



Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	9000 rpm
Continuous stall torque	<p>0.8 N.m for LXM32.U90M2 3 A at 115 V single phase</p> <p>0.8 N.m for LXM32.U90M2 3 A at 230 V single phase</p> <p>0.9 N.m for LXM05AD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05BD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05CD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM15LD13M3 at 230 V single phase</p> <p>0.77 N.m for LXM05CU70M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05AD10F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05AD17F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05BD10F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05BD17F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05CD10F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05CD17F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05AD10M3X at 200...240 V three phase</p> <p>0.9 N.m for LXM05BD10M3X at 200...240 V three phase</p> <p>0.9 N.m for LXM05CD10M3X at 200...240 V three phase</p> <p>0.9 N.m for LXM15LD13M3 at 230 V three phase</p>
Peak stall torque	<p>1.9 N.m for LXM32.U90M2 3 A at 115 V single phase</p> <p>2.5 N.m for LXM32.U90M2 3 A at 230 V single phase</p> <p>1.5 N.m for LXM15LD13M3 at 230 V single phase</p> <p>1.31 N.m for LXM05CU70M2 at 200...240 V single phase</p> <p>1.77 N.m for LXM05AD10F1 at 110...120 V single phase</p> <p>1.77 N.m for LXM05AD10M2 at 200...240 V single phase</p> <p>2.7 N.m for LXM05AD17F1 at 110...120 V single phase</p> <p>1.77 N.m for LXM05BD10F1 at 110...120 V single phase</p> <p>1.77 N.m for LXM05BD10M2 at 200...240 V single phase</p> <p>2.7 N.m for LXM05BD17F1 at 110...120 V single phase</p> <p>1.77 N.m for LXM05CD10F1 at 110...120 V single phase</p> <p>1.77 N.m for LXM05CD10M2 at 200...240 V single phase</p> <p>2.7 N.m for LXM05CD17F1 at 110...120 V single phase</p> <p>1.5 N.m for LXM15LD13M3 at 230 V three phase</p> <p>1.77 N.m for LXM05AD10M3X at 200...240 V three phase</p> <p>1.77 N.m for LXM05BD10M3X at 200...240 V three phase</p> <p>1.77 N.m for LXM05CD10M3X at 200...240 V three phase</p>

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

Nominal output power	<p>250 W for LXM32.U90M2 3 A at 115 V single phase 450 W for LXM32.U90M2 3 A at 230 V single phase 240 W for LXM05CU70M2 at 200...240 V single phase 250 W for LXM05AD10F1 at 110...120 V single phase 250 W for LXM05AD17F1 at 110...120 V single phase 250 W for LXM05BD10F1 at 110...120 V single phase 250 W for LXM05BD17F1 at 110...120 V single phase 250 W for LXM05CD10F1 at 110...120 V single phase 250 W for LXM05CD17F1 at 110...120 V single phase 450 W for LXM05AD10M2 at 200...240 V single phase 450 W for LXM05BD10M2 at 200...240 V single phase 450 W for LXM05CD10M2 at 200...240 V single phase 450 W for LXM15LD13M3 at 230 V single phase 450 W for LXM05AD10M3X at 200...240 V three phase 450 W for LXM05BD10M3X at 200...240 V three phase 450 W for LXM05CD10M3X at 200...240 V three phase 570 W for LXM15LD13M3 at 230 V three phase</p>
Nominal torque	<p>0.77 N.m for LXM05CU70M2 at 200...240 V single phase 0.9 N.m for LXM05AD10F1 at 110...120 V single phase 0.9 N.m for LXM05AD10M2 at 200...240 V single phase 0.9 N.m for LXM05AD17F1 at 110...120 V single phase 0.9 N.m for LXM05BD10F1 at 110...120 V single phase 0.9 N.m for LXM05BD10M2 at 200...240 V single phase 0.9 N.m for LXM05BD17F1 at 110...120 V single phase 0.9 N.m for LXM05CD10F1 at 110...120 V single phase 0.9 N.m for LXM05CD10M2 at 200...240 V single phase 0.9 N.m for LXM05CD17F1 at 110...120 V single phase 0.9 N.m for LXM05AD10M3X at 200...240 V three phase 0.9 N.m for LXM05BD10M3X at 200...240 V three phase 0.9 N.m for LXM05CD10M3X at 200...240 V three phase 0.77 N.m for LXM32.U90M2 3 A at 115 V single phase 0.74 N.m for LXM32.U90M2 3 A at 230 V single phase 0.72 N.m for LXM15LD13M3 at 230 V single phase 0.68 N.m for LXM15LD13M3 at 230 V three phase</p>
Nominal speed	<p>3000 rpm for LXM32.U90M2 3 A at 115 V single phase 6000 rpm for LXM32.U90M2 3 A at 230 V single phase 3000 rpm for LXM05AD10F1 at 110...120 V single phase 3000 rpm for LXM05AD17F1 at 110...120 V single phase 3000 rpm for LXM05BD10F1 at 110...120 V single phase 3000 rpm for LXM05BD17F1 at 110...120 V single phase 3000 rpm for LXM05CD10F1 at 110...120 V single phase 3000 rpm for LXM05CD17F1 at 110...120 V single phase 3000 rpm for LXM05CU70M2 at 200...240 V single phase 6000 rpm for LXM05AD10M2 at 200...240 V single phase 6000 rpm for LXM05BD10M2 at 200...240 V single phase 6000 rpm for LXM05CD10M2 at 200...240 V single phase 6000 rpm for LXM15LD13M3 at 230 V single phase 6000 rpm for LXM05AD10M3X at 200...240 V three phase 6000 rpm for LXM05BD10M3X at 200...240 V three phase 6000 rpm for LXM05CD10M3X at 200...240 V three phase 8000 rpm for LXM15LD13M3 at 230 V three phase</p>
Product compatibility	<p>LXM05AD10F1 at 110...120 V single phase LXM05AD10M2 at 200...240 V single phase LXM05AD17F1 at 110...120 V single phase LXM05BD10F1 at 110...120 V single phase LXM05BD10M2 at 200...240 V single phase LXM05BD17F1 at 110...120 V single phase LXM05CD10F1 at 110...120 V single phase LXM05CD10M2 at 200...240 V single phase LXM05CD17F1 at 110...120 V single phase LXM05CU70M2 at 200...240 V single phase LXM15LD13M3 at 230 V single phase LXM32.U90M2 at 115 V single phase LXM32.U90M2 at 230 V single phase LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase LXM15LD13M3 at 230 V three phase</p>
Shaft end	Untapped
IP degree of protection	<p>IP65 (standard) IP67 (with IP67 kit)</p>
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With

Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32 Lexium 15 Lexium 05
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	2.2 A
Maximum continuous power	0.67 W
Maximum current Irms	10.3 A for LXM15LD13M3 8.8 A for LXM05AD10F1 8.8 A for LXM05AD10M2 8.8 A for LXM05AD10M3X 8.8 A for LXM05AD17F1 8.8 A for LXM05BD10F1 8.8 A for LXM05BD10M2 8.8 A for LXM05BD10M3X 8.8 A for LXM05BD17F1 8.8 A for LXM05CD10F1 8.8 A for LXM05CD10M2 8.8 A for LXM05CD10M3X 8.8 A for LXM05CD17F1 8.8 A for LXM05CU70M2 6 A for LXM32.U90M2 at 115 V 8.8 A for LXM32.U90M2 at 230 V
Maximum permanent current	8.8 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	20 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	0.8 N.m (holding brake)
Motor flange size	55 mm
Number of motor stacks	2
Torque constant	0.36 N.m/A at 120 °C
Back emf constant	22 V/krpm at 120 °C
Number of motor poles	6
Rotor inertia	0.1173 kg.cm ²
Stator resistance	5.2 Ohm at 20 °C
Stator inductance	10.6 mH at 20 °C
Stator electrical time constant	2.04 ms at 20 °C
Maximum radial force Fr	190 N at 7000 rpm 190 N at 8000 rpm 200 N at 6000 rpm 220 N at 5000 rpm 230 N at 4000 rpm 260 N at 3000 rpm 290 N at 2000 rpm 370 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	10 W
Type of cooling	Natural convection
Length	181 mm
Centring collar diameter	40 mm
Centring collar depth	2 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	63 mm

Product weight	1.6 kg
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Offer Sustainability

