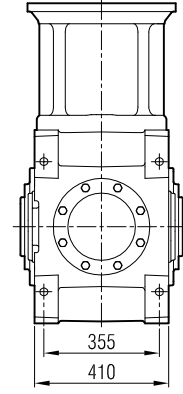
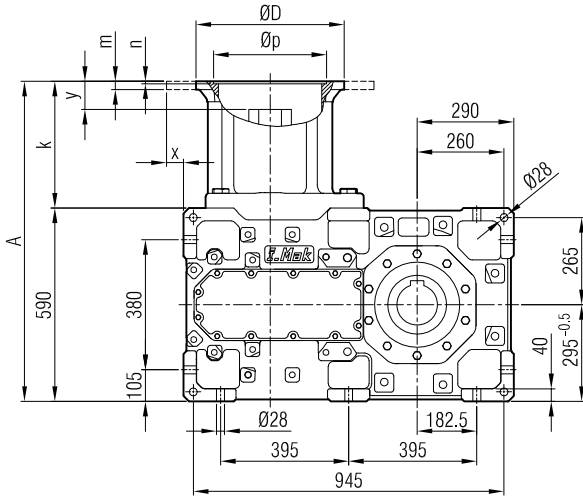
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

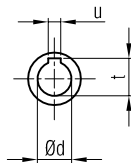
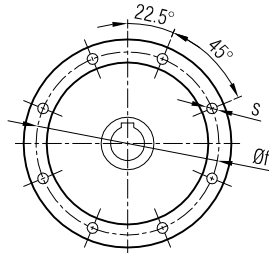
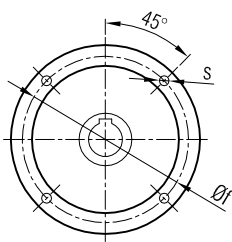


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≤ 200 B5 **Tip/Type/Typ**

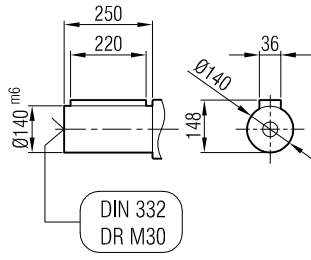
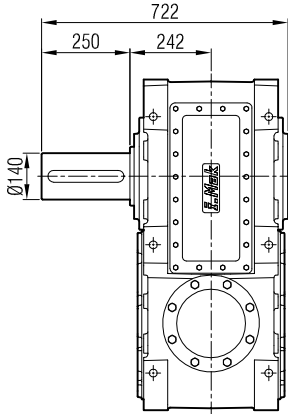
≥ 225 B5 **Tip/Type/Typ**



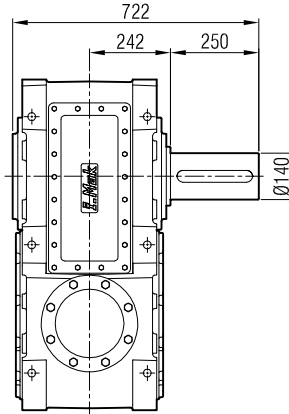
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
180/B5	930	250	300	350	M14	340	20	6	48	51.8	14	-	38
200/B5	930	300	350	400	M16	340	22	6	55	59.3	16	-	38
225/B5	973	350	400	450	M16	383	22	6	60	64.4	18	-	75
250/B5	973	450	500	550	M16	383	25	6.5	65	69.4	18	10	75
280/B5	973	450	500	550	M16	383	25	6.5	75	75.9	20	10	65
315/B5	1003	550	600	660	M24	413	30	7	85	90.4	22	65	90



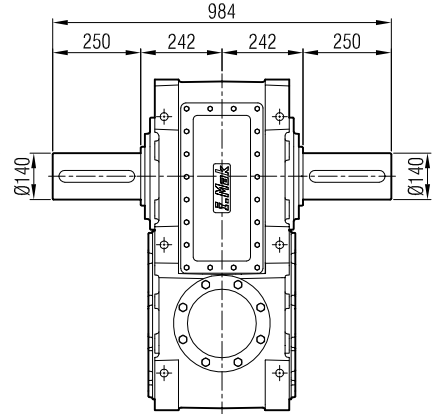
MA / MK 90_
...-SL



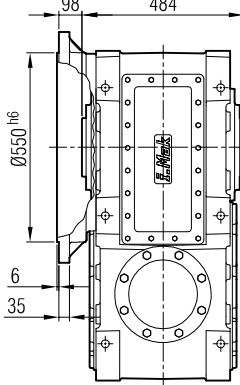
...-SR



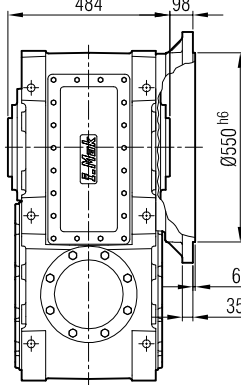
...-SD



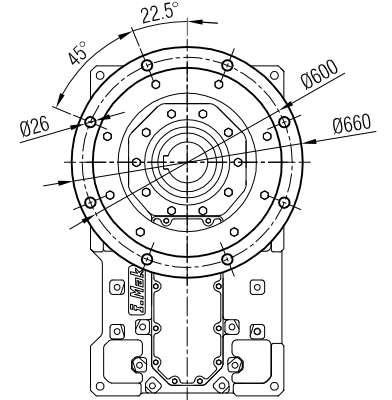
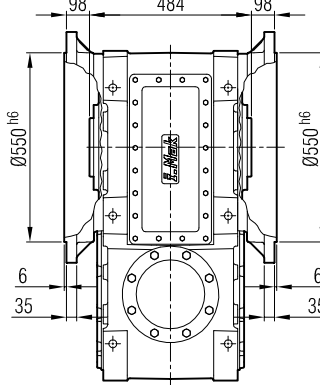
...-FL



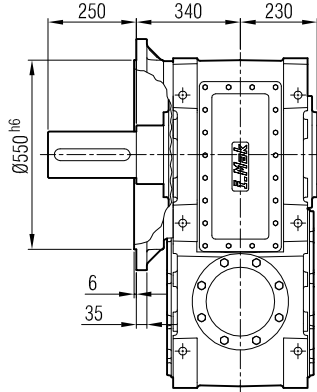
...-FR



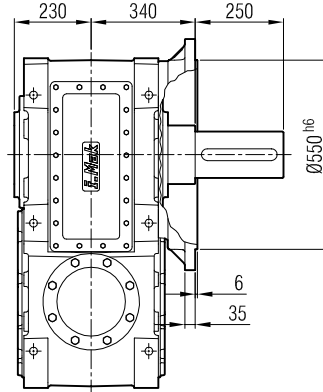
...-FD



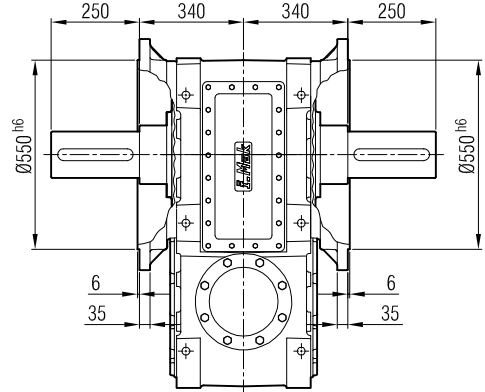
...-FL-SL



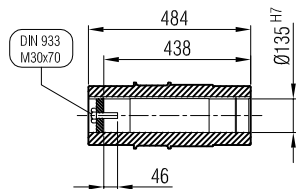
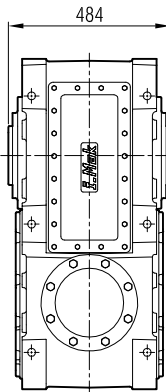
...-FR-SR



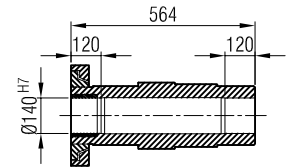
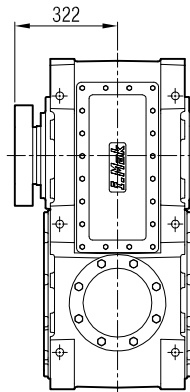
...-FD-SD



...-H



...-SDL / SDR



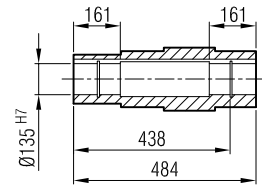
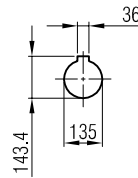
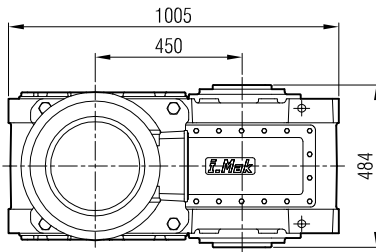
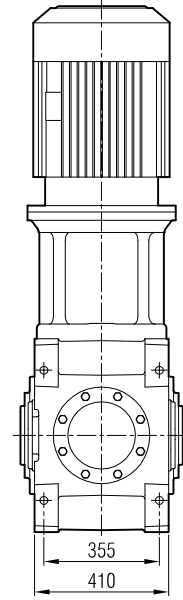
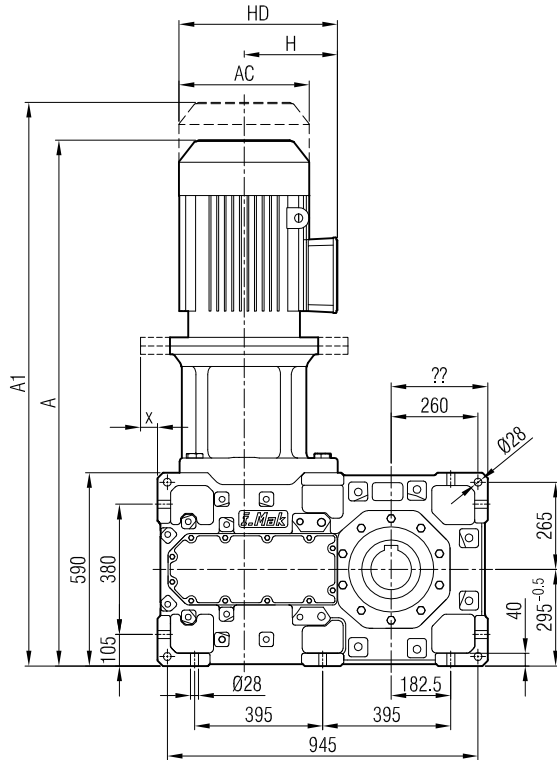
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5
A	1571	1571	1639	1658	1718	1768	1858	1858	2039	2039
A1	1691	1691	1759	1778	1838	1888	1978	2058	2239	2239
H	260	260	300	313	313	366	398	398	518	518
HD	440	440	500	538	538	618	678	678	833	833
AC	357	357	394	456	456	489	548	548	652	652
x	-	-	-	-	-	10	10	10	65	65

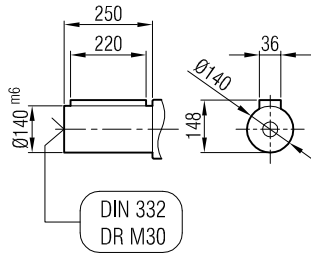
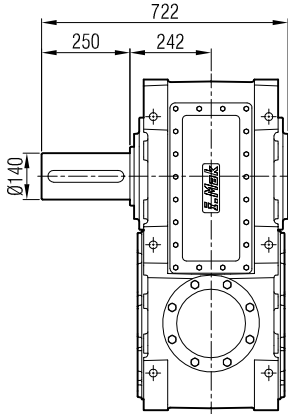
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

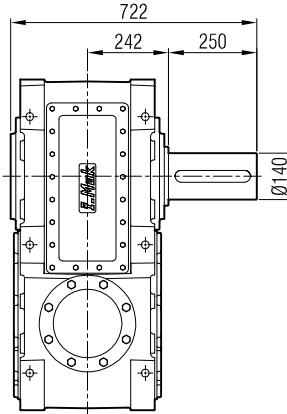
Le dimensions "A1" correspond aux moteurs équipés de freins.



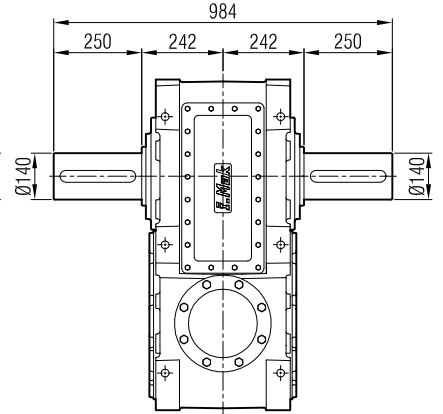
MA / MK 90_
...-SL



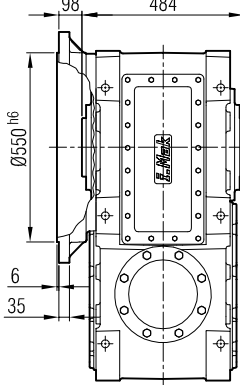
...-SR



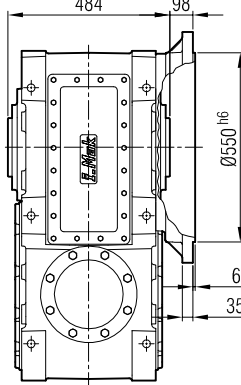
...-SD



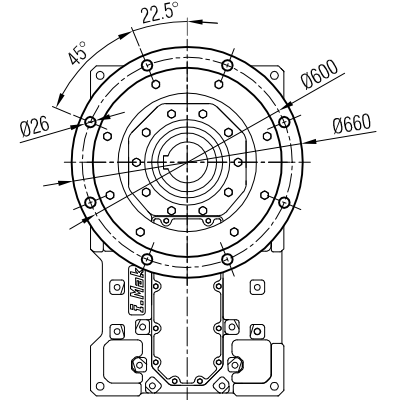
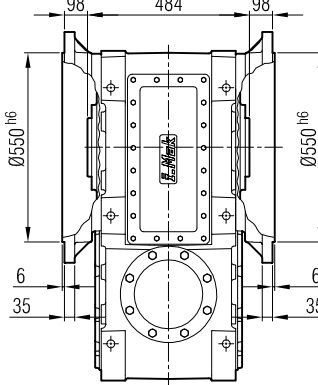
...-FL



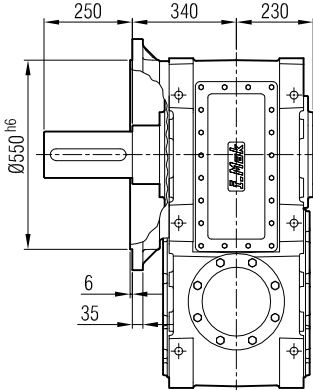
...-FR



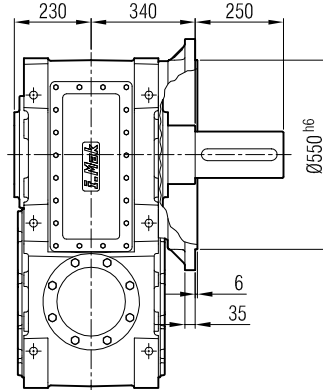
...-FD



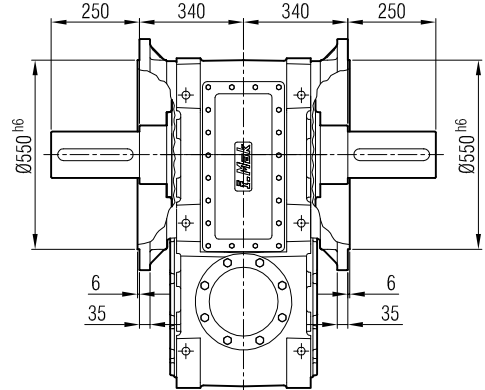
...-FL-SL



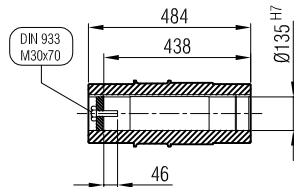
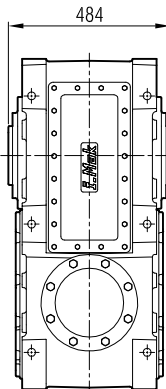
...-FR-SR



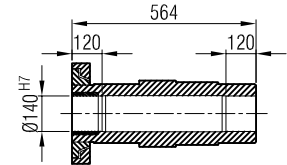
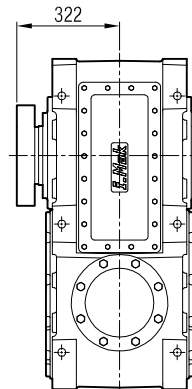
...-FD-SD



...-H



...-SDL / SDR



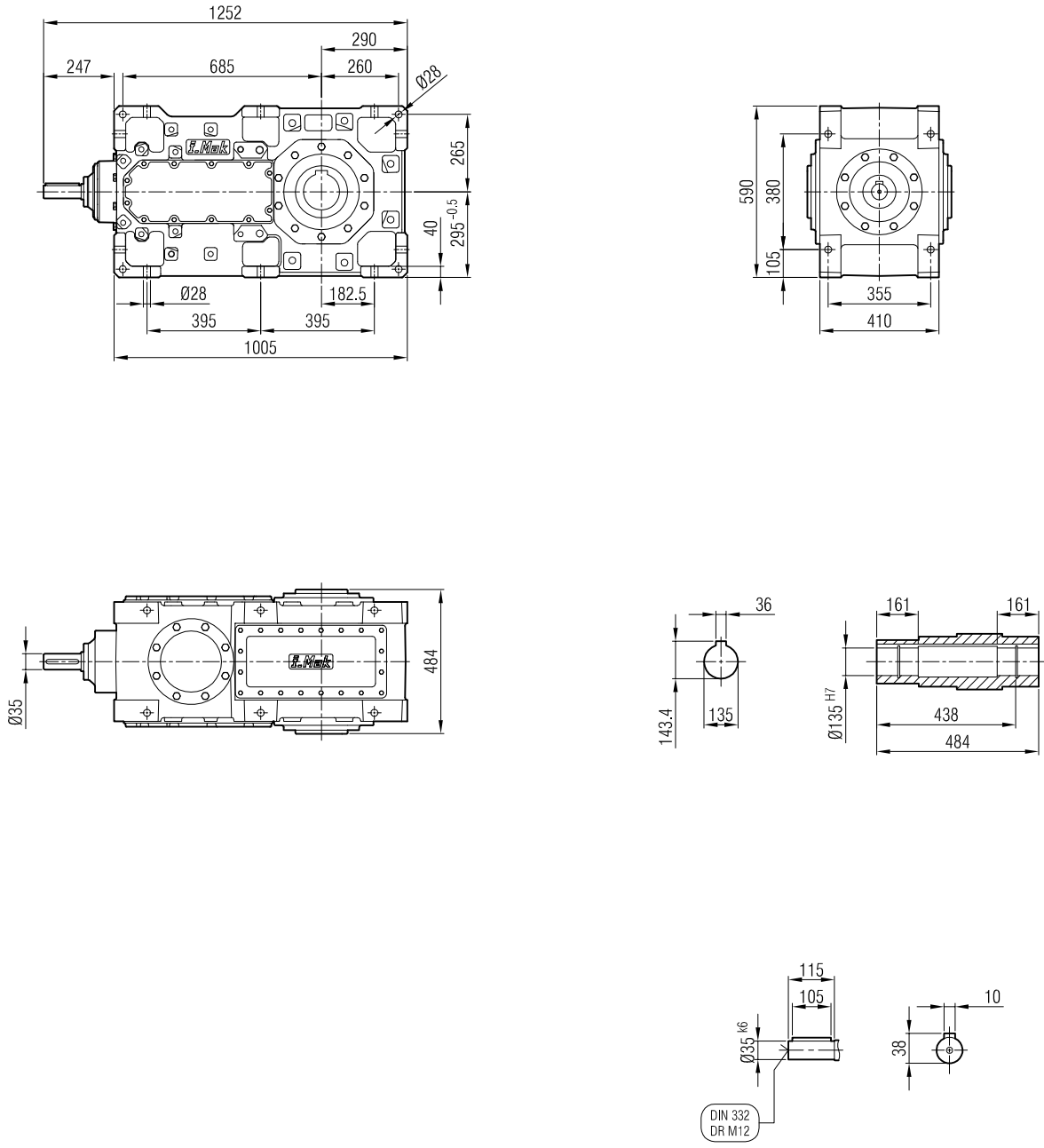
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

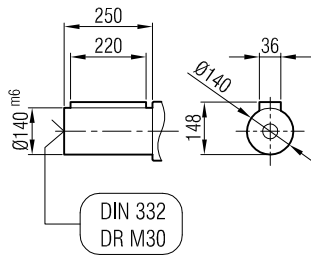
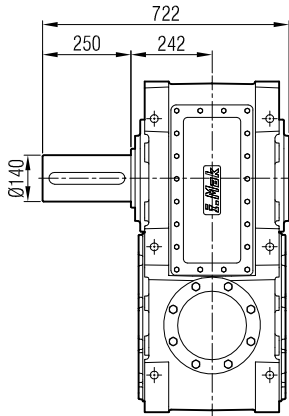


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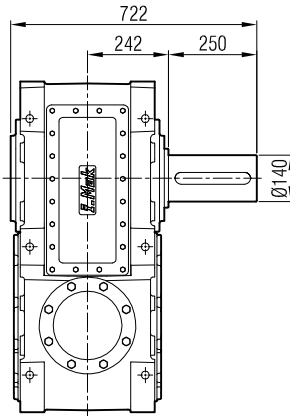




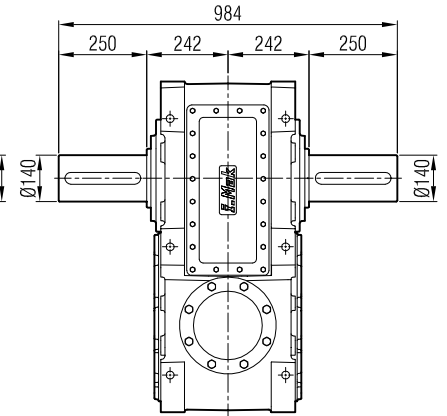
MA / MK 90_
...-SL



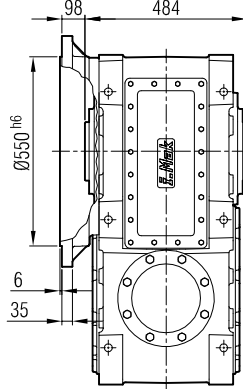
...-SR



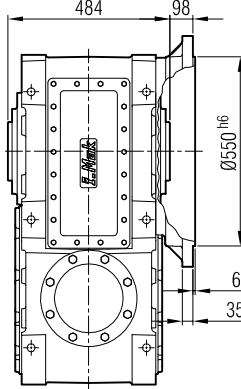
...-SD



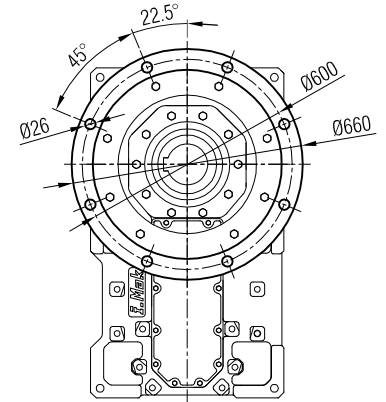
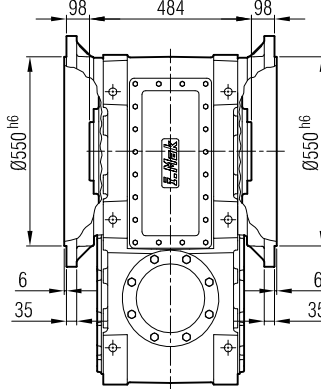
...-FL



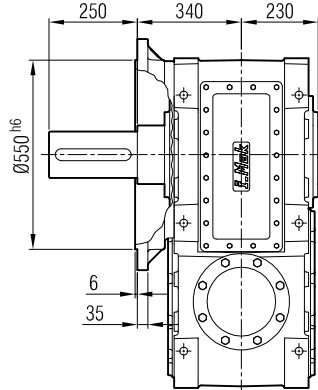
...-FR



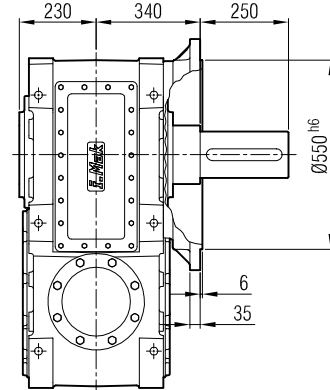
...-FD



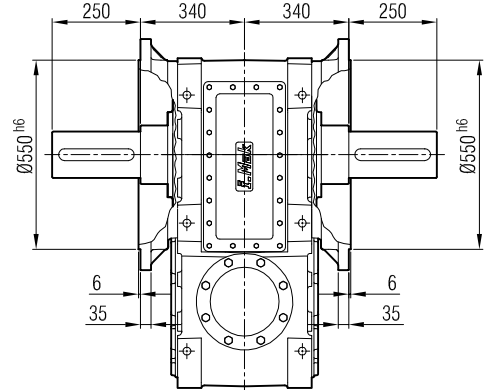
...-FL-SL



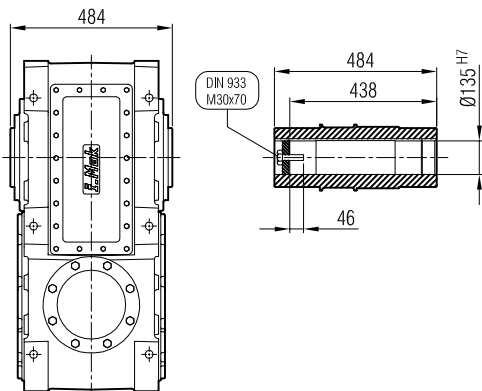
...-FR-SR



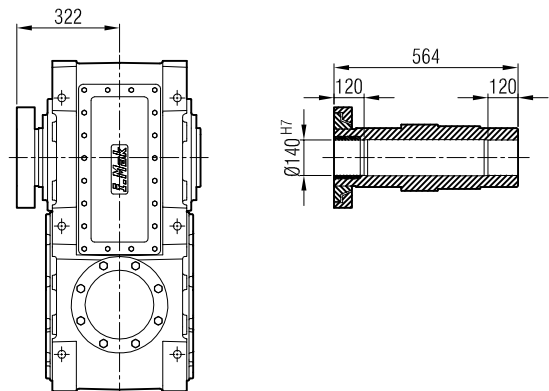
...-FD-SD



...-H



...-SDL / SDR



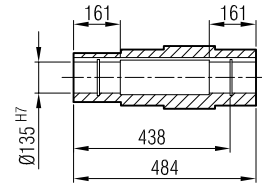
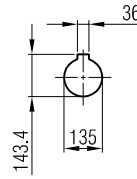
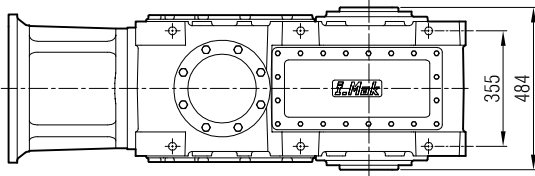
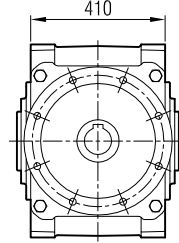
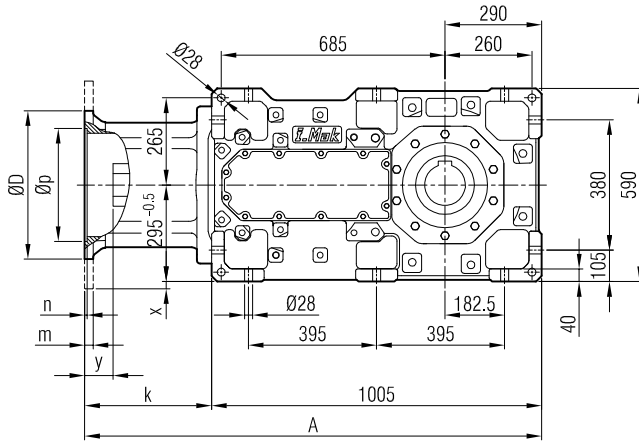
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

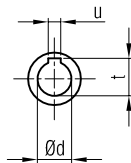
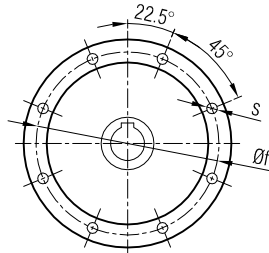
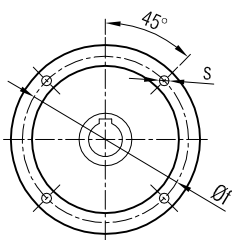


MKP 904-G09



≤ 200 B5 **Tip/Type/Typ**

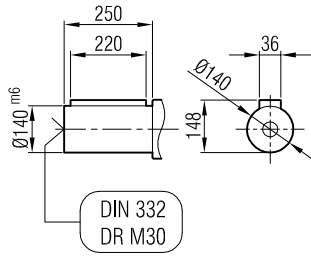
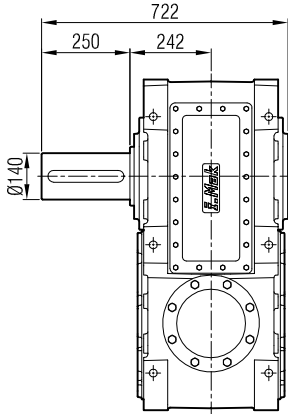
≥ 225 B5 **Tip/Type/Typ**



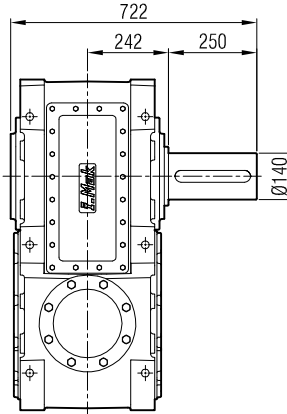
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	1328	180	215	250	M12	325	15	5	28	31.3	8	-	23
132/B5	1348	230	265	300	M12	345	18	6	38	41.3	10	-	28
160/B5	1380	250	300	350	M14	370	20	6	42	45.3	12	-	60
180/B5	1380	250	300	350	M14	370	20	6	48	51.8	14	-	60
200/B5	1380	300	350	400	M16	370	22	6	55	59.3	16	-	60
225/B5	1423	350	400	450	M16	413	22	6	60	64.4	18	-	80



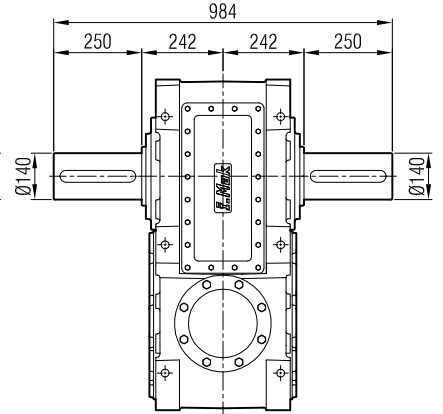
MA / MK 90_
...-SL



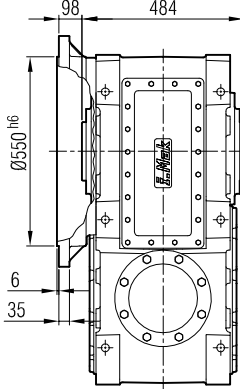
...-SR



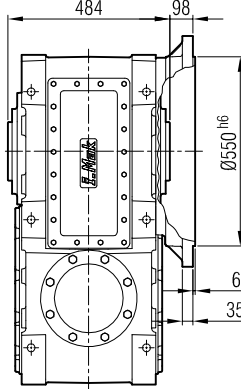
...-SD



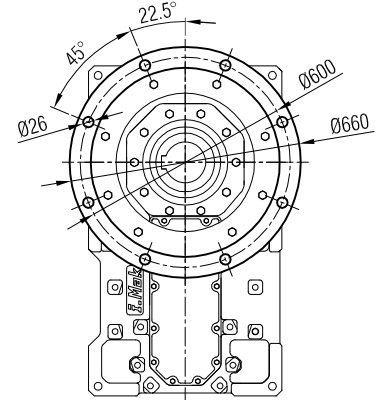
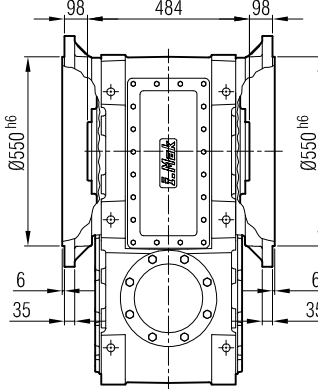
...-FL



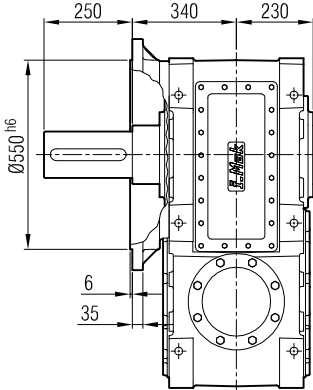
...-FR



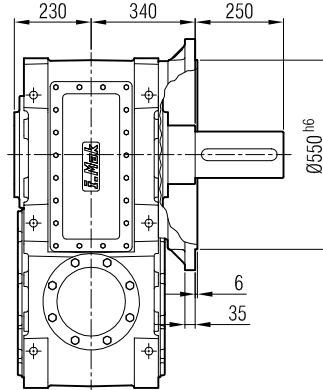
...-FD



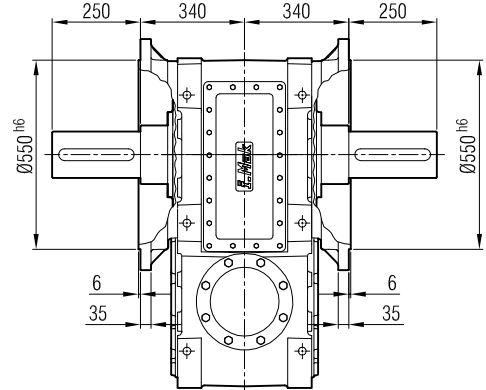
...-FL-SL



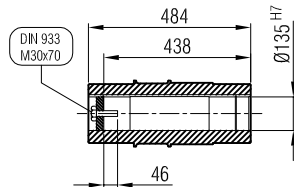
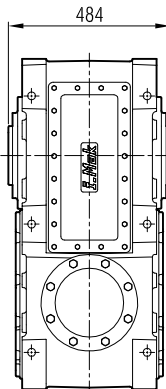
...-FR-SR



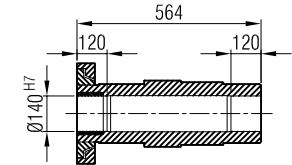
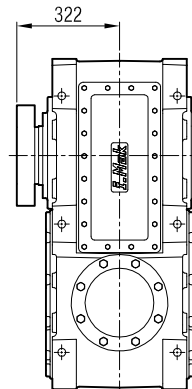
...-FD-SD



...-H



...-SDL / SDR



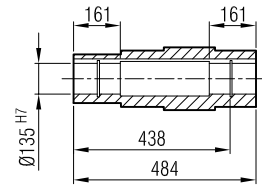
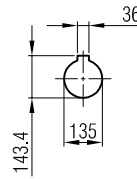
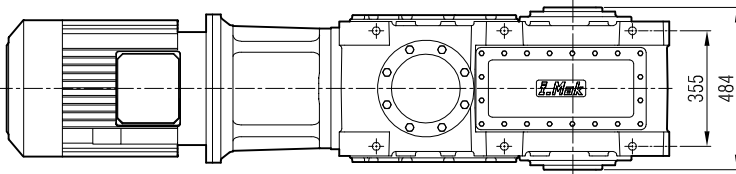
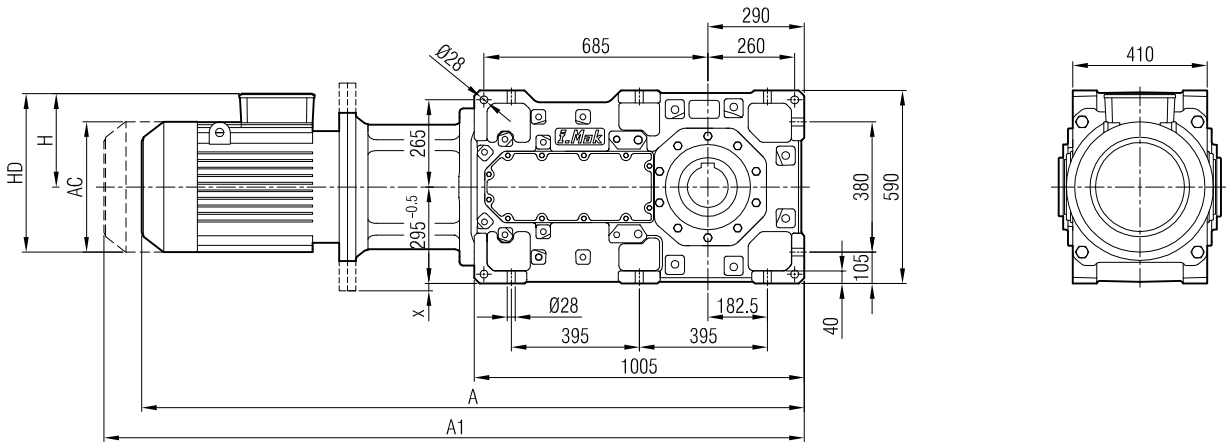
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5
A	1672	1749	1790	1900	1945	2021	2021	2089	2108	2168
A1	1755	1849	1890	2015	2060	2141	2141	2209	2228	2288
H	170	193	193	240	240	260	260	300	313	313
HD	282	325	325	400	400	440	440	500	538	538
AC	220	262	262	315	315	357	357	394	456	456
x	-	-	-	-	-	-	-	-	-	-

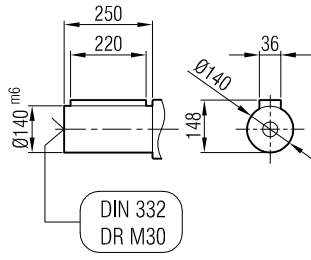
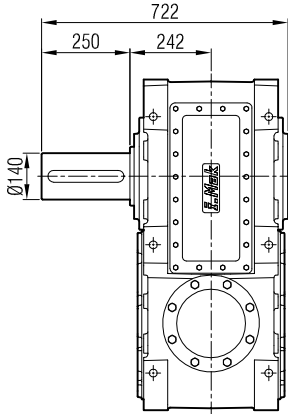
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

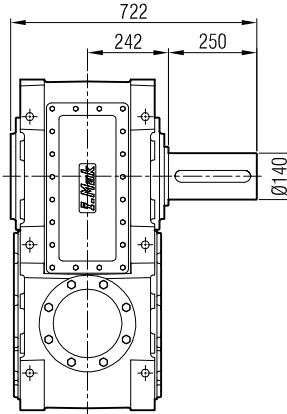
Le dimensions "A1" correspond aux moteurs équipés de freins.



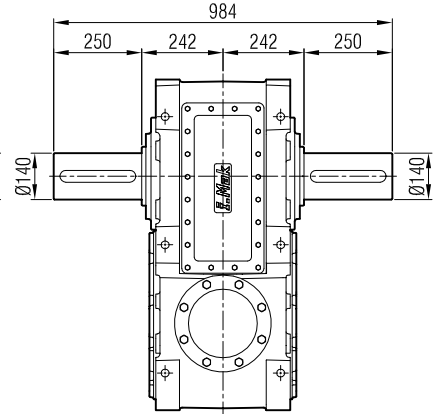
MA / MK 90_
...-SL



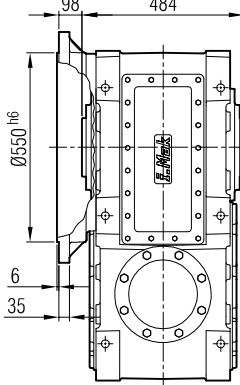
...-SR



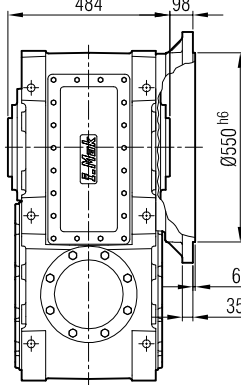
...-SD



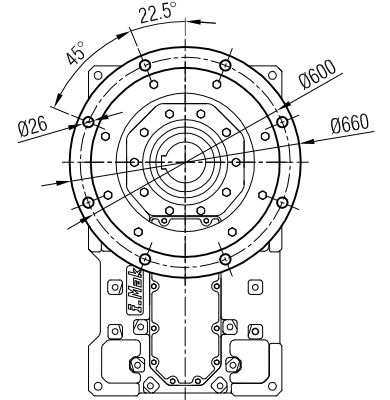
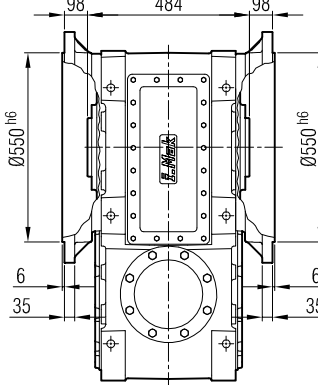
...-FL



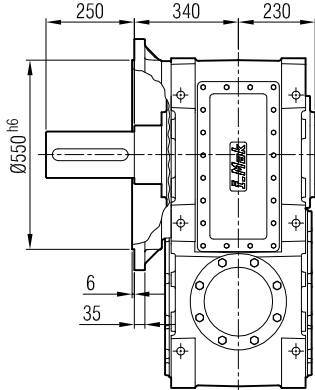
...-FR



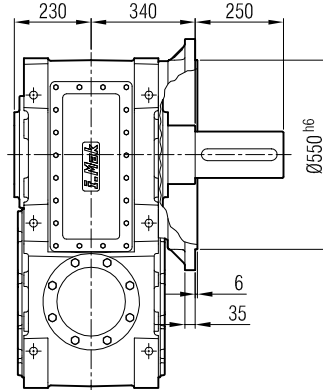
...-FD



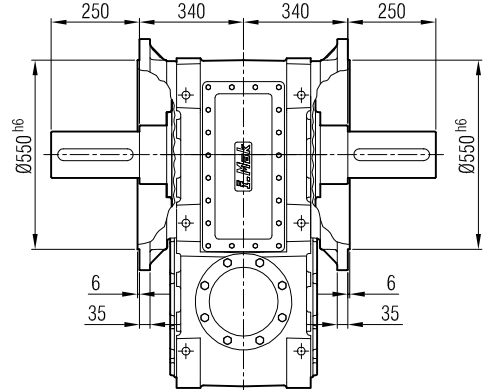
...-FL-SL



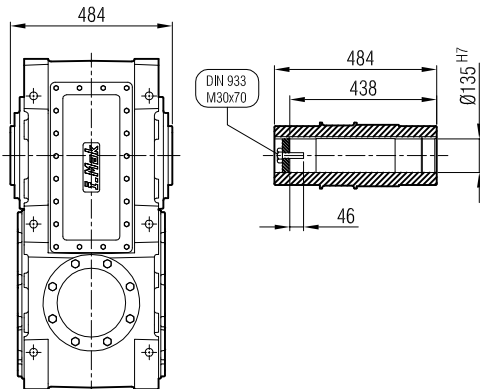
...-FR-SR



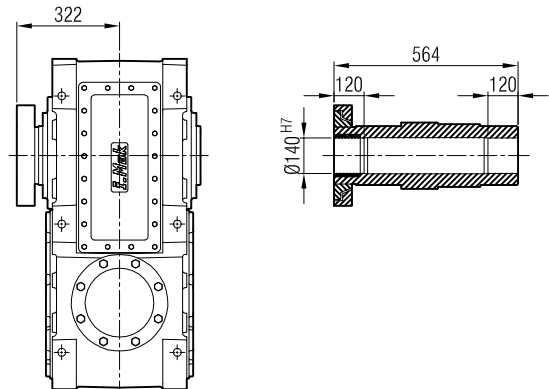
...-FD-SD



...-H



...-SDL / SDR



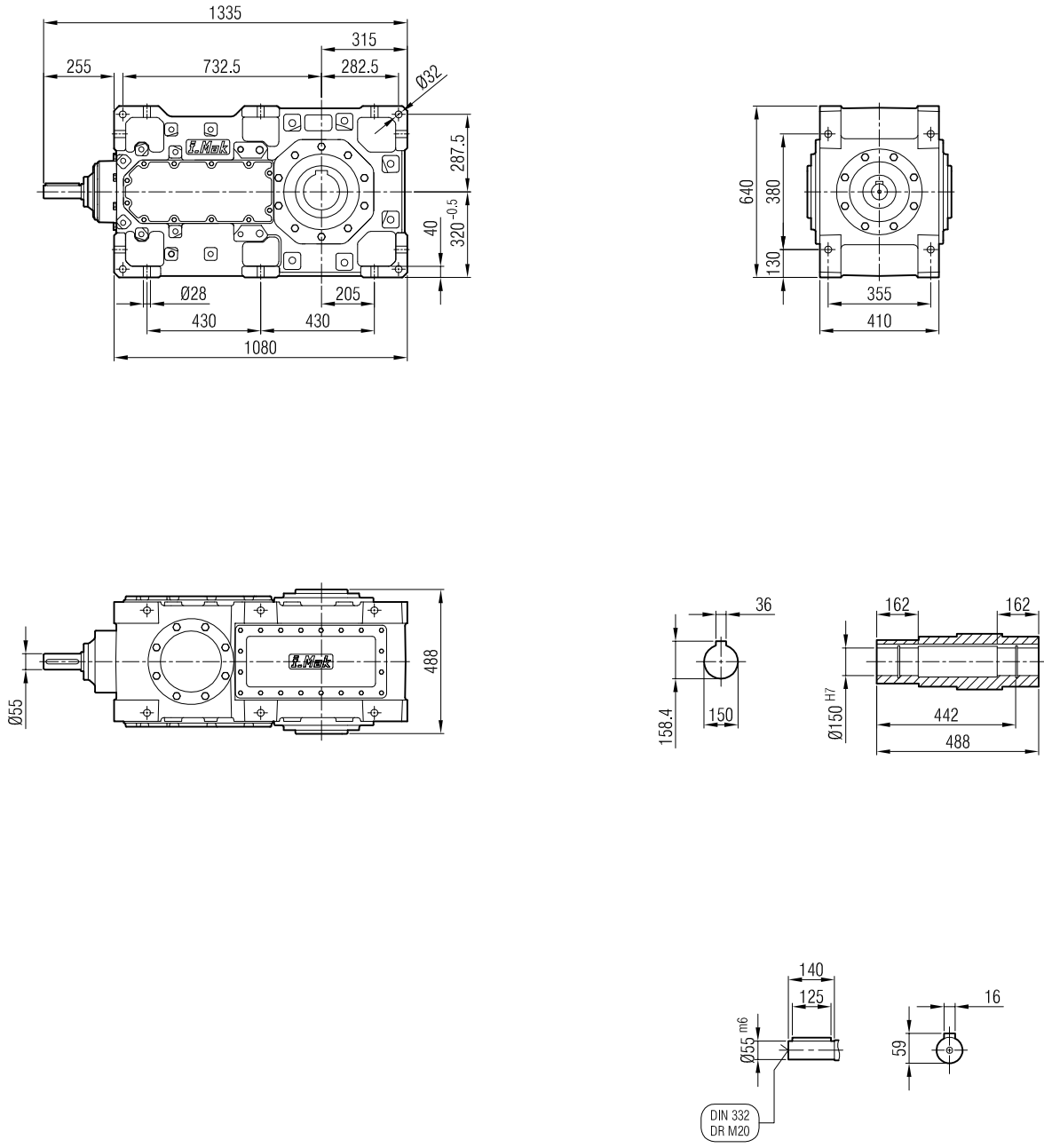
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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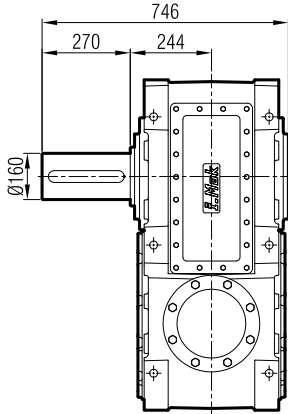


MK 1003-G07

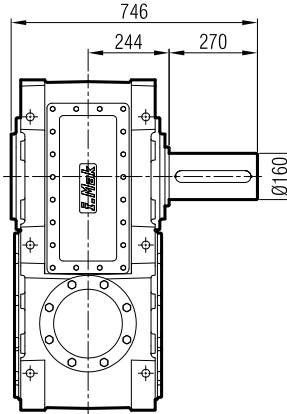
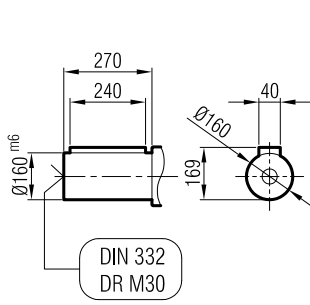




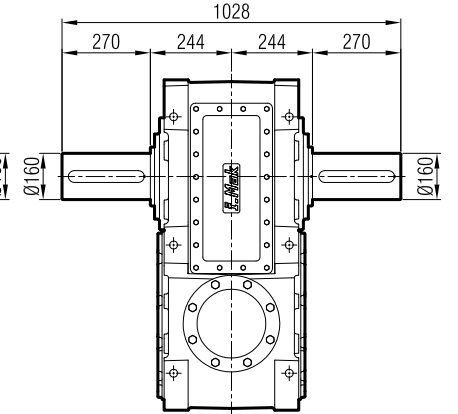
MA / MK 100_
...-SL



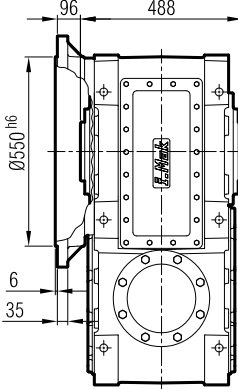
...-SR



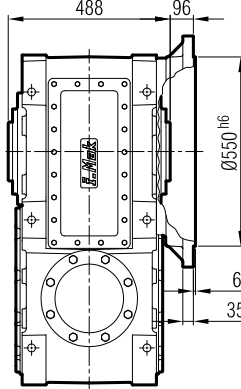
...-SD



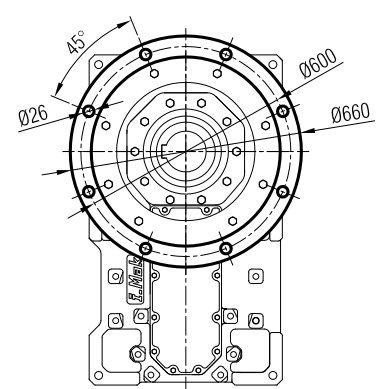
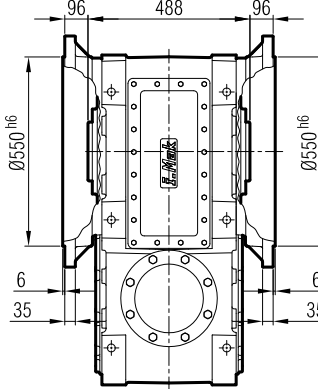
...-FL



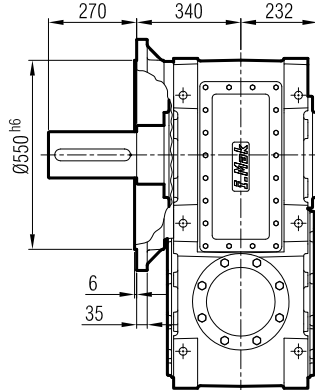
...-FR



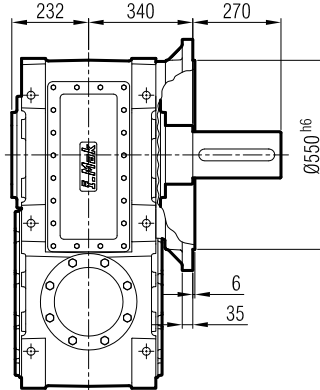
...-FD



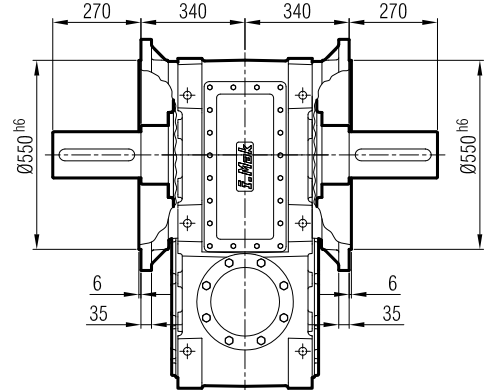
...-FL-SL



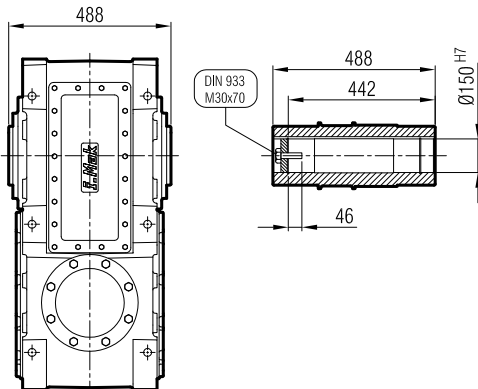
...-FR-SR



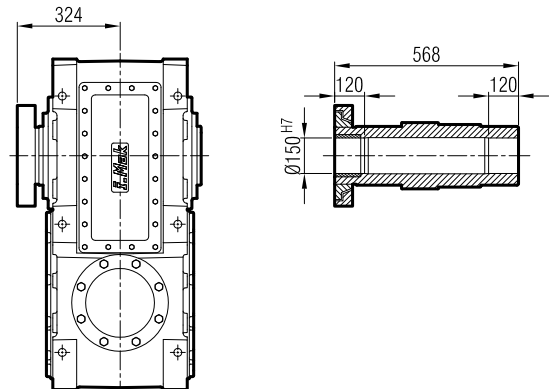
...-FD-SD



...-H



...-SDL / SDR



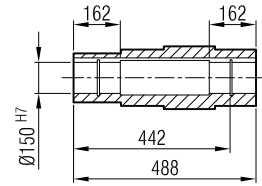
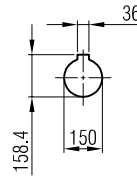
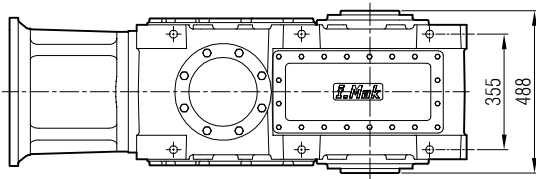
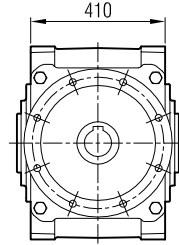
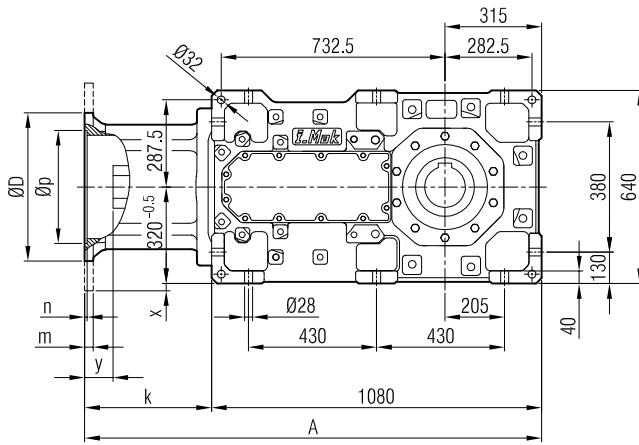
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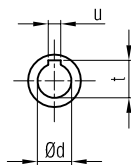
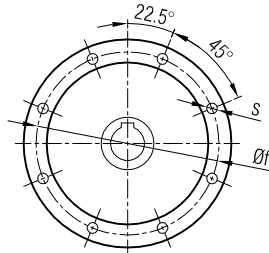
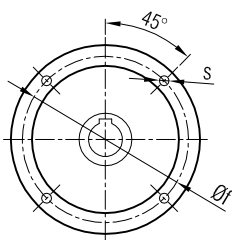


MKP 1003-G09



≤ 200 B5 **Tip/Type/Typ**

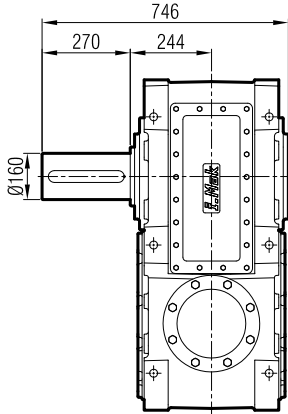
≥ 225 B5 **Tip/Type/Typ**



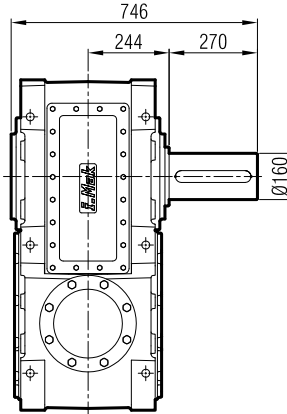
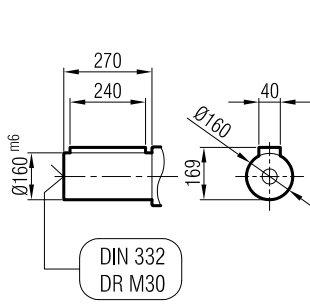
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
180/B5	1450	250	300	350	M14	370	20	6	48	51.8	14	-	38
200/B5	1450	300	350	400	M16	370	22	6	55	59.3	16	-	40
225/B5	1493	350	400	450	M16	413	22	6	60	64.4	18	-	75
250/B5	1493	450	500	550	M16	413	25	6.5	65	69.4	18	-	75
280/B5	1493	450	500	550	M16	413	25	6.5	75	75.9	20	-	65
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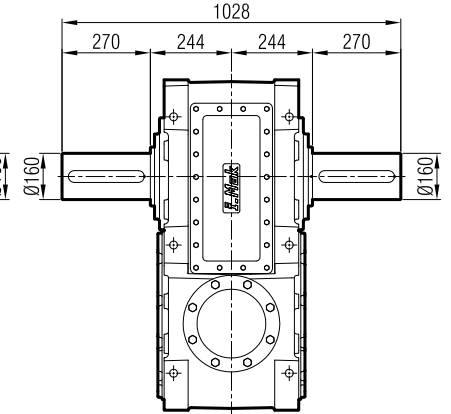
MA / MK 100_
...-SL



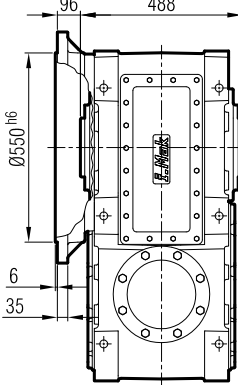
...-SR



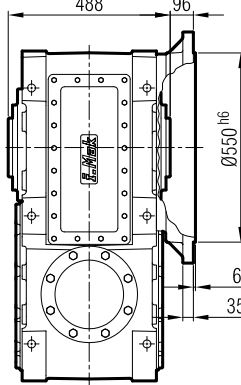
...-SD



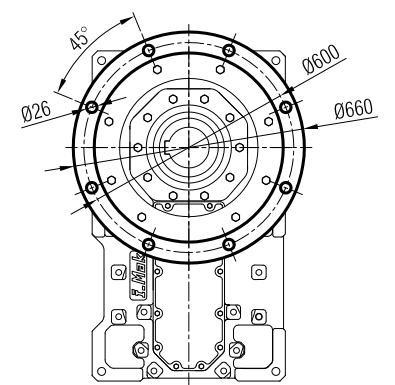
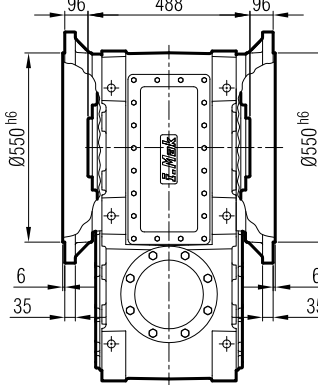
...-FL



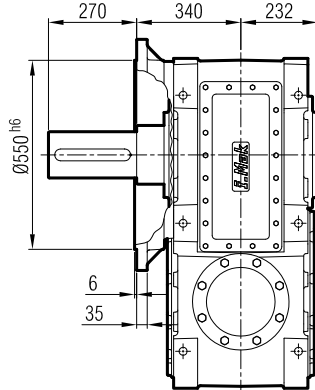
...-FR



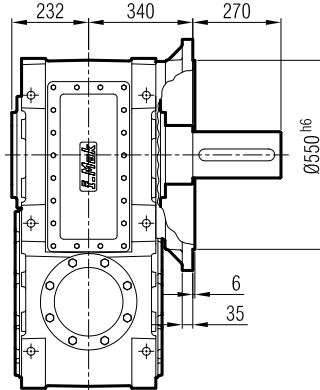
...-FD



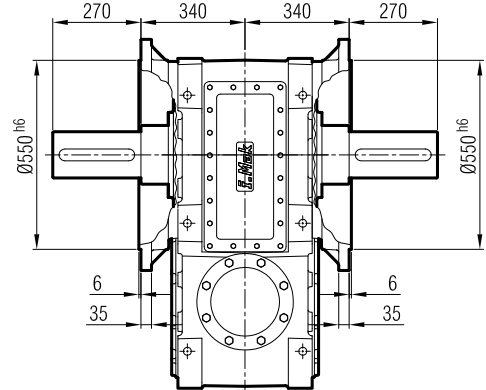
...-FL-SL



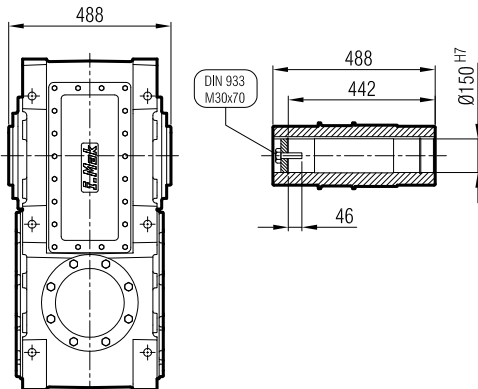
...-FR-SR



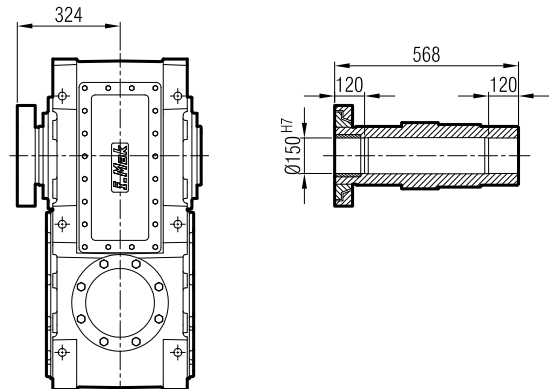
...-FD-SD



...-H



...-SDL / SDR



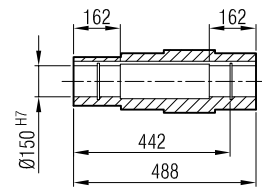
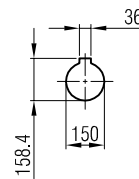
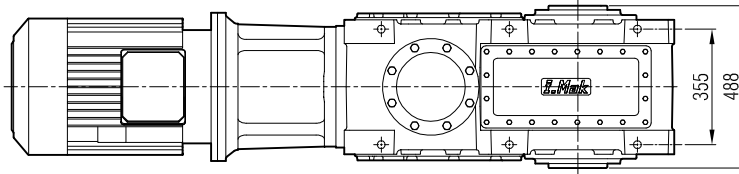
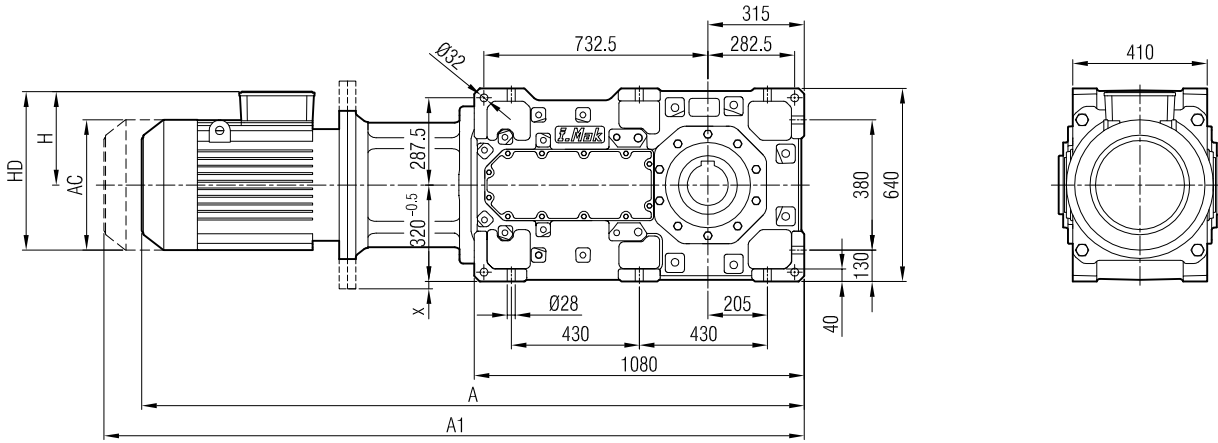
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



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	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5
A	2091	2159	2178	2238	2288	2378	2378	2559	2559
A1	2211	2279	2298	2358	2408	2498	2578	2759	2759
H	260	300	313	313	366	398	398	518	518
HD	440	500	538	538	618	678	678	833	833
AC	357	394	456	456	489	548	548	652	652
x	-	-	-	-	-	-	-	10	10

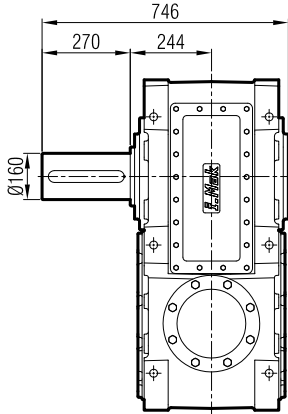
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

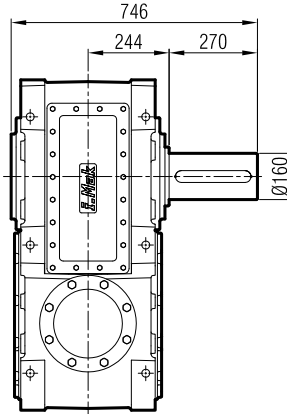
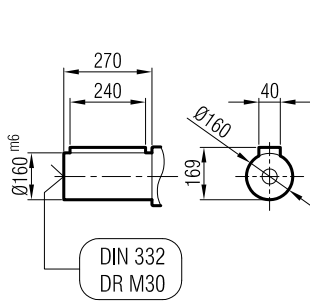
Le dimensions "A1" correspond aux moteurs équipés de freins.



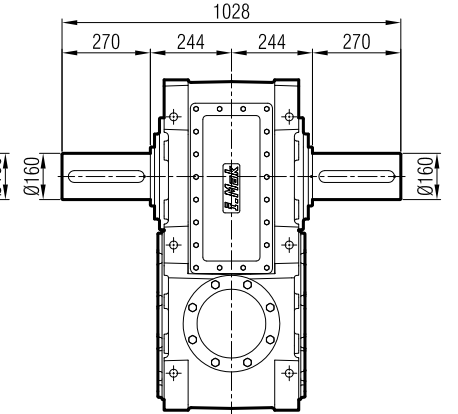
MA / MK 100_
...-SL



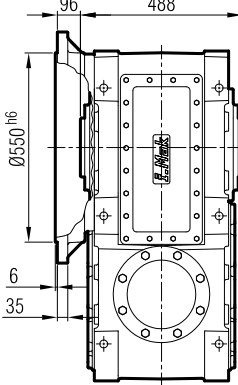
...-SR



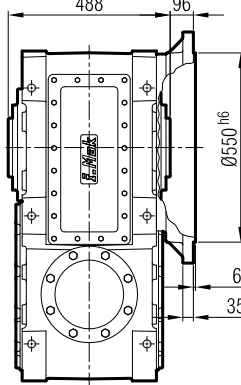
...-SD



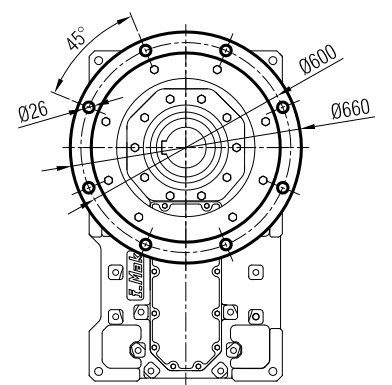
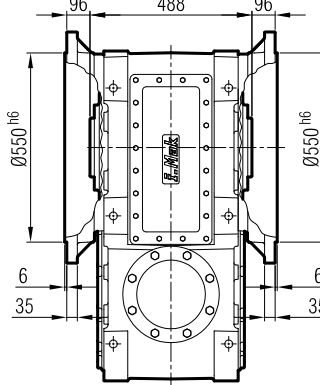
...-FL



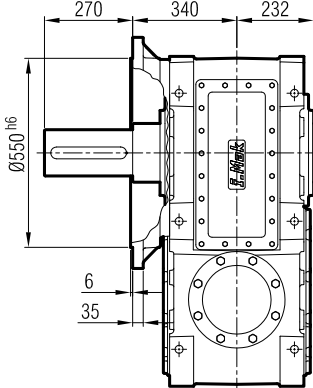
...-FR



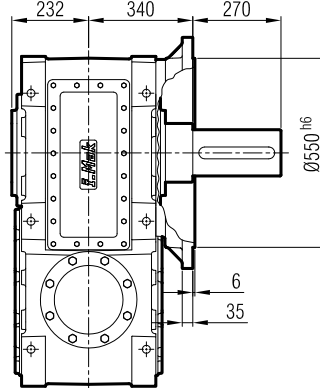
...-FD



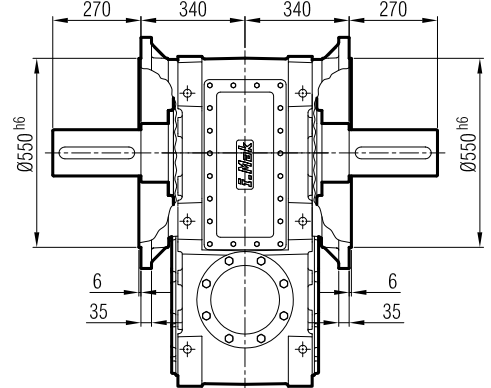
...-FL-SL



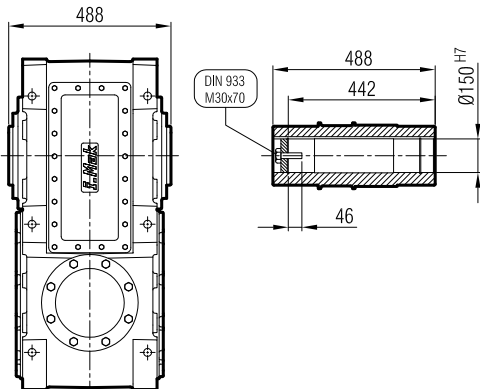
...-FR-SR



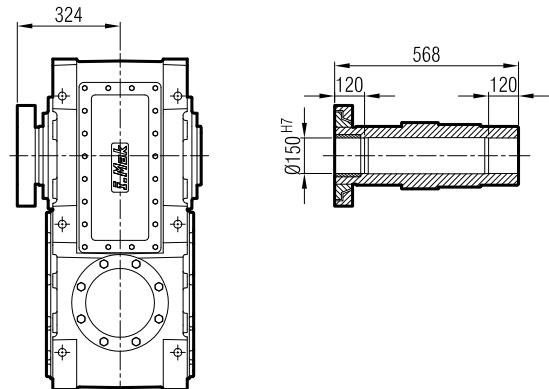
...-FD-SD



...-H



...-SDL / SDR



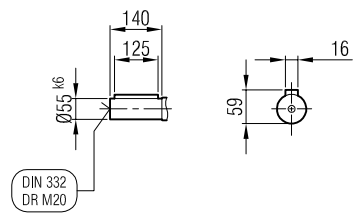
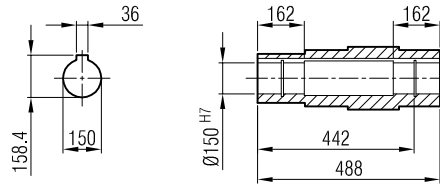
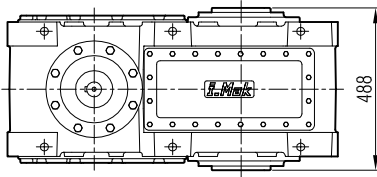
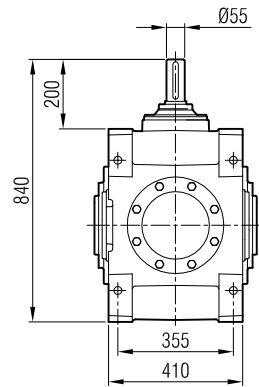
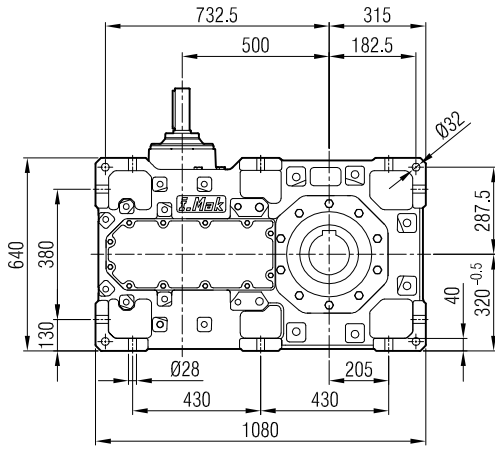
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

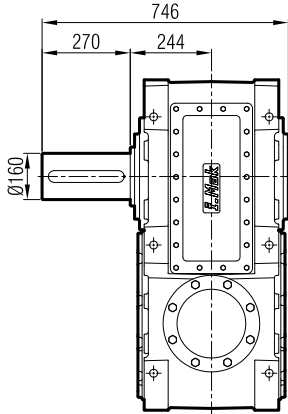


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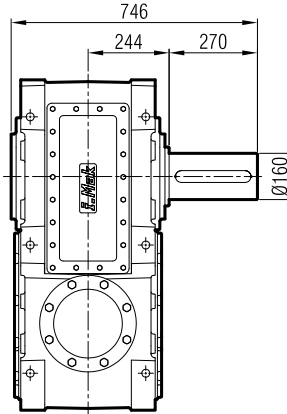
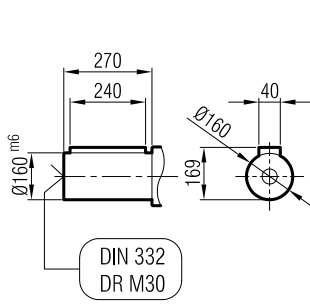




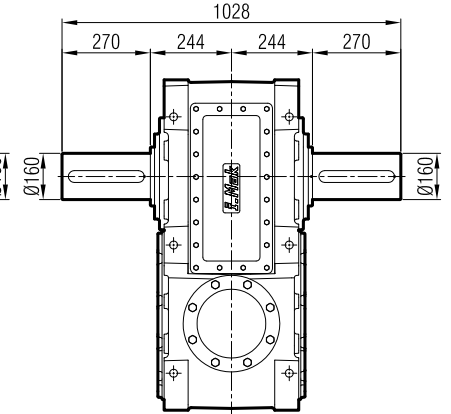
MA / MK 100_
...-SL



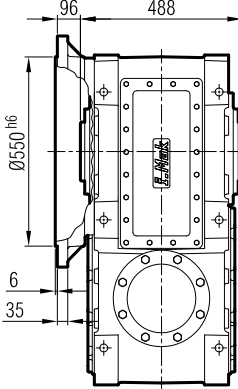
...-SR



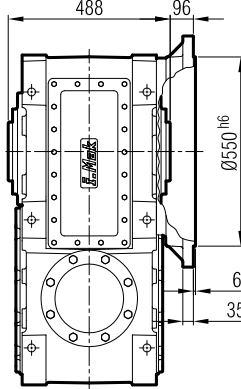
...-SD



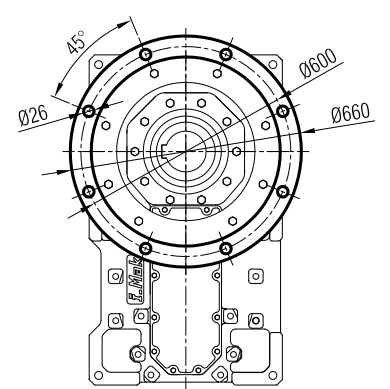
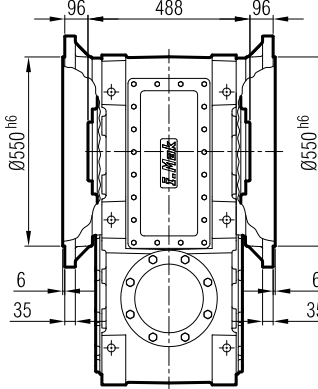
...-FL



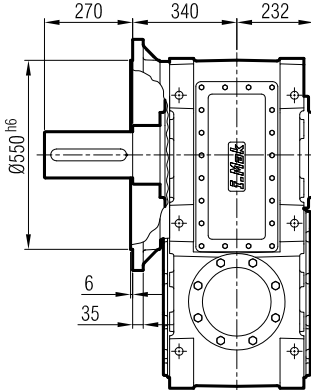
...-FR



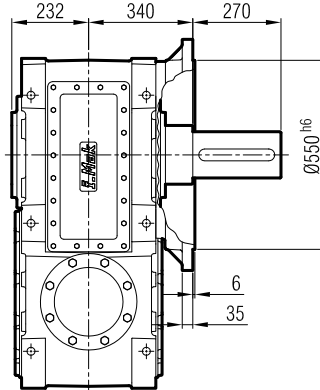
...-FD



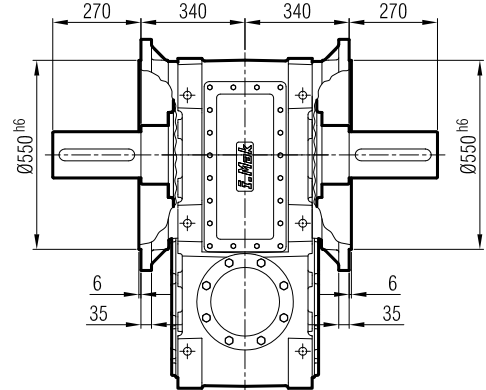
...-FL-SL



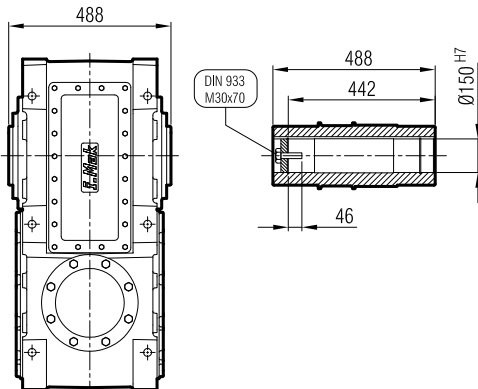
...-FR-SR



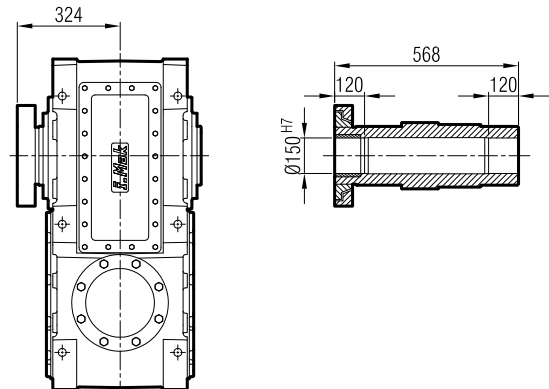
...-FD-SD



...-H



...-SDL / SDR



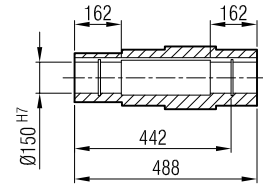
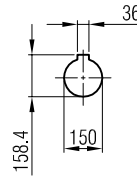
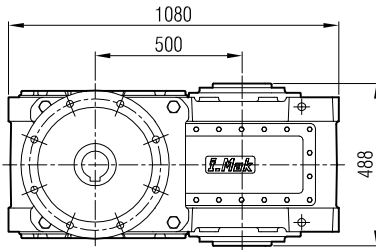
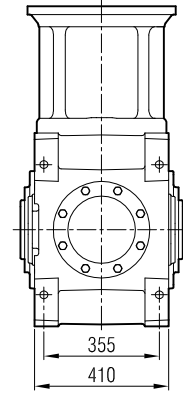
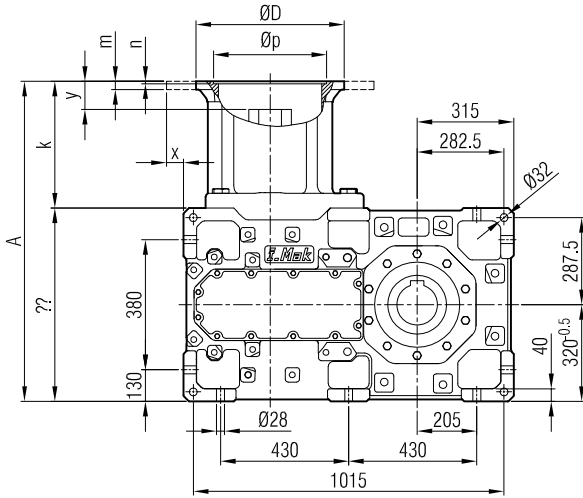
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

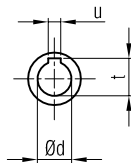
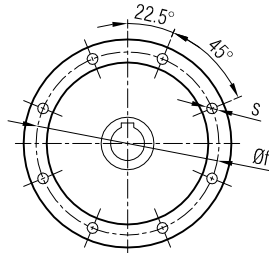
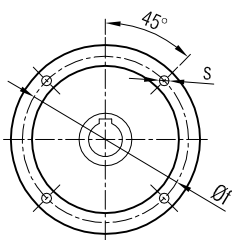


MKP 1003-G10



≤ 200 B5 **Tip/Type/Typ**

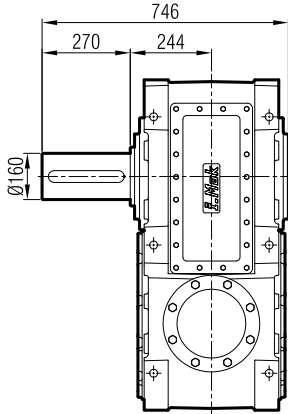
≥ 225 B5 **Tip/Type/Typ**



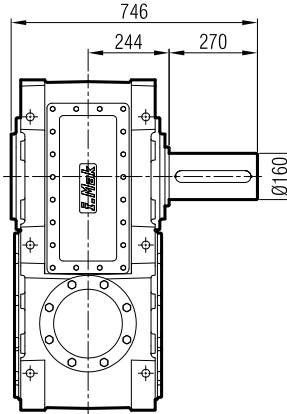
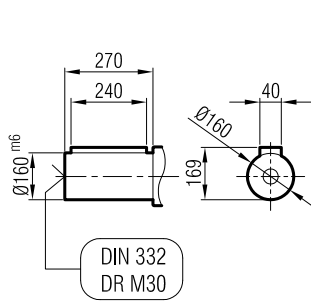
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
180/B5	955	250	300	350	M14	315	20	6	48	51.8	14	-	38
200/B5	955	300	350	400	M16	358	22	6	55	59.3	16	-	38
225/B5	998	350	400	450	M16	358	22	6	60	64.4	18	-	75
250/B5	998	450	500	550	M16	358	25	6.5	65	69.4	18	10	75
280/B5	998	450	500	550	M16	358	25	6.5	75	75.9	20	10	65
315/B5	1028	550	600	660	M24	388	30	7	85	90.4	22	65	90



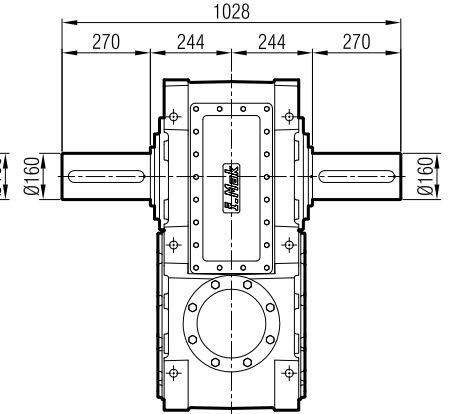
MA / MK 100_
...-SL



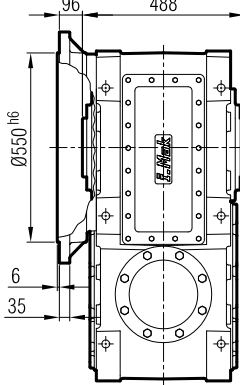
...-SR



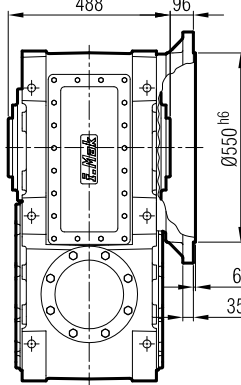
...-SD



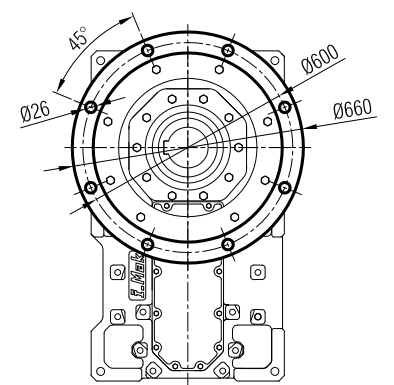
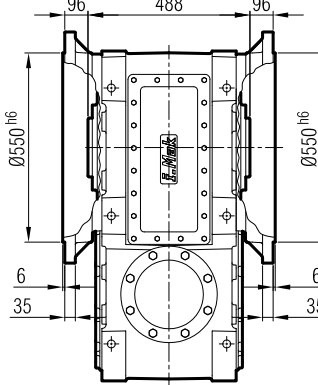
...-FL



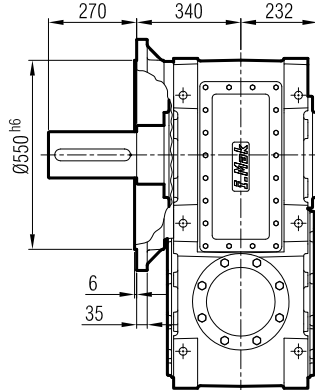
...-FR



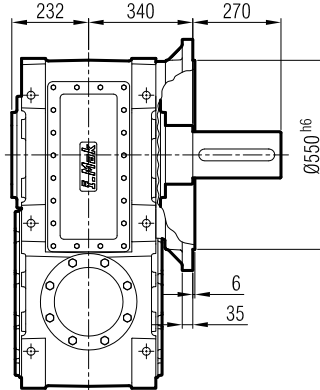
...-FD



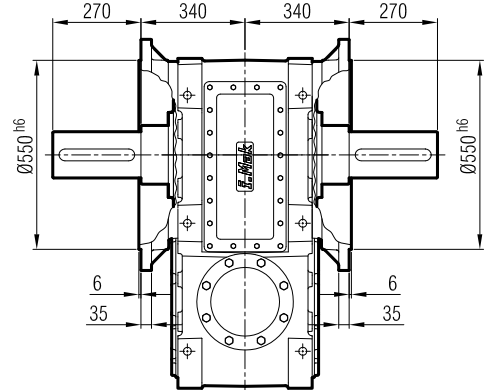
...-FL-SL



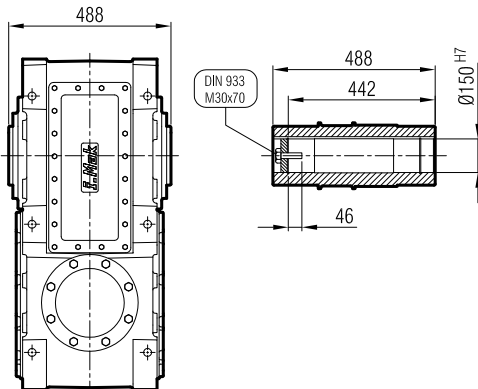
...-FR-SR



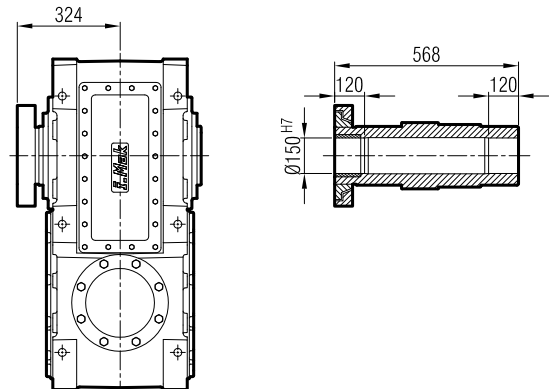
...-FD-SD



...-H



...-SDL / SDR



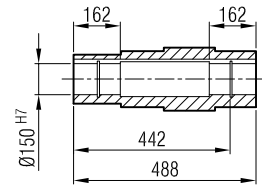
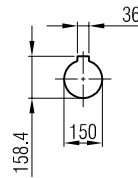
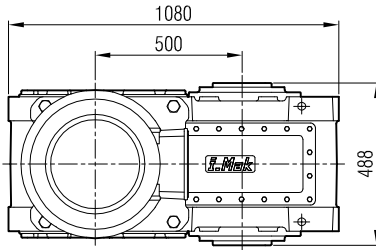
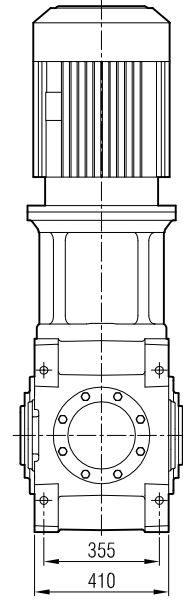
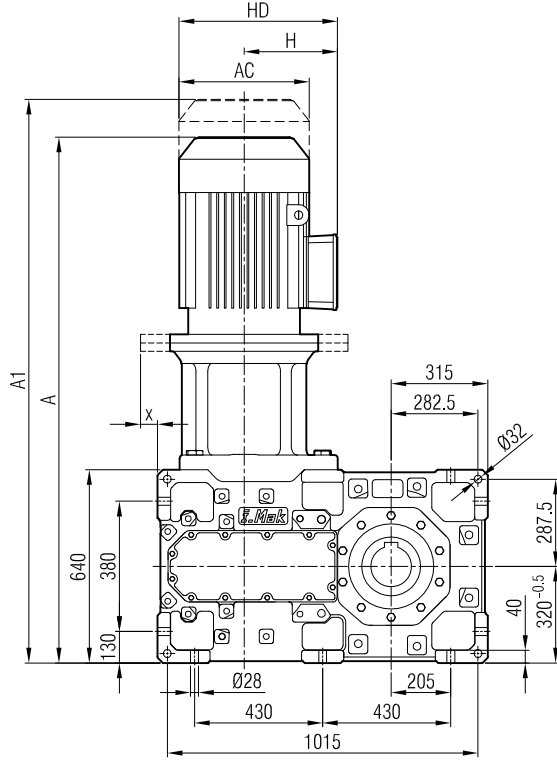
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

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	180 L/B5	200 L/B5	225 S/B5	225 M/B5	250 M/B5	280 S/B5	280 M/B5	315 S/B5	315 M/B5
A	1596	1664	1683	1743	1793	1883	1883	2064	2064
A1	1716	1784	1803	1863	1913	2003	2083	2264	2264
H	260	300	313	313	366	398	398	518	518
HD	440	500	538	538	618	678	678	833	833
AC	357	394	456	456	489	548	548	652	652
x	-	-	-	-	10	10	10	65	65

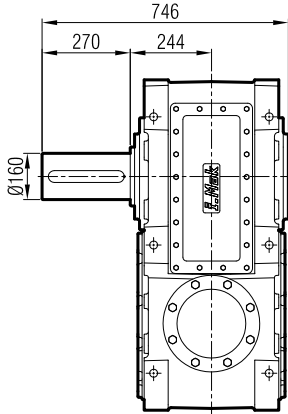
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

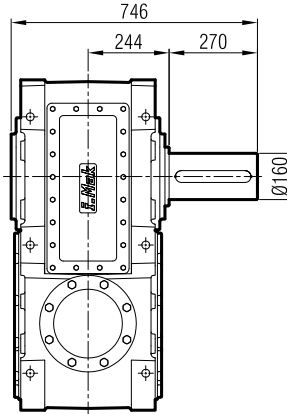
Le dimensions "A1" correspond aux moteurs équipés de freins.



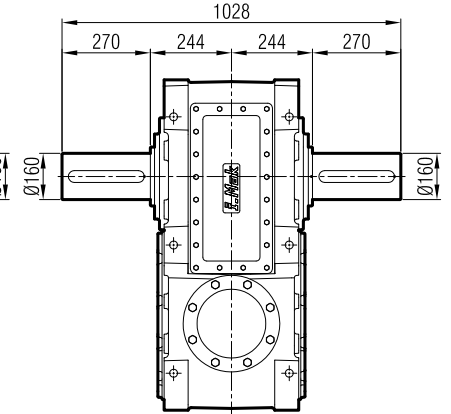
MA / MK 100_
...-SL



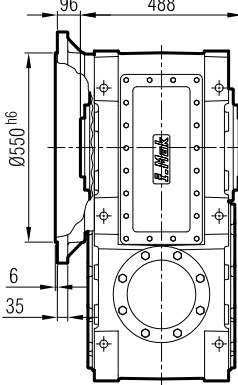
...-SR



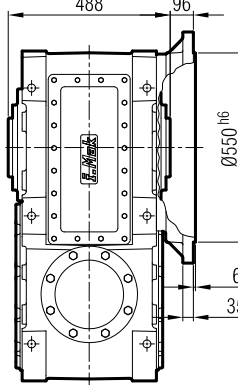
...-SD



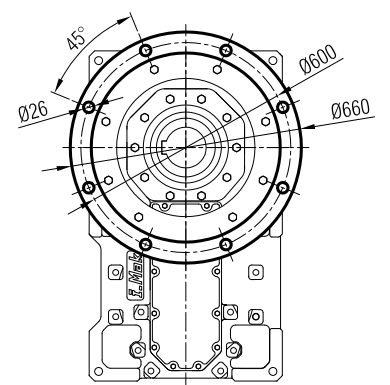
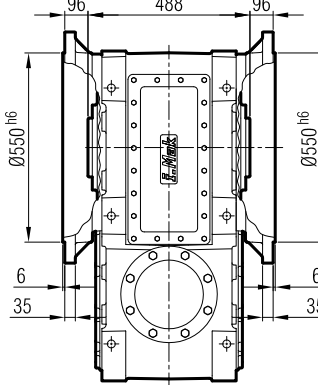
...-FL



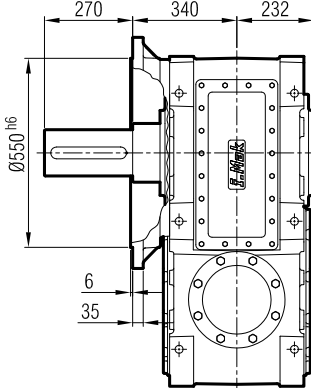
...-FR



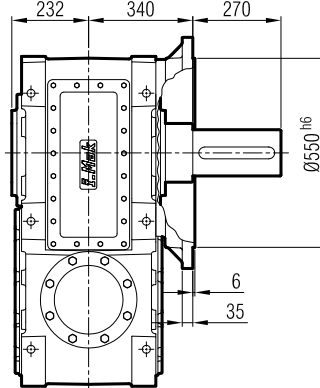
...-FD



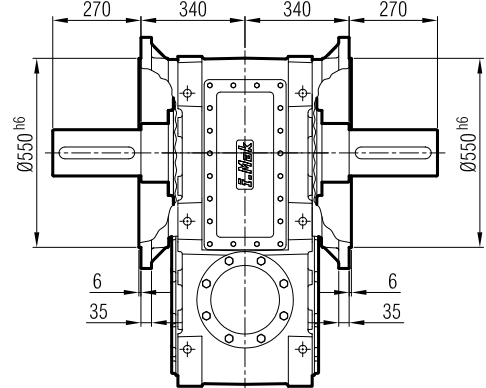
...-FL-SL



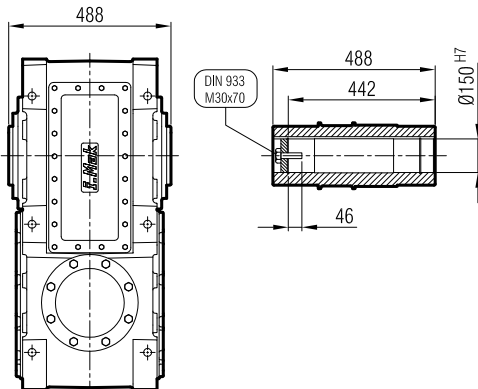
...-FR-SR



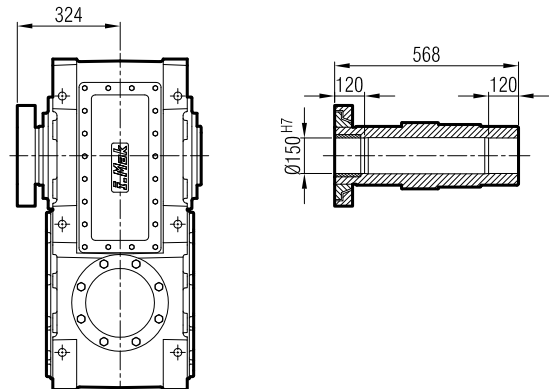
...-FD-SD



...-H



...-SDL / SDR



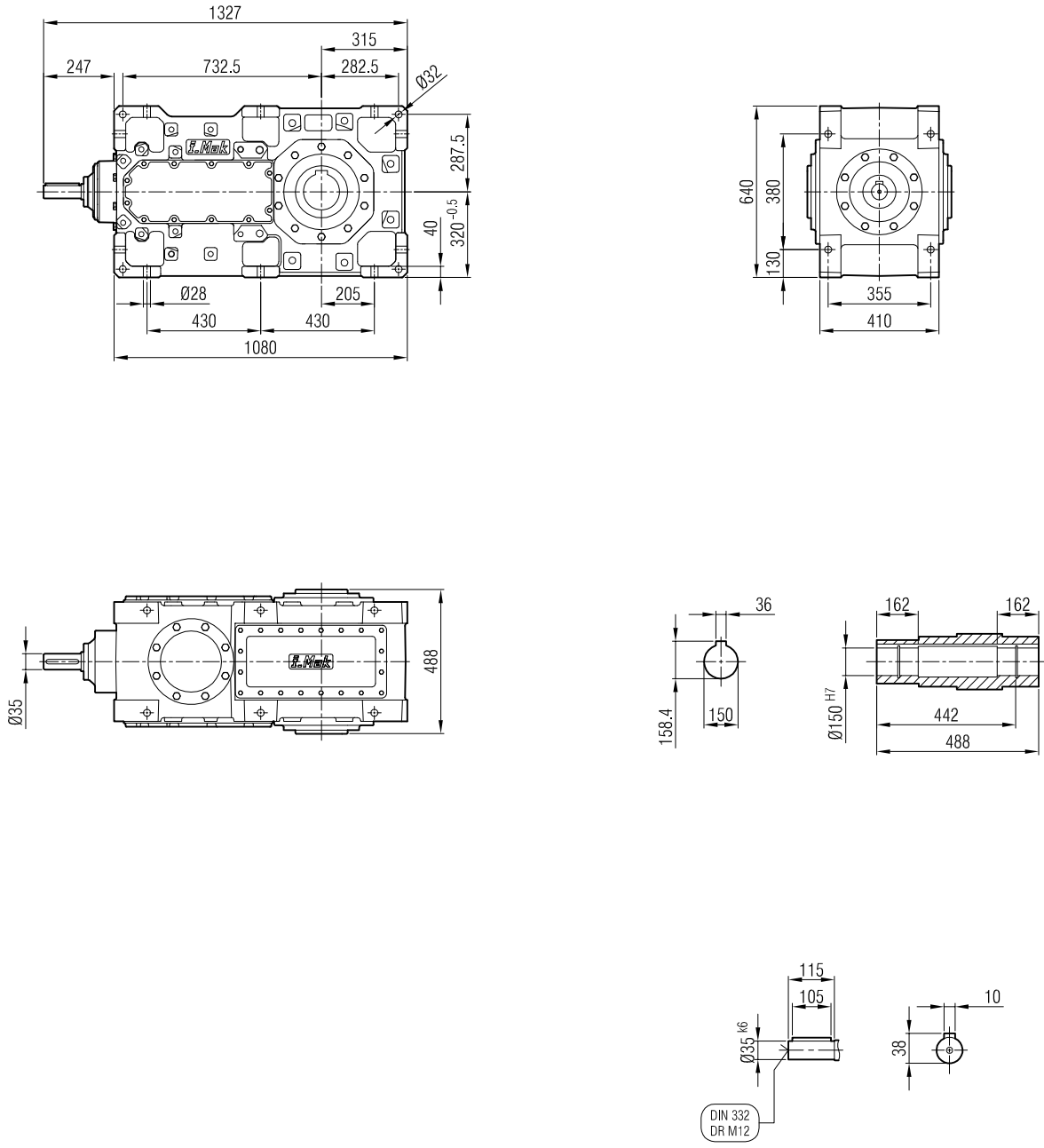
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

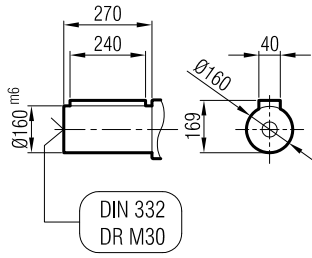
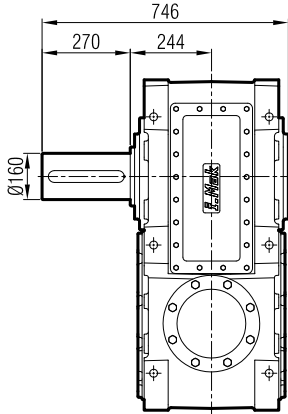


MK 1004-G07

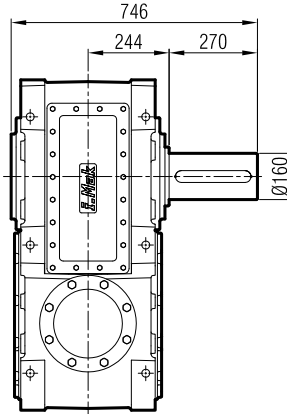




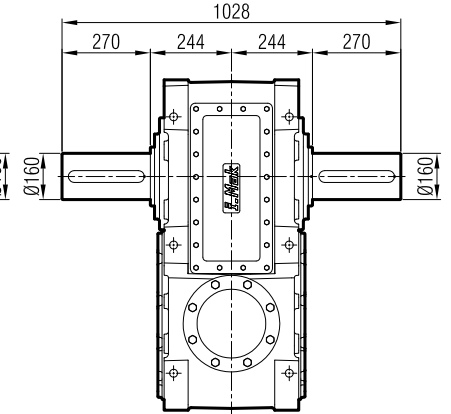
MA / MK 100_
...-SL



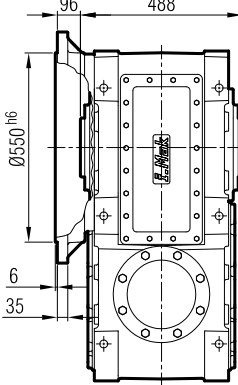
...-SR



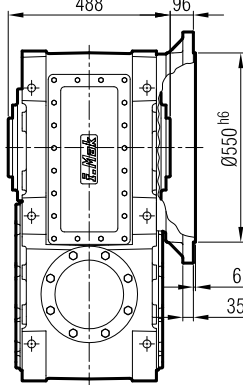
...-SD



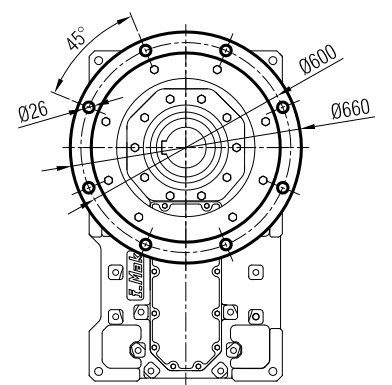
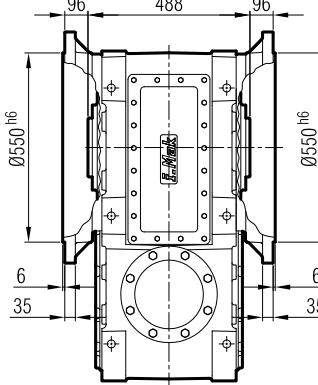
...-FL



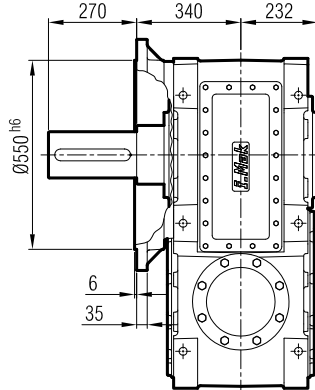
...-FR



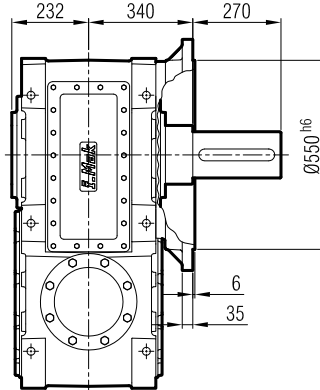
...-FD



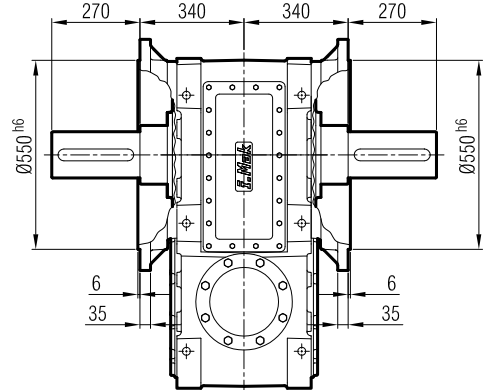
...-FL-SL



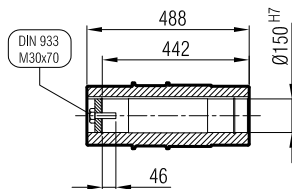
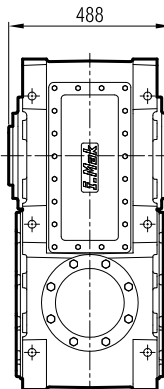
...-FR-SR



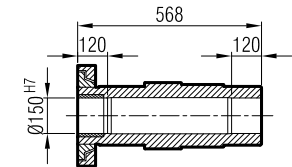
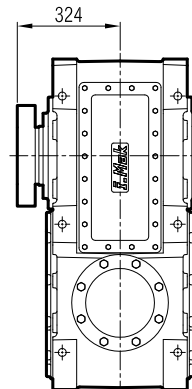
...-FD-SD



...-H



...-SDL / SDR



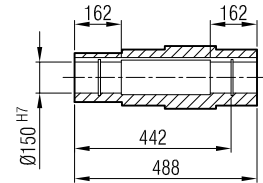
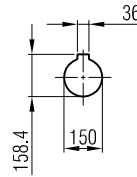
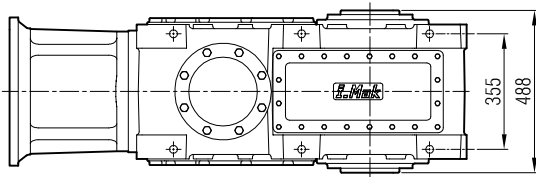
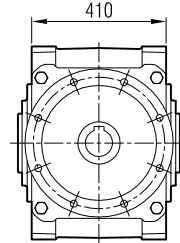
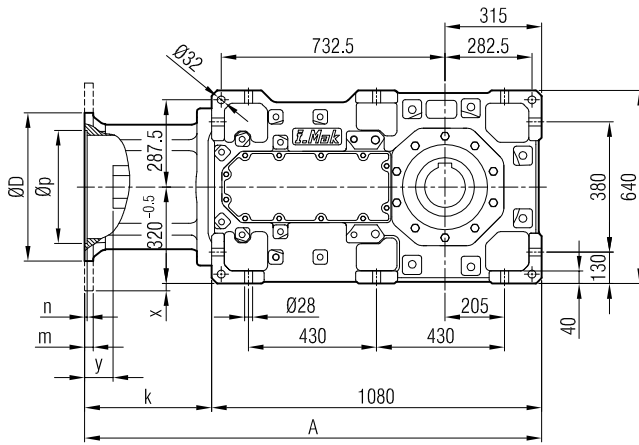
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.

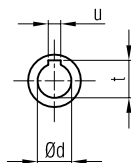
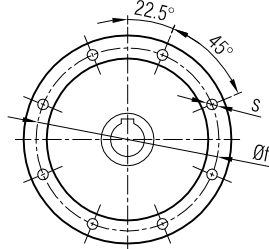
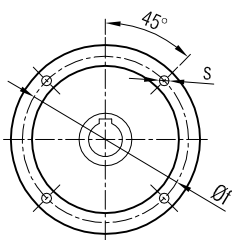


MKP 1004-G09



≤ 200 B5 **Tip/Type/Typ**

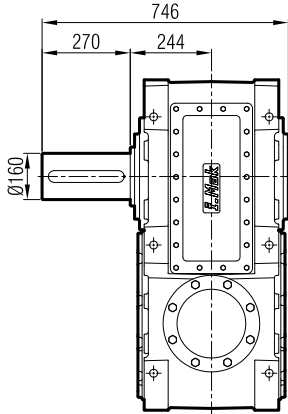
≥ 225 B5 **Tip/Type/Typ**



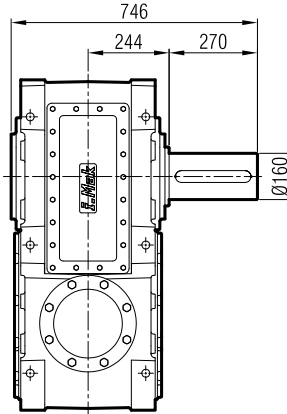
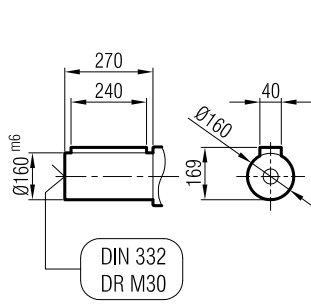
	A	Øp	Øf	ØD	s	k	m	n	Ød	t	u	x	y
112/B5	1398	180	215	250	M12	325	15	5	28	31.3	8	-	23
132/B5	1418	230	265	300	M12	345	18	6	38	41.3	10	-	28
160/B5	1450	250	300	350	M14	370	20	6	42	45.3	12	-	60
180/B5	1450	250	300	350	M14	370	20	6	48	51.8	14	-	60
200/B5	1450	300	350	400	M16	370	22	6	55	59.3	16	-	60
225/B5	1493	350	400	450	M16	413	22	6	60	64.4	18	-	80



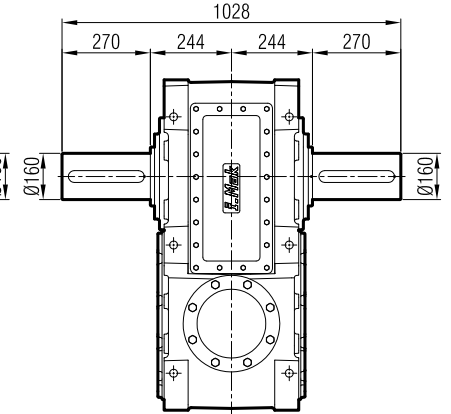
MA / MK 100_
...-SL



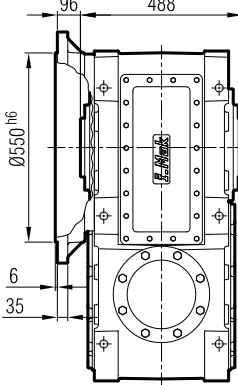
...-SR



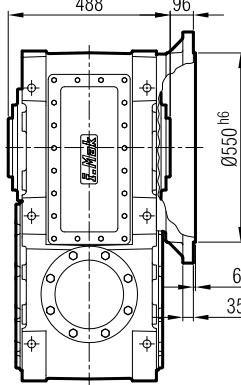
...-SD



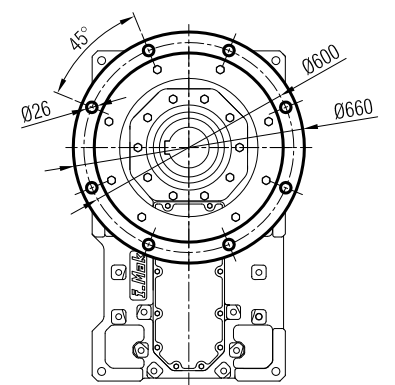
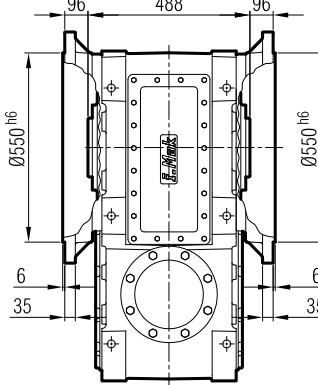
...-FL



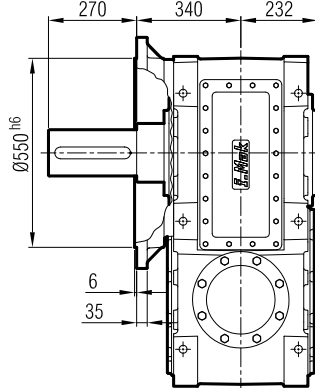
...-FR



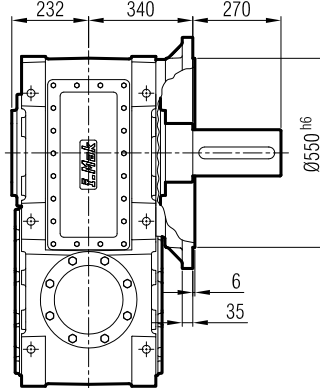
...-FD



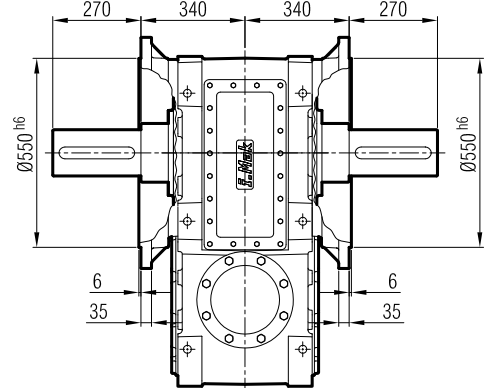
...-FL-SL



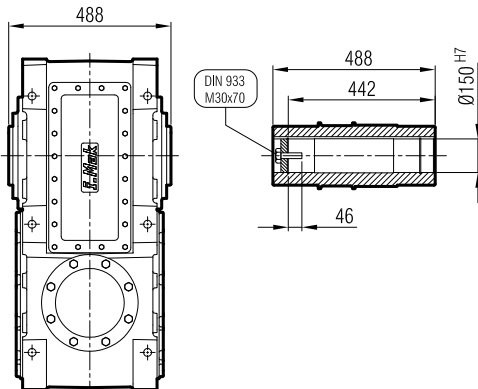
...-FR-SR



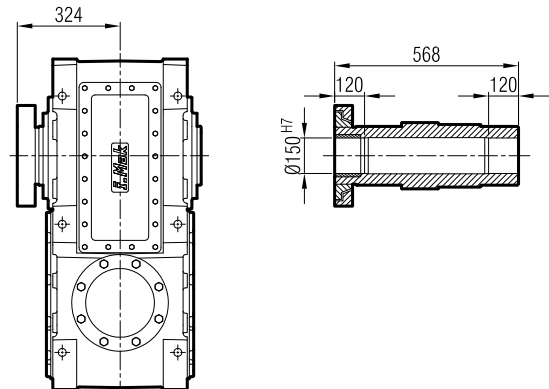
...-FD-SD



...-H



...-SDL / SDR



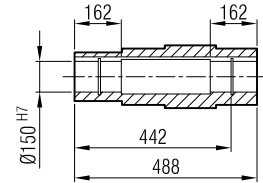
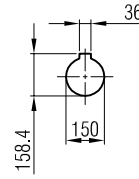
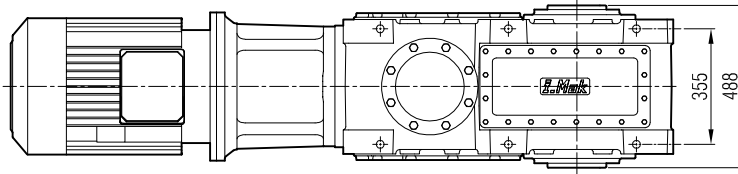
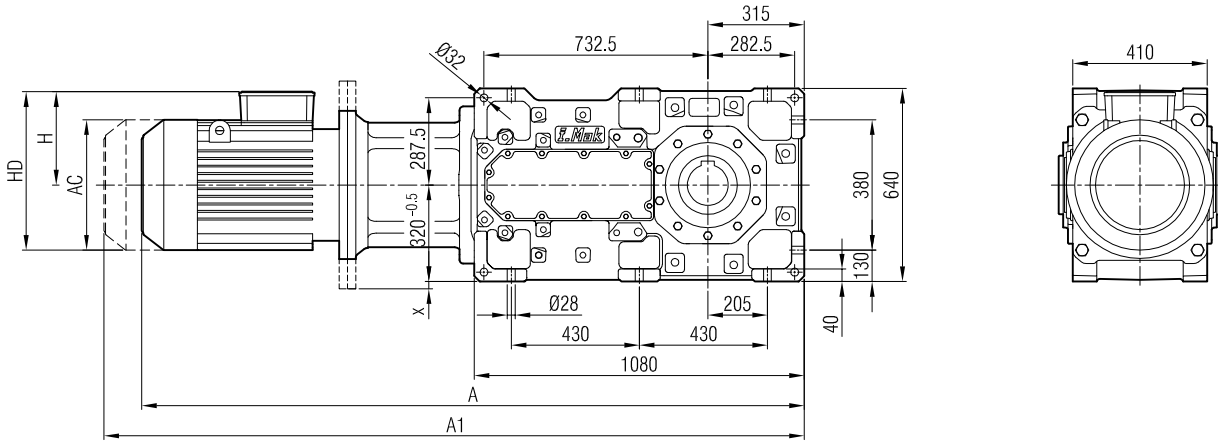
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



MKM 1004-G09



	112 M/B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200 L/B5	225 S/B5	225 M/B5
A	1742	1819	1860	1970	2015	2091	2091	2159	2178	2238
A1	1825	1919	1960	2085	2130	2211	2211	2279	2298	2358
H	170	193	193	240	240	260	260	300	313	313
HD	282	325	325	400	400	440	440	500	538	538
AC	220	262	262	315	315	357	357	394	456	456
x	-	-	-	-	-	-	-	-	-	-

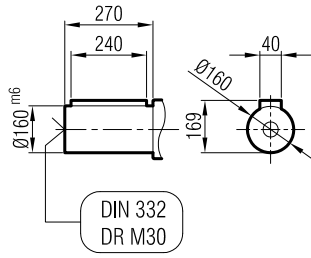
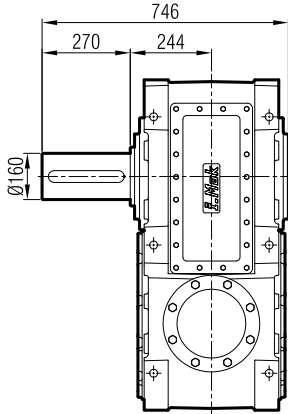
"A1" ölçüsü frenli motorlar içindir.

Dimension "A1" is for motors with brake.

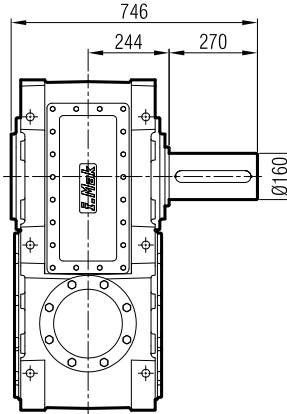
Le dimensions "A1" correspond aux moteurs équipés de freins.



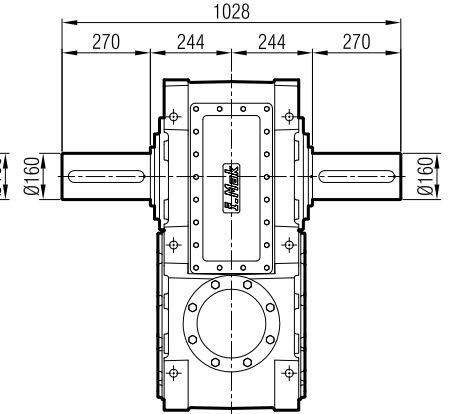
MA / MK 100_
...-SL



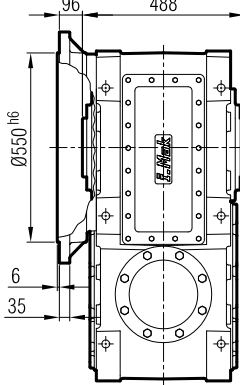
...-SR



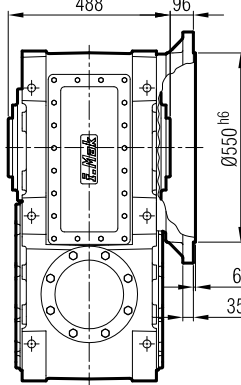
...-SD



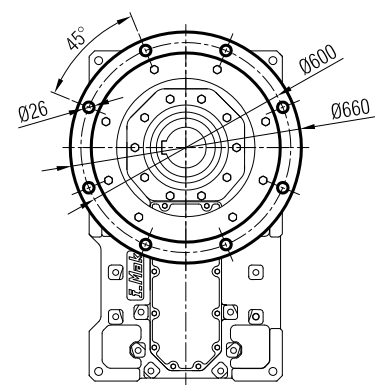
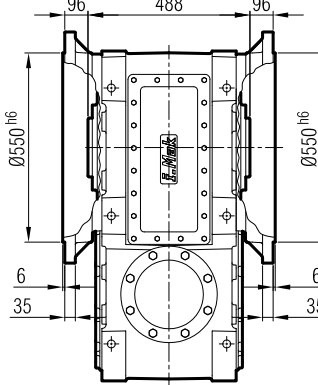
...-FL



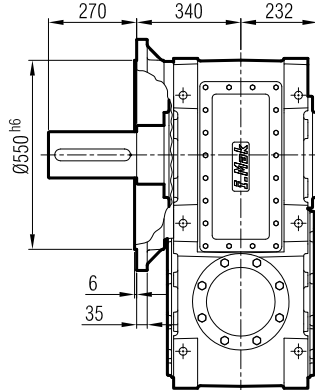
...-FR



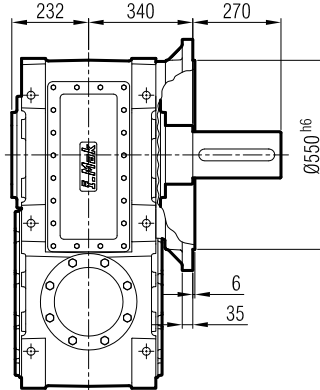
...-FD



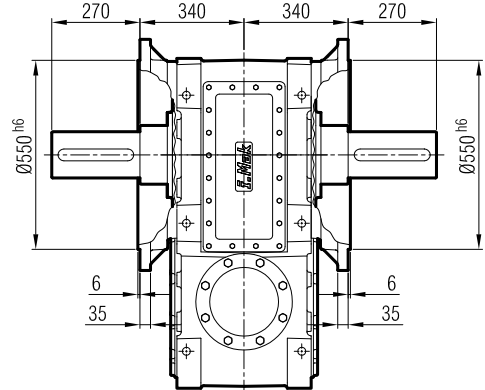
...-FL-SL



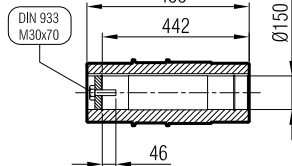
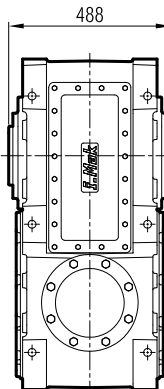
...-FR-SR



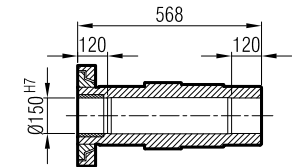
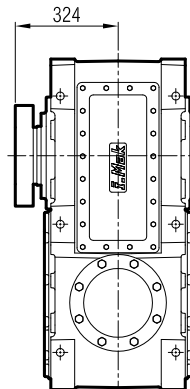
...-FD-SD



...-H



...-SDL / SDR



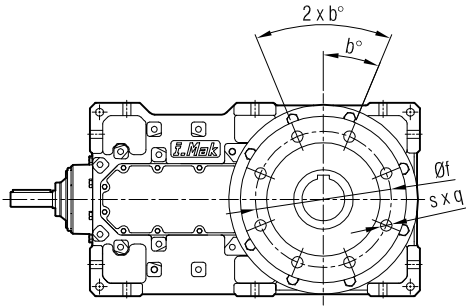
Giriş seçeneklerine göre çıkış opsiyonlarının kullanımında bazı kısıtlamalar vardır! Bkz. sayfa 13.

There are some restrictions on the selection of the Output Options according to the Input Options! Cf. page 13.

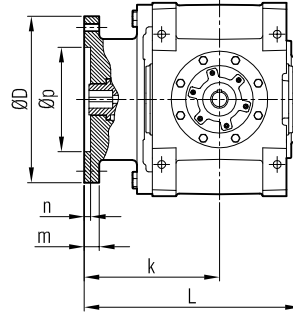
Il existe certaines restrictions sur l'utilisation des options de sortie en fonction des options d'entrée! Voir page 13.



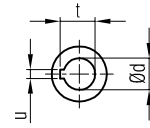
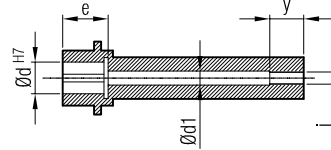
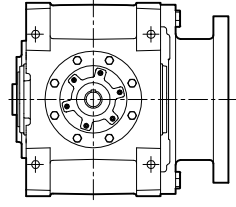
MKE / G07



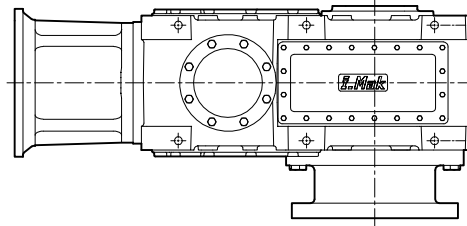
.... / EL



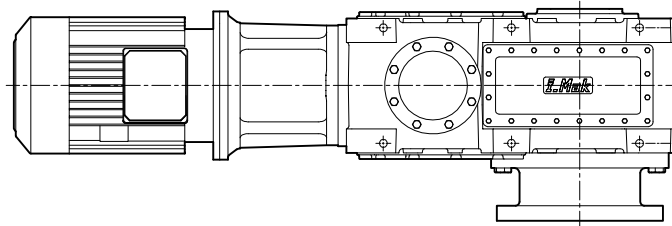
.... / ER



MKEP / G09



MKEP / G09



q: Adet / Quantity / quantité

	Øp	Øf	ØD	m	n	s	q	b°	Ød	Ød1	e	u	t	j	y	k	L
MKE... 504-503	290	325	370	30	10	M20	8	22.5°	Ø70	Ø40	140	20	74.9	M36	75	360	552.5
MKE... 604-603	340	375	420	44	10	M20	8	22.5°	Ø80	Ø40	145	22	85.4	M36	75	376	571
MKE... 704-703	355	400	450	35	10	M24	8	22.5°	Ø90	Ø40	145	25	95.4	M36	75	402.5	620
MKE... 804-803	395	440	490	35	10	M24	8	22.5°	Ø100	Ø40	155	28	106.4	M36	75	427.5	647.5
MKE... 904-903	425	480	540	45	15	M30	8	22.5°	Ø110	Ø40	155	28	116.4	M36	75	460	702
MKE... 1004-1003	455	500	560	45	15	M30	8	22.5°	Ø120	Ø40	175	32	127.4	M36	75	475	719

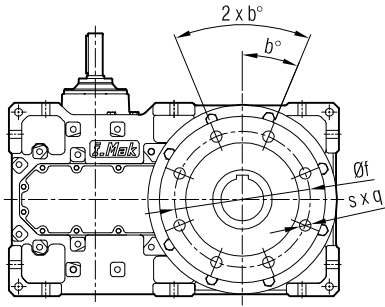
Redüktör gövde ölçüleri için standart ölçü sayfasına bakınız.

For gearbox housing dimensions please refer to the standart dimension pages.

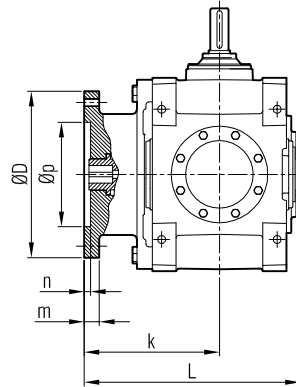
Consultez la page de dimensions standard pour plus d'informations sur la taille du carter



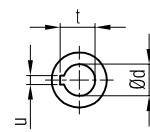
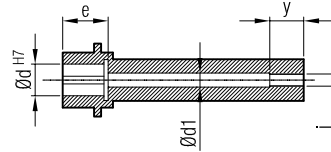
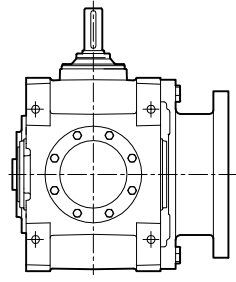
MKE / G08



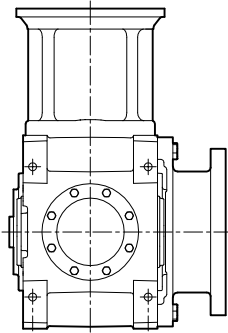
.... / EL



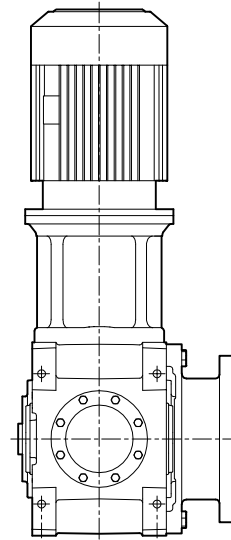
.... / ER



MKEP / G10



MKEM / G10



q: Adet / Quantity / quantité

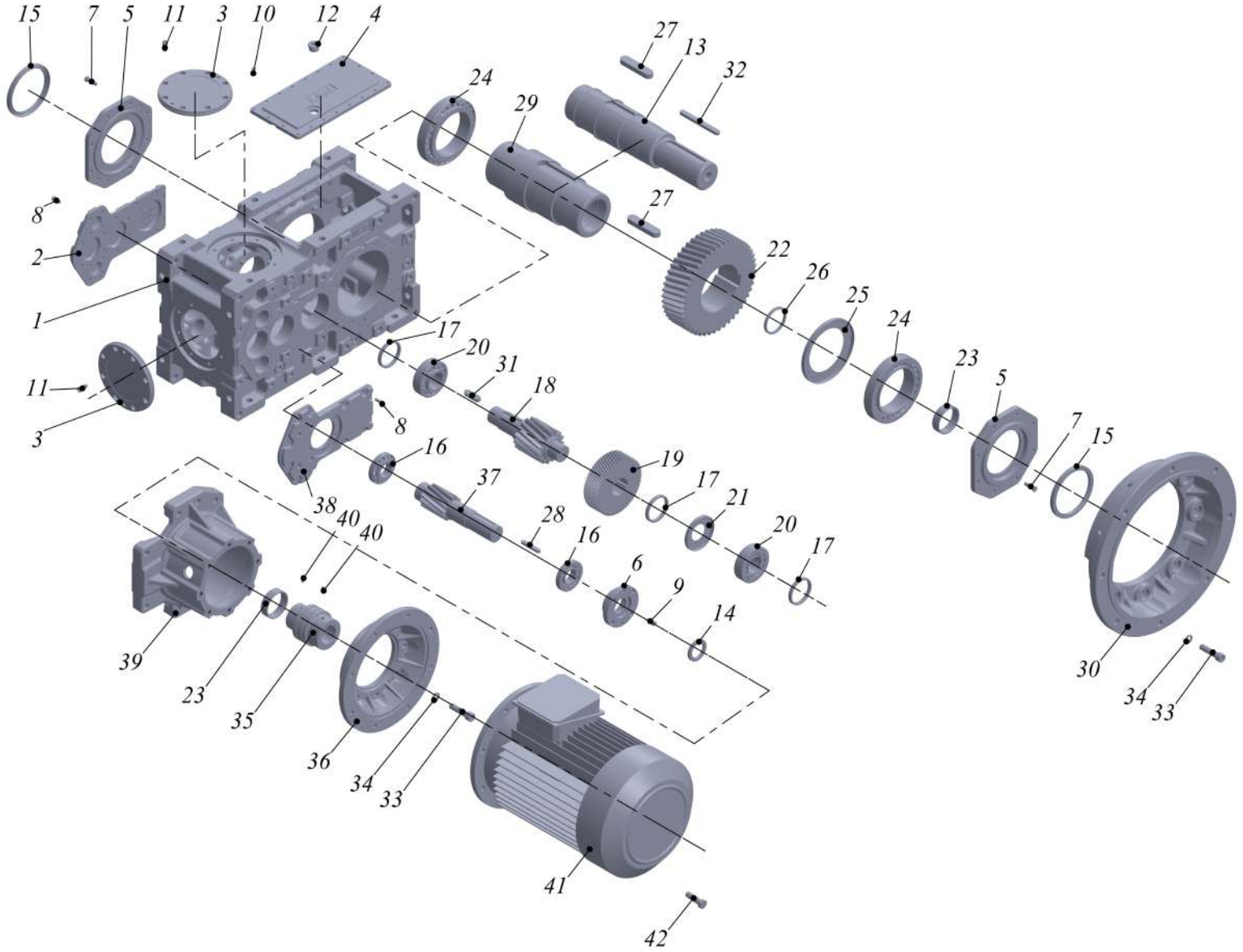
	Øp	Øf	ØD	m	n	s	q	b°	Ød	Ød1	e	u	t	j	y	k	L
MKE... 503	290	325	370	30	10	M20	8	22.5°	Ø70	Ø40	140	20	74.9	M36	75	360	552.5
MKE... 603	340	375	420	44	10	M20	8	22.5°	Ø80	Ø40	145	22	85.4	M36	75	376	571
MKE... 703	355	400	450	35	10	M24	8	22.5°	Ø90	Ø40	145	25	95.4	M36	75	402.5	620
MKE... 803	395	440	490	35	10	M24	8	22.5°	Ø100	Ø40	155	28	106.4	M36	75	427.5	647.5
MKE... 903	425	480	540	45	15	M30	8	22.5°	Ø110	Ø40	155	28	116.4	M36	75	460	702
MKE... 1003	455	500	560	45	15	M30	8	22.5°	Ø120	Ø40	175	32	127.4	M36	75	475	719

Redüktör gövde ölçüleri için standart ölçü sayfasına bakınız.
For gearbox housing dimensions please refer to the standart dimension pages.
Consultez la page de dimensions standard pour plus d'informations sur la taille du carter

MA Serisi Redüktörler Yedek Parça Listeleri

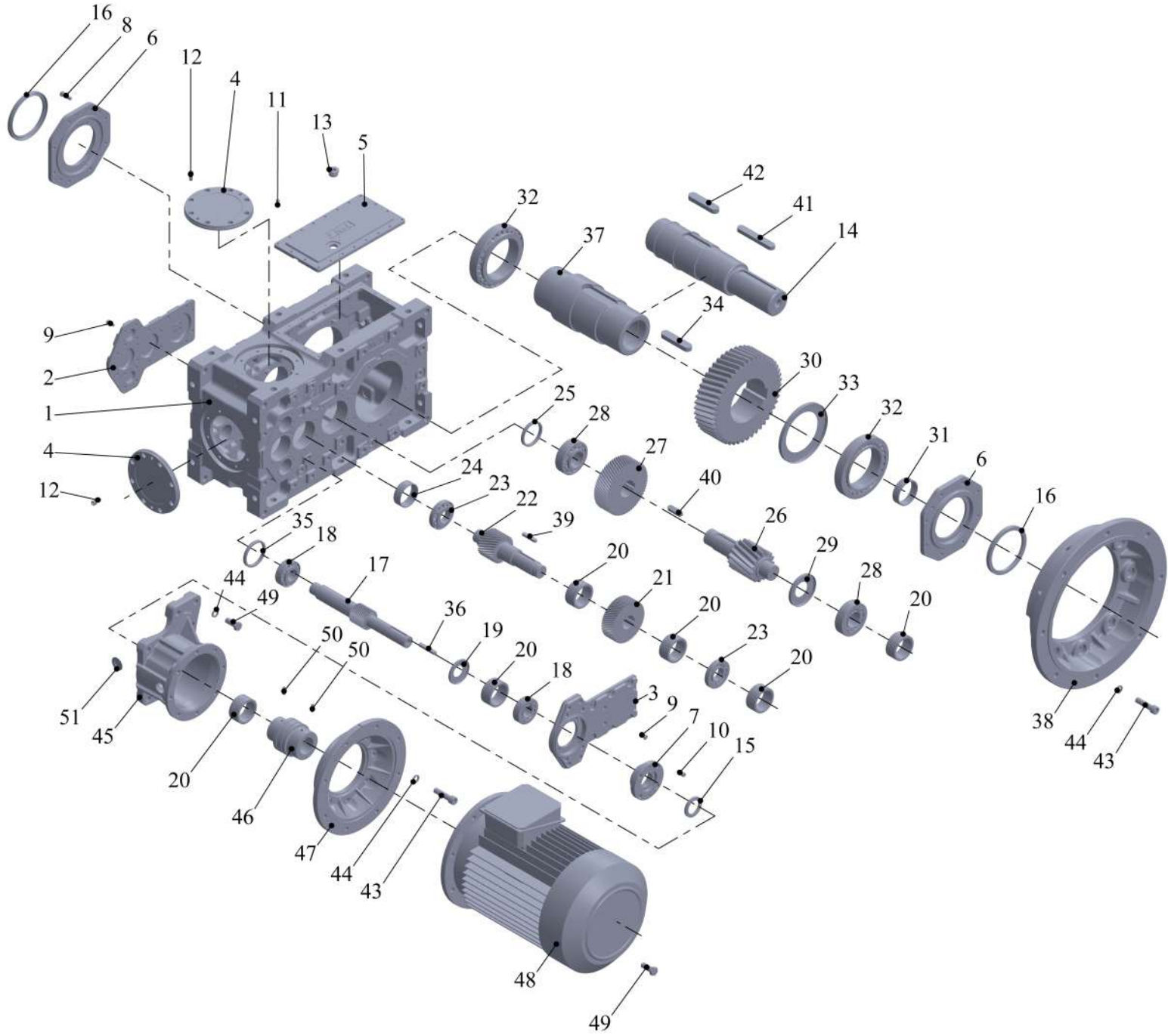
General Parts List

Liste des pièces détachées

**TİP / TYPE / TYP****MA - MAP - MAM 502 - 602 - 702 - 802 - 902 - 1002**

**TİP / TYPE / TYP****MA - MAP - MAM 502 - 602 - 702 - 802 - 902 - 1002**

1 - Gövde	1 - Gear Case	1 - Carter
2 - Rulman Baskı Kapağı	2 - Bearing Cover	2 - Couvercle de Roulement
3 - Ön veya Üst Konik Kapağı	3 - Front or Top Conical Cover	3 - Couvercle conique avant ou supérieur
4 - Kapak	4 - Cover	4 - Couvercle
5 - Keçe Kapağı	5 - Seal Cover	5 - Couvercle de joint
6 - Keçe Kapağı	6 - Seal Cover	6 - Couvercle de joint
7 - Cıvata	7 - Bolt	7 - Vis
8 - Cıvata	8 - Bolt	8 - Vis
9 - Cıvata	9 - Bolt	9 - Vis
10 - Cıvata	10 - Bolt	10 - Vis
11 - Cıvata	11 - Bolt	11 - Vis
12 - Yağ Tapası	12 - Oil Plug	12 - Bouchon d'huile
13 - Çıkış Mili	13 - Output Shaft	13 - Arbre de sortie
14 - Keçe	14 - Seal	14 - Joint
15 - Keçe	15 - Seal	15 - Joint
16 - Rulman	16 - Bearing	16 - Roulement
17 - Burç	17 - Spacer	17 - Anneau d'espacement
18 - Dişli Z3	18 - Gear Z3	18 - Pignon Z3
19 - Dişli Z2	19 - Gear Z2	19 - Pignon Z2
20 - Rulman	20 - Bearing	20 - Roulement
21 - Nilos Ring	21 - Nilos Ring	21 - Nilos Ring
22 - Dişli Z4	22 - Gear Z4	22 - Pignon Z4
23 - Burç	23 - Spacer	23 - Anneau d'espacement
24 - Rulman	24 - Bearing	24 - Roulement
25 - Nilosring	25 - Nilos Ring	25 - Nilos Ring
26 - Burç	26 - Spacer	26 - Anneau d'espacement
27 - Kama	27 - Key	27 - Clavette
28 - Kama	28 - Key	28 - Clavette
29 - Kovan	29 - Hollow Shalt	29 - Arbre creux
30 - Flanş	30 - Flange	30 - Bride
31 - Kama	31 - Key	31 - Clavette
32 - Kama	32 - Key	32 - Clavette
33 - Cıvata	33 - Bolt	33 - Vis
34 - Rondela	34 - Washer	34 - Machine à laver
35 - Kaplin	35 - Coupling	35 - Couplage
36 - Motor Bağlantı Flanşı	36 - Motor Mounting Flange	36 - Bride moteur
37 - Dişli Z1	37 - Gear Z1	37 - Pignon Z1
38 - Rulman Baskı Kapağı	38 - Bearing Cover	38 - Couvercle de Roulement
39 - Motor Bağlantı Boğazı	39 - Motor Mounting Adapter	39 - Bride moteur
40 - Setskur	40 - Setskur	40 - Setskur
41 - Elektrik Motoru	41 - Electric Motor	41 - Moteur électrique
42 - Cıvata	42 - Bolt	42 - Vis

**TİP / TYPE / TYP****MA - MAP - MAM 503 - 603 - 703 - 803 - 903 - 1003**

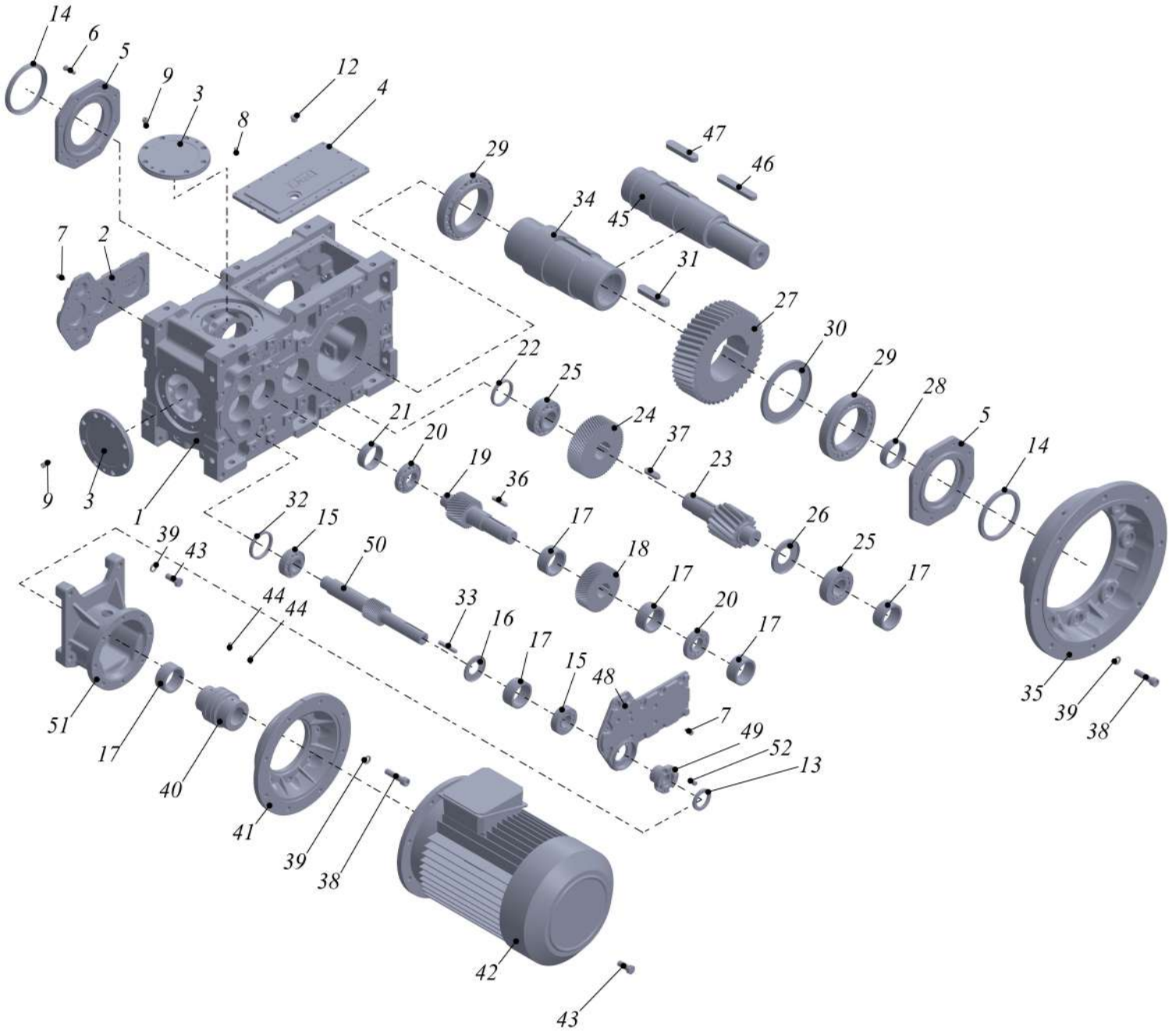
**TİP / TYPE / TYP****MA - MAP - MAM 503 - 603 - 703 - 803 - 903 - 1003**

1 - Gövde	1 - Gear Case	1 - Carter
2 - Rulman Baskı Kapağı	2 - Bearing Cover	2 - Couvercle de Roulement
3 - Rulman Baskı Kapağı	3 - Bearing Cover	3 - Couvercle de Roulement
4 - Ön veya Üst Konik Kapağı	4 - Front or Top Conical Cover	4 - Couvercle conique avant ou supérieur
5 - Kapak	5 - Cover	5 - Couvercle
6 - Keçe Kapağı	6 - Seal Cover	6 - Couvercle de joint
7 - Keçe Kapağı	7 - Seal Cover	7 - Couvercle de joint
8 - Civata	8 - Bolt	8 - Vis
9 - Civata	9 - Bolt	9 - Vis
10 - Civata	10 - Bolt	10 - Vis
11 - Civata	11 - Bolt	11 - Vis
12 - Civata	12 - Bolt	12 - Vis
13 - Yağ Tapası	13 - Oil Plug	13 - Bouchon d'huile
14 - Çıkış Mili	14 - Output Shaft	14 - Arbre de sortie
15 - Keçe	15 - Seal	15 - Joint
16 - Keçe	16 - Seal	16 - Joint
17 - Dişli Z1	17 - Gear Z1	17 - Pignon Z1
18 - Rulman	18 - Bearing	18 - Roulement
19 - Nilos Ring	19 - Nilos Ring	19 - Nilos Ring
20 - Burç	20 - Spacer	20 - Anneau d'espacement
21 - Dişli Z2	21 - Gear Z2	21 - Pignon Z2
22 - Dişli Z3	22 - Gear Z3	22 - Pignon Z3
23 - Rulman	23 - Bearing	23 - Roulement
24 - Burç	24 - Spacer	24 - Anneau d'espacement
25 - Burç	25 - Spacer	25 - Anneau d'espacement
26 - Dişli Z5	26 - Gear Z5	26 - Pignon Z5
27 - Dişli Z4	27 - Gear Z4	27 - Pignon Z4
28 - Rulman	28 - Bearing	28 - Roulement
29 - Nilosring	29 - Nilos Ring	29 - Nilos Ring
30 - Dişli Z6	30 - Gear Z6	30 - Pignon Z6
31 - Burç	31 - Spacer	31 - Anneau d'espacement
32 - Rulman	32 - Bearing	32 - Roulement
33 - Nilos Ring	33 - Nilos Ring	33 - Nilos Ring
34 - Kama	34 - Key	34 - Clavette
35 - Burç	35 - Spacer	35 - Anneau d'espacement
36 - Kama	36 - Key	36 - Clavette
37 - Kovan	37 - Hollow Shalt	37 - Arbre creux
38 - Flanş	38 - Flange	38 - Bride
39 - Kama	39 - Key	39 - Clavette
40 - Kama	40 - Key	40 - Clavette
41 - Kama	41 - Key	41 - Clavette
42 - Kama	42 - Key	42 - Clavette
43 - Civata	43 - Bolt	43 - Vis
44 - Rondela	44 - Washer	44 - Machine à laver
45 - Motor Bağlantı Boğazı	45 - Motor Mounting Adapter	45 - Bride moteur
46 - Kaplin	46 - Coupling	46 - Couplage
47 - Motor Bağlantı Flanşı	47 - Motor Mounting Flange	47 - Bride moteur
48 - Elektrik Motoru	48 - Electric Motor	48 - Moteur électrique
49 - Civata	49 - Bolt	49 - Vis
50 - Setskur	50 - Setskur	50 - Setskur
51 - Kapak	51 - Cover	51 - Couvercle



TİP / TYPE / TYP

MA - MAP - MAM 704 - 8044- 904 - 10044



**TİP / TYPE / TYP****MA - MAP - MAM 704 - 804 - 904 - 1004**

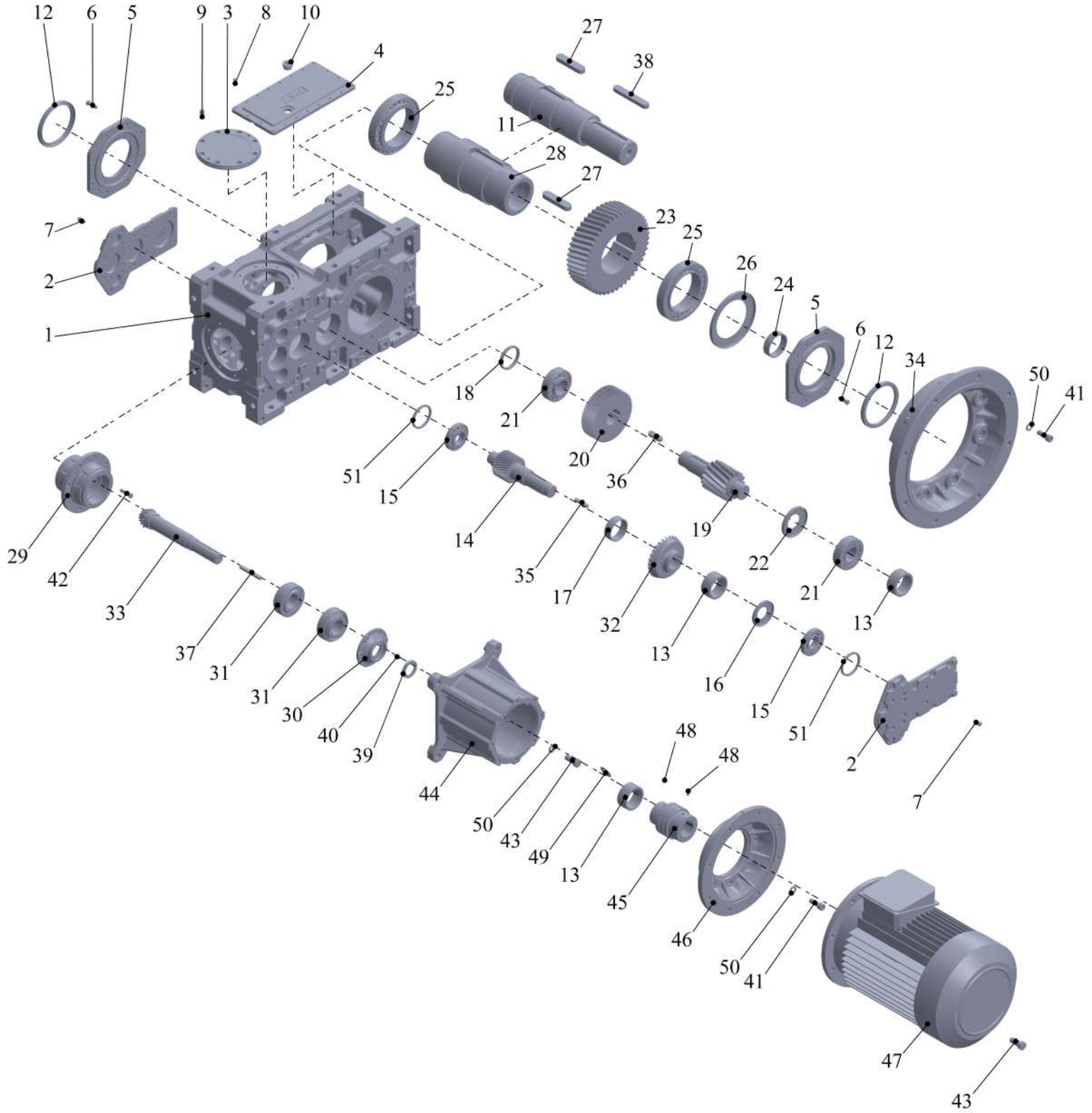
1 - Gövde	1 - Gear Case	1 - Carter
2 - Rulman Baskı Kapağı	2 - Bearing Cover	2 - Couvercle de Roulement
3 - Ön veya Üst Konik Kapağı	3 - Front or Top Conical Cover	3 - Couvercle conique avant ou supérieur
4 - Kapak	4 - Cover	4 - Couvercle
5 - Keçe Kapağı	5 - Seal Cover	5 - Couvercle de joint
6 - Cıvata	6 - Bolt	6 - Vis
7 - Cıvata	7 - Bolt	7 - Vis
8 - Cıvata	8 - Bolt	8 - Vis
9 - Cıvata	9 - Bolt	9 - Vis
10 - Yağ Tapası	10 - Oil Plug	10 - Bouchon d'huile
11 - Çıkış Mili*	11 - Output Shaft	11 - Arbre de sortie
12 - Keçe	12 - Seal	12 - Joint
13 - Keçe	13 - Seal	13 - Joint
14 - Rulman	14 - Bearing	14 - Roulement
15 - Nilos Ring	15 - Nilos Ring	15 - Nilos Ring
16 - Burç	16 - Spacer	16 - Anneau d'espacement
17 - Dişli Z2	17 - Gear Z2	17 - Pignon Z2
18 - Dişli Z3	18 - Gear Z3	18 - Pignon Z3
19 - Rulman	19 - Bearing	19 - Roulement
20 - Burç	20 - Spacer	20 - Anneau d'espacement
21 - Burç	21 - Spacer	21 - Anneau d'espacement
22 - Dişli Z5	22 - Gear Z5	22 - Pignon Z5
23 - Dişli Z4	23 - Gear Z4	23 - Pignon Z4
24 - Rulman	24 - Bearing	24 - Roulement
25 - Nilosring	25 - Nilos Ring	25 - Nilos Ring
26 - Dişli Z6	26 - Gear Z6	26 - Pignon Z6
27 - Burç	27 - Spacer	27 - Anneau d'espacement
28 - Rulman	28 - Bearing	28 - Roulement
29 - Nilos Ring	29 - Nilos Ring	29 - Nilos Ring
30 - Kama	30 - Key	30 - Clavette
31 - Burç	31 - Spacer	31 - Anneau d'espacement
32 - Kama	32 - Key	32 - Clavette
33 - Kovan*	33 - Hollow Shalt	33 - Arbre creux
34 - Flanş	34 - Flange	34 - Bridge
35 - Kama	35 - Key	35 - Clavette
36 - Kama	36 - Key	36 - Clavette
37 - Kama	37 - Key	37 - Clavette
38 - Kama	38 - Key	38 - Clavette
39 - Cıvata	39 - Bolt	39 - Vis
40 - Rondela	40 - Washer	40 - Machine à laver
41 - Kaplin	41 - Coupling	41 - Couplage
42 - Motor Bağlantı Flanşı	42 - Motor Mounting Flange	42 - Bride moteur
43 - Elektrik Motoru	43 - Electric Motor	43 - Moteur électrique
44 - Cıvata	44 - Bolt	44 - Vis
45 - Setskur	45 - Setskur	45 - Setskur
46 - Rulman Baskı Kapağı	46 - Bearing Cover	46 - Couvercle de Roulement
47 - Keçe Kapağı	47 - Seal Cover	47 - Couvercle de joint
48 - Dişli Z1	48 - Gear Z1	48 - Pignon Z1
49 - Motor Bağlantı Boğazi	49 - Motor Mounting Adapter	49 - Bride moteur
50 - Cıvata	50 - Bolt	50 - Vis



MK Serisi Redüktörler Yedek Parça Listeleri

General Parts List

Liste des pièces détachées

**TİP / TYPE / TYP****MK - MKP - MKM****503 - 603 - 703 - 803 - 903 - 1003 / G07 - G09****504 - 604 - 704 - 804 - 904 - 1004 / G07 - G09**

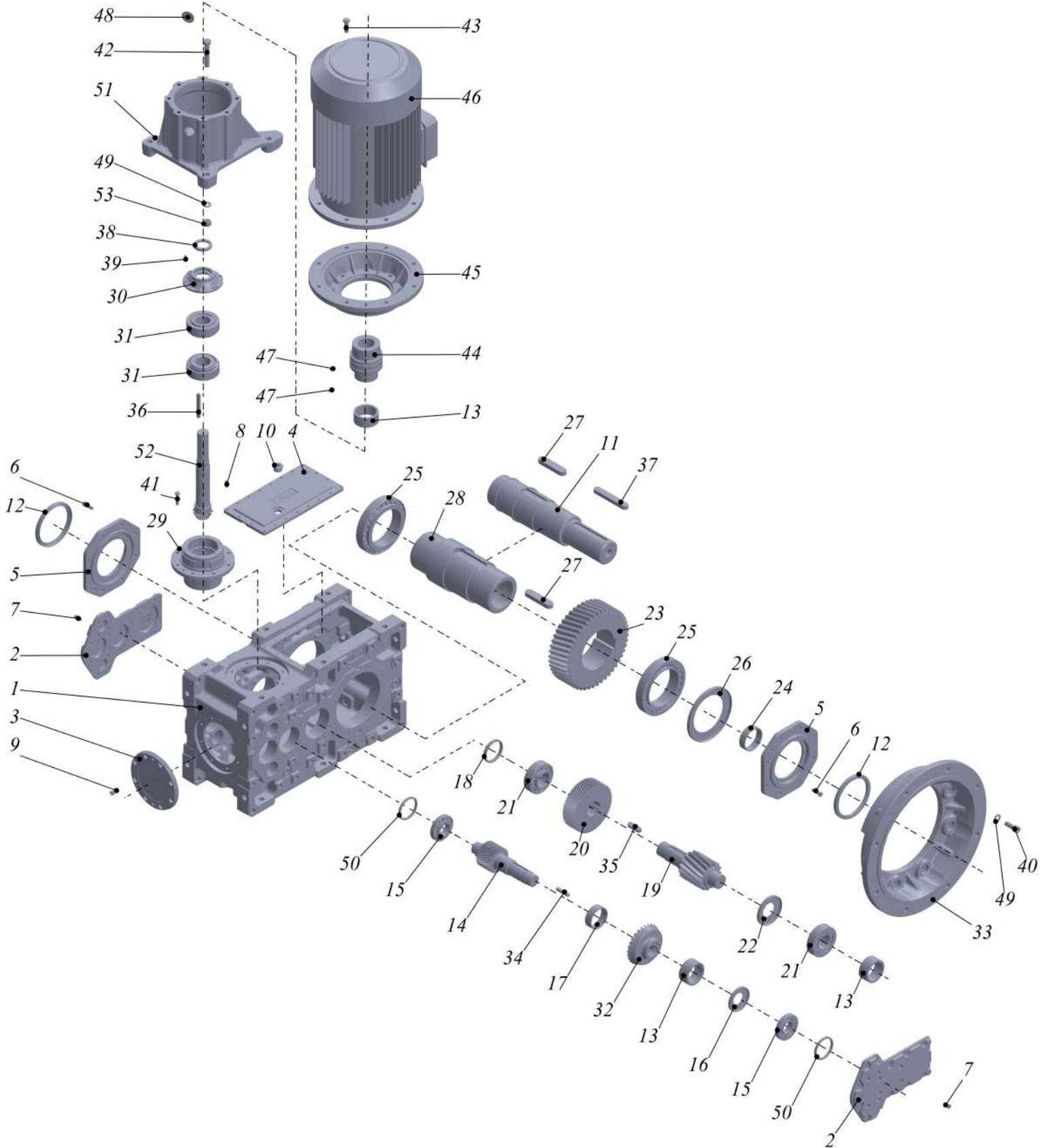
**TİP / TYPE / TYP****MK - MKP - MKM****503 - 603 - 703 - 803 - 903 - 1003 / G07 - G09****504 - 604 - 704 - 804 - 904 - 1004 / G07 - G09**

1 - Gövde	1 - Gear Case	1 - Carter
2 - Rulman Baskı Kapağı	2 - Bearing Cover	2 - Couvercle de Roulement
3 - Ön veya Üst Konik Kapağı	3 - Front or Top Conical Cover	3 - Couvercle conique avant ou supérieur
4 - Kapak	4 - Cover	4 - Couvercle
5 - Keçe Kapağı	5 - Seal Cover	5 - Couvercle de joint
6 - Civata	6 - Bolt	6 - Vis
7 - Civata	7 - Bolt	7 - Vis
8 - Civata	8 - Bolt	8 - Vis
9 - Civata	9 - Bolt	9 - Vis
10 - Yağ Tapası	10 - Oil Plug	10 - Bouchon d'huile
11 - Çıkış Mili	11 - Output Shaft	11 - Arbre de sortie
12 - Keçe	12 - Seal	12 - Joint
13 - Burç	13 - Spacer	13 - Anneau d'espacement
14 - Dişli Z3	14 - Gear Z3	14 - Pignon Z3
15 - Rulman	15 - Bearing	15 - Roulement
16 - Nilos Ring	16 - Nilos Ring	16 - Nilos Ring
17 - Burç	17 - Spacer	17 - Anneau d'espacement
18 - Burç	18 - Spacer	18 - Anneau d'espacement
19 - Dişli Z5	19 - Gear Z5	19 - Pignon Z5
20 - Dişli Z4	20 - Gear Z4	20 - Pignon Z4
21 - Rulman	21 - Bearing	21 - Roulement
22 - Nilos Ring	22 - Nilos Ring	22 - Nilos Ring
23 - Dişli Z6	23 - Gear Z6	23 - Pignon Z6
24 - Burç	24 - Spacer	24 - Anneau d'espacement
25 - Rulman	25 - Bearing	25 - Roulement
26 - Nilosring	26 - Nilos Ring	26 - Nilos Ring
27 - Kama	27 - Key	27 - Clavette
28 - Kovan	28 - Hollow Shaft	28 - Arbre creux
29 - Motorsuz Kapak	29 - Gear Case Cover	29 - Antriebsdeckel
30 - Keçe Kapağı	30 - Seal Cover	30 - Couvercle de joint
31 - Rulman	31 - Bearing	31 - Roulement
32 - Ayna Dişlisi Z4	32 - Gear Wheel Z4	32 - Pignon Z4
33 - Pinyon Z3	33 - Pinion Shaft Z3	33 - Pignon Z3
34 - Flanş	34 - Flange	34 - Bridge
35 - Kama	35 - Key	35 - Clavette
36 - Kama	36 - Key	36 - Clavette
37 - Kama	37 - Key	37 - Clavette
38 - Kama	38 - Key	38 - Clavette
39 - Keçe	39 - Seal	39 - Joint
40 - Civata	40 - Bolt	40 - Vis
41 - Civata	41 - Bolt	41 - Vis
42 - Civata	42 - Bolt	42 - Vis
43 - Civata	43 - Bolt	43 - Vis
44 - Motor Bağlantı Boğazı	44 - Motor Mounting Adapter	44 - Bride moteur
45 - Kaplin	45 - Coupling	45 - Couplage
46 - Motor Bağlantı Flanşı	46 - Motor Mounting Flange	46 - Bride moteur
47 - Elektrik Motoru	47 - Electric Motor	47 - Moteur électrique
48 - Setskur	48 - Setskur	48 - Setskur
49 - Kapak	49 - Cover	49 - Couvercle
50 - Rondela	50 - Washer	50 - Machine à laver
51 - Burç	51 - Spacer	51 - Anneau d'espacement



TİP / TYPE / TYP

MK - MKP - MKM 503 - 603 - 703 - 803 - 903 - 1003 / G08 - G10



**TİP / TYPE / TYP****MK - MKP - MKM 503 - 603 - 703 - 803 - 903 - 1003 / G08 - G10**

1 - Gövde	1 - Gear Case	1 - Carter
2 - Rulman Baskı Kapağı	2 - Bearing Cover	2 - Couvercle de Roulement
3 - Ön veya Üst Konik Kapağı	3 - Front or Top Conical Cover	3 - Couvercle conique avant ou supérieur
4 - Kapak	4 - Cover	4 - Couvercle
5 - Keçe Kapağı	5 - Seal Cover	5 - Couvercle de joint
6 - Cıvata	6 - Bolt	6 - Vis
7 - Cıvata	7 - Bolt	7 - Vis
8 - Cıvata	8 - Bolt	8 - Vis
9 - Cıvata	9 - Bolt	9 - Vis
10 - Yağ Tapası	10 - Oil Plug	10 - Bouchon d'huile
11 - Çıkış Mili	11 - Output Shaft	11 - Arbre de sortie
12 - Keçe	12 - Seal	12 - Joint
13 - Burç	13 - Spacer	13 - Anneau d'espacement
14 - Dişli Z3	14 - Gear Z3	14 - Pignon Z3
15 - Rulman	15 - Bearing	15 - Roulement
16 - Nilos Ring	16 - Nilos Ring	16 - Nilos Ring
17 - Burç	17 - Spacer	17 - Anneau d'espacement
18 - Burç	18 - Spacer	18 - Anneau d'espacement
19 - Dişli Z5	19 - Gear Z5	19 - Pignon Z5
20 - Dişli Z4	20 - Gear Z4	20 - Pignon Z4
21 - Rulman	21 - Bearing	21 - Roulement
22 - Nilos Ring	22 - Nilos Ring	22 - Nilos Ring
23 - Dişli Z6	23 - Gear Z6	23 - Pignon Z6
24 - Burç	24 - Spacer	24 - Anneau d'espacement
25 - Rulman	25 - Bearing	25 - Roulement
26 - Nilosring	26 - Nilos Ring	26 - Nilos Ring
27 - Kama	27 - Key	27 - Clavette
28 - Kovan	28 - Hollow Shaft	28 - Arbre creux
29 - Motorsuz Kapak	29 - Gear Case Cover	29 - Antriebsdeckel
30 - Keçe Kapağı	30 - Seal Cover	30 - Couvercle de joint
31 - Rulman	31 - Bearing	31 - Roulement
32 - Ayna Dişlisi Z4	32 - Gear Wheel Z4	32 - Pignon Z4
33 - Flanş	33 - Flange	33 - Bride
34 - Kama	34 - Key	34 - Clavette
35 - Kama	35 - Key	35 - Clavette
36 - Kama	36 - Key	36 - Clavette
37 - Kama	37 - Key	37 - Clavette
38 - Keçe	38 - Seal	38 - Joint
39 - Cıvata	39 - Bolt	39 - Vis
40 - Cıvata	40 - Bolt	40 - Vis
41 - Cıvata	41 - Bolt	41 - Vis
42 - Cıvata	42 - Bolt	42 - Vis
43 - Cıvata	43 - Bolt	43 - Vis
44 - Kaplin	44 - Coupling	44 - Couplage
45 - Motor Bağlantı Flanşı	45 - Motor Mounting Flange	45 - Bride moteur
46 - Elektrik Motoru	46 - Electric Motor	46 - Moteur électrique
47 - Setskur	47 - Setskur	47 - Setskur
48 - Kapak	48 - Cover	48 - Couvercle
49 - Rondela	49 - Washer	49 - Machine à laver
50 - Burç	50 - Spacer	50 - Anneau d'espacement
51 - Motor Bağlantı Boğazı	51 - Motor Mounting Adapter	51 - Bride moteur
52 - Pinyon Z3	52 - Pinion Shaft Z3	52 - Pignon Z3
53 - Somun	53 - Nut	53 - Noix

Notlar
Notes

Notlar
Notes



Fabrika - Merkez Satış

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