

BMH2053P22A1A

servo motor BMH - 84 Nm - 3800 rpm -
untapped shaft - without brake - IP65/IP67



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 3800 rpm |
| Continuous stall torque | 84 N.m for LXM32.D72N4 24 A at 400 V three phase 84 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Peak stall torque | 232 N.m for LXM32.D72N4 24 A at 400 V three phase 232 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal output power | 6500 W for LXM32.D72N4 24 A at 400 V three phase 6500 W for LXM32.D72N4 24 A at 480 V three phase |
| Nominal torque | 52.2 N.m for LXM32.D72N4 24 A at 400 V three phase 52.2 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal speed | 1200 rpm for LXM32.D72N4 24 A at 400 V three phase 1200 rpm for LXM32.D72N4 24 A at 480 V three phase |
| Product compatibility | LXM32.D72N4 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 x 4096 turns |
| Holding brake | Without |
| Mounting support | International standard flange |
| Electrical connection | Straight connectors |

Complementary

| | |
|---------------------------|----------------------------|
| Range compatibility | Lexium 32 |
| [Us] rated supply voltage | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 25.2 A |
| Continuous power | 9.6 W |
| Maximum current Irms | 72 A for LXM32.D72N4 |
| Maximum permanent current | 107.4 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 38 mm |
| Shaft length | 80 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Motor flange size | 205 mm |
| Number of motor stacks | 3 |
| Torque constant | 3.5 N.m/A at 120 °C |
| Back emf constant | 218 V/krpm at 120 °C |

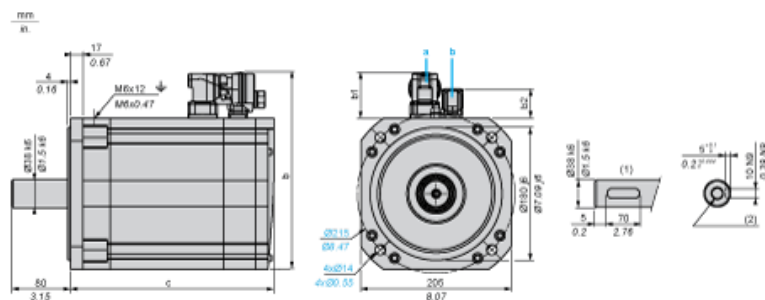
| | |
|---------------------------------------|--|
| Number of motor poles | 10 |
| Rotor inertia | 190 kg.cm ² |
| Stator resistance | 0.32 Ohm at 20 °C |
| Stator inductance | 6.9 mH at 20 °C |
| Stator electrical time constant | 21.6 ms at 20 °C |
| Maximum radial force Fr | 4500 N at 1000 rpm 3570 N at 2000 rpm 3120 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 489 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 | 67 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 | 489 | 538.5 |

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 | 19.25 | 21.20 |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

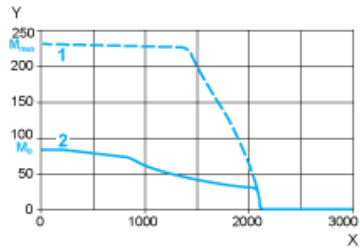


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

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