BMH0702P17F2A

servo motor BMH - 2.5 Nm - 8000 rpm - keyed shaft - with brake - IP54





Main Product or component

| Product or component type | Servo motor |
|---------------------------|---|
| Device short name | ВМН |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 2.5 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 2.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Peak stall torque | 7.4 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 7.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Nominal output power | 700 W for LXM32.D12N4 at 3 A, 400 V, three phase 700 W for LXM32.D12N4 at 3 A, 480 V, three phase |
| Nominal torque | 2.2 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 2.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Nominal speed | 3000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 3000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase |
| Product compatibility | LXM32.D12N4 at 400480 V three phase |
| Shaft end | Keyed |
| IP degree of protection | IP54 standard |
| Speed feedback resolution | 32768 points/turn x 4096 turns |
| 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 | 2.94 A |
| Continuous power | 1.51 W |
| Maximum current Irms | 9.7 A for LXM32.D12N4 |
| Maximum permanent current | 9.68 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 11 mm |
| Shaft length | 23 mm |
| Key width | 18 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 3 N.m holding brake |
| Motor flange size | 70 mm |
| Number of motor stacks | 2 |
| Torque constant | 0.84 N.m/A at 120 °C |
| Back emf constant | 54.08 V/krpm at 120 °C |
| Number of motor poles | 10 |
| | |

| Rotor inertia | 1.24 kg.cm² | | | | | | |
|---------------------------------------|--|--|--|--|--|--|--|
| Stator resistance | 3.8 Ohm at 20 °C | | | | | | |
| Stator inductance | 12.2 mH at 20 °C | | | | | | |
| Stator electrical time constant | 3.2 ms at 20 °C | | | | | | |
| Maximum radial force Fr | 710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm | | | | | | |
| Maximum axial force Fa | 0.2 x Fr | | | | | | |
| Brake pull-in power | 7 W | | | | | | |
| Type of cooling | Natural convection | | | | | | |
| Length | 193 mm | | | | | | |
| Centring collar diameter | 60 mm | | | | | | |
| Centring collar depth | 2.5 mm | | | | | | |
| Number of mounting holes | 4 | | | | | | |
| Mounting holes diameter | 5.5 mm | | | | | | |
| Circle diameter of the mounting holes | 82 mm | | | | | | |
| Net weight | 3.3 kg | | | | | | |
| | | | | | | | |

Packing Units

| Unit Type of Package 1 | PCE |
|------------------------------|----------|
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 3.393 kg |
| Package 1 Height | 11.0 cm |
| Package 1 width | 20.0 cm |
| Package 1 Length | 40.0 cm |
| Unit Type of Package 2 | CAR |
| Number of Units in Package 2 | 1 |
| Package 2 Weight | 2.2 kg |
| Package 2 Height | 11.0 cm |
| Package 2 width | 20.0 cm |
| Package 2 Length | 40.0 cm |
| | |

Offer Sustainability

| Sustainable offer status | Green Premium product | | | | | |
|----------------------------|---|--|--|--|--|--|
| REACh Regulation | ☑ REACh Declaration | | | | | |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) | | | | | |
| Mercury free | Yes | | | | | |
| RoHS exemption information | €Yes | | | | | |
| China RoHS Regulation | China RoHS Declaration | | | | | |
| Environmental Disclosure | Product Environmental Profile | | | | | |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins | | | | | |
| PVC free | Yes | | | | | |

Contractual warranty

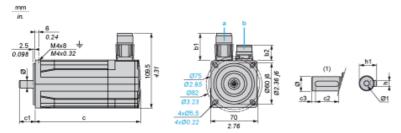
| Warranty | 19 months |
|-----------|-----------|
| vvarianty | 16 months |

Product data sheet **Dimensions Drawings**

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Servo Motors Dimensions

Example with Straight Connectors



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

Dimensions in mm

| Straight | | Rotatable angled connectors | | , , , | c (with brake) | с1 | c1 c2 | с3 | h | h1 | Ø | Ø1 for screws |
|----------|------|-----------------------------|------|-------|-------------------|----|-------|-----|------|-------------------------------------|-------|------------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 154 | 193 | 23 | 18 | 2.5 | 4 h9 | 12.5 ⁺⁰ _{-0.13} | 11 k6 | M4 x 14 |

Dimensions in in.

| Straight | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | с3 | h | h1 | Ø | Ø1 for screws |
|----------|----|-----------------------------|------|----------------------|-------------------|------|------|------|---------|---------------------------------------|---------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 1.55 | 1 | 1.55 | 1.55 | 6.06 | 7.59 | 0.90 | 0.70 | 0.09 | 0.16 h9 | 0.49 ⁺⁰ _{-0.0051} | 0.43 k6 | M4 x 0.55 |

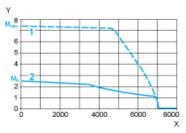
Product data sheet **Performance Curves**

BMH0702P17F2A

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive

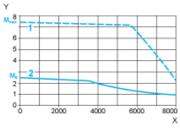


- Speed in rpm
- X Y Torque in Nm
- Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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