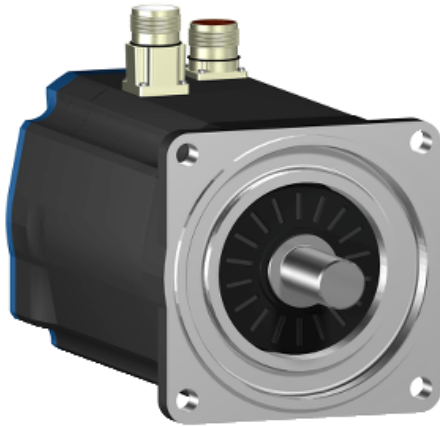


BSH1002P21A1A

AC servo motor BSH - 3.4 N.m - 2500 rpm -
untapped shaft - without brake - IP65



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	IP65 (standard) IP67 (with IP67 kit)
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 ²
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

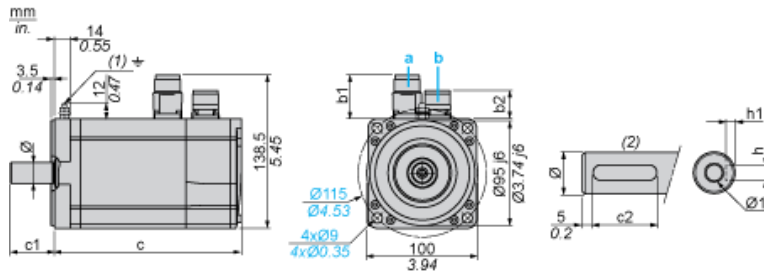
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0850 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental 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	3.5 ^{+0.1} ₀	19 k6	M6 x 16

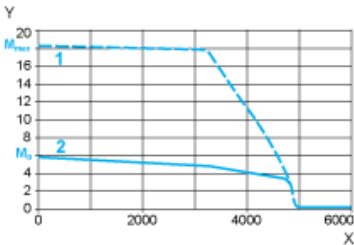
Dimensions in in.

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	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

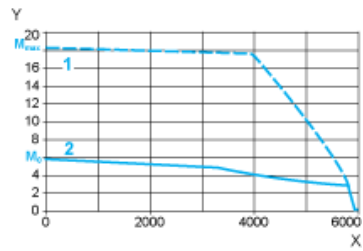


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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