# Product data sheet

Specifications





servo motor BMH, Lexium 32, 3.3Nm, 6000rpm, keyed shaft, without brake, IP65, IP67, 16 multiturn encoder, straight

BMH1001P37A1A

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

### Price\*: 2,970.00 USD

### Main

| Servo motor  |  |  |
|--|--|--|
| ВМН  |  |  |
| 6000 rpm   |  |  |
| 29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 480 V, three phase<br>30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 480 V, three phase     |  |  |
| 95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 480 V, three phase<br>95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 480 V, three phase |  |  |
| 800 W LXM32.D12N4 3 A, 400 V, three phase<br>800 W LXM32.D12N4 3 A, 480 V, three phase<br>1300 W LXM32.D18N4 6 A, 400 V, three phase<br>1300 W LXM32.D18N4 6 A, 480 V, three phase   |  |  |
| 16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 480 V, three phase<br>27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 480 V, three phase     |  |  |
| 4000 rpm LXM32.D12N4 3 A, 400 V, three phase<br>4000 rpm LXM32.D12N4 3 A, 480 V, three phase<br>4000 rpm LXM32.D18N4 6 A, 400 V, three phase<br>4000 rpm LXM32.D18N4 6 A, 480 V, three phase   |  |  |
| LXM32.D12N4 400480 V three phase<br>LXM32.D18N4 400480 V three phase   |  |  |
| Keyed  |  |  |
| IP65 standard<br>IP67 with IP67 kit  |  |  |
| 32768 points/turn x 4096 turns   |  |  |
| Without  |  |  |
| International standard flange  |  |  |
| Straight connectors  |  |  |
|  |  |  |

## Complementary

| Range Compatibility       | Lexium 32   |
|---------------------------|-------------|
| [Us] Rated Supply Voltage | 480 V       |
| Phase                     | Three phase |

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

| Continuous Stall Current                 | 3.15 A   |  |  |  |
|--|--|--|--|--|
| Continuous Power                         | 1.76 W   |  |  |  |
| Maximum Current Irms                     | 11.9 A LXM32.D12N4<br>11.9 A LXM32.D18N4   |  |  |  |
| Maximum Permanent Current                | 11.93 A  |  |  |  |
| Second Shaft                             | Without second shaft end   |  |  |  |
| Shaft Diameter                           | 0.75 in (19 mm)  |  |  |  |
| Shaft Length                             | 1.57 in (40 mm)  |  |  |  |
| Key Width                                | 1.18 in (30 mm)  |  |  |  |
| Feedback Type                            | Multiturn SinCos Hiperface   |  |  |  |
| Motor Flange Size                        | 3.94 in (100 mm)   |  |  |  |
| Number Of Motor Stacks                   | 1  |  |  |  |
| Torque Constant                          | 1.1 N.m/A 248 °F (120 °C)  |  |  |  |
| Back Emf Constant                        | 70.3 V/krpm 248 °F (120 °C)  |  |  |  |
| Number Of Motor Poles                    | 10   |  |  |  |
| Rotor Inertia                            | 3.19 kg.cm <sup>2</sup>  |  |  |  |
| Stator Resistance                        | 3.1 Ohm 68 °F (20 °C)  |  |  |  |
| Stator Inductance                        | 13.9 mH 68 °F (20 °C)  |  |  |  |
| Stator Electrical Time Constant          | 4.5 ms 68 °F (20 °C)   |  |  |  |
| Maximum Radial Force Fr                  | 900 N 1000 rpm<br>720 N 2000 rpm<br>630 N 3000 rpm<br>570 N 4000 rpm<br>530 N 5000 rpm |  |  |  |
| Maximum Axial Force Fa                   | 0.2 x Fr   |  |  |  |
| Type Of Cooling                          | Natural convection   |  |  |  |
| Length                                   | 5.06 in (128.6 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<br>Holes | 4.53 in (115 mm)   |  |  |  |
| Net Weight                               | 7.36 lb(US) (3.34 kg)  |  |  |  |

## Ordering and shipping details

| Category          | US1PC5318282  |  |  |
|-------------------|---------------|--|--|
| Discount Schedule | PC53          |  |  |
| Gtin              | 3606485195742 |  |  |
| Returnability     | No            |  |  |
| Country Of Origin | DE            |  |  |

## **Packing Units**

Unit Type Of Package 1

PCE

| Number Of Units In Package 1 | 1                     |
|------------------------------|-----------------------|
| Package 1 Height             | 7.87 in (20.0 cm)     |
| Package 1 Width              | 8.66 in (22.0 cm)     |
| Package 1 Length             | 15.75 in (40.0 cm)    |
| Package 1 Weight             | 8.02 lb(US) (3.64 kg) |

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**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.

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

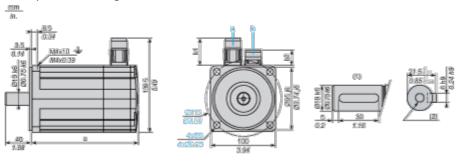
### **Certifications & Standards**

| 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<br>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 | onnectors | Rotatable angled connectors |      | a (without braka) | o (with broko) |
|------------|-----------|-----------------------------|------|-------------------|----------------|
| b1         | b2        | b1                          | b2   | c (without brake) | c (with brake) |
| 39.5       | 25.5      | 39.5                        | 39.5 | 128               | 170            |

Dimensions in in.

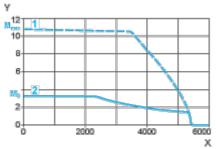
| Straight c | onnectors | Rotatable angled connectors |      | a (without braka) | o (with broko) |
|------------|-----------|-----------------------------|------|-------------------|----------------|
| b1         | b2        | b1                          | b2   | c (without brake) | c (with brake) |
| 1.55       | 1.00      | 1.55                        | 1.55 | 5.03              | 6.69           |

#### Performance Curves

#### 400 V 3-Phase Supply Voltage

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

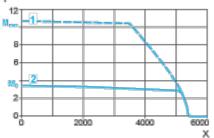
Servo motor with LXM32•D12N4 servo drive



#### X Speed in rpm

- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

# Servo motor with LXM32•D18N4 servo drive

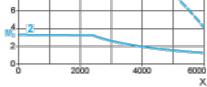


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 480 V 3-Phase Supply Voltage

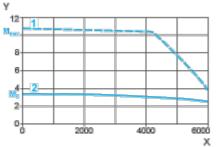
#### **Torque/Speed Curves**

Servo motor with LXM32•D12N4 servo drive



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

### Servo motor with LXM32•D18N4 servo drive



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