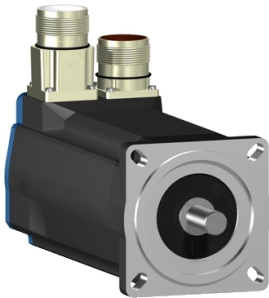


Product data sheet

Specifications



AC servo motor BSH, Lexium 05,
2.83N.m, 6000rpm, untapped
shaft, with brake, IP65

BSH0703T22F2A

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

Price*: 2,685.00 USD

Main

| | |
|---------------------------|---|
| Product Or Component Type | Servo motor |
| Device Short Name | BSH |
| Maximum Mechanical Speed | 8000 rpm |
| Continuous Stall Torque | 24.78 lbf.in (2.8 N.m) LXM05AD28M2, 200...240 V, single phase 24.78 lbf.in (2.8 N.m) LXM05BD28M2, 200...240 V, single phase 24.78 lbf.in (2.8 N.m) LXM05CD28M2, 200...240 V, single phase 23.01 lbf.in (2.6 N.m) LXM32.D18M2 6 A, 230 V, single phase 25.05 lbf.in (2.83 N.m) LXM15LD28M3, 230 V, three phase 24.78 lbf.in (2.8 N.m) LXM05AD28F1, 110...120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05AD42M3X, 200...240 V, three phase 24.78 lbf.in (2.8 N.m) LXM05BD28F1, 110...120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05BD42M3X, 200...240 V, three phase 24.78 lbf.in (2.8 N.m) LXM05CD28F1, 110...120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Peak Stall Torque | 65.32 lbf.in (7.38 N.m) LXM05AD28F1, 110...120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05AD28M2, 200...240 V, single phase 65.32 lbf.in (7.38 N.m) LXM05BD28F1, 110...120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05BD28M2, 200...240 V, single phase 65.32 lbf.in (7.38 N.m) LXM05CD28F1, 110...120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05CD28M2, 200...240 V, single phase 65.50 lbf.in (7.4 N.m) LXM32.D18M2 6 A, 230 V, single phase 65.32 lbf.in (7.38 N.m) LXM15LD28M3, 230 V, three phase 90.72 lbf.in (10.25 N.m) LXM05AD42M3X, 200...240 V, three phase 90.72 lbf.in (10.25 N.m) LXM05BD42M3X, 200...240 V, three phase 90.72 lbf.in (10.25 N.m) LXM05CD42M3X, 200...240 V, three phase |
| Nominal Output Power | 750 W LXM05AD28M2, 200...240 V, single phase 750 W LXM05BD28M2, 200...240 V, single phase 750 W LXM05CD28M2, 200...240 V, single phase 750 W LXM05AD28F1, 110...120 V, single phase 750 W LXM05BD28F1, 110...120 V, single phase 750 W LXM05CD28F1, 110...120 V, single phase 900 W LXM32.D18M2 6 A, 230 V, single phase 1250 W LXM15LD28M3, 230 V, three phase 750 W LXM05AD42M3X, 200...240 V, three phase 750 W LXM05BD42M3X, 200...240 V, three phase 750 W LXM05CD42M3X, 200...240 V, three phase |
| Nominal Torque | 21.24 lbf.in (2.4 N.m) LXM05AD28M2, 200...240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05BD28M2, 200...240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05CD28M2, 200...240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05AD28F1, 110...120 V, single phase 21.24 lbf.in (2.4 N.m) LXM05BD28F1, 110...120 V, single phase 21.24 lbf.in (2.4 N.m) LXM05CD28F1, 110...120 V, single phase 18.59 lbf.in (2.1 N.m) LXM32.D18M2 6 A, 230 V, single phase 17.70 lbf.in (2 N.m) LXM15LD28M3, 230 V, three phase 21.24 lbf.in (2.4 N.m) LXM05AD42M3X, 200...240 V, three phase 21.24 lbf.in (2.4 N.m) LXM05BD42M3X, 200...240 V, three phase 21.24 lbf.in (2.4 N.m) LXM05CD42M3X, 200...240 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.

Disclaimer: 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

| | |
|---------------------------|--|
| Nominal Speed | 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 3000 rpm LXM05AD28F1, 110...120 V, single phase 3000 rpm LXM05BD28F1, 110...120 V, single phase 3000 rpm LXM05CD28F1, 110...120 V, single phase 4000 rpm LXM32.D18M2 6 A, 230 V, single phase 6000 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.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 | 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 | Rotatable right-angled connectors |

Complementary

| | |
|---------------------------|---|
| Range Compatibility | Lexium 05 Lexium 15 Lexium 32 |
| Supply Voltage Max | 480 V |
| Phase | Three phase |
| Continuous Stall Current | 7 A |
| Maximum Continuous Power | 1.7 W |
| Maximum Current Irms | 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD42M3X 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X 29.2 A LXM05CD28F1 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X |
| Maximum Permanent Current | 29.2 A |
| Switching Frequency | 8 kHz |
| Second Shaft | Without second shaft end |
| Shaft Diameter | 0.55 in (14 mm) |
| Shaft Length | 1.18 in (30 mm) |
| Feedback Type | Multiturn SinCos Hiperface |
| Holding Torque | 26.55 lbf.in (3 N.m) holding brake |
| Motor Flange Size | 2.76 in (70 mm) |

| | |
|---------------------------------------|--|
| Number Of Motor Stacks | 3 |
| Torque Constant | 0.44 N.m/A 248 °F (120 °C) |
| Back Emf Constant | 29 V/krpm 248 °F (120 °C) |
| Number Of Motor Poles | 6 |
| Rotor Inertia | 0.81 kg.cm² |
| Stator Resistance | 0.91 Ohm 68 °F (20 °C) |
| Stator Inductance | 4.4 mH 68 °F (20 °C) |
| Stator Electrical Time Constant | 4.84 ms 68 °F (20 °C) |
| Maximum Radial Force Fr | 400 N 6000 rpm 430 N 5000 rpm 460 N 4000 rpm 510 N 3000 rpm 580 N 2000 rpm 730 N 1000 rpm |
| Maximum Axial Force Fa | 0.2 x Fr |
| Brake Pull-In Power | 12 W |
| Type Of Cooling | Natural convection |
| Length | 10.00 in (254 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 | 8.38 lb(US) (3.8 kg) |

Ordering and shipping details

| | |
|-------------------|---------------|
| Category | US1PC5318282 |
| Discount Schedule | PC53 |
| Gtin | 3389118137677 |
| 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 | 8.93 lb(US) (4.05 kg) |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability



Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class 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](#)

✓ Pvc Free

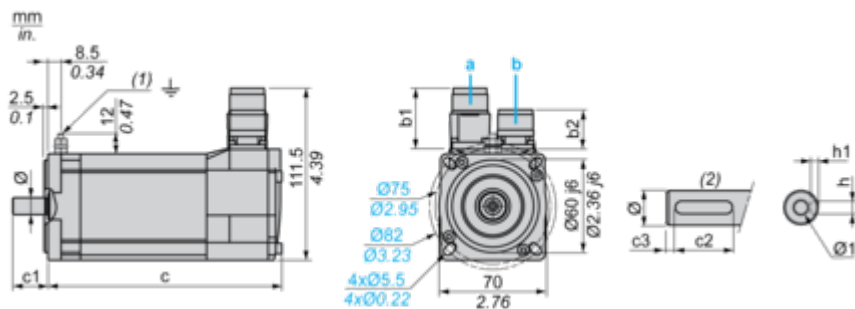
Certifications & Standards

| | |
|---------------------------|---|
| Reach Regulation | REACH Declaration |
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| 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 |

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)

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 | 220 | 254 | 30 | 20 | 5 | 5 N9 | 3 ^{+0.1} ₀ | 14 k6 | M5 x 12.5 | | |

Dimensions in in.

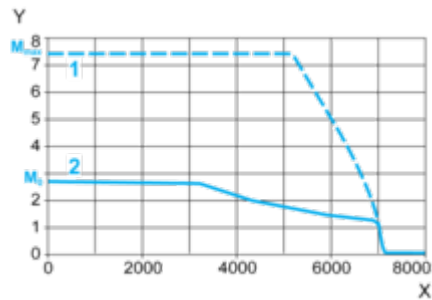
| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|------|------|------|------------|-------------------------------------|------------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 1.55 | 1.00 | 1.55 | 1.55 | 8.66 | 10.00 | 1.18 | 0.78 | 0.19 | 0.20 N9 | 0.12 ^{+0.004} ₀ | 0.55 k6 | M5 x 0.49 |

Performance Curves

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