

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
6.2Nm, 6000rpm, untapped shaft,  
with brake, IP54, 128 multitrans  
encoder, straight

BMH1002P02F1A

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

Price\*: 2,895.00 USD

## Main

|                           |                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Device short name         | BMH                                                                                                                        |
| Product or Component Type | Servo motor                                                                                                                |
| Maximum mechanical speed  | 6000 rpm                                                                                                                   |
| Continuous stall torque   | 54.9 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>54.9 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 480 V, three phase     |
| Peak stall torque         | 162.9 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>162.9 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            | 34.5 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 400 V, three phase<br>34.5 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 400...480 V three phase                                                                                        |
| Shaft end                 | Smooth shaft                                                                                                               |
| 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     | 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            | 0.7 in (19 mm)           |

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

|                                       |                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------|
| Shaft length                          | 1.6 in (40 mm)                                                                         |
| Feedback type                         | Multiturn SinCos Hiperface                                                             |
| Holding torque                        | 48.7 lbf.in (5.5 N.m) holding brake                                                    |
| Motor flange size                     | 3.9 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                         | 6.77 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                                                                               |
| Brake pull-in power                   | 12 W                                                                                   |
| Type of cooling                       | Natural convection                                                                     |
| Length                                | 8.0 in (202.3 mm)                                                                      |
| Centring collar diameter              | 3.7 in (95 mm)                                                                         |
| Centring collar depth                 | 0.1 in (3.5 mm)                                                                        |
| Number of mounting holes              | 4                                                                                      |
| Mounting holes diameter               | 0.4 in (9 mm)                                                                          |
| Circle diameter of the mounting holes | 4.5 in (115 mm)                                                                        |
| Net Weight                            | 14.1 lb(US) (6.4 kg)                                                                   |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5318282  |
| Discount Schedule | PC53          |
| GTIN              | 3606485195919 |
| Returnability     | No            |
| Country of origin | DE            |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Number of Units in Package 1 | 1                        |
| Package 1 Height             | 7.677 in (19.500 cm)     |
| Package 1 Width              | 8.661 in (22.000 cm)     |
| Package 1 Length             | 15.551 in (39.500 cm)    |
| Package 1 Weight             | 14.815 lb(US) (6.720 kg) |
| Unit Type of Package 2       | S04                      |

|                              |                            |
|------------------------------|----------------------------|
| Number of Units in Package 2 | 2                          |
| Package 2 Height             | 11.811 in (30.000 cm)      |
| Package 2 Width              | 15.748 in (40.000 cm)      |
| Package 2 Length             | 23.622 in (60.000 cm)      |
| Package 2 Weight             | 31.063 lb(US) (14.090 kg)  |
| Unit Type of Package 3       | P06                        |
| Number of Units in Package 3 | 8                          |
| Package 3 Height             | 29.528 in (75.000 cm)      |
| Package 3 Width              | 23.622 in (60.000 cm)      |
| Package 3 Length             | 31.496 in (80.000 cm)      |
| Package 3 Weight             | 141.890 lb(US) (64.360 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-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                   |     |

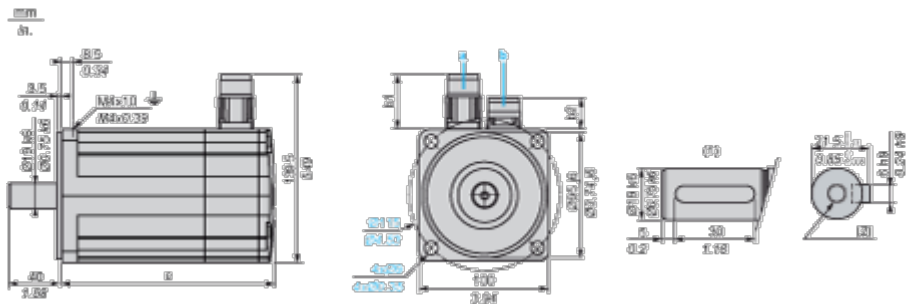
Certifications & Standards

|                           |                                                                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)                                                                                                                                                                                                                                  |
| China Rohs Regulation     | <a href="#">China RoHS declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure  | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

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 |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 39.5                | 25.5 | 39.5                        | 39.5 | 160               | 202            |

Dimensions in in.

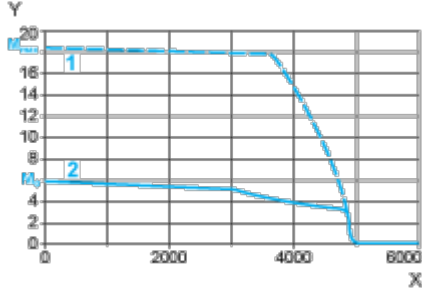
| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 1.55                | 1.00 | 1.55                        | 1.55 | 6.29              | 7.95           |

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

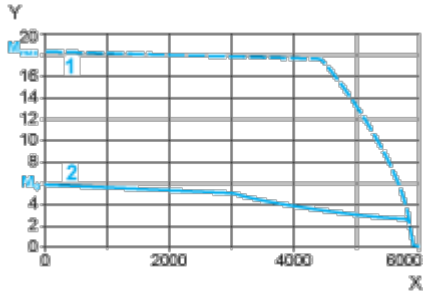
1 Peak torque

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