

FENNER FEN SERIES

Worm Gearbox &
Motor Range



WHO WE ARE.

Motion delivers a world-class customer-first approach to everything we do. This has firmly established our business as the leader in the market, providing excellence and expertise in industrial products, solutions and services.

For more than 100 years we have been a feature in the Australian industrial landscape giving customers unmatched products and service through an integrated network of branches, workshops and service centres.

We have an ongoing commitment to invest in our people, facilities, IT and systems to ensure we can continue to offer a broad ranging and premium level of engineering design, servicing and turnkey projects to our customers across Australia.

We are committed and proud to keep our customers in motion, every day of the year.

“**WE KEEP THE WORLD MOVING**”



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INTRODUCING THE FENNER WORM GEARBOX & ELECTRIC MOTOR

COMPLETE DRIVE SOLUTIONS

Fenner's cutting-edge solutions with Motion's strong distribution capabilities and technical support, means customers benefit from a comprehensive package that goes beyond mere product supply. This collaboration ensures that customers receive tailored solutions that address their unique challenges, ultimately boosting their productivity and success.

Fenner has been a leading name in power transmission for over 150 years and generations of professional engineers have placed their trust in Fenner products.

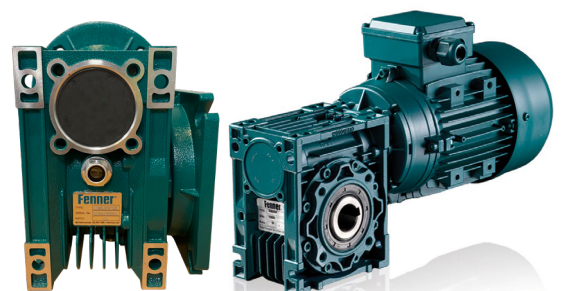
- Pulleys
- Taper Locks
- Jaw Shaft Couplings
- Fenaflex™ Tyre Coupling
- HRC Couplings
- Worm Reducers
- Sprockets
- Chain

The Fenner "FEN Series" Worm Gearbox & Fenner Electric Motor stand as a testament to Fenner and Motion's commitment to delivering top-quality power transmission solutions.

The Fenner Worm Gearbox are a modular designed aluminium Worm Gearbox, available in a vast range of sizes and ratios for both rugged, reliable as well as cost effective solutions. Dimensionally interchangeable with many others in the market and versatile mounting options, the Fenner Worm Gearbox exhibits excellent mechanical strength whilst being especially light weight.

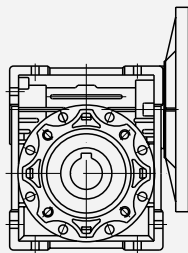
The 3 Phase AC Induction Motor is a totally Enclosed Fan Forced Cooled (TEFC-IC411) alloy frame with a protection rating of IP55. Complete with class F insulation and class B temperature rise, it is well renowned for its reliability. Greased for life quality bearings, shaft oil seals and fully gasketed alloy terminal box ensure that the motor's mechanical strength is second to none, whilst being especially light weight.

Fenner "FEN Series" Worm Gearbox & Electric Motor make an ideal choice for OEM applications and carry a two year Warranty.

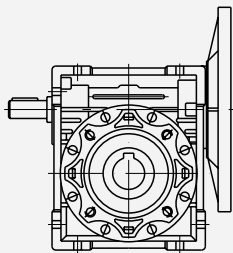


CONFIGURATIONS

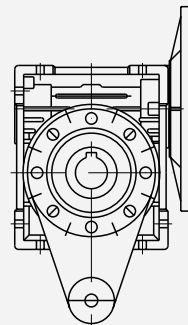
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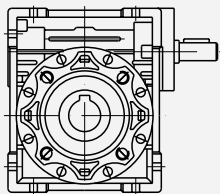
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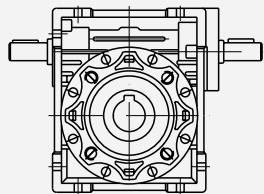
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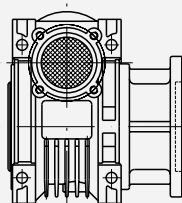
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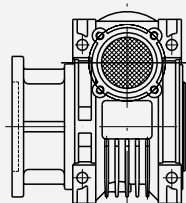
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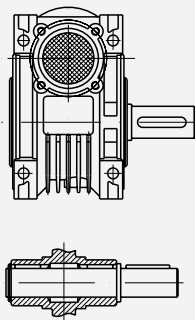
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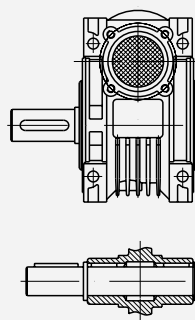
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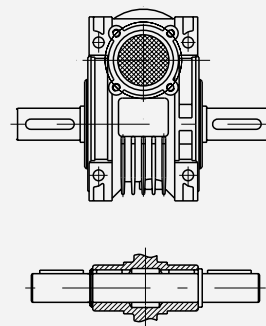
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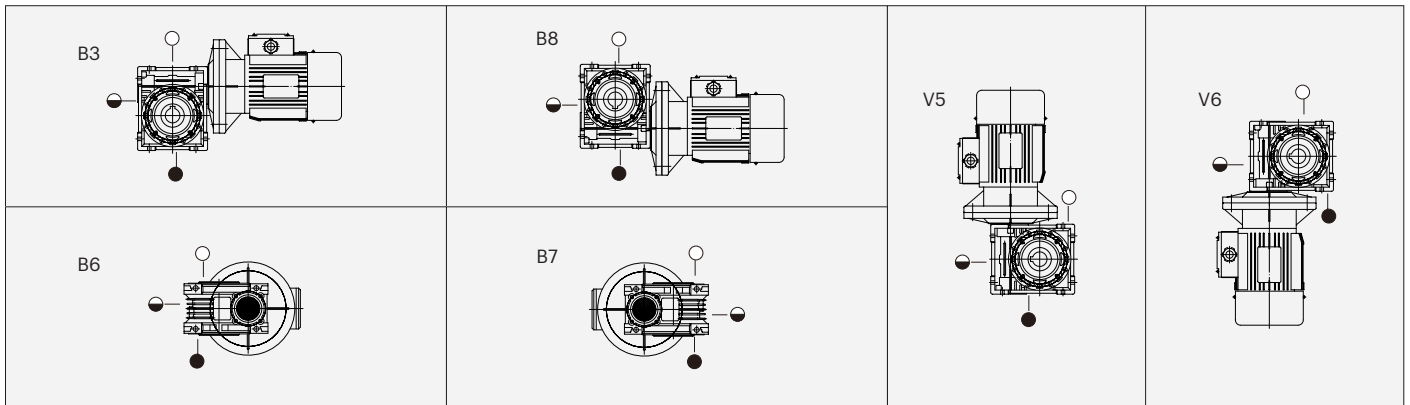


MOUNTING, OIL AMOUNT & TYPE

Installation type of reducer and the corresponding oil feeding amount and lubrication varieties.

1. Mounting size

○ Oil filling hole and air hole ● Oil level view mirror ● Oil drain plug



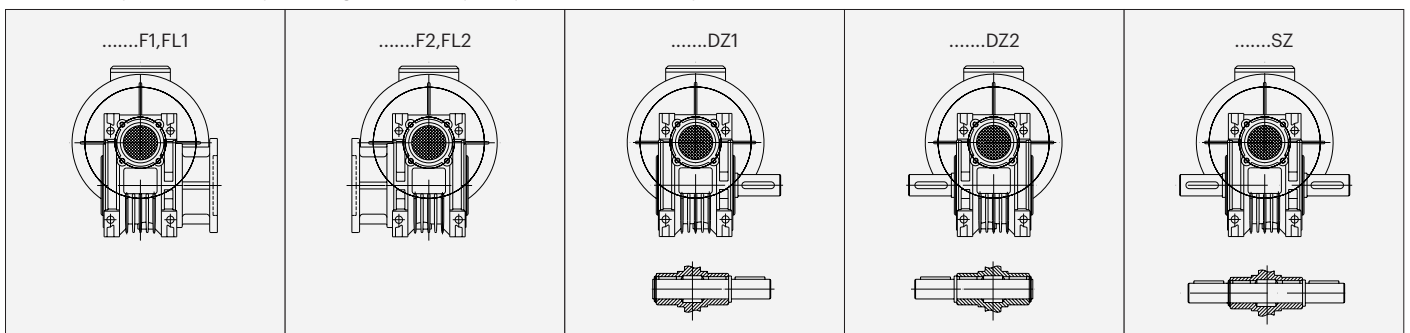
2. Oil amount to various installation patterns

Types of worm speed reducers		FEN25	FEN30	FEN40	FEN50	FEN63	FEN75	FEN90	FEN110	FEN130	FEN150	FEN185
Lubricating oil	B3	0.02	0.04	0.08	0.15	0.3	0.55	1.0	3.0	4.5	7.0	10
	B6.B7								2.5	3.5	5.4	8.0
	B8								2.2	3.3	5.1	7.5
	V5								3.0	4.5	7.0	10
	V6								2.2	3.3	5.1	8.0

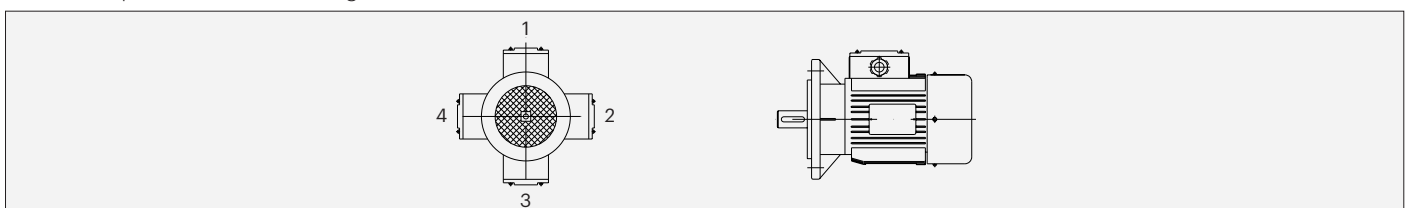
3. Lubricating oil

Types of worm speed reducers		FEN25, FEN40, FEN50, FEN63, FEN75, FEN90	RV110, RV130, RV150, RV185		
Lubricant		Oil sintetice synthetic oil	Oil sintetice synthetic oil	Oil minerale mineral oil	
Ambient Temperature		-25°C ~ +50°C	-25°C ~ +50°C	-5°C ~ +40°C	-15°C ~ +40°C
ISO		VG320	VG320	VG460	VG320
Used in interior		WA460	WA460		
Used in foreign countries	AGIP	TELIUM VSF320	TELIUM VSF320	BLASIA 460	BLASIA 220
	SHELL	TIVELA S320	TIVELA S320	OMALA OIL 460	OMALA OIL 220
	ESSO	S220	S220	SPARTAN EP 460	SPARTAN EP 220
	MOBIL	GLYGOYLE 30	GLYGOYLE 30	MOBIL GEAR 634	MOBIL GEAR 630
	CASTROL	ALPHASYN PG 320	ALPHASYN PG 320	ALPHA MAX 460	ALPHA MAX 220
	BP	ENERGOL SG-XP 320	ENERGOL SG-XP 320	ENETGOL SG-XP 460	ENETGOL SG-XP 220

Installation pattern of output flange F, FL, output spindle DZ, SZ of speed reducers.



Installation pattern of motor wiring box.



SERVICE FACTORS

(Attached table)

Reference circle of worm slide(m/s)	Lubrication type
≤2.2	G-N680W(G-N460W)
>2.5-5	G-N320W
>5-12	G-N220W

By table 2 and 3, can find out the service factor(sf) about worm reducer.

(Table 2)

NO of starts per hour <10			
Nature of load generated by driven machine	Hours running per day		
	<2	2-8	8-16
Uniform	sf=0.8	sf=1	sf=1.25
Moderate shock	sf=1	sf=1.25	sf=1.5
Heavy shock	sf=1.25	sf=1.5	sf=1.75

(Table 3)

NO of starts per hour >10			
Nature of load generated by driven machine	Hours running per day		
	<2	2-8	8-24
Uniform	sf=1	sf=1.25	sf=1.75
Moderate shock	sf=1.5	sf=1.75	sf=2
Heavy shock	sf=1.75	sf=2	sf=2.25

SELECTION CHARTS

Input Power (kW)	Worm Gear Box					Accessories			
	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.06kW	186.7	2.6	4.2	7.5	FEN02500756 (B5 or B14)	FEN025TORQARM	FEN025SGLSHAFT or FEN025DBLSHAFT	FEN025FLANGEFA or FEN025FLANGEFB	0.06DD4MA or 0.06DD4S or 0.06DD4R
	140	3.4	3.5	10	FEN02501056 (B5 or B14)				
	93.3	4.9	2.5	15	FEN02501556 (B5 or B14)				
	70	6.1	2	20	FEN02502056 (B5 or B14)				
	46.7	8.2	1.6	30	FEN02503056 (B5 or B14)				
	35	10	1.3	40	FEN02504056 (B5 or B14)				
	28	12	0.9	50	FEN02505056 (B5 or B14)				
	23.3	14	0.7	60	FEN02506056 (B5 or B14)				
	186.7	2.6	6.9	7.5	FEN03000756 (B5 or B14)	FEN030TORQARM	FEN030SGLSHAFT or FEN030DBLSHAFT	FEN030FLANGEFA or FEN030FLANGEFB	
	140	3.4	5.4	10	FEN03001056 (B5 or B14)				
	93.3	4.7	3.8	15	FEN03001556 (B5 or B14)				
	70	6	3	20	FEN03002056 (B5 or B14)				
	56	7	3	25	FEN03002556 (B5 or B14)				
	46.7	8	2.5	30	FEN03003056 (B5 or B14)				
	35	9.7	1.9	40	FEN03004056 (B5 or B14)				
	28	11	1.5	50	FEN03005056 (B5 or B14)				
	23.3	13	1.3	60	FEN03006056 (B5 or B14)				
	17.5	14	0.9	80	FEN03008056 (B5 or B14)				

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.09kW	186.7	3.9	2.8	7.5	FEN02500756 (B5 or B14)	FEN025TORQARM	FEN025SGLSHAFT or FEN025DBLSHAFT	FEN025FLANGEFA or FEN025FLANGEFB	0.09DD4MA or 0.09DD4S or 0.09DD4R
	140	5.1	2.4	10	FEN02501056 (B5 or B14)				
	93.3	7.3	1.6	15	FEN02501556 (B5 or B14)				
	70	9.2	1.3	20	FEN02502056 (B5 or B14)				
	46.7	12	1.1	30	FEN02503056 (B5 or B14)				
	35	15	0.9	40	FEN02504056 (B5 or B14)				
	28	12	0.9	50	FEN02505056 (B5 or B14)				
	23.3	14	0.7	60	FEN02506056 (B5 or B14)				
	186.7	3.9	4.6	7.5	FEN03000756 (B5 or B14)	FEN030TORQARM	FEN030SGLSHAFT or FEN030DBLSHAFT	FEN030FLANGEFA or FEN030FLANGEFB	
	140	5	3.6	10	FEN03001056 (B5 or B14)				
	93.3	7.1	2.5	15	FEN03001556 (B5 or B14)				
	70	9	2	20	FEN03002056 (B5 or B14)				
	56	10	2	25	FEN03002556 (B5 or B14)				
	46.7	12	1.7	30	FEN03003056 (B5 or B14)				
	35	14	1.2	40	FEN03004056 (B5 or B14)				
	28	17	1	50	FEN03005056 (B5 or B14)				
	23.3	19	0.9	60	FEN03006056 (B5 or B14)	FEN040TORQARM	FEN040SGLSHAFT or FEN040DBLSHAFT	FEN040FLANGEFA or FEN040FLANGEFB	
	28	19	2	50	FEN04005056 (B5 or B14)				
	23.3	21	1.7	60	FEN04006056 (B5 or B14)				
	17.5	26	1.3	80	FEN04008056 (B5 or B14)				
	14	29	1.7	100	FEN04010056 (B5 or B14)				

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.12kW	186.7	5.2	3.4	7.5	FEN03000763 (B5 or B14)	FEN030TORQARM	FEN030SGLSHAFT or FEN030DBLSHAFT	FEN030FLANGEFA or FEN030FLANGEFB	0.12DD4MA or 0.12DD4S or 0.12DD4R
	140	6.7	2.7	10	FEN03001063 (B5 or B14)				
	93.3	9.5	1.9	15	FEN03001563 (B5 or B14)				
	70	12	1.5	20	FEN03002063 (B5 or B14)				
	56	14	1.5	25	FEN03002563 (B5 or B14)				
	46.7	16	1.3	30	FEN03003063 (B5 or B14)				
	35	19	0.9	40	FEN03004063 (B5 or B14)				
	28	23	0.8	50	FEN03005063 (B5 or B14)				
	46.7	17.2	2.6	30	FEN04003063 (B5 or B14)	FEN040TORQARM	FEN040SGLSHAFT or FEN040DBLSHAFT	FEN040FLANGEFA or FEN040FLANGEFB	
	35	21	1.9	40	FEN04004063 (B5 or B14)				
	28	25	1.5	50	FEN04005063 (B5 or B14)				
	23.3	28	1.3	60	FEN04006063 (B5 or B14)				
	17.5	34	1	80	FEN04008063 (B5 or B14)				
	14	38	0.8	100	FEN04010063 (B5 or B14)				
	23.3	29	2.3	60	FEN05006063 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	
	17.5	35	1.9	80	FEN05008063 (B5 or B14)				
	14	40	1.4	100	FEN05010063 (B5 or B14)				

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.18kW	186.7	5.2	3.4	7.5	FEN03000763 (B5 or B14)	FEN030TORQARM	FEN030SGLSHAFT or FEN030DBLSHAFT	FEN030FLANGEFA or FEN030FLANGEFB	0.18DD4MA or 0.18DD4S or 0.18DD4R
	140	6.7	2.7	10	FEN03001063 (B5 or B14)				
	93.3	9.5	1.9	15	FEN03001563 (B5 or B14)				
	70	12	1.5	20	FEN03002063 (B5 or B14)				
	56	14	1.5	25	FEN03002563 (B5 or B14)				
	46.7	16	1.3	30	FEN03003063 (B5 or B14)				
	70	19	2	20	FEN04002063 (B5 or B14)	FEN040TORQARM	FEN040SGLSHAFT or FEN040DBLSHAFT	FEN040FLANGEFA or FEN040FLANGEFB	
	56	23	1.7	25	FEN04002563 (B5 or B14)				
	46.7	26	1.7	30	FEN04003063 (B5 or B14)				
	35	32	1.3	40	FEN04004063 (B5 or B14)				
	28	38	1	50	FEN04005063 (B5 or B14)				
	23.3	43	0.8	60	FEN04006063 (B5 or B14)				
	35	32	2.3	40	FEN05004063 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	
	28	39	1.9	50	FEN05005063 (B5 or B14)				
	23.3	43	1.6	60	FEN05006063 (B5 or B14)				
17.5	52	1.2	80	FEN05008063 (B5 or B14)					
14	60	0.9	100	FEN05010063 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.25kW	186.7	5.2	3.4	7.5	FEN03000763 (B5 or B14)	FEN040TORQARM	FEN040SGLSHAFT or FEN040DBLSHAFT	FEN040FLANGEFA or FEN040FLANGEFB	0.25DD4MA or 0.25DD4S or 0.25DD4R
	140	6.7	2.7	10	FEN03001063 (B5 or B14)				
	93.3	9.5	1.9	15	FEN03001563 (B5 or B14)				
	70	12	1.5	20	FEN03002063 (B5 or B14)				
	56	14	1.5	25	FEN03002563 (B5 or B14)				
	46.7	16	1.3	30	FEN03003063 (B5 or B14)				
	35	19	0.9	40	FEN03004063 (B5 or B14)				
	28	23	0.8	50	FEN03005063 (B5 or B14)				
	70	26	2.7	20	FEN05002071 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	
	56	32	2.2	25	FEN05002571 (B5 or B14)				
	46.7	37	2.3	30	FEN05003071 (B5 or B14)				
	35	46	1.7	40	FEN05004071 (B5 or B14)				
	28	54	1.4	50	FEN05005071 (B5 or B14)				
	23.3	60	1.1	60	FEN05006071 (B5 or B14)				
	17.5	72	0.9	80	FEN05008071 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	
	28	56	2.4	50	FEN06305071 (B5 or B14)				
23.3	63	2	60	FEN06306071 (B5 or B14)					
17.5	78	1.6	80	FEN06308071 (B5 or B14)					
14	87	1.4	100	FEN06310071 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.37kW	186.7	16	2.4	7.5	FEN04000771 (B5 or B14)	FEN040TORQARM	FEN040SGLSHAFT or FEN040DBLSHAFT	FEN040FLANGEFA or FEN040FLANGEFB	0.37DD4MA or 0.37DD4S or 0.37DD4R
	140	21	1.9	10	FEN04001071 (B5 or B14)				
	93.3	31	1.3	15	FEN04001571 (B5 or B14)				
	70	39	1	20	FEN04002071 (B5 or B14)				
	56	47	0.8	25	FEN04002571 (B5 or B14)				
	46.7	53	0.8	30	FEN04003071 (B5 or B14)				
	140	21	3.3	10	FEN05001071 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	
	93.3	31	2.4	15	FEN05001571 (B5 or B14)				
	70	10	1.8	20	FEN05002071 (B5 or B14)				
	56	48	1.5	25	FEN05002571 (B5 or B14)				
	46.7	55	1.5	30	FEN05003071 (B5 or B14)				
	35	68	1.1	40	FEN05004071 (B5 or B14)				
	28	80	0.9	50	FEN05005071 (B5 or B14)				
	23.3	89	0.8	60	FEN05006071 (B5 or B14)				
	35	70	2.1	40	FEN06304071 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	
28	83	1.6	50	FEN06305071 (B5 or B14)					
23.3	94	1.4	60	FEN06306071 (B5 or B14)					
17.5	115	1.1	80	FEN06308071 (B5 or B14)					
14	129	0.9	100	FEN06310071 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.55kW	186.7	25	2.9	7.5	FEN05000780 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	0.55DD4MA or 0.55DD4S or 0.55DD4R
	140	32	2.2	10	FEN05001080 (B5 or B14)				
	93.3	46	1.6	15	FEN05001580 (B5 or B14)				
	70	59	1.2	20	FEN05002080 (B5 or B14)				
	56	71	1	25	FEN05002580 (B5 or B14)				
	46.7	81	1	30	FEN05003080 (B5 or B14)				
	35	80	0.9	40	FEN05004080 (B5 or B14)				
	70	60	2.2	20	FEN06302080 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	
	56	73	1.8	25	FEN06302580 (B5 or B14)				
	46.7	83	1.9	30	FEN06303080 (B5 or B14)				
	35	105	1.4	40	FEN06304080 (B5 or B14)				
	28	124	1.1	50	FEN06305080 (B5 or B14)				
	23.3	140	0.9	60	FEN06306080 (B5 or B14)				
	35	108	2	40	FEN07504080 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	
	28	129	1.6	50	FEN07505080 (B5 or B14)				
	23.3	146	1.4	60	FEN07506080 (B5 or B14)				
	17.5	180	1.1	80	FEN07508080 (B5 or B14)				
	14	206	0.9	100	FEN07510080 (B5 or B14)				
	17.5	189	1.5	80	FEN09008080 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	14	221	1.2	100	FEN09010080 (B5 or B14)				

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
0.75kW	186.7	34	2.1	7.5	FEN05000780 (B5 or B14)	FEN050TORQARM	FEN050SGLSHAFT or FEN050DBLSHAFT	FEN050FLANGEFA or FEN050FLANGEFB	0.75DD4MA or 0.75DD4S or 0.75DD4R
	140	44	1.6	10	FEN05001080 (B5 or B14)				
	93.3	63	1.2	15	FEN05001580 (B5 or B14)				
	70	81	0.9	20	FEN05002080 (B5 or B14)				
	93	63	2.2	15	FEN06301580 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	
	70	83	1.6	20	FEN06302080 (B5 or B14)				
	56	100	1.3	25	FEN06302580 (B5 or B14)				
	46.7	114	1.4	30	FEN06303080 (B5 or B14)				
	35	143	1	40	FEN06304080 (B5 or B14)				
	56	102	2	25	FEN07502580 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	
	46.7	117	2	30	FEN07503080 (B5 or B14)				
	35	147	1.5	40	FEN07504080 (B5 or B14)				
	28	177	1.2	50	FEN07505080 (B5 or B14)				
	23.3	200	1	60	FEN07506080 (B5 or B14)				
	28	184	1.8	50	FEN09005080 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	23.3	212	1.5	60	FEN09006080 (B5 or B14)				
17.5	258	1.1	80	FEN09008080 (B5 or B14)					
14	302	0.9	100	FEN09010080 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
1.1kW	186.7	49	2.6	7.5	FEN06300790 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	1.1DD4MA or 1.1DD4S or 1.1DD4R
	140	65	2	10	FEN06301090 (B5 or B14)				
	93	93	1.5	15	FEN06301590 (B5 or B14)				
	70	122	1.1	20	FEN06302090 (B5 or B14)				
	56	146	0.9	25	FEN06302590 (B5 or B14)				
	46.7	167	1	30	FEN06303090 (B5 or B14)				
	35	165	0.9	40	FEN06304090 (B5 or B14)				
	93.3	95	2.1	15	FEN07501590 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	
	70	123	1.7	20	FEN07502090 (B5 or B14)				
	56	150	1.3	25	FEN07502590 (B5 or B14)				
	46.7	171	1.3	30	FEN07503090 (B5 or B14)				
	35	216	1	40	FEN07504090 (B5 or B14)				
	28	264	0.9	50	FEN07505090 (B5 or B14)				
	23.3	223	0.8	60	FEN07506090 (B5 or B14)				
	35	225	1.6	40	FEN09004090 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	28	270	1.3	50	FEN09005090 (B5 or B14)				
	23.3	311	1	60	FEN09006090 (B5 or B14)				
	17.5	328	0.9	80	FEN09008090 (B5 or B14)				
	28	281	2.3	50	FEN11005090 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	
	23.3	324	1.9	60	FEN11006090 (B5 or B14)				
17.5	402	1.3	80	FEN11008090 (B5 or B14)					
14	473	1	100	FEN11010090 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
1.5kW	186.7	67	1.9	7.5	FEN06300790 (B5 or B14)	FEN063TORQARM	FEN063SGLSHAFT or FEN063DBLSHAFT	FEN063FLANGEFA or FEN063FLANGEFB	1.5DD4MA or 1.5DD4S or 1.5DD4R
	140	89	1.5	10	FEN06301090 (B5 or B14)				
	93	127	1.1	15	FEN06301590 (B5 or B14)				
	70	166	0.8	20	FEN06302090 (B5 or B14)				
	140	90	2.2	10	FEN07501090 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	
	93.3	130	1.5	15	FEN07501590 (B5 or B14)				
	70	168	1.3	20	FEN07502090 (B5 or B14)				
	56	205	1	25	FEN07502590 (B5 or B14)				
	46.7	233	1	30	FEN07503090 (B5 or B14)				
	70	171	2.1	20	FEN09002090 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	56	210	1.6	25	FEN09002590 (B5 or B14)				
	46.7	239	1.7	30	FEN09003090 (B5 or B14)				
	35	307	1.2	40	FEN09004090 (B5 or B14)				
	28	368	0.9	50	FEN09005090 (B5 or B14)				
	23.3	424	0.8	60	FEN09006090 (B5 or B14)				
	35	319	2.2	40	FEN11004090 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	
28	384	1.7	50	FEN11005090 (B5 or B14)					
23.3	442	1.4	60	FEN11006090 (B5 or B14)					
17.5	548	0.9	80	FEN11008090 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
2.2kW	186.7	100	1.8	7.5	FEN075007112 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	2.2DD4MA or 2.2DD4S or 2.2DD4R
	140	132	1.5	10	FEN075010112 (B5 or B14)				
	93.3	191	1	15	FEN075015112 (B5 or B14)				
	70	240	0.9	20	FEN075020112 (B5 or B14)				
	46.7	269	0.8	30	FEN075030112 (B5 or B14)				
	186.7	101	2.9	7.5	FEN090007112 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	140	134	2.3	10	FEN090010112 (B5 or B14)				
	93.3	194	1.9	15	FEN090015112 (B5 or B14)				
	70	252	1.4	20	FEN090020112 (B5 or B14)				
	56	308	1.1	25	FEN090025112 (B5 or B14)				
	46.7	351	1.2	30	FEN090030112 (B5 or B14)				
	35	433	1	40	FEN090040112 (B5 or B14)				
	28	393	0.9	50	FEN090050112 (B5 or B14)				
	70	255	2.5	20	FEN110020112 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	
	56	315	2.2	25	FEN110025112 (B5 or B14)				
	46.7	356	2	30	FEN110030112 (B5 or B14)				
	35	468	1.5	40	FEN110040112 (B5 or B14)				
	28	563	1.2	50	FEN110050112 (B5 or B14)				
	23.3	648	1	60	FEN110060112 (B5 or B14)				
	35	468	2.2	40	FEN130040112 (B5 or B14)	FEN130TORQARM	FEN130SGLSHAFT or FEN130DBLSHAFT	FEN130FLANGEFA or FEN130FLANGEFB	
	28	563	1.7	50	FEN130050112 (B5 or B14)				
	23.3	648	1.4	60	FEN130060112 (B5 or B14)				
	17.5	816	1	80	FEN130080112 (B5 or B14)				
	14	869	0.8	100	FEN130100112 (B5 or B14)				
	28	570	2.5	50	FEN150050112 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	
	23.3	657	1.9	60	FEN150060112 (B5 or B14)				
	17.5	816	1.4	80	FEN150080112 (B5 or B14)				
	14	960	1	100	FEN150100112 (B5 or B14)				

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
3kW	186.7	136	1.4	7.5	FEN075007112 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT or FEN075DBLSHAFT	FEN075FLANGEFA or FEN075FLANGEFB	3DD4MA or 3DD4S or 3DD4R
	140	180	1.1	10	FEN075010112 (B5 or B14)				
	93.3	261	0.8	15	FEN075015112 (B5 or B14)				
	186.7	138	2.1	7.5	FEN090007112 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	140	182	1.7	10	FEN090010112 (B5 or B14)				
	93.3	264	1.4	15	FEN090015112 (B5 or B14)				
	70	344	1	20	FEN090020112 (B5 or B14)				
	56	420	0.8	25	FEN090025112 (B5 or B14)				
	46.7	479	0.9	30	FEN090030112 (B5 or B14)				
	93.3	264	2.5	15	FEN110015112 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	
	70	348	1.9	20	FEN110020112 (B5 or B14)				
	56	430	1.6	25	FEN110025112 (B5 or B14)				
	46.7	485	1.5	30	FEN110030112 (B5 or B14)				
	35	638	1.1	40	FEN110040112 (B5 or B14)				
	28	767	0.9	50	FEN110050112 (B5 or B14)				
	56	429	2.2	25	FEN130025112 (B5 or B14)	FEN130TORQARM	FEN130SGLSHAFT or FEN130DBLSHAFT	FEN130FLANGEFA or FEN130FLANGEFB	
	46.7	491	2.1	30	FEN130030112 (B5 or B14)				
	35	638	1.6	40	FEN130040112 (B5 or B14)				
	28	767	1.3	50	FEN130050112 (B5 or B14)				
	23.3	884	1	60	FEN130060112 (B5 or B14)				
	17.5	1113	0.8	80	FEN130080112 (B5 or B14)				
	28	777	1.8	50	FEN150050112 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	
	23.3	896	1.4	60	FEN150060112 (B5 or B14)				
	17.5	1113	1	80	FEN150080112 (B5 or B14)				
14	1310	0.8	100	FEN150100112 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
4kW	186.7	182	1	7.5	FEN075007112 (B5 or B14)	FEN075TORQARM	FEN075SGLSHAFT FEN075DBLSHAFT	FEN075FLANGEFA FEN075FLANGEFB	4DD4MA or 4DD4S or 4DD4R
	140	240	0.8	10	FEN075010112 (B5 or B14)				
	186.7	184	1.6	7.5	FEN090007112 (B5 or B14)	FEN090TORQARM	FEN090SGLSHAFT or FEN090DBLSHAFT	FEN090FLANGEFA or FEN090FLANGEFB	
	140	243	1.3	10	FEN090010112 (B5 or B14)				
	93.3	352	1	15	FEN090015112 (B5 or B14)				
	70	458	0.8	20	FEN090020112 (B5 or B14)				
	140	242	2.5	10	FEN110010112 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	
	93.3	352	1.9	15	FEN110015112 (B5 or B14)				
	70	464	1.4	20	FEN110020112 (B5 or B14)				
	56	573	1.2	25	FEN110025112 (B5 or B14)				
	46.7	647	1.1	30	FEN110030112 (B5 or B14)				
	56	573	1.6	25	FEN130025112 (B5 or B14)	FEN130TORQARM	FEN130SGLSHAFT or FEN130DBLSHAFT	FEN130FLANGEFA or FEN130FLANGEFB	
	46.7	655	1.6	30	FEN130030112 (B5 or B14)				
	35	851	1.2	40	FEN130040112 (B5 or B14)				
	28	1023	1	50	FEN130050112 (B5 or B14)				
	23.3	1179	0.8	60	FEN130060112 (B5 or B14)				
	28	1036	1.4	50	FEN150050112 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	
	23.3	1195	1.1	60	FEN150060112 (B5 or B14)				
	17.5	1484	0.8	80	FEN150080112 (B5 or B14)				
	28	1019	2.3	50	FEN185050112 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB	
23.3	1195	1.9	60	FEN185060112 (B5 or B14)					
17.5	1500	1.4	80	FEN185080112 (B5 or B14)					
14	1766	1	100	FEN185100112 (B5 or B14)					

Worm Gear Box						Accessories				
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)	
5.5kW	186.7	253	2.2	7.5	FEN110007132 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	5.5DD4MA or 5.5DD4S or 5.5DD4R	
	140	334	1.8	10	FEN110010132 (B5 or B14)					
	93.3	484	1.4	15	FEN110015132 (B5 or B14)					
	70	638	1	20	FEN110020132 (B5 or B14)					
	56	711	0.9	25	FEN110025132 (B5 or B14)					
	140	333	2.5	10	FEN130010132 (B5 or B14)	FEN130TORQARM	FEN130SGLSHAFT or FEN130DBLSHAFT	FEN130FLANGEFA or FEN130FLANGEFB		
	93.3	490	1.9	15	FEN130015132 (B5 or B14)					
	70	645	1.4	20	FEN130020132 (B5 or B14)					
	56	788	1.2	25	FEN130025132 (B5 or B14)					
	46.7	900	1.2	30	FEN130030132 (B5 or B14)					
	35	1171	0.9	40	FEN130040132 (B5 or B14)					
	28	1103	0.8	50	FEN130050132 (B5 or B14)					
	70	645	2	20	FEN150020132 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB		
	56	788	1.5	25	FEN150025132 (B5 or B14)					
	46.7	934	1.3	30	FEN150030132 (B5 or B14)					
	35	1171	1.3	40	FEN150040132 (B5 or B14)					
	28	1426	1	50	FEN150050132 (B5 or B14)					
	23.3	1643	0.8	60	FEN150060132 (B5 or B14)					
56	777	2.5	25	FEN185025132 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB			
46.7	864	2.5	30	FEN185030132 (B5 or B14)						
35	1168	2.2	40	FEN185040132 (B5 or B14)						
28	1402	1.7	50	FEN185050132 (B5 or B14)						
23.3	1643	1.4	60	FEN185060132 (B5 or B14)						
17.5	2063	1	80	FEN185080132 (B5 or B14)						

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
7.5kW	186.7	345	1.6	7.5	FEN110007132 (B5 or B14)	FEN110TORQARM	FEN110SGLSHAFT or FEN110DBLSHAFT	FEN110FLANGEFA or FEN110FLANGEFB	7.5DD4MA or 7.5DD4S or 7.5DD4R
	140	455	1.3	10	FEN110010132 (B5 or B14)				
	93.3	660	1	15	FEN110015132 (B5 or B14)				
	186.7	349	2.1	7.5	FEN130007132 (B5 or B14)	FEN130TORQARM	FEN130SGLSHAFT or FEN130DBLSHAFT	FEN130FLANGEFA or FEN130FLANGEFB	
	140	455	1.8	10	FEN130010132 (B5 or B14)				
	93.3	668	1.4	15	FEN130015132 (B5 or B14)				
	70	880	1	20	FEN130020132 (B5 or B14)				
	56	1074	0.9	25	FEN130025132 (B5 or B14)				
	46.7	1228	0.8	30	FEN130030132 (B5 or B14)				
	35	1596	0.7	40	FEN130040132 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	
	70	880	1.5	20	FEN150020132 (B5 or B14)				
	56	1074	1.1	25	FEN150025132 (B5 or B14)				
	46.7	1274	0.9	30	FEN150030132 (B5 or B14)				
	35	1596	0.8	40	FEN150040132 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB	
	56	1060	1.8	25	FEN185025132 (B5 or B14)				
	46.7	1179	1.9	30	FEN185030132 (B5 or B14)				
	35	1593	1.6	40	FEN185040132 (B5 or B14)				
	28	1911	1.2	50	FEN185050132 (B5 or B14)				
23.3	2240	1	60	FEN185060132 (B5 or B14)					

Worm Gear Box						Accessories			
Input Power (kW)	Output Speed (rpm)	Output Torque (Nm)	Service Factor (fs)	Ratio	Worm Gearbox	Torque Arm	Plug-in Output Shaft	Output Flange	Electric Motor (4 Pole)
11kW	186.7	512	2.3	7.5	FEN150007160 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	11DD4MA or 11DD4S or 11DD4R
	140	675	1.8	10	FEN150010160 (B5 or B14)				
	93.3	990	1.3	15	FEN150015160 (B5 or B14)				
	70	1291	1	20	FEN150020160 (B5 or B14)				
	56	1576	0.8	25	FEN150025160 (B5 or B14)				
	93.3	922	1.9	15	FEN185015160 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB	
	70	1274	1.8	20	FEN185020160 (B5 or B14)				
	56	1554	1.2	25	FEN185025160 (B5 or B14)				
	46.7	1729	1.3	30	FEN185030160 (B5 or B14)				
	35	2336	1.1	40	FEN185040160 (B5 or B14)				
28	2803	0.8	50	FEN185050160 (B5 or B14)					

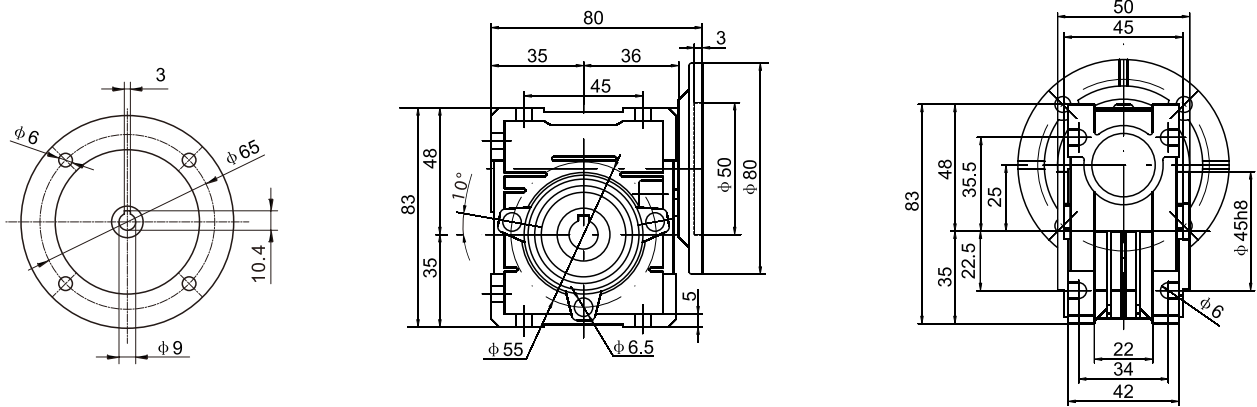
15kW	186.7	698	1.7	7.5	FEN150007160 (B5 or B14)	FEN150TORQARM	FEN150SGLSHAFT or FEN150DBLSHAFT	FEN150FLANGEFA or FEN150FLANGEFB	15DD4MA or 15DD4S or 15DD4R
	140	921	1.3	10	FEN150010160 (B5 or B14)				
	93.3	1351	0.9	15	FEN150015160 (B5 or B14)				
	70	1760	0.7	20	FEN150020160 (B5 or B14)				
	140	900	2	10	FEN185010160 (B5 or B14)				
	93.3	1257	1.4	15	FEN185015160 (B5 or B14)				
	70	1737	1.3	20	FEN185020160 (B5 or B14)				
	56	2120	0.9	25	FEN185025160 (B5 or B14)				
	46.7	2357	0.9	30	FEN185030160 (B5 or B14)				

18.5 kW	186.7	823	2.1	7.5	FEN185007180 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB	18.5DD4S or 18.5DD4R
	140	1110	1.6	10	FEN185010180 (B5 or B14)				
	93.3	1550	1.1	15	FEN185015180 (B5 or B14)				
	70	2143	1	20	FEN185020180 (B5 or B14)				

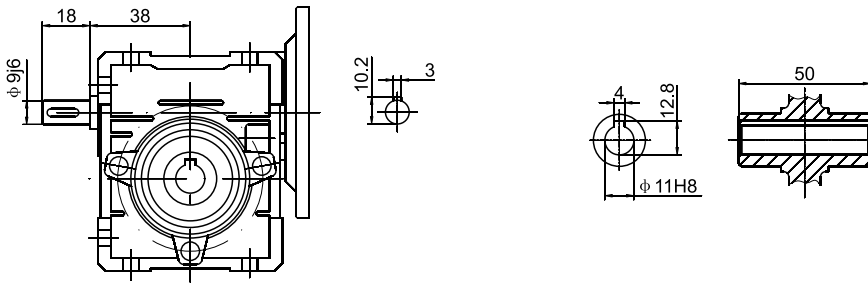
22 kW	186.7	979	1.8	7.5	FEN185007180 (B5 or B14)	FEN185TORQARM	FEN185SGLSHAFT or FEN185DBLSHAFT	FEN185FLANGEFA or FEN185FLANGEFB	22DD4S or 22DD4R
	140	1320	1.3	10	FEN185010180 (B5 or B14)				
	93.3	1844	0.9	15	FEN185015180 (B5 or B14)				
	70	2548	0.9	20	FEN185020180 (B5 or B14)				

DIMENSION CHARTS

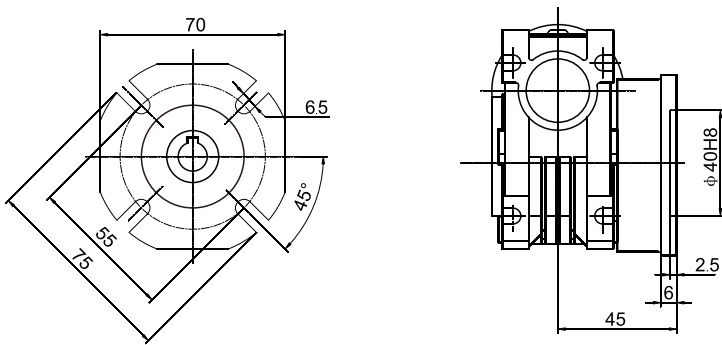
FENO25



YZ

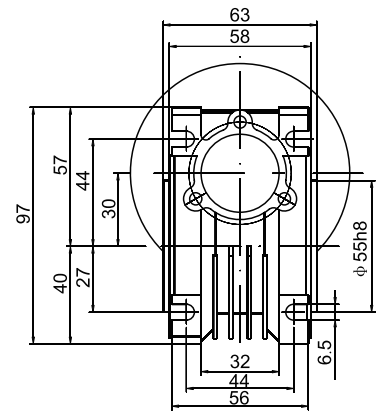
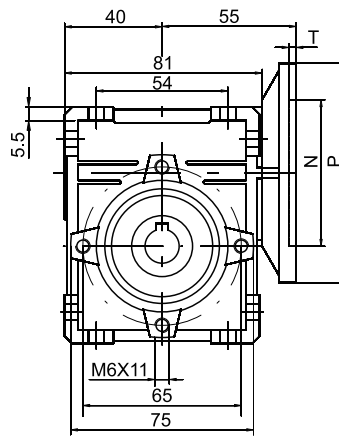
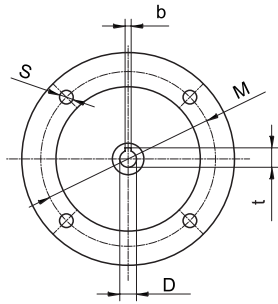


FA

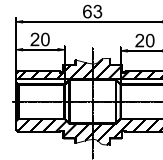
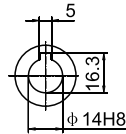
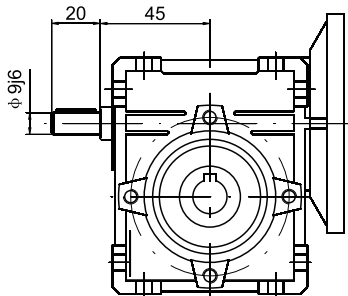


Weight without motor ≈ 0.8 kg

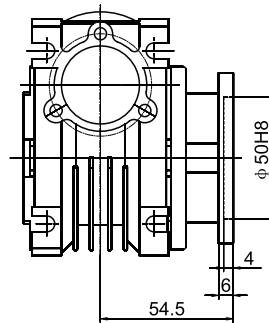
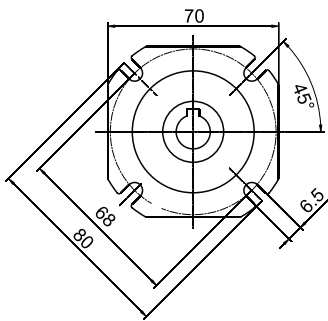
FEN030



YZ



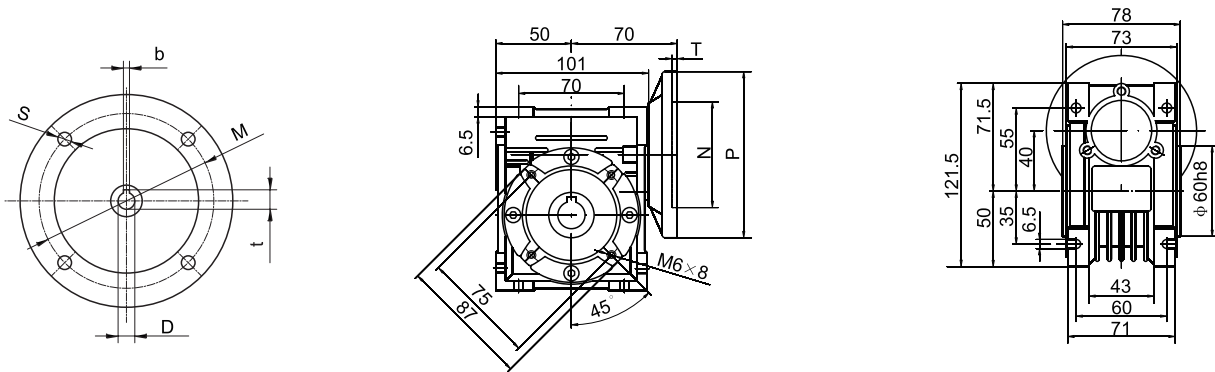
FA



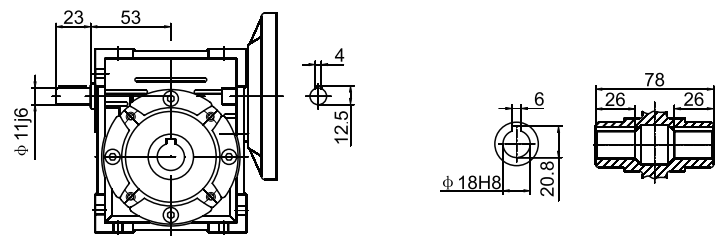
IEC	DE8	b	t	P	M	N	S	T
56B5	9	3	10.4	120	100	80	7	3.5
56B14	9	3	10.4	80	65	50	5.5	3
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5

Weight without motor ≈1.2kg

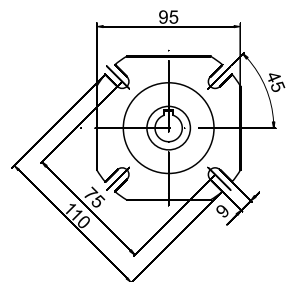
FENO40



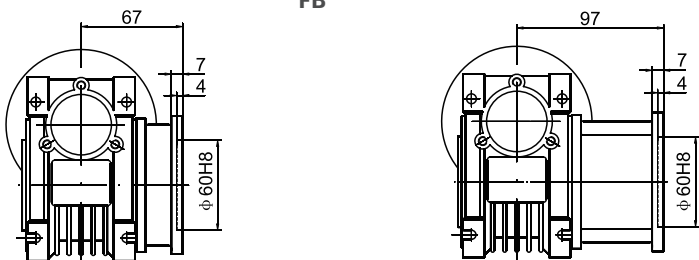
YZ



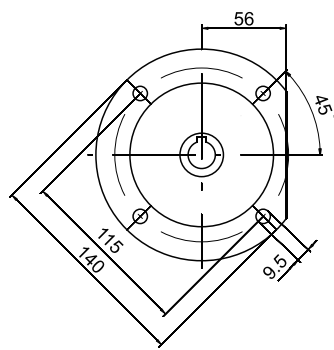
FA



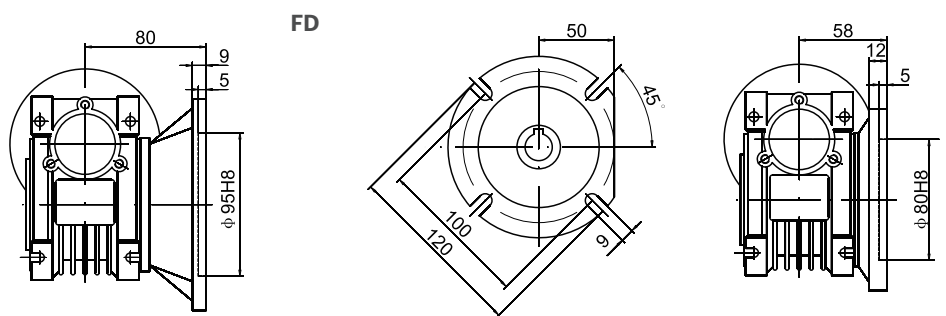
FB



FC



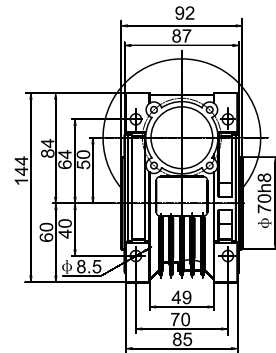
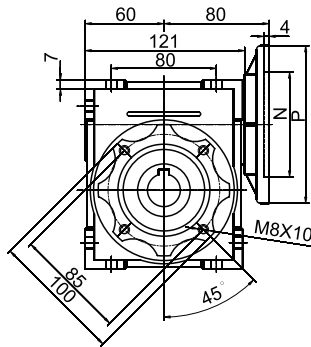
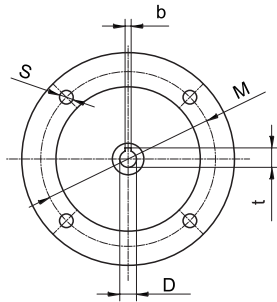
FD



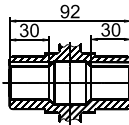
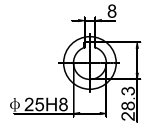
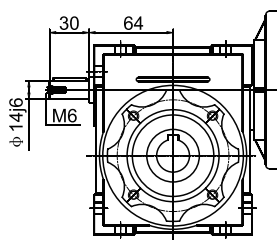
IEC	DE8	b	t	P	M	N	S	T
56B14	9	3	10.4	80	65	50	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5
63B14	11	4	12.8	90	75	60	5.5	3
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3

Weight without motor $\approx 2.2\text{kg}$

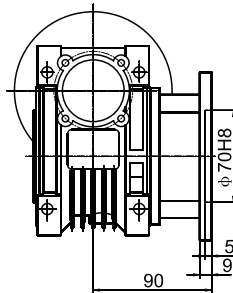
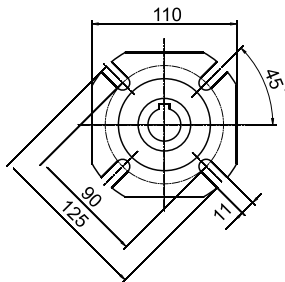
FEN050



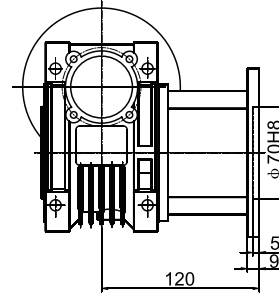
YZ



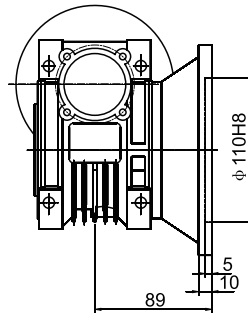
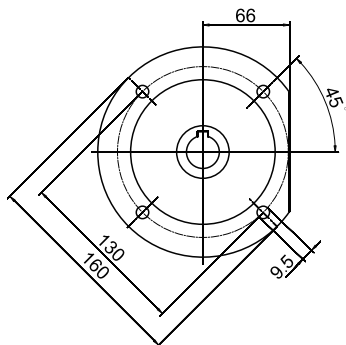
FA



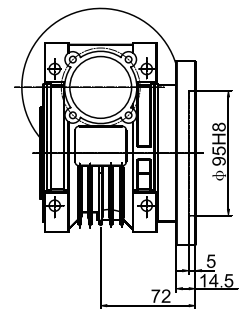
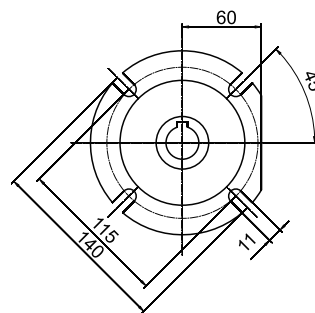
FB



FC



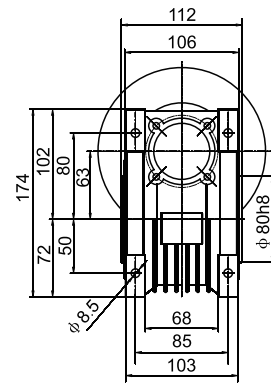
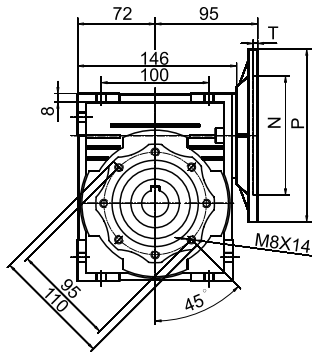
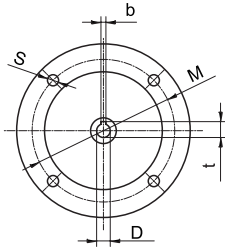
FD



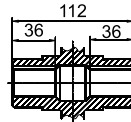
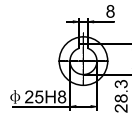
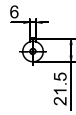
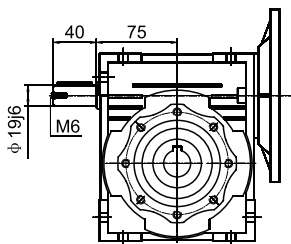
IEC	DE8	b	t	P	M	N	S	T
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3
80B5	19	6	21.8	120	100	80	7	3.5
80B14	19	6	21.8	120	100	80	7	3.5

Weight without motor ≈3.8kg

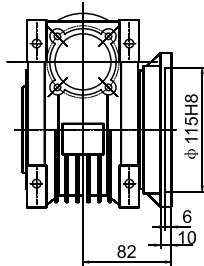
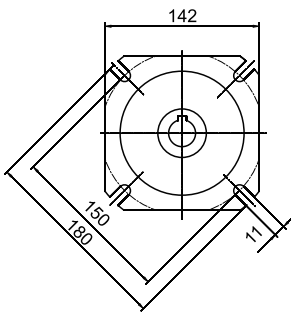
FEN063



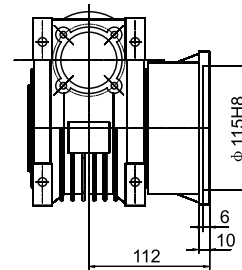
YZ



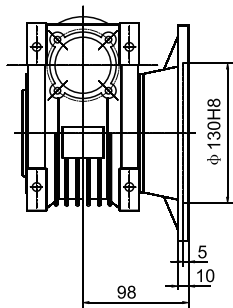
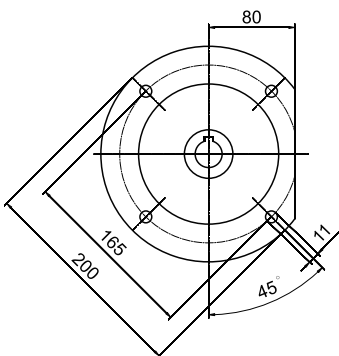
FA



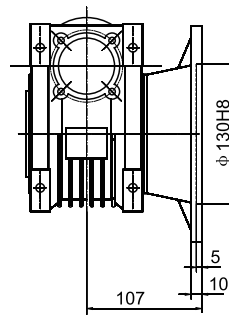
FB



FC

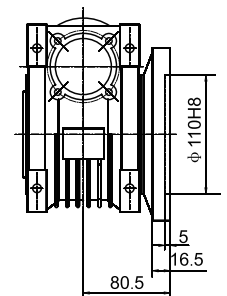
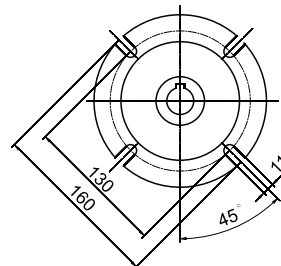


FD



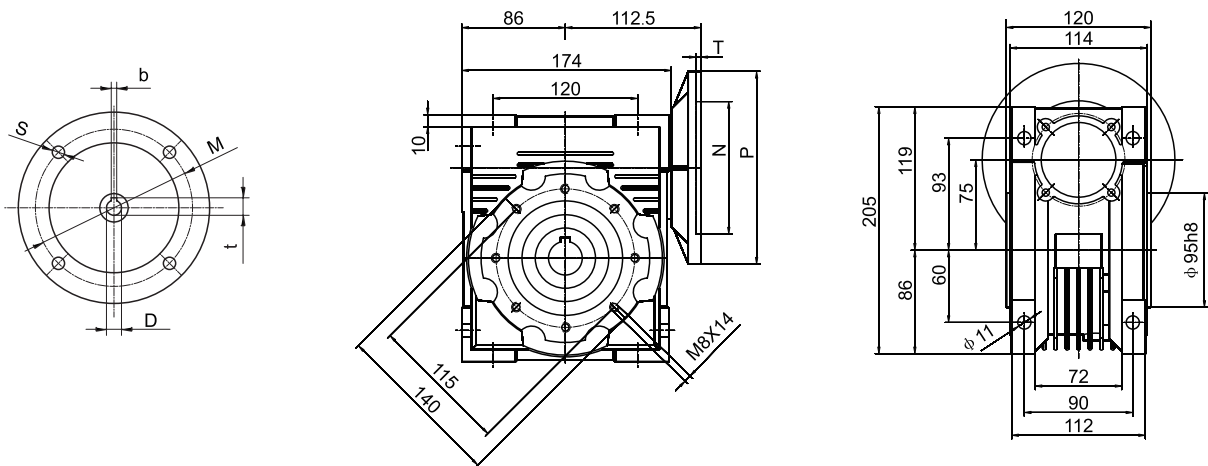
IEC	DE8	b	t	P	M	N	S	T
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3
80B5	19	6	16.3	105	85	70	7	3
80B14	19	6	21.8	120	100	80	7	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5

FE

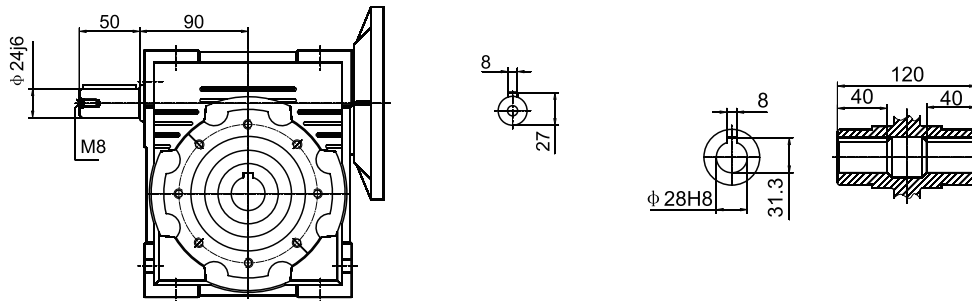


Weight without motor ≈6.2kg

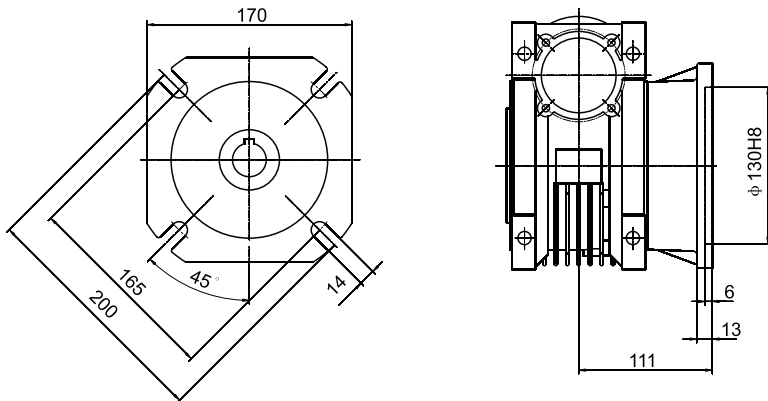
FEN075



YZ



FA



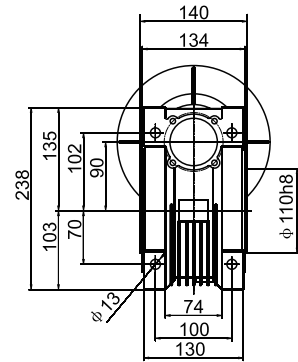
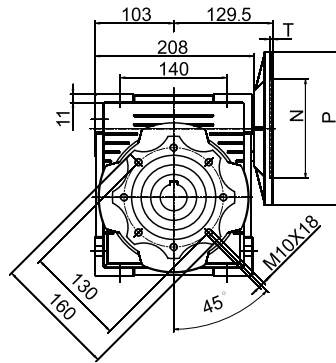
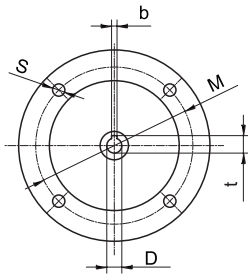
FB



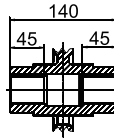
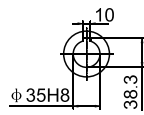
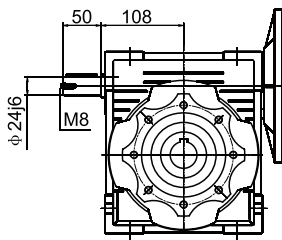
IEC	DE8	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

Weight without motor =9kg

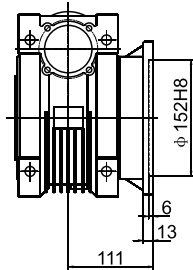
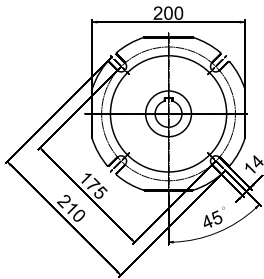
FEN090



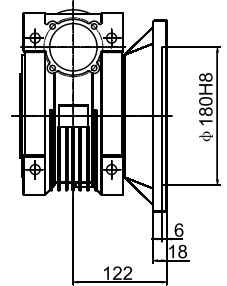
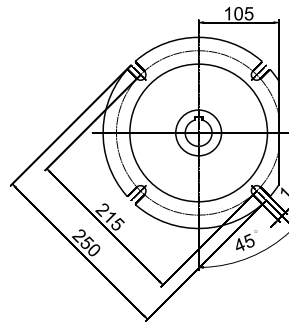
YZ



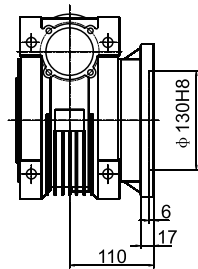
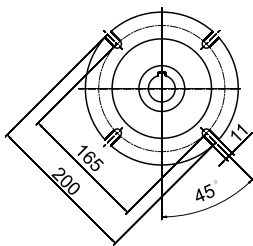
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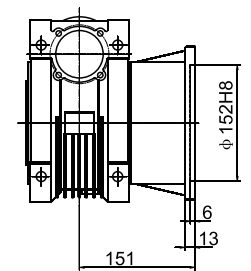
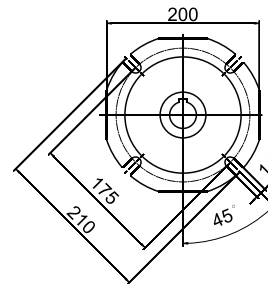
FB



FC



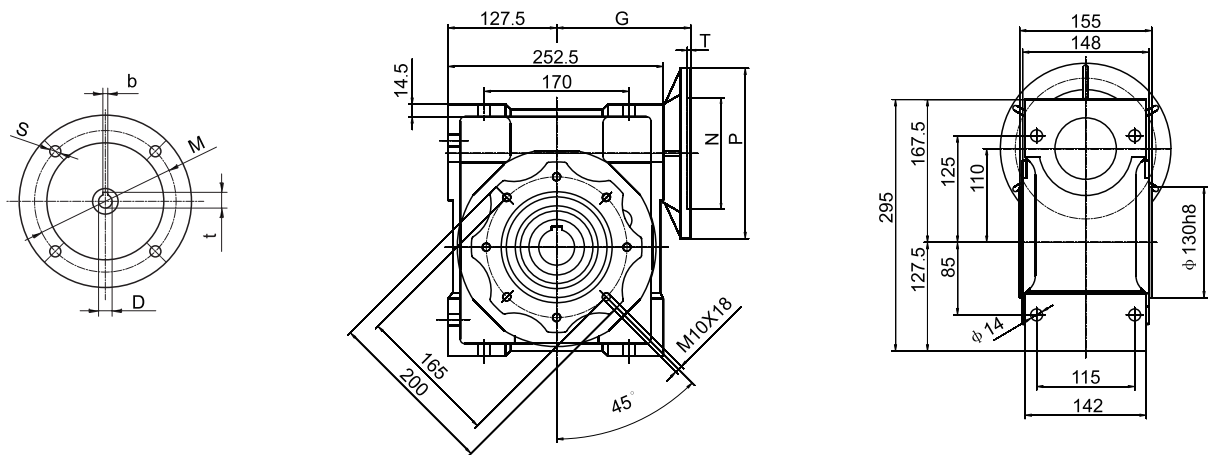
FD



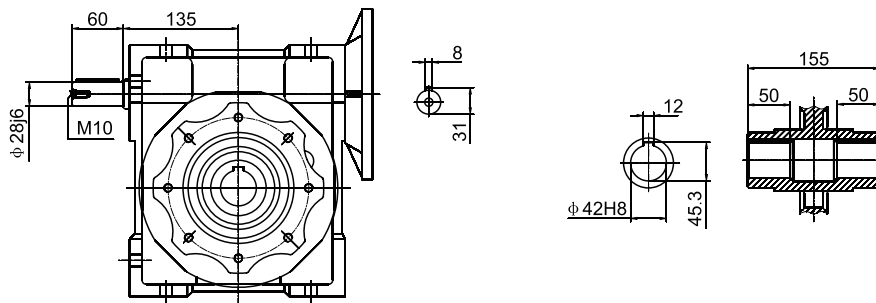
IEC	DE8	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

Weight without motor ≈12kg

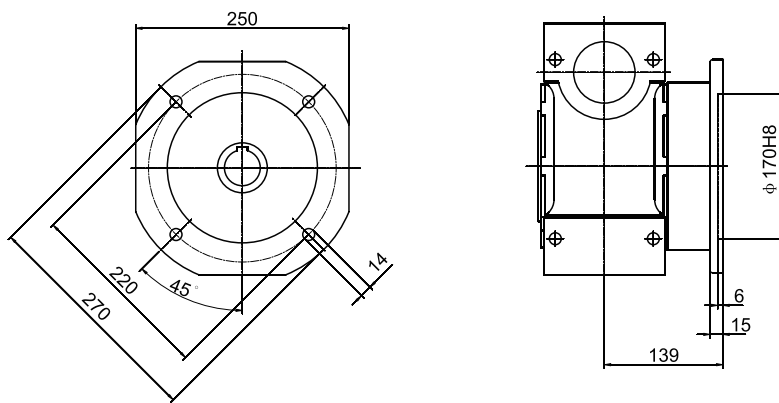
FEN110



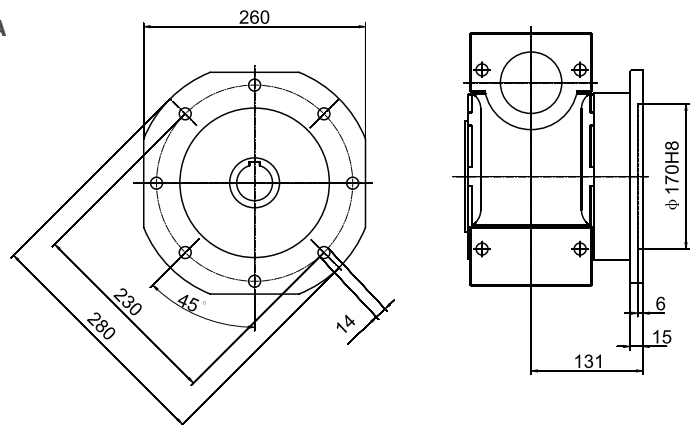
YZ



F



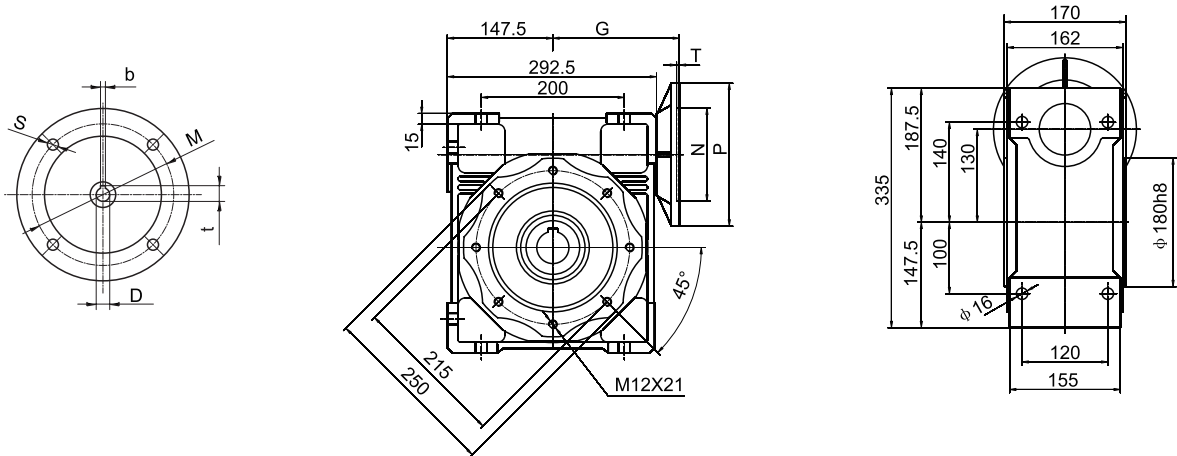
FA



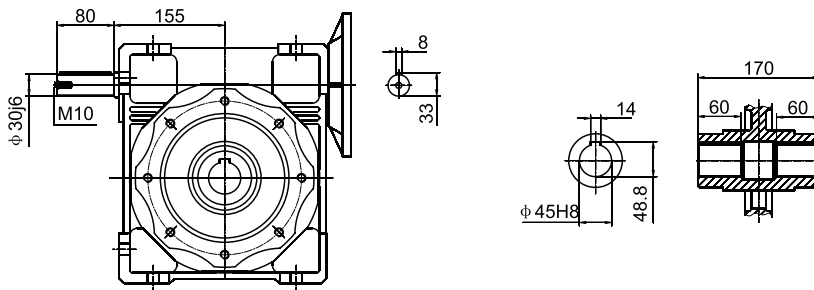
IEC	DE8	b	t	P	M	N	S	T	G
90B5	24	8	27.3	200	165	120	11	4	157
90B14	24	8	27.3	140	115	95	9	3.5	157
100/112B5	28	8	31.3	250	215	180	13.5	4	155
100/112B14	28	8	31.3	160	130	110	9	4.5	155
132B5	38	10	41.3	300	265	230	13.5	4.5	159

Weight without motor ≈38kg

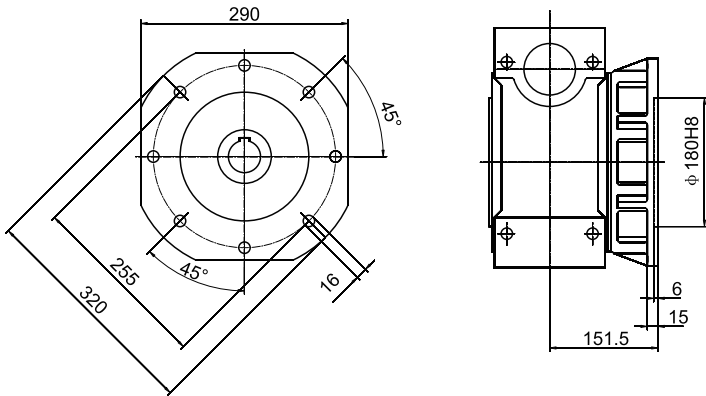
FEN130



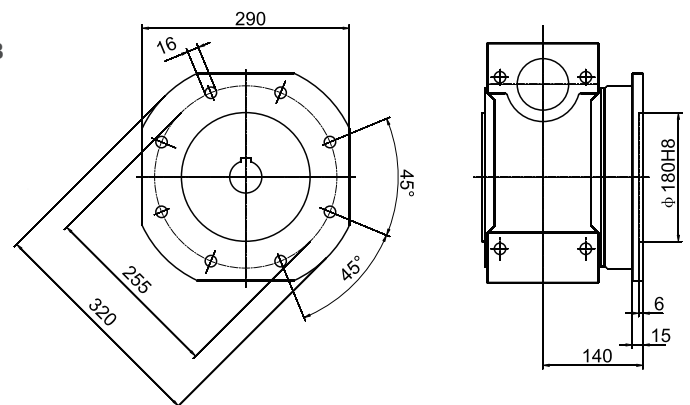
YZ



F



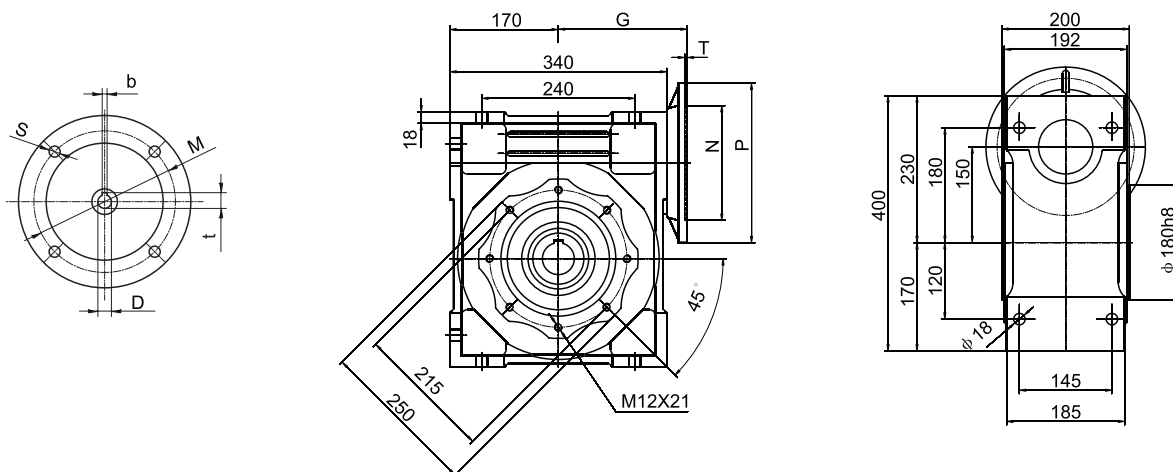
FB



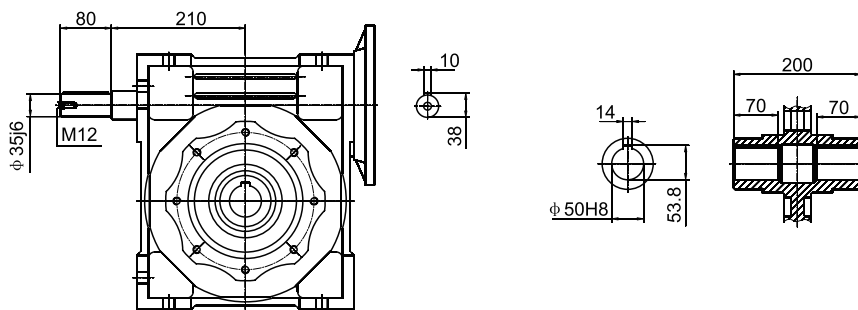
IEC	DE8	b	t	P	M	N	S	T	G
90B5	24	8	27.3	200	165	130	11	4	177
90B14	24	8	27.3	140	115	95	9	3.5	177
100/112B5	28	8	31.3	250	215	180	13.5	4	175
100/112B14	28	8	31.3	160	130	110	9	4.5	175
132B5	38	10	41.3	300	265	230	13.5	4.5	179

Weight without motor ≈55kg

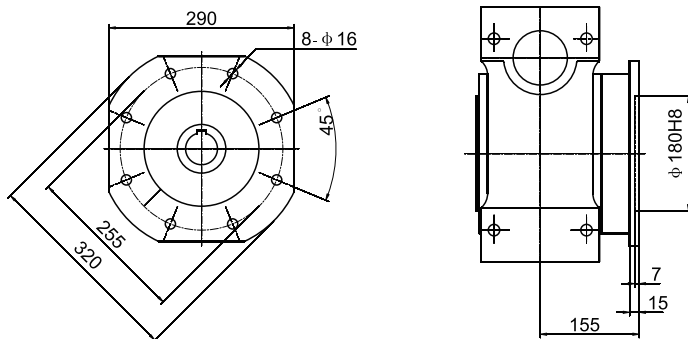
FEN150



YZ



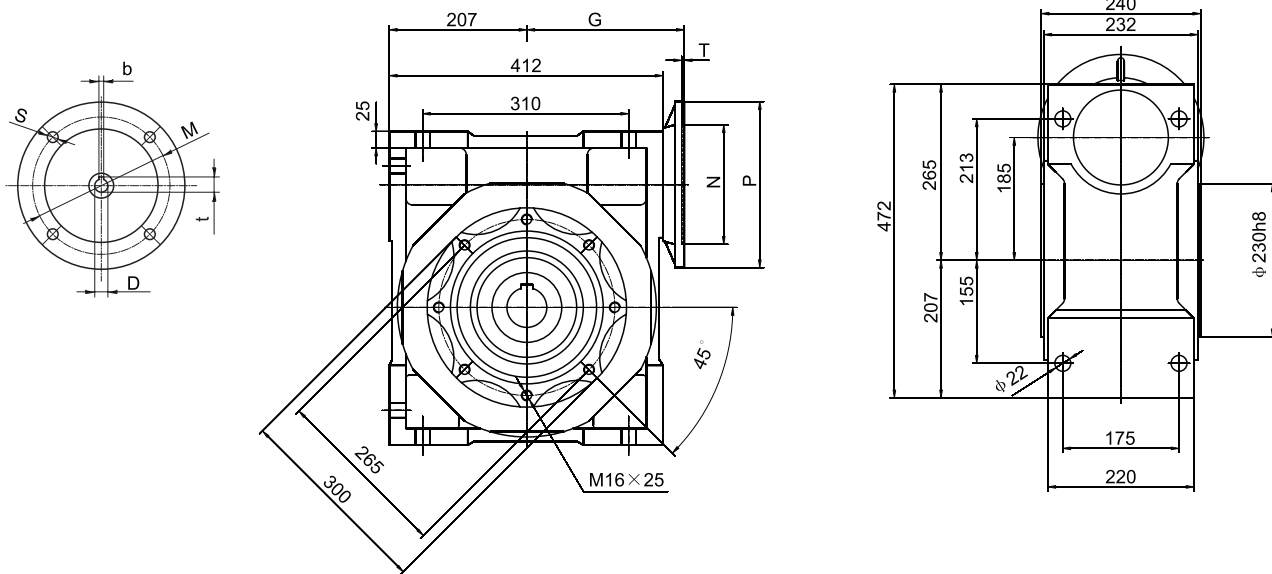
F



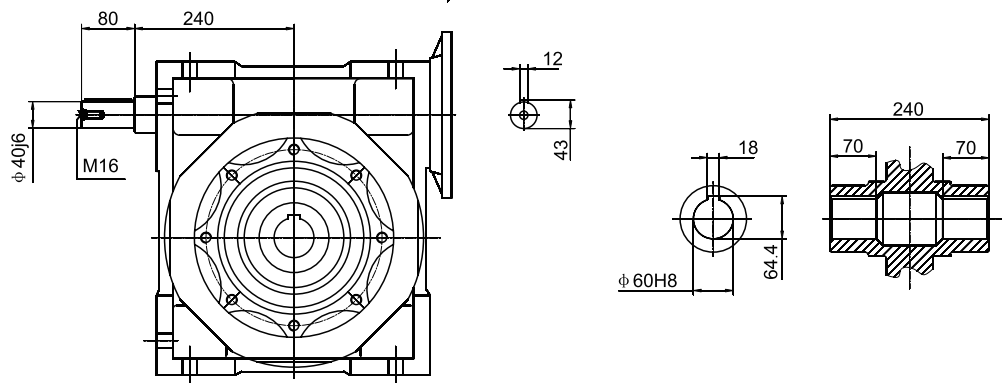
IEC	DE8	b	t	P	M	N	S	T	G
100/112B5	28	8	31.3	250	215	180	13.5	4	202
132B5	38	10	41.3	300	265	230	13.5	4.5	202
160B5	42	12	45.3	350	300	250	18	6	212

Weight without motor ≈105kg

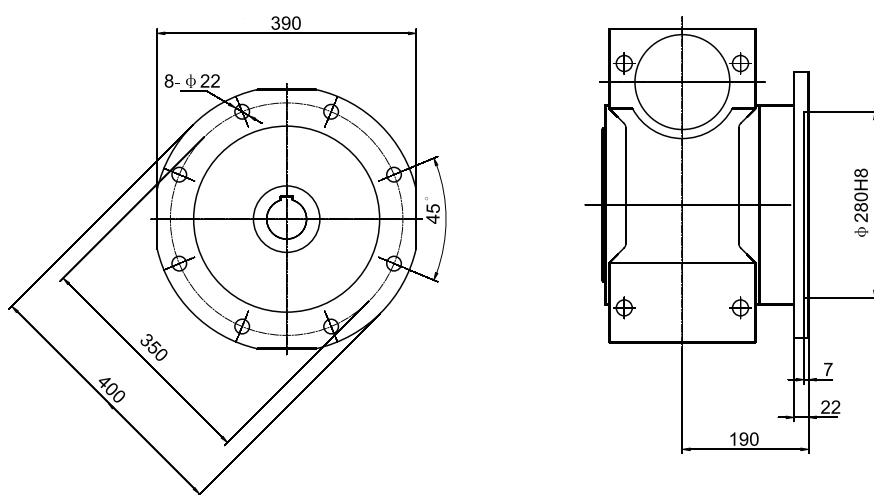
FEN185



YZ



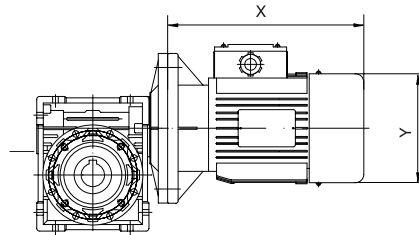
F



IEC	DE8	b	t	P	M	N	S	T	G
100/112B5	28	8	31.3	250	215	180	13.5	4	237
132B5	38	10	41.3	300	265	230	13.5	4.4	237
160B5	42	12	45.3	350	300	250	18	6	247
180B5	48	14	51.8	350	300	250	18	6	247

Weight without motor ≈200kg

ACCESSORIES

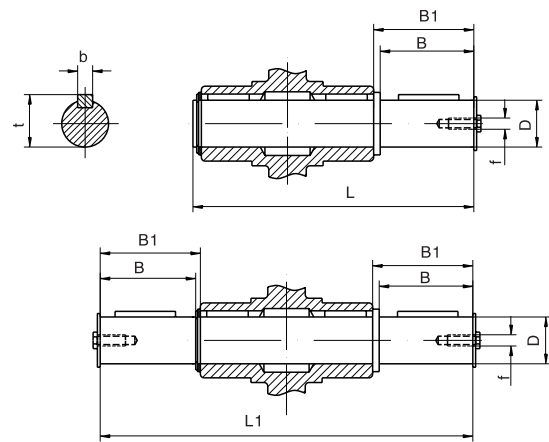


Overall dimensions for electric motor

	50		63		71		80		90		100		112		132		160		180	
kw	0.06	0.09	0.12	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5	22	
X	175		200		240		245		270	295	315		340		390	430	520	565	580	615
Y	120		130		140		160		175		195		225		275		320		360	

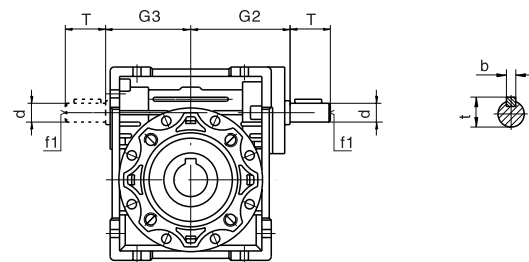
Dimensions of single/double output shaft

Type	D(h6)	B	B1	L	L1	f	b	t
25	11	23	25.5	81	101	-	4	12.5
30	14	30	32.5	102	128	M6	5	16
40	18	40	43	128	164	M6	6	20.5
50	25	50	53.5	153	199	M10	8	28
63	25	50	53.5	153	199	M10	8	28
73	28	60	63.5	192	247	M10	8	31
90	35	80	84	234	308	M12	10	38
110	42	80	84.5	249	324	M16	12	45
130	45	80	85	265	340	M16	14	48.5
150	50	102	110	324	420	M20	14	53.5
185	60	112	120	374	480	M20	18	64



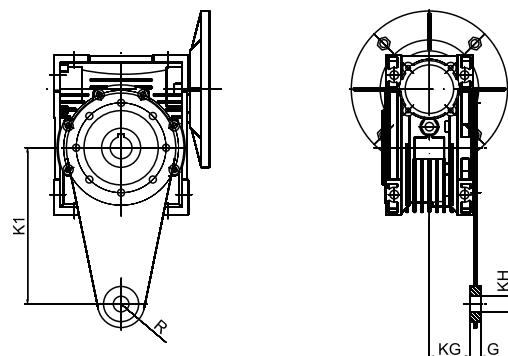
Dimensions of extension worm shafts

Type	G3	G2	T	d(j6)	b	t	f1
25	38	42	18	9	3	10.2	-
30	45	51	20	9	3	10.2	-
40	53	60	23	11	4	12.5	M6
50	64	74	30	14	5	16	M6
63	75	90	40	19	6	21.5	M6
75	90	105	50	24	8	27	M8
90	108	125	50	24	8	27	M8
110	135	142	60	28	8	31	M10
130	155	162	80	30	8	33	M10
150	210	195	80	35	10	38	M12
185	240	240	80	40	12	43	M16



Dimensions of torque arms

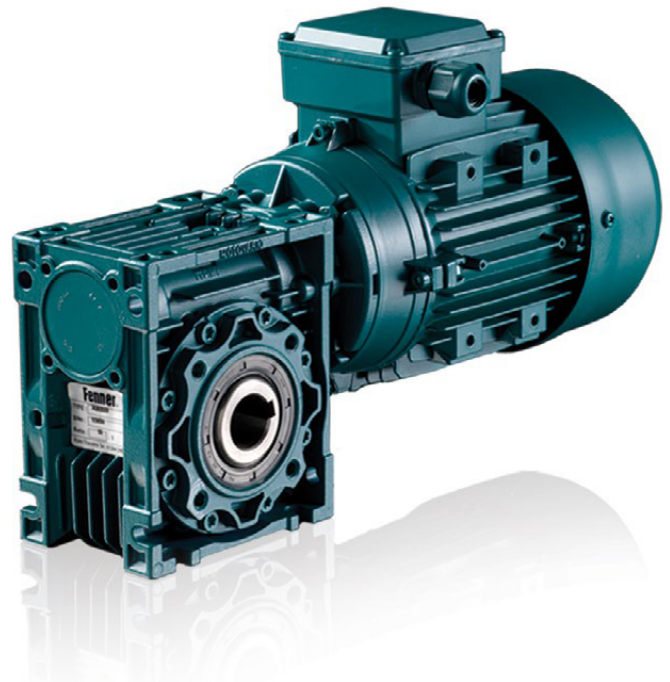
Type	K1	R	KH	G	KG
25	70	15	8	14	17.5
30	85	15	8	14	24
40	100	18	10	14	31.5
50	100	18	10	14	38.5
63	150	18	10	14	38.5
75	200	30	20	25	47.5
90	200	30	20	25	57.5
110	250	35	25	30	62
130	250	35	25	30	84
150	250	35	25	30	84



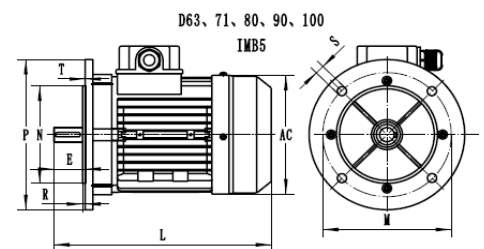
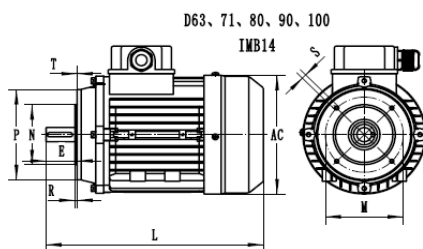
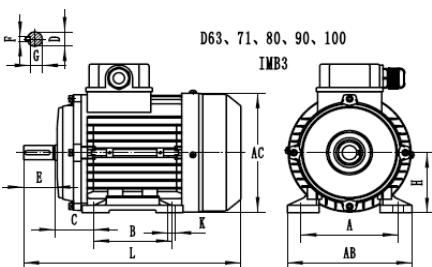
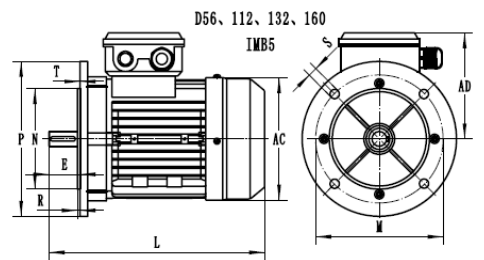
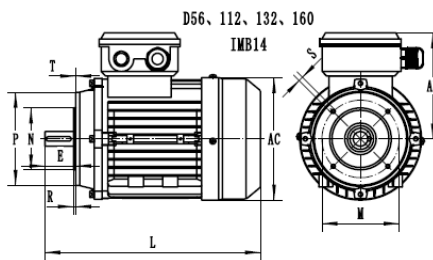
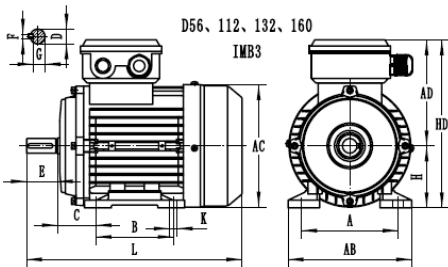
FEATURES

3 PHASE AC INDUCTION MOTORS

- Tefc Ic411 Alloy Frame
- Enclosure Protection Rating Ip55
- Class F Insulation
- Class B Temperature Rise
- Greased For Life Quality Bearings
- Shaft Oil Seals
- Fully Gasketed Alloy Terminal Box
- Compression Gland Included
- Light-Weight
- Gloss Fenner Paint
- 0.75 & Larger Are Multimount Construction
- Ideal For Oem Applications
- Wide Range Of Options On Request
- Two (2) Year Warranty



DIMENSION CHARTS



DIMENSIONS

FRAME SIZE & POLES	MOUNTING DIMENSIONS (MM)																								FRAME DIMENSIONS (mm)						
	IMB3									IMB14A							IMB5														
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD
56	90	71	36	9	20	3	7.2	56	5.8	65	50	80	0	M5	2.5	100	80	120	0	7	3.0	110	112	90	146	198					
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	120	119	96	159	219					
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	132	140	104	175	236					
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	157	118	198	279					
90S-2	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	175	173	125	215	296					
90S-4	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	174	177	126	216	313					
90S-6	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	174	177	126	216	313					
90S-8	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	175	173	125	215	296					
90L-2	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	175	173	125	215	322					
90L-4	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	174	177	126	216	313					
90L-6	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	174	177	126	216	313					
90L-8	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	175	173	125	215	322					
100L-2-4	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	198	196	134	234	384					
100L-6	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	198	198	137	237	384					
112M	190	140	70	28	60	8	24	112	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	220	221	166	278	390					
132S	216	140	89	38	80	10	33	132	12	165	130	200	0	M10	3.5	265	230	300	0	15	4.0	252	256	184	316	436					
132M	216	178	89	38	80	10	33	132	12	165	130	200	0	M10	3.5	265	230	300	0	15	4.0	252	256	184	316	474					

NOTES:

1. Dimensional data subject to change without notice.
2. AS60034 / IEC60072 tolerances apply.
3. Lifting facilities provided on motors frame size D100 and larger.

PERFORMANCE CHART

TYPICAL PERFORMANCE (415 VOLTS)														
Output (kW)	Poles	Full Load Nominal (rpm)	Frame Size	Efficiency Full Load (%)	Power Factor (%)	Rated Voltage	Winding Connection	Current			Torque			Weight Foot (B3) Mount (Kg)
								Full Load Amps	Locked Rotor (%)	Full Load (Nm)	Locked Rotor (%)	Break-down (%)		
0.18	2	2730	63	62%	70%	240/415	Δ / Y	1.0 / 0.6	450%	0.63	230%	230%	3.7	
0.18	4	1400	63	58%	65%	240/415	Δ / Y	1.2 / 0.7	300%	1.23	240%	240%	4.1	
0.25	2	2730	63	67%	74%	240/415	Δ / Y	1.2 / 0.7	450%	0.875	230%	230%	4.2	
0.25	4	1380	71	67%	68%	240/415	Δ / Y	1.3 / 0.8	400%	1.73	240%	240%	5.1	
0.37	2	2800	71	73%	74%	240/415	Δ / Y	1.7 / 1.0	550%	1.26	230%	230%	5.1	
0.37	4	1400	71	67%	66%	240/415	Δ / Y	2.0 / 1.2	850%	2.52	240%	240%	5.9	
0.37	6	910	80	71%	65%	240/415	Δ / Y	1.9 / 1.1	400%	3.88	200%	210%	8.7	
0.55	2	2800	71	75%	81%	240/415	Δ / Y	2.2 / 1.3	600%	1.88	230%	230%	6.2	
0.55	4	1400	80	72%	80%	240/415	Δ / Y	2.3 / 1.3	500%	3.75	240%	240%	8.7	
0.55	6	910	80	71%	71%	240/415	Δ / Y	2.6 / 1.5	450%	5.77	200%	210%	9.8	
0.75	2	2880	80	78.8%	84%	240/415	Δ / Y	2.8 / 1.6	708%	2.49	230%	230%	9.5	
0.75	4	1410	80	80.5%	74%	240/415	Δ / Y	3.1 / 1.8	553%	5.08	240%	230%	11	
0.75	6	940	90S	76%	72%	240/415	Δ / Y	3.3 / 1.9	464%	7.62	200%	210%	12.5	
1.1	2	2880	80	80.6%	86%	240/415	Δ / Y	3.8 / 2.2	785%	3.65	230%	230%	11	
1.1	4	1430	90S	82.2%	75%	240/415	Δ / Y	4.3 / 2.5	720%	7.35	230%	230%	14.5	
1.1	6	940	90L	78.3%	73%	240/415	Δ / Y	4.7 / 2.7	491%	11.2	210%	210%	15.5	
1.5	2	2870	90S	82.6%	86%	240/415	Δ / Y	5.0 / 2.9	837%	4.99	230%	230%	14	
1.5	4	1430	90L	83.5%	75%	240/415	Δ / Y	5.7 / 3.3	736%	10	230%	230%	16	
1.5	6	950	100L	79.9%	70%	240/415	Δ / Y	6.4 / 3.7	584%	15.1	210%	210%	26.5	
2.2	2	2870	90L	84.1%	87%	240/415	Δ / Y	7.3 / 4.2	814%	7.32	230%	230%	17	
2.2	4	1450	100L	84.9%	77%	240/415	Δ / Y	8.1 / 4.7	806%	14.5	230%	230%	24.5	
2.2	6	950	112M	81.9%	74%	240/415	Δ / Y	8.8 / 5.1	548%	22.1	210%	210%	29.5	
3	2	2900	100L	85.3%	89%	240/415	Δ / Y	9.5 / 5.5	902%	8.88	230%	230%	24.5	
3	4	1450	100L	86%	79%	240/415	Δ / Y	10.6 / 6.1	825%	19.8	230%	230%	28	
3	6	960	132S	83.5%	74%	240/415	Δ / Y	11.8 / 6.8	575%	29.8	203%	210%	38.5	
4	2	2920	112M	86.3%	89%	415	Δ	7.2	853%	13.1	230%	230%	31	
4	4	1450	112M	87%	83%	415	Δ	7.7	830%	26.34	230%	230%	35.5	
4	6	960	132M	84.7%	74%	415	Δ	8.9	657%	39.79	203%	210%	48	
5.5	2	2920	132S	87.2%	89%	415	Δ	9.9	834%	17.99	219%	230%	43	
5.5	4	1460	132S	87.9%	83%	415	Δ	10.5	849%	35.98	200%	230%	46	
5.5	6	960	132M	86.1%	74%	415	Δ	12.0	714%	54.71	203%	210%	58	
7.5	2	2920	132S	88.3%	89%	415	Δ	13.3	888%	24.53	220%	230%	51	
7.5	4	1460	132M	88.9%	84%	415	Δ	14.0	859%	49.06	200%	230%	56	
7.5	6	970	160M	87.3%	77%	415	Δ	15.5	750%	73.84	210%	210%	80	

NOTES:

1. Data Subject to AS60034 tolerances.
2. Efficiency Test Method to AS/NZS 1359.5 Test Method A.
3. Data subject to change without notice.



C10-025 12/23

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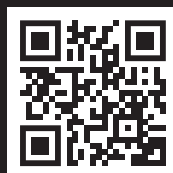
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