Applied Motion Products, Inc.
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Product Datasheet
www.Applied-Motion.com

BL100-H03-I

80mm Brushless DC Motor, 100W, 24V

1pc. - $200.00
50pc. - $150.00



Product **Features**

- *Brushless design for long life*
- *Low maintenance*
- *80 mm frame size*
- *Peak torque to 4.24 in-lb*
- *Hall signals for velocity feedback*
- *Compatible with BD5-I6-AH brushless drive*



Description

The BL100-H03-I is a three-phase brushless DC motor for use in velocity control applications. Paired with a BD5-I6-AH

brushless DC drive this motor provides excellent performance over a wide speed range.

Specifications

Part Number	BL100-H03-I
Frame Size	80 mm
Rated Torque	2.12 in-lb
Peak Torque	4.24 in-lb
Rated Power	100 watts
Rated Voltage	24 volts
Rated Speed	4000 rpm
Peak Speed	4500 rpm
Rated Current	5.0 A rms
Peak Current	10.0 A rms
Torque Constant	0.41 in-lb/A
Voltage Constant	3.44 V/krpm
Armature Resistance	0.18 ohms
Armature Inductance	0.34 mH
Motor Length	1.97 inch
Rotor Inertia	5.38E-03 oz-in-sec^2
Integral Gearhead	NA
Gearhead Ratio	NA
Gearhead Continuous Torque	NA
Gearhead Peak Torque	NA
Gearhead Efficiency	NA
Weight	2.16 lbs
Integral Holding Brake	NA
Storage Temperature	-20 to 70 °C
Operating Temperature	0 to 40 °C
Insulation Class	Class E (120 °C)
Maximum Radial Load	NA
Maximum Thrust Load	NA
Shaft Run Out	NA
Radial Play	NA
End Play	NA
Perpendicularity	NA

Concentricity	NA

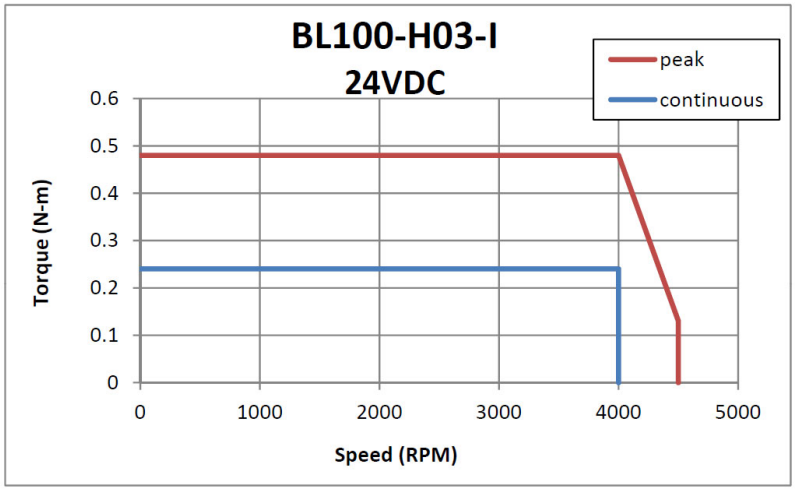
Downloads

Datasheet	No datasheets available for this product.
2D Drawing	BL100-H03-I_RevB.pdf
3D Drawing	BL100-H03-I.igs
Speed-Torque Curves	speed torque curves 80mm BL100-H03-I updated 1-21-14.pdf
Agency Approvals	There are no related agency approval documents at this time.
Application Notes	There are currently no Application Notes available for this product.

Pricing

	BL100-H03-I Part No. BL100-H03-I
1pc.	$200.00
25pc.	$172.00
50pc.	$150.00
100pc.	Contact us for 100+ piece pricing.

Torque Curves



Products in the Series *Brushless DC Motors and Drives*

* Closeout priced products are highlighted in green.

* Items with web only pricing are highlighted in yellow.

Part Number	Frame Size	Continuous Torque (in-lb)	Peak Torque (in-lb)	Motor Length (inch)	Rated Power (W)	Rotor Inertia (oz-in-sec^2)	1pc./50pc.
5000-255-001	NA	NA	NA	NA	NA	NA	$186.00
5000-255-002	NA	NA	NA	NA	NA	NA	$186.00
5000-255-003	NA	NA	NA	NA	NA	NA	$186.00
5000-255-004	NA	NA	NA	NA	NA	NA	$186.00
5000-255-005	NA	NA	NA	NA	NA	NA	$186.00
5000-260-001	NA	NA	NA	NA	NA	NA	$223.00
5000-260-002	NA	NA	NA	NA	NA	NA	$223.00
5000-260-003	NA	NA	NA	NA	NA	NA	$223.00
5000-260-004	NA	NA	NA	NA	NA	NA	$223.00
BL030-H03-G	42 mm	0.58	1.15	1.81	30	5.49E-04	$120.00
BL030-H03-GP005	42 mm	2.38	4.77	4.41	30	0.00055	$269.00 / $ 269.00
BL030-H03-GP014	42 mm	5.92	11.8	4.93	30	0.00055	$296.00 / $ 296.00
BL030-H03-GP019	42 mm	8.28	16.6	4.93	30	0.00055	$296.00 / $ 296.00
BL030-H03-GP029	42 mm	12.5	25.0	4.93	30	0.00055	$296.00 / $ 296.00
BL030-H03-GP051	42 mm	20.5	41.0	5.45	30	0.00055	$324.00 / $ 324.00
BL030-H03-GP100	42 mm	40.1	80.1	5.45	30	0.00055	$324.00 / $ 324.00
BL060-H03-G	42 mm	1.15	2.30	2.76	60	1.02E-03	$160.00
BL060-H03-GP005	42 mm	4.77	9.56	5.36	60	0.001	$309.00 / $ 309.00
BL060-H03-GP014	42 mm	11.8	23.7	5.87	60	0.001	$336.00 / $ 336.00
BL060-H03-GP019	42 mm	16.6	33.1	5.87	60	0.001	$336.00 / $ 336.00
BL060-H03-GP051	42 mm	41.0	82.0	6.39	60	0.001	$364.00 / $ 364.00
BL060-H03-H	57 mm	1.28	2.56	2.15	60	2.09E-03	$160.00
BL090-H03-G	42 mm	1.90	3.98	3.94	90	1.61E-03	$200.00
BL090-H03-GP005	42 mm	8.25	16.4	6.54	90	0.0016	$344.00 / $ 344.00
BL090-H03-GP014	42 mm	20.5	41.1	7.05	90	0.0016	$374.00 / $ 374.00
BL100-H03-I	80 mm	2.12	4.24	1.97	100	5.38E-03	$200.00
BL120-H03-H	57 mm	2.56	5.13	3.25	120	3.95E-03	$200.00
BL180-H04-H	57 mm	3.80	7.61	4.74	180	6.46E-03	$240.00
BL200-H04-I	80 mm	4.24	8.49	2.67	200	0.74	$250.00
BL300-H04-I	80 mm	6.37	12.75	3.31	300	1.53E-02	$300.00