Product datasheet





servo motor BMH - 3.4 Nm - 8000 rpm - untapped shaft - without brake - IP54

BMH0703P06A1A

! Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3606485199351

Main

| Device short name | ВМН |
|---------------------------|--|
| Product or component type | Servo motor |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 3.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase |
| Peak stall torque | 10.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 10.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase |
| Nominal output power | 1300 W for LXM32.D18N4 at 6 A, 400 V, three phase 1300 W for LXM32.D18N4 at 6 A, 480 V, three phase |
| Nominal torque | 2.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 2.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase |
| Nominal speed | 5000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 5000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase |
| Product compatibility | LXM32.D18N4 at 400480 V three phase |
| Shaft end | Smooth shaft |
| IP degree of protection | IP54 standard |
| Speed feedback resolution | 32768 points/turn |
| 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 | 3.91 A |
| Continuous power | 1.68 W |
| Maximum current Irms | 12.6 A for LXM32.D18N4 |
| Maximum permanent current | 12.57 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 14 mm |
| Shaft length | 30 mm |
| Feedback type | Single turn SinCos Hiperface |

| Motor flange size | 70 mm |
|---------------------------------------|--|
| Number of motor stacks | 3 |
| Torque constant | 0.87 N.m/A at 120 °C |
| Back emf constant | 55.8 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 1.67 kg.cm² |
| Stator resistance | 2.65 Ohm at 20 °C |
| Stator inductance | 8.6 mH at 20 °C |
| Stator electrical time constant | 3.2 ms at 20 °C |
| Maximum radial force Fr | 730 N at 1000 rpm 580 N at 2000 rpm 510 N at 3000 rpm 460 N at 4000 rpm 430 N at 5000 rpm 400 N at 6000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 186 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 kg |

Packing Units

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

Contractual warranty

Warranty 18 months



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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Certifications & Standards

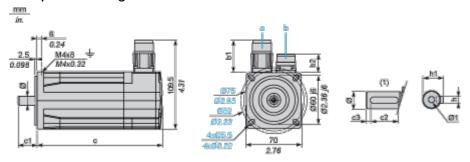
| Circularity Profile | No need of specific recycling operations |
|---------------------------------|---|
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Environmental Disclosure | Product Environmental Profile |
| China Rohs Regulation | China RoHS declaration |
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Reach Regulation | REACh Declaration |

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Dimensions Drawings

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)

Dimensions in mm

| Straight Rotatable angled connectors connectors | | , | c (with | c1 | c2 | с3 | h | h1 | Ø | Ø1 for | | |
|---|------|------|---------|--------|--------|----|----|----|------|----------------------------|-------|---------|
| b1 | b2 | b1 | b2 | brake) | brake) | | | | | | | screws |
| 39.5 | 25.5 | 39.5 | 39.5 | 186 | 225 | 30 | 20 | 5 | 5 h9 | 16 ⁺⁰ _ 0.13 | 14 k6 | M5 x 17 |

Dimensions in in.

| Straigh | | Rotata angled connec | | c (without | c (with brake) | c1 | c2 | с3 | h | h1 | Ø | Ø1 for screws |
|---------|----|----------------------------|------|---------------|----------------|------|------|------|---------|--------------------------------|---------|---------------|
| b1 | b2 | b1 | b2 | brake) | | | | | | | | |
| 1.55 | 1 | 1.55 | 1.55 | 7.32 | 8.85 | 1.18 | 0.78 | 0.19 | 0.20 h9 | 0.63 ⁺⁰ _ 0.0051 | 0.55 k6 | M5 x 0.67 |

Product datasheet

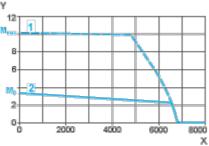
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

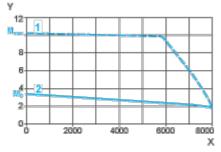


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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