



Main

| | |
|---------------------------|--------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 1.4 N.M for LXM32.U90M2 at 3 A, 230 V, single phase 1.4 N.m for LXM32.D18M2 at 6 A, 115 V, single phase |
| Peak stall torque | 4 N.M for LXM32.U90M2 at 3 A, 230 V, single phase 4.2 N.m for LXM32.D18M2 at 6 A, 115 V, single phase |
| Nominal output power | 450 W for LXM32.U90M2 at 3 A, 230 V, single phase 350 W for LXM32.D18M2 at 6 A, 115 V, single phase |
| Nominal torque | 1.1 N.M for LXM32.U90M2 at 3 A, 230 V, single phase 1.35 N.m for LXM32.D18M2 at 6 A, 115 V, single phase |
| Nominal speed | 4000 rpm for LXM32.U90M2 at 3 A, 230 V, single phase 2500 rpm for LXM32.D18M2 at 6 A, 115 V, single phase |
| Product compatibility | LXM32.D18M2 at 115 V single phase LXM32.U90M2 at 230 V single phase |
| Shaft end | Smooth shaft |
| 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 | Rotatable right-angled connectors |

Complementary

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

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

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 11.0 cm |
| Package 1 Width | 20.0 cm |
| Package 1 Length | 40.0 cm |
| Package 1 Weight | 2.8 kg |

Offer Sustainability

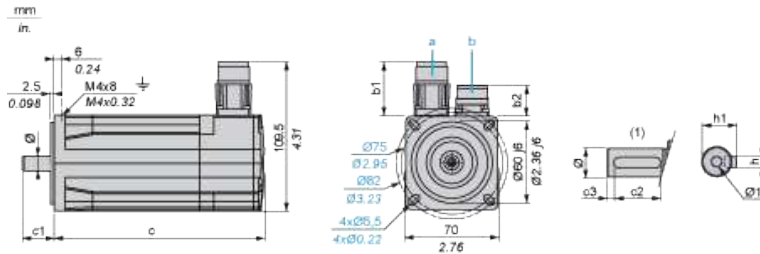
| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance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

| | |
|----------|-----------|
| 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)

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 |

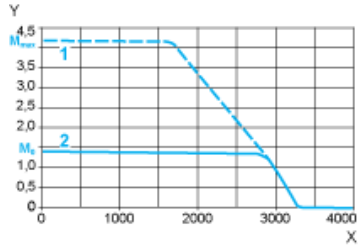
Dimensions in in.

| 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

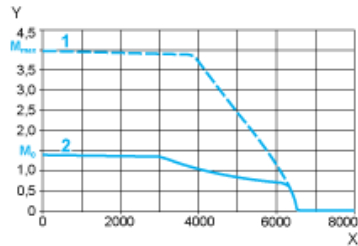


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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