# **Product data sheet**





servo motor BMH, Lexium 32, 6.2Nm, 6000rpm, untapped shaft, without brake, IP65, IP67, straight

BMH1002P27A1A

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

Price\*: 2,197.50 USD

### Main

| Product Or Component Type | Servo motor   |  |  |
|---------------------------|---|--|--|
| Device Short Name         | ВМН   |  |  |
| Maximum Mechanical Speed  | 6000 rpm  |  |  |
| Continuous Stall Torque   | 54.87 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 400 V, three phase 54.87 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 480 V, three phase     |  |  |
| Peak Stall Torque         | 162.85 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 400 V, three phase 162.85 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 480 V, three phase |  |  |
| Nominal Output Power      | 1600 W LXM32.D18N4 6 A, 400 V, three phase<br>1600 W LXM32.D18N4 6 A, 480 V, three phase                                  |  |  |
| Nominal Torque            | 34.52 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 400 V, three phase 34.52 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 480 V, three phase     |  |  |
| Nominal Speed             | 4000 rpm LXM32.D18N4 6 A, 400 V, three phase<br>4000 rpm LXM32.D18N4 6 A, 480 V, three phase                              |  |  |
| Product Compatibility     | LXM32.D18N4 400480 V three phase  |  |  |
| Shaft End                 | Smooth shaft  |  |  |
| Ip Degree Of Protection   | IP65 standard<br>IP67 with IP67 kit   |  |  |
| Speed Feedback Resolution | 32768 points/turn x 4096 turns  |  |  |
| Holding Brake             | Without   |  |  |
| Mounting Support          | International standard flange   |  |  |
| Electrical Connection     | Straight connectors   |  |  |

### Complementary

| Range Compatibility       | Lexium 32                |  |  |
|---------------------------|--------------------------|--|--|
| [Us] Rated Supply Voltage | 480 V                    |  |  |
| Phase                     | Three phase              |  |  |
| Continuous Stall Current  | 5.04 A                   |  |  |
| Continuous Power          | 2.36 W                   |  |  |
| Maximum Current Irms      | 18 A LXM32.D18N4         |  |  |
| Maximum Permanent Current | 18.23 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.

| Feedback Type                         | Multiturn SinCos Hiperface   |  |  |
|---------------------------------------|--|--|--|
| Motor Flange Size                     | 3.94 in (100 mm)   |  |  |
| Number Of Motor Stacks                | 2  |  |  |
| Torque Constant                       | 1.2 N.m/A 248 °F (120 °C)  |  |  |
| Back Emf Constant                     | 77 V/krpm 248 °F (120 °C)  |  |  |
| Number Of Motor Poles                 | 10   |  |  |
| Rotor Inertia                         | 6.28 kg.cm²  |  |  |
| Stator Resistance                     | 1.51 Ohm 68 °F (20 °C)   |  |  |
| Stator Inductance                     | 7.5 mH 68 °F (20 °C)   |  |  |
| Stator Electrical Time Constant       | 5 ms 68 °F (20 °C)   |  |  |
| Maximum Radial Force Fr               | 990 N 1000 rpm<br>790 N 2000 rpm<br>690 N 3000 rpm<br>620 N 4000 rpm<br>580 N 5000 rpm |  |  |
| Maximum Axial Force Fa                | 0.2 x Fr   |  |  |
| Type Of Cooling                       | Natural convection   |  |  |
| Length                                | 6.32 in (160.6 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                            | 10.85 lb(US) (4.92 kg)   |  |  |

# Ordering and shipping details

| Category          | US1PC5318282  |  |  |
|-------------------|---------------|--|--|
| Discount Schedule | PC53          |  |  |
| Gtin              | 3606485196206 |  |  |
| Returnability     | No            |  |  |
| Country Of Origin | DE            |  |  |

# **Packing Units**

| 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             | 11.51 lb(US) (5.22 kg) |

# **Contractual warranty**

Warranty 18 months



**Green Premium**<sup>TM</sup> **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-CO<sub>2</sub> products.

**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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Transparency RoHS/REACh

### Well-being performance



#### **Certifications & Standards**

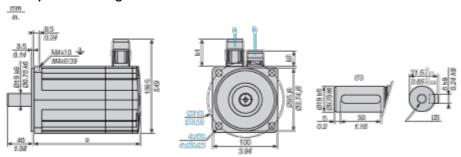
| Reach Regulation          | REACh Declaration   |  |  |  |
|---------------------------|---|--|--|--|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)  |  |  |  |
| China Rohs Regulation     | China RoHS declaration  |  |  |  |
| Environmental Disclosure  | Product 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 |  |  |  |

# BMH1002P27A1A

#### **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 connectors |      | onnectors Rotatable angled connectors |      | a (without broke) | o (with broke) |
|---------------------|------|---------------------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                                    | b2   | c (without brake) | c (with brake) |
| 39.5                | 25.5 | 39.5                                  | 39.5 | 160               | 202            |

#### Dimensions in in.

| Straight connectors |      | Rotatable ang | led connectors | a (without broke) | o (with broke) |
|---------------------|------|---------------|----------------|-------------------|----------------|
| b1                  | b2   | b1            | b2             | c (without brake) | c (with brake) |
| 1.55                | 1.00 | 1.55          | 1.55           | 6.29              | 7.95           |

### Product data sheet

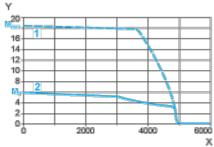
# BMH1002P27A1A

#### Performance Curves

### 400 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**

Servo motor with LXM32•D18N4 servo drive

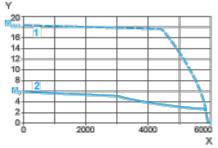


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 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