Product data sheet

Specifications





servo motor BMH, Lexium 32, 8.4Nm, 6000rpm, keyed shaft, with brake, IP54, 128 multiturn encoder

BMH1003P12F2A

Product availability: Non-Stock - Not normally stocked in distribution facility

Price*: 2,175.00 USD

Main

| Product Or Component Type | Servo motor | | | |
|---------------------------|---|--|--|--|
| Device Short Name | ВМН | | | |
| Maximum Mechanical Speed | 6000 rpm | | | |
| Continuous Stall Torque | 74.35 lbf.in (8.4 N.m) LXM32.D30N4 10 A, 400 V, three phase 74.35 lbf.in (8.4 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| Peak Stall Torque | 222.15 lbf.in (25.1 N.m) LXM32.D30N4 10 A, 400 V, three phase 222.15 lbf.in (25.1 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| Nominal Output Power | 2700 W LXM32.D30N4 10 A, 400 V, three phase 2700 W LXM32.D30N4 10 A, 480 V, three phase | | | |
| Nominal Torque | 54.87 lbf.in (6.2 N.m) LXM32.D30N4 10 A, 400 V, three phase 54.87 lbf.in (6.2 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| Nominal Speed | 4000 rpm LXM32.D30N4 10 A, 400 V, three phase 4000 rpm LXM32.D30N4 10 A, 480 V, three phase | | | |
| Product Compatibility | LXM32.D30N4 400480 V three phase | | | |
| Shaft End | Keyed | | | |
| Ip Degree Of Protection | IP54 standard | | | |
| Speed Feedback Resolution | 131072 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 | | | |
| Phase | Three phase | | | |
| Continuous Stall Current | 7.69 A | | | |
| Continuous Power | 3.3 W | | | |
| Maximum Current Irms | 29.1 A LXM32.D30N4 | | | |
| Maximum Permanent Current | 29.1 A | | | |
| Second Shaft | Without second shaft end | | | |
| Shaft Diameter | 0.75 in (19 mm) | | | |
| Shaft Length | 1.57 in (40 mm) | | | |

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

| Key Width | 1.18 in (30 mm) | | | |
|--|---|--|--|--|
| Feedback Type | Multiturn SinCos Hiperface | | | |
| Holding Torque | 79.66 lbf.in (9 N.m) holding brake | | | |
| Motor Flange Size | 3.94 in (100 mm) | | | |
| Number Of Motor Stacks | 3 | | | |
| Torque Constant | 1 N.m/A 248 °F (120 °C) | | | |
| Back Emf Constant | 63.5 V/krpm 248 °F (120 °C) | | | |
| Number Of Motor Poles | 10 | | | |
| Rotor Inertia | 10.3 kg.cm ² | | | |
| Stator Resistance | 0.63 Ohm 68 °F (20 °C) | | | |
| Stator Inductance | 4 mH 68 °F (20 °C) | | | |
| Stator Electrical Time Constant | 6.3 ms 68 °F (20 °C) | | | |
| Maximum Radial Force Fr | 1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm 610 N 5000 rpm | | | |
| Maximum Axial Force Fa | 0.2 x Fr | | | |
| Brake Pull-In Power | 18 W | | | |
| Type Of Cooling | Natural convection | | | |
| Length | 9.22 in (234.3 mm) | | | |
| Centring Collar Diameter | 3.74 in (95 mm) | | | |
| Centring Collar Depth | 0.14 in (3.5 mm) | | | |
| Number Of Mounting Holes | 4 | | | |
| Mounting Holes Diameter | 0.35 in (9 mm) | | | |
| Circle Diameter Of The Mounting Holes | 4.53 in (115 mm) | | | |
| Net Weight | 17.97 lb(US) (8.15 kg) | | | |
| | | | | |

Ordering and shipping details

| Category | US1PC5318282 | | |
|-------------------|---------------|--|--|
| Discount Schedule | PC53 | | |
| Gtin | 3606485196473 | | |
| Returnability | No | | |
| Country Of Origin | DE | | |

Packing Units

| U | | | |
|------------------------------|-------------------------|--|--|
| Unit Type Of Package 1 | PCE | | |
| Number Of Units In Package 1 | 1 | | |
| Package 1 Height | 8.66 in (22.0 cm) | | |
| Package 1 Width | 7.87 in (20.0 cm) | | |
| Package 1 Length | 15.75 in (40.0 cm) | | |
| Package 1 Weight | 19.00 lb(US) (8.616 kg) | | |

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

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

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

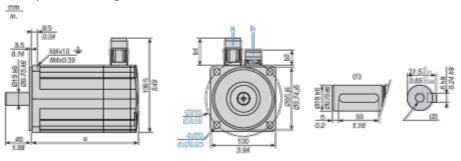
Certifications & Standards

| Reach Regulation | REACh Declaration | | | |
|---------------------------|---|--|--|--|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) | | | |
| 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. | | | |
| Circularity Profile | No need of specific recycling operations | | | |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov | | | |

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)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

| Straight c | traight connectors Rotatable angled connectors | | | o (with broke) | |
|------------|--|------|------|-------------------|----------------|
| b1 | b2 | b1 | b2 | c (without brake) | c (with brake) |
| 39.5 | 25.5 | 39.5 | 39.5 | 192 | 234 |

Dimensions in in.

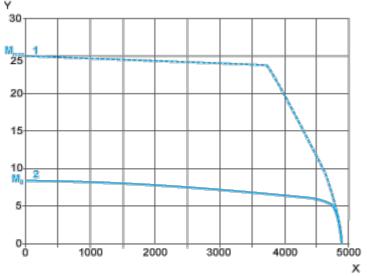
| Straight c | Straight connectors Rotatable angled connect | | led connectors | a (without braka) | o (with broko) |
|------------|--|------|----------------|-------------------|----------------|
| b1 | b2 | b1 | b2 | c (without brake) | c (with brake) |
| 1.55 | 1.00 | 1.55 | 1.55 | 7.55 | 9.21 |

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

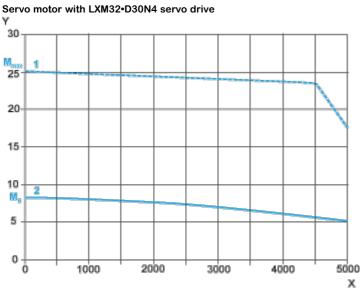
Servo motor with LXM32•D30N4 servo drive



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

480 V 3-Phase Supply Voltage

Torque/Speed Curves



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque