

BMH1001P02F2A

servo motor BMH - 3.3 Nm - 6000 rpm -
untapped shaft - with brake - IP54



Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	6000 rpm
Continuous stall torque	3.3 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 3.3 N.M for LXM32.D12N4 at 3 A, 480 V, three phase 3.4 N.M for LXM32.D18N4 at 6 A, 400 V, three phase 3.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Peak stall torque	10.8 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 10.8 N.M for LXM32.D12N4 at 3 A, 480 V, three phase 10.8 N.M for LXM32.D18N4 at 6 A, 400 V, three phase 10.8 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal output power	800 W for LXM32.D12N4 at 3 A, 400 V, three phase 800 W for LXM32.D12N4 at 3 A, 480 V, three phase 1300 W for LXM32.D18N4 at 6 A, 400 V, three phase 1300 W for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal torque	1.9 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 1.9 N.M for LXM32.D12N4 at 3 A, 480 V, three phase 3.1 N.M for LXM32.D18N4 at 6 A, 400 V, three phase 3.1 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal speed	4000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 4000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase LXM32.D18N4 at 400...480 V three phase
Shaft end	Smooth shaft
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	Rotatable right-angled connectors

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.

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	3.15 A
Continuous power	1.76 W
Maximum current Irms	11.9 A for LXM32.D12N4 11.9 A for LXM32.D18N4
Maximum permanent current	11.93 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	5.5 N.m holding brake
Motor flange size	100 mm
Number of motor stacks	1
Torque constant	1.1 N.m/A at 120 °C
Back emf constant	70.3 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	3.68 kg.cm ²
Stator resistance	3.1 Ohm at 20 °C
Stator inductance	13.9 mH at 20 °C
Stator electrical time constant	4.5 ms at 20 °C
Maximum radial force Fr	900 N at 1000 rpm 720 N at 2000 rpm 630 N at 3000 rpm 570 N at 4000 rpm 530 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	170.3 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
Net weight	4.8 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	5.1 kg
Package 1 Height	22 cm
Package 1 width	20 cm
Package 1 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration

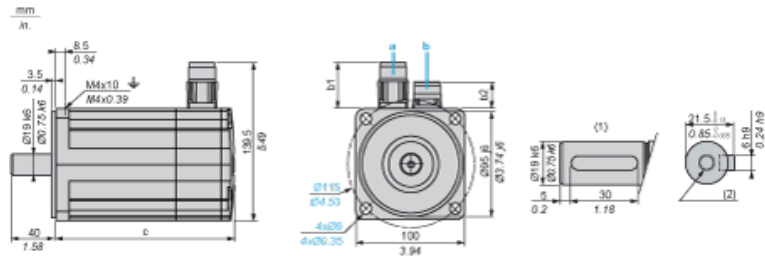
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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	128	170

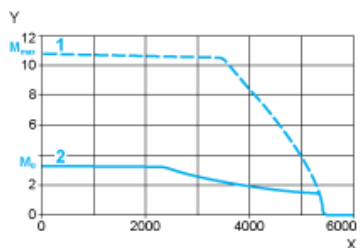
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	5.03	6.69

400 V 3-Phase Supply Voltage

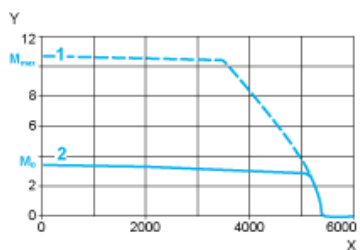
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive

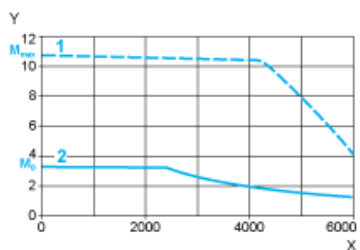


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

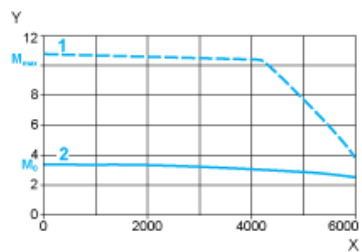
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32-D18N4 servo drive



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