

BMH0701T21F1A

servo motor BMH - 1.4 Nm - 8000 rpm -
untapped shaft - with brake - IP65/IP67



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 12.39 Lbf.in (1.4 N.m) LXM32.U90M2 3 A, 230 V, single phase 12.39 lbf.in (1.4 N.m) LXM32.D18M2 6 A, 115 V, single phase |
| Peak stall torque | 35.40 Lbf.in (4 N.m) LXM32.U90M2 3 A, 230 V, single phase 37.17 lbf.in (4.2 N.m) LXM32.D18M2 6 A, 115 V, single phase |
| Nominal output power | 450 W LXM32.U90M2 3 A, 230 V, single phase 350 W LXM32.D18M2 6 A, 115 V, single phase |
| Nominal torque | 9.74 Lbf.in (1.1 N.m) LXM32.U90M2 3 A, 230 V, single phase 11.95 lbf.in (1.35 N.m) LXM32.D18M2 6 A, 115 V, single phase |
| Nominal speed | 4000 rpm LXM32.U90M2 3 A, 230 V, single phase 2500 rpm LXM32.D18M2 6 A, 115 V, single phase |
| Product compatibility | LXM32.D18M2 115 V single phase LXM32.U90M2 230 V single phase |
| Shaft end | Smooth shaft |
| IP degree of protection | IP65 standard IP67 with IP67 kit |
| Speed feedback resolution | 131072 points/turn |
| Holding brake | With |
| Mounting support | International standard flange |
| Electrical connection | Straight connectors |

Complementary

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|---------------------------|--|
| Range compatibility | Lexium 32 |
| [Us] rated supply voltage | 240 V |
| Phase | Three phase |
| Continuous stall current | 2.85 A |
| Continuous power | 1.05 W |
| Maximum current Irms | 9.6 A LXM32.D18M2 9.6 A LXM32.U90M2 |
| Maximum permanent current | 9.56 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.43 in (11 mm) |
| Shaft length | 0.91 in (23 mm) |
| Feedback type | Single turn SinCos Hiperface |
| Holding torque | 26.55 lbf.in (3 N.m) holding brake |
| Motor flange size | 2.76 in (70 mm) |
| Number of motor stacks | 1 |
| Torque constant | 0.49 N.m/A 248 °F (120 °C) |
| Back emf constant | 31.17 V/krpm 248 °F (120 °C) |
| Number of motor poles | 10 |

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|---------------------------------------|--|
| Rotor inertia | 0.7 kg.cm ² |
| Stator resistance | 3.2 Ohm 68 °F (20 °C) |
| Stator inductance | 9.1 mH 68 °F (20 °C) |
| Stator electrical time constant | 2.8 ms 68 °F (20 °C) |
| Maximum radial force Fr | 660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 7 W |
| Type of cooling | Natural convection |
| Length | 6.34 in (161 mm) |
| Centring collar diameter | 2.36 in (60 mm) |
| Centring collar depth | 0.10 in (2.5 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.22 in (5.5 mm) |
| Circle diameter of the mounting holes | 3.23 in (82 mm) |
| Net weight | 5.73 lb(US) (2.6 kg) |

Ordering and shipping details

| | |
|-----------------------|--------------------------|
| Category | 18282 - LEXIUM 32 MOTORS |
| Discount Schedule | PC53 |
| GTIN | 03606485199733 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 4.3 lb(US) (1.95 kg) |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------|------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 4.33 in (11 cm) |
| Package 1 width | 7.87 in (20 cm) |
| Package 1 Length | 15.75 in (40 cm) |

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) 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. |
| PVC free | Yes |

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)

Dimensions in mm

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|----|----|-----|------|-------------------------------------|-------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 122 | 161 | 23 | 18 | 2.5 | 4 h9 | 12.5 ⁺⁰ _{-0.13} | 11 k6 | M4 x 14 |

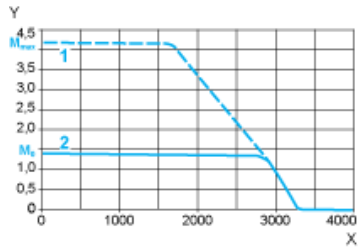
Dimensions in in.

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|----|-----------------------------|------|-------------------|----------------|------|------|------|---------|---------------------------------------|---------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 1.55 | 1 | 1.55 | 1.55 | 4.80 | 6.33 | 0.90 | 0.70 | 0.09 | 0.16 h9 | 0.49 ⁺⁰ _{-0.0051} | 0.43 k6 | M4 x 0.55 |

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18M2 servo drive

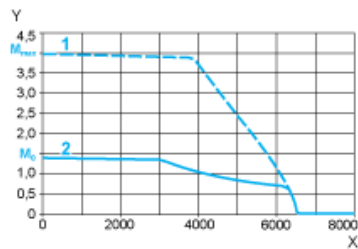


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-U90M2 servo drive



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