

Product data sheet

Specifications



servo motor BMH, Lexium 32,
1.2Nm, 8000rpm, keyed shaft,
without brake, IP65, IP67, 128bit
encoder

BMH0701P31A2A

Main

| | |
|---------------------------|--|
| Product Or Component Type | Servo motor |
| Device Short Name | BMH |
| Maximum Mechanical Speed | 8000 rpm |
| Continuous Stall Torque | 1.2 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.2 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 1.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Peak Stall Torque | 4.2 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 4.2 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 4.2 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 4.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Nominal Output Power | 350 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 350 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 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 | 1.1 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.1 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.3 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 1.3 N.m for LXM32.D12N4 at 3 A, 480 V, three phase |
| Nominal Speed | 3000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase 3000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 5000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 5000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase |
| Product Compatibility | LXM32.U60N4 at 400...480 V three phase LXM32.D12N4 at 400...480 V three phase |
| Shaft End | Keyed |
| Ip Degree Of Protection | IP65 standard IP67 with IP67 kit |
| Speed Feedback Resolution | 131072 points/turn |
| 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 | 1.78 A |
| Continuous Power | 1.05 W |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---------------------------------------|--|
| Maximum Current Irms | 6 A for LXM32.U60N4 6 A for LXM32.D12N4 |
| Maximum Permanent Current | 5.97 A |
| Second Shaft | Without second shaft end |
| Shaft Diameter | 11 mm |
| Shaft Length | 23 mm |
| Key Width | 18 mm |
| Feedback Type | Single turn SinCos Hiperface |
| Motor Flange Size | 70 mm |
| Number Of Motor Stacks | 1 |
| Torque Constant | 0.79 N.m/A at 120 °C |
| Back Emf Constant | 50.72 V/krpm at 120 °C |
| Number Of Motor Poles | 10 |
| Rotor Inertia | 0.59 kg.cm² |
| Stator Resistance | 8.3 Ohm at 20 °C |
| Stator Inductance | 23.4 mH at 20 °C |
| Stator Electrical Time Constant | 2.8 ms at 20 °C |
| Maximum Radial Force Fr | 660 N at 1000 rpm 520 N at 2000 rpm 460 N at 3000 rpm 410 N at 4000 rpm 380 N at 5000 rpm 360 N at 6000 rpm |
| Maximum Axial Force Fa | 0.2 x Fr |
| Type Of Cooling | Natural convection |
| Length | 122 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 | 1.6 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 | 1.8 kg |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class 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

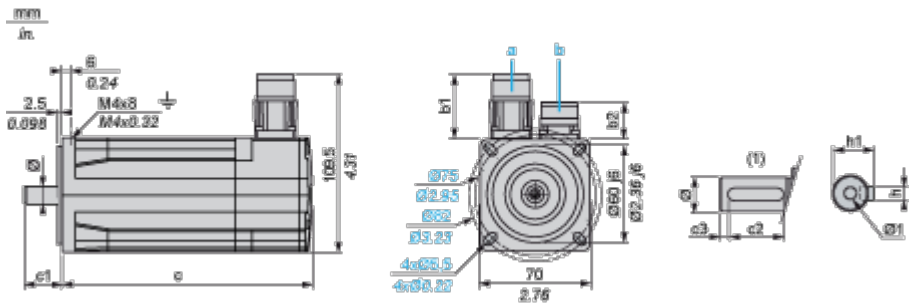
Certifications & Standards

| | |
|---------------------------|---|
| 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)

Dimensions in mm

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|----|----|-----|------|-------------------------------------|-------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 122 | 161 | 23 | 18 | 2.5 | 4 h9 | 12.5 ⁺⁰ _{-0.13} | 11 k6 | M4 x 14 |

Dimensions in in.

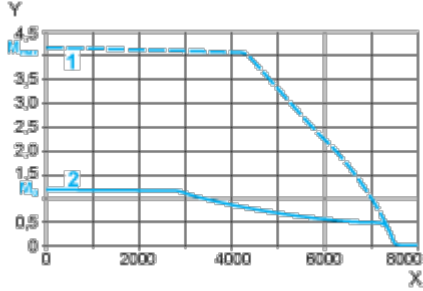
| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|----|-----------------------------|------|-------------------|----------------|------|------|------|---------|---------------------------------------|---------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 1.55 | 1 | 1.55 | 1.55 | 4.80 | 6.33 | 0.90 | 0.70 | 0.09 | 0.16 h9 | 0.49 ⁺⁰ _{-0.0051} | 0.43 k6 | M4 x 0.55 |

Performance Curves

400 V 3-Phase Supply Voltage

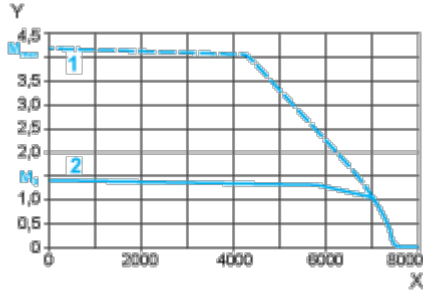
Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

Servo motor with LXM32•D12N4 servo drive

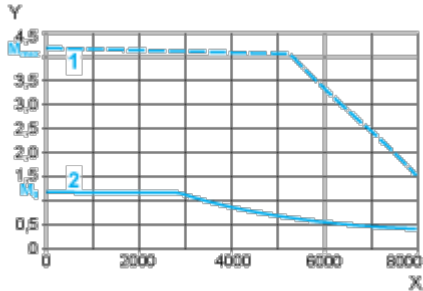


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

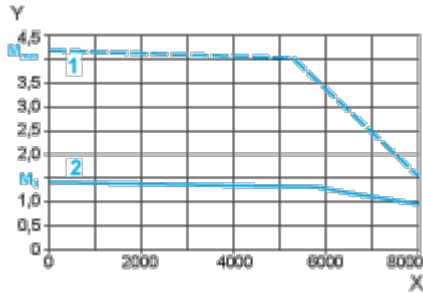
Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

Servo motor with LXM32•D12N4 servo drive



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