

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
6.2Nm, 6000rpm, keyed shaft,  
without brake, IP65, IP67, 128  
multiturn encoder, straight

BMH1002P32A1A

! Discontinued

! Discontinued on: 18 Apr 2024

! To be end-of-service on: 18 Apr 2026

## Main

|                           |                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|
| Device short name         | BMH                                                                                                        |
| Product or component type | Servo motor                                                                                                |
| Maximum mechanical speed  | 6000 rpm                                                                                                   |
| Continuous stall torque   | 6.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase<br>6.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase   |
| Peak stall torque         | 18.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase<br>18.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase |
| Nominal output power      | 1600 W for LXM32.D18N4 at 6 A, 400 V, three phase<br>1600 W for LXM32.D18N4 at 6 A, 480 V, three phase     |
| Nominal torque            | 3.9 N.m for LXM32.D18N4 at 6 A, 400 V, three phase<br>3.9 N.m for LXM32.D18N4 at 6 A, 480 V, three phase   |
| Nominal speed             | 4000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase<br>4000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase |
| Product compatibility     | LXM32.D18N4 at 400...480 V three phase                                                                     |
| Shaft end                 | Keyed                                                                                                      |
| IP degree of protection   | IP65 standard<br>IP67 with IP67 kit                                                                        |
| Speed feedback resolution | 131072 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                    |
| Network number of phases  | Three phase              |
| Continuous stall current  | 5.04 A                   |
| Continuous power          | 2.36 W                   |
| Maximum current Irms      | 18 A for LXM32.D18N4     |
| Maximum permanent current | 18.23 A                  |
| Second shaft              | Without second shaft end |

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

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Shaft diameter                        | 19 mm                                                                                                 |
| Shaft length                          | 40 mm                                                                                                 |
| Key width                             | 30 mm                                                                                                 |
| Feedback type                         | Multiturn SinCos Hiperface                                                                            |
| Motor flange size                     | 100 mm                                                                                                |
| Number of motor stacks                | 2                                                                                                     |
| Torque constant                       | 1.2 N.m/A at 120 °C                                                                                   |
| Back emf constant                     | 77 V/krpm at 120 °C                                                                                   |
| Number of motor poles                 | 10                                                                                                    |
| Rotor inertia                         | 6.28 kg.cm²                                                                                           |
| Stator resistance                     | 1.51 Ohm at 20 °C                                                                                     |
| Stator inductance                     | 7.5 mH at 20 °C                                                                                       |
| Stator electrical time constant       | 5 ms at 20 °C                                                                                         |
| Maximum radial force Fr               | 990 N at 1000 rpm<br>790 N at 2000 rpm<br>690 N at 3000 rpm<br>620 N at 4000 rpm<br>580 N at 5000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                              |
| Type of cooling                       | Natural convection                                                                                    |
| Length                                | 160.6 mm                                                                                              |
| Centring collar diameter              | 95 mm                                                                                                 |
| Centring collar depth                 | 3.5 mm                                                                                                |
| Number of mounting holes              | 4                                                                                                     |
| Mounting holes diameter               | 9 mm                                                                                                  |
| Circle diameter of the mounting holes | 115 mm                                                                                                |
| Net weight                            | 4.92 kg                                                                                               |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 22.0 cm |
| Package 1 Width              | 20.0 cm |
| Package 1 Length             | 40.0 cm |
| Package 1 Weight             | 5.22 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.

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[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

|                                                                                                              |                     |
|--------------------------------------------------------------------------------------------------------------|---------------------|
|  Mercury Free               |                     |
|  Rohs Exemption Information | <a href="#">Yes</a> |
|  Pvc Free                   |                     |

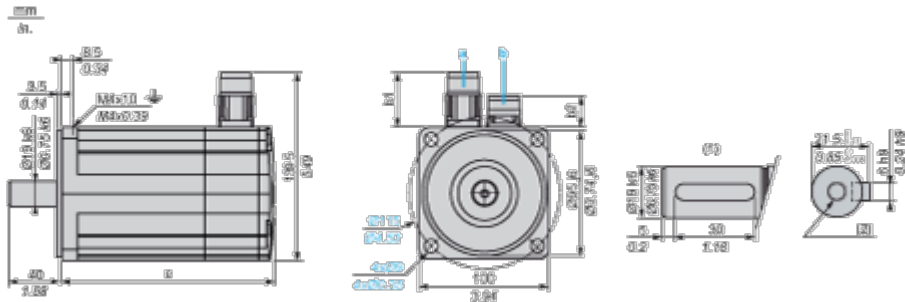
## Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                    |

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.

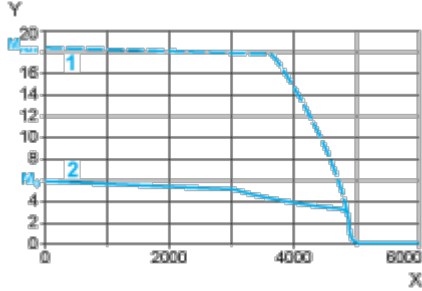
| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 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

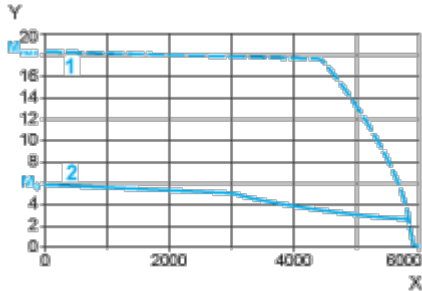


- X    Speed in rpm
- Y    Torque in Nm
- 1    Peak torque
- 2    Continuous torque

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