

Product data sheet

Characteristics

BMH1003T27F1A

servo motor BMH - 8.2 Nm - 6000 rpm -
untapped shaft - with brake - IP65/IP67



Main

| | |
|---------------------------|---|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 8.2 N.m for LXM32.D30M2 10 A at 230 V single phase |
| Peak stall torque | 22.8 N.m for LXM32.D30M2 10 A at 230 V single phase |
| Nominal output power | 1450 W for LXM32.D30M2 10 A at 230 V single phase |
| Nominal torque | 5.6 N.m for LXM32.D30M2 10 A at 230 V single phase |
| Nominal speed | 2500 rpm for LXM32.D30M2 10 A at 230 V single phase |
| Product compatibility | LXM32.D30M2 at 230 V single phase |
| Shaft end | Untapped |
| IP degree of protection | IP65 (standard) IP67 (with IP67 kit) |
| Speed feedback resolution | 32768 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 |
| Network number of phases | Three phase |
| Continuous stall current | 10 A |
| Continuous power | 2.62 W |
| Maximum current Irms | 30 A for LXM32.D30M2 |
| Maximum permanent current | 33.85 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 19 mm |
| Shaft length | 40 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 9 N.m (holding brake) |
| Motor flange size | 100 mm |
| Number of motor stacks | 3 |
| Torque constant | 0.851 N.m/A at 120 °C |
| Back emf constant | 54.8 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 10.3 kg.cm² |
| Stator resistance | 0.47 Ohm at 20 °C |
| Stator inductance | 3 mH at 20 °C |
| Stator electrical time constant | 6.4 ms at 20 °C |

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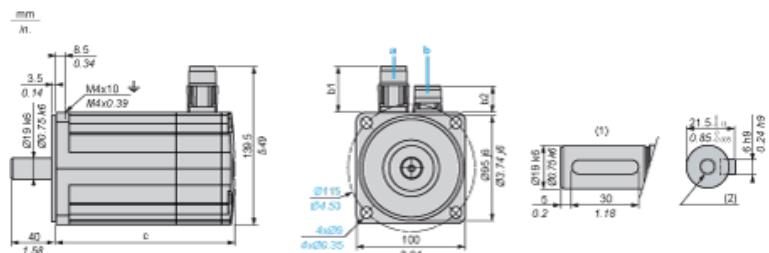
| | |
|---------------------------------------|--|
| Maximum radial force Fr | 1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 18 W |
| Type of cooling | Natural convection |
| Length | 234.3 mm |
| Centring collar diameter | 95 mm |
| Centring collar depth | 3.5 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 9 mm |
| Circle diameter of the mounting holes | 115 mm |
| Product weight | 8.15 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)
- (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 | 192 | 234 |

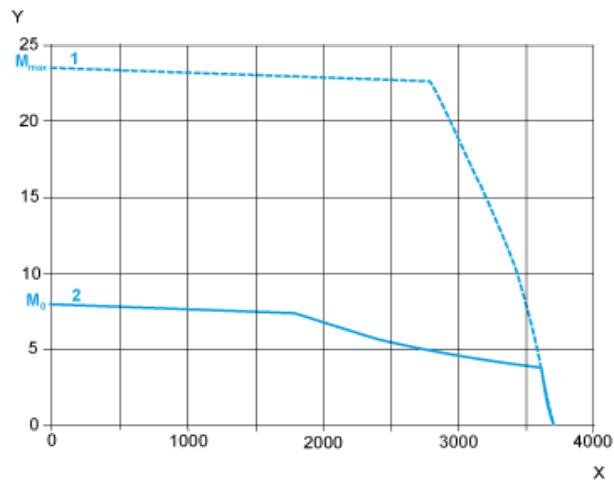
Dimensions in in.

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1 | b2 | b1 | b2 | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 7.55 | 9.21 |

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