

BMH2051P11F2A

servo motor BMH - 34.4 Nm - 3800 rpm -
keyed shaft - with brake - IP54



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 3800 rpm |
| Continuous stall torque | 34.4 N.m for LXM32.D72N4 24 A at 400 V three phase 34.4 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Peak stall torque | 103.4 N.m for LXM32.D72N4 24 A at 400 V three phase 103.4 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal output power | 5400 W for LXM32.D72N4 24 A at 400 V three phase 5400 W for LXM32.D72N4 24 A at 480 V three phase |
| Nominal torque | 25.8 N.m for LXM32.D72N4 24 A at 400 V three phase 25.8 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal speed | 2000 rpm for LXM32.D72N4 24 A at 400 V three phase 2000 rpm for LXM32.D72N4 24 A at 480 V three phase |
| Product compatibility | LXM32.D72N4 at 400...480 V three phase |
| Shaft end | Keyed |
| IP degree of protection | IP54 (standard) |
| 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 | 21.5 A |
| Continuous power | 6.8 W |
| Maximum current Irms | 72 A for LXM32.D72N4 |
| Maximum permanent current | 78.1 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 38 mm |
| Shaft length | 80 mm |
| Key width | 70 mm |
| Feedback type | Single turn SinCos Hiperface |
| Holding torque | 80 N.m (holding brake) |
| Motor flange size | 205 mm |
| Number of motor stacks | 1 |

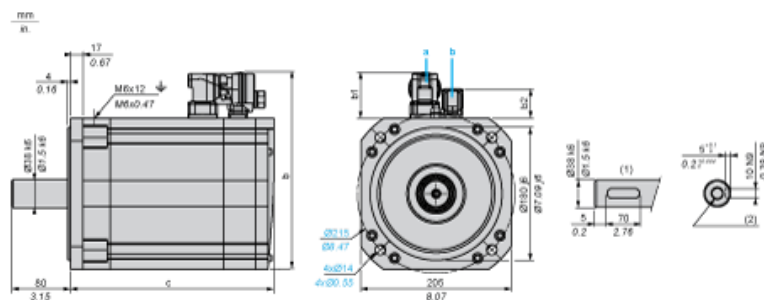
| | |
|---------------------------------------|--|
| Back emf constant | 104 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 87.4 kg.cm ² |
| Stator resistance | 0.3 Ohm at 20 °C |
| Stator inductance | 5.9 mH at 20 °C |
| Stator electrical time constant | 19.7 ms at 20 °C |
| Maximum radial force Fr | 3730 N at 1000 rpm 2960 N at 2000 rpm 2580 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 40 W |
| Type of cooling | Natural convection |
| Length | 370.5 mm |
| Centring collar diameter | 180 mm |
| Centring collar depth | 4 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 14 mm |
| Circle diameter of the mounting holes | 215 mm |
| Product weight | 37.9 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 M12 x 28 mm/M12 x 1.10 in.

Dimensions in mm

| Straight connectors | | | Rotatable angled connectors | | | c (without brake) | c (with brake) |
|---------------------|----|------|-----------------------------|----|------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | | |
| 259 | 54 | 25.5 | 265 | 60 | 39.5 | 312 | 370.5 |

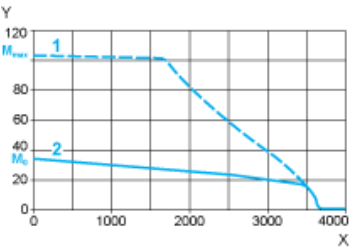
Dimensions in in.

| Straight connectors | | | Rotatable angled connectors | | | c (without brake) | c (with brake) |
|---------------------|------|------|-----------------------------|------|------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | | |
| 10.19 | 2.12 | 1.00 | 10.43 | 2.36 | 1.55 | 12.28 | 14.58 |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

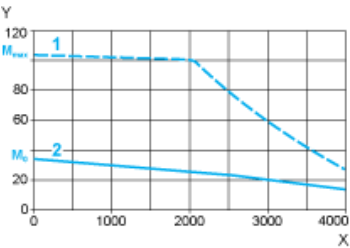


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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