

Product data sheet

Specifications



servo motor BMH, Lexium 32,
3.4Nm, 6000rpm, keyed shaft, with
brake, IP54, 16bit encoder, straight

BMH1001T16F1A

⚠ Discontinued on: Jun 30, 2023

⚠ Discontinued

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 | 30.09 lbf.in (3.4 N.m) LXM32.D30M2 10 A, 115 V, single phase 30.09 lbf.in (3.4 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Peak stall torque | 78.8 lbf.in (8.9 N.m) LXM32.D30M2 10 A, 115 V, single phase 90.3 lbf.in (10.2 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Nominal output power | 700 W LXM32.D30M2 10 A, 115 V, single phase 900 W LXM32.D18M2 6 A, 230 V, single phase |
| Nominal torque | 29.2 lbf.in (3.3 N.m) LXM32.D30M2 10 A, 115 V, single phase 24.8 lbf.in (2.8 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Nominal speed | 2000 rpm LXM32.D30M2 10 A, 115 V, single phase 3000 rpm LXM32.D18M2 6 A, 230 V, single phase |
| Product compatibility | LXM32.D30M2 115 V single phase LXM32.D18M2 230 V single phase |
| Shaft end | Keyed |
| IP Degree of Protection | IP54 standard |
| Speed feedback resolution | 32768 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 | 5.11 A |
| Continuous power | 1.74 W |
| Maximum current Irms | 15 A LXM32.D30M2 19.4 A LXM32.D18M2 |
| Maximum permanent current | 19.38 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.7 in (19 mm) |

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

| | |
|---------------------------------------|--|
| Shaft length | 1.6 in (40 mm) |
| Key width | 1.2 in (30 mm) |
| Feedback type | Single turn 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 | 0.67 N.m/A 248 °F (120 °C) |
| Back emf constant | 43.3 V/krpm 248 °F (120 °C) |
| Number of motor poles | 10 |
| Rotor inertia | 3.68 kg.cm ² |
| Stator resistance | 1.19 Ohm 68 °F (20 °C) |
| Stator inductance | 5.3 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) |
| Product Weight | 10.6 lb(US) (4.8 kg) |
| Sizing reference | BMH1001T |
| Network number of phases | 3 |
| Accuracy error [angular] | 4.8 ° |
| 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

| | |
|-------------------|---------------|
| Category | US1PC5318282 |
| Discount Schedule | PC53 |
| GTIN | 3606485197036 |
| Returnability | No |

Packing Units

| | |
|------------------------|-----|
| Unit Type of Package 1 | PCE |
|------------------------|-----|

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

Contractual warranty

| | |
|-----------------------------|----|
| Warranty (in months) | 18 |
|-----------------------------|----|



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

[Compliant By Exemption](#)

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

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

Circularity Profile

No need of specific recycling operations

Dimensions Drawings

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.

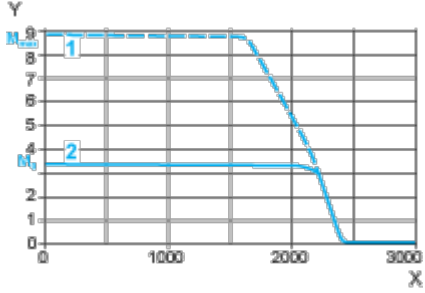
| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1 | b2 | b1 | b2 | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 5.03 | 6.69 |

Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive



X Speed in rpm

Y Torque in Nm

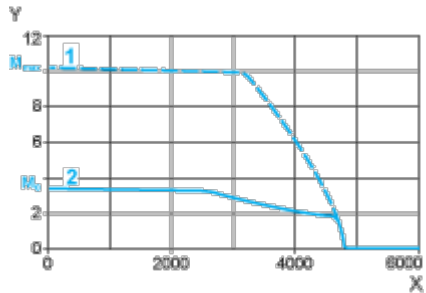
1 Peak torque

2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque