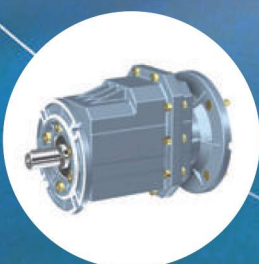
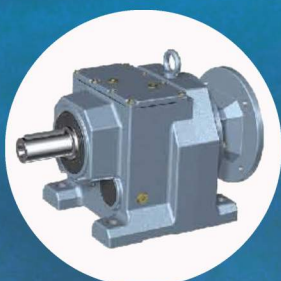


BRC/TR

Reductor coaxial

TR/BRC SERIES

Helical gear units



**BROWN
ADVANCE**



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Specialist in power transmission

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4	• ESTRUCTURA DE BRC	PRODUCT STRUCTURE PICTURE
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	• SERIE TR/TRF HIERRO FUNDIDO	IRON CAST SERIES TR/TRF

3. REFERENCIAS / REFERENCES

Reductor / Gear unit								Motor / Motor		
BRC F 02 II - P71B5 - 28.88 - M6 / 270° - 7124 (或/or 0.37-4) - 220/380-50 / 1										
1	2	3	4	5	6	7	8	9	10	11

No	说 明	Comments
1	BRC: Reductor coaxial	BRC: Helical gearbox
2	1). Sin codigo la posición es patas 2). F: Brida tipo B5 3). Z: Brida tipo B14	1). No code means foot-mounted 2). F: b5 flange mounted 3). Z: b14 flange mounted
3	Tamaño de reductor 01,02,03,04	Specification code of gear units 01,02,03,04
4	1). Sin codigo la posición es patas 3). I, II, III: B5 Brida de salida según especificaciones.	1). No code means foot-mounted, no flange 3). I, II, III: B5 Output flange specification, default I not to write out is ok
5	1). IEC motor (PAM) 2). HS: Eje libre de entrada	1). IEC Motor adapters 2). HS: Shaft input
6	Relación de reducción i	Transmission ratio of gear units i
7	M1: Posición de montaje Si no se especifica la posición será M1	M1: Mounting positio, default mounting position M1 not to write out is ok
8	Diagrama de posición de la caja de bornes del motor 0°	Position diagram for motor terminal box default position 0°
9	1). Sin marcar no incluye motor 2). Polos del motor	1). No mark means without motor 2). Model motors (poles of power)
10	Voltaje - frecuencia	Voltage - frequency
11	Diagrama de posción par acaja de conexiones	Position diagram for motor terminal box default position

Ejemplo / Example : BRC01-P71B5 - 28.50

BRCZ03 - HS - 6.31

BRCF02III - P80B14- 8.78-7124 -220/380-50 / 2

4. PARAMETROS RELEVANTES

4.1 Potencia P

$$P_1 = \frac{P_2}{\eta} \text{ [kW]}$$

$$P_{1n} \geq P_1 \cdot f_s \text{ [kW]}$$

P_1	Potencia de entrada
P_2	Potencia de salida
P_{1n}	Potencia nominal de entrada
f_s	Factor de servicio
η	Eficiencia

La eficiencia de los reductores BRC para 2 trenes de engranajes es del 96%.

4.2 Velocidad de giro n

n_1	Velocidad de entrada
n_2	Velocidad de salida

Se recomiendan velocidades de entrada inferiores a 1400rpm para optimizar las condiciones de trabajo del reductor y garantizar la vida de la unidad. mayores velocidades son permitidas, pero el pam M2 se vera reducido.

4.3 Reducción i

$$i = \frac{n_1}{n_2}$$

4.4 Par M

$$M_2 = \frac{9550 \cdot P_1 \cdot \eta}{n_2} \text{ [Nm]}$$

$$M_{2n} \geq M_2 \cdot f_s \text{ [Nm]}$$

M_2	Par de salida
M_{2n}	Par nominal de salida
P_1	Potencia de entrada
η	Eficiencia
f_s	Factor de servicio

4. RELEVANT PARAMETER

4.1 Power P

$$P_1 = \frac{P_2}{\eta} \text{ [kW]}$$

$$P_{1n} \geq P_1 \cdot f_s \text{ [kW]}$$

P_1	Input power
P_2	Output power
P_{1n}	Rated input motor power
f_s	Service factor
η	Transmission efficiency

BRC Series helical gear units has **2 stage** and the efficiency is about **96%**.

4.2 Rotation speed n

n_1	Gear units input speed
n_2	Gear units output speed

If driven by the external gearing, 1400r/min or lower rotation speed is suggested so as to optimize the working conditions and prolong the service life. Higher input rotation speed is permitted, but in this situation, the rated torque M_2 will be reduced.

4.3 Transmission ratio i

$$i = \frac{n_1}{n_2}$$

4.4 Torque M

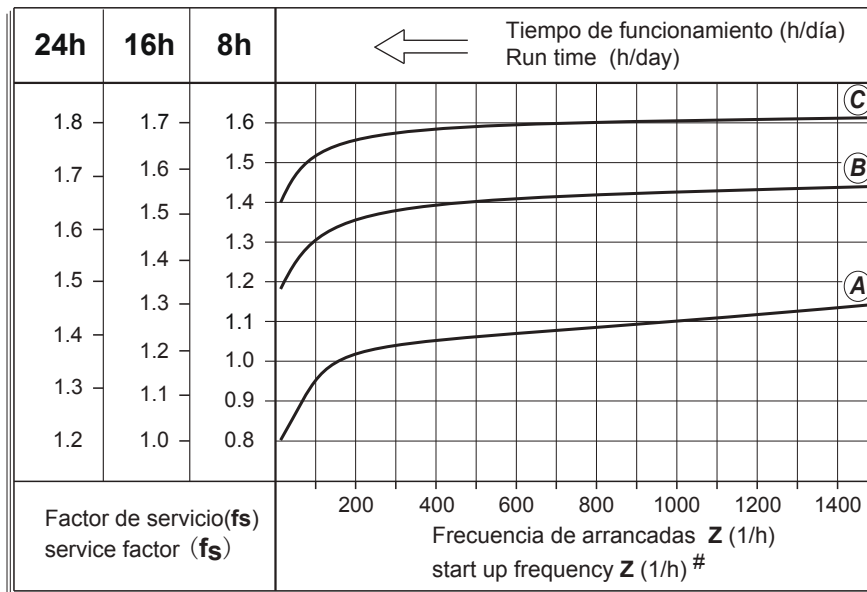
$$M_2 = \frac{9550 \cdot P_1 \cdot \eta}{n_2} \text{ [Nm]}$$

$$M_{2n} \geq M_2 \cdot f_s \text{ [Nm]}$$

M_2	Output torque
M_{2n}	Rated output torque
P_1	Input power
η	Transmission efficiency
f_s	Service factor

4.5 Facto de servicio *fs*

El efecto de la máquina accionada por el engranaje se tiene en cuenta a un nivel suficiente de precisión utilizando el factor de servicio *fs*. El factor de servicio se determinará en función del tiempo de funcionamiento diario y la frecuencia de arranque *Z*. Tres clasificaciones de carga se consideran en función del factor masa de aceleración. Puede ver el factor de servicio aplicable a su máquina en la figura siguiente. El factor de servicio seleccionado utilizando este diagrama debe ser menor que o igual al factor de servicio según se indica en la tabla de parámetros de rendimiento.



Frecuencia de arrancadas *Z*: Los ciclos incluyen el arranque y la parada así como aumentos y disminución de la velocidad.

Starting frequency *Z*: The cycles include all starting and braking procedures as well as change overs from low to high speed.

4.5.1 Clasificación de cargas

- Ⓐ carga uniforme, Factor de aceleración permitido ≤ 0.2
- Ⓑ Carga moderada, Factor de aceleración permitido ≤ 3
- Ⓒ Carga impulsiva, Factor de aceleración permitido ≤ 10

4.5.1 Load classifications

- Ⓐ Uniformshock load, permitted mass acceleration factor ≤ 0.2
- Ⓑ Moderate shock load, permitted mass acceleration factor ≤ 3
- Ⓒ Heavy shock load, permitted mass acceleration factor ≤ 10

Load classifications see the addendum.

4.5.2 Factor de aceleración

El factor de aceleración es calculado como sigue:

$$fa = \frac{Jc}{Jm}$$

4.5.2 Mass acceleration factor

The mass acceleration factor is calculated as follows:

$$fa = \frac{Jc}{Jm}$$

fa Factor de aceleración

Jc Momentos de inercia externos [kgm²]

Jm Momentos de inercia en el motor [kgm²]

Si el factor de aceleración es **fa** > 10, por favor contactar con nuestro servicio técnico

Para asegurar el servicio del reductor, el use del factor **fs** Seleccionado en el catálogo, debe ser igual o superior que el calculado en **fs**.

4.6 Cargas radiales Fr

Al determinar las cargas radiales resultantes, debe ser considerado el tipo de elemento de transmisión montado en el eje de salida. Ver la siguiente tabla para obtener el factor fz de cálculo de algunos elementos.

Elemento de transmisión Transmission element	Factor según elemento Fz Transmission element factor Fz	Comentarios Comments
Engranajes / Gears	1.00	≥ 17 / teeth
	1.15	< 17 / teeth
Piñón de cadena / Chain sprockets	1.00	≥ 20 / teeth
	1.25	< 20 / teeth
	1.40	< 13 / teeth
Poleas tipo V / Narrow V-belt pulleys	1.75	Influencia de la tensión Influence of the tensile force
Poleas planas / Flat belt pulleys	2.50	Influencia de la tensión Influence of the tensile force
Poleas dentadas / Toothed belt pulleys	2.50	Influencia de la tensión Influence of the tensile force

Las cargas ejercidas sobre el eje son calculadas de la siguiente forma:

$$F_r = \frac{M \cdot 2000 \cdot f_z}{d_0} \text{ [N]}$$

Fr Carga radial resultante [N]

M Par en el eje [Nm]

d₀ Diámetro del elemento de transmisión montado en el eje en [mm]

fz Factor del elemento de transmisión

La carga radial permitida en el eje es calculado con la siguiente formula:

$$F_{xL} \leq \frac{Fr_2 \cdot a}{(b+x)} \text{ [N]}$$

Fr₂ Carga radial permitida (x = L/2) para montaje de reductores con patas según tablas de selección en [N]

a, b constantes según table

fa Mass acceleration factor

Jc All external mass moments of inertia [kgm²]

Jm Mass moment of inertia on the motor end [kgm²]

If mass acceleration factors **fa** > 10, please call our Technical Service.

To keep the service-life of gear units, the use factor **fs** selected from the catalogue must be equal or slightly higher than the calculated use factor **fs**.

4.6 Radial loads Fr

When determining the resulting radial loads, the type of transmission elements, mounted on the shaft end must be considered. Various transmission elements are corresponding with following transmission element factors fz:

The overhung loads exerted on the motor or gear shaft is then calculated as follows:

$$F_r = \frac{M \cdot 2000 \cdot f_z}{d_0} \text{ [N]}$$

Fr Resulting radial load [N]

M Torque on the shaft [Nm]

d₀ Mean diameter of the mounted transmission element in [mm]

fz Transmission element factor

The allowed radial load force on the shaft is calculated with the following formula:

$$F_{xL} \leq \frac{Fr_2 \cdot a}{(b+x)} \text{ [N]}$$

Fr₂ Permitted overhung load (x = L/2) for foot-mounted gear units according to the selection tables in [N]

a, b Constant as per table.

PARAMETROS RELEVANTES *RELEVANT PARAMETER*

x Distancia desde el punto de apoyo hasta el punto de aplicación de la carga en mm

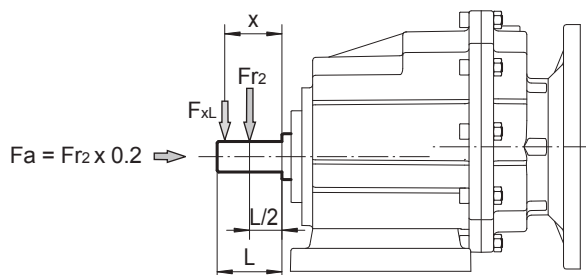
Los valores de a , b , Fr2 son dados en las siguientes tablas:

x Distance from the shaft shoulder to the force application point in (mm)

The values of a , b , Fr2 are given in the following tables:

	BRC01	BRC02	BRC03	BRC04
a	103	116.5	130	147
b	83	91.5	100	112

Cargas radiales y axiales Fr2, Fa / output shafts radial loads & axial loads Fr2, Fa



n_2 [min^{-1}]	10	40	60	80	100	120	150	180	250	400
Fr2 [N]	BRC01	2500	2500	2180	1980	1840	1630	1400	1080	920
	BRC02	5000	5000	4370	3970	3680	3470	2710	2150	1840
	BRC03	6500	6500	5550	5040	4510	3800	3530	2800	2390
	BRC04	8000	8000	6590	5990	5230	4570	4240	3350	2860

4.7 SELECTION TABLES COMMENTS

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
------------------	------------------	------------------	---	-------	--	---	------

P_{1n} Potencia nominal [kW];

n_2 Velocidad de salida [r/min];

M_{2n} M_{2n} Par nominal de salida [Nm];

$M_{2 \max}$ Par máximo de salida [Nm];

i Relación de reducción

f_s Factor de servicio



Reductor tipo



Tipo de motor

page localización de dimensiones

P_{1n} Rated power driving motor [kW];

n_2 Output speed [r/min];

M_{2n} Rated output torque [Nm];

$M_{2 \max}$ Permissible output torque [Nm];

i Gear unit ratio;

f_s Service factor;



Gear unit type;



Motor type;

page Dimension sheet page no;

5. EJEMPLO DE SELECCION / SELECTION EXAMPLE

5.1 Reductor

Ejemplo: El par necesario en la maquina es de 400Nm. Trabaja durante 6 horas al día con carga uniforme. 400 arrancadas por hora. brida de salida Ø200mm velocidad $n_2=30\text{rpm}$.

Ver tablas, $f_s=1.05$

$$M_{2n} \geq M_2 \cdot f_s = 400 \times 1.05 = 420[\text{Nm}]$$

$$i = \frac{n_1}{n_2} = \frac{1400}{30} = 46.67$$

Reductor seleccionado:

BRCF04 II - P90B5 - 44.18

5.2 Motoreductor

Ejemplo Potencia requerida por la maquina 1KW. Funcionamiento 8 horas al día con carga moderada. trabajo en continuo, montaje patas. Velocidad $n_2=95\text{rpm}$

Ver tablas, $f_s=1.35$

$$i = \frac{n_1}{n_2} = \frac{1400}{95} = 14.74$$

$$P_{1n} \geq P_1 \cdot f_s = \frac{P_2}{\eta} \cdot f_s = \frac{1}{0.96} \times 1.35 = 1.41[\text{kW}]$$

Reductor seleccionado:

BRC02 - P90B5 - 14.81 - 1.5-4 - M6

5.1 Gear units

Example: The required torque on driven machine is 400Nm, works for 6 hours per day, Uniform shock load, start-up frequency is 400 times per hour, Ø200mm output flange-mounted, $n_2=30 \text{ r/min}$.

see tables, $f_s=1.05$

$$M_{2n} \geq M_2 \cdot f_s = 400 \times 1.05 = 420[\text{Nm}]$$

$$i = \frac{n_1}{n_2} = \frac{1400}{30} = 46.67$$

Choose type:

BRCF04 II - P90B5 - 44.18

5.2 Gear motor

Example: The required power on driven machine 1kW, works for 8 hours per day, moderate shock load, start-up continuously, M6 foot-mounted, $n_2=95 \text{ r/min}$.

see tables, $f_s=1.35$

$$i = \frac{n_1}{n_2} = \frac{1400}{95} = 14.74$$

$$P_{1n} \geq P_1 \cdot f_s = \frac{P_2}{\eta} \cdot f_s = \frac{1}{0.96} \times 1.35 = 1.41[\text{kW}]$$

Choose type:

BRC02 - P90B5 - 14.81 - 1.5-4 - M6

6. RATIO AND IEC MOTOR ADAPTERS

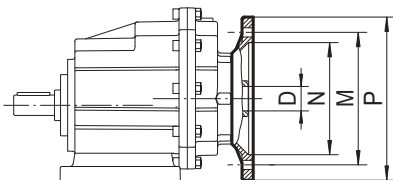
BRC..01..P(IEC)				
i	63B5	71B5 71B14	80B5 80B14	90B5 90B14
53.33				
45.89				
40.10				
35.47				
28.50				
23.56				
19.83				
17.86				
14.62				
13.80*				
11.90				
9.81				
9.17				
7.72				
5.69				
4.63				
3.82				

BRC..02..P(IEC)				
i	63B5	71B5 71B14	80B5 80B14	90B5 90B14
54.00*				
46.46*				
40.60*				
35.91*				
28.88*				
23.85*				
20.08*				
17.10				
14.81*				
13.21				
12.05				
9.93				
8.78				
7.39				
5.45				
4.43				
3.66				

BRC..03..P(IEC)					
i	71B5	80B5 80B14	90B5 90B14	100B5 100B14	112B5 112B14
51.30*					
44.18*					
38.63					
34.20*					
30.57					
24.99					
21.15*					
19.24*					
18.21*					
15.30*					
13.30*					
12.60					
10.93*					
9.08					
7.93*					
6.31					
5.48					
4.50					
3.74					


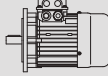
BRC..04..P(IEC)				
i	80B5 80B14	90B5 90B14	100B5 100B14	112B5 112B14
51.30*				
44.18*				
38.63				
34.20*				
30.57				
24.99				
21.15*				
19.24*				
18.21*				
15.30*				
13.30*				
12.60				
10.93*				
9.08				
7.93*				
6.31				
5.48				
4.50				
3.74				

“*” Finite gear unit reduction ratio


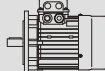


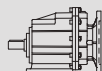
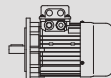
IEC	63B5	71B5	71B14	80B5	80B14	90B5	90B14	100B5	100B14	112B5	112B14
D _{E8}	11	14		19		24		28		28	
P	140	160	105	200	140	200	140	250	160	250	160
M	115	130	85	165	115	165	115	215	130	215	130
N	95	110	70	130	95	130	95	180	110	180	110

7.EAR UNIT SELECTION TABLES 7.1 TRC..P(IEC)..
Performance parameter


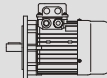
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page
0.12	26.3	42	53.33	2.9	BRC01 63B5	6314	21
	30.5	36	45.89	3.3	BRCF01 63B5	6314	21
	34.9	32	40.10	3.8	BRCZ01 63B5	6314	21
	39.5	28	35.47	4.3			
	49.1	22	28.50	5.4			
	59.4	18.5	23.56	6.5			
	70.6	15.6	19.83	7.7			
	78.4	14.0	17.86	7.1			
	95.8	11.5	14.62	10.4			
	101	10.8	13.80*	9.2			
	118	9.4	11.90	12.8			
	143	7.7	9.81	13.0			
	153	7.2	9.17	11.1			
	181	6.1	7.72	13.2			
	246	4.5	5.69	13.4			
	302	3.6	4.63	16.5			
	366	3.0	3.82	20.0			
0.18	16.9	98	53.33	1.2	BRC01 71B5	7116	21
	19.6	84	45.89	1.4	BRCF01 71B5	7116	21
	22.4	74	40.10	1.6	BRCZ01 71B5	7116	21
	25.4	65	35.47	1.8			
	31.6	52	28.50	2.3			
	26.3	63	53.33	1.9	BRC01 63B5	6324	21
	30.5	54	45.89	2.2	BRCF01 63B5	6324	21
	34.9	47	40.10	2.5	BRCZ01 63B5	6324	21
	39.5	42	35.47	2.9			
	49.1	34	28.50	3.6			
	59.4	28	23.56	4.3			
	70.6	23	19.83	5.1			
	78.4	21	17.86	4.8			
	95.8	17.2	14.62	7.0			
	101	16.3	13.80*	6.1			
	118	14.0	11.90	8.6			
	143	11.6	9.81	8.6			
	153	10.8	9.17	7.4			
	181	9.1	7.72	8.8			
	246	6.7	5.69	8.9			
	302	5.5	4.63	11.0			
	366	4.5	3.82	13.3			
	16.7	99	54.00*	2.0	BRC02 71B5	7116	23
	19.4	85	46.46*	2.3	BRCF02 71B5	7116	23
	22.2	74	40.60*	2.7	BRCZ02 71B5	7116	23
	25.1	66	35.91*	3.0			
	31.2	53	28.88*	3.8			
	25.9	64	54.00*	3.1	BRC02 63B5	6324	23
	30.1	55	46.46*	3.7	BRCF02 63B5	6324	23
	34.5	48	40.60*	4.2	BRCZ02 63B5	6324	23

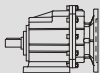
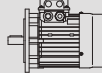
TABLAS DE SELECCIÓN ADAPTERS SELECTION TABLES

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page	
0.25	16.9	136	53.33	0.88	BRC01	71B5/B14	7126	21
	19.6	117	45.89	1.0	BRCF01	71B5/B14	7126	21
	22.4	102	40.10	1.2	BRCZ01	71B5/B14	7126	21
	25.4	90	35.47	1.3				
	31.6	73	28.50	1.7				
	26.3	87	53.33	1.4	BRC01	71B5/B14	7114	21
	30.5	75	45.89	1.6	BRCF01	71B5/B14	7114	21
	34.9	66	40.10	1.8	BRCZ01	71B5/B14	7114	21
	39.5	58	35.47	2.1				
	49.1	47	28.50	2.6				
	59.4	39	23.56	3.1				
	70.6	32	19.83	3.7				
	78.4	29	17.86	3.4				
	95.8	24	14.62	5.0				
	101	23	13.80*	4.4				
	118	19.5	11.90	6.2				
	143	16.1	9.81	6.2				
	153	15.0	9.17	5.3				
	181	12.6	7.72	6.3				
	246	9.3	5.69	6.4				
	302	7.6	4.63	7.9				
	366	6.3	3.82	9.6				
	16.7	138	54.00*	1.5	BRC02	71B5/B14	7126	23
	19.4	118	46.46*	1.7	BRCF02	71B5/B14	7126	23
	22.2	103	40.60*	1.9	BRCZ02	71B5/B14	7126	23
	25.1	91	35.91*	2.2				
	31.2	74	28.88*	2.7				
	25.9	88	54.00*	2.3	BRC02	71B5/B14	7114	23
	30.1	76	46.46*	2.6	BRCF02	71B5/B14	7114	23
	34.5	66	40.60*	3.0	BRCZ02	71B5/B14	7114	23
	39.0	59	35.91*	3.4				
	48.5	47	28.88*	4.2				
0.37	22.4	151	40.10	0.79	BRC01	80B5/B14	8016	21
	25.4	134	35.47	0.90	BRCF01	80B5/B14	8016	21
	31.6	107	28.50	1.1	BRCZ01	80B5/B14	8016	21
	38.2	89	23.56	1.4				
	26.3	129	53.33	0.93	BRC01	71B5/B14	7124	21
	30.5	111	45.89	1.1	BRCF01	71B5/B14	7124	21
	34.9	97	40.10	1.2	BRCZ01	71B5/B14	7124	21
	39.5	86	35.47	1.4				
	49.1	69	28.50	1.7				
	59.4	57	23.56	2.1				
	70.6	48	19.83	2.5				
	78.4	43	17.86	2.3				
	95.8	35	14.62	3.4				
	101	33	13.80*	3.0				
	118	29	11.90	4.2				
	143	24	9.81	4.2				
	153	22	9.17	3.6				
	181	19	7.72	4.3				
	246	14	5.69	4.4				
	302	11	4.63	5.3				
	366	9	3.82	6.5				


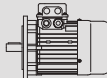
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page	
0.37	16.7	204	54.00*	1.0	BRC02	80B5/B14	8016	23
	19.4	175	46.46*	1.1	BCF02	80B5/B14	8016	23
	22.2	153	40.60*	1.3	BRCZ02	80B5/B14	8016	23
	25.1	135	35.91*	1.5				
	31.2	109	28.88*	1.8				
	25.9	131	54.00*	1.5	BRC02	71B5/B14	7124	23
	30.1	113	46.46*	1.8	BRCF02	71B5/B14	7124	23
	34.5	98	40.60*	2.0	BRCZ02	71B5/B14	7124	23
	39.0	87	35.91*	2.3				
	48.5	70	28.88*	2.9				
	58.7	58	23.85*	3.5				
	81.9	41	17.10	3.9				
	17.5	193	51.30*	1.6	BRC03	80B5/B14	8016	25
	20.4	167	44.18*	1.8	BRCF03	80B5/B14	8016	25
	23.3	146	38.63	2.1	BRCZ03	80B5/B14	8016	25
	26.3	129	34.20*	2.3				
	29.4	115	30.57	2.6				
	27.3	124	51.30*	2.4	BRC03	71B5	7124	25
	31.7	107	44.18*	2.8	BRCF03	71B5	7124	25
	36.2	94	38.63	3.2	BRCZ03	71B5	7124	25
	40.9	83	34.20*	3.6				
0.55	31.6	160	28.50	0.75	BRC01	80B5/B14	8026	21
	38.2	132	23.56	0.91	BRCF01	80B5/B14	8026	21
	45.4	111	19.83	1.1	BRCZ01	80B5/B14	8026	21
	34.9	144	40.10	0.8	BRC01	80B5/B14	8014	21
	39.5	128	35.47	0.9	BRCF01	80B5/B14	8014	21
	49.1	103	28.50	1.2	BRCZ01	80B5/B14	8014	21
	59.4	85	23.56	1.4				
	70.6	71	19.83	1.7				
	78.4	64	17.86	1.6				
	95.8	53	14.62	2.3				
	101	50	13.80*	2.0				
	118	43	11.90	2.8				
	143	35	9.81	2.8				
	153	33	9.17	2.4				
	181	28	7.72	2.9				
	246	20	5.69	2.9				
	302	17	4.63	3.6				
	366	14	3.82	4.4				
	19.4	260	46.46*	0.77	BRC02	80B5/B14	8026	23
	22.2	227	40.60*	0.88	BRCF02	80B5/B14	8026	23
	25.1	201	35.91*	1.0	BRCZ02	80B5/B14	8026	23
	31.2	162	28.88*	1.2				
	37.7	134	23.85*	1.5				
	25.9	194	54.00*	1.0	BRC02	80B5/B14	8014	23
	30.1	167	46.46*	1.2	BRCF02	80B5/B14	8014	23
	34.5	146	40.60*	1.4	BRCZ02	80B5/B14	8014	23
	39.0	129	35.91*	1.5				
	48.5	104	28.88*	1.9				
	58.7	86	23.85*	2.3				

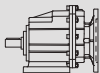
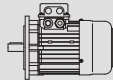
TABLAS DE SELECCIÓN ADAPTERS SELECTION TABLES

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page
0.55	69.7	72	20.08*	2.8	BRC02	80B5/B14	8014 23
	81.9	62	17.10	2.6	BRCF02	80B5/B14	8014 23
	94.5	53	14.81*	3.7	BRCZ02	80B5/B14	8014 23
	17.5	287	51.30*	1.0	BRC03	80B5/B14	8026 25
	20.4	248	44.18*	1.2	BRCF03	80B5/B14	8026 25
	23.3	216	38.63	1.4	BRCZ03	80B5/B14	8026 25
	26.3	192	34.20*	1.6			
	29.4	171	30.57	1.8			
	27.3	185	51.30*	1.6	BRC03	80B5/B14	8014 25
	31.7	159	44.18*	1.9	BRCF03	80B5/B14	8014 25
	36.2	139	38.63	2.2	BRCZ03	80B5/B14	8014 25
	40.9	123	34.20*	2.4			
	45.8	110	30.57	2.7			
	56.0	90	24.99	3.3			
	49.1	140	28.50	0.86	BRC01	80B5/B14	8024 21
	59.4	116	23.56	1.0	BRCF01	80B5/B14	8024 21
	70.6	97	19.83	1.2	BRCZ01	80B5/B14	8024 21
	78.4	88	17.86	1.1			
	95.8	72	14.62	1.7			
	101	68	13.80*	1.5			
	118	58	11.90	2.1			
	143	48	9.81	2.1			
	153	45	9.17	1.8			
	181	38	7.72	2.1			
	246	28	5.69	2.1			
	302	23	4.63	2.6			
	366	19	3.82	3.2			
0.75	31.2	221	28.88*	0.91	BRC02	90B5/B14	90S6 23
	37.7	182	23.85*	1.1	BRCF02	90B5/B14	90S6 23
	44.8	153	20.08*	1.3	BRCZ02	90B5/B14	90S6 23
	30.1	228	46.46*	0.88	BRC02	80B5/B14	8024 23
	34.5	199	40.60*	1.0	BRCF02	80B5/B14	8024 23
	39.0	176	35.91*	1.1	BRCZ02	80B5/B14	8024 23
	48.5	142	28.88*	1.4			
	58.7	117	23.85*	1.7			
	69.7	99	20.08*	2.0			
	81.9	84	17.10	1.9			
	94.5	73	14.81*	2.7			
	106	65	13.21	2.5			
	116.2	59	12.05	3.4			
	141	49	9.93	3.3			
	159	43	8.78	2.8			
	189	36	7.39	3.3			
	257	27	5.45	3.7			
	97.0	71	28.88*	2.8	BRC02	80B5/B14	8012 23
	117.4	59	23.85*	3.4	BRCF02	80B5/B14	8012 23
	139.4	49	20.08*	4.1	BRCZ02	80B5/B14	8012 23
	163.7	42	17.10	3.8			


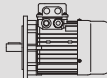
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0.75	17.5	392	51.30*	0.77	BRC03	90B5/B14	90S6 25
	20.4	338	44.18*	0.89	BRCF03	90B5/B14	90S6 25
	23.3	295	38.63	1.0	BRCZ03	90B5/B14	90S6 25
	26.3	261	34.20*	1.1			
	29.4	234	30.57	1.3			
	36.0	191	24.99	1.6			
	27.3	252	51.30*	1.2	BRC03	80B5/B14	8024 25
	31.7	217	44.18*	1.4	BRCF03	80B5/B14	8024 25
	36.2	190	38.63	1.6	BRCZ03	80B5/B14	8024 25
	40.9	168	34.20*	1.8			
	45.8	150	30.57	2.0			
	56.0	123	24.99	2.4			
	66.2	104	21.15*	2.7			
	72.8	94	19.24*	3.0			
	76.9	89	18.21*	3.1			
	91.5	75	15.30*	3.7			
	105	65	13.30*	3.8			
	111	62	12.60	4.0			
	17.5	392	51.30*	1.3	BRC04	90B5/B14	90S6 27
	20.4	338	44.18*	1.5	BRCF04	90B5/B14	90S6 27
	23.3	295	38.63	1.7	BRCZ04	90B5/B14	90S6 27
	26.3	261	34.20*	1.8			
	29.4	234	30.57	2.1			
	27.3	252	51.30*	2.0	BRC04	80B5/B14	8024 27
	31.7	217	44.18*	2.3	BRCF04	80B5/B14	8024 27
	36.2	190	38.63	2.6	BRCZ04	80B5/B14	8024 27
	40.9	168	34.20*	2.9			
	45.8	150	30.57	3.2			
	56.0	123	24.99	3.9			
	66.2	104	21.15*	4.0			
1.1	70.6	143	19.83	0.84	BRC01	90B5/B14	90S4 21
	78.4	129	17.86	0.78	BRCF01	90B5/B14	90S4 21
	95.8	105	14.62	1.1	BRCZ01	90B5/B14	90S4 21
	101	99	13.80*	1.0			
	118	86	11.90	1.4			
	143	71	9.81	1.4			
	153	66	9.17	1.2			
	181	56	7.72	1.4			
	246	41	5.69	1.5			
	302	33	4.63	1.8			
	366	28	3.82	2.2			
	285	35	9.81	2.8	BRC01	80B5/B14	8022 21
	305	33	9.17	2.4	BRCF01	80B5/B14	8022 21
	363	28	7.72	2.9	BRCZ01	80B5/B14	8022 21
	492	20	5.69	2.9			
	605	17	4.63	3.6			
	733	14	3.82	4.4			
	39.0	259	35.91*	0.77	BRC02	90B5/B14	90S4 23
	48.5	208	28.88*	1.0	BRCF02	90B5/B14	90S4 23
	58.7	172	23.85*	1.2	BRCZ02	90B5/B14	90S4 23
	69.7	145	20.08*	1.4			
	81.9	123	17.10	1.3			

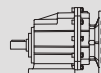
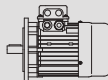
TABLAS DE SELECCIÓN ADAPTERS SELECTION TABLES

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page
1.1	94.5	107	14.81*	1.9	BRC02	90B5/B14	90S4 23
	106	95	13.21	1.7	BRCF02	90B5/B14	90S4 23
	116	87	12.05	2.3	BRCZ02	90B5/B14	90S4 23
	141	72	9.93	2.2			
	159	63	8.78	1.9			
	189	53	7.39	2.3			
	257	39	5.45	2.5			
	316	32	4.43	3.1			
	383	26	3.66	3.8			
	27.3	370	51.30*	0.81	BRC03	90B5/B14	90S4 25
	31.7	318	44.18*	0.94	BRCF03	90B5/B14	90S4 25
	36.2	278	38.63	1.1	BRCZ03	90B5/B14	90S4 25
	40.9	246	34.20*	1.2			
	45.8	220	30.57	1.4			
	56.0	180	24.99	1.7			
	66.2	152	21.15*	1.8			
	72.8	139	19.24*	2.0			
	76.9	131	18.21*	2.1			
	91.5	110	15.30*	2.5			
	72.5	139	38.63	2.2	BRC03	80B5/B14	8022 25
	81.9	123	34.20*	2.4	BRCF03	80B5/B14	8022 25
	91.6	110	30.57	2.7	BRCZ03	80B5/B14	8022 25
	112.0	90	24.99	3.3			
	132.4	76	21.15*	3.7			
	145.5	69	19.24*	4.0			
	153.8	66	18.21*	4.3			
	27.3	370	51.30*	1.4	BRC04	90B5/B14	90S4 27
	31.7	318	44.18*	1.6	BRCF04	90B5/B14	90S4 27
	36.2	278	38.63	1.8	BRCZ04	90B5/B14	90S4 27
	40.9	246	34.20*	1.9			
	45.8	220	30.57	2.2			
	56.0	180	24.99	2.7			
	66.2	152	21.15*	2.8			
	72.8	139	19.24*	3.0			
	76.9	131	18.21*	3.2			
	91.5	110	15.30*	3.8			
	105	96	13.30*	3.7			
1.5	118	117	11.90	1.0	BRC01	90B5/B14	90L4 21
	143	96	9.81	1.0	BRCF01	90B5/B14	90L4 21
	153	90	9.17	0.9	BRCZ01	90B5/B14	90L4 21
	181	76	7.72	1.1			
	246	56	5.69	1.1			
	302	45	4.63	1.3			
	366	38	3.82	1.6			
	305	45	9.17	1.8	BRC01	90B5/B14	90S2 21
	363	38	7.72	2.1	BRCF01	90B5/B14	90S2 21
	492	28	5.69	2.1	BRCZ01	90B5/B14	90S2 21
	605	23	4.63	2.6			
	733	19	3.82	3.2			


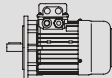
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	f_s			Page
1.5	58.7	234	23.85*	0.85	BRC02	90B5/B14	90L4 23
	69.7	197	20.08*	1.0	BRCF02	90B5/B14	90L4 23
	81.9	168	17.10	1.0	BRCZ02	90B5/B14	90L4 23
	94.5	145	14.81*	1.4			
	106	130	13.21	1.2			
	116	118	12.05	1.7			
	141	98	9.93	1.6			
	159	86	8.78	1.4			
	189	73	7.39	1.7			
	257	54	5.45	1.9			
	316	44	4.43	2.3			
	383	36	3.66	2.8			
	212	65	13.21	2.5	BRC02	90B5/B14	90S2 23
	232	59	12.05	3.4	BRCF02	90B5/B14	90S2 23
	282	49	9.93	3.3	BRCZ02	90B5/B14	90S2 23
	319	43	8.78	2.8			
	379	36	7.39	3.3			
	514	27	5.45	3.7			
	40.9	336	34.20*	0.89	BRC03	90B5/B14	90L4 25
	45.8	300	30.57	1.0	BRCF03	90B5/B14	90L4 25
	56.0	245	24.99	1.2	BRCZ03	90B5/B14	90L4 25
	66.2	208	21.15*	1.3			
	72.8	189	19.24*	1.5			
	76.9	179	18.21*	1.6			
	91.5	150	15.30*	1.9			
	105	131	13.30*	1.9			
	111	124	12.60	2.0			
	128	107	10.93*	1.7			
	154	89	9.08	2.0			
	177	78	7.93*	2.3			
	222	62	6.31	2.9			
	255	54	5.48	2.8			
	311	44	4.50	3.4			
	374	37	3.74	4.1			
	256	54	10.93*	3.4	BRC03	90B5/B14	90S2 25
	308	45	9.08	4.0	BRCF03	90B5/B14	90S2 25
	353	39	7.93*	4.6	BRCZ03	90B5/B14	90S2 25
	26.3	523	34.20*	0.92	BRC04	100B5/B14	100L6 27
	29.4	467	30.57	1.0	BRCF04	100B5/B14	100L6 27
	36.0	382	24.99	1.3	BRCZ04	100B5/B14	100L6 27
	27.3	504	51.30*	1.0	BRC04	90B5/B14	90L4 27
	31.7	434	44.18*	1.2	BRCF04	90B5/B14	90L4 27
	36.2	379	38.63	1.3	BRCZ04	90B5/B14	90L4 27
	40.9	336	34.20*	1.4			
	45.8	300	30.57	1.6			
	56.0	245	24.99	2.0			
	66.2	208	21.15*	2.0			
	72.8	189	19.24*	2.2			
	76.9	179	18.21*	2.3			
	91.5	150	15.30*	2.8			
	105	131	13.30*	2.7			
	111	124	12.60	2.8			
	128	107	10.93*	2.6			
	154	89	9.08	3.1			
	177	78	7.93*	3.3			

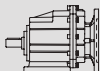
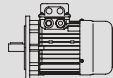
TABLAS DE SELECCIÓN ADAPTERS SELECTION TABLES

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page
2.2	66.2	305	21.15*	0.92	BRC03	100B5/B14	100LA4 25
	72.8	277	19.24*	1.0	BRCF03	100B5/B14	100LA4 25
	76.9	262	18.21*	1.1	BRCZ03	100B5/B14	100LA4 25
	91.5	220	15.30*	1.1			
	105	192	13.30*	1.3			
	111	182	12.60	1.4			
	128	157	10.93*	1.1			
	154	131	9.08	1.4			
	177	114	7.93*	1.6			
	222	91	6.31	2.0			
	255	79	5.48	1.9			
	311	65	4.50	2.3			
	374	54	3.74	2.8			
	308	65	9.08	2.8	BRC03	90B5/B14	90L2 25
	353	57	7.93*	3.2	BRCF03	90B5/B14	90L2 25
	444	45	6.31	4.0	BRCZ03	90B5/B14	90L2 25
	511	39	5.48	3.8			
	36.0	560	24.99	0.86	BRC04	112B5/B14	112M6 27
	42.6	474	21.15*	0.9	BRCF04	112B5/B14	112M6 27
	46.8	431	19.24*	1.0	BRCZ04	112B5/B14	112M6 27
	49.4	408	18.21*	1.0			
	40.9	493	34.20*	1.0	BRC04	100B5/B14	100LA4 27
	45.8	440	30.57	1.1	BRCF04	100B5/B14	100LA4 27
	56.0	360	24.99	1.3	BRCZ04	100B5/B14	100LA4 27
	66.2	305	21.15*	1.4			
	72.8	277	19.24*	1.5			
	76.9	262	18.21*	1.6			
	91.5	220	15.30*	1.9			
	105	192	13.30*	1.8			
	111	182	12.60	1.9			
	128	157	10.93*	1.8			
	154	131	9.08	2.1			
	177	114	7.93*	2.3			
	222	91	6.31	2.9			
	255	79	5.48	2.9			
	311	65	4.50	3.5			
	374	54	3.74	4.3			
3	91.5	301	15.30*	0.93	BRC03	100B5/B14	100LB4 25
	105	261	13.30*	1.0	BRCF03	100B5/B14	100LB4 25
	111	248	12.60	1.0	BRCZ03	100B5/B14	100LB4 25
	128	215	10.93*	0.8			
	154	178	9.08	1.0			
	177	156	7.93*	1.2			
	222	124	6.31	1.5			
	255	108	5.48	1.4			
	311	88	4.50	1.7			
	374	73	3.74	2.0			
	45.8	601	30.57	0.80	BRC04	100B5/B14	100LB4 27
	56.0	491	24.99	1.0	BRCF04	100B5/B14	100LB4 27
	66.2	416	21.15*	1.0	BRCZ04	100B5/B14	100LB4 27
	72.8	378	19.24*	1.1			

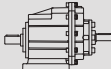
P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page	
3	76.9	358	18.21*	1.2	BRC04	100B5/B14	100LB4	27
	91.5	301	15.30*	1.4	BRCF04	100B5/B14	100LB4	27
	105	261	13.30*	1.3	BRCZ04	100B5/B14	100LB4	27
	111	248	12.60	1.4				
	128	215	10.93*	1.3				
	154	178	9.08	1.6				
	177	156	7.93*	1.7				
	222	124	6.31	2.1				
	255	108	5.48	2.1				
	311	88	4.50	2.6				
	374	73	3.74	3.1				
	308	89	9.08	3.1	BRC04	100B5/B14	100L2	27
	353	78	7.93*	3.3	BRCF04	100B5/B14	100L2	27
	444	62	6.31	4.2	BRCZ04	100B5/B14	100L2	27
	511	54	5.48	4.3				
4	177	208	7.93*	0.87	BRC03	112B5/B14	112M4	25
	222	165	6.31	1.1	BRCF03	112B5/B14	112M4	25
	255	144	5.48	1.0	BRCZ03	112B5/B14	112M4	25
	311	118	4.50	1.3				
	374	98	3.74	1.5				
	105	348	13.30*	1.0	BRC04	112B5/B14	112M4	27
	111	330	12.60	1.1	BRCF04	112B5/B14	112M4	27
	128	286	10.93*	1.0	BRCZ04	112B5/B14	112M4	27
	154	238	9.08	1.2				
	177	208	7.93*	1.3				
	222	165	6.31	1.6				
	255	144	5.48	1.6				
	311	118	4.50	2.0				
	374	98	3.74	2.3				
	308	119	9.08	2.4	RC04	112B5/B14	112M2	27
	353	104	7.93*	2.5	BRCF04	112B5/B14	112M2	27
	444	83	6.31	3.1	BRCZ04	112B5/B14	112M2	27
	511	72	5.48	3.2				
	622	59	4.50	3.9				

