

# BMH1003T21F1A

servo motor BMH - 8.2 Nm - 6000 rpm -  
untapped shaft - with brake - IP65/IP67



## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	6000 rpm
Continuous stall torque	72.58 lbf.in (8.2 N.m) LXM32.D30M2 10 A, 230 V, single phase
Peak stall torque	201.80 lbf.in (22.8 N.m) LXM32.D30M2 10 A, 230 V, single phase
Nominal output power	1450 W LXM32.D30M2 10 A, 230 V, single phase
Nominal torque	49.56 lbf.in (5.6 N.m) LXM32.D30M2 10 A, 230 V, single phase
Nominal speed	2500 rpm LXM32.D30M2 10 A, 230 V, single phase
Product compatibility	LXM32.D30M2 230 V single phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	240 V
Phase	Three phase
Continuous stall current	10 A
Continuous power	2.62 W
Maximum current Irms	30 A LXM32.D30M2
Maximum permanent current	33.85 A
Second shaft	Without second shaft end
Shaft diameter	0.75 in (19 mm)
Shaft length	1.57 in (40 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	79.66 lbf.in (9 N.m) holding brake
Motor flange size	3.94 in (100 mm)
Number of motor stacks	3
Torque constant	0.851 N.m/A 248 °F (120 °C)
Back emf constant	54.8 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	10.3 kg.cm <sup>2</sup>
Stator resistance	0.47 Ohm 68 °F (20 °C)
Stator inductance	3 mH 68 °F (20 °C)
Stator electrical time constant	6.4 ms 68 °F (20 °C)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Maximum radial force Fr	1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm 610 N 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	9.22 in (234.3 mm)
Centring collar diameter	3.74 in (95 mm)
Centring collar depth	0.14 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.35 in (9 mm)
Circle diameter of the mounting holes	4.53 in (115 mm)
Net weight	17.97 lb(US) (8.15 kg)

## Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	03606485201023
Nbr. of units in pkg.	1
Package weight(Lbs)	18.59 lb(US) (8.43 kg)
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	8.66 in (22 cm)
Package 1 width	7.87 in (20 cm)
Package 1 Length	15.75 in (40 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## 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

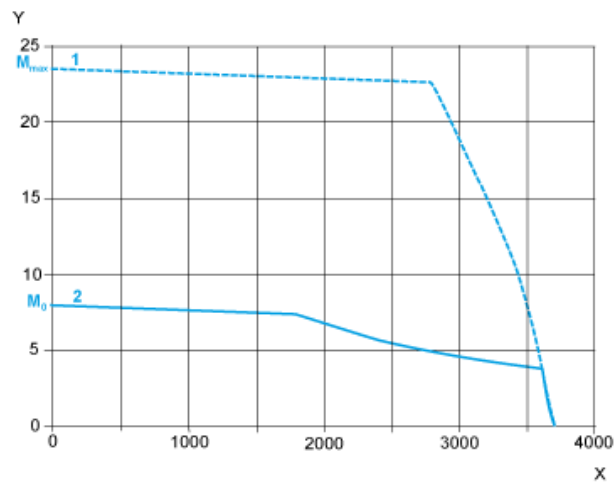
Dimensions in in.

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