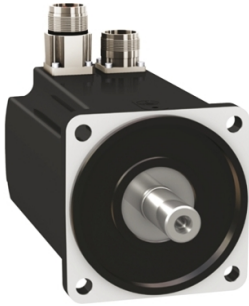


# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
3.3Nm, 6000rpm, keyed shaft, with  
brake, IP65, IP67, 128 multiturn  
encoder, straight

BMH1001P32F1A

! Discontinued

! Discontinued on: Jun 30, 2023

**Product availability: Non-Stock - Not normally stocked in  
distribution facility**

## Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	29.2 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 400 V, three phase 29.2 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 480 V, three phase 30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 400 V, three phase 30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 480 V, three phase
Peak stall torque	95.6 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 400 V, three phase 95.6 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 480 V, three phase 95.6 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 400 V, three phase 95.6 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal output power	800 W LXM32.D12N4 3 A, 400 V, three phase 800 W LXM32.D12N4 3 A, 480 V, three phase 1300 W LXM32.D18N4 6 A, 400 V, three phase 1300 W LXM32.D18N4 6 A, 480 V, three phase
Nominal torque	16.8 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 400 V, three phase 16.8 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 480 V, three phase 27.4 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 400 V, three phase 27.4 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal speed	4000 rpm LXM32.D12N4 3 A, 400 V, three phase 4000 rpm LXM32.D12N4 3 A, 480 V, three phase 4000 rpm LXM32.D18N4 6 A, 400 V, three phase 4000 rpm LXM32.D18N4 6 A, 480 V, three phase
Product compatibility	LXM32.D12N4 400...480 V three phase LXM32.D18N4 400...480 V three phase
Shaft end	Keyed
IP Degree of Protection	IP65 standard IP67 with IP67 kit
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	480 V
Phase	Three phase

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Continuous stall current	3.15 A
Continuous power	1.76 W
Maximum current Irms	11.9 A LXM32.D12N4 11.9 A LXM32.D18N4
Maximum permanent current	11.93 A
Second shaft	Without second shaft end
Shaft diameter	0.7 in (19 mm)
Shaft length	1.6 in (40 mm)
Key width	1.2 in (30 mm)
Feedback type	Multiturn SinCos Hiperface
Holding torque	48.7 lbf.in (5.5 N.m) holding brake
Motor flange size	3.9 in (100 mm)
Number of motor stacks	1
Torque constant	1.1 N.m/A 248 °F (120 °C)
Back emf constant	70.3 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	3.68 kg.cm <sup>2</sup>
Stator resistance	3.1 Ohm 68 °F (20 °C)
Stator inductance	13.9 mH 68 °F (20 °C)
Stator electrical time constant	4.5 ms 68 °F (20 °C)
Maximum radial force Fr	900 N 1000 rpm 720 N 2000 rpm 630 N 3000 rpm 570 N 4000 rpm 530 N 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	6.7 in (170.3 mm)
Centring collar diameter	3.7 in (95 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (9 mm)
Circle diameter of the mounting holes	4.5 in (115 mm)
Net Weight	10.6 lb(US) (4.8 kg)
Sizing reference	BMH1001P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)

## Ordering and shipping details

<b>Category</b>	US1PC5318282
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3606485195476
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	8.7 in (22.0 cm)
<b>Package 1 Width</b>	7.9 in (20.0 cm)
<b>Package 1 Length</b>	15.7 in (40.0 cm)
<b>Package weight(Lbs)</b>	11.2 lb(US) (5.1 kg)
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	41.3 in (105.0 cm)
<b>Package 2 Width</b>	31.496 in (80.000 cm)
<b>Package 2 Length</b>	23.622 in (60.000 cm)
<b>Package 2 Weight</b>	79.6 lb(US) (36.1 kg)

## Contractual warranty

<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better



#### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

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](http://www.P65Warnings.ca.gov)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No

### Use Again



#### Repack and remanufacture

Circularity Profile

No need of specific recycling operations



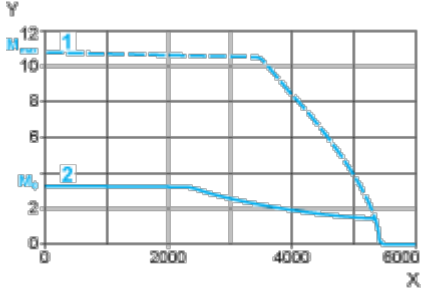
Performance Curves

400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



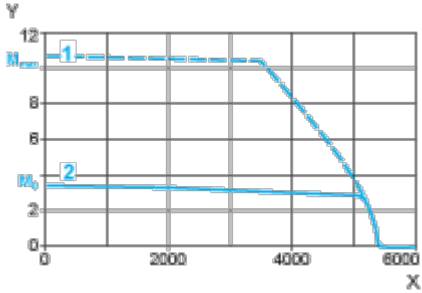
X Speed in rpm

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

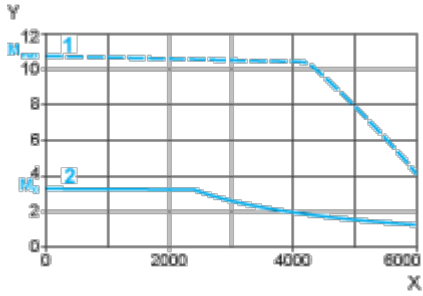
2 Continuous torque

480 V 3-Phase Supply Voltage

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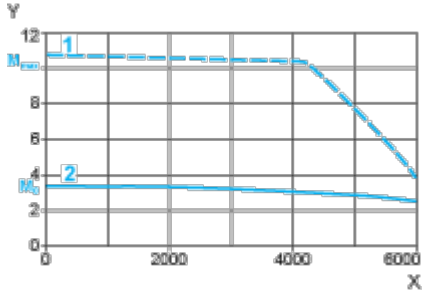
**Torque/Speed Curves**

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