

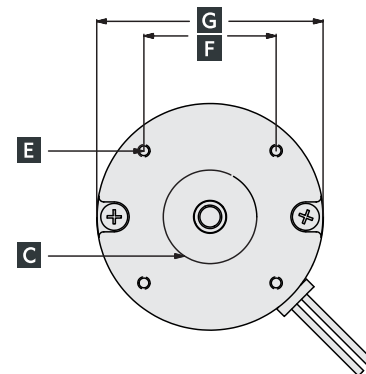
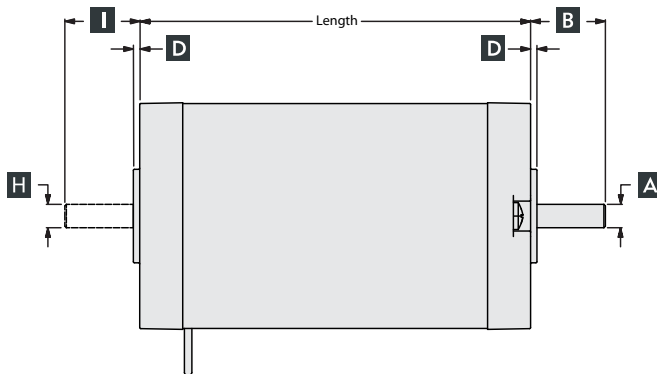
Better-Performance. Good Price.

Our ElectroCraft DirectPower™ Nema 30 is a conventional brush-type permanent magnet DC motor. It provides torque up to 230 oz-in or 162.4 Ncm.



DP30 BRUSH MOTOR	
Size	Nema 30
Peak Torque	to 230 oz-in or 162.4 Ncm

Model	MAX Length	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)
DP30-60	5.265 in	0.3124 in 0.3127 in	1.00 in ±0.04	1.250 ±0.005	0.085 in	(4) 8-32 UNC-2B x 0.25 DP on 2.50 in D.B.C.	1.768 in	3.03 in	0.3124 in 0.3127 in	1.00 in ±0.04	N/A
DP30-75	5.986 in										
DP30-85	5.986 in										



DP30 Model Number

1 - Frame Size

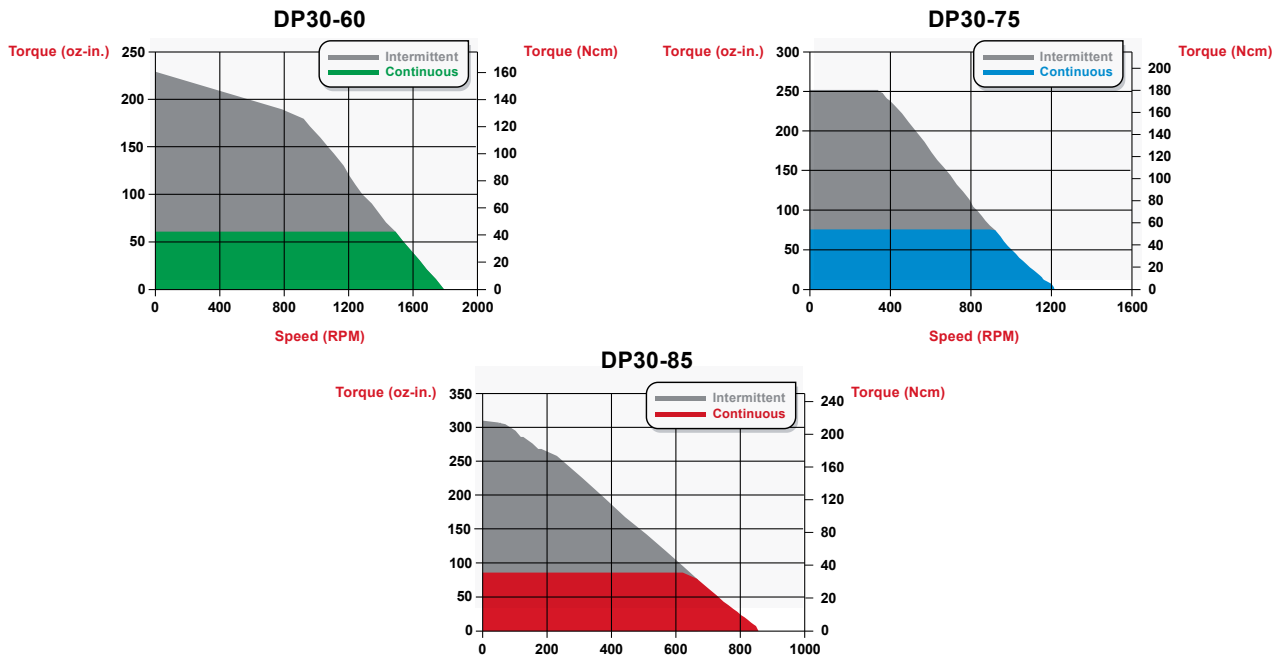
2 - Torque

3 - Winding

4 - Features



DP30 - Performance



DP30 Mechanical / Winding Data

DP30 Stack/Torque Sizes

Stack Size Models	DP30-60	DP30-75	DP30-85
Continuous Stall Torque ¹ (oz-in)	60	75	85
Continuous Stall Torque ¹ (Ncm)	42.37	52.96	60.02
Peak Torque ² (oz-in)	230	180	215
Peak Torque ² (Ncm)	162.40	127.10	151.81
Rotor Inertia (oz-in-sec ²)	0.0170	0.0220	0.0250
Rotor Inertia (g-cm ²)	1200.5	1553.6	1765.5
Weight (oz)	73.6	92.8	96.0
Weight (Kg)	2.1	2.6	2.7
Length ³ (inches)	5.2	5.2	6.0
Length ³ (mm)	1.32	1.32	1.52
Number of Poles	2	2	2

DP30 Winding Options

Winding Models	60V12	60V24	75V12	75V24	85V12	85V244
Design Voltage (VDC)	12	24	12	24	12	24
Continuous Current ¹ (Amps)	9	4	7	3	5	3
Peak Current ² (Amps)	27	14	14	7	15	6
Voltage Constant ±10% (VDC/kRPM)	6.5	13.1	9.0	18.0	13.6	27.1
Torque Constant ±10% (oz-in / Amp)	8.9	17.7	12.2	24.3	18.4	36.6
Torque Constant ±10% (Ncm / Amp)	6.285	12.499	8.615	17.160	12.993	25.845
Resistance ±10% (Ohms)	0.3	3.0	0.6	3.0	0.7	3.0
Inductance ±10% (mH)	0.5	1.4	1.4	3.7	2.6	7.8
Motor Constant (oz-in / √ Watt)	16.25	16.16	15.75	15.37	21.99	21.49
Motor Constant (Nm / √ Watt)	11.47	11.41	11.12	10.85	15.53	15.18
Electrical Constant (msec)	1.67	0.47	2.3	1.23	1.82	2.6
Mechanical Constant (msec)	9.12	23.0	12.6	15.8	7.32	7.93
Thermal Resistance (C / Watts)	2.7	2.7	2.3	2.3	3.4	3.4

¹ Continuous rating based on 25°C ambient temperature, winding temperature rise of 100°C and motor mounted to a 12x12x0.50 inch aluminum heatsink.

² 10 seconds at 25°C ambient, 100°C winding temperature.

³ Inductance bridge measurement method @ 1kHz.

