

Main

| | |
|---------------------------|---|
| Product or component type | Servo motor |
| Device short name | BSH |
| Maximum mechanical speed | 6000 rpm |
| Continuous stall torque | 5.8 N.m for LXM32.D18N4 6 A at 400 V three phase 5.8 N.m for LXM32.D18N4 6 A at 480 V three phase 4.5 N.m for LXM15LD21M3 at 230 V single phase 5.5 N.m for LXM05AD28M2 at 200...240 V single phase 5.5 N.m for LXM05BD28M2 at 200...240 V single phase 5.5 N.m for LXM05CD28M2 at 200...240 V single phase 3.4 N.m for LXM15LD13M3 at 230 V three phase 3.4 N.m for LXM15LD10N4 at 230 V three phase 3.4 N.m for LXM15LD10N4 at 400 V three phase 3.4 N.m for LXM15LD10N4 at 480 V three phase 5.8 N.m for LXM15LD17N4 at 400 V three phase 5.8 N.m for LXM15LD17N4 at 480 V three phase 5.8 N.m for LXM15LD21M3 at 230 V three phase 5.5 N.m for LXM05AD17M3X at 200...240 V three phase 5.5 N.m for LXM05AD22N4 at 380...480 V three phase 5.5 N.m for LXM05BD17M3X at 200...240 V three phase 5.5 N.m for LXM05BD22N4 at 380...480 V three phase 5.5 N.m for LXM05CD17M3X at 200...240 V three phase 5.5 N.m for LXM05CD22N4 at 380...480 V three phase |
| Peak stall torque | 18.3 N.m for LXM32.D18N4 6 A at 480 V three phase 18.3 N.m for LXM32.D18N4 6 A at 400 V three phase 16 N.m for LXM05AD28M2 at 200...240 V single phase 16 N.m for LXM05BD28M2 at 200...240 V single phase 16 N.m for LXM05CD28M2 at 200...240 V single phase 9.39 N.m for LXM15LD21M3 at 230 V single phase 5.6 N.m for LXM15LD13M3 at 230 V three phase 8 N.m for LXM15LD10N4 at 230 V three phase 8 N.m for LXM15LD10N4 at 400 V three phase 8 N.m for LXM15LD10N4 at 480 V three phase 12.13 N.m for LXM15LD17N4 at 400 V three phase 12.13 N.m for LXM15LD17N4 at 480 V three phase 14.79 N.m for LXM15LD21M3 at 230 V three phase 11.23 N.m for LXM05AD17M3X at 200...240 V three phase 13.92 N.m for LXM05AD22N4 at 380...480 V three phase 11.23 N.m for LXM05BD17M3X at 200...240 V three phase |

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

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|-----------------------|---|
| | <p>13.92 N.m for LXM05BD22N4 at 380...480 V three phase 11.23 N.m for LXM05CD17M3X at 200...240 V three phase 13.92 N.m for LXM05CD22N4 at 380...480 V three phase</p> |
| Nominal output power | <p>1700 W for LXM32.D18N4 6 A at 480 V three phase 1700 W for LXM32.D18N4 6 A at 400 V three phase 780 W for LXM05AD28M2 at 200...240 V single phase 780 W for LXM05BD28M2 at 200...240 V single phase 780 W for LXM05CD28M2 at 200...240 V single phase 950 W for LXM15LD21M3 at 230 V single phase 950 W for LXM15LD21M3 at 230 V three phase 1400 W for LXM05AD22N4 at 380...480 V three phase 1400 W for LXM05BD22N4 at 380...480 V three phase 1400 W for LXM05CD22N4 at 380...480 V three phase 1600 W for LXM15LD10N4 at 400 V three phase 1700 W for LXM15LD17N4 at 400 V three phase 1950 W for LXM15LD17N4 at 480 V three phase 2150 W for LXM15LD10N4 at 480 V three phase 780 W for LXM05AD17M3X at 200...240 V three phase 780 W for LXM05BD17M3X at 200...240 V three phase 780 W for LXM05CD17M3X at 200...240 V three phase 840 W for LXM15LD13M3 at 230 V three phase 890 W for LXM15LD10N4 at 230 V three phase</p> |
| Nominal torque | <p>4.5 N.m for LXM15LD21M3 at 230 V single phase 3.4 N.m for LXM15LD10N4 at 230 V three phase 3.4 N.m for LXM15LD10N4 at 400 V three phase 3.4 N.m for LXM15LD10N4 at 480 V three phase 3.4 N.m for LXM15LD13M3 at 230 V three phase 5.8 N.m for LXM15LD21M3 at 230 V three phase 4 N.m for LXM32.D18N4 6 A at 400 V three phase 4 N.m for LXM32.D18N4 6 A at 480 V three phase 4.96 N.m for LXM05AD28M2 at 200...240 V single phase 4.96 N.m for LXM05BD28M2 at 200...240 V single phase 4.96 N.m for LXM05CD28M2 at 200...240 V single phase 3.7 N.m for LXM15LD17N4 at 480 V three phase 4 N.m for LXM15LD17N4 at 400 V three phase 4.4 N.m for LXM05AD22N4 at 380...480 V three phase 4.4 N.m for LXM05BD22N4 at 380...480 V three phase 4.4 N.m for LXM05CD22N4 at 380...480 V three phase 4.96 N.m for LXM05AD17M3X at 200...240 V three phase 4.96 N.m for LXM05BD17M3X at 200...240 V three phase 4.96 N.m for LXM05CD17M3X at 200...240 V three phase</p> |
| Nominal speed | <p>4000 rpm for LXM32.D18N4 6 A at 400 V three phase 4000 rpm for LXM32.D18N4 6 A at 480 V three phase 1500 rpm for LXM05AD28M2 at 200...240 V single phase 1500 rpm for LXM05BD28M2 at 200...240 V single phase 1500 rpm for LXM05CD28M2 at 200...240 V single phase 2000 rpm for LXM15LD21M3 at 230 V single phase 3000 rpm for LXM05AD22N4 at 380...480 V three phase 3000 rpm for LXM05BD22N4 at 380...480 V three phase 3000 rpm for LXM05CD22N4 at 380...480 V three phase 1500 rpm for LXM05AD17M3X at 200...240 V three phase 1500 rpm for LXM05BD17M3X at 200...240 V three phase 1500 rpm for LXM05CD17M3X at 200...240 V three phase 4500 rpm for LXM15LD10N4 at 400 V three phase 6000 rpm for LXM15LD10N4 at 480 V three phase 2000 rpm for LXM15LD21M3 at 230 V three phase 2500 rpm for LXM15LD10N4 at 230 V three phase 2500 rpm for LXM15LD13M3 at 230 V three phase 4000 rpm for LXM15LD17N4 at 400 V three phase 5000 rpm for LXM15LD17N4 at 480 V three phase</p> |
| Product compatibility | <p>LXM05AD28M2 at 200...240 V single phase LXM05BD28M2 at 200...240 V single phase LXM05CD28M2 at 200...240 V single phase LXM15LD21M3 at 230 V single phase LXM15LD13M3 at 230 V three phase LXM15LD10N4 at 400 V three phase LXM05AD17M3X at 200...240 V three phase LXM05BD17M3X at 200...240 V three phase LXM05CD17M3X at 200...240 V three phase LXM15LD10N4 at 230 V three phase LXM15LD10N4 at 480 V three phase LXM15LD21M3 at 230 V three phase LXM05AD22N4 at 380...480 V three phase LXM05BD22N4 at 380...480 V three phase</p> |

LXM05CD22N4 at 380...480 V three phase
 LXM15LD17N4 at 400 V three phase
 LXM15LD17N4 at 480 V three phase
 LXM32.D18N4 at 400 V three phase
 LXM32.D18N4 at 480 V three phase

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|---------------------------|-------------------------------|
| Shaft end | Untapped |
| IP degree of protection | IP50 (standard) |
| Speed feedback resolution | 131072 points/turn |
| Holding brake | With |
| Mounting support | International standard flange |
| Electrical connection | Straight connectors |

Complementary

| | |
|---------------------------------|---|
| Range compatibility | Lexium 05 Lexium 15 Lexium 32 |
| Supply voltage max | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 4.8 A |
| Maximum continuous power | 2.51 W |
| Maximum current Irms | 17.1 A for LXM05AD17M3X 17.1 A for LXM05AD22N4 17.1 A for LXM05AD28M2 17.1 A for LXM05BD17M3X 17.1 A for LXM05BD22N4 17.1 A for LXM05BD28M2 17.1 A for LXM05CD17M3X 17.1 A for LXM05CD22N4 17.1 A for LXM05CD28M2 17.1 A for LXM15LD10N4 17.1 A for LXM15LD13M3 17.1 A for LXM15LD17N4 17.1 A for LXM15LD21M3 17.1 A for LXM32.D18N4 |
| Maximum permanent current | 17.1 A |
| Switching frequency | 8 kHz |
| Second shaft | Without second shaft end |
| Shaft diameter | 19 mm |
| Shaft length | 40 mm |
| Feedback type | Single turn SinCos Hiperface |
| Holding torque | 9 N.m (holding brake) |
| Motor flange size | 100 mm |
| Number of motor stacks | 2 |
| Torque constant | 1.21 N.m/A at 120 °C |
| Back emf constant | 77 V/krpm at 120 °C |
| Number of motor poles | 8 |
| Rotor inertia | 2.928 kg.cm ² |
| Stator resistance | 2.4 Ohm at 20 °C |
| Stator inductance | 12.7 mH at 20 °C |
| Stator electrical time constant | 5.29 ms at 20 °C |
| Maximum radial force Fr | 620 N at 4000 rpm 690 N at 3000 rpm 790 N at 2000 rpm 990 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 18 W |
| Type of cooling | Natural convection |
| Length | 235.5 mm |
| Centring collar diameter | 95 mm |

| | |
|---------------------------------------|--------|
| Centring collar depth | 3.5 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 9 mm |
| Circle diameter of the mounting holes | 115 mm |
| Product weight | 6.3 kg |

Offer Sustainability

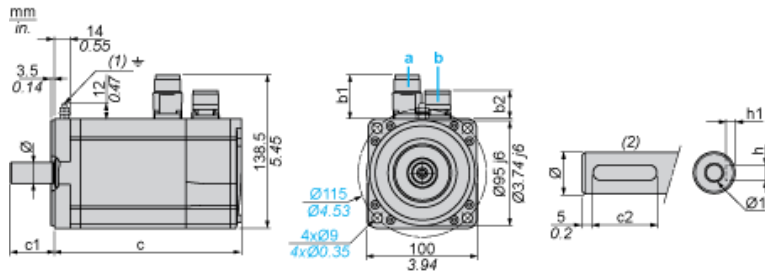
| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0850 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Need no specific recycling operations |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty period | 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 | 205 | 236 | 40 | 30 | 6 N9 | 3.5 ^{+0.1} ₀ | 19 k6 | M6 x 16 | | |

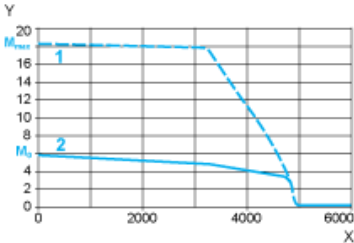
Dimensions in in.

| Straight connector | | 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 | 8.07 | 9.29 | 1.57 | 1.18 | 0.24 N9 | 0.14 ^{+0.1} ₀ | 0.75 k6 | M6 x 0.63 | | |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18N4 servo drive

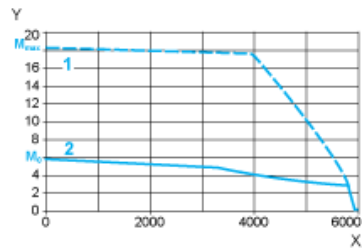


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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