



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	<p>82.39 lbf.in (9.31 N.m) LXM15MD40N4 at 400 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD40N4 at 480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD28M3 at 230 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD28N4 at 230 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD28N4 at 400 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD28N4 at 480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM15MD40N4 at 230 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05AD34N4 at 380...480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05AD42M3X at 200...240 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05AD57N4 at 380...480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05BD34N4 at 380...480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05BD42M3X at 200...240 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05BD57N4 at 380...480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05CD34N4 at 380...480 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05CD42M3X at 200...240 V three phase</p> <p>82.39 lbf.in (9.31 N.m) LXM05CD57N4 at 380...480 V three phase</p> <p>70.8 lbf.in (8 N.m) LXM32.D30N4 10 A at 400 V three phase</p> <p>70.8 lbf.in (8 N.m) LXM32.D30N4 10 A at 480 V three phase</p>
Peak stall torque	<p>227.43 lbf.in (25.7 N.m) LXM15MD28M3 at 230 V three phase</p> <p>227.43 lbf.in (25.7 N.m) LXM15MD28N4 at 230 V three phase</p> <p>227.43 lbf.in (25.7 N.m) LXM15MD28N4 at 400 V three phase</p> <p>227.43 lbf.in (25.7 N.m) LXM15MD28N4 at 480 V three phase</p> <p>299.38 lbf.in (33.83 N.m) LXM15MD40N4 at 230 V three phase</p> <p>299.38 lbf.in (33.83 N.m) LXM15MD40N4 at 400 V three phase</p> <p>299.38 lbf.in (33.83 N.m) LXM15MD40N4 at 480 V three phase</p> <p>207.7 lbf.in (23.47 N.m) LXM05AD34N4 at 380...480 V three phase</p> <p>315.93 lbf.in (35.7 N.m) LXM05AD42M3X at 200...240 V three phase</p> <p>315.93 lbf.in (35.7 N.m) LXM05AD57N4 at 380...480 V three phase</p> <p>207.7 lbf.in (23.47 N.m) LXM05BD34N4 at 380...480 V three phase</p> <p>315.93 lbf.in (35.7 N.m) LXM05BD42M3X at 200...240 V three phase</p> <p>315.93 lbf.in (35.7 N.m) LXM05BD57N4 at 380...480 V three phase</p> <p>207.7 lbf.in (23.47 N.m) LXM05CD34N4 at</p>

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	380...480 V three phase 315.93 lbf.in (35.7 N.m) LXM05CD42M3X at 200...240 V three phase 315.93 lbf.in (35.7 N.m) LXM05CD57N4 at 380...480 V three phase 335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A at 480 V three phase 335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A at 400 V three phase
Nominal output power	1300 W LXM05AD42M3X at 200...240 V three phase 1300 W LXM05BD42M3X at 200...240 V three phase 1300 W LXM05CD42M3X at 200...240 V three phase 1300 W LXM15MD28M3 at 230 V three phase 1300 W LXM15MD28N4 at 230 V three phase 1300 W LXM15MD40N4 at 230 V three phase 2200 W LXM05AD34N4 at 380...480 V three phase 2200 W LXM05AD57N4 at 380...480 V three phase 2200 W LXM05BD34N4 at 380...480 V three phase 2200 W LXM05BD57N4 at 380...480 V three phase 2200 W LXM05CD34N4 at 380...480 V three phase 2200 W LXM05CD57N4 at 380...480 V three phase 2200 W LXM15MD28N4 at 400 V three phase 2300 W LXM15MD40N4 at 400 V three phase 2400 W LXM15MD40N4 at 480 V three phase 2700 W LXM15MD28N4 at 480 V three phase 2600 W LXM32.D30N4 10 A at 480 V three phase 2100 W LXM32.D30N4 10 A at 400 V three phase
Nominal torque	57.52 lbf.in (6.5 N.m) LXM15MD28N4 at 480 V three phase 59.2 lbf.in (6.69 N.m) LXM15MD40N4 at 480 V three phase 61.95 lbf.in (7 N.m) LXM15MD28N4 at 400 V three phase 62.83 lbf.in (7.1 N.m) LXM05AD34N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05AD57N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05BD34N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05BD57N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05CD34N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05CD57N4 at 380...480 V three phase 63.45 lbf.in (7.17 N.m) LXM15MD40N4 at 400 V three phase 72.39 lbf.in (8.18 N.m) LXM15MD40N4 at 230 V three phase 72.74 lbf.in (8.22 N.m) LXM05AD42M3X at 200...240 V three phase 72.74 lbf.in (8.22 N.m) LXM05BD42M3X at 200...240 V three phase 72.74 lbf.in (8.22 N.m) LXM05CD42M3X at 200...240 V three phase 72.74 lbf.in (8.22 N.m) LXM15LD28M3 at 230 V three phase 72.74 lbf.in (8.22 N.m) LXM15MD28N4 at 230 V three phase 73.45 lbf.in (8.3 N.m) LXM32.D30N4 10 A at 400 V three phase 73.45 lbf.in (8.3 N.m) LXM32.D30N4 10 A at 480 V three phase
Nominal speed	1500 rpm LXM05AD42M3X at 200...240 V three phase 1500 rpm LXM05BD42M3X at 200...240 V three phase 1500 rpm LXM05CD42M3X at 200...240 V three phase 3000 rpm LXM05AD34N4 at 380...480 V three phase 3000 rpm LXM05BD34N4 at 380...480 V three phase 3000 rpm LXM05CD34N4 at 380...480 V three phase

