

BMH1401P21F2A

servo motor BMH - 10.3 Nm - 4000 rpm -
untapped shaft - with brake - IP65/IP67



Main

| | |
|---------------------------|---|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 4000 rpm |
| Continuous stall torque | 10.3 N.m for LXM32.D30M2 10 A at 230 V single phase 10.3 N.m for LXM32.D30N4 10 A at 400 V three phase 10.3 N.m for LXM32.D30N4 10 A at 480 V three phase |
| Peak stall torque | 30.8 N.m for LXM32.D30M2 10 A at 230 V single phase 30.8 N.m for LXM32.D30N4 10 A at 400 V three phase 30.8 N.m for LXM32.D30N4 10 A at 480 V three phase |
| Nominal output power | 1450 W for LXM32.D30M2 10 A at 230 V single phase 2400 W for LXM32.D30N4 10 A at 400 V three phase 2400 W for LXM32.D30N4 10 A at 480 V three phase |
| Nominal torque | 6.9 N.m for LXM32.D30M2 10 A at 230 V single phase 7.7 N.m for LXM32.D30N4 10 A at 400 V three phase 7.7 N.m for LXM32.D30N4 10 A at 480 V three phase |
| Nominal speed | 2000 rpm for LXM32.D30M2 10 A at 230 V single phase 3000 rpm for LXM32.D30N4 10 A at 400 V three phase 3000 rpm for LXM32.D30N4 10 A at 480 V three phase |
| Product compatibility | LXM32.D30M2 at 230 V single phase LXM32.D30N4 at 400...480 V three phase |
| Shaft end | Untapped |
| 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 | Rotatable right-angled connectors |

Complementary

| | |
|---------------------------|--|
| Range compatibility | Lexium 32 |
| [Us] rated supply voltage | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 8.58 A |
| Continuous power | 2.85 W |
| Maximum current Irms | 29.8 A for LXM32.D30M2 29.8 A for LXM32.D30N4 |

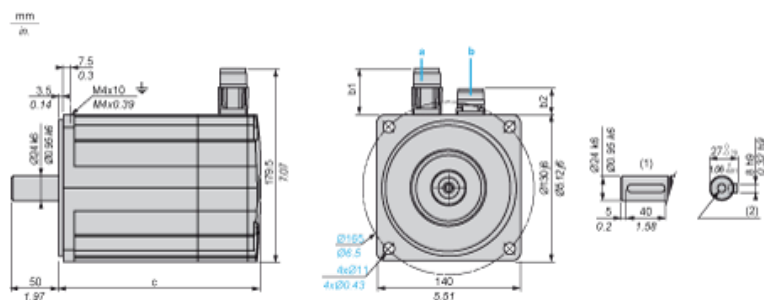
| | |
|---------------------------------------|--|
| Maximum permanent current | 29.8 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 24 mm |
| Shaft length | 50 mm |
| Feedback type | Single turn SinCos Hiperface |
| Holding torque | 18 N.m (holding brake) |
| Motor flange size | 140 mm |
| Number of motor stacks | 1 |
| Torque constant | 1.2 N.m/A at 120 °C |
| Back emf constant | 77.4 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 17.96 kg.cm ² |
| Stator resistance | 0.69 Ohm at 20 °C |
| Stator inductance | 6.7 mH at 20 °C |
| Stator electrical time constant | 9.7 ms at 20 °C |
| Maximum radial force Fr | 1930 N at 1000 rpm 1530 N at 2000 rpm 1340 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 18 W |
| Type of cooling | Natural convection |
| Length | 187 mm |
| Centring collar diameter | 130 mm |
| Centring collar depth | 3.5 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 11 mm |
| Circle diameter of the mounting holes | 165 mm |
| Product weight | 10.3 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)
- (2) For screw M8 x 25 mm/M8 x 0.98 in.

Dimensions in mm

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b | b1 | b | b1 | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 152 | 187 |

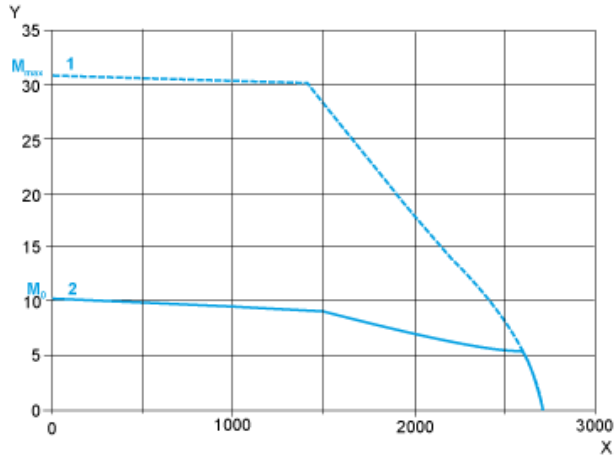
Dimensions in in.

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b | b1 | b | b1 | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 5.98 | 7.36 |

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

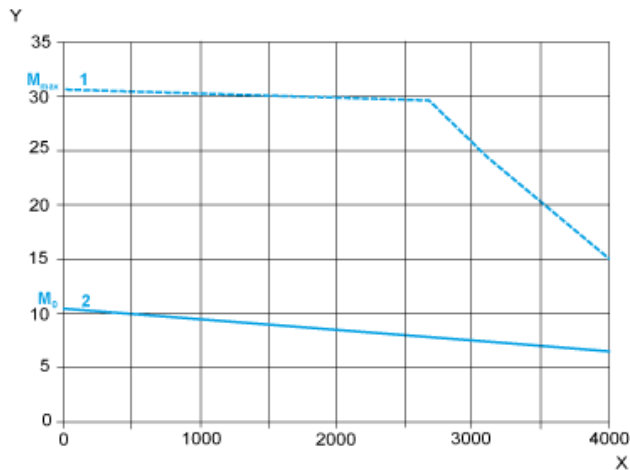


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

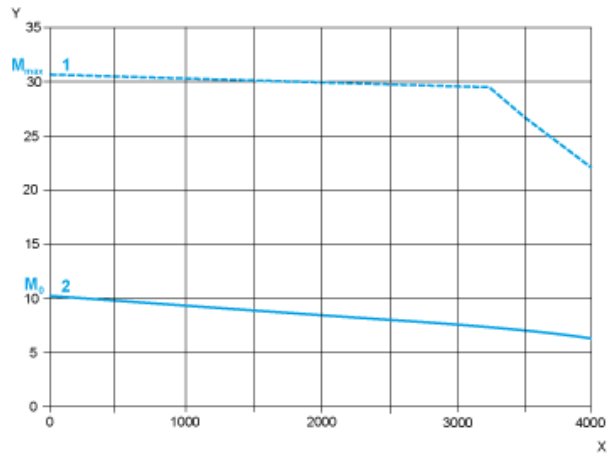


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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