

# PM-DD Series

## Powerful Direct Drive Rotary Motors

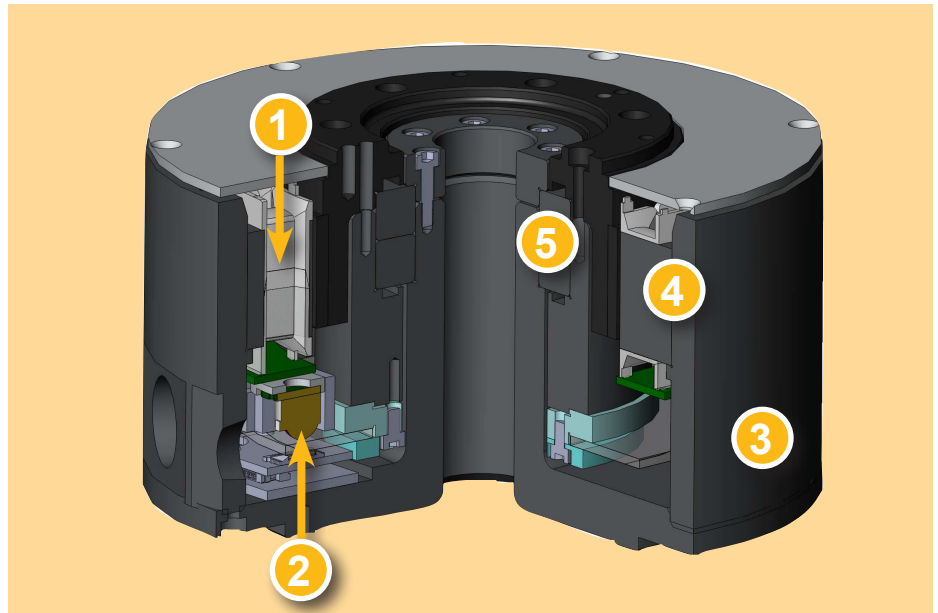


### General Information

The PM-DD servo motor is designed to provide high torque and high accuracy. Tapped mounting holes and a hollow through bore allow this robust motor to be used in a variety of applications that require the load to be attached directly to the motor. By eliminating the use of couplings or belts, the load can be driven in a smooth, nearly frictionless motion with no backlash.

### Key Features

- 1 Winding**  
Optimized winding structure...provides high performance in a compact package.
- 2 Encoder**  
For accurate control, the PM-DD is equipped with 20 bit absolute feedback with BISS-C communication as standard. This allows accuracy of +/- 30 arc sec. with repeatability of +/- 1.3 arc sec.
- 3 Frame**  
The PM-DD is made in five frame sizes - 135mm/175mm/230mm/290mm/360mm. 13 models provide power options that can meet a wide variety of application requirements  
Rated speed: 200 RPM/150 RPM  
Rated torque: 3 Nm to 160 Nm
- 4 Magnet**  
High torque density by using highest class rated Neodymium permanent magnet.
- 5 Bearing**  
Low vibration and outstanding mechanical accuracy by improved bearing design. Load carrying capabilities extend to 15,000N.



### Easy configuration

PM-DD motors are a perfect match with the **P Series Servo Drives**. The absolute encoders in the motor populate motor nameplate data back to the drives for simplified commissioning.

Accurate and easy to use inertia detection leads to fast set-up of tuning parameters and minimal settling time.

### Multiple control options

The pulse version of the drive can be configured for step and direction control input and includes analog inputs for torque or velocity control. Select indexer mode to create up to 64 position table entries triggered via inputs or over a RS422 interface.

For high speed, real-time network applications, the P-Series is available with EtherCAT, the fastest growing, most flexible industrial Ethernet protocol. Ideal for use with the Parker Automation Controller, the P-Series also follows the open standards for EtherCAT.



For more information, please visit [www.parkermotion.com](http://www.parkermotion.com)



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# PM-DD Series Direct Drive Motors

## 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			mm			mm			mm		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

## How to order

Motor:

P M-DD	B	60	D	NO	H	
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Code	Type
DD	DD Motor

Code	Diameter size
B	External Diameter 135mm
C	External Diameter 175mm
D	External Diameter 230mm
E	External Diameter 290mm
F	External Diameter 360mm

Code	Torque
03	3 Nm
06	6 Nm
09	9 Nm
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60	60 Nm
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A6	160 Nm

Code	Encoder					Note
	135	175	230	290	360	
NO	20Bit		20Bit	20Bit		Single turn ABS, Biss-C Communication

Code	Rated Speed	Note
D	200rpm	Standard, ø135-ø290 : 200rpm
G	150rpm	Standard, ø360 : 150rpm

Code	Shaft Type
H	Standard Hollow shaft

Code	Voltage
None	200V DD Motor

Cables:

APCS	-	E	03	ZS
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Code	Cable
APCS	
E	Encoder Feedback
PN	Motor Power

Code	Length
03	3 m
05	5 m
10	10 m
20	20 m

Code	Option
ZS	Standard Feedback Cable Standard Power Cable (PM-DDF series)
YS	Standard Power Cable (PM-DDB-E series)

