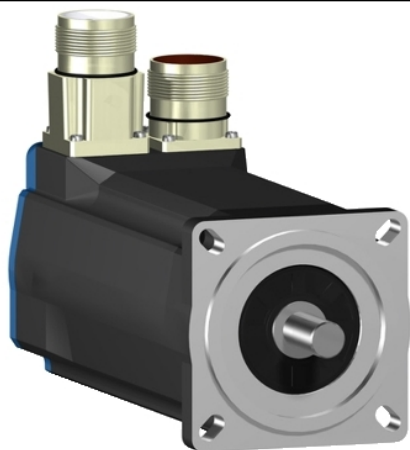






## Main

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or Component Type | Servo motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Device short name         | BSH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum mechanical speed  | 8000 rpm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Continuous stall torque   | 19.47 Lbf.In (2.2 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05AD17M2, 200...240 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05BD17M2, 200...240 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05CD17M2, 200...240 V, single phase<br>19.47 Lbf.In (2.2 N.m) LXM32.D18M2 6 A, 230 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05AD17F1, 110...120 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05AD28M2, 200...240 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05BD17F1, 110...120 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05BD28M2, 200...240 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05CD17F1, 110...120 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM05CD28M2, 200...240 V, single phase<br>18.76 Lbf.In (2.12 N.m) LXM15LD17N4, 230 V, three phase<br>18.76 Lbf.In (2.12 N.m) LXM15LD21M3, 230 V, three phase<br>18.76 Lbf.In (2.12 N.m) LXM05AD42M3X, 200...240 V, three phase<br>18.76 Lbf.In (2.12 N.m) LXM05BD42M3X, 200...240 V, three phase<br>18.76 lbf.in (2.12 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Peak stall torque         | 53.99 Lbf.In (6.1 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>63.73 Lbf.In (7.2 N.m) LXM32.D18M2 6 A, 230 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05AD17F1, 110...120 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05AD17M2, 200...240 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05BD17F1, 110...120 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05BD17M2, 200...240 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05CD17F1, 110...120 V, single phase<br>36.64 Lbf.In (4.14 N.m) LXM05CD17M2, 200...240 V, single phase<br>60.18 Lbf.In (6.8 N.m) LXM05AD28M2, 200...240 V, single phase<br>60.18 Lbf.In (6.8 N.m) LXM05BD28M2, 200...240 V, single phase<br>60.18 Lbf.In (6.8 N.m) LXM05CD28M2, 200...240 V, single phase<br>39.56 Lbf.In (4.47 N.m) LXM15LD17N4, 230 V, three phase<br>48.24 Lbf.In (5.45 N.m) LXM15LD21M3, 230 V, three phase<br>60.18 Lbf.In (6.8 N.m) LXM05AD42M3X, 200...240 V, three phase<br>60.18 Lbf.In (6.8 N.m) LXM05BD42M3X, 200...240 V, three phase<br>60.18 lbf.in (6.8 N.m) LXM05CD42M3X, 200...240 V, three phase       |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal output power | 550 W LXM32.D30M2 10 A, 115 V, single phase<br>600 W LXM05AD17M2, 200...240 V, single phase<br>600 W LXM05BD17M2, 200...240 V, single phase<br>600 W LXM05CD17M2, 200...240 V, single phase<br>570 W LXM05AD17F1, 110...120 V, single phase<br>570 W LXM05BD17F1, 110...120 V, single phase<br>570 W LXM05CD17F1, 110...120 V, single phase<br>600 W LXM05AD28M2, 200...240 V, single phase<br>600 W LXM05BD28M2, 200...240 V, single phase<br>600 W LXM05CD28M2, 200...240 V, single phase<br>950 W LXM32.D18M2 6 A, 230 V, single phase<br>1000 W LXM15LD17N4, 230 V, three phase<br>1000 W LXM15LD21M3, 230 V, three phase<br>600 W LXM05AD42M3X, 200...240 V, three phase<br>600 W LXM05BD42M3X, 200...240 V, three phase<br>600 W LXM05CD42M3X, 200...240 V, three phase                                                                                                                                                                                                                                                                                     |
| Nominal torque       | 18.32 Lbf.In (2.07 N.m) LXM32.D30M2 10 A, 115 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05AD17M2, 200...240 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05BD17M2, 200...240 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05CD17M2, 200...240 V, single phase<br>16.20 Lbf.In (1.83 N.m) LXM05AD17F1, 110...120 V, single phase<br>16.20 Lbf.In (1.83 N.m) LXM05BD17F1, 110...120 V, single phase<br>16.20 Lbf.In (1.83 N.m) LXM05CD17F1, 110...120 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05AD28M2, 200...240 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05BD28M2, 200...240 V, single phase<br>16.82 Lbf.In (1.9 N.m) LXM05CD28M2, 200...240 V, single phase<br>15.93 Lbf.In (1.8 N.m) LXM32.D18M2 6 A, 230 V, single phase<br>14.69 Lbf.In (1.66 N.m) LXM15LD17N4, 230 V, three phase<br>14.69 Lbf.In (1.66 N.m) LXM15LD21M3, 230 V, three phase<br>16.82 Lbf.In (1.9 N.m) LXM05AD42M3X, 200...240 V, three phase<br>16.82 Lbf.In (1.9 N.m) LXM05BD42M3X, 200...240 V, three phase<br>16.82 lbf.in (1.9 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Nominal speed        | 2500 rpm LXM32.D30M2 10 A, 115 V, single phase<br>3000 rpm LXM05AD17F1, 110...120 V, single phase<br>3000 rpm LXM05BD17F1, 110...120 V, single phase<br>3000 rpm LXM05CD17F1, 110...120 V, single phase<br>3000 rpm LXM05AD17M2, 200...240 V, single phase<br>3000 rpm LXM05BD17M2, 200...240 V, single phase<br>3000 rpm LXM05CD17M2, 200...240 V, single phase<br>3000 rpm LXM05AD28M2, 200...240 V, single phase<br>3000 rpm LXM05BD28M2, 200...240 V, single phase<br>3000 rpm LXM05CD28M2, 200...240 V, single phase<br>5000 rpm LXM32.D18M2 6 A, 230 V, single phase<br>3000 rpm LXM05AD42M3X, 200...240 V, three phase<br>3000 rpm LXM05BD42M3X, 200...240 V, three phase<br>3000 rpm LXM05CD42M3X, 200...240 V, three phase<br>6000 rpm LXM15LD17N4, 230 V, three phase<br>6000 rpm LXM15LD21M3, 230 V, three phase                                                                                                                                                                                                                                       |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product compatibility     | LXM05AD17F1 110...120 V single phase<br>LXM05AD17M2 200...240 V single phase<br>LXM05AD28M2 200...240 V single phase<br>LXM05BD17F1 110...120 V single phase<br>LXM05BD17M2 200...240 V single phase<br>LXM05BD28M2 200...240 V single phase<br>LXM05CD17F1 110...120 V single phase<br>LXM05CD17M2 200...240 V single phase<br>LXM05CD28M2 200...240 V single phase<br>LXM32.D30M2 115 V single phase<br>LXM32.D18M2 230 V single phase<br>LXM15LD21M3 230 V three phase<br>LXM05AD42M3X 200...240 V three phase<br>LXM05BD42M3X 200...240 V three phase<br>LXM05CD42M3X 200...240 V three phase<br>LXM15LD17N4 230 V three phase |
| Shaft end                 | Keyed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| IP Degree of Protection   | IP50 standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Speed feedback resolution | 131072 points/turn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Holding brake             | With                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Mounting Support          | International standard flange                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electrical Connection     | Rotatable right-angled connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## Complementary

|                                 |                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range Compatibility             | Lexium 05<br>Lexium 15<br>Lexium 32                                                                                                                                                                                                                                                                                                                         |
| Supply voltage max              | 480 V                                                                                                                                                                                                                                                                                                                                                       |
| Phase                           | Three phase                                                                                                                                                                                                                                                                                                                                                 |
| Continuous stall current        | 4.9 A                                                                                                                                                                                                                                                                                                                                                       |
| Maximum continuous power        | 1.51 W                                                                                                                                                                                                                                                                                                                                                      |
| Maximum current Irms            | 20.6 A LXM15LD21M3<br>20.6 A LXM15LD17N4<br>19.9 A LXM05AD17F1<br>19.9 A LXM05AD17M2<br>19.9 A LXM05AD28M2<br>19.9 A LXM05AD42M3X<br>19.9 A LXM05BD17F1<br>19.9 A LXM05BD17M2<br>19.9 A LXM05BD28M2<br>19.9 A LXM05BD42M3X<br>19.9 A LXM05CD17F1<br>19.9 A LXM05CD17M2<br>19.9 A LXM05CD28M2<br>19.9 A LXM05CD42M3X<br>15 A LXM32.D30M2<br>18 A LXM32.D18M2 |
| Maximum permanent current       | 19.9 A                                                                                                                                                                                                                                                                                                                                                      |
| Switching frequency             | 8 kHz                                                                                                                                                                                                                                                                                                                                                       |
| 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                  | 17.70 lbf.in (2 N.m) holding brake                                                                                                                                                                                                                                                                                                                          |
| Motor flange size               | 2.76 in (70 mm)                                                                                                                                                                                                                                                                                                                                             |
| Number of motor stacks          | 2                                                                                                                                                                                                                                                                                                                                                           |
| Torque constant                 | 0.45 N.m/A 248 °F (120 °C)                                                                                                                                                                                                                                                                                                                                  |
| Back emf constant               | 28 V/krpm 248 °F (120 °C)                                                                                                                                                                                                                                                                                                                                   |
| Number of motor poles           | 6                                                                                                                                                                                                                                                                                                                                                           |
| Rotor inertia                   | 0.482 kg.cm <sup>2</sup>                                                                                                                                                                                                                                                                                                                                    |
| Stator resistance               | 1.5 Ohm 68 °F (20 °C)                                                                                                                                                                                                                                                                                                                                       |
| Stator inductance               | 6.7 mH 68 °F (20 °C)                                                                                                                                                                                                                                                                                                                                        |
| Stator electrical time constant | 4.47 ms 68 °F (20 °C)                                                                                                                                                                                                                                                                                                                                       |

|                                       |                                                                                                          |
|---------------------------------------|----------------------------------------------------------------------------------------------------------|
| Maximum radial force Fr               | 390 N 6000 rpm<br>410 N 5000 rpm<br>450 N 4000 rpm<br>490 N 3000 rpm<br>560 N 2000 rpm<br>710 N 1000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                                 |
| Brake pull-in power                   | 10 W                                                                                                     |
| Type of cooling                       | Natural convection                                                                                       |
| Length                                | 8.37 in (212.5 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                            | 6.61 lb(US) (3 kg)                                                                                       |

### Ordering and shipping details

|                   |                        |
|-------------------|------------------------|
| Category          | 18282-LEXIUM 32 MOTORS |
| Discount Schedule | PC53                   |
| GTIN              | 3389118134799          |
| Returnability     | No                     |
| Country of origin | DE                     |

### Packing Units

|                              |                       |
|------------------------------|-----------------------|
| Unit Type of Package 1       | PCE                   |
| Number of Units in Package 1 | 1                     |
| Package 1 Height             | 4.84 in (12.3 cm)     |
| Package 1 Width              | 5.04 in (12.8 cm)     |
| Package 1 Length             | 14.84 in (37.7 cm)    |
| Package 1 Weight             | 7.17 lb(US) (3.25 kg) |

### Offer Sustainability

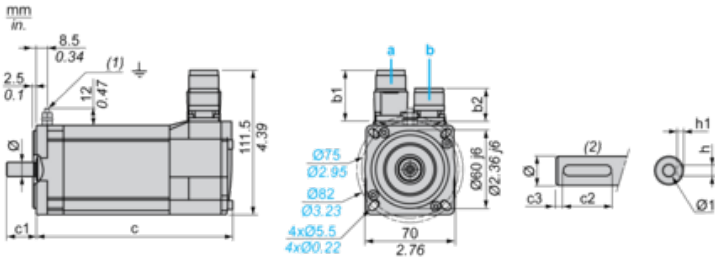
|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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) M4 screw  
(2) 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 | 187               | 213            | 23 | 18 | 2.5 | 4 N9 | 2.5 <sup>+0.1</sup> <sub>0</sub> | 11 k6 | M4 x 10       |

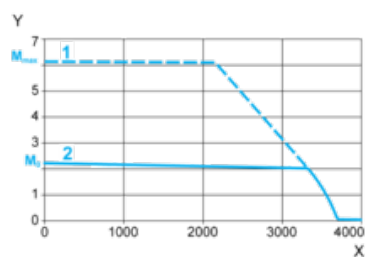
Dimensions in in.

| 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                | 1.00 | 1.55                        | 1.55 | 7.36              | 8.38           | 0.90 | 0.70 | 0.09 | 0.16 N9 | 0.01 <sup>+0.004</sup> <sub>0</sub> | 0.43 k6 | M4 x 0.39     |

### 115 V Single-Phase Supply Voltage

#### Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



X Speed in rpm

Y Torque in Nm

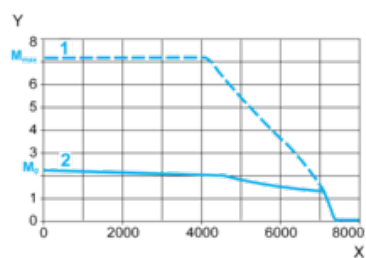
1 Peak torque

2 Continuous torque

### 230 V Single-Phase Supply Voltage

#### Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque