

BMH1002T12F1A

servo motor BMH, Lexium 32, 6Nm, 6000rpm, keyed shaft, with brake, IP54, 128 multiturn encoder, straight



Main

| | |
|---------------------------|---|
| Product or Component Type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 53.10 Lbf.In (6 N.m) LXM32.D30M2 10 A, 115 V, single phase 53.10 lbf.in (6 N.m) LXM32.D30M2 10 A, 230 V, single phase |
| Peak stall torque | 91.16 Lbf.In (10.3 N.m) LXM32.D30M2 10 A, 115 V, single phase 162.85 lbf.in (18.4 N.m) LXM32.D30M2 10 A, 230 V, single phase |
| Nominal output power | 750 W LXM32.D30M2 10 A, 115 V, single phase 1450 W LXM32.D30M2 10 A, 230 V, single phase |
| Nominal torque | 30.98 Lbf.In (3.5 N.m) LXM32.D30M2 10 A, 115 V, single phase 40.71 lbf.in (4.6 N.m) LXM32.D30M2 10 A, 230 V, single phase |
| Nominal speed | 2000 rpm LXM32.D30M2 10 A, 115 V, single phase 3000 rpm LXM32.D30M2 10 A, 230 V, single phase |
| Product compatibility | LXM32.D30M2 115 V single phase LXM32.D30M2 230 V single phase |
| Shaft end | Keyed |
| IP Degree of Protection | IP54 standard |
| 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 | 240 V |
| Phase | Three phase |
| Continuous stall current | 8.65 A |
| Continuous power | 2.39 W |
| Maximum current Irms | 15 A LXM32.D30M2 115 V 30 A LXM32.D30M2 230 V |
| Maximum permanent current | 30.24 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 | Multiturn SinCos Hiperface |
| Holding torque | 48.68 lbf.in (5.5 N.m) holding brake |
| Motor flange size | 3.94 in (100 mm) |
| Number of motor stacks | 2 |
| Torque constant | 0.72 N.m/A 248 °F (120 °C) |
| Back emf constant | 46.2 V/krpm 248 °F (120 °C) |

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| | |
|---------------------------------------|--|
| Number of motor poles | 10 |
| Rotor inertia | 6.77 kg.cm ² |
| Stator resistance | 0.54 Ohm 68 °F (20 °C) |
| Stator inductance | 2.7 mH 68 °F (20 °C) |
| Stator electrical time constant | 5 ms 68 °F (20 °C) |
| Maximum radial force Fr | 990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm 580 N 5000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 12 W |
| Type of cooling | Natural convection |
| Length | 7.96 in (202.3 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 | 14.11 lb(US) (6.4 kg) |

Ordering and shipping details

| | |
|-------------------|------------------------|
| Category | 18282-LEXIUM 32 MOTORS |
| Discount Schedule | PC53 |
| GTIN | 3606485197340 |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 7.87 in (20.000 cm) |
| Package 1 Width | 8.66 in (22.000 cm) |
| Package 1 Length | 15.75 in (40.000 cm) |
| Package 1 Weight | 14.73 lb(US) (6.680 kg) |

Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| 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 |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | No need of specific recycling operations |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free | Yes |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

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 | 160 | 202 |

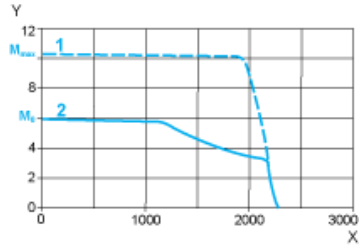
Dimensions in in.

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1 | b2 | b1 | b2 | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 6.29 | 7.95 |

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

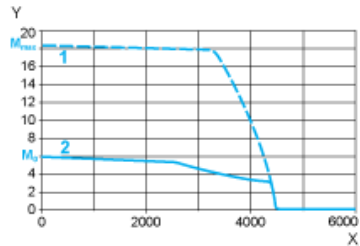


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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