

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
2.5Nm, 8000rpm, untapped shaft,  
without brake, IP65, IP67, 128bit  
encoder, straight

BMH0702T21A1A

⚠ Discontinued

⚠ Discontinued on: Jun 30, 2023

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## Main

|                           |   |
|---------------------------|---|
| Device short name         | BMH   |
| Product or Component Type | Servo motor   |
| Maximum mechanical speed  | 8000 rpm  |
| Continuous stall torque   | 22.1 lbf.in (2.5 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>22.1 lbf.in (2.5 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Peak stall torque         | 56.6 lbf.in (6.4 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>65.5 lbf.in (7.4 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Nominal output power      | 600 W LXM32.D30M2 10 A, 115 V, single phase<br>900 W LXM32.D18M2 6 A, 230 V, single phase                                 |
| Nominal torque            | 20.4 lbf.in (2.3 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>18.6 lbf.in (2.1 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Nominal speed             | 2500 rpm LXM32.D30M2 10 A, 115 V, single phase<br>4000 rpm LXM32.D18M2 6 A, 230 V, single phase                           |
| Product compatibility     | LXM32.D30M2 115 V single phase<br>LXM32.D18M2 230 V single phase  |
| Shaft end                 | Smooth shaft  |
| IP Degree of Protection   | IP65 standard<br>IP67 with IP67 kit   |
| Speed feedback resolution | 131072 points/turn  |
| Holding brake             | Without   |
| Mounting Support          | International standard flange   |
| Electrical Connection     | Straight connectors   |

## Complementary

|                           |  |
|---------------------------|--|
| Range Compatibility       | Lexium 32                              |
| [Us] rated supply voltage | 240 V                                  |
| Phase                     | Three phase                            |
| Continuous stall current  | 5.38 A                                 |
| Continuous power          | 1.51 W                                 |
| Maximum current Irms      | 15 A LXM32.D30M2<br>17.5 A LXM32.D18M2 |
| Maximum permanent current | 17.71 A                                |
| Second shaft              | Without second shaft end               |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                                       |  |
|---------------------------------------|--|
| Shaft diameter                        | 0.4 in (11 mm)   |
| Shaft length                          | 0.9 in (23 mm)   |
| Feedback type                         | Single turn SinCos Hiperface   |
| Motor flange size                     | 2.8 in (70 mm)   |
| Number of motor stacks                | 2  |
| Torque constant                       | 0.46 N.m/A 248 °F (120 °C)   |
| Back emf constant                     | 29.6 V/krpm 248 °F (120 °C)  |
| Number of motor poles                 | 10   |
| Rotor inertia                         | 1.13 kg.cm <sup>2</sup>  |
| Stator resistance                     | 1.15 Ohm 68 °F (20 °C)   |
| Stator inductance                     | 3.6 mH 68 °F (20 °C)   |
| Stator electrical time constant       | 3.1 ms 68 °F (20 °C)   |
| Maximum radial force Fr               | 710 N 1000 rpm<br>560 N 2000 rpm<br>490 N 3000 rpm<br>450 N 4000 rpm<br>410 N 5000 rpm<br>390 N 6000 rpm |
| Maximum axial force Fa                | 0.2 x Fr   |
| Type of cooling                       | Natural convection   |
| Length                                | 6.06 in (154 mm)   |
| Centring collar diameter              | 2.4 in (60 mm)   |
| Centring collar depth                 | 0.10 in (2.5 mm)   |
| Number of mounting holes              | 4  |
| Mounting holes diameter               | 0.2 in (5.5 mm)  |
| Circle diameter of the mounting holes | 3.2 in (82 mm)   |
| Net Weight                            | 5.07 lb(US) (2.3 kg)   |
| Sizing reference                      | BMH0702T   |
| Network number of phases              | 3  |
| Accuracy error [angular]              | 1.4 °  |
| Temperature copper hot                | 275 °F (135 °C)  |
| Temperature magnet hot                | 212 °F (100 °C)  |
| Temperature magnet rt                 | 68 °F (20 °C)  |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5318282  |
| Discount Schedule | PC53          |
| GTIN              | 3606485199856 |
| Returnability     | No            |

## Packing Units

|                        |     |
|------------------------|-----|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg.  | 1   |

|                                     |                      |
|-------------------------------------|----------------------|
| <b>Package 1 Height</b>             | 4.3 in (11.0 cm)     |
| <b>Package 1 Width</b>              | 7.9 in (20.0 cm)     |
| <b>Package 1 Length</b>             | 15.7 in (40.0 cm)    |
| <b>Package weight(Lbs)</b>          | 4.4 lb(US) (2.0 kg)  |
| <b>Unit Type of Package 2</b>       | P06                  |
| <b>Number of Units in Package 2</b> | 36                   |
| <b>Package 2 Height</b>             | 41.3 in (105.0 cm)   |
| <b>Package 2 Width</b>              | 31.5 in (80.0 cm)    |
| <b>Package 2 Length</b>             | 23.6 in (60.0 cm)    |
| <b>Package 2 Weight</b>             | 174.2 lb(US) (79 kg) |

## Contractual warranty

|                             |    |
|-----------------------------|----|
| <b>Warranty (in months)</b> | 18 |
|-----------------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better



#### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

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 [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No

### Use Again



#### Repack and remanufacture

Circularity Profile

No need of specific recycling operations

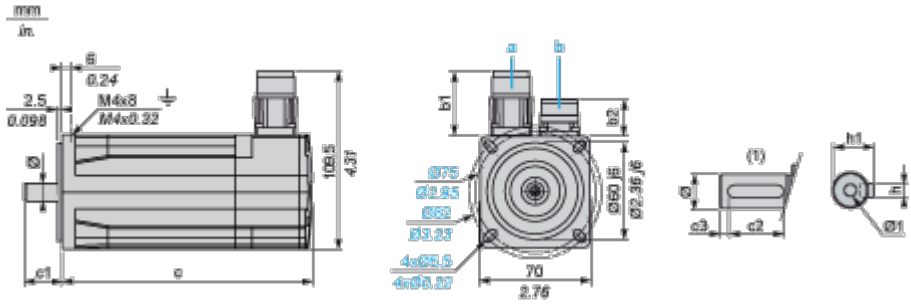
WEEE Label

 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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)

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 | 154               | 193            | 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 | 6.06              | 7.59           | 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     |

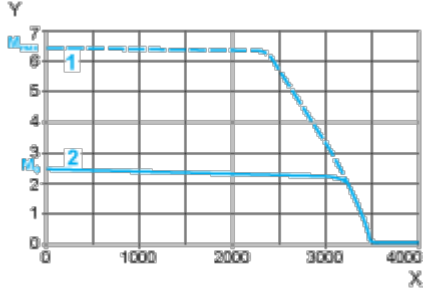
Performance Curves

115 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive



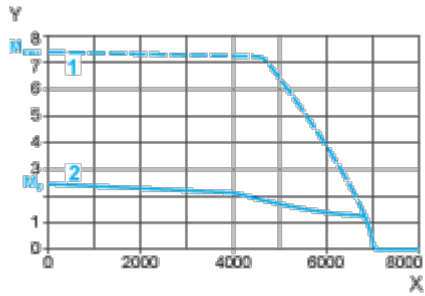
- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

230 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque