

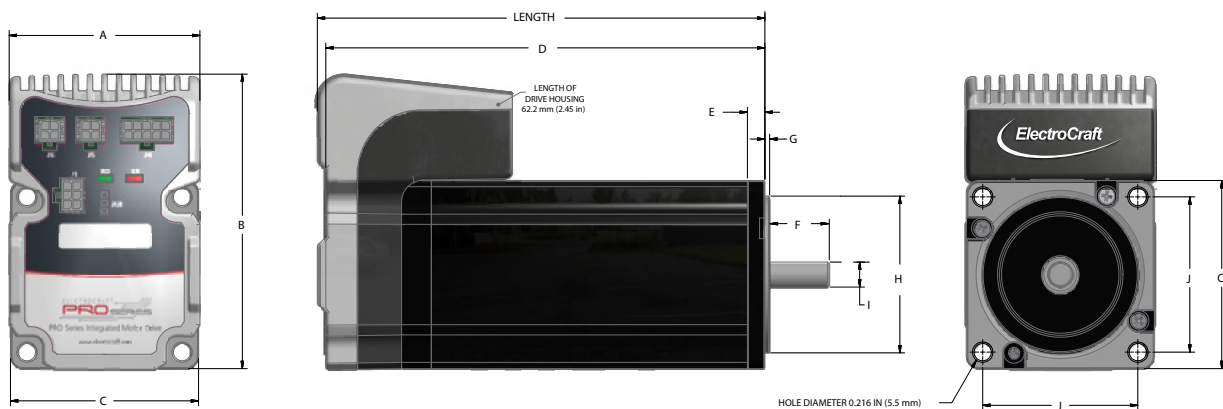
### Compact. Programmable.

ElectroCraft's PR integrated motor drive controllers are the highest-performance products in the range. Each combines a high-performance neodymium brushless motor with a fully programmable controller to give maximum torque for each of the four frame sizes. These are the ideal products for precision applications.



PR60 Integrated Motor Drive Controller	
Size	60mm or Nema 23
Peak Torque	to 89 Ncm (126 oz-in)
Continuous Torque	to 52 Ncm (74 oz-in)
Speed	to 9,460 RPM

Model	Units	Length	A	B	C	D	E	F	G	H	I	J
PR60-A18	mm	82	60.86	93.94	60	79.2	5.59	20.5±0.76	1.5	49.95 - 50	7.98 - 7.99	49.5
	inch	3.23	2.4	3.7	2.36	3.12	0.22	0.81±0.03	0.059	1.967 - 1.969	0.314 - 0.3145	1.95
PR60-A25	mm	92	60.86	93.94	60	89.25	5.59	20.5±0.76	1.5	49.95 - 50	7.98 - 7.99	49.5
	inch	3.6	2.4	3.7	2.36	3.51	0.22	0.81±0.03	0.059	1.967 - 1.969	0.314 - 0.3145	1.95
PR60-A38	mm	117.3	60.86	93.94	60	114.8	5.59	20.5±0.76	1.5	49.95 - 50	7.98 - 7.99	49.5
	inch	4.62	2.4	3.7	2.36	4.52	0.22	0.81±0.03	0.059	1.967 - 1.969	0.314 - 0.3145	1.95
PR60-A52	mm	143	60.86	93.94	60	140.06	5.59	20.5±0.76	1.5	49.95 - 50	7.98 - 7.99	49.5
	inch	5.6	2.4	3.7	2.36	5.51	0.22	0.81±0.03	0.059	1.967 - 1.969	0.314 - 0.3145	1.95



### PR60 Model Number

#### 1 - Motor Type

**P R**

Product Name

#### 2 - Torque

**6 0**

Frame Size

#### 3 - Voltage

**A 2 5**

Drive Type  
Holding Torque (Ncm)

#### 4 - Features

**V 4 8 A**

Voltage (Volts)  
Drive Version

#### 5 - Front Shaft

**0**

Front Shaft

#### 6 - Feedback

**D**

Feedback

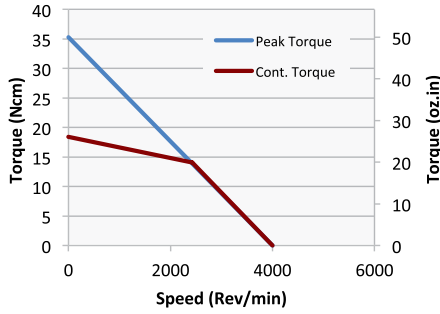
#### 7 - Network

**CAN**

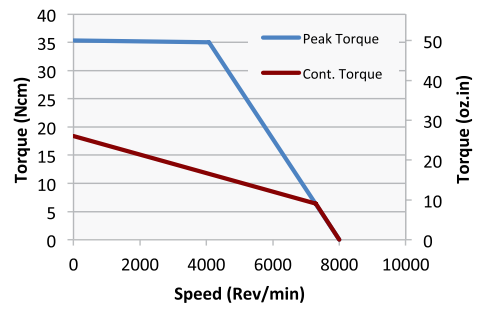
Network

PR60 - Performance

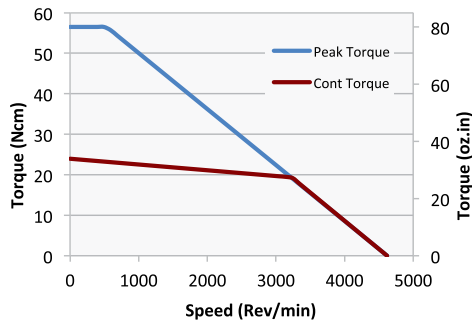
PR60-A18 at 24V



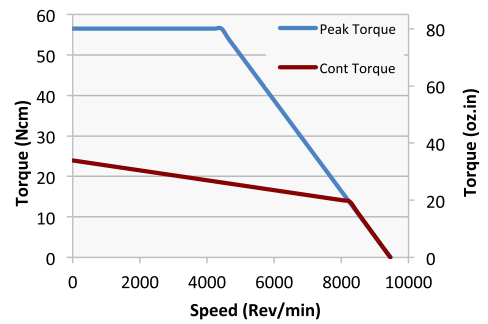
PR60-A18 at 48V



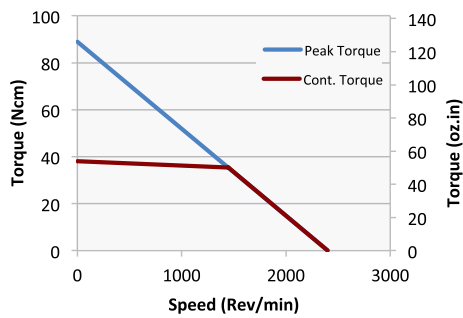
PR60-A25 at 24V



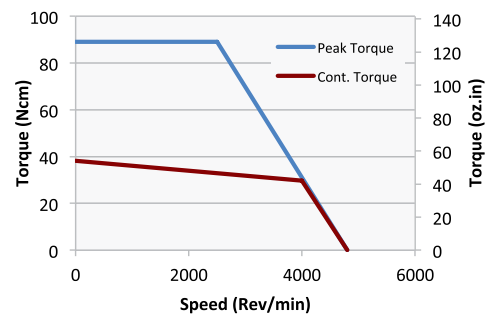
PR60-A25 at 48V



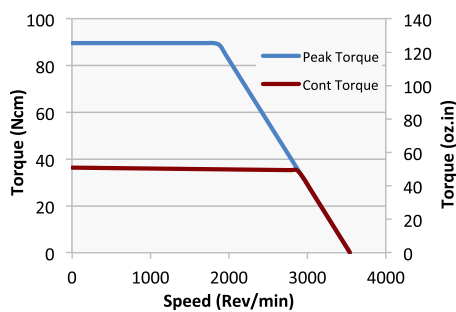
PR60-A38 at 24V



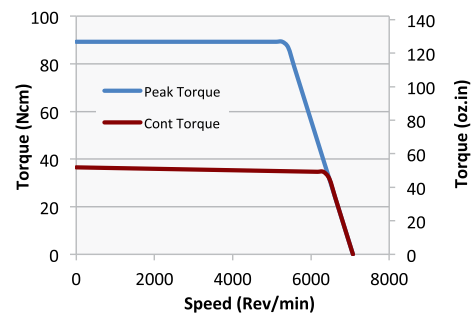
PR60-A38 at 48V



PR60-A52 at 24V



PR60-A52 at 48V



## PR60 Mechanical Data

### PR60 Stack Size Mode/s

Stack Size Models	PR60-A18	PR60-A25	PR60-A38	PR60-A52
Peak Torque (oz-in)	50	80	113	126
Peak Torque (Ncm)	35.31	56.49	79.79	88.97
Continuous Torque (oz-in)	26	35	54	74
Continuous Torque (Ncm)	18.36	24.71	38.13	52.25
Length (inches)	3.23	3.62	4.62	5.63
Length (mm)	82.04	91.95	117.35	143.00
Rotor Inertia (oz-in-sec <sup>2</sup> )	0.0015	0.0029	0.0047	0.0072
Rotor Inertia (kg-cm <sup>2</sup> )	0.1059	0.2048	0.3319	0.5085
Phase Resistance ±10% (Ohms)	3.6	1.3	1.6	1.3
Phase Inductance ±10% (mH)	4.6	1.8	2.4	2.0
Weight (oz)	22.0	31.0	42.0	52.9
Weight (Kg)	0.6	0.9	1.2	1.5

Power Inputs	
Motor Supply Voltage (VDC)	12-48
Logic Supply Voltage (VDC)	9-36
Control Inputs	
AUX Analog Input (x1)	12-BIT, 0 - 5V
Digital inputs (x5) Enable, 2 Limit Switches, Plus 2 General Purpose	5 - 36V, NPN
Control Outputs	
Digital outputs (x2) Status, Plus 1 General Purpose	5 - 36V, 0.5A, NPN open Collector
Operation Modes	
Operation Mode	Single axis motion controller, Intelligent slave executing I/O triggered motion sequences, Multi-axis, distributed motion solution, Intelligent slave executing network (RS232 or CAN) triggered motion sequences
Communications	
Serial	RS232
CAN	CAN-bus 2.0
Environmental	
Operating Temperature (°C)	0 - +40
Storage Temperature (°C)	-40 - +80
Humidity Range Not Condensing (% Rh)	90
Protections	
Hardware protections	Short circuit - Phase to GND Short circuit - Phase to Phase Over-voltage Under-voltage I <sup>2</sup> t
Regulatory Compliance	
CE	IEC60529
UL	UL508



Your Genius. Our Drive.

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