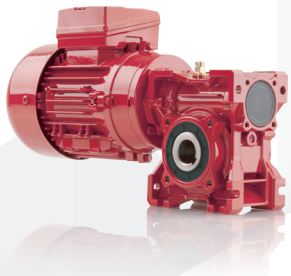
i.Mak®
Gearboxes and Drives

Worm Gearboxes

Motorreductores sinfin - corona

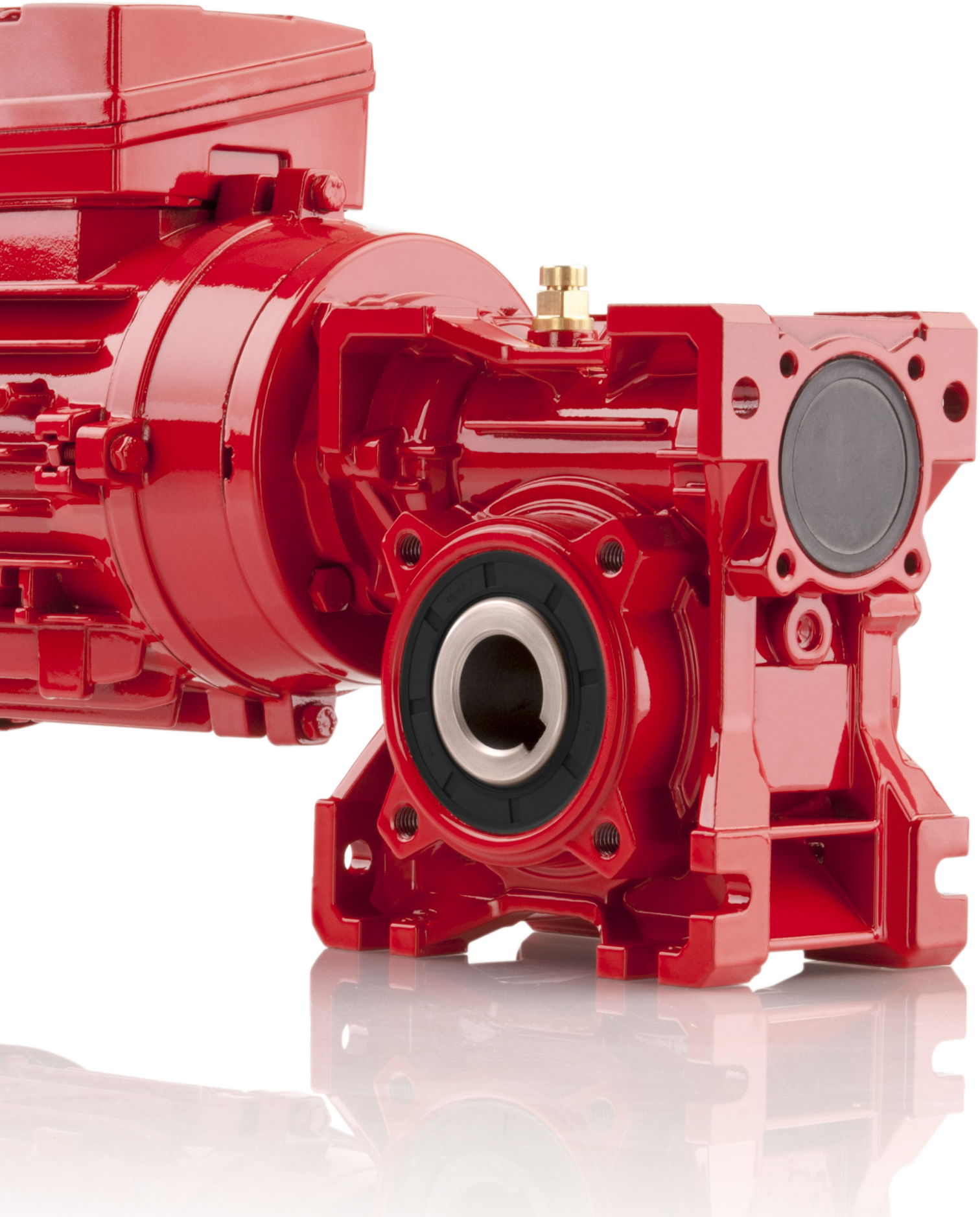
S00 50/60Hz



SERIES
S
iRS
iRSD

2023
EN | ES

Gearboxes and Drives / Motorreductores



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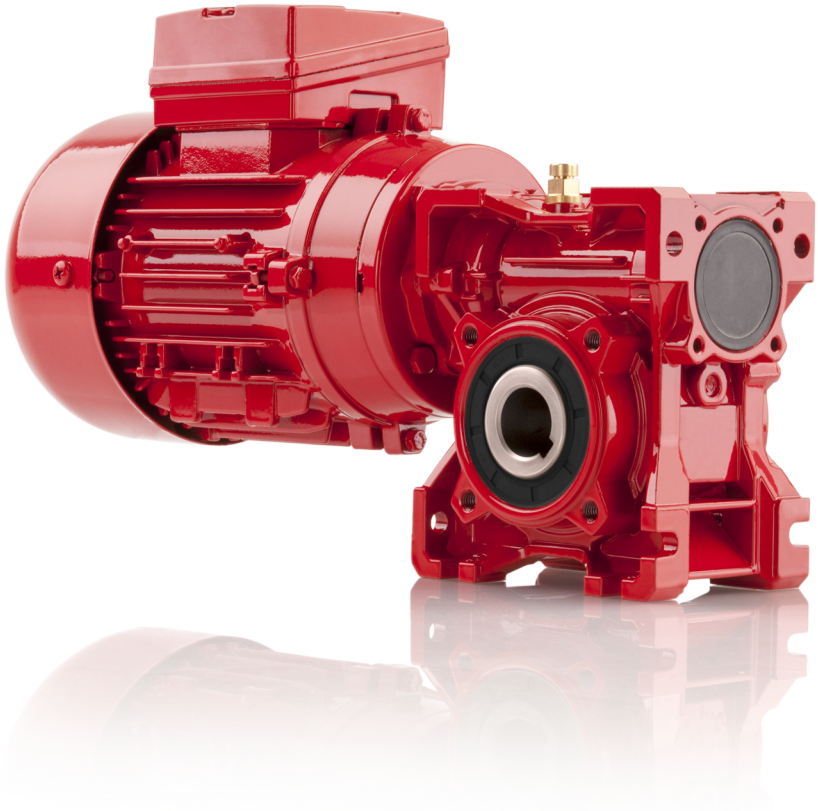
General Information

Información general

S

SERIES / SERIE

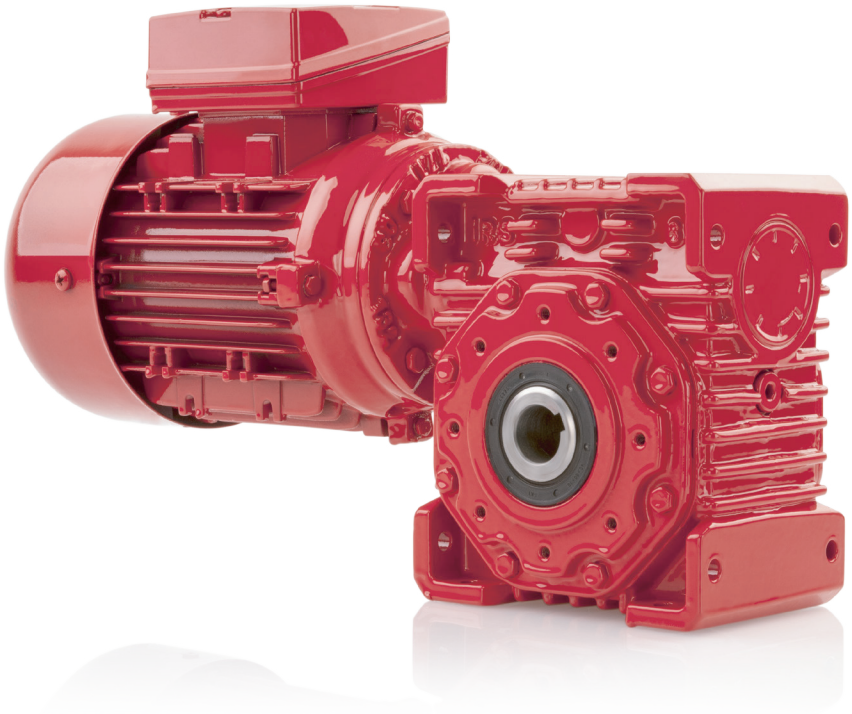


- Worm geared unit with aluminium housing
- 6 Size of housing
- Torque range from 13 to 460 Nm
- Ratio range from 7.5 to 100

- *Los reductores sinfin-corona con carcasa de aluminio*
- *6 Tamaños de unidades*
- *13 - 460 N.m par de salida*
- *Rango de relación desde 7.5 hasta 100*

iRS

SERIES / SERIE



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

- *Los reductores sinfin-corona con carcasa de hierro fundido*
- *8 Tamaños de unidades*
- *96 - 16876 N.m par de salida*
- *Rango de relación desde 7.5 hasta 115*

İRSD

SERIES / SERIE

- Helical worm geared unit with cast iron housing
- 5 Size of housing
- Torque range from 211 to 4479 Nm
- Ratio range from 25 to 333

- *Los reductores helicoidales sinfin-corona con carcasa de hierro fundido*
- *5 Tamaños de unidades*
- *211 - 4479 N.m par de salida*
- *Rango de relación desde 25 hasta 333*

Aluminium housing worm gearbox
Los reductores sinfin - coroana con carcasa de aluminio

Code	Type designation	Tipo de entrada
S…	Input shaft - foot mounted - hollow shaft	Eje de entrada - Eje hueco
SM…	With motor - foot mounted - hollow shaft	Con motor – Eje hueco
SP…	IEC B14 input flange - foot mounted - hollow shaft	Brida de entrada IEC B5 – Eje hueco

Cast iron housing worm gearbox
Los reductores sinfin - corona con carcasa de hierro fundido

Code	Type designation	Tipo de entrada
İRSA…	Input shaft - foot mounted - hollow shaft	Eje de entrada - Eje hueco
İRSF…	Input shaft - flange mounted - hollow shaf	Eje de entrada - Brida de salida - Eje hueco
İRSAM…	With motor - foot mounted - hollow shaft	Con motor – Eje hueco
İRSFM…	With motor - flange mounted - hollow shaf	Con motor – Brida de salida – Eje hueco
İRSAP…	IEC B14 input flange - foot mounted - hollow shaft	Brida de entrada IEC B5 – Eje hueco
İRSFP…	IEC B14 input flange - flange mounted - hollow shaft	Brida de entrada IEC B5 – Brida de salida eje hueco

Cast iron housing helical - worm gearbox
Los reductores helicoidales sinfin - corona con carcasa de hierro fundido

Kod	Type designation	Tipo de entrada
İRSD…	Input shaft - foot mounted - hollow shaft	Eje de entrada - Eje hueco
İRSDF…	Input shaft - flange mounted - hollow shaf	Eje de entrada - Brida de salida - Eje hueco
İRSDM…	With motor - foot mounted - hollow shaft	Con motor – Eje hueco
İRSDFM…	With motor - flange mounted - hollow shaf	Con motor – Brida de salida – Eje hueco
İRSDP…	IEC B14 input flange - foot mounted - hollow shaft	Brida de entrada IEC B5 – Eje hueco
İRSDFP…	IEC B14 input flange - flange mounted - hollow shaft	Brida de entrada IEC B5 – Brida de salida eje hueco
İRSDPM…	IEC PAM Flange with motor - foot mounted - hollow shaft	Brida con motor IEC Pam – Eje hueco
İRSDFPM…	IEC PAM Flange with motor - flange mounted- hollow shaft	Brida con motor IEC Pam – Brida de salida eje hueco

Gearboxes options / *Options des motoréducteurs*

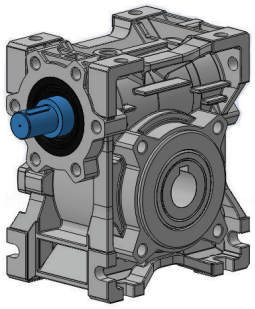
Kod	Options	Options
FR	Output flange righ	Bride de sortie (Droite)
FL	Output flange lef	Bride de sortie (Gauche)
FD	Double output flang	Bride de sortie (Double)
SR	Output shaft right	Arbre de sortie (Droite)
SL	Output shaft left	Arbre de sortie (gauche)
SD	Output shaft double	Arbre de sortie (Double)
C	Double input shaft	Arbre d'entrée (Double)
CBR	Double input shaft with brake	Double arbre d'entrée avec freins
TR	Torque arm right	Bras de couple (Droit)
TL	Torque arm left	Bras de couple (Gauche)
H *	Retaining screw washer	Epaullement (vis de fixation
SDR **	Shrink disk right	Frette de serrage (Droit)
SDL **	Shrink disk left	Frette de serrage (Gauche)
OC	Output cover	Bouchon (arbre creux)

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

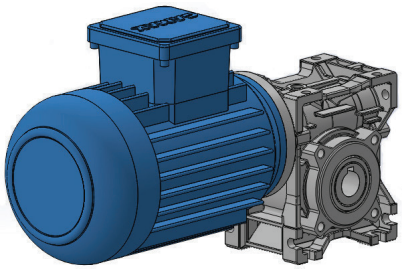
** **İRSD Redüktörler içindir** / Only for IRSD Series / *Uniquement pour la série IRSD*

Motor Opsiyonlari / Motor's options / *Options moteurs*

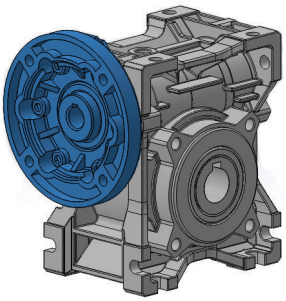
Kod	Options	Options
BR	Brake	Frein
BRH	Brake with hand release	Frein avec ouverture manuel
BD	Double brake	Double frein
BDH	Double brake with hand release	Double frein avec ouverture manuel
E	Encoder	Encoder
EMK	Electromagnetic clutches	Disque electromagnetique
CF	External fan	Ventilation externe
FG	Canopy	Canopé
U	Without fan	Sans ventilation
M	Mono phase motor	Moteur monophasé
BS	Backstop	Roulement anti-retour



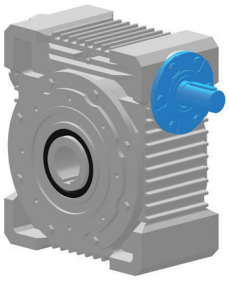
S
Solid Input Shaft
Eje de entrada solido



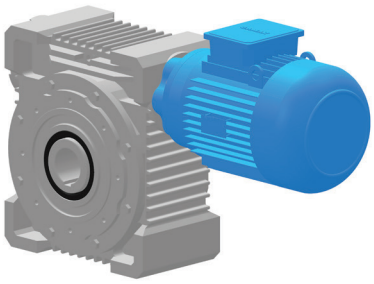
SM
With Motor
Con motor



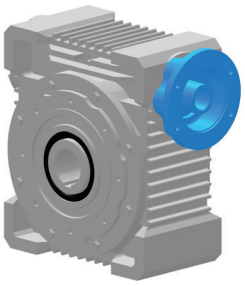
SP
IEC Input Flange
Brida de entrada IEC



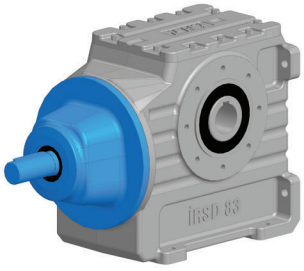
İRSA
Solid Input Shaft
Eje de entrada solido



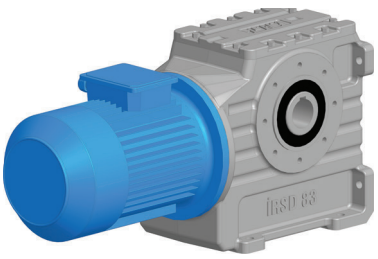
İRSAM
With Motor
Con motor



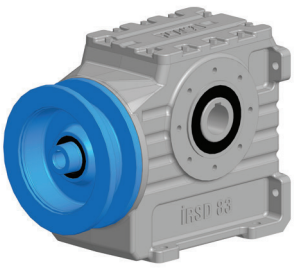
İRSAP
IEC Input Flange
Brida de entrada IEC



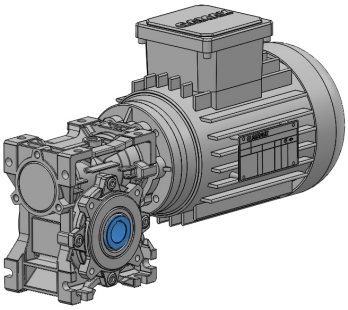
İRSD
Solid Input Shaft
Eje de entrada solido



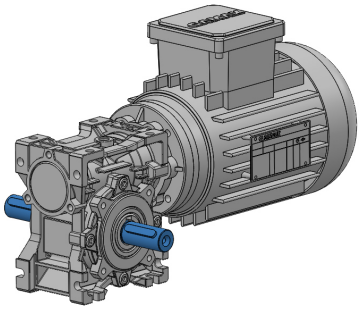
İRSDM
With Motor
Con motor



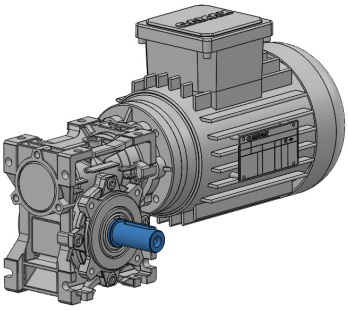
İRSDP
IEC Input Flange
Brida de entrada IEC



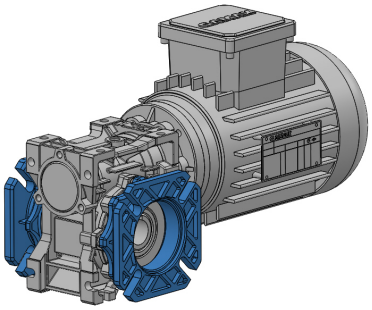
S..
Hollow output shaft
Eje hueco



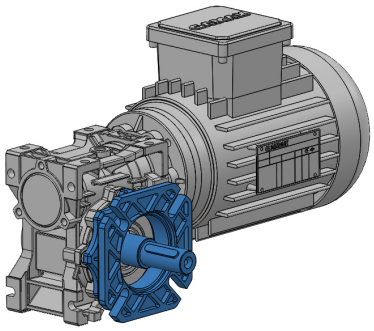
S…SD
Double output shaft
Eje doble hueco



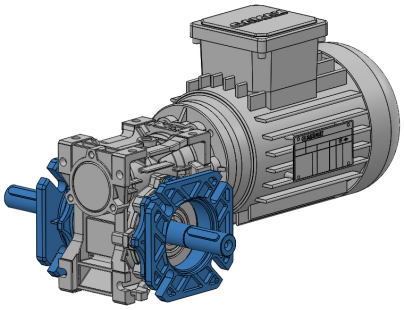
S….SL
Output shaft (Left)
Eje de salida (izquierda)



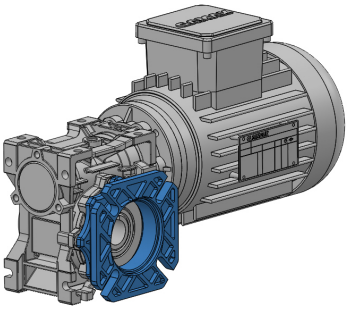
S…FD
Double output flange
Brida doble de salida



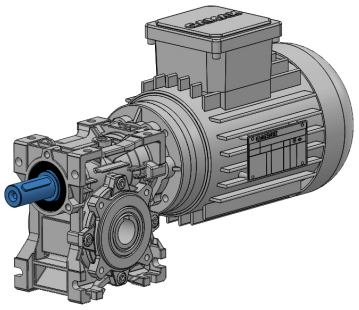
S…FL-SL
Output shaft - Output flange (Left)
Eje de salida - Brida de salida (izquierda)



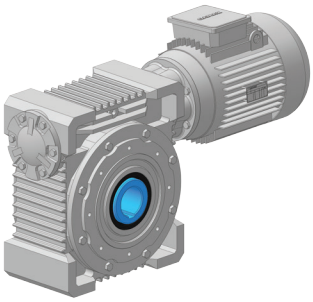
S…FD-SD
Double output flange - Double output shaft
Brida doble de salida - Eje doble de salida



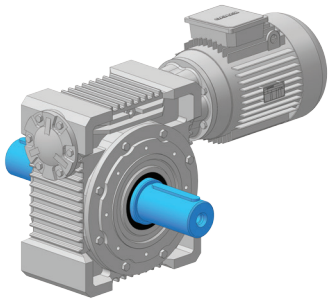
S…FL
Output flange (Left)
Brida de salida (izquierda)



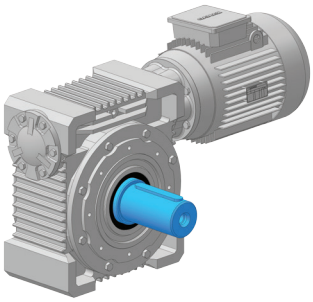
S…C
Input shaft
Eje de entrada



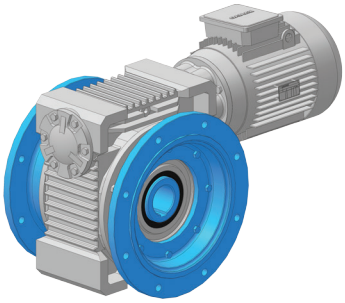
İRS..
Hollow output shaft
Eje hueco



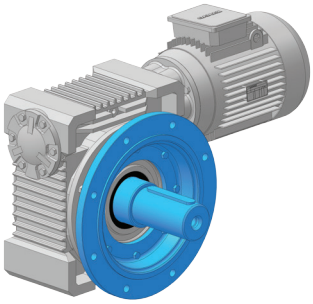
İRS…SD
Double output shaft
Eje doble de salida



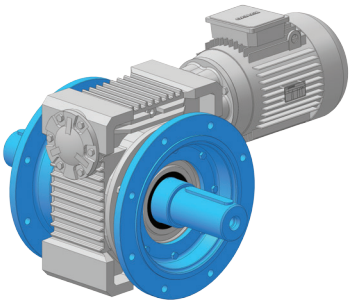
İRS….SL
Output shaft (Left)
Eje de salida (izquierda)



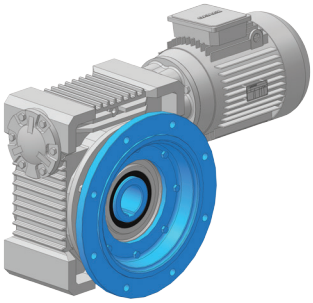
İRSF…FD
Double output flange
Brida doble de salida



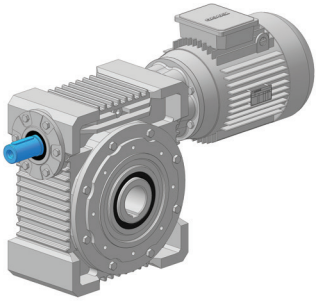
İRSF…FL-SL
Output shaft - Output flange (Left)
Eje de salida - Brida de salida (izquierda)



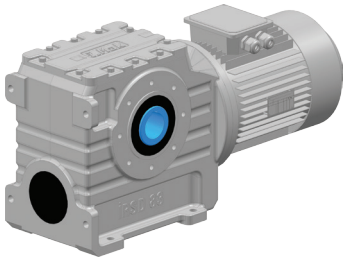
İRSF…FD-SD
Double output flange - Double output shaft
Bride doble de salida - Eje doble de salida



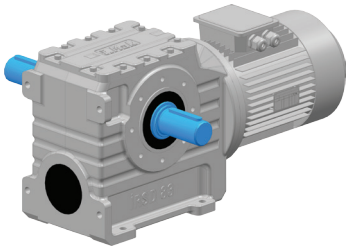
İRSF…FL
Output flange (Left)
Brida de salida (izquierda)



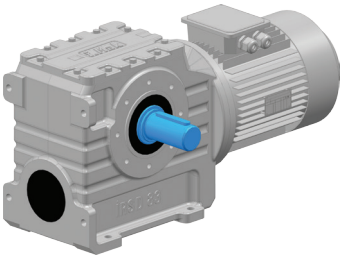
İRSA …C
Input shaft
Eje de entrada



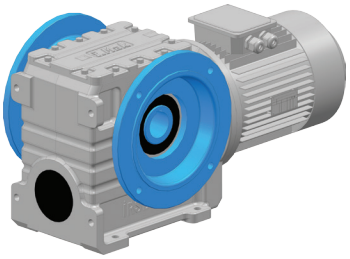
İRSD...
Hollow output shaft
Eje hueco



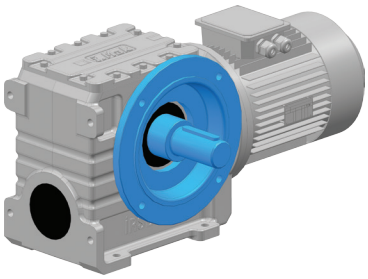
İRSD...-SD
Double output shaft
Eje doble de salida



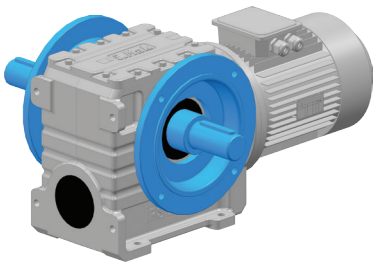
İRSD...-SL
Output shaft (Left)
Eje de salida (İzquierda)



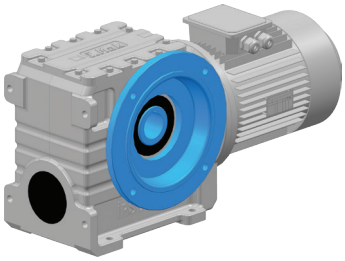
İRSDF…FD
Double output flange
Brida doble de salida



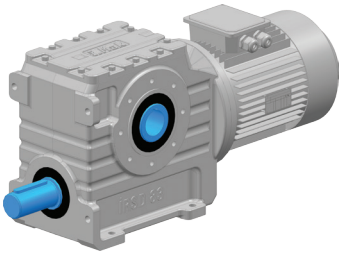
İRSDF…FL-SL
Output shaft - Output flange (Left)
Eje de salida - Brida de salida (izquierda)



İRSDF…FD-SD
Double output flange - Double output shaft
Bride doble de salida - Eje doble de salida



İRSDF…FL
Output flange (Left)
Brida de salida (izquierda)



İRSD …C
Input shaft
Eje de entrada

Output shaft / *Eje de salida*

Code	Options	Opciones
111	Special shaft dimensions	Dimensiones especiales del eje
112	Special shaft materials	Materiales especiales del eje
113	Hardened shaft	Eje cementados
114	Shaft with screw	Eje con tornillo
115	Shaft with multiple key	Eje con llave multiple

Hollow shaft / *Eje hueco*

Code	Options	Opciones
121	Dimensions of special shaft	Dimensiones del eje especial
122	Material of special output shaft	Materiales del eje de salida especial
123	Hardneed steel hollow shaft	Eje hueco de acero cementados
124	Hollow shaft with screw	Eje hueco con tornillo
125	Optional output shaft	Eje de salida opcional
126	Hollow shaft with splining	Eje hueco con giro

Input shaft / *Eje de entrada*

Code	Options	Opciones
131	Dimensions of the shaft	Dimensiones del eje
132	Material of special shaft	Materiales del eje especial
133	Hardened steel shaft	Eje de acero cementados
134	Hollow shaft with screw	Eje hueco con tornillo eje
135	Spécial input shaft	De entrada especial
136	Shaft with screw	Eje con tornillo

Output flange / *Brida de salida*

Code	Options	Opciones
141	Dimensions of special output flange	Dimensiones de la brida de salida
142	Material of special output flange	Especial material de la brida de salida
143	Optional output flange	Especial brida de salida opcional
144	Special output flange	Brida de salida especial

***In the case your configuration require the production of a special flange**
En el caso en que su configuración requiera de producción de una brida especial

Input flange / *Brida de entrada*

Code	Options	Opciones
151	Special input flange	Brida de entrada especial
152	Material of special input flange	Material de la brida de salida especial
153	Special output shaft	Eje de salida especial
154	IEC B14 Flange	Brida IEC B14
155	IEC B5 Flange	Brida IEC B5
156	IEC PAM with integrated coupling	Brida de entrada (IEC) integrado con acoplamiento
157	NEMA input flange	NEMA brida de entrada

***In the case your configuration require the the production of a special flange**
En el caso en que su configuración requiera de producción de una brida especial

Oil / *Aceites*

Code	Options	Opciones
211	Synthetic oil VG 220 (SHC 630)	Aceite sintético Vg 220 (Shc 630)
212	Food compatible oil VG 220 (CIBUS 220)	Aceite para la industria agroalimentaria Vg 220 (Cibus 220)
213	Cold resistant oil -40C° VG 220 (SHC 630)	Aceite resistente a temperaturas bajas -40 C° Vg 220 (Shc 630)

Seal-cover / *Retenes*

Code	Options	Opciones
221	Dimensions of special seal	Dimensiones especiales de los retenes
222	Dimensions of special cover	Dimensiones especiales de la cubierta
223	Special brand of seal	Marca especial del los retenes
224	Special brand of cover	Marca especial de la cubierta
225	Viton seal	Sello viton
226	Special configuration of seal	Configuración especial de los retenes
227	Dust cover	Cubierta de polvo

Bearing / *Rodamientos*

Code	Options	Opciones
231	Reinfored output bearing	Rodamiento de salida reforzado
232	Reinforced input bearing	Rodamiento de entrada reforzado
233	Special brand of bearing	Marca especial del rodamientos
234	Special dimensions of bearing	Dimensiones especiales del rodamientos
235	Backstop bearing (CW)	Rodamiento de barrera (CW)
236	Backstop bearing (CCW)	Rodamiento de barrera (CCW)

Housing / *Carcasa*

Code	Options	Opciones
241	Special housing	Carcasa especial
242	Special housing materials	Materiales especiales de la cracasa

Paint / *Pintura*

Code	Options	Opciones
251	Special paint color	Pintura de color especial
252	Special paint type	Tipo de pintura especial
253	Epoxy paint	Pintura epoxi
254	Acrilic paint	Pintura acrílica
255	Water based paint	Pintura a base de agua
256	Anti-corrosion paint	Pintura anticorrosión

Gears / *Engranajes*

Code	Options	Opciones
261*	Special gear	Engranaje especial
262	Gear ratio (Catalogue)	Relación de tansmisión (Catalogo)

*** 261 and 262 codes are equivalent** / *Los códigos 261 y 262 son equivalentes*

Voltage and frequency / *Voltaje y frecuencia*

Code	Options	Opciones
311	Special voltage	Voltaje especial
312	Special frequency	Frecuencia especial

*400 V 50 Hz are considered as standard / *400 V 50 Hz Son consideradas como estándar*

IP Clasification / *Clasificación IP*

Code	Options	Opciones
321	IP 54	IP 54
322	IP 56	IP 56
323	IP 65	IP 65
324	IP 66	IP 66

IP 55 is our standard / *IP 55 es considerada como cstándar*

Isolation class / *Clases de aislamiento*

Code	Options	Opciones
331	B - class	Clase – B
332	H - class	Clase – H

*** F class is accepted as a standard** / *Clase – F es aceptada como estándar*
*** Adapted for outside environment with temperature in between 0 C° and 40 C°**
Adaptado para el ambiente exterior con temperaturas entre 0 C° y 40 C°

Bearing / *Rodamiento*

Code	Options	Opciones
341	Bearing for hot environment	Rodamiento para altas temperaturas
342	Bearing for cold environment	Rodamiento para bajas temperaturas
343	Isolated bearing	Rodamiento aislado
344	Bearing with greasing nipples	Rodamiento con engrasadores
345	Backstop bearing (CW)	Rodamiento de barrera (CW)
346	Backstop bearing (CCW)	Rodamiento de barrera (CCW)

*** For outside environment with temperature out of 0C° and 40 C° consult our technical team.**
Para yemperaturas exteriores fuera de 0 C° y 40 C° consulte con nuestro equipo técnico

Brand / *Marca*

Code	Options	Opciones
351	Gamak Motor	Gamak Motor
352	Volt Motor	Volt Elektrik Motor
353	Aemot Motor	Aemot Motor
354	Wat Motor	Wat Motor
356	Diğer	Diger

Efficiency classifications / *Clases de eficiencia*

Code	Options	Opciones
361	IE1	IE1
362	IE3	IE3
363	IE4	IE4

*** IE2 is the standart category** / *IE2 es la categoría estándar*

Brake's brand / *Marcas de freno*

Code	Options	Opciones
411	EMF brake	Freno – EMF
412	Fatih brake	Freno – Fatih
413	Other	Otros

Type of brake / *Clases de freno*

Code	Options	Opciones
421	220 V cooler	220 V refrigerante
422	24 V cooler	24 V refrigerante
423	220 V without cooler	220 V sin refrigerante
424	24 V without cooler	24 V sin refrigerante
425	Double disk brake	Freno de doble disco
426	Special brake type	Tipo de freno especial
427	Special voltage for brake	Voltaje especial para freno

***The brake wihout cooling are installed without fan or cover** / El freno sin refrigeracion es instalado sin ventilador o cubierta

Encoder / Rotativo

Code	Options	Opciones
431	HPL 100 Pulse rotary encoder	HPL 100 codificador de pulso rotativo
432	HPL 360 Pulse rotary encoder	HPL 360 codificador de pulso rotativo
433	HPL 500 Pulse rotary encoder	HPL 500 codificador de pulso rotativo
434	HPL 1024 Pulse rotary encoder	HPL 1024 codificador de pulso rotativo
435	HPL 2048 Pulse rotary encoder	HPL 2048 codificador de pulso rotativo
436	HTL 1024 Pulse rotary encoder	HTL 1024 codificador de pulso rotativo
437	HTL 2048 Pulse rotary encoder	HTL 2048 codificador de pulso rotativo
438	TTL 1024 Pulse rotary encoder	TTL 1024 codificador de pulso rotativo
439	TTL 2048 Pulse rotary encoder	TTL 2048 codificador de pulso rotativo
440	Others	Otros

***For different type of encoder contact our sales team** / *Para otro tipo de codificadores, contáctese con nuestro equipo de ventas*

Thermistor and heater /*Termistor y calentador*

Code	Options	Opciones
441	PTC X 1 thermistor	Ptc X 1 termistor
442	Bimetallic switch	Interruptor bimetálico
443	Pressure sensor	Sensor de presión
444	110 V coil heat	110 V bobina de calor
445	220 V colt hear	220 V bobina de calor
446	PT 100	PT 100

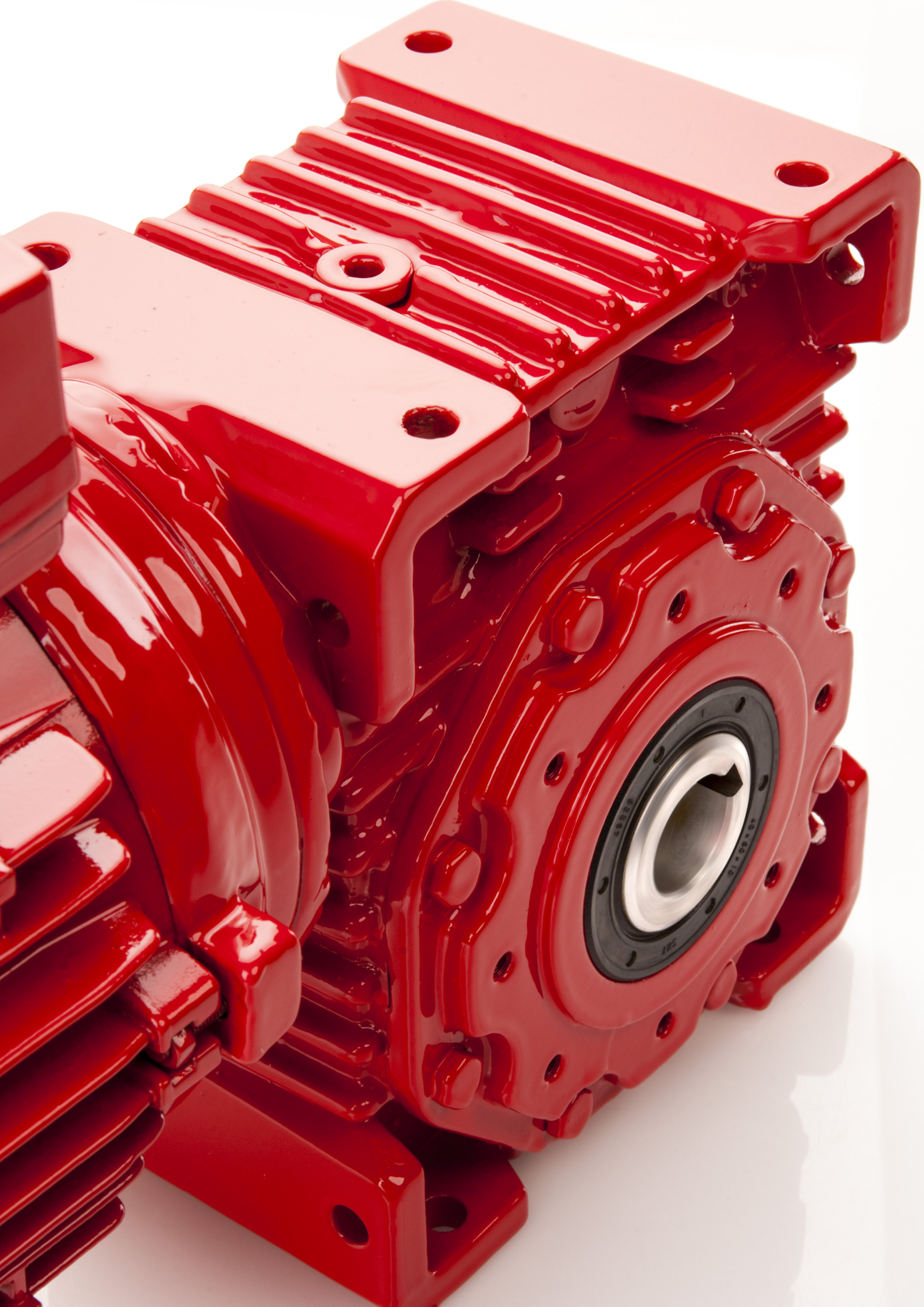
External fan / *Ventilador externo*

Code	Options	Opciones
451	24 VDC (EBM)	24 VDC (EBM)
452	230 VAC (EBM)	230 VAC (EBM)
453	380 VAC (EBM)	380 VAC (EBM)
454	230 VAC	230 VAC
455	380 VAC	380 VAC

Special motor / *Motor especial*

Code	Options	Opciones
461	Servo motor	Motor Servo
462	DC motor	Motor DC
463	Vector motor	Motor vector
464	Tork motor	Motor de par
465	Hydraulic motor	Motor hidráulico
466	Compressed air motor	Motor de aire comprimido
467	Explosition proof motor	Motor anti-explosión
468	Synchronous reluctance motors	Motor de reluctancia sincrónica
469	Synchronous motors	Motor sincrónico
470	Customer's motor	Motor del cliente

***Our factory is not providing such motors** / *Para otro tipo de codificadores, contáctese con nuestro equipo de ventas*
Motors installed in our factory / *Los motores son instalados en nuestra fabrica*



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 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 = 2 is taken from Table 2.

Factor de servicio (F_s)

El valor de factor de servicio de reductores depende de todas las especificaciones técnica y características de una máquina accionada. En general, las máquinas tienen tres tipos de características de carga:

1. CARGA UNIFORME (U)
2. CARGA MODERADA (M)
3. CARGA PESADA (H)

Las especificaciones de carga permanecen iguales cuando tres máquinas diferentes están sujetas a cargas independientes.

El reductor de la máquina que funciona bajo condiciones de carga pesada debería tener un factor de servicio mayor.

El período de servicio diario tiene efecto sobre los elementos del reductor debido a la fatiga de los materiales de las piezas de trabajo.

Se debe tener un cuenta que todas las máquinas están sujetas a la mayor carga en el primer arranque, por lo que en número de arranques también tiene efecto en el factor de servicio.

Este es un ejemplo de cómo usar el factor de servicio dado en el catálogo.

La especificación de carga de una máquina debe dereminarse primero, de la tabla 1 en nuestro ejemplo, la máquina es una excavadora de cadena accionada por un motor eléctrico que tiene una especificación de carga pesada y el servicio diario es de 24 horas. De modo que el factor de servicio mínimo Fs=2 se toma de la Tabla 2.

Excavators		Excavadoras	
Chain-Bucket excavators	H	Excavadora De Cadena	H
Travelling gears (Caterpiller)	H	Mecanismos de translación (Orugas)	H
Travelling gears (Rails)	M	Mecanismos de translación (sobre raıl)	M
Manoevring winches	U	Grúas De Maniobra	U
Pumps	M	Bombas	M
Bucket wheels	H	Ruedas De paletas de excavadores	H
Slewing gears	M	Mecanısmo de orıentacıon (gıratorıos)	M

Building Machines		Máquinas De Construcción	
Hoists	U	Mecanismos de elevación	U
Concrete mixers	M	Hormigoneras	M
Road contruction machines	M	Máquinas De Construcción De Carreteras	M

Conveyor		Transportador	
Through chain conveyors	M	Transportador A Través De Cadenas	M
Link conveyors	M	Transportador De Enlace	M
Belt conveyors (Bulk Goods)	U	Cinta Transportadora (Productos A Granel)	U
Ballast elevators	M	Elevadores De Lastre	M
Ballast pocket elevators	M	Elevadores De Bolsillo De Lastre	M
Belt conveyors (Piece Goods)	M	Cinta Transportadora (Bienes Por Pieza)	M
Chain conveyors	U	Transportadores De Cadena	U
Goods lifts	M	Asansores	M
Bucket elevators (Flour Goods)	U	Elevadores De Cangilones (Productos)	U
Screw conveyors	M	Transportador de torrnillos sın fın	M
Bucket elevators (Piece Goods)	M	Elevadores De Cangilones (Bienes Por Pieza)	M
Inclined hoists	H	Polipastos Inclinados	H
Steel belt conveyors	M	Transportadores De Cinta De Acero	M
Apron conveyors	M	Transportadores De Delantal	M

Torque Machine *Máquina de torsión*	Daily Working Period (Hour) *Servicio diarıo (Hora)*	Load Characteristics of Machines *Características de carga de las maquinas*		
		Uniform Load U *Carga uniforme (U)*	Moderate Load M *Carga moderada (M)*	Heavy Load H *Carga pesada (H)*
Elect. Motor / *Motor eléc.* **Turbin** / *Turbina* **Hydraulic** / *Hidrálico*	0…..3	0.8	1	1.5
	3….10	1	1.25	1.75
	10…24	1.25	1.5	2
Piston Machines (4....6 Cylinder) *Máqinas de pistones (4....6 Cilindro)*	0…..3	1	1.25	2
	3….10	1.25	1.5	2
	10…24	1.5	1.75	2
Piston Machines (1....2 Cylinder) *Máquinas de pistones (1....2 Cilindro)*	0…..3	1.25	1.5	2
	3….10	1.5	1.75	2.25
	10…24	1.75	2	2.5

Chemical Industry		Industria Química	
Cooling drums	M	Tambores De Refrigeracion	M
Mixers	M	Mezcladores	M
Agitators (Liquids)	U	Agitadores (líquidos fluidos)	U
Agitators (Semi Liquids)	M	Agitadores (líquidos viscosos)	M
Drying drums	M	Tambores secadores	M
Centrifuges (Lights)	U	Centrifugas (Ligeras)	U
Centrifuges (Heavy)	H	Centrifugas (Viscosos)	H

Oil Industry		Industria Del Aceite	
Pipeline pumps	M	Bombas De Tubería	M
Rotary drilling equipment	H	Equipos De Perforación Rotativa	H

Fans		Ventiladores	
Rotary piston blowers	M	Sopladores De Pistón Rotativo	M
Blowers (Axial and Radial)	U	Sopladores (Axiales Y Radiales)	U
Centrifugal	H	Centrifugo	H

Rubber Machines		Máquinas De Goma	
Extruders and calenders	H	Extrusoras	H
Pug mills	H	Amasadoras	H
Mixers	M	Mezcladoras	M
Rolling mills	H	Trenes De Laminación	H

Wood Working Machine		Industria Maderera	
Backers	H	Prensa De Madera	H
Planing machines	M	Cepilladoras	M
Wood working machines	U	Corte De Madera	U
Band saws	H	Sierras De Bandas	H

Washing Machines		Lavadoras	
Washing machines	U	Máquinas De lavar	U
Tumblers	M	Tambores secadores	M

Torque Machine *Máquina de torsión*	Daily Working Period (Hour) *Servicio diario (Hora)*	Load Characteristics of Machines *Características de carga de las maquinas*		
		Uniform Load U *Carga uniforme (U)*	Moderate Load M *Carga moderada (M)*	Heavy Load H *Carga pesada (H)*
Elect. Motor / *Motor eléc.* **Turbin** / *Turbina* **Hydraulic** / *Hidrálico*	0…..3	0.8	1	1.5
	3….10	1	1.25	1.75
	10…24	1.25	1.5	2
Piston Machines (4....6 Cylinder) *Máqinas de pistones (4....6 Cilindro)*	0…..3	1	1.25	2
	3….10	1.25	1.5	2
	10…24	1.5	1.75	2
Piston Machines (1....2 Cylinder) *Máquinas de pistones (1....2 Cilindro)*	0…..3	1.25	1.5	2
	3….10	1.5	1.75	2.25
	10…24	1.75	2	2.5

Cranes		Grúas	
Derricking jib boom gear	H	Grua pluma	H
Travelling gears	U	Grúas De Carretilla	U
Hoist gears	H	Engranajes De Elevación	H
Slewing gears	U	Engranajes De Giro	U

Metal Working Machines		Metalurgia y Trabajo de los Metales	
Planing machine	S	Aplanadoras	S
Hammer	S	Martillo	S
Engraving machine	S	Máquina De Grabado	S
Presses	H	Prensas	H
Shears	M	Tijeras	M
Forging presses	H	Prensas De Forjar	H
Machines tools (Main Drives)	M	Máquinas De Herramientas (Unidades Principales)	M
Machines tools (Auxiliarly Drives)	U	Máquinas De Herramientas (Unidades Auxiliares)	U

Food Industry Machines		Industria Alimenticia	
Filling machines (Bottles, Contaniers.)	U	Máquinas De Llenado (Botellas, Contenedores)	U
Kneading machines	M	Amasadoras	M
Packaging machines	U	Embaladoras	U
Cane crushers	M	Prensas De Caña	M
Cane cutters	M	Cortadoras De Caña	M
Cane millis	H	Trituradoras De Caña	H
Sugar beet cutters	M	Cortadoras De Remolacha Azucarera	M
Sugar beet washers	M	Agitadores De Remolacha Azucarera	M

Pumps		Bombas	
Reciprocating Pumps (Q1 / 100)	H	Bombas De Pistón (Q1/100)	H
pumps (Q1 / 100 : 1 / 20) Turbin	M	Bombas De Pistón (Q1/100 : 1/20)	M
Centrifugal pumps (Light - Liquids)	U	Centrifugas (Líquidos Ligeros)	U
Centrifugal pumps (Semi - Liquids)	M	Centrifugas (Líquidos Viscosos)	M

Torque Machine *Máquina de torsión*	Daily Working Period (Hour) *Servicio diario (Hora)*	Load Characteristics of Machines *Características de carga de las maquinas*		
		Uniform Load U *Carga uniforme (U)*	Moderate Load M *Carga moderada (M)*	Heavy Load H *Carga pesada (H)*
Elect. Motor / *Motor eléc.* **Turbin** / *Turbina* **Hydraulic** / *Hidrálico*	0…..3	0.8	1	1.5
	3….10	1	1.25	1.75
	10…24	1.25	1.5	2
Piston Machines (4....6 Cylinder) *Máqinas de pistones (4....6 Cilindro)*	0…..3	1	1.25	2
	3….10	1.25	1.5	2
	10…24	1.5	1.75	2
Piston Machines (1....2 Cylinder) *Máquinas de pistones (1....2 Cilindro)*	0…..3	1.25	1.5	2
	3….10	1.5	1.75	2.25
	10…24	1.75	2	2.5

Paper Industry Machines		Industria del Papel	
Glazing Cylinders	H	Cilindros De Acristalamiento	H
Hollenders	M	Holleros	M
Pulpers	H	Desfibradoras de pulpa	H
Calender	H	Calandras	H
Stone Presses	H	Prensas De Piedra	H
Vacum Presses	H	Prensas De Vacío	H
Drying Cylinders	H	Cilindros secadores	H

Stone and Clay Working Machines		Máquinas Para Piedra Y Arcilla	
Breakers	H	Interruptores	H
Rotary ovens	M	Hornos Rotatorios	M
Hammer mills	H	Molinos De Martillo	H
Ball mills	H	Molinos De Bola	H
Beater mills	H	Molinos Batidores	H
Brick presses	H	Prensas De Ladrillo	H

Textile Machines		Maquinas Textiles	
Batchers (Q1 / 100)	M	Dosificadores (Q1/100)	M
Printing and dyeing machines	M	Máquinas de estampar y tenir	M
Looms	M	Telares	M

Compressors		Compresores	
Turbo compressors	M	Turbo Compresores	M

Metal Rolling Mills		Laminadores De Metal	
Sheet metal cutting machines	H	Maquinas Cortadoras De Láminas De Metal	H
Roller adjustment drivers	M	Controladoras De Ajuste De Rodillo	M
Billet shears	H	Motosierras	H
Descaling machines	H	Maquinas Descalcificadoras	H
Wire drawing machines	M	Máquinas De Trefilado	M
Cooling beds	H	Camas De Enfriamiento	H
Roller tables (Lights)	M	Mesas De Rodillo (Ligeras)	M
Roller tables (Heavy)	H	Mesas De Rodillo (Pesadas)	H
Manipulators	H	Cilindros	H

Torque Machine *Máquina de torsión*	Daily Working Period (Hour) *Servicio diario (Hora)*	Load Characteristics of Machines *Características de carga de las maquinas*		
		Uniform Load U *Carga uniforme (U)*	Moderate Load M *Carga moderada (M)*	Heavy Load H *Carga pesada (H)*
Elect. Motor / *Motor eléc.* **Turbin** / *Turbina* **Hydraulic** / *Hidrálico*	0…..3	0.8	1	1.5
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	3….10	1.25	1.5	2
	10…24	1.5	1.75	2
Piston Machines (1....2 Cylinder) *Máquinas de pistones (1....2 Cilindro)*	0…..3	1.25	1.5	2
	3….10	1.5	1.75	2.25
	10…24	1.75	2	2.5

1500 d/d Motors / *Motores*

Code	Power (KW)	Speed (r.p.m.)	Rated Current	Torque (Nm)	Efficiency		IE Class	Duty Type
					100%	75%		
Código	**Potencia (Kw)**	**Velocidad (R.P.M)**	**Amperio**	**Par (Nm)**	**Eficiencia**		**Clase IE**	**Clase De Uso**
					100%	75%		
63M4a	0,12	1365	0,41	0,84	57,1	57,1	IE1	S1
63M4b	0,18	1340	0,60	1,28	59,7	59,7	IE1	S1
C63M4	0,25	1350	0,95	1,77	60,7	60,7	IE1	S1
71M4a	0,25	1380	0,81	1,73	61,9	61,8	IE1	S1
71M4b	0,37	1390	1,15	2,54	68,1	68,1	IE1	S1
C71M4	0,55	1385	1,50	3,75	68,6	68,6	IE1	S1
80M4a	0,55	1365	1,60	3,85	69,1	69,0	IE1	S1
80M4b	0,75	1410	2,10	5,08	79,6	79,6	IE2	S1
90S4	1,1	1420	2,60	7,39	82,0	82,0	IE2	S1
90L4	1,5	1430	3,50	10,02	83,0	83,0	IE2	S1
C90L4	2,2	1435	5,00	14,60	84,4	84,5	IE2	S1
100L4a	2,2	1435	5,00	14,60	84,5	84,6	IE2	S1
100L4b	3	1435	6,60	20,00	85,5	85,7	IE2	S1
C100L4	4	1455	8,20	26,30	86,5	86,6	IE2	S1
112M4	4	1455	8,20	26,30	86,7	86,8	IE2	S1
132S4	5,5	1465	11,20	35,90	87,9	88,8	IE2	S1
132M4	7,5	1465	15,40	48,90	89,0	89,1	IE2	S1
C132M4	11	1465	21,00	71,70	89,9	90,0	IE2	S1
160M4	11	1465	21,00	71,70	90,0	90,1	IE2	S1
160L4	15	1465	29,80	97,80	90,6	90,7	IE2	S1
180M4	18,5	1470	34,50	120,00	91,3	91,4	IE2	S1
180L4	22	1470	42,50	143,00	91,7	91,4	IE2	S1
200L4	30	1470	55,00	195,00	92,5	92,6	IE2	S1
225S4	37	1470	67,00	240,00	92,7	92,7	IE2	S1
225M4	45	1470	80,00	292,00	93,3	93,3	IE2	S1
250M4	55	1475	96,00	356,00	93,7	93,8	IE2	S1
280S4	75	1480	133,00	484,00	94,0	94,1	IE2	S1
280M4	90	1480	158,00	581,00	94,3	94,5	IE2	S1
315S4	110	1485	195,00	707,00	94,5	94,5	IE2	S1
315M4	132	1485	230,00	849,00	94,7	94,5	IE2	S1
315M4	160	1485	280,00	1029,00	94,9	94,9	IE2	S1
315L4	185	1485	323,00	1190,00	95,1	95,1	IE2	S1
315L4	200	1485	350,00	1286,00	95,1	95,1	IE2	S1

1000 d/d Motors / *Motores*

Code	Power **(KW)**	Speed **(r.p.m.)**	Rated Current	Torque **(Nm)**	Efficiency		IE Class	Duty Type
					100%	75%		
Código	**Potencia (Kw)**	**Velocidad (R.P.M)**	**Amperio**	**Torque (Nm)**	**Eficiencia**		**Clase IE**	**Clase De Uso**
					100%	75%		
71M6a	0,18	915	0,61	1,88	63,0	62,9	IE1	S1
71M6b	0,25	915	0,83	2,61	63,8	63,7	IE1	S1
80M6a	0,37	910	1,10	3,88	72,9	72,8	IE1	S1
80M6b	0,55	890	1,50	5,90	70,4	70,3	IE1	S1
90S6	0,75	920	2,00	7,79	75,9	75,9	IE2	S1
90L6	1,1	930	2,90	11,30	78,1	78,1	IE2	S1
100L6	1,5	945	3,60	15,20	79,8	79,7	IE2	S1
112M6	2,2	950	5,40	22,00	81,8	81,7	IE2	S1
132S6	3	960	6,90	29,80	83,3	83,2	IE2	S1
132M6a	4	960	9,00	39,80	84,6	84,5	IE2	S1
132M6b	5,5	960	12,30	54,70	86,0	86,0	IE2	S1
160M6	7,5	960	15,00	74,60	87,2	87,2	IE2	S1
160L6	11	965	22,00	108,90	88,7	88,7	IE2	S1
180L6	15	965	29,00	148,00	89,7	89,7	IE2	S1
200L6a	18,5	975	38,00	182,00	90,4	90,4	IE2	S1

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 touse fan. This type of brake is necesarry 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 disengagementof 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.

Frenos

1) Frenos sin ventilador

Cuando el freno esta montado en el lado del motor electrico se cancela el efecto de enfriamiento del ventilador. Este tipo de motor es usqdo por cortos periodos de tiempo.

2) Frenos Con Ventilador

Freno montados en el lado del ventilador del motor electrico a traves de un eje y cubierta extendida. Este tipo de freno es necesario para motores aue operan continuamente.

3) Frenos con microinterruptor

Debido a la alta corriente de arranque de los motores, se producen condiciones no deseadas para el desacoplamiento retardado de los frenos magnéticos. Para evitar esta situación, se proporciona el arranque del motor después de la desconexión del freno por medio del freno mediante un microinterruptor instalado en el freno. Este tipo de freno es especialmente adecuado para motorreductores de alta potencia.

Frenado no retardado o retardado de motorreductores

Los motorreductores retardados o no retardados se utilizan en muchas máquinas industriales. Por lo tanto, los frenos están diseñados para funcionar tanto en condiciones retardadas como no retardadas. Se suministra con cada motorreductor montado en el freno.

No olvide que los frenos están conectados para operaciones retardadas de serie.

Operating voltage of brakes

Brakes are manufactured to operateat 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

Voltaje de funcionamiento de los frenos

Los frenos están fabricados para funcionar a 24 V-CC o 220 V-CA. Los frenos de 220 V se conectan directamente a la caja de terminales del motor, pero se necesita un transformador de 220/30 V con unidad rectificadora para los frenos de funcionamiento de 24 V. Esta unidad se suministrará si es necesario.

Los motores freno con engranajes deben estar conectados a tierra.

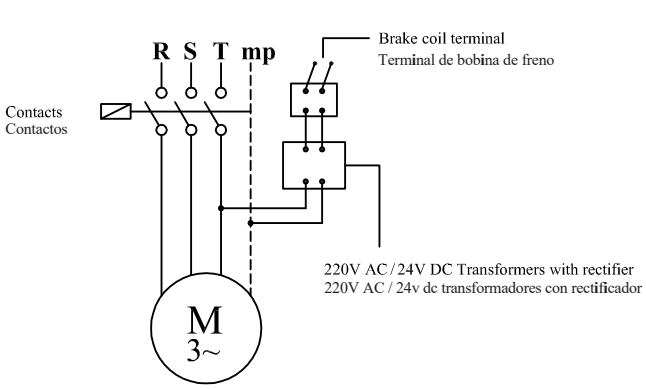
Datos reaueriods para el pedido de frenos

1) Par de freno
2) Tipo de freno
3) Voltaje operativo del freno

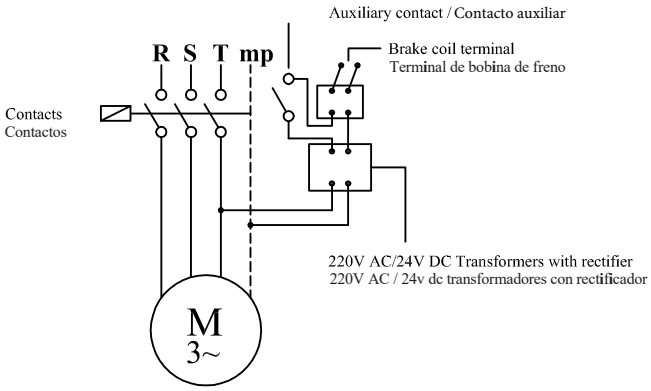
Informe como si necesita un transformador de 220 / 30V con unidad rectificadora para frenos de funcionamiento de 24V.

Tipos de conexión de frenos

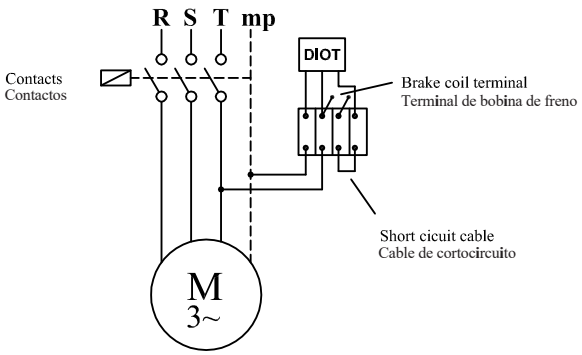
Delayed Running Brake (24V)
Freno de marcha retrasada (24v)



Sudden Running Brake (24V)
Terminal de bobina de freno (24V)



Delayed Running Brake (220V)
Freno de marcha retrasada (220 v)



Sudden Running Brake (220V)
Frenado repentino (220v)

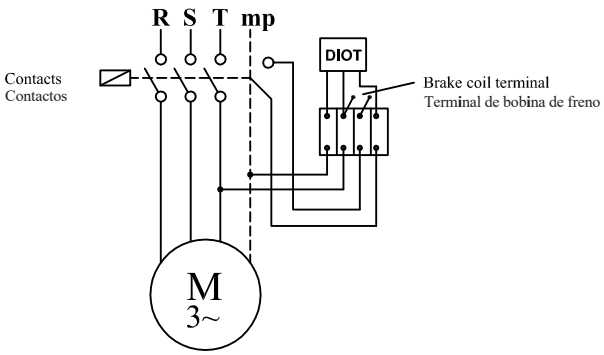


Table 1 / *Tabla 1*

Motor size Tamaño Del Motor	n1 r.p.m / r.p.m			
	750	1000	1500	3000
	Power / *Potencia* [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

Table 2 / *Tabla 2*

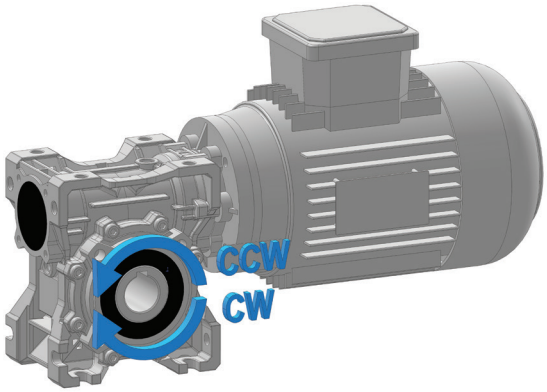
Motor size Tamaño Del Motor	Braking torque [kgm] *Potencia De Frenado [kgm]*																			
	Light braking *Freno Ligero*										Strong braking *Freno Potente*									
	0,5	1	2,5	4	5	10	20	30	50	80	0,5	1	2,5	4	5	10	20	30	50	80
63																				
71																				
80																				
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																				

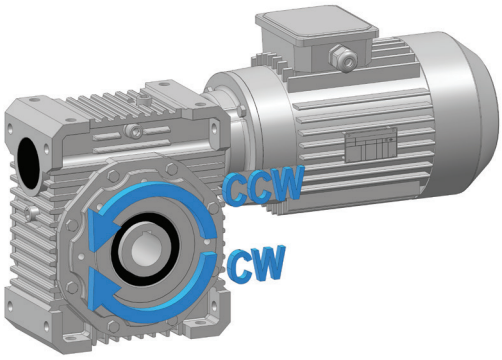
In certain applications when the machinery stops, the operator would not like the gearbox to slip and loose its adjustment. Under these circumstances, the gearbox would be equipped with a locked ball bearing. Accordingly, the direction of rotation should be noted as shown below.

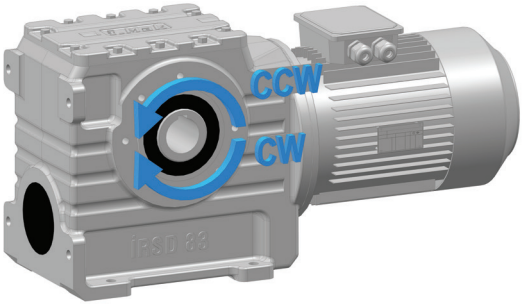
Ccw : Counterclockwise
Cw : Clockwise

En ciertas aplicaciones cuando la maquina se detiene, al operador no le gustaría que la reductor se deslice y pierda sus ajustes. debido a esto, el reductor equipada con un rodamiento de bolas bloqueada. Con base en esto, la dirección de la rotación debería ser como se muestra en la imagen.

CCW: En contra de las manecillas del reloj
CW: Manecillas del reloj



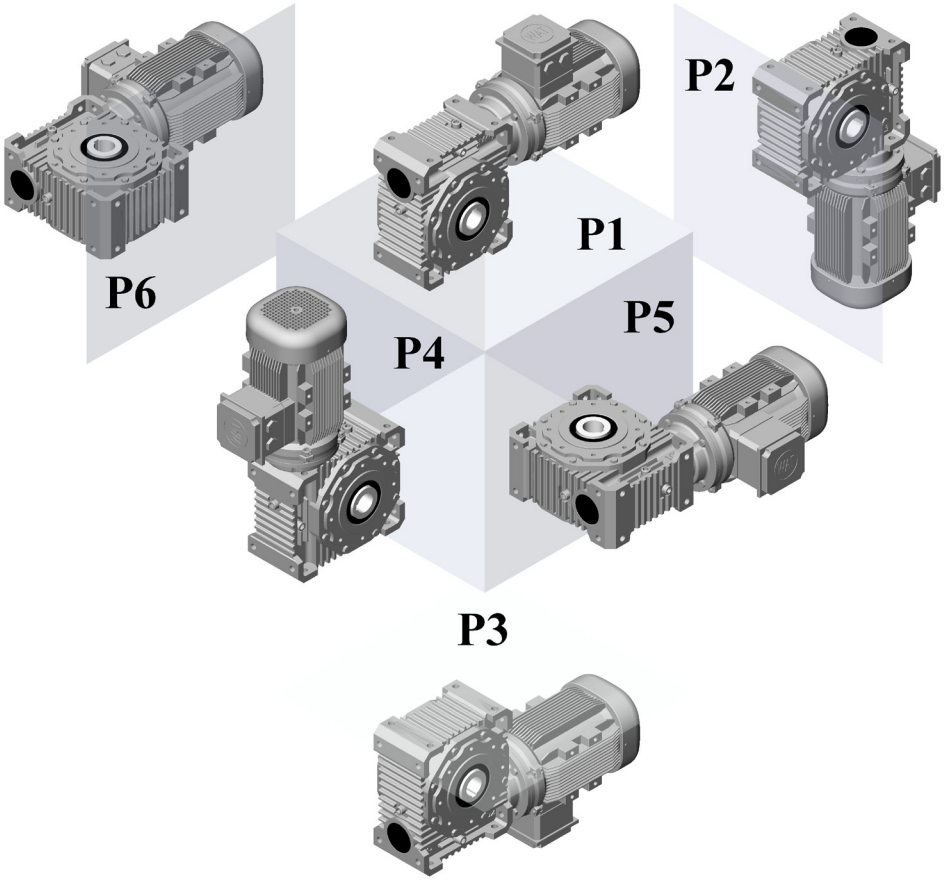




İRSA.... ,S....

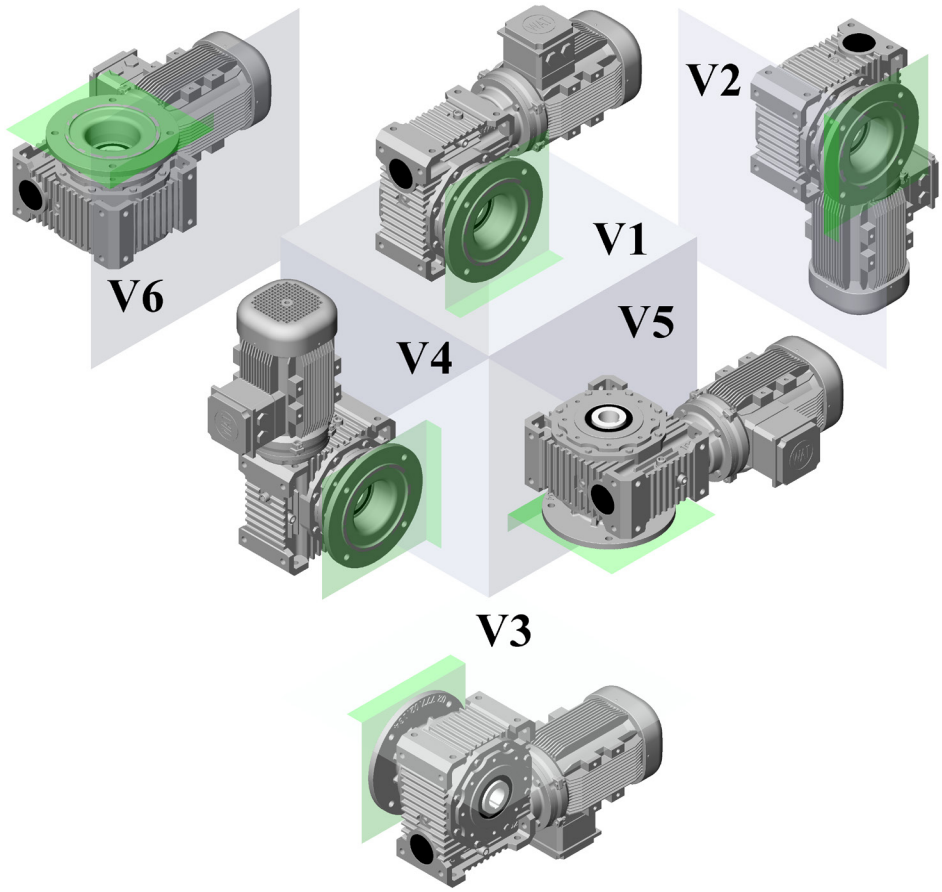
Foot mounted gearboxes position are defined as “P

La posiciones de los redcutores que están de pie se definen como “P”



Flange mounted gearboxes position are defined as “V

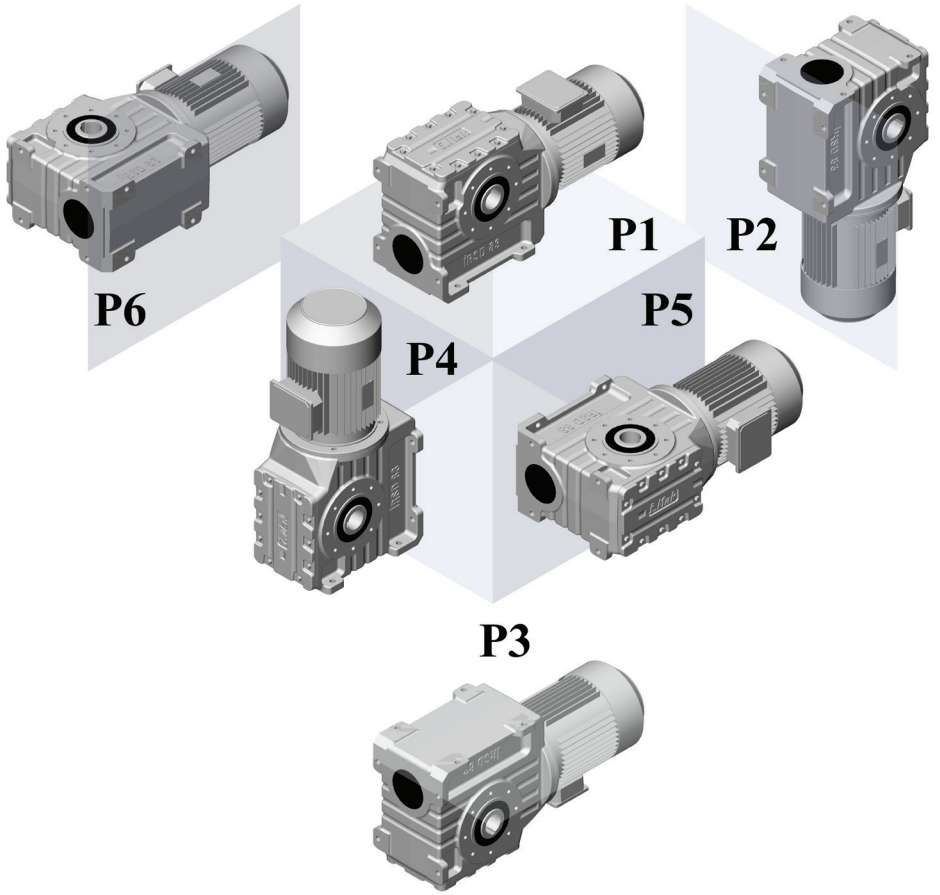
Las posiciones de que los reductores están sobre la br da, se def nen como “v”



İRSD

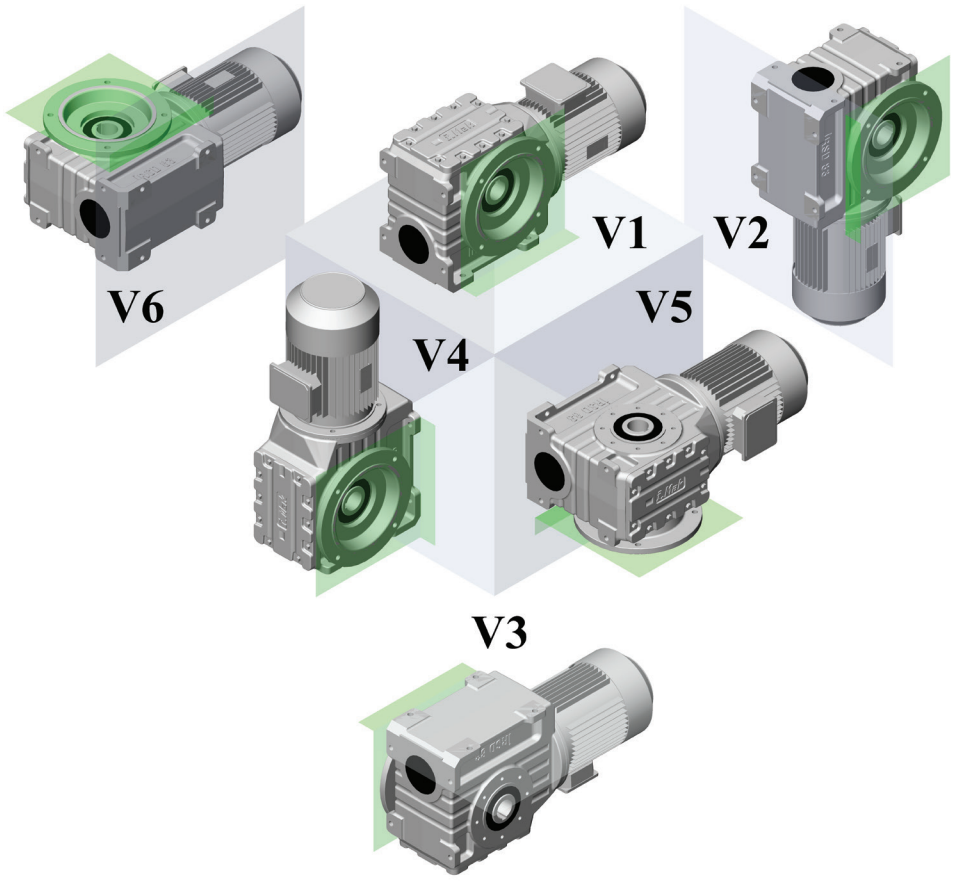
Foot mounted gearboxes position are defined as “P

La posiciones de los redcutores que están de pie se definen como “P”



Flange mounted gearboxes position are defined as “V

Las posiciones de que los reductores están sobre la br da, se def nen como “v”



Lubricant *Tipo de aceite*	Viscocity class *Grado de viscosidad*	DIN 51517-3	Usage temperature *Temperatura de uso* *C°*	Firm *Marca* Mobil	ARAL	bp	Shell	Castrol	KLÜBER LUBRICATION	BELGIN
Mineral Oil **Aceite mineral**	ISO VG 320	CLP	-10.....+90	Mobilgear 600XP320	Degol BG 320	Energol GR-XP 320	Omala S2 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	Omala S2 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	Omala S2 GX 150	Alpha SP 150	Klüberoil GEM 1 N 150	Recompound FL 150
	ISO VG 100	CLP	-15.....+90	Mobilgear 600 XP 100	-	-	Omala S2 GX 100	Alpha SP 100	Klüberoil GEM 1 N 100	Recompound FL 100
Synthetic Oil **Aceite sintético**	ISO VG 320	CLP HC	-30.....+110	Mobil SHC Gear 320	Degol GS 320	Enersyn SG-XP320	Omala S4 GX V 320	Optigear Synthetic PD 320 ES	Klübersynth GEM 4 N 320	Recompound Syn 320
	ISO VG 220	CLP HC	-35.....+110	Mobil SHC Gear 220	Degol GS 220	Enersyn SG-XP220	Omala S4 GX V 220	Optigear Synthetic PD 220 ES	Klübersynth GEM 4 N 220	Recompound Syn 220
	ISO VG 150	CLP HC	-40.....+110	Mobil SHC Gear 150	Degol GS 150	Enersyn SG-XP150	Omala S4 GX V 150	Optigear Synthetic PD 150 ES	Klübersynth GEM 4 N 150	Recompound Syn 150
	ISO VG 100	CLP HC	-45.....+110	Mobil SHC 627	-	-	-	Optigear Synthetic PD 100 ES	Klübersynth GEM 4 N 100	Recompound Syn 100

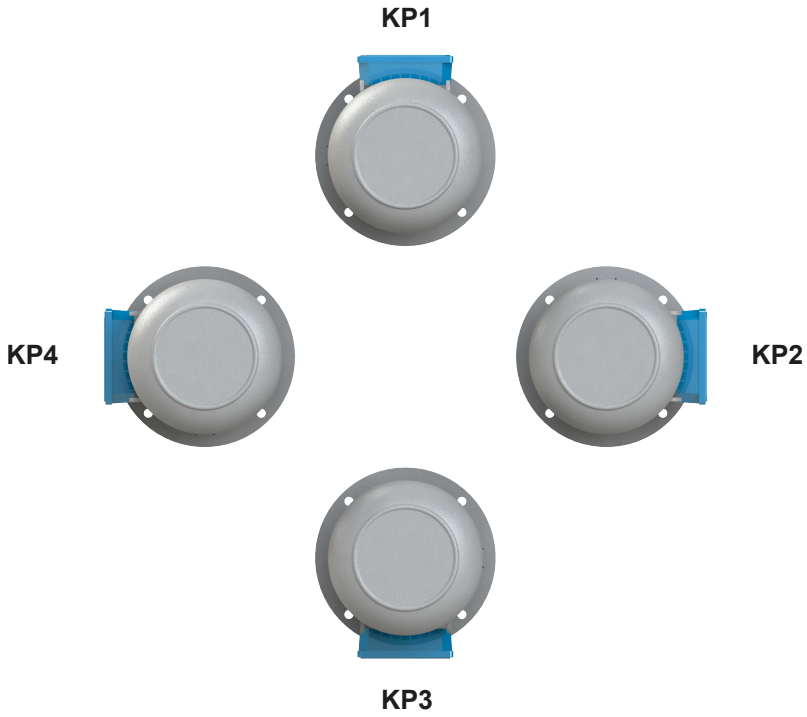
Type *Tipo*	**Oil quantities per mounting positions (liter)** *Cantidad de aceite según la posición del montaje (litro)*											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
SM 30	0,04											
SM 40	0,08											
SM 50	0,16											
SM 63	0,34											
SM 75	0,55											
SM 90	0,82											

Type *Tipo*	**Oil quantities per mounting positions (liter)** *Cantidad de aceite según la posición del montaje (litro)*											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İRS_M 52	0,6		0,65				0,3		0,5			
İRS_M 65	1,25		1,35				0,75		1			
İRS_M 82	2,25		2,35				1		2			
İRS_M 102	2,3		2,5				1,5		2			
İRS_M 127	4,5		4,75				3		4			
İRS_M 162	12		12,5				8		10			
İRS_M 201	18		24				23		21			
İRS_M 250	31		40				38		35			

Type *Tipo*	**Oil quantities per mounting positions (liter)** *Cantidad de aceite según la posición del montaje (litro)*											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İRSD_ 53	2		1,8				2		1,5			
İRSD_ 63	3		2,5				3		2			
İRSD_ 73	5		4				5		4			
İRSD_ 83	13		12				13		12			
İRSD_ 161	17		16				17		16			

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

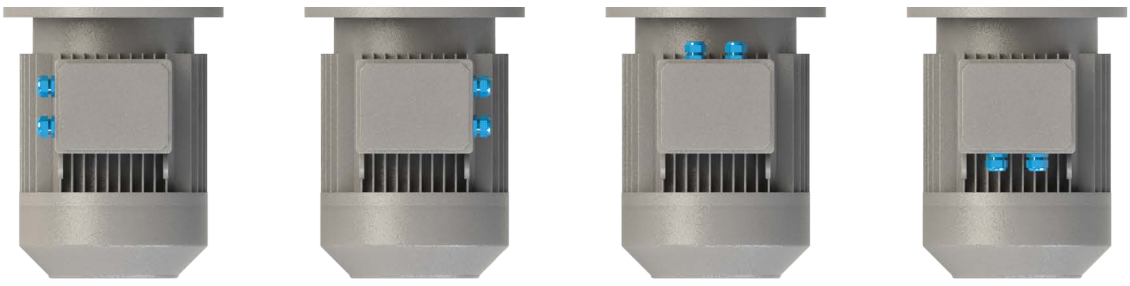
La posición estándar de montaje es "KP1", si el montaje no es aclarado durante el pedido, la posición de montaje será siempre "KP1"



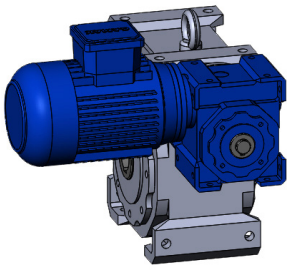
Cable entry
Cable de entrada

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"

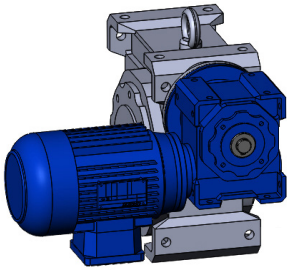
La posición estándar del cable de entrada es "A", si la posición no es aclarada durante el pedido, se tomara en el montaje la posición "A".



A DIRECTION | B DIRECTION | C DIRECTION | D DIRECTION



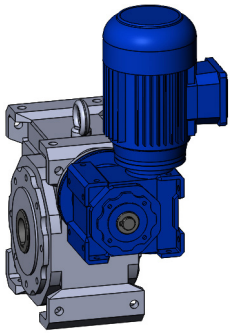
W1



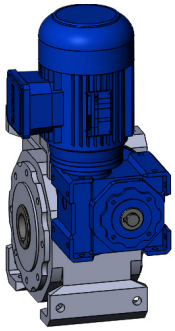
W2

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

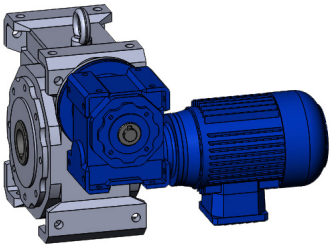
La position de montage standard est W1, si aucune position de montage n’est précisée lors de la prise de commande, la position W1 sera attribuée par défaut.



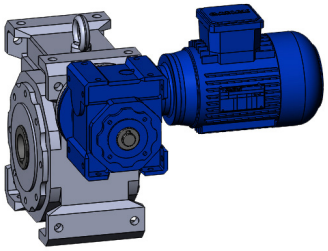
N1



N2



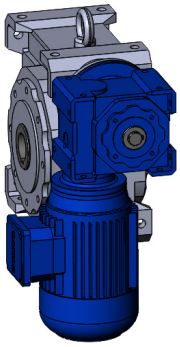
E1



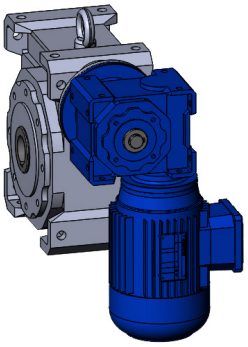
E2

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

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



S1



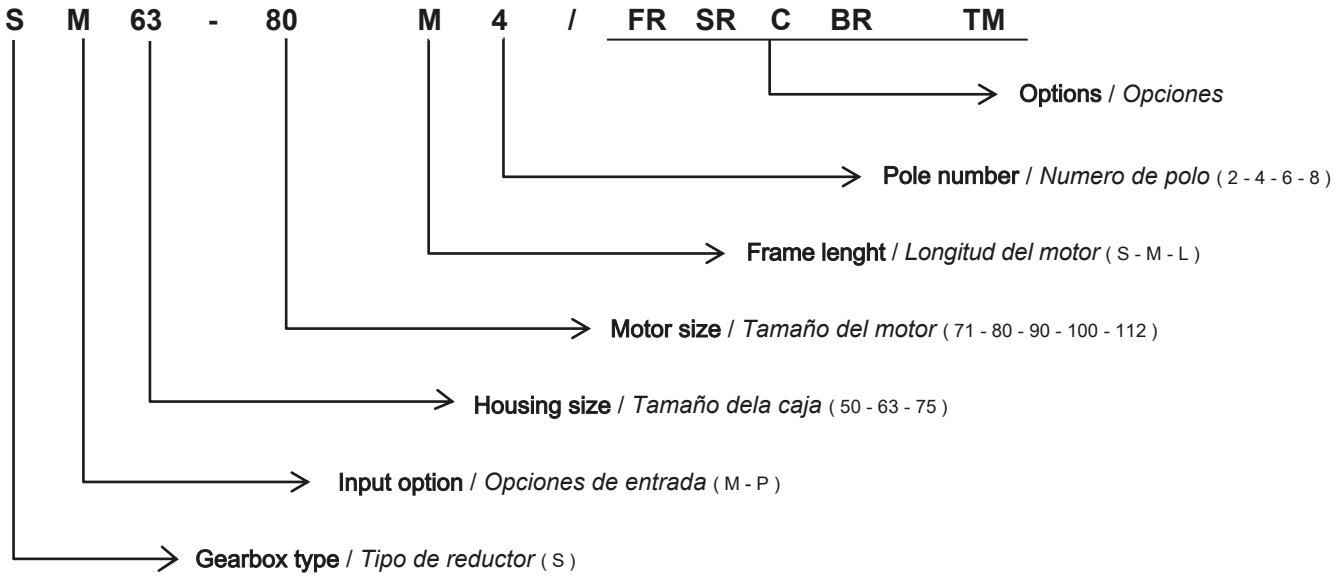
S2

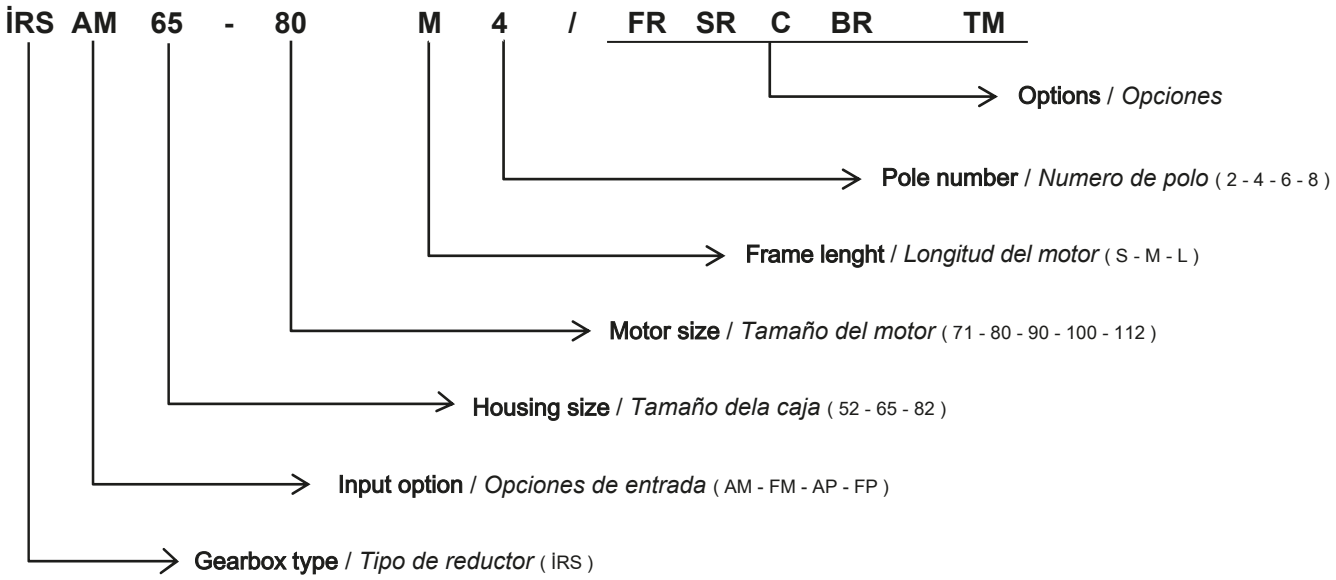
Control and maintenance gearboxes

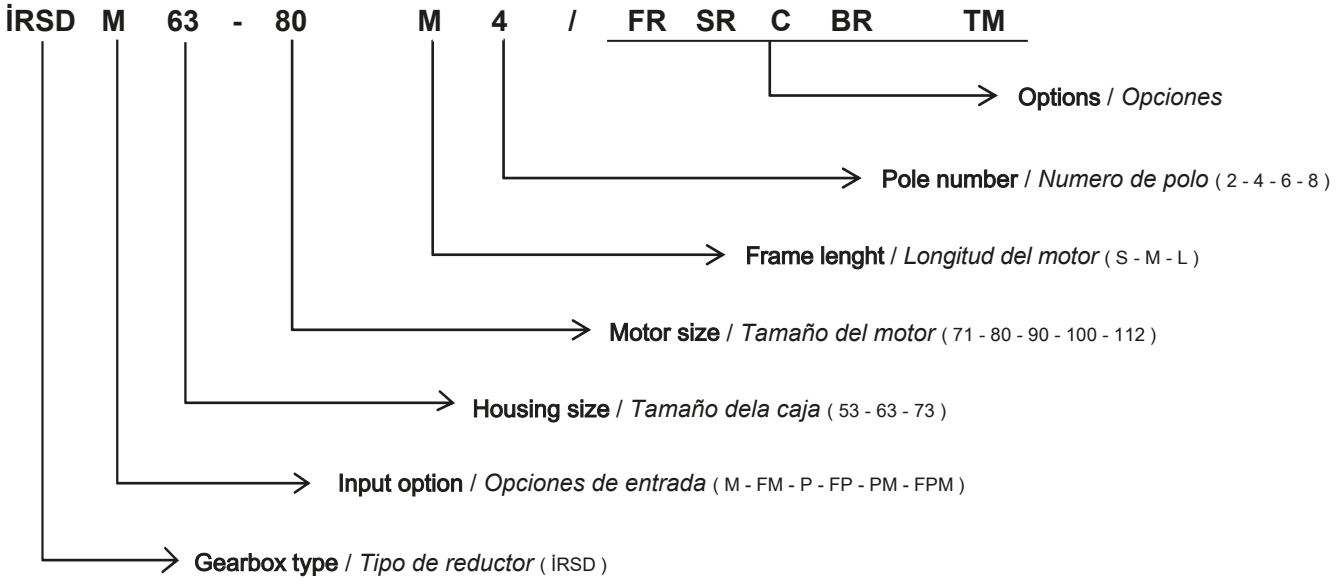
- Check the oil levels and quantity of your gearboxes. Choose the type and quantity of oil from the I-MAK catalogue.
- Check if the ventilation stopper is active or not. If the air evacuation hole does not work properly, the accumulated air in the gearbox trunk might causes pressure and gas leakage from 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.

Control y mantenimiento de los reductores

- Verificar los niveles de aceite al igual que el numero de reductores . Escoja el tipo y la antidad de aceite del catálogo de I-MAK
- Verifique si el tapón de ventilación está activado o no. Si el hueco de evacuación de aire no funciona de manera adecuada, el aire acumulado en el maletero del reductor podría generar fugas de presión y de gas de las esteras.
- Antes de empezar el motoreductor, proceda a chequear la conexión de los pernos y tornillos. Revise si se han aflojado o no durante la instalación. Tome medidas para reafirmar los pernos flojos. Una conexión errónea podría crear una vibración en el eje y a su paso dañar el motoreductor.
- Cambie el aceite después de 500 horas del arranque inicial y después se hará periódicamente cada 6000 horas en la que el motoreductor funcione.
- Si está teniendo algún problema técnico, por favor consulte la guía del usuario que fue entregada con su motoreductor. En caso de alguna emergencia o situación inusual contáctese directamente con el vendedor, o con el centro técnico más cercano de I-MAK

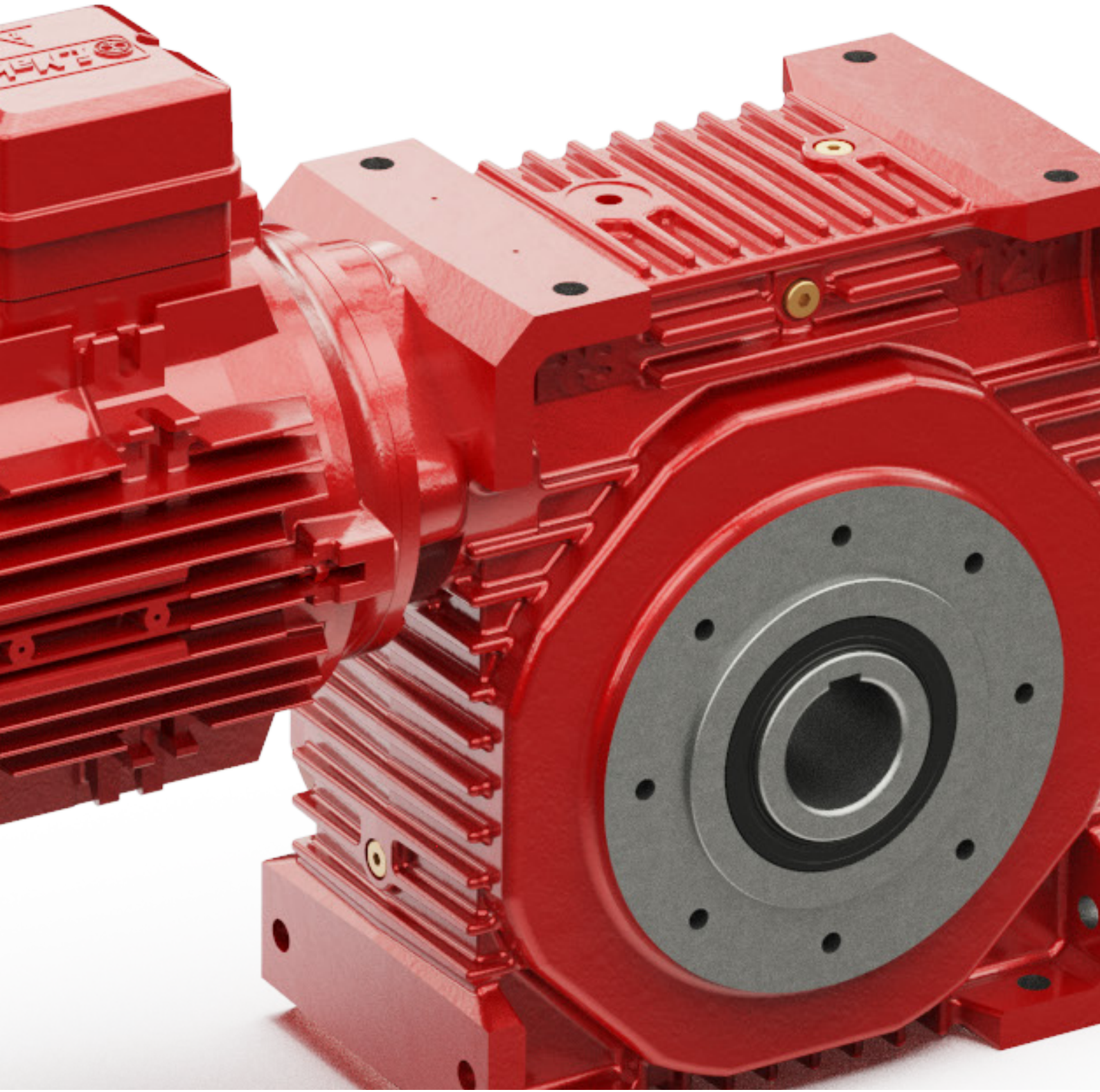

S M 63 - 80 M 4 / FR SR C BR TM
Options / Opciones
Pole number / Numero de polo (2 - 4 - 6 - 8)
Frame lenght / Longitud del motor (S - M - L)
Motor size / Tamaño del motor (71 - 80 - 90 - 100 - 112)
Housing size / Tamaño dela caja (50 - 63 - 75)
Input option / Opciones de entrada (M - P)
Gearbox type / Tipo de reductor (S)


İRS AM 65 - 80 M 4 / FR SR C BR TM
Options / Opciones
Pole number / Numero de polo (2 - 4 - 6 - 8)
Frame lenght / Longitud del motor (S - M - L)
Motor size / Tamaño del motor (71 - 80 - 90 - 100 - 112)
Housing size / Tamaño dela caja (52 - 65 - 82)
Input option / Opciones de entrada (AM - FM - AP - FP)
Gearbox type / Tipo de reductor (İRS)


İRSD M 63 - 80 M 4 / FR SR C BR TM
Options / Opciones
Pole number / Numero de polo (2 - 4 - 6 - 8)
Frame lenght / Longitud del motor (S - M - L)
Motor size / Tamaño del motor (71 - 80 - 90 - 100 - 112)
Housing size / Tamaño dela caja (53 - 63 - 73)
Input option / Opciones de entrada (M - FM - P - FP - PM - FPM)
Gearbox type / Tipo de reductor (İRSD)

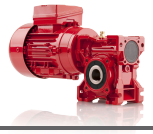
Corrosion Categories *Categorías de corrosión*	**Field of Applications** *Campo de aplicaciones*	**Type of Paint** *Tipo de pintura*	**Paint Thickness (µm)** *Espesor de la pintura (µm)*	**Total Paint Thickness (µm)** *Espesor de pintura total (µm)*
C2 **EN 12944**	Indoor installation and outdoor applications with protection roof. Environment with controlled humidity and low contamination. *Instalación interior y aplicaciones exteriores con techo de protección. Ambiente con humedad controlada y baja contaminación .*	Epoxy including zinc phosphate pigment *Epoxi que incluye pigmento de fosfato de zinc*	60	120
		Aliphatic acrylic polyurethane *Poliuretano acrílico alifático*	60	
C3 **EN 12944**	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of humidity and contamination. *Aplicaciones interiores y exteriores con exposición regular a la intemperie. Ambiente con presencia de humedad y contaminación.*	Epoxy ingluding zinc phosphate pigment *Epoxi que incluye pigmento de fosfato de zinc*	110	160
		Aliphatic acrylic polyurethane *Poliuretano acrílico alifático*	50	
C4 **EN 12944**	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of high humidity and chemical contamination. *Aplicaciones interiores y exteriores con exposición regular a la intemperie. Medio ambiente con presencia de alta humedad y contaminación química.*	Epoxy including zinc phosphate pigment *Epoxi que incluye pigmento de fosfato de zinc*	90	240
		High-volume epoxy *Epoxi de alto volumen*	100	
		Aliphatic acrylic polyurethane *Poliuretano acrílico alifático*	50	
C5 **EN 12944**	Indoor and outdoor applications with regular exposition to weathering. Environment with the presence of continuous high humidity and chemical cleaning contamination. *Aplicaciones interiores y exteriores con exposición regular a la intemperie. Medio ambiente con presencia de alta humedad continua y contaminación por limpieza química.*	Epoxy ingluding zinc phosphate pigment *Epoxi que incluye pigmento de fosfato de zinc*	80	500
		High-volume MOI epoxy *Epoxi MOI de alto volumen*	160	
		Aliphatic acrylic polyurethane *Poliuretano acrílico alifático*	60	

		ISO 9000:2008 QUALITY MANAGEMENT SYSTEM ISO 9000:2008 sistema de manejo de calidad
		ISO 10002:2004 CUSTOMER SATISFACTION MANAGEMENT SYSTEM ISO 10002:2004 CUSTOMER SATISFACTION MANAGEMENT SYSTEM
		OHSAS 18001:2007 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT OHSAS 18001:2007 Gestión de seguridad y salud laboral
		CE DECLARATION OF CONFORMITY CE Declaración de Conformidad
		EC TYPE EXAMINATION CERTIFICATE ATEX Certificate

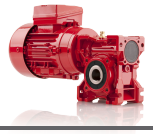


Worm Geared Motors - Performances Tables

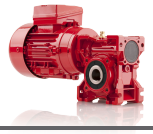
Motorreductores sinfín-corona - Tabla de rendimiento



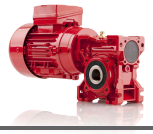
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	2400	0,58	0,90	695	0,71	1,1	579	8180	SM	90 S 40 / 63 M 4a	85 86	18
	1800	0,78	0,90	547	0,94	1,1	456	8180				
	1500	0,93	1,0	553	1,1	1,2	461	8300				
	1200	1,2	1,2	472	1,4	1,4	393	8300				
	900	1,6	1,5	370	1,9	1,8	308	8300				
	750	1,9	1,7	322	2,3	2,1	268	8300	İRSAM İRSFM	82 S 40 / 63 M 4a	103 104	31 33
	600	2,3	2,1	268	2,8	2,5	224	8300				
	450	3,1	2,6	215	3,8	3,1	179	8300				
	300	4,7	3,8	149	5,7	4,5	124	8300				
	225	6,2	4,8	116	7,6	5,8	96	8300				
	1500	0,93	0,90	495	1,1	1,1	413	7380				
	1200	1,2	1,1	415	1,4	1,3	346	7380				
	900	1,6	1,3	335	1,9	1,6	279	7380				
	750	1,9	1,5	299	2,3	1,8	249	7380				
	600	2,3	1,8	248	2,8	2,2	207	7380	SM	75 S 40 / 63 M 4a	83 84	15
	500	2,8	2,0	188	3,4	2,4	157	7380				
	400	3,5	2,5	164	4,3	3,0	137	7380				
	300	4,7	3,3	134	5,7	4,0	112	7380				
	250	5,6	3,2	120	6,8	3,8	100	7380				
	900	1,6	0,80	319	1,9	0,96	266	6270				
	750	1,9	1,0	285	2,3	1,2	238	6270				
	600	2,3	1,1	237	2,8	1,3	198	6270				
	500	2,8	1,1	217	3,4	1,3	181	6270				
	400	3,5	1,6	156	4,3	1,9	130	6270	SM	63 S 30 / 63 M 4a	81 82	11
	300	4,7	2,1	127	5,7	2,5	106	6270				
0,12	250	5,6	2,0	117	6,8	2,4	98	6270				
0,16	200	7,0	2,6	97	8,5	3,1	81	6270				
	150	9,3	3,4	77	11	4,1	64	6270				
	500	2,8	0,70	500	3,4	0,84	417	4840				
	400	3,5	0,80	400	4,3	0,96	333	4840				
	300	4,7	1,2	300	5,7	1,4	250	4840				
	250	5,6	1,0	250	6,8	1,2	208	4840	SM	50 S 30 / 63 M 4a	79 80	8
	200	7,0	1,3	200	8,5	1,6	167	4788				
	150	9,3	1,8	150	11	2,2	125	4350				
	100	14	2,6	100	17	3,1	83	3800				
	100	14	1,3	41	17	1,6	34	4280	SM	50 / 63 M 4a	71 72	7
	80	18	1,8	35	21	2,2	29	3973				
	100	14	0,70	39	17	0,84	33	3118				
	80	18	1,0	35	21	1,2	29	2895				
	60	23	1,3	29	28	1,6	24	2630				
	50	28	1,6	26	34	1,9	22	2475	SM	40 / 63 M 4a	69 70	5,5
	40	35	2,1	22	43	2,5	18	2298				
	30	47	2,8	17	57	3,4	14	2087				
	25	56	2,5	16	68	3,0	13	1964				
	20	70	3,3	13	85	4,0	11	1824				
	50	28	0,80	23	34	0,96	19	1286				
	40	35	1,0	20	43	1,2	17	1194				
	30	47	1,3	16	57	1,6	13	1085				
	25	56	1,6	14	68	1,9	12	1021	SM	30 / 63 M 4a	67 68	4,5
	20	70	1,5	12	85	1,8	10,0	948				
	15	93	2,0	10,0	113	2,4	8,3	861				
	10	140	2,8	7,0	170	3,4	5,8	752				
	7,5	187	3,2	5,0	227	3,8	4,2	750				
	1409	0,99	0,79	1257	1,2	0,95	1048	11800				
0,18	1091	1,3	1,0	974	1,6	1,2	812	11800	İRSAM İRSFM	102 İR 43 / 63 M 4b	111 112	52 56
0,25	842	1,7	1,3	751	2,0	1,6	626	11800				
	685	2,0	1,6	611	2,5	2,0	509	11800				



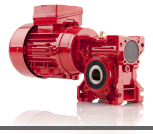
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	1500	0,93	0,80	735	1,1	0,96	613	8180	SM	90 S 40 / 63 M 4b	85 86	18
	1200	1,2	1,0	629	1,4	1,2	524	8180				
	900	1,6	0,99	565	1,9	1,2	471	7700	İRSAM İRSFM	82 S 40 / 63 M 4b	103 104	32 34
	750	1,9	1,1	492	2,3	1,4	410	7700				
	600	2,3	1,4	410	2,8	1,6	342	7700				
	450	3,1	1,7	328	3,8	2,1	274	7700				
	300	4,7	2,5	227	5,7	3,0	189	7700				
	225	6,2	3,2	177	7,6	3,8	147	7700				
	900	1,6	0,90	502	1,9	1,1	418	7420	SM	75 S 40 / 63 M 4b	83 84	15
	750	1,9	1,0	448	2,3	1,2	373	7420				
	600	2,3	1,2	372	2,8	1,4	310	7420				
	500	2,8	1,3	282	3,4	1,6	235	7420				
	400	3,5	1,7	246	4,3	2,0	205	7420				
	300	4,7	2,2	200	5,7	2,6	167	7420				
	250	5,6	2,1	180	6,8	2,5	150	7420				
	200	7,0	2,8	150	8,5	3,4	125	7420				
	500	2,8	0,90	265	3,4	1,1	221	6245	SM	63 S 30 / 63 M 4b	81 82	12
	400	3,5	1,1	228	4,3	1,3	190	6245				
	300	4,7	1,5	175	5,7	1,8	146	6245				
	250	5,6	1,4	171	6,8	1,7	143	6110				
	150	9,3	1,9	113	11	2,3	94	5650				
	100	14	1,9	81	17	2,3	68	4950				
	100	9,0	1,4	92	11	1,7	77	6250	SM	63 / 71 M 6a	73 74	11
	80	11	1,7	71	14	2,0	59	6030				
	60	15	2,3	68	18	2,8	57	5450				
	50	18	2,7	59	22	3,2	49	5100				
	40	23	3,4	50	28	4,1	42	4750				
0,18	300	4,7	0,80	183	5,7	0,96	153	4800	SM	50 S 30 / 63 M 4b	79 80	9
0,25	200	7,0	0,90	141	8,5	1,1	118	4700				
	150	9,3	1,2	112	11	1,4	93	4400				
	80	11	0,90	76	14	1,1	63	4521	SM	50 / 71 M 6a	71 72	8
	60	15	1,2	64	18	1,4	53	4156				
	50	18	1,4	57	22	1,7	48	3920				
	40	23	1,8	49	28	2,2	41	3708				
	30	30	2,4	40	37	2,9	33	3350				
	25	36	2,1	35	44	2,5	29	3215				
	20	45	2,8	29	55	3,4	24	3100				
	100	14	0,90	61	17	1,1	51	4310	SM	50 / 63 M 4b	71 72	7
	80	18	1,2	53	21	1,4	44	3944				
	40	23	1,0	48	28	1,2	40	2662	SM	40 / 71 M 6a	69 70	7
	30	30	1,4	38	37	1,7	32	2516				
	25	36	1,3	35	44	1,6	29	2405				
	20	45	1,7	29	55	2,0	24	2200				
	15	60	2,2	23	73	2,6	19	2105				
	10	90	3,0	16	110	3,6	13	2043				
	60	23	0,90	43	28	1,1	36	2545	SM	40 / 63 M 4b	69 70	6
	50	28	1,1	39	34	1,3	33	2426				
	40	35	1,4	32	43	1,7	27	2271				
	30	47	1,8	26	57	2,2	22	2116				
	25	56	1,7	23	68	2,0	19	2078				
	20	70	2,2	19	85	2,6	16	2010				
	15	93	2,9	15	113	3,5	13	1987				
	30	47	0,90	24	57	1,1	20	1056	SM	30 / 63 M 4b	67 68	5,5
	25	56	1,0	21	68	1,2	18	1041				
	20	70	1,0	18	85	1,2	15	955				
	15	93	1,3	14	113	1,6	12	920				
	10	140	1,9	10,0	170	2,3	8,3	853				
	7,5	187	2,4	8,0	227	2,9	6,7	706				



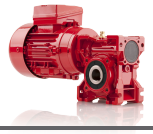
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
0,25 0,34	1984	**0,71**	1,3	1409	**0,86**	1,5	1174	16500	**İRSAM İRSFM**	**127 İRS 65 / 71 M 4a**	107 108	85 89
	1600	**0,88**	1,3	1367	**1,1**	1,6	1139	16500				
	1248	**1,1**	1,6	1116	**1,4**	1,9	930	16500				
	960	**1,5**	2,1	858	**1,8**	2,5	715	16500				
	800	**1,8**	2,3	789	**2,1**	2,7	658	16500				
	624	**2,2**	2,8	640	**2,7**	3,4	533	16500				
	1503	**0,93**	0,96	1858	**1,1**	1,2	1548	16500	**İRSAM İRSFM**	**127 İR 43 / 71 M 4a**	113 114	83 87
	1019	**1,4**	1,4	1260	**1,7**	1,7	1050	16500				
	838	**1,7**	1,7	1036	**2,0**	2,1	863	16500				
	675	**2,1**	2,2	835	**2,5**	2,6	696	16500				
	568	**2,5**	2,6	703	**3,0**	3,1	586	16500				
	467	**3,0**	3,1	578	**3,6**	3,7	482	16500				
	416	**3,4**	3,5	514	**4,1**	4,2	428	16500				
	1500	**0,93**	0,90	1114	**1,1**	1,1	928	10500	**İRSAM İRSFM**	**102 İRS 52 / 71 M 4a**	105 106	56 60
	1140	**1,2**	1,0	963	**1,5**	1,2	803	10500				
	870	**1,6**	1,3	757	**2,0**	1,6	631	10500				
	750	**1,9**	1,5	691	**2,3**	1,7	576	10500				
	570	**2,5**	1,8	562	**3,0**	2,1	468	10500				
	435	**3,2**	2,3	434	**3,9**	2,8	362	10500				
	633	**2,2**	1,3	762	**2,7**	1,6	635	10500	**İRSAM İRSFM**	**102 İR 43 / 71 M 4a**	111 112	53 57
	533	**2,6**	1,6	641	**3,2**	1,9	534	10500				
	438	**3,2**	1,9	527	**3,9**	2,3	439	10500				
	390	**3,6**	2,1	469	**4,4**	2,6	391	10500				
	337	**4,2**	2,5	406	**5,0**	3,0	338	10500	**İRSAM İRSFM**	**102 İR 42 / 71 M 4a**	111 112	52 56
	260	**5,4**	3,2	313	**6,5**	3,8	261	10500				
	182	**7,7**	4,6	220	**9,3**	5,5	183	10500				
	147	**9,5**	5,7	177	**12**	6,8	148	10500				
	900	**1,6**	0,80	667	**1,9**	0,96	556	8180	**SM**	**90 S 40 / 71 M 4a**	85 86	19
	750	**1,9**	0,90	598	**2,3**	1,1	498	8180				
	600	**2,3**	1,2	512	**2,8**	1,4	427	8180				
	795	**1,8**	0,85	664	**2,1**	1,0	553	7600	**İRSAM İRSFM**	**82 S 40 / 71 M 4a**	103 104	33 35
	600	**2,3**	1,0	553	**2,8**	1,2	461	7600				
	450	**3,1**	1,3	443	**3,8**	1,5	369	7600				
	300	**4,7**	1,8	306	**5,7**	2,2	255	7600				
	225	**6,2**	2,4	238	**7,6**	2,8	198	7600				
	500	**2,8**	0,90	391	**3,4**	1,1	326	7420	**SM**	**75 S 40 / 71 M 4a**	83 84	16
	400	**3,5**	1,2	342	**4,3**	1,4	285	7420				
	300	**4,7**	1,6	278	**5,7**	1,9	232	7420				
	250	**5,6**	1,5	250	**6,8**	1,8	208	7420				
	200	**7,0**	2,0	209	**8,5**	2,4	174	7420				
	150	**9,3**	2,6	165	**11**	3,1	138	6752				
	100	**14**	3,0	116	**17**	3,6	97	5813				
	82	**11**	1,8	120	**13**	2,1	100	6450	**İRSAM İRSFM**	**65 / 71 M 6b**	89 90	23 24
	62	**15**	2,4	84	**18**	2,8	70	6325				
	50	**18**	3,4	84	**22**	4,0	70	6123				
	39	**23**	4,6	68	**28**	5,6	57	5841				
	100	**9,0**	1,0	127	**11**	1,2	106	6225	**SM**	**63 / 71 M 6b**	73 74	12
	80	**11**	1,2	113	**14**	1,4	94	6026				
	60	**15**	1,6	94	**18**	1,9	78	5410				
	50	**18**	2,0	82	**22**	2,4	68	5093				
	40	**23**	2,4	70	**28**	2,9	58	4711				
	100	**14**	1,3	89	**17**	1,6	74	5590	**SM**	**63 / 71 M 4a**	73 74	11
	80	**18**	1,5	79	**21**	1,8	66	5187				
	60	**23**	2,1	64	**28**	2,5	53	4705				
	50	**28**	2,5	57	**34**	3,0	48	4432				
	40	**35**	3,1	48	**43**	3,7	40	4109				



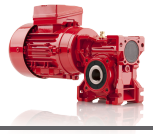
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	62	15	1,3	90	18	1,6	75	4252				
	50	18	1,7	80	22	2,0	66	4160				
	38	24	2,5	66	29	3,0	55	4112				
	29	31	3,4	51	38	4,1	42	4064	İRSAM İRSFM	52 / 71 M 6b	87 88	17 19
	25	36	2,5	46	44	3,0	39	4016				
	19	47	3,6	38	58	4,3	32	3975				
	14,5	62	4,9	30	76	5,9	25	3920				
	60	15	0,90	89	18	1,1	74	4180				
	50	18	1,0	80	22	1,2	67	3940				
	40	23	1,3	68	28	1,6	57	3623				
	30	30	1,7	55	37	2,0	46	3453	SM	50 / 71 M 6b	71 72	9
	25	36	1,5	49	44	1,8	41	3369				
	20	45	2,0	41	55	2,4	34	3298				
	15	60	2,9	32	73	3,5	27	3156				
	62	23	1,8	59	27	2,1	49	4356				
	50	28	2,2	49	34	2,7	41	4269				
	38	37	3,4	43	45	4,1	36	4122				
	29	48	4,5	34	59	5,4	28	4063	İRSAM İRSFM	52 / 71 M 4a	87 88	15 17
	25	56	3,4	31	68	4,0	26	4023				
	19	74	4,8	25	89	5,8	21	3987				
	14,5	97	6,6	19	117	7,9	16	3850				
0,25 0,34	80	18	0,90	74	21	1,1	62	4264				
	60	23	1,2	61	28	1,4	51	4019				
	50	28	1,4	55	34	1,7	46	3695				
	40	35	1,8	46	43	2,2	38	3522	SM	50 / 71 M 4a	71 72	8
	30	47	2,4	37	57	2,9	31	3436				
	25	56	2,2	33	68	2,6	28	3364				
	20	70	2,9	27	85	3,5	23	3219				
	30	30	1,0	53	37	1,2	44	2440				
	25	36	0,90	48	44	1,1	40	2285				
	20	45	1,2	40	55	1,4	33	2193	SM	40 / 71 M 6b	69 70	8
	15	60	1,6	31	73	1,9	26	1945				
	10	90	2,2	22	110	2,6	18	1820				
	7,5	120	2,7	17	147	3,2	14	1785				
	40	35	1,0	45	43	1,2	38	2489				
	30	47	1,3	36	57	1,6	30	2331				
	25	56	1,2	32	68	1,4	27	2237	SM	40 / 71 M 4a	69 70	7
	20	70	1,6	27	85	1,9	23	1984				
	15	93	2,1	21	113	2,5	18	1856				
	10	140	3,0	15	170	3,6	13	1821				
	20	70	0,70	25	85	0,84	21	965				
	15	93	1,0	20	113	1,2	17	865	SM	30 / C63 M 4	67 68	6
	10	140	1,3	14	170	1,6	12	795				
	7,5	187	1,7	11	227	2,0	9,2	744				
	1600	0,88	1,0	1793	1,1	1,2	1494	17300				
	1248	1,1	1,1	1591	1,4	1,4	1326	17300				
	928	1,5	1,5	1219	1,8	1,8	1016	17300				
	800	1,8	1,6	928	2,1	1,9	773	17300	İRSAM İRSFM	127 İRS 65 / 71 M 4b	107 108	91 97
0,37 0,5	624	2,2	1,9	723	2,7	2,3	603	17300				
	480	2,9	2,5	506	3,5	3,0	422	17300				
	312	4,5	3,5	493	5,4	4,2	411	17300				
	675	2,1	1,5	1227	2,5	1,8	1023	17300				
	568	2,5	1,7	1032	3,0	2,1	860	17300	İRSAM İRSFM	127 İR 43 / 71 M 4b	113 114	84 90
	467	3,0	2,1	849	3,6	2,5	708	17300				
	416	3,4	2,4	755	4,1	2,8	629	17300				



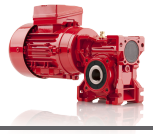
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	870	1,6	0,90	1113	2,0	1,1	928	9600				
	750	1,9	0,98	1016	2,3	1,2	847	9600	İRSAM İRSFM	102 İRS 52 / 71 M 4b	105 106	57 61
	570	2,5	1,2	826	3,0	1,5	688	9600				
	435	3,2	1,6	638	3,9	1,9	532	9600				
	633	2,2	0,89	1120	2,7	1,1	933	9600				
	533	2,6	1,1	942	3,2	1,3	785	9600	İRSAM İRSFM	102 İR 43 / 71 M 4b	111 112	54 58
	438	3,2	1,3	775	3,9	1,5	646	9600				
	390	3,6	1,5	689	4,4	1,7	574	9600				
	337	4,2	1,7	596	5,0	2,0	497	9600				
	260	5,4	2,2	460	6,5	2,6	383	9600	İRSAM İRSFM	102 İR 42 / 71 M 4b	111 112	53 57
	182	7,7	3,1	323	9,3	3,7	269	9600				
	147	9,5	3,8	260	12	4,6	217	9600				
	100	9,0	1,3	212	11	1,6	177	8180	SM	90 / 80 M 6a	77 78	20
	80	11	1,7	185	14	2,0	154	8180				
	600	2,3	0,80	757	2,8	0,96	631	8180				
	500	2,8	0,90	611	3,4	1,1	509	8180	SM	90 S 40 / 71 M 4b	85 86	20
	400	3,5	1,2	523	4,3	1,4	436	8180				
	300	4,7	1,5	402	5,7	1,8	335	8180				
	450	3,1	0,86	651	3,8	1,0	543	7550	İRSAM İRSFM	82 S 40 / 71 M 4b	103 104	34 36
	300	4,7	1,2	450	5,7	1,5	375	7550				
	225	6,2	1,6	350	7,6	1,9	292	7550				
	400	3,5	0,80	506	4,3	0,96	422	7400				
	300	4,7	1,1	412	5,7	1,3	343	7400				
	250	5,6	1,0	370	6,8	1,2	308	7400	SM	75 S 40 / 71 M 4b	83 84	17
	200	7,0	1,4	309	8,5	1,7	258	7400				
	150	9,3	1,7	245	11	2,0	204	6852				
0,37	100	14	2,1	172	17	2,5	143	6455				
0,5	100	9,0	1,0	200	11	1,2	167	7380				
	80	11	1,3	176	14	1,6	147	7123				
	60	15	1,7	146	18	2,0	122	6350				
	50	18	2,0	126	22	2,4	105	6241	SM	75 / 80 M 6a	75 76	17
	40	23	2,6	108	28	3,1	90	6112				
	30	30	3,3	87	37	4,0	73	6053				
	25	36	3,1	77	44	3,7	64	5987				
	82	11	1,2	177	13	1,4	148	6320				
	62	15	1,6	124	18	1,9	103	6285				
	50	18	2,3	124	22	2,7	103	6124				
	39	23	3,1	101	28	3,8	84	6098	İRSAM İRSFM	65 / 80 M 6a	89 90	22 24
	30	30	3,9	77	37	4,6	64	6025				
	25	36	3,2	74	44	3,9	61	5963				
	20	46	4,5	59	56	5,5	49	5951				
	15	60	5,5	45	73	6,6	37	5820				
	9,75	92	6,7	32	113	8,0	27	5750				
	80	11	0,80	167	14	0,96	139	5237				
	60	15	1,1	139	18	1,3	116	5156				
	50	18	1,3	122	22	1,6	102	5111				
	40	23	1,7	104	28	2,0	87	5091	SM	63 / 80 M 6a	73 74	14
	30	30	2,1	84	37	2,5	70	5012				
	25	36	2,0	75	44	2,4	63	4863				
	20	45	2,7	61	55	3,2	51	4765				
	100	14	0,90	131	17	1,1	109	5595				
	80	18	1,0	117	21	1,2	98	5525				
	60	23	1,4	95	28	1,7	79	5123	SM	63 / 71 M 4b	73 74	12
	50	28	1,7	85	34	2,0	71	4982				
	40	35	2,1	72	43	2,5	60	4713				



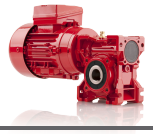
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	62	15	0,89	134	18	1,1	112	3850				
	50	18	1,1	118	22	1,4	98	3810				
	38	24	1,7	97	29	2,0	81	3756				
	29	31	2,3	75	38	2,8	63	3701				
	25	36	1,7	69	44	2,0	57	3640	İRSAM İRSFM	52 / 80 M 6a	87 88	19 20
	19	47	2,4	57	58	2,9	47	3562				
	14,5	62	3,3	44	76	4,0	37	3502				
	9,5	95	3,6	31	116	4,3	26	3427				
	7,25	124	4,9	21	152	5,9	18	3326				
	30	30	1,2	81	37	1,4	68	3353				
	25	36	1,0	73	44	1,2	61	3186				
	20	45	1,4	60	55	1,7	50	2987	SM	50 / 80 M 6a	71 72	12
	15	60	2,0	47	73	2,4	39	2740				
	10	90	2,8	33	110	3,4	28	2417				
	62	23	1,2	88	27	1,4	73	3927				
	50	28	1,5	73	34	1,8	61	3848				
	38	37	2,3	63	45	2,7	53	3831				
0,37	29	48	3,1	50	59	3,7	41	3738				
0,5	25	56	2,3	45	68	2,7	38	3676	İRSAM İRSFM	52 / 71 M 4b	87 88	16 18
	19	74	3,3	37	89	3,9	31	3633				
	14,5	97	4,4	29	117	5,3	24	3607				
	9,5	147	4,8	20	179	5,7	17	3496				
	7,25	193	6,5	16	234	7,8	13	3359				
	60	23	0,80	91	28	0,96	76	3646				
	50	28	1,0	81	34	1,2	68	3465				
	40	35	1,2	69	43	1,4	58	3248				
	30	47	1,6	55	57	1,9	46	2980	SM	50 / 71 M 4b	71 72	9
	25	56	1,5	49	68	1,8	41	2831				
	20	70	1,9	40	85	2,3	33	2653				
	15	93	2,6	31	113	3,1	26	2433				
	30	47	0,90	54	57	1,1	45	2108				
	25	56	0,80	48	68	0,96	40	2003				
	20	70	1,1	40	85	1,3	33	1879	SM	40 / 71 M 4b	69 70	8
	15	93	1,4	31	113	1,7	26	1723				
	10	140	2,1	21	170	2,5	18	1519				
	7,5	187	2,5	16	227	3,0	13	1394				
	1248	1,1	0,74	2409	1,4	0,89	2008	12980				
	960	1,5	0,94	1909	1,8	1,1	1591	12980				
	800	1,8	1,1	1685	2,1	1,3	1404	12980	İRSAM İRSFM	127 İRS 65 / 80 M 4a	107 108	92 98
	624	2,2	1,3	1405	2,7	1,5	1171	12980				
	480	2,9	1,6	1095	3,5	2,0	913	12980				
	312	4,5	2,3	766	5,4	2,8	638	12980				
	240	5,8	3,0	597	7,1	3,6	498	12980				
	550	2,5	1,2	1511	3,1	1,4	1259	12980				
0,55	482	2,9	1,4	1324	3,5	1,6	1103	12980	İRSAM İRSFM	127 İR 52 / 80 M 4a	115 116	91 97
0,75	378	3,7	1,7	1039	4,5	2,1	866	12980				
	303	4,6	2,2	833	5,6	2,6	694	12980				
	570	2,5	0,80	1250	3,0	0,96	1042	8470				
	435	3,2	1,0	966	3,9	1,2	805	8470	İRSAM İRSFM	102 İRS 52 / 80 M 4a	105 106	59 63
	285	4,9	1,6	625	6,0	1,9	521	8470				
	218	6,4	2,1	483	7,8	2,5	403	8470				
	260	5,4	1,4	696	6,5	1,7	580	8470	İRSAM İRSFM	102 İR 42 / 80 M 4a	111 112	54 58
	182	7,7	2,1	488	9,3	2,5	407	8470				
	147	9,5	2,5	394	12	3,0	328	8470				
	100	14	1,2	221	17	1,4	184	7140	SM	90 / 80 M 4a	77 78	20
	80	18	1,5	189	21	1,8	158	6783				



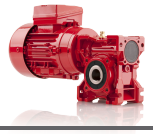
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	100	9,0	0,90	315	11	1,1	263	8180	SM	90 / 80 M 6b	77 78	22
	80	11	1,1	275	14	1,3	229	7859				
	60	15	1,6	224	18	1,9	187	7140				
	50	18	2,0	198	22	2,4	165	6719				
	62	15	2,1	203	18	2,5	169	7900	İRSAM İRSFM	82 / 80 M 6b	91 92	32 36
	53	17	2,8	204	21	3,4	170	7850				
	40	23	3,6	149	28	4,4	125	7721				
	30	30	5,4	121	37	6,4	101	7516				
	80	11	0,80	262	14	0,96	218	7033	SM	75 / 80 M 6b	75 76	18
	60	15	1,1	217	18	1,3	181	6326				
	50	18	1,4	187	22	1,7	156	5896				
	40	23	1,7	161	28	2,0	134	5420				
	100	14	0,90	210	17	1,1	175	6538	SM	75 / 80 M 4a	75 76	16
	80	18	1,1	183	21	1,3	153	6010				
	60	23	1,4	149	28	1,7	124	5407				
	50	28	1,7	131	34	2,0	109	5039				
	40	35	2,2	110	43	2,6	92	4633				
	82	11	0,80	263	13	0,96	219	5715	İRSAM İRSFM	65 / 80 M 6b	89 90	27 28
	62	15	1,1	185	18	1,3	154	5682				
	50	18	1,5	184	22	1,8	153	5601				
	39	23	2,1	150	28	2,5	125	5496				
	30	30	2,6	114	37	3,1	95	5326				
	60	15	0,70	207	18	0,84	173	5257	SM	63 / 80 M 6b	73 74	16
	50	18	0,90	181	22	1,1	151	4995				
	40	23	1,1	154	28	1,3	128	4682				
0,55	30	30	1,4	124	37	1,7	103	4296				
0,75	82	17	1,1	172	21	1,3	144	5823	İRSAM İRSFM	65 / 80 M 4a	89 90	25 26
	62	23	1,4	126	27	1,7	105	5741				
	50	28	2,1	122	34	2,5	102	5703				
	39	36	2,8	99	44	3,4	83	5620				
	30	47	3,4	77	57	4,1	64	5573				
	25	56	2,9	70	68	3,5	59	5403				
	20	72	4,0	57	87	4,9	48	5362				
	15	93	4,8	44	113	5,7	37	5250				
	9,75	144	6,1	31	174	7,4	26	5123				
	80	18	0,70	174	21	0,84	145	4808	SM	63 / 80 M 4a	73 74	13
	60	23	0,90	142	28	1,1	118	4410				
	50	28	1,1	126	34	1,3	105	4189				
	40	35	1,4	107	43	1,7	89	3926				
	30	47	1,9	84	57	2,3	70	3601				
	25	56	1,8	74	68	2,2	62	3421				
	20	70	2,4	62	85	2,9	52	3208				
	15	93	3,2	47	113	3,8	39	2944				
	38	24	1,1	144	29	1,4	120	3305	İRSAM İRSFM	52 / 80 M 6b	87 88	20 21
	29	31	1,5	112	38	1,9	93	3245				
	25	36	1,1	102	44	1,4	85	3200				
	19	47	1,6	84	58	2,0	70	3158				
	14,5	62	2,2	65	76	2,7	54	3091				
	9,5	95	2,4	46	116	2,9	38	2980				
	7,25	124	3,3	31	152	3,9	26	2880				
	30	30	0,80	121	37	0,96	101	3453	SM	50 / 80 M 6b	71 72	13
	25	36	0,70	108	44	0,84	90	3218				
	20	45	0,90	90	55	1,1	75	2958				
	15	60	1,3	70	73	1,6	58	2661				



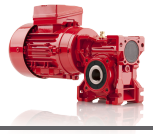
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	62	23	0,80	130	27	0,96	109	3320				
	50	28	1,0	109	34	1,2	91	3245				
	38	37	1,5	94	45	1,8	78	3215				
	29	48	2,1	74	59	2,5	62	3158				
	25	56	1,5	68	68	1,8	56	3112	İRSAM İRSFM	52 / 80 M 4a	87 88	19 20
	19	74	2,2	55	89	2,6	46	2980				
	14,5	97	3,0	42	117	3,6	35	2885				
0,55	9,5	147	3,2	30	179	3,8	25	2756				
0,75	7,25	193	4,4	23	234	5,2	19	2641				
	30	47	1,1	82	57	1,3	68	2703				
	25	56	1,0	72	68	1,2	60	2568				
	20	70	1,3	60	85	1,6	50	2407	SM	50 / 80 M 4a	71 72	11
	15	93	1,7	47	113	2,0	39	2208				
	10	140	2,4	33	170	2,9	28	1948				
	7,5	187	3,1	25	227	3,7	21	1787				
	20	70	0,70	59	85	0,84	49	1754				
	15	93	0,90	47	113	1,1	39	1609	SM	40 / C71 M 4	69 70	9,5
	10	140	1,4	32	170	1,7	27	1419				
	7,5	187	1,7	24	227	2,0	20	1302				
	1590	0,88	0,82	4095	1,1	0,98	3413	21500				
	1200	1,2	1,0	3233	1,4	1,2	2694	21500				
	900	1,6	1,4	2425	1,9	1,7	2021	21500	İRSAM İRSFM	162 İRS 82 / 80 M 4b	109 110	199 222
	795	1,8	1,4	2363	2,1	1,7	1969	21500				
	600	2,3	1,8	1854	2,8	2,2	1545	21500				
	624	2,2	0,97	1855	2,7	1,2	1546	11610				
	480	2,9	1,2	1445	3,5	1,5	1204	11610	İRSAM İRSFM	127 İRS 65 / 80 M 4b	107 108	93 99
	312	4,5	1,8	1012	5,4	2,1	843	11610				
	240	5,8	2,3	788	7,1	2,7	657	11610				
	550	2,5	0,90	1995	3,1	1,1	1663	11610				
	482	2,9	1,0	1748	3,5	1,2	1457	11610				
	378	3,7	1,3	1372	4,5	1,6	1143	11610	İRSAM İRSFM	127 İR 52 / 80 M 4b	115 116	92 98
	303	4,6	1,6	1100	5,6	2,0	917	11610				
	229	6,1	2,2	833	7,4	2,6	694	11610				
	186	7,5	2,7	676	9,1	3,2	563	11610				
	435	3,2	0,78	1275	3,9	0,94	1063	8100				
0,75	285	4,9	1,2	825	6,0	1,5	688	8100	İRSAM İRSFM	102 İRS 52 / 80 M 4b	105 106	60 64
1	218	6,4	1,6	638	7,8	1,9	532	8100				
	143	9,8	1,8	457	12	2,1	381	8100				
	9	156	2,3	353	189	2,7	294	8100				
	100	14	0,90	302	17	1,1	252	7306				
	80	18	1,1	258	21	1,3	215	6783	SM	90 / 80 M 4b	77 78	23
	60	23	1,5	212	28	1,8	177	6163				
	50	28	1,8	184	34	2,2	153	5799				
	60	15	1,1	306	18	1,3	255	7140				
	50	18	1,4	271	22	1,7	226	6719	SM	90 / 90 S 6a	77 78	24
	40	23	1,8	226	28	2,2	188	6238				
	30	30	2,6	179	37	3,1	149	5667				
	62	15	1,5	276	18	1,9	230	7700				
	53	17	2,1	278	21	2,5	232	7700				
	40	23	2,7	204	28	3,2	170	7700	İRSAM İRSFM	82 / 90 S 6a	91 92	38 40
	30	30	3,9	165	37	4,7	137	7700				
	26,5	34	2,9	162	42	3,5	135	7700				
	20	45	3,7	124	55	4,5	103	7700				



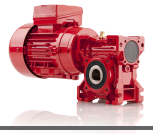
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
0,75 1	60	15	0,80	296	18	0,96	247	6088	SM	75 / 90 S 6a	75 76	20
	50	18	1,0	255	22	1,2	213	5784				
	40	23	1,3	220	28	1,6	183	5420				
	30	30	1,6	177	37	1,9	148	4973				
	25	36	1,6	155	44	1,9	129	4725				
	20	45	2,1	127	55	2,5	106	4430				
	15	60	2,7	99	73	3,2	83	4065				
	80	18	0,80	250	21	0,96	208	5783	SM	75 / 80 M 4b	75 76	18
	60	23	1,1	203	28	1,3	169	5304				
	50	28	1,3	179	34	1,6	149	5039				
	40	35	1,6	149	43	1,9	124	4723				
	30	47	2,1	118	57	2,5	98	4334				
	25	56	2,1	104	68	2,5	87	4119				
	20	70	2,8	85	85	3,4	71	3862				
	50	18	1,1	251	22	1,3	209	5423	İRSAM İRSFM	65 / 90 S 6a	89 90	28 29
	39	23	1,5	205	28	1,9	171	5263				
	30	30	1,9	155	37	2,3	129	5123				
	25	36	1,6	149	44	1,9	124	5050				
	19,5	46	2,2	119	56	2,7	100	4950				
	15	60	2,7	91	73	3,3	76	4812				
	9,75	92	3,3	65	113	4,0	54	4756				
	40	23	0,80	210	28	0,96	175	4506	SM	63 / 90 S 6a	73 74	17
	30	30	1,0	170	37	1,2	142	4132				
	25	36	1,0	151	44	1,2	126	3927				
	20	45	1,3	124	55	1,6	103	3681				
	15	60	1,7	98	73	2,0	82	3376				
	10	90	2,3	68	110	2,8	57	2979				
	7,5	120	2,9	53	147	3,5	44	2734				
	82	17	0,80	235	21	0,96	196	5127	İRSAM İRSFM	65 / 80 M 4b	89 90	26 27
	62	23	1,0	171	27	1,2	143	5296				
	50	28	1,5	166	34	1,8	139	5200				
	39	36	2,1	136	44	2,5	113	5055				
	30	47	2,5	104	57	3,0	87	4955				
	25	56	2,1	96	68	2,6	80	4957				
	19,5	72	3,0	78	87	3,6	65	4856				
	15	93	3,5	60	113	4,2	50	4744				
	9,75	144	4,5	42	174	5,4	35	4701				
	7,5	187	5,5	33	227	6,6	27	4635				
	50	28	0,80	171	34	0,96	143	4189	SM	63 / 80 M 4b	73 74	15
	40	35	1,0	145	43	1,2	121	3926				
	30	47	1,4	115	57	1,7	96	3601				
	25	56	1,3	101	68	1,6	84	3421				
	20	70	1,7	84	85	2,0	70	3208				
	15	93	2,3	64	113	2,8	53	2944				
	50	28	0,75	148	34	0,90	124	2608	İRSAM İRSFM	52 / 80 M 4b	87 88	20 21
	38	37	1,1	128	45	1,4	107	2554				
	29	48	1,5	101	59	1,8	84	2501				
	25	56	1,1	92	68	1,3	77	2478				
	19	74	1,6	75	89	1,9	62	2435				
	14,5	97	2,2	58	117	2,6	48	2397				
	9,5	147	2,4	41	179	2,8	34	2359				
	7,25	193	3,2	32	234	3,8	26	2321				
	30	47	0,80	112	57	0,96	93	2703	SM	50 / 80 M 4b	71 72	12
	25	56	0,70	99	68	0,84	83	2568				
	20	70	1,0	82	85	1,2	68	2407				
	15	93	1,3	64	113	1,6	53	2208				
	10	140	1,8	45	170	2,2	38	1948				
	7,5	187	2,3	34	227	2,8	28	1787				



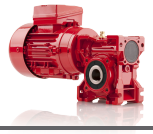
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	900	1,6	0,90	3739	1,9	1,1	3116	20700	İRSAM İRSFM	162 İRS 82 / 90 S 4a	109 110	201 224
	795	1,8	0,96	3486	2,1	1,2	2905	20700				
	600	2,3	1,2	2700	2,8	1,5	2250	20700				
	450	3,1	1,6	2103	3,8	1,9	1753	20700				
	300	4,7	2,3	1471	5,7	2,7	1226	20700				
	755	1,9	0,82	4094	2,3	0,98	3412	20700	İRSAM İRSFM	162 İR 63 / 90 S 4a	117 118	206 209
	645	2,2	0,96	3498	2,6	1,2	2915	20700				
	545	2,6	1,1	2958	3,1	1,4	2465	20700				
	480	2,9	0,85	2105	3,5	1,0	1754	10800	İRSAM İRSFM	127 İRS 65 / 90 S 4a	107 108	96 102
	312	4,5	1,2	1491	5,4	1,4	1243	10800				
	240	5,8	1,6	1147	7,1	1,9	956	10800				
	378	3,7	0,90	1997	4,5	1,1	1664	10800	İRSAM İRSFM	127 İR 52 / 90 S 4a	115 116	95 101
	303	4,6	1,1	1601	5,6	1,3	1334	10800				
	229	6,1	1,5	1213	7,4	1,8	1011	10800				
	186	7,5	1,8	984	9,1	2,2	820	10800				
	161	8,7	2,1	851	11	2,5	709	10800				
	130	11	2,6	687	13	3,1	573	10800				
	82	11	1,4	536	13	1,7	447	7900	İRSAM İRSFM	102 / 90 S 4a	93 94	54 58
	63	14	1,9	412	17	2,2	343	7900				
	50	18	2,7	391	22	3,2	326	7900				
	60	15	0,80	448	18	0,96	373	7140	SM	90 / 90 L 6b	77 78	26
	50	18	1,0	397	22	1,2	331	6719				
	40	23	1,2	331	28	1,4	276	6238				
	30	30	1,8	263	37	2,2	219	5667				
	25	36	1,6	231	44	1,9	193	5333				
	60	23	1,0	311	28	1,2	259	6163	SM	90 / 90 S 4a	77 78	25
	50	28	1,3	270	34	1,6	225	5799				
	40	35	1,6	225	43	1,9	188	5383				
1,1 1,5	62	15	1,1	405	18	1,3	338	6852	İRSAM İRSFM	82 / 90 L 6b	91 92	40 42
	53	17	1,4	408	21	1,7	340	6700				
	40	23	1,8	299	28	2,2	249	6623				
	30	30	2,7	242	37	3,2	201	6496				
	27	34	2,0	238	42	2,4	198	6382				
	20	45	2,5	182	55	3,1	152	6267				
	15	60	3,9	138	73	4,7	115	6153				
	10	90	4,0	97	110	4,7	81	6038				
	62	23	1,4	279	27	1,6	233	6623	İRSAM İRSFM	82 / 90 S 4a	91 92	38 40
	53	26	2,1	270	32	2,5	225	6470				
	40	35	2,3	201	43	2,8	168	6382				
	30	47	3,5	162	57	4,1	135	6247				
	27	53	2,7	151	64	3,2	126	6153				
	20	70	3,3	117	85	3,9	98	6057				
	15	93	5,0	91	113	6,0	76	5960				
	10	140	5,1	64	170	6,1	53	5800				
	40	23	0,90	322	28	1,1	268	5318	SM	75 / 90 L 6b	75 76	21
	30	30	1,1	259	37	1,3	216	4878				
	25	36	1,1	228	44	1,3	190	4635				
	20	45	1,4	187	55	1,7	156	4344				
	15	60	1,8	145	73	2,2	121	3985				
	10	90	2,3	100	110	2,8	83	3516				
	7,5	120	2,8	77	147	3,4	64	3195				
	60	23	0,70	297	28	0,84	248	5254	SM	75 / 90 S 4a	75 76	20
	50	28	0,90	263	34	1,1	219	4991				
	40	35	1,1	219	43	1,3	183	4678				
	30	47	1,4	173	57	1,7	144	4292				
	25	56	1,4	152	68	1,7	127	4078				
	20	70	1,9	125	85	2,3	104	3824				
	15	93	2,4	97	113	2,9	81	3474				



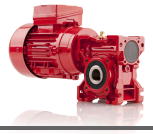
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	39	23	1,1	300	28	1,3	250	4865				
	30	30	1,3	228	37	1,6	190	4801				
	25	36	1,1	219	44	1,3	182	4723				
	19,5	46	1,5	175	56	1,8	146	4650	İRSAM İRSFM	65 / 90 L 6b	89 90	26 28
	15	60	1,8	133	73	2,2	111	4555				
	9,75	92	2,2	96	113	2,7	80	4489				
	7,5	120	2,9	74	147	3,5	61	4321				
	20	45	0,90	182	55	1,1	152	3791				
	15	60	1,2	144	73	1,4	120	3444	SM	63 / 90 L 6b	73 74	20
	10	90	1,5	99	110	1,8	83	3009				
	7,5	120	2,0	77	147	2,4	64	2734				
1,1	50	28	1,0	244	34	1,2	203	4910				
1,5	39	36	1,4	199	44	1,7	166	4801				
	30	47	1,7	153	57	2,0	128	4723				
	25	56	1,5	141	68	1,7	117	4650	İRSAM İRSFM	65 / 90 S 4a	89 90	26 28
	19,5	72	2,0	114	87	2,4	95	4555				
	15	93	2,4	88	113	2,9	73	4489				
	9,75	144	3,1	62	174	3,7	52	4321				
	7,5	187	3,7	48	227	4,5	40	4259				
	30	47	0,90	169	57	1,1	141	3533				
	25	56	0,90	148	68	1,1	123	3356				
	20	70	1,2	123	85	1,4	103	3146	SM	63 / 90 S 4a	73 74	17
	15	93	1,6	95	113	1,9	79	2886				
	10	140	2,1	65	170	2,5	54	2546				
	7,5	187	2,6	50	227	3,1	42	2336				
	600	2,3	0,99	3376	2,8	1,2	2813	19950	İRSAM İRSFM	162 İRS 82 / 90 L 4a	109 110	203 226
	450	3,1	1,3	2629	3,8	1,5	2191	19950				
	300	4,7	1,8	1839	5,7	2,2	1533	19950				
	303	4,6	0,83	1475	5,6	1,00	1229	9650				
	229	6,1	1,1	1117	7,4	1,3	931	9650	İRSAM İRSFM	127 İR 52 / 90 L 4a	115 116	97 103
	186	7,5	1,3	907	9,1	1,6	756	9650				
	161	8,7	1,6	784	11	1,9	653	9650				
	130	11	1,9	632	13	2,3	527	9650				
	83	11	1,8	740	13	2,2	617	9650				
	65	14	2,3	610	17	2,8	509	9650	İRSAM İRSFM	127 / 100 L 6a	95 96	91 95
	52	17	3,5	571	21	4,2	476	9650				
	40	23	4,7	458	28	5,6	382	9650				
	82	11	1,1	731	13	1,3	609	7750				
	63	14	1,4	562	17	1,6	468	7750				
1,5	50	18	2,0	533	22	2,4	444	7750	İRSAM İRSFM	102 / 100 L 6a	93 94	63 67
2	40	23	2,6	439	28	3,1	366	7720				
	30	30	3,5	334	37	4,2	279	7690				
	25	36	2,9	310	44	3,4	259	7520				
	20	45	3,8	251	55	4,6	210	7300				
	30	30	1,3	358	37	1,6	298	5667				
	25	36	1,2	314	44	1,4	262	5333				
	20	45	1,5	258	55	1,8	215	4951	SM	90 / 100 L 6a	77 78	31
	15	60	2,1	201	73	2,5	168	4498				
	10	90	2,7	138	110	3,2	115	3929				
	60	23	0,80	424	28	0,96	353	6163				
	50	28	0,90	368	34	1,1	307	5799				
	40	35	1,2	307	43	1,4	256	5383	SM	90 / 90 L 4a	77 78	28
	30	47	1,7	239	57	2,0	199	4891				
	25	56	1,6	210	68	1,9	175	4603				
	20	70	2,1	172	85	2,5	143	4273				



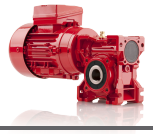
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	53	17	1,0	557	21	1,2	464	6650				
	40	23	1,3	407	28	1,6	340	6450				
	30	30	2,0	329	37	2,4	275	6420				
	26,5	34	1,5	325	42	1,8	271	6380	İRSAM İRSFM	82 / 100 L 6a	91 92	44 46
	20	45	1,9	248	55	2,2	207	6190				
	15	60	2,9	189	73	3,4	157	6050				
	10	90	2,9	132	110	3,5	110	5960				
	62	23	1,0	381	27	1,2	317	6450				
	53	26	1,5	369	32	1,8	307	6420				
	40	35	1,7	274	43	2,1	229	6380				
	30	47	2,5	221	57	3,0	184	6190	İRSAM İRSFM	82 / 90 L 4a	91 92	40 42
	26,5	53	1,9	206	64	2,3	172	6050				
	20	70	2,4	160	85	2,9	133	5960				
	15	93	3,7	124	113	4,4	104	5800				
	10	140	3,7	87	170	4,5	72	5680				
	20	45	1,1	255	55	1,3	213	4181				
	15	60	1,3	198	73	1,6	165	3835	SM	75 / 100 L 6a	75 76	29
	10	90	1,7	137	110	2,0	114	3382				
1,5	7,5	120	2,0	105	147	2,4	88	3103				
2	40	35	0,80	299	43	0,96	249	4547				
	30	47	1,0	236	57	1,2	197	4171				
	25	56	1,0	207	68	1,2	173	3962				
	20	70	1,4	170	85	1,7	142	3713	SM	75 / 90 L 4a	75 76	22
	15	93	1,7	132	113	2,0	110	3407				
	10	140	2,2	90	170	2,6	75	3005				
	7,5	187	2,7	68	227	3,2	57	2757				
	50	28	0,75	333	34	0,91	277	4817				
	39	36	1,0	271	44	1,2	226	4707				
	30	47	1,2	209	57	1,5	174	4676				
	25	56	1,1	192	68	1,3	160	4559	İRSAM İRSFM	65 / 90 L 4a	89 90	28 29
	19,5	72	1,5	156	87	1,8	130	4466				
	15	93	1,8	120	113	2,1	100	4445				
	9,75	144	2,3	85	174	2,7	71	4195				
	7,5	187	2,7	65	227	3,3	54	4112				
	20	70	1,1	255	85	1,3	213	4181				
	15	93	1,3	198	113	1,6	165	3835	SM	63 / 90 L 4a	73 74	19
	10	140	1,7	137	170	2,0	114	3382				
	7,5	187	2,0	105	227	2,4	88	3103				
	366	3,8	0,91	3627	4,6	1,1	3023	19800				
	302	4,6	1,1	2993	5,6	1,3	2494	19800				
	255	5,5	1,3	2530	6,7	1,6	2108	19800				
	213	6,6	1,6	2110	8,0	1,9	1758	19800	İRSAM İRSFM	162 İR 62 / 100 L 4a	117 118	207 230
	180	7,8	1,9	1781	9,4	2,2	1484	19800				
	160	8,8	2,1	1582	11	2,5	1318	19800				
	135	10	2,5	1335	13	3,0	1113	19800				
	111	13	3,0	1103	15	3,6	919	19800				
	87	10	2,1	1178	13	2,6	982	19800	İRSAM İRSFM	162 / 112 M 6a	97 98	190 213
2,2	54	17	4,3	882	20	5,1	735	19800				
3	42	21	5,5	696	26	6,7	580	19800				
	83	11	1,2	1085	13	1,5	904	9500				
	65	14	1,6	895	17	1,9	746	9500	İRSAM İRSFM	127 / 112 M 6a	95 96	100 104
	52	17	2,4	838	21	2,8	698	9500				
	40	23	3,2	672	28	3,8	560	9420				
	32	28	4,0	560	34	4,7	467	9300				
	83	17	1,6	772	20	1,9	644	9500				
	65	22	2,0	634	26	2,4	528	9450	İRSAM İRSFM	127 / 100 L 4a	95 96	88 92
	52	27	3,0	562	33	3,7	468	9300				
	40	35	4,0	444	43	4,8	370	9220				



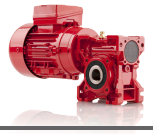
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
2,2 3	82	**17**	1,00	738	**21**	1,2	615	7730	**İRSAM İRSFM**	**102 / 100 L 4a**	93 94	59 63
	63	**22**	1,2	586	**27**	1,4	488	7620				
	50	**28**	1,7	518	**34**	2,1	431	7590				
	40	**35**	2,3	432	**43**	2,7	360	7540				
	30	**47**	3,0	333	**57**	3,6	278	7420				
	25	**56**	2,5	296	**68**	3,0	247	7360				
	20	**70**	3,3	243	**85**	4,0	203	7250				
	15	**93**	4,4	185	**113**	5,2	154	7100				
	10	**140**	4,9	129	**170**	5,8	108	7030				
	7,5	**187**	6,4	98	**227**	7,6	82	6950				
	30	**47**	1,2	351	**57**	1,4	293	4891	**SM**	**90 / 100 L 4a**	77 78	30
	25	**56**	1,1	308	**68**	1,3	257	4603				
	20	**70**	1,4	252	**85**	1,7	210	4273				
	15	**93**	1,9	194	**113**	2,3	162	3882				
	10	**140**	2,3	134	**170**	2,8	112	3391				
	7,5	**187**	2,9	101	**227**	3,5	84	3081				
	20	**45**	1,0	378	**55**	1,2	315	4951	**SM**	**90 / 112 M 6a**	77 78	39
	15	**60**	1,4	294	**73**	1,7	245	4498				
	10	**90**	1,8	203	**110**	2,2	169	3929				
	7,5	**120**	2,2	156	**147**	2,6	130	3570				
	53	**26**	1,0	541	**32**	1,3	451	6320	**İRSAM İRSFM**	**82 / 100 L 4a**	91 92	43 45
	40	**35**	1,2	402	**43**	1,4	335	6250				
	30	**47**	1,7	324	**57**	2,1	270	6125				
	26,5	**53**	1,3	302	**64**	1,6	252	6050				
	20	**70**	1,6	234	**85**	2,0	195	5975				
	15	**93**	2,5	182	**113**	3,0	152	5950				
	10	**140**	2,5	128	**170**	3,1	106	5900				
	20	**70**	0,90	249	**85**	1,1	208	3609	**SM**	**75 / 100 L 4a**	75 76	26
	15	**93**	1,2	194	**113**	1,4	162	3310				
	10	**140**	1,5	132	**170**	1,8	110	2919				
	7,5	**187**	1,8	100	**227**	2,2	83	2678				
3 4	280	**5,0**	1,1	4150	**6,1**	1,3	3458	28460	**İRSAM İRSFM**	**201 İR 72 / 100 L 4b**	99 100	355 367
	224	**6,2**	1,4	3323	**7,6**	1,7	2769	28460				
	182	**7,7**	1,7	2700	**9,3**	2,0	2250	28460				
	150	**9,4**	2,0	2220	**11**	2,4	1850	28460				
	122	**12**	2,5	1801	**14**	3,0	1501	28460				
	100	**14**	3,1	1477	**17**	3,7	1231	28460				
	87	**10**	1,6	1606	**13**	1,9	1339	19800	**İRSAM İRSFM**	**162 / 132 S 6b**	97 98	201 224
	54	**17**	3,1	1203	**20**	3,8	1003	19800				
	42	**21**	4,1	949	**26**	4,9	791	19800				
	30	**30**	5,7	707	**37**	6,9	589	19800				
	83	**17**	1,2	1053	**20**	1,4	878	9500	**İRSAM İRSFM**	**127 / 100 L 4b**	95 96	91 95
	65	**22**	1,5	865	**26**	1,8	721	9400				
	52	**27**	2,2	766	**33**	2,7	638	9320				
	40	**35**	2,9	606	**43**	3,5	505	9240				
	32	**44**	3,6	498	**53**	4,3	415	9520				
	26	**54**	3,2	431	**65**	3,9	359	9360				
	20	**70**	4,3	336	**85**	5,1	280	9210				
	16	**88**	5,4	275	**106**	6,5	229	9180				
	13	**108**	4,7	229	**131**	5,7	191	8930				
	63	**22**	0,88	799	**27**	1,1	666	7620	**İRSAM İRSFM**	**102 / 100 L 4b**	93 94	62 66
	50	**28**	1,3	706	**34**	1,5	588	7590				
	40	**35**	1,7	589	**43**	2,0	491	7480				
	30	**47**	2,2	454	**57**	2,6	379	7620				
	25	**56**	1,9	404	**68**	2,2	337	7530				
	20	**70**	2,4	332	**85**	2,9	276	7450				
	15	**93**	3,2	252	**113**	3,8	210	7360				
	10	**140**	3,6	176	**170**	4,3	147	7290				
	7,5	**187**	4,7	134	**227**	5,6	111	7130				



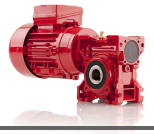
P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
	30	47	0,90	479	57	1,1	399	4891				
	25	56	0,80	420	68	0,96	350	4603				
	20	70	1,0	344	85	1,2	287	4273	SM	90 / 100 L 4b	77 78	36
	15	93	1,4	264	113	1,7	220	3882				
	10	140	1,7	182	170	2,0	152	3391				
3	7,5	187	2,1	138	227	2,5	115	3081				
	40	35	0,86	548	43	1,0	457	6250				
4	30	47	1,3	442	57	1,5	368	6125				
	26,5	53	0,97	412	64	1,2	343	6050	İRSAM		91	45
	20	70	1,2	319	85	1,4	266	5975	İRSFM	82 / 100 L 4b	92	47
	15	93	1,8	249	113	2,2	207	5950				
	10	140	1,9	174	170	2,2	145	5900				
	7,5	187	2,7	132	227	3,2	110	5860				
	280	5,0	0,83	5457	6,1	1,00	4548	28460				
	224	6,2	1,0	4369	7,6	1,2	3641	28460				
	182	7,7	1,3	3550	9,3	1,5	2958	28460	İRSAM		119	342
	150	9,4	1,6	2918	11	1,9	2432	28460	İRSFM	201 İR 72 / 112 M 4b	120	374
	122	12	1,9	2369	14	2,3	1974	28460				
	100	14	2,3	1941	17	2,8	1618	28460				
	83	11	2,3	2219	13	2,7	1850	28460				
	63	14	3,3	1899	17	3,9	1582	28460	İRSAM		99	344
	55	16	4,0	1727	20	4,8	1440	28460	İRSFM	201 / 132 M 6a	100	376
	40	23	4,3	1290	28	5,2	1075	28460				
	87	10	1,2	2142	13	1,4	1785	19800				
	54	17	2,3	1604	20	2,8	1337	19800	İRSAM		97	209
	42	21	3,0	1266	26	3,7	1055	19800	İRSFM	162 / 132 M 6a	98	232
	30	30	4,3	942	37	5,2	785	19800				
	21	43	4,4	713	52	5,3	594	19800				
	83	17	0,87	1404	20	1,0	1170	9406				
	65	22	1,1	1153	26	1,3	961	9216				
	52	27	1,7	1022	33	2,0	851	9228				
	40	35	2,2	808	43	2,6	673	9059	İRSAM		95	100
	32	44	2,7	664	53	3,2	553	9333	İRSFM	127 / 112 M 4b	96	104
4	26	54	2,4	575	65	2,9	479	9267				
5,5	20	70	3,2	447	85	3,8	373	8942				
	16	88	4,0	367	106	4,9	306	9089				
	13	108	3,6	305	131	4,3	254	9020				
	50	28	0,96	941	34	1,2	784	7545				
	40	35	1,2	786	43	1,5	655	7441				
	30	47	1,6	606	57	2,0	505	7406				
	25	56	1,4	539	68	1,7	449	7471	İRSAM		93	66
	20	70	1,8	442	85	2,2	368	7382	İRSFM	102 / 112 M 4b	94	69
	15	93	2,4	336	113	2,9	280	7376				
	10	140	2,7	235	170	3,2	196	7146				
	7,5	187	3,5	178	227	4,2	148	7218				
	20	70	0,80	458	85	0,96	382	4273				
	15	93	1,0	352	113	1,2	293	3882	SM	90 / 112 M 4b	77 78	42
	10	140	1,3	243	170	1,6	203	3391				
	7,5	187	1,6	184	227	1,9	153	3081				
	30	47	0,95	589	57	1,1	491	6127				
	26,5	53	0,73	550	64	0,88	458	6005				
	20	70	0,90	426	85	1,1	355	5990	İRSAM		91	52
	15	93	1,4	332	113	1,7	276	5858	İRSFM	82 / C100 L 4	92	54
	10	140	1,4	232	170	1,7	193	5833				
	7,5	187	2,0	176	227	2,4	147	5842				



P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
5,5 7,5	83	**11**	1,7	2909	**13**	2,0	2424	28100	**İRSAM İRSFM**	**201 / 132 M 6b**	99 100	351 383
	63	**14**	2,2	2246	**17**	2,7	1872	28100				
	55	**16**	2,9	2193	**20**	3,5	1828	28100				
	40	**23**	4,3	1647	**28**	5,1	1373	28100				
	87	**10**	0,85	2945	**13**	1,0	2454	19800	**İRSAM İRSFM**	**162 / 132 M 6b**	97 98	216 251
	54	**17**	1,7	2206	**20**	2,1	1838	19800				
	42	**21**	2,2	1740	**26**	2,7	1450	19800				
	30	**30**	3,1	1296	**37**	3,8	1080	19800				
	21	**43**	3,2	980	**52**	3,8	817	19800				
	15	**60**	4,5	727	**73**	5,5	605	19800				
	87	**16**	1,1	2089	**20**	1,3	1741	19800	**İRSAM İRSFM**	**162 / 132 S 4c**	97 98	202 227
	54	**26**	2,2	1499	**31**	2,6	1249	19800				
	42	**33**	2,7	1182	**40**	3,3	985	19800				
	30	**47**	3,8	878	**57**	4,6	732	19800				
	27	**52**	3,2	831	**63**	3,8	692	19800				
	21	**67**	3,9	654	**81**	4,7	545	19800				
	15	**93**	5,5	478	**113**	6,7	399	19800				
	65	**22**	0,80	1585	**26**	0,96	1321	9560	**İRSAM İRSFM**	**127 / 132 S 4c**	95 96	102 106
	52	**27**	1,2	1405	**33**	1,5	1171	9520				
	40	**35**	1,6	1111	**43**	1,9	925	9410				
	32	**44**	2,0	912	**53**	2,4	760	9630				
	26	**54**	1,8	790	**65**	2,1	658	9350				
	20	**70**	2,3	615	**85**	2,8	513	9260				
	16	**88**	2,9	504	**106**	3,5	420	9450				
	13	**108**	2,6	419	**131**	3,1	350	9210				
	10	**140**	3,4	326	**170**	4,1	272	8960				
7,5 10	83	**11**	1,2	4161	**13**	1,4	3468	27500	**İRSAM İRSFM**	**201 / 160 M 6b**	99 100	415 447
	63	**14**	1,7	3560	**17**	2,1	2966	27500				
	55	**16**	2,1	3239	**20**	2,6	2699	27500				
	40	**23**	2,3	2419	**28**	2,8	2016	27500				
	54	**17**	1,3	3008	**20**	1,5	2507	19800	**İRSAM İRSFM**	**162 / 160 M 6b**	97 98	230 303
	42	**21**	1,6	2373	**26**	2,0	1978	19800				
	30	**30**	2,3	1767	**37**	2,8	1472	19800				
	21	**43**	2,3	1337	**52**	2,8	1114	19800				
	15	**60**	3,3	991	**73**	4,0	826	19800				
	87	**16**	0,79	2849	**20**	0,94	2374	19800	**İRSAM İRSFM**	**162 / 132 M 4b**	97 98	212 235
	54	**26**	1,6	2044	**31**	1,9	1704	19800				
	42	**33**	2,0	1612	**40**	2,4	1343	19800				
	30	**47**	2,8	1197	**57**	3,4	998	19800				
	21	**67**	2,9	892	**81**	3,5	743	19800				
	15	**93**	4,1	652	**113**	4,9	544	19800				
	40	**35**	1,2	1514	**43**	1,4	1262	9373	**İRSAM İRSFM**	**127 / 132 M 4b**	95 96	119 123
	32	**44**	1,4	1244	**53**	1,7	1037	9333				
	26	**54**	1,3	1077	**65**	1,6	898	9317				
	20	**70**	1,7	839	**85**	2,0	699	9441				
	16	**88**	2,2	688	**106**	2,6	573	9167				
	13	**108**	1,9	572	**131**	2,3	477	9168				
	10	**140**	2,5	445	**170**	3,0	371	9175				
	8	**175**	3,2	360	**213**	3,8	300	9119				
11 15	52	**17**	2,1	4492	**21**	2,5	3743	33000	**İRSAM İRSFM**	**250 / 160 L 6b**	101 102	626 656
	40	**23**	3,5	3547	**28**	4,3	2956	33000				
	26	**35**	5,7	2910	**42**	6,9	2425	33000				
	20	**45**	6,2	1962	**55**	7,4	1635	33000				
	63	**14**	1,00	4853	**17**	1,2	4044	25850	**İRSAM İRSFM**	**201 / 160 L 6b**	99 100	430 462
	55	**16**	1,4	4558	**20**	1,6	3798	25850				
	40	**23**	2,0	3455	**28**	2,4	2879	25850				
	30	**30**	2,1	2661	**37**	2,5	2218	25850				



P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
11 15	54	**17**	0,85	4412	**20**	1,0	3677	23250	**İRSAM İRSFM**	**162 / 160 L 6b**	97 98	296 319
	42	**21**	1,1	3481	**26**	1,3	2901	23250				
	30	**30**	1,6	2591	**37**	1,9	2159	23250				
	21	**43**	1,6	1961	**52**	1,9	1634	23250				
	15	**60**	2,3	1453	**73**	2,7	1211	23250				
	54	**26**	1,1	2998	**31**	1,3	2499	23250	**İRSAM İRSFM**	**162 / 160 M 4b**	97 98	273 296
	42	**33**	1,4	2364	**40**	1,6	1970	23250				
	30	**47**	1,9	1756	**57**	2,3	1463	23250				
	21	**67**	2,0	1308	**81**	2,4	1090	23250				
	15	**93**	2,8	957	**113**	3,3	797	23250				
	10,5	**133**	2,9	654	**162**	3,4	545	23250				
	7,5	**187**	4,0	501	**227**	4,8	417	23250				
	40	**35**	0,80	2221	**43**	0,96	1851	9465	**İRSAM İRSFM**	**127 / C132 M 4**	95 96	124 132
	32	**44**	0,98	1825	**53**	1,2	1521	9333				
	26	**54**	0,88	1580	**65**	1,1	1317	9317				
	20	**70**	1,2	1231	**85**	1,4	1025	9441				
	16	**88**	1,5	1008	**106**	1,8	840	9167				
	13	**108**	1,3	839	**131**	1,5	699	9168				
	10	**140**	1,7	653	**170**	2,1	544	9175				
	8	**175**	2,2	528	**213**	2,6	440	9119				
15 20	63	**14**	1,3	5816	**17**	1,5	4847	32700	**İRSAM İRSFM**	**250 / 180 L 6a**	101 102	684 704
	52	**17**	2,0	6125	**21**	2,4	5104	32700				
	40	**23**	2,7	4839	**28**	3,3	4032	32700				
	31	**29**	2,9	3849	**35**	3,5	3207	32700				
	26	**35**	3,3	3435	**42**	4,0	2862	32700				
	20	**45**	4,0	2674	**55**	4,8	2228	32700				
	52	**27**	2,5	4150	**33**	3,0	3458	32700	**İRSAM İRSFM**	**250 / 160 L 4a**	101 102	637 667
	40	**35**	3,3	3233	**43**	3,9	2694	32700				
	31	**45**	3,9	2506	**55**	4,7	2088	32700				
	26	**54**	3,5	2261	**65**	4,2	1884	32700				
	20	**70**	4,8	1760	**85**	5,8	1467	32700				
	15,5	**90**	5,7	1364	**110**	6,9	1137	32700				
	10	**140**	6,9	911	**170**	8,3	759	32700				
	55	**25**	1,3	4221	**31**	1,5	3517	25100	**İRSAM İRSFM**	**201 / 160 L 4a**	99 100	442 474
	40	**35**	1,8	3192	**43**	2,2	2660	25100				
	30	**47**	1,9	2425	**57**	2,2	2021	25100				
	27,5	**51**	2,5	2335	**62**	3,0	1946	25100				
	20	**70**	2,7	1739	**85**	3,2	1450	25100				
	15	**93**	2,7	1320	**113**	3,2	1100	25100				
	13,75	**102**	3,6	1238	**124**	4,3	1032	25100				
	10	**140**	3,9	911	**170**	4,6	759	25100				
	7,5	**187**	5,3	683	**227**	6,3	569	25100				
	42	**33**	1,0	3114	**40**	1,2	2595	22400	**İRSAM İRSFM**	**162 / 160 L 4a**	97 98	298 318
	30	**47**	1,4	2312	**57**	1,7	1927	22400				
	21	**67**	1,5	1723	**81**	1,8	1436	22400				
	15	**93**	2,1	1260	**113**	2,5	1050	22400				
	10,5	**133**	2,1	892	**162**	2,5	743	22400				
	7,5	**187**	3,0	681	**227**	3,5	568	22400				
18,5 25	52	**27**	2,0	5119	**33**	2,4	4265	32450	**İRSAM İRSFM**	**250 / 180 M 4b**	101 102	657 687
	40	**35**	2,6	3988	**43**	3,2	3323	32450				
	31	**45**	3,2	3091	**55**	3,8	2575	32450				
	26	**54**	2,9	2789	**65**	3,4	2324	32450				
	20	**70**	3,9	2171	**85**	4,7	1809	32450				
	15,5	**90**	4,6	1682	**110**	5,6	1402	32450				
	10	**140**	5,6	1123	**170**	6,7	936	32450				
	7,75	**181**	6,8	870	**219**	8,1	725	32450				

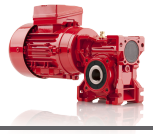


P_1 Power *Potencia* [kW] Hp	İ Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Qlo} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
18,5 25	55	**25**	1,1	5206	**31**	1,3	4338	24650	**İRSAM İRSFM**	**201 / 180 M 4b**	99 100	462 494
	40	**35**	1,5	3937	**43**	1,8	3281	24650				
	30	**47**	2,0	2991	**57**	2,4	2492	24650				
	28	**51**	1,5	2880	**62**	1,8	2400	24650				
	20	**70**	2,2	2145	**85**	2,7	1788	24650				
	15	**93**	3,0	1628	**113**	3,6	1357	24650				
	13,75	**102**	2,2	1527	**124**	2,7	1272	24650				
	10	**140**	3,3	1123	**170**	3,9	936	24650				
	7,5	**187**	4,4	842	**227**	5,2	702	24650				
	42	**33**	0,82	3975	**40**	0,98	3313	21200	**İRSAM İRSFM**	**162 / C160 L 4**	97 98	285 305
	30	**47**	1,1	2953	**57**	1,4	2461	21200				
	21	**67**	1,2	2200	**81**	1,4	1833	21200				
	15	**93**	1,6	1609	**113**	2,0	1341	21200				
	10,5	**133**	1,7	1100	**162**	2,0	917	21200				
	7,5	**187**	2,4	842	**227**	2,9	702	21200				
22 30	52	**27**	1,7	6087	**33**	2,0	5072	32200	**İRSAM İRSFM**	**250 / 180 L 4b**	101 102	682 702
	40	**35**	2,2	4742	**43**	2,7	3952	32200				
	31	**45**	2,7	3675	**55**	3,2	3063	32200				
	20	**70**	3,3	2581	**85**	3,9	2151	32200				
	15,5	**90**	3,9	2000	**110**	4,7	1667	32200				
	10	**140**	4,7	1336	**170**	5,7	1113	32200				
	7,75	**181**	5,7	1035	**219**	6,8	863	32200				

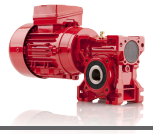
Sonsuz Vidali Redüktörler Güç ve Devir Tablolari

Worm Gear Unit - Performances Tables

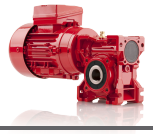
Réducteurs à roue et vis sans fin - able de performances



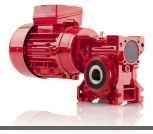
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
13-21 Nm	80	48	0,05	18	13	0,06	21	16	190	1250	**S**	**30**	67 68	1,2
	60	54	0,07	23	15	0,08	28	19	190	1250				
	50	56	0,09	28	17	0,11	34	21	190	1250				
	40	60	0,11	35	18	0,13	43	22	190	1250				
	30	66	0,13	47	18	0,16	57	21	190	1250				
	25	71	0,17	56	21	0,20	68	25	190	1250				
	20	75	0,18	70	18	0,22	85	22	190	1250				
	15	78	0,23	93	18	0,28	113	22	190	1250				
	10	80	0,31	140	17	0,37	170	20	190	1250				
	7,5	83	0,40	187	17	0,48	227	20	190	1250				
28-42 Nm	100	45	0,09	14	28	0,11	17	33	330	2100	**S**	**40**	69 70	2,1
	80	49	0,12	18	32	0,14	21	39	330	2100				
	60	55	0,14	23	32	0,17	28	38	330	2100				
	50	61	0,18	28	37	0,22	34	45	330	2100				
	40	65	0,22	35	39	0,26	43	47	330	2100				
	30	68	0,30	47	42	0,36	57	50	330	2100				
	25	71	0,30	56	36	0,36	68	44	330	2100				
	20	74	0,35	70	35	0,42	85	42	330	2100				
	15	79	0,46	93	37	0,55	113	45	330	2100				
	10	82	0,66	140	37	0,79	170	44	330	2100				
	7,5	85	0,85	187	37	1.0	227	44	330	2100				
50-71 Nm	100	46	0,16	14	50	0,19	17	60	450	3000	**S**	**50**	71 72	3,3
	80	53	0,20	18	58	0,24	21	69	450	3000				
	60	57	0,26	23	61	0,31	28	73	450	3000				
	50	61	0,31	28	64	0,37	34	77	450	3000				
	40	65	0,40	35	71	0,48	43	85	450	3000				
	30	68	0,50	47	70	0,60	57	83	450	3000				
	25	71	0,50	56	61	0,60	68	73	450	3000				
	20	74	0,64	70	65	0,77	85	78	450	3000				
	15	79	0,85	93	69	1,0	113	82	450	3000				
	10	82	1,1	140	62	1,3	170	75	450	3000				
	7,5	85	1,5	187	67	1,8	227	80	450	3000				
96-152 Nm	62	56	0,44	23	104	0,53	27	125	490	3400	**İRSA İRSF**	**52**	87 88	9 11
	50	58	0,56	28	111	0,67	34	133	490	3400				
	38	66	0,85	37	145	1,0	45	175	490	3400				
	29	68	1,1	48	152	1,4	59	182	490	3400				
	25	72	0,84	56	103	1,0	68	124	490	3400				
	19	77	1,2	74	121	1,5	89	145	490	3400				
	14,5	78	1,6	97	127	2,0	117	152	490	3400				
	9,5	84	1,8	147	96	2,1	179	116	490	3400				
	7,25	85	2,4	193	101	2,9	234	121	490	3400				
114-145 Nm	100	52	0,32	14	114	0,38	17	136	650	4200	**S**	**63**	73 74	6
	80	58	0,38	18	120	0,46	21	144	650	4200				
	60	60	0,50	23	123	0,60	28	147	650	4200				
	50	62	0,60	28	127	0,72	34	152	650	4200				
	40	67	0,75	35	137	0,90	43	165	650	4200				
	30	71	1,0	47	145	1,2	57	174	650	4200				
	25	74	0,99	56	125	1,2	68	150	650	4200				
	20	78	1,2	70	128	1,4	85	153	650	4200				
	15	80	1,6	93	131	1,9	113	157	650	4200				
	10	82	2,2	140	123	2,6	170	148	650	4200				
	7,5	85	2,8	187	122	3.4	227	147	650	4200				
176-280 Nm	82	56	0,60	17	188	0,72	21	226	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	62	54	0,77	23	176	0,92	27	211	670	4900				
	50	65	1,1	28	251	1,4	34	301	670	4900				
	39	68	1,6	36	280	1,9	44	336	670	4900				
	30	68	1,9	47	259	2,2	57	311	670	4900				



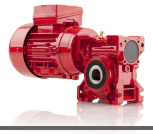
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
176-280 Nm	25	75	1,6	56	205	1,9	68	246	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	19,5	78	2,2	72	231	2,7	87	278	670	4900				
	15	78	2,6	93	210	3,2	113	252	670	4900				
	9,75	85	3,4	144	191	4,0	174	229	670	4900				
	7,5	85	4,1	187	179	4,9	227	214	670	4900				
172-221 Nm	100	53	0,48	14	174	0,58	17	208	700	5800	**S**	**75**	75 76	9
	80	58	0,56	18	177	0,67	21	213	700	5800				
	60	60	0,75	23	184	0,90	28	221	700	5800				
	50	63	0,85	28	183	1,0	34	219	700	5800				
	40	67	1,1	35	201	1,3	43	241	700	5800				
	30	72	1,5	47	221	1,8	57	265	700	5800				
	25	76	1,5	56	194	1,8	68	233	700	5800				
	20	78	1,8	70	192	2,2	85	230	700	5800				
	15	80	2,2	93	180	2,6	113	216	700	5800				
	10	84	3,0	140	172	3,6	170	206	700	5800				
	7,5	86	4,0	187	176	4,8	227	211	700	5800				
270-460 Nm	100	59	0,67	14	270	0,80	17	324	7306	1270	**S**	**90**	77 78	12
	80	63	0,83	18	285	1,0	21	342	6783	1270				
	60	71	1,1	23	320	1,3	28	384	6163	1270				
	50	71	1,4	28	339	1,7	34	407	5799	1270				
	40	73	1,8	35	359	2,2	43	430	5383	1270				
	30	77	2,6	47	410	3,1	57	492	4891	1270				
	25	83	2,4	56	340	2,9	68	408	4603	1270				
	20	84	3,1	70	355	3,7	85	426	4273	1270				
	15	86	4,1	93	361	4,9	113	433	3882	1270				
	10	89	5,1	140	310	6,1	170	372	3391	1270				
	7,5	90	6,3	187	290	7,6	227	348	3081	1270				
325-560 Nm	62	60	1,5	23	381	1,8	27	457	850	6900	**İRSA İRSF**	**82**	91 92	24 26
	53	68	2,3	26	565	2,8	32	679	850	6900				
	40	67	2,6	35	470	3,1	43	564	850	6900				
	30	72	3,8	47	560	4,6	57	672	850	6900				
	26,5	76	2,9	53	401	3,5	64	481	850	6900				
	20	78	3,6	70	385	4,3	85	462	850	6900				
	15	81	5,5	93	456	6,6	113	547	850	6900				
	10	85	5,6	140	325	6,7	170	390	850	6900				
	7,5	86	8,1	187	356	9,7	227	428	850	6900				
623-1000 Nm	82	60	2,2	17	738	2,6	21	886	1450	10000	**IRSA IRSF**	**102**	93 94	39 43
	63	62	2,6	22	703	3,2	27	844	1450	10000				
	50	69	3,9	28	906	4,6	34	1087	1450	10000				
	40	72	5,0	35	982	6,0	43	1179	1450	10000				
	30	74	6,6	47	999	7,9	57	1199	1450	10000				
	25	79	5,6	56	748	6,7	68	897	1450	10000				
	20	81	7,3	70	807	8,8	85	968	1450	10000				
	15	82	9,6	93	805	11,5	113	967	1450	10000				
	10	86	11	140	628	12,8	170	753	1450	10000				
	7,5	87	14	187	623	16,8	227	748	1450	10000				
1083-1792 Nm	83	62	3,5	17	1218	4,2	20	1462	2300	17000	**İRSA İRSF**	**127**	95 96	69 73
	65	65	4,4	22	1268	5,3	26	1522	2300	17000				
	52	72	6,7	27	1711	8,0	33	2053	2300	17000				
	40	74	8,8	35	1777	11	43	2132	2300	17000				
	32	76	11	44	1792	13	53	2150	2300	17000				
	26	81	9,7	54	1393	12	65	1672	2300	17000				
	20	82	13	70	1432	15	85	1718	2300	17000				
	16	84	16	88	1485	19	106	1782	2300	17000				
	13	86	14	108	1083	17	131	1300	2300	17000				
	10	87	19	140	1116	23	170	1339	2300	17000				



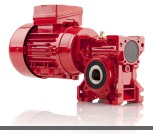
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q10} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
1873-3352 Nm	111	62	**4,6**	13	2159	**5,5**	15	2591	2900	21500	**IRSA IRSF**	**162**	97 98	163 186
	87	64	**5,9**	16	2241	**7,1**	20	2689	2900	21500				
	54	74	**12**	26	3244	**14**	31	3893	2900	21500				
	42	75	**15**	33	3245	**18**	40	3894	2900	21500				
	30	78	**21**	47	3352	**25**	57	4022	2900	21500				
	27	82	**17**	52	2628	**21**	63	3153	2900	21500				
	21	83	**22**	67	2580	**26**	81	3096	2900	21500				
	15	85	**31**	93	2653	**37**	113	3183	2900	21500				
	10,5	83	**32**	133	1873	**38**	162	2247	2900	21500				
	7,5	89	**44**	187	2003	**53**	227	2404	2900	21500				
3521-5746 Nm	115	65	**7,5**	12	3824	**9,0**	15	4589	3250	24750	**İRSA İRSF**	**201**	99 100	300 332
	83	68	**11**	17	4235	**13**	20	5082	3250	24750				
	63	70	**14**	22	4212	**17**	27	5054	3250	24750				
	55	75	**19**	25	5346	**23**	31	6416	3250	24750				
	40	78	**27**	35	5746	**32**	43	6896	3250	24750				
	30	79	**28**	47	4527	**34**	57	5432	3250	24750				
	27,5	83	**37**	51	5761	**44**	62	6913	3250	24750				
	20	85	**40**	70	4639	**48**	85	5566	3250	24750				
	15	86	**40**	93	3520	**48**	113	4224	3250	24750				
	13,75	88	**54**	102	4457	**65**	124	5349	3250	24750				
	10	89	**58**	140	3521	**70**	170	4225	3250	24750				
	7,5	89	**79**	187	3597	**95**	227	4317	3250	24750				
5791-13370 Nm	63	58	**23**	22	5733	**28**	27	6879	3750	29000	**IRSA IRSF**	**250**	101 102	493 513
	52	78	**37**	27	10237	**44**	33	12284	3750	29000				
	40	79	**49**	35	10562	**59**	43	12675	3750	29000				
	31	79	**59**	45	9856	**71**	55	11828	3750	29000				
	26	85	**53**	54	7990	**64**	65	9588	3750	29000				
	20	86	**72**	70	8448	**86**	85	10137	3750	29000				
	15,5	86	**86**	90	7820	**103**	110	9384	3750	29000				
	10	89	**104**	140	6314	**125**	170	7577	3750	29000				
	7,75	89	**125**	181	5881	**150**	219	7058	3750	29000				



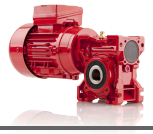
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=900)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1100)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
13-21 Nm	80	48	0,05	11	20	0,06	14	24	190	1250	**S**	**30**	67 68	1,2
	60	54	0,07	15	24	0,08	18	29	190	1250				
	50	56	0,09	18	27	0,11	22	32	190	1250				
	40	60	0,11	23	28	0,13	28	34	190	1250				
	30	66	0,13	30	27	0,16	37	33	190	1250				
	25	71	0,17	36	32	0,20	44	38	190	1250				
	20	75	0,18	45	29	0,22	55	34	190	1250				
	15	78	0,23	60	29	0,28	73	34	190	1250				
	10	80	0,31	90	26	0,37	110	32	190	1250				
	7,5	83	0,40	120	26	0,48	147	32	190	1250				
28-42 Nm	100	45	0,09	9	43	0,11	11	52	330	2100	**S**	**40**	69 70	2,1
	80	49	0,12	11	50	0,14	14	60	330	2100				
	60	55	0,14	15	49	0,17	18	59	330	2100				
	50	61	0,18	18	58	0,22	22	70	330	2100				
	40	65	0,22	23	61	0,26	28	73	330	2100				
	30	68	0,30	30	65	0,36	37	78	330	2100				
	25	71	0,30	36	57	0,36	44	68	330	2100				
	20	74	0,35	45	55	0,42	55	66	330	2100				
	15	79	0,46	60	58	0,55	73	69	330	2100				
	10	82	0,66	90	57	0,79	110	69	330	2100				
	7,5	85	0,85	120	57	1,0	147	69	330	2100				
50-71 Nm	100	46	0,16	9	78	0,19	11	94	450	3000	**S**	**50**	71 72	3,3
	80	53	0,20	11	90	0,24	14	108	450	3000				
	60	57	0,26	15	94	0,31	18	113	450	3000				
	50	61	0,31	18	100	0,37	22	120	450	3000				
	40	65	0,40	23	110	0,48	28	132	450	3000				
	30	68	0,50	30	108	0,60	37	130	450	3000				
	25	71	0,50	36	94	0,60	44	113	450	3000				
	20	74	0,64	45	101	0,77	55	121	450	3000				
	15	79	0,85	60	107	1,0	73	128	450	3000				
	10	82	1,1	90	97	1,3	110	116	450	3000				
	7,5	85	1,5	120	104	1,8	147	125	450	3000				
96-152 Nm	62	56	0,44	15	162	0,53	18	195	490	3400	**İRSA İRSF**	**52**	87 88	9 11
	50	58	0,56	18	172	0,67	22	207	490	3400				
	38	66	0,85	24	226	1,0	29	271	490	3400				
	29	68	1,1	31	236	1,4	38	284	490	3400				
	25	72	0,84	36	160	1,0	44	193	490	3400				
	19	77	1,2	47	188	1,5	58	225	490	3400				
	14,5	78	1,6	62	197	2,0	76	236	490	3400				
	9,5	84	1,8	95	150	2,1	116	180	490	3400				
	7,25	85	2,4	124	157	2,9	152	188	490	3400				
114-145 Nm	100	52	0,32	9	177	0,38	11	212	650	4200	**S**	**63**	73 74	6
	80	58	0,38	11	187	0,46	14	225	650	4200				
	60	60	0,50	15	191	0,60	18	229	650	4200				
	50	62	0,60	18	197	0,72	22	237	650	4200				
	40	67	0,75	23	213	0,90	28	256	650	4200				
	30	71	1,0	30	226	1,2	37	271	650	4200				
	25	74	0,99	36	194	1,2	44	233	650	4200				
	20	78	1,2	45	199	1,4	55	238	650	4200				
	15	80	1,6	60	204	1,9	73	244	650	4200				
	10	82	2,2	90	191	2,6	110	230	650	4200				
	7,5	85	2,8	120	190	3,4	147	228	650	4200				
176-280 Nm	82	56	0,60	11	292	0,72	13	351	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	62	54	0,77	15	274	0,92	18	328	670	4900				
	50	65	1,1	18	390	1,4	22	468	670	4900				
	39	68	1,6	23	436	1,9	28	523	670	4900				
	30	68	1,9	30	403	2,2	37	483	670	4900				



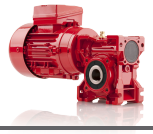
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=900)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1100)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
176-280 Nm	25	75	1,6	36	318	1,9	44	382	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	19,5	78	2,2	46	360	2,7	56	432	670	4900				
	15	78	2,6	60	327	3,2	73	392	670	4900				
	9,75	85	3,4	92	296	4,0	113	356	670	4900				
	7,5	85	4,1	120	278	4,9	147	334	670	4900				
172-221 Nm	100	53	0,48	9	270	0,58	11	324	700	5800	**S**	**75**	75 76	9
	80	58	0,56	11	276	0,67	14	331	700	5800				
	60	60	0,75	15	287	0,90	18	344	700	5800				
	50	63	0,85	18	284	1,0	22	341	700	5800				
	40	67	1,1	23	313	1,3	28	375	700	5800				
	30	72	1,5	30	344	1,8	37	413	700	5800				
	25	76	1,5	36	302	1,8	44	363	700	5800				
	20	78	1,8	45	298	2,2	55	358	700	5800				
	15	80	2,2	60	280	2,6	73	336	700	5800				
	10	84	3,0	90	267	3,6	110	321	700	5800				
	7,5	86	4,0	120	274	4,8	147	329	700	5800				
270-460 Nm	100	59	0,67	9	419	0,80	11	503	7306	1270	**S**	**90**	77 78	12
	80	63	0,83	11	444	1,0	14	533	6783	1270				
	60	71	1,1	15	497	1,3	18	597	6163	1270				
	50	71	1,4	18	527	1,7	22	633	5799	1270				
	40	73	1,8	23	558	2,2	28	669	5383	1270				
	30	77	2,6	30	637	3,1	37	765	4891	1270				
	25	83	2,4	36	528	2,9	44	634	4603	1270				
	20	84	3,1	45	553	3,7	55	663	4273	1270				
	15	86	4,1	60	561	4,9	73	673	3882	1270				
	10	89	5,1	90	482	6,1	110	578	3391	1270				
	7,5	90	6,3	120	451	7,6	147	541	3081	1270				
325-560 Nm	62	60	1,5	15	592	1,8	18	711	850	6900	**İRSA İRSF**	**82**	91 92	24 26
	53	68	2,3	17	880	2,8	21	1055	850	6900				
	40	67	2,6	23	731	3,1	28	877	850	6900				
	30	72	3,8	30	871	4,6	37	1045	850	6900				
	26,5	76	2,9	34	624	3,5	42	749	850	6900				
	20	78	3,6	45	599	4,3	55	719	850	6900				
	15	81	5,5	60	709	6,6	73	851	850	6900				
	10	85	5,6	90	505	6,7	110	606	850	6900				
	7,5	86	8,1	120	554	9,7	147	665	850	6900				
623-1000 Nm	82	60	2,2	11	1149	2,6	13	1378	1450	10000	**IRSA IRSF**	**102**	93 94	39 43
	63	62	2,6	14	1094	3,2	17	1313	1450	10000				
	50	69	3,9	18	1409	4,6	22	1691	1450	10000				
	40	72	5,0	23	1528	6,0	28	1834	1450	10000				
	30	74	6,6	30	1555	7,9	37	1866	1450	10000				
	25	79	5,6	36	1163	6,7	44	1396	1450	10000				
	20	81	7,3	45	1255	8,8	55	1506	1450	10000				
	15	82	9,6	60	1253	11,5	73	1504	1450	10000				
	10	86	11	90	976	12,8	110	1172	1450	10000				
	7,5	87	14	120	969	16,8	147	1163	1450	10000				
1083-1792 Nm	83	62	3,5	11	1895	4,2	13	2274	2300	17000	**İRSA İRSF**	**127**	95 96	69 73
	65	65	4,4	14	1973	5,3	17	2367	2300	17000				
	52	72	6,7	17	2662	8,0	21	3194	2300	17000				
	40	74	8,8	23	2764	11	28	3317	2300	17000				
	32	76	11	28	2787	13	34	3344	2300	17000				
	26	81	9,7	35	2168	12	42	2601	2300	17000				
	20	82	13	45	2227	15	55	2673	2300	17000				
	16	84	16	56	2310	19	69	2772	2300	17000				
	13	86	14	69	1685	17	85	2021	2300	17000				
	10	87	19	90	1736	23	110	2083	2300	17000				



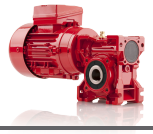
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=900)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1100)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q10} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
1873-3352 Nm	111	62	**4,6**	8	3359	**5,5**	10	4031	2900	21500				
	87	64	**5,9**	10	3486	**7,1**	13	4183	2900	21500				
	54	74	**12**	17	5046	**14**	20	6055	2900	21500				
	42	75	**15**	21	5047	**18**	26	6057	2900	21500				
	30	78	**21**	30	5214	**25**	37	6257	2900	21500	**IRSA**	**162**	97	163
	27	82	**17**	33	4088	**21**	41	4905	2900	21500	**IRSF**		98	186
	21	83	**22**	43	4013	**26**	52	4816	2900	21500				
	15	85	**31**	60	4126	**37**	73	4952	2900	21500				
	10,5	83	**32**	86	2913	**38**	105	3496	2900	21500				
	7,5	89	**44**	120	3116	**53**	147	3740	2900	21500				
3521-5746 Nm	115	65	**7,5**	8	5949	**9,0**	10	7139	3250	24750				
	83	68	**11**	11	6588	**13**	13	7905	3250	24750				
	63	70	**14**	14	6551	**17**	17	7862	3250	24750				
	55	75	**19**	16	8316	**23**	20	9980	3250	24750				
	40	78	**27**	23	8939	**32**	28	10727	3250	24750				
	30	79	**28**	30	7042	**34**	37	8450	3250	24750	**İRSA**	**201**	99	300
	27,5	83	**37**	33	8961	**44**	40	10754	3250	24750	**İRSF**		100	332
	20	85	**40**	45	7216	**48**	55	8659	3250	24750				
	15	86	**40**	60	5475	**48**	73	6570	3250	24750				
	13,75	88	**54**	65	6933	**65**	80	8320	3250	24750				
	10	89	**58**	90	5477	**70**	110	6573	3250	24750				
	7,5	89	**79**	120	5596	**95**	147	6715	3250	24750				
5791-13370 Nm	63	58	**23**	14	8918	**28**	17	10701	3750	29000				
	52	78	**37**	17	15924	**44**	21	19109	3750	29000				
	40	79	**49**	23	16430	**59**	28	19716	3750	29000				
	31	79	**59**	29	15332	**71**	35	18399	3750	29000				
	26	85	**53**	35	12429	**64**	42	14915	3750	29000	**IRSA**	**250**	101	493
	20	86	**72**	45	13141	**86**	55	15769	3750	29000	**IRSF**		102	513
	15,5	86	**86**	58	12164	**103**	71	14597	3750	29000				
	10	89	**104**	90	9822	**125**	110	11786	3750	29000				
	7,75	89	**125**	116	9149	**150**	142	10979	3750	29000				



Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=700)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=850)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q10} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
13-21 Nm	80	48	0,05	9	26	0,06	11	31	190	1250	**S**	**30**	67 68	1,2
	60	54	0,07	12	31	0,08	14	37	190	1250				
	50	56	0,09	14	34	0,11	17	41	190	1250				
	40	60	0,11	18	36	0,13	21	43	190	1250				
	30	66	0,13	23	35	0,16	28	42	190	1250				
	25	71	0,17	28	41	0,20	34	49	190	1250				
	20	75	0,18	35	37	0,22	43	44	190	1250				
	15	78	0,23	47	37	0,28	57	44	190	1250				
	10	80	0,31	70	34	0,37	85	41	190	1250				
	7,5	83	0,40	93	34	0,48	113	41	190	1250				
28-42 Nm	100	45	0,09	7	55	0,11	9	66	330	2100	**S**	**40**	69 70	2,1
	80	49	0,12	9	64	0,14	11	77	330	2100				
	60	55	0,14	12	63	0,17	14	76	330	2100				
	50	61	0,18	14	75	0,22	17	90	330	2100				
	40	65	0,22	18	78	0,26	21	94	330	2100				
	30	68	0,30	23	83	0,36	28	100	330	2100				
	25	71	0,30	28	73	0,36	34	87	330	2100				
	20	74	0,35	35	71	0,42	43	85	330	2100				
	15	79	0,46	47	74	0,55	57	89	330	2100				
	10	82	0,66	70	74	0,79	85	89	330	2100				
	7,5	85	0,85	93	74	1.0	113	89	330	2100				
50-71 Nm	100	46	0,16	7	100	0,19	9	120	450	3000	**S**	**50**	71 72	3,3
	80	53	0,20	9	116	0,24	11	139	450	3000				
	60	57	0,26	12	121	0,31	14	146	450	3000				
	50	61	0,31	14	129	0,37	17	155	450	3000				
	40	65	0,40	18	142	0,48	21	170	450	3000				
	30	68	0,50	23	139	0,60	28	167	450	3000				
	25	71	0,50	28	121	0,60	34	145	450	3000				
	20	74	0,64	35	129	0,77	43	155	450	3000				
	15	79	0,85	47	137	1,0	57	165	450	3000				
	10	82	1,1	70	124	1,3	85	149	450	3000				
	7,5	85	1,5	93	134	1,8	113	161	450	3000				
96-152 Nm	62	56	0,44	11	208	0,53	14	250	490	3400	**İRSA İRSF**	**52**	87 88	9 11
	50	58	0,56	14	222	0,67	17	266	490	3400				
	38	66	0,85	18	291	1,0	22	349	490	3400				
	29	68	1,1	24	304	1,4	29	365	490	3400				
	25	72	0,84	28	206	1,0	34	248	490	3400				
	19	77	1,2	37	242	1,5	45	290	490	3400				
	14,5	78	1,6	48	253	2,0	59	304	490	3400				
	9,5	84	1,8	74	193	2,1	89	231	490	3400				
	7,25	85	2,4	97	202	2.9	117	242	490	3400				
114-145 Nm	100	52	0,32	7	227	0,38	9	272	650	4200	**S**	**63**	73 74	6
	80	58	0,38	9	241	0,46	11	289	650	4200				
	60	60	0,50	12	246	0,60	14	295	650	4200				
	50	62	0,60	14	254	0,72	17	305	650	4200				
	40	67	0,75	18	274	0,90	21	329	650	4200				
	30	71	1,0	23	291	1,2	28	349	650	4200				
	25	74	0,99	28	250	1,2	34	300	650	4200				
	20	78	1,2	35	255	1,4	43	306	650	4200				
	15	80	1,6	47	262	1,9	57	314	650	4200				
	10	82	2,2	70	246	2,6	85	295	650	4200				
	7,5	85	2,8	93	244	3.4	113	293	650	4200				
176-280 Nm	82	56	0,60	9	376	0,72	10	451	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	62	54	0,77	11	352	0,92	14	422	670	4900				
	50	65	1,1	14	501	1,4	17	601	670	4900				
	39	68	1,6	18	561	1,9	22	673	670	4900				
	30	68	1,9	23	518	2,2	28	621	670	4900				



Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=700)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=850)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
176-280 Nm	25	75	1,6	28	409	1,9	34	491	670	4900	**İRSA İRSF**	**65**	89 90	14 15
	19,5	78	2,2	36	463	2,7	44	555	670	4900				
	15	78	2,6	47	420	3,2	57	504	670	4900				
	9,75	85	3,4	72	381	4,0	87	457	670	4900				
	7,5	85	4,1	93	357	4,9	113	429	670	4900				
172-221 Nm	100	53	0,48	7	347	0,58	9	416	700	5800	**S**	**75**	75 76	9
	80	58	0,56	9	354	0,67	11	425	700	5800				
	60	60	0,75	12	368	0,90	14	442	700	5800				
	50	63	0,85	14	365	1,0	17	438	700	5800				
	40	67	1,1	18	402	1,3	21	483	700	5800				
	30	72	1,5	23	442	1,8	28	530	700	5800				
	25	76	1,5	28	389	1,8	34	467	700	5800				
	20	78	1,8	35	383	2,2	43	460	700	5800				
	15	80	2,2	47	360	2,6	57	432	700	5800				
	10	84	3,0	70	344	3,6	85	413	700	5800				
	7,5	86	4,0	93	352	4,8	113	422	700	5800				
270-460 Nm	100	59	0,67	7	539	0,80	9	647	7306	1270	**S**	**90**	77 78	12
	80	63	0,83	9	571	1,0	11	685	6783	1270				
	60	71	1,1	12	639	1,3	14	767	6163	1270				
	50	71	1,4	14	678	1,7	17	814	5799	1270				
	40	73	1,8	18	717	2,2	21	860	5383	1270				
	30	77	2,6	23	819	3,1	28	983	4891	1270				
	25	83	2,4	28	679	2,9	34	815	4603	1270				
	20	84	3,1	35	711	3,7	43	853	4273	1270				
	15	86	4,1	47	722	4,9	57	866	3882	1270				
	10	89	5,1	70	619	6,1	85	743	3391	1270				
	7,5	90	6,3	93	580	7,6	113	696	3081	1270				
325-560 Nm	62	60	1,5	11	761	1,8	14	914	850	6900	**İRSA İRSF**	**82**	91 92	24 26
	53	68	2,3	13	1131	2,8	16	1357	850	6900				
	40	67	2,6	18	940	3,1	21	1128	850	6900				
	30	72	3,8	23	1120	4,6	28	1344	850	6900				
	26,5	76	2,9	26	802	3,5	32	963	850	6900				
	20	78	3,6	35	770	4,3	43	925	850	6900				
	15	81	5,5	47	912	6,6	57	1094	850	6900				
	10	85	5,6	70	649	6,7	85	779	850	6900				
	7,5	86	8,1	93	713	9,7	113	855	850	6900				
623-1000 Nm	82	60	2,2	9	1477	2,6	10	1772	1450	10000	**IRSA IRSF**	**102**	93 94	39 43
	63	62	2,6	11	1407	3,2	13	1688	1450	10000				
	50	69	3,9	14	1812	4,6	17	2175	1450	10000				
	40	72	5,0	18	1965	6,0	21	2357	1450	10000				
	30	74	6,6	23	1999	7,9	28	2399	1450	10000				
	25	79	5,6	28	1495	6,7	34	1795	1450	10000				
	20	81	7,3	35	1613	8,8	43	1936	1450	10000				
	15	82	9,6	47	1611	11,5	57	1933	1450	10000				
	10	86	11	70	1255	12,8	85	1506	1450	10000				
	7,5	87	14	93	1246	16,8	113	1496	1450	10000				
1083-1792 Nm	83	62	3,5	8	2436	4,2	10	2923	2300	17000	**İRSA İRSF**	**127**	95 96	69 73
	65	65	4,4	11	2536	5,3	13	3043	2300	17000				
	52	72	6,7	13	3422	8,0	16	4107	2300	17000				
	40	74	8,8	18	3554	11	21	4264	2300	17000				
	32	76	11	22	3583	13	27	4300	2300	17000				
	26	81	9,7	27	2787	12	33	3344	2300	17000				
	20	82	13	35	2864	15	43	3437	2300	17000				
	16	84	16	44	2970	19	53	3565	2300	17000				
	13	86	14	54	2166	17	65	2599	2300	17000				
	10	87	19	70	2231	23	85	2678	2300	17000				



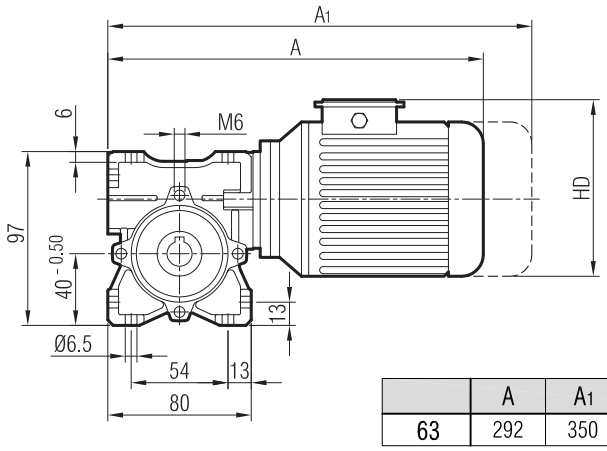
Service Factor *Factor de servicio* $S_f = 1$	İ Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=700)	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=850)	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
1873-3352 Nm	111	62	**4,6**	6	4319	**5,5**	8	5183	2900	21500	**IRSA**	**162**	97	163
	87	64	**5,9**	8	4482	**7,1**	10	5378	2900	21500	**IRSF**		98	186
	54	74	**12**	13	6488	**14**	16	7785	2900	21500				
	42	75	**15**	17	6489	**18**	20	7787	2900	21500				
	30	78	**21**	23	6704	**25**	28	8045	2900	21500				
	27	82	**17**	26	5256	**21**	31	6307	2900	21500				
	21	83	**22**	33	5160	**26**	40	6192	2900	21500				
	15	85	**31**	47	5305	**37**	57	6366	2900	21500				
	10,5	83	**32**	67	3745	**38**	81	4494	2900	21500				
	7,5	89	**44**	93	4007	**53**	113	4808	2900	21500				
3521-5746 Nm	115	65	**7,5**	6	7649	**9,0**	7	9178	3250	24750	**İRSA**	**201**	99	300
	83	68	**11**	8	8470	**13**	10	10164	3250	24750	**İRSF**		100	332
	63	70	**14**	11	8423	**17**	13	10108	3250	24750				
	55	75	**19**	13	10693	**23**	15	12831	3250	24750				
	40	78	**27**	18	11493	**32**	21	13791	3250	24750				
	30	79	**28**	23	9053	**34**	28	10864	3250	24750				
	27,5	83	**37**	25	11522	**44**	31	13826	3250	24750				
	20	85	**40**	35	9277	**48**	43	11133	3250	24750				
	15	86	**40**	47	7040	**48**	57	8448	3250	24750				
	13,75	88	**54**	51	8914	**65**	62	10697	3250	24750				
	10	89	**58**	70	7042	**70**	85	8451	3250	24750				
	7,5	89	**79**	93	7194	**95**	113	8633	3250	24750				
5791-13370 Nm	63	58	**23**	11	11466	**28**	13	13759	3750	29000	**IRSA**	**250**	101	493
	52	78	**37**	13	20474	**44**	16	24569	3750	29000	**IRSF**		102	513
	40	79	**49**	18	21125	**59**	21	25350	3750	29000				
	31	79	**59**	23	19713	**71**	27	23655	3750	29000				
	26	85	**53**	27	15980	**64**	33	19176	3750	29000				
	20	86	**72**	35	16895	**86**	43	20274	3750	29000				
	15,5	86	**86**	45	15640	**103**	55	18768	3750	29000				
	10	89	**104**	70	12628	**125**	85	15153	3750	29000				
	7,75	89	**125**	90	11763	**150**	110	14115	3750	29000				

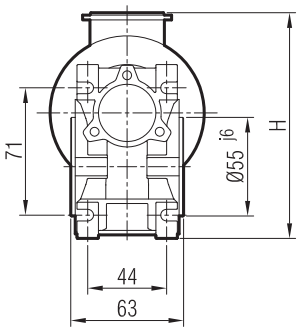
Sonsuz Vidali Redüktörler Ölçü Sayfalari

Worm Gearbox Dimension Pages

Réducteurs à roue et vis sans fin dimension

SM 30





	A	A1	H	HD
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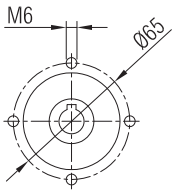
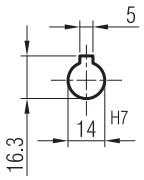
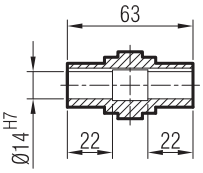
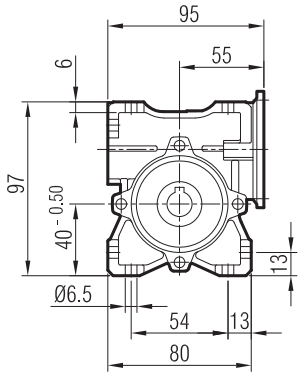
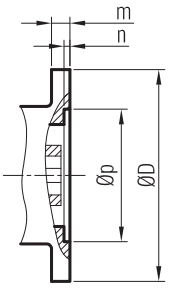


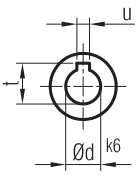


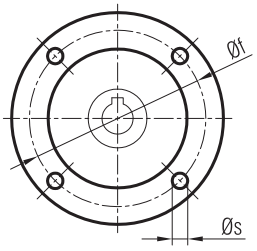


SP 30



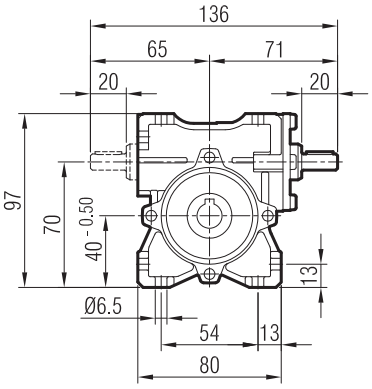


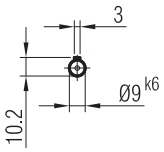


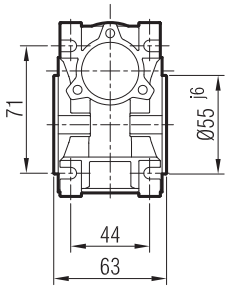


IEC B14	m	n	p	f	D	d	t	u	s
63	9	4.5	60	75	90	11	12.8	4	6

S 30

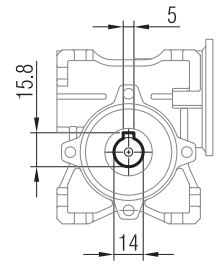




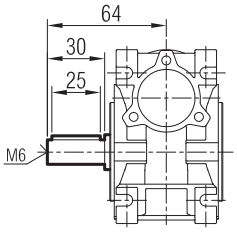


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

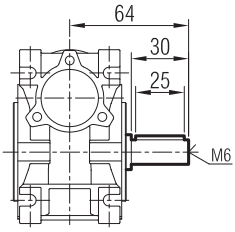
SM / SP / S



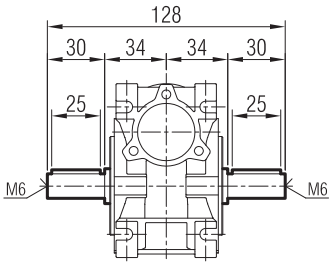
- SR



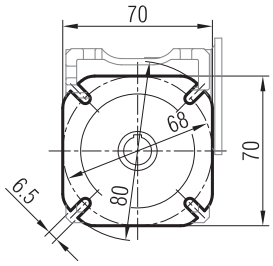
- SL



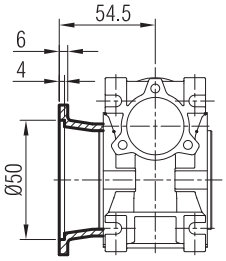
- SD



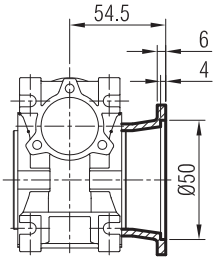
SM / SP / S



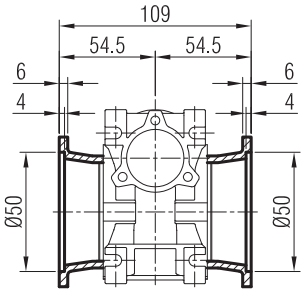
- FR



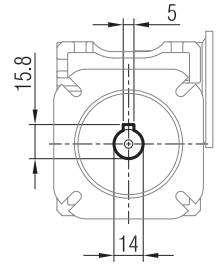
- FL



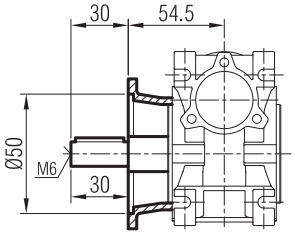
- FD



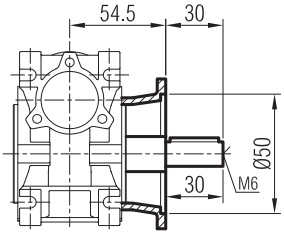
SM / SP / S



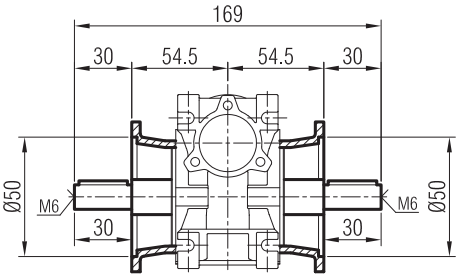
- FR - SR



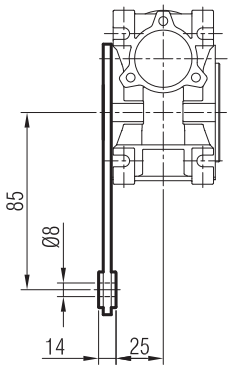
- FL - SL



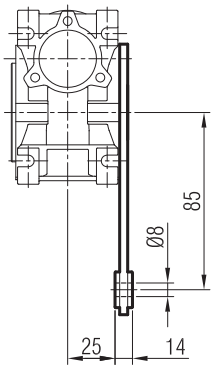
- FD - SD

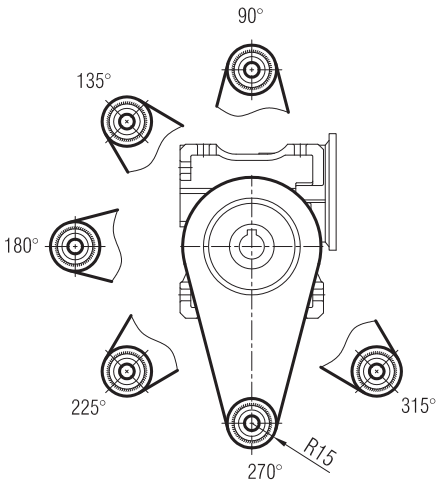


- TR

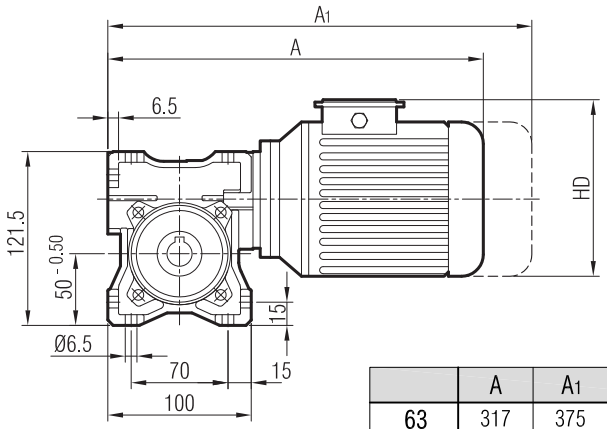


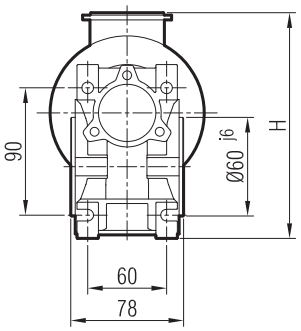
- TL





SM 40





	A	A1	H	HD
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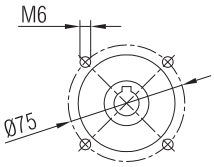
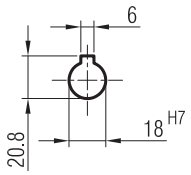
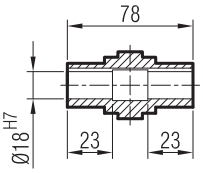
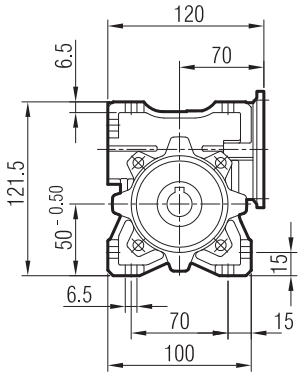
71	343	395	201	182

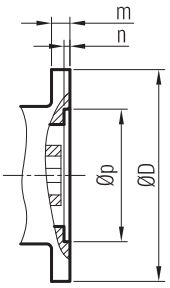


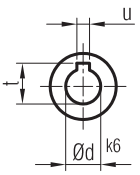


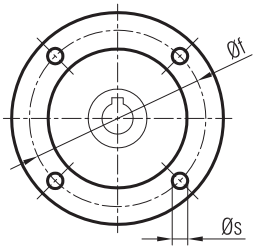


SP 40



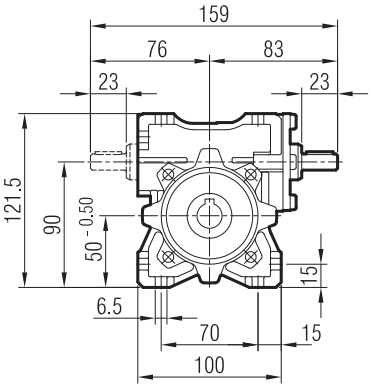


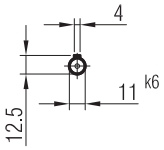


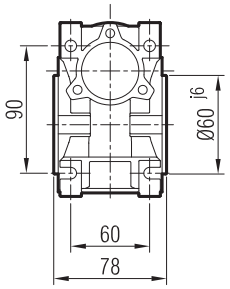


IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

S 40

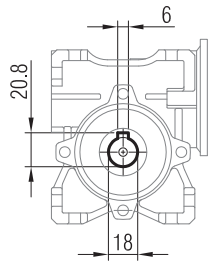




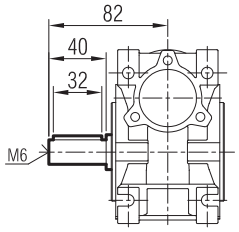


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

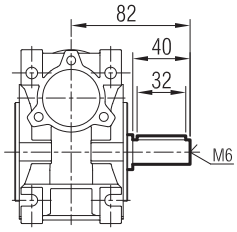
SM / SP / S



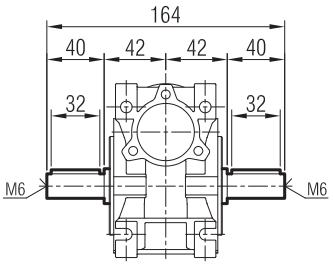
- SR



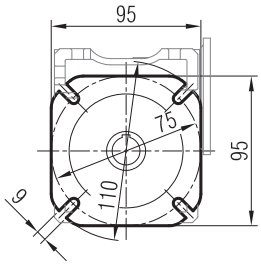
- SL



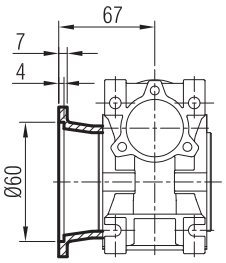
- SD



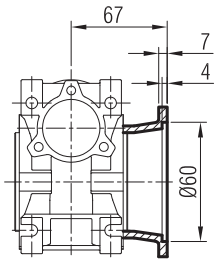
SM / SP / S



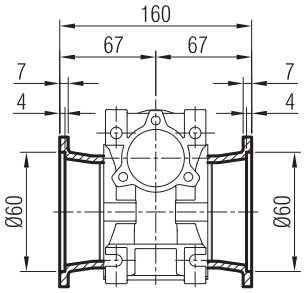
- FR



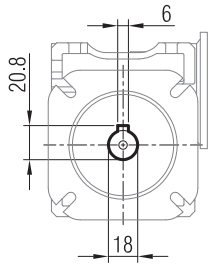
- FL



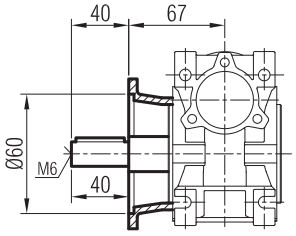
- FD



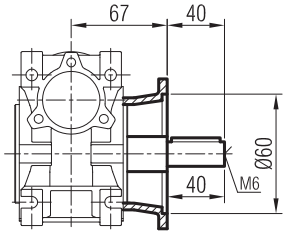
SM / SP / S



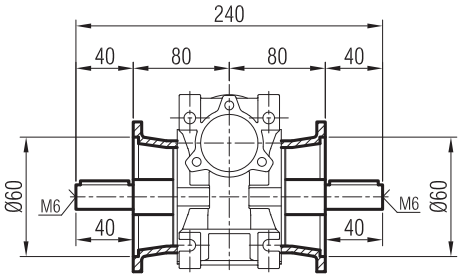
- FR - SR



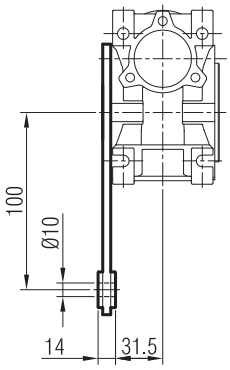
- FL - SL



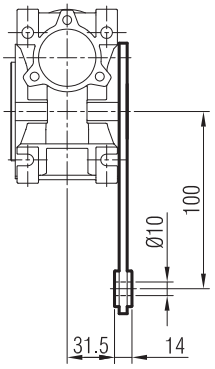
- FD - SD

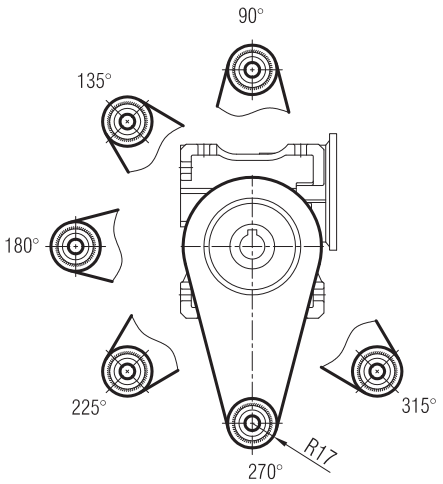


- TR

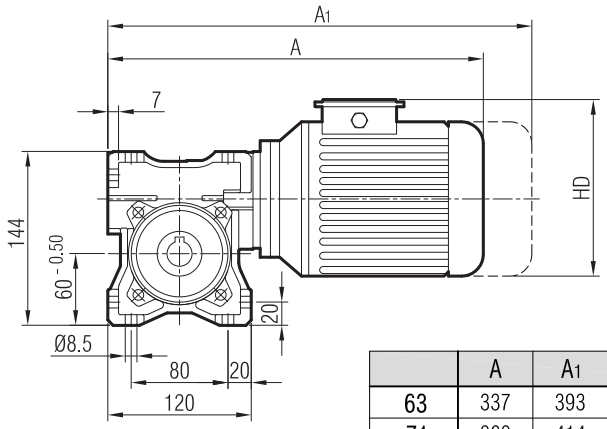


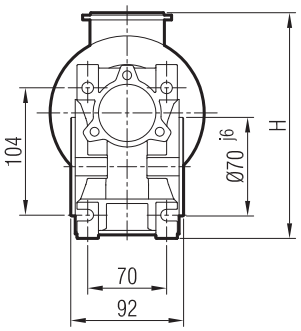
- TL



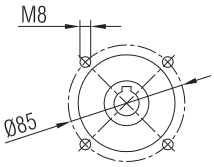


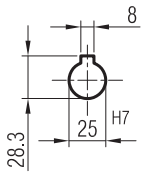
SM 50

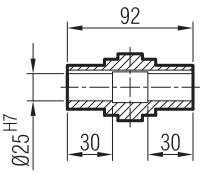




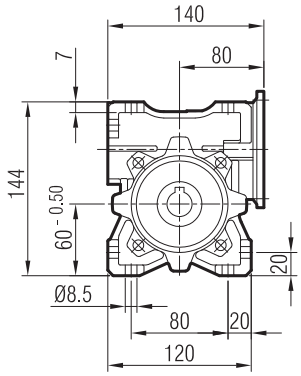
	A	A1	H	HD
63	337	393	209	162
71	363	414	221	182
80	384	453	228	198

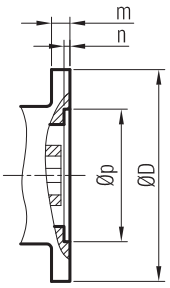


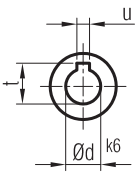


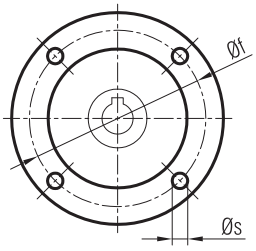


SP 50



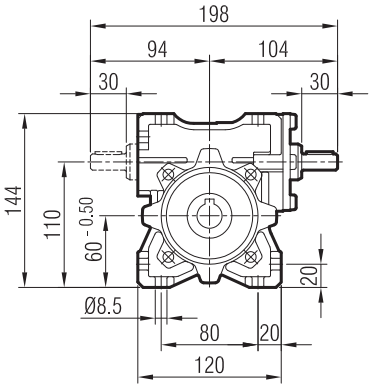


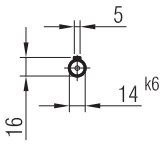


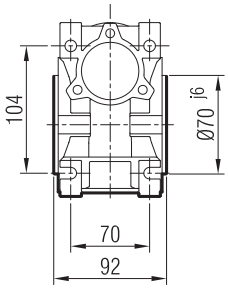


IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7
80	10	4.5	80	100	120	19	21.8	6	7

S 50

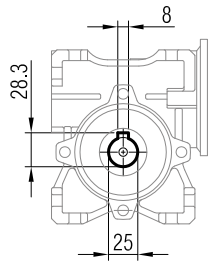




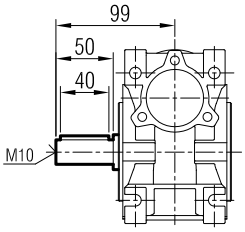


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

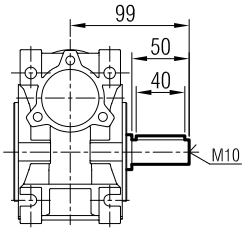
SM / SP / S



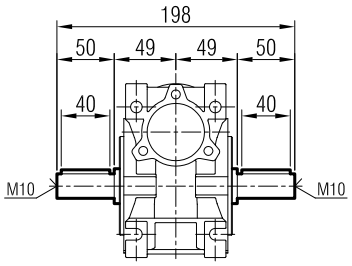
- SR



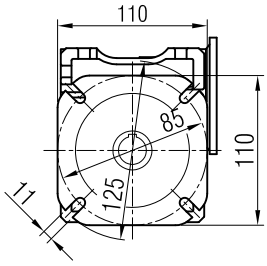
- SL



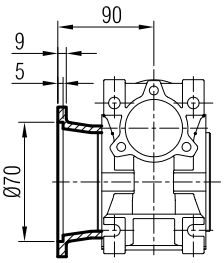
- SD



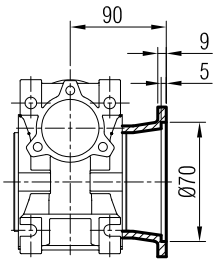
SM / SP / S



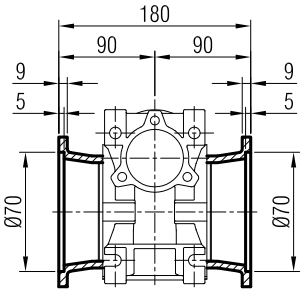
- FR



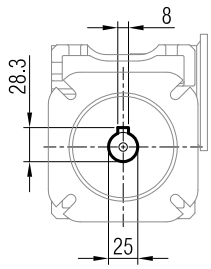
- FL



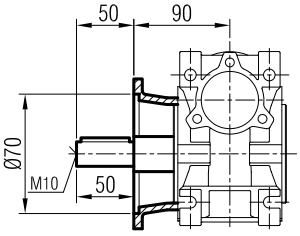
- FD



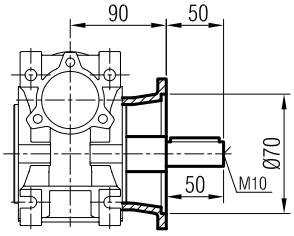
SM / SP / S



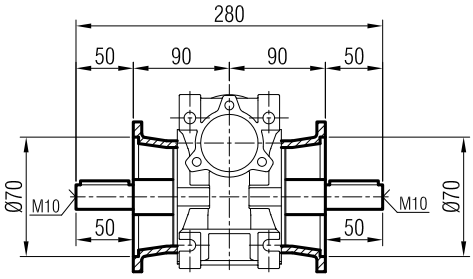
- FR - SR



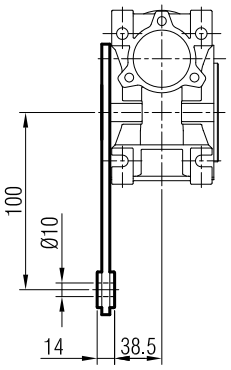
- FL - SL



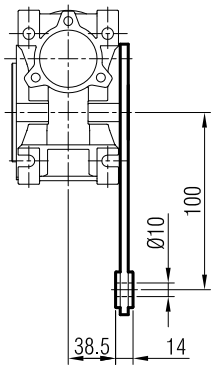
- FD - SD

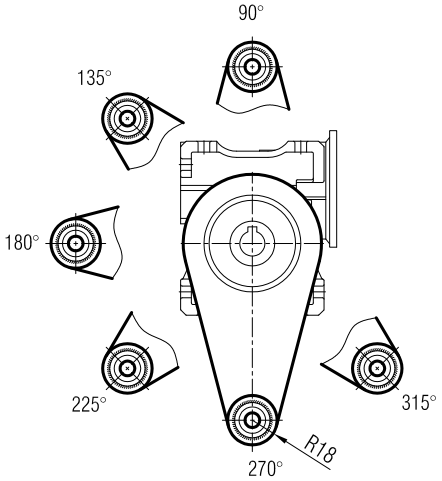


- TR

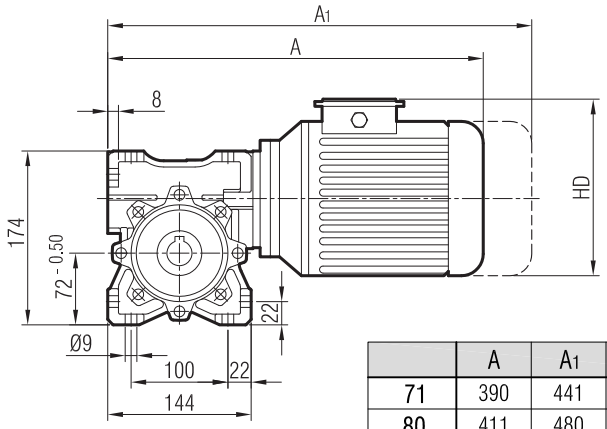


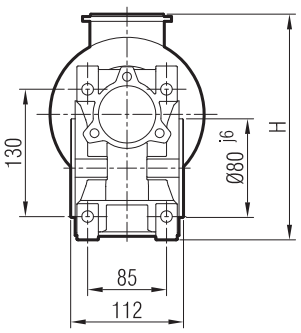
- TL



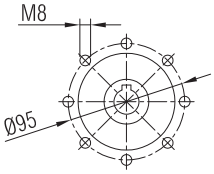


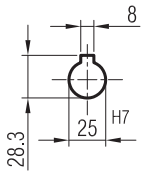
SM 63

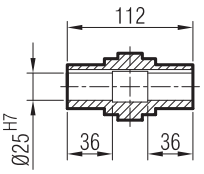




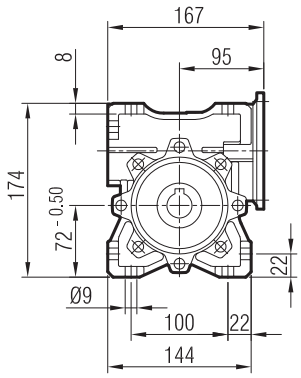
	A	A1	H	HD
71	390	441	246	182
80	411	480	253	198
90 S	426	492	267	222
90 L	451	517	267	241

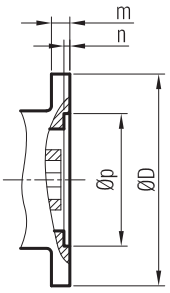


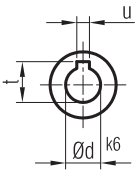


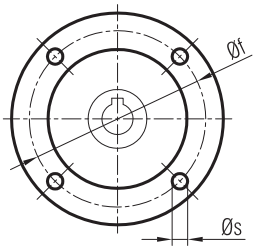


SP 63



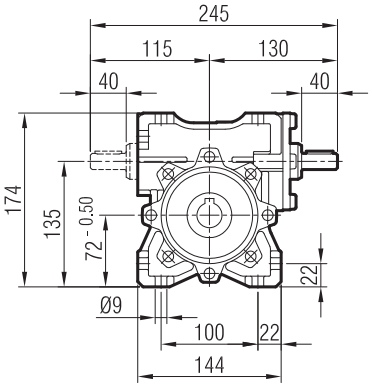


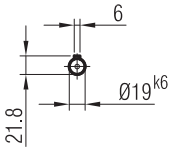


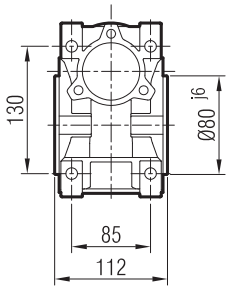


IEC B14	m	n	p	f	D	d	t	u	s
71	10	4.5	70	85	105	14	16.3	5	7
80	10	4.5	80	100	120	19	21.8	6	7
90	11	5	95	115	140	24	27.3	8	9

S 63

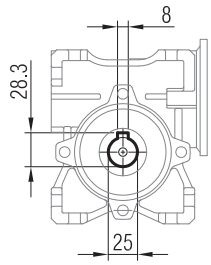




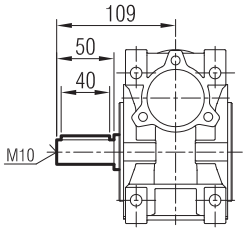


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

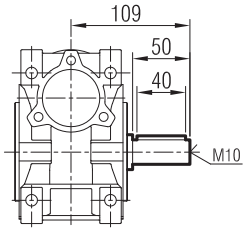
SM / SP / S



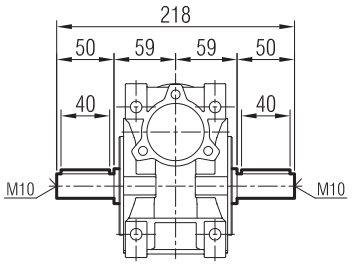
- SR



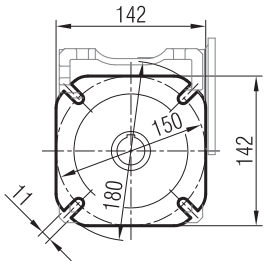
- SL



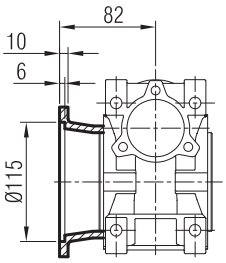
- SD



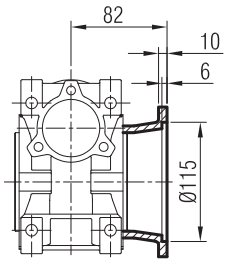
SM / SP / S



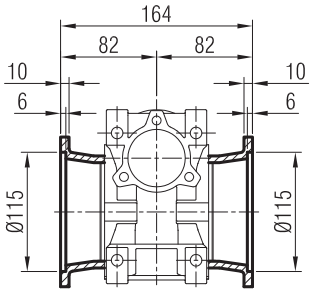
- FR



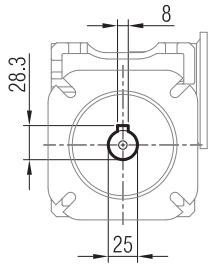
- FL



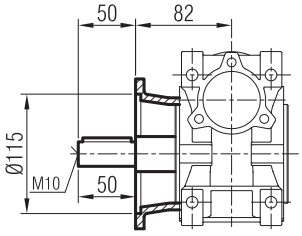
- FD



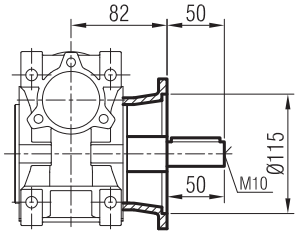
SM / SP / S



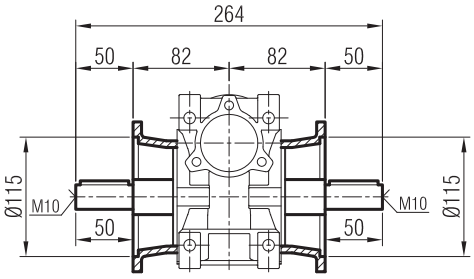
- FR - SR



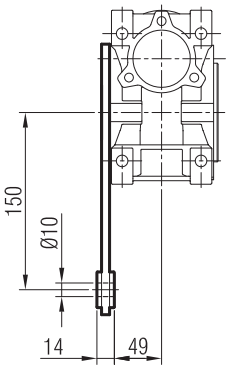
- FL - SL



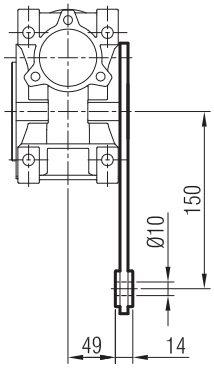
- FD - SD

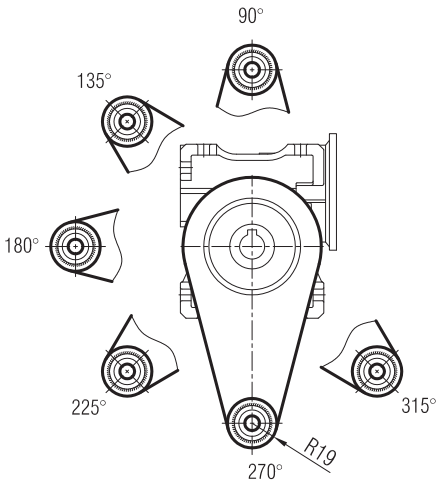


- TR

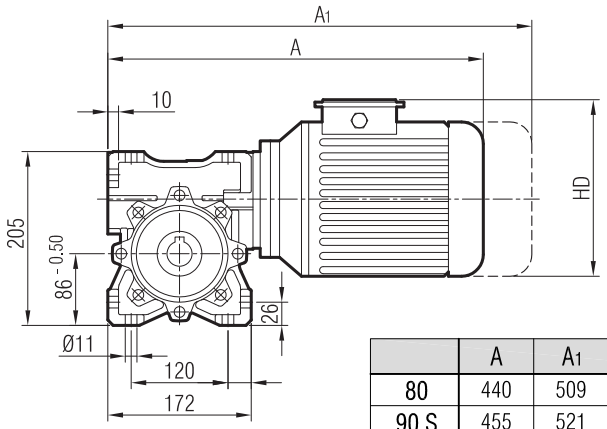


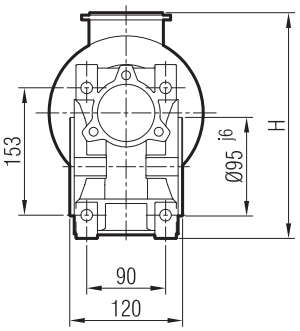
- TL



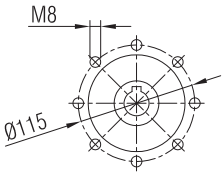


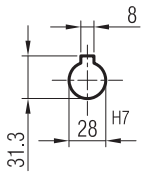
SM 75

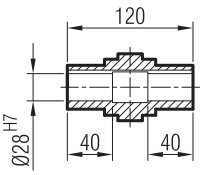




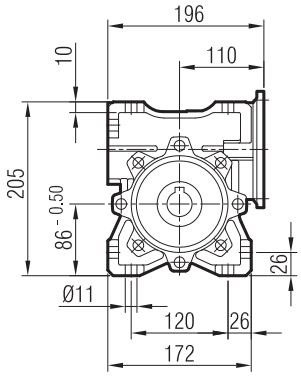
	A	A1	H	HD
80	440	509	279	198
90 S	455	521	293	222
90 L	480	546	293	222
100	512	590	302	241

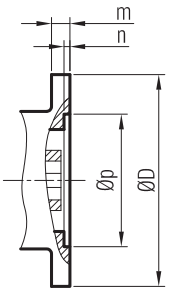


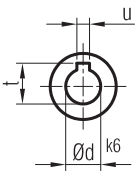


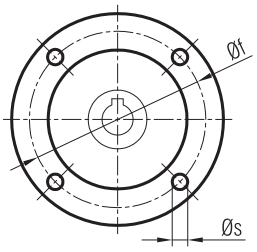


SP 75



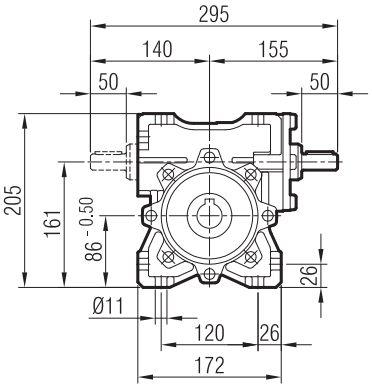


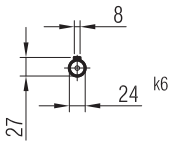


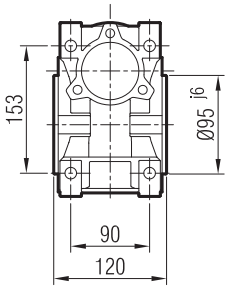


IEC B14	m	n	p	f	D	d	t	u	s
80	10	4.5	80	100	120	19	21.8	6	7
90	11	5	95	115	140	24	27.3	8	10
100	11	5	110	130	160	28	31.3	8	10

S 75

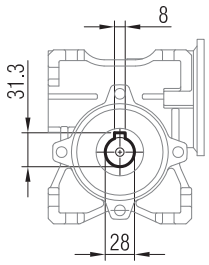




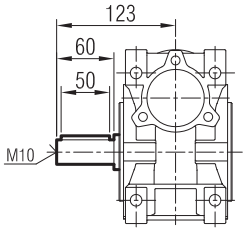


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

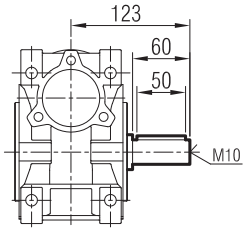
SM / SP / S



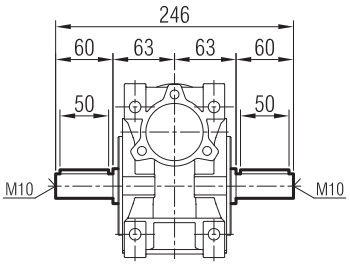
- SR



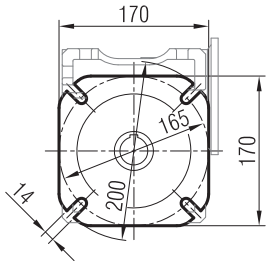
- SL



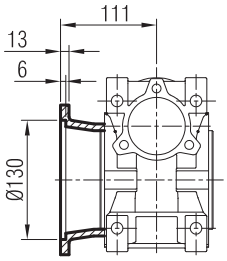
- SD



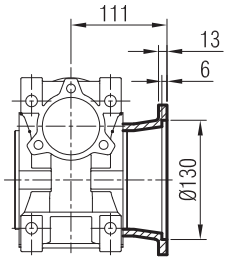
SM / SP / S



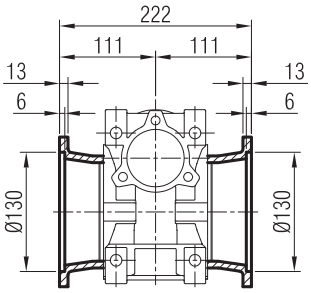
- FR



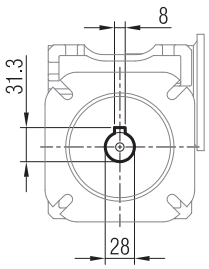
- FL



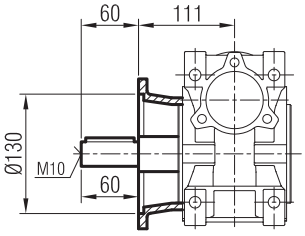
- FD



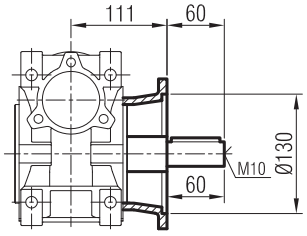
SM / SP / S



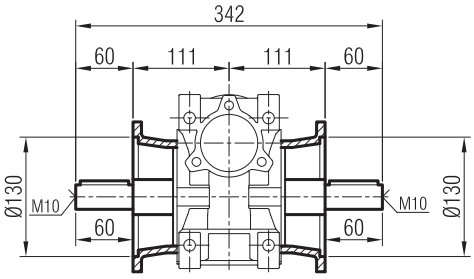
- FR - SR



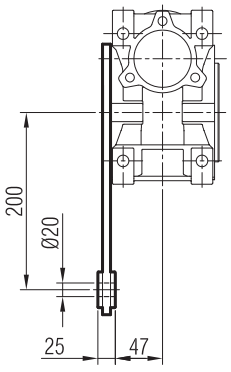
- FL - SL



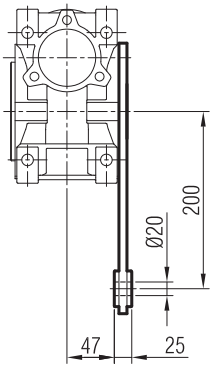
- FD - SD

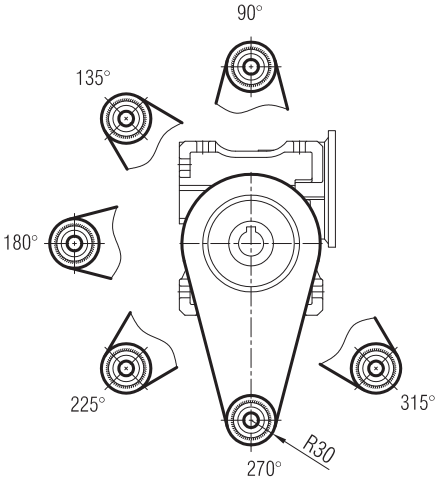


- TR

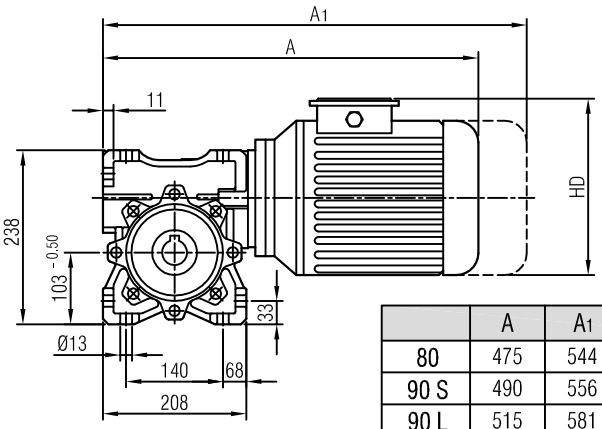


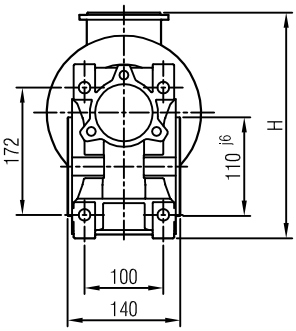
- TL



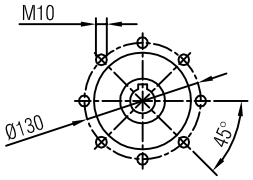


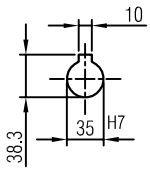
SM 90

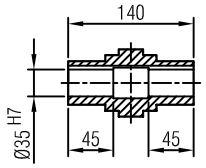




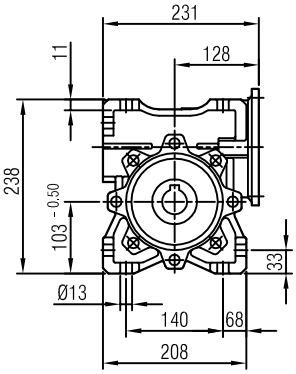
	A	A1	H	HD
80	475	544	312	198
90 S	490	556	313	216
90 L	515	581	313	216
100	547	625	320	235
112	567	650	335	258

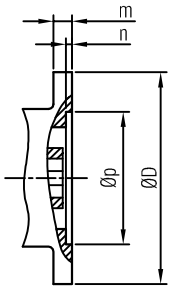


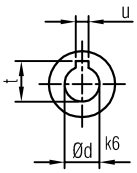


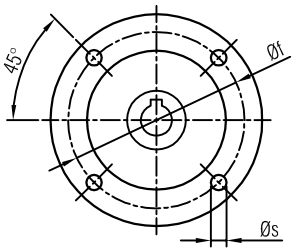


SP 90





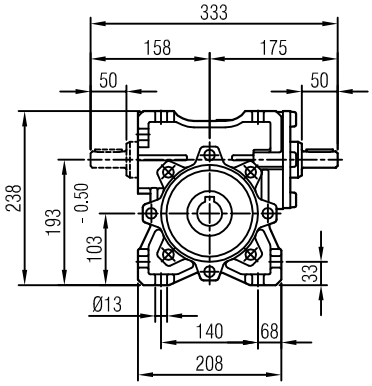


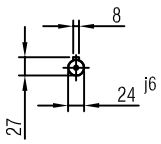


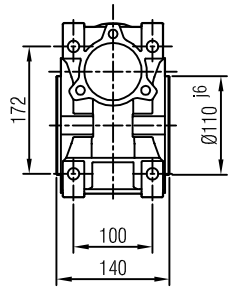
IEC B14	m	n	p	f	D	d	t	u	s
80	10	4.5	80	100	120	19	21.8	6	7
90	11	5	95	115	140	24	27.3	8	10
100-112	11	5	110	130	160	28	31.3	8	10

IEC B5	m	n	p	f	D	d	t	u	s
80	10	5	130	165	200	19	21.8	6	M10
90	11	5	130	165	200	24	27.3	8	M10
100-112	11	5	110	130	250	28	31.3	8	M12

S 90

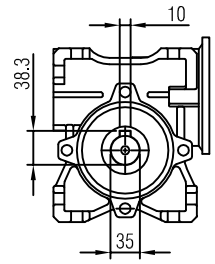




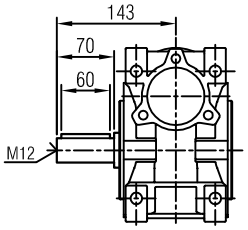


"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

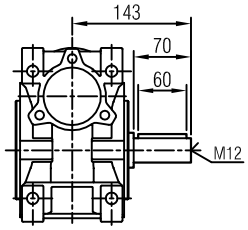
SM / SP / S



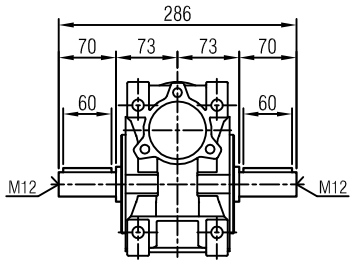
- SR



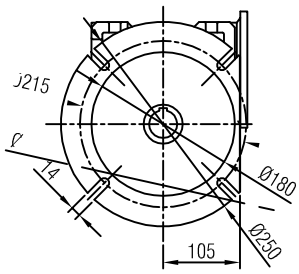
- SL



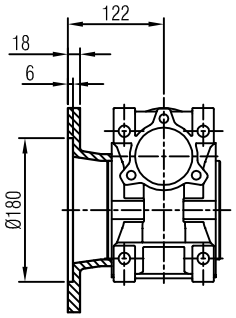
- SD



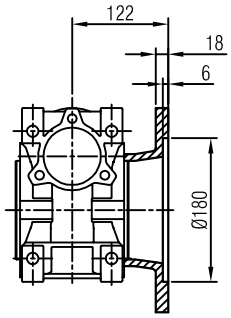
SM / SP / S



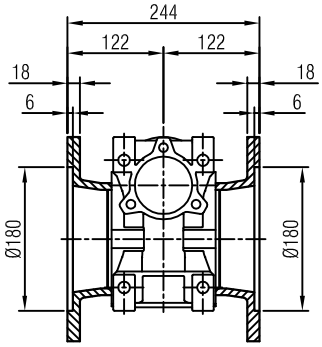
- FR



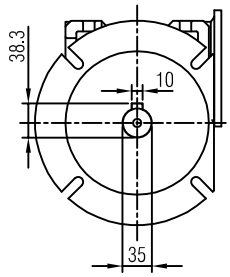
- FL



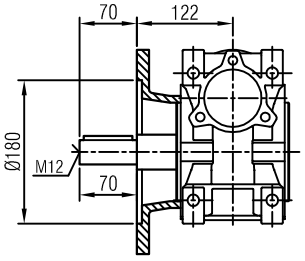
- FD



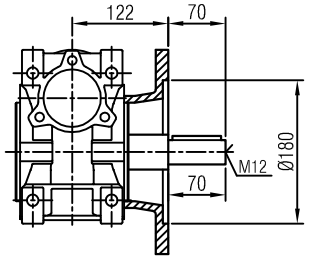
SM / SP / S



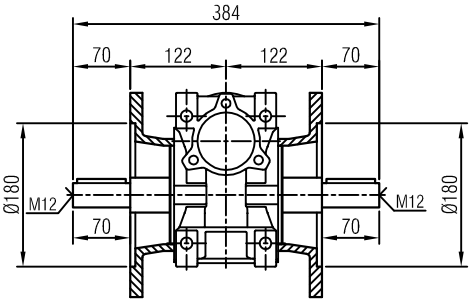
- FR - SR



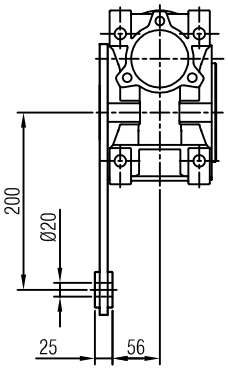
- FL - SL



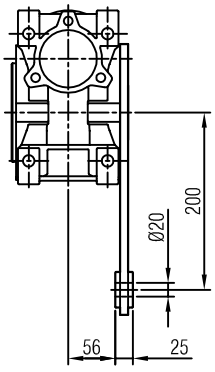
- FD - SD

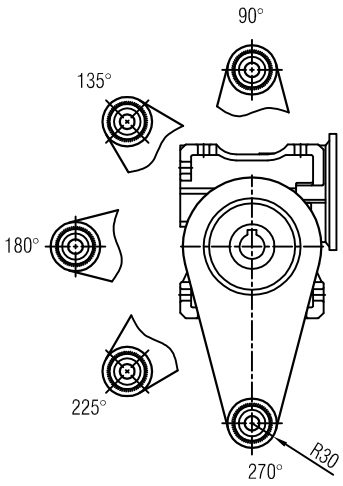


- TR

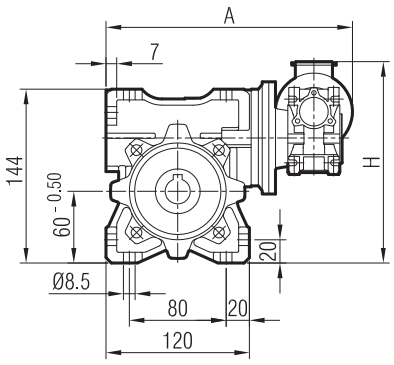


- TL

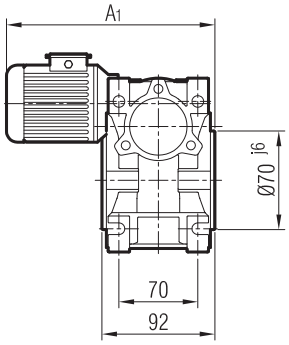


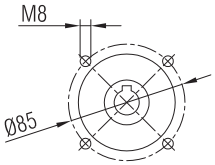


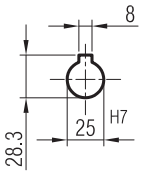
SM 50 S 30

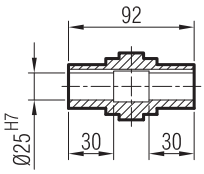


	A	A1	H
63	256	298	210

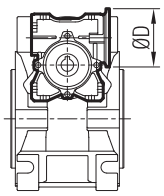


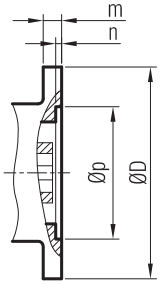


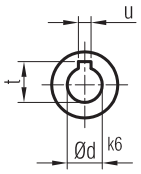


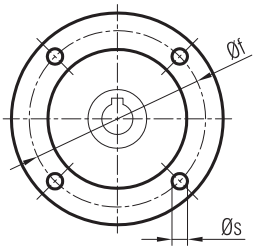


SP 50 S 30



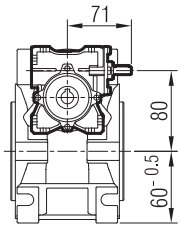


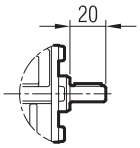


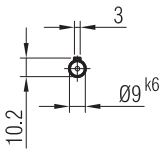


IEC B14	m	n	p	f	D	d	t	u	s
63	9	4.5	60	75	90	11	12.8	4	6

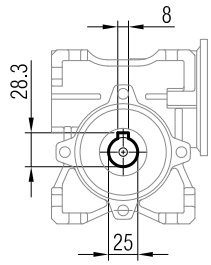
S 50 S 30



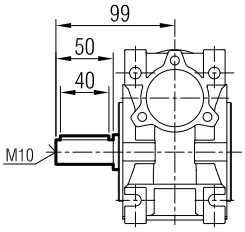




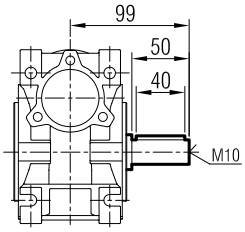
SM / SP / S



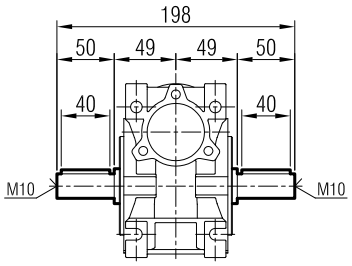
- SR



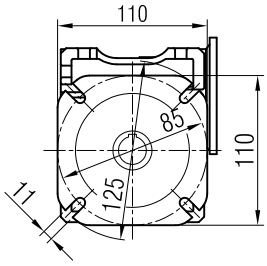
- SL



- SD



SM / SP / S



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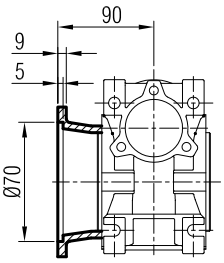
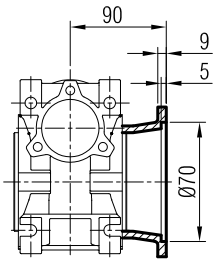
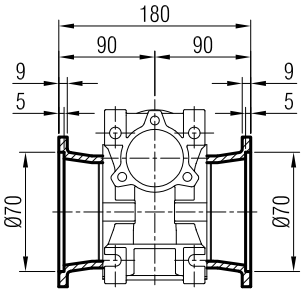


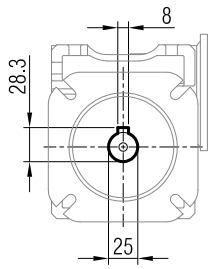
- FL



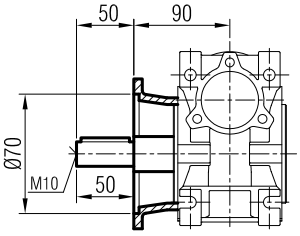
- FD



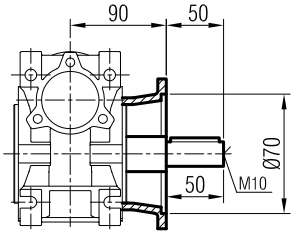
SM / SP / S



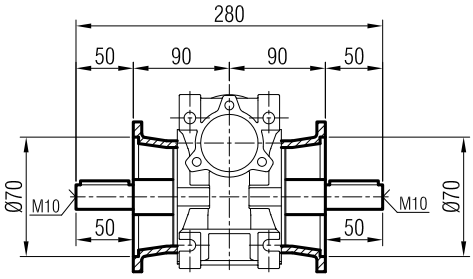
- FR - SR



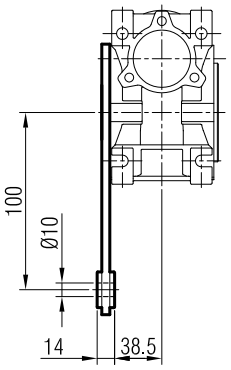
- FL - SL



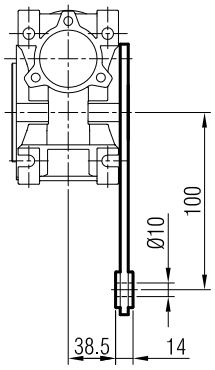
- FD - SD

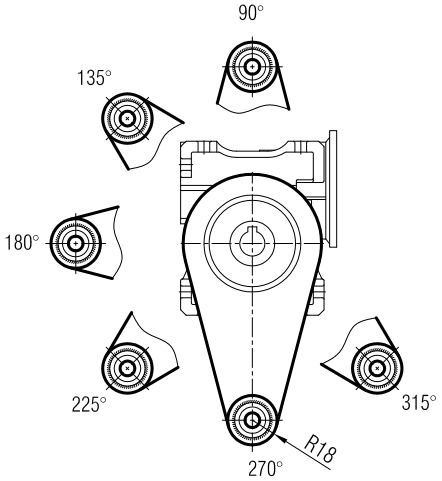


- TR

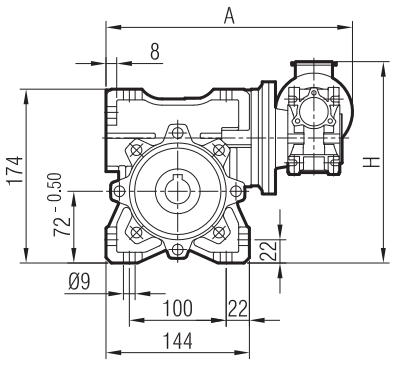


- TL

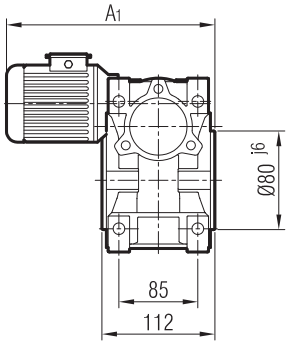


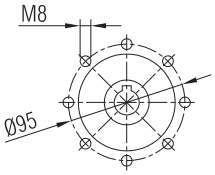


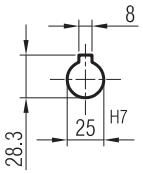
SM 63 S 30

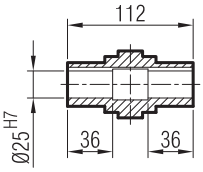


	A	A1	H
63	283	308	264

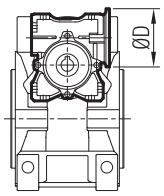


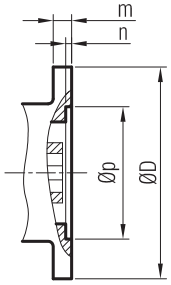


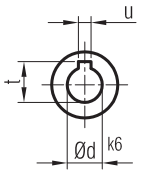


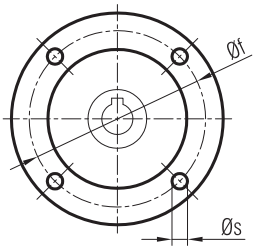


SP 63 S 30



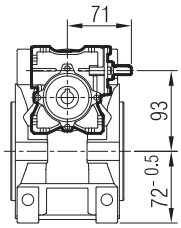


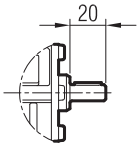


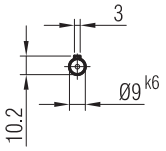


IEC B14	m	n	p	f	D	d	t	u	s
63	9	4.5	60	75	90	11	12.8	4	6

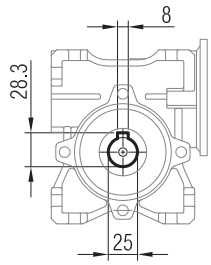
S 63 S 30



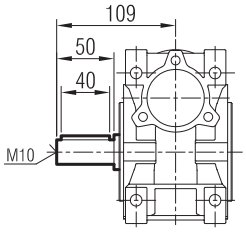




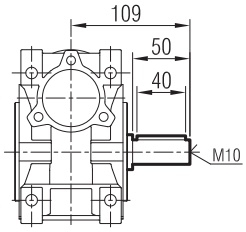
SM / SP / S



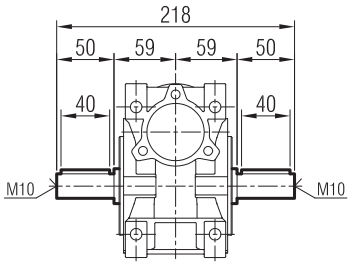
- SR



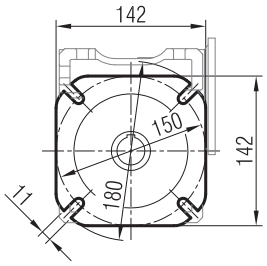
- SL



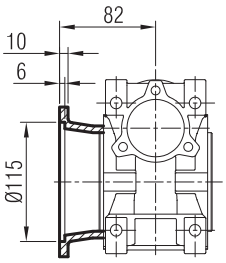
- SD



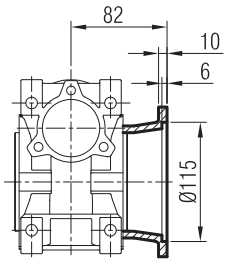
SM / SP / S



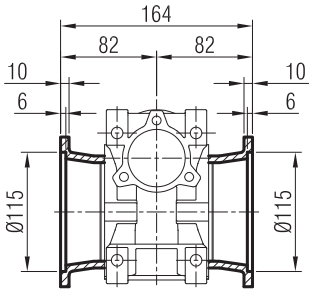
- FR



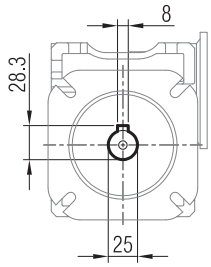
- FL



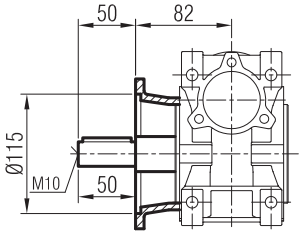
- FD



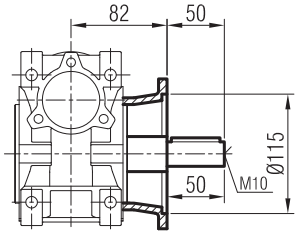
SM / SP / S



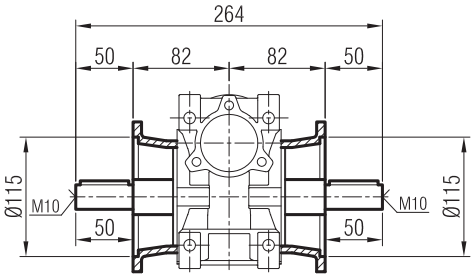
- FR - SR



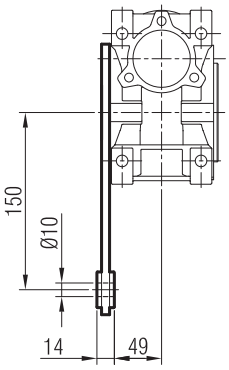
- FL - SL



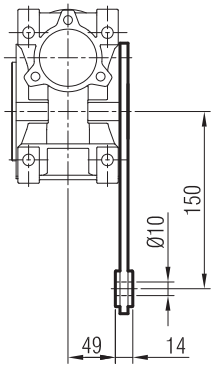
- FD - SD

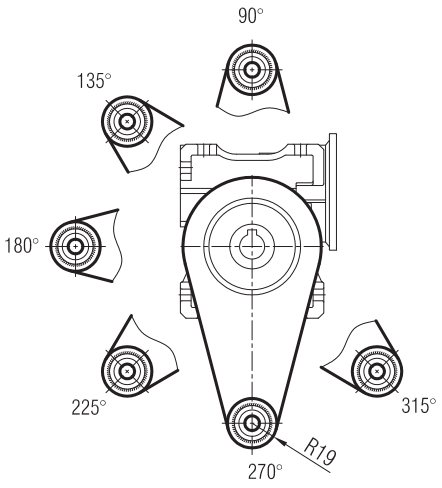


- TR

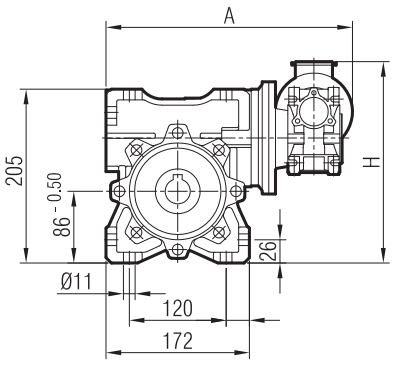


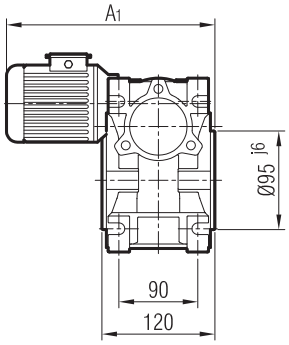
- TL



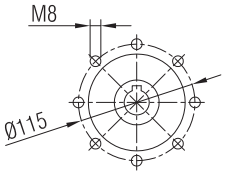


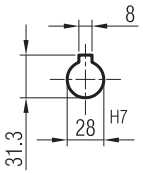
SM 75 S 40

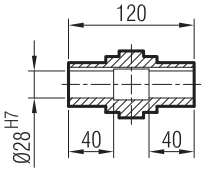




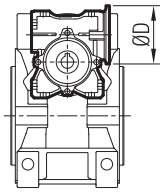
	A	A1	H
63	312	385	300
71	320	426	312

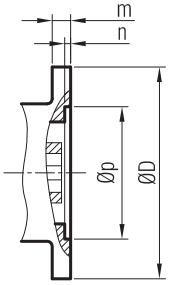


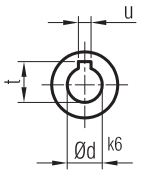


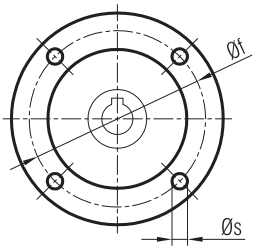


SP 75 S 40



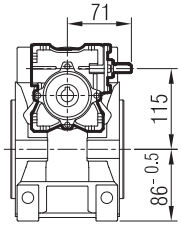


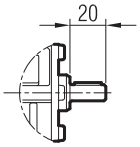


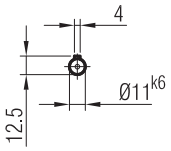


IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

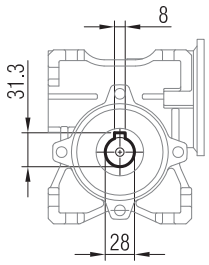
S 75 S 40



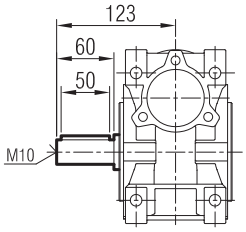




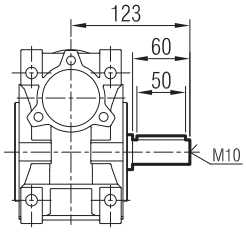
SM / SP / S



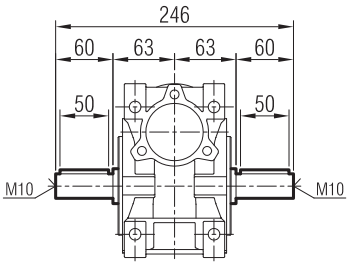
- SR



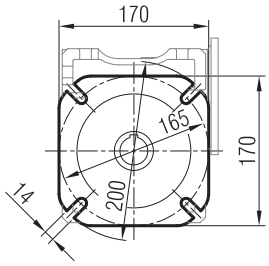
- SL



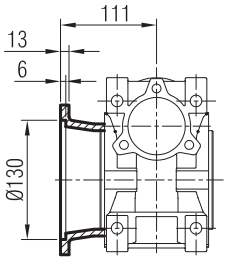
- SD



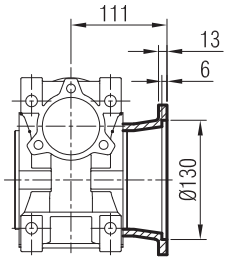
SM / SP / S



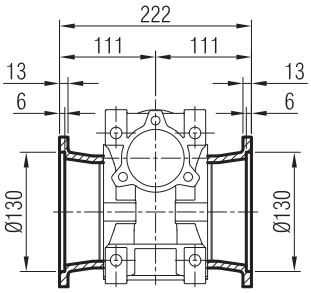
- FR



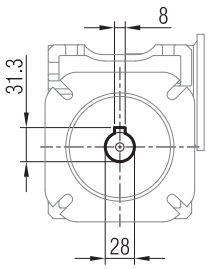
- FL



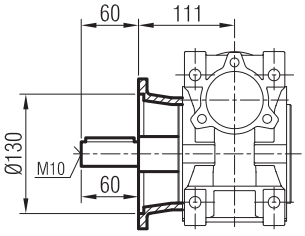
- FD



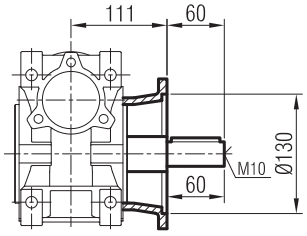
SM / SP / S



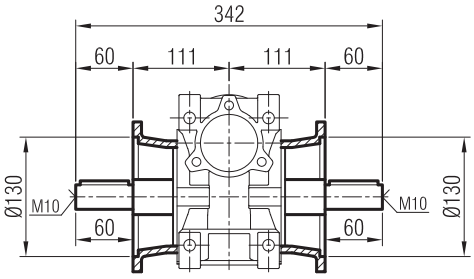
- FR - SR



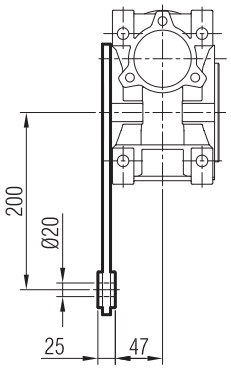
- FL - SL



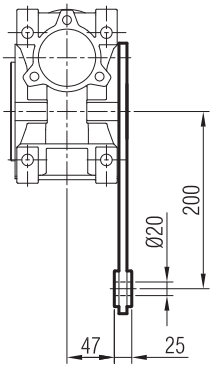
- FD - SD

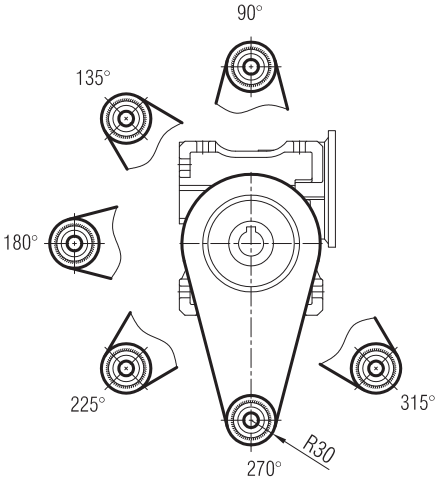


- TR

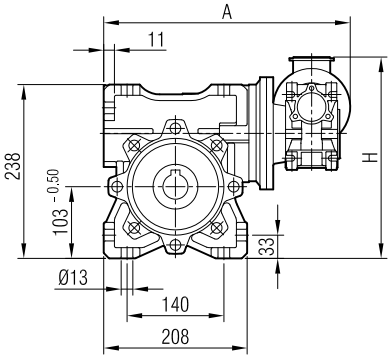


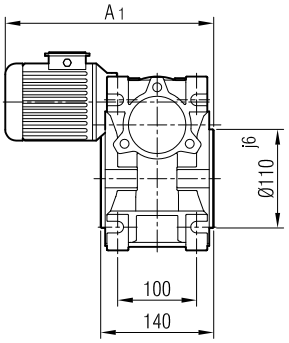
- TL



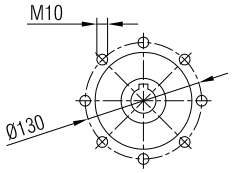


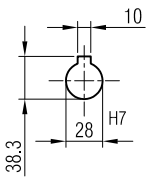
SM 90 S 40

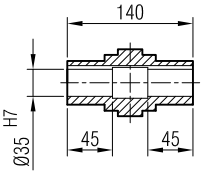




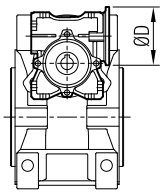
	A	A1	H
63	357	337	242
71	367	363	304

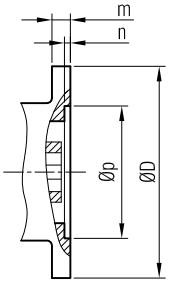


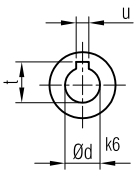


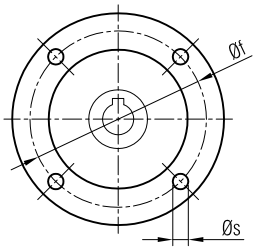


SP 90 S 40



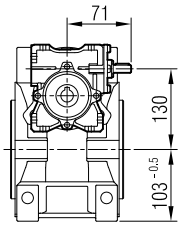


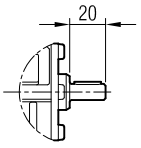


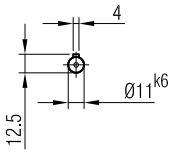


IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

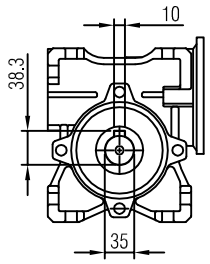
S 90 S 40



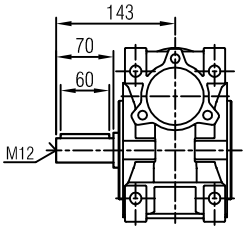




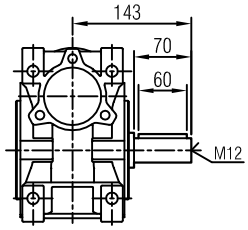
SM / SP / S



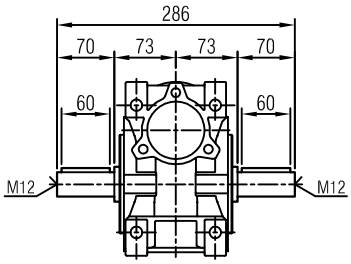
- SR



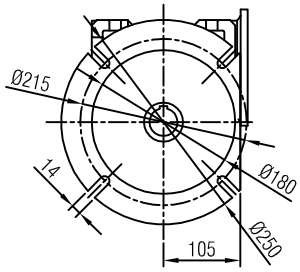
- SL



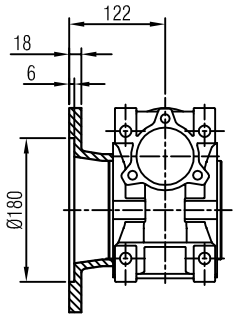
- SD



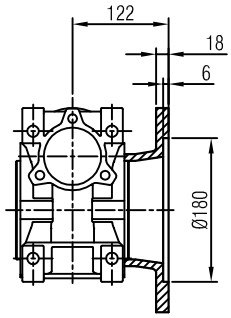
SM / SP / S



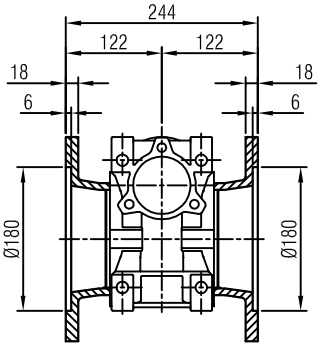
- FR



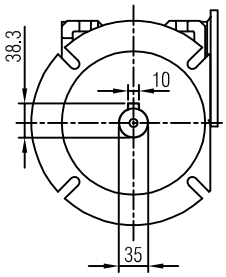
- FL



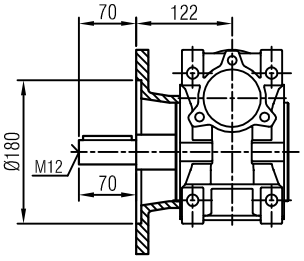
- FD



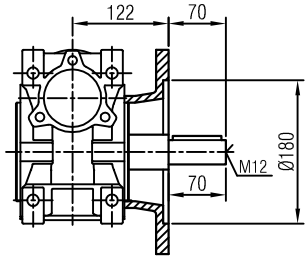
SM / SP / S



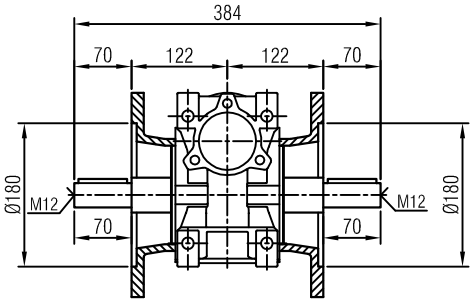
- FR - SR



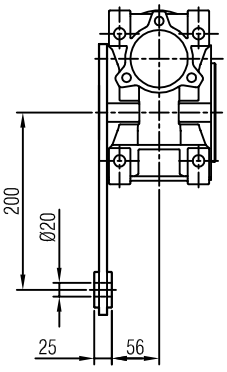
- FL - SL



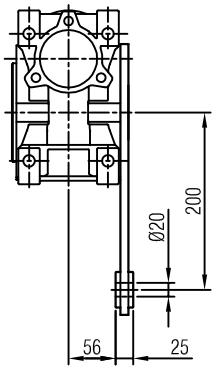
- FD - SD

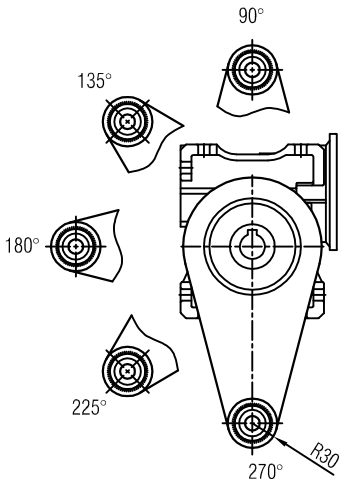


- TR

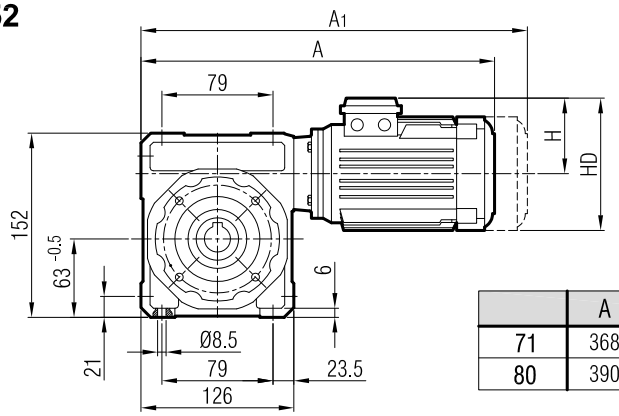


- TR

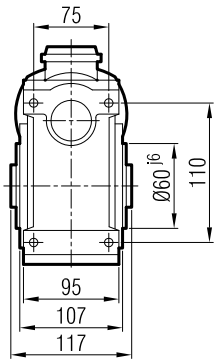


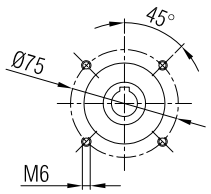


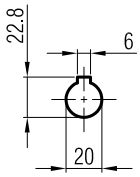
İRSAM 52

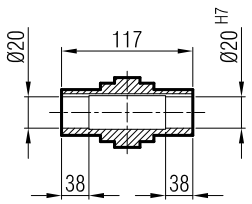


	A	A1	H	HD
71	368	441	111	182
80	390	472	118	198

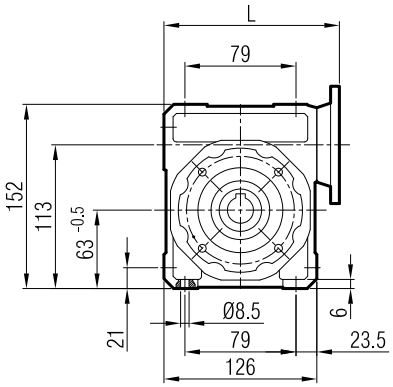


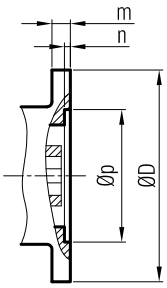


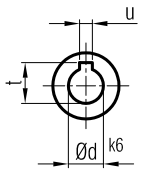


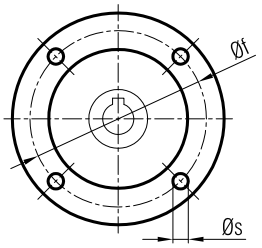


İRSAP 52



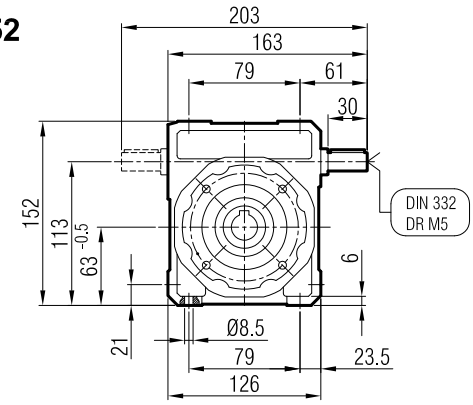


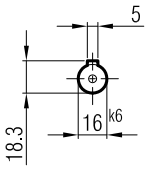


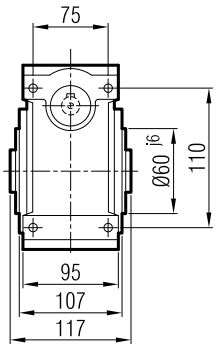


IEC B14	L	m	n	p	f	D	d	t	u	s
71	145	8	3.5	70	85	105	14	16.3	5	7
80	146	8	4	80	100	120	19	21.8	6	7

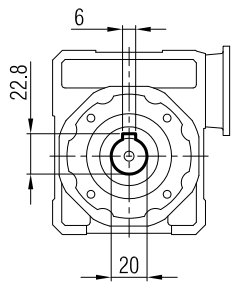
İRSA 52



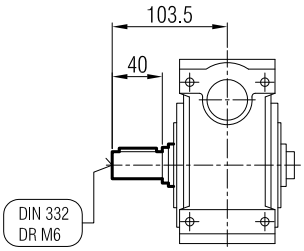




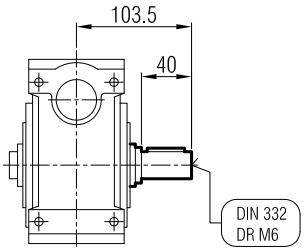
IRSAM / IRSAP / IRSA



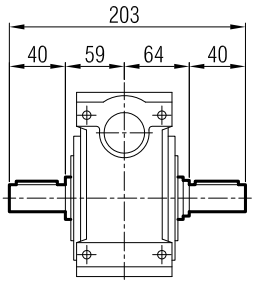
- SR



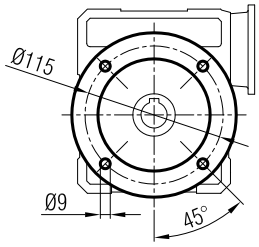
- SL



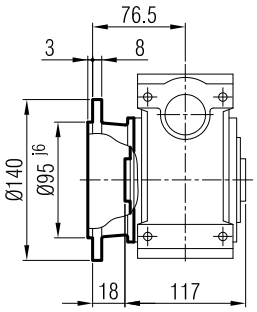
- SD



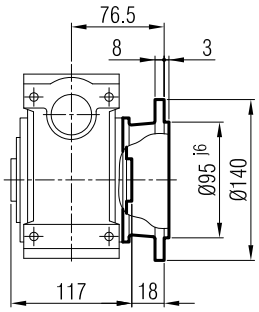
IRSFM / IRSFP / IRSF



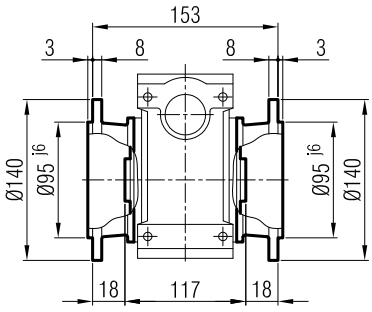
- FR



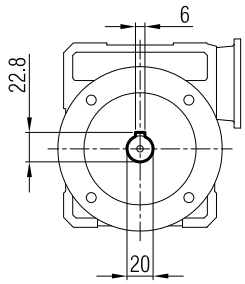
- FL



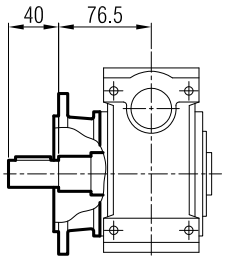
- FD



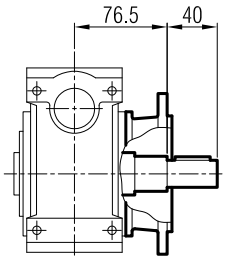
IRSFM / IRSFP / IRSF



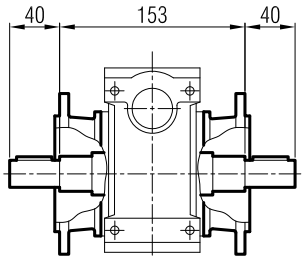
- FR - SR



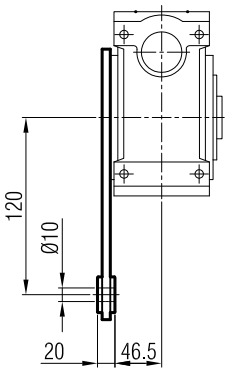
- FL - SL



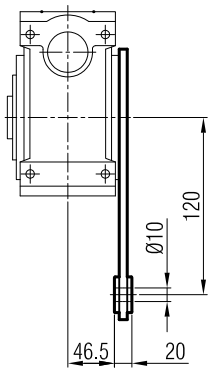
- FD - SD

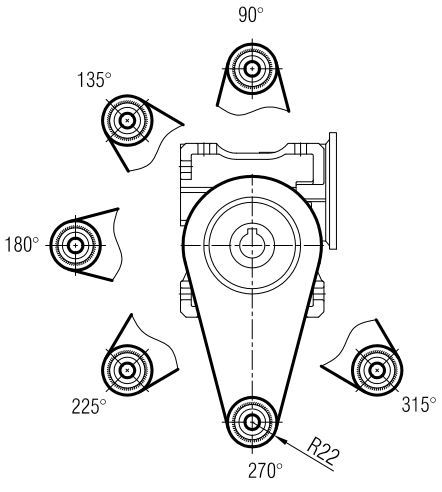


- TR

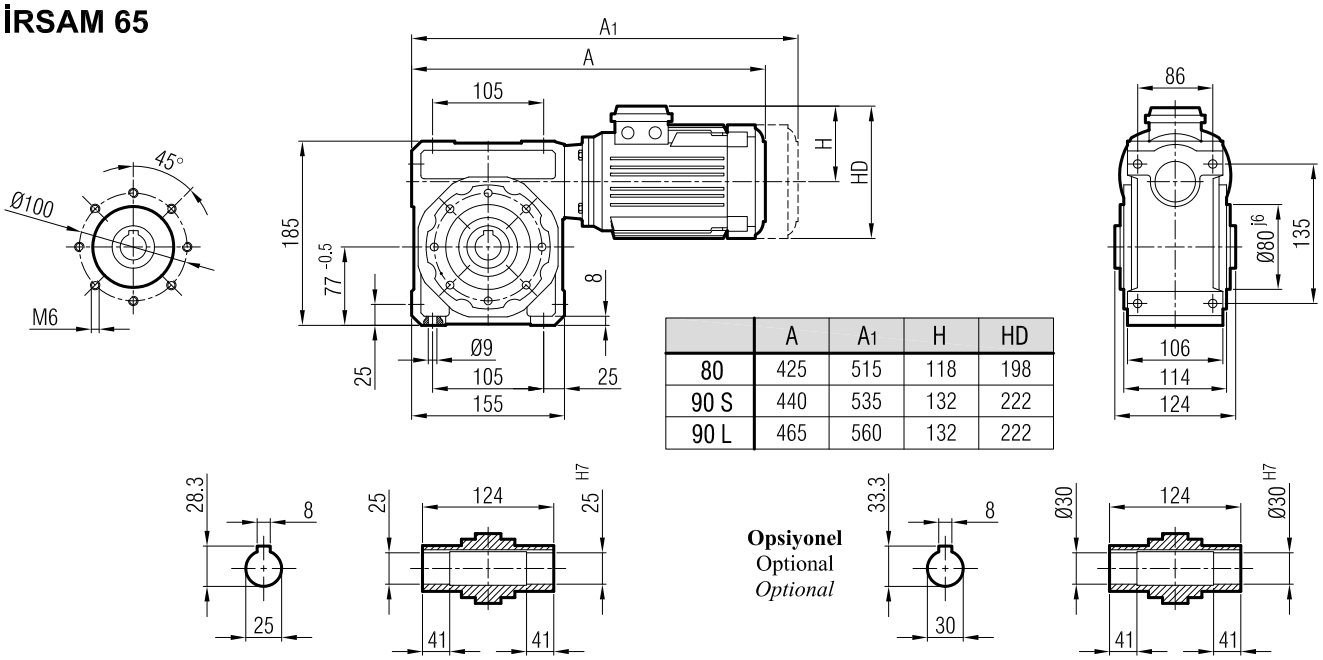


- TL



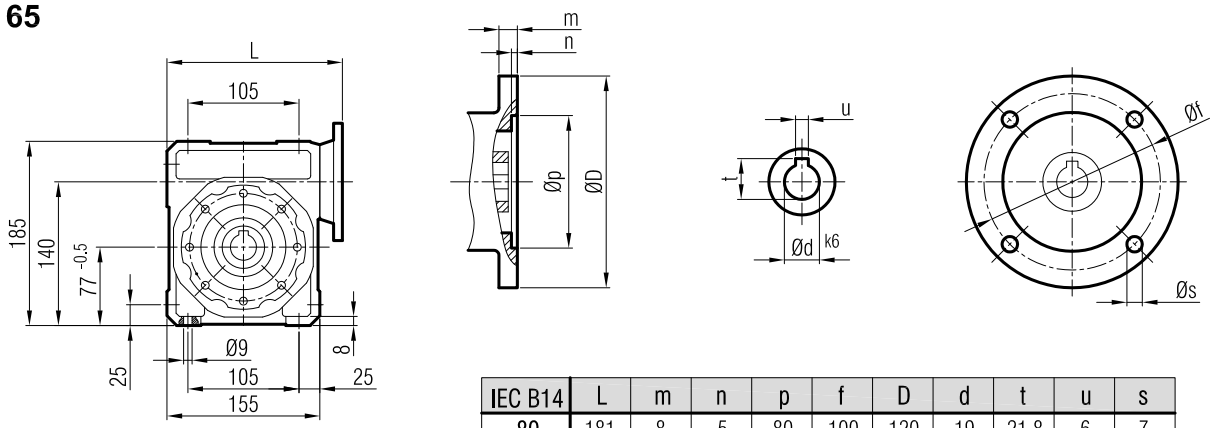


İRSAM 65



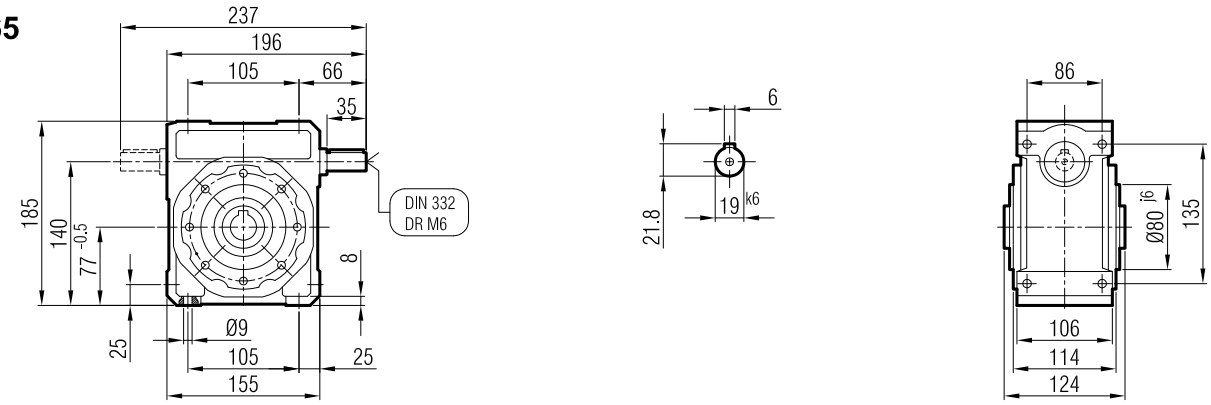
	A	A1	H	HD
80	425	515	118	198
90 S	440	535	132	222
90 L	465	560	132	222

İRSAP 65

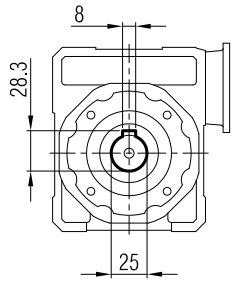


IEC B14	L	m	n	p	f	D	d	t	u	s
80	181	8	5	80	100	120	19	21.8	6	7
90	181	10	5	95	115	140	24	27.3	8	9

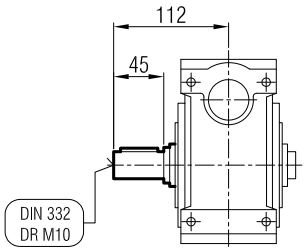
İRSA 65



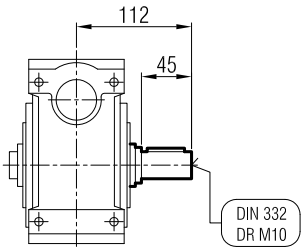
IRSAM / IRSAP / IRSA



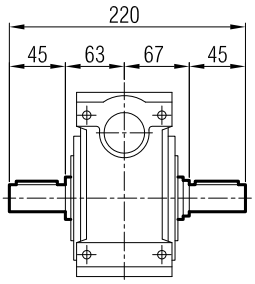
- SR



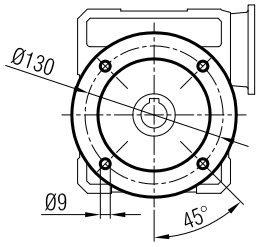
- SL



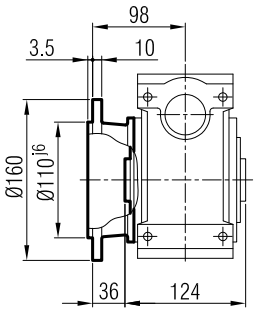
- SD



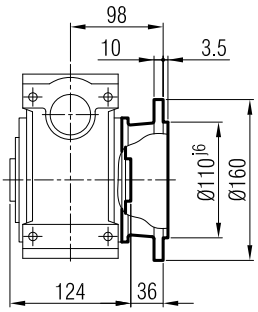
IRSFM / IRSFP / IRSF



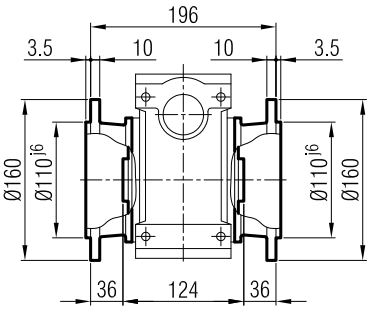
- FR



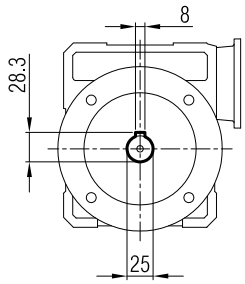
- FL



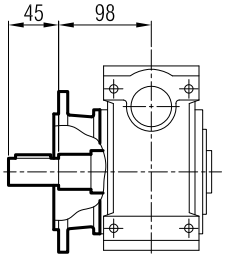
- FD



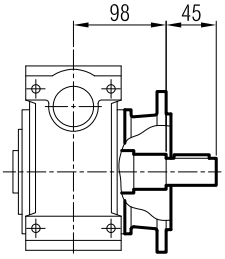
IRSFM / IRSFP / IRSF



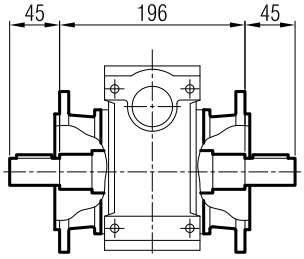
- FR - SR



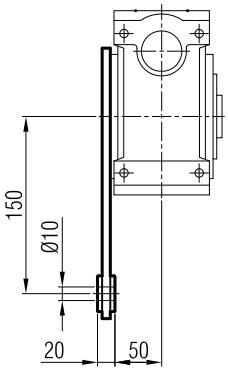
- FL - SL



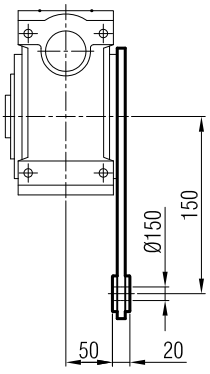
- FD - SD

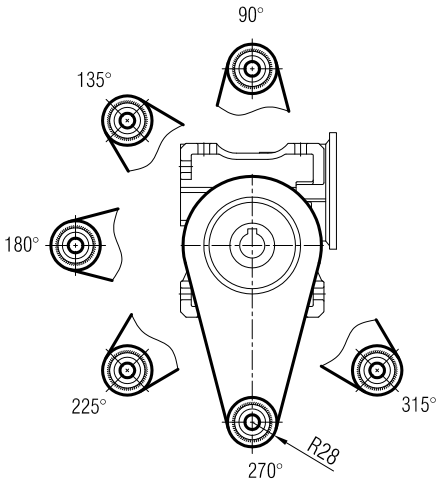


- TR

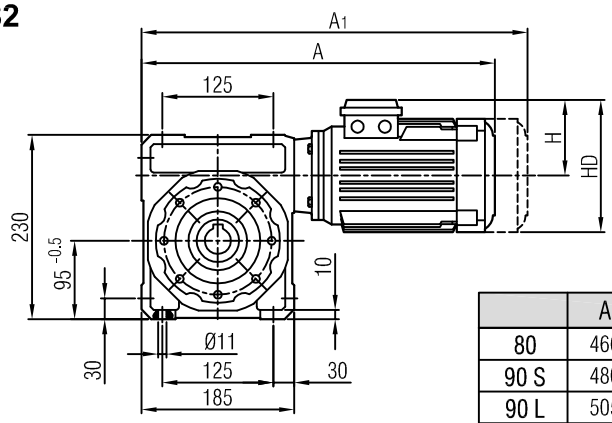


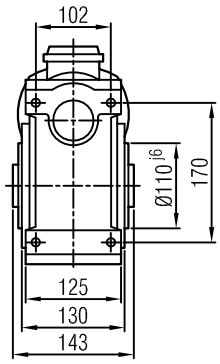
- TL



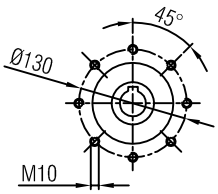


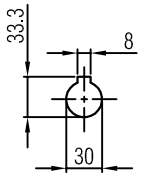
İRSAM 82

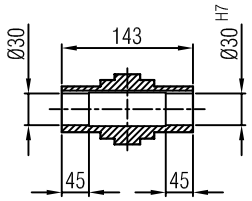




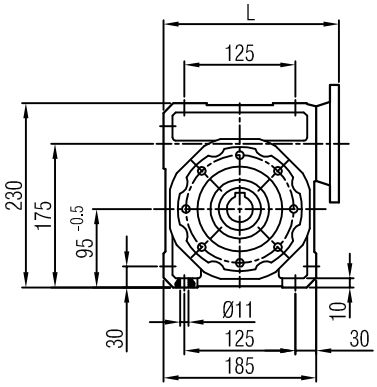
	A	A1	H	HD
80	466	549	118	198
90 S	480	565	132	222
90 L	505	590	132	222
100	540	625	141	241

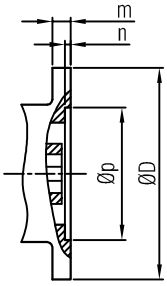


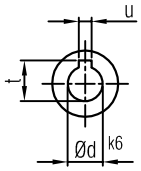


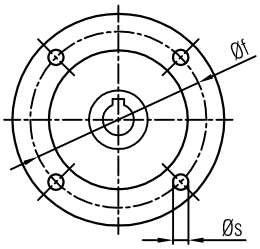


İRSAP 82



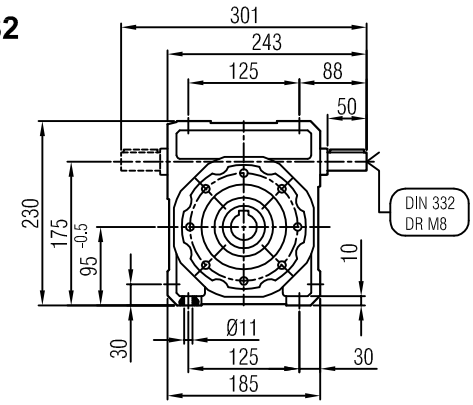


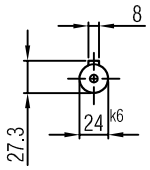


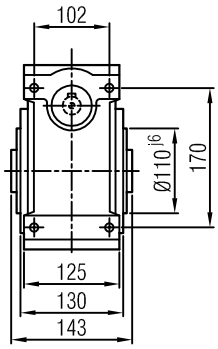


IEC B14	L	m	n	p	f	D	d	t	u	s
80	222	9	5	80	100	120	19	21.8	6	9
90	222	10	5	95	115	140	24	27.3	8	9

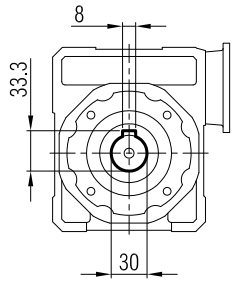
İRSA 82



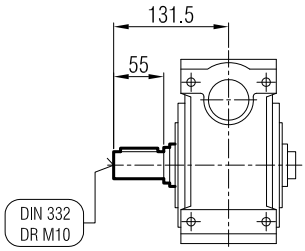




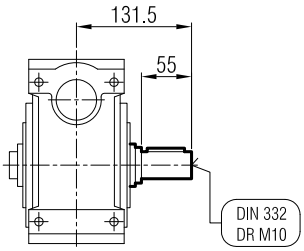
IRSAM / IRSAP / IRSA



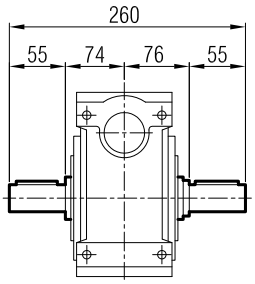
- SR



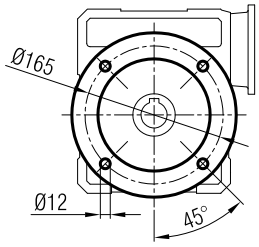
- SL



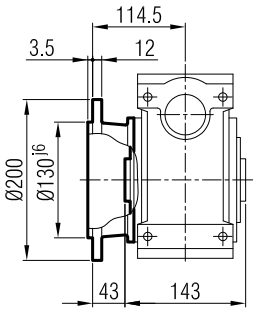
- SD



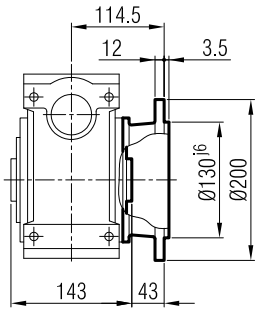
IRSFM / IRSFP / IRSF



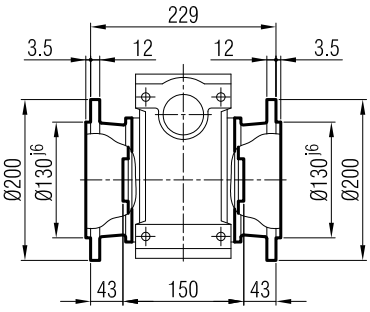
- FR



- FL

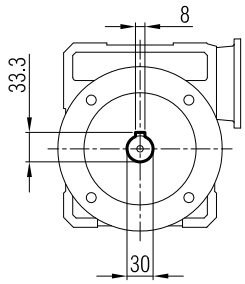


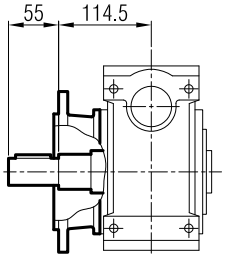
- FD



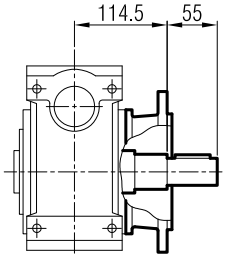
IRSFM / IRSFP / IRSF

- FR - SR

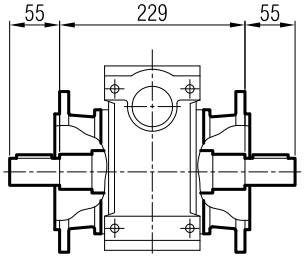




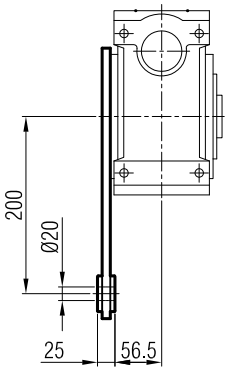
- FL - SL



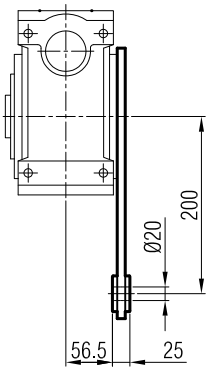
- FD - SD

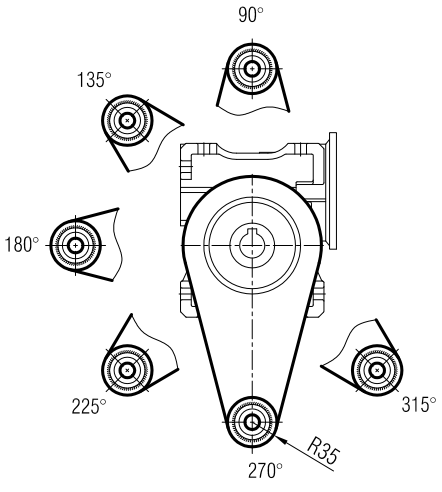


- TR

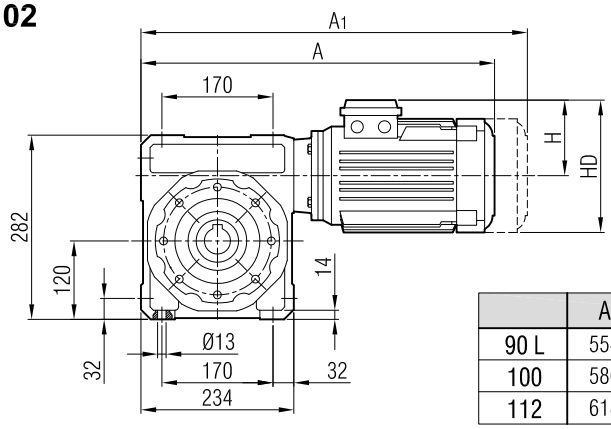


- TL

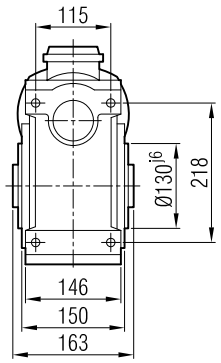


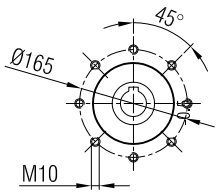


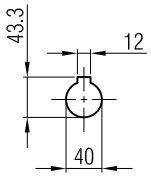
İRSAM 102

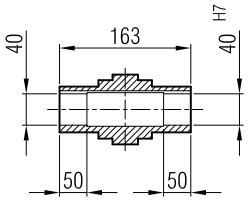


	A	A1	H	HD
90 L	554	639	132	222
100	586	688	141	241
112	618	720	149	261

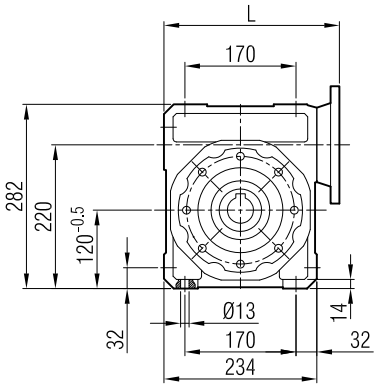


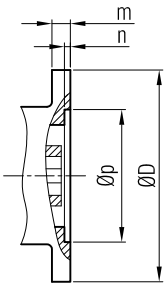


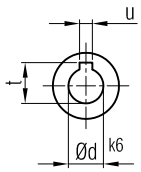


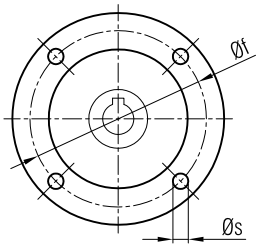


İRSAP 102



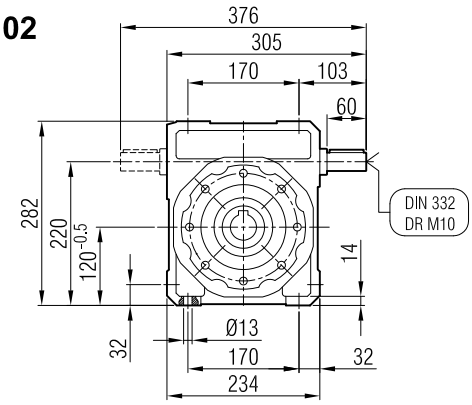


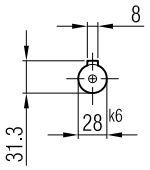


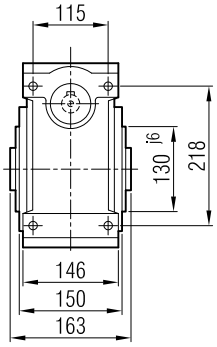


IEC B14	L	m	n	p	f	D	d	t	u	s
90	271	10	5	95	115	140	24	27.3	8	9
100	271	10	5	110	130	160	28	31.3	8	9
112	271	10	5	110	130	160	28	31.3	8	9

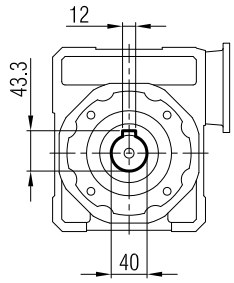
İRSA 102



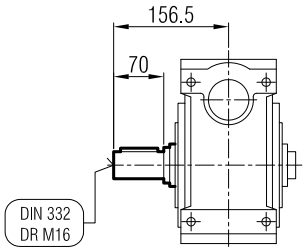




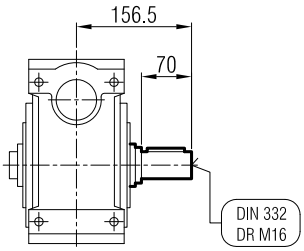
IRSAM / IRSAP / IRSA



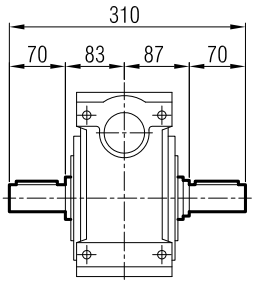
- SR



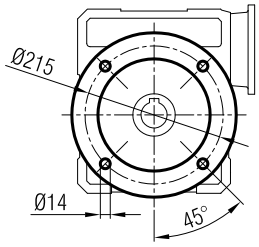
- SL



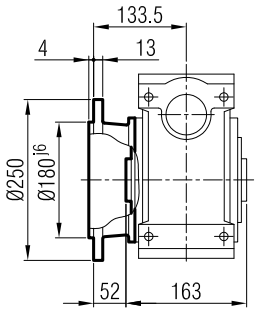
- SD



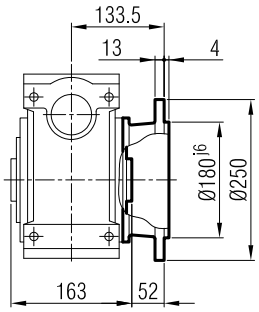
IRSFM / IRSFP / IRSF



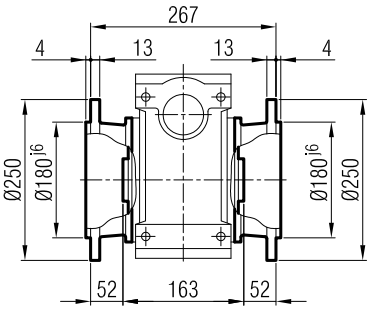
- FR



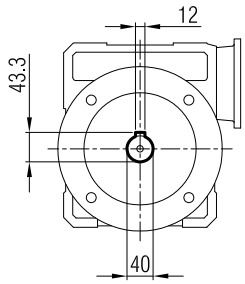
- FL



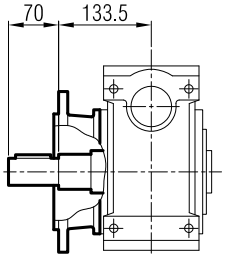
- FD



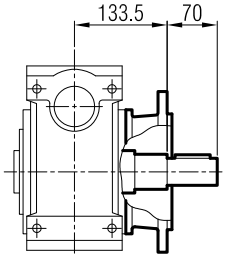
IRSFM / IRSFP / IRSF



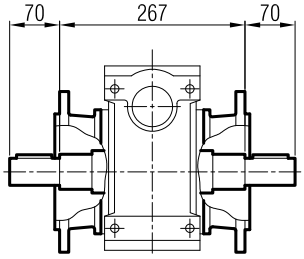
- FR - SR



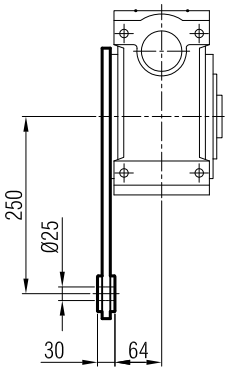
- FL - SL



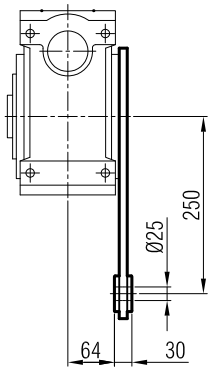
- FD - SD

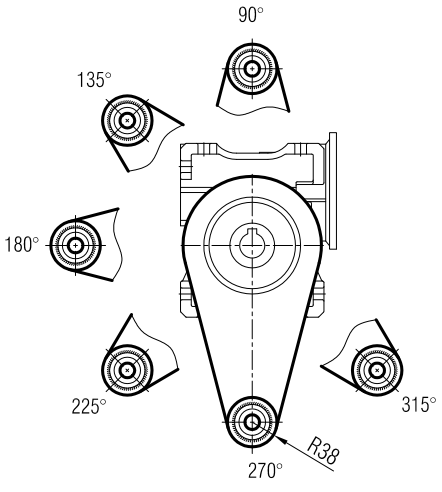


- TR

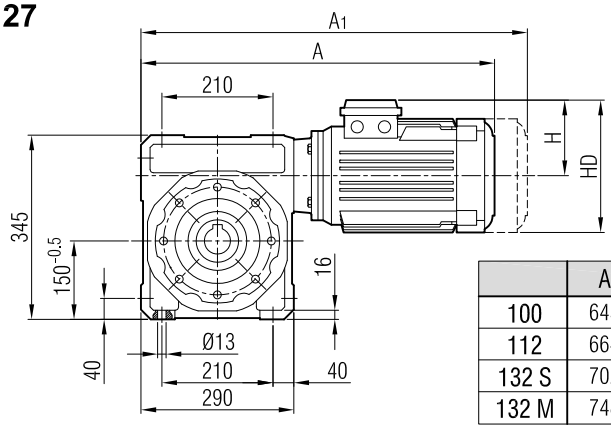


- TL

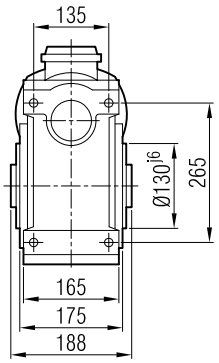


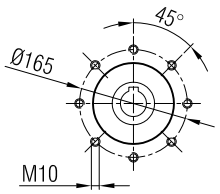


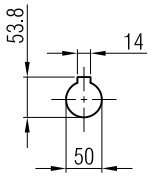
İRSAM 127

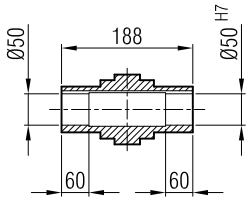


	A	A1	H	HD
100	643	745	141	241
112	664	789	149	261
132 S	702	844	182	314
132 M	748	890	182	314

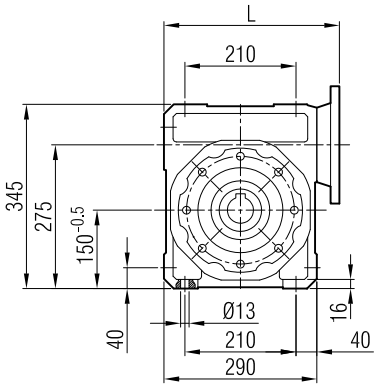


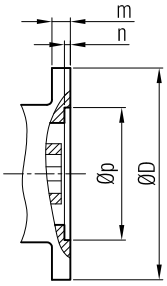


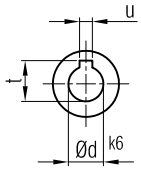


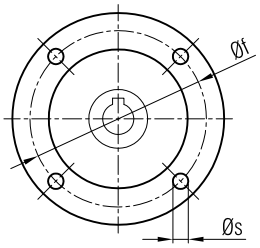


İRSAP 127



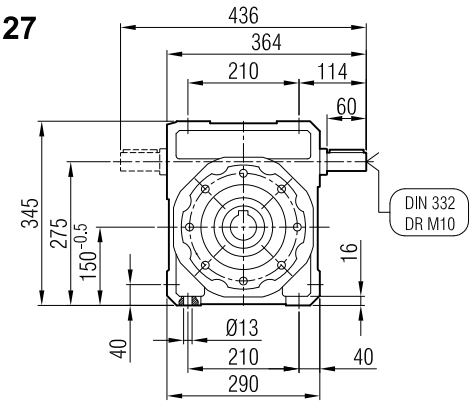


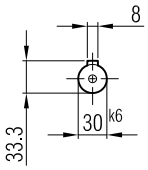


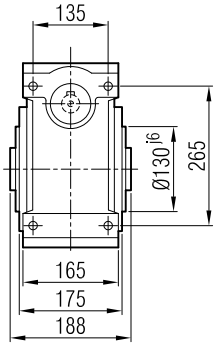


IEC B14	L	m	n	p	f	D	d	t	u	s
100	328	11	5	110	130	160	28	31.3	8	9
112	328	11	5	110	130	160	28	31.3	8	9
132	328	23	5	130	165	200	38	41.3	10	11

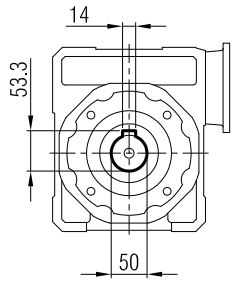
İRSA 127



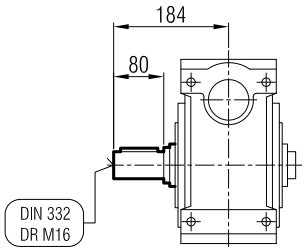




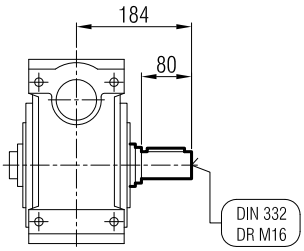
IRSAM / IRSAP / IRSA



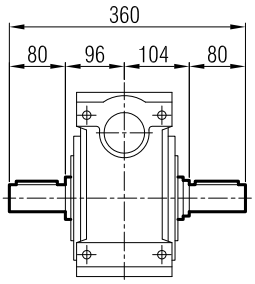
- SR



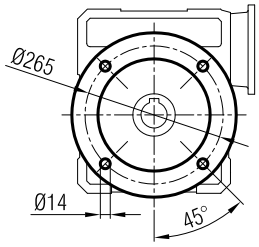
- SL



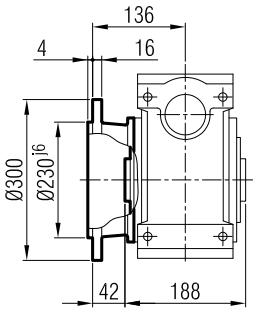
- SD



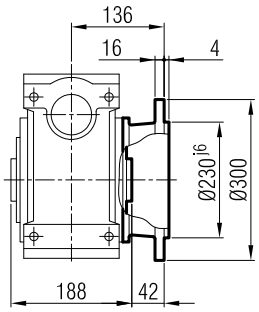
IRSFM / IRSFP / IRSF



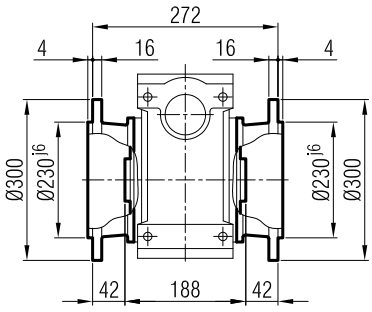
- FR



- FL

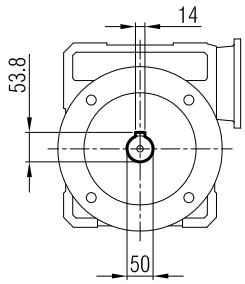


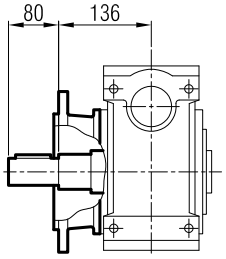
- FD



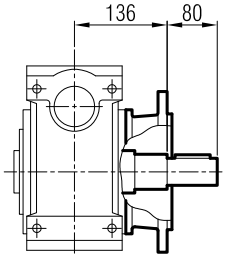
IRSFM / IRSFP / IRSF

- FR - SR

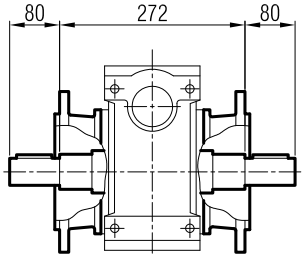




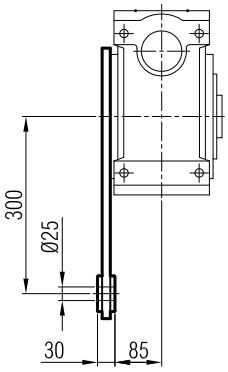
- FL - SL



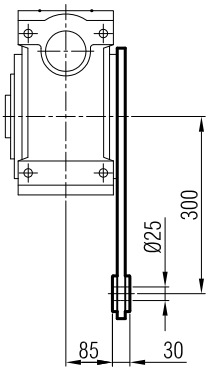
- FD - SD

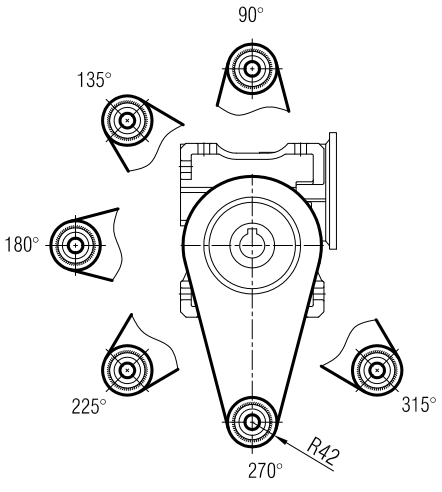


- TR

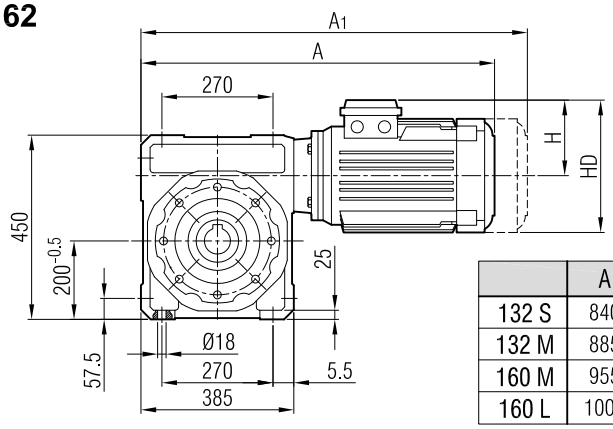


- TL

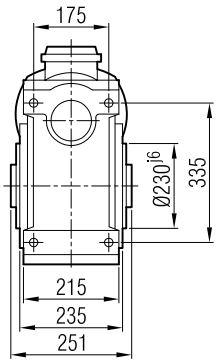


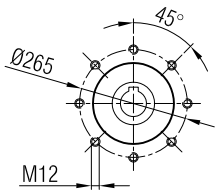


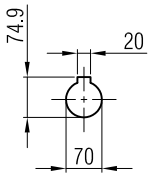
İRSAM 162

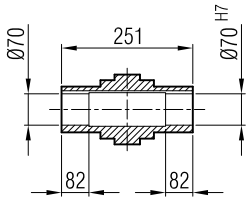


	A	A1	H	HD
132 S	840	981	182	314
132 M	885	1027	182	314
160 M	955	1145	225	385
160 L	1000	1190	225	385

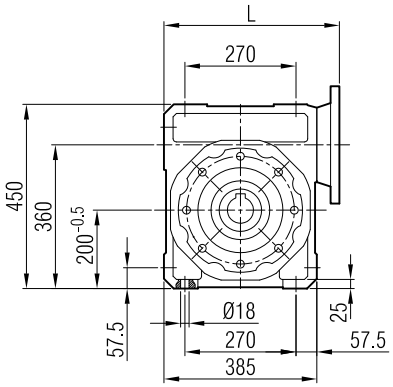


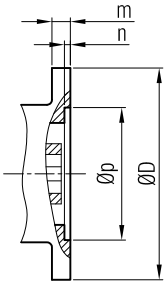


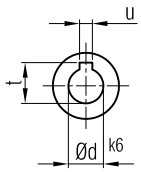


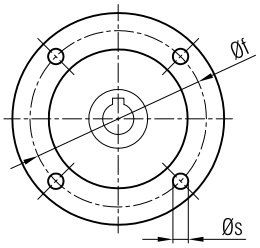


İRSAP 162



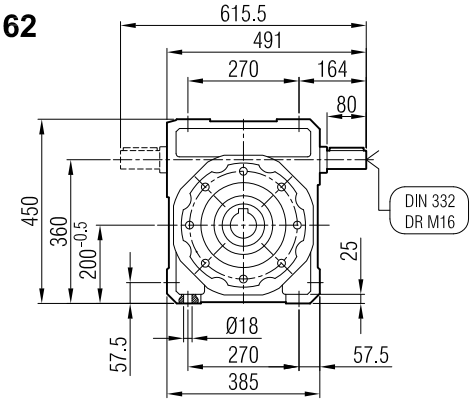


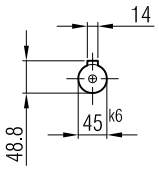


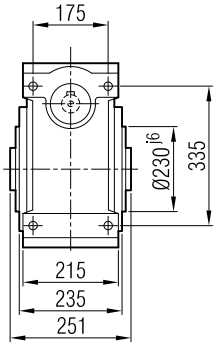


IEC B14	L	m	n	p	f	D	d	t	u	s
132	446	23	5	130	165	200	38	41.3	10	11
160	446	23	5	180	215	250	42	45.3	12	13

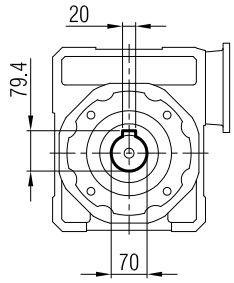
İRSA 162



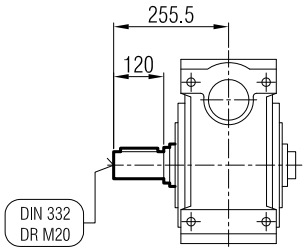




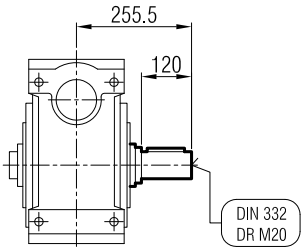
IRSAM / IRSAP / IRSA



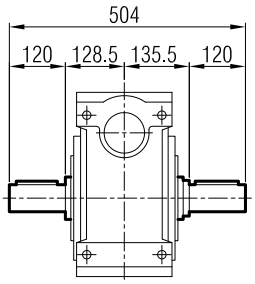
- SR



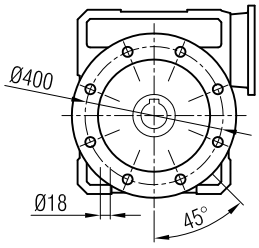
- SL



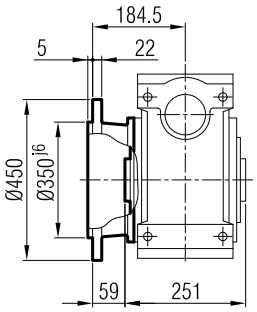
- SD



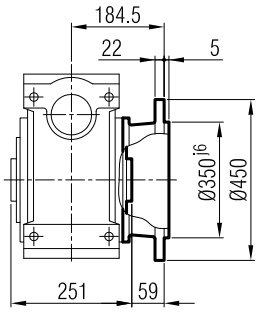
IRSFM / IRSFP / IRSF



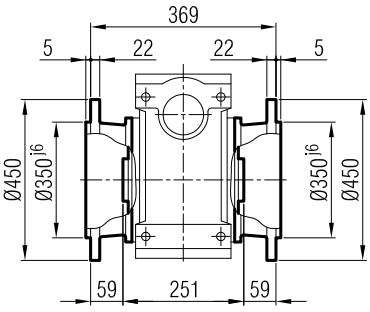
- FR



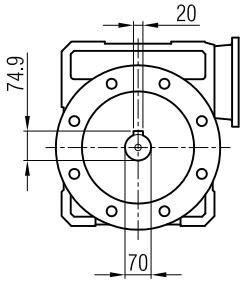
- FL



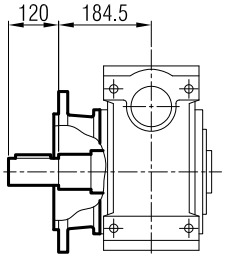
- FD



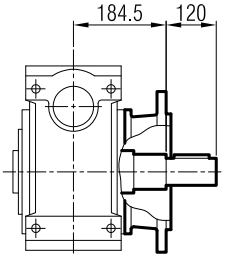
İRSFM / İRSFP / İRSF



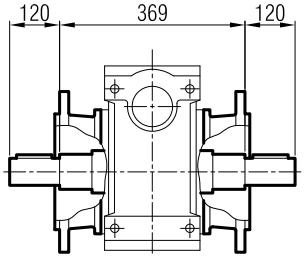
- FR - SR



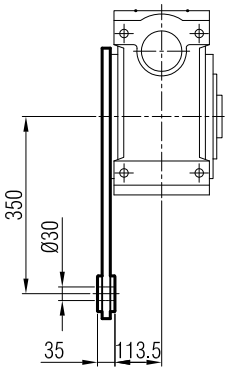
- FL - SL



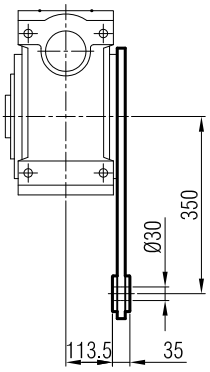
- FD - SD

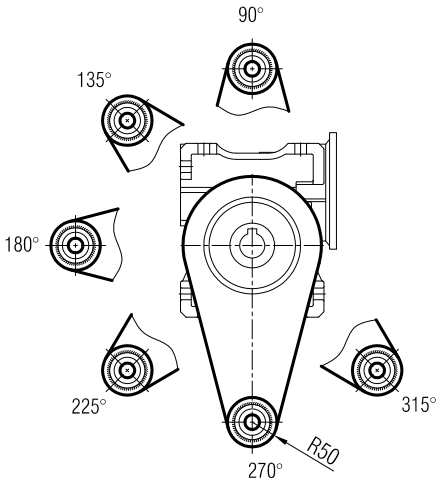


- TR

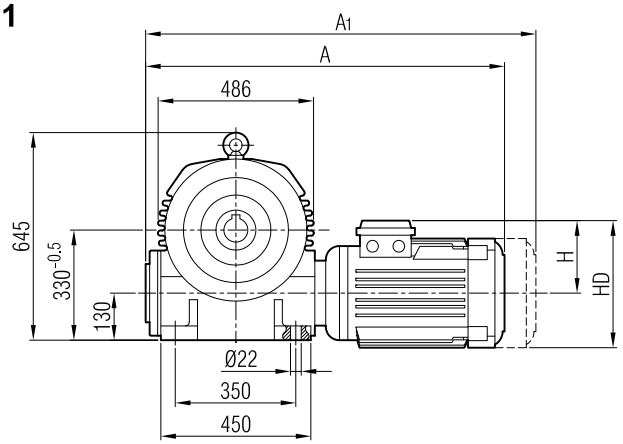


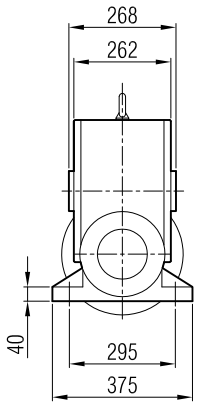
- TL

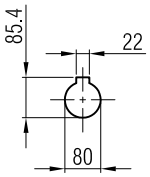




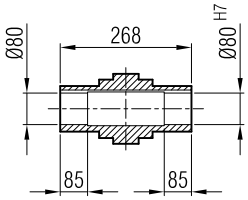
İRSAM 201







	A	A1	H	HD
132 S	888	1030	182	314
132 M	934	1076	182	314
160 M	1002	1192	225	385
160 L	1046	1236	225	385



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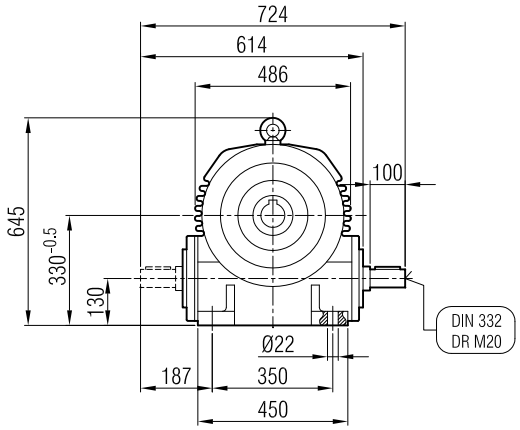
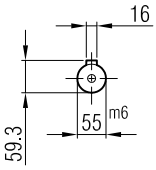
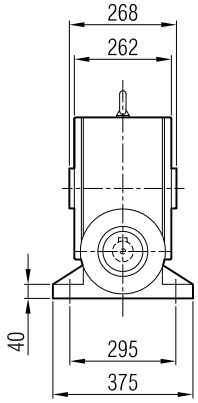
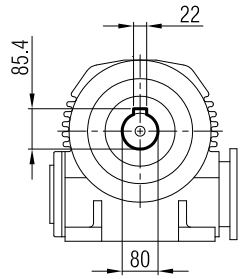


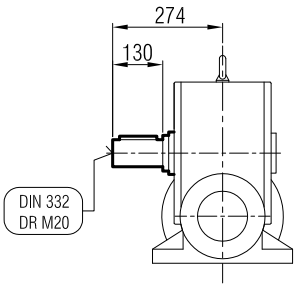




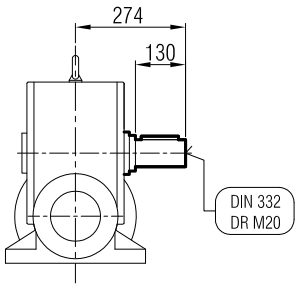
IRSAM / IRSA



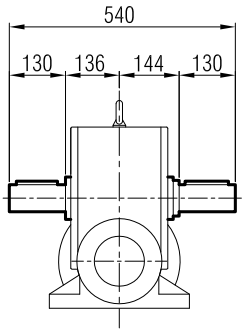
- SR



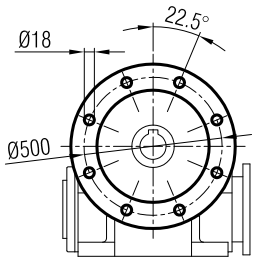
- SL



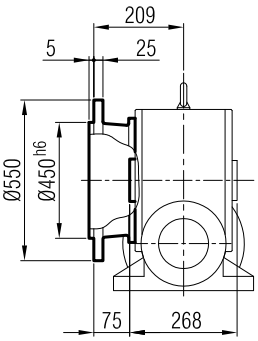
- SD



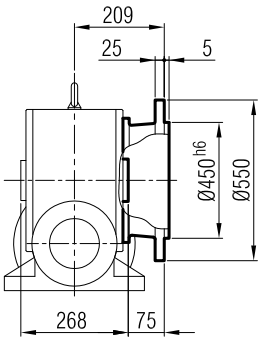
İRSFM / İRSF



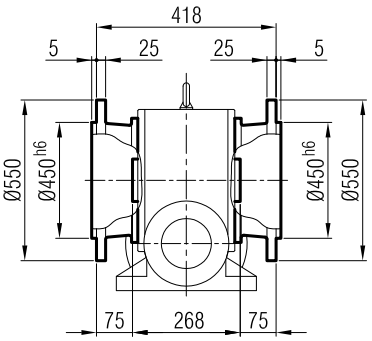
- FR



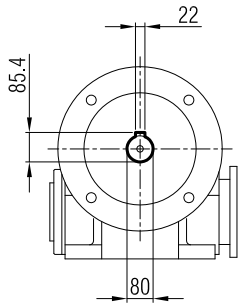
- FL



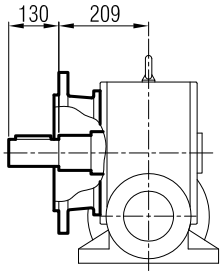
- FD



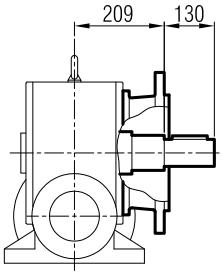
IRSFM / IRSF



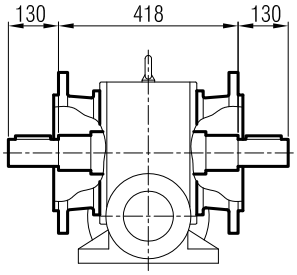
- FR - SR



- FL - SL



- FD - SD



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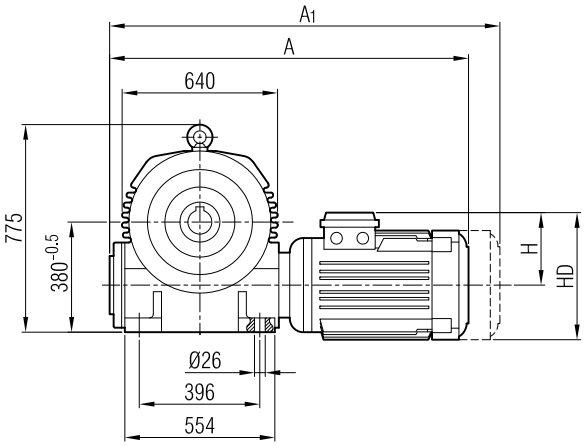

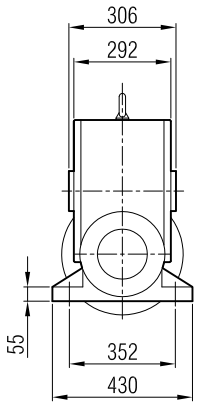

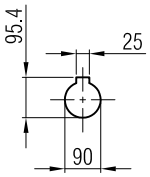

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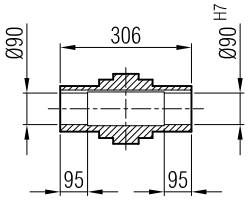

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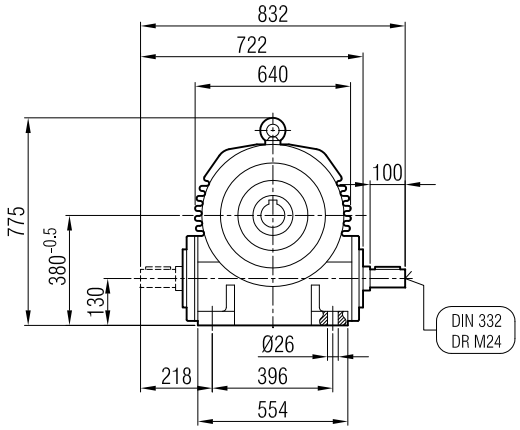
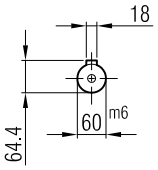
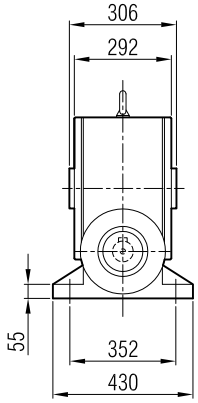
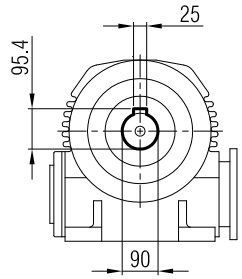






IRSAM / IRSA



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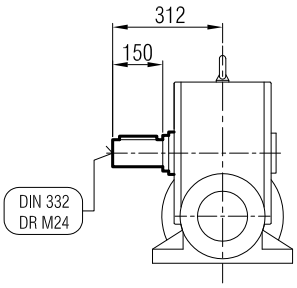
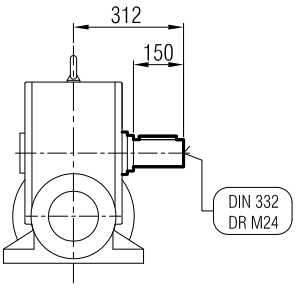
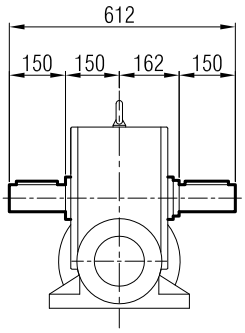


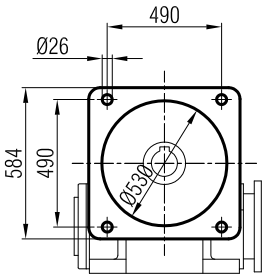
- SL



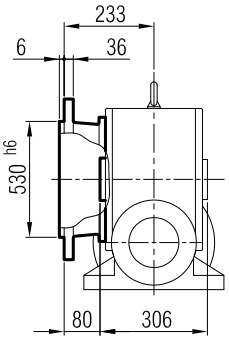
- SD



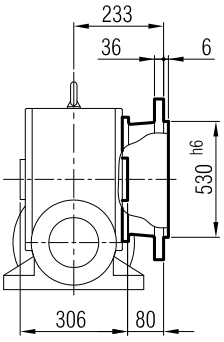
İRSFM / İRSF



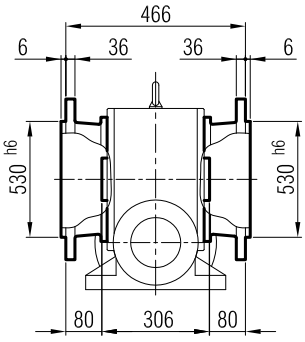
- FR



- FL



- FD



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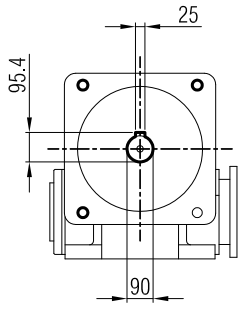
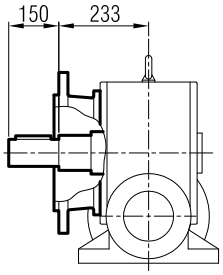
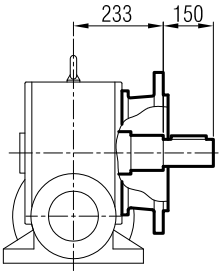


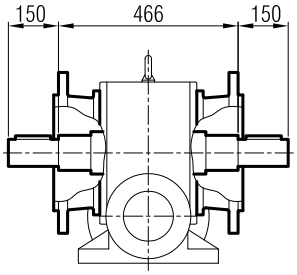
- FR - SR



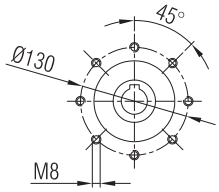
- FL - SL

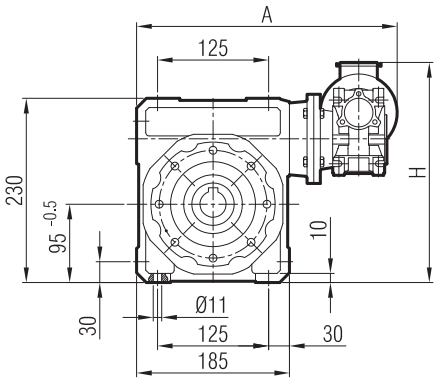


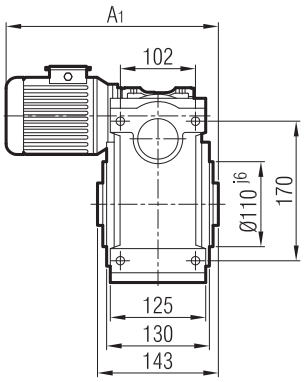
- FD - SD



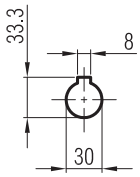
İRSAM 82 S 40

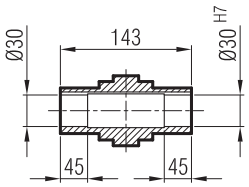




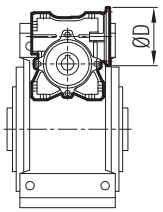


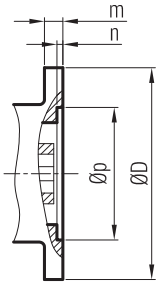
	A	A1	H
63	423	339	377
71	440	365	397

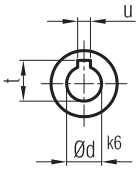


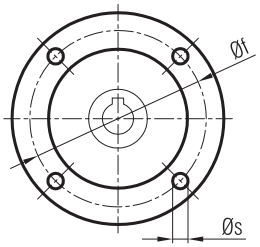


İRSAP 82 S 40



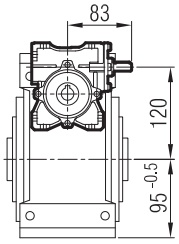


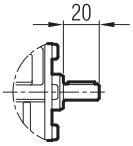


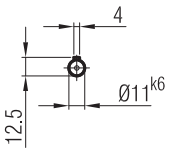


IEC B14	m	n	p	f	D	d	t	u	s
63	10	4.5	60	75	90	11	12.8	4	6
71	10	4.5	70	85	105	14	16.3	5	7

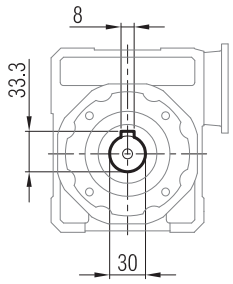
İRSA 82 S 40



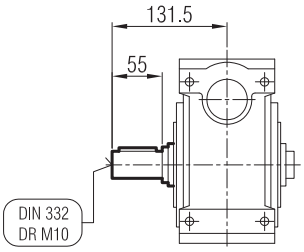




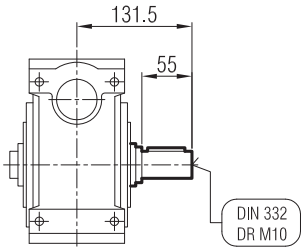
İRSAM / İRSAP / İRSA



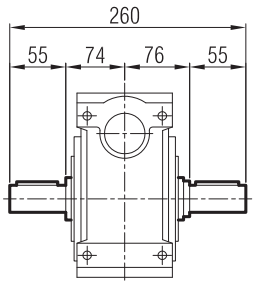
- SR



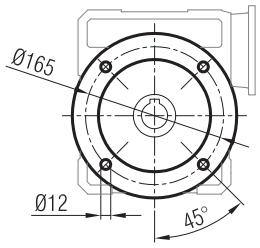
- SL



- SD



İRSFM / İRSFP / İRSF



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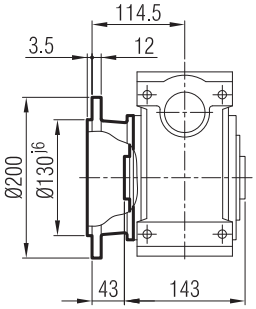
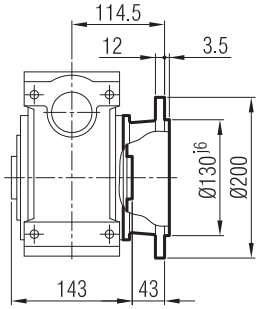
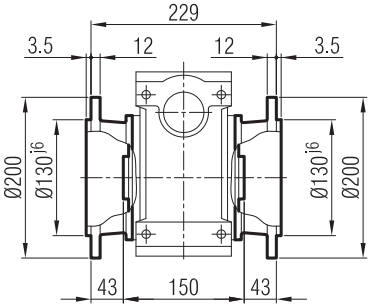


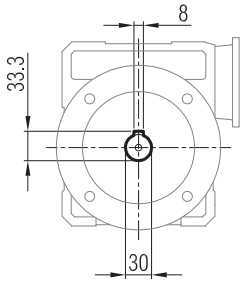
- FL



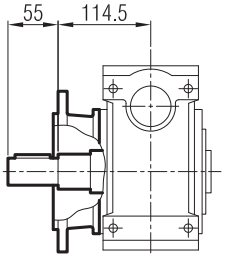
- FD



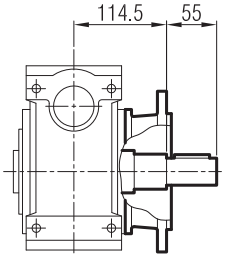
İRSFM / İRSFP / İRSF



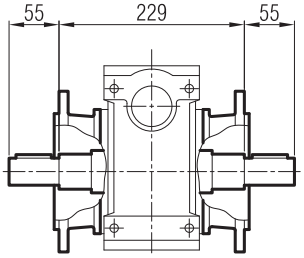
- FR - SR



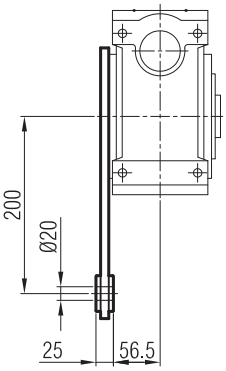
- FL - SL



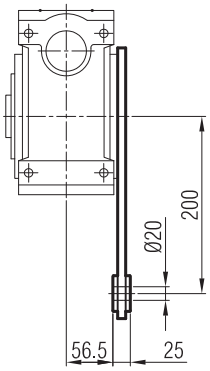
- FD - SD

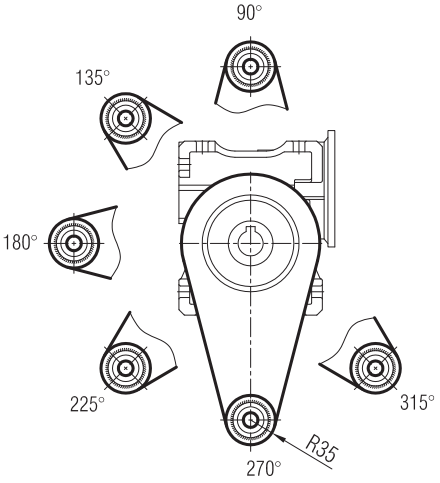


- TR

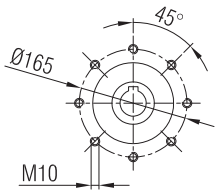


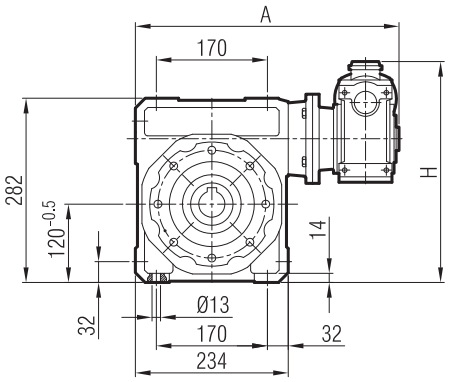
- TL

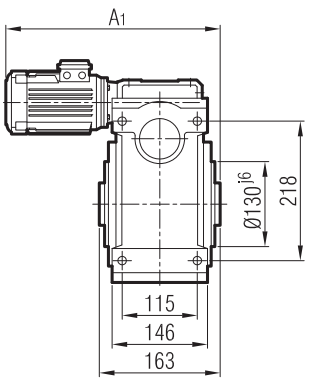




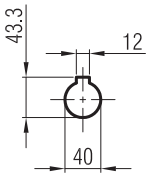
İRSAM 102 İRS 52

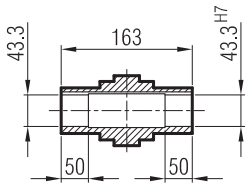




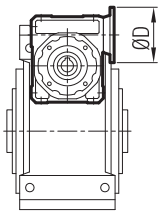


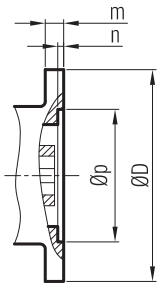
	A	A1	H
71	406	387	336
80	406	409	343

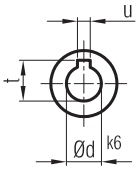


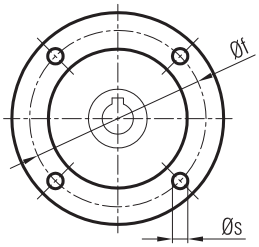


İRSAP 102 İRS 52



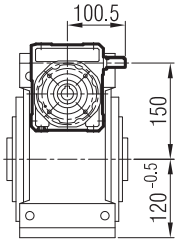


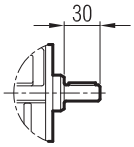


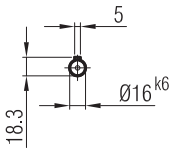


IEC B14	m	n	p	f	D	d	t	u	s
71	8	3.5	70	85	105	14	16.3	5	7
80	8	4	80	100	120	19	21.8	6	7

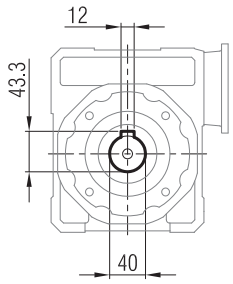
İRSA 102 İRS 52



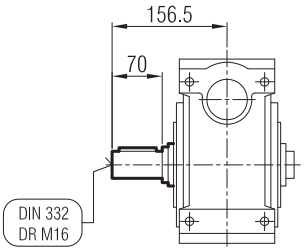




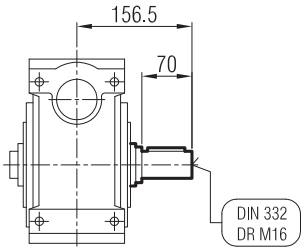
İRSAM / İRSAP / İRSA



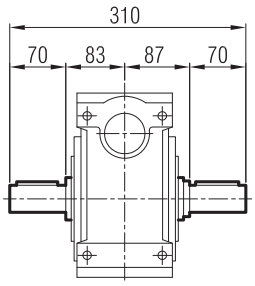
- SR



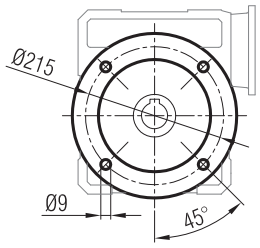
- SL



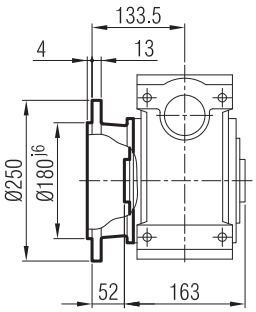
- SD



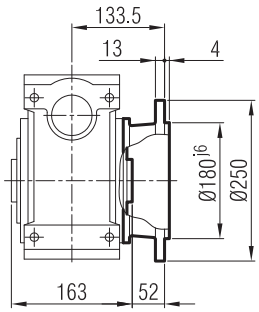
İRSFM / İRSFP / İRSF



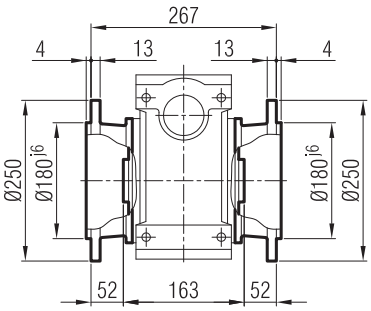
- FR



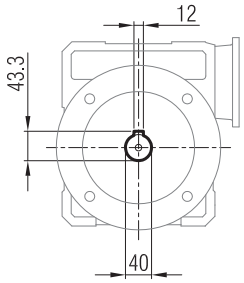
- FL



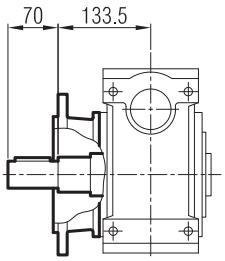
- FD



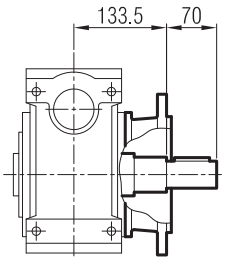
İRSFM / İRSFP / İRSF



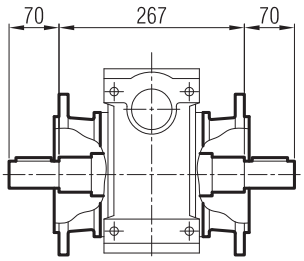
- FR - SR



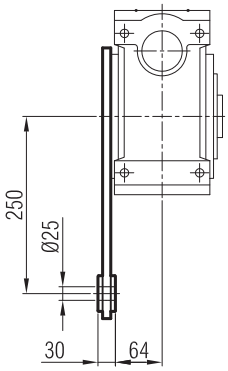
- FL - SL



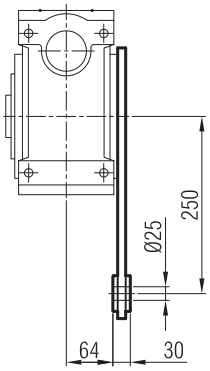
- FD - SD

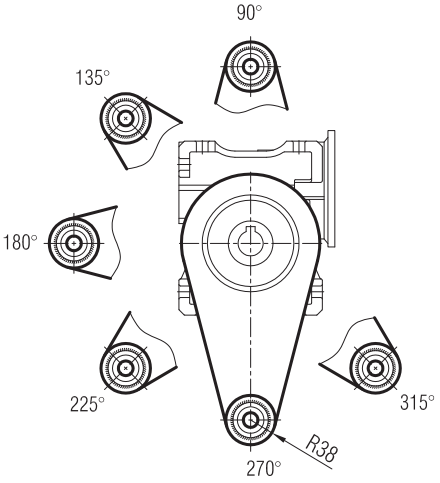


- TR

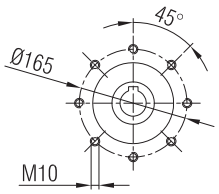


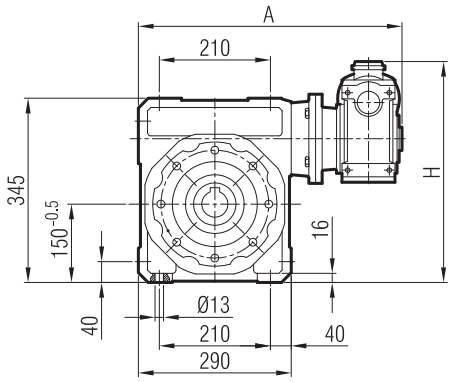
- TL

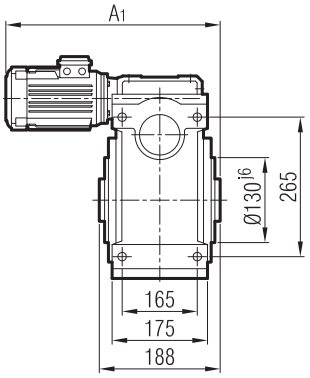




İRSAM 127 İRS 65







	A	A1	H
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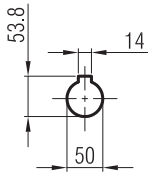
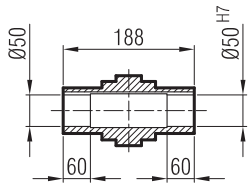
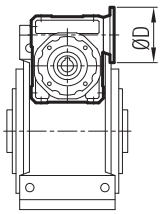
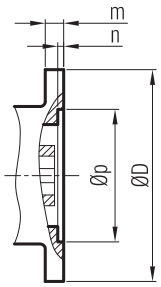
90 L	488	482	470