phase  
 1500 rpm LXM15MD28M3 at 230 V three phase  
 1500 rpm LXM15MD28N4 at 230 V three phase  
 1500 rpm LXM15MD40N4 at 230 V three phase  
 3000 rpm LXM05AD57N4 at 380...480 V three phase  
 phase  
 3000 rpm LXM05BD57N4 at 380...480 V three phase  
 phase  
 3000 rpm LXM05CD57N4 at 380...480 V three phase  
 phase  
 3000 rpm LXM15MD28N4 at 400 V three phase  
 3000 rpm LXM15MD40N4 at 400 V three phase  
 3500 rpm LXM15MD40N4 at 480 V three phase  
 4000 rpm LXM15MD28N4 at 480 V three phase  
 3000 rpm LXM32.D30N4 10 A at 480 V three phase  
 phase  
 2500 rpm LXM32.D30N4 10 A at 400 V three phase  
 phase

Product compatibility	LXM05AD42M3X at 200...240 V three phase LXM05BD42M3X at 200...240 V three phase LXM05CD42M3X at 200...240 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 LXM05AD57N4 at 380...480 V three phase LXM05BD57N4 at 380...480 V three phase LXM05CD57N4 at 380...480 V three phase LXM15MD28M3 at 230 V three phase LXM15MD28N4 at 230 V three phase LXM15MD40N4 at 230 V three phase
Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	6.2 A
Continuous power	3.64 W
Maximum current I <sub>rms</sub>	32.3 A LXM05AD34N4 32.3 A LXM05AD42M3X 32.3 A LXM05AD57N4 32.3 A LXM05BD34N4 32.3 A LXM05BD42M3X 32.3 A LXM05BD57N4 32.3 A LXM05CD34N4 32.3 A LXM05CD42M3X 32.3 A LXM05CD57N4 34.8 A LXM15LD28M3 34.8 A LXM15MD28N4 34.8 A LXM15MD40N4 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	Single turn SinCos Hiperface
Motor flange size	3.94 in (100 mm)
Number of motor stacks	4
Torque constant	1.62 N.m/A at 248 °F (120 °C)
Back emf constant	103 V/krpm at 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	4.22 kg.cm <sup>2</sup>
Stator resistance	1.81 Ohm at 68 °F (20 °C)
Stator inductance	11.8 mH at 68 °F (20 °C)
Stator electrical time constant	6.52 ms at 68 °F (20 °C)
Maximum radial force Fr	1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	10.89 in (276.5 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)
Product weight	20.94 lb(US) (9.5 kg)

## Environment

## Offer Sustainability

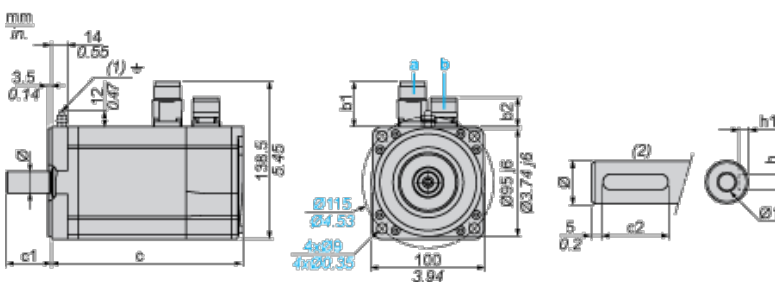
Green Premium product	Green Premium product
Compliant - since 0850 - Schneider Electric declaration of conformity	Compliant - since 0850 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations
WARNING: This product can expose you to chemicals including:	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.	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 <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## 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	277	308	50	40	8 N9	$4^{+0.1}_0$	24 k6	M8 x 19

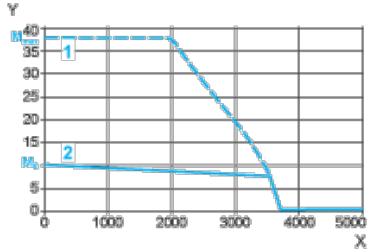
Dimensions in in.

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	10.90	12.12	1.96	1.57	0.31 N9	$0.16^{+0.1}_0$	0.94 k6	M8 x 0.75

## 400 V 3-Phase Supply Voltage

### Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

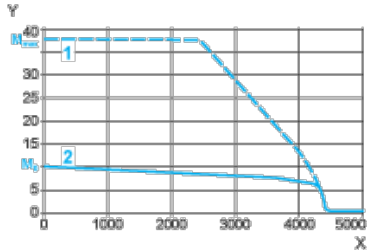


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

## 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