

# BMH0701P36F2A

servo motor BMH, Lexium 32, 1.2Nm,  
8000rpm, keyed shaft, with brake, IP65, IP67,  
16bit encoder



## Main

|                           |  |
|---------------------------|--|
| Product or Component Type | Servo motor  |
| Device short name         | BMH  |
| Maximum mechanical speed  | 8000 rpm   |
| Continuous stall torque   | 10.62 Lbf.In (1.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase<br>10.62 Lbf.In (1.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase<br>12.39 Lbf.In (1.4 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>12.39 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 480 V, three phase |
| Peak stall torque         | 37.17 Lbf.In (4.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase<br>37.17 Lbf.In (4.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase<br>37.17 Lbf.In (4.2 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>37.17 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 480 V, three phase |
| Nominal output power      | 350 W LXM32.U60N4 1.5 A, 400 V, three phase<br>350 W LXM32.U60N4 1.5 A, 480 V, three phase<br>700 W LXM32.D12N4 3 A, 400 V, three phase<br>700 W LXM32.D12N4 3 A, 480 V, three phase   |
| Nominal torque            | 9.74 Lbf.In (1.1 N.m) LXM32.U60N4 1.5 A, 400 V, three phase<br>9.74 Lbf.In (1.1 N.m) LXM32.U60N4 1.5 A, 480 V, three phase<br>11.51 Lbf.In (1.3 N.m) LXM32.D12N4 3 A, 400 V, three phase<br>11.51 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 480 V, three phase   |
| Nominal speed             | 3000 rpm LXM32.U60N4 1.5 A, 400 V, three phase<br>3000 rpm LXM32.U60N4 1.5 A, 480 V, three phase<br>5000 rpm LXM32.D12N4 3 A, 400 V, three phase<br>5000 rpm LXM32.D12N4 3 A, 480 V, three phase   |
| Product compatibility     | LXM32.U60N4 400...480 V three phase<br>LXM32.D12N4 400...480 V three phase   |
| Shaft end                 | Keyed  |
| IP Degree of Protection   | IP65 standard<br>IP67 with IP67 kit  |
| Speed feedback resolution | 32768 points/turn  |
| Holding brake             | With   |
| Mounting Support          | International standard flange  |
| Electrical Connection     | Rotatable right-angled connectors  |

## Complementary

|                           |             |
|---------------------------|-------------|
| Range Compatibility       | Lexium 32   |
| [Us] rated supply voltage | 480 V       |
| Phase                     | Three phase |
| Continuous stall current  | 1.78 A      |
| Continuous power          | 1.05 W      |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                                       |  |
|---------------------------------------|--|
| Maximum current Irms                  | 6 A LXM32.U60N4<br>6 A LXM32.D12N4   |
| Maximum permanent current             | 5.97 A   |
| Second shaft                          | Without second shaft end   |
| Shaft diameter                        | 0.43 in (11 mm)  |
| Shaft length                          | 0.91 in (23 mm)  |
| Key width                             | 0.71 in (18 mm)  |
| Feedback type                         | Single turn SinCos Hiperface   |
| Holding torque                        | 26.55 lbf.in (3 N.m) holding brake   |
| Motor flange size                     | 2.76 in (70 mm)  |
| Number of motor stacks                | 1  |
| Torque constant                       | 0.79 N.m/A 248 °F (120 °C)   |
| Back emf constant                     | 50.72 V/krpm 248 °F (120 °C)   |
| Number of motor poles                 | 10   |
| Rotor inertia                         | 0.7 kg.cm <sup>2</sup>   |
| Stator resistance                     | 8.3 Ohm 68 °F (20 °C)  |
| Stator inductance                     | 23.4 mH 68 °F (20 °C)  |
| Stator electrical time constant       | 2.8 ms 68 °F (20 °C)   |
| Maximum radial force Fr               | 660 N 1000 rpm<br>520 N 2000 rpm<br>460 N 3000 rpm<br>410 N 4000 rpm<br>380 N 5000 rpm<br>360 N 6000 rpm |
| Maximum axial force Fa                | 0.2 x Fr   |
| Brake pull-in power                   | 7 W  |
| Type of cooling                       | Natural convection   |
| Length                                | 6.34 in (161 mm)   |
| Centring collar diameter              | 2.36 in (60 mm)  |
| Centring collar depth                 | 0.10 in (2.5 mm)   |
| Number of mounting holes              | 4  |
| Mounting holes diameter               | 0.22 in (5.5 mm)   |
| Circle diameter of the mounting holes | 3.23 in (82 mm)  |
| Net Weight                            | 5.73 lb(US) (2.6 kg)   |

## Ordering and shipping details

|                   |                        |
|-------------------|------------------------|
| Category          | 18282-LEXIUM 32 MOTORS |
| Discount Schedule | PC53                   |
| GTIN              | 3606485193359          |
| Returnability     | No                     |
| Country of origin | DE                     |

## Packing Units

|                              |                      |
|------------------------------|----------------------|
| Unit Type of Package 1       | PCE                  |
| Number of Units in Package 1 | 1                    |
| Package 1 Height             | 4.33 in (11.0 cm)    |
| Package 1 Width              | 7.87 in (20.0 cm)    |
| Package 1 Length             | 15.75 in (40.0 cm)   |
| Package 1 Weight             | 6.17 lb(US) (2.8 kg) |

## Offer Sustainability

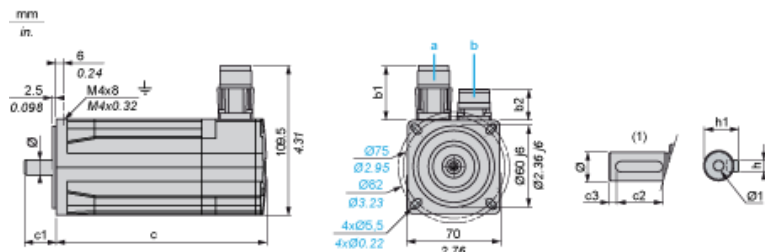
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</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.  |
| PVC free                   | Yes   |

## 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)

Dimensions in mm

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) | c1 | c2 | c3  | h    | h1                                  | Ø     | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|----|----|-----|------|-------------------------------------|-------|---------------|
| b1                  | b2   | b1                          | b2   |                   |                |    |    |     |      |                                     |       |               |
| 39.5                | 25.5 | 39.5                        | 39.5 | 122               | 161            | 23 | 18 | 2.5 | 4 h9 | 12.5 <sup>+0</sup> <sub>-0.13</sub> | 11 k6 | M4 x 14       |

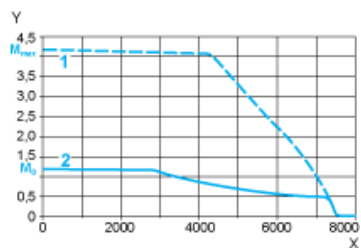
Dimensions in in.

| Straight connectors |    | Rotatable angled connectors |      | c (without brake) | c (with brake) | c1   | c2   | c3   | h       | h1                                    | Ø       | Ø1 for screws |
|---------------------|----|-----------------------------|------|-------------------|----------------|------|------|------|---------|---------------------------------------|---------|---------------|
| b1                  | b2 | b1                          | b2   |                   |                |      |      |      |         |                                       |         |               |
| 1.55                | 1  | 1.55                        | 1.55 | 4.80              | 6.33           | 0.90 | 0.70 | 0.09 | 0.16 h9 | 0.49 <sup>+0</sup> <sub>-0.0051</sub> | 0.43 k6 | M4 x 0.55     |

400 V 3-Phase Supply Voltage

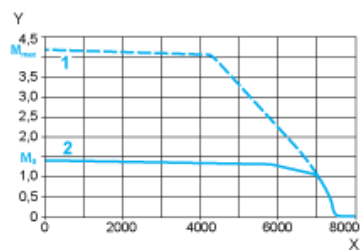
Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

Servo motor with LXM32•D12N4 servo drive

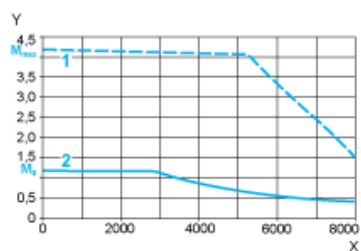


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

### Servo motor with LXM32•D12N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque