Product data sheet

Specifications





servo motor BSH, Lexium 05, 9.31N.m, 1500rpm, 100mm, keyed shaft, Sincos multi turn, with brake, IP65

BSH1004P32F2A

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

Price*: 4,087.50 USD

Main

| Product Or Component Type | Servo motor BSH | | | | | | |
|---------------------------|---|--|--|--|--|--|--|
| Device Short Name | | | | | | | |
| Maximum Mechanical Speed | 6000 rpm | | | | | | |
| Continuous Stall Torque | 70.81 lbf.in (8 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | | | | |
| | 70.81 lbf.in (8 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD40N4, 400 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD40N4, 480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD28M3, 230 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD28N4, 230 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD28N4, 400 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD28N4, 480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM15MD40N4, 230 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05AD34N4, 380480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05AD42M3X, 200240 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05AD57N4, 380480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05BD34N4, 380480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05BD42M3X, 200240 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05BD57N4, 380480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05CD34N4, 380480 V, three phase | | | | | | |
| | 82.40 lbf.in (9.31 N.m) LXM05CD42M3X, 200240 V, three phase 82.40 lbf.in (9.31 N.m) LXM05CD57N4, 380480 V, three phase | | | | | | |
| Peak Stall Torque | 335.44 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | | | | |
| | 335.44 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | | | | |
| | 227.46 lbf.in (25.7 N.m) LXM15MD28M3, 230 V, three phase | | | | | | |
| | 227.46 lbf.in (25.7 N.m) LXM15MD28N4, 230 V, three phase | | | | | | |
| | 227.46 lbf.in (25.7 N.m) LXM15MD28N4, 400 V, three phase | | | | | | |
| | 227.46 lbf.in (25.7 N.m) LXM15MD28N4, 480 V, three phase | | | | | | |
| | 299.42 lbf.in (33.83 N.m) LXM15MD40N4, 230 V, three phase | | | | | | |
| | 299.42 lbf.in (33.83 N.m) LXM15MD40N4, 400 V, three phase | | | | | | |
| | 299.42 lbf.in (33.83 N.m) LXM15MD40N4, 480 V, three phase | | | | | | |
| | 207.73 lbf.in (23.47 N.m) LXM05AD34N4, 380480 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05AD42M3X, 200240 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05AD57N4, 380480 V, three phase | | | | | | |
| | 207.73 lbf.in (23.47 N.m) LXM05BD34N4, 380480 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05BD42M3X, 200240 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05BD57N4, 380480 V, three phase | | | | | | |
| | 207.73 lbf.in (23.47 N.m) LXM05CD34N4, 380480 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05CD42M3X, 200240 V, three phase | | | | | | |
| | 315.97 lbf.in (35.7 N.m) LXM05CD57N4, 380480 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 Output Power | 2600 W LXM32.D30N4 10 A, 480 V, three phase | | | | | |
|-----------------------|--|--|--|--|--|--|
| | 2100 W LXM32.D30N4 10 A, 400 V, three phase | | | | | |
| | 1300 W LXM05AD42M3X, 200240 V, three phase | | | | | |
| | 1300 W LXM05BD42M3X, 200240 V, three phase 1300 W LXM05CD42M3X, 200240 V, three phase | | | | | |
| | 1300 W LXM15MD28M3, 230 V, three phase | | | | | |
| | 1300 W LXM15MD28N4, 230 V, three phase | | | | | |
| | 1300 W LXM15MD40N4, 230 V, three phase | | | | | |
| | 2200 W LXM05AD34N4, 380480 V, three phase | | | | | |
| | 2200 W LXM05AD57N4, 380480 V, three phase | | | | | |
| | 2200 W LXM05BD34N4, 380480 V, three phase | | | | | |
| | 2200 W LXM05BD57N4, 380480 V, three phase | | | | | |
| | 2200 W LXM05CD34N4, 380480 V, three phase | | | | | |
| | 2200 W LXM05CD57N4, 380480 V, three phase 2200 W LXM15MD28N4, 400 V, three phase | | | | | |
| | 2300 W LXM15MD40N4, 400 V, three phase | | | | | |
| | 2400 W LXM15MD40N4, 480 V, three phase | | | | | |
| | 2700 W LXM15MD28N4, 480 V, three phase | | | | | |
| Nominal Torque | 73.46 lbf.in (8.3 N.m) LXM32.D30N4 10 A, 400 V, three phase | | | | | |
| | 73.46 lbf.in (8.3 N.m) LXM32.D30N4 10 A, 480 V, three phase | | | | | |
| | 57.53 lbf.in (6.5 N.m) LXM15MD28N4, 480 V, three phase | | | | | |
| | 59.21 lbf.in (6.69 N.m) LXM15MD40N4, 480 V, three phase | | | | | |
| | 61.96 lbf.in (7 N.m) LXM15MD28N4, 400 V, three phase | | | | | |
| | 62.84 lbf.in (7.1 N.m) LXM05AD34N4, 380480 V, three phase | | | | | |
| | 62.84 lbf.in (7.1 N.m) LXM05AD57N4, 380480 V, three phase | | | | | |
| | 62.84 lbf.in (7.1 N.m) LXM05BD34N4, 380480 V, three phase | | | | | |
| | 62.84 lbf.in (7.1 N.m) LXM05BD57N4, 380480 V, three phase | | | | | |
| | 62.84 lbf.in (7.1 N.m) LXM05CD34N4, 380480 V, three phase 62.84 lbf.in (7.1 N.m) LXM05CD57N4, 380480 V, three phase | | | | | |
| | 63.46 lbf.in (7.17 N.m) LXM05CD57N4, 380460 V, three phase | | | | | |
| | 72.40 lbf.in (8.18 N.m) LXM15MD40N4, 230 V, three phase | | | | | |
| | 72.75 lbf.in (8.22 N.m) LXM05AD42M3X, 200240 V, three phase | | | | | |
| | 72.75 lbf.in (8.22 N.m) LXM05BD42M3X, 200240 V, three phase | | | | | |
| | 72.75 lbf.in (8.22 N.m) LXM05CD42M3X, 200240 V, three phase | | | | | |
| | 72.75 lbf.in (8.22 N.m) LXM15LD28M3, 230 V, three phase | | | | | |
| | 72.75 lbf.in (8.22 N.m) LXM15MD28N4, 230 V, three phase | | | | | |
| Nominal Speed | 2500 rpm LXM32.D30N4 10 A, 400 V, three phase | | | | | |
| | 3000 rpm LXM32.D30N4 10 A, 480 V, three phase | | | | | |
| | 1500 rpm LXM05AD42M3X, 200240 V, three phase | | | | | |
| | 1500 rpm LXM05BD42M3X, 200240 V, three phase | | | | | |
| | 1500 rpm LXM05CD42M3X, 200240 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 LXM15MD28M3, 230 V, three phase | | | | | |
| | 1500 rpm LXM15MD28N4, 230 V, three phase | | | | | |
| | 1500 rpm LXM15MD40N4, 230 V, three phase | | | | | |
| | 3000 rpm LXM05AD57N4, 380480 V, three phase | | | | | |
| | 3000 rpm LXM05BD57N4, 380480 V, three phase | | | | | |
| | 3000 rpm LXM05CD57N4, 380480 V, three phase | | | | | |
| | 3000 rpm LXM15MD28N4, 400 V, three phase | | | | | |
| | 3000 rpm LXM15MD40N4, 400 V, three phase | | | | | |
| | 3500 rpm LXM15MD40N4, 480 V, three phase 4000 rpm LXM15MD28N4, 480 V, three phase | | | | | |
| | | | | | | |
| Product Compatibility | LXM05AD42M3X 200240 V three phase | | | | | |
| | LXM05BD42M3X 200240 V three phase | | | | | |
| | LXM05CD42M3X 200240 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 | | | | | |
| | LXM32.D30N4 400 V three phase | | | | | |
| | LXM32.D30N4 480 V three phase | | | | | |
| | LXM05AD57N4 380480 V three phase | | | | | |
| | LXM05BD57N4 380480 V three phase | | | | | |
| | LXM05CD57N4 380480 V three phase | | | | | |
| | LXM15MD28M3 230 V three phase | | | | | |
| | LXM15MD28N4 230 V three phase | | | | | |
| | LXM15MD40N4 230 V three phase | | | | | |
| Shoft End | | | | | | |

Shaft End

Keyed

| 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 15 Lexium 32 | | | | | | |
|---------------------------------|--------------------------------------|--|--|--|--|--|--|
| | Lexium 05 | | | | | | |
| Supply Voltage Max | 480 V | | | | | | |
| Phase | Three phase | | | | | | |
| Continuous Stall Current | 6.2 A | | | | | | |
| Maximum Continuous Power | 3.64 W | | | | | | |
| Maximum Current Irms | 34.8 A LXM15LD28M3 | | | | | | |
| | 34.8 A LXM15MD28N4 | | | | | | |
| | 34.8 A LXM15MD40N4 | | | | | | |
| | 32.3 A LXM05AD42M3X | | | | | | |
| | 32.3 A LXM05AD34N4 | | | | | | |
| | 32.3 A LXM05AD57N4 | | | | | | |
| | 32.3 A LXM05BD42M3X | | | | | | |
| | 32.3 A LXM05BD34N4 | | | | | | |
| | | | | | | | |
| | 32.3 A LXM050BD57N4 | | | | | | |
| | 32.3 A LXM05CD42M3X | | | | | | |
| | 32.3 A LXM05CD34N4 | | | | | | |
| | 32.3 A LXM05CD57N4 | | | | | | |
| | 30 A LXM32.D30N4 | | | | | | |
| Maximum Permanent Current | 32.3 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) | | | | | | |
| Key Width | 1.57 in (40 mm) | | | | | | |
| Feedback Type | Multiturn SinCos Hiperface | | | | | | |
| Holding Torque | 106.21 lbf.in (12 N.m) holding brake | | | | | | |
| Motor Flange Size | 3.94 in (100 mm) | | | | | | |
| Number Of Motor Stacks | 4 | | | | | | |
| Torque Constant | 1.62 N.m/A 248 °F (120 °C) | | | | | | |
| Back Emf Constant | 103 V/krpm 248 °F (120 °C) | | | | | | |
| Number Of Motor Poles | 8 | | | | | | |
| Rotor Inertia | 5.245 kg.cm ² | | | | | | |
| Stator Resistance | 1.81 Ohm 68 °F (20 °C) | | | | | | |
| Stator Inductance | 11.8 mH 68 °F (20 °C) | | | | | | |
| Stator Electrical Time Constant | 6.52 ms 68 °F (20 °C) | | | | | | |
| Maximum Radial Force Fr | 1070 N 1000 rpm | | | | | | |
| | 740 N 3000 rpm | | | | | | |
| | 850 N 2000 rpm | | | | | | |
| | 000 H 2000 Ipin | | | | | | |
| Maximum Axial Force Fa | 0.2 x Fr | | | | | | |

| Brake Pull-In Power | 17 W |
|--|-----------------------|
| Type Of Cooling | Natural convection |
| Length | 12.11 in (307.5 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 | 21.83 lb(US) (9.9 kg) |

Ordering and shipping details

| Category | US1PC5318282 PC53 | | | | |
|-------------------|----------------------|--|--|--|--|
| Discount Schedule | | | | | |
| Gtin | 3389118140738 | | | | |
| Returnability | No | | | | |
| Country Of Origin | DE | | | | |

Packing Units

| - | | | | | | |
|------------------------------|---------------------------|--|--|--|--|--|
| Unit Type Of Package 1 | PCE | | | | | |
| Number Of Units In Package 1 | 1 | | | | | |
| Package 1 Height | 8.27 in (21.0 cm) | | | | | |
| Package 1 Width | 7.09 in (18.0 cm) | | | | | |
| Package 1 Length | 22.05 in (56.0 cm) | | | | | |
| Package 1 Weight | 23.62 lb(US) (10.715 kg) | | | | | |
| Unit Type Of Package 2 | P06 | | | | | |
| Number Of Units In Package 2 | 12 | | | | | |
| Package 2 Height | 30.31 in (77.0 cm) | | | | | |
| Package 2 Width | 31.50 in (80.0 cm) | | | | | |
| Package 2 Length | 23.62 in (60.0 cm) | | | | | |
| Package 2 Weight | 302.21 lb(US) (137.08 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
Pvc Free

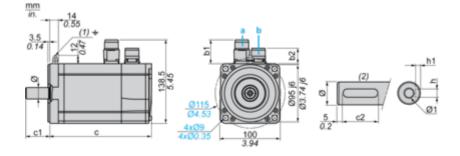
Certifications & Standards

| 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 | c (with | c1 | c2 | h | h1 | ø | Ø1 for |
|---------------------|------|-----------------------------|------|------------|---------|----|----|---------|---------------------|----------|---------|
| b1 | b2 | b1 | b2 | brake) | brake) | | | | | | screws |
| 39.5 | 25.5 | 39.5 | 39.5 | 277 | 308 | 50 | 40 | 8 N9 | 4 ^{+0.1} 0 | 24 k6 | M8 x 19 |

Dimensions in in.

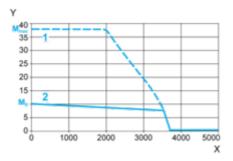
| Straight Rotatable angled connectors connectors | | c (without c (with | | c1 | c2 | h | h1 | ø | Ø1 for | | |
|---|------|--------------------|------|--------|--------|------|------|------------|------------------------|------------|--------------|
| b1 | b2 | b1 | b2 | brake) | brake) | | | | | | screws |
| 1.55 | 1.00 | 1.55 | 1.55 | 10.90 | 12.12 | 1.96 | 1.57 | 0.31 N9 | 0.16 ^{+0.1} 0 | 0.94 k6 | M8 x 0.75 |

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



 \boldsymbol{X} Speed in rpm

Y Torque in Nm

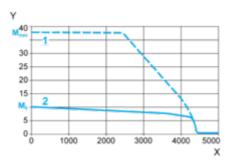
1 Peak torque

2 Continuous torque

480 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