

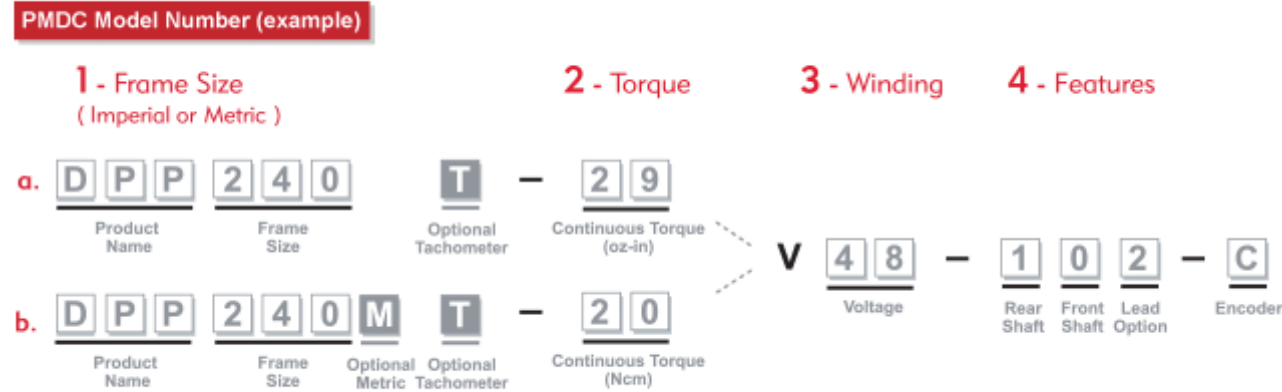


DPP240 : DirectPower™ Plus Brush Motor

Size: 2.25-inch or 57mm
Peak Torque: to 240 oz-in or 169 Ncm

High-Torque. Long life.

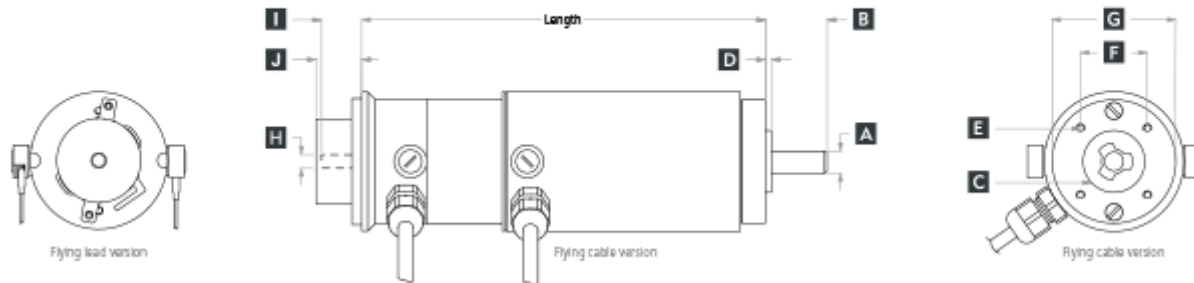
Our ElectroCraft DirectPower™ Plus 240 Series features up a rugged, heavy-gauge steel housing construction for long-life and durability. This high-efficiency motor includes dynamically balanced armatures, sealed ball bearings, and replaceable brushes.



DPP240 Outline Drawing

Step 1: DPP240 & DPP240M Frame Size Drawing Key

Model	MAX Length	MAX Length (with tachometer)	A Front Shaft Diameter	B Front Shaft Length	C Pilot Diameter	D Pilot Length (Ref)	E Mounting Hole Pattern (Ref)	F Mount Hole Spacing (Ref)	G Flange External Dimension (Ref)	H Rear Shaft Diameter	I Rear Shaft Length	J Encoder Length (Ref)
DPP240	4.0 in	6.1 in	0.2500 in 0.2495 in	1.00 in ±0.03	1.000 in 0.998 in	0.10 in	[4] 6-32 UNC-2B 0.38 in Deep Min EQ SP on 1.531 in D.B.C.	1.083 in	2.00 in	0.2497 in 0.2494 in	0.70 in ±0.030	0.74 in
DPP242	5.0 in	7.1 in	0.3750 in 0.3747 in									
DPP243	5.5 in	7.6 in	0.3750 in 0.3747 in	25 mm ±0.762	24.99 mm 24.94 mm	2.54 mm	[4] M4 x 0.7-6H 10 mm Deep Min EQ SP on 38.89 mm D.B.C.	27.5 mm	50.8 mm	8.00 mm 7.99 mm (motor only) 6.00 mm 5.99 mm (motor-tach)	19 mm ±0.381	18.8 mm
DPP240M	102 mm	155 mm	6.00 mm 5.99 mm									
DPP242M	127 mm	179 mm	6.00 mm 5.99 mm									
DPP243M	140 mm	192 mm	8.00 mm 7.99 mm									

**DPP240 Mechanical / Winding Data****Array Stack/Torque Sizes**

Stack Size Models	DPP240-29	DPP242-44	DPP243-52
Continuous Stall Torque (oz-in)	29	44	52
Continuous Stall Torque (Ncm)	20.48	31.07	36.72
Peak Torque (oz-in)	240	350	400
Peak Torque (Ncm)	169.46	247.13	282.44
Motor Constant (oz-in / √ Watt)	0.00	0.00	0.00
Motor Constant (Nm / √ Watt)	0.00	0.00	0.00
Electrical Constant (msec)	0.00	0.00	0.00
Mechanical Constant (msec)	0.00	0.00	0.00
Rotor Inertia (oz-in-sec ²)	0.0040	0.0060	0.0070
Rotor Inertia (gm-cm ²)	282.5	423.7	494.3
Thermal Resistance (C / Watts)	5.0	4.2	3.8
Weight (oz)	2.1	2.1	2.1
Weight (Kg)	0.1	0.1	0.1
Length (inches)	4.0	5.0	5.5
Length (cm)	10.2	12.7	14.0
Number of Poles	2	2	2

Array Winding Options						
Winding Models	29V48	29V60	44V48	44V60	52V48	52V60
Design Voltage (VDC)	48	60	48	60	48	60
Continuous Current (Amps)	2	2	4	3	5	4
Peak Current (Amps)	16	14	27	21	32	25
Voltage Constant ±10% (VDC/kRPM)	10.9	14.2	9.8	12.4	9.7	12.3
Torque Constant ±10% (oz-in / Amp)	14.7	19.2	13.3	16.7	13.2	16.6
Torque Constant ±10% (Ncm / Amp)	10.380	13.558	9.392	11.793	9.321	11.722
Resistance ±10% (Ohms)	3.2	5.2	1.7	2.6	1.3	2.0
Inductance ±10% (mH)	4.8	8.2	4.2	6.6	3.8	6.0

DPP240 Speed / Torque Curves

