

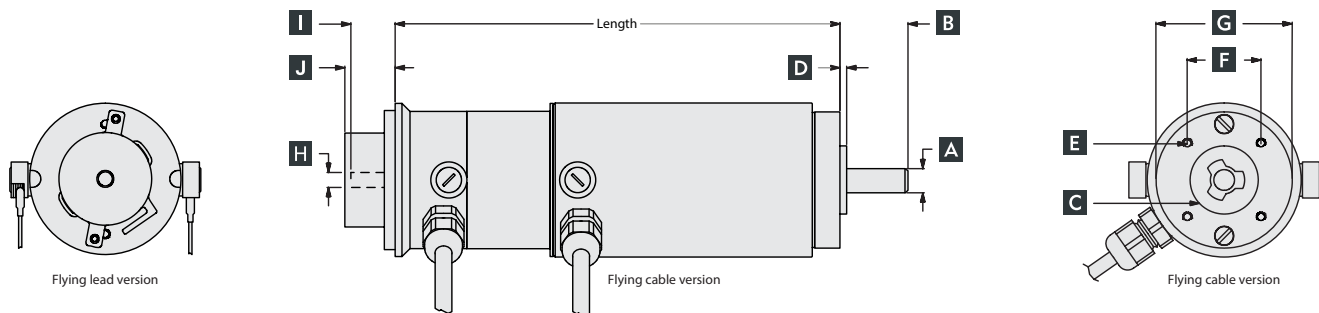
High-Torque. Long life.

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

Model	MAX Length	MAX Length (with tachometer)	A	B	C	D	E	F	G	H	I	J
			Front Shaft Diameter	Front Shaft Length	Pilot Diameter	Pilot Length (Ref)	Mount Hole Callout (Ref)	Mount Hole Spacing (Ref)	Flange External Dimension (Ref)	Rear Shaft Diameter	Rear Shaft Length	Encoder Length (max)
DPP240	4.0 in	6.1 in	0.2500 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	0.43 in ±0.030	0.43 in
DPP242	5.0 in	7.1 in	0.2495 in									
DPP243	5.5 in	7.6 in	0.3750 in 0.3747 in									
DPP240M	102 mm	155 mm	6.00 mm	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	10.9 mm ±0.762	10.9 mm
DPP242M	127 mm	179 mm	5.99 mm							7.99 mm (motor only)		
DPP243M	140 mm	192 mm	8.00 mm 7.99 mm							6.00 mm 5.99 mm (motor-tach)		



DPP240 Model Number

1 - Frame Size
(Imperial or Metric)

D P P 2 4 0

Product Name Frame Size

2 - Torque

T - 2 9

Optional Tachometer Continuous Torque (oz-in)

3 - Winding

4 - Features

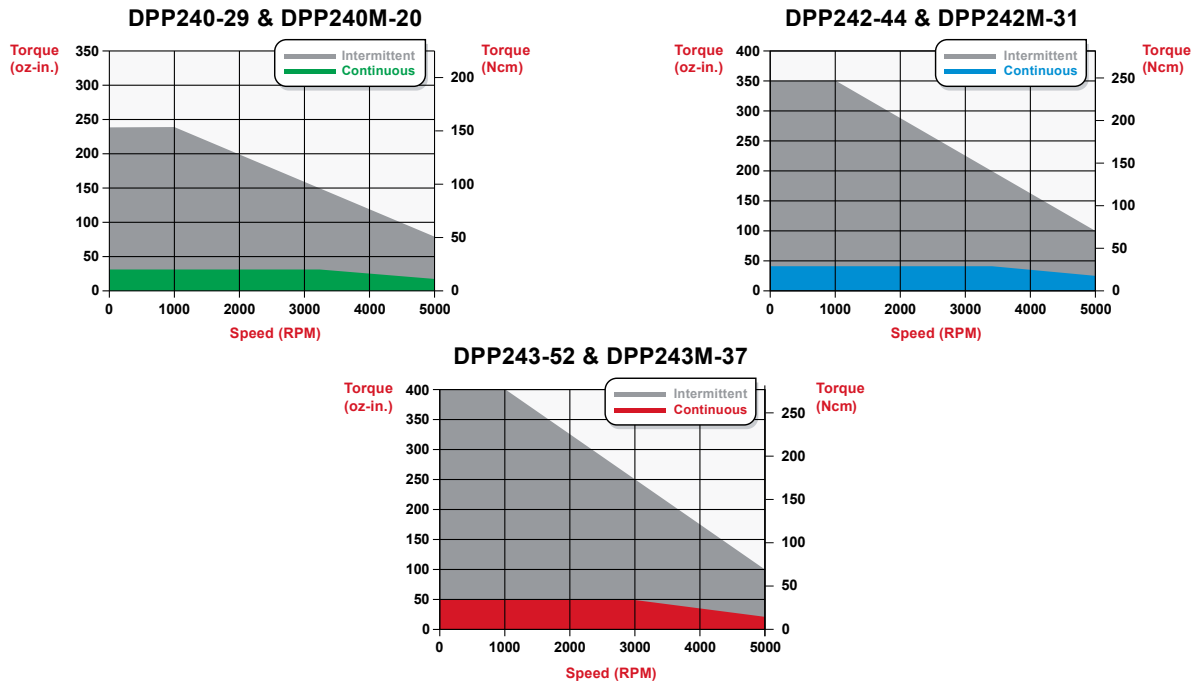
V 4 8 - 1 0 2 - C

Voltage Rear Shaft Front Shaft Lead Option Encoder

D P P 2 4 0 M T - 2 0

Product Name Frame Size Optional Metric Optional Tachometer Continuous Torque (Ncm)

DPP240 - Performance



DPP240 Mechanical / Winding Data

DPP240 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
Rotor Inertia (oz-in-sec ²)	0.0040	0.0060	0.0070
Rotor Inertia (g-cm ²)	282.5	423.7	494.3
Thermal Resistance (C / Watts)	5.0	4.2	3.8
Weight (lbs)	2.1	3.0	3.5
Weight (Kg)	0.95	1.36	1.59
Length (inches)	4.0	5.0	5.5
Length (mm)	10.2	12.7	14.0
Number of Poles	2	2	2

DPP240 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
Motor Constant (oz-in / √ Watt)	8.24	8.45	10.26	10.47	11.36	11.69
Motor Constant (Nm / √ Watt)	0.93	0.95	1.16	1.18	1.28	1.32
Electrical Constant (msec)	1.5	1.58	2.5	2.6	2.82	2.98
Mechanical Constant (msec)	7.93	7.53	8.34	8.01	8.12	7.67

