

BMH0703P01A2A

servo motor BMH - 3.4 Nm - 8000 rpm -
untapped shaft - without brake - IP54



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 3.4 N.m for LXM32.D18N4 6 A at 400 V three phase 3.4 N.m for LXM32.D18N4 6 A at 480 V three phase |
| Peak stall torque | 10.2 N.m for LXM32.D18N4 6 A at 400 V three phase 10.2 N.m for LXM32.D18N4 6 A at 480 V three phase |
| Nominal output power | 1300 W for LXM32.D18N4 6 A at 400 V three phase 1300 W for LXM32.D18N4 6 A at 480 V three phase |
| Nominal torque | 2.4 N.m for LXM32.D18N4 6 A at 400 V three phase 2.4 N.m for LXM32.D18N4 6 A at 480 V three phase |
| Nominal speed | 5000 rpm for LXM32.D18N4 6 A at 400 V three phase 5000 rpm for LXM32.D18N4 6 A at 480 V three phase |
| Product compatibility | LXM32.D18N4 at 400...480 V three phase |
| Shaft end | Untapped |
| IP degree of protection | IP54 (standard) |
| Speed feedback resolution | 131072 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 |
| Network number of phases | Three phase |
| Continuous stall current | 3.91 A |
| Continuous power | 1.68 W |
| Maximum current Irms | 12.6 A for LXM32.D18N4 |
| Maximum permanent current | 12.57 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 14 mm |
| Shaft length | 30 mm |
| Feedback type | Single turn SinCos Hiperface |
| Motor flange size | 70 mm |
| Number of motor stacks | 3 |
| Torque constant | 0.87 N.m/A at 120 °C |
| Back emf constant | 55.8 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 1.67 kg.cm ² |
| Stator resistance | 2.65 Ohm at 20 °C |
| Stator inductance | 8.6 mH at 20 °C |
| Stator electrical time constant | 3.2 ms at 20 °C |

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| | |
|---------------------------------------|--|
| Maximum radial force Fr | 730 N at 1000 rpm 580 N at 2000 rpm 510 N at 3000 rpm 460 N at 4000 rpm 430 N at 5000 rpm 400 N at 6000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 186 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 |
| Product weight | 3 kg |

Offer Sustainability

| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0936 - Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold |
| Product environmental profile | Available Download Product Environmental |
| Product end of life instructions | Need no specific recycling operations |

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 | 186 | 225 | 30 | 20 | 5 | 5 h9 | 16 ⁺⁰ _{-0.13} | 14 k6 | M5 x 17 |

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 | 7.32 | 8.85 | 1.18 | 0.78 | 0.19 | 0.20 h9 | 0.63 ⁺⁰ _{-0.0051} | 0.55 k6 | M5 x 0.67 |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18N4 servo drive

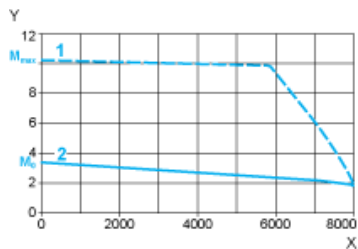


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18N4 servo drive



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