



## 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

	<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

Shaft end	Untapped
IP degree of protection	IP50 (standard)
Speed feedback resolution	131072 points/turn
Holding brake	Without
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
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	2.31 kg.cm <sup>2</sup>
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
Type of cooling	Natural convection
Length	204.5 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	5.9 kg

### Offer Sustainability

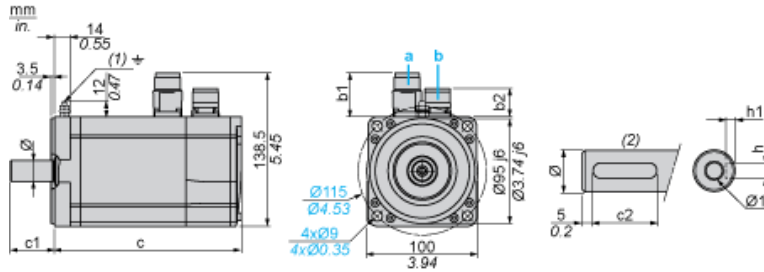
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold <a href="#">Reference not containing SVHC above the threshold</a>
Product environmental profile	Available
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	205	236	40	30	6 N9	30	6 N9	3.5 <sup>+0.1</sup> <sub>0</sub>	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	1.18	0.24 N9	0.14 <sup>+0.1</sup> <sub>0</sub>	0.75 k6	M6 x 0.63

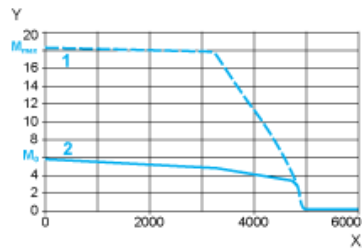
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400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D18N4 servo drive



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

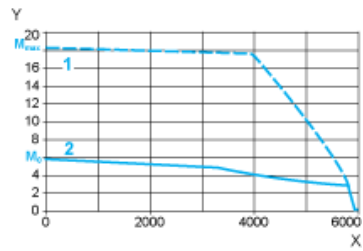
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480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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