

BSH1001T11F2A

servo motor BSH, Lexium 05, 3.39N.m,
4000rpm, 100mm, keyed shaft, Sincos single
turn, with brake, IP50





Main

| | |
|---------------------------|---|
| Product or Component Type | Servo motor |
| Device short name | BSH |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 29.21 Lbf.In (3.3 N.m) LXM32.D30M2 10 A, 115 V, single phase 30.00 Lbf.In (3.39 N.m) LXM15LD28M3, 230 V, three phase 30.09 Lbf.In (3.4 N.m) LXM05AD28F1, 110...120 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05AD28M2, 200...240 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05AD42M3X, 200...240 V, three phase 30.09 Lbf.In (3.4 N.m) LXM05BD28F1, 110...120 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05BD28M2, 200...240 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05BD42M3X, 200...240 V, three phase 30.09 Lbf.In (3.4 N.m) LXM05CD28F1, 110...120 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05CD28M2, 200...240 V, single phase 30.09 Lbf.In (3.4 N.m) LXM05CD42M3X, 200...240 V, three phase 23.90 lbf.in (2.7 N.m) LXM32.D18M2 6 A, 230 V, single phase |
| Peak stall torque | 55.76 Lbf.In (6.3 N.m) LXM32.D30M2 10 A, 115 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05AD28F1, 110...120 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05AD28M2, 200...240 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05BD28F1, 110...120 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05BD28M2, 200...240 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05CD28F1, 110...120 V, single phase 75.23 Lbf.In (8.5 N.m) LXM05CD28M2, 200...240 V, single phase 66.38 Lbf.In (7.5 N.m) LXM32.D18M2 6 A, 230 V, single phase 75.23 Lbf.In (8.5 N.m) LXM15LD28M3, 230 V, three phase 75.23 Lbf.In (8.5 N.m) LXM05AD42M3X, 200...240 V, three phase 75.23 Lbf.In (8.5 N.m) LXM05BD42M3X, 200...240 V, three phase 75.23 lbf.in (8.5 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Nominal output power | 700 W LXM32.D30M2 10 A, 115 V, single phase 900 W LXM32.D18M2 6 A, 230 V, single phase 500 W LXM05AD28F1, 110...120 V, single phase 500 W LXM05BD28F1, 110...120 V, single phase 500 W LXM05CD28F1, 110...120 V, single phase 900 W LXM05AD28M2, 200...240 V, single phase 900 W LXM05BD28M2, 200...240 V, single phase 900 W LXM05CD28M2, 200...240 V, single phase 1150 W LXM15LD28M3, 230 V, three phase 900 W LXM05AD42M3X, 200...240 V, three phase 900 W LXM05BD42M3X, 200...240 V, three phase 900 W LXM05CD42M3X, 200...240 V, three phase |

| | |
|---------------------------|---|
| Nominal torque | 24.34 Lbf.In (2.75 N.m) LXM32.D30M2 10 A, 115 V, single phase 25.67 Lbf.In (2.9 N.m) LXM05AD28M2, 200...240 V, single phase 25.67 Lbf.In (2.9 N.m) LXM05BD28M2, 200...240 V, single phase 25.67 Lbf.In (2.9 N.m) LXM05CD28M2, 200...240 V, single phase 27.97 Lbf.In (3.16 N.m) LXM05AD28F1, 110...120 V, single phase 27.97 Lbf.In (3.16 N.m) LXM05BD28F1, 110...120 V, single phase 27.97 Lbf.In (3.16 N.m) LXM05CD28F1, 110...120 V, single phase 19.47 Lbf.In (2.2 N.m) LXM32.D18M2 6 A, 230 V, single phase 24.34 Lbf.In (2.75 N.m) LXM15LD28M3, 230 V, three phase 25.67 Lbf.In (2.9 N.m) LXM05AD42M3X, 200...240 V, three phase 25.67 Lbf.In (2.9 N.m) LXM05BD42M3X, 200...240 V, three phase 25.67 lbf.in (2.9 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Nominal speed | 2500 rpm LXM32.D30M2 10 A, 115 V, single phase 3000 rpm LXM05AD28M2, 200...240 V, single phase 3000 rpm LXM05BD28M2, 200...240 V, single phase 3000 rpm LXM05CD28M2, 200...240 V, single phase 3000 rpm LXM05AD42M3X, 200...240 V, three phase 3000 rpm LXM05BD42M3X, 200...240 V, three phase 3000 rpm LXM05CD42M3X, 200...240 V, three phase 4000 rpm LXM32.D18M2 6 A, 230 V, single phase 1500 rpm LXM05AD28F1, 110...120 V, single phase 1500 rpm LXM05BD28F1, 110...120 V, single phase 1500 rpm LXM05CD28F1, 110...120 V, single phase 4000 rpm LXM15LD28M3, 230 V, three phase |
| Product compatibility | LXM05AD28F1 110...120 V single phase LXM05AD28M2 200...240 V single phase LXM05BD28F1 110...120 V single phase LXM05BD28M2 200...240 V single phase LXM05CD28F1 110...120 V single phase LXM05CD28M2 200...240 V single phase LXM32.D30M2 115 V single phase LXM32.D18M2 230 V single phase LXM05AD42M3X 200...240 V three phase LXM05BD42M3X 200...240 V three phase LXM05CD42M3X 200...240 V three phase LXM15LD28M3 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 Lexium 32 Lexium 15 |
| Supply voltage max | 480 V |
| Phase | Three phase |
| Continuous stall current | 7.3 A |
| Maximum continuous power | 1.6 W |

| | |
|---------------------------------------|---|
| Maximum current Irms | 18 A LXM32.D18M2 230 V 15 A LXM32.D30M2 115 V 23 A LXM15LD28M3 25.1 A LXM05AD28F1 25.1 A LXM05AD28M2 25.1 A LXM05AD42M3X 25.1 A LXM05BD28F1 25.1 A LXM05BD28M2 25.1 A LXM05BD42M3X 25.1 A LXM05CD28F1 25.1 A LXM05CD28M2 25.1 A LXM05CD42M3X |
| Maximum permanent current | 25.1 A |
| Switching frequency | 8 kHz |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.75 in (19 mm) |
| Shaft length | 1.57 in (40 mm) |
| Key width | 1.18 in (30 mm) |
| Feedback type | Single turn SinCos Hiperface |
| Holding torque | 79.66 lbf.in (9 N.m) holding brake |
| Motor flange size | 3.94 in (100 mm) |
| Number of motor stacks | 1 |
| Torque constant | 0.45 N.m/A 248 °F (120 °C) |
| Back emf constant | 29 V/krpm 248 °F (120 °C) |
| Number of motor poles | 8 |
| Rotor inertia | 2.018 kg.cm ² |
| Stator resistance | 0.87 Ohm 68 °F (20 °C) |
| Stator inductance | 4 mH 68 °F (20 °C) |
| Stator electrical time constant | 4.6 ms 68 °F (20 °C) |
| Maximum radial force Fr | 530 N 5000 rpm 570 N 4000 rpm 630 N 3000 rpm 720 N 2000 rpm 900 N 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 18 W |
| Type of cooling | Natural convection |
| Length | 7.85 in (199.5 mm) |
| Centring collar diameter | 3.74 in (95 mm) |
| Centring collar depth | 0.14 in (3.5 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.35 in (9 mm) |
| Circle diameter of the mounting holes | 4.53 in (115 mm) |
| Net Weight | 10.58 lb(US) (4.8 kg) |

Ordering and shipping details

| | |
|-------------------|------------------------|
| Category | 18282-LEXIUM 32 MOTORS |
| Discount Schedule | PC53 |
| GTIN | 3389118138544 |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------------|------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.06 in (15.4 cm) |
| Package 1 Width | 6.42 in (16.3 cm) |
| Package 1 Length | 16.02 in (40.7 cm) |
| Package 1 Weight | 10.91 lb(US) (4.95 kg) |

Offer Sustainability

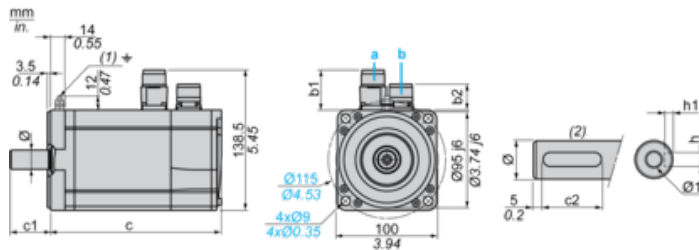
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| 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 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|----|----|------|----------------------------------|-------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 169 | 200 | 40 | 30 | 6 N9 | 3.5 ^{+0.1} ₀ | 19 k6 | M6 x 16 |

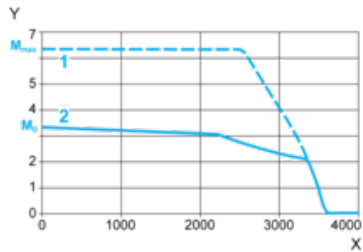
Dimensions in in.

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|------|------|---------|-----------------------------------|---------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 6.65 | 7.87 | 1.57 | 1.18 | 0.24 N9 | 0.14 ^{+0.1} ₀ | 0.75 k6 | M6 x 0.63 |

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



X Speed in rpm

Y Torque in Nm

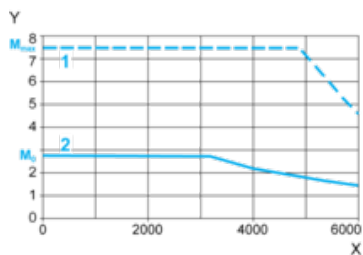
1 Peak torque

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