



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	<p>8 N.m for LXM32.D30N4 10 A at 400 V three phase</p> <p>8 N.m for LXM32.D30N4 10 A at 480 V three phase</p> <p>7.8 N.m for LXM05CD28M2 at 200...240 V single phase</p> <p>7.8 N.m for LXM05AD28M2 at 200...240 V single phase</p> <p>7.8 N.m for LXM05BD28M2 at 200...240 V single phase</p> <p>7.8 N.m for LXM05BD34N4 at 380...480 V three phase</p> <p>7.8 N.m for LXM05BD42M3X at 200...240 V three phase</p> <p>7.8 N.m for LXM05CD34N4 at 380...480 V three phase</p> <p>7.8 N.m for LXM05CD42M3X at 200...240 V three phase</p> <p>6.7 N.m for LXM15LD21M3 at 230 V three phase</p> <p>6.7 N.m for LXM15LD17N4 at 230 V three phase</p> <p>6.7 N.m for LXM15LD17N4 at 400 V three phase</p> <p>6.7 N.m for LXM15LD17N4 at 480 V three phase</p> <p>7.8 N.m for LXM15LD28M3 at 230 V three phase</p> <p>7.8 N.m for LXM15MD28N4 at 400 V three phase</p> <p>7.8 N.m for LXM15MD28N4 at 480 V three phase</p> <p>7.8 N.m for LXM15MD40N4 at 400 V three phase</p> <p>7.8 N.m for LXM15MD40N4 at 480 V three phase</p> <p>7.8 N.m for LXM05AD34N4 at 380...480 V three phase</p> <p>7.8 N.m for LXM05AD42M3X at 200...240 V three phase</p>
Peak stall torque	<p>28.3 N.m for LXM32.D30N4 10 A at 400 V three phase</p> <p>28.3 N.m for LXM32.D30N4 10 A at 480 V three phase</p> <p>19.69 N.m for LXM05AD28M2 at 200...240 V single phase</p> <p>19.69 N.m for LXM05BD28M2 at 200...240 V single phase</p> <p>19.69 N.m for LXM05CD28M2 at 200...240 V single phase</p> <p>15.5 N.m for LXM15LD21M3 at 230 V three phase</p> <p>12.5 N.m for LXM15LD17N4 at 230 V three phase</p> <p>12.5 N.m for LXM15LD17N4 at 400 V three phase</p> <p>12.5 N.m for LXM15LD17N4 at 480 V three phase</p> <p>19.69 N.m for LXM15LD28M3 at 230 V three phase</p> <p>19.69 N.m for LXM15MD28N4 at 400 V three phase</p> <p>19.69 N.m for LXM15MD28N4 at 480 V three phase</p> <p>23.17 N.m for LXM15MD40N4 at 400 V three phase</p> <p>23.17 N.m for LXM15MD40N4 at 480 V three phase</p> <p>23.01 N.m for LXM05AD34N4 at 380...480 V three phase</p>

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

	<p>23.17 N.m for LXM05AD42M3X at 200...240 V three phase</p> <p>23.01 N.m for LXM05BD34N4 at 380...480 V three phase</p> <p>23.17 N.m for LXM05BD42M3X at 200...240 V three phase</p> <p>23.01 N.m for LXM05CD34N4 at 380...480 V three phase</p> <p>23.17 N.m for LXM05CD42M3X at 200...240 V three phase</p>
Nominal output power	<p>2000 W for LXM32.D30N4 10 A at 400 V three phase</p> <p>2600 W for LXM32.D30N4 10 A at 480 V three phase</p> <p>1100 W for LXM05AD28M2 at 200...240 V single phase</p> <p>1100 W for LXM05BD28M2 at 200...240 V single phase</p> <p>1100 W for LXM05CD28M2 at 200...240 V single phase</p> <p>1100 W for LXM05AD42M3X at 200...240 V three phase</p> <p>1100 W for LXM05BD42M3X at 200...240 V three phase</p> <p>1100 W for LXM05CD42M3X at 200...240 V three phase</p> <p>1300 W for LXM15LD28M3 at 230 V three phase</p> <p>1700 W for LXM15LD17N4 at 230 V three phase</p> <p>1700 W for LXM15LD21M3 at 230 V three phase</p> <p>1800 W for LXM05AD34N4 at 380...480 V three phase</p> <p>1800 W for LXM05BD34N4 at 380...480 V three phase</p> <p>1800 W for LXM05CD34N4 at 380...480 V three phase</p> <p>2000 W for LXM15MD28N4 at 400 V three phase</p> <p>2000 W for LXM15MD40N4 at 400 V three phase</p> <p>2200 W for LXM15LD17N4 at 400 V three phase</p> <p>2200 W for LXM15MD28N4 at 480 V three phase</p> <p>2200 W for LXM15MD40N4 at 480 V three phase</p> <p>2300 W for LXM15LD17N4 at 480 V three phase</p>
Nominal torque	<p>6.3 N.m for LXM32.D30N4 10 A at 400 V three phase</p> <p>6.3 N.m for LXM32.D30N4 10 A at 480 V three phase</p> <p>6.73 N.m for LXM05AD28M2 at 200...240 V single phase</p> <p>6.73 N.m for LXM05BD28M2 at 200...240 V single phase</p> <p>6.73 N.m for LXM05CD28M2 at 200...240 V single phase</p> <p>3.7 N.m for LXM15LD17N4 at 480 V three phase</p> <p>4.6 N.m for LXM15MD28N4 at 480 V three phase</p> <p>4.6 N.m for LXM15MD40N4 at 480 V three phase</p> <p>4.7 N.m for LXM15LD17N4 at 400 V three phase</p> <p>5 N.m for LXM15MD28N4 at 400 V three phase</p> <p>5 N.m for LXM15MD40N4 at 400 V three phase</p> <p>5.7 N.m for LXM05AD34N4 at 380...480 V three phase</p> <p>5.7 N.m for LXM05BD34N4 at 380...480 V three phase</p> <p>5.7 N.m for LXM05CD34N4 at 380...480 V three phase</p> <p>6 N.m for LXM15LD17N4 at 230 V three phase</p> <p>6 N.m for LXM15LD21M3 at 230 V three phase</p> <p>6.3 N.m for LXM15LD28M3 at 230 V three phase</p> <p>6.73 N.m for LXM05AD42M3X at 200...240 V three phase</p> <p>6.73 N.m for LXM05BD42M3X at 200...240 V three phase</p> <p>6.73 N.m for LXM05CD42M3X at 200...240 V three phase</p>
Nominal speed	<p>4000 rpm for LXM32.D30N4 10 A at 480 V three phase</p> <p>3000 rpm for LXM32.D30N4 10 A at 400 V three phase</p> <p>1500 rpm for LXM05AD28M2 at 200...240 V single phase</p> <p>1500 rpm for LXM05BD28M2 at 200...240 V single phase</p> <p>1500 rpm for LXM05CD28M2 at 200...240 V single phase</p> <p>4500 rpm for LXM15LD17N4 at 400 V three phase</p> <p>6000 rpm for LXM15LD17N4 at 480 V three phase</p> <p>1500 rpm for LXM05AD42M3X at 200...240 V three phase</p> <p>1500 rpm for LXM05BD42M3X at 200...240 V three phase</p> <p>1500 rpm for LXM05CD42M3X at 200...240 V three phase</p> <p>2000 rpm for LXM15LD28M3 at 230 V three phase</p> <p>2500 rpm for LXM15LD17N4 at 230 V three phase</p> <p>2500 rpm for LXM15LD21M3 at 230 V three phase</p> <p>3000 rpm for LXM05AD34N4 at 380...480 V three phase</p> <p>3000 rpm for LXM05BD34N4 at 380...480 V three phase</p> <p>3000 rpm for LXM05CD34N4 at 380...480 V three phase</p> <p>4000 rpm for LXM15MD28N4 at 400 V three phase</p> <p>4000 rpm for LXM15MD40N4 at 400 V three phase</p> <p>4500 rpm for LXM15MD28N4 at 480 V three phase</p> <p>4500 rpm for LXM15MD40N4 at 480 V three phase</p>
Product compatibility	<p>LXM05AD28M2 at 200...240 V single phase</p> <p>LXM05BD28M2 at 200...240 V single phase</p> <p>LXM05CD28M2 at 200...240 V single phase</p> <p>LXM15LD21M3 at 230 V three phase</p> <p>LXM05AD42M3X at 200...240 V three phase</p> <p>LXM05BD42M3X at 200...240 V three phase</p> <p>LXM05CD42M3X at 200...240 V three phase</p> <p>LXM15LD17N4 at 230 V three phase</p> <p>LXM15LD17N4 at 400 V three phase</p>

LXM15LD17N4 at 480 V three phase  
 LXM15LD28M3 at 230 V three phase  
 LXM05AD34N4 at 380...480 V three phase  
 LXM05BD34N4 at 380...480 V three phase  
 LXM05CD34N4 at 380...480 V three phase  
 LXM15MD28N4 at 400 V three phase  
 LXM15MD28N4 at 480 V three phase  
 LXM15MD40N4 at 400 V three phase  
 LXM15MD40N4 at 480 V three phase  
 LXM32.D30N4 at 400 V three phase  
 LXM32.D30N4 at 480 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
Network number of phases	Three phase
Continuous stall current	6.6 A
Maximum continuous power	3.14 W
Maximum current Irms	28.3 A for LXM05AD28M2 28.3 A for LXM05AD34N4 28.3 A for LXM05AD42M3X 28.3 A for LXM05BD28M2 28.3 A for LXM05BD34N4 28.3 A for LXM05BD42M3X 28.3 A for LXM05CD28M2 28.3 A for LXM05CD34N4 28.3 A for LXM05CD42M3X 28.3 A for LXM15LD17N4 28.3 A for LXM15LD21M3 28.3 A for LXM15LD28M3 28.3 A for LXM15MD28N4 28.3 A for LXM15MD40N4 28.3 A for LXM32.D30N4
Maximum permanent current	28.3 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	9 N.m (holding brake)
Motor flange size	100 mm
Number of motor stacks	3
Torque constant	1.22 N.m/A at 120 °C
Back emf constant	77 V/krpm at 120 °C
Number of motor poles	8
Rotor inertia	3.838 kg.cm <sup>2</sup>
Stator resistance	1.43 Ohm at 20 °C
Stator inductance	8.8 mH at 20 °C
Stator electrical time constant	6.15 ms at 20 °C
Maximum radial force Fr	1050 N at 1000 rpm 660 N at 4000 rpm 730 N at 3000 rpm 830 N at 2000 rpm

Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	271.5 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	8 kg

### Offer Sustainability

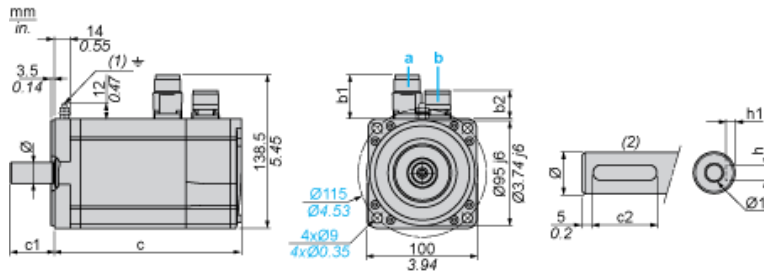
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

### Contractual warranty

Warranty period	18 months
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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	241	272	40	30	6 N9	3.5 <sup>+0.1</sup> <sub>0</sub>	19 k6	M6 x 16

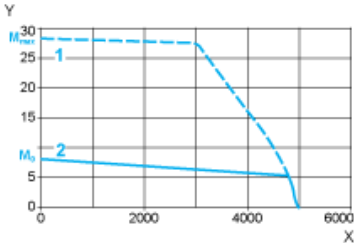
Dimensions in in.

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	9.48	10.70	1.57	1.18	0.24 N9	0.14 <sup>+0.1</sup> <sub>0</sub>	0.75 k6	M6 x 0.63

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

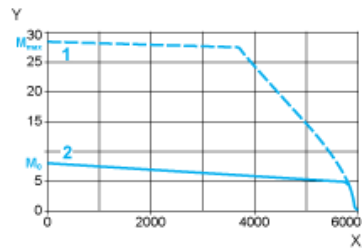
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480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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