

Powerful Direct Drive Motors



Easy configuration

- once the motor is connected to P series drive it will automatically recognize the motor

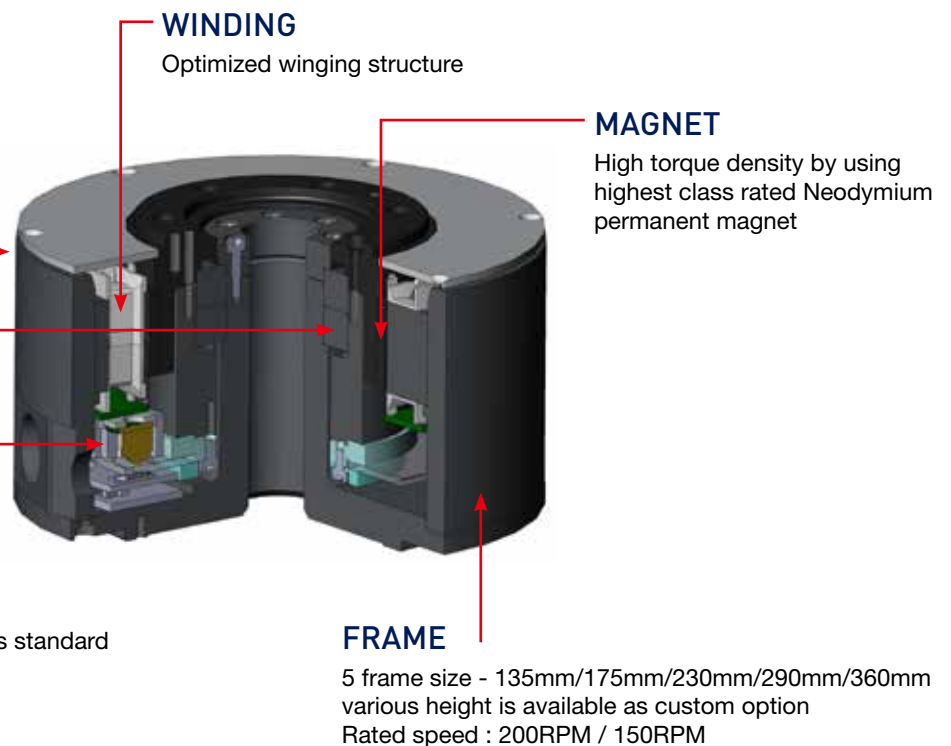
Various control option

- Predefined Profile mode provides ideal indexing feature for your machine
- EtherCAT gives high speed communication for multi-axis solutions

SERVO DRIVE

Ideal direct drive solution for P series drive

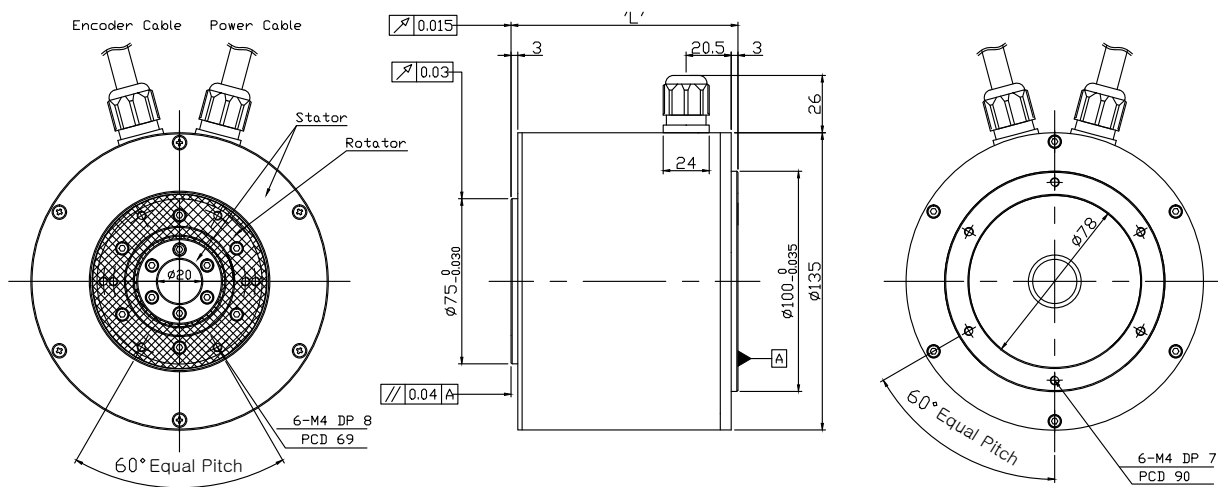
- 100~400W : PD-04P & 04C
- 400~1kW : PD-10P & 10C
- 1kW~3.5kW : PD-35P & 35C



