

BMH1903P37A2A

servo motor BMH - 65 Nm - 3500 rpm - keyed
shaft - without brake - IP65/IP67



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BMH |
| Maximum mechanical speed | 3500 rpm |
| Continuous stall torque | 43.2 N.m for LXM32.D72N4 24 A at 400 V three phase 43.2 N.m for LXM32.D72N4 24 A at 480 V three phase 57.6 N.m for LXM32MD85N4 32 A at 400 V three phase 57.6 N.m for LXM32MD85N4 32 A at 480 V three phase 65 N.m for LXM32MC10N4 40 A at 400 V three phase 65 N.m for LXM32MC10N4 40 A at 480 V three phase |
| Peak stall torque | 122.8 N.m for LXM32.D72N4 24 A at 400 V three phase 122.8 N.m for LXM32.D72N4 24 A at 480 V three phase 141.3 N.m for LXM32MD85N4 32 A at 400 V three phase 141.3 N.m for LXM32MD85N4 32 A at 480 V three phase 162.7 N.m for LXM32MC10N4 40 A at 400 V three phase 162.7 N.m for LXM32MC10N4 40 A at 480 V three phase |
| Nominal output power | 5700 W for LXM32.D72N4 24 A at 400 V three phase 5700 W for LXM32.D72N4 24 A at 480 V three phase 7330 W for LXM32MD85N4 32 A at 400 V three phase 7330 W for LXM32MD85N4 32 A at 480 V three phase 7750 W for LXM32MC10N4 40 A at 400 V three phase 7750 W for LXM32MC10N4 40 A at 480 V three phase |
| Nominal torque | 36 N.m for LXM32.D72N4 24 A at 400 V three phase 36 N.m for LXM32.D72N4 24 A at 480 V three phase 35 N.m for LXM32MD85N4 32 A at 400 V three phase 35 N.m for LXM32MD85N4 32 A at 480 V three phase 37 N.m for LXM32MC10N4 40 A at 400 V three phase 37 N.m for LXM32MC10N4 40 A at 480 V three phase |
| Nominal speed | 1500 rpm for LXM32.D72N4 24 A at 400 V three phase 1500 rpm for LXM32.D72N4 24 A at 480 V three phase 2000 rpm for LXM32MC10N4 40 A at 400 V three phase 2000 rpm for LXM32MC10N4 40 A at 480 V three phase 2000 rpm for LXM32MD85N4 32 A at 400 V three phase 2000 rpm for LXM32MD85N4 32 A at 480 V three phase |

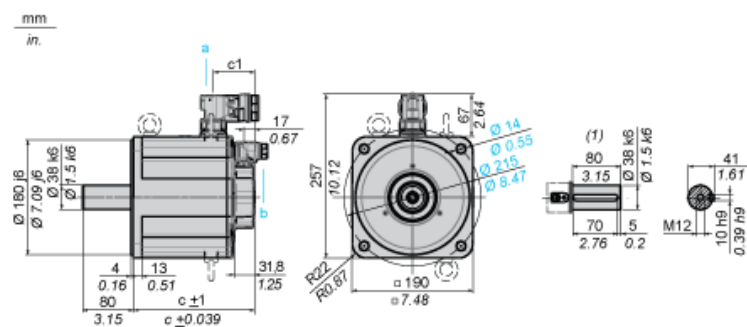
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| | |
|---------------------------|---|
| Product compatibility | LXM32.D72N4 at 400...480 V three phase |
| Shaft end | Keyed |
| IP degree of protection | IP65 (standard) IP67 (with IP67 kit) |
| Speed feedback resolution | 32768 points/turn x 4096 turns |
| 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 | 36.1 A |
| Continuous power | 7.95 W |
| Maximum current Irms | 72 A for LXM32.D72N4 |
| Maximum permanent current | 124.5 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 38 mm |
| Shaft length | 80 mm |
| Key width | 70 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Motor flange size | 190 mm |
| Number of motor stacks | 3 |
| Torque constant | 1.8 N.m/A at 120 °C |
| Back emf constant | 129.2 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 194.1 kg.cm ² |
| Stator resistance | 0.13 Ohm at 20 °C |
| Stator inductance | 3.62 mH at 20 °C |
| Stator electrical time constant | 27.8 ms at 20 °C |
| Maximum radial force Fr | 4500 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 310 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 | 43 kg |

Servo Motors Dimensions



- a Power supply for servo motor brake
b Power supply for servo motor encoder
(1) Shaft end, keyed slot (optional)

Dimensions in mm

| c (without brake) | c (with brake) | c1 (without brake) | c1 (with brake) |
|-------------------|----------------|--------------------|-----------------|
| 310 | 368 | 65 | 123 |

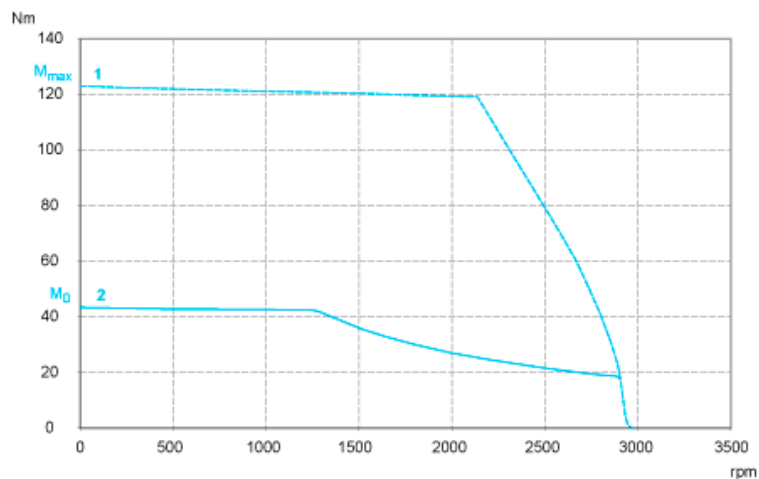
Dimensions in in.

| c (without brake) | c (with brake) | c1 (without brake) | c1 (with brake) |
|-------------------|----------------|--------------------|-----------------|
| 12.20 | 14.45 | 2.56 | 4.84 |

Torque/Speed Curves

400 V 3-Phase Supply Voltage

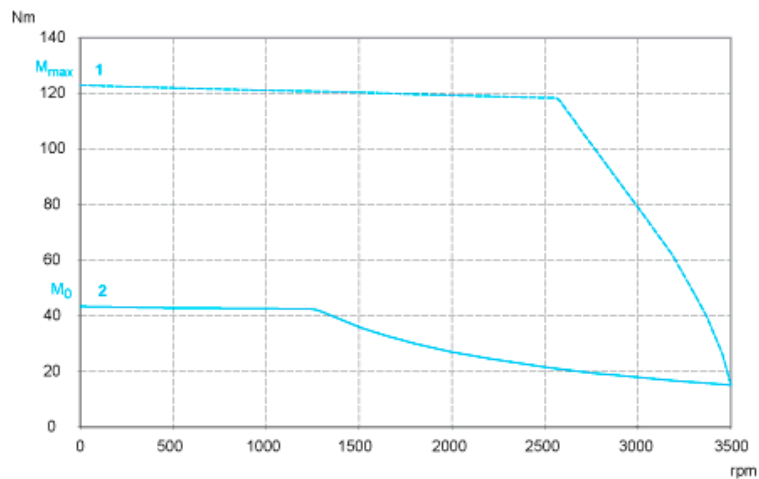
Servo motor with LXM32•D72N4 servo drive



- (1) Peak torque
- (2) Continuous torque

480 V 3-Phase Supply Voltage

Servo motor with LXM32•D72N4 servo drive



- (1) Peak torque
- (2) Continuous torque