

# BMH1003P01F1A

servo motor BMH - 8.4 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	8.4 N.m for LXM32.D30N4 10 A at 400 V three phase 8.4 N.m for LXM32.D30N4 10 A at 480 V three phase
Peak stall torque	25.1 N.m for LXM32.D30N4 10 A at 400 V three phase 25.1 N.m for LXM32.D30N4 10 A at 480 V three phase
Nominal output power	2700 W for LXM32.D30N4 10 A at 400 V three phase 2700 W for LXM32.D30N4 10 A at 480 V three phase
Nominal torque	6.2 N.m for LXM32.D30N4 10 A at 400 V three phase 6.2 N.m for LXM32.D30N4 10 A at 480 V three phase
Nominal speed	4000 rpm for LXM32.D30N4 10 A at 400 V three phase 4000 rpm for LXM32.D30N4 10 A at 480 V three phase
Product compatibility	LXM32.D30N4 at 400...480 V three phase
Shaft end	Untapped
IP degree of protection	IP54 (standard)
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	480 V
Network number of phases	Three phase
Continuous stall current	7.69 A
Continuous power	3.3 W
Maximum current Irms	29.1 A for LXM32.D30N4
Maximum permanent current	29.1 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	9 N.m (holding brake)
Motor flange size	100 mm
Number of motor stacks	3
Torque constant	1 N.m/A at 120 °C

Back emf constant	63.5 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	10.3 kg.cm <sup>2</sup>
Stator resistance	0.63 Ohm at 20 °C
Stator inductance	4 mH at 20 °C
Stator electrical time constant	6.3 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
RoHS (date code: YYWW)	Compliant - since 0936 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Need no specific recycling operations

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

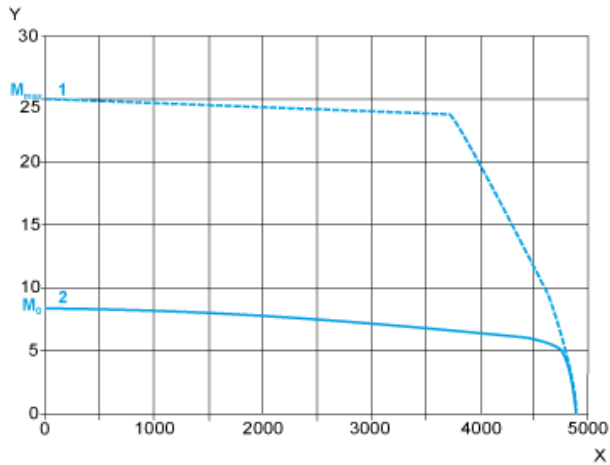
Dimensions in in.

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

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

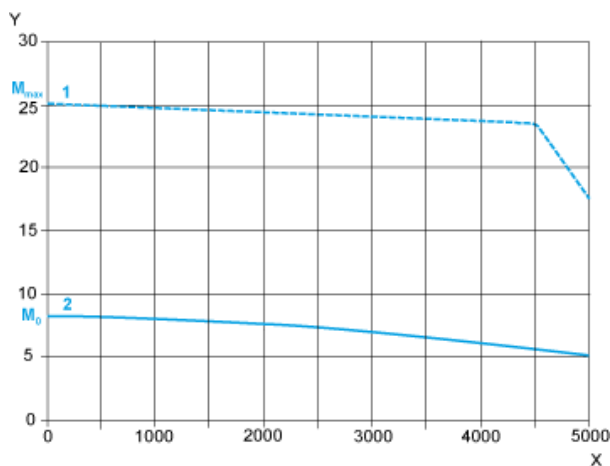


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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