

INTEGRAL HELICAL GEAR MOTOR

FH || FV | FVA |
DMRS | OTS Series



SMALL GEAR MOTOR
HIGH EFFICIENCY | MAINTENANCE FREE





SMALL GEAR MOTOR

F SERIES

INTEGRAL HELICAL GEAR MOTOR UNIVERSAL DESIGN



Integral Gear Motor design enables motor and gear reducer permanently coupled together. Its pinion gear driving the gearbox is directly mounted to the drive shaft of the motor to achieve shorter in axial length and lower weight.

Features:

- Its pinion gear driving the gearbox is directly mounted to the drive shaft of the motor offers perfect, permanent alignment between motor and gearbox with zero loss in mechanical efficiency.
- Shorter in axial length and Lower weight.
- Option to add integrated brake or encoder is available upon request.

GENERAL SPECIFICATIONS

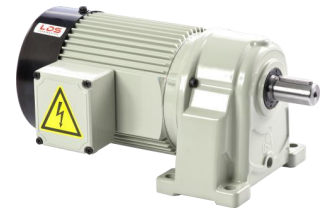
Output Power :	0.1kW ~ 3.7kW (IE1)
Power Source:	3phase 220V ▪ 240V ▪ 380V ▪ 415V ▪ 440V
Insulation Class:	B / F
Protection:	IP44 / IP54
Number of Pole :	4 Pole (1420rpm) ▪ 6Pole (900rpm)
Rating :	Continuous Rating
Gear Reduction Method:	Helical Gear
Lubrication:	Grease Lubrication (Maintenance Free)
Output Shaft :	New JIS Key (JIS 1301-1976 Class)
Output Shaft Material :	S43C
Case Material :	Aluminium Die-cast
Ambient Temperature:	-10°C ~ +40°C
Ambient Humidity :	85% Maximum
Environment :	Well-ventilated place (In door use)
Mounting Direction :	Any direction
Electromagnetic Brake (DC) :	Brake with Rectifier 220V (Optional)
Conformity Certification :	CE / CCC



#FVA



#FV



#FH

Permissible Torque (Based on 4Pole Motor, 50Hz)

Gear Ratio		3	5	10	15	20	25	30	40	50	60	80	100	120	150	200		
Motor Speed Output RPM (1400)		467	280	140	93	70	56	47	35	28	23	17.5	14.0	11.7	9.3	7.0		
Output Power (kW) / Model Number Max Output Torque (kg.m)	0.1kW	#18	0.17	0.3	0.6	0.9	1.2	1.5	1.8	2.3	2.9	2.9	2.9	2.9	2.9	2.9	2.9	
		#22	0.17	0.3	0.6	0.9	1.2	1.5	1.8	2.3	2.9	3.5	4.4	5.8	7.0	8.7	11.6	
	0.2kW	#18	0.3	0.6	1.2	1.8	2.4	3.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
		#22	0.3	0.6	1.2	1.8	2.4	3.0	3.6	3.9	4.8	5.8	7.3	7.3	7.3	7.3	7.3	7.3
	0.4kW	#28	--	--	--	--	--	--	--	3.9	4.8	5.8	7.3	9.7	11.6	14.6	19.1	
		#22	0.75	1.2	3.6	4.8	6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	
	0.75kW	#28	0.75	1.2	3.6	4.8	6	7.2	9.3	11.6	14	17.5	17.5	17.5	17.5	17.5	17.5	
		#32	--	--	--	--	--	--	--	--	--	--	--	23.3	28.0	35.0	43.0	
	1.5kW	#28	1.6	2.3	4.5	6.9	9.1	11.3	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	
		#32	1.6	2.3	4.5	6.9	9.1	11.3	13.6	17.5	21.9	26.3	32.9	32.9	32.9	32.9	32.9	
	2.2kW	#40	--	--	--	--	--	--	--	--	--	--	--	43	52	65	78	
		#28	2.5	4.5	9.0	13.6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	
		#32	2.5	4.5	9.0	13.6	18.0	22.8	27.2	35	43.7	43.7	43.7	43.7	43.7	43.7	43.7	
		#40	--	--	--	--	--	--	--	--	--	52	66	87	--	--	--	
		#32	4.0	6.7	13.4	20.0	26.8	33.6	33.6	33.6	33.6	--	--	--	--	--	--	
		#40	--	--	--	--	--	--	40	52	65	--	--	--	--	--	--	

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SMALL GEAR MOTOR

F SERIES INTEGRAL HELICAL GEAR MOTOR UNIVERSAL DESIGN



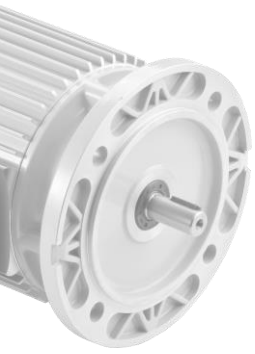
THREE PHASE ASYNCHRONOUS INTEGRAL HELICAL GEAR MOTOR (DUAL VOLTAGE 3Ø240V - 3Ø415V, 50Hz / 60Hz)

Output Power (kW)	Product Code			AC Voltage (V)	Frequency (Hz)	Current (A) (50 / 60Hz)	RPM (50 / 60Hz)	No. Of Pole
	Foot Mount	Flange Mount	Flange-A Mount					
0.2kW (1/4HP)	FH18-[]-0.2kW-UF FH22-[]-0.2kW-UF	FV18-[]-0.2kW-UF FV22-[]-0.2kW-UF	FVA18-[]-0.2kW-UF FVA22-[]-0.2kW-UF	3Ø220V	50 / 60Hz	1.20 / 1.13	1420 / 1720	4P
				3Ø380V	50 / 60Hz	0.70 / 0.63	1420 / 1720	4P
	FH18-[]-0.2kW-TQF FH22-[]-0.2kW-TQF	FV18-[]-0.2kW-TQF FV22-[]-0.2kW-TQF	FVA18-[]-0.2kW-TQF FVA22-[]-0.2kW-TQF	3Ø240V	50 / 60Hz	1.10 / 1.02	1420 / 1720	4P
				3Ø415V	50 / 60Hz	0.64 / 0.58	1420 / 1720	4P
0.4kW (1/2HP)	FH22-[]-0.4kW-UF FH28-[]-0.4kW-UF	FV22-[]-0.4kW-UF FV28-[]-0.4kW-UF	FVA22-[]-0.4kW-UF	3Ø220V	50 / 60Hz	2.10 / 2.00	1420 / 1720	4P
				3Ø380V	50 / 60Hz	1.20 / 1.11	1420 / 1720	4P
	FH22-[]-0.4kW-TQF FH28-[]-0.4kW-TQF	FV22-[]-0.4kW-TQF FV28-[]-0.4kW-TQF	FVA22-[]-0.4kW-TQF	3Ø240V	50 / 60Hz	1.93 / 1.82	1420 / 1720	4P
				3Ø415V	50 / 60Hz	1.12 / 1.05	1420 / 1720	4P
0.75kW (1HP)	FH28-[]-0.75kW-UF FH32-[]-0.75kW-UF FH40-[]-0.75kW-UF	FV28-[]-0.75kW-UF FV32-[]-0.75kW-UF FV40-[]-0.75kW-UF	N/A	3Ø220V	50 / 60Hz	3.5 / 3.3	1420 / 1720	4P
				3Ø380V	50 / 60Hz	2.1 / 2.0	1420 / 1720	4P
	FH28-[]-0.75kW-TQF FH32-[]-0.75kW-TQF FH40-[]-0.75kW-TQF	FV28-[]-0.75kW-TQF FV32-[]-0.75kW-TQF FV40-[]-0.75kW-TQF	N/A	3Ø240V	50 / 60Hz	3.2 / 2.6	1420 / 1720	4P
				3Ø415V	50 / 60Hz	1.9 / 1.7	1420 / 1720	4P
1.5kW (2HP)	FH28-[]-1.5kW-UF FH32-[]-1.5kW-UF FH40-[]-1.5kW-UF	FV28-[]-1.5kW-UF FV32-[]-1.5kW-UF FV40-[]-1.5kW-UF	N/A	3Ø220V	50 / 60Hz	6.0 / 5.6	1420 / 1720	4P
				3Ø380V	50 / 60Hz	3.5 / 3.2	1420 / 1720	4P
	FH28-[]-1.5kW-TQF FH32-[]-1.5kW-TQF FH40-[]-1.5kW-TQF	FV28-[]-1.5kW-TQF FV32-[]-1.5kW-TQF FV40-[]-1.5kW-TQF	N/A	3Ø240V	50 / 60Hz	5.5 / 5.2	1420 / 1720	4P
				3Ø415V	50 / 60Hz	3.2 / 3.0	1420 / 1720	4P
2.2kW (3HP)	FH32-[]-2.2kW-UF FH40-[]-2.2kW-UF	FV32-[]-2.2kW-UF FV40-[]-2.2kW-UF	N/A	3Ø220V	50 / 60Hz	9.5 / 9.0	1420 / 1720	4P
				3Ø380V	50 / 60Hz	5.5 / 5.2	1420 / 1720	4P
	FH32-[]-2.2kW-TQF FH40-[]-2.2kW-TQF	FV32-[]-2.2kW-TQF FV40-[]-2.2kW-TQF	N/A	3Ø240V	50 / 60Hz	8.7 / 8.4	1420 / 1720	4P
				3Ø415V	50 / 60Hz	5.0 / 4.6	1420 / 1720	4P

SINGLE PHASE INTEGRAL HELICAL GEAR MOTOR (1Ø240V, 50Hz / 60Hz)

Output Power (kW)	Product Code			AC Voltage (V)	Frequency (Hz)	Current (A) (50 / 60Hz)	RPM (50 / 60Hz)	No. Of Pole
	Foot Mount	Flange Mount	Flange-A Mount					
0.2kW (1/4HP)	FH18-[]-0.2kW-C2F FH22-[]-0.2kW-C2F	FV18-[]-0.2kW-C2F FV22-[]-0.2kW-C2F	FVA18-[]-0.2kW-C2F FVA18-[]-0.2kW-C2F	1Ø240V	50 / 60Hz	1.8 / 1.7	1350 / 1650	4P
0.4kW (1/2HP)	FH22-[]-0.4kW-C2F FH28-[]-0.4kW-C2F	FV22-[]-0.4kW-C2F FV28-[]-0.4kW-C2F	FVA22-[]-0.4kW-C2F	1Ø240V	50 / 60Hz	2.6 / 2.4	1350 / 1650	4P

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SMALL GEAR MOTOR

LD SERIES ELECTRIC MOTOR IEC DESIGN



GENERAL SPECIFICATIONS

Output Power :	0.1kW ~ 3.7kW (IE1)
Power Source :	3phase 220V ▪ 240V ▪ 380V ▪ 415V ▪ 440V
Insulation Class :	B / F
Protection :	IP44 / IP54
Number of Pole :	2Pole (2800rpm) ▪ 4 Pole (1420rpm) ▪ 6Pole (900rpm)
Rating :	Continuous Rating
Output Shaft :	New JIS Key (JIS 1301-1976 Class)
Output Shaft Material :	S43C
Case Material :	Aluminium Die-cast / Cast Iron
Ambient Temperature:	-10°C ~ +40°C
Ambient Humidity :	85% Maximum
Environment :	Well-ventilated place (Indoor use)
Mounting Direction :	Any direction
Electromagnetic Brake (DC) :	Brake with Rectifier 220V (Optional)
Conformity Certification :	CE / CCC

Efficiency Classes:	
IE1	Standard Efficiency
IE2	High Efficiency
IE3	Premium Efficiency
IE4	Super Premium Efficiency

Mounting Type :	
B3	Foot Mounted
B5	Flange Mounted
B14	C-Face Mounted

GEAR REDUCER, VARIATOR AND BRAKE OPTIONS



FHB Series Helical Gear Reducer
Foot Mount
Gear Reduction Ratio :
1/3 ~ 1/150



FVB Series Helical Gear Reducer
Flange Mount
Gear Reduction Ratio :
1/3 ~ 1/150



DMRV / DMRS Series
Worm Gear Reducer
Gear Reduction Ratio :
1/5 ~ 1/100



OTS Series
Helical Hypoid Gear Reducer
Gear Reduction Ratio :
1/5 ~ 1/300



EFVF Series
Clutch & Brake DC24V
(High frequency brake operation)



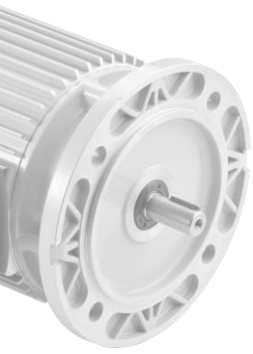
Electro-Magnetic Brake
Power-off-activated-type 220V (AC-DC Rectifier included)



EV Series
Mechanical Variator
(Reduction Ratio 1/1.4 ~ 1/7)



IP55 Series Electric Motor with limited ingress protection – Protected from low pressure jets



SMALL GEAR MOTOR

LD SERIES

ASYNCHRONOUS MOTOR IEC DESIGN



SINGLE PHASE INDUCTION MOTOR / CAPACITOR RUN MOTOR (1Ø240V, 50Hz / 60Hz)

Rating (IE1)	No. of Pole	IEC Frame Size	Product Code		Ampere (A)		Rated Speed (RPM) (50 / 60Hz)	Torque (Nm)		Capacitor (µF)
			LDVF Series (Flange Mount)	LDVS Series (Foot Mount)	50Hz	60Hz		Start	Rated	
0.2kW (1/4HP)	4P	71M	LDVF04-0.2kW-C2F	LDVS04-0.2kW-C2F	1.8A	1.7A	1350 / 1650	0.7	1.2	12µF
0.4kW (1/2HP)	4P	71M	LDVF04-0.4kW-C2F	LDVS04-0.4kW-C2F	2.6A	2.4A	1350 / 1650	1.4	2.4	20µF

THREE PHASE ASYNCHRONOUS MOTOR (DUAL VOLTAGE 3Ø240V - 3Ø415V, 50Hz / 60Hz)

Rating (IE1)	No. of Pole	IEC Frame Size	Product Code		Ampere (Dual-Voltage, TQ)		Rated Speed (RPM) (50 / 60Hz)	Torque (Nm)		Inertia (Kg-m ²)
			LDVF Series	LDVS Series	Start (3Ø240V/415V)	Rated (3Ø240V/415V)		Start	Rated	
0.2kW (1/4HP)	2P	71M	LDVF02-0.2kW-TQF	LDVS02-0.2kW-TQF	4.9 / 2.9	1.00 / 0.58	2800 / 3300	1.3	0.65	0.0007
	4P	71M	LDVF04-0.2kW-TQF	LDVS04-0.2kW-TQF	5.0 / 3.0	1.10 / 0.64	1380 / 1650	2.6	1.25	0.0008
	6P	80M	LDVF06-0.2kW-TQF	LDVS06-0.2kW-TQF	5.5 / 3.2	1.70 / 0.90	910 / 1120	3.5	2	0.0001
0.4kW (1/2HP)	2P	80M	LDVF02-0.4kW-TQF	LDVS02-0.4kW-TQF	8 / 4.5	1.60 / 0.90	2810 / 3300	2.5	1.3	0.0009
	4P	80M	LDVF04-0.4kW-TQF	LDVS04-0.4kW-TQF	9.5 / 5.5	1.93 / 1.12	1400 / 1650	4.2	2.5	0.0001
	6P	90L	LDVF06-0.4kW-TQF	LDVS06-0.4kW-TQF	10 / 6.0	2.30 / 1.20	920 / 1130	6.5	3.8	0.003
0.75kW (1HP)	2P	90L	LDVF02-0.75kW-TQF	LDVS02-0.75kW-TQF	16.0 / 9.0	2.8 / 1.7	2820 / 3300	5.2	2.5	0.002
	4P	90L	LDVF04-0.75kW-TQF	LDVS04-0.75kW-TQF	17.6 / 10	3.2 / 1.9	1410 / 1720	9	5	0.003
	6P	90L	LDVF06-0.75kW-TQF	LDVS06-0.75kW-TQF	20 / 11.5	3.7 / 2.2	920 / 1140	13.8	7.7	0.005
1.5kW (2HP)	2P	90L	LDVF02-1.5kW-TQF	LDVS02-1.5kW-TQF	35 / 20	5.5 / 3.2	2820 / 3310	12	5.05	0.004
	4P	90L	LDVF04-1.5kW-TQF	LDVS04-1.5kW-TQF	37 / 22	6.0 / 3.5	1420 / 1720	25	10	0.005
	6P	100L	LDVF06-1.5kW-TQF	LDVS06-1.5kW-TQF	40 / 24	6.8 / 3.8	930 / 1140	31	15	0.008
2.2kW (3HP)	2P	100L	LDVF02-2.2kW-TQF	LDVS02-2.2kW-TQF	55 / 31	8.1 / 4.5	2830 / 3320	21	7.4	0.007
	4P	100L	LDVF04-2.2kW-TQF	LDVS04-2.2kW-TQF	65 / 35	8.7 / 5.0	1420 / 1720	38	15	0.008
	6P	112M	LDVF06-2.2kW-TQF	LDVS06-2.2kW-TQF	68 / 39	9.5 / 5.5	930 / 1140	45	20.5	0.015
3.7kW (5HP)	2P	112M	LDVF02-3.7kW-TQF	LDVS02-3.7kW-TQF	105 / 60	14.5 / 8.4	2830 / 3330	25	12.4	0.013
	4P	112M	LDVF06-3.7kW-TQF	LDVS06-3.7kW-TQF	108 / 62	14.8 / 8.7	1420 / 1720	65	25	0.015
	6P	132M	LDVF06-3.7kW-TQF	LDVS06-3.7kW-TQF	112 / 65	15.5 / 9.0	930 / 1140	73	31	0.019

Note:

Dual-voltage motor 3ph208V/415V, 3ph220V/380V, 3ph230V/400V available upon request.

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SMALL GEAR MOTOR

DMRV (DMRS) SERIES

**WORM GEAR REDUCER
UNIVERSAL DESIGN**



The Worm Gear Reducer is designed with high thermal capacity die-cast aluminium housings for exceptional heat dissipation. It uses high efficiency gear design to create maximum torque output in a highly compact package. The housings come with a rust-free powder coat paint finishing.



Aluminium Worm Gear Reducer Ratio and Output Torque (Single Reduction, Based on 4Pole Motor, 50Hz)

Gear Reduction ratio (i)	Output Speed (RPM)	# 030 Series			# 040 Series			# 050 Series			# 063 Series			Gear Reduction ratio (i)	Output Speed (RPM)
		Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)		
5	284	0.2	5.3	3.4	0.4	11.2	3	0.75	22.8	2.7	1.5	46	2.0	5	284
7.5	189	0.2	7.8	2.3	0.4	16	2.4	0.75	34	2.1	1.5	68	1.9	7.5	189
10	142	0.2	10	1.8	0.4	21	1.9	0.75	44	1.6	1.5	89	1.5	10	142
15	95	0.2	14	1.3	0.4	31	0.8	0.75	63	1.2	1.5	127	1.1	15	95
20	71	0.2	18	1.0	0.4	39	1.0	0.75	81	0.9	1.5	166	0.8	20	71
25	57	0.2	21	1.0	0.4	47	0.8	0.75	96	0.9	1.1	146	0.9	25	57
30	47	0.2	24	0.8	0.4	53	0.8	0.75	110	0.9	1.1	167	1.0	30	47
40	36	0.12	19	0.9	0.2	44	0.9	0.4	68	1.1	0.75	143	1.0	40	36
50	28	0.12	23	0.8	0.2	47	0.8	0.4	80	0.9	0.75	169	0.9	50	28
60	24	0.09	19	0.9	0.18	43	0.8	0.4	89	0.8	0.4	102	1.2	60	24
80	18	0.06	14	0.9	0.12	34	1.0	0.25	57	1.1	0.4	124	1.1	80	18
100	14	-	-	-	-	-	-	0.2	60	0.9	0.4	139	0.9	100	14

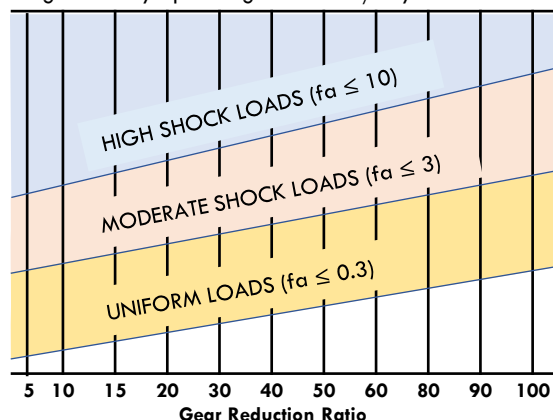
Gear Reduction ratio (i)	Output Speed (RPM)	# 075 Series			# 090 Series			# 110 Series			# 130 Series			Gear Reduction ratio (i)	Output Speed (RPM)
		Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)		
5	284	-	-	-	-	-	-	-	-	-	-	-	-	5	284
7.5	189	4	182	1.0	4	184	1.6	7.5	345	1.3	7.5	349	2.1	7.5	189
10	142	3	180	1.1	4	243	1.3	7.5	455	1.1	7.5	455	1.8	10	142
15	95	3	261	0.8	4	352	1.0	5.5	484	1.4	7.5	668	1.4	15	95
20	71	1.5	168	1.3	4	458	0.8	5.5	638	0.9	7.5	880	1.0	20	71
25	57	1.5	205	1.0	3	420	0.8	4	573	1.0	7.5	1074	0.9	25	57
30	47	1.5	233	1.0	3	479	0.9	4	647	1.1	5.5	900	1.2	30	47
40	36	1.1	216	1.0	2.2	307	1.1	3	638	1.0	5.5	1171	0.9	40	36
50	28	0.75	175	1.2	2.2	368	0.9	3	767	0.8	4	1036	1.2	50	28
60	24	0.75	199	1.1	1.5	424	0.8	2.2	648	0.9	4	1179	0.8	60	24
80	18	0.4	130	1.3	0.75	258	1.1	1.5	548	0.9	2.2	816	1.0	80	18
100	14	0.4	149	1.1	0.75	302	0.9	1.1	473	1.0	2.2	966	1.0	100	14

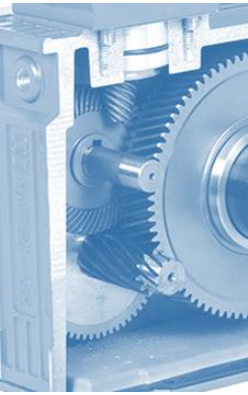
Gear Reduction ratio (i)	Output Speed (RPM)	# 150 Series		
		Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)
5	284	-	-	-
7.5	189	-	-	-
10	142	1.5	921	1.3
15	95	11	990	1.3
20	71	11	1291	1.0
25	57	7.5	1074	1.1
30	47	7.5	1274	0.9
40	36	5.5	1171	1.3
50	28	5.5	1426	1.0
60	24	4	1195	1.1
80	18	4	1484	0.8
100	14	2.2	960	1.0

SERVICE FACTOR

	24Hr	16Hr	8Hr	2Hr
2.3	2	1.8	1.6	
2.2	1.9	1.7	1.5	
2.1	1.8	1.6	1.4	
2.0	1.7	1.5	1.3	
1.9	1.6	1.4	1.2	
1.8	1.5	1.3	1.1	
1.7	1.4	1.2	1.0	
1.6	1.3	1.1	0.9	
1.5	1.2	1.0	0.8	
				SERVICE FACTOR

Length of daily operating time: hours/day

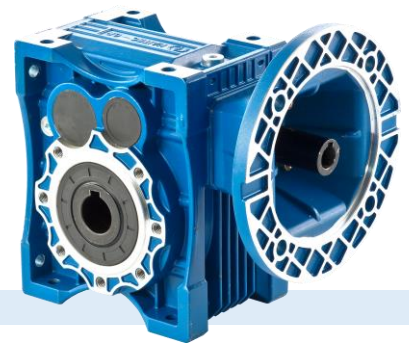




SMALL GEAR MOTOR

OTS SERIES

HELICAL HYPOID GEAR REDUCER UNIVERSAL DESIGN



The Helical Hypoid Gear Reducer offers higher transmission efficiency and longer lifespan compared to conventional IEC worm gear reducer. Having compactible design with IEC Worm Gear Reducer, it comes with high thermal capacity die-cast aluminium housings and offers gear reduction ratio up to 1/300.

Features:

- Helical Hypoid Gear design offer higher higher transmission efficiency and longer lifespan compared to conventional worm gear reducer.
- Higher Ratio Ranges from 1/7.5 ~ 1/300.
- More energy-saving and lower operating temperature.
- Smooth running operation with lower noise compared to worm gear reducer.
- Compactible mounting with IEC worm gear reducer.



Aluminium Helical Hypoid Gear Reducer Ratio and Permissible Output Torque (Single Reduction, Based on 4Pole Motor, 50Hz)

	Gear Reduction ratio (i)	Output Speed (RPM)	OTS #050(2) Series			OTS #063(2) Series			OTS #075(2) Series		
			Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)
2-Stage Gear Reduction	7.5	189	0.75	36	2.7	1.5	74	1.4	3	149	1.9
	10	142	0.75	47	2.5	1.5	96	1.4	3	205	1.7
	12.5	114	0.75	61	2.1	1.5	120	1.3	2.2	182	1.8
	15	95	0.75	73	1.8	1.5	142	1.3	2.2	221	1.5
	20	71	0.4	53	2.0	1.5	199	1.1	2.2	307	1.1
	25	57	0.4	60	1.6	0.75	114	1.7	1.5	239	1.5
	30	47	0.4	80	1.3	0.75	147	1.3	1.5	288	1.3
	40	36	0.4	104	1.0	0.75	193	1.0	0.75	206	1.7
	50	28	0.2	63	2.2	0.4	118	1.3	0.75	233	1.4
60	24	0.2	75	1.8	0.4	143	1.2	0.75	289	1.2	

	Gear Reduction ratio (i)	Output Speed (RPM)	OTS #050(3) Series			OTS #063(3) Series			OTS #075(3) Series		
			Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)	Rated Power (kW)	Output Torque (Nm)	Service Factor (SF)
3-Stage Gear Reduction	75	18.9	0.2	93	1.6	0.2	87	1.8	0.75	349	1.1
	100	14.2	0.2	120	1.1	0.2	115	1.7	0.4	246	2.1
	125	11.4	0.12	90	1.4	0.2	141	1.3	0.4	293	1.7
	150	9.5	0.12	113	1.2	0.2	176	1.2	0.4	353	1.3
	200	7.1	0.12	151	0.9	0.2	226	1.0	0.4	480	1.0
	250	5.7	0.12	185	0.7	0.12	188	1.1	0.2	277	1.2
	300	4.7	-	-	-	-	-	-	0.2	336	1.0

Worm Gear Reducer and Hypoid Gear Reducer Accessories

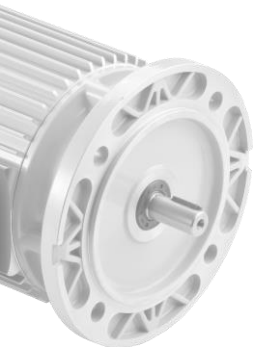


Low Speed Output Shaft
S : Single Output shaft (Left/Right)
D: Double Output Shaft

Torque Arm
Option : Nylon Bush

Aluminium Output Flange
#30F • #130F

Protective Cover



SMALL GEAR MOTOR

F SERIES

DC ELECTROMAGNETIC BRAKE DC ELECTROMAGNETIC CLUTCH AND BRAKE

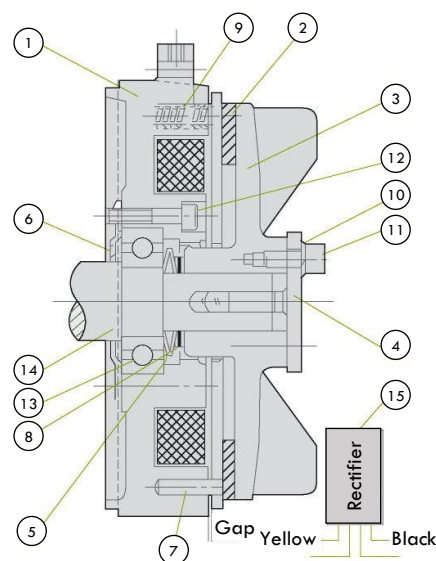


General Specifications:

Ambient Temperature	-5°C ~ 40°C
Ambient Humidity	below 85%
Ambient Condition	Please place in dry and well-ventilated location. Environment with corrosive gas, inflammable gas and moisture should be avoided.
Location	Indoor; the product should be installed on flat and solid foundation.
Elevation	below 1000m

DC Electromagnetic Brake

No.	Name of Parts	No.	Name of Parts
1	Bracket (Brake coil included)	8	Washer
2	Brake Shoe	9	Spring Pin
3	Outer Fan	10	Washer for Spring
4	Adjusting Screw	11	Hex. Screw
5	Tray-Type Spring	12	Hex. Screw
6	Bearing Cover	13	Bearing
7	Spring Pin	14	Motor Spindle
		15	Rectifier (AC to DC)



Output Power (kW, 4Pole)		0.1kW	0.2kW	0.4kW	0.75kW	1.5kW	2.2kW
Actuation by Gradual Control (kg-m)		0.1	0.2	0.4	0.75	1.5	2.2
Time of Releasing (Sec)	Alternative Current Switch	0.1	0.07	0.1	0.12	0.14	0.15
	Direct Current Switch	0.06	0.03	0.03	0.05	0.05	0.03
Clearance for Adjustment (mm)	Specified Value	0.3	0.3	0.3	0.4	0.4	0.4
	Boundary Value	0.7	0.7	0.7	1	1	1

ELECTROMAGNETIC CLUTCH & BRAKE

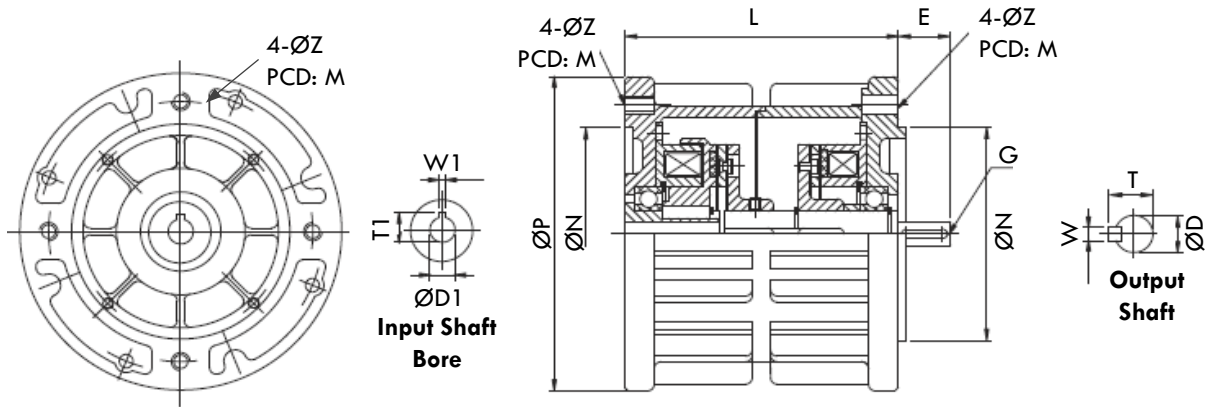
EFVF-Z

MODEL : EFVF-Z

ELECTROMAGNETIC CLUTCH & BRAKE

DUAL FLANGE (IEC FRAME COMPATIBLE-B5)

INPUT VOLTAGE : DC24V



		MODEL				
GENERAL SPECIFICATION	UNIT	#015	#025	#050	#100	#200
DYNAMIC FRICTION TORQUE	KGM	1.0	2.0	4.0	8.0	16
STATIC FRICTION TORQUE	KGM	1.5	2.5	5.0	10	20
MAXIMUM SPEED	RPM	2,000	2,000	2,000	2,000	2,000
COMPACTIBLE MOTOR (KW -4POLE)	KW	0.2KW/0.4KW	0.4KW/0.75KW	0.75KW/1.5KW	2.2KW/3.75KW	5.5KW/7.5KW
D (OUTPUT SHAFT DIA.)	MM	Ø11 / Ø14	Ø14 / Ø19	Ø19 / Ø24	Ø28	Ø38
WXT (KEYWAY AND OVERALL SHAFT HEIGHT)	MM	4X12.8 / 5X16.3	5X16.3 / 6X21.8	6X21.8 / 8X27.3	8X31.3	10X41.5
D1 (HOLLOW INPUT SHAFT BORE DIA.)	MM	Ø11 / Ø14	Ø14 / Ø19	Ø19 / Ø24	Ø28	Ø38
W1XT1 (KEYWAY AND OVERALL SHAFT HEIGHT)	MM	4X12.8 / 5X16.3	5X16.3 / 6X21.8	6X21.8 / 8X27.3	8X31.3	10X41.5
N (INPUT / OUTPUT PILOT DIA.)	MM	Ø110	Ø110/130	Ø130	Ø180	Ø230
E (OUTPUT SHAFT LENGTH)	MM	23 / 30	30 / 40	40 / 50	60	80
G (OUTPUT SHAFT SCREW HOLE TYPE)	MM	M4-DEEP15	M6-DEEP15			
L (BODY LENGTH)	MM	120	140	161	177	215
M (INPUT / OUTPUT FLANGE MOUNTING PCD)	MM	Ø130	Ø130 / Ø165	Ø165	Ø215	Ø265
P (INPUT / OUTPUT FLANGE DIA.)	MM	Ø160	Ø160/200	Ø200	Ø250	Ø300
Z (MOUNTING HOLE DIA.)	MM	Ø9	Ø9 / Ø11	Ø11	Ø13	Ø15
UNIT WEIGHT	KG	4.39	7.35	10.7	19.55	32.6

DIMENSION : INTEGRAL SMALL GEAR MOTOR

FH18~FH32

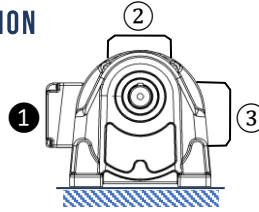
INPUT VOLTAGE OF MOTOR :

C2 : 1PHASE 240V (50/60HZ)
 TN : 3PHASE 205/415V (50/60HZ)
 TQ : 3PHASE 240/415V (50/60HZ)
 U : 3PHASE 220/380V (50/60HZ)

TERMINAL BOX POSITION

DEFAULT POSITION :

① LEFT



MODEL : FH18-0.2KW-□

FOOT MOUNTING

MOTOR POWER : 0.2KW

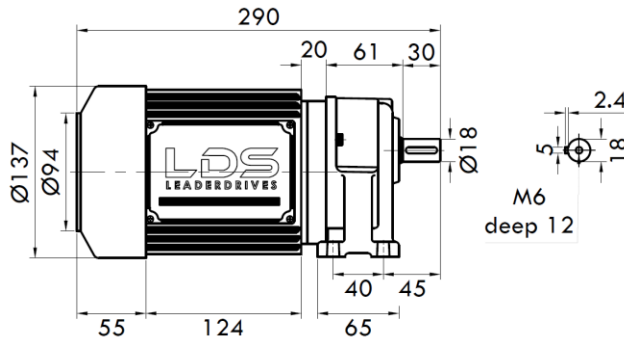
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
 25 • 30 • 40 • 50 • 60 •
 80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 18MM (KEY 5X5)

FOOT MOUNTING PCD : 40 X 110MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH18

MODEL : FH22-0.4KW-□

FOOT MOUNTING

MOTOR POWER : 0.4KW

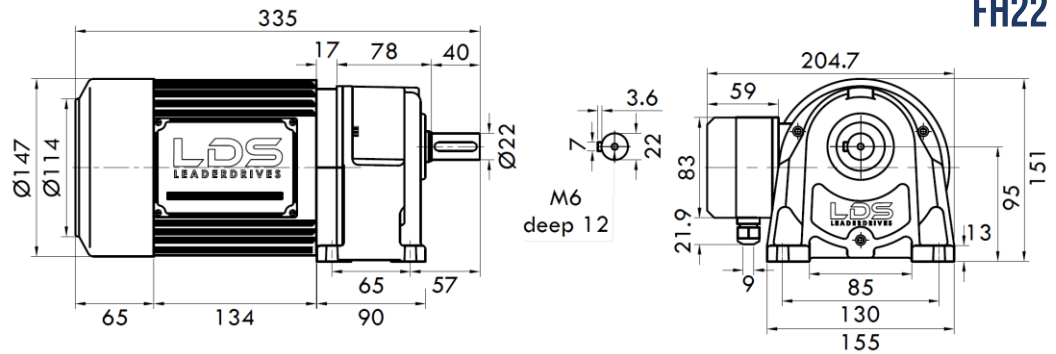
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
 25 • 30 • 40 • 50 • 60 •
 80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 22MM (KEY 7X7)

FOOT MOUNTING PCD : 65 X 130MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH22

MODEL : FH28-0.75KW-□

FOOT MOUNTING

MOTOR POWER : 0.75KW

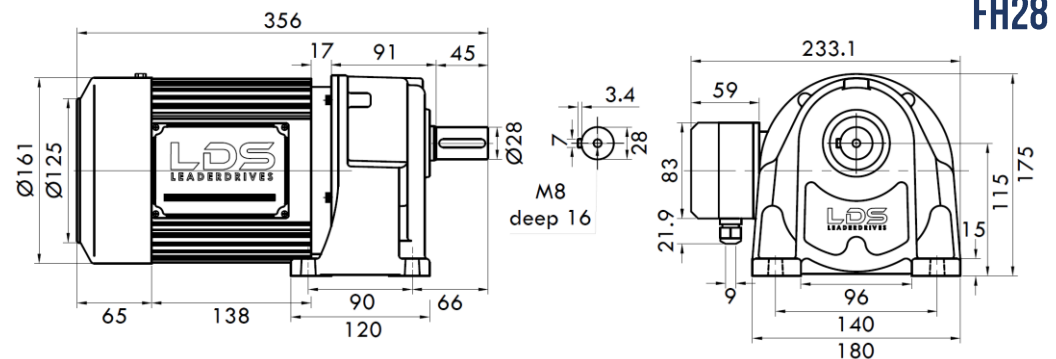
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
 25 • 30 • 40 • 50 • 60 •
 80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 28MM (KEY 7X7)

FOOT MOUNTING PCD : 90 X 140MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH28

MODEL : FH32-1.5KW-□

FOOT MOUNTING

MOTOR POWER : 1.5KW

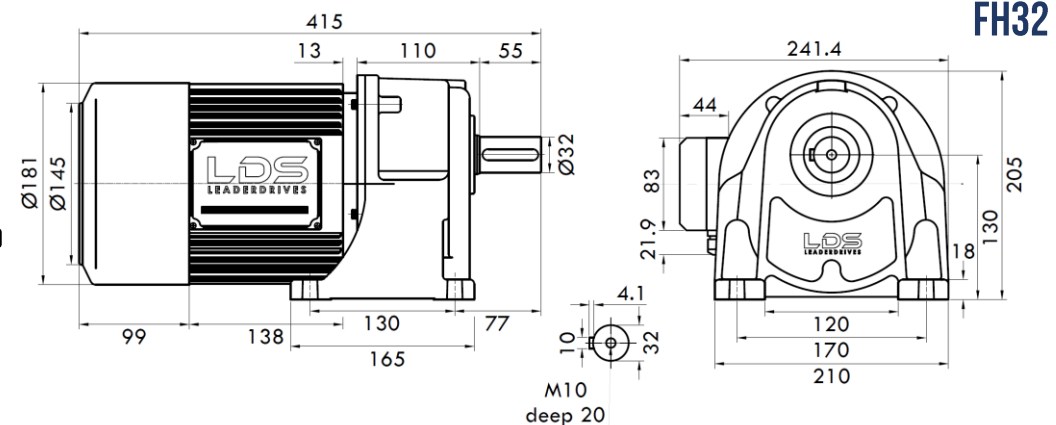
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
 25 • 30 • 40 • 50 • 60 •
 80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 32MM (KEY 10X10)

FOOT MOUNTING PCD : 130 X 170MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH32

DIMENSION : INTEGRAL SMALL GEAR MOTOR

FH32~FH40

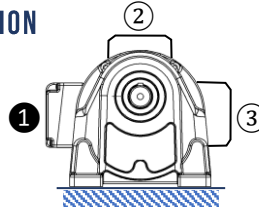
INPUT VOLTAGE OF MOTOR :

- C2 : 1PHASE 240V (50/60HZ)
- TN : 3PHASE 205/415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

TERMINAL BOX POSITION

DEFAULT POSITION :

- ① LEFT



MODEL : FH32-2.2KW-□

FOOT MOUNTING

MOTOR POWER : 2.2KW

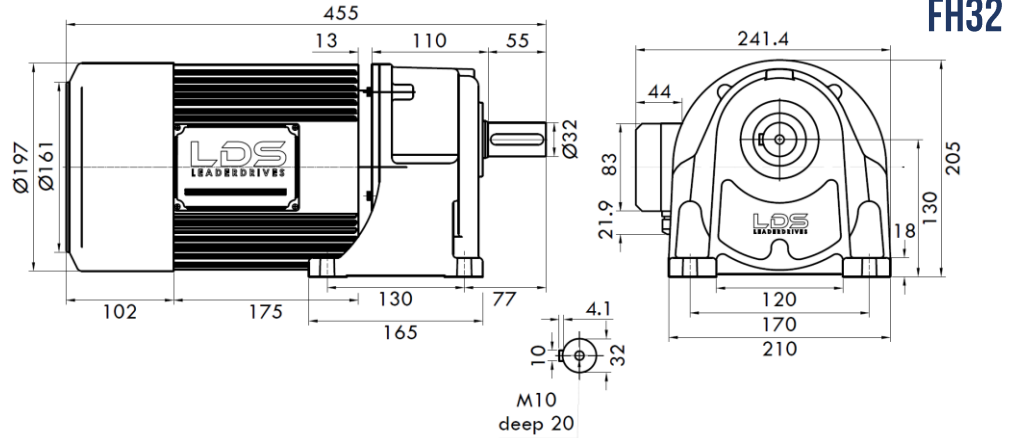
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 32MM (KEY 10X10)

FOOT MOUNTING PCD : 130 X 170MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH32

MODEL : FH40-2.2KW-□

FOOT MOUNTING

MOTOR POWER : 2.2KW

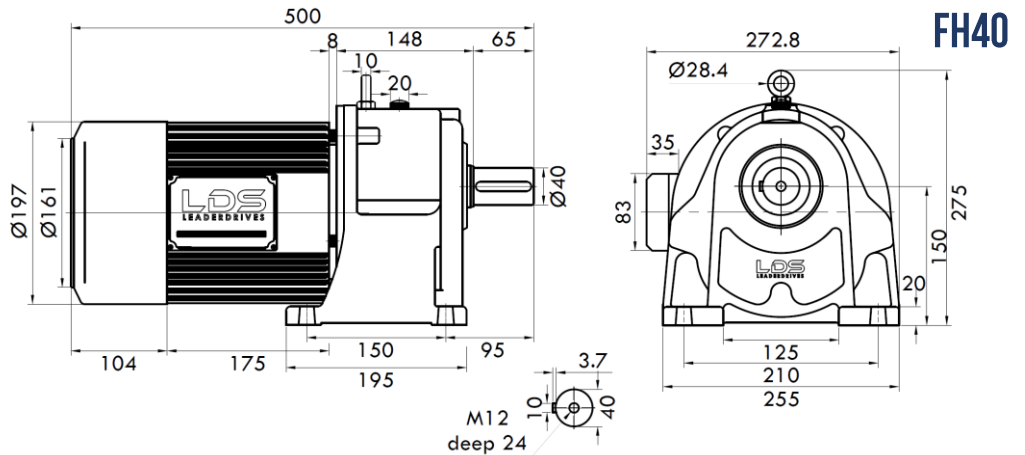
GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 40MM (KEY 10X10)

FOOT MOUNTING PCD : 150 X 210MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FH40

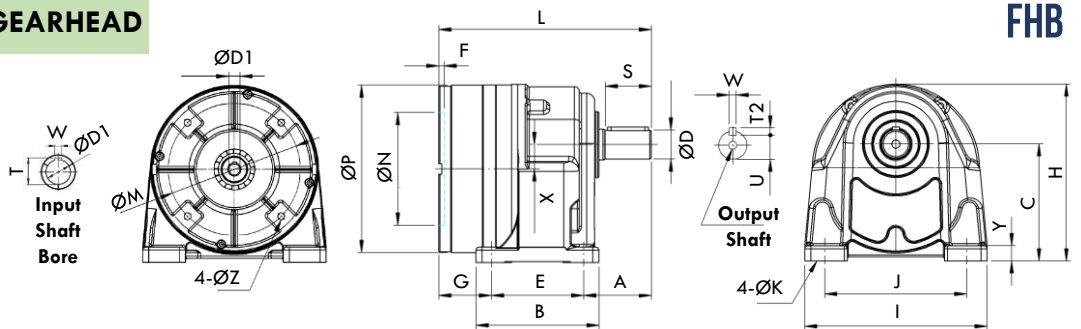
DIMENSION : SEPARATED GEARHEAD

MODEL :

FHB18 ~

FHB40

FOOT
MOUNTING



FHB

OUTPUT POWER (4P)	MODEL NO.	GEAR RATIO	A	B	C	E	F	G	H	I	J	K	L	M	N	P	X	Y	Z	OUTPUT SHAFT				INPUT SHAFT BORE			WEIGHT (KG)	
																				D	S	W	T2	U	D1	W		T
0.2KW	18	1/3-1/30	46	65	85	40	5	78	148	135	110	9	164	130	110	160	17	12	8	18	30	5	5	15	11	4	13	3
	22	1/40-1/160	58	90	95	65	5	67	158	155	130	9	190	130	110	160	18	13	8	22	40	7	7	18	11	4	13	6
0.4KW	22	1/3-1/30	58	90	95	65	5	67	158	155	130	9	190	130	110	160	18	13	8	22	40	7	7	18	14	5	16.5	5
	28	1/40-1/160	66	120	115	90	5	54	175	180	140	11	210	130	110	160	23	15	8	28	45	7	7	24	14	5	16.5	7
0.75KW	28	1/3-1/30	66	120	115	90	5	69	191	180	140	11	225	165	130	200	23	15	10	28	45	7	7	24	19	6	22	6
	32	1/30-1/160	78	165	130	130	5	42	202	210	170	13	250	165	130	200	26	18	10	32	55	10	8	27	19	6	22	10
1.5KW	28	1/3-1/25	66	120	115	90	5	79	191	180	140	11	235	165	130	200	23	15	10	28	45	7	7	24	24	8	27.5	7
	32	1/3-1/60	78	165	130	130	5	52	202	210	170	13	260	165	130	200	26	18	10	32	55	10	8	27	24	8	27.5	10
2.2KW	40	1/60-1/100	95	195	150	150	5	57	240	255	210	15	302	165	130	200	28	20	10	40	65	10	8	35	24	8	27.5	34
	32	1/3-1/60	78	165	130	130	5	52	202	210	170	13	260	165	130	200	26	18	10	32	55	10	8	27	24	8	27.5	10
2.2KW	40	1/60-1/100	95	195	150	150	5	57	240	255	210	15	302	165	130	200	28	20	10	40	65	10	8	35	24	8	27.5	34

DIMENSION : INTEGRAL SMALL GEAR MOTOR

FV18~FV32

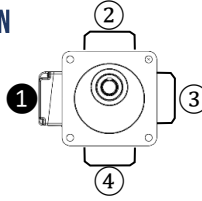
INPUT VOLTAGE OF MOTOR :

- C2 : 1PHASE 240V (50/60HZ)
- TN : 3PHASE 205/415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

TERMINAL BOX POSITION

DEFAULT POSITION :

- ① LEFT



MODEL : FV18-0.2KW-□

FLANGE MOUNTING

MOTOR POWER : 0.2KW

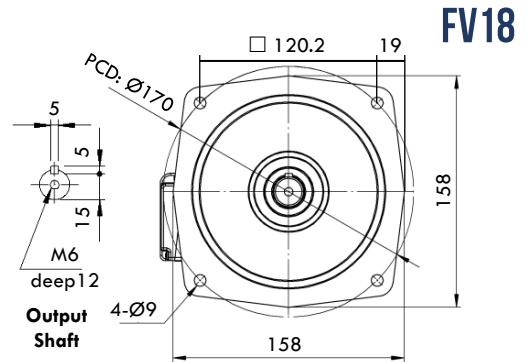
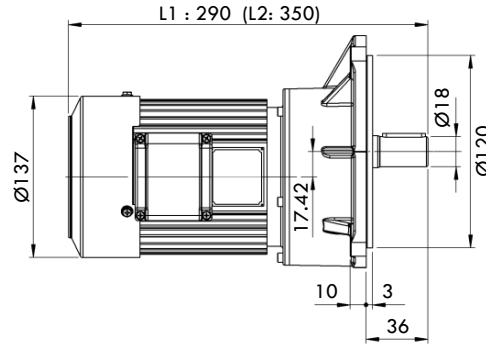
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 18MM (KEY 5X5)

FLANGE MOUNTING PCD : 170MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV18

MODEL : FV22-0.4KW-□

FLANGE MOUNTING

MOTOR POWER : 0.4KW

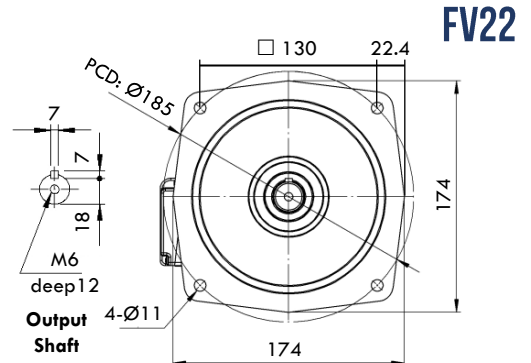
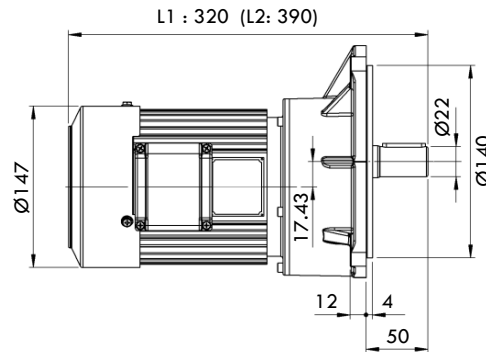
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 22MM (KEY 7X7)

FLANGE MOUNTING PCD : 185MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV22

MODEL : FV28-0.75KW-□

FLANGE MOUNTING

MOTOR POWER : 0.75KW

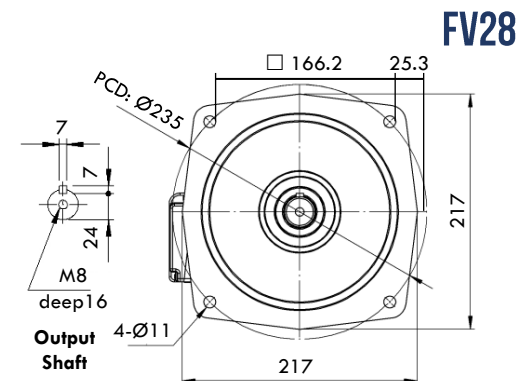
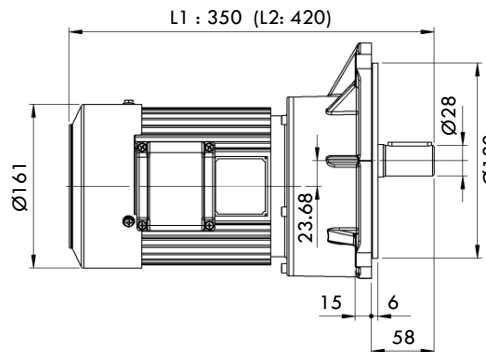
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 28MM (KEY 7X7)

FLANGE MOUNTING PCD : 235MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV28

MODEL : FV32-1.5KW-□

FLANGE MOUNTING

MOTOR POWER : 1.5KW

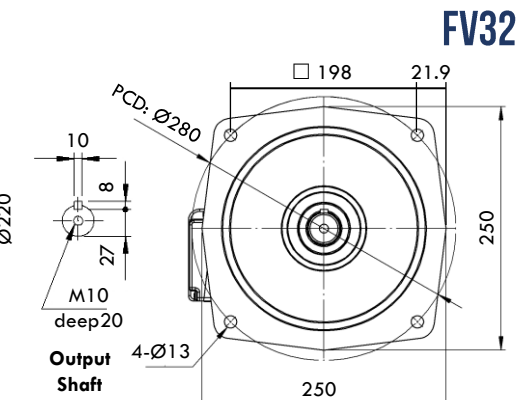
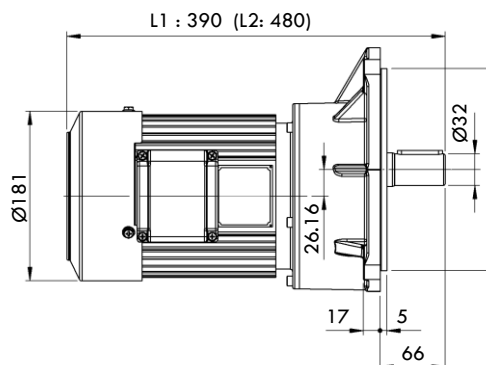
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 32MM (KEY 10X10)

FLANGE MOUNTING PCD : 280MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV32

DIMENSION : INTEGRAL SMALL GEAR MOTOR

FV32~FV40

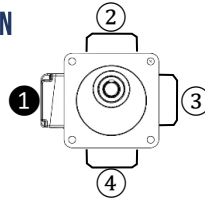
INPUT VOLTAGE OF MOTOR :

- C2 : 1PHASE 240V (50/60HZ)
- TN : 3PHASE 205/415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

TERMINAL BOX POSITION

DEFAULT POSITION :

- ① LEFT



MODEL : FV32-2.2KW-□

FLANGE MOUNTING

MOTOR POWER : 2.2KW

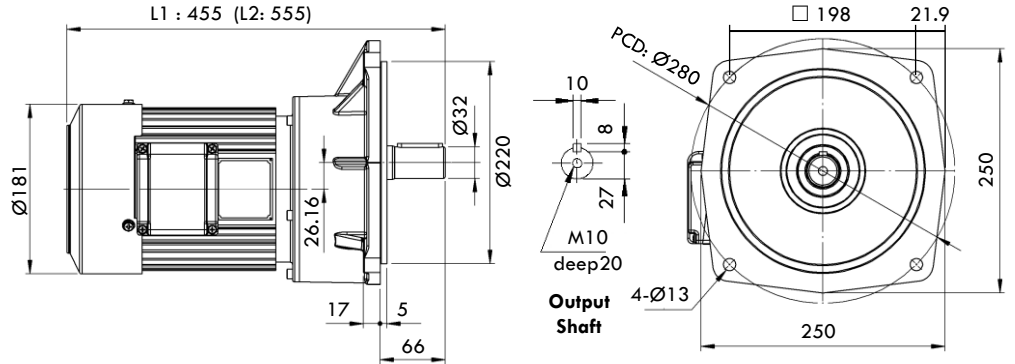
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 32MM (KEY 10X10)

FLANGE MOUNTING PCD : 280MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV32

MODEL : FV40-2.2KW-□

FLANGE MOUNTING

MOTOR POWER : 2.2KW

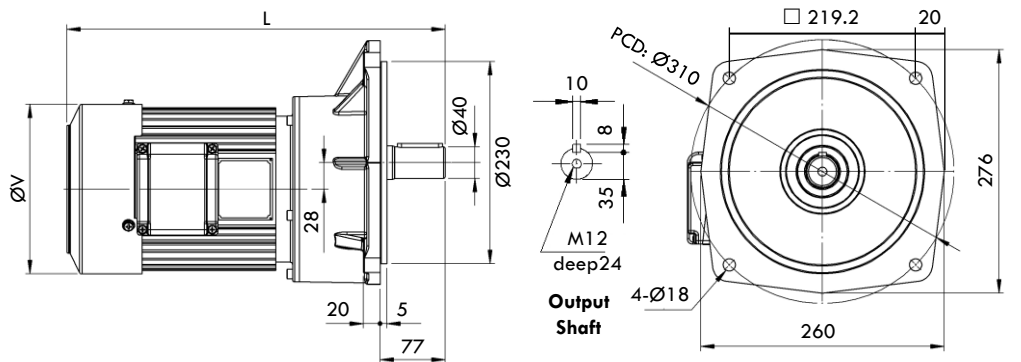
GEAR RATIO : 3 - 5 - 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 - 60 -
80 - 100 - 120 - 150

OUTPUT SHAFT SIZE : DIA. 40MM (KEY 10X10)

FLANGE MOUNTING PCD : 310MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FV40

DIMENSION : SEPARATED GEARHEAD

MODEL :

FVB18 ~

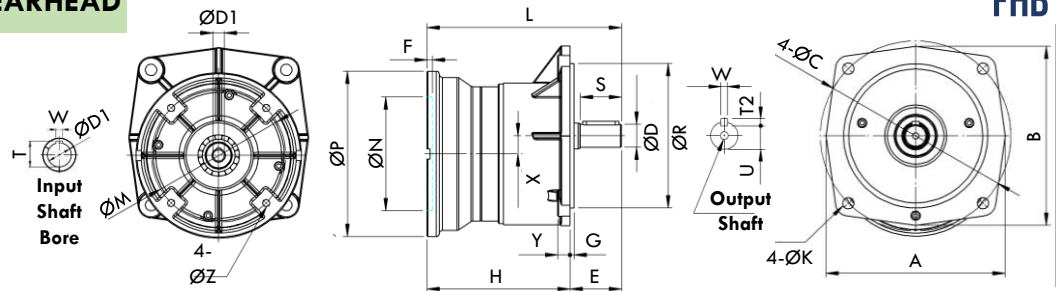
FVB40

IEC

INPUT

FLANGE

MOUNTING



FHB

OUTPUT POWER (4P)	MODEL NO.	GEAR RATIO	A	B	C	E	F	G	H	K	L	M	N	P	R	X	Y	Z	OUTPUT SHAFT				INPUT SHAFT BORE			WEIGHT (KG)	
																			D	S	W	T2	U	D1	W		T
0.2KW	18	1/3-1/30	158	158	170	36	5	3	128	9	164	130	110	160	120	17	10	8	18	30	5	5	15	11	4	13	3
	22	1/40-1/160	174	174	185	50	5	4	140	11	190	130	110	160	140	18	12	8	22	40	7	7	18	11	4	13	6
0.4KW	22	1/3-1/30	174	174	185	50	5	4	140	11	190	130	110	160	140	18	12	8	22	40	7	7	18	14	5	16.5	5
	28	1/40-1/160	217	217	235	58	5	6	152	11	210	130	110	160	180	23	15	8	28	45	7	7	24	14	5	16.5	7
0.75KW	28	1/3-1/30	217	217	235	58	5	6	167	11	225	165	130	200	180	23	15	10	28	45	7	7	24	19	6	22	6
	32	1/30-1/160	250	250	280	66	5	5	184	13	250	165	130	200	220	26	17	10	32	55	10	8	27	19	6	22	10
1.5KW	28	1/3-1/25	217	217	235	58	5	6	177	11	235	165	130	200	180	23	15	10	28	45	7	7	24	24	8	27.5	7
	32	1/3-1/60	250	250	280	66	5	5	194	13	260	165	130	200	220	26	17	10	32	55	10	8	27	24	8	27.5	10
	40	1/60-1/160	260	276	310	77	5	5	225	18	302	165	130	200	230	28	20	10	40	65	10	8	35	24	8	27.5	34
2.2KW	32	1/3-1/60	250	250	280	66	5	5	194	13	260	165	130	200	220	26	17	10	32	55	10	8	27	24	8	27.5	10
	40	1/60-1/160	260	276	310	77	5	5	225	18	302	165	130	200	230	28	20	10	40	65	10	8	35	24	8	27.5	34

DIMENSION : INTEGRAL SMALL GEAR MOTOR

FVA18~FVA22

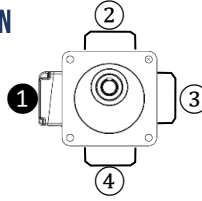
INPUT VOLTAGE OF MOTOR :

- C2 : 1PHASE 240V (50/60HZ)
- TN : 3PHASE 205/415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

TERMINAL BOX POSITION

DEFAULT POSITION :

- ① LEFT



MODEL : FVA18-0.1KW-□

SMALL FLANGE MOUNTING

MOTOR POWER : 0.1KW

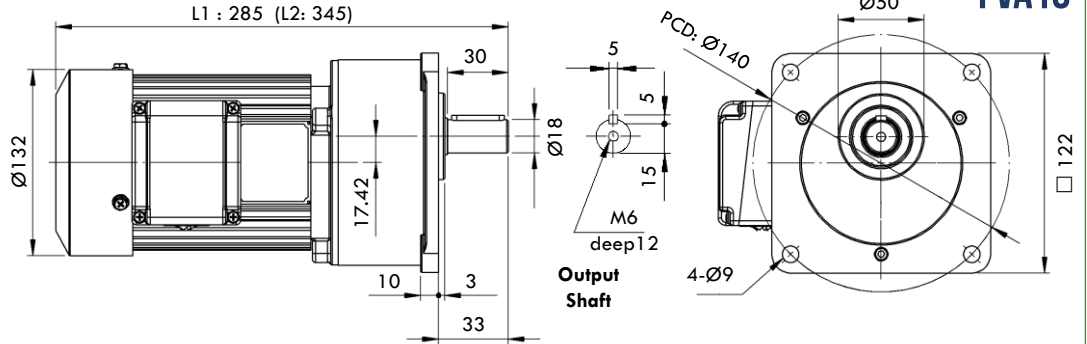
- GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 18MM (KEY 5X5)

FLANGE MOUNTING PCD : 140MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FVA18

MODEL : FVA18-0.2KW-□

SMALL FLANGE MOUNTING

MOTOR POWER : 0.2KW

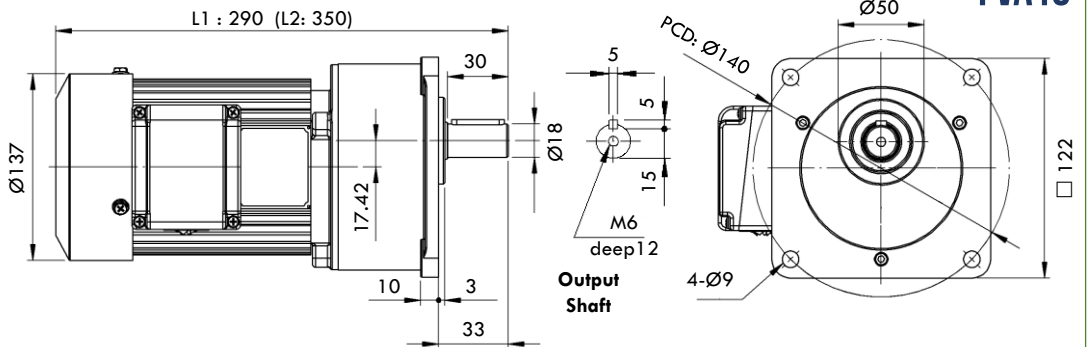
- GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 18MM (KEY 5X5)

FLANGE MOUNTING PCD : 140MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FVA18

MODEL : FVA22-0.2KW-□

SMALL FLANGE MOUNTING

MOTOR POWER : 0.2KW

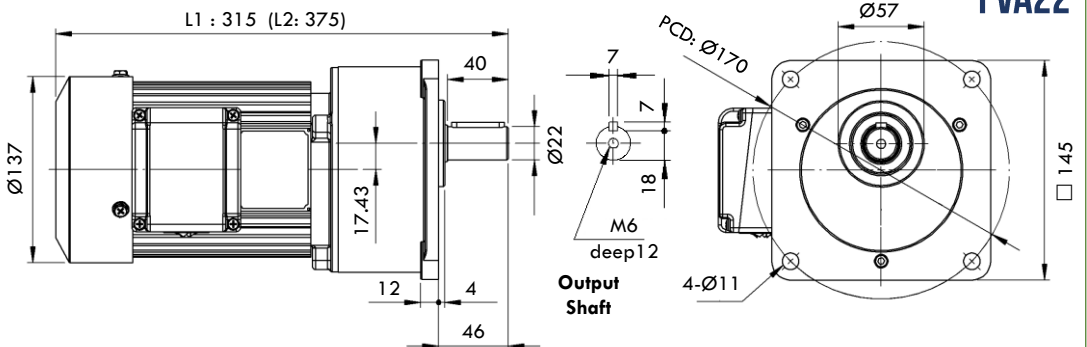
- GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 22MM (KEY 7X7)

FLANGE MOUNTING PCD : 170MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FVA22

MODEL : FVA22-0.4KW-□

SMALL FLANGE MOUNTING

MOTOR POWER : 0.4KW

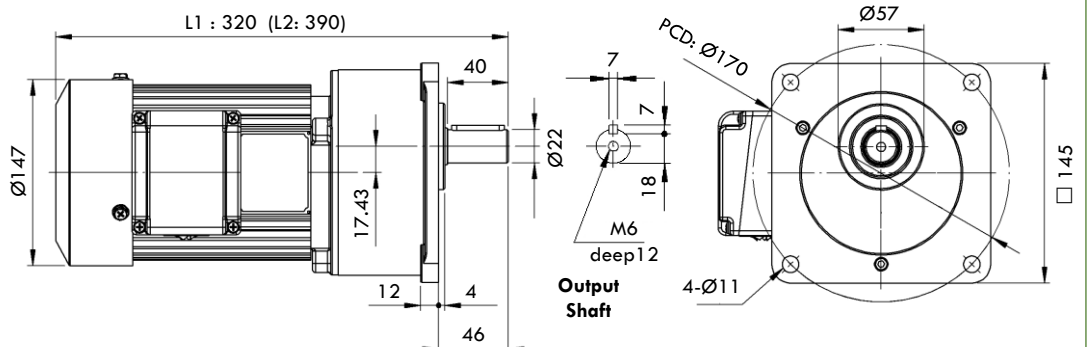
- GEAR RATIO : 3 • 5 • 7.5 • 10 • 15 • 20 •
25 • 30 • 40 • 50 • 60 •
80 • 100 • 120 • 150

OUTPUT SHAFT SIZE : DIA. 22MM (KEY 7X7)

FLANGE MOUNTING PCD : 170MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



FVA22

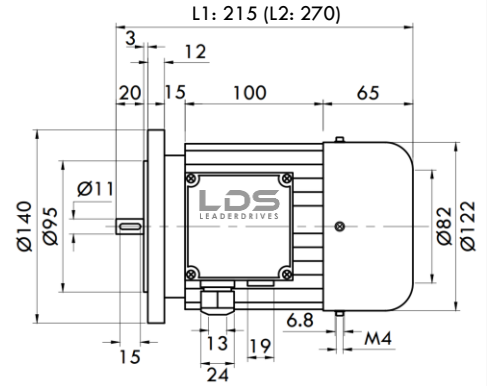
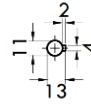
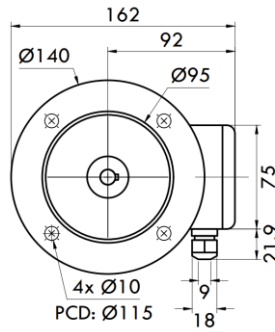
DIMENSION : ASYNCHRONOUS MOTOR

0.18KW~0.37KW

MOTOR POWER : 0.18KW - 0.25KW

MOTOR FRAME : 63B5

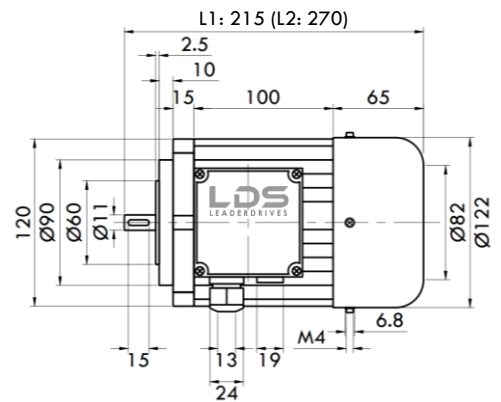
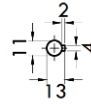
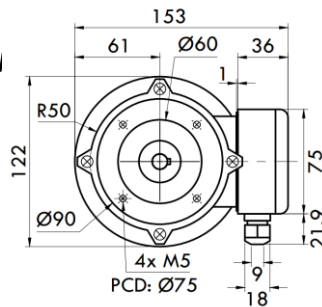
- OUTPUT SHAFT SIZE: Ø11MM (KEY 4X4)
- OUTPUT SHAFT HEIGHT: 13MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 20MM
- MOUNTING PCD: Ø115MM
- FRAME SIZE: Ø140MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 0.18KW - 0.25KW

MOTOR FRAME : 63B14

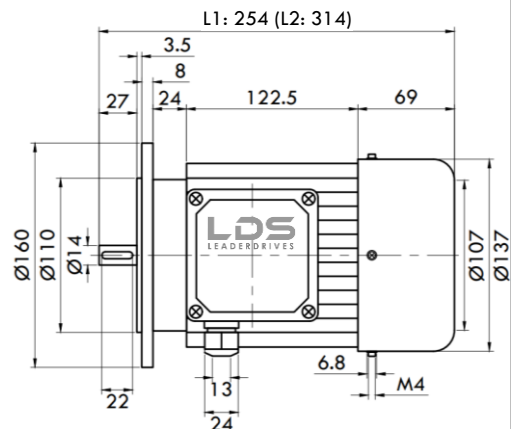
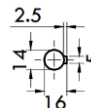
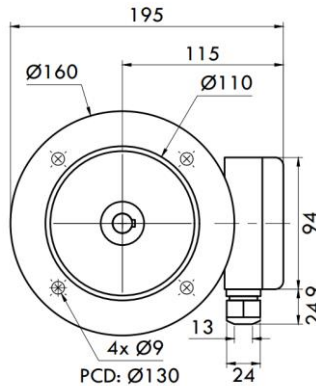
- OUTPUT SHAFT SIZE: Ø11MM (KEY 4X4)
- OUTPUT SHAFT HEIGHT: 13MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 20MM
- MOUNTING PCD: Ø75MM
- FRAME SIZE: Ø120MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 0.37KW - 0.55KW

MOTOR FRAME : 71B5

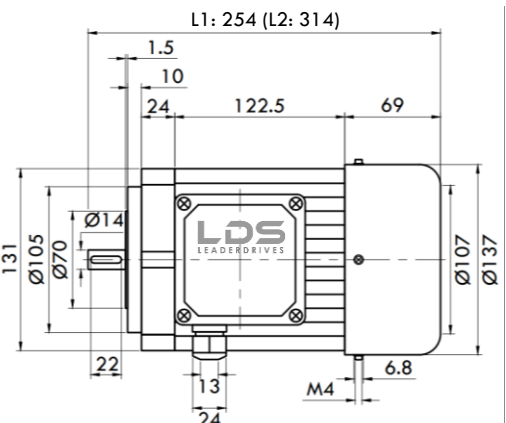
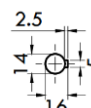
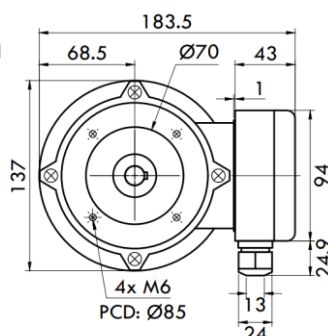
- OUTPUT SHAFT SIZE: Ø14MM (KEY 5X5)
- OUTPUT SHAFT HEIGHT: 16MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 27MM
- MOUNTING PCD: Ø130MM
- FRAME SIZE: Ø160MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 0.37KW - 0.55KW

