

DC070AS Brushless Motor Series

General Features

- 70 mm square Frame Sizes
- Torques up to 784.00 Oz-in Peak, 261.00 Oz-in continuous
- Speeds up to 4100 RPM
- Voltage rating up to 48 Vdc
- Integrated Hall Effect Commutation
- Class B rated construction
- RoHS and CE compliant

Available Options

- Encoder - IMS Q or EQM35 Series
- Connectors and Matting cables
- Custom Shaft ends
- Custom Winding (Voltage or Current)
- Gearbox - IMS EL60 Series



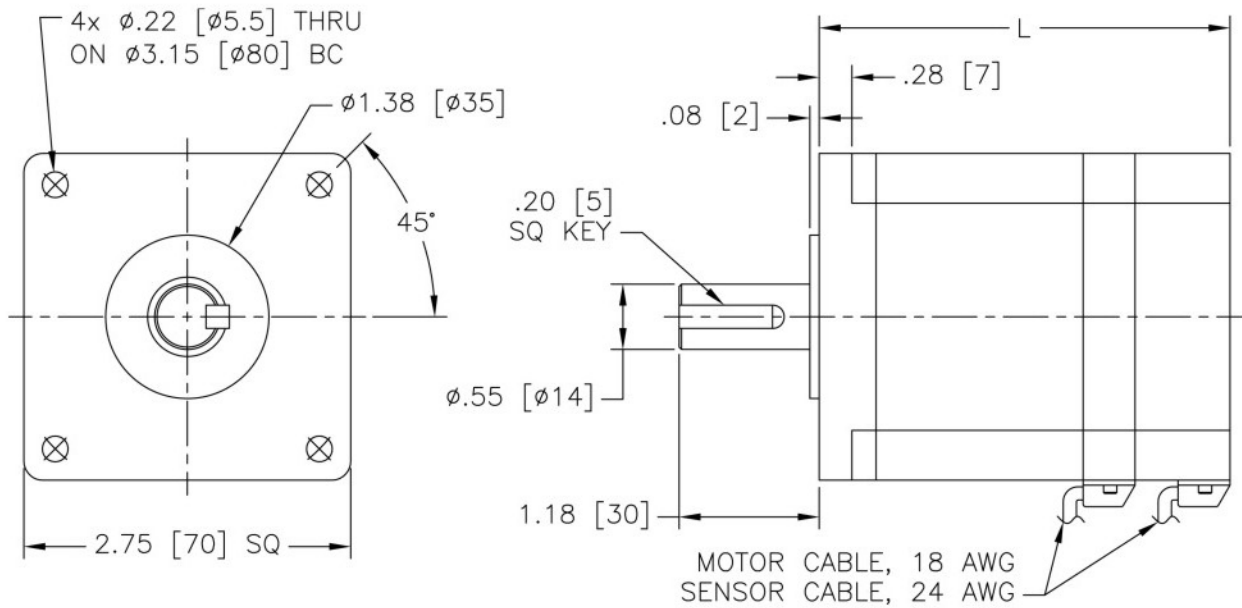
Technical and Performance Data

Model Number		DC070AS100	DC070AS200	DC070AS300	
General					
Maximum Terminal Voltage	Vdc	48.00	48.00	48.00	
Continuous Stall Torque	Oz-in	88.70	173.60	261.40	
	Nm	0.63	1.23	1.85	
Continuous Current (3)	Amps	6.90	13.29	19.91	
Peak Stall Torque	Oz-in	266.11	520.81	784.20	
	Nm	1.88	3.68	5.54	
Peak Current (3)	Amps	19.80	38.53	57.91	
24 Vdc Bus Rating	Rated Speed	RPM	1000	1000	
	Rated Torque @ Rated Speed	Oz-in	83.00	163.00	247.00
		Nm	0.59	1.15	1.74
	Rated Output Power @ Rated Speed	Watts	61	121	183
Maximum Speed (1)	RPM	2000	2000	2000	
48 Vdc Bus Rating	Rated Speed	RPM	3000	3000	
	Rated Torque @ Rated Speed	Oz-in	71.00	136.00	213.00
		Nm	0.50	0.96	1.50
	Rated Output Power @ Rated Speed	Watts	158	302	473
Maximum Speed (1)	RPM	4100	4100	4100	
Thermal Resistance	° C/W	2.8	2.0	1.3	
Electrical					
Torque Constant (± 10%), (2)	Oz-in/Amp	15.33	15.33	15.33	
	Nm/Amp	0.1083	0.1083	0.1083	
Voltage Constant (± 10%), (2)	V/KRPM	11.40	11.40	11.40	
	V s/rad	0.1083	0.1083	0.1083	
Resistance (± 15%), (2)	Ohms	0.78	0.28	0.19	
Inductance (± 15%), (2)	mH	1.60	0.80	0.45	
Mechanical					
Inertia	Oz-in-Sec ²	0.000330	0.000655	0.000974	
	kg m ²	2.33E-06	4.63E-06	6.88E-06	
Weight	Oz	45.9	74.1	98.8	
	gm	1300.00	2100.00	2800.00	
Length (L)	Inch	3.46	4.65	5.83	
	mm	88.00	118.00	148.00	

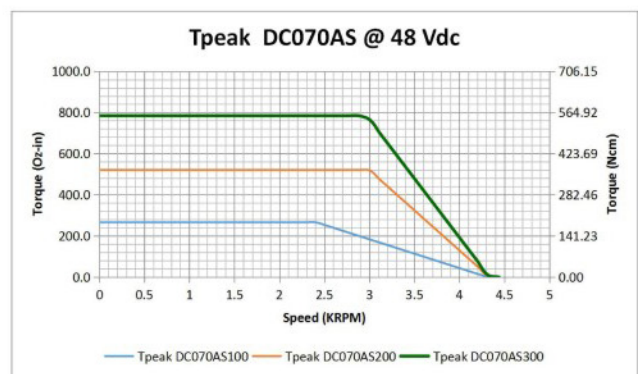
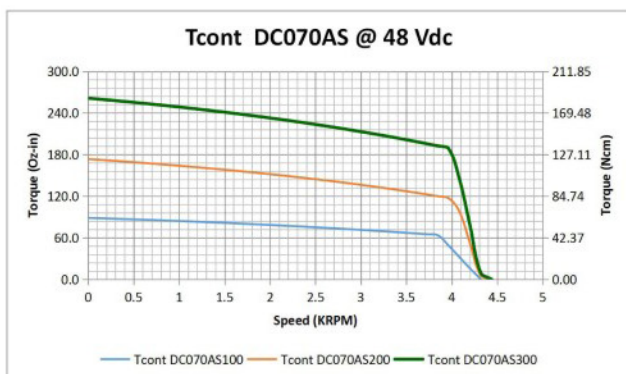
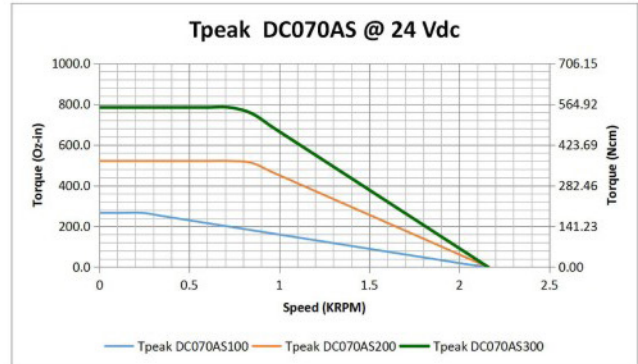
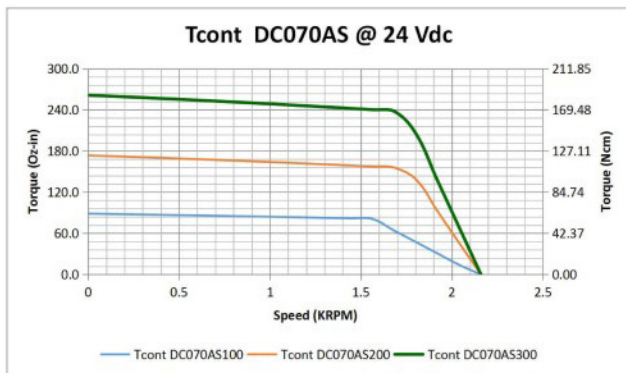
(1) Maximum Speed can be limited by bus voltage and feedback types
 (3) Current values are at maximum allowable winding temperature 125 °C

(2) Measure values at 20 °C

Outline Drawing and Dimensional Data



Performance Curves



* Motor performance curves may vary with the drive technology used

** Motor performance curves may vary based upon the quality of the input voltage