Product data sheet

Specification





AC servo motor BSH, Lexium 05, 11.1N.m, 1500rpm, untapped shaft, with brake, IP65

BSH1401P22F1A

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

Price*: 4,005.00 USD

Main

| Product Or Component Type | Servo motor | | | |
|---------------------------|--|--|--|--|
| Device Short Name | BSH | | | |
| Maximum Mechanical Speed | 4000 rpm | | | |
| Continuous Stall Torque | 98.24 lbf.in (11.1 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15MD28N4, 400 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15MD28N4, 480 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15MD28N4, 230 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15MD40N4, 400 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15MD40N4, 480 V, three phase | | | |
| | 98.24 lbf.in (11.1 N.m) LXM15LD28M3, 230 V, three phase | | | |
| | 100.90 lbf.in (11.4 N.m) LXM05AD34N4, 380480 V, three phase | | | |
| | 100.90 lbf.in (11.4 N.m) LXM05BD34N4, 380480 V, three phase | | | |
| | 100.90 lbf.in (11.4 N.m) LXM05CD34N4, 380480 V, three phase | | | |
| Peak Stall Torque | 238.97 lbf.in (27 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | |
| | 238.97 lbf.in (27 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM15MD28N4, 230 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM15MD28N4, 400 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM15MD28N4, 480 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM15MD40N4, 400 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM15MD40N4, 480 V, three phase | | | |
| | 210.65 lbf.in (23.8 N.m) LXM15LD28M3, 230 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM05AD34N4, 380480 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM05BD34N4, 380480 V, three phase | | | |
| | 206.49 lbf.in (23.33 N.m) LXM05CD34N4, 380480 V, three phase | | | |
| Nominal Output Power | 2500 W LXM32.D30N4 10 A, 400 V, three phase | | | |
| | 3000 W LXM32.D30N4 10 A, 480 V, three phase | | | |
| | 2000 W LXM15MD28N4, 400 V, three phase | | | |
| | 2000 W LXM15MD40N4, 400 V, three phase | | | |
| | 2200 W LXM05AD34N4, 380480 V, three phase | | | |
| | 2200 W LXM05BD34N4, 380480 V, three phase | | | |
| | 2200 W LXM05CD34N4, 380480 V, three phase | | | |
| | 1400 W LXM15LD28M3, 230 V, three phase | | | |
| | 1400 W LXM15MD28N4, 230 V, three phase | | | |
| | 2150 W LXM15MD28N4, 480 V, three phase | | | |
| | 2150 W LXM15MD40N4, 480 V, three phase | | | |
| Nominal Torque | 84.08 lbf.in (9.5 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | |
| | 84.08 lbf.in (9.5 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | |
| | 60.18 lbf.in (6.8 N.m) LXM15MD28N4, 480 V, three phase | | | |
| | 60.18 lbf.in (6.8 N.m) LXM15MD40N4, 480 V, three phase | | | |
| | 61.07 lbf.in (6.9 N.m) LXM05AD34N4, 380480 V, three phase | | | |
| | 61.07 lbf.in (6.9 N.m) LXM05BD34N4, 380480 V, three phase | | | |
| | 61.07 lbf.in (6.9 N.m) LXM05CD34N4, 380480 V, three phase | | | |
| | 67.53 lbf.in (7.63 N.m) LXM15MD28N4, 400 V, three phase | | | |
| | 67.53 lbf.in (7.63 N.m) LXM15MD40N4, 400 V, three phase | | | |
| | 80.54 lbf.in (9.1 N.m) LXM15LD28M3, 230 V, three phase | | | |
| | 80.54 lbf.in (9.1 N.m) LXM15MD28N4, 230 V, three phase | | | |

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

| Nominal Speed | 2500 rpm LXM32.D30N4 10 A, 400 V, three phase | | | | | |
|---------------------------|---|--|--|--|--|--|
| | 3000 rpm LXM32.D30N4 10 A, 480 V, three phase | | | | | |
| | 3000 rpm LXM05AD34N4, 380480 V, three phase | | | | | |
| | 3000 rpm LXM05BD34N4, 380480 V, three phase | | | | | |
| | 3000 rpm LXM05CD34N4, 380480 V, three phase | | | | | |
| | 1500 rpm LXM15MD28N4, 230 V, three phase | | | | | |
| | 1500 rpm LXM15LD28M3, 230 V, three phase | | | | | |
| | 2500 rpm LXM15MD28N4, 400 V, three phase | | | | | |
| | 2500 rpm LXM15MD40N4, 400 V, three phase | | | | | |
| | 3000 rpm LXM15MD28N4, 480 V, three phase | | | | | |
| | 3000 rpm LXM15MD40N4, 480 V, three phase | | | | | |
| Product Compatibility | LXM15LD28M3 230 V three phase | | | | | |
| , | LXM05AD34N4 380480 V three phase | | | | | |
| | LXM05BD34N4 380480 V three phase | | | | | |
| | LXM05CD34N4 380480 V three phase | | | | | |
| | LXM15MD28N4 400 V three phase | | | | | |
| | LXM15MD28N4 480 V three phase | | | | | |
| | LXM15MD40N4 400 V three phase | | | | | |
| | LXM15MD40N4 480 V three phase | | | | | |
| | LXM15MD28N4 230 V three phase | | | | | |
| Shaft End | Untapped | | | | | |
| | | | | | | |
| Ip Degree Of Protection | IP65 standard | | | | | |
| | IP67 with IP67 kit | | | | | |
| Speed Feedback Resolution | 131072 points/turn x 4096 turns | | | | | |
| Holding Brake | With | | | | | |
| Mounting Support | International standard flange | | | | | |
| Electrical Connection | Straight connectors | | | | | |
| | · | | | | | |
| | | | | | | |
| Complementary | | | | | | |
| Range Compatibility | Lexium 32 | | | | | |
| | Lexium 15 | | | | | |
| | Lexium 05 | | | | | |
| Supply Voltage Max | 480 V | | | | | |
| Phase | Three phase | | | | | |
| Continuous Stall Current | 7.8 A | | | | | |
| Maximum Continuous Power | 3.6 W | | | | | |
| Maximum Current Irms | 20.8 A LXM15LD28M3 | | | | | |
| | 20.8 A LXM15MD28N4 | | | | | |
| | 20.8 A LXM15MD40N4 | | | | | |
| | 20.8 A LXM05AD34N4 | | | | | |
| | 20.8 A LXM05BD34N4 | | | | | |
| | 20.8 A LXM05CD34N4 | | | | | |
| | 20.8 A LXM32.D30N4 | | | | | |
| Maximum Permanent Current | 20.8 A | | | | | |
| Switching Frequency | 8 kHz | | | | | |
| Second Shaft | Without second shaft end | | | | | |
| Shaft Diameter | 0.94 in (24 mm) | | | | | |
| Shaft Length | 1.97 in (50 mm) | | | | | |
| Feedback Type | Multiturn SinCos Hiperface | | | | | |
| Holding Torque | 203.57 lbf.in (23 N.m) holding brake | | | | | |
| Motor Flange Size | 5.51 in (140 mm) | | | | | |
| Number Of Motor Stacks | 1 | | | | | |
| Torque Constant | 1.43 N.m/A 248 °F (120 °C) | | | | | |
| Back Emf Constant | 100 V/krpm 248 °F (120 °C) | | | | | |

| Number Of Motor Poles | 10 | | | |
|---------------------------------------|---|--|--|--|
| Rotor Inertia | 9.21 kg.cm² | | | |
| Stator Resistance | 1.41 Ohm 68 °F (20 °C) | | | |
| Stator Inductance | 15.6 mH 68 °F (20 °C) | | | |
| Stator Electrical Time Constant | 11.06 ms 68 °F (20 °C) | | | |
| Maximum Radial Force Fr | 1530 N 3000 rpm 1760 N 2000 rpm 2210 N 1000 rpm | | | |
| Maximum Axial Force Fa | 0.2 x Fr | | | |
| Brake Pull-In Power | 24 W | | | |
| Type Of Cooling | Natural convection | | | |
| Length | 10.06 in (255.5 mm) | | | |
| Centring Collar Diameter | 5.12 in (130 mm) | | | |
| Centring Collar Depth | 0.14 in (3.5 mm) | | | |
| Number Of Mounting Holes | 4 | | | |
| Mounting Holes Diameter | 0.43 in (11 mm) | | | |
| Circle Diameter Of The Mounting Holes | 6.50 in (165 mm) | | | |
| Net Weight | 28.66 lb(US) (13 kg) | | | |

Ordering and shipping details

| Category | US1PC5318282 |
|-------------------|---------------|
| Discount Schedule | PC53 |
| Gtin | 3389118140882 |
| Returnability | No |
| Country Of Origin | DE |

Packing Units

| Unit Type Of Package 1 | PCE | | |
|------------------------------|------------------------|--|--|
| Number Of Units In Package 1 | 1 | | |
| Package 1 Height | 10.63 in (27.0 cm) | | |
| Package 1 Width | 10.63 in (27.0 cm) | | |
| Package 1 Length | 18.98 in (48.2 cm) | | |
| Package 1 Weight | 21.58 lb(US) (9.79 kg) | | |

Contractual warranty

Warranty 18 months

Sustainability Screen Premium

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Certifications & Standards

| Reach Regulation | Pro-active compliance (Product out of EU RoHS legal scope) | | | | |
|---------------------------------|---|--|--|--|--|
| Eu Rohs Directive | | | | | |
| China Rohs Regulation | China RoHS declaration | | | | |
| Environmental Disclosure | Product Environmental Profile | | | | |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. | | | | |
| Circularity Profile | No need of specific recycling operations | | | | |
| 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 | | | | |

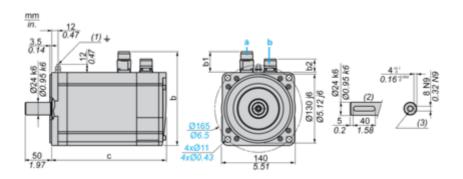
Apr 26, 2024

BSH1401P22F1A

Dimensions Drawings

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 screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

| Straight connectors | | | Rotatable angled connectors | | (د دا معرا لم در طالمان د | a (with harden) | |
|---------------------|------|------|-----------------------------|------|----------------------------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | c (without brake) | c (with brake) |
| 178 | 39.5 | 25.5 | 178 | 39.5 | 39.5 | 218 | 256 |

Dimensions in in.

| Straig | Straight connectors Rotatable angled connectors | | a (with a st bunder) | a (with harles) | | | |
|--------|---|------|----------------------|-----------------|------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | c (without brake) | c (with brake) |
| 7.00 | 1.55 | 1.00 | 7.00 | 1.55 | 1.55 | 8.58 | 10.07 |

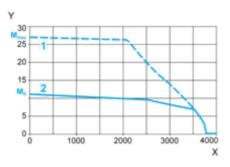
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



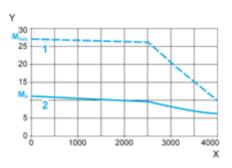
- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



- X Speed in rpm
- ${\bf Y}$ Torque in Nm
- 1 Peak torque
- 2 Continuous torque