Product datasheet
Characteristics

BSH1001P11A2A

Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	30 lbf.in (3.39 N.m) LXM15LD21M3 at 230 V single phase 23.89 lbf.in (2.7 N.m) LXM15LD10N4 at 230 V three phase 30 lbf.in (3.39 N.m) LXM15LD10N4 at 400 V three phase 30 lbf.in (3.39 N.m) LXM15LD10N4 at 480 V three phase 30 lbf.in (3.39 N.m) LXM15LD21M3 at 230 V three phase 30 lbf.in (3.39 N.m) LXM15LD17N4 at 230 V three phase 30 lbf.in (3.39 N.m) LXM15LD17N4 at 400 V three phase 30 lbf.in (3.39 N.m) LXM15LD17N4 at 480 V three phase 30.09 lbf.in (3.4 N.m) LXM05AD17M3X at 200...240 V three phase 30.09 lbf.in (3.4 N.m) LXM05AD22N4 at 380...480 V three phase 30.09 lbf.in (3.4 N.m) LXM05BD17M3X at 200...240 V three phase 30.09 lbf.in (3.4 N.m) LXM05BD22N4 at 380...480 V three phase 30.09 lbf.in (3.4 N.m) LXM05CD17M3X at 200...240 V three phase 30.09 lbf.in (3.4 N.m) LXM05CD22N4 at 380...480 V three phase 29.2 lbf.in (3.3 N.m) for LXM32.D18N4 6 A at 400 V three phase 29.2 lbf.in (3.3 N.m) for LXM32.D18N4 6 A at 480 V three phase
Peak stall torque	62.65 lbf.in (7.08 N.m) LXM15LD21M3 at 230 V single phase 54.78 lbf.in (6.19 N.m) LXM15LD10N4 at 230 V three phase 54.78 lbf.in (6.19 N.m) LXM15LD10N4 at 400 V three phase 54.78 lbf.in (6.19 N.m) LXM15LD10N4 at 480 V three phase 62.65 lbf.in (7.08 N.m) LXM15LD21M3 at 230 V three phase 62.65 lbf.in (7.08 N.m) LXM15LD17N4 at 230 V three phase 62.65 lbf.in (7.08 N.m) LXM15LD17N4 at 400 V three phase 62.65 lbf.in (7.08 N.m) LXM15LD17N4 at 480 V three phase 62.83 lbf.in (7.1 N.m) LXM05AD17M3X at 200...240 V three phase 62.83 lbf.in (7.1 N.m) LXM05AD22N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05BD17M3X at 200...240 V three phase 62.83 lbf.in (7.1 N.m) LXM05BD22N4 at 380...480 V three phase 62.83 lbf.in (7.1 N.m) LXM05CD17M3X at 200...240 V three phase 62.83 lbf.in (7.1 N.m) LXM05CD22N4 at 380...480 V three phase 84.96 lbf.in (9.6 N.m) for LXM32.D18N4 6 A at 480 V three phase 84.96 lbf.in (9.6 N.m) for LXM32.D18N4 6 A at 400

	V three phase
Nominal output power	950 W LXM15LD21M3 at 230 V single phase 1300 W LXM15LD17N4 at 400 V three phase 1500 W LXM15LD10N4 at 480 V three phase 1300 W LXM15LD10N4 at 400 V three phase 1500 W LXM15LD17N4 at 480 V three phase 500 W LXM05AD17M3X at 200...240 V three phase 500 W LXM05BD17M3X at 200...240 V three phase 500 W LXM05CD17M3X at 200...240 V three phase 850 W LXM15LD10N4 at 230 V three phase 900 W LXM05AD22N4 at 380...480 V three phase 900 W LXM05BD22N4 at 380...480 V three phase 900 W LXM05CD22N4 at 380...480 V three phase 950 W LXM15LD17N4 at 230 V three phase 950 W LXM15LD21M3 at 230 V three phase 1100 W for LXM32.D18N4 6 A at 400 V three phase 1100 W for LXM32.D18N4 6 A at 480 V three phase
Nominal torque	26.55 lbf.in (3 N.m) LXM15LD21M3 at 230 V single phase 22.12 lbf.in (2.5 N.m) LXM15LD10N4 at 480 V three phase 22.12 lbf.in (2.5 N.m) LXM15LD17N4 at 480 V three phase 23.89 lbf.in (2.7 N.m) LXM15LD10N4 at 400 V three phase 23.89 lbf.in (2.7 N.m) LXM15LD17N4 at 400 V three phase 25.84 lbf.in (2.92 N.m) LXM05AD22N4 at 380...480 V three phase 25.84 lbf.in (2.92 N.m) LXM05BD22N4 at 380...480 V three phase 25.84 lbf.in (2.92 N.m) LXM05CD22N4 at 380...480 V three phase 26.55 lbf.in (3 N.m) LXM15LD17N4 at 230 V three phase 26.55 lbf.in (3 N.m) LXM15LD21M3 at 230 V three phase 27.96 lbf.in (3.16 N.m) LXM05AD17M3X at 200...240 V three phase 27.96 lbf.in (3.16 N.m) LXM05BD17M3X at 200...240 V three phase 27.96 lbf.in (3.16 N.m) LXM05CD17M3X at 200...240 V three phase 23.89 lbf.in (2.7 N.m) LXM15LD10N4 at 230 V three phase 23.89 lbf.in (2.7 N.m) for LXM32.D18N4 6 A at 400 V three phase 23.89 lbf.in (2.7 N.m) for LXM32.D18N4 6 A at 480 V three phase
Nominal speed	3000 rpm LXM15LD21M3 at 230 V single phase 3000 rpm LXM15LD10N4 at 230 V three phase 3000 rpm LXM05AD22N4 at 380...480 V three phase 3000 rpm LXM05BD22N4 at 380...480 V three phase 3000 rpm LXM05CD22N4 at 380...480 V three phase 3000 rpm LXM15LD17N4 at 230 V three phase 3000 rpm LXM15LD21M3 at 230 V three phase 1500 rpm LXM05AD17M3X at 200...240 V three phase 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 4500 rpm LXM15LD17N4 at 400 V three phase 6000 rpm LXM15LD10N4 at 480 V three phase 6000 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
Product compatibility	LXM15LD21M3 at 230 V single 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 LXM15LD17N4 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	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	3.5 A
Continuous power	1.6 W
Maximum current Irms	12 A LXM05AD17M3X 12 A LXM05AD22N4 12 A LXM05BD17M3X 12 A LXM05BD22N4 12 A LXM05CD17M3X 12 A LXM05CD22N4 12 A LXM15LD10N4 12 A LXM15LD17N4 12 A LXM15LD21M3 12 A LXM32.D18N4
Maximum permanent current	12 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
Motor flange size	3.94 in (100 mm)
Number of motor stacks	1
Torque constant	0.89 N.m/A at 248 °F (120 °C)
Back emf constant	60 V/krpm at 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	1.4 kg.cm²
Stator resistance	3.8 Ohm at 68 °F (20 °C)
Stator inductance	17.6 mH at 68 °F (20 °C)
Stator electrical time constant	4.63 ms at 68 °F (20 °C)
Maximum radial force Fr	530 N at 5000 rpm 570 N at 4000 rpm 630 N at 3000 rpm 720 N at 2000 rpm 900 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	6.63 in (168.5 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	9.26 lb(US) (4.2 kg)

Environment

Offer Sustainability

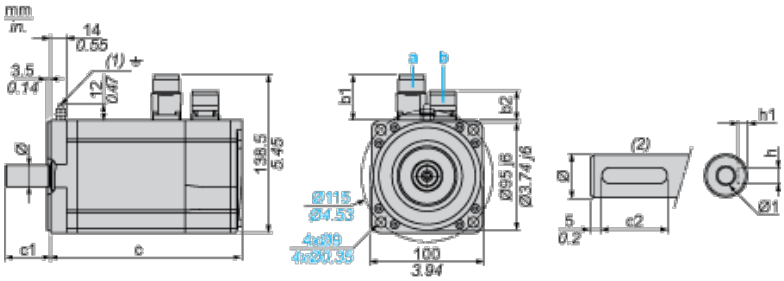
Green Premium product	Green Premium product
Compliant - since 0850 - Schneider Electric declaration of conformity	Compliant - since 0850 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
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

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	169	200	40	30	6 N9	$3.5^{+0.1}_{0}$	19 k6	M6 x 16

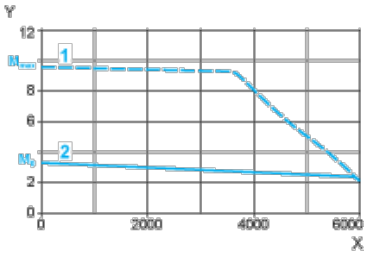
Dimensions in in.

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	6.65	7.87	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

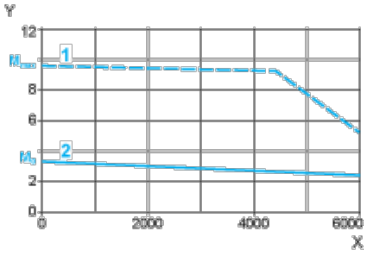
1 Peak torque

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