MOTOR FRAME : 71B14

- OUTPUT SHAFT SIZE: Ø14MM (KEY 5X5)
- OUTPUT SHAFT HEIGHT: 16MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 27MM
- MOUNTING PCD: Ø85MM
- FRAME SIZE: Ø131MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



0.75KW~1.5KW

DIMENSION : ASYNCHRONOUS MOTOR

MOTOR POWER : 0.75KW - 1.1KW

MOTOR FRAME : 80B5

OUTPUT SHAFT SIZE: Ø19MM (KEY 6X6)

OUTPUT SHAFT HEIGHT: 22MM (INCLUDE KEYWAY)

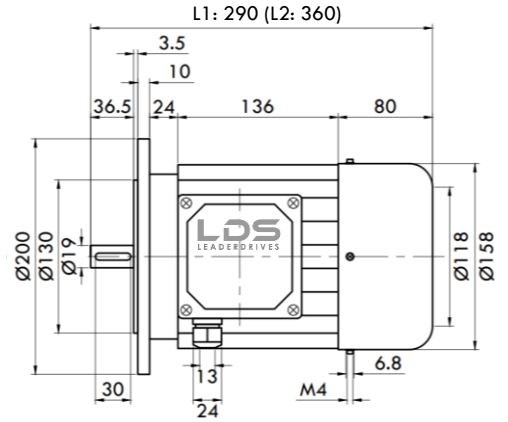
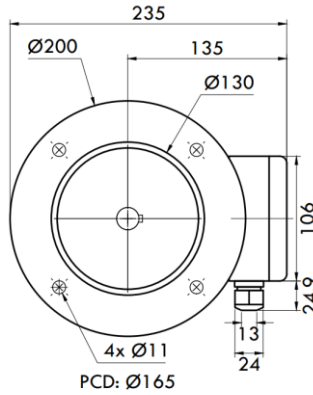
OUTPUT SHAFT LENGTH: 36MM

MOUNTING PCD: Ø165MM

FRAME SIZE: Ø200MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 0.75KW - 1.1KW

MOTOR FRAME : 80B14

OUTPUT SHAFT SIZE: Ø19MM (KEY 6X6)

OUTPUT SHAFT HEIGHT: 22MM (INCLUDE KEYWAY)

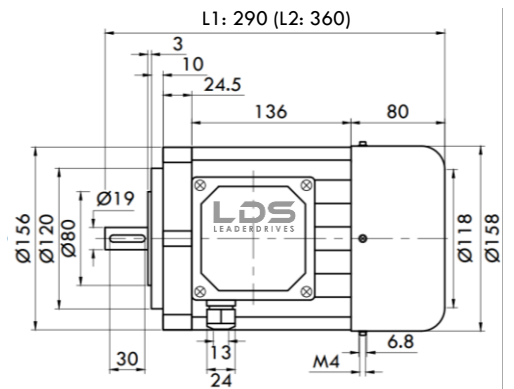
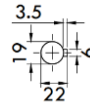
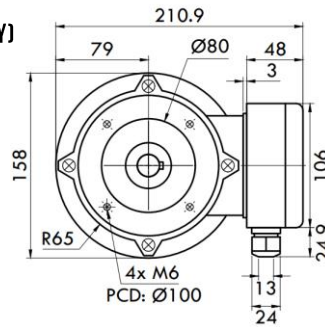
OUTPUT SHAFT LENGTH: 36MM

MOUNTING PCD: Ø100MM

FRAME SIZE: Ø156MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 1.1KW - 1.5KW

MOTOR FRAME : 90B14

OUTPUT SHAFT SIZE: Ø24MM (KEY 8X8)

OUTPUT SHAFT HEIGHT: 27MM (INCLUDE KEYWAY)

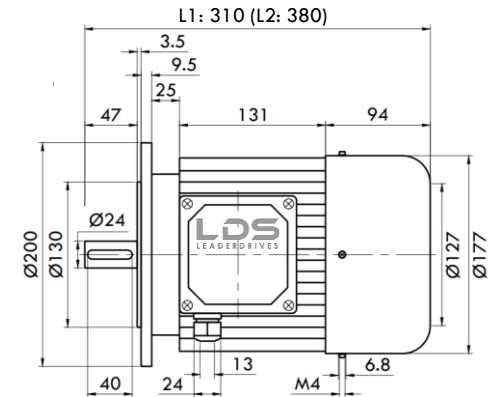
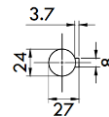
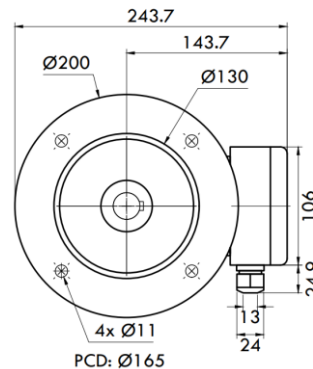
OUTPUT SHAFT LENGTH: 47MM

MOUNTING PCD: Ø165MM

FRAME SIZE: Ø200MM

L1 : BODY LENGTH OF STANDARD MOTOR

L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 1.1KW - 1.5KW

MOTOR FRAME : 90B14

OUTPUT SHAFT SIZE: Ø24MM (KEY 8X8)

OUTPUT SHAFT HEIGHT: 27MM (INCLUDE KEYWAY)

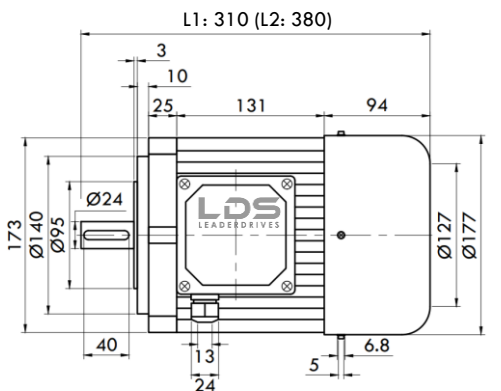
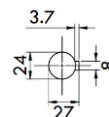
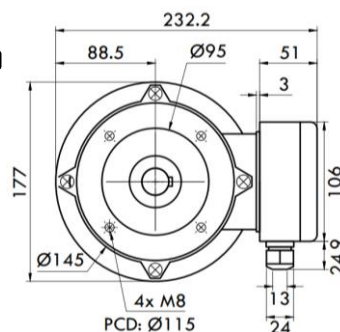
OUTPUT SHAFT LENGTH: 47MM

LENGTH:

MOUNTING PCD: Ø115MM

FRAME SIZE: Ø173MM

() : BODY LENGTH OF BRAKE MOTOR

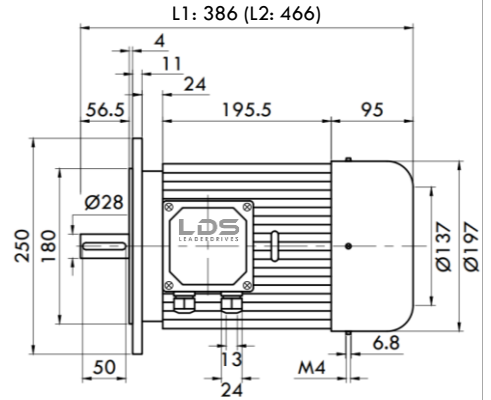
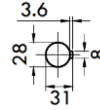
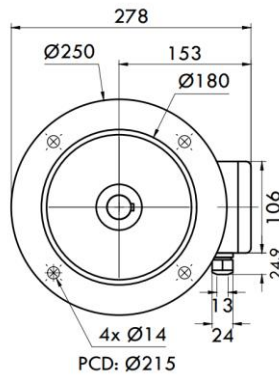


DIMENSION : ASYNCHRONOUS MOTOR

MOTOR POWER : 2.2KW

MOTOR FRAME : 100B5

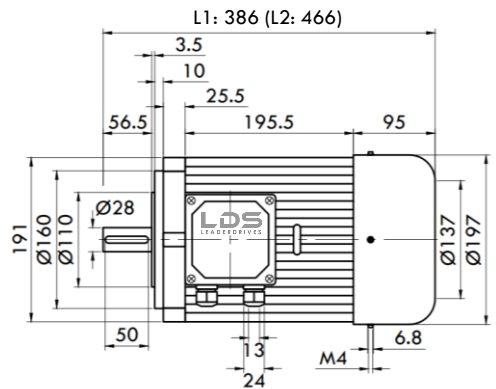
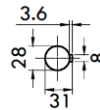
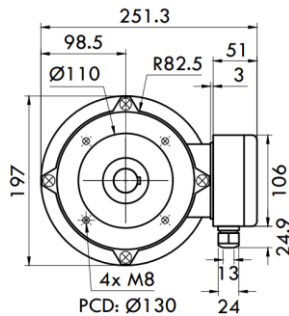
- OUTPUT SHAFT SIZE: Ø28MM (KEY 8X8)
- OUTPUT SHAFT HEIGHT: 31MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 56MM
- MOUNTING PCD: Ø215MM
- FRAME SIZE: Ø250MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



MOTOR POWER : 2.2KW

MOTOR FRAME : 100B14

- OUTPUT SHAFT SIZE: Ø28MM (KEY 8X8)
- OUTPUT SHAFT HEIGHT: 31MM (INCLUDE KEYWAY)
- OUTPUT SHAFT LENGTH: 56MM
- MOUNTING PCD: Ø120MM
- FRAME SIZE: Ø191MM
- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF BRAKE MOTOR



DIMENSION : AUMINIUM WORM GEAR REDUCER

MODEL : DMRS#030 - DMRV#030

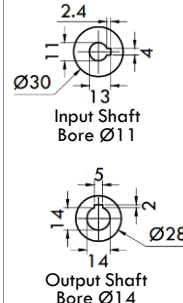
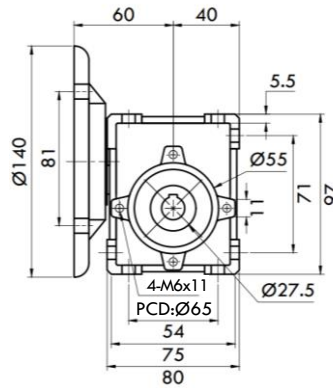
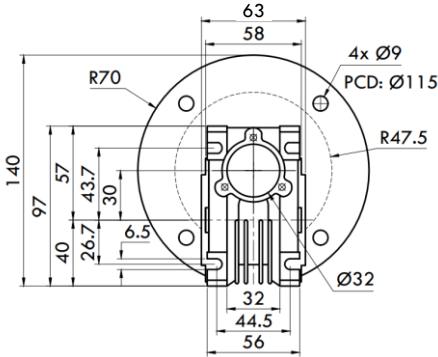
MOTOR POWER: 0.18KW - 0.2KW - 0.25KW - 0.37KW
 MOTOR FRAME (IEC): 63B5 - 63B14 - 71B5 - 71B14
 GEAR RATIO: 5 - 7.5 - 10 - 15 - 20 - 25 -
 30 - 40 - 50 - 60 - 80

OUTPUT SHAFT BORE: HOLLOW Ø14MM (KEY 5X5)
 OUTPUT SHAFT HEIGHT: 16MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø65MM



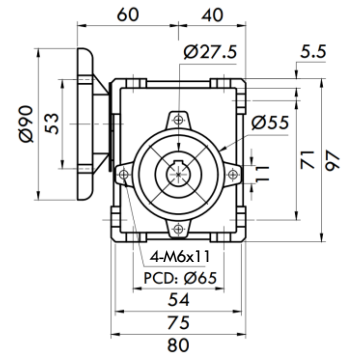
MODEL : #030 - 63B5

MOTOR POWER : 0.18KW ~ 0.25KW



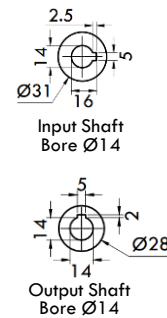
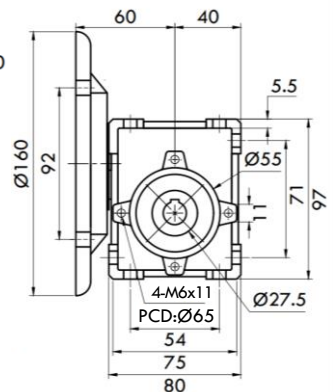
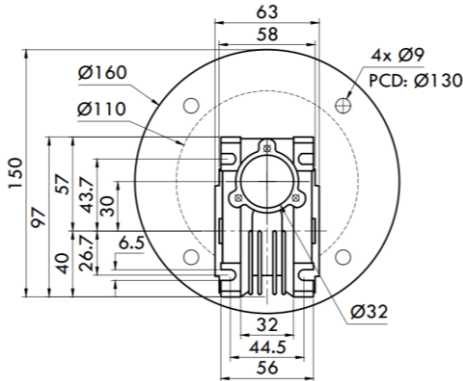
MODEL : #030 - 63B14

MOTOR POWER : 0.18KW ~ 0.25KW
 *WITH SMALL MOUNTING FLANGE



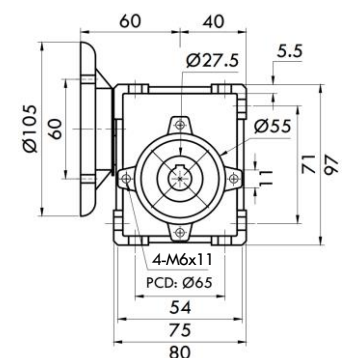
MODEL : #030 - 71B5

MOTOR POWER : 0.25KW ~ 0.4KW

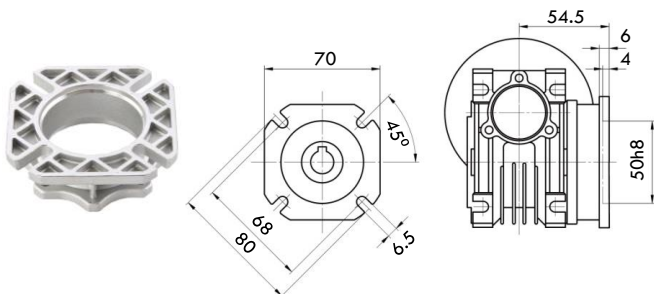


MODEL : #030 - 71B14

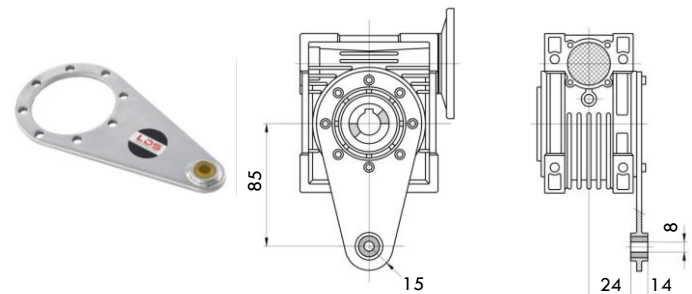
MOTOR POWER : 0.25KW ~ 0.4KW
 *WITH SMALL MOUNTING FLANGE



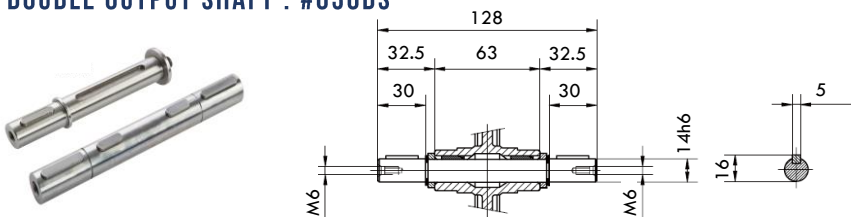
OUTPUT FLANGE : #030F



TORQUE ARM : #030TA



SINGLE OUTPUT SHAFT : #030SS DOUBLE OUTPUT SHAFT : #030DS



TERMINAL BOX POSITION DEFAULT POSITION :



#040

DIMENSION : ALUMINIUM WORM GEAR REDUCER

MODEL : DMRS#040 - DMRV#040

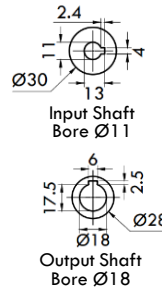
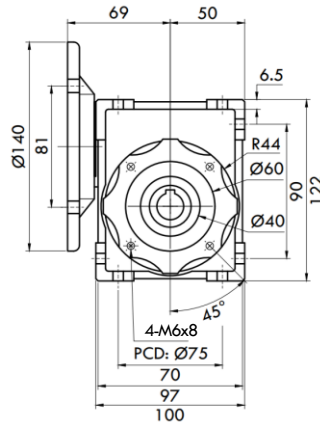
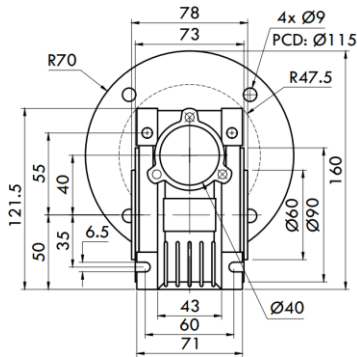
MOTOR POWER: 0.2KW - 0.25KW - 0.37KW - 0.4KW
 MOTOR FRAME (IEC): 63B5 - 63B14 - 71B5 - 71B14
 GEAR RATIO: 5 - 7.5 - 10 - 15 - 20 - 25 -
 30 - 40 - 50 - 60 - 80

OUTPUT SHAFT BORE: HOLLOW Ø18MM (KEY 6X6)
 OUTPUT SHAFT HEIGHT: 20MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø75MM



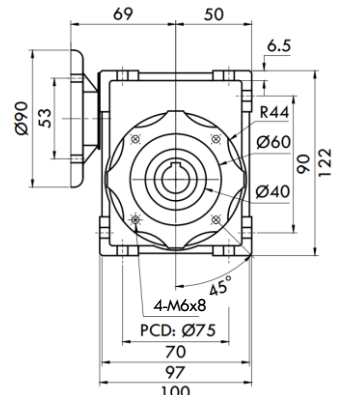
MODEL : #040 - 63B5

MOTOR POWER : 0.18KW ~ 0.25KW



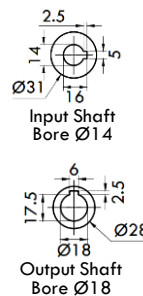
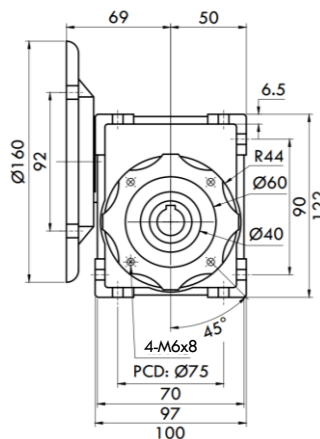
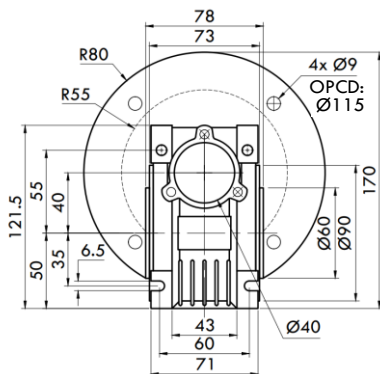
MODEL : #040 - 63B14

MOTOR POWER : 0.18KW ~ 0.25KW
 *WITH SMALL MOUNTING FLANGE



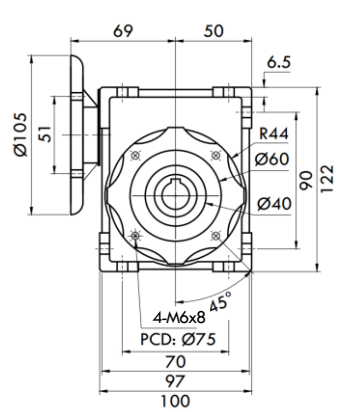
MODEL : #040 - 71B5

MOTOR POWER : 0.25KW ~ 0.4KW

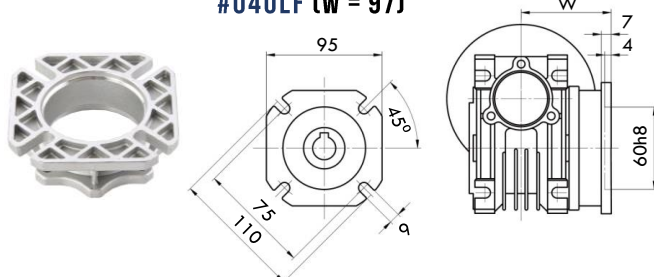


MODEL : #040 - 71B14

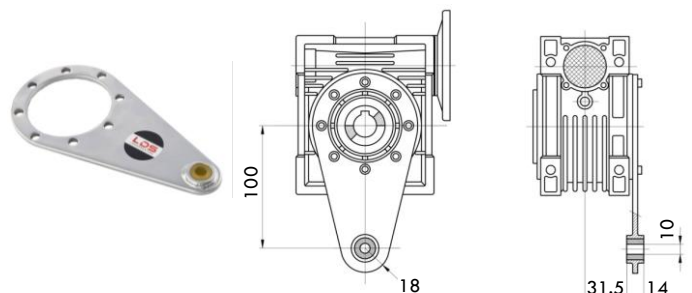
MOTOR POWER : 0.25KW ~ 0.4KW
 *WITH SMALL MOUNTING FLANGE



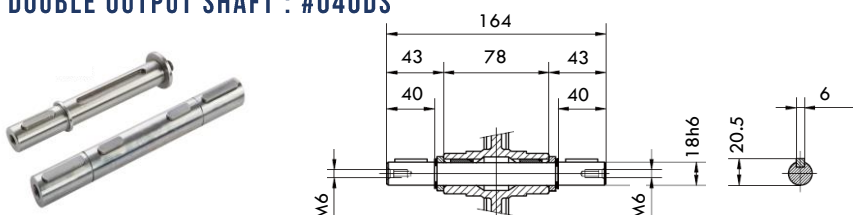
OUTPUT FLANGE : #040F (W = 67) #040LF (W = 97)



TORQUE ARM : #040TA

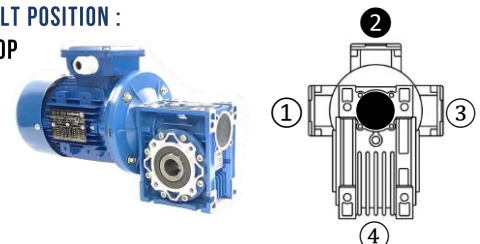


SINGLE OUTPUT SHAFT : #040SS DOUBLE OUTPUT SHAFT : #040DS



TERMINAL BOX POSITION DEFAULT POSITION :

② TOP



DIMENSION : ALUMINIUM WORM GEAR REDUCER

#050

MODEL : DMRS#050 - DMRV#050

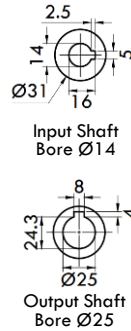
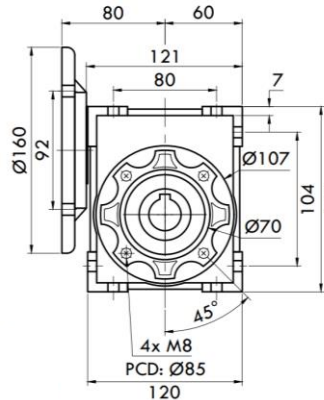
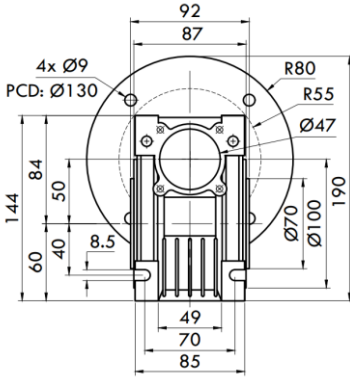
MOTOR POWER: 0.37KW - 0.4KW - 0.55KW - 0.75KW
 MOTOR FRAME (IEC): 71B5 - 71B14 - 80B5 - 80B14
 GEAR RATIO: 5 - 7.5 - 10 - 15 - 20 - 25 - 30 - 40 - 50 - 60 - 80 - 100

OUTPUT SHAFT BORE: HOLLOW Ø25MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 28.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø85MM



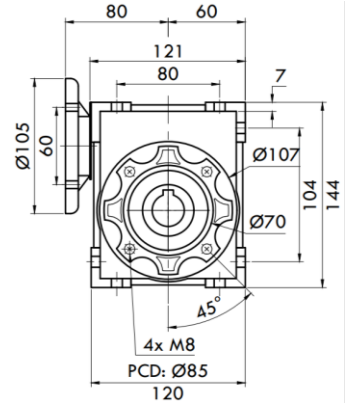
MODEL : #050 - 71B5

MOTOR POWER : 0.37KW ~ 0.55KW



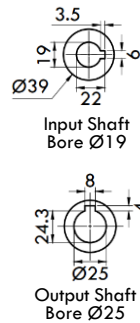
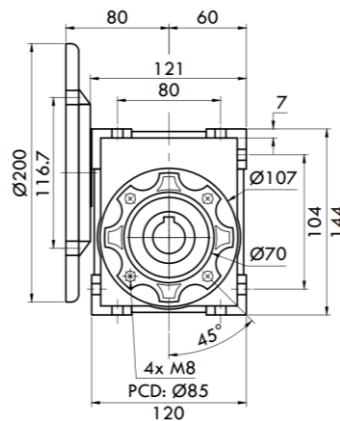
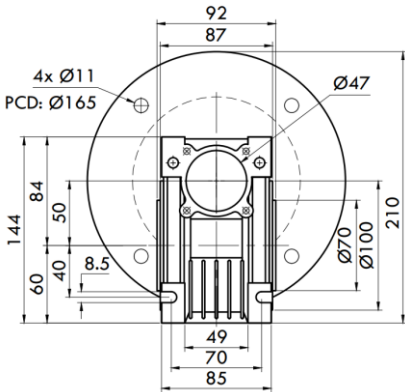
MODEL : #050 - 71B14

MOTOR POWER : 0.37KW ~ 0.55KW
 *WITH SMALL MOUNTING FLANGE



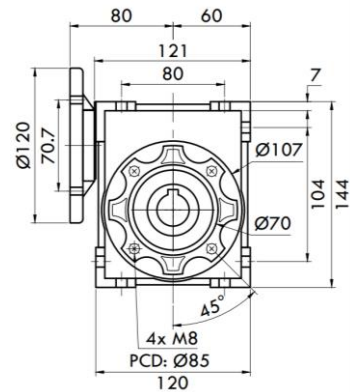
MODEL : #050 - 80B5

MOTOR POWER : 0.55KW ~ 0.75KW

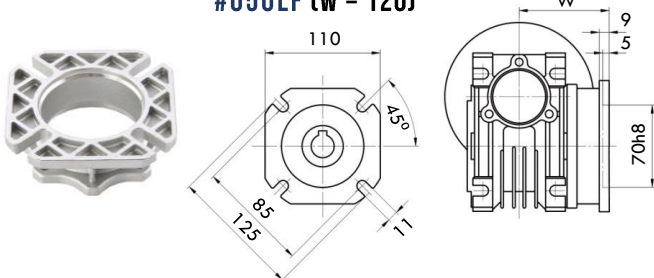


MODEL : #050 - 80B14

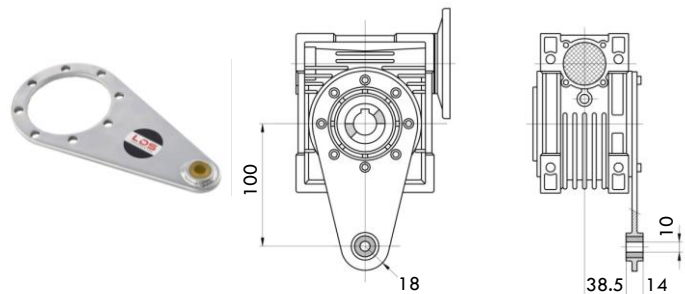
MOTOR POWER : 0.55KW ~ 0.75KW
 *WITH SMALL MOUNTING FLANGE



OUTPUT FLANGE : #050F (W = 90) - #050LF (W = 120)

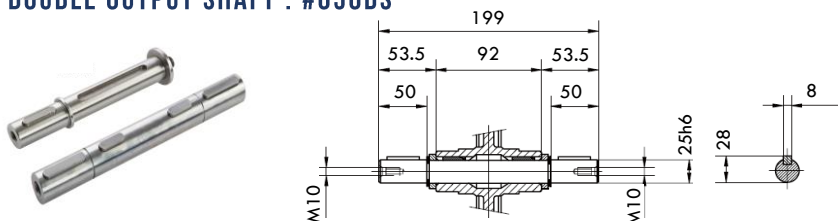


TORQUE ARM : #050TA



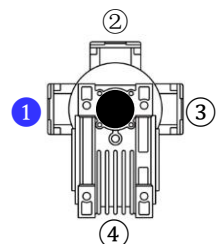
SINGLE OUTPUT SHAFT : #050SS

DOUBLE OUTPUT SHAFT : #050DS



TERMINAL BOX POSITION

1 LEFT



DIMENSION : ALUMINIUM WORM GEAR REDUCER

MODEL : DMRS#063 - DMRV#063

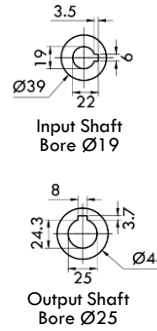
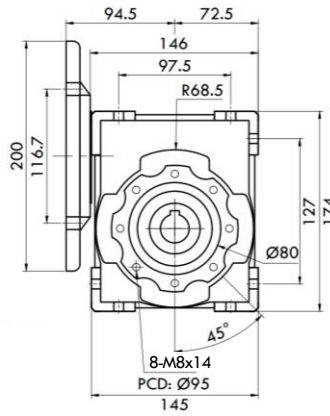
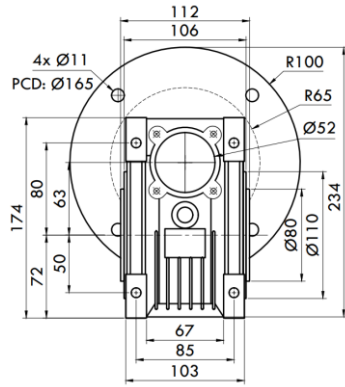
MOTOR POWER: 0.55KW - 0.75KW - 1.1KW - 1.5KW
 MOTOR FRAME (IEC): 80B5 - 80B14 - 90B5 - 90B14
 GEAR RATIO: 5 - 7.5 - 10 - 15 - 20 - 25 -
 30 - 40 - 50 - 60 - 80 - 100

OUTPUT SHAFT BORE: HOLLOW Ø25MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 28MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø95MM



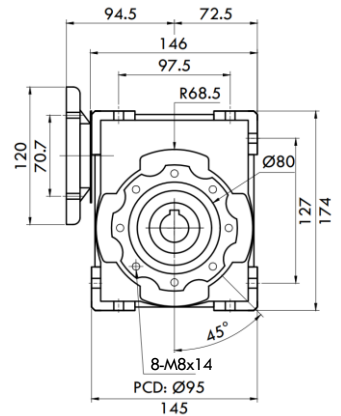
MODEL : #063 - 80B5

MOTOR POWER : 0.55KW ~ 1.1KW



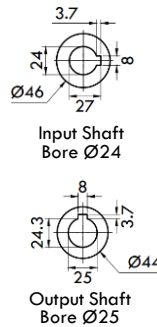
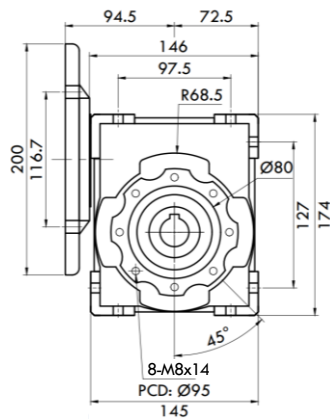
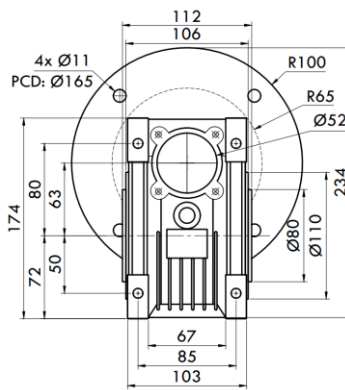
MODEL : #063 - 80B14

MOTOR POWER : 0.55KW ~ 1.1KW



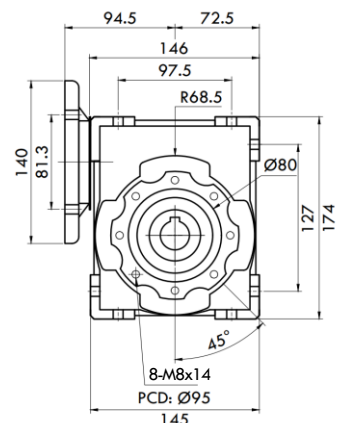
MODEL : #063 - 90B5

MOTOR POWER : 1.1KW ~ 1.5KW



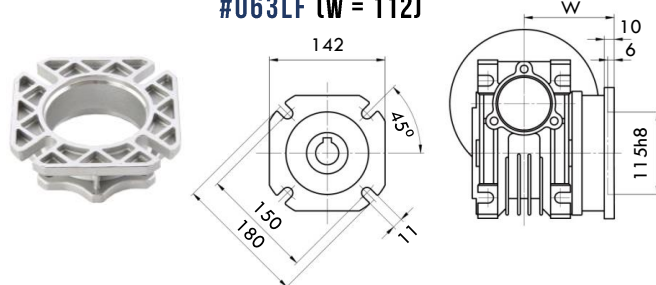
MODEL : #063 - 90B14

MOTOR POWER : 1.1KW ~ 1.5KW

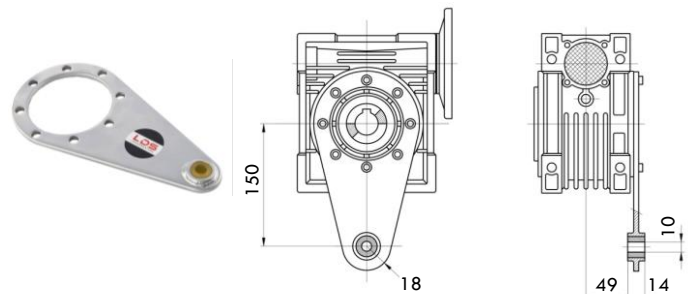


OUTPUT FLANGE : #063F (W = 82)

#063LF (W = 112)

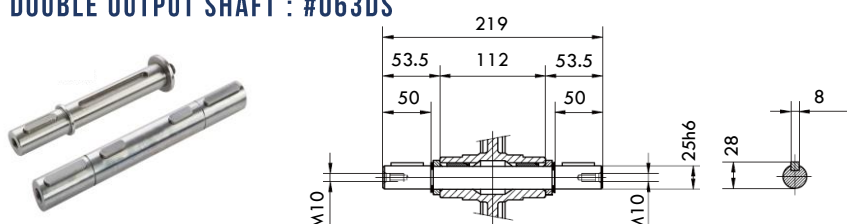


TORQUE ARM : #063TA



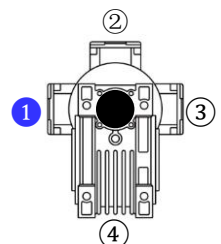
SINGLE OUTPUT SHAFT : #063SS

DOUBLE OUTPUT SHAFT : #063DS



TERMINAL BOX POSITION

① LEFT



#075

DIMENSION : ALUMINIUM WORM GEAR REDUCER

MODEL : DMRS#075 - DMRV#075

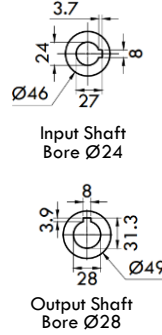
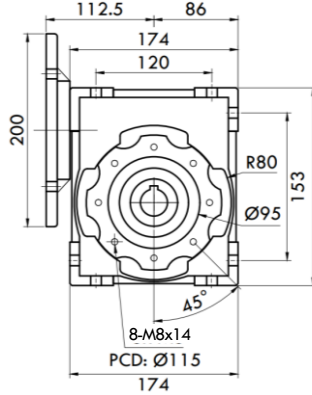
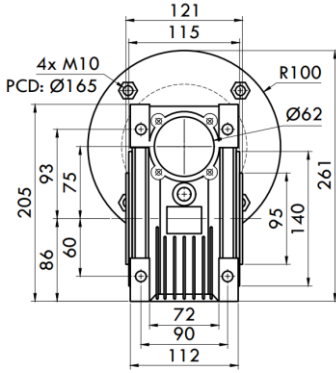
MOTOR POWER: 1.1KW - 1.5KW - 2.2KW - 3KW
 MOTOR FRAME (IEC): 90B5 - 90B14 - 100B5 - 100B14
 GEAR RATIO: 7.5 - 10 - 15 - 20 - 25 - 30 -
 40 - 50 - 60 - 80 - 100

OUTPUT SHAFT BORE: HOLLOW Ø28MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 31.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø115MM



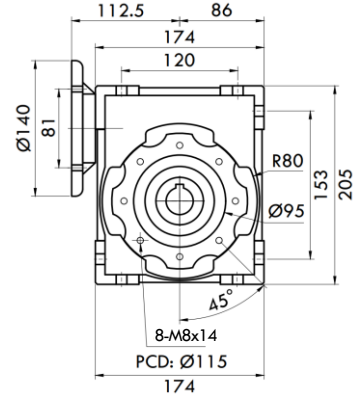
MODEL : #075 - 90B5

MOTOR POWER : 1.1KW ~ 2.2KW



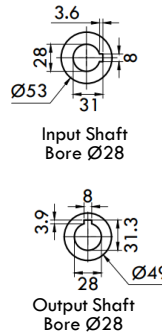
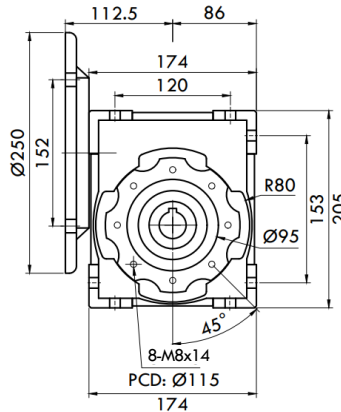
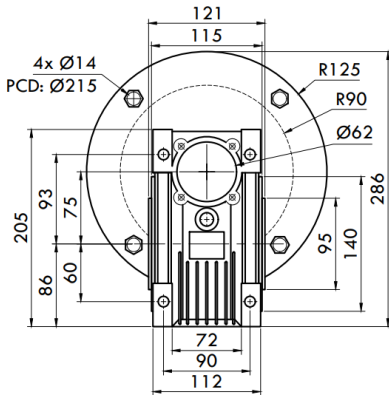
MODEL : #075 - 90B14

MOTOR POWER : 1.1KW ~ 2.2KW
 *WITH SMALL MOUNTING FLANGE



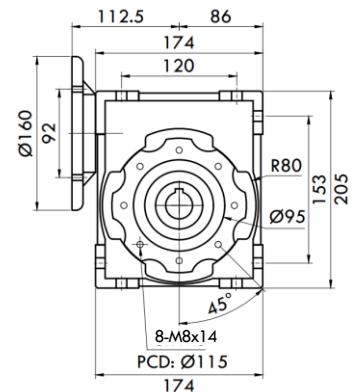
MODEL : #075 - 100B5

MOTOR POWER : 2.2KW ~ 3KW

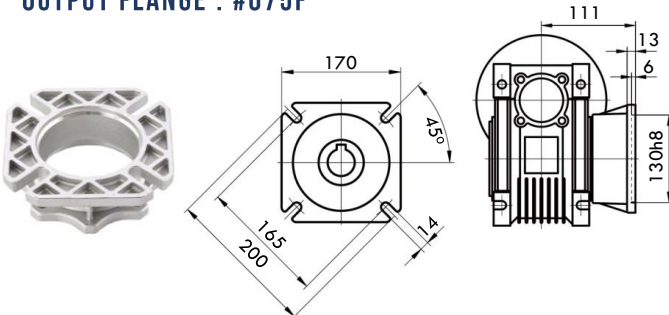


MODEL : #075 - 100B14

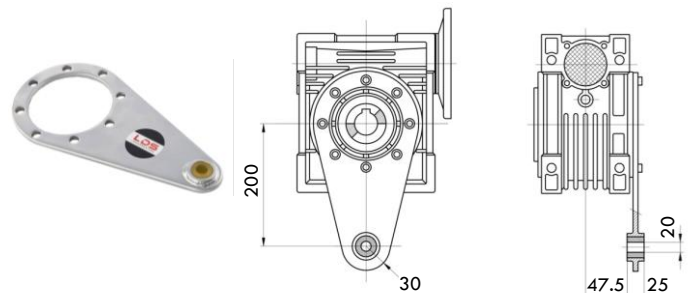
MOTOR POWER : 2.2KW ~ 3KW
 *WITH SMALL MOUNTING FLANGE



OUTPUT FLANGE : #075F

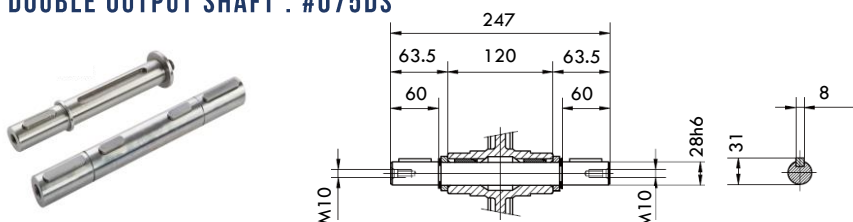


TORQUE ARM : #075TA



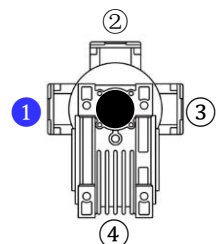
SINGLE OUTPUT SHAFT : #075SS

DOUBLE OUTPUT SHAFT : #075DS



TERMINAL BOX POSITION

① LEFT



DIMENSION : ALUMINIUM WORM GEAR REDUCER

MODEL : DMRS#090

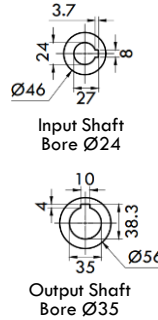
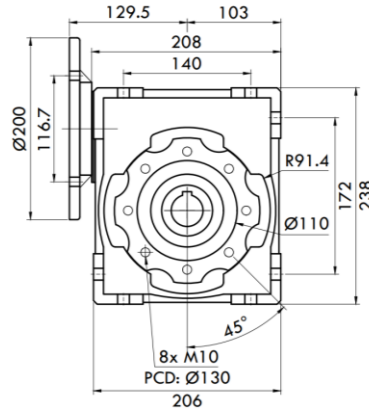
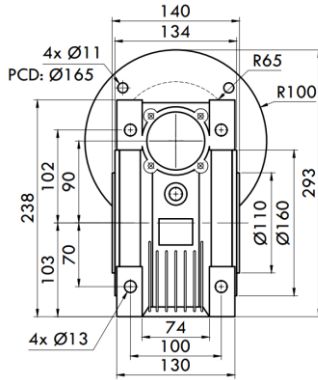
MOTOR POWER: 1.1KW • 1.5KW • 2.2KW • 3KW
 MOTOR FRAME (IEC): 90B5 • 90B14 • 100B5 • 100B14
 GEAR RATIO: 7.5 • 10 • 15 • 20 • 25 • 30 •
 40 • 50 • 60 • 80 • 100

OUTPUT SHAFT BORE: HOLLOW Ø35MM (KEY 10X10)
 OUTPUT SHAFT HEIGHT: 38.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø130MM



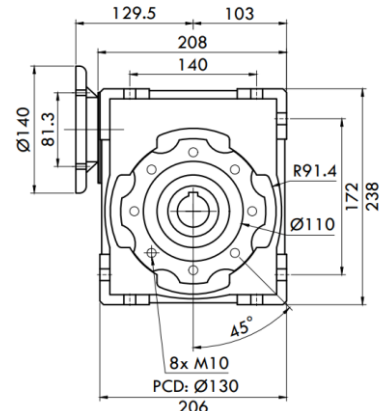
MODEL : #090 – 90B5

MOTOR POWER : 1.1KW ~ 2.2KW



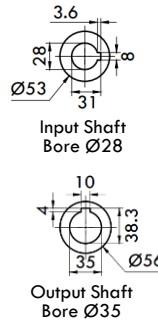
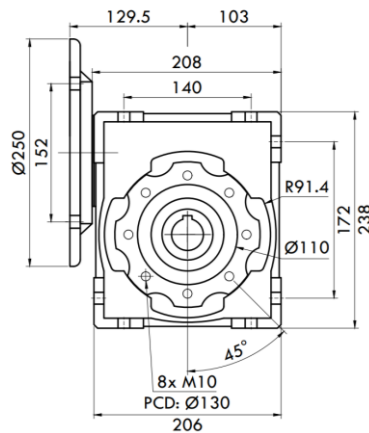
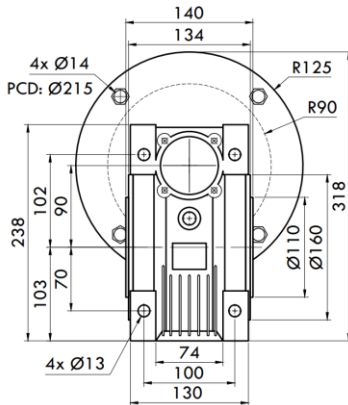
MODEL : #090 – 90B14

MOTOR POWER : 1.1KW ~ 2.2KW



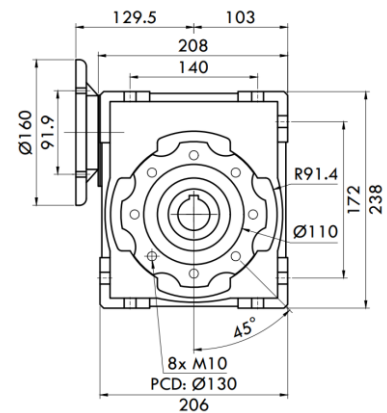
MODEL : #090 – 100B5

MOTOR POWER : 2.2KW ~ 3KW

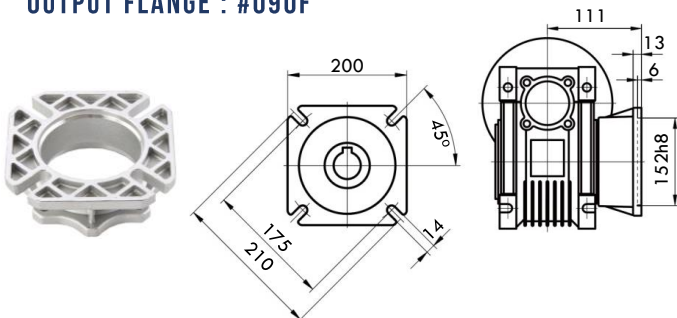


MODEL : #090 – 100B14

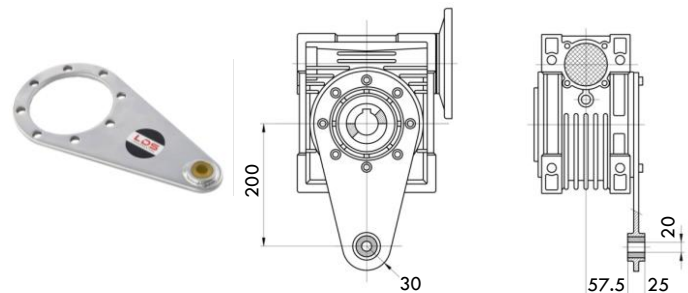
MOTOR POWER : 2.2KW ~ 3KW



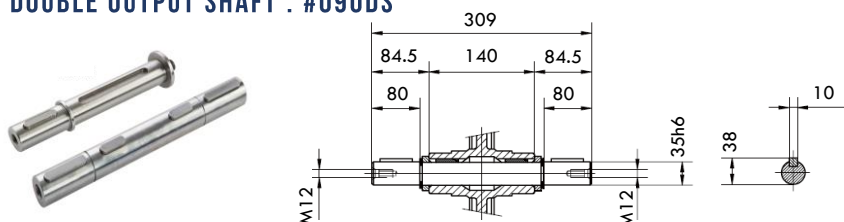
OUTPUT FLANGE : #090F



TORQUE ARM : #090TA

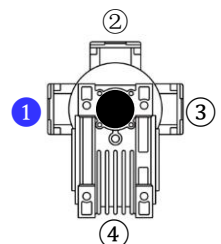


SINGLE OUTPUT SHAFT : #090SS DOUBLE OUTPUT SHAFT : #090DS



TERMINAL BOX POSITION

1 LEFT



#110~#150

DIMENSION : WORM GEAR REDUCER

MODEL : DMRS#110 - DMRS#130 - DMRS#150

MOTOR POWER: 4KW ~ 11KW

MOTOR FRAME (IEC): 112B5 - 132B5

GEAR RATIO: 10 - 15 - 20 - 25 - 30 - 40 - 50 - 60 - 80



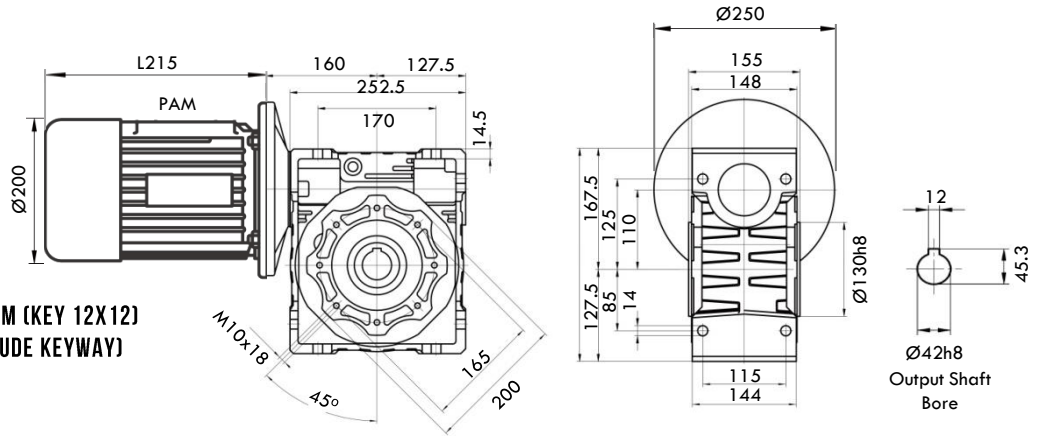
MODEL : DMRS#110

MOTOR POWER: 4KW - 5.5KW - 7.5KW

MOTOR FRAME: 112B5

GEAR RATIO: 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 -
60 - 80 - 100

OUTPUT SHAFT BORE: HOLLOW Ø42MM (KEY 12X12)
OUTPUT SHAFT HEIGHT: 45.3MM (INCLUDE KEYWAY)
OUTPUT MOUNTING : PCD Ø165MM



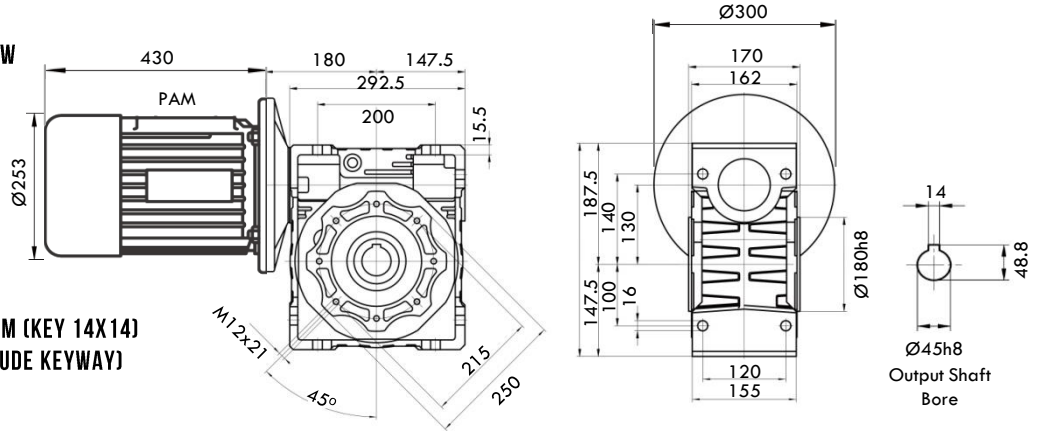
MODEL : DMRS#130

MOTOR POWER: 5.5KW - 7.5KW - 9.2KW

MOTOR FRAME: 132B5

GEAR RATIO: 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 -
60 - 80 - 100

