



## Main

|                           |                                                                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                                                                                                                                                                                  |
| Device short name         | BMH                                                                                                                                                                                                                                                                          |
| Maximum mechanical speed  | 8000 rpm                                                                                                                                                                                                                                                                     |
| Continuous stall torque   | 12.39 lbf.in (1.4 N.m) LXM32.D12N4 3 A at 400 V three phase<br>12.39 lbf.in (1.4 N.m) LXM32.D12N4 3 A at 480 V three phase<br>10.62 lbf.in (1.2 N.m) for LXM32.U60N4 1.5 A at 400 V three phase<br>10.62 lbf.in (1.2 N.m) for LXM32.U60N4 1.5 A at 480 V three phase         |
| Peak stall torque         | 37.17 lbf.in (4.2 N.m) for LXM32.U60N4 1.5 A at 400 V three phase<br>37.17 lbf.in (4.2 N.m) for LXM32.U60N4 1.5 A at 480 V three phase<br>37.17 lbf.in (4.2 N.m) for LXM32.D12N4 3 A at 400 V three phase<br>37.17 lbf.in (4.2 N.m) for LXM32.D12N4 3 A at 480 V three phase |
| Nominal output power      | 700 W LXM32.D12N4 3 A at 400 V three phase<br>700 W LXM32.D12N4 3 A at 480 V three phase<br>350 W for LXM32.U60N4 1.5 A at 400 V three phase<br>350 W for LXM32.U60N4 1.5 A at 480 V three phase                                                                             |
| Nominal torque            | 9.73 lbf.in (1.1 N.m) for LXM32.U60N4 1.5 A at 400 V three phase<br>9.73 lbf.in (1.1 N.m) for LXM32.U60N4 1.5 A at 480 V three phase<br>11.5 lbf.in (1.3 N.m) for LXM32.D12N4 3 A at 400 V three phase<br>11.5 lbf.in (1.3 N.m) for LXM32.D12N4 3 A at 480 V three phase     |
| Nominal speed             | 5000 rpm LXM32.D12N4 3 A at 400 V three phase<br>3000 rpm for LXM32.U60N4 1.5 A at 480 V three phase<br>5000 rpm LXM32.D12N4 3 A at 480 V three phase<br>3000 rpm for LXM32.U60N4 1.5 A at 400 V three phase                                                                 |
| Product compatibility     | LXM32.U60N4 at 400...480 V three phase<br>LXM32.D12N4 at 400...480 V three phase                                                                                                                                                                                             |
| Shaft end                 | Keyed                                                                                                                                                                                                                                                                        |
| IP degree of protection   | IP54 (standard)                                                                                                                                                                                                                                                              |
| Speed feedback resolution | 131072 points/turn                                                                                                                                                                                                                                                           |
| Holding brake             | Without                                                                                                                                                                                                                                                                      |
| 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                                 |
| Maximum current I <sub>rms</sub> | 6 A LXM32.U60N4<br>6 A for LXM32.D12N4 |
| Maximum permanent current        | 5.97 A                                 |

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.

|                                       |                                                                                                                            |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                               |
| Motor flange size                     | 2.76 in (70 mm)                                                                                                            |
| Number of motor stacks                | 1                                                                                                                          |
| Torque constant                       | 0.79 N.m/A at 248 °F (120 °C)                                                                                              |
| Back emf constant                     | 50.72 V/krpm at 248 °F (120 °C)                                                                                            |
| Number of motor poles                 | 10                                                                                                                         |
| Rotor inertia                         | 0.59 kg.cm <sup>2</sup>                                                                                                    |
| Stator resistance                     | 8.3 Ohm at 68 °F (20 °C)                                                                                                   |
| Stator inductance                     | 23.4 mH at 68 °F (20 °C)                                                                                                   |
| Stator electrical time constant       | 2.8 ms at 68 °F (20 °C)                                                                                                    |
| Maximum radial force Fr               | 360 N at 6000 rpm<br>380 N at 5000 rpm<br>410 N at 4000 rpm<br>460 N at 3000 rpm<br>520 N at 2000 rpm<br>660 N at 1000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                                                   |
| Type of cooling                       | Natural convection                                                                                                         |
| Length                                | 4.8 in (122 mm)                                                                                                            |
| Centring collar diameter              | 2.36 in (60 mm)                                                                                                            |
| Centring collar depth                 | 0.1 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)                                                                                                            |
| Product weight                        | 3.53 lb(US) (1.6 kg)                                                                                                       |

## Environment

### Offer Sustainability

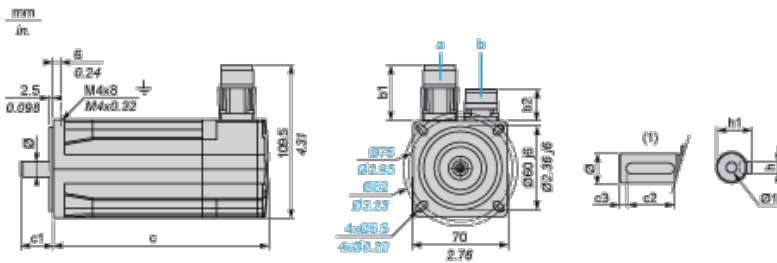
|                                                                                                                                  |                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Green Premium product                                                                                                            | Green Premium product                                                                                                            |
| Compliant - since 0936 - Schneider Electric declaration of conformity                                                            | Compliant - since 0936 - Schneider Electric declaration of conformity                                                            |
| Reference not containing SVHC above the threshold                                                                                | Reference not containing SVHC above the threshold                                                                                |
| Available                                                                                                                        | Available                                                                                                                        |
| Need no specific recycling operations                                                                                            | Need no specific recycling operations                                                                                            |
| WARNING: This product can expose you to chemicals including:                                                                     | 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. | 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>                                    | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                                    |

### Contractual warranty

|                 |           |
|-----------------|-----------|
| Warranty period | 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       |

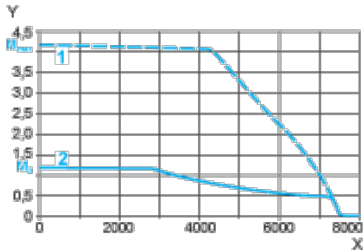
Dimensions in in.

| 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

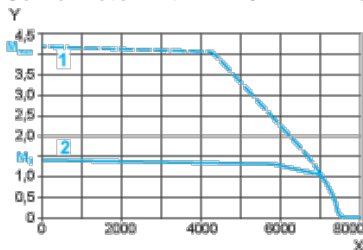
### Torque/Speed Curves

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

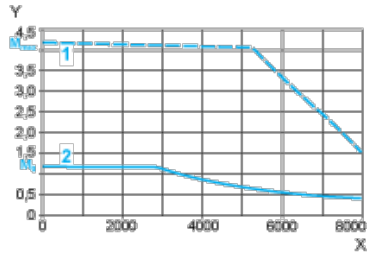


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

## 480 V 3-Phase Supply Voltage

## Torque/Speed Curves

### Servo motor with LXM32•U60N4 servo drive



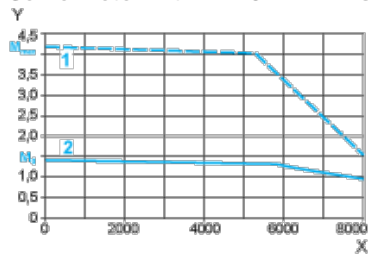
X Speed in rpm

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