BSH1002P11F2A

Product or component type





Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	39.82 lbf.in (4.5 N.m) LXM15LD21M3 at 230 V single phase
	48.67 lbf.in (5.5 N.m) LXM05AD28M2 at 200240 V single phase
	48.67 lbf.in (5.5 N.m) LXM05BD28M2 at 200240 V single phase
	48.67 lbf.in (5.5 N.m) LXM05CD28M2 at 200240 V single phase
	30.09 lbf.in (3.4 N.m) LXM15LD13M3 at 230 V three phase
	30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 230 V three phase
	30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 400 V three phase
	30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 480 V three phase
	51.33 lbf.in (5.8 N.m) LXM15LD17N4 at 400 V three phase
	51.33 lbf.in (5.8 N.m) LXM15LD17N4 at 480 V three phase
	51.33 lbf.in (5.8 N.m) LXM15LD21M3 at 230 V three phase
	48.67 lbf.in (5.5 N.m) LXM05AD17M3X at 200240 V three phase
	48.67 lbf.in (5.5 N.m) LXM05AD22N4 at 380480 V three phase
	48.67 lbf.in (5.5 N.m) LXM05BD17M3X at 200240 V three phase
	48.67 lbf.in (5.5 N.m) LXM05BD22N4 at 380480 V three phase
	48.67 lbf.in (5.5 N.m) LXM05CD17M3X at 200240 V three phase
	48.67 lbf.in (5.5 N.m) LXM05CD22N4 at 380480 V three phase
	51.33 lbf.in (5.8 N.m) for LXM32.D18N4 6 A at 400 V three phase
	51.33 lbf.in (5.8 N.m) for LXM32.D18N4 6 A at 480 V three phase
Peak stall torque	141.59 lbf.in (16 N.m) LXM05AD28M2 at 200240 V single phase
	141.59 lbf.in (16 N.m) LXM05BD28M2 at 200240 V single phase
	141.59 lbf.in (16 N.m) LXM05CD28M2 at 200240 V single phase
	83.1 lbf.in (9.39 N.m) LXM15LD21M3 at 230 V single phase
	49.56 lbf.in (5.6 N.m) LXM15LD13M3 at 230 V three phase
	70.8 lbf.in (8 N.m) LXM15LD10N4 at 230 V three phase
	70.8 lbf.in (8 N.m) LXM15LD10N4 at 400 V three phase
	70.8 lbf.in (8 N.m) LXM15LD10N4 at 480 V three phase
	107.35 lbf.in (12.13 N.m) LXM15LD17N4 at 400 V three phase
	107.35 lbf.in (12.13 N.m) LXM15LD17N4 at 480 V three phase
	130.88 lbf.in (14.79 N.m) LXM15LD21M3 at 230 V three phase
	99.38 lbf.in (11.23 N.m) LXM05AD17M3X at 200240 V three phase
	123.19 lbf.in (13.92 N.m) LXM05AD22N4 at

Servo motor

380...480 V three phase 99.38 lbf.in (11.23 N.m) LXM05BD17M3X at 200...240 V three phase 123.19 lbf.in (13.92 N.m) LXM05BD22N4 at 380...480 V three phase 99.38 lbf.in (11.23 N.m) LXM05CD17M3X at 200...240 V three phase 123.19 lbf.in (13.92 N.m) LXM05CD22N4 at 380...480 V three phase 161.95 lbf.in (18.3 N.m) for LXM32.D18N4 6 A at 480 V three phase 161.95 lbf.in (18.3 N.m) for LXM32.D18N4 6 A at 400 V three phase Nominal output power 780 W LXM05AD28M2 at 200...240 V single phase 780 W LXM05BD28M2 at 200...240 V single phase 780 W LXM05CD28M2 at 200...240 V single phase 950 W LXM15LD21M3 at 230 V single phase 950 W LXM15LD21M3 at 230 V three phase 1400 W LXM05AD22N4 at 380...480 V three phase 1400 W LXM05BD22N4 at 380...480 V three phase 1400 W LXM05CD22N4 at 380...480 V three phase 1600 W LXM15LD10N4 at 400 V three phase 1700 W LXM15LD17N4 at 400 V three phase 1950 W LXM15LD17N4 at 480 V three phase 2150 W LXM15LD10N4 at 480 V three phase 780 W LXM05AD17M3X at 200...240 V three phase 780 W LXM05BD17M3X at 200...240 V three phase 780 W LXM05CD17M3X at 200...240 V three phase 840 W LXM15LD13M3 at 230 V three phase 890 W LXM15LD10N4 at 230 V three phase 1700 W for LXM32.D18N4 6 A at 480 V three phase 1700 W for LXM32.D18N4 6 A at 400 V three phase 43.89 lbf.in (4.96 N.m) LXM05AD28M2 at 200...240 Nominal torque V single phase 43.89 lbf.in (4.96 N.m) LXM05BD28M2 at 200...240 V single phase 43.89 lbf.in (4.96 N.m) LXM05CD28M2 at 200...240 V single phase 32.74 lbf.in (3.7 N.m) LXM15LD17N4 at 480 V three phase 35.4 lbf.in (4 N.m) LXM15LD17N4 at 400 V three phase 38.94 lbf.in (4.4 N.m) LXM05AD22N4 at 380...480 V three phase 38.94 lbf.in (4.4 N.m) LXM05BD22N4 at 380...480 V three phase 38.94 lbf.in (4.4 N.m) LXM05CD22N4 at 380...480 V three phase 43.89 lbf.in (4.96 N.m) LXM05AD17M3X at 200...240 V three phase 43.89 lbf.in (4.96 N.m) LXM05BD17M3X at 200...240 V three phase 43.89 lbf.in (4.96 N.m) LXM05CD17M3X at 200...240 V three phase 39.82 lbf.in (4.5 N.m) LXM15LD21M3 at 230 V single phase 30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 230 V three phase 30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 400 V three phase 30.09 lbf.in (3.4 N.m) LXM15LD10N4 at 480 V three phase 30.09 lbf.in (3.4 N.m) LXM15LD13M3 at 230 V three phase 51.33 lbf.in (5.8 N.m) LXM15LD21M3 at 230 V three phase 35.4 lbf.in (4 N.m) for LXM32.D18N4 6 A at 400 V three phase 35.4 lbf.in (4 N.m) for LXM32.D18N4 6 A at 480 V three phase Nominal speed 1500 rpm LXM05AD28M2 at 200...240 V single phase 1500 rpm LXM05BD28M2 at 200...240 V single phase 1500 rpm LXM05CD28M2 at 200...240 V single



2000 rpm LXM15LD21M3 at 230 V single phase 3000 rpm LXM05AD22N4 at 380...480 V three $3000 \ rpm \ LXM05BD22N4$ at $380...480 \ V$ three phase 3000 rpm LXM05CD22N4 at 380...480 V three 1500 rpm LXM05AD17M3X at 200...240 V three 1500 rpm LXM05BD17M3X at 200...240 V three phase 1500 rpm LXM05CD17M3X at 200...240 V three phase 4500 rpm LXM15LD10N4 at 400 V three phase 6000 rpm LXM15LD10N4 at 480 V three phase 2000 rpm LXM15LD21M3 at 230 V three phase 2500 rpm LXM15LD10N4 at 230 V three phase 2500 rpm LXM15LD13M3 at 230 V three phase 4000 rpm LXM15LD17N4 at 400 V three phase 5000 rpm LXM15LD17N4 at 480 V three phase 4000 rpm for LXM32.D18N4 6 A at 400 V three phase 4000 rpm for LXM32.D18N4 6 A at 480 V three phase LXM05AD28M2 at 200...240 V single phase Product compatibility 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 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 Keyed IP degree of protection IP50 (standard) Speed feedback resolution 131072 points/turn Holding brake With 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	4.8 A	
Continuous power	2.51 W	
Maximum current Irms	17.1 A LXM05AD17M3X 17.1 A LXM05AD22N4 17.1 A LXM05AD28M2 17.1 A LXM05BD17M3X 17.1 A LXM05BD22N4 17.1 A LXM05BD22N4 17.1 A LXM05BD28M2 17.1 A LXM05CD17M3X 17.1 A LXM05CD22N4 17.1 A LXM05CD28M2 17.1 A LXM05CD28M2 17.1 A LXM15LD10N4 17.1 A LXM15LD13M3 17.1 A LXM15LD17N4 17.1 A LXM15LD21M3 17.1 A LXM15LD21M3 17.1 A LXM32.D18N4	



Maximum permanent current	17.1 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	0.75 in (19 mm)
Shaft length	1.57 in (40 mm)
Key width	1.18 in (30 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	79.65 lbf.in (9 N.m) (holding brake)
Motor flange size	3.94 in (100 mm)
Number of motor stacks	2
Torque constant	1.21 N.m/A at 248 °F (120 °C)
Back emf constant	77 V/krpm at 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	2.928 kg.cm ²
Stator resistance	2.4 Ohm at 68 °F (20 °C)
Stator inductance	12.7 mH at 68 °F (20 °C)
Stator electrical time constant	5.29 ms at 68 °F (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	9.27 in (235.5 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	13.89 lb(US) (6.3 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 www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

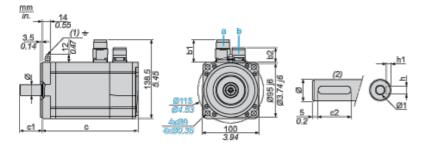
Servo Motors Dimensions

Contractual warranty
Warranty period

Example with Straight Connectors



18 months



- 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

	Stra	ight ectors	ang	table gled ectors	c (without brake)	c (with brake)	с1	c2	h	h1	Ø	Ø1 for screws
b	1	b2	b1	b2								
39.5	5	25.5	39.5	39.5	205	236	40	30	6 N9	3.5+0.1	19 k6	M6 x 16

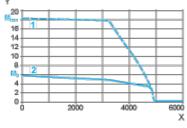
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	с1	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	0.75 k6	M6 x 0.63

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

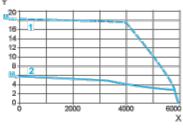


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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