

# AB48000 Brushless Motor

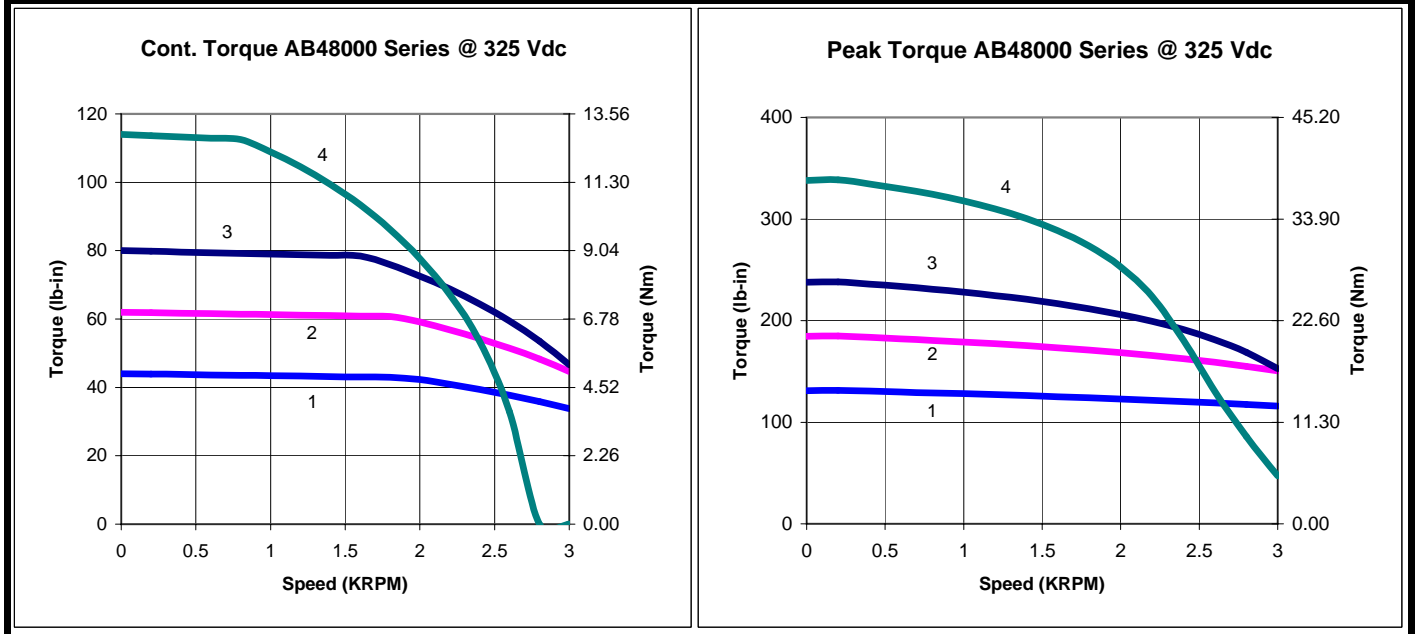
- 4.75 Inch Nema 56 Motor
- Continuous Torques from 44 to 114 lb-in
- Speeds up to 3000 rpm
- Voltage Rating up to 325 Vdc
- 100 Lb Radial Load 1/2" from Front Face
- IP65 Sealing w/ Shaft Seal
- Optical Encoders - High Precision w/Bearing, Optional
- Precision Gearhead, Optional



AB48000 Automation Brushless Motor

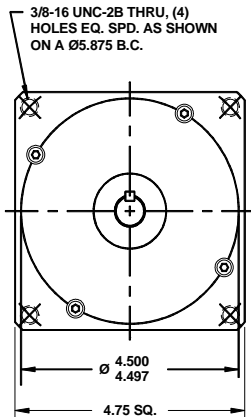
Catalog Number	Torque		Speed @ Vt ω RPM	Voltage Terminal Vt V dc	Current		Torque Constant		Voltage Constant Ke V / KRPM	Res. Rt ohms	Ind. L mH	Inertia Jm		Weight Kg / lb
	Cont. Tcs Nm / lb-in	Peak Tps Nm / lb-in			Cont. Ics A	Peak Ips A	Nm / A	lb-in / A				kg-cm <sup>2</sup>	lb-in-s <sup>2</sup>	
AB48000	4.97 / 44	14.91 / 132	3000	325	14.5	43.5	0.372	3.30	39	0.48	2.41	3.84	0.0034	8.16 / 18
AB48001	7.01 / 62	21.02 / 186	3000	325	14.8	44.3	0.516	4.56	54	0.48	2.85	5.65	0.005	9.98 / 22
AB48002	9.04 / 80	27.12 / 240	3000	325	14.3	42.9	0.688	6.09	72	0.54	3.64	7.46	0.0066	11.79 / 26
AB48003	12.88 / 114	38.64 / 342	2000	325	13.6	40.7	1.031	9.13	108	0.72	5.23	10.96	0.0097	15.42 / 34

Notes: 1) 125C winding temp for Tc, Ic, Tp, Ip. All others @ 25C. 2) Tolerance on winding constants (+/- 10%), Resistance and Inductance (+/- 15%). 3) Visit [www.mcg-net.com](http://www.mcg-net.com) for more CAD drawings & data

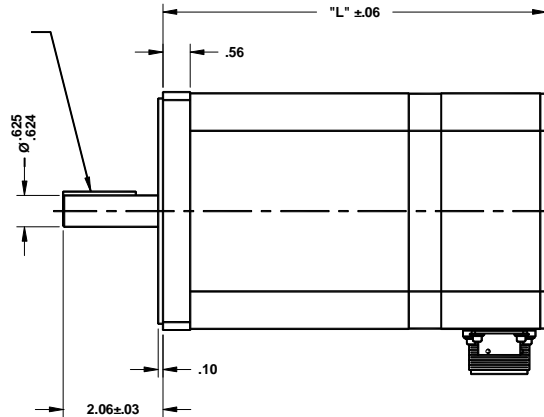


Curves: 1) AB48000, 2) AB48001, 3) AB48002, 4) AB48003

System performance may differ depending on the drive capability.

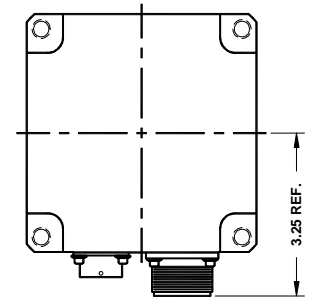


3/16" SQ. KEY  
X 1 1/2" LONG



MODEL	"L"
AB48000	7.93
AB48001	8.93
AB48002	9.93
AB48003	11.93

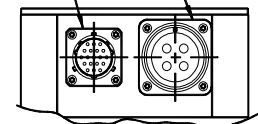
MOTOR CONNECTOR PINOUT	
PIN	FUNCTION
A	PHASE R
B	PHASE S
C	PHASE T
D	CASE GROUND



SENSOR CONNECTOR  
MS3112E-14-19P

MOTOR CONNECTOR  
MS3102E-20-4P

SENSOR CONNECTOR PINOUT							
PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A	THERMOSTAT	E	N.C.	J	SENSOR GROUND	N	N.C.
B	THERMOSTAT	F	N.C.	K	N.C.	P	N.C.
C	HALL B	G	N.C.	L	+5-15 VDC SENSOR	R	HALL C
D	N.C.	H	N.C.	M	HALL A	S	N.C.



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