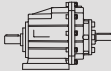
TABLAS DE SELECCIÓN ADAPTERS SELECTION TABLES

P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	fs			Page
0,12	8,8	126,0	160,0	0,9	BRC01 BRCF01 BRCZ01		11
	10,2	108,0	137,7	1,1			
	11,6	96,0	120,3	1,2			
	13,2	84,0	106,4	1,4			
	16,4	66,0	85,5	1,8			
	19,8	55,5	70,7	2,1			
	23,5	46,8	59,5	2,5			
	26,1	42,3	53,6	2,7			
0,18	13,2	126,2	106,41	0,9	BRC01 6324 BRCF01 6324 BRCZ01 6324		11
	16,4	102,0	85,50	1,1			
	19,8	84,0	70,68	1,4			
	23,5	69,0	59,49	1,7			
	26,1	63,5	53,58	1,8			
0,25	19,8	117,0	70,68	1,0	BRC01 7114 BRCF01 7114 BRCZ01 7114		12
	23,5	96,0	59,49	1,2			
	26,1	88,2	53,58	1,3			
0,18	8,6	192,0	162,0	1,0	BRC02 6324 BRCF02 6324 BRCZ02 6324		12
	10,0	165,0	139,4	1,2			
	11,5	144,0	121,8	1,3			
	13,0	127,7	107,7	1,5			
	16,2	102,7	86,6	1,9			
	19,6	84,8	71,6	2,3			
	23,5	70,5	59,5	2,8			
0,25	11,5	198,0	121,8	1,0	BRC02 7114 BRCF02 7114 BRCZ02 7114		12
	13,0	177,0	107,7	1,1			
	16,2	141,0	86,6	1,4			
	19,3	117,0	71,6	1,6			
	23,2	99,0	60,3	2,0			
0,37	16,2	210,0	86,6	0,9	BRC02 7124 BRCF02 7124 BRCZ02 7124		12
	19,6	174,0	71,6	1,1			
	23,2	147,0	60,2	1,3			
0,55	23,2	218,0	60,2	0,9	BRC02 8014		13
0,37	10,6	321	132,54	0,9	BRC03 7124 BRCF03 7124 BRCZ03 7124		13
	11,5	297	121,8	1			
	12,1	282	115,89	1,1			
	13,6	250	102,6	1,2			
	15,3	223	91,71	1,3			
	18,7	183	74,97	1,6			
	22,1	155	63,45	1,9			
	24,3	141	57,72	2,1			
	25,6	133	54,63	2,3			
0,55	15,3	332	91,71	0,9	BRC03 8014 BRCF03 8014 BRCZ03 8014		14
	18,7	272	74,97	1,1			
	22,1	230	63,45	1,3			
	24,3	209	57,75	1,4			
	25,6	198	54,63	1,5			
0,75	22,1	313	22,1	1	BRC03 8024 BRCF03 8024 BRCZ03 8024		15
	24,3	285	24,3	1,1			
	25,6	270	25,6	1,1			

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	fs			Page
0,75	13,6	507	102,6		BRC04 8024		15
	15,3	453	91,71		BRCF04 8024		15
	18,7	370	74,97		BRCZ04 8024		15
	22,1	113	63,45				
	24,3	285	57,72				
	25,6	270	54,63				
1,1	18,7	543	74,97	0,9	BRC04 90S4		15
	22,1	460	63,45	1,1	BRCF04 90S4		15
	24,3	418	57,72	1,2	BRCZ04 90S4		15
	25,6	396	54,63	1,3			

7.2 BRC..HS.. Performance parameter

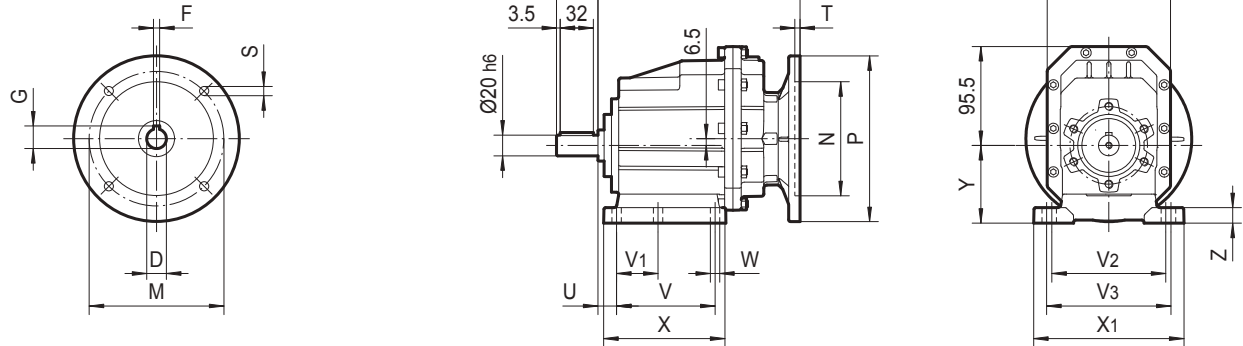
M _{2max} [Nm]	n ₁ [r/min]	i	P _{1n} [kW]	n ₂ [r/min]		Page
120	1400	53.3	0.34	26.3	BRC01-HS	22
120	1400	45.9	0.40	30.5	BRCF01-HS	22
120	1400	40.1	0.46	34.9	BRCZ01-HS	22
120	1400	35.5	0.52	39.5		
120	1400	28.5	0.64	49.1		
120	1400	23.6	0.78	59.4		
120	1400	19.8	0.92	70.6		
100	1400	17.9	0.86	78.4		
120	1400	14.6	1.25	95.7		
100	1400	13.8	1.10	101		
120	1400	11.9	1.54	118		
100	1400	9.8	1.56	143		
80	1400	9.2	1.34	153		
80	1400	7.7	1.58	181		
60	1400	5.7	1.61	246		
60	1400	4.6	1.98	302		
60	1400	3.8	2.40	367		
200	1400	54.0	0.57	25.9	BRC02-HS	24
200	1400	46.5	0.66	30.1	BRCF02-HS	24
200	1400	40.6	0.75	34.5	BRCZ02-HS	24
200	1400	35.9	0.85	39.0		
200	1400	28.9	1.06	48.5		
200	1400	23.9	1.28	58.7		
200	1400	20.1	1.52	69.7		
160	1400	17.1	1.43	81.9		
200	1400	14.8	2.06	94.6		
160	1400	13.2	1.85	106		
200	1400	12.1	2.53	116		
160	1400	9.9	2.46	141		
120	1400	8.8	2.08	159		
120	1400	7.4	2.49	190		
100	1400	5.5	2.80	257		
100	1400	4.4	3.45	316		
100	1400	3.7	4.18	383		

M_{2max} [Nm]	n_1 [r/min]	i	P_{1n} [kW]	n_2 [r/min]		Page
300	1400	51.3	0.89	27.3	BRC03-HS	26
300	1400	44.2	1.04	31.7	BRCF03-HS	26
300	1400	38.6	1.19	36.2	BRCZ03-HS	26
300	1400	34.2	1.34	40.9		
300	1400	30.6	1.50	45.8		
300	1400	25.0	1.83	56.0		
280	1400	21.2	2.02	66.2		
280	1400	19.2	2.22	72.8		
280	1400	18.2	2.35	76.9		
280	1400	15.3	2.79	91.5		
250	1400	13.3	2.86	105		
250	1400	12.6	3.03	111		
180	1400	10.9	2.51	128		
180	1400	9.1	3.02	154		
180	1400	7.9	3.46	176		
180	1400	6.3	4.36	222		
150	1400	5.5	4.17	255		
150	1400	4.5	5.09	311		
150	1400	3.7	6.12	374		
500	1400	51.3	1.49	27.3	BRC04-HS	28
500	1400	44.2	1.73	31.7	BRCF04-HS	28
500	1400	38.6	1.98	36.2	BRCZ04-HS	28
480	1400	34.2	2.14	40.9		
480	1400	30.6	2.40	45.8		
480	1400	25.0	2.93	56.0		
420	1400	21.2	3.03	66.2		
420	1400	19.2	3.34	72.8		
420	1400	18.2	3.52	76.9		
420	1400	15.3	4.19	91.5		
350	1400	13.3	4.01	105		
350	1400	12.6	4.24	111		
280	1400	10.9	3.91	128		
280	1400	9.1	4.70	154		
260	1400	7.9	4.99	176		
260	1400	6.3	6.30	222		
230	1400	5.5	6.40	255		
230	1400	4.5	7.80	311		
230	1400	3.7	9.38	374		

8. OUTLINE DIMENSION SHEET

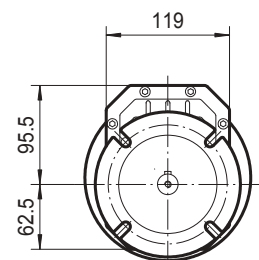
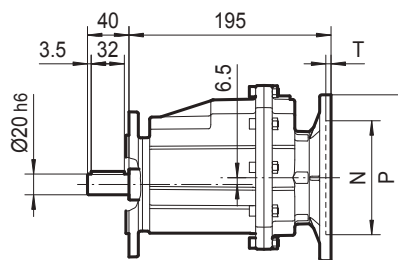
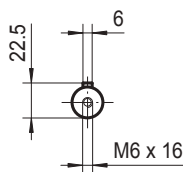
BRC01..P(IEC)

INPUT

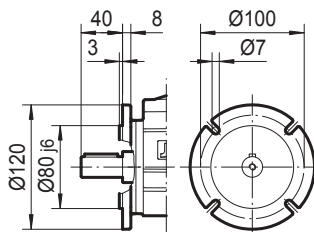


BRCF01..P(IEC)

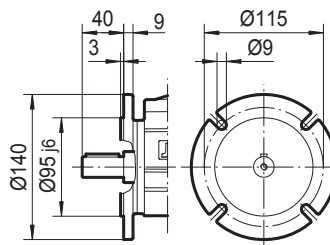
OUTPUT



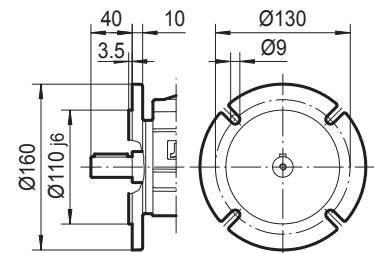
I
Ø120



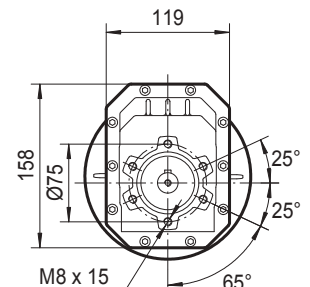
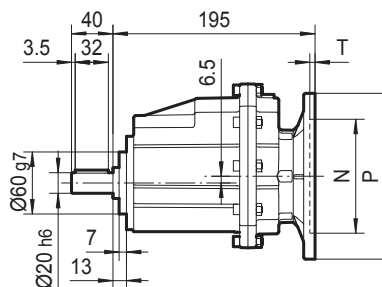
II
Ø140



III
Ø160



BRCZ01..P(IEC)

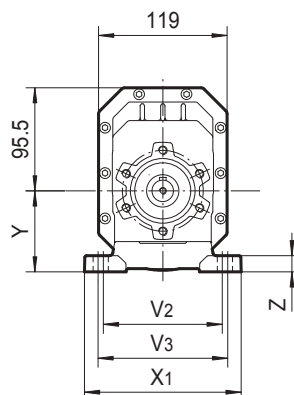
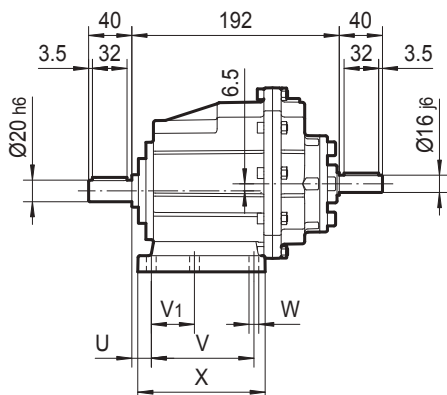
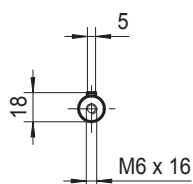


IEC	D	F	G	P	M	N	S	T
63B5	11	4	12.8	140	115	95	9	5
71B5	14	5	16.3	160	130	110	9	5
71B14	14	5	16.3	105	85	70	7	5
80B5	19	6	21.8	200	165	130	11	5
80B14	19	6	21.8	120	100	80	7	5
90B5	24	8	27.3	200	165	130	11	5
90B14	24	8	27.3	140	115	95	9	5

底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B01	18	87	50	110	—	9	118	130	85	15
M01	18	80	—	110	120	9	118	145	75	15
M02	25	85	—	110	120	9	112	145	75	15
B02	18	107.5	60	—	130	11	136	155	95	17

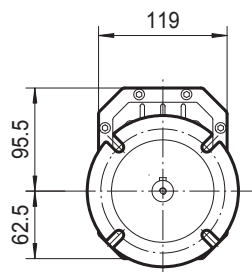
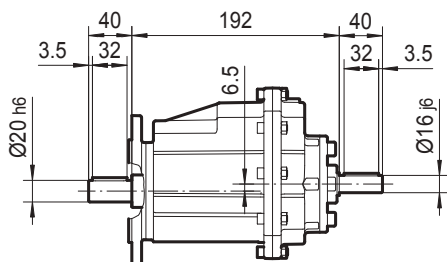
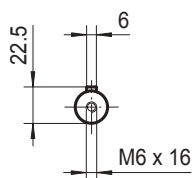
BRC01..HS

INPUT

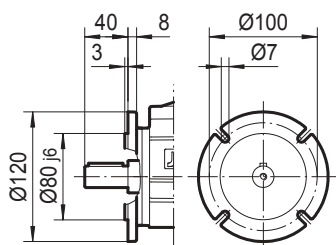


BRCF01..HS

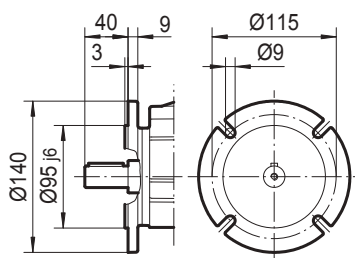
OUTPUT



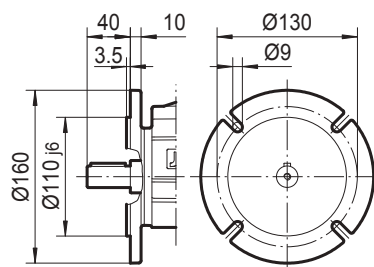
I
Ø120



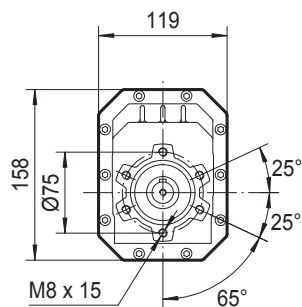
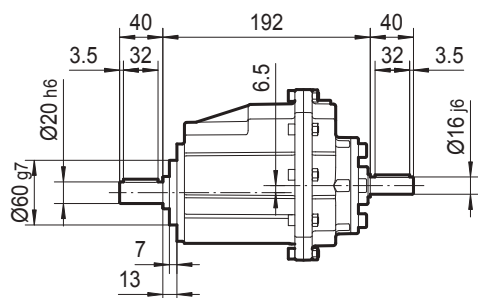
II
Ø140



III
Ø160



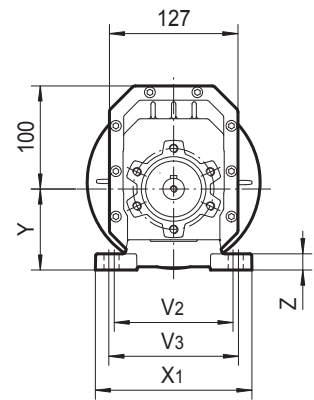
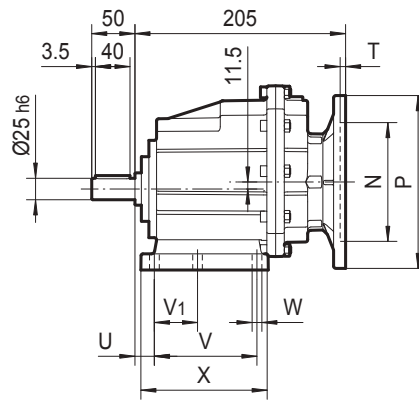
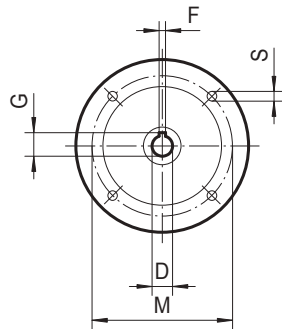
BRCZ01..HS



底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B01	18	87	50	110	—	9	118	130	85	15
M01	18	80	—	110	120	9	118	145	75	15
M02	25	85	—	110	120	9	112	145	75	15
B02	18	107.5	60	—	130	11	136	155	95	17

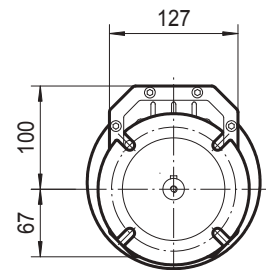
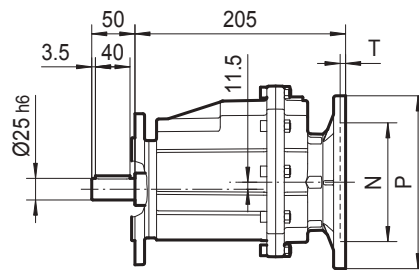
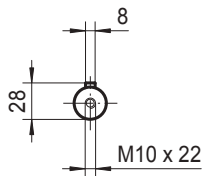
BRC02..P(IEC)

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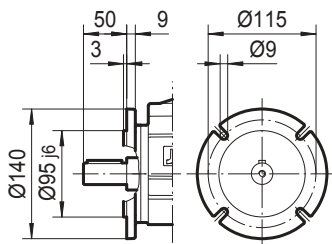


BRCF02..P(IEC)

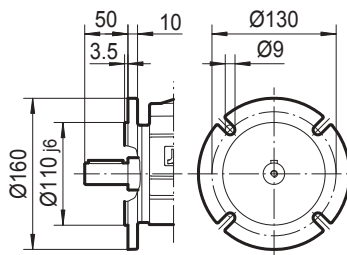
OUTPUT



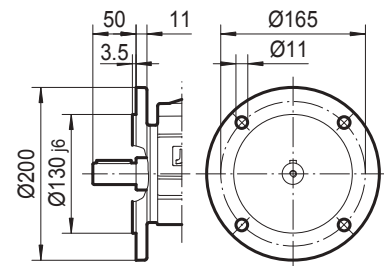
I
Ø140



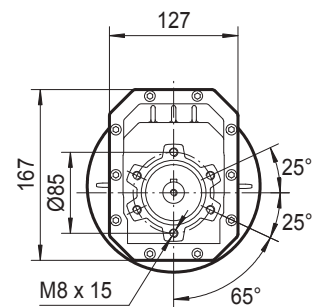
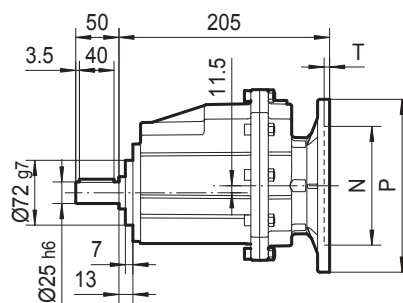
II
Ø160



III
Ø200



BRCZ02..P(IEC)

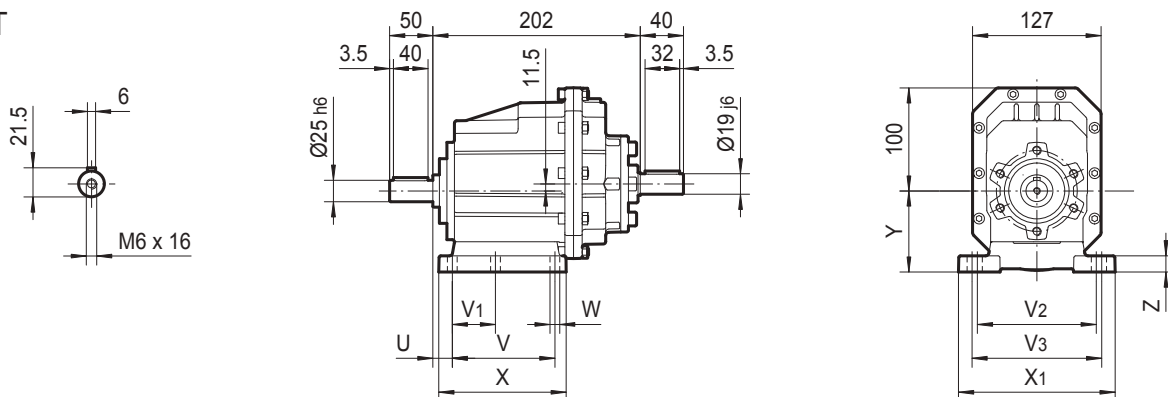


IEC	D	F	G	P	M	N	S	T
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71B5	14	5	16.3	160	130	110	9	5
71B14	14	5	16.3	105	85	70	7	5
80B5	19	6	21.8	200	165	130	11	5
80B14	19	6	21.8	120	100	80	7	5
90B5	24	8	27.3	200	165	130	11	5
90B14	24	8	27.3	140	115	95	9	5

底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B02	18	107.5	60	—	130	11	136	155	100	17
M02	25	85	—	110	120	9	112	145	80	15
M01	18	80	—	110	120	9	118	145	80	15
B01	18	87	50	110	—	9	118	130	90	15

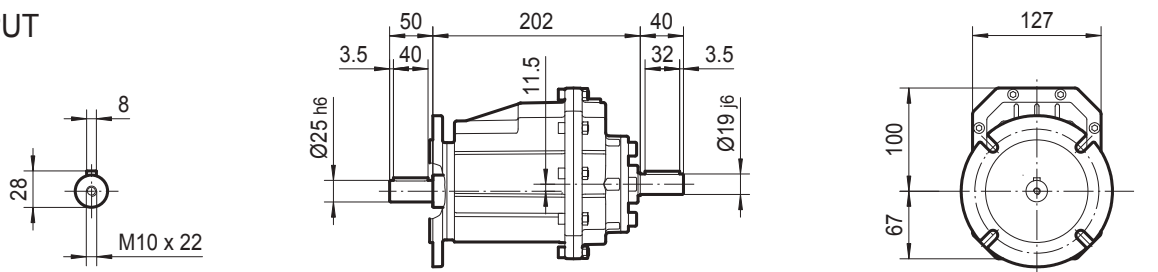
BRC02..HS

INPUT

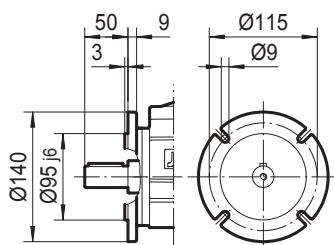


BRCF02..HS

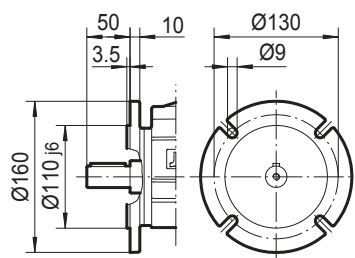
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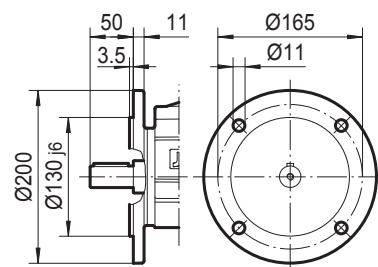
I
Ø140



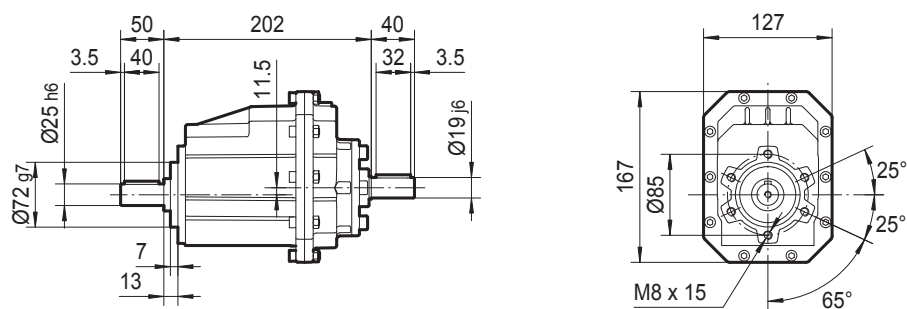
II
Ø160



III
Ø200



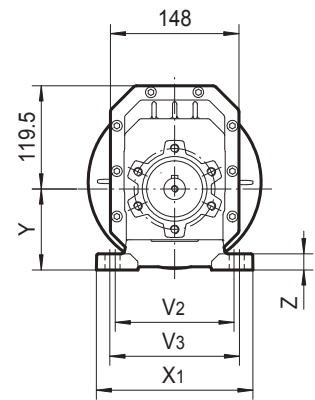
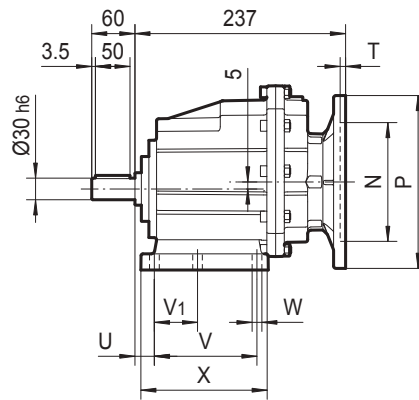
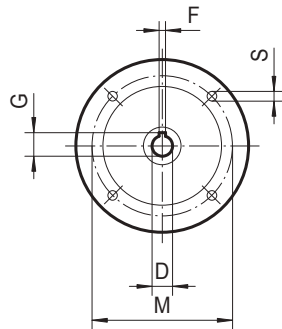
BRCZ02..HS



底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B02	18	107.5	60	—	130	11	136	155	100	17
M02	25	85	—	110	120	9	112	145	80	15
M01	18	80	—	110	120	9	118	145	80	15
B01	18	87	50	110	—	9	118	130	90	15

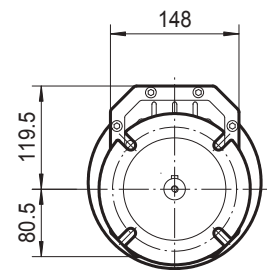
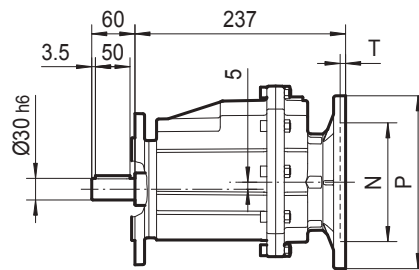
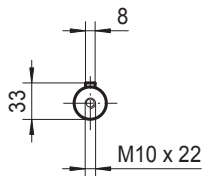
BRC03..P(IEC)

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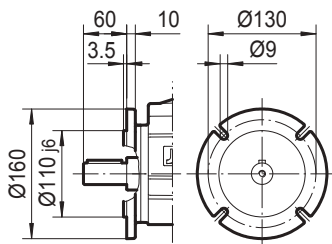


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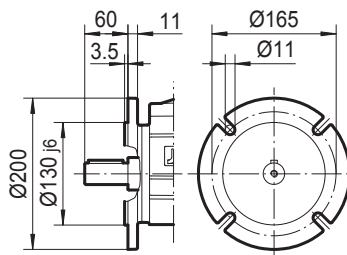
OUTPUT



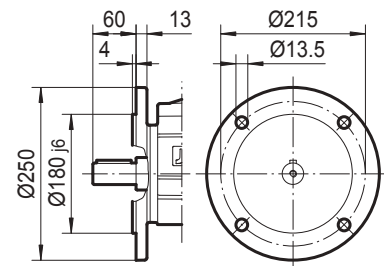
I
Ø160



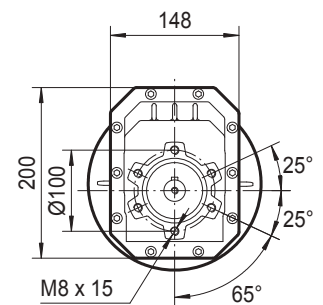
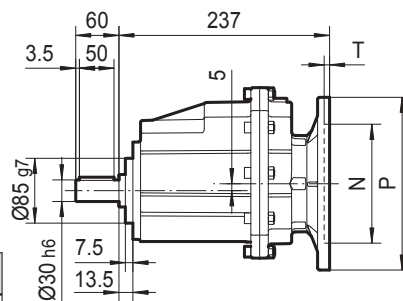
II
Ø200



III
Ø250



BRCZ03..P(IEC)

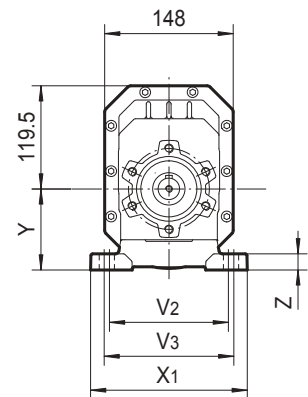
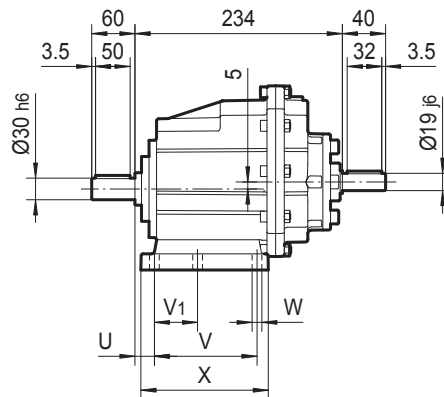
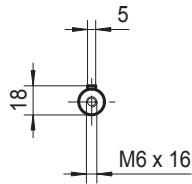


IEC	D	F	G	P	M	N	S	T
71B5	14	5	16.3	160	130	110	9	5
80B5	19	6	21.8	200	165	130	11	5
80B14	19	6	21.8	120	100	80	7	5
90B5	24	8	27.3	200	165	130	11	5
90B14	24	8	27.3	140	115	95	9	5
100/112B5	28	8	31.3	250	215	180	13.5	5
100/112B14	28	8	31.3	160	130	110	9	5

底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B03	18	130	70	—	160	11	156	190	110	20
M03	30	100	—	135	150	11	150	190	110	18
M04	32	110	—	170	185	14	150	230	110	20
B04	20.5	130	—	170	—	14	168	205	105	20

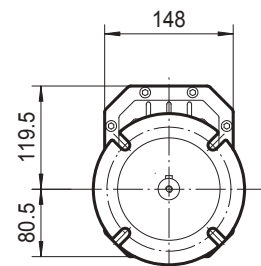
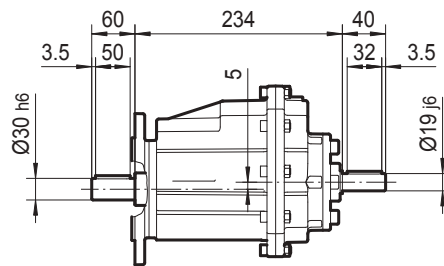
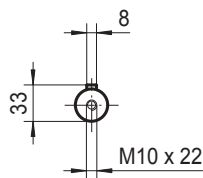
BRC03..HS

INPUT

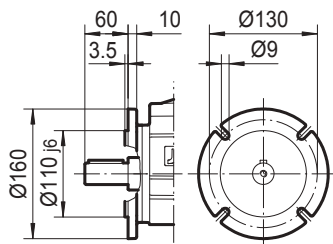


BRCF03..HS

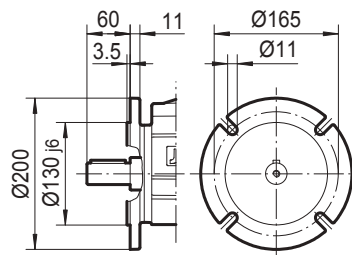
OUTPUT



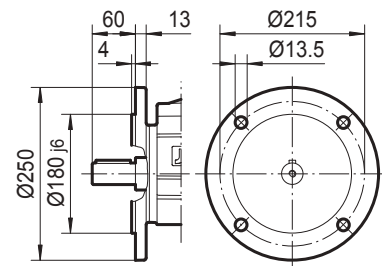
I
Ø160



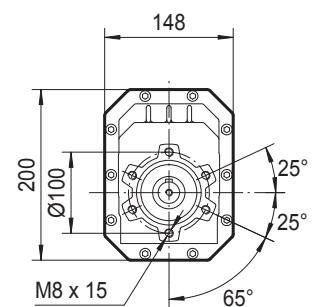
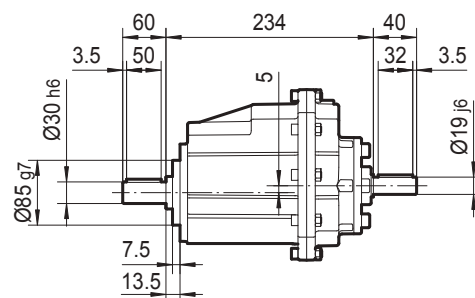
II
Ø200



III
Ø250



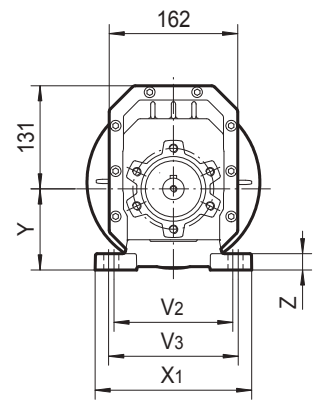
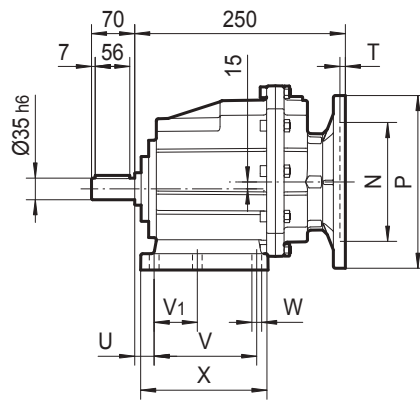
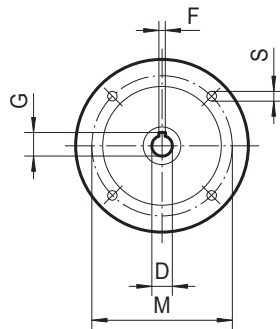
BRCZ03..HS



底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B03	18	130	70	—	160	11	156	190	110	20
M03	30	100	—	135	150	11	150	190	110	18
M04	32	110	—	170	185	14	150	230	110	20
B04	20.5	130	—	170	—	14	168	205	105	20

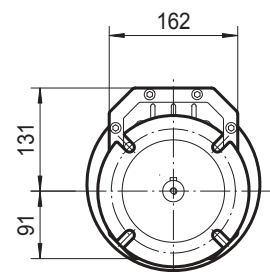
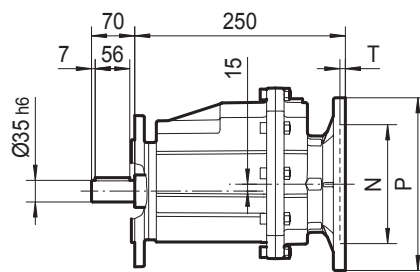
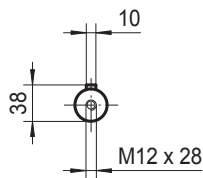
BRC04..P(IEC)

INPUT



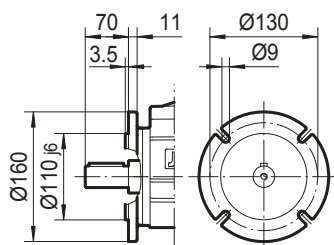
BRCF04..P(IEC)

OUTPUT



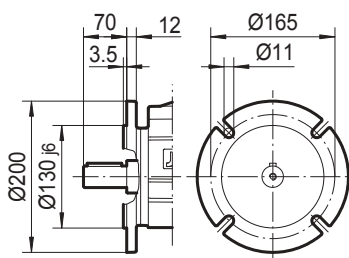
I

Ø160



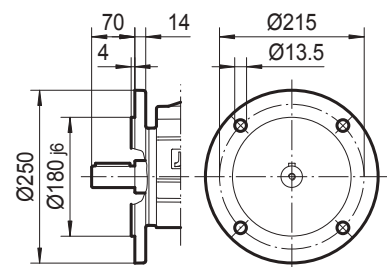
II

Ø200

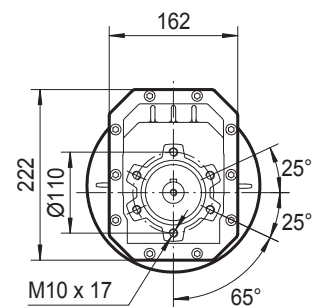
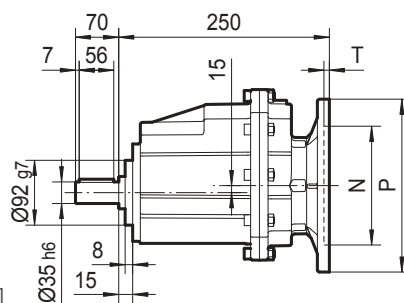


III

Ø250



BRCZ04..P(IEC)

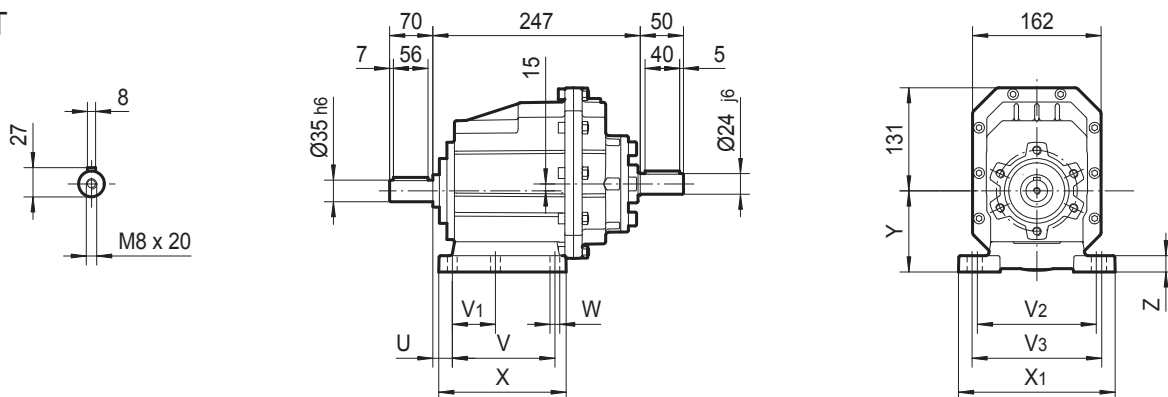


IEC	D	F	G	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	5
80B14	19	6	21.8	120	100	80	7	5
90B5	24	8	27.3	200	165	130	11	5
90B14	24	8	27.3	140	115	95	9	5
100/112B5	28	8	31.3	250	215	180	13.5	5
100/112B14	28	8	31.3	160	130	110	9	5

底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B04	23.5	130	—	170	—	14	168	205	115	20
B05	19.5	149.5	—	180	—	14	185	215	130	20
M04	35	110	—	170	185	14	150	230	120	20
M03	33	100	—	135	150	11	150	190	120	18
B03	21	130	70	—	160	11	156	190	120	20

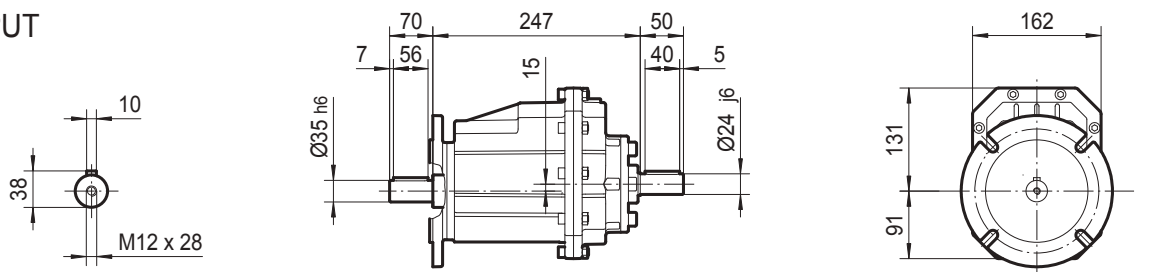
BRC04..HS

INPUT

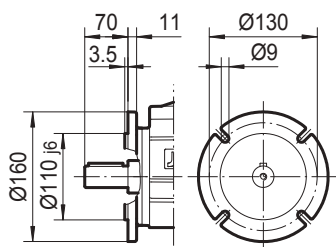


BRCF04..HS

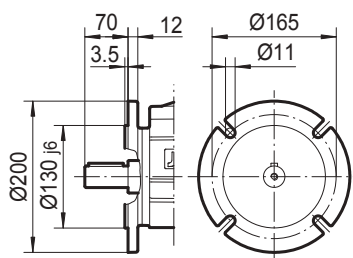
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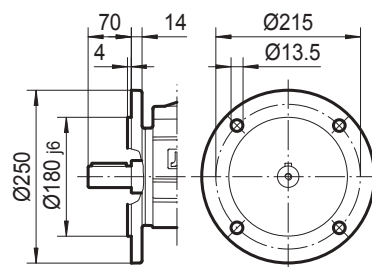
I
Ø160



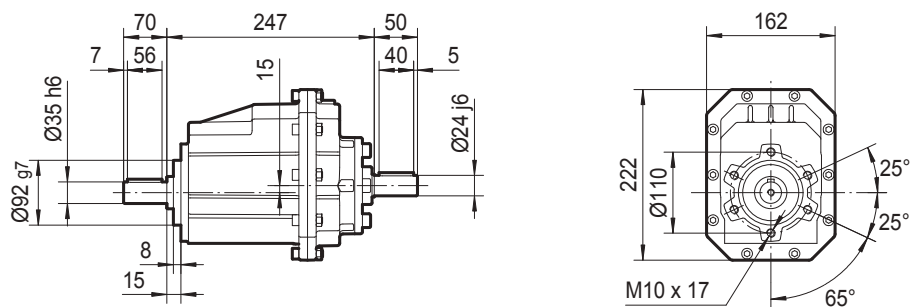
II
Ø200



III
Ø250

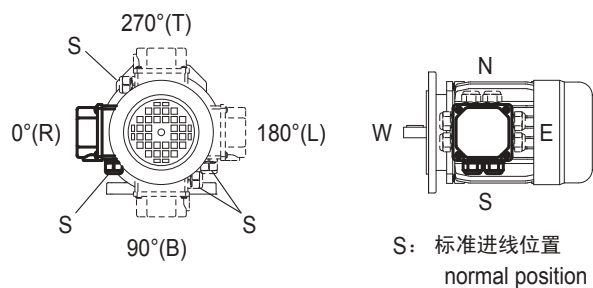
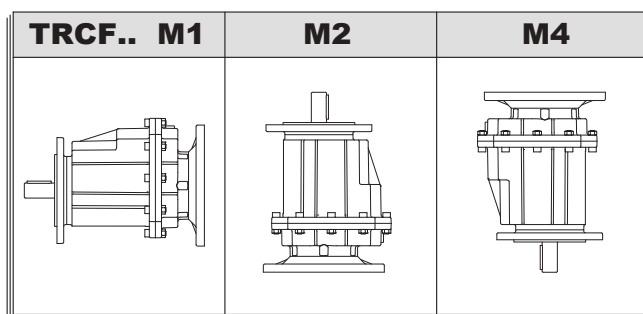
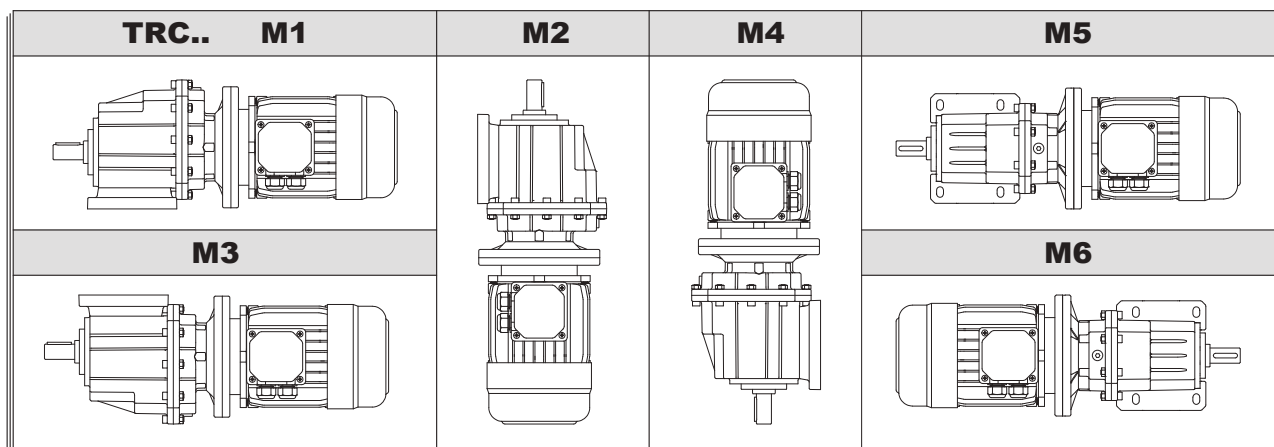


BRCZ04..HS



底脚代号 Foot Code	U	V	V1	V2	V3	W	X	X1	Y	Z
B04	23.5	130	—	170	—	14	168	205	115	20
B05	19.5	149.5	—	180	—	14	185	215	130	20
M04	35	110	—	170	185	14	150	230	120	20
M03	33	100	—	135	150	11	150	190	120	18
B03	21	130	70	—	160	11	156	190	120	20

9. MOUNTING POSITION AND TERMINAL BOX ORIENTATION



10. LUBRICATION

10.1 Types of lubrication

						润滑油类型 lubrication type
	°C -50 0 +50 +100	ISO	SHELL	MOBIL	BP	
BRC..	标准 Standard -10 +40	VG 220	Shell Omala 220	Mobilgear 630	BP Energol GR-XP 220	矿物油 Mineral oil
	-20 +25	VG 150 VG 100	Shell Omala 100	Mobilgear 627	BP Energol GR-XP 100	
	-30 +10	VG 68-46 VG 32	Shell Tellus T 32	Mobil D.T.E. 13M		
	-40 -20	VG 22 VG 15	Shell Tellus T 15	Mobil D.T.E. 11M	BP Energol HLP-HM 15	
	-40 +80	VG 220	Shell Omala HD 220	Mobil SHC 630		合成油 Synthetic oil
	-40 +40	VG 150	Shell Omala HD 150	Mobil SHC 629		
	-40 +10	VG 32		Mobil SHC 624		

10.2 Lubricant fill quantity

Gear units	Fill quantity in liters						unit: (L)
	M1	M2	M3	M4	M5	M6	
BRC..01..	0.4	0.6	0.4	0.3	0.3	0.3	
BRC..02..	0.5	0.7	0.5	0.4	0.4	0.4	
BRC..03..	0.8	1.1	0.8	0.6	0.6	0.6	
BRC..04..	1.2	1.6	1	1	0.9	0.9	

11. INSTALACIÓN

11.1 Preparación antes de la instalación

- 1). Comprovar que los datos de la placa son compatible con el voltaje.
- 2). Para reductores estándar, la temperatura ambiente a de estar en concordancia con el lubricante seleccionado.
- 3). el reductor no debe ser instalado en ambientes con aceite, gas, vapores, acidos, radiación etc..
- 4). El eje de salida y la brida deben estar limpias para evitar la corrosión. evitar el contacto de agentes limpiadores con los retenes para evitar daños y futuras perdidas de aceite.
- 5). La estructura de soporte debe estar nivelada, sin vibraciones y debe ser suficientemente rigida.

11.2 La instalación del reductor

- 1). Nunca montar poleas, acoplamientos, piñones etc. forzando su entrada en el eje golpeando con un martillo, ya que esto puede dañar los rodamientos y la caja del reductor
- 2). Antes del arranque, compruebe que el nivel de aceite se corresponde con la posición de montaje. Compruebe que los tapones de llenado y nivel son accesibles.


11. INSTALLATION METHODS

11.1 Preparation before the installation

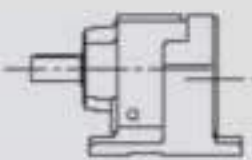
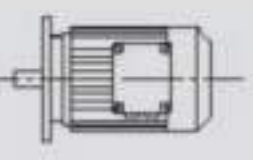
- 1). Check if the data on the nameplates of the gearmotor matches the voltage supply system.
- 2). For standard gear unit, the ambient temperature must be in accordance with the corresponding lubricant table.
- 3). The drive must not be assembled in conditions such as oil, gas, vapors, acids, radiation and so on.
- 4). Output shaft and flange surfaces must thoroughly cleaned to ensure they are free of anti-corrosion agents, contamination or similar. Use a commercially available solvent. Do not let the solvent come into contact with the sealing lip of the oil seals, or will damage the material!
- 5). The supporting structure must have the following characteristics: level, vibration damping and torsionally rigid.

11.2 The installation of the gear units

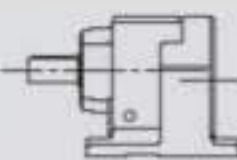
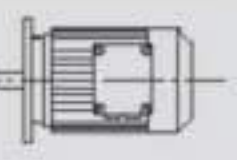
- 1). Never drive belt pulleys, couplings, pinions, etc. onto the shaft end by hitting them with a hammer. This will damage the bearing, housing and the shaft.
- 2). Prior to startup, check that if the oil level is as specified for the mounting position. if the oil checking and drain screw and the breather valves are free accessible.

P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s			Page
0.12	4.6	250	195.24*	12900	3.3	TR	78	MY 63M6
	5.4	210	166.59	13000	3.9	TRF	78	MY 63M6
0.18	4.5	385	195.24*	12500	2.1	TR	78	MY 63L6
	5.2	330	166.59	12700	2.5	TRF	78	MY 63L6
	6.3	275	138.39	12900	3.0			
0.25	2.4	1020	289.74	28200	3.0	TR	98	MY 80N8
	2.8	850	241.25	28400	3.5	TRF	98	MY 80N8
	2.8	870	246.54	20000	1.80	TR	88	MY 80N8
	3.1	760	216.54	20000	2.0	TRF	88	MY 80N8
	3.3	720	205.71	20000	2.2	TR	88	MY 80N8
	3.7	640	181.77	20000	2.4	TRF	88	MY 80N8
	4.1	585	166.59	11600	1.40	TR	78	MY 80N8
	4.9	485	138.39	12100	1.70	TRF	78	MY 80N8
	4.5	530	195.24*	11900	1.55	TR	78	MY 71D6
	5.3	450	166.59	12300	1.80	TRF	78	MY 71D6
	6.7	360	195.24*	12600	2.3	TR	78	MY 63L4
	7.8	305	166.59	12800	2.7	TRF	78	MY 63L4
0.37	2.8	1250	241.25	28000	2.4	TR	98	MY 90S8
	3.6	970	186.30	28300	3.1	TRF	98	MY 90S8
	3.1	1140	289.74	28100	2.6	TR	98	MY 80K6
	3.7	950	241.25	28300	3.2	TRF	98	MY 80K6
	3.3	1070	205.71	19600	1.45	TR	88	MY 90S8
	3.7	940	181.77	20000	1.65	TRF	88	MY 90S8
	3.6	970	246.54	20000	1.60	TR	88	MY 80K6
	4.4	810	205.71	20000	1.90	TRF	88	MY 80K6
	5.0	715	181.77	20000	2.2			
	5.8	610	155.34	20000	2.5			
	4.9	720	138.39	10800	1.15	TR	78	MY 90S8
						TRF	78	MY 90S8
	5.4	655	166.59	11200	1.25	TR	78	MY 80K6
	6.5	545	138.39	11900	1.50	TRF	78	MY 80K6
	7.1	500	195.24*	12100	1.65	TR	78	MY 71D4
	8.3	425	166.59	12400	1.90	TRF	78	MY 71D4
	10	355	138.39	12600	2.3			
	15	240	92.97	12900	3.5			
0.55	2.8	1860	241.25	26900	1.60	TR	98	MY 90L8
						TRF	98	MY 90L8
	3.1	1690	289.74	27400	1.75	TR	98	MY 80N6
	3.7	1410	241.25	27800	2.1	TRF	98	MY 80N6
	4.7	1120	289.74	28100	2.7	TR	98	MY 80K4
	5.6	930	241.25	28300	3.2	TRF	98	MY 80K4




P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	f_s			Page
0.55	3.6	1440	246.54	17700	1.10	TR	88	MY 80N6
	4.4	1200	205.71	19000	1.30	TRF	88	MY 80N6
	5.0	1060	181.77	19600	1.45			
	5.8	910	155.34	20000	1.70			
	5.5	950	246.54	20000	1.65	TR	88	MY 80K4
	6.6	795	205.71	20000	1.95	TRF	88	MY 80K4
	7.5	700	181.77	20000	2.2			
	8.8	600	155.34	20000	2.6			
	11	485	124.97	20000	3.2			
	13	400	103.65	20000	3.9	TR	88	MY 80K4
						TRF	88	MY 80K4
	8.2	645	166.59	11300	1.25	TR	78	MY 80K4
						TRF	78	MY 80K4
	9.8	535	138.39	11900	1.55	TR	78	MY 80K4
	15	360	92.97	12600	2.3	TRF	78	MY 80K4
	17	315	81.80	12800	2.6			
	21	255	65.77	12900	3.2			
0.75	3.7	1930	186.30	26600	1.55	TR	98	MY 100M8
						TRF	98	MY 100M8
	3.7	1920	241.25	26700	1.55	TR	98	MY 90S6
						TRF	98	MY 90S6
	4.8	1500	289.74	27600	2.0	TR	98	MY 80N4
	5.7	1250	241.25	28000	2.4	TRF	98	MY 80N4
	7.4	970	186.30	28300	3.1	TR	98	MY 80N4
						TRF	98	MY 80N4
	4.4	1640	205.71	16300	0.95	TR	88	MY 90S6
	5.0	1450	181.77	17600	1.05	TRF	88	MY 90S6
	5.8	1240	155.34	18800	1.25			
	5.6	1280	246.54	18600	1.20	TR	88	MY 80N4
	6.7	1070	205.71	19600	1.45	TRF	88	MY 80N4
	7.6	940	181.77	20000	1.65			
	8.9	810	155.34	20000	1.90			
	11	650	124.97	20000	2.4			
	13	540	103.65	20000	2.9			
	15	485	93.38	20000	3.2			
	8.3	860	166.59	9490	0.95	TR	78	MY 80N4
	10	720	138.39	10800	1.15	TRF	78	MY 80N4
	15	485	92.97	12200	1.70			
	17	425	81.80	12400	1.95			
	21	340	65.77	12700	2.4			
	27	270	52.07	12900	3.0			
	30	240	45.81	12900	3.5			
1.1	3.8	2750	241.25	22600	1.10	TR	98	MY 90L6
	4.9	2130	186.30	25900	1.40	TRF	98	MY 90L6
	5.8	1810	241.25	27100	1.65	TR	98	MY 90S4
	7.5	1400	186.30	27800	2.2	TRF	98	MY 90S4
	9.3	1130	150.78	28100	2.7			
	12	870	116.48	28300	3.4			

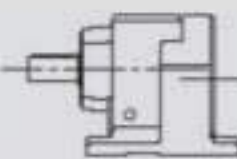
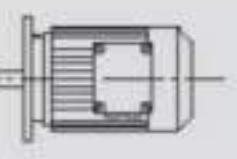


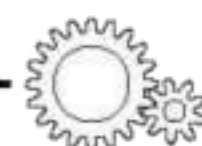
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	Fr_2 [N]	fs			Page
1.1	6.8	1540	205.71	17000	1.00	TR	88	MY 90S4
	7.7	1360	181.77	18100	1.15	TRF	88	MY 90S4
	9.0	1170	155.34	19100	1.35			
	11	940	124.97	20000	1.65			
	14	780	103.65	20000	2.0			
	15	700	93.38	20000	2.2			
	17	615	81.92	20000	2.5			
	22	480	63.68*	20000	3.2			
	27	395	52.82	20000	3.9			
	15	700	92.97	10900	1.20	TR	78	MY 90S4
	17	615	81.80	11500	1.35	TRF	78	MY 90S4
	21	495	65.77	12100	1.65			
	27	390	52.07	12500	2.1			
	31	345	45.81	12700	2.4			
	38	275	36.83	12900	3.0			
1.5	5.8	2450	241.25	24300	1.20	TR	98	MY 90L4
	7.6	1890	186.30	26800	1.60	TRF	98	MY 90L4
	9.3	1530	150.78	27600	1.95			
	12	1180	116.48	28000	2.5	TR	98	MY 90L4
	15	940	92.48	28300	3.2	TRF	98	MY 90L4
	7.8	1850	181.77	11400	0.85	TR	88	MY 90L4
	9.1	1580	155.34	16700	1.00	TRF	88	MY 90L4
	11	1270	124.97	18600	1.20			
	14	1050	103.65	19600	1.45			
	15	950	93.38	20000	1.65			
	17	830	81.92	20000	1.85			
	22	645	63.68*	20000	2.4	TR	88	MY 90L4
	27	535	52.82	20000	2.9	TRF	88	MY 90L4
	30	485	47.58	20000	3.2			
	34	425	41.74	20000	3.7			
	38	375	36.84*	19600	4.1			
	15	940	92.97	8500	0.85	TR	78	MY 90L4
	17	830	81.80	9820	1.00	TRF	78	MY 90L4
	21	670	65.77	11100	1.25			
	27	530	52.07	11900	1.55	TR	78	MY 90L4
	31	465	45.81	12200	1.75	TRF	78	MY 90L4
	38	375	36.83	12600	2.2			
	49	295	29.00	12500	2.8			
	56	255	25.23	12000	3.0			
	60	240	23.37	11800	3.5	TR	78	MY 90L4
	75	191	18.80	11000	4.1	TRF	78	MY 90L4

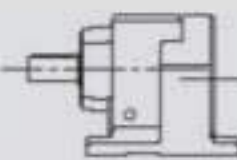
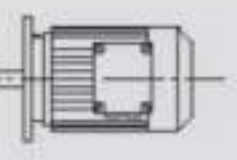


P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
2.2	7.6	2780	186.30	22500	1.10	TR	98	MY 100M4
						TRF	98	MY 100M4
	9.3	2250	150.78	25300	1.35	TR	98	MY 100M4
	12	1740	116.48	27300	1.75	TRF	98	MY 100M4
	15	1380	92.48	27800	2.2	TR	98	MY 100M4
	20	1080	72.17	28200	2.8	TRF	98	MY 100M4
	24	890	59.92	27000	3.4			
	30	710	47.58	25300	4.2			
	11	1860	124.97	10100	0.85	TR	88	MY 100M4
	14	1540	103.65	17000	1.00	TRF	88	MY 100M4
	15	1390	93.38	17900	1.10			
	17	1220	81.92	18900	1.25			
	22	950	63.68*	20000	1.65	TR	88	MY 100M4
	27	785	52.82	20000	1.95	TRF	88	MY 100M4
	30	710	47.58	20000	2.2			
	34	620	41.74	19900	2.5			
	38	550	36.84*	19200	2.8			
	41	515	34.40*	18800	2.9	TR	88	MY 100M4
	51	415	27.84*	17700	3.7	TRF	88	MY 100M4
	66	320	21.51	16400	4.7			
	21	980	65.77	5470	0.85	TR	78	MY 100M4
	27	775	52.07	10300	1.05	TRF	78	MY 100M4
	31	685	45.81	11000	1.20			
	38	550	36.83	11800	1.50			
	49	430	29.00	12100	1.90			
	56	375	25.23	11700	2.1			
	60	350	23.37	11400	2.4			
	75	280	18.80	10800	2.8			
	90	230	15.60	10200	3.2			
3	9.3	3090	150.78	16200	0.95	TR	98	MY 100L4
	12	2380	116.48	24700	1.25	TRF	98	MY 100L4
	15	1890	92.48	26800	1.60			
	19	1480	72.17	27700	2.0			
	23	1230	59.92	26400	2.5			
	29	970	47.58	24800	3.1			
	38	760	37.13	23100	4.0			
	15	1910	93.38	3630	0.80	TR	88	MY 100L4
	17	1680	81.92	16000	0.90	TRF	88	MY 100L4
	22	1300	63.68*	18400	1.20			
	27	1080	52.82	19500	1.45	TR	88	MY 100L4
	29	970	47.58	19900	1.60	TRF	88	MY 100L4

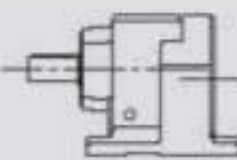
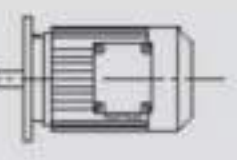


P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
3	9.3	3090	150.78	16200	0.95	TR	98	MY 100L4
	12	2380	116.48	24700	1.25	TRF	98	MY 100L4
	15	1890	92.48	26800	1.60			
	19	1480	72.17	27700	2.0			
	23	1230	59.92	26400	2.5			
	29	970	47.58	24800	3.1			
	38	760	37.13	23100	4.0			
	15	1910	93.38	3630	0.80	TR	88	MY 100L4
	17	1680	81.92	16000	0.90	TRF	88	MY 100L4
	22	1300	63.68*	18400	1.20			
	27	1080	52.82	19500	1.45	TR	88	MY 100L4
	29	970	47.58	19900	1.60	TRF	88	MY 100L4
	34	850	41.74	19400	1.80	TR	88	MY 100L4
	38	755	36.84*	18700	2.1	TRF	88	MY 100L4
	50	570	27.88	17400	2.6			
	41	705	34.40*	18400	2.1	TR	88	MY 100L4
	50	570	27.84*	17400	2.7	TRF	88	MY 100L4
	65	440	21.51	16100	3.4			
	82	350	17.08*	15100	4.0	TR	88	MY 100L4
						TRF	88	MY 100L4
	31	940	45.81	8670	0.85	TR	78	MY 100L4
	38	755	36.83	10500	1.10	TRF	78	MY 100L4
	48	595	29.00	11600	1.40	TR	78	MY 100L4
	55	515	25.23	11300	1.50	TRF	78	MY 100L4
	60	480	23.37	11100	1.70	TR	78	MY 100L4
	74	385	18.80	10500	2.0	TRF	78	MY 100L4
	90	320	15.60	9980	2.3			
	129	225	10.88	9030	3.0			
	163	176	8.59	8500	3.6			
4	12	3130	116.48	13800	0.95	TR	98	MY 112M4
	15	2490	92.48	24100	1.20	TRF	98	MY 112M4
	20	1940	72.17	26600	1.55			
	24	1610	59.92	25500	1.85			
	30	1280	47.58	24000	2.3			
	38	1000	37.13	22500	3.0			
	44	860	32.05	21600	3.0			
	57	675	25.03	20100	4.2			
	71	540	20.14	18900	4.8			
	22	1710	63.68*	13300	0.90	TR	88	MY 112M4
	27	1420	52.82	15200	1.10	TRF	88	MY 112M4
	30	1280	47.58	16000	1.20			
	34	1120	41.74	16800	1.40			
	39	990	36.84*	17400	1.55			
	51	750	27.88	16800	2.0			




P _{1n} [kW]	n ₂ [r/min]	M _{2n} [Nm]	i	Fr ₂ [N]	fs			Page
4	41	930	34.40*	17600	1.60	TR	88	MY 112M4
	51	750	27.84*	16800	2.1	TRF	88	MY 112M4
	66	580	21.51	15700	2.6			
	83	460	17.08*	14700	3.0			
	107	360	13.33	13700	3.6			
	39	990	36.83	4070	0.85	TR	78	MY 112M4
	49	780	29.00	10300	1.05	TRF	78	MY 112M4
	56	680	25.23	10800	1.15			
	61	630	23.37	10600	1.30	TR	78	MY 112M4
	76	505	18.80	10100	1.55	TRF	78	MY 112M4
	91	420	15.60	9630	1.75			
	131	295	10.88	8780	2.3			
	165	230	8.59	8320	2.7			
	237	161	5.99*	7490	3.4			
5.5	20	2650	72.17	21800	1.15	TR	98	MY 132S4
	24	2200	59.92	24200	1.35	TRF	98	MY 132S4
	30	1750	47.58	23000	1.70			
	39	1360	37.13	21700	2.2			
	52	1010	27.58	20100	2.6			
	45	1180	32.05	20900	2.2			
	57	920	25.03	19600	3.1			
	71	740	20.14	18400	3.5			
	88	595	16.17	17300	4.0			
	30	1750	47.58	15400	0.90	TR	88	MY 132S4
	34	1530	41.74	17000	1.00	TRF	88	MY 132S4
	39	1350	36.84*	17200	1.15			
	51	1020	27.88	16100	1.45			
	51	1020	27.84*	16100	1.50			
	66	790	21.51	15200	1.90			
	84	625	17.08*	14300	2.2			
	107	490	13.33	13400	2.6			
	144	365	9.90*	12300	3.3			
	156	335	9.14*	12200	3.6			
	174	300	8.22	11800	3.8			
	76	690	18.80	9240	1.15	TR	78	MY 132S4
	92	575	15.60	9150	1.30	TRF	78	MY 132S4
	131	400	10.88	8440	1.65			
	166	315	8.59	8080	2.0			
	239	220	5.99*	7320	2.5			
7.5	24	3000	59.92	19700	1.00	TR	98	MY 132M4
	30	2380	47.58	21800	1.25	TRF	98	MY 132M4
	39	1860	37.13	20700	1.60			
	43	1670	33.25	20200	1.75			
	45	1610	32.05	20000	1.60			
	57	1250	25.03	18900	2.3			
	71	1010	20.14	17900	2.6			
	39	1840	36.84*	11500	0.85	TR	88	MY 132M4
	51	1400	27.88	15200	1.05	TRF	88	MY 132M4
	51	1390	27.84*	15200	1.10			
	66	1080	21.51	14500	1.40			
	84	860	17.08*	13700	1.65			
	107	670	13.33	12900	1.90			



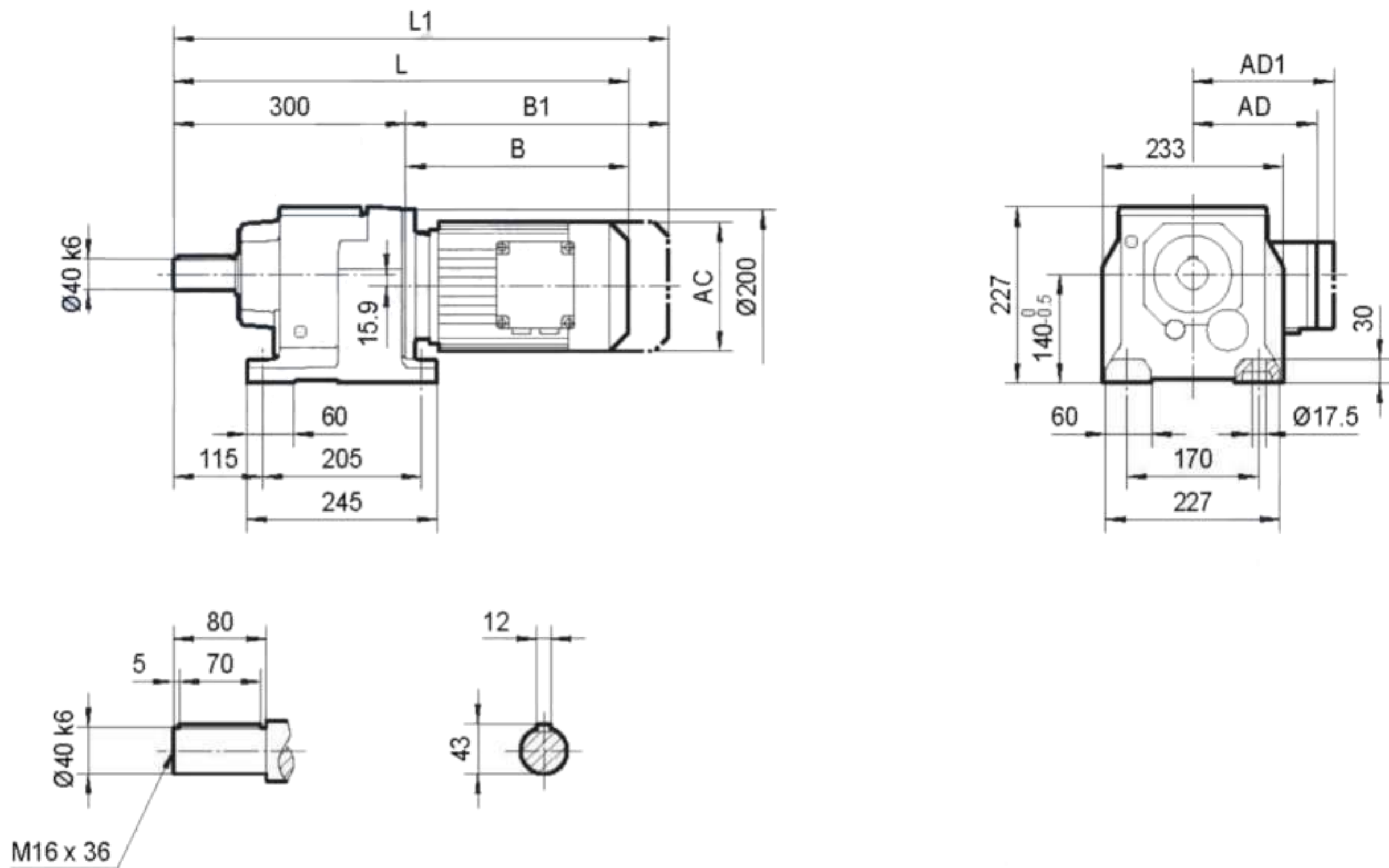
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
7.5	144	495	9.90*	12000	2.4	TR	88	MY 132M4
	156	460	9.14*	11900	2.6	TRF	88	MY 132M4
	200	355	7.13	11100	3.0			
	270	265	5.30*	10200	3.4			
	76	940	18.80	5310	0.85	TR	78	MY 132M4
	92	780	15.60	6610	0.95	TRF	78	MY 132M4
	131	545	10.88	8010	1.20			
	166	430	8.59	7620	1.45			
	30	2900	47.58	20600	1.05	TR	98	MY 132ML4
	39	2270	37.13	19800	1.30	TRF	98	MY 132ML4
9.2	52	1680	27.58	18700	1.60			
	58	1530	25.03	18300	1.85			
	71	1230	20.14	17400	2.1			
	89	990	16.17	16500	2.4			
	116	755	12.39	15400	2.9			
	67	1310	21.51	13900	1.15	TR	88	MY 132ML4
	84	1040	17.08*	13200	1.35	TRF	88	MY 132ML4
	108	810	13.33	12600	1.55			
	145	605	9.90*	11700	1.95			
	158	560	9.14*	11700	2.2			
	202	435	7.13	10900	2.5			
	132	665	10.88	6280	1.00	TR	78	MY 132ML4
	240	365	5.99*	6920	1.50	TRF	78	MY 132ML4
	34	3120	42.78	14500	0.95	TR	98	MY 160M4
	52	2010	27.58	18000	1.35	TRF	98	MY 160M4
	58	1830	25.03	17700	1.55			
	71	1470	20.14	16900	1.80			
	89	1180	16.17	16100	2.0			
	116	900	12.39	15100	2.4			
	155	675	9.29	14300	3.0			
	202	520	7.12	13200	3.9			
11	67	1570	21.51	13200	0.95	TR	88	MY 160M4
	84	1250	17.08*	12800	1.10	TRF	88	MY 160M4
	108	970	13.33	12200	1.30			
	145	720	9.90*	11400	1.65			
	158	665	9.14*	11500	1.80			
	202	520	7.13	10800	2.1			
	272	385	5.30*	9910	2.4			
	132	795	10.88	4250	0.85	TR	78	MY 160M4
	240	435	5.99*	5720	1.25	TRF	78	MY 160M4
	53	2710	27.58	16500	1.00	TR	98	MY 160L4
	58	2460	25.03	16300	1.15	TRF	98	MY 160L4
	72	1980	20.14	15800	1.30			
	90	1590	16.17	15200	1.50			
	118	1220	12.39	14400	1.80			
	157	910	9.29	13800	2.2			
	205	700	7.12	12800	2.9			
15								



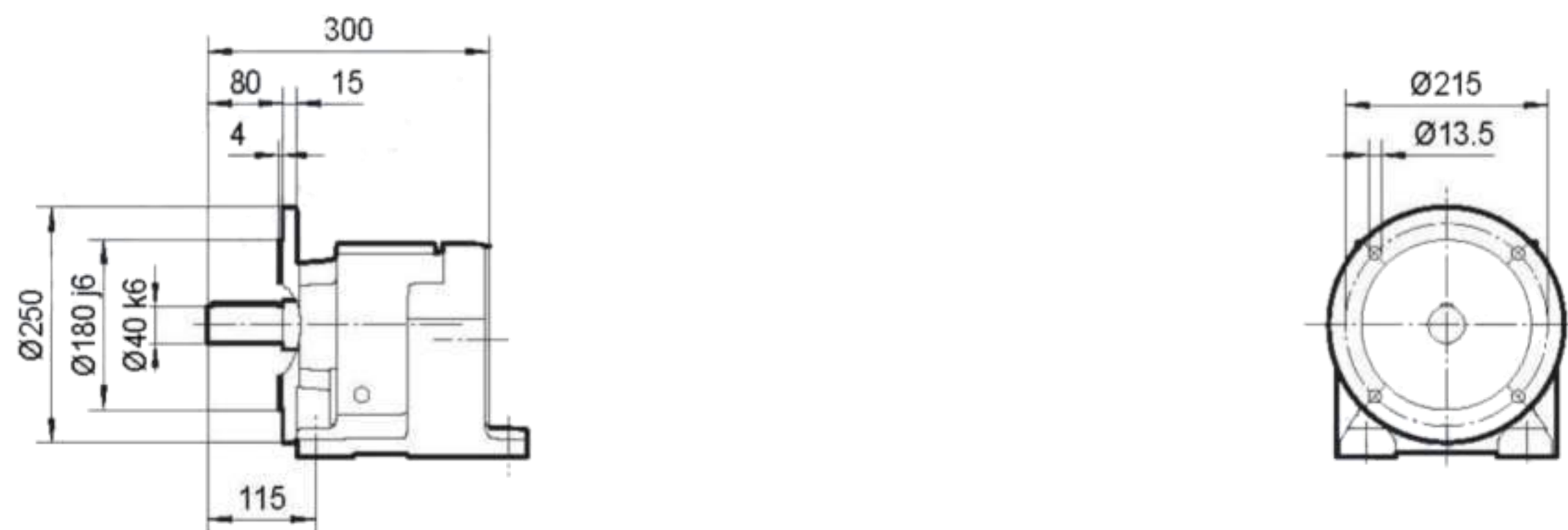
P_{1n} [kW]	n_2 [r/min]	M_{2n} [Nm]	i	F_{r2} [N]	f_s			Page
15	85	1680	17.08*	11600	0.85	TR	88	MY 160L4
	110	1310	13.33	11300	1.00	TRF	88	MY 160L4
	147	970	9.90*	10700	1.20			
	160	900	9.14*	11000	1.35			
	205	700	7.13	10300	1.55			
	275	520	5.30*	9600	1.75			
18.5	73	2430	20.14	14900	1.05	TR	98	MY 180M4
	91	1950	16.17	14500	1.25	TRF	98	MY 180M4
	118	1490	12.39	13800	1.45			
	158	1120	9.29	13400	1.80			
	206	860	7.12	12600	2.3			
	282	625	5.20	11600	2.8			
	110	1610	13.33	10600	0.80	TR	88	MY 180M4
	148	1190	9.90*	10200	1.00	TRF	88	MY 180M4
	160	1100	9.14*	10600	1.10			
	205	860	7.13	10000	1.25			
	276	640	5.30*	9350	1.40			
22	73	2890	20.14	14000	0.90	TR	98	MY 180L4
	91	2320	16.17	13700	1.05	TRF	98	MY 180L4
	118	1780	12.39	13200	1.25			
	158	1330	9.29	13100	1.50			
	206	1020	7.12	12300	1.95			
	282	745	5.20	11400	2.4			
	148	1420	9.90*	9640	0.85	TR	88	MY 180L4
	160	1310	9.14*	10100	0.90	TRF	88	MY 180L4
	205	1020	7.13	9700	1.05			
	276	760	5.30*	9110	1.20			
30	119	2420	12.39	11900	0.90	TR	98	MY 200L4
	158	1810	9.29	12300	1.10	TRF	98	MY 200L4
	207	1390	7.12	11700	1.45			
	283	1010	5.20	10900	1.75			



TR78..

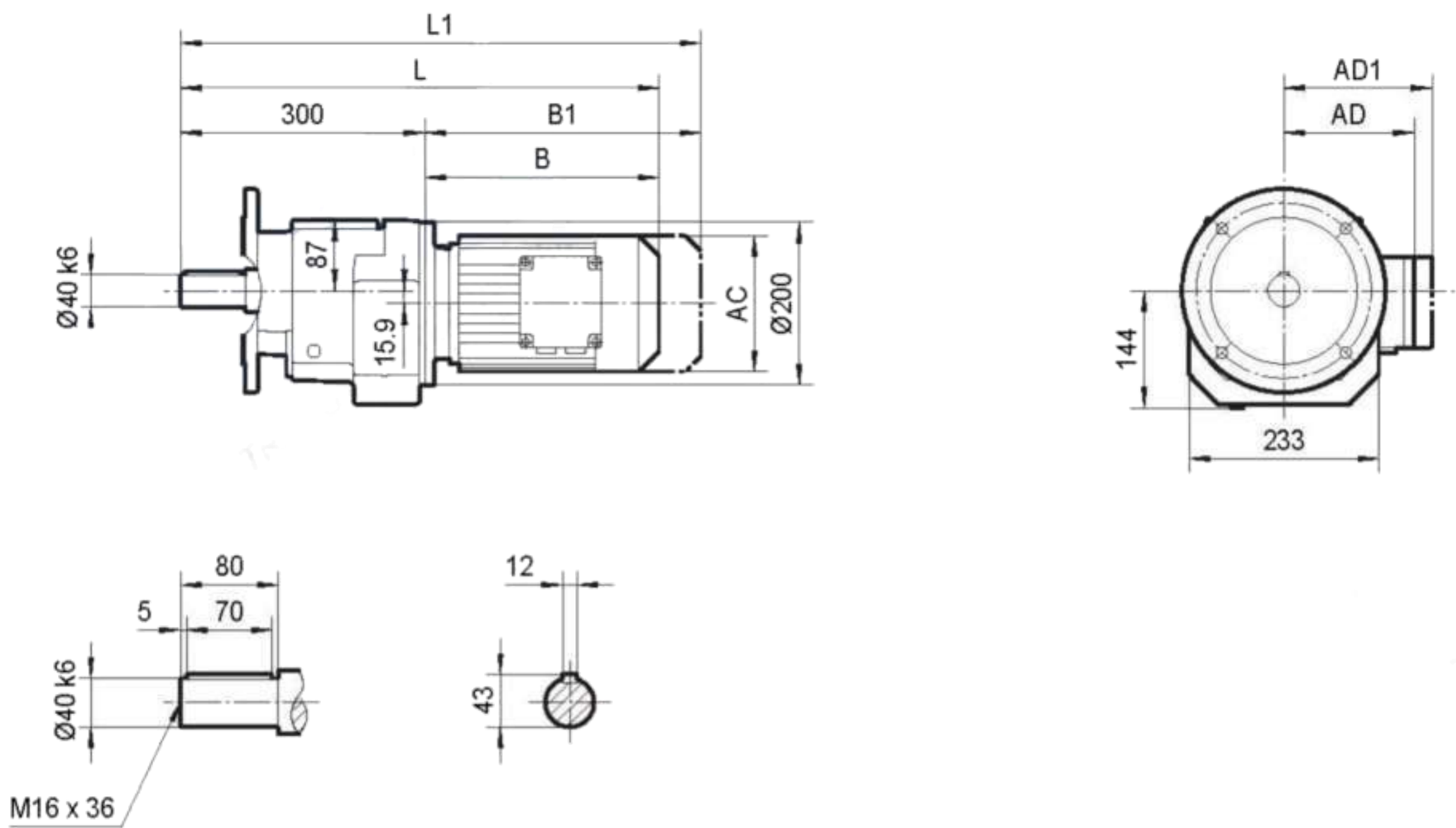
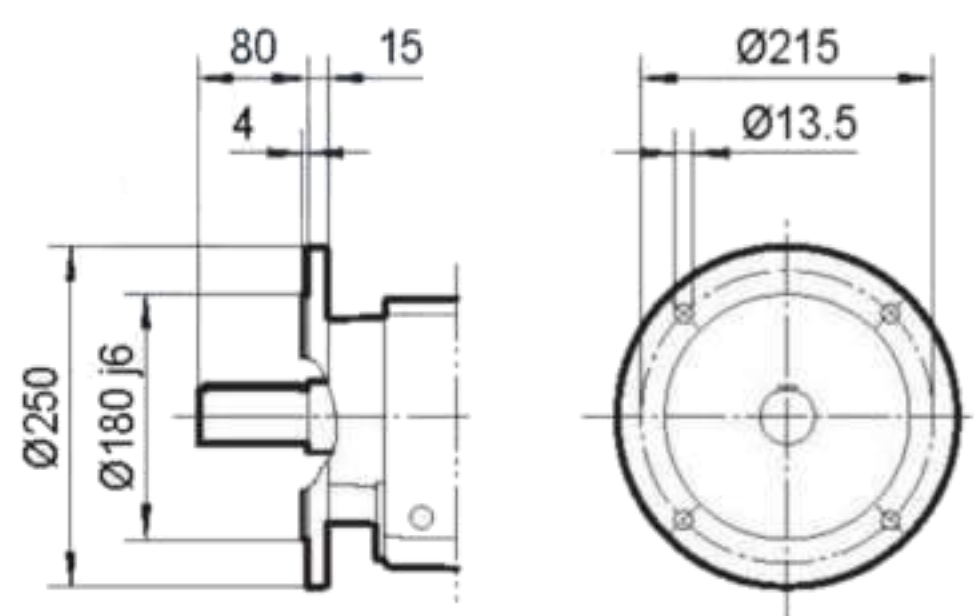
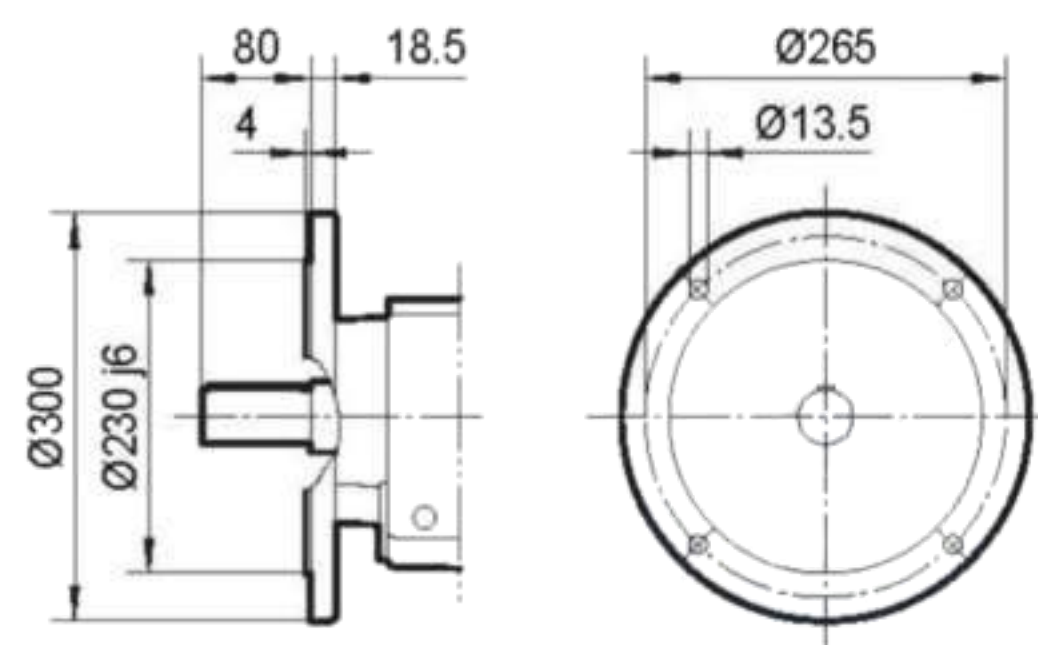


TR78F..



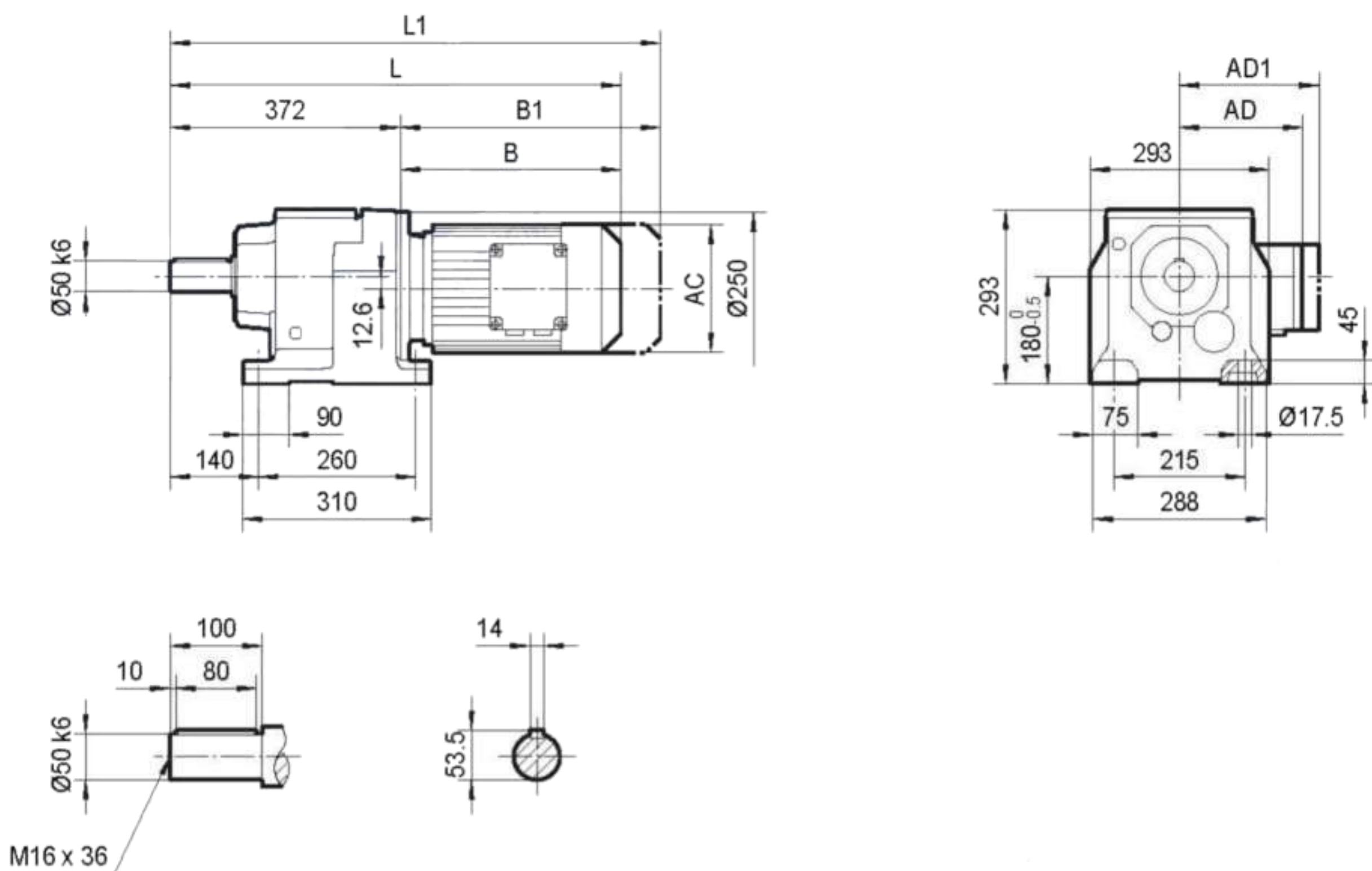
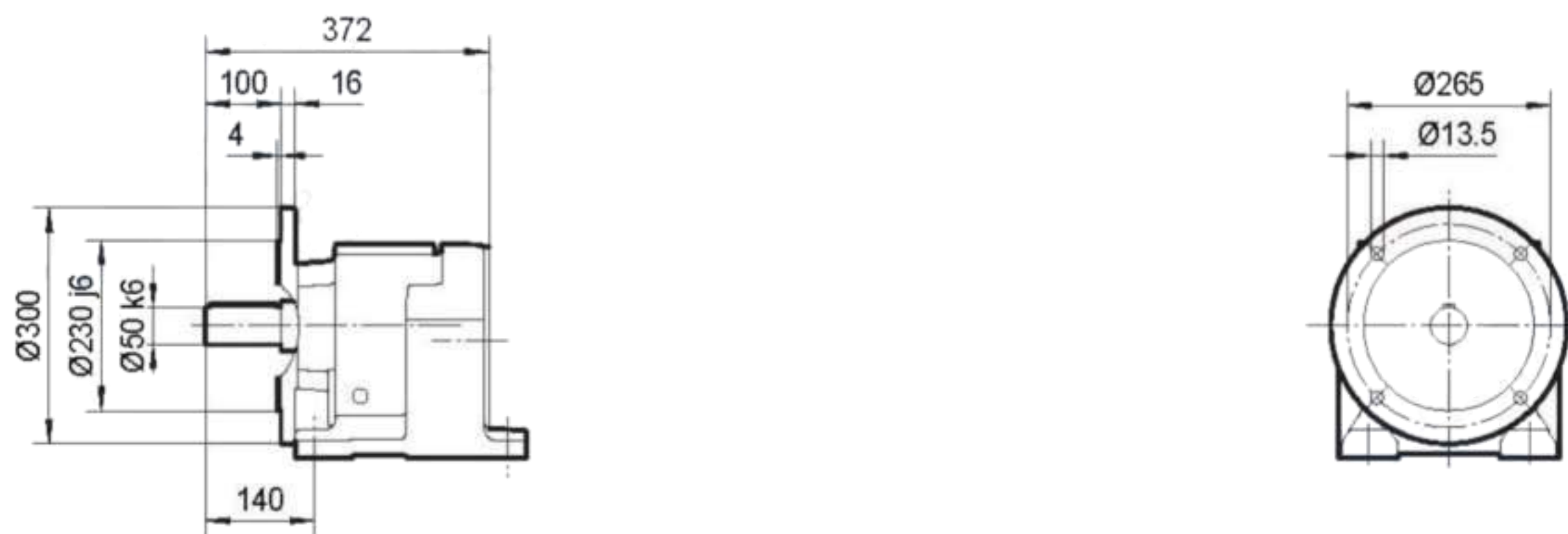
	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M
AC	132	145	145	197	197	197	221	221	275	275	275
AD	105	122	122	154	166	166	179	179	230	230	230
AD1	105	127	127	161	166	166	182	182	230	230	230
B	179	193	243	261	311	341	345	390	412	472	472
B1	234	257	307	346	396	426	425	470	524	584	584
L	479	493	543	561	611	641	645	690	712	772	772
L1	534	557	607	646	696	726	725	770	824	884	884



TRF78..

**I
Ø250**

**II
Ø300**


	MY63..	MY71D	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M
AC	132	145	145	197	197	197	221	221	275	275	275
AD	105	122	122	154	166	166	179	179	230	230	230
AD1	105	127	127	161	166	166	182	182	230	230	230
B	179	193	243	261	311	341	345	390	412	472	472
B1	234	257	307	346	396	426	425	470	524	584	584
L	479	493	543	561	611	641	645	690	712	772	772
L1	534	557	607	646	696	726	725	770	824	884	884

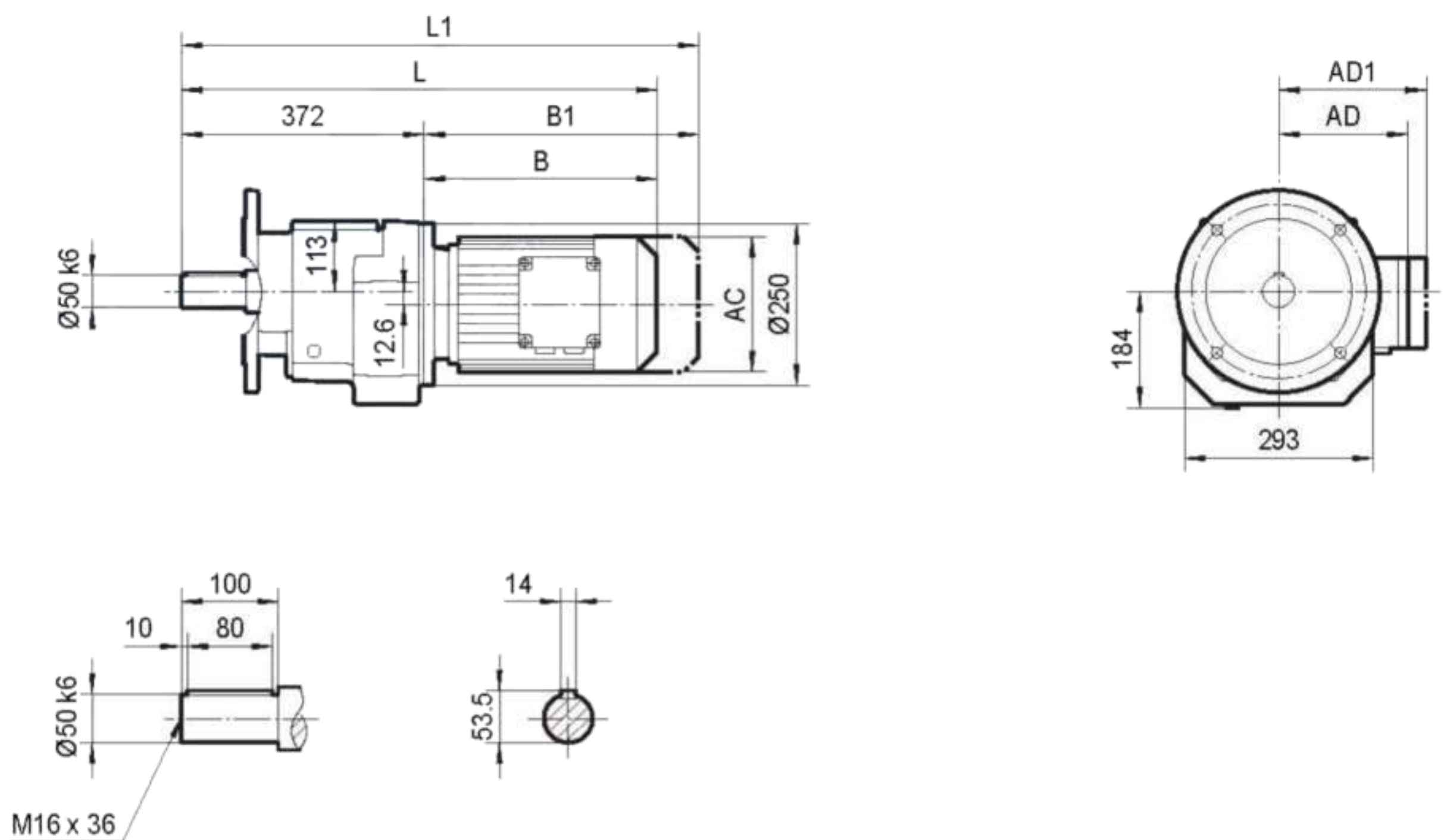


TR88..

TR88F..


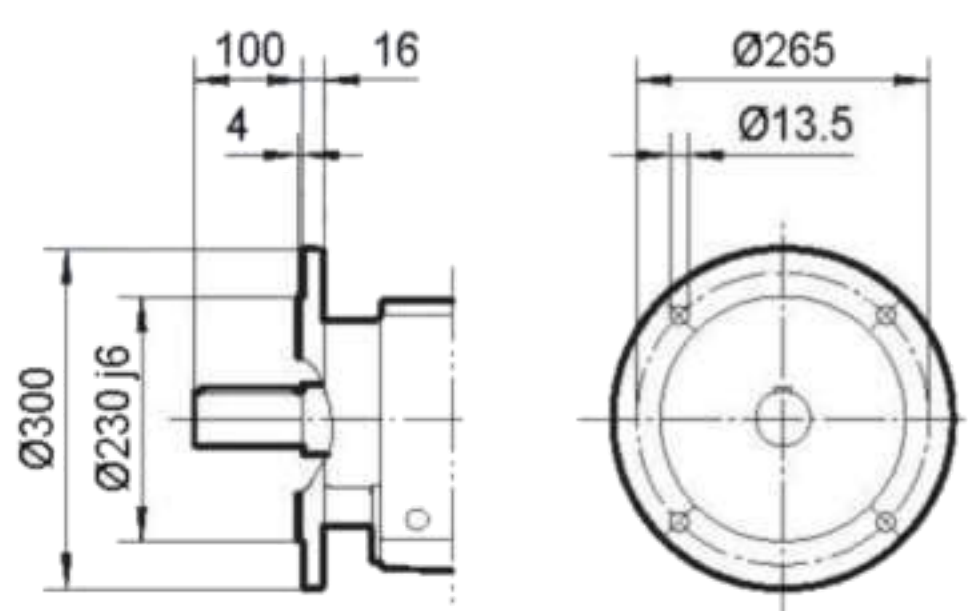
	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..
AC	145	197	197	197	221	221	275	275	275	331	331
AD	122	154	166	166	179	179	230	230	230	258	258
AD1	127	161	166	166	182	182	230	230	230	258	258
B	238	257	307	337	340	385	407	467	467	514	586
B1	302	342	392	422	420	465	519	579	579	670	742
L	610	629	679	709	712	757	779	839	839	886	958
L1	674	714	764	794	792	837	891	951	951	1042	1114



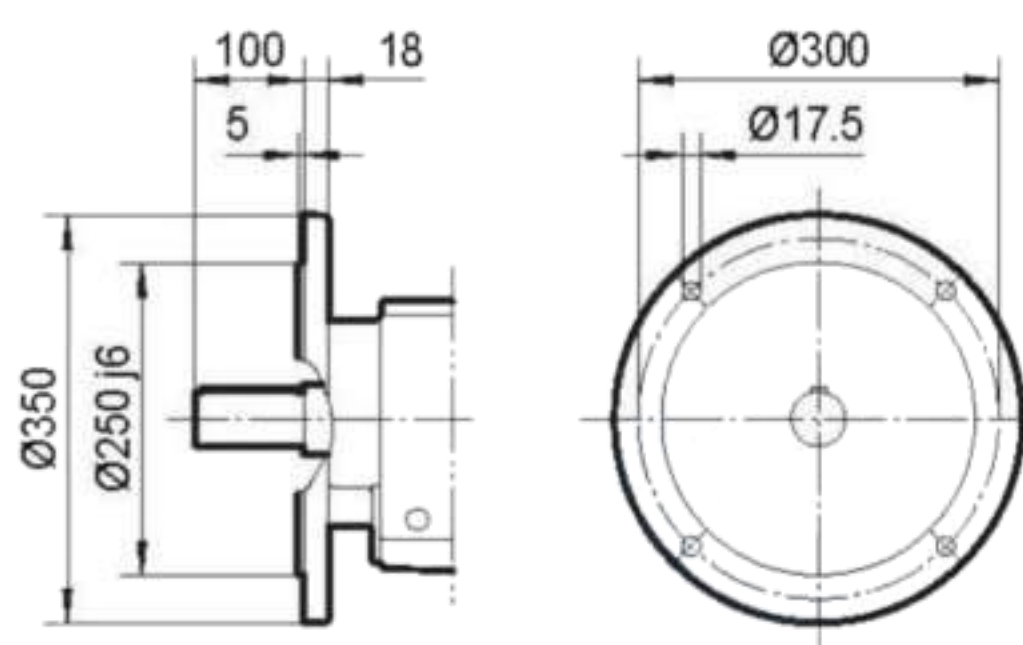
TRF88..



**I
Ø300**



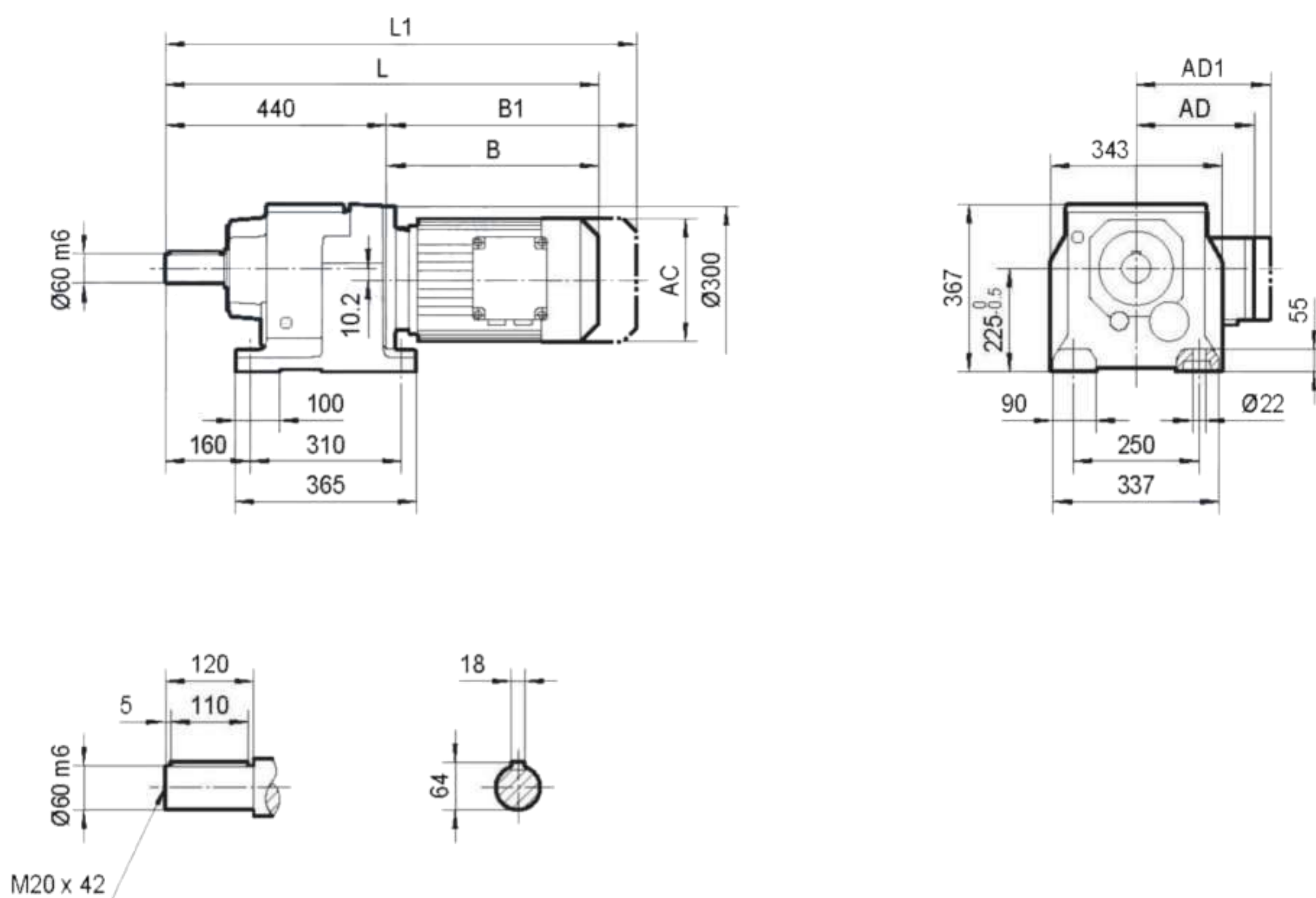
**II
Ø350**



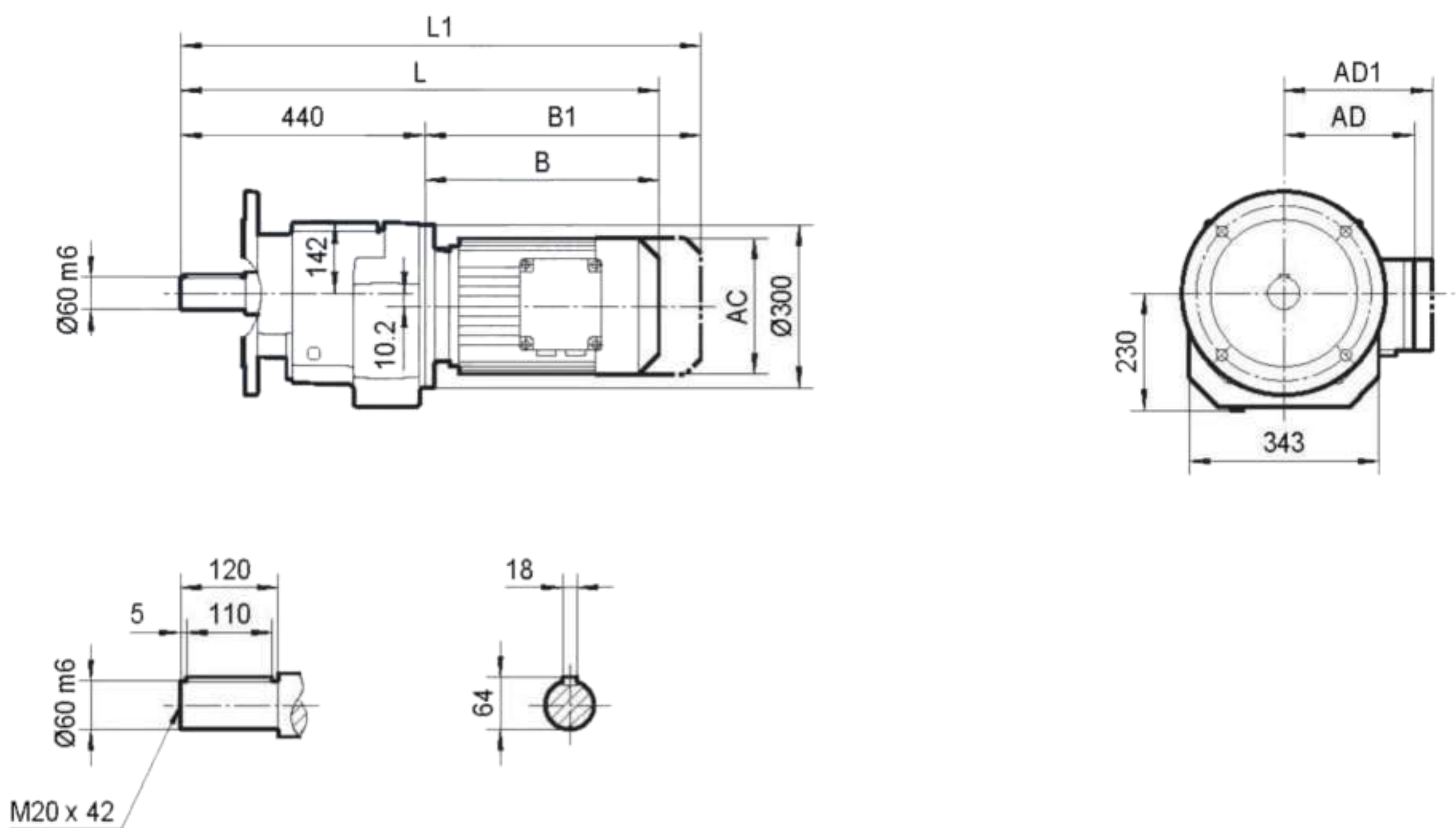
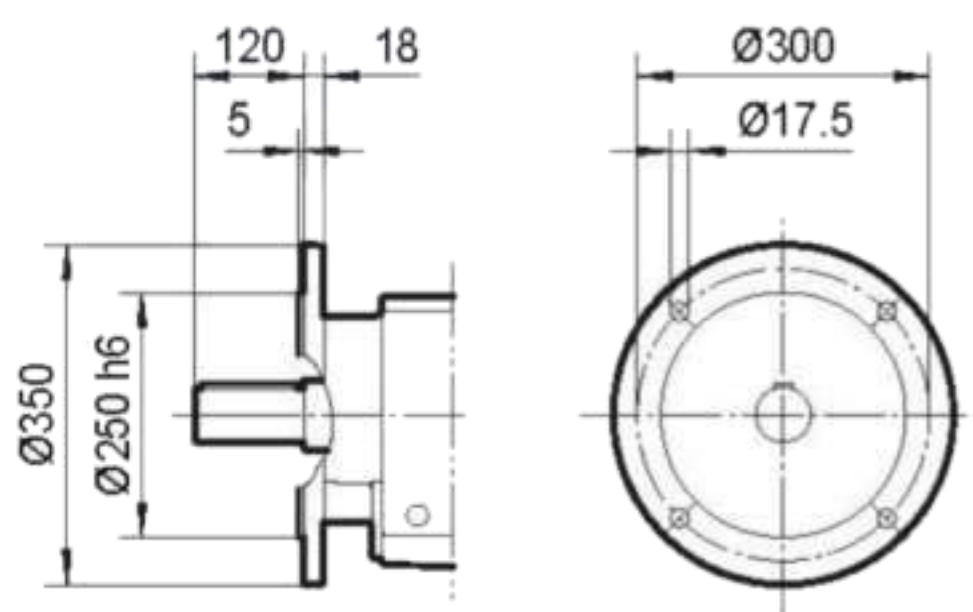
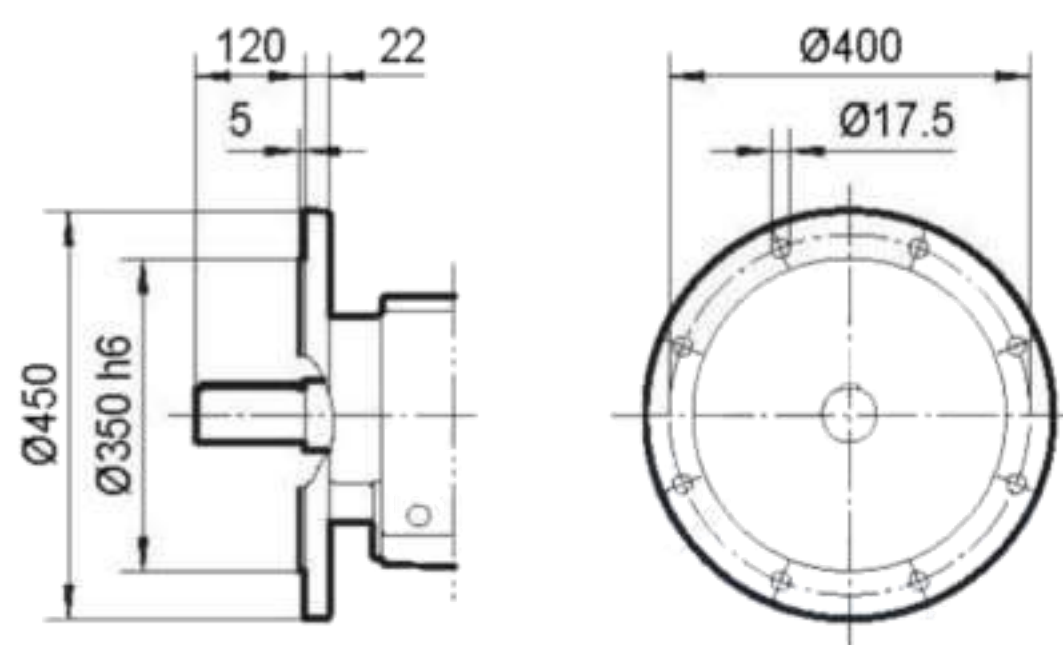
	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..
AC	145	197	197	197	221	221	275	275	275	331	331
AD	122	154	166	166	179	179	230	230	230	258	258
AD1	127	161	166	166	182	182	230	230	230	258	258
B	238	257	307	337	340	385	407	467	467	514	586
B1	302	342	392	422	420	465	519	579	579	670	742
L	610	629	679	709	712	757	779	839	839	886	958
L1	674	714	764	794	792	837	891	951	951	1042	1114



TR98..



	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..
AC	145	197	197	197	221	221	275	275	275	331	331	394
AD	122	154	166	166	179	179	230	230	230	258	258	285
AD1	127	161	166	166	182	182	230	230	230	258	258	285
B	231	251	301	331	335	380	402	462	462	509	581	629
B1	295	336	386	416	415	460	514	574	574	665	737	785
L	671	691	741	771	775	820	842	902	902	949	1021	1069
L1	735	776	826	856	855	900	954	1014	1014	1105	1177	1225

TRF98..

**I
Ø350**

**II
Ø450**


	MY80..	MY90..	MY100M	MY100L	MY112M	MY132S	MY132M	MY132ML	MY160M	MY160L	MY180..	MY200..
AC	145	197	197	197	221	221	275	275	275	331	331	394
AD	122	154	166	166	179	179	230	230	230	258	258	285
AD1	127	161	166	166	182	182	230	230	230	258	258	285
B	231	251	301	331	335	380	402	462	462	509	581	629
B1	295	336	386	416	415	460	514	574	574	665	737	785
L	671	691	741	771	775	820	842	902	902	949	1021	1069
L1	735	776	826	856	855	900	954	1014	1014	1105	1177	1225

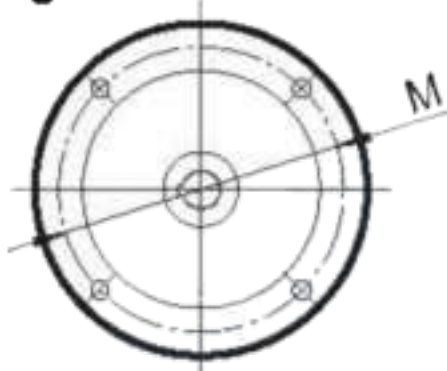


7.3 TR.. AM(IEC)..

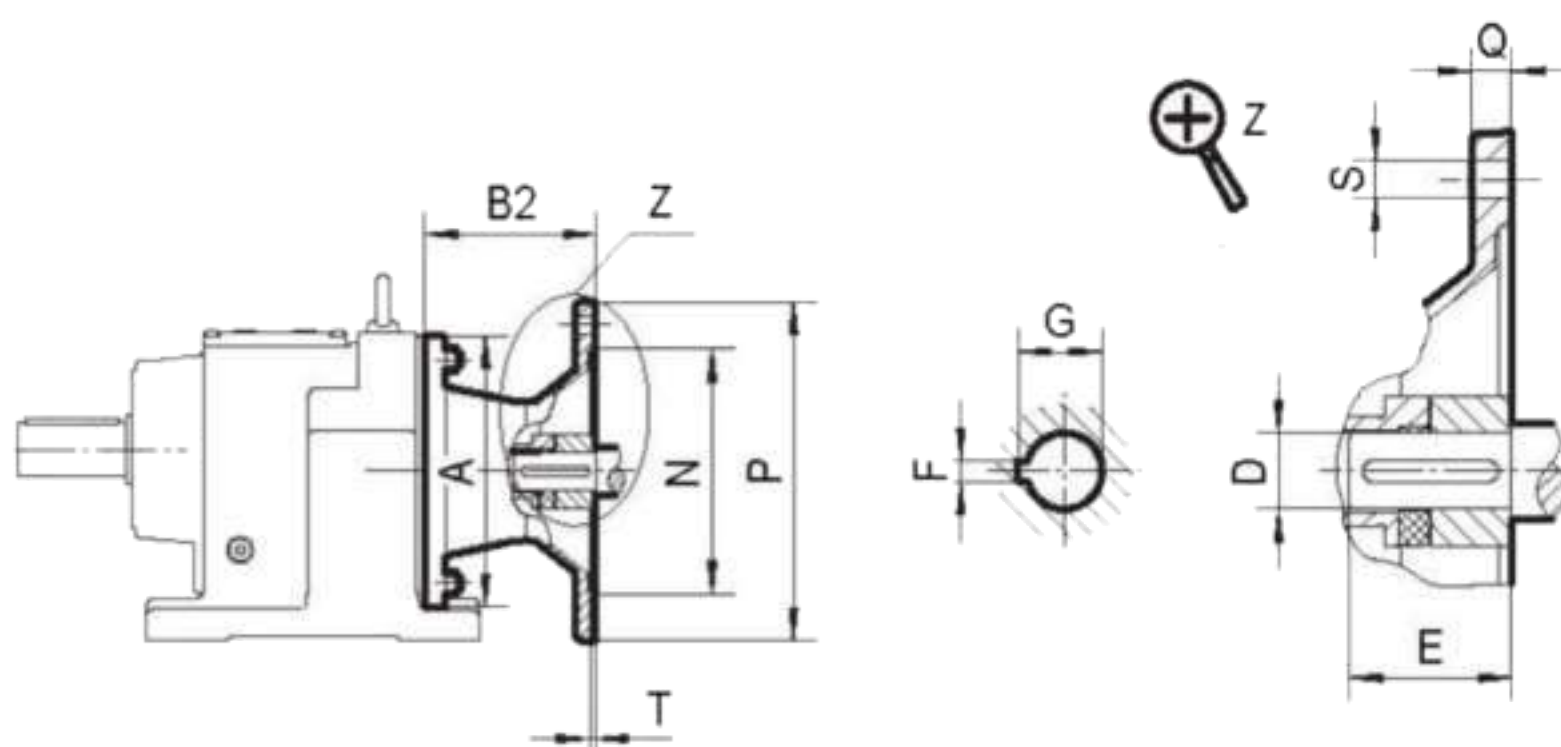
/ Outline Dimension

TR..AM(IEC)..

Flange.1



Flange.2



TR..	AM..	Flange.	A	B2	D	E	F	G	M	N	P	Q	S	T
TR..78	AM63	1	200	60	11	23	4	12.8	115	95	140	10	4-Φ 9	3.5
	AM71				14	30	5	16.3	130	110	160			
	AM80			92	19	40	6	21.8	165	130	200	12	4-Φ 11	4.5
	AM90				24	50	8	27.3						
	AM100 1)			126	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112 1)													
	AM132S/M 1)													
	AM132ML 1)													
TR..88	AM80	1	250	87	19	40	6	21.8	165	130	200	12	4-Φ 11	4.5
	AM90				24	50	8	27.3						
	AM100			121	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M													
	AM132ML													
	AM160 1)			232	42	110	12	45.3	300	250	350	18	4-Φ 17.5	6
	AM180 1)				48		14	51.8						
TR..98	AM100	1	300	116	28	60	8	31.3	215	180	250	15	4-Φ13.5	5
	AM112													
	AM132S/M			169	38	80	10	41.3	265	230	300	16		
	AM132ML													
	AM160			227	42	110	12	45.3	300	250	350	18	4-Φ17.5	6
	AM180				48		14	51.8						
	AM200			268	55		16	59.3	350	300	400	20		7

1) Dimension P/2 may protrude past foot mounting surface, please check.

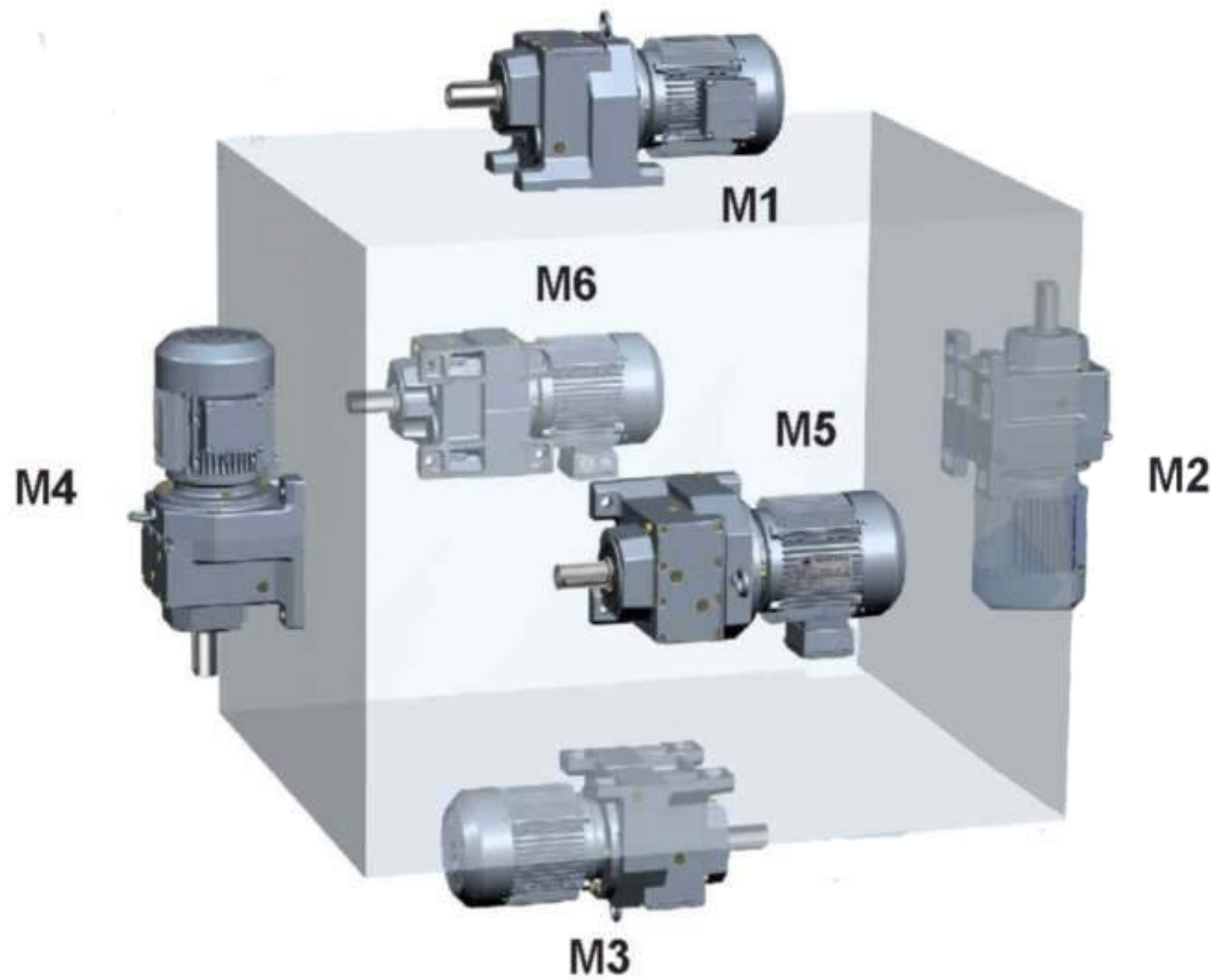
2) not with AM112.



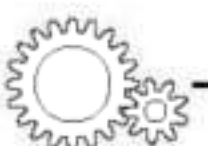
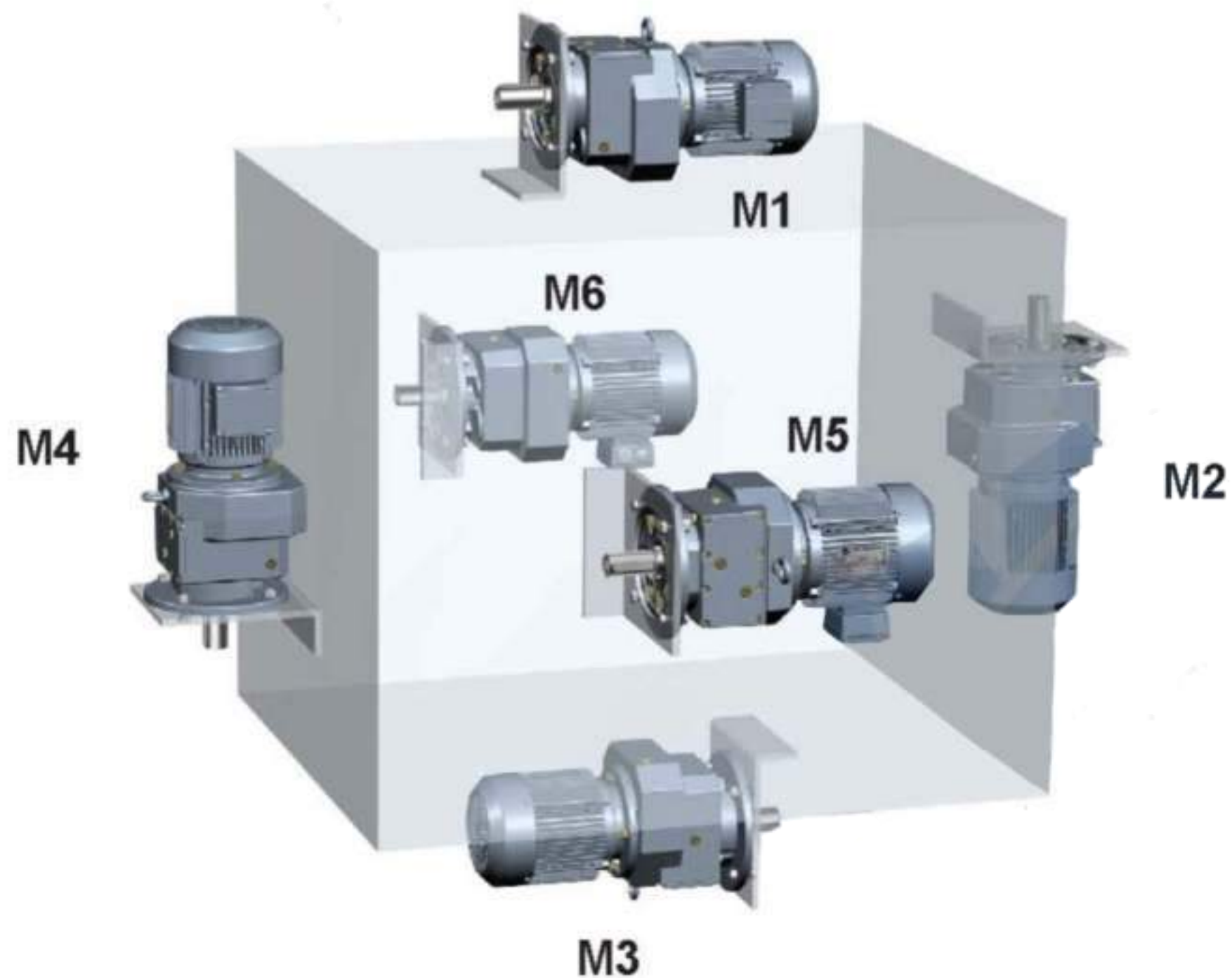
8. MOUNTING POSITIONS

8.1 Mounting position designation

Differentiates between six mounting positions M1 ... M6 for gear units. The following figure shows the spatial orientation of the gearmotor in mounting positions M1 ... M6.



TR..



TR../TR..F:

Gear units	Fill quantity in liters					
	M1**	M2**	M3	M4	M5	M6
TR78	1.20/3.00	3.80/4.10	3.60	4.10	2.50	3.40
TR88	2.30/6.0	6.7/8.2	7.20	7.70	6.30	6.50
TR98	4.60/9.8	11.7/14.0	11.70	13.40	11.30	11.70
TRF78	1.20/2.60	3.80/4.10	3.30	4.10	2.40	3.00
TRF88	2.40/6.0	6.8/7.9	7.10	7.70	6.30	6.40
TRF98	5.1/10.2	11.9/14.0	11.20	14.00	11.20	11.80

** The large gear unit of multi-stage gear units must be filled with the larger oil volume.





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