

BMH1001P16A2A

servo motor BMH - 3.3 Nm - 6000 rpm - keyed shaft - without brake - IP54



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 29.21 Lbf.In (3.3 N.m) LXM32.D12N4 3 A, 400 V, three phase 29.21 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 | 95.59 Lbf.In (10.8 N.m) LXM32.D12N4 3 A, 400 V, three phase 95.59 Lbf.In (10.8 N.m) LXM32.D12N4 3 A, 480 V, three phase 95.59 Lbf.In (10.8 N.m) LXM32.D18N4 6 A, 400 V, three phase 95.59 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 | 16.82 Lbf.In (1.9 N.m) LXM32.D12N4 3 A, 400 V, three phase 16.82 Lbf.In (1.9 N.m) LXM32.D12N4 3 A, 480 V, three phase 27.44 Lbf.In (3.1 N.m) LXM32.D18N4 6 A, 400 V, three phase 27.44 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 | IP54 standard |
| Speed feedback resolution | 32768 points/turn |
| Holding brake | Without |
| Mounting support | International standard flange |
| Electrical connection | Rotatable right-angled connectors |

Complementary

| | |
|---------------------------|--|
| Range compatibility | Lexium 32 |
| [Us] rated supply voltage | 480 V |
| Phase | Three phase |
| 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 | 0.75 in (19 mm) |
| Shaft length | 1.57 in (40 mm) |
| Key width | 1.18 in (30 mm) |
| Feedback type | Single turn SinCos Hiperface |
| Motor flange size | 3.94 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 | 3.19 kg.cm ² |
| 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 |
| Type of cooling | Natural convection |
| Length | 5.06 in (128.6 mm) |
| Centring collar diameter | 3.74 in (95 mm) |
| Centring collar depth | 0.14 in (3.5 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.35 in (9 mm) |
| Circle diameter of the mounting holes | 4.53 in (115 mm) |
| Net Weight | 7.36 lb(US) (3.34 kg) |

Ordering and shipping details

| | |
|-----------------------|--------------------------|
| Category | 18282 - LEXIUM 32 MOTORS |
| Discount Schedule | PC53 |
| GTIN | 00785901769552 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 10.1 lb(US) (4.58 kg) |
| Returnability | Yes |
| Country of origin | DE |

Packing Units

| | |
|------------------------------|---------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 7.48 in (19 cm) |
| Package 1 width | 8.66 in (22 cm) |
| Package 1 Length | 15.75 in (40 cm) |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 12 |
| Package 2 Weight | 140.27 lb(US) (63.625 kg) |
| Package 2 Height | 31.50 in (80 cm) |
| Package 2 width | 31.50 in (80 cm) |
| Package 2 Length | 23.62 in (60 cm) |

Offer Sustainability

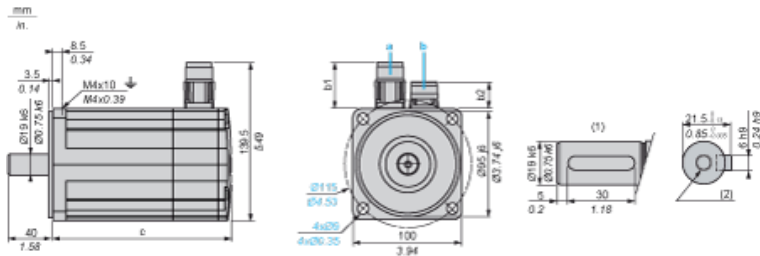
| | |
|----------------------------|--|
| Sustainable offer status | Green Premium product |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration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

Contractual warranty

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| 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 |

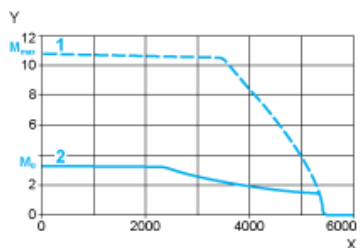
Dimensions in in.

| 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

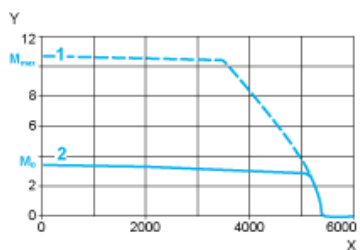
Torque/Speed Curves

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

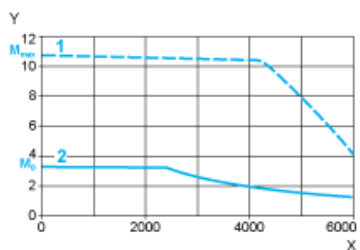


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

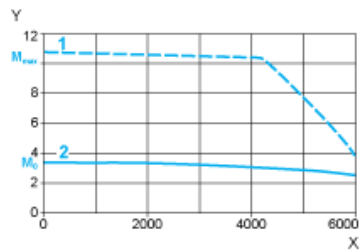
Torque/Speed Curves

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