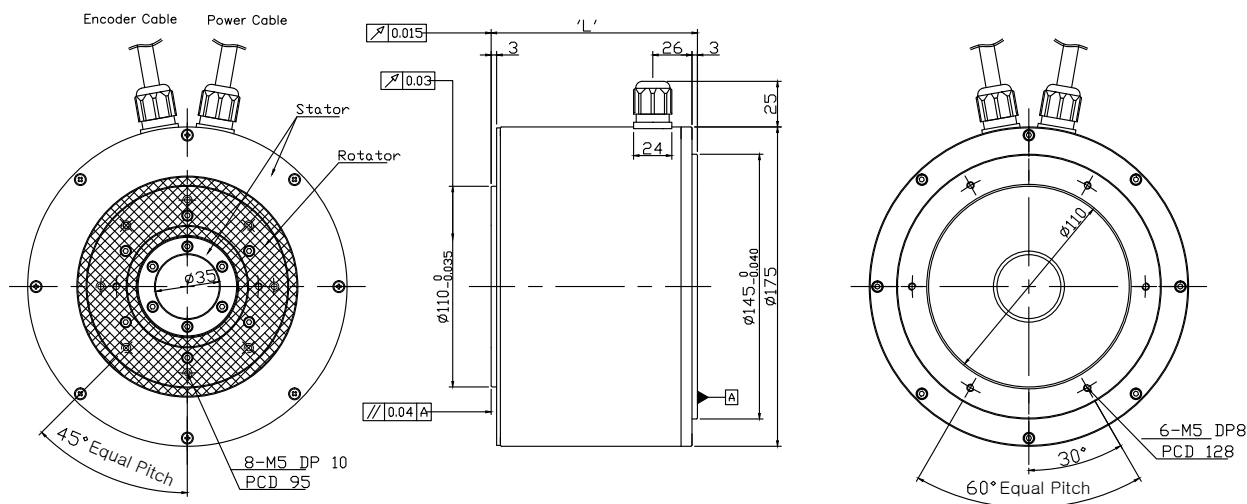
Basic specification

Motor		PM-DDB□□D□H			PM-DDC□□D□H			PM-DDD□□D□H			PM-DDE□□D□H		PM-DDF□□G□H	
		03	06	09	06	12	18	12	22	34	40	60	A1	A6
P series Drive		PD-04	PD-04	PD-04	PD-04	PD-04	PD-04	PD-04	PD-10	PD-10	PD-10	PD-35	PD-35	PD-35
Diameter	mm	ø135			ø175			ø230			ø290		ø360	
Rated Power	W	63	126	188	126	251	377	251	461	712	838	1,257	1,728	2,513
Rated Torque	N-m	3	6	9	6	12	18	12	22	34	40	60	110	160
Peak Torque	N-m	9	18	27	18	36	54	36	66	102	120	180	330	480
Rated Current	Arms	1.12	1.46	2.63	1.48	2.41	3	2.58	3.33	5.72	5.3	8.33	9.48	14.6
Peak Current	Arms	3.36	4.38	7.89	4.44	7.23	9	7.74	9.99	17.16	15.9	24.99	28.44	43.8
Rated Velocity	rpm	200			200			200			200		150	
Max. Velocity	rpm	500	500	500	500	500	400	500	400	400	300	300	250	250
Torque Constant	N-m/Arms	2.76	4.25	3.57	4.18	5.13	6.12	4.8	6.81	6.13	7.77	7.42	11.95	11.29
Moment of Inertia	kg-m ² ×10 ⁻⁴	5.74	8.67	11.5	27.32	38.9	50.48	54.14	68.15	82.16	311.55	371.71	1410.2	1763.4
Power Rate	kW/s	15.68	42.35	70.43	13.18	52.71	118.59	26.6	71.02	140.7	51.36	96.68	85.9	145.4
Angular Accel	rad/s ²	191.2	141.6	127.7	455.03	323.9	280.3	450.9	309.6	241.5	778.35	619.1	1281.13	1101.4
Accuracy for ABS Position	arc-sec	±30												
Accuracy for Repeatability	arc-sec	±1.3												
Axial run-out	mm	0.015												
Radial run-out	mm	0.03												
Allow. thrust load	N	1500			3300			4000			11000		15000	
Allow. moment load	N-m	40			70			93			250		350	
Encoder		20-bit single turn serial encoder (BiSS-C / Absolute)												
Weight(Approx.)	kg	6.3	7.2	9.2	8.7	10.6	12.6	17.3	19.6	21.9	28.2	35	54	70.3

Dimensions



Size B		
Product	Length (mm) 'L'	Weight (Kg)
PM-DDB03D	78	6.3
PM-DDB06D	100	7.2
PM-DDB09D	124	9.2



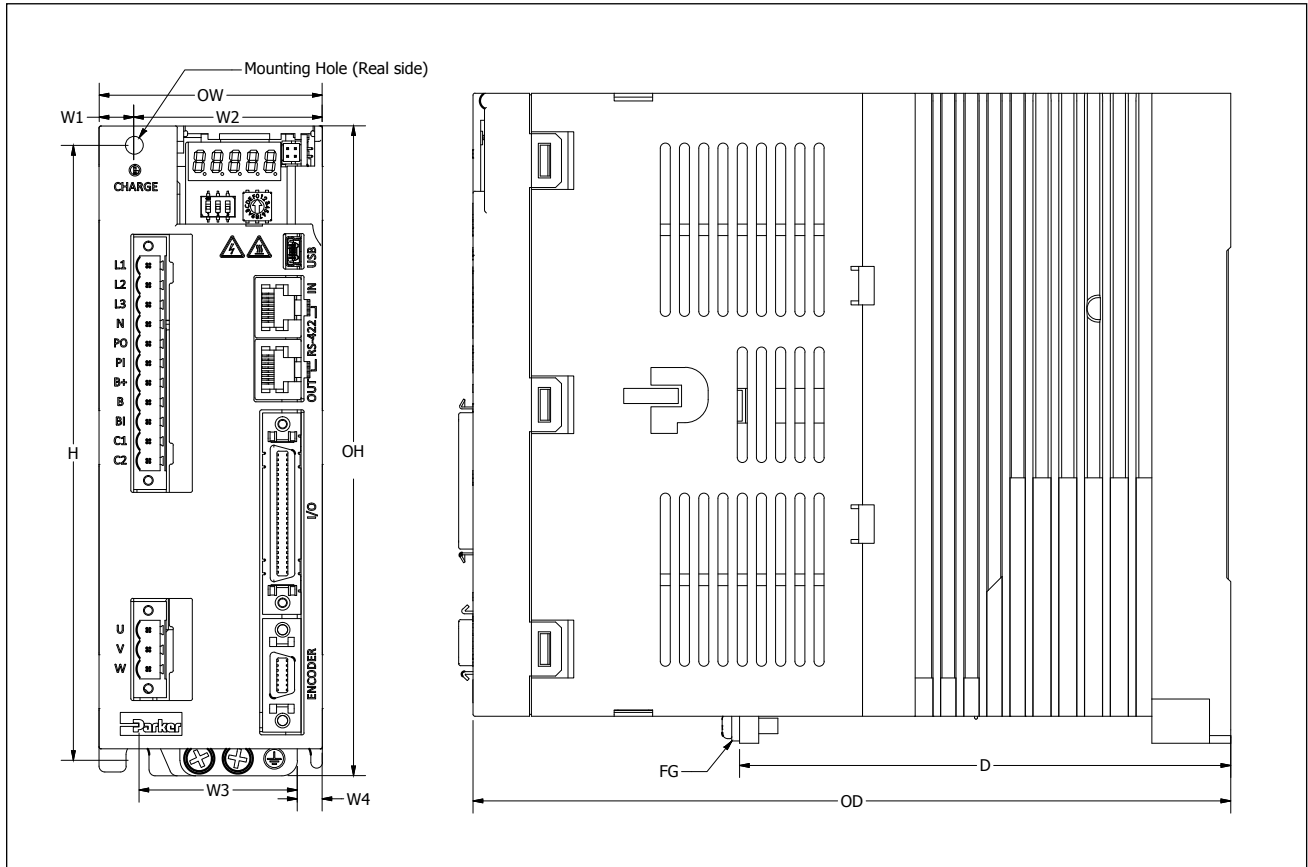
Size C		
Product	Length (mm) 'L'	Weight (Kg)
PM-DDC06D	77	8.7
PM-DDC12D	95	10.6
PM-DDC18D	113	12.6

P Series Servo Drive

Pulse Drive Specifications

Motor Output Power	PD-04P	PD-10P	PD-35P
Shaft Power @ Continuous Current	400 Watts	1000 Watts	3500 Watts
Shaft Power @ Peak Current	1200 Watts	3000 Watts	10500 Watts
Drive Output Power			
Continuous Current (RMS)	3.0 Amps	6.75 Amps	16.7 Amps
Peak Current (RMS)	9.0 Amps	20.25 Amps	50.1 Amps
Bus Voltage	340VDC		
Drive Input Voltage	100-120VAC 50/60Hz 230 VAC, 1/3Ø, 50/60Hz	230 VAC, 1/3Ø, 50/60Hz	
Drive Control Voltage	100-120VAC 50/60Hz 230 VAC, 1Ø, 50/60Hz	230 VAC, 1Ø, 50/60Hz	230 VAC, 1Ø, 50/60Hz
Performance			
Servo update	62.5µ seconds		
Accuracy	± 1 encoder count ; encoder dependent		
Commutation	Sinusoidal		
Control			
Indexer Function	64 user defined profiles, relative/absolute moves, registration, sequences and I/O selection		
Position Control	Step and direction, CW and CCW		
Speed Control	+/- 10V, 1:5000		
Torque Control	+/- 10V		
Feedback			
Encoder Input	Quadrature Incremental encoder, BiSS-C (absolute) encoder, EnDAT 2.2, SinCos		
Encoder Output	RS-422 compatible differential driver		
I/O			
Digital input	16-channel, +24V common, user selectable functions		
Digital output	8-channel, Differential (Isolated), user selectable functions		
Analog input	2-channel, ±10V (max.), 12bits		
Analog output	2-channel, ±10V (max.), selectable, 12bits		
Communications			
USB	USB 2.0 for firmware upload and drive configuration		
Serial	RS422 for PC or HMI interface, MODBUS-RTU		
Standard	ANSI/ TIA/ EIA-422 standard		
Baud Rate	9,600/ 19,200/ 38,400/ 57,600/ 115,200 bps		
Configuration Software	Drive Support Tool		
Standards	CE (EMC, LVD) UL/cUL recognized	CE (EMC, LVD) UL/cUL listed	CE (EMC, LVD) UL/cUL listed
Built-in Functions			
Display	7 Segments, 5 digits for Status and Alarms		
Node Selection	3 dip switches, 1 rotary for address 0-31		
Dynamic Braking	Built-in, user selectable reaction		
Internal Regeneration	100ohm, 50W	40ohm, 100W	12.6Ohm, 150W
External Regeneration	50ohm, 140W	30ohm, 300W	30Ohm, 600W
Environmental			
Temperature	0 - 50 °C (32 - 122 °F)		
Humidity	0 - 90% non-condensing		
Shock / Vibration	15g, 11msec half sign / 10-2,000Hz @ 2g		

Dimensions



(Unit: mm)

		PD-04P	PD-10P	PD-35P
H	Height	158	158	158
OH	Overall Height	169	169	169
OW	Overall Width	38	58	88
W1	Width 1	6	10	44
W2	Width 2	26	48	44
W3	Width 3	32	42	78
W4	Width 4	6	6	5
D	Depth	107.7	127.7	112.5
OD	Overall Depth	173	197	198

Solid Models Available for Download http://solutions.parker.com/AUG_EM