

BL060-H03-GP051

42mm Brushless DC Gearmotor, 60W, 51:1 ratio

1pc. - 364.00
50pc. - 364.00



Product Features

- Brushless design for long life
- Low maintenance
- 42 mm frame size
- Planetary gearbox with 51:1 ratio (50.89:1)
- Peak torque to 49.91 in-lb
- Hall signals for velocity feedback
- Compatible with BD5 brushless drive



Submitted by Eric Rice on Thu, 2013-02-07 10:40

Description

The BL060-H03-GP005 is a three-phase brushless DC gearmotor for use in velocity control applications. The motor comes with a 5:1 (5.18:1) inline planetary gearbox. Paired with a [BD5-G1-AH](#) brushless DC drive this motor provides excellent performance over a wide speed range.

Specifications

Part Number:

BL060-H03-GP051

Rated Torque:

41.0 in-lb

Peak Torque:

82.0 in-lb

Rated Power:

60 watts

Rated Voltage:

24 volts

Rated Speed:

88 rpm

Peak Speed:

88 rpm

Rated Current:

3.6 A rms

Peak Current:

7.2 A rms

Torque Constant:

0.33 in-lb/A

Voltage Constant:

2.7 V/krpm

Armature Resistance:

0.45 ohms

Armature Inductance:

0.44 mH

Motor Length:

6.39 inch

Rotor Inertia:

0.001 oz-in-sec²

Integral Gearhead:

Yes

Gearhead Ratio:

50.89:1

Gearhead Continuous Torque:

2.82 oz-in

Gearhead Peak Torque:

5.64 oz-in

Gearhead Efficiency:

70%

Weight:

2.5 lbs

Storage Temperature:

-20 to 60 °C

Operating Temperature:

0 to 50 °C

Insulation Class:

E

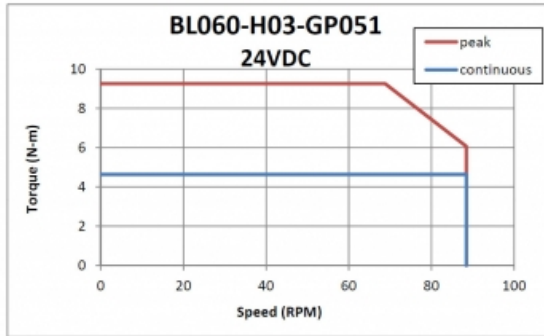
Maximum Radial Load:

67 lbs

Maximum Thrust Load:

25 lbs

Torque Curves



Downloads

Datasheet:

<http://s3.amazonaws.com/applied-motion-pdf/BL060-H03-GP051.pdf>

Speed-Torque Curves:

[speed torque curves 42mm BL060-H03-GP051 updated 1-21-14.pdf](#)

2D Drawing:

[BL060-H03-GPXXX_RevA.pdf](#)

[BL060-H03-G_RevC.pdf](#)

[BL060-H03-G w_Gearhead_TripleStage_3D-PDF.pdf](#)

3D Drawing:

[BL060-H03-G w_Gearhead_TripleStage.igs](#)

Pricing

	BL060-H03-GP051 Part No. BL060-H03-GP051
1pc.	\$364.00
25pc.	\$364.00
50pc.	\$364.00
100pc.	Request a Quote for 100+ piece pricing.

Products in the Series *Brushless DC Motors and Drives*

Number	Frame Size	Continuous Torque	Peak Torque	Motor Length	Rated Power	Rotor Inertia	1pc./50pc.
-255-001	NA	NA	NA	NA	NA	NA	\$186.00 / \$139.50
-255-002	NA	NA	NA	NA	NA	NA	\$186.00 / \$139.50
-255-003	NA	NA	NA	NA	NA	NA	\$186.00 / \$139.50
-255-004	NA	NA	NA	NA	NA	NA	\$186.00 / \$139.50
-255-005	NA	NA	NA	NA	NA	NA	\$186.00 / \$139.50
-260-001	NA	NA	NA	NA	NA	NA	\$223.00 / \$167.25
-260-002	NA	NA	NA	NA	NA	NA	\$223.00 / \$167.25
-260-003	NA	NA	NA	NA	NA	NA	\$223.00 / \$167.25
-260-004	NA	NA	NA	NA	NA	NA	\$223.00 / \$167.25
i0-H03-G	42 mm	0.58	1.15	1.81	30	5.49E-04	\$120.00 / \$90.00
H03-GP005	42 mm	2.38	4.77	4.41	30	0.00055	\$269.00 / \$269.00
H03-GP014	42 mm	5.92	11.8	4.93	30	0.00055	\$296.00 / \$296.00
H03-GP019	42 mm	8.28	16.6	4.93	30	0.00055	\$296.00 / \$296.00
H03-GP029	42 mm	12.5	25.0	4.93	30	0.00055	\$296.00 / \$296.00
H03-GP051	42 mm	20.5	41.0	5.45	30	0.00055	\$324.00 / \$324.00
H03-GP100	42 mm	40.1	80.1	5.45	30	0.00055	\$324.00 / \$324.00
i0-H03-G	42 mm	1.15	2.30	2.76	60	1.02E-03	\$160.00 / \$120.00
H03-GP005	42 mm	4.77	9.56	5.36	60	0.001	\$309.00 / \$309.00
H03-GP014	42 mm	11.8	23.7	5.87	60	0.001	\$336.00 / \$336.00
H03-GP019	42 mm	16.6	33.1	5.87	60	0.001	\$336.00 / \$336.00
H03-GP051	42 mm	41.0	82.0	6.39	60	0.001	\$364.00 / \$364.00
i0-H03-H	57 mm	1.28	2.56	2.15	60	2.09E-03	\$160.00 / \$120.00
i0-H03-G	42 mm	1.90	3.98	3.94	90	1.61E-03	\$200.00 / \$150.00
H03-GP005	42 mm	8.25	16.4	6.54	90	0.0016	\$344.00 / \$344.00
H03-GP014	42 mm	20.5	41.1	7.05	90	0.0016	\$374.00 / \$374.00
00-H03-I	80 mm	2.12	4.24	1.97	100	5.38E-03	\$200.00 / \$150.00
i0-H03-H	57 mm	2.56	5.13	3.25	120	3.95E-03	\$200.00 / \$150.00
i0-H04-H	57 mm	3.80	7.61	4.74	180	6.46E-03	\$240.00 / \$180.00
00-H04-I	80 mm	4.24	8.49	2.67	200	0.74	\$250.00 / \$187.50
00-H04-I	80 mm	6.37	12.75	3.31	300	1.53E-02	\$300.00 / \$225.00