

# BMH1002T32F2A

servo motor BMH - 6 Nm - 6000 rpm - keyed shaft  
- with brake - IP65/IP67



## Main

|                           |                                                                                                                |
|---------------------------|----------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                    |
| Device short name         | BMH                                                                                                            |
| Maximum mechanical speed  | 6000 rpm                                                                                                       |
| Continuous stall torque   | 6 N.m for LXM32.D30M2 at 10 A, 115 V, single phase<br>6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase       |
| Peak stall torque         | 10.3 N.m for LXM32.D30M2 at 10 A, 115 V, single phase<br>18.4 N.m for LXM32.D30M2 at 10 A, 230 V, single phase |
| Nominal output power      | 750 W for LXM32.D30M2 at 10 A, 115 V, single phase<br>1450 W for LXM32.D30M2 at 10 A, 230 V, single phase      |
| Nominal torque            | 3.5 N.m for LXM32.D30M2 at 10 A, 115 V, single phase<br>4.6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase   |
| Nominal speed             | 2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase<br>3000 rpm for LXM32.D30M2 at 10 A, 230 V, single phase |
| Product compatibility     | LXM32.D30M2 at 115 V single phase<br>LXM32.D30M2 at 230 V single 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             | With                                                                                                           |
| Mounting support          | International standard flange                                                                                  |
| Electrical connection     | Rotatable right-angled connectors                                                                              |

## Complementary

|                           |             |
|---------------------------|-------------|
| Range compatibility       | Lexium 32   |
| [Us] rated supply voltage | 240 V       |
| Network number of phases  | Three phase |
| Continuous stall current  | 8.65 A      |
| Continuous power          | 2.39 W      |

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Maximum current Irms                  | 15 A for LXM32.D30M2 at 115 V<br>30 A for LXM32.D30M2 at 230 V                                        |
| Maximum permanent current             | 30.24 A                                                                                               |
| Second shaft                          | Without second shaft end                                                                              |
| Shaft diameter                        | 19 mm                                                                                                 |
| Shaft length                          | 40 mm                                                                                                 |
| Key width                             | 30 mm                                                                                                 |
| Feedback type                         | Multiturn SinCos Hiperface                                                                            |
| Holding torque                        | 5.5 N.m holding brake                                                                                 |
| Motor flange size                     | 100 mm                                                                                                |
| Number of motor stacks                | 2                                                                                                     |
| Torque constant                       | 0.72 N.m/A at 120 °C                                                                                  |
| Back emf constant                     | 46.2 V/krpm at 120 °C                                                                                 |
| Number of motor poles                 | 10                                                                                                    |
| Rotor inertia                         | 6.77 kg.cm <sup>2</sup>                                                                               |
| Stator resistance                     | 0.54 Ohm at 20 °C                                                                                     |
| Stator inductance                     | 2.7 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                                                                                              |
| Brake pull-in power                   | 12 W                                                                                                  |
| Type of cooling                       | Natural convection                                                                                    |
| Length                                | 202.3 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                                                                                                |
| Product weight                        | 6.4 kg                                                                                                |

## Offer Sustainability

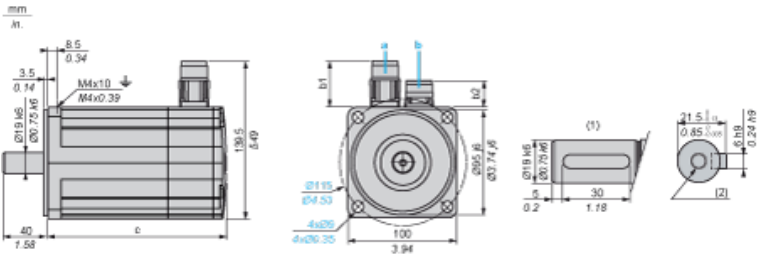
|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | No need of specific recycling operations                                                                                    |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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

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            |

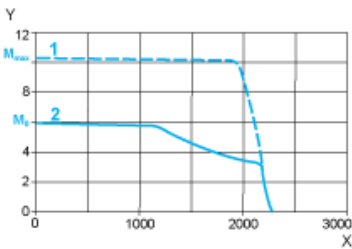
Dimensions in in.

| 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           |

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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

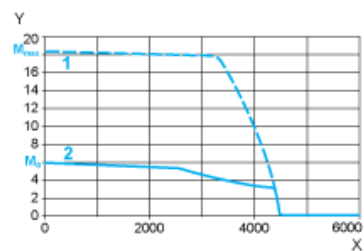
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230 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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