

Product datasheet

Specifications



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

BMH1001T17F1A

! Discontinued

! Discontinued on: 9 Feb 2023

Main

| | |
|---------------------------|---|
| Device short name | BMH |
| Product or component type | Servo motor |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 3.4 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 3.4 N.m for LXM32.D18M2 at 6 A, 230 V, single phase |
| Peak stall torque | 8.9 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 10.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase |
| Nominal output power | 700 W for LXM32.D30M2 at 10 A, 115 V, single phase 900 W for LXM32.D18M2 at 6 A, 230 V, single phase |
| Nominal torque | 3.3 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 2.8 N.m for LXM32.D18M2 at 6 A, 230 V, single phase |
| Nominal speed | 2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase 3000 rpm for LXM32.D18M2 at 6 A, 230 V, single phase |
| Product compatibility | LXM32.D30M2 at 115 V single phase LXM32.D18M2 at 230 V single phase |
| Shaft end | Keyed |
| IP degree of protection | IP54 standard |
| Speed feedback resolution | 32768 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 | 240 V |
| Network number of phases | Three phase |
| Continuous stall current | 5.11 A |
| Continuous power | 1.74 W |
| Maximum current I _{rms} | 15 A for LXM32.D30M2 19.4 A for LXM32.D18M2 |
| Maximum permanent current | 19.38 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 19 mm |

| | |
|---------------------------------------|---|
| Shaft length | 40 mm |
| Key width | 30 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 | 0.67 N.m/A at 120 °C |
| Back emf constant | 43.3 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 3.68 kg.cm ² |
| Stator resistance | 1.19 Ohm at 20 °C |
| Stator inductance | 5.3 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 |
| Sizing reference | BMH1001T |
| Network number of phases | 3 |
| Accuracy error [angular] | 4.8 ° |
| Temperature copper hot | 135 °C |
| Temperature magnet hot | 100 °C |
| Temperature magnet rt | 20 °C |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 22.0 cm |
| Package 1 Width | 20.0 cm |
| Package 1 Length | 40.0 cm |
| Package 1 Weight | 5.1 kg |
| Unit Type of Package 2 | P06 |

| | |
|-------------------------------------|-----------|
| Number of Units in Package 2 | 24 |
| Package 2 Height | 105.0 cm |
| Package 2 Width | 80.000 cm |
| Package 2 Length | 60.000 cm |
| Package 2 Weight | 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](#)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

End of life manual availability

No need of specific recycling operations

WEEE Label

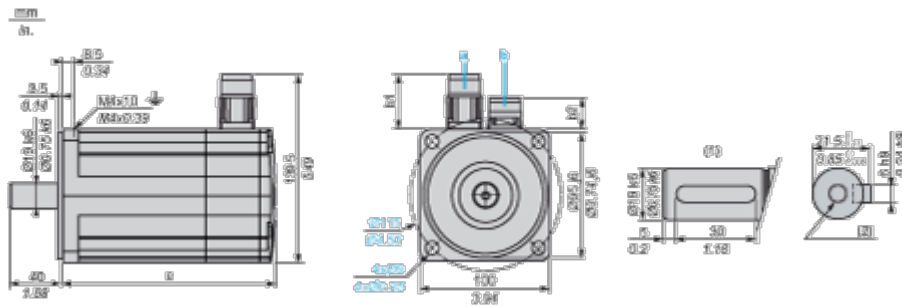


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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.

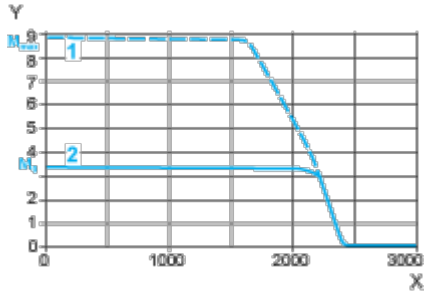
| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1 | b2 | b1 | b2 | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 5.03 | 6.69 |

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

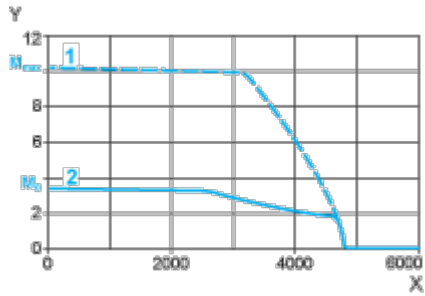
1 Peak torque

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