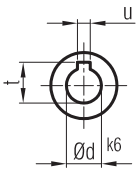


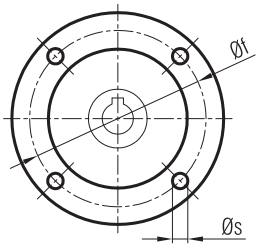


İRSAP 127 İRS 65



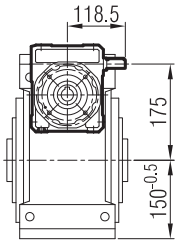


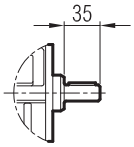


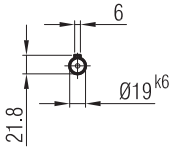


IEC B14	m	n	p	f	D	d	t	u	s
90	10	5	95	115	140	24	27.3	8	9

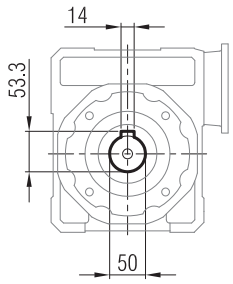
İRSA 127 İRS 65



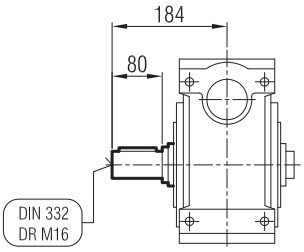




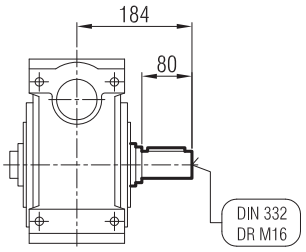
İRSAM / İRSAP / İRSA



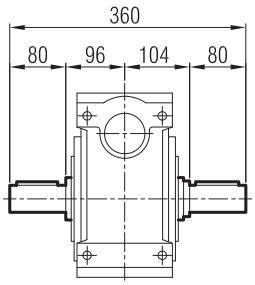
- SR



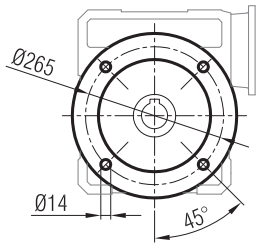
- SL



- SD



İRSFM / İRSFP / İRSF



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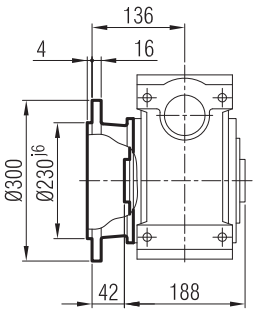
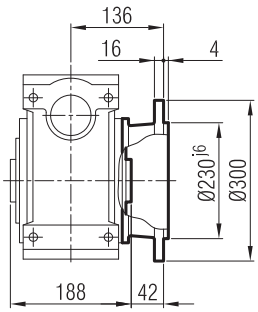
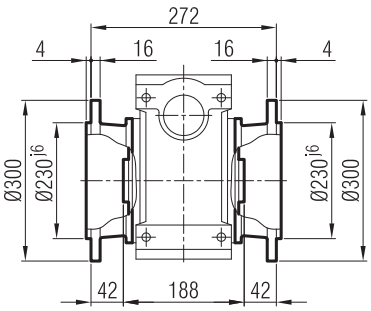


- FL

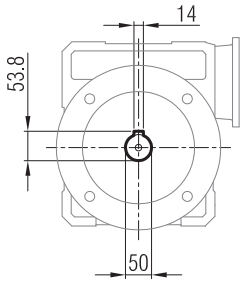


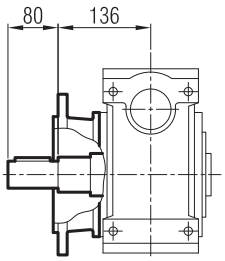
- FD



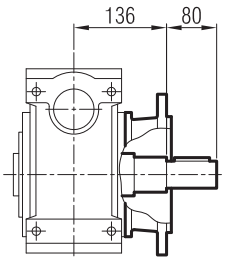
İRSFM / İRSFP / İRSF

- FR - SR

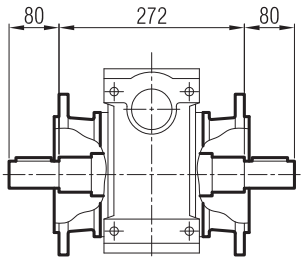




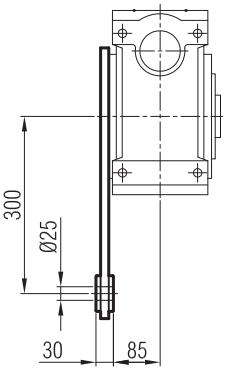
- FL - SL



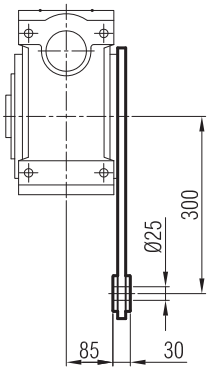
- FD - SD

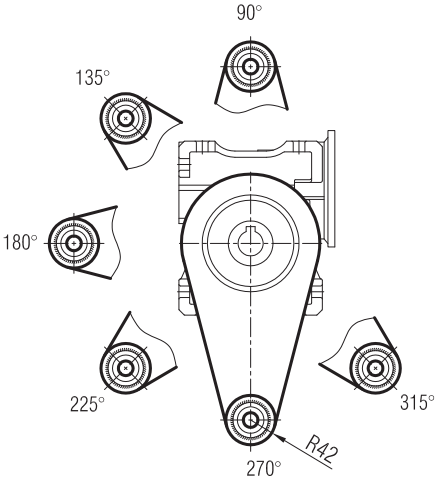


- TR

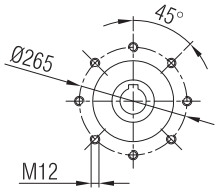


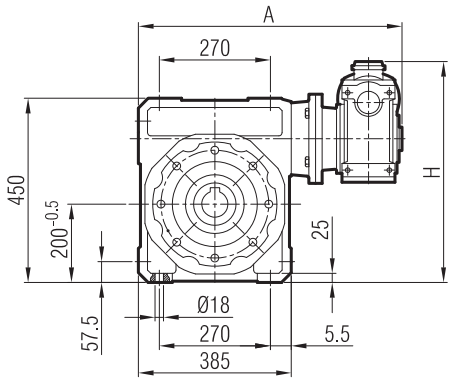
- TL

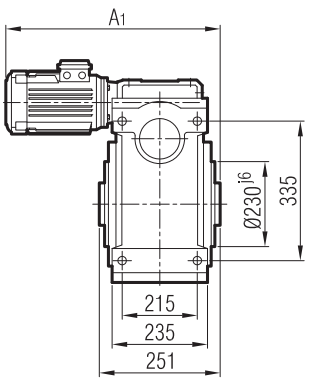




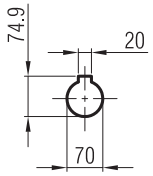
İRSAM 162 İRS 82

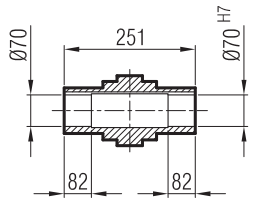




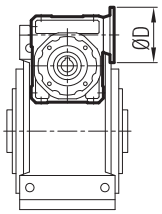


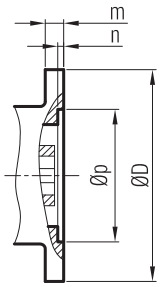
	A	A1	H
80	632	374	653

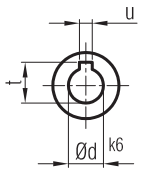


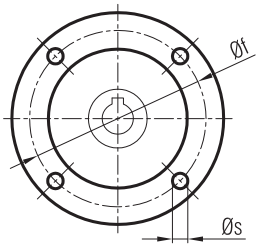


İRSAP 162 İRS 82



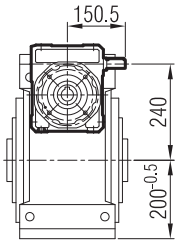


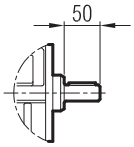


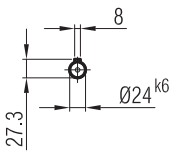


IEC B14	m	n	p	f	D	d	t	u	s
90	10	5	95	115	140	24	27.3	8	9

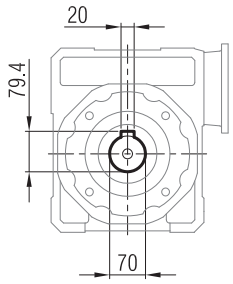
İRSA 162 İRS 82



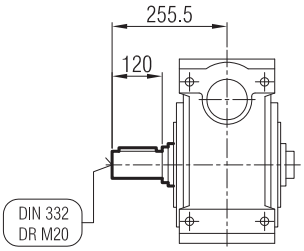




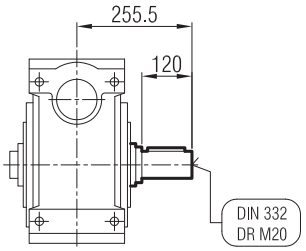
İRSAM / İRSAP / İRSA



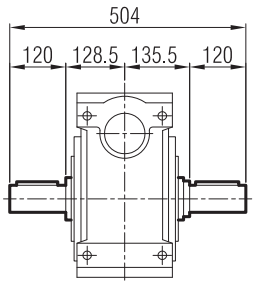
- SR



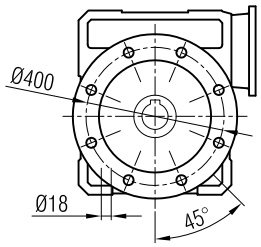
- SL



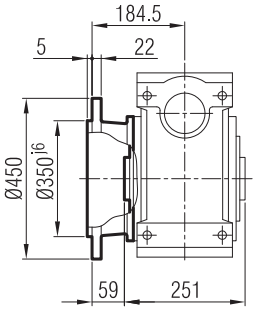
- SD



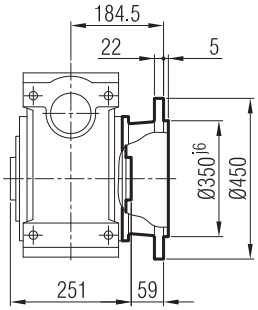
İRSFM / İRSFP / İRSF



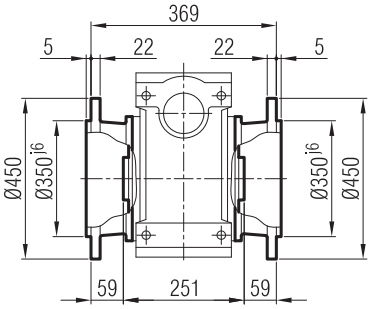
- FR



- FL

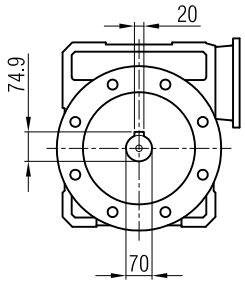


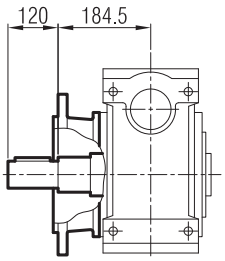
- FD



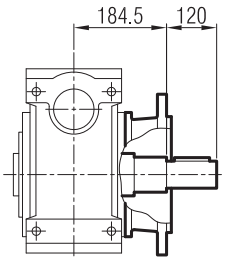
İRSFM / İRSFP / İRSF

- FR - SR

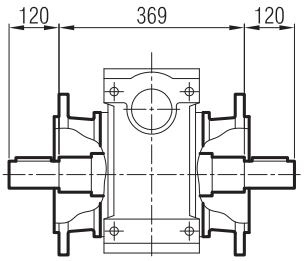




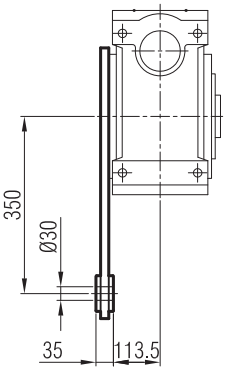
- FL - SL



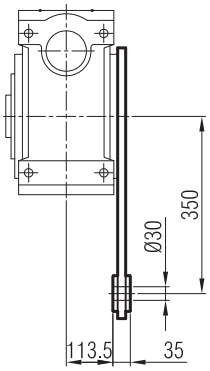
- FD - SD

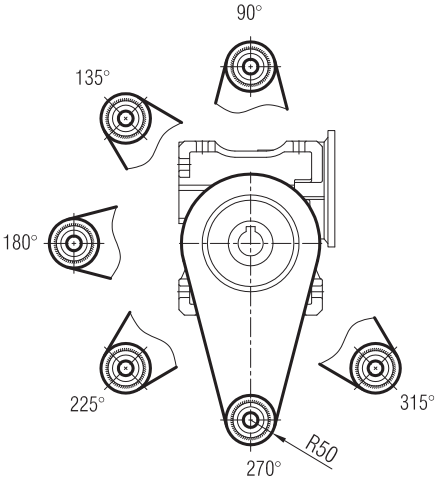


- TR

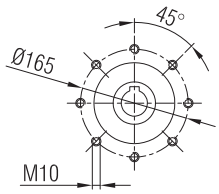


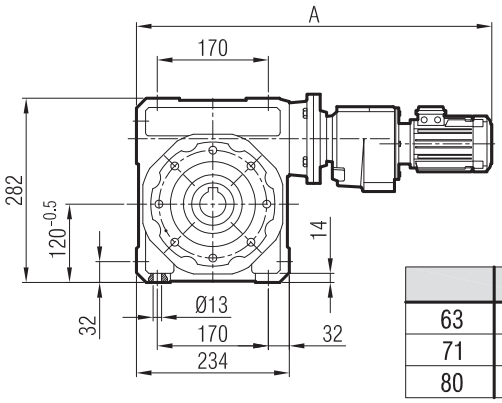
- TL



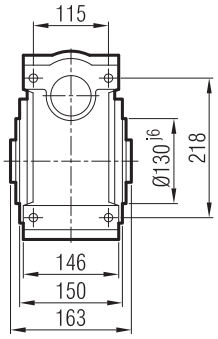


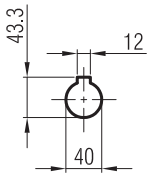
İRSAM 102 İR 43
İRSAM 102 İR 42

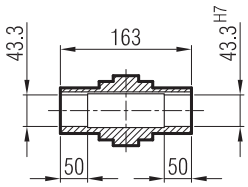




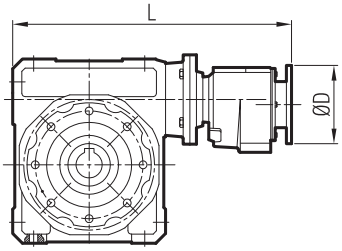
	A
63	587
71	615
80	645

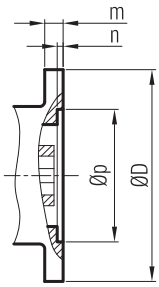


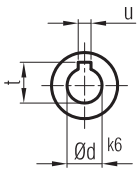


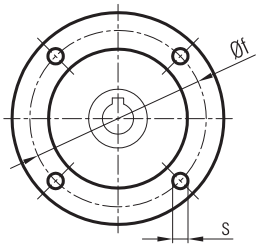


İRSAP 102 İR 43
İRSAP 102 İR 42



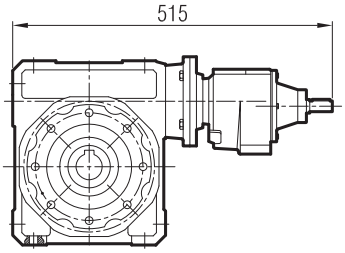


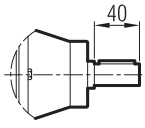


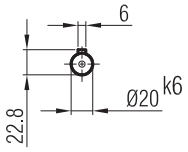


IEC B5	L	m	n	p	f	D	d	t	u	s
63	432	8	4	95	115	140	11	12.8	4	M8
71	440	9	4	110	130	160	14	16.3	5	M8
80	442	12	5	130	165	200	19	21.8	6	M10

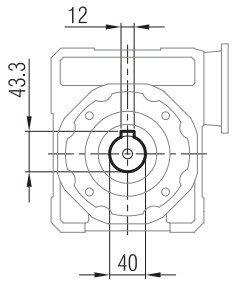
IRSA 102 IR 43
IRSA 102 IR 42



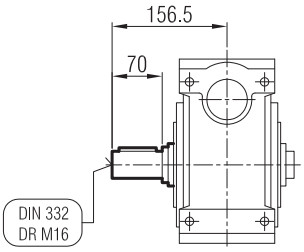




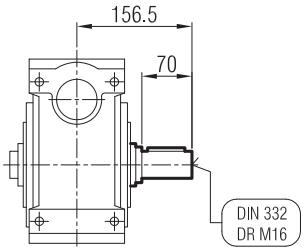
İRSAM / İRSAP / İRSA



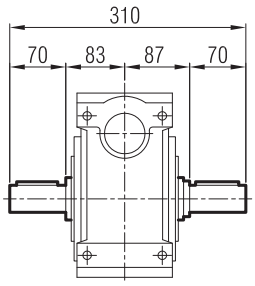
- SR



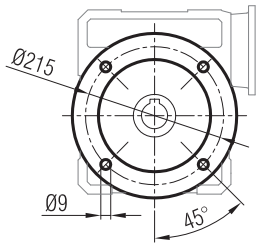
- SL



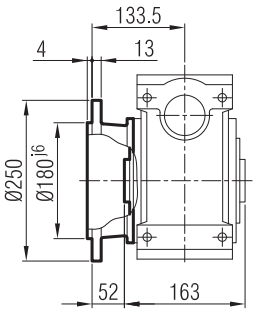
- SD



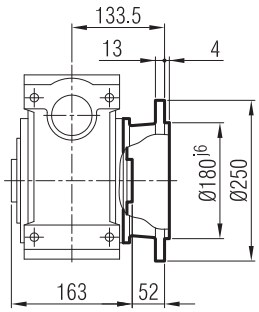
İRSFM / İRSFP / İRSF



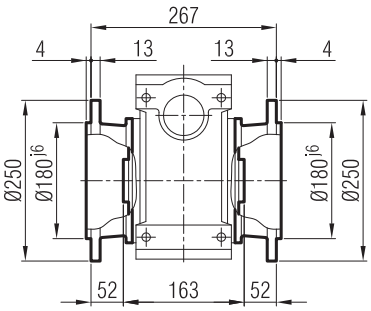
- FR



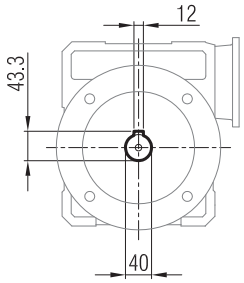
- FL



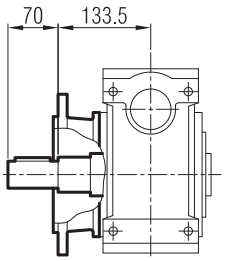
- FD



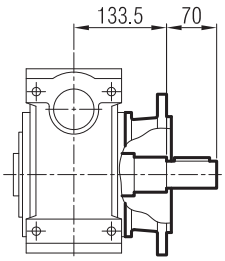
İRSFM / İRSFP / İRSF



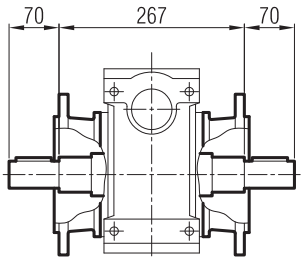
- FR - SR



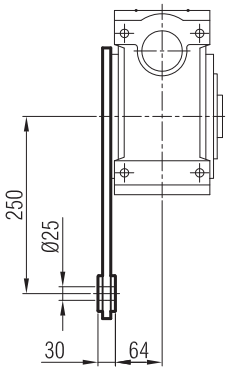
- FL - SL



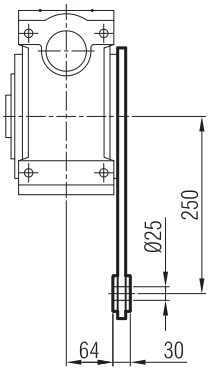
- FD - SD

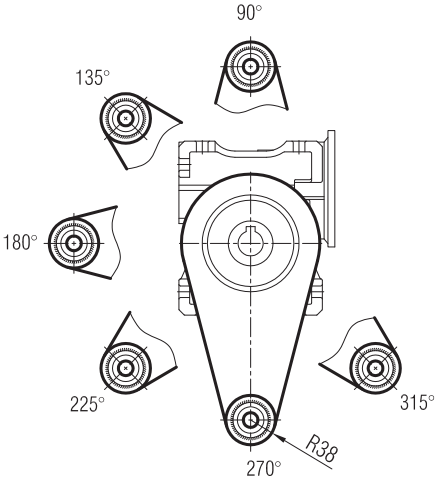


- TR

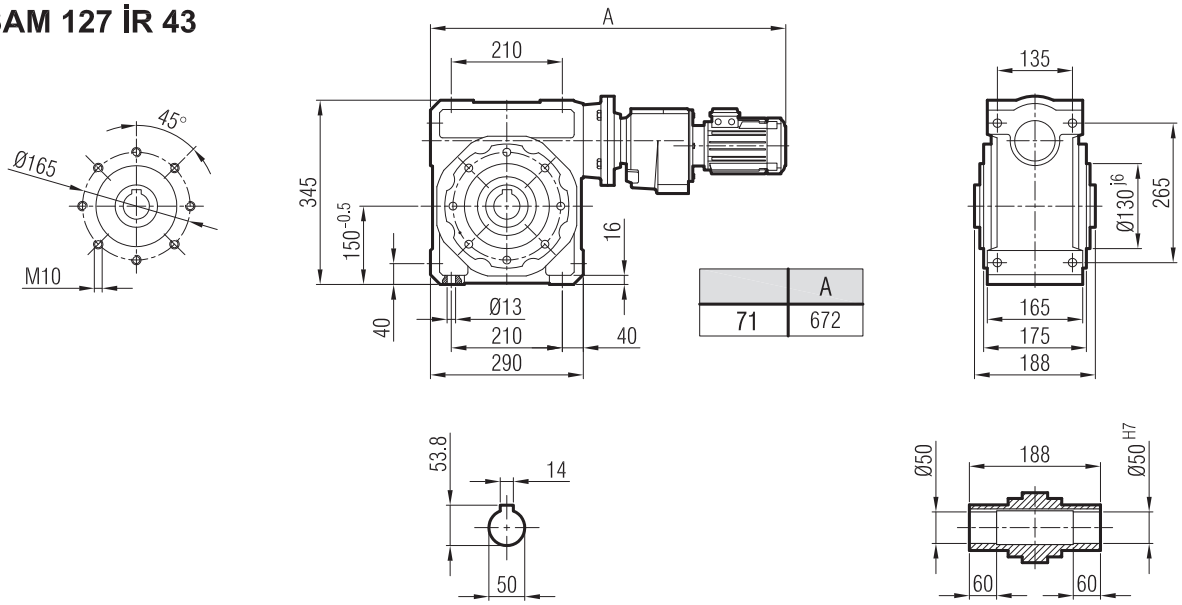


- TL



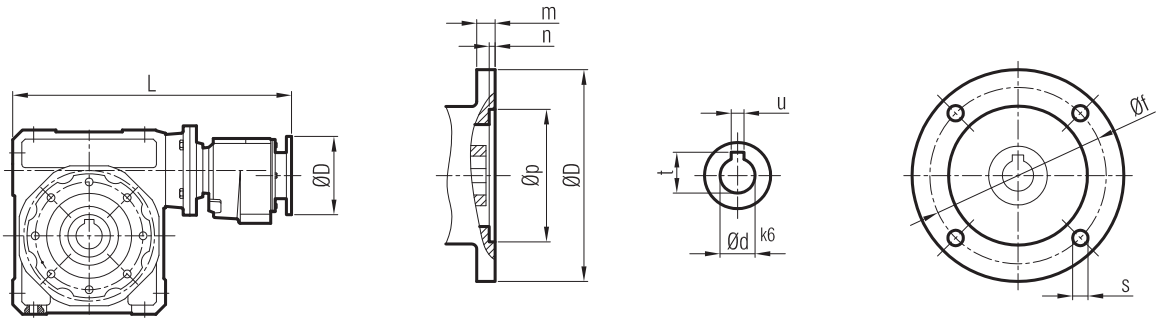


İRSAM 127 İR 43



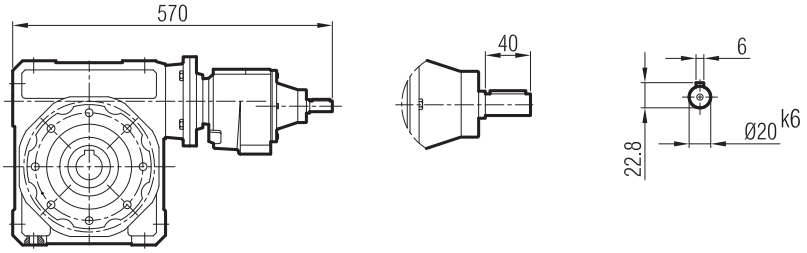
	A
71	672

İRSAP 127 İR 43

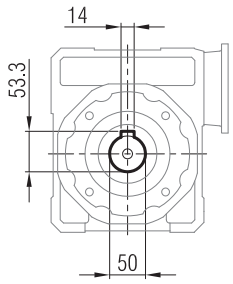


IEC B5	L	m	n	p	f	D	d	t	u	s
71	497	9	4	110	130	160	14	16.3	5	M8

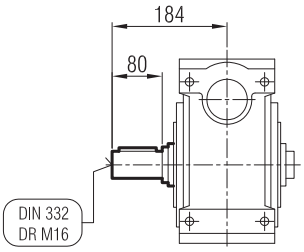
IRSA 127 IR 43



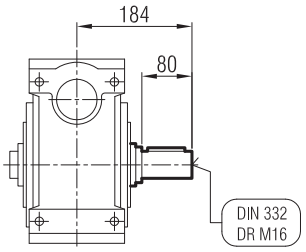
İRSAM / İRSAP / İRSA



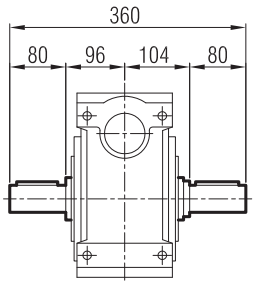
- SR



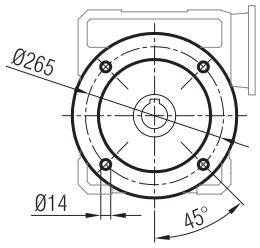
- SL



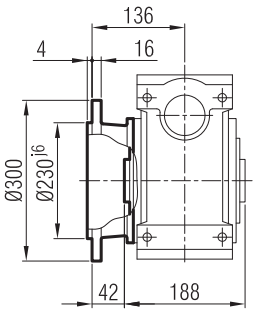
- SD



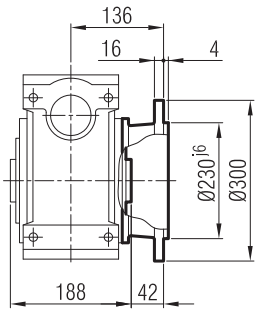
İRSFM / İRSFP / İRSF



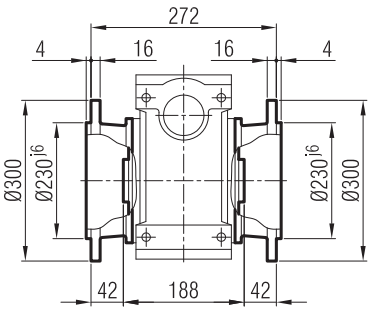
- FR



- FL

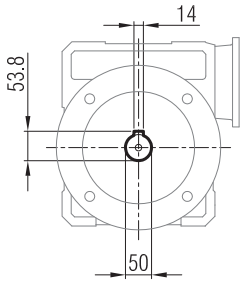


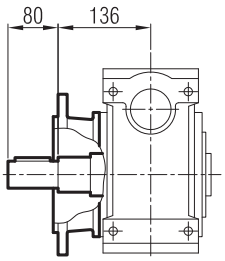
- FD



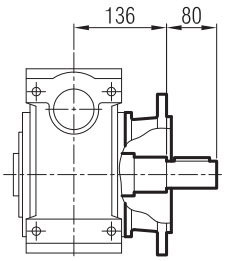
İRSFM / İRSFP / İRSF

- FR - SR

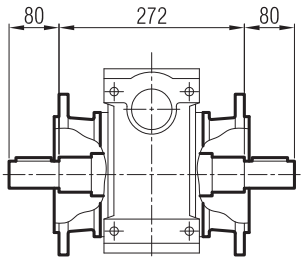




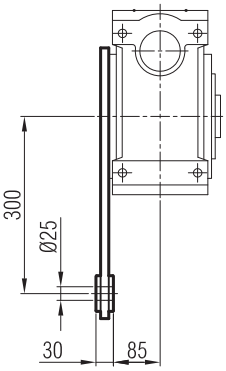
- FL - SL



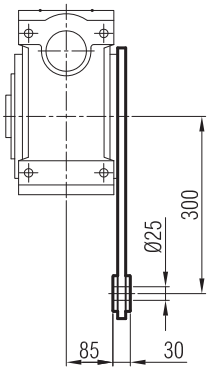
- FD - SD

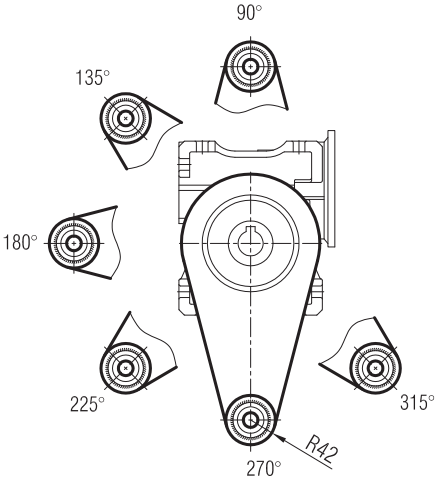


- TR

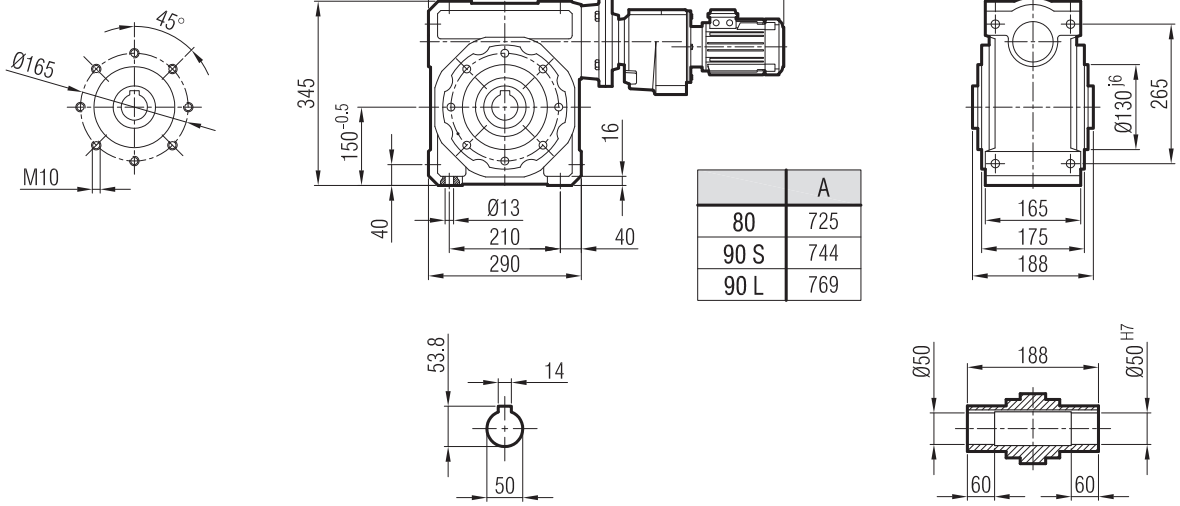


- TL



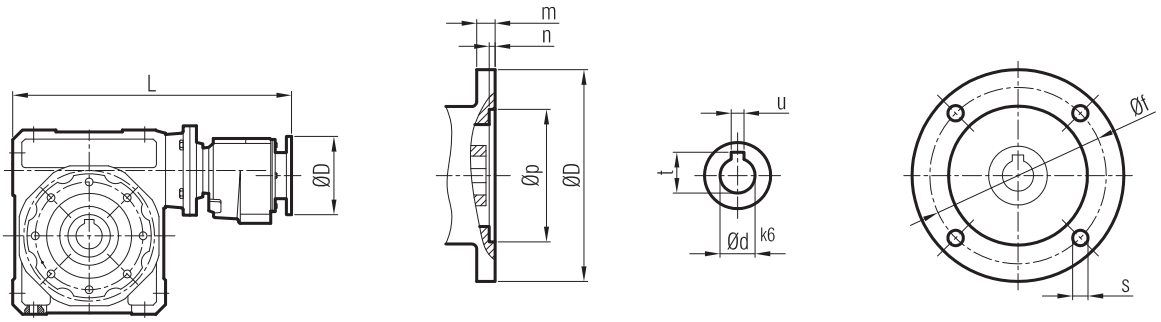


İRSAM 127 İR 52



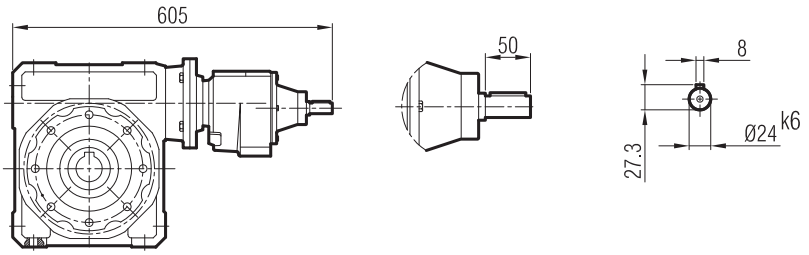
	A
80	725
90 S	744
90 L	769

İRSAP 127 İR 52

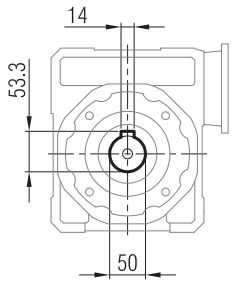


IEC B5	L	m	n	p	f	D	d	t	u	s
80	572	12	5	130	165	200	19	21.8	6	M10
90	572	12	5	130	165	200	24	27.3	8	M10

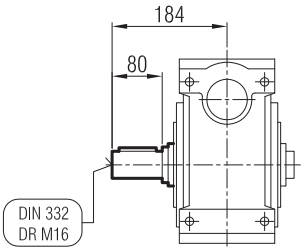
İRSA 127 İR 52



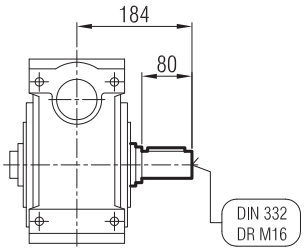
İRSAM / İRSAP / İRSA



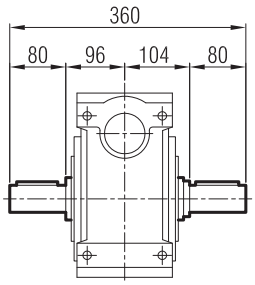
- SR



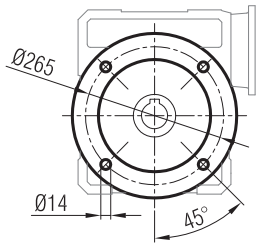
- SL



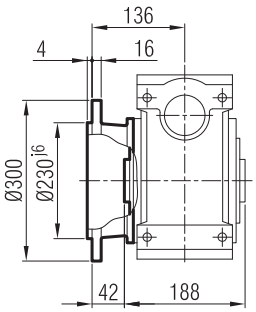
- SD



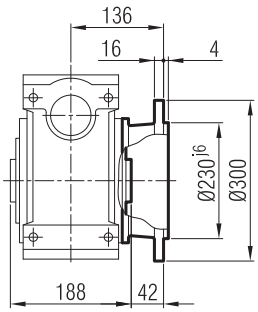
İRSFM / İRSFP / İRSF



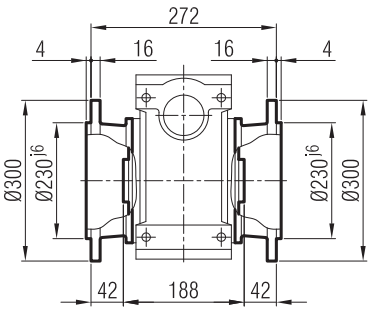
- FR



- FL

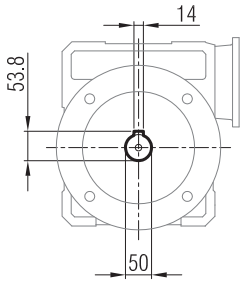


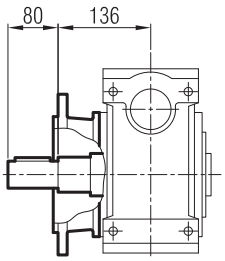
- FD



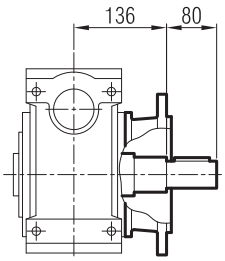
İRSFM / İRSFP / İRSF

- FR - SR

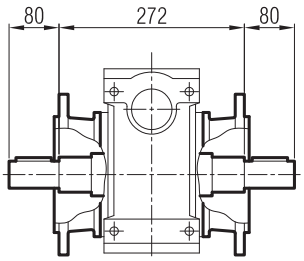




- FL - SL



- FD - SD



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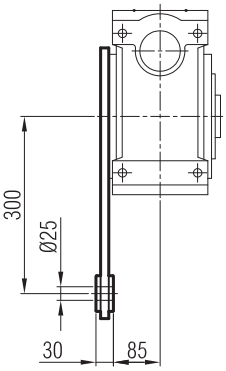
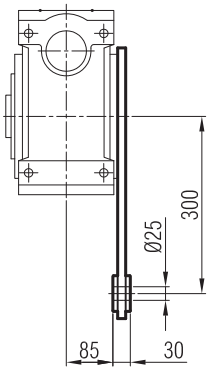
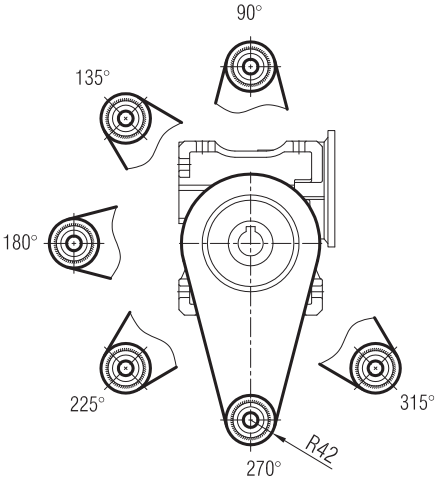
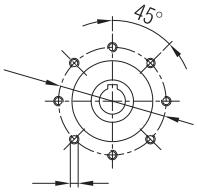


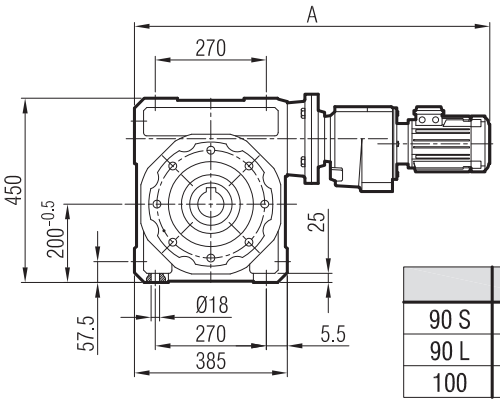
- TL





İRSAM 162 İR 63
İRSAM 162 İR 62





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90 L	887
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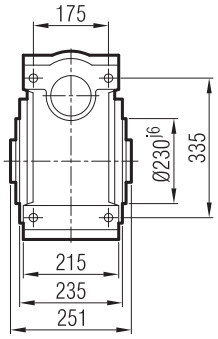
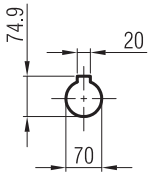
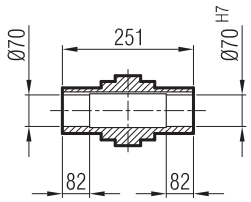
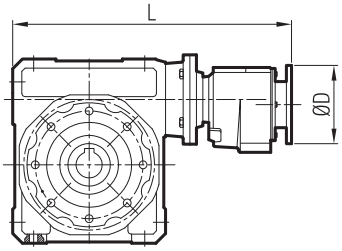
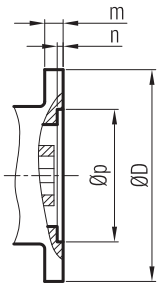


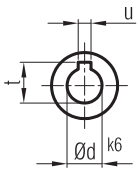


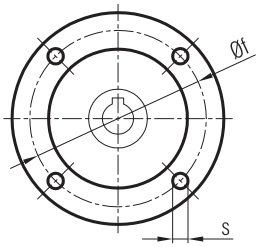


İRSAP 162 İR 63
İRSAP 162 İR 62



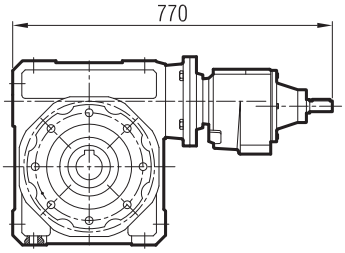


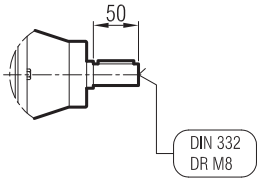


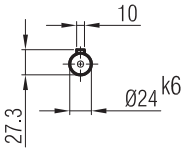


IEC B5	L	m	n	p	f	D	d	t	u	s
90	677	12	5	130	165	200	24	27.3	8	M10
100	690	14	5	180	215	250	28	31.3	8	M12

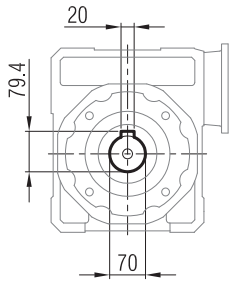
İRSA 162 İR 63
İRSA 162 İR 62



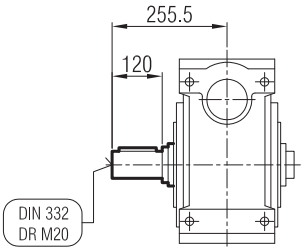




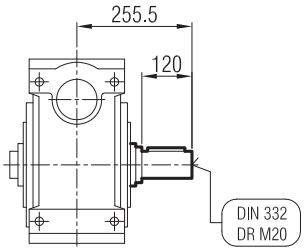
İRSAM / İRSAP / İRSA



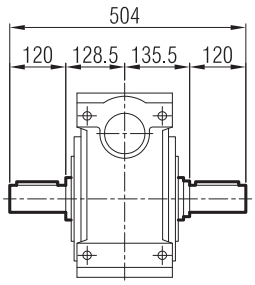
- SR



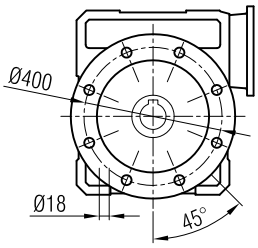
- SL



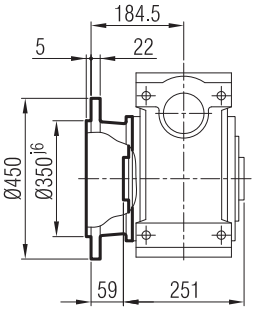
- SD



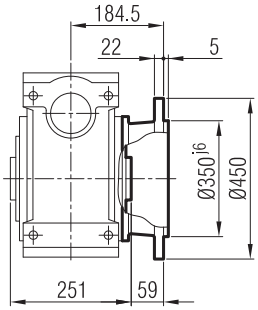
İRSFM / İRSFP / İRSF



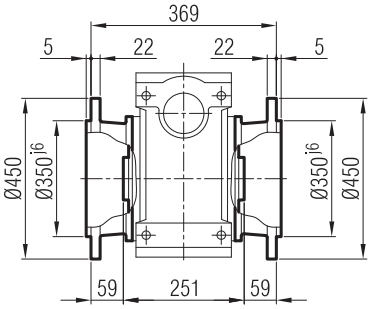
- FR



- FL

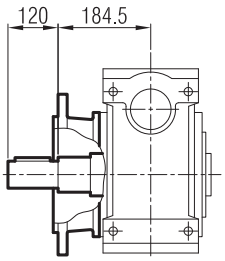


- FD

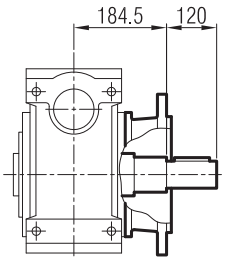


İRSFM / İRSFP / İRSF

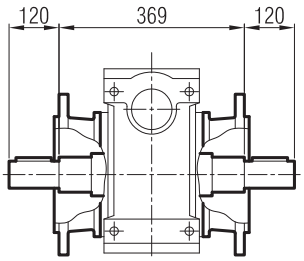
- FR - SR

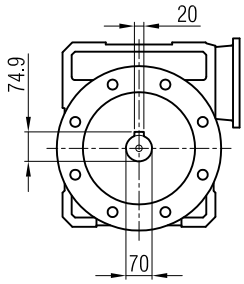


- FL - SL

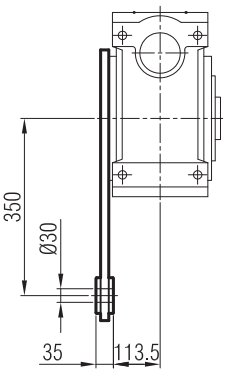


- FD - SD

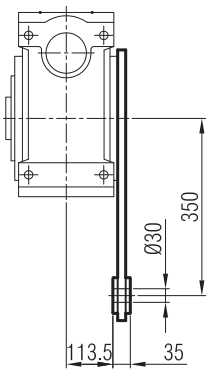


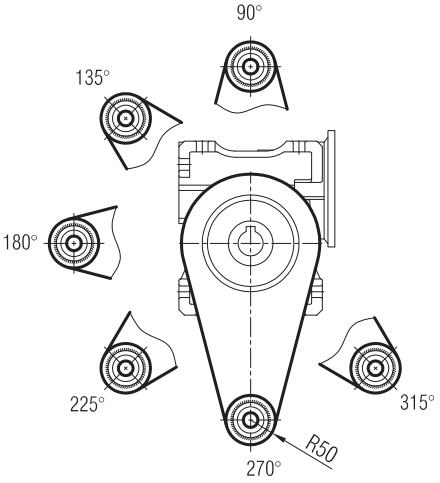


- TR

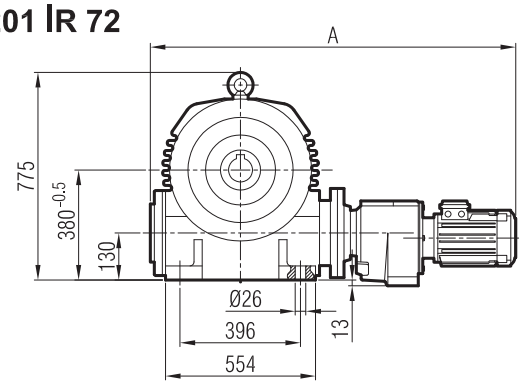


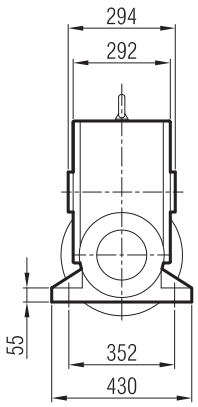
- TL

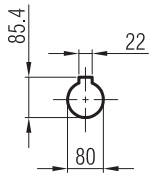




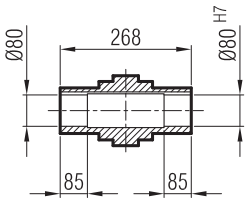
IRSAM 201 IR 72



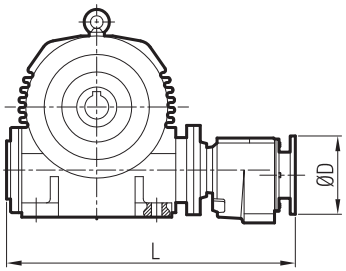


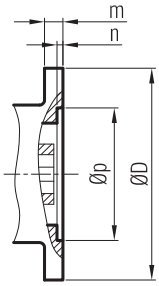


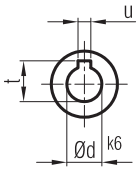
	A
100	1080
112	1282

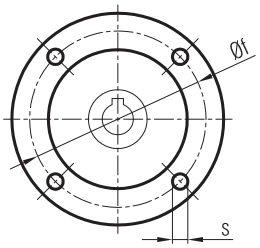


IRSAP 201 IR 72









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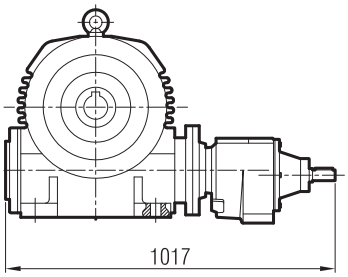
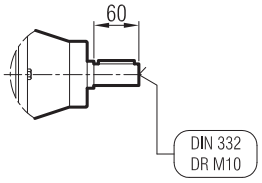
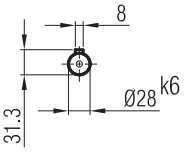
112	924	14	5	180	215	250	28	31.3	8	M12

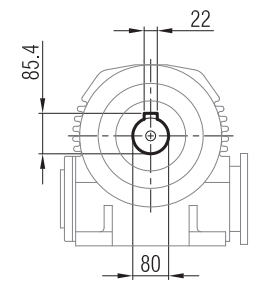
IRSA 201 IR 72



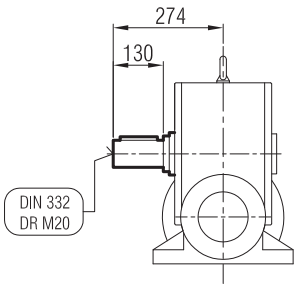




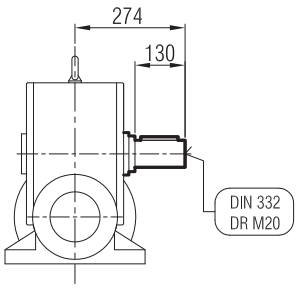
İRSAM / İRSA



- SR



- SL



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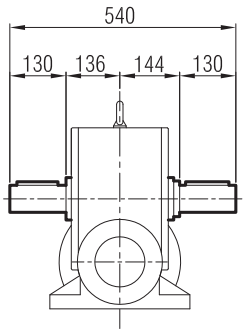

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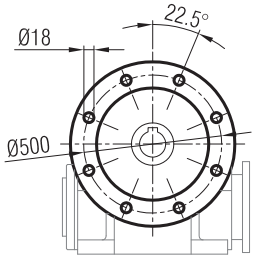

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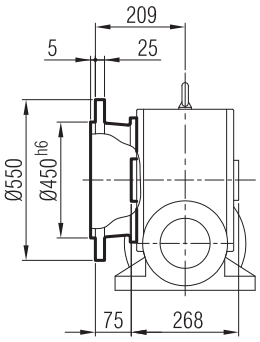

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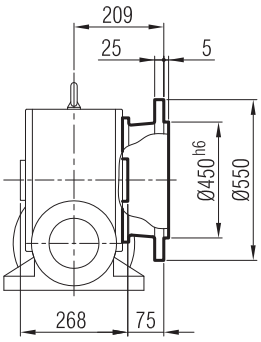

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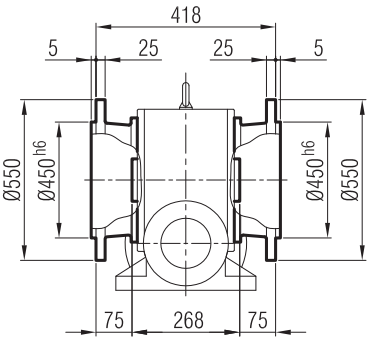

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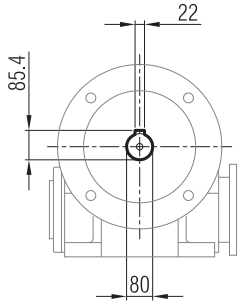

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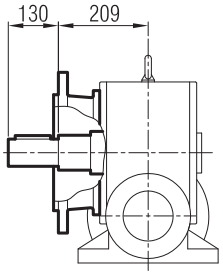

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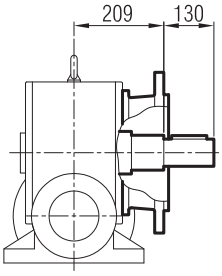
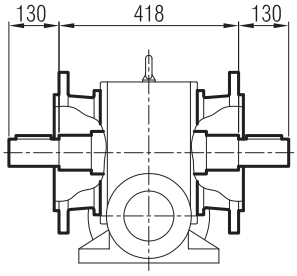


- FD - SD



Helisel Sonsuz Vidali Motorlu Redüktörler Güç ve Devir Tablolari

Helical Worm Geared Motors - Performances Tables

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

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
	285,89	62	3,15	2,00	323	3,8	2,4	264	9900	**İRSDPM İRSDFPM**	**63 / 71 M 6a**	151 152	34 37
	267,58	62	3,36	2,10	302	4,1	2,5	247	9900				
	228,74	53	3,93	2,70	293	4,8	3,2	239	9900	**İRSDM İRSDFM**	**63 / 71 M 6a**	151 152	34 37
	210,26	62	4,28	2,60	237	5,2	3,1	194	9900				
0,18	179,74	53	5,01	3,30	230	6,1	4,0	188	9900				
0,25	271,89	82	3,31	0,95	286	4,0	1,1	234	6150				
	238,19		3,78	1,07	251	4,6	1,3	205	6150				
	205,58	62	4,38	1,36	209	5,4	1,6	171	6150	**İRSDM İRSDFM**	**53 / 71 M 6a**	149 150	16 18
	180,10		5,00	1,51	183	6,1	1,8	150	6150				
	165,79	50	5,43	1,83	203	6,6	2,2	166	6150				
	145,24		6,20	2,00	178	7,6	2,4	145	6150				
	429,05	106	2,10	2,90	661	2,6	3,5	541	21000				
	382,52		2,35	3,10	590	2,9	3,7	482	21000	**İRSDM İRSDFM**	**83 / 71 M 6b**	155 156	83 91
	343,44		2,62	3,40	529	3,2	4,1	433	21000				
	335,95	83	2,68	4,00	544	3,3	4,8	445	21000				
	285,89	62	3,15	1,44	448	3,8	1,7	367	9900	**İRSDPM İRSDFPM**	**63 / 71 M 6b**	151 152	34 37
	267,58	62	3,36	1,51	420	4,1	1,8	343	9900				
	228,74	53	3,93	1,94	406	4,8	2,3	333	9900	**İRSDM İRSDFM**	**63 / 71 M 6b**	151 152	34 37
	210,26	62	4,28	1,87	330	5,2	2,2	270	9900				
	179,74	53	5,01	2,38	319	6,1	2,9	261	9900				
	285,89	62	4,90	2,10	288	5,9	2,5	237	9900	**İRSDPM İRSDFPM**	**63 / 71 M 4a**	151 152	33 36
	267,58	62	5,23	2,20	270	6,4	2,6	222	9900				
	228,74	53	6,12	2,80	261	7,4	3,4	215	9900	**İRSDM İRSDFM**	**63 / 71 M 4a**	151 152	33 36
	210,26	62	6,66	2,70	212	8,1	3,2	175	9900				
	179,74	53	7,79	3,40	205	9,5	4,1	169	9900				
	169,93	62	8,24	3,10	171	10	3,7	141	9900				
0,25	238,19	82	3,78	0,77	349	4,6	0,92	285	6100				
0,34	205,58	62	4,38	0,98	290	5,4	1,2	237	6100				
	180,10		5,00	1,08	254	6,1	1,3	208	6100				
	165,79	50	5,43	1,32	282	6,6	1,6	230	6100	**İRSDM İRSDFM**	**53 / 71 M 6b**	149 150	17 19
	145,24		6,20	1,44	247	7,6	1,7	202	6100				
	129,32	39	6,96	2,70	220	8,5	3,2	180	6100				
	113,29		7,94	2,10	192	9,7	2,5	157	6100				
	100,04		9,00	2,30	170	11	2,8	139	6100				
	271,89	82	5,15	0,99	256	6,3	1,2	211	6100				
	238,19		5,88	1,11	224	7,1	1,3	185	6100				
	205,58	62	6,81	1,39	186	8,3	1,7	154	6100				
	180,10		7,77	1,51	163	9,4	1,8	135	6100				
	165,79	50	8,44	1,91	181	10	2,3	149	6100	**İRSDM İRSDFM**	**53 / 71 M 4a**	149 150	15 17
	145,24		9,64	2,10	159	12	2,5	131	6100				
	129,32	39	10,83	2,60	141	13	3,1	116	6100				
	113,29		12,36	2,90	124	15	3,5	102	6100				
	100,04		13,99	3,20	109	17	3,8	90	6100				
	88,92	50	15,74	3,50	97	19	4,2	80	6100				
	79,44		17,62	3,80	87	21	4,6	71	6100				
	429,05	106	2,10	1,96	979	2,6	2,4	801	21000				
	382,52		2,35	2,09	873	2,9	2,5	714	21000				
0,37	343,44		2,62	2,30	784	3,2	2,8	641	21000	**İRSDM İRSDFM**	**83 / 80 M 6a**	155 156	89 99
0,5	335,95	83	2,68	2,70	806	3,3	3,2	659	21000				
	299,52		3,00	2,84	718	3,7	3,4	588	21000				
	263,10	65	3,42	3,72	661	4,2	4,5	541	21000				
	234,57		3,84	4,01	590	4,7	4,8	482	21000				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					kg
	429,05	106	3,26	2,80	629	4,0	3,4	518	21000	**İRSDPM İRSDFPM**	**83 / 71 M 4b**	155 156	77 87
	382,52		3,66	3,00	561	4,4	3,6	462	21000				
	343,44		4,08	3,30	504	4,9	4,0	415	21000				
	335,95	83	4,17	3,80	518	5,1	4,6	426	21000				
	340,95	82	2,64	1,43	791	3,2	1,7	647	15250	**İRSDM İRSDFM**	**73 / 80 M 6a**	153 154	58 63
	300,67		2,99	1,59	698	3,7	1,9	571	15250				
	261,95	63	3,44	2,00	628	4,2	2,4	514	15250				
	231,00		3,90	2,20	554	4,8	2,6	453	15250				
	207,89	50	4,33	2,70	555	5,3	3,2	454	15250				
	340,95	82	4,11	2,00	509	5,0	2,4	419	15250	**İRSDM İRSDFM**	**73 / 71 M 4b**	153 154	56 61
	261,95	63	5,34	2,80	404	6,5	3,4	333	15250				
	285,89	62	3,15	0,97	663	3,8	1,2	543	9800	**İRSDPM İRSDFPM**	**63 / 80 M 6a**	151 152	36 39
	267,58	62	3,36	1,02	621	4,1	1,2	508	9800	**İRSDM İRSDFM**	**63 / 80 M 6a**	151 152	36 39
	228,74	53	3,93	1,31	602	4,8	1,6	492	9800				
	210,26	62	4,28	1,26	488	5,2	1,5	399	9800				
	179,74	53	5,01	1,61	473	6,1	1,9	387	9800				
	285,89	62	4,90	1,42	426	5,9	1,7	351	9800	**İRSDPM İRSDFPM**	**63 / 71 M 4b**	151 152	33 36
	267,58	62	5,23	1,49	399	6,4	1,8	329	9800	**İRSDM İRSDFM**	**63 / 71 M 4b**	151 152	33 36
	228,74	53	6,12	1,89	387	7,4	2,3	318	9800				
	210,26	62	6,66	1,82	314	8,1	2,2	258	9800				
0,37 0,5	179,74	53	7,79	2,30	304	9,5	2,8	250	9800				
	169,93	62	8,24	2,09	253	10	2,5	209	9800				
	145,26	53	9,64	2,77	246	12	3,3	202	9800				
	135,57	40	10,33	3,18	226	13	3,8	186	9800				
	131,59	53	10,64	2,97	222	13	3,6	183	9800				
	109,63	40	12,77	3,72	183	16	4,5	150	9800				
	165,79	50	5,43	0,89	417	6,6	1,1	341	6040	**İRSDM İRSDFM**	**53 / 80 M 6a**	149 150	17 19
	145,24		6,20	0,97	365	7,6	1,2	299	6040				
	129,32	39	6,96	1,80	325	8,5	2,2	266	6040				
	113,29		7,94	1,41	285	9,7	1,7	233	6040				
	100,04		9,00	1,53	251	11	1,8	206	6040				
	205,58	62	6,81	0,94	276	8,3	1,1	227	6040	**İRSDM İRSDFM**	**53 / 71 M 4b**	149 150	16 18
	180,10		7,77	1,02	242	9,4	1,2	199	6040				
	165,79	50	8,44	1,29	268	10	1,5	221	6040				
	145,24		9,64	1,41	235	12	1,7	193	6040				
	129,32	39	10,83	1,80	209	13	2,2	172	6040				
	113,29		12,36	1,99	183	15	2,4	151	6040				
	100,04		13,99	2,20	162	17	2,6	133	6040				
	88,92		15,74	2,40	144	19	2,9	118	6040				
	79,44		17,62	2,60	134	21	3,1	111	6040				
	68,40	30	20,47	2,90	116	25	3,5	95	6040				
	61,11		22,91	3,20	103	28	3,8	85	6040				
	54,83		25,53	3,40	93	31	4,1	76	6040				
	49,35		28,37	3,70	83	34	4,4	69	6040				
	429,05	106	2,10	1,32	1554	2,6	1,6	1271	21000	**İRSDM İRSDFM**	**83 / 80 M 6b**	155 156	90 100
	382,52		2,35	1,41	1385	2,9	1,7	1133	21001				
	343,44		2,62	1,55	1244	3,2	1,9	1018	21002				
0,55 0,75	335,95	83	2,68	1,82	1197	3,3	2,2	980	21003				
	299,52		3,00	1,91	1068	3,7	2,3	873	21004				
	263,10	65	3,42	2,50	983	4,2	3,0	804	21005				
	234,57		3,84	2,70	876	4,7	3,2	717	21006				
	210,48	52	4,28	3,40	871	5,2	4,1	713	21007				
	187,65		4,80	3,70	777	5,9	4,4	635	21008				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					kg
	429,05	106	3,26	1,88	999	4,0	2,3	823	21000	İRSDM İRSDFM	83 / 80 M 4a	155 156	88 98
	382,52		3,66	2,02	891	4,4	2,4	733	21000				
	343,44		4,08	2,22	800	4,9	2,7	658	21000				
	335,95	83	4,17	2,56	770	5,1	3,1	634	21000				
	299,52		4,67	2,83	686	5,7	3,4	565	21000				
	263,10	65	5,32	3,43	603	6,5	4,1	496	21000				
	234,57		5,97	3,76	563	7,2	4,5	464	21000				
	340,95	82	2,64	0,96	1176	3,2	1,2	962	15170	İRSDM İRSDFM	73 / 80 M 6b	153 154	58 63
	300,67		2,99	1,07	1037	3,7	1,3	848	15170				
	261,95	63	3,44	1,35	934	4,2	1,6	764	15170				
	231,00		3,90	1,48	823	4,8	1,8	674	15170				
	207,89	50	4,33	1,82	825	5,3	2,2	675	15170				
	340,95	82	4,11	1,35	756	5,0	1,6	623	15170	İRSDM İRSDFM	73 / 80 M 4a	153 154	57 62
	300,67		4,66	1,55	667	5,7	1,9	549	15170				
	261,95	63	5,34	1,88	600	6,5	2,3	494	15170				
	231,00		6,06	2,09	529	7,4	2,5	436	15170				
	207,89	50	6,73	2,69	530	8,2	3,2	437	15170				
	183,33		7,64	2,96	467	9,3	3,6	385	15170				
	163,04		8,59	3,23	416	10	3,9	342	15170				
	145,24		9,64	3,48	370	12	4,2	305	15170				
	128,26		10,92	3,80	327	13	4,6	269	15170				
	228,74	53	3,93	0,88	894	4,8	1,1	732	9670	İRSDM İRSDFM	63 / 80 M 6b	151 152	36 39
	210,26	62	4,28	0,85	725	5,2	1,0	593	9670				
	179,74	53	5,01	1,08	703	6,1	1,3	575	9670				
	285,89	62	4,90	0,95	634	5,9	1,1	522	9670	İRSDPM İRSDFPM	63 / 80 M 4a	151 152	36 39
0,55 0,75	267,58	62	5,23	1,00	593	6,4	1,2	489	9670	İRSDM İRSDFM	63 / 80 M 4a	151 152	36 39
	228,74	53	6,12	1,27	575	7,4	1,5	473	9670				
	210,26	62	6,66	1,23	466	8,1	1,5	384	9670				
	179,74	53	7,79	1,55	452	9,5	1,9	372	9670				
	169,93	62	8,24	1,41	377	10	1,7	310	9670				
	145,26	53	9,64	1,86	365	12	2,2	301	9670				
	135,57	40	10,33	2,14	336	13	2,6	276	9670				
	131,59	53	10,64	2,00	331	13	2,4	272	9670				
	109,63	40	12,77	2,50	271	16	3,0	224	9670				
	101,74	30	13,76	3,12	271	17	3,7	223	9670				
	99,31	40	14,10	2,68	246	17	3,2	202	9670				
	90,32		15,50	2,86	224	19	3,4	184	9670				
	82,22	30	17,03	3,68	219	21	4,4	180	9670				
	75,43	40	18,56	3,22	187	23	3,9	154	9670				
	63,59		22,02	3,60	157	27	4,3	130	9670				
	60,74		23,05	3,70	150	28	4,4	124	9670				
	129,32	39	6,96	0,84	483	8,5	1,0	395	5890	İRSDM İRSDFM	53 / 80 M 6b	149 150	19 21
	113,29		7,94	0,95	423	9,7	1,1	346	5890				
	100,04		9,00	1,03	374	11	1,2	306	5890				
	165,79	50	8,44	0,87	398	10	1,0	328	5890	İRSDM İRSDFM	53 / 80 M 4a	149 150	18 20
	145,24		9,64	0,95	349	12	1,1	287	5891				
	129,32	39	10,83	1,21	311	13	1,5	256	5890				
	113,29		12,36	1,34	272	15	1,6	224	5890				
	100,04		13,99	1,47	240	17	1,8	198	5890				
	88,92		15,74	1,60	214	19	1,9	176	5890				
	79,44		17,62	1,73	191	21	2,1	157	5890				
	76,96	30	18,19	1,86	193	22	2,2	159	5890				
	68,40		20,47	1,99	172	25	2,4	142	5890				
	61,11		22,91	2,10	154	28	2,5	126	5890				
	54,83		25,53	2,30	138	31	2,8	113	5890				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	50 Hz S_f Service Factor *Factor de servicio*	50 Hz M_2 Output Torque *Par de salida* [Nm]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m]	60 Hz S_f Service Factor *Factor de servicio*	60 Hz M_2 Output Torque *Par de salida* [Nm]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
0,55 0,75	49,35	30	**28,37**	2,50	124	**34**	3,0	102	5890	**İRSDM İRSDFM**	**53 / 80 M 4a**	149 150	18 20
	44,55		**31,43**	2,70	112	**38**	3,2	92	5890				
	40,29		**34,75**	2,80	101	**42**	3,4	83	5890				
	38,28		**36,58**	2,90	96	**44**	3,5	79	5890				
	33,87		**41,33**	3,10	85	**50**	3,7	70	5890				
	30,56	15	**45,82**	3,00	88	**56**	3,6	73	5890				
	27,41		**51,07**	3,30	79	**62**	4,0	65	5890				
	24,68		**56,73**	3,50	71	**69**	4,2	59	5890				
	22,27		**62,86**	3,80	64	**76**	4,6	53	5890				
0,75 1	370,90	87	**2,43**	2,49	1832	**3,0**	3,0	1499	25200	**İRSDPM İRSDFPM**	**161 / 90 S 6a**	157 158	173 183
	327,29		**2,75**	2,79	1616	**3,4**	3,3	1322	25200				
	291,26		**3,09**	3,28	1438	**3,8**	3,9	1177	25200				
	429,05	106	**2,10**	0,97	2119	**2,6**	1,2	1734	21000	**İRSDM İRSDFM**	**83 / 90 S 6a**	155 156	93 103
	382,52		**2,35**	1,03	1889	**2,9**	1,2	1546	21001				
	343,44		**2,62**	1,13	1696	**3,2**	1,4	1388	21002				
	335,95	83	**2,68**	1,33	1633	**3,3**	1,6	1336	21003				
	299,52		**3,00**	1,40	1456	**3,7**	1,7	1191	21004				
	263,10	65	**3,42**	1,83	1341	**4,2**	2,2	1097	21005				
	234,57		**3,84**	1,98	1195	**4,7**	2,4	978	21006				
	210,48	52	**4,28**	2,49	1188	**5,2**	3,0	972	21007				
	187,65		**4,80**	2,71	1059	**5,9**	3,3	867	21008				
	429,05	106	**3,26**	1,38	1362	**4,0**	1,7	1122	21000	**İRSDM İRSDFM**	**83 / 80 M 4b**	155 156	91 101
	382,52		**3,66**	1,48	1214	**4,4**	1,8	1000	21001				
	343,44		**4,08**	1,63	1090	**4,9**	2,0	898	21002				
	335,95	83	**4,17**	1,87	1067	**5,1**	2,2	878	21003				
	299,52		**4,67**	2,07	951	**5,7**	2,5	783	21004				
	263,10	65	**5,32**	2,52	835	**6,5**	3,0	688	21005				
	234,57		**5,97**	2,76	745	**7,2**	3,3	613	21006				
	210,48	52	**6,65**	3,60	668	**8,1**	4,3	550	21007				
	187,65		**7,46**	3,88	596	**9,1**	4,7	491	21008				
	300,67	82	**2,99**	0,78	1414	**3,7**	0,94	1157	15060	**İRSDM İRSDFM**	**73 / 90 S 6a**	153 154	61 66
	261,95	63	**3,44**	0,99	1273	**4,2**	1,2	1042	15060				
	231,00		**3,90**	1,09	1123	**4,8**	1,3	919	15060				
	207,89	50	**4,33**	1,33	1124	**5,3**	1,6	920	15060				
	340,95	82	**4,11**	0,99	1031	**5,0**	1,2	849	15060	**İRSDM İRSDFM**	**73 / 80 M 4b**	153 154	58 63
	300,67		**4,66**	1,13	909	**5,7**	1,4	749	15060				
	261,95	63	**5,34**	1,38	818	**6,5**	1,7	674	15060				
	231,00		**6,06**	1,53	722	**7,4**	1,8	594	15060				
	207,89	50	**6,73**	1,97	723	**8,2**	2,4	595	15060				
	183,33		**7,64**	2,17	637	**9,3**	2,6	525	15060				
	163,04		**8,59**	2,37	567	**10**	2,8	467	15060				
	145,24		**9,64**	2,55	505	**12**	3,1	416	15060				
	128,26		**10,92**	2,79	446	**13**	3,3	367	15060				
	116,19	40	**12,05**	3,43	422	**15**	4,1	347	15060				
	102,61		**13,64**	3,73	372	**17**	4,5	307	15060				
	228,74	62	**6,12**	0,93	692	**7,4**	1,1	570	9490	**İRSDM İRSDFM**	**63 / 80 M 4b**	151 152	37 40
	210,26		**6,66**	0,90	636	**8,1**	1,1	524	9491				
	179,74	53	**7,79**	1,13	616	**9,5**	1,4	507	9492				
	169,93	62	**8,24**	1,03	514	**10**	1,2	423	9493				
	145,26	53	**9,64**	1,37	498	**12**	1,6	410	9494				
	135,57	62	**10,33**	1,57	410	**13**	1,9	338	9495				
	131,59	53	**10,64**	1,47	451	**13**	1,8	371	9496				
	109,63	40	**12,77**	1,83	370	**16**	2,2	305	9497				
	101,74	53	**13,76**	2,29	349	**17**	2,7	287	9498				
	99,31	40	**14,10**	1,97	335	**17**	2,4	276	9499				
	90,32		**15,50**	2,10	305	**19**	2,5	251	9500				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					kg
	82,22	30	17,03	2,70	298	21	3,2	246	9501				
	75,43	40	18,56	2,36	255	23	2,8	210	9502				
	74,48	30	18,80	2,90	270	23	3,5	223	9503				
	67,74		20,67	3,08	246	25	3,7	202	9504				
	63,59	40	22,02	2,64	215	27	3,2	177	9505	**İRSDM İRSDFM**	**63 / 80 M 4b**	151	37
	60,74		23,05	2,71	205	28	3,3	169	9506			152	40
	56,57	30	24,75	3,52	205	30	4,2	169	9507				
	53,79	40	26,03	2,90	182	32	3,5	150	9508				
	47,69	30	29,36	3,81	173	36	4,6	143	9509				
	129,32	39	10,83	0,89	424	13	1,1	349	5650				
	113,29		12,36	0,98	371	15	1,2	306	5650				
	100,04		13,99	1,08	328	17	1,3	270	5650				
	88,92		15,74	1,17	291	19	1,4	240	5650				
	79,44		17,62	1,27	260	21	1,5	214	5650				
0,75	76,96	30	18,19	1,37	264	22	1,6	217	5650				
1	68,40		20,47	1,46	234	25	1,8	193	5650				
	61,11		22,91	1,58	209	28	1,9	172	5650				
	54,83		25,53	1,70	188	31	2,0	155	5650				
	49,35		28,37	1,82	169	34	2,2	139	5650	**İRSDM İRSDFM**	**53 / 80 M 4b**	149	19
	44,55		31,43	1,97	153	38	2,4	126	5650			150	21
	40,29		34,75	2,10	138	42	2,5	114	5650				
	38,28		36,58	2,10	131	44	2,5	108	5650				
	33,87		41,33	2,30	116	50	2,8	96	5650				
	30,56	15	45,82	2,20	120	56	2,6	99	5650				
	27,41		51,07	2,40	108	62	2,9	89	5650				
	24,68		56,73	2,60	97	69	3,1	80	5650				
	22,27		62,86	2,80	88	76	3,4	72	5650				
	20,14		69,51	2,90	79	84	3,5	65	5650				
	19,14		73,16	3,00	75	89	3,6	62	5650				
	16,94		82,67	3,20	67	100	3,8	55	5650				
	370,90	87	2,43	1,70	2686	3,0	2,0	2198	25000				
	327,29		2,75	1,90	2371	3,4	2,3	1940	25000				
	291,26		3,09	2,06	2110	3,8	2,5	1726	25000				
	261,00		3,45	2,24	1890	4,2	2,7	1547	25000	**İRSDPM İRSDFPM**	**161 / 90 L 6b**	157	168
	230,21	54	3,91	3,25	1932	4,8	3,9	1581	25000			158	178
	203,14		4,43	3,61	1705	5,4	4,3	1395	25000				
	180,78		4,98	3,94	1517	6,1	4,7	1241	25000				
	162,00		5,56	4,30	1360	6,8	5,2	1112	25000				
	335,95	83	2,68	0,91	2395	3,3	1,1	1959	20750				
	299,52		3,00	0,95	2135	3,7	1,1	1747	20750				
	263,10	65	3,42	1,25	1966	4,2	1,5	1609	20750	**İRSDM İRSDFM**	**83 / 90 L 6b**	155	95
1,1	234,57		3,84	1,35	1753	4,7	1,6	1434	20750			156	105
1,5	210,48	52	4,28	1,70	1742	5,2	2,0	1426	20750				
	187,65		4,80	1,85	1553	5,9	2,2	1271	20750				
	429,05	106	3,26	0,94	1998	4,0	1,1	1645	20750				
	382,52		3,66	1,01	1781	4,4	1,2	1467	20751				
	343,44		4,08	1,11	1599	4,9	1,3	1317	20752				
	335,95	83	4,17	1,28	1539	5,1	1,5	1268	20753				
	299,52		4,67	1,41	1373	5,7	1,7	1130	20754				
	263,10	65	5,32	1,72	1264	6,5	2,1	1041	20755	**İRSDM İRSDFM**	**83 / 90 S 4a**	155	93
	234,57		5,97	1,88	1127	7,2	2,3	928	20756			156	103
	210,48	52	6,65	2,45	1120	8,1	2,9	922	20757				
	187,65		7,46	2,65	999	9,1	3,2	822	20758				
	161,90		8,65	3,40	862	11	4,1	710	20759				
	144,35		9,70	3,70	768	12	4,4	633	20760				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
	300,67	82	4,66	0,77	1333	5,7	0,93	1098	14750				
	261,95	63	5,34	0,94	1200	6,5	1,1	989	14750				
	231,00		6,06	1,04	1059	7,4	1,3	872	14750				
	207,89	50	6,73	1,35	1060	8,2	1,6	873	14750				
	183,33		7,64	1,48	935	9,3	1,8	770	14750				
	163,04		8,59	1,61	831	10	1,9	685	14750				
	145,24		9,64	1,74	741	12	2,1	610	14750	**İRSDM**	**73 / 90 S 4a**	153	61
	128,26		10,92	1,90	654	13	2,3	539	14750	**İRSDFM**		154	67
	116,19	40	12,05	2,34	618	15	2,8	509	14750				
	102,61		13,64	2,54	546	17	3,0	450	14750				
	91,20		15,35	2,80	485	19	3,4	400	14750				
	87,14	30	16,07	3,20	477	20	3,8	393	14750				
	76,96		18,19	3,50	421	22	4,2	347	14750				
	68,40		20,47	3,80	374	25	4,6	308	14750				
	145,26	53	9,64	0,93	730	12	1,1	601	9250				
	135,57	62	10,33	1,07	601	13	1,3	495	9250				
	131,59	53	10,64	1,00	661	13	1,2	545	9250				
	109,63	40	12,77	1,25	543	16	1,5	447	9250				
	101,74	53	13,76	1,56	511	17	1,9	421	9250				
	99,31	40	14,10	1,34	492	17	1,6	405	9250				
	90,32		15,50	1,43	447	19	1,7	368	9250				
	82,22	30	17,03	1,84	438	21	2,2	360	9250				
	75,43	40	18,56	1,61	374	23	1,9	308	9250	**İRSDM**	**63 / 90 S 4a**	151	58
1,1	74,48	30	18,80	1,98	396	23	2,4	326	9250	**İRSDFM**		152	61
1,5	67,74		20,67	2,10	360	25	2,5	297	9250				
	63,59	40	22,02	1,80	315	27	2,2	259	9250				
	60,74		23,05	1,85	301	28	2,2	248	9250				
	56,57	30	24,75	2,40	301	30	2,9	248	9250				
	53,79	40	26,03	1,98	266	32	2,4	219	9250				
	47,69	30	29,36	2,60	254	36	3,1	209	9250				
	45,56		30,73	2,70	242	37	3,2	200	9250				
	40,34		34,70	2,90	215	42	3,5	177	9250				
	88,92	39	15,74	0,80	427	19	0,96	352	5400				
	79,44		17,62	0,86	382	21	1,0	314	5400				
	76,96	30	18,19	0,93	387	22	1,1	319	5400				
	68,40		20,47	1,00	344	25	1,2	283	5400				
	61,11		22,91	1,08	307	28	1,3	253	5400				
	54,83		25,53	1,16	276	31	1,4	227	5400				
	49,35		28,37	1,24	248	34	1,5	204	5400				
	44,55		31,43	1,34	224	38	1,6	184	5400				
	40,29		34,75	1,42	202	42	1,7	167	5400	**İRSDM**	**53 / 90 S 4a**	149	22
	38,28		36,58	1,45	192	44	1,7	158	5400	**İRSDFM**		150	24
	33,87		41,33	1,57	170	50	1,9	140	5400				
	30,56	15	45,82	1,54	176	56	1,8	145	5400				
	27,41		51,07	1,65	158	62	2,0	130	5400				
	24,68		56,73	1,78	142	69	2,1	117	5400				
	22,27		62,86	1,90	128	76	2,3	106	5400				
	20,14		69,51	2,00	116	84	2,4	96	5400				
	19,14		73,16	2,10	110	89	2,5	91	5400				
	16,94		82,67	2,20	98	100	2,6	80	5400				
	370,90	87	2,43	1,25	3663	3,0	1,5	2997	24700				
1,5	327,29		2,75	1,39	3233	3,4	1,7	2645	24700	**İRSDM**	**161 / 100 L 6a**	157	168
2	261,00		3,45	1,64	2578	4,2	2,0	2109	24700	**İRSDFM**		158	178
	235,22		3,83	1,76	2323	4,7	2,1	1901	24700				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					kg
	263,10	65	3,42	0,92	2681	4,2	1,1	2194	20000	**İRSDM İRSDFM**	**83 / 100 L 6a**	155 156	98 108
	234,57		3,84	0,99	2390	4,7	1,2	1956	20000				
	210,48	52	4,28	1,25	2376	5,2	1,5	1944	20000				
	187,65		4,80	1,36	2118	5,9	1,6	1733	20000				
	343,44	106	4,08	0,81	2181	4,9	0,98	1796	20000	**İRSDM İRSDFM**	**83 / 90 L 4a**	155 156	96 106
	335,95	83	4,17	0,94	2099	5,1	1,1	1729	20001				
	299,52	83	4,67	1,04	1872	5,7	1,2	1541	20000				
	263,10	65	5,32	1,26	1724	6,5	1,5	1419	20000				
	234,57		5,97	1,38	1537	7,2	1,7	1265	20000				
	210,48	52	6,65	1,80	1527	8,1	2,2	1258	20000				
	187,65		7,46	1,94	1362	9,1	2,3	1121	20000				
	161,90		8,65	2,50	1175	11	3,0	968	20000				
	144,35		9,70	2,70	1047	12	3,2	863	20000				
	129,60	40	10,80	2,94	967	13	3,5	796	20000				
	117,04		11,96	3,16	873	15	3,8	719	20000				
	104,00		13,46	3,38	776	16	4,1	639	20000				
	207,89	50	6,73	0,99	1446	8,2	1,2	1191	14440	**İRSDM İRSDFM**	**73 / 90 L 4a**	153 154	69 74
	183,33		7,64	1,09	1275	9,3	1,3	1050	14440				
	163,04		8,59	1,18	1134	10	1,4	934	14440				
	145,24		9,64	1,28	1010	12	1,5	832	14440				
	128,26		10,92	1,39	892	13	1,7	735	14440				
	116,19	40	12,05	1,72	843	15	2,1	694	14440				
	102,61		13,64	1,86	745	17	2,2	613	14440				
	91,20		15,35	2,05	662	19	2,5	545	14440				
	87,14	30	16,07	2,35	650	20	2,8	535	14440				
	76,96		18,19	2,57	574	22	3,1	473	14440				
1,5	68,40		20,47	2,79	510	25	3,3	420	14440				
	61,11		22,91	3,08	456	28	3,7	375	14440				
2	54,83		25,53	3,23	409	31	3,9	337	14440				
	49,35		28,37	3,37	368	34	4,0	303	14440				
	44,55		31,43	3,52	332	38	4,2	274	14440				
	40,29		34,75	3,81	300	42	4,6	247	14440				
	36,49		38,37	3,96	272	47	4,8	224	14440				
	109,63	40	12,77	0,92	740	16	1,1	610	8900	**İRSDM İRSDFM**	**63 / 90 L 4a**	151 152	40 43
	101,74	53	13,76	1,14	697	17	1,4	574	8900				
	99,31	40	14,10	0,98	671	17	1,2	552	8900				
	90,32		15,50	1,05	610	19	1,3	502	8900				
	82,22	30	17,03	1,35	597	21	1,6	491	8900				
	75,43	40	18,56	1,18	509	23	1,4	419	8900				
	74,48	30	18,80	1,45	540	23	1,7	445	8900				
	67,74		20,67	1,54	492	25	1,8	405	8900				
	63,59	40	22,02	1,32	429	27	1,6	354	8900				
	60,74		23,05	1,36	410	28	1,6	338	8900				
	56,57	30	24,75	1,76	411	30	2,1	338	8900				
	53,79	40	26,03	1,45	363	32	1,7	299	8900				
	47,69	30	29,36	1,91	346	36	2,3	285	8900				
	45,56		30,73	1,98	331	37	2,4	272	8900				
	40,34		34,70	2,13	293	42	2,6	241	8900				
	61,11	30	22,91	0,79	419	28	0,95	345	5400	**İRSDM İRSDFM**	**53 / 90 L 4a**	149 150	24 26
	54,83		25,53	0,85	376	31	1,0	309	5400				
	49,35		28,37	0,91	338	34	1,1	279	5400				
	44,55		31,43	0,98	305	38	1,2	251	5400				
	40,29		34,75	1,04	276	42	1,2	227	5400				
	38,28		36,58	1,07	262	44	1,3	216	5400				
	33,87		41,33	1,15	232	50	1,4	191	5400				

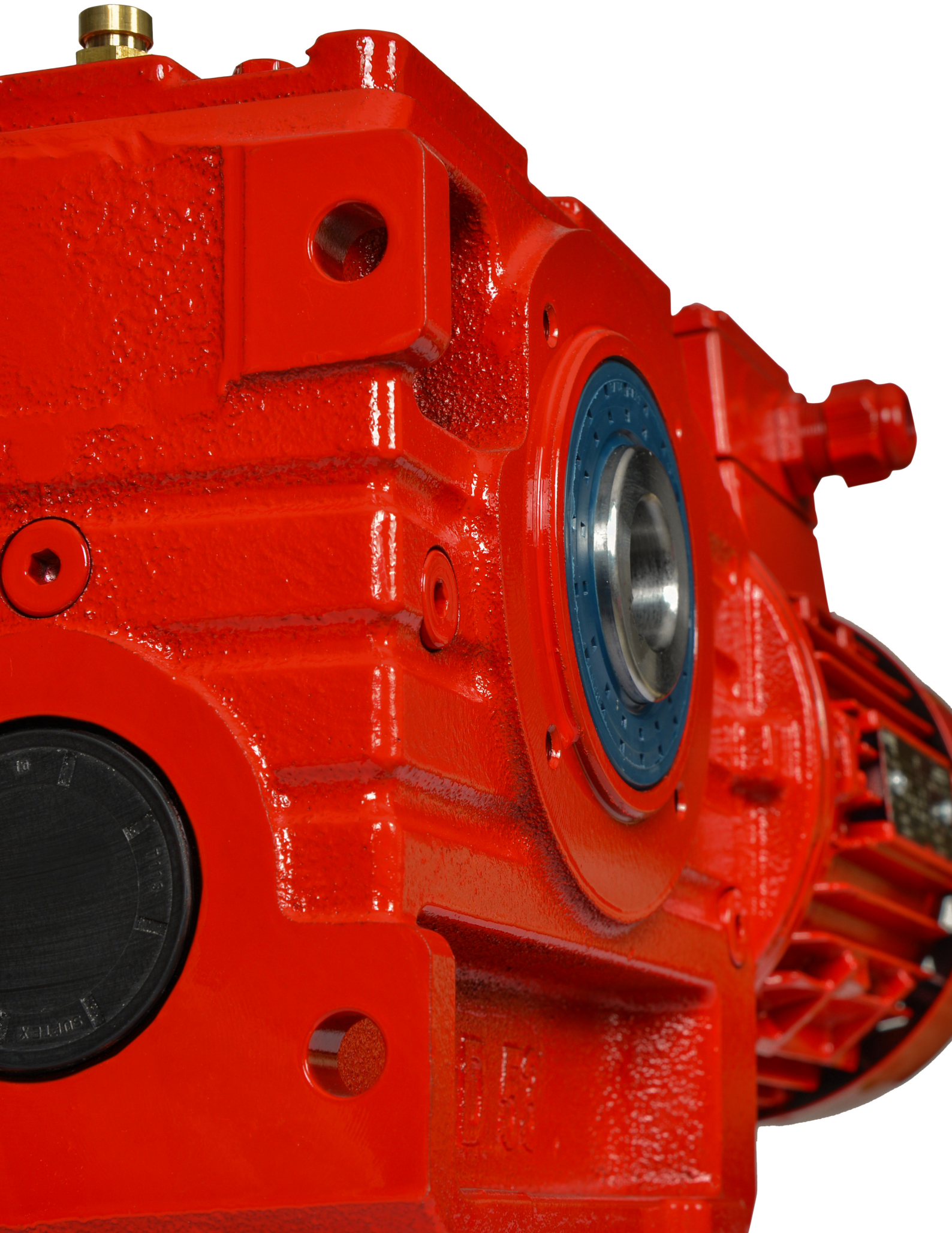
P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
1,5 2	30,56	15	**45,82**	1,13	240	**56**	1,4	198	5400	**İRSDM İRSDFM**	**53 / 90 L 4a**	149 150	24 26
	27,41		**51,07**	1,21	216	**62**	1,5	177	5400				
	24,68		**56,73**	1,30	194	**69**	1,6	160	5400				
	22,27		**62,86**	1,39	175	**76**	1,7	144	5400				
	20,14		**69,51**	1,47	158	**84**	1,8	130	5400				
	19,14		**73,16**	1,52	150	**89**	1,8	124	5400				
	16,94		**82,67**	1,63	133	**100**	2,0	110	5400				
2,2 3	291,26	87	**4,81**	1,38	2712	**5,8**	1,7	2234	24350	**İRSDM İRSDFM**	**161 / 100 L 4a**	157 158	175 185
	261,00		**5,36**	1,49	2431	**6,5**	1,8	2002	24350				
	235,22		**5,95**	1,59	2191	**7,2**	1,9	1804	24350				
	203,14	54	**6,89**	2,47	2192	**8,4**	3,0	1805	24350				
	180,78		**7,74**	2,68	1951	**9,4**	3,2	1607	24350				
	162,00		**8,64**	2,90	1748	**10**	3,5	1440	24350				
	146,00		**9,59**	3,10	1575	**12**	3,7	1297	24350				
	210,48	52	**4,28**	0,85	3485	**5,2**	1,0	2851	19450	**İRSDM İRSDFM**	**83 / 112 M 6a**	155 156	111 121
	187,65		**4,80**	0,93	3107	**5,9**	1,1	2542	19450				
	263,10	65	**5,32**	0,86	2528	**6,5**	1,0	2082	19450	**İRSDM İRSDFM**	**83 / 100 L 4a**	155 156	98 108
	234,57		**5,97**	0,94	2254	**7,2**	1,1	1856	19450				
	210,48	52	**6,65**	1,23	2240	**8,1**	1,5	1845	19450				
	187,65		**7,46**	1,32	1997	**9,1**	1,6	1645	19450				
	161,90		**8,65**	1,70	1723	**11**	2,0	1419	19450				
	144,35		**9,70**	1,85	1536	**12**	2,2	1265	19450				
	129,60	40	**10,80**	2,00	1418	**13**	2,4	1167	19450				
	117,04		**11,96**	2,15	1280	**15**	2,6	1054	19450				
	104,00		**13,46**	2,30	1138	**16**	2,8	937	19450				
	93,63	32	**14,95**	2,80	1052	**18**	3,4	866	19450				
	83,20		**16,83**	3,00	935	**20**	3,6	770	19450				
	74,67		**18,75**	3,14	839	**23**	3,8	691	19450				
	67,31		**20,80**	3,41	756	**25**	4,1	623	19450				
	59,83		**23,40**	3,55	672	**28**	4,3	553	19450				
	55,73		**25,12**	3,82	626	**31**	4,6	516	19450				
	163,04	50	**8,59**	0,81	1663	**10**	0,97	1370	14100	**İRSDM İRSDFM**	**73 / 100 L 4a**	153 154	67 73
	145,24		**9,64**	0,87	1481	**12**	1,0	1220	14100				
	128,26		**10,92**	0,95	1308	**13**	1,1	1077	14100				
	116,19	40	**12,05**	1,17	1237	**15**	1,4	1018	14100				
	102,61		**13,64**	1,27	1092	**17**	1,5	899	14100				
	91,20		**15,35**	1,40	971	**19**	1,7	799	14100				
	87,14	30	**16,07**	1,60	953	**20**	1,9	785	14100				
	76,96		**18,19**	1,75	842	**22**	2,1	693	14100				
	68,40		**20,47**	1,90	748	**25**	2,3	616	14100				
	61,11		**22,91**	2,10	668	**28**	2,5	551	14100				
	54,83		**25,53**	2,20	600	**31**	2,6	494	14100				
	49,35		**28,37**	2,30	540	**34**	2,8	445	14100				
	44,55		**31,43**	2,40	487	**38**	2,9	401	14100				
	40,29		**34,75**	2,60	441	**42**	3,1	363	14100				
	36,49		**38,37**	2,70	399	**47**	3,2	329	14100				
	33,08		**42,33**	2,90	362	**51**	3,5	298	14100				
	30,66	15	**45,67**	3,00	372	**55**	3,6	306	14100				
	27,41		**51,07**	3,20	332	**62**	3,8	274	14100				
	24,68		**56,73**	3,40	299	**69**	4,1	246	14100				
	22,27		**62,86**	3,60	270	**76**	4,3	222	14100				
	20,14		**69,51**	3,80	244	**84**	4,6	201	14100				
	82,22	30	**17,03**	0,92	875	**21**	1,1	721	8700	**İRSDM İRSDFM**	**63 / 100 L 4a**	151 152	42 45
	75,43	40	**18,56**	0,81	747	**23**	0,97	615	8700				
	74,48	30	**18,80**	0,99	793	**23**	1,2	653	8700				
	67,74		**20,67**	1,05	721	**25**	1,3	594	8700				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
2,2 3	63,59	40	22,02	0,90	630	27	1,1	519	8700	**İRSDM İRSDFM**	**63 / 100 L 4a**	151 152	42 45
	60,74		23,05	0,93	602	28	1,1	495	8700				
	56,57	30	24,75	1,20	602	30	1,4	496	8700				
	53,79	40	26,03	0,99	533	32	1,2	439	8700				
	47,69	30	29,36	1,30	508	36	1,6	418	8700				
	45,56		30,73	1,35	485	37	1,6	399	8700				
	40,34		34,70	1,45	429	42	1,7	354	8700				
	33,87	30	41,33	0,78	340	50	0,94	280	5400	**İRSDM İRSDFM**	**53 / 100 L 4a**	149 150	28 30
	30,56	15	45,82	0,77	352	56	0,92	290	5400				
	27,41		51,07	0,82	316	62	0,98	260	5400				
	24,68		56,73	0,89	285	69	1,1	234	5400				
	22,27		62,86	0,95	257	76	1,1	211	5400				
	20,14		69,51	1,00	232	84	1,2	191	5400				
	19,14		73,16	1,04	221	89	1,2	182	5400				
	16,94		82,67	1,11	195	100	1,3	161	5400				
3 4	261,00	87	5,36	1,09	3314	6,5	1,3	2730	24100	**İRSDM İRSDFM**	**161 / 100 L 4b**	157 158	174 184
	235,22		5,95	1,17	2987	7,2	1,4	2460	24100				
	213,00		6,57	1,24	2705	8,0	1,5	2228	24100				
	193,65		7,23	1,31	2459	8,8	1,6	2025	24100				
	162,00	54	8,64	2,13	2384	10	2,6	1963	24100				
	146,00		9,59	2,27	2148	12	2,7	1769	24100				
	132,21		10,59	2,43	1945	13	2,9	1602	24100				
	120,19		11,65	2,58	1769	14	3,1	1457	24100				
	210,48	52	6,65	0,90	3055	8,1	1,1	2516	19100	**İRSDM İRSDFM**	**83 / 100 L 4b**	155 156	105 115
	187,65		7,46	0,97	2723	9,1	1,2	2243	19100				
	161,90		8,65	1,25	2350	11	1,5	1935	19100				
	144,35		9,70	1,35	2095	12	1,6	1725	19100				
	129,60	40	10,80	1,47	1933	13	1,8	1592	19100				
	117,04		11,96	1,58	1746	15	1,9	1438	19100				
	104,00		13,46	1,69	1551	16	2,0	1278	19100				
	93,63	32	14,95	2,00	1434	18	2,4	1181	19100				
	83,20		16,83	2,20	1275	20	2,6	1050	19100				
	74,67		18,75	2,30	1144	23	2,8	942	19100				
	67,31		20,80	2,50	1031	25	3,0	849	19100				
	59,83		23,40	2,60	917	28	3,1	755	19100				
	55,73		25,12	2,80	854	31	3,4	703	19100				
	50,29		27,84	2,90	770	34	3,5	634	19100				
	45,84		30,54	3,10	702	37	3,7	578	19100				
	41,85		33,46	3,20	641	41	3,8	528	19100				
	38,24		36,61	3,40	586	44	4,1	482	19100				
	33,94		41,25	3,60	520	50	4,3	428	19100				
	116,19	40	12,05	0,86	1686	15	1,0	1389	13700	**İRSDM İRSDFM**	**73 / 100 L 4b**	153 154	69 74
	102,61		13,64	0,93	1489	17	1,1	1226	13700				
	91,20		15,35	1,03	1324	19	1,2	1090	13700				
	87,14	30	16,07	1,17	1300	20	1,4	1070	13700				
	76,96		18,19	1,28	1148	22	1,5	945	13700				
	68,40		20,47	1,39	1020	25	1,7	840	13700				
	61,11		22,91	1,54	912	28	1,8	751	13700				
	54,83		25,53	1,61	818	31	1,9	674	13700				
	49,35		28,37	1,69	736	34	2,0	606	13700				
	44,55		31,43	1,76	664	38	2,1	547	13700				
	40,29		34,75	1,91	601	42	2,3	495	13700				
	36,49		38,37	1,98	544	47	2,4	448	13700				
	33,08		42,33	2,13	493	51	2,6	406	13700				
	30,66		45,67	2,20	507	55	2,6	417	13700				
	27,41		51,07	2,35	453	62	2,8	373	13700				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
3 4	24,68	15	**56,73**	2,49	408	**69**	3,0	336	13700	**İRSDM İRSDFM**	**73 / 100 L 4b**	153 154	69 74
	22,27		**62,86**	2,64	368	**76**	3,2	303	13700				
	20,14		**69,51**	2,79	333	**84**	3,3	274	13700				
	18,24		**76,74**	2,93	302	**93**	3,5	248	13700				
	16,54		**84,65**	3,08	273	**103**	3,7	225	13700				
	56,57	30	**24,75**	0,88	821	**30**	1,1	676	8700	**İRSDM İRSDFM**	**63 / 100 L 4b**	151 152	42 45
	47,69		**29,36**	0,95	692	**36**	1,1	570	8700				
	45,56		**30,73**	0,99	661	**37**	1,2	544	8700				
	40,34		**34,70**	1,06	586	**42**	1,3	482	8700				
4 5,5	261,00	87	**5,36**	0,82	4419	**6,5**	0,98	3639	23500	**İRSDM İRSDFM**	**161 / 112 M 4b**	157 158	184 194
	235,22		**5,95**	0,88	3983	**7,2**	1,1	3280	23500				
	213,00		**6,57**	0,93	3607	**8,0**	1,1	2970	23500				
	203,14	54	**6,89**	1,36	3986	**8,4**	1,6	3282	23500				
	180,78		**7,74**	1,48	3547	**9,4**	1,8	2921	23500				
	162,00		**8,64**	1,60	3178	**10**	1,9	2618	23500				
	146,00		**9,59**	1,70	2864	**12**	2,0	2359	23500				
	132,21		**10,59**	1,82	2594	**13**	2,2	2136	23500				
	126,00		**11,11**	2,10	2472	**13**	2,5	2036	23500				
	120,19	42	**11,65**	1,93	2390	**14**	2,3	1969	23500				
	113,56		**12,33**	2,25	2258	**15**	2,7	1860	23500				
	102,83		**13,62**	2,39	2045	**17**	2,9	1684	23500				
	93,48		**14,98**	2,52	1859	**18**	3,0	1531	23500				
	161,90	52	**8,65**	0,94	3133	**11**	1,1	2580	18500	**İRSDM İRSDFM**	**83 / 112 M 4b**	155 156	111 121
	144,35		**9,70**	0,98	2793	**12**	1,2	2300	18500				
	129,60	40	**10,80**	1,10	2578	**13**	1,3	2123	18500				
	117,04		**11,96**	1,19	2328	**15**	1,4	1917	18500				
	104,00		**13,46**	1,27	2068	**16**	1,5	1703	18500				
	93,63	32	**14,95**	1,47	1912	**18**	1,8	1575	18500				
	83,20		**16,83**	1,65	1699	**20**	2,0	1400	18500				
	74,67		**18,75**	1,73	1525	**23**	2,1	1256	18500				
	67,31		**20,80**	1,88	1375	**25**	2,3	1132	18500				
	59,83		**23,40**	1,95	1222	**28**	2,3	1006	18500				
	55,73		**25,12**	2,10	1138	**31**	2,5	937	18500				
	50,29		**27,84**	2,18	1027	**34**	2,6	846	18500				
	45,84		**30,54**	2,33	936	**37**	2,8	771	18500				
	41,85		**33,46**	2,40	855	**41**	2,9	704	18500				
	38,24		**36,61**	2,55	781	**44**	3,1	643	18500				
	33,94		**41,25**	2,70	693	**50**	3,2	571	18500				
	91,20	40	**15,35**	0,77	1765	**19**	0,92	1453	13200	**İRSDM İRSDFM**	**73 / 112 M 4b**	153 154	73 78
	87,14	30	**16,07**	0,88	1733	**20**	1,1	1427	13200				
	76,96		**18,19**	0,96	1531	**22**	1,2	1260	13200				
	68,40		**20,47**	1,05	1360	**25**	1,3	1120	13200				
	61,11		**22,91**	1,16	1215	**28**	1,4	1001	13200				
	54,83		**25,53**	1,21	1090	**31**	1,5	898	13200				
	49,35		**28,37**	1,27	982	**34**	1,5	808	13200				
	44,55		**31,43**	1,32	886	**38**	1,6	730	13200				
	40,29		**34,75**	1,43	801	**42**	1,7	660	13200				
	36,49		**38,37**	1,49	726	**47**	1,8	598	13200				
	33,08		**42,33**	1,60	658	**51**	1,9	542	13200				
	30,66	15	**45,67**	1,65	676	**55**	2,0	556	13200				
	27,41		**51,07**	1,76	604	**62**	2,1	498	13200				
	24,68		**56,73**	1,87	544	**69**	2,2	448	13200				
	22,27		**62,86**	1,98	491	**76**	2,4	404	13200				
	20,14		**69,51**	2,09	444	**84**	2,5	366	13200				
	18,24		**76,74**	2,20	402	**93**	2,6	331	13200				
	16,54		**84,65**	2,31	364	**103**	2,8	300	13200				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
	161,57		**8,66**	0,80	3762	**11**	0,96	3098	23500				
	148,13	87	**9,45**	0,84	3449	**11**	1,0	2840	23500				
	136,07		**10,29**	0,88	3168	**12**	1,1	2609	23500				
	109,63		**12,77**	1,48	2958	**16**	1,8	2436	23000				
	100,28	54	**13,96**	1,57	2705	**17**	1,9	2228	23000				
	91,95		**15,23**	1,65	2480	**18**	2,0	2043	23000				
	85,27		**16,42**	1,94	2332	**20**	2,3	1920	23000	**İRSDM**		157	193
	78,00	42	**17,95**	2,25	2133	**22**	2,7	1757	23000	**İRSDFM**	**161 / 132 S 4c**	158	203
	71,51		**19,58**	2,14	1956	**24**	2,6	1611	23000				
	60,91	30	**22,99**	2,76	1733	**28**	3,3	1427	23000				
	55,71		**25,13**	2,89	1585	**31**	3,5	1306	23000				
	51,08	30	**27,41**	3,03	1454	**33**	3,6	1197	23000				
	46,92		**29,84**	3,15	1335	**36**	3,8	1100	23000				
	33,66		**41,59**	3,66	958	**51**	4,4	789	23000				
	129,60		**10,80**	0,80	3544	**13**	0,96	2919	17250				
	117,04	40	**11,96**	0,86	3201	**15**	1,0	2636	17250				
	104,00		**13,46**	0,92	2844	**16**	1,1	2342	17250				
	93,63		**14,95**	1,07	2630	**18**	1,3	2166	17250				
	83,20		**16,83**	1,20	2337	**20**	1,4	1924	17250				
	74,67		**18,75**	1,25	2097	**23**	1,5	1727	17250				
5,5	67,31		**20,80**	1,36	1890	**25**	1,6	1557	17250	**İRSDM**		155	122
	59,83		**23,40**	1,42	1680	**28**	1,7	1384	17250	**İRSDFM**	**83 / 132 S 4c**	156	132
7,5	55,73	32	**25,12**	1,53	1565	**31**	1,8	1289	17250				
	50,29		**27,84**	1,58	1412	**34**	1,9	1163	17250				
	45,84		**30,54**	1,69	1287	**37**	2,0	1060	17250				
	41,85		**33,46**	1,75	1175	**41**	2,1	968	17250				
	38,24		**36,61**	1,85	1074	**44**	2,2	885	17250				
	33,94		**41,25**	1,96	953	**50**	2,4	785	17250				
	68,40		**20,47**	0,76	1871	**25**	0,91	1540	13200				
	61,11		**22,91**	0,84	1671	**28**	1,0	1376	13200				
	54,83		**25,53**	0,88	1499	**31**	1,1	1235	13200				
	49,35	30	**28,37**	0,92	1350	**34**	1,1	1111	13200				
	44,55		**31,43**	0,96	1218	**38**	1,2	1003	13200				
	40,29		**34,75**	1,04	1102	**42**	1,2	907	13200				
	36,49		**38,37**	1,08	998	**47**	1,3	822	13200	**İRSDM**		153	84
	33,08		**42,33**	1,16	905	**51**	1,4	745	13200	**İRSDFM**	**73 / 132 S 4c**	154	89
	30,66		**45,67**	1,20	929	**55**	1,4	765	13200				
	27,41		**51,07**	1,28	831	**62**	1,5	684	13200				
	24,68		**56,73**	1,36	748	**69**	1,6	616	13200				
	22,27	15	**62,86**	1,44	675	**76**	1,7	556	13200				
	20,14		**69,51**	1,52	610	**84**	1,8	503	13200				
	18,24		**76,74**	1,60	553	**93**	1,9	455	13200				
	16,54		**84,65**	1,68	501	**103**	2,0	413	13200				
	109,63		**12,77**	1,08	4033	**16**	1,3	3321	22440				
	100,28	54	**13,96**	1,15	3689	**17**	1,4	3038	22440				
	91,95		**15,23**	1,21	3382	**18**	1,5	2785	22440				
	85,27		**16,42**	1,42	3180	**20**	1,7	2619	22440				
	78,00	42	**17,95**	1,65	2909	**22**	2,0	2395	22440				
7,5	71,51		**19,58**	1,57	2667	**24**	1,9	2196	22440	**İRSDM**		157	201
	65,69		**21,31**	1,64	2450	**26**	2,0	2017	22440	**İRSDFM**	**161 / 132 M 4b**	158	211
10	60,91		**22,99**	2,02	2363	**28**	2,4	1946	22440				
	55,71		**25,13**	2,12	2162	**31**	2,5	1780	22440				
	51,08	30	**27,41**	2,22	1982	**33**	2,7	1632	22440				
	46,92		**29,84**	2,31	1821	**36**	2,8	1499	22440				
	33,66		**41,59**	2,68	1306	**51**	3,2	1076	22440				

P_1 Power *Potencia* [kW] Hp	i_t Total Ratio *Relación de transmision*	i_s Worm Ratio *Relación de transmision*	50 Hz			60 Hz			F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
			n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]	n_2 Output Speeds *Velocidad de salida* [r.p.m]	S_f Service Factor *Factor de servicio*	M_2 Output Torque *Par de salida* [Nm]					
7,5 10	93,63	32	**14,95**	0,79	3586	**18**	0,95	2953	17000	**İRSDM İRSDFM**	**83 / 132 M 4b**	155 156	129 139
	83,20		**16,83**	0,88	3186	**20**	1,1	2624	17000				
	74,67		**18,75**	0,92	2860	**23**	1,1	2355	17000				
	67,31		**20,80**	1,00	2578	**25**	1,2	2123	17000				
	59,83		**23,40**	1,04	2291	**28**	1,2	1887	17000				
	55,73		**25,12**	1,12	2134	**31**	1,3	1758	17000				
	50,29		**27,84**	1,16	1926	**34**	1,4	1586	17000				
	45,84		**30,54**	1,24	1756	**37**	1,5	1446	17000				
	41,85		**33,46**	1,28	1603	**41**	1,5	1320	17000				
	38,24		**36,61**	1,36	1465	**44**	1,6	1206	17000				
	33,94		**41,25**	1,44	1300	**50**	1,7	1070	17000				
	40,29	30	**34,75**	0,76	1502	**42**	0,92	1237	13200	**İRSDM İRSDFM**	**73 / 132 M 4b**	153 154	91 96
	36,49		**38,37**	0,79	1361	**47**	0,95	1120	13200				
	33,08		**42,33**	0,85	1233	**51**	1,0	1016	13200				
	30,66	15	**45,67**	0,88	1267	**55**	1,1	1043	13200				
	27,41		**51,07**	0,94	1133	**62**	1,1	933	13200				
	24,68		**56,73**	1,00	1020	**69**	1,2	840	13200				
	22,27		**62,86**	1,06	920	**76**	1,3	758	13200				
	20,14		**69,51**	1,11	832	**84**	1,3	685	13200				
	18,24		**76,74**	1,17	754	**93**	1,4	621	13200				
	16,54		**84,65**	1,23	683	**103**	1,5	563	13200				
11 15	85,27	42	**16,42**	0,97	4664	**20**	1,2	3841	22440	**İRSDM İRSDFM**	**161 / C132 M 4**	157 158	210 220
	78,00		**17,95**	1,13	4266	**22**	1,4	3513	22440				
	71,51		**19,58**	1,07	3911	**24**	1,3	3221	22440				
	65,69		**21,31**	1,12	3593	**26**	1,3	2959	22440				
	60,91	30	**22,99**	1,38	3466	**28**	1,7	2855	22440				
	55,71		**25,13**	1,45	3171	**31**	1,7	2611	22440				
	51,08		**27,41**	1,52	2907	**33**	1,8	2394	22440				
	46,92		**29,84**	1,57	2670	**36**	1,9	2199	22440				
	33,66		**41,59**	1,83	1916	**51**	2,2	1577	22440				
	30,45	15	**45,97**	2,01	1891	**56**	2,4	1557	22440				
	27,86		**50,26**	2,11	1729	**61**	2,5	1424	22440				
	25,54		**54,81**	2,20	1586	**67**	2,6	1306	22440				
	23,46		**59,68**	2,28	1457	**72**	2,7	1199	22440				
	16,83		**83,19**	2,66	1045	**101**	3,2	860	22440				
	50,29	32	**27,84**	0,79	2825	**34**	0,95	2326	17000	**İRSDM İRSDFM**	**83 / 160 M 4b**	155 156	166 171
	45,84		**30,54**	0,85	2575	**37**	1,0	2120	17000				
	41,85		**33,46**	0,87	2351	**41**	1,0	1936	17000				
	38,24		**36,61**	0,93	2148	**44**	1,1	1769	17000				
	33,94		**41,25**	0,98	1906	**50**	1,2	1570	17000				



Helisel Sonsuz Vidali Redüktörler Güç ve Devir Tablolari

Helical Worm Gear Unit - Performances Tables

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

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
270-420 Nm	272	82	56	**0,3**	5,15	**0,32**	6,3	270	420	6000	**İRSD** **İRSDF**	**53**	149 150	13 15
	238			**0,3**	5,88	**0,37**	7,1	270	420	6000				
	206	62	54	**0,4**	6,81	**0,44**	8,3	270	420	6000				
	180			**0,4**	7,77	**0,50**	9,4	270	420	6000				
	166	50	65	**0,4**	8,44	**0,45**	10,3	270	420	6000				
	145			**0,5**	9,64	**0,55**	11,7	290	420	6000				
	129	39		**0,7**	10,83	**0,90**	13,1	420	420	6000				
	113			**0,8**	12,36	**1,0**	15,0	420	420	6000				
	100			**0,7**	13,99	**0,81**	17,0	290	420	6000				
	88,92			**1,08**	15,74	**1,3**	19,1	420	420	6000				
	79,44			**1,21**	17,62	**1,5**	21,4	420	420	6000				
	76,96	30	68	**1,17**	18,19	**1,4**	22,1	410	420	6000				
	68,40			**1,31**	20,47	**1,6**	24,9	410	420	6000				
	61,11			**1,47**	22,91	**1,8**	27,8	410	420	6000				
	54,83			**1,64**	25,53	**2,0**	31,0	410	420	6000				
	49,35			**1,82**	28,37	**2,2**	34,4	410	420	6000				
	44,55			**2,01**	31,43	**2,4**	38,2	410	420	6000				
	40,29			**2,23**	34,75	**2,7**	42,2	410	420	6000				
	38,28			**2,34**	36,58	**2,8**	44,4	410	420	6000				
	33,87			**2,65**	41,33	**3,2**	50,2	410	420	6000				
	30,56	15	78	**2,56**	45,82	**3,1**	55,6	410	420	6000				
	27,41			**2,85**	51,07	**3,5**	62,0	410	420	6000				
	24,68			**3,17**	56,73	**3,8**	68,9	410	420	6000				
	22,27			**3,51**	62,86	**4,3**	76,3	410	420	6000				
	20,14			**3,88**	69,51	**4,7**	84,4	410	420	6000				
	19,14			**4,09**	73,16	**5,0**	88,8	410	420	6000				
	16,94			**4,62**	82,67	**5,6**	100	410	420	6000				
510-870 Nm	286	62	60	**0,5**	4,90	**0,67**	5,9	634	700	8700	**İRSD** **İRSDF**	**63**	151 152	22 25
	268			**0,6**	5,23	**0,67**	6,4	594	700	8700				
	229	53	68	**0,7**	6,12	**0,80**	7,4	692	700	8700				
	210	62	60	**0,7**	6,66	**0,91**	8,1	636	700	8700				
	180	53	68	**0,8**	7,79	**0,94**	9,5	636	700	8700				
	170	62	60	**0,7**	8,24	**0,91**	10,0	514	700	8700				
	145	53	68	**1,10**	9,64	**1,3**	11,7	730	700	8700				
	136	40	67	**1,08**	10,33	**1,3**	12,5	662	700	8700				
	132	53	68	**1,00**	10,64	**1,2**	12,9	602	700	8700				
	110	40	67	**1,50**	12,77	**1,8**	15,5	741	700	8700				
	102	30	72	**1,42**	13,76	**1,7**	16,7	698	700	8700				
	99,31	40	67	**1,50**	14,10	**1,8**	17,1	671	700	8700				
	90,32			**1,50**	15,50	**1,8**	18,8	610	700	8700				
	82,22	30	72	**2,20**	17,03	**2,7**	20,7	876	700	8700				
	75,43	40	67	**2,20**	18,56	**2,7**	22,5	747	700	8700				
	74,48	30		**2,36**	18,80	**2,9**	22,8	793	700	8700				
	67,74			**2,36**	20,67	**2,9**	25,1	721	700	8700				
	63,59	40		**2,20**	22,02	**2,7**	26,7	630	700	8700				
	60,74			**2,20**	23,05	**2,7**	28,0	602	700	8700				
	56,57	30	72	**2,20**	24,75	**2,7**	30,1	602	700	8700				
	53,79	40	67	**3,39**	26,03	**4,1**	31,6	821	700	8700				
	47,69	30	72	**3,00**	29,36	**3,6**	35,6	693	700	8700				
	45,56			**3,00**	30,73	**3,6**	37,3	662	700	8700				
	40,34			**4,46**	34,70	**5,4**	42,1	871	700	8700				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
680-1870 Nm	341	82	60	**0,7**	4,11	**0,91**	5,0	1031	1100	13300	**İRSD**	**73**	153	55
	301			**1,10**	4,66	**1,3**	5,7	1334	1100	13300	**İRSDF**		154	60
	262	63	62	**1,10**	5,34	**1,3**	6,5	1201	1100	13300				
	231			**1,10**	6,06	**1,3**	7,4	1059	1100	13300				
	208	50	69	**1,48**	6,73	**1,8**	8,2	1284	1100	13300				
	183			**1,50**	7,64	**1,8**	9,3	1150	1100	13300				
	163			**1,52**	8,59	**1,8**	10,4	1033	1100	13300				
	145			**2,20**	9,64	**2,7**	11,7	1482	1100	13300				
	128			**2,20**	10,92	**2,7**	13,3	1309	1100	13300				
	116	40	72	**3,00**	12,05	**3,6**	14,6	1687	1100	13300				
	103			**3,00**	13,64	**3,6**	16,6	1490	1100	13300				
	91,20			**4,00**	15,35	**4,9**	18,6	1766	1100	13300				
	87,14	30	74	**4,00**	16,07	**4,9**	19,5	1734	1100	13300				
	76,96			**4,00**	18,19	**4,9**	22,1	1531	1100	13300				
	68,40			**5,50**	20,47	**6,7**	24,9	1872	1100	13300				
	61,11			**5,50**	22,91	**6,7**	27,8	1672	1100	13300				
	54,83			**5,50**	25,53	**6,7**	31,0	1500	1100	13300				
	49,35			**5,50**	28,37	**6,7**	34,4	1350	1100	13300				
	44,55			**5,50**	31,43	**6,7**	38,2	1219	1100	13300				
	40,29			**7,50**	34,75	**9,1**	42,2	1503	1100	13300				
	36,49			**7,50**	38,37	**9,1**	46,6	1361	1100	13300				
	33,08			**7,50**	42,33	**9,1**	51,4	1234	1100	13300				
	30,66	15	82	**7,50**	45,67	**9,1**	55,5	1267	1100	13300				
	27,41			**7,50**	51,07	**9,1**	62,0	1133	1100	13300				
	24,68			**7,50**	56,73	**9,1**	68,9	1020	1100	13300				
	22,27			**7,50**	62,86	**9,1**	76,3	921	1100	13300				
	20,14			**7,50**	69,51	**9,1**	84,4	833	1100	13300				
	18,24			**7,50**	76,74	**9,1**	93,2	754	1100	13300				
	16,54			**7,50**	84,65	**9,1**	103	684	1100	13300				
1670-3540 Nm	429	106	63	**1,20**	3,26	**1,5**	4,0	2038	1550	18800	**İRSD**	**83**	155	97
	383			**1,19**	3,66	**1,5**	4,4	1812	1550	18800	**İRSDF**		156	107
	343			**1,20**	4,08	**1,5**	4,9	1631	1550	18800				
	336	83	62	**1,34**	4,17	**1,6**	5,1	1873	1550	18800				
	300			**1,50**	4,67	**1,8**	5,7	1873	1550	18800				
	263	65	65	**2,20**	5,32	**2,7**	6,5	2529	1550	18800				
	235			**2,20**	5,97	**2,7**	7,2	2255	1550	18800				
	210	52	72	**3,00**	6,65	**3,6**	8,1	3056	1550	18800				
	188			**3,00**	7,46	**3,6**	9,1	2725	1550	18800				
	162			**3,12**	8,65	**3,8**	10,5	2447	1550	18800				
	144			**3,16**	9,70	**3,8**	11,8	2209	1550	18800				
	130	40	74	**5,50**	10,80	**6,7**	13,1	3546	1550	18800				
	117			**5,50**	11,96	**6,7**	14,5	3202	1550	18800				
	104			**5,50**	13,46	**6,7**	16,3	2846	1550	18800				
	93,63			**5,48**	14,95	**6,7**	18,2	2554	1550	18800				
	83,20	32	76	**7,50**	16,83	**9,1**	20,4	3188	1550	18800				
	74,67			**7,50**	18,75	**9,1**	22,8	2861	1550	18800				
	67,31			**7,50**	20,80	**9,1**	25,3	2579	1550	18800				
	59,83			**7,50**	23,40	**9,1**	28,4	2293	1550	18800				
	55,73			**7,50**	25,12	**9,1**	30,5	2135	1550	18800				
	50,29			**11,00**	27,84	**13,4**	33,8	2826	1550	18800				
	45,84			**11,00**	30,54	**13,4**	37,1	2576	1550	18800				
	41,85			**11,00**	33,46	**13,4**	40,6	2352	1550	18800				
	38,24			**11,00**	36,61	**13,4**	44,5	2149	1550	18800				
	33,94			**11,00**	41,25	**13,4**	50,1	1907	1550	18800				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
3400-6000 Nm	261	54	73	**2,56**	5,36	**3,1**	6,5	3274	2120	22000	**İRSD İRSDF**	**161**	157 158	160 170
	235			**2,97**	5,95	**3,6**	7,2	3430	2120	22000				
	213			**3,17**	6,57	**3,9**	8,0	3317	2120	22000				
	194			**3,35**	7,23	**4,1**	8,8	3186	2120	22000				
	203	87	63	**6,25**	6,89	**7,6**	8,4	5380	2120	22000				
	181			**6,81**	7,74	**8,3**	9,4	5213	2120	22000				
	162			**7,35**	8,64	**8,9**	10,5	5045	2120	22000				
	146	87	63	**7,82**	9,59	**9,5**	11,6	4834	2120	22000				
	132			**8,37**	10,59	**10,2**	12,9	4687	2120	22000				
	120			**8,88**	11,65	**10,8**	14,1	4518	2120	22000				
	126	42	74	**8,33**	11,11	**10,1**	13,5	5222	2120	22000				
	114			**8,92**	12,33	**10,8**	15,0	5039	2120	22000				
	103			**9,09**	13,62	**11,0**	16,5	4652	2120	22000				
	93,48			**10,00**	14,98	**12,1**	18,2	4652	2120	22000				
	85,27			**10,56**	16,42	**12,8**	19,9	4481	2120	22000				
	78,00			**12,26**	17,95	**14,9**	21,8	4756	2120	22000				
	71,51			**11,67**	19,58	**14,2**	23,8	4153	2120	22000				
	65,69			**12,20**	21,31	**14,8**	25,9	3988	2120	22000				
	60,90	30	77	**14,33**	22,99	**17,4**	27,9	4518	2120	22000				
	55,71			**15,01**	25,13	**18,2**	30,5	4330	2120	22000				
	51,08			**15,74**	27,41	**19,1**	33,3	4162	2120	22000				
	46,92			**16,37**	29,84	**19,9**	36,2	3976	2120	22000				
	33,65			**18,77**	41,60	**22,8**	50,5	3270	2120	22000				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz		60 Hz		M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecar gas* [N]	F_{Q1o} Over Loads *Sobrecar gas* [N]	Type *Tipo*			kg
				P_1 Power *Potencia* [kW]	n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	P_1 Power *Potencia* [kW]	n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)							
270-420 Nm	272	82	56	0,2	3,31	0,21	4,0	270	420	6000	**İRSD İRSDF**	**53**	149 150	13 15
	238			0,2	3,78	0,24	4,6	270	420	6000				
	206	62	54	0,2	4,38	0,28	5,4	270	420	6000				
	180			0,3	5,00	0,32	6,1	270	420	6000				
	166	50	65	0,2	5,43	0,29	6,6	270	420	6000				
	145			0,3	6,20	0,36	7,6	290	420	6000				
	129	39		0,5	6,96	0,58	8,5	420	420	6000				
	113			0,5	7,94	0,67	9,7	420	420	6000				
	100			0,4	9,00	0,52	11,0	290	420	6000				
	88,92			0,7	10,12	0,85	12,4	420	420	6000				
	79,44			0,8	11,33	0,95	13,8	420	420	6000				
	76,96	30	68	0,7	11,69	0,92	14,3	410	420	6000				
	68,40			0,8	13,16	1,0	16,1	410	420	6000				
	61,11			0,9	14,73	1,2	18,0	410	420	6000				
	54,83			1,05	16,42	1,3	20,1	410	420	6000				
	49,35			1,17	18,24	1,4	22,3	410	420	6000				
	44,55			1,29	20,20	1,6	24,7	410	420	6000				
	40,29			1,43	22,34	1,7	27,3	410	420	6000				
	38,28			1,51	23,51	1,8	28,7	410	420	6000				
	33,87			1,70	26,57	2,1	32,5	410	420	6000				
	30,56	15	78	1,65	29,46	2,0	36,0	410	420	6000				
	27,41			1,83	32,83	2,2	40,1	410	420	6000				
	24,68			2,04	36,47	2,5	44,6	410	420	6000				
	22,27			2,26	40,41	2,8	49,4	410	420	6000				
	20,14			2,50	44,68	3,0	54,6	410	420	6000				
	19,14			2,63	47,03	3,2	57,5	410	420	6000				
	16,94			2,97	53,14	3,6	65,0	410	420	6000				
510-870 Nm	286	62	60	0,4	3,15	0,43	3,8	634	700	8700	**İRSD İRSDF**	**63**	151 152	22 25
	268			0,4	3,36	0,43	4,1	594	700	8700				
	229	53	68	0,4	3,93	0,52	4,8	692	700	8700				
	210	62	60	0,5	4,28	0,59	5,2	636	700	8700				
	180	53	68	0,5	5,01	0,61	6,1	636	700	8700				
	170	62	60	0,5	5,30	0,59	6,5	514	700	8700				
	145	53	68	0,7	6,20	0,86	7,6	730	700	8700				
	136	40	67	1	6,64	0,85	8,1	662	700	8700				
	132	53	68	1	6,84	0,79	8,4	602	700	8700				
	110	40	67	1	8,21	1,2	10,0	741	700	8700				
	102	30	72	1	8,85	1,1	10,8	698	700	8700				
	99,31	40	67	1	9,06	1,2	11,1	671	700	8700				
	90,32			1	9,96	1,2	12,2	610	700	8700				
	82,22	30	72	1,41	10,95	1,7	13,4	876	700	8700				
	75,43	40	67	1,41	11,93	1,7	14,6	747	700	8700				
	74,48	30		1,52	12,08	1,9	14,8	793	700	8700				
	67,74			1,52	13,29	1,9	16,2	721	700	8700				
	63,59	40		1,41	14,15	1,7	17,3	630	700	8700				
	60,74			1,41	14,82	1,7	18,1	602	700	8700				
	56,57	30	72	1,41	15,91	1,7	19,4	602	700	8700				
	53,79	40	67	2,18	16,73	2,7	20,4	821	700	8700				
	47,69	30	72	1,93	18,87	2,4	23,1	693	700	8700				
	45,56			1,93	19,76	2,4	24,1	662	700	8700				
	40,34			2,87	22,31	3,5	27,3	871	700	8700				

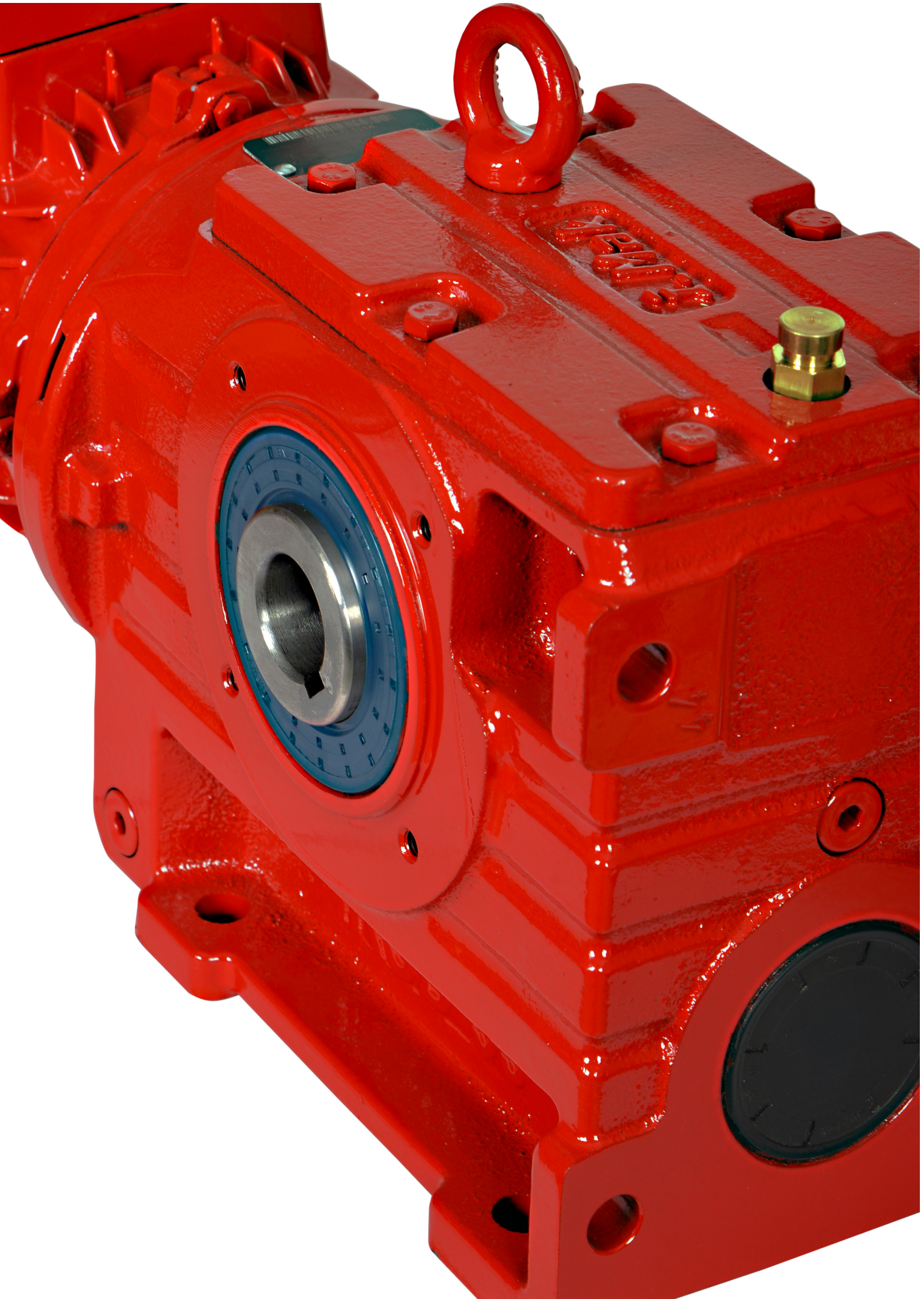
Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
680-1870 Nm	341	82	60	0,5	2,64	0,59	3,2	1031	1100	13300	**İRSD**	**73**	153	55
	301			0,7	2,99	0,86	3,7	1334	1100	13300	**İRSDF**		154	60
	262	63	62	0,7	3,44	0,86	4,2	1201	1100	13300				
	231			0,7	3,90	0,86	4,8	1059	1100	13300				
	208	50	69	1,0	4,33	1,2	5,3	1284	1100	13300				
	183			1,0	4,91	1,2	6,0	1150	1100	13300				
	163			1,0	5,52	1,2	6,7	1033	1100	13300				
	145			1,41	6,20	1,7	7,6	1482	1100	13300				
	128			1,41	7,02	1,7	8,6	1309	1100	13300				
	116	40	72	1,93	7,75	2,4	9,5	1687	1100	13300				
	103			1,93	8,77	2,4	10,7	1490	1100	13300				
	91,20			2,57	9,87	3,1	12,1	1766	1100	13300				
	87,14	30	74	2,57	10,33	3,1	12,6	1734	1100	13300				
	76,96			2,57	11,69	3,1	14,3	1531	1100	13300				
	68,40			3,54	13,16	4,3	16,1	1872	1100	13300				
	61,11			3,54	14,73	4,3	18,0	1672	1100	13300				
	54,83			3,54	16,42	4,3	20,1	1500	1100	13300				
	49,35			3,53	18,24	4,3	22,3	1350	1100	13300				
	44,55			3,54	20,20	4,3	24,7	1219	1100	13300				
	40,29			4,82	22,34	5,9	27,3	1503	1100	13300				
	36,49			4,82	24,67	5,9	30,1	1361	1100	13300				
	33,08			4,82	27,21	5,9	33,3	1234	1100	13300				
	30,66	15	82	4,82	29,36	5,9	35,9	1267	1100	13300				
	27,41			4,82	32,83	5,9	40,1	1133	1100	13300				
	24,68			4,82	36,47	5,9	44,6	1020	1100	13300				
	22,27			4,82	40,41	5,9	49,4	921	1100	13300				
	20,14			4,82	44,68	5,9	54,6	833	1100	13300				
	18,24			4,82	49,33	5,9	60,3	754	1100	13300				
	16,54			4,82	54,42	5,9	66,5	684	1100	13300				
1670-3540 Nm	429	106	63	0,8	2,10	0,94	2,6	2038	1550	18800	**İRSD**	**83**	155	97
	383			0,8	2,35	0,94	2,9	1812	1550	18800	**İRSDF**		156	107
	343			0,8	2,62	0,94	3,2	1631	1550	18800				
	336	83	62	0,9	2,68	1,1	3,3	1873	1550	18800				
	300			1,0	3,00	1,2	3,7	1873	1550	18800				
	263	65	65	1,41	3,42	1,7	4,2	2529	1550	18800				
	235			1,41	3,84	1,7	4,7	2255	1550	18800				
	210	52	72	1,93	4,28	2,4	5,2	3056	1550	18800				
	188			1,93	4,80	2,4	5,9	2725	1550	18800				
	162			2,01	5,56	2,5	6,8	2447	1550	18800				
	144			2,03	6,23	2,5	7,6	2209	1550	18800				
	130	40	74	3,54	6,94	4,3	8,5	3546	1550	18800				
	117			3,54	7,69	4,3	9,4	3202	1550	18800				
	104			3,54	8,65	4,3	10,6	2846	1550	18800				
	93,63			3,52	9,61	4,3	11,7	2554	1550	18800				
	83,20	32	76	4,82	10,82	5,9	13,2	3188	1550	18800				
	74,67			4,82	12,05	5,9	14,7	2861	1550	18800				
	67,31			4,82	13,37	5,9	16,3	2579	1550	18800				
	59,83			4,82	15,04	5,9	18,4	2293	1550	18800				
	55,73			4,82	16,15	5,9	19,7	2135	1550	18800				
	50,29			7,07	17,90	8,6	21,9	2826	1550	18800				
	45,84			7,07	19,63	8,6	24,0	2576	1550	18800				
	41,85			7,07	21,51	8,6	26,3	2352	1550	18800				
	38,24			7,07	23,53	8,6	28,8	2149	1550	18800				
	33,94			7,07	26,52	8,6	32,4	1907	1550	18800				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
3400-6000 Nm	261	54	73	**1,64**	3,45	**2,0**	4,2	3274	2120	22000	**İRSD İRSDF**	**161**	157 158	160 170
	235			**1,91**	3,83	**2,3**	4,7	3430	2120	22000				
	213			**2,04**	4,23	**2,5**	5,2	3317	2120	22000				
	194			**2,16**	4,65	**2,6**	5,7	3186	2120	22000				
	203	87	63	**4,02**	4,43	**4,9**	5,4	5380	2120	22000				
	181			**4,38**	4,98	**5,3**	6,1	5213	2120	22000				
	162			**4,73**	5,56	**5,8**	6,8	5045	2120	22000				
	146	87	63	**5,03**	6,16	**6,1**	7,5	4834	2120	22000				
	132			**5,38**	6,81	**6,6**	8,3	4687	2120	22000				
	120			**5,71**	7,49	**7,0**	9,2	4518	2120	22000				
	126	42	74	**5,36**	7,14	**6,5**	8,7	5222	2120	22000				
	114			**5,73**	7,93	**7,0**	9,7	5039	2120	22000				
	103			**5,85**	8,75	**7,1**	10,7	4652	2120	22000				
	93,48			**6,43**	9,63	**7,9**	11,8	4652	2120	22000				
	85,27			**6,79**	10,55	**8,3**	12,9	4481	2120	22000				
	78,00			**7,88**	11,54	**9,6**	14,1	4756	2120	22000				
	71,51			**7,50**	12,59	**9,2**	15,4	4153	2120	22000				
	65,69			**7,84**	13,70	**9,6**	16,7	3988	2120	22000				
	60,90	30	77	**9,21**	14,78	**11,3**	18,1	4518	2120	22000				
	55,71			**9,65**	16,16	**11,8**	19,7	4330	2120	22000				
	51,08			**10,12**	17,62	**12,4**	21,5	4162	2120	22000				
	46,92			**10,52**	19,18	**12,9**	23,4	3976	2120	22000				
	33,65			**12,07**	26,75	**14,7**	32,7	3270	2120	22000				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz		60 Hz		M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecar gas* [N]	F_{Q1o} Over Loads *Sobrecar gas* [N]	Type *Tipo*			kg
				P_1 Power *Potencia* [kW]	n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	P_1 Power *Potencia* [kW]	n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)							
270-420 Nm	272	82	56	**0,1**	2,57	**0,16**	3,1	270	420	6000	**İRSD** **İRSDF**	**53**	149 150	13 15
	238			**0,2**	2,94	**0,18**	3,6	270	420	6000				
	206	62	54	**0,2**	3,41	**0,22**	4,1	270	420	6000				
	180			**0,2**	3,89	**0,25**	4,7	270	420	6000				
	166	50	65	**0,2**	4,22	**0,23**	5,1	270	420	6000				
	145			**0,2**	4,82	**0,28**	5,9	290	420	6000				
	129	39		**0,4**	5,41	**0,45**	6,6	420	420	6000				
	113			**0,4**	6,18	**0,52**	7,5	420	420	6000				
	100			**0,3**	7,00	**0,40**	8,5	290	420	6000				
	88,92			**0,5**	7,87	**0,66**	9,6	420	420	6000				
	79,44			**0,6**	8,81	**0,73**	10,7	420	420	6000				
	76,96	30	68	**0,6**	9,10	**0,71**	11,0	410	420	6000				
	68,40			**0,7**	10,23	**0,80**	12,4	410	420	6000				
	61,11			**0,7**	11,45	**0,89**	13,9	410	420	6000				
	54,83			**0,8**	12,77	**0,99**	15,5	410	420	6000				
	49,35			**0,9**	14,18	**1,1**	17,2	410	420	6000				
	44,55			**1,01**	15,71	**1,2**	19,1	410	420	6000				
	40,29			**1,11**	17,38	**1,4**	21,1	410	420	6000				
	38,28			**1,17**	18,29	**1,4**	22,2	410	420	6000				
	33,87			**1,32**	20,67	**1,6**	25,1	410	420	6000				
	30,56	15	78	**1,28**	22,91	**1,6**	27,8	410	420	6000				
	27,41			**1,43**	25,54	**1,7**	31,0	410	420	6000				
	24,68			**1,58**	28,37	**1,9**	34,4	410	420	6000				
	22,27			**1,76**	31,43	**2,1**	38,2	410	420	6000				
	20,14			**1,94**	34,75	**2,4**	42,2	410	420	6000				
	19,14			**2,04**	36,58	**2,5**	44,4	410	420	6000				
	16,94			**2,31**	41,33	**2,8**	50,2	410	420	6000				
510-870 Nm	286	62	60	**0,3**	2,45	**0,33**	3,0	634	700	8700	**İRSD** **İRSDF**	**63**	151 152	22 25
	268			**0,3**	2,62	**0,33**	3,2	594	700	8700				
	229	53	68	**0,3**	3,06	**0,40**	3,7	692	700	8700				
	210	62	60	**0,4**	3,33	**0,46**	4,0	636	700	8700				
	180	53	68	**0,4**	3,89	**0,47**	4,7	636	700	8700				
	170	62	60	**0,4**	4,12	**0,46**	5,0	514	700	8700				
	145	53	68	**0,5**	4,82	**0,67**	5,9	730	700	8700				
	136	40	67	**1**	5,16	**0,66**	6,3	662	700	8700				
	132	53	68	**1**	5,32	**0,61**	6,5	602	700	8700				
	110	40	67	**1**	6,39	**0,91**	7,8	741	700	8700				
	102	30	72	**1**	6,88	**0,86**	8,4	698	700	8700				
	99,31	40	67	**1**	7,05	**0,91**	8,6	671	700	8700				
	90,32			**1**	7,75	**0,91**	9,4	610	700	8700				
	82,22	30	72	**1,10**	8,51	**1,3**	10,3	876	700	8700				
	75,43	40	67	**1,10**	9,28	**1,3**	11,3	747	700	8700				
	74,48	30		**1,18**	9,40	**1,4**	11,4	793	700	8700				
	67,74			**1,18**	10,33	**1,4**	12,5	721	700	8700				
	63,59	40		**1,10**	11,01	**1,3**	13,4	630	700	8700				
	60,74			**1,10**	11,52	**1,3**	14,0	602	700	8700				
	56,57	30	72	**1,10**	12,37	**1,3**	15,0	602	700	8700				
	53,79	40	67	**1,69**	13,01	**2,1**	15,8	821	700	8700				
	47,69	30	72	**1,50**	14,68	**1,8**	17,8	693	700	8700				
	45,56			**1,50**	15,37	**1,8**	18,7	662	700	8700				
	40,34			**2,23**	17,35	**2,7**	21,1	871	700	8700				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
680-1870 Nm	341	82	60	**0,4**	2,05	**0,46**	2,5	1031	1100	13300	**İRSD**	**73**	153	55
	301			**0,5**	2,33	**0,67**	2,8	1334	1100	13300	**İRSDF**		154	60
	262	63	62	**0,5**	2,67	**0,67**	3,2	1201	1100	13300				
	231			**0,5**	3,03	**0,67**	3,7	1059	1100	13300				
	208	50	69	**0,7**	3,37	**0,90**	4,1	1284	1100	13300				
	183			**0,8**	3,82	**0,91**	4,6	1150	1100	13300				
	163			**0,8**	4,29	**0,92**	5,2	1033	1100	13300				
	145			**1,10**	4,82	**1,3**	5,9	1482	1100	13300				
	128			**1,10**	5,46	**1,3**	6,6	1309	1100	13300				
	116	40	72	**1,50**	6,02	**1,8**	7,3	1687	1100	13300				
	103			**1,50**	6,82	**1,8**	8,3	1490	1100	13300				
	91,20			**2,00**	7,68	**2,4**	9,3	1766	1100	13300				
	87,14	30	74	**2,00**	8,03	**2,4**	9,8	1734	1100	13300				
	76,96			**2,00**	9,10	**2,4**	11,0	1531	1100	13300				
	68,40			**2,75**	10,23	**3,3**	12,4	1872	1100	13300				
	61,11			**2,75**	11,45	**3,3**	13,9	1672	1100	13300				
	54,83			**2,75**	12,77	**3,3**	15,5	1500	1100	13300				
	49,35			**2,75**	14,18	**3,3**	17,2	1350	1100	13300				
	44,55			**2,75**	15,71	**3,3**	19,1	1219	1100	13300				
	40,29			**3,75**	17,38	**4,6**	21,1	1503	1100	13300				
	36,49			**3,75**	19,19	**4,6**	23,3	1361	1100	13300				
	33,08			**3,75**	21,16	**4,6**	25,7	1234	1100	13300				
	30,66	15	82	**3,75**	22,83	**4,6**	27,7	1267	1100	13300				
	27,41			**3,75**	25,54	**4,6**	31,0	1133	1100	13300				
	24,68			**3,75**	28,37	**4,6**	34,4	1020	1100	13300				
	22,27			**3,75**	31,43	**4,6**	38,2	921	1100	13300				
	20,14			**3,75**	34,75	**4,6**	42,2	833	1100	13300				
	18,24			**3,75**	38,37	**4,6**	46,6	754	1100	13300				
	16,54			**3,75**	42,33	**4,6**	51,4	684	1100	13300				
1670-3540 Nm	429	106	63	**0,6**	1,63	**0,73**	2,0	2038	1550	18800	**İRSD**	**83**	155	97
	383			**0,6**	1,83	**0,73**	2,2	1812	1550	18800	**İRSDF**		156	107
	343			**0,6**	2,04	**0,73**	2,5	1631	1550	18800				
	336	83	62	**0,7**	2,08	**0,81**	2,5	1873	1550	18800				
	300			**0,8**	2,34	**0,91**	2,8	1873	1550	18800				
	263	65	65	**1,10**	2,66	**1,3**	3,2	2529	1550	18800				
	235			**1,10**	2,98	**1,3**	3,6	2255	1550	18800				
	210	52	72	**1,50**	3,33	**1,8**	4,0	3056	1550	18800				
	188			**1,50**	3,73	**1,8**	4,5	2725	1550	18800				
	162			**1,56**	4,32	**1,9**	5,3	2447	1550	18800				
	144			**1,58**	4,85	**1,9**	5,9	2209	1550	18800				
	130	40	74	**2,75**	5,40	**3,3**	6,6	3546	1550	18800				
	117			**2,75**	5,98	**3,3**	7,3	3202	1550	18800				
	104			**2,75**	6,73	**3,3**	8,2	2846	1550	18800				
	93,63			**2,74**	7,48	**3,3**	9,1	2554	1550	18800				
	83,20	32	76	**3,75**	8,41	**4,6**	10,2	3188	1550	18800				
	74,67			**3,75**	9,38	**4,6**	11,4	2861	1550	18800				
	67,31			**3,75**	10,40	**4,6**	12,6	2579	1550	18800				
	59,83			**3,75**	11,70	**4,6**	14,2	2293	1550	18800				
	55,73			**3,75**	12,56	**4,6**	15,3	2135	1550	18800				
	50,29			**5,50**	13,92	**6,7**	16,9	2826	1550	18800				
	45,84			**5,50**	15,27	**6,7**	18,5	2576	1550	18800				
	41,85			**5,50**	16,73	**6,7**	20,3	2352	1550	18800				
	38,24			**5,50**	18,30	**6,7**	22,2	2149	1550	18800				
	33,94			**5,50**	20,63	**6,7**	25,0	1907	1550	18800				

Service Factor *Factor de servicio* $S_f = 1$	i_t Total Ratio *Relación de*	i_s Worm Ratio *Relación de transmision*	η Efficiency *Eficiencia* [%]	50 Hz P_1 Power *Potencia* [kW]	50 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1400)	60 Hz P_1 Power *Potencia* [kW]	60 Hz n_2 Output Speeds *Velocidad de salida* [r.p.m] (n_1=1700)	M_2 Output Torque *Par de salida* [Nm]	F_{Q1} Over Loads *Sobrecargas* [N]	F_{Q1o} Over Loads *Sobrecargas* [N]	Type *Tipo*			kg
3400-6000 Nm	261	54	73	**1,28**	2,68	**1,6**	3,3	3274	2120	22000	**İRSD İRSDF**	**161**	157 158	160 170
	235			**1,49**	2,98	**1,8**	3,6	3430	2120	22000				
	213			**1,59**	3,29	**1,9**	4,0	3317	2120	22000				
	194			**1,68**	3,61	**2,0**	4,4	3186	2120	22000				
	203	87	63	**3,13**	3,45	**3,8**	4,2	5380	2120	22000				
	181			**3,40**	3,87	**4,1**	4,7	5213	2120	22000				
	162			**3,68**	4,32	**4,5**	5,2	5045	2120	22000				
	146	87	63	**3,91**	4,79	**4,7**	5,8	4834	2120	22000				
	132			**4,19**	5,30	**5,1**	6,4	4687	2120	22000				
	120			**4,44**	5,82	**5,4**	7,1	4518	2120	22000				
	126	42	74	**4,17**	5,56	**5,1**	6,7	5222	2120	22000				
	114			**4,46**	6,16	**5,4**	7,5	5039	2120	22000				
	103			**4,55**	6,81	**5,5**	8,3	4652	2120	22000				
	93,48			**5,00**	7,49	**6,1**	9,1	4652	2120	22000				
	85,27			**5,28**	8,21	**6,4**	10,0	4481	2120	22000				
	78,00			**6,13**	8,97	**7,4**	10,9	4756	2120	22000				
	71,51			**5,84**	9,79	**7,1**	11,9	4153	2120	22000				
	65,69			**6,10**	10,66	**7,4**	12,9	3988	2120	22000				
	60,90	30	77	**7,17**	11,49	**8,7**	14,0	4518	2120	22000				
	55,71			**7,51**	12,57	**9,1**	15,3	4330	2120	22000				
	51,08			**7,87**	13,70	**9,6**	16,6	4162	2120	22000				
	46,92			**8,18**	14,92	**9,9**	18,1	3976	2120	22000				
	33,65			**9,39**	20,80	**11,4**	25,3	3270	2120	22000				

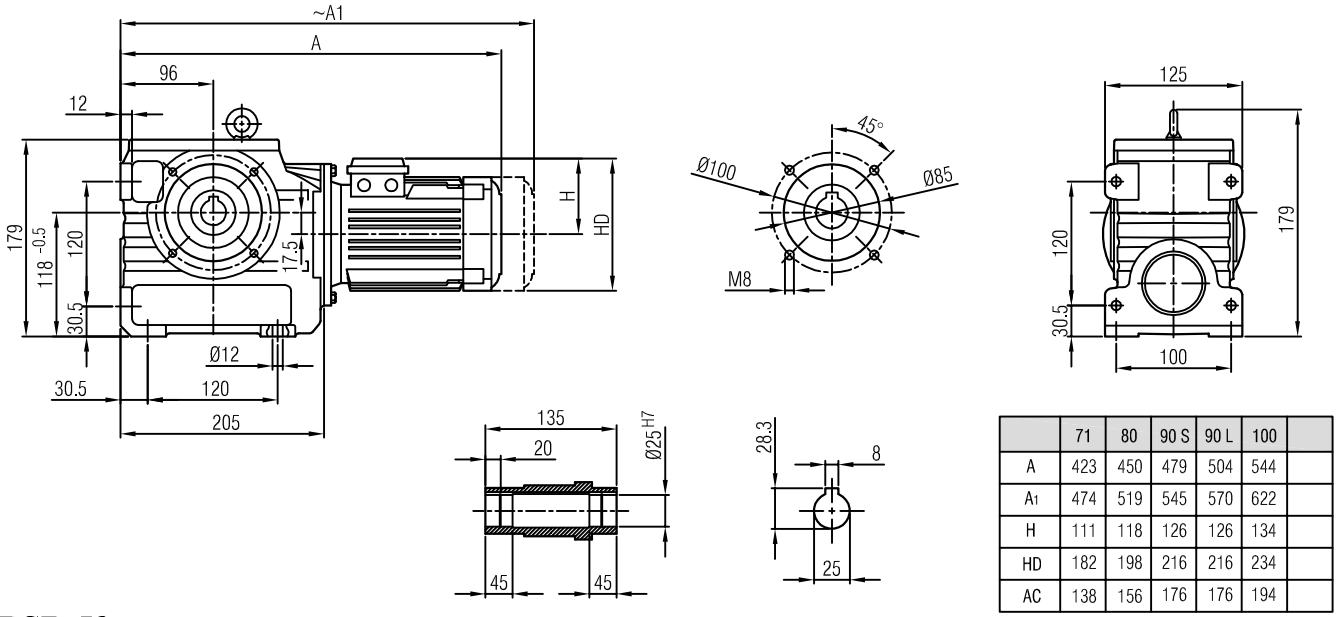


Helisel Sonsuz Vidali Redüktörler Ölçü Sayfalari

Helical,Worm Gearbox

Réducteurs hélicoïdaux à roue et vis sans fi

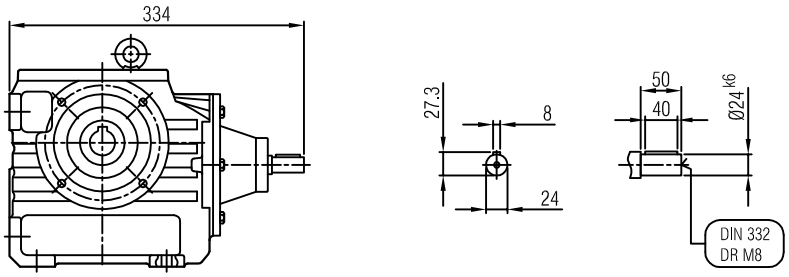
İRSDM 53



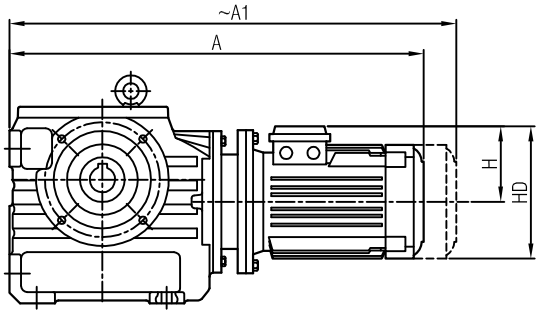
	71	80	90 S	90 L	100	
A	423	450	479	504	544	
A_1	474	519	545	570	622	
H	111	118	126	126	134	
HD	182	198	216	216	234	
AC	138	156	176	176	194	

"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSD 53



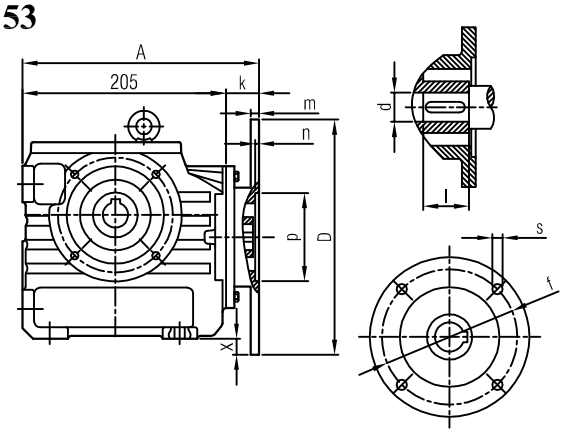
İRSDPM 53



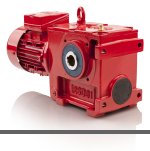
	71/B5	80/B5	90 S/B5	90 L/B5	100/B5
A	472	495	510	535	581
A_1	523	564	576	601	659
H	111	118	126	126	134
HD	182	198	216	216	234
AC	138	156	176	176	194

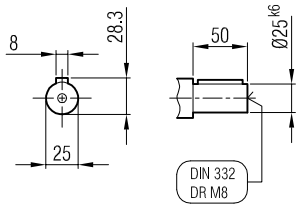
"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSDP 53



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





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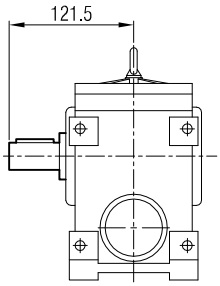

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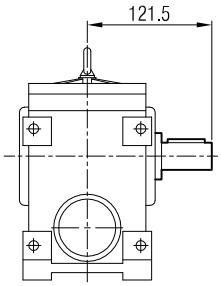

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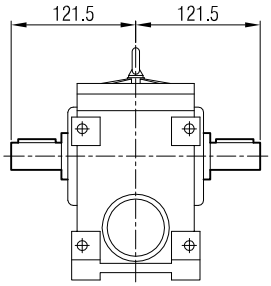

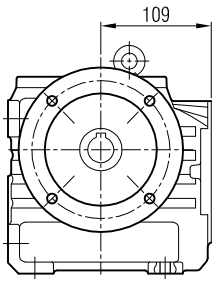

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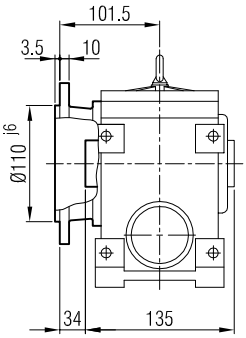

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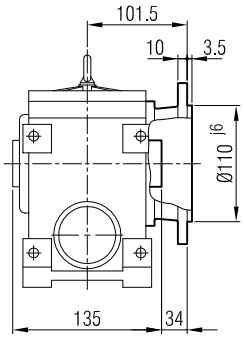

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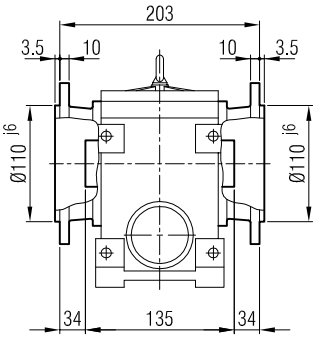

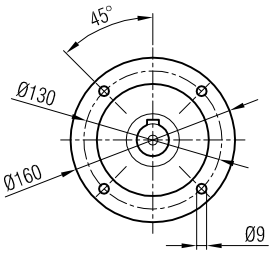

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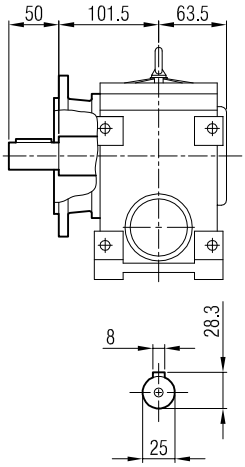

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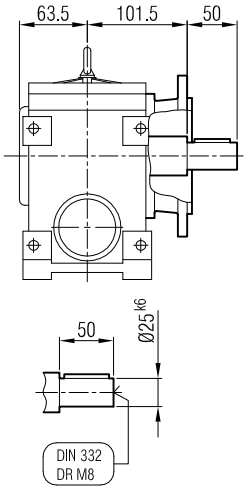

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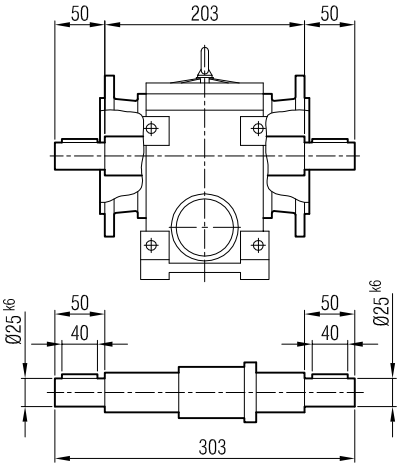
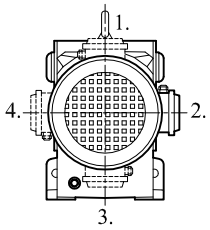


Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



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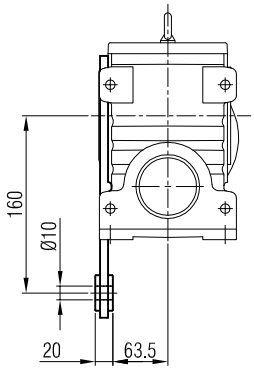

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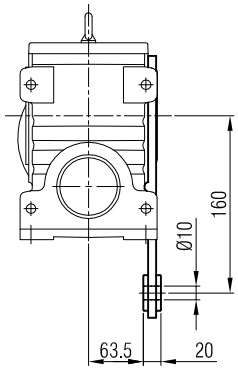
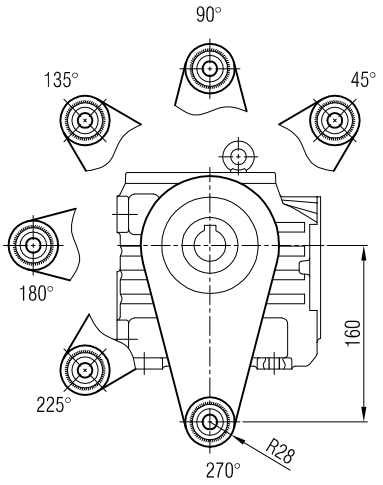
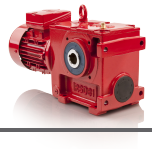
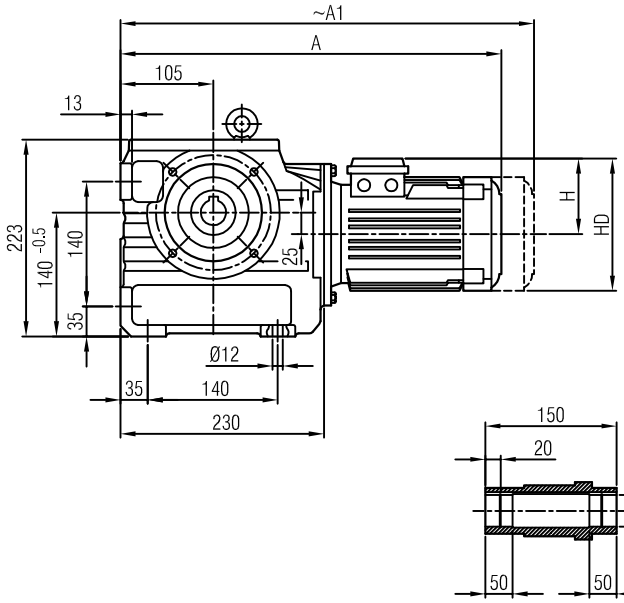






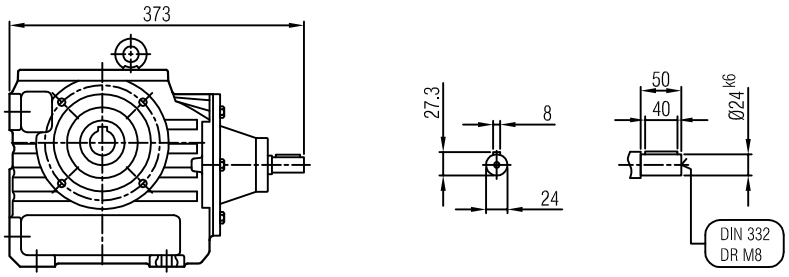
İRSDM 63



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

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

İRSD 63



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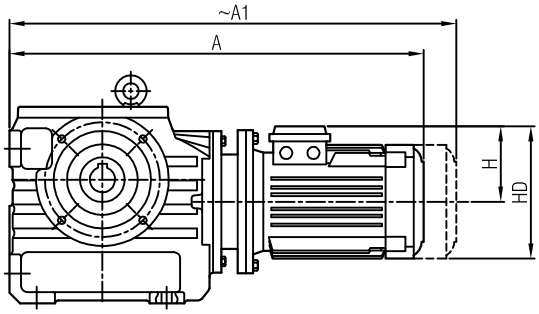
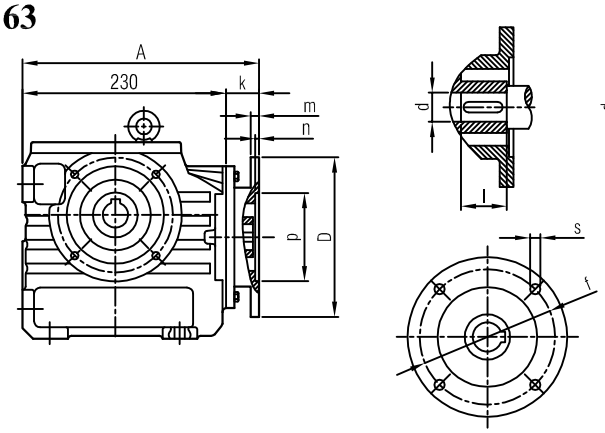


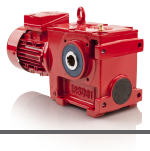
	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/B5
A	498	524	539	564	609	629
A1	549	593	605	630	687	712
H	111	118	126	126	134	145
HD	182	198	216	216	234	257
AC	138	156	176	176	194	218

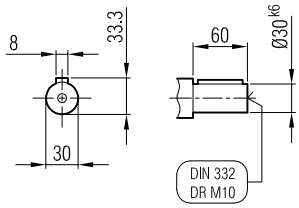
"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSDP 63



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





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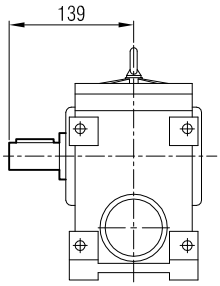

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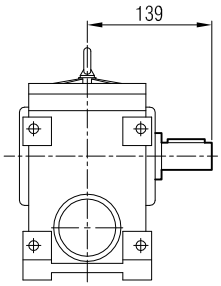

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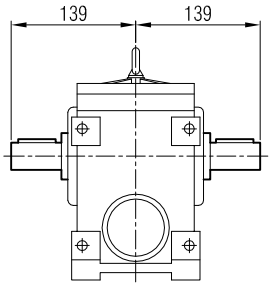

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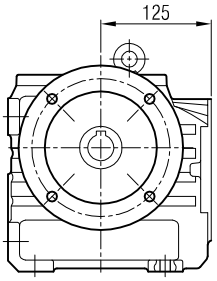

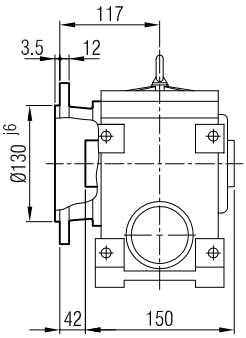

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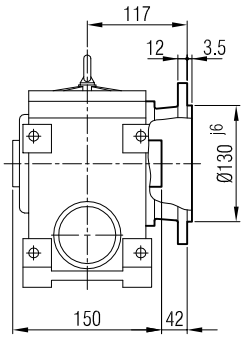

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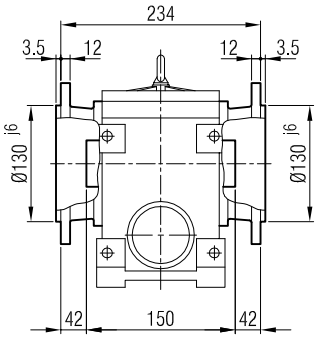

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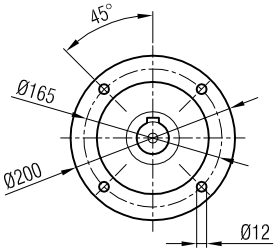

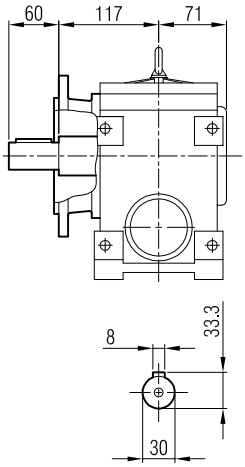

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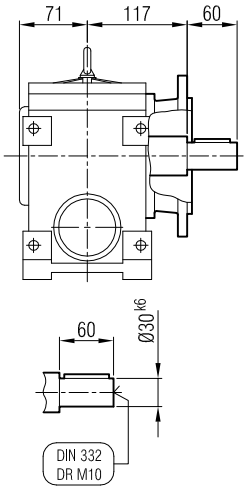

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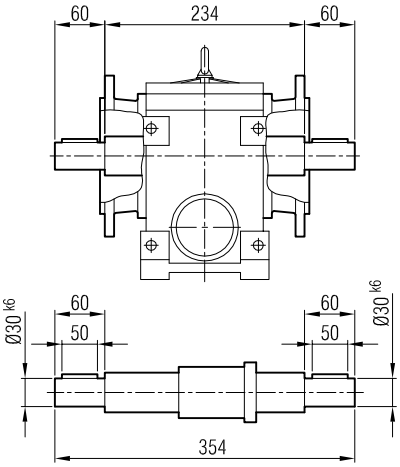
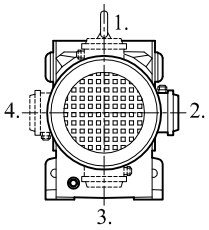


Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



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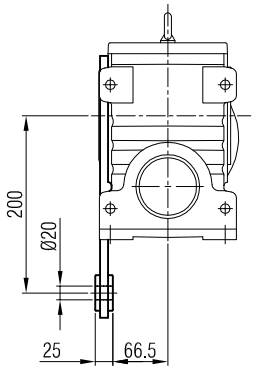

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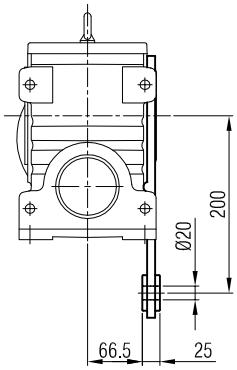
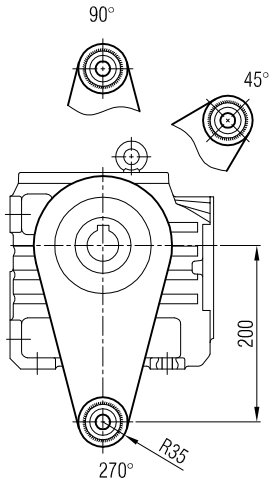
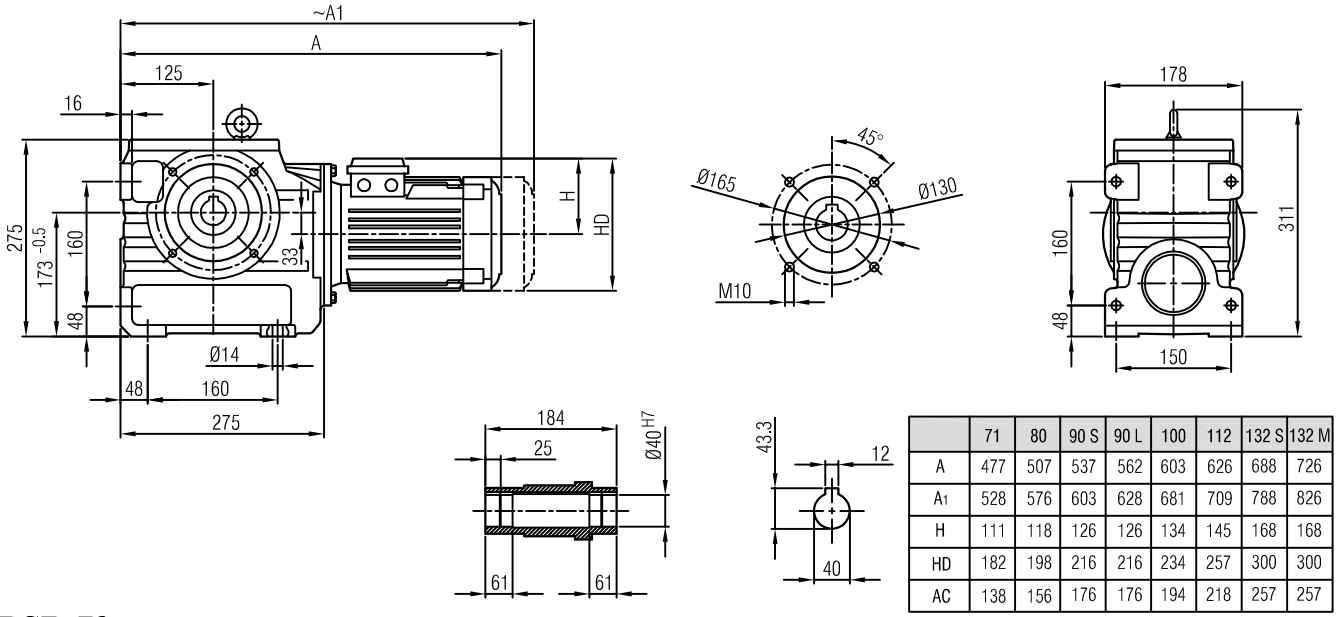




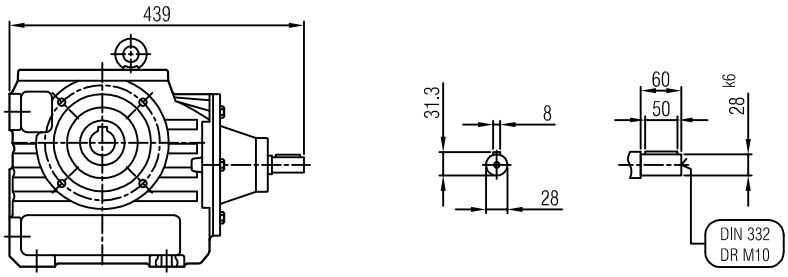
İRSDM 73



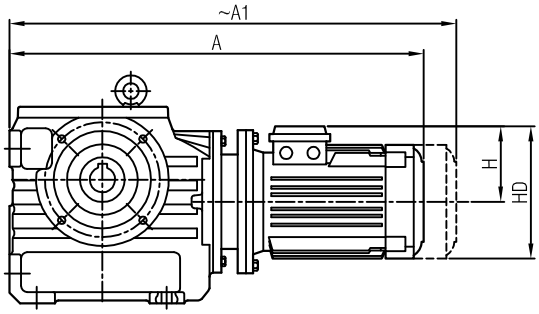
	71	80	90 S	90 L	100	112	132 S	132 M
A	477	507	537	562	603	626	688	726
A_1	528	576	603	628	681	709	788	826
H	111	118	126	126	134	145	168	168
HD	182	198	216	216	234	257	300	300
AC	138	156	176	176	194	218	257	257

"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSD 73



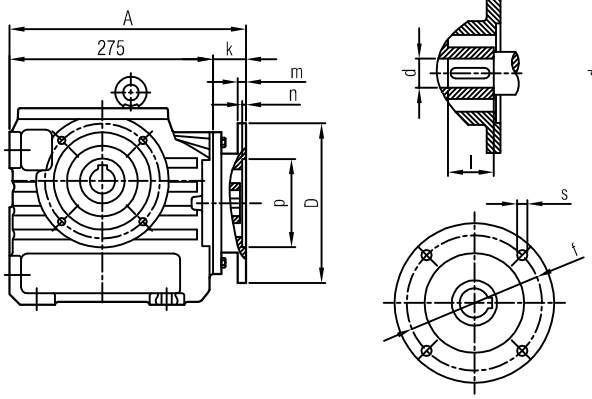
İRSDPM 73



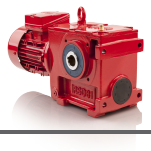
	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5
A	553	586	601	626	663	683	751	789
A_1	604	655	667	692	741	766	851	889
H	111	118	126	126	134	145	168	168
HD	182	198	216	216	234	257	300	300
AC	138	156	176	176	194	218	257	257

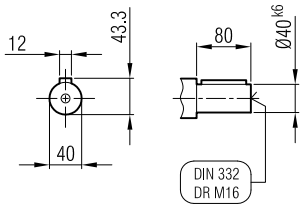
"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSDP 73



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





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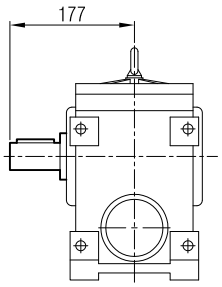

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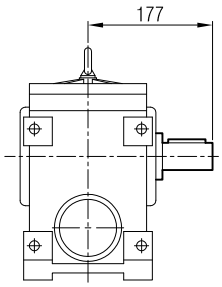

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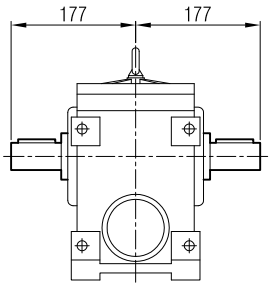

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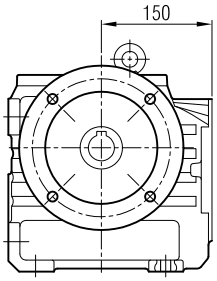

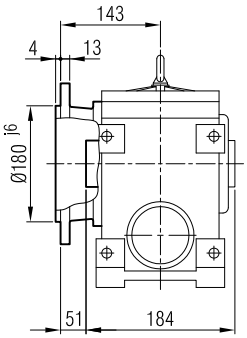

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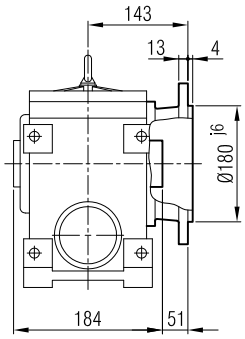

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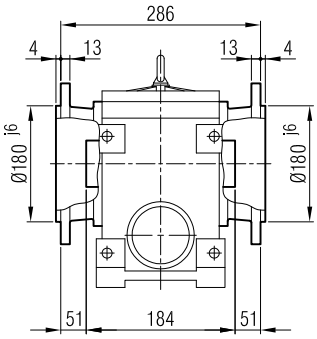

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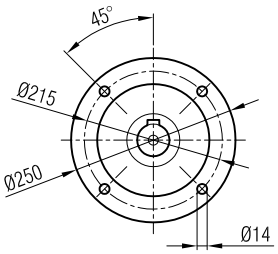

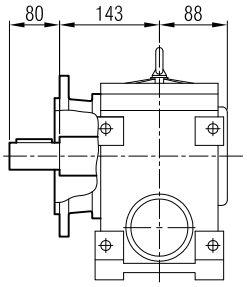

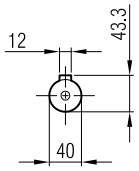

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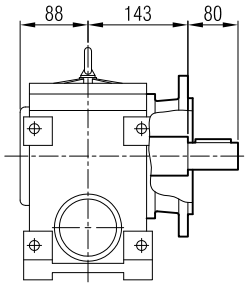

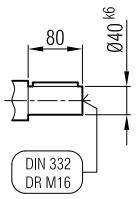

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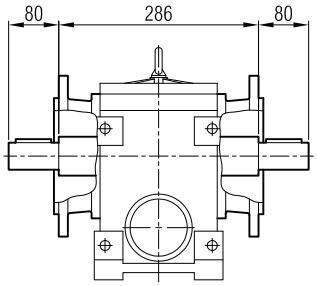
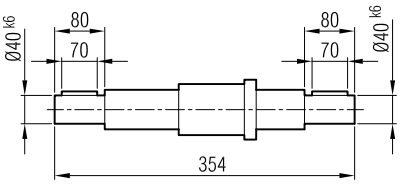
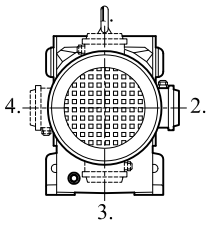




Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



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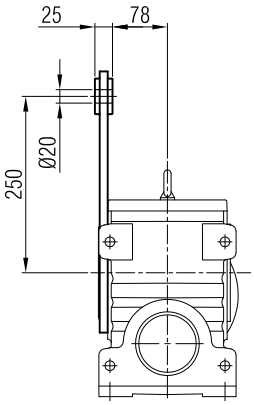

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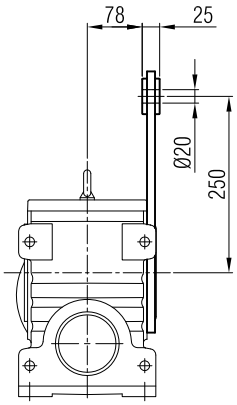
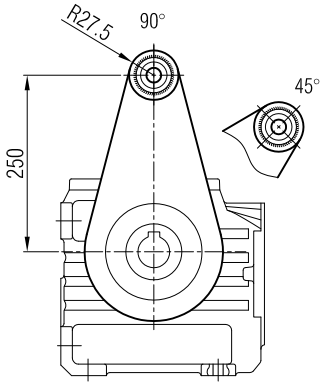
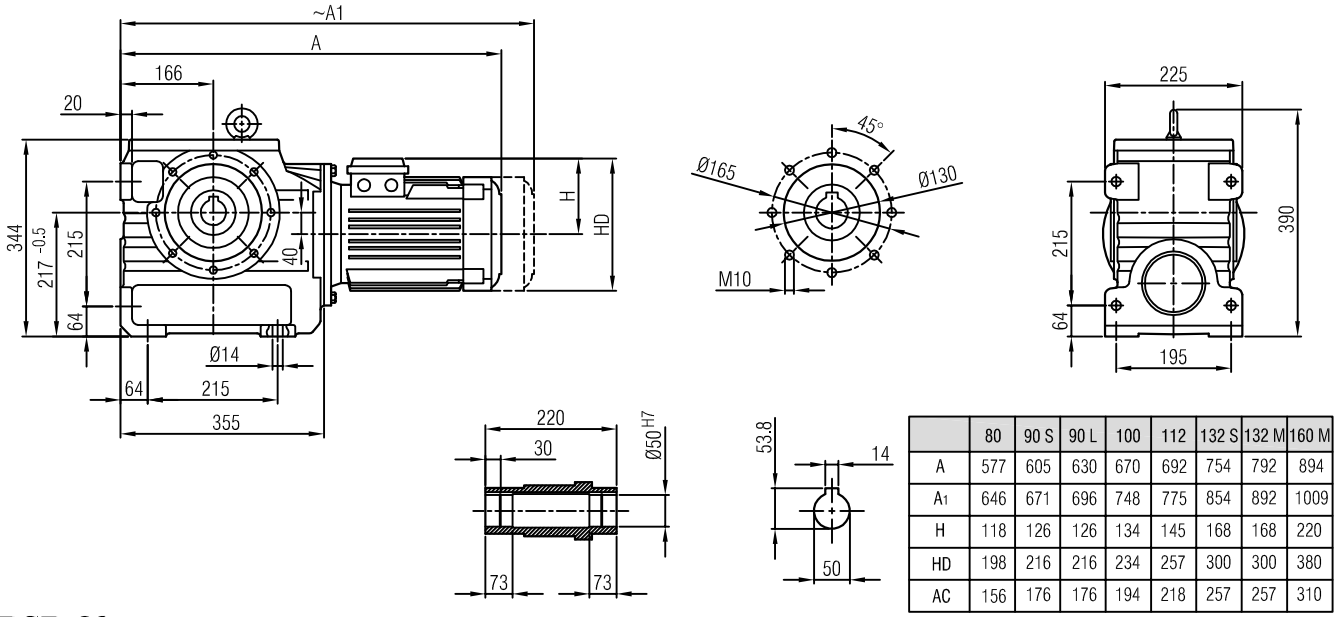




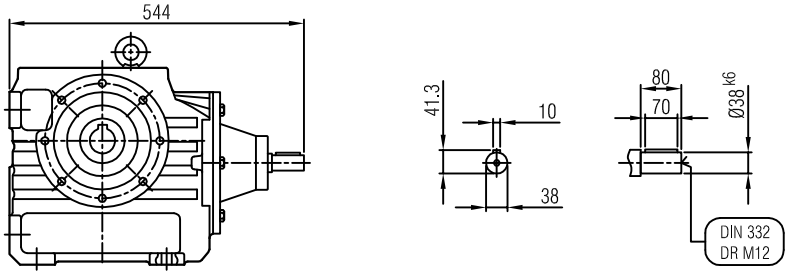
İRSDM 83



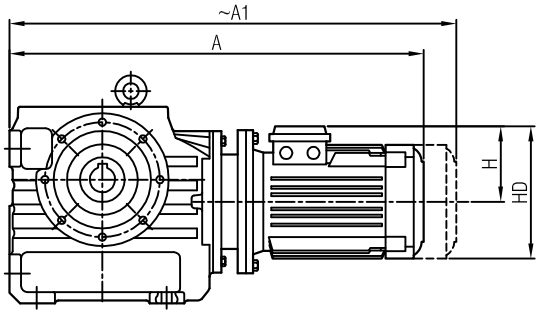
	80	90 S	90 L	100	112	132 S	132 M	160 M
A	577	605	630	670	692	754	792	894
A_1	646	671	696	748	775	854	892	1009
H	118	126	126	134	145	168	168	220
HD	198	216	216	234	257	300	300	380
AC	156	176	176	194	218	257	257	310

"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSD 83



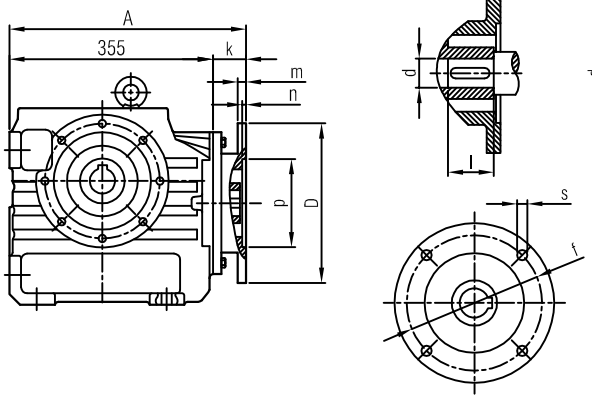
İRSDPM 83



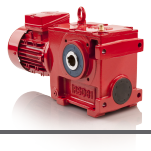
	80/B5	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5	160 M/B5
A	665	680	705	745	765	830	868	956
A_1	734	746	771	823	848	930	968	1071
H	118	126	126	134	145	168	168	220
HD	198	216	216	234	257	300	300	380
AC	156	176	176	194	218	257	257	310

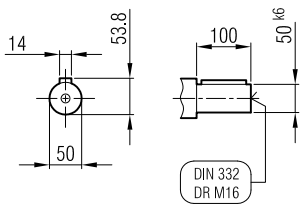
"A_1" Ölçüsü Frenli Motorlar içindir.
Dimension "A_1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSDP 83



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





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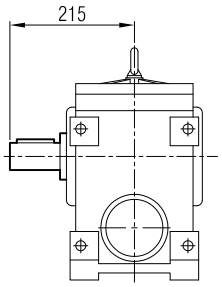

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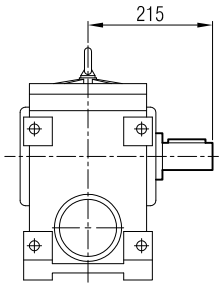
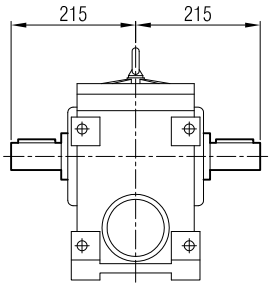
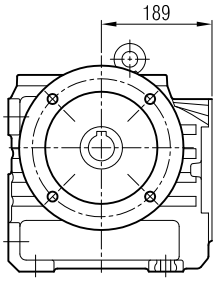


... -SD





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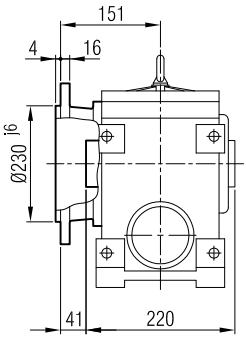

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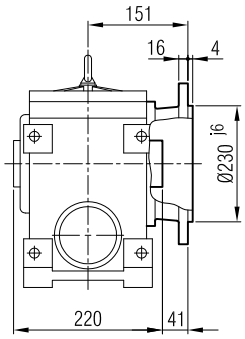

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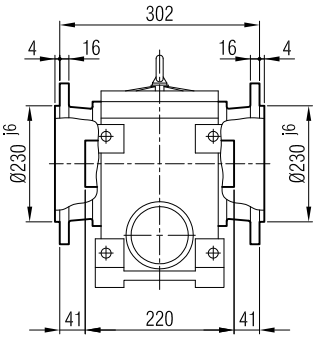
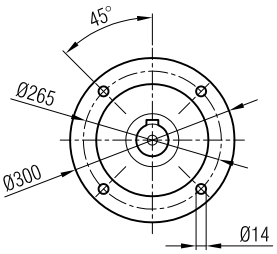
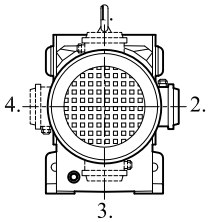
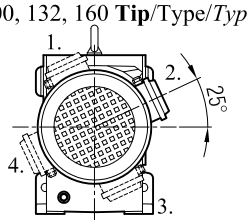




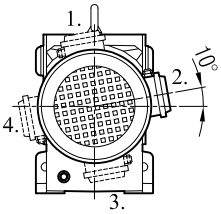
Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



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

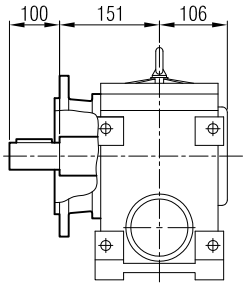


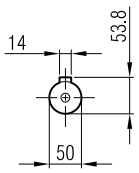
80 **Tip**/Type/*Typ*



112 **Tip**/Type/*Typ*

... -FR -SR





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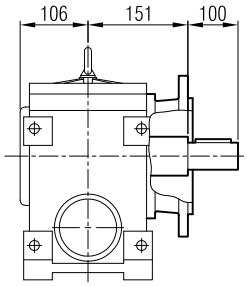

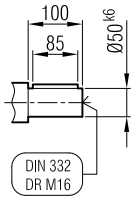

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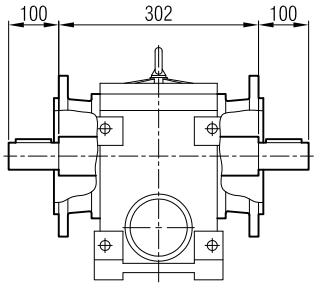
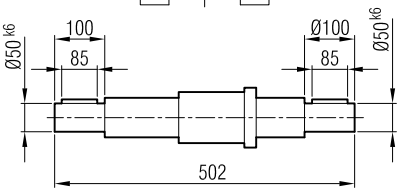
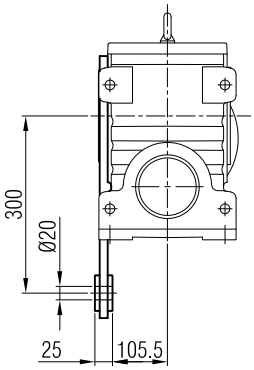
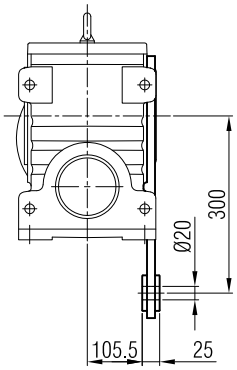


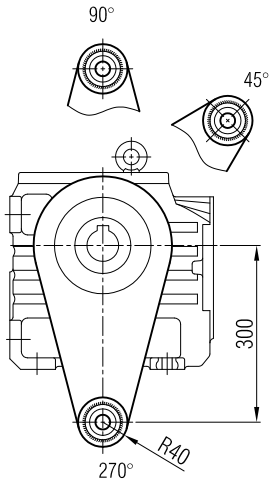


-TR

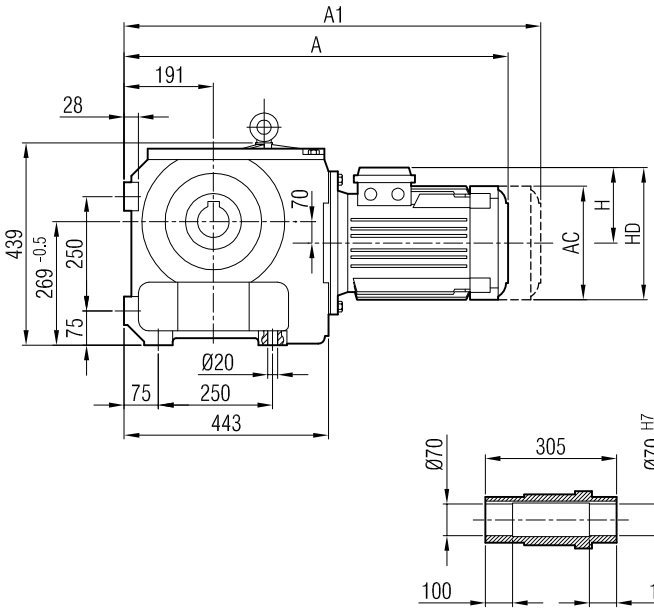


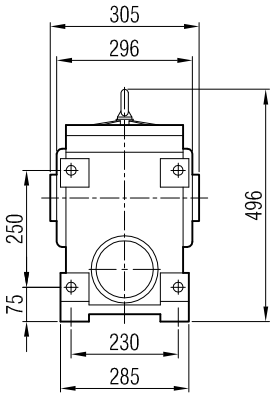
-TL





İRSDM 161

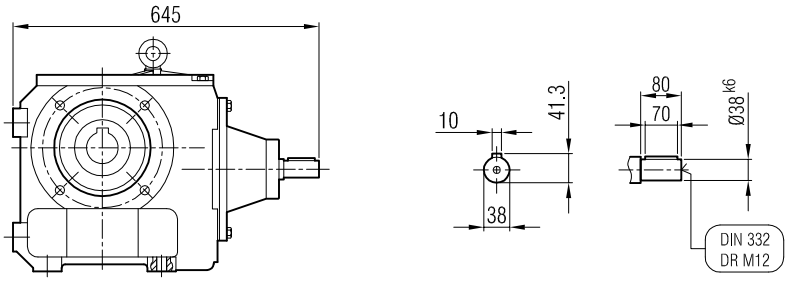




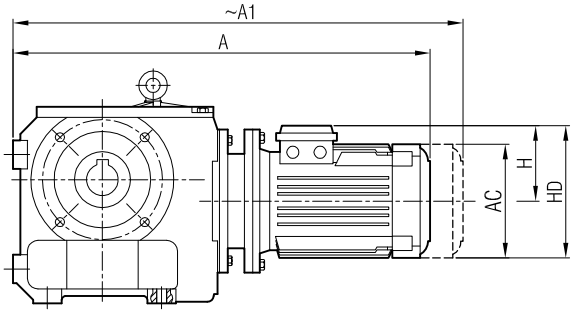
	90 S	90 L	100	112	132 S	132 M
A	784	810	755	778	825	871
A1	879	905	870	903	980	1030
H	126	126	134	145	168	168
HD	216	216	234	257	300	300
AC	176	176	194	218	257	257

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

İRSD 161



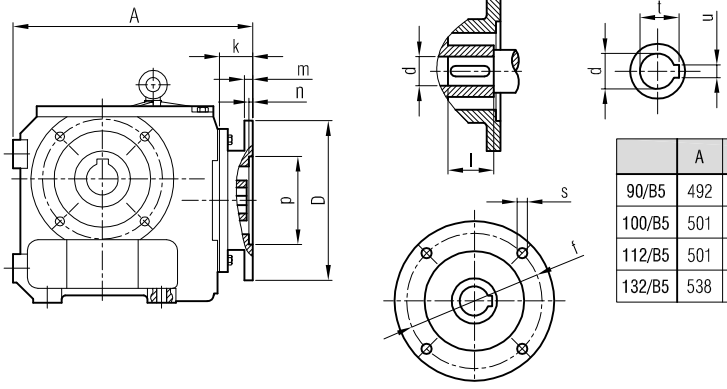
İRSDPM 161



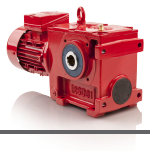
	90 S/B5	90 L/B5	100/B5	112/B5	132 S/B5	132 M/B5
A	751	776	817	837	918	956
A1	817	842	895	920	1018	1056
H	126	126	134	145	168	168
HD	216	216	234	257	300	300
AC	176	176	194	218	257	257

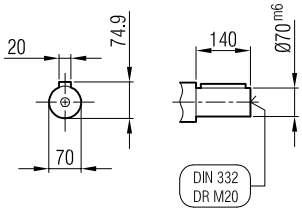
"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake.
Le dimensions "A1" correspond aux moteurs équipés de freins.

İRSDP 161

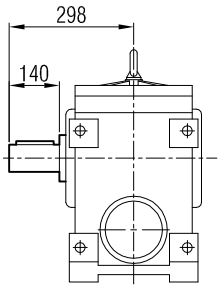


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u
90/B5	492	130	165	200	M10	49	12	5	24	50	27.3	8
100/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
112/B5	501	180	215	250	M12	58	14	5	28	50	31.3	8
132/B5	538	230	265	300	M12	95	17	6	38	80	41.3	10

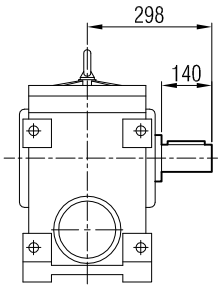




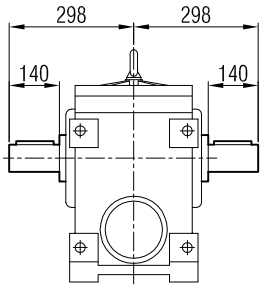
... -SR

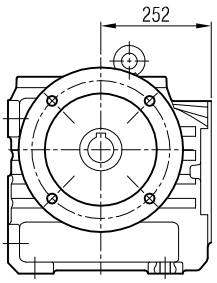


... -SL



... -SD





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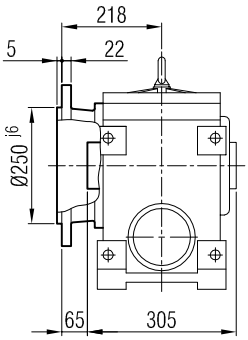

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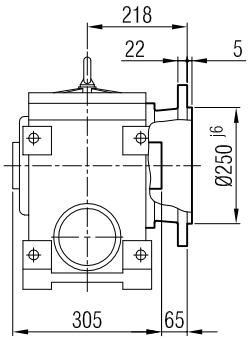

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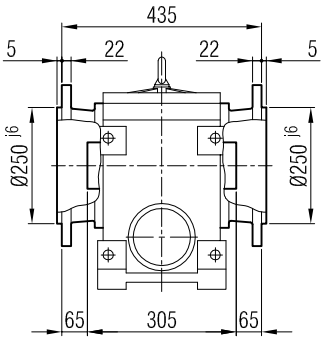

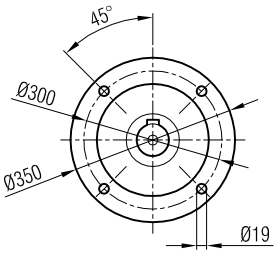

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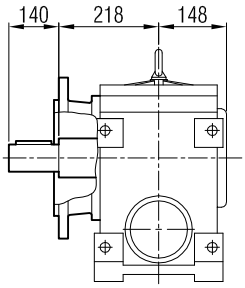
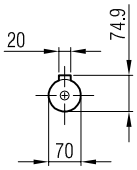
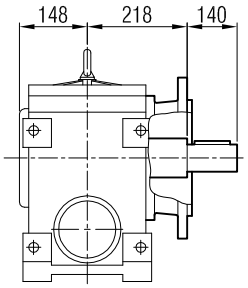
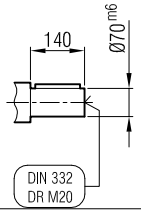


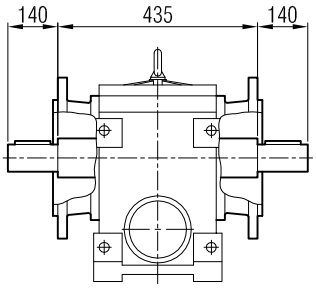


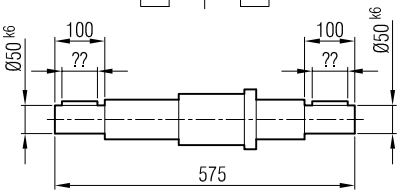
... -FL -SL



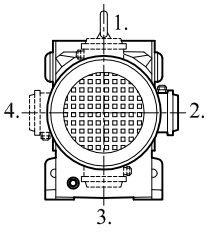


... -FD -SD





Klemens Pozisyonları
Terminal Box Positions
Klemenskasten Positionen



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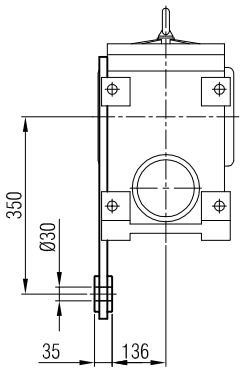
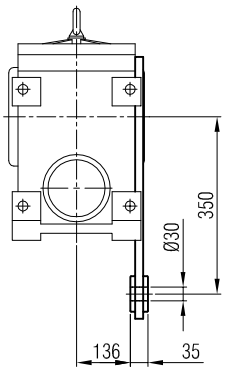
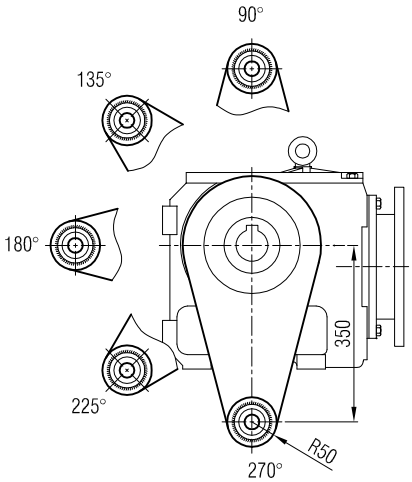


-TL



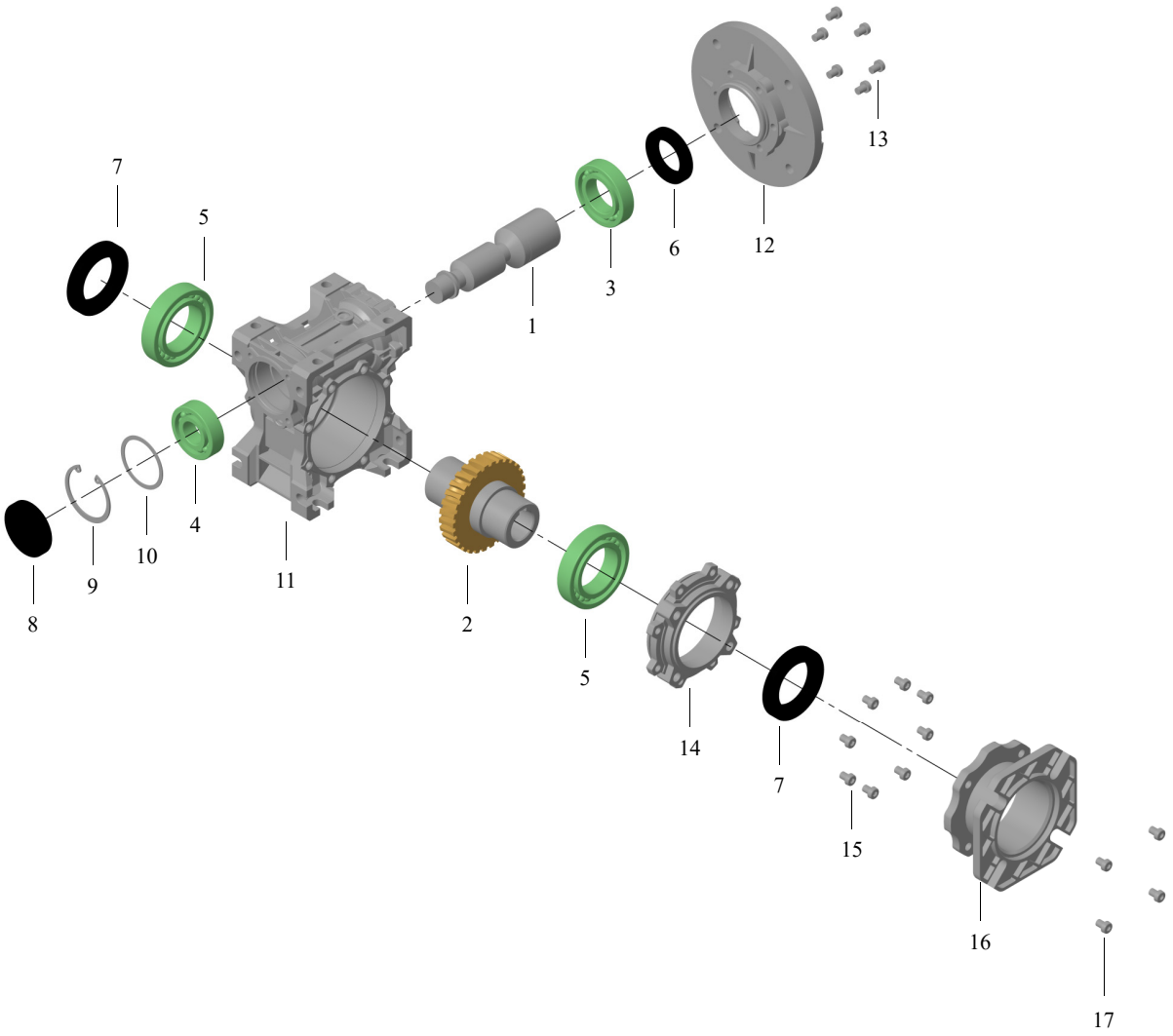


Yedek Parça Listeleri

General Parts List
Liste des composants

TİP / TYPE

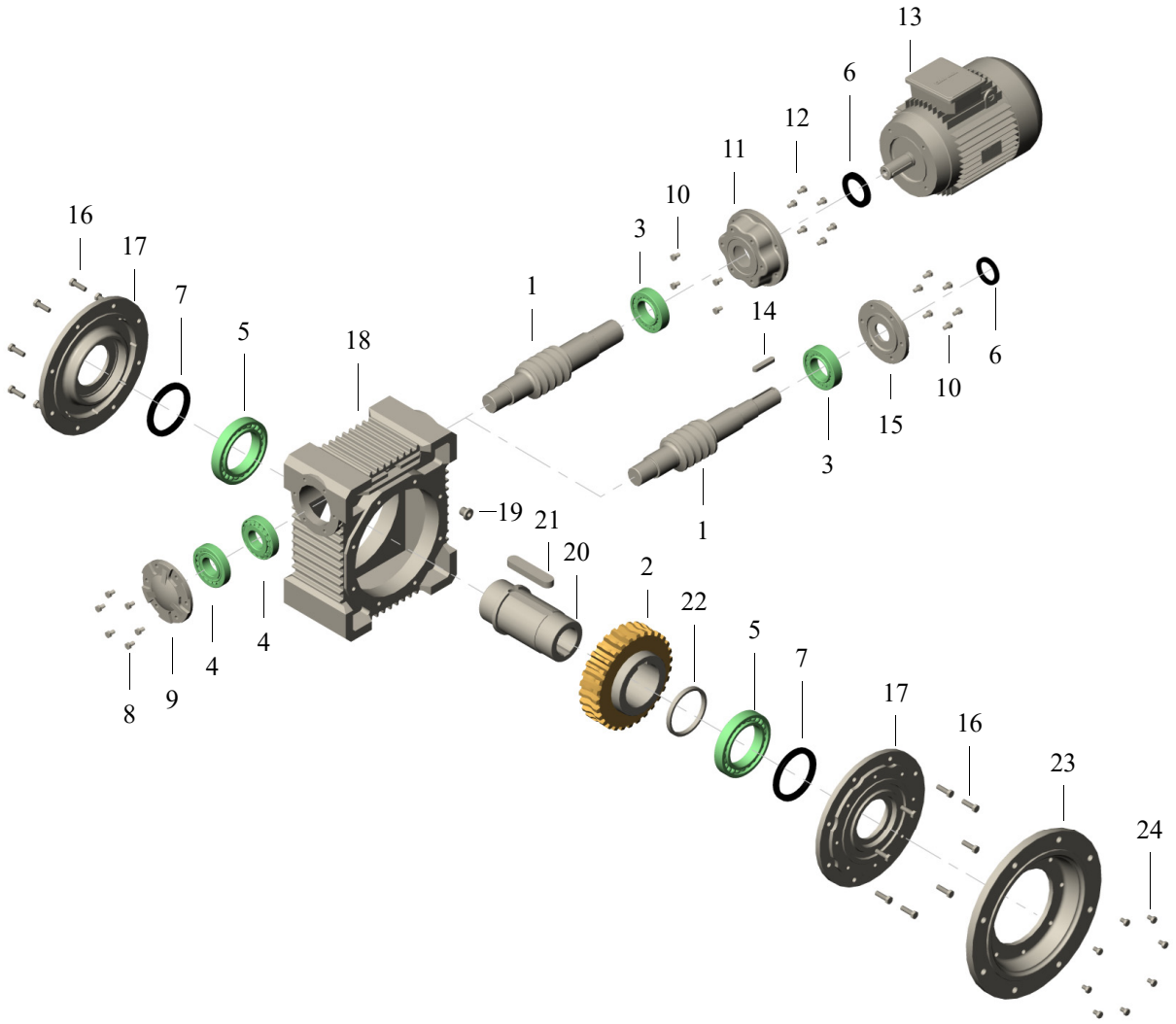
SM / SP / S } 30-40-50-63-75-90



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

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

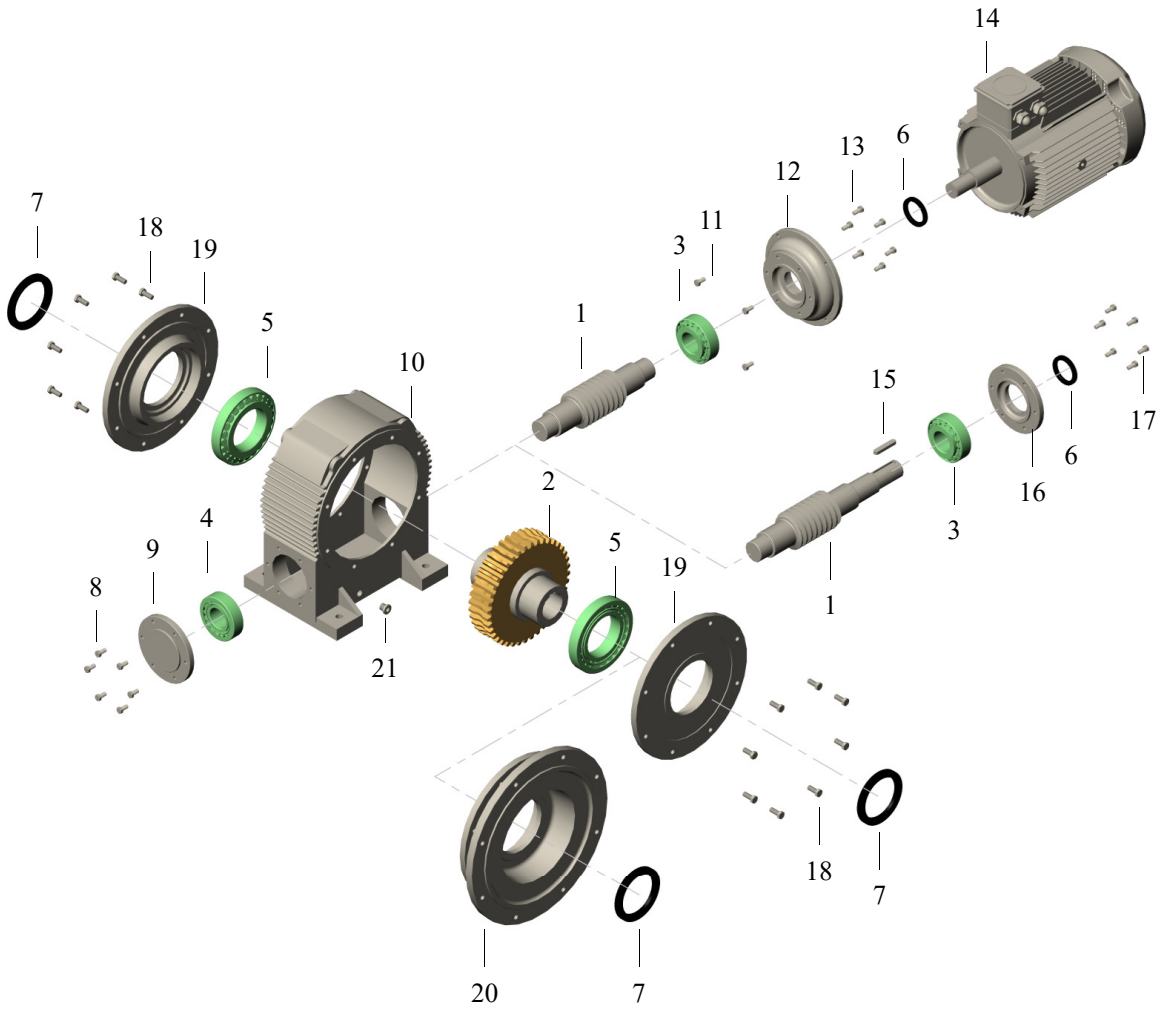
TİP / TYPE
İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 52-65-82-102-127-162



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

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

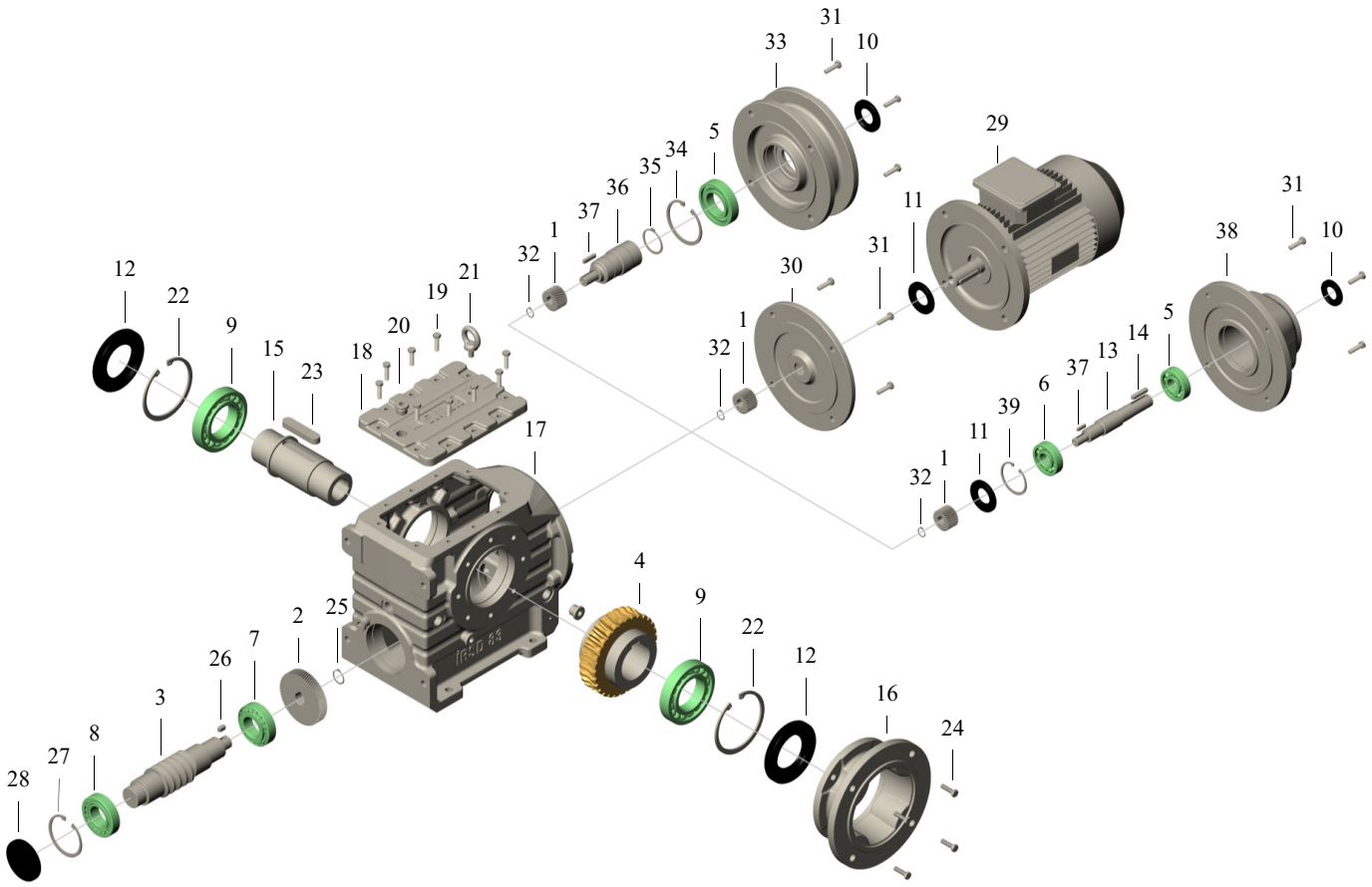
TİP / TYPE
İRSA / İRSF / İRSAP / İRSFP / İRSAM / İRSFM } 201-250



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

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

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



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

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

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