



## Main

|                           |                                                                                                                                                                                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                                                                                                                                                           |
| Device short name         | BSH                                                                                                                                                                                                                                                   |
| Maximum mechanical speed  | 9000 rpm                                                                                                                                                                                                                                              |
| Continuous stall torque   | 4.42 lbf.in (0.5 N.m) LXM15LD13M3 at 230 V single phase<br>4.42 lbf.in (0.5 N.m) LXM15LU60N4 at 230 V three phase<br>4.42 lbf.in (0.5 N.m) LXM32.U60N4 1.5 A at 400 V three phase<br>4.42 lbf.in (0.5 N.m) LXM32.U60N4 1.5 A at 480 V three phase     |
| Peak stall torque         | 12.39 lbf.in (1.4 N.m) LXM15LD13M3 at 230 V single phase<br>12.39 lbf.in (1.4 N.m) LXM15LU60N4 at 230 V three phase<br>13.27 lbf.in (1.5 N.m) LXM32.U60N4 1.5 A at 400 V three phase<br>13.27 lbf.in (1.5 N.m) LXM32.U60N4 1.5 A at 480 V three phase |
| Nominal output power      | 170 W LXM15LD13M3 at 230 V single phase<br>170 W LXM15LU60N4 at 230 V three phase<br>300 W LXM32.U60N4 1.5 A at 400 V three phase<br>300 W LXM32.U60N4 1.5 A at 480 V three phase                                                                     |
| Nominal torque            | 4.07 lbf.in (0.46 N.m) LXM15LD13M3 at 230 V single phase<br>4.07 lbf.in (0.46 N.m) LXM15LU60N4 at 230 V three phase<br>4.25 lbf.in (0.48 N.m) LXM32.U60N4 1.5 A at 400 V three phase<br>4.25 lbf.in (0.48 N.m) LXM32.U60N4 1.5 A at 480 V three phase |
| Nominal speed             | 4000 rpm LXM15LD13M3 at 230 V single phase<br>4000 rpm LXM15LU60N4 at 230 V three phase<br>6000 rpm LXM32.U60N4 1.5 A at 480 V three phase<br>6000 rpm LXM32.U60N4 1.5 A at 400 V three phase                                                         |
| Product compatibility     | LXM15LD13M3 at 230 V single phase<br>LXM15LU60N4 at 230 V three phase<br>LXM32.U60N4 at 400 V three phase<br>LXM32.U60N4 at 480 V three phase                                                                                                         |
| Shaft end                 | Untapped                                                                                                                                                                                                                                              |
| 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 15<br>Lexium 32 |
| [Us] rated supply voltage | 480 V                  |
| Phase                     | Three phase            |
| Continuous stall current  | 0.73 A                 |
| Continuous power          | 0.45 W                 |
| Maximum current Irms      | 3.5 A LXM15LD13M3      |

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.

|                                       |                                                                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | 3.5 A LXM15LU60N4<br>2.9 A LXM32.U60N4                                                                                                                               |
| Maximum permanent current             | 2.9 A                                                                                                                                                                |
| Switching frequency                   | 8 kHz                                                                                                                                                                |
| Second shaft                          | Without second shaft end                                                                                                                                             |
| Shaft diameter                        | 0.35 in (9 mm)                                                                                                                                                       |
| Shaft length                          | 0.79 in (20 mm)                                                                                                                                                      |
| Feedback type                         | Multiturn SinCos Hiperface                                                                                                                                           |
| Holding torque                        | 7.08 lbf.in (0.8 N.m) (holding brake)                                                                                                                                |
| Motor flange size                     | 2.17 in (55 mm)                                                                                                                                                      |
| Number of motor stacks                | 1                                                                                                                                                                    |
| Torque constant                       | 0.7 N.m/A at 248 °F (120 °C)                                                                                                                                         |
| Back emf constant                     | 40 V/krpm at 248 °F (120 °C)                                                                                                                                         |
| Number of motor poles                 | 6                                                                                                                                                                    |
| Rotor inertia                         | 0.083 kg.cm <sup>2</sup>                                                                                                                                             |
| Stator resistance                     | 41.8 Ohm at 68 °F (20 °C)                                                                                                                                            |
| Stator inductance                     | 71.5 mH at 68 °F (20 °C)                                                                                                                                             |
| Stator electrical time constant       | 1.09 ms at 68 °F (20 °C)                                                                                                                                             |
| Maximum radial force Fr               | 170 N at 8000 rpm<br>180 N at 7000 rpm<br>190 N at 6000 rpm<br>200 N at 5000 rpm<br>220 N at 4000 rpm<br>240 N at 3000 rpm<br>270 N at 2000 rpm<br>340 N at 1000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                                                                                             |
| Brake pull-in power                   | 10 W                                                                                                                                                                 |
| Type of cooling                       | Natural convection                                                                                                                                                   |
| Length                                | 6.26 in (159 mm)                                                                                                                                                     |
| Centring collar diameter              | 1.57 in (40 mm)                                                                                                                                                      |
| Centring collar depth                 | 0.08 in (2 mm)                                                                                                                                                       |
| Number of mounting holes              | 4                                                                                                                                                                    |
| Mounting holes diameter               | 0.22 in (5.5 mm)                                                                                                                                                     |
| Circle diameter of the mounting holes | 2.48 in (63 mm)                                                                                                                                                      |
| Product weight                        | 2.87 lb(US) (1.3 kg)                                                                                                                                                 |

## Environment

## Offer Sustainability

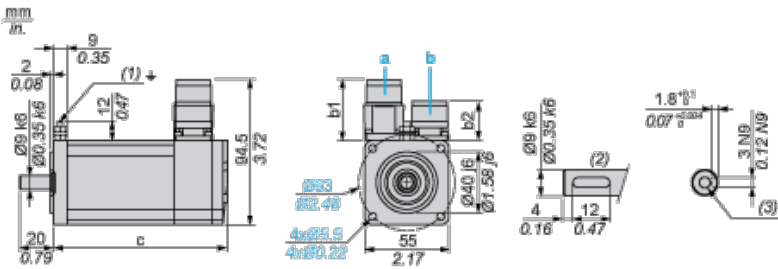
|                                                                                                                                 |                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Green Premium product                                                                                                           | Green Premium product                                                                                                           |
| Compliant - since 1018 - Schneider Electric declaration of conformity                                                           | Compliant - since 1018 - 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) M4 screw
- (2) Shaft end, keyed slot (optional)
- (3) For screw M3 x 9 mm/M3 x 0.35 in.

Dimensions in mm

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b                   | b1   | b                           | b1   |                   |                |
| 39.5                | 25.5 | 39.5                        | 39.5 | 132.5             | 159            |

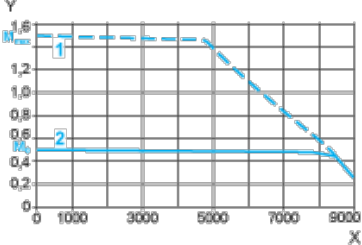
Dimensions in in.

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b                   | b1   | b                           | b1   |                   |                |
| 1.55                | 1.00 | 1.55                        | 1.55 | 5.21              | 6.25           |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

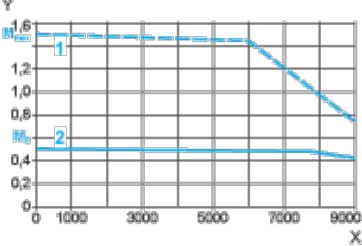


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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