OUTPUT SHAFT BORE: HOLLOW Ø45MM (KEY 14X14)
OUTPUT SHAFT HEIGHT: 48.8MM (INCLUDE KEYWAY)
OUTPUT MOUNTING : PCD Ø215MM



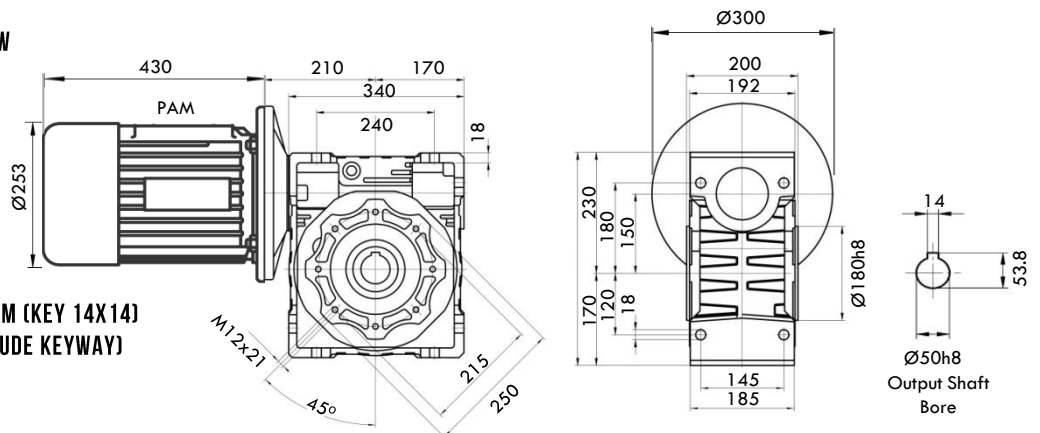
MODEL : DMRS#150

MOTOR POWER: 7.5KW - 9.2KW - 11KW

MOTOR FRAME: 132B5

GEAR RATIO: 7.5 - 10 - 15 - 20 -
25 - 30 - 40 - 50 -
60 - 80 - 100

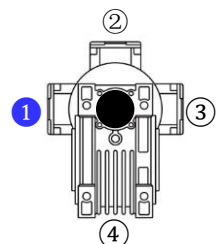
OUTPUT SHAFT BORE: HOLLOW Ø50MM (KEY 14X14)
OUTPUT SHAFT HEIGHT: 53.8MM (INCLUDE KEYWAY)
OUTPUT MOUNTING : PCD Ø215MM



Unit of measurement : mm (millimeter)

TERMINAL BOX POSITION

① LEFT



Unit of measurement : mm (millimeter)

DIMENSION : HELICAL HYPOID GEAR REDUCER

MODEL : OTS#050 - OTS#063 - OTS#075

MOTOR POWER: 0.2KW ~ 1.5KW
 MOTOR FRAME (IEC): 63B5 - 90B5
 GEAR RATIO: 7.5 - 10 - 15 - 20 - 25 - 30 - 40 - 50 - 60 - 80 - 100 - 125 - 150 - 200 - 250 - 300

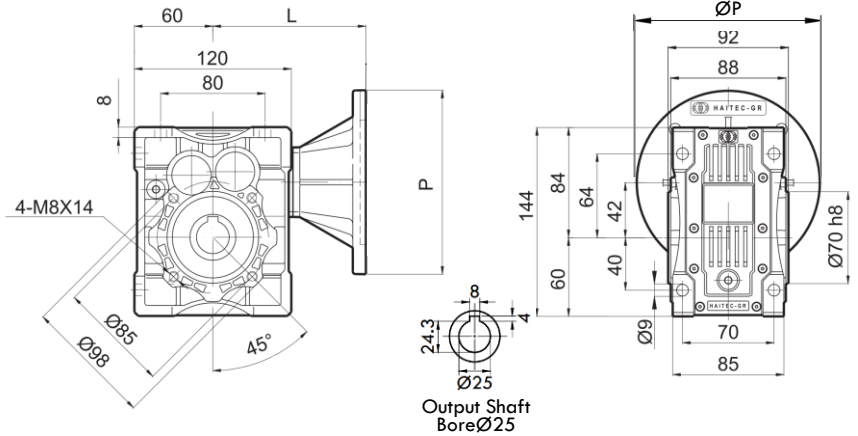


MODEL : OTS#050

MOTOR POWER: 0.2KW - 0.4KW - 0.75KW
 MOTOR FLANGE: 63B5 - 71B5 - 80B5
 GEAR RATIO: 7.5 ~ 100 - 125 - 150 - 200 - 250

DIMENSION:	L	P
INPUT FLANGE 63B5:	117	140
71B5:	124	160
80B5:	144	200

OUTPUT SHAFT BORE: HOLLOW Ø25MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 28.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø85MM

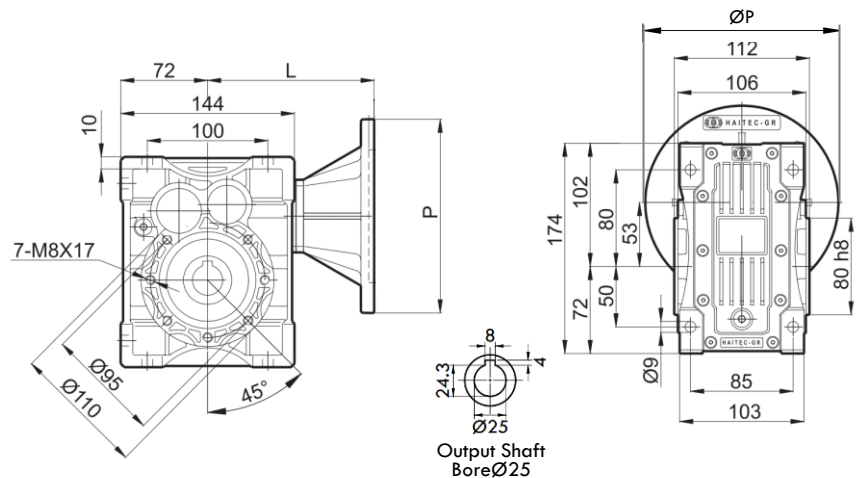


MODEL : OTS#063

MOTOR POWER: 0.2KW - 0.4KW - 0.75KW - 1.5KW
 MOTOR FLANGE: 63B5 - 71B5 - 80B5 - 90B5
 GEAR RATIO: 7.5 ~ 100 - 125 - 150 - 200 - 250

DIMENSION:	L	P
INPUT FLANGE 63B5:	117	140
71B5:	124	160
80B5:	144	200
90B5:	158	200

OUTPUT SHAFT BORE: HOLLOW Ø25MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 28.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø85MM

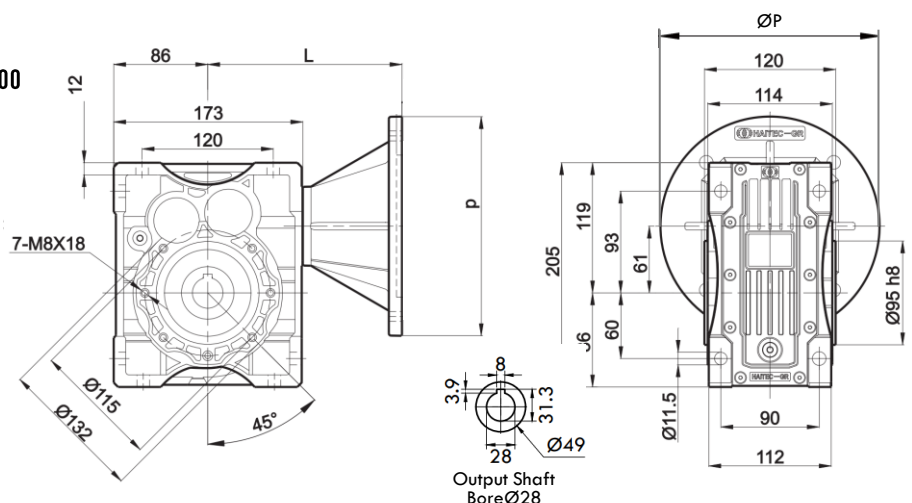


MODEL : OTS#075

MOTOR POWER: 0.2KW - 0.4KW - 0.75KW - 1.5KW
 MOTOR FLANGE: 63B5 - 71B5 - 80B5 - 90B5
 GEAR RATIO: 7.5 ~ 100 - 125 - 150 - 200 - 250 - 300

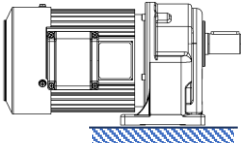
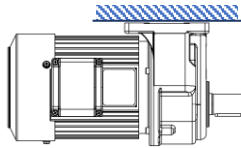
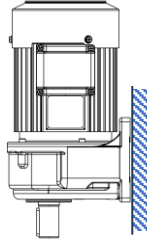
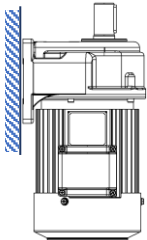
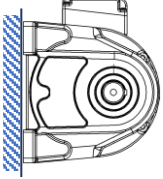
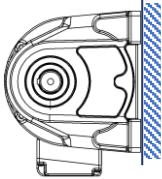

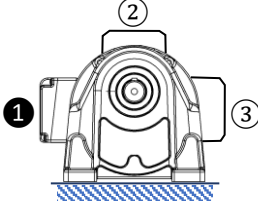
DIMENSION:	L	P
INPUT FLANGE 63B5:	117	140
71B5:	124	160
80B5:	144	200
90B5:	158	200

OUTPUT SHAFT BORE: HOLLOW Ø28MM (KEY 8X8)
 OUTPUT SHAFT HEIGHT: 31.3MM (INCLUDE KEYWAY)
 OUTPUT MOUNTING : PCD Ø115MM

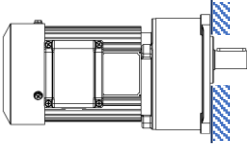
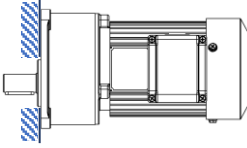
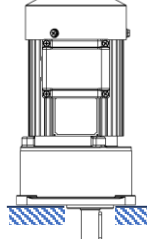
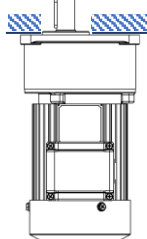
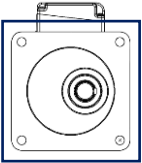
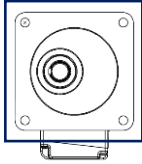

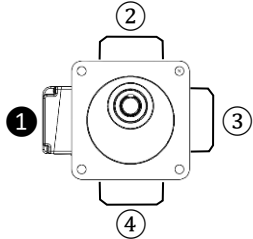


MOUNTING DIRECTION & TERMINAL BOX POSITION

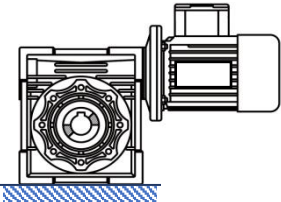
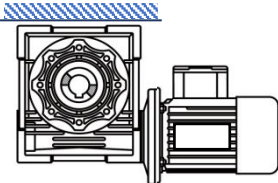
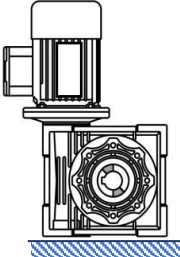
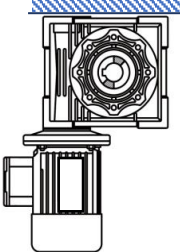
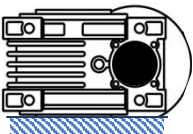
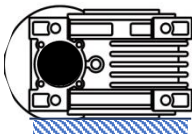

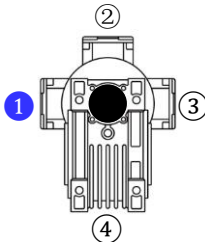
FOOT MOUNT GEAR MOTOR

<p>B3 (DEFAULT - RECOMMENDED)</p> 	<p>B8</p> 	<p>V5</p> 	<p>V6</p> 
<p>B5</p> 	<p>B6</p> 	<p>TERMINAL BOX POSITION DEFAULT POSITION : ① LEFT</p>  	

FLANGE MOUNT GEAR MOTOR

<p>B3 (DEFAULT - RECOMMENDED)</p> 	<p>B8</p> 	<p>V5</p> 	<p>V6</p> 
<p>B5</p> 	<p>B6</p> 	<p>TERMINAL BOX POSITION DEFAULT POSITION : ① LEFT</p>  	

ALUMINIUM WORM GEAR REDUCER

<p>B3 (DEFAULT - RECOMMENDED)</p> 	<p>B8</p> 	<p>V5</p> 	<p>V6</p> 
<p>B5</p> 	<p>B6</p> 	<p>TERMINAL BOX POSITION ① LEFT</p>  	

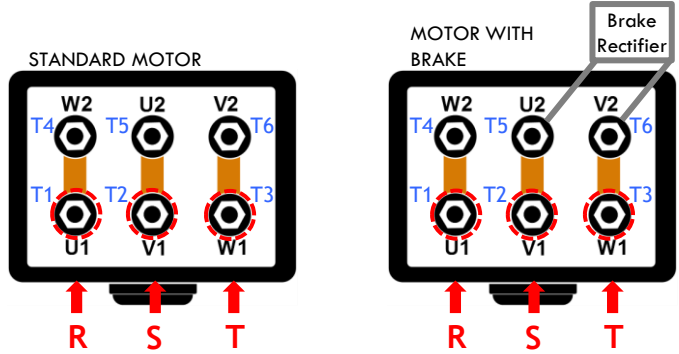
CONNECTION DIAGRAM

ASYNCHRONOUS MOTOR (DELTA CONNECTION – 6WIRES)

Motor Input Voltage : AC 3Ø 200~240V
 Brake Input Voltage : AC 220~240V
 (Separate AC to DC Rectifier Included)

Direction of Rotation: To change the rotation, exchange any two wires between U1, V1, W1.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier and Coactive Cooling Fan.

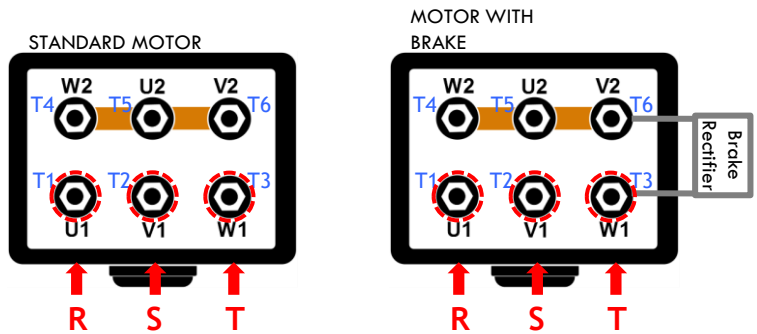


ASYNCHRONOUS MOTOR (STAR CONNECTION – 6WIRES)

Motor Input Voltage : AC 3Ø 380~415V
 Brake Input Voltage : AC 220~240V
 (Separate AC to DC Rectifier Included)

Direction of Rotation: To change the rotation, exchange any two wires between U1, V1, W1.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.

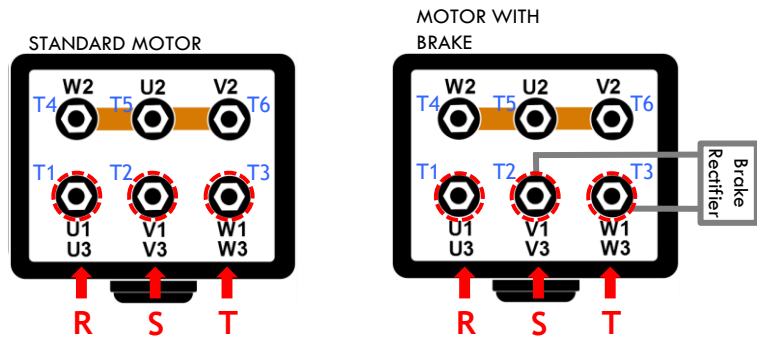


ASYNCHRONOUS MOTOR (STAR CONNECTION – 9WIRES)

Motor Input Voltage : AC 3Ø 200~240V
 Brake Input Voltage : AC 220~240V
 (Separate AC to DC Rectifier Included)

Direction of Rotation: To change the rotation, exchange any two wires between U1/U3, V1/V3 and W1/W3.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.

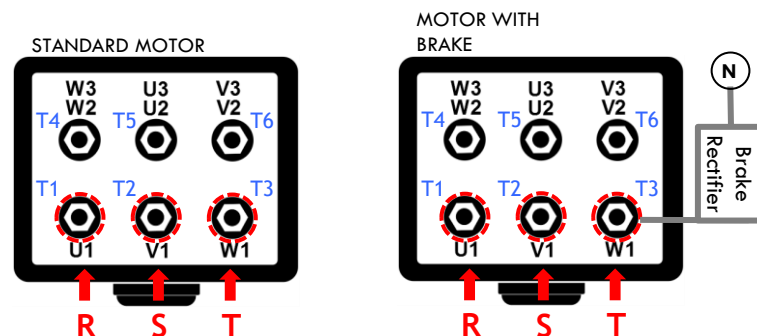


ASYNCHRONOUS MOTOR (9WIRES)

Motor Input Voltage : AC 3Ø 380~415V
 Brake Input Voltage : AC 220~240V
 (Separate AC to DC Rectifier Included)

Direction of Rotation: To change the rotation, exchange any two wires between U1, V1, W1.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.



PRODUCTS

OVERVIEW

HELICAL GEAR | HYPOID GEAR | WORM GEAR MOTOR (0.2KW ~ 2.2KW)

 <p>FH SERIES INTEGRAL HELICAL GEAR MOTOR</p>	 <p>FV SERIES INTEGRAL HELICAL GEAR MOTOR</p>	 <p>FVA SERIES SMALL FLANGE INTEGRAL HELICAL GEAR MOTOR</p>	 <p>LDVF ASYNCHRONOUS MOTOR WITH CLUTCH AND BRAKE</p>
 <p>FHB SERIES HELICAL GEAR REDUCER</p>	 <p>FVB SERIES HELICAL GEAR REDUCER</p>	 <p>LDVF MOTOR & DMRV SERIES ALUMINIUM WORM GEAR MOTOR</p>	 <p>OTS SERIES HELICAL HYPOID GEAR MOTOR</p>
 <p>SLDF SERIES HYPOID GEAR MOTOR</p>	 <p>SLH SERIES HYPOID GEAR MOTOR</p>	 <p>MARELLI MOTORI MOTOR WITH DMRS WORMGEAR REDUCER (IEC FLANGE B5)</p>	 <p>MARELLI MOTORI MOTOR WITH DMRS WORMGEAR REDUCER (IEC FLANGE B14)</p>
 <p>SLOFB SERIES HYPOID GEAR REDUCER</p>	 <p>H SERIES HEAVY DUTY CAST IRON HELICAL GEAR MOTOR</p>	 <p>V SERIES HEAVY DUTY CAST IRON HELICAL GEAR MOTOR</p>	 <p>AS-MO SERIES HEAVY DUTY CAST IRON HYPOID GEAR MOTOR</p>