

# BMH1003T12F1A

servo motor BMH - 8.2 Nm - 6000 rpm - keyed  
shaft - with brake - IP54



## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	6000 rpm
Continuous stall torque	8.2 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Peak stall torque	22.8 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal output power	1450 W for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal torque	5.6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal speed	2500 rpm for LXM32.D30M2 at 10 A, 230 V, single phase
Product compatibility	LXM32.D30M2 at 230 V single phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	240 V
Network number of phases	Three phase
Continuous stall current	10 A
Continuous power	2.62 W
Maximum current Irms	30 A for LXM32.D30M2
Maximum permanent current	33.85 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm

Key width	30 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	9 N.m holding brake
Motor flange size	100 mm
Number of motor stacks	3
Torque constant	0.851 N.m/A at 120 °C
Back emf constant	54.8 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	10.3 kg.cm <sup>2</sup>
Stator resistance	0.47 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	6.4 ms at 20 °C
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	234.3 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Product weight	8.15 kg

## Offer Sustainability

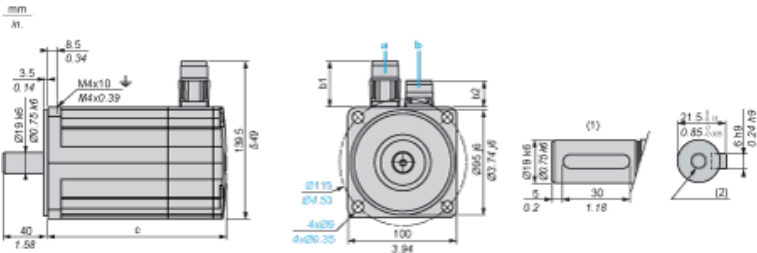
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake  
b: Power supply for servo motor encoder  
(1) Shaft end, keyed slot (optional)  
(2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	192	234

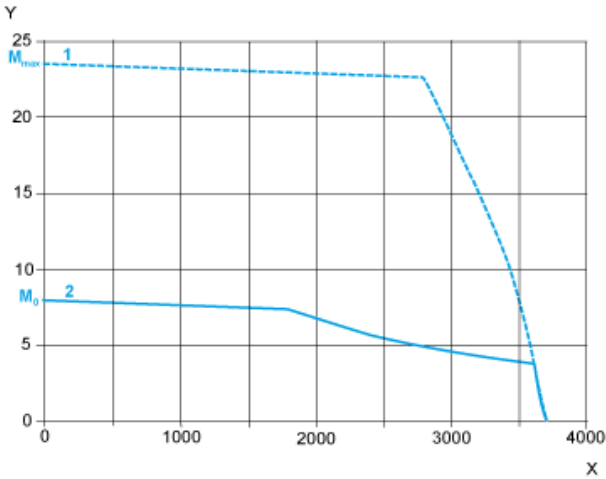
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	7.55	9.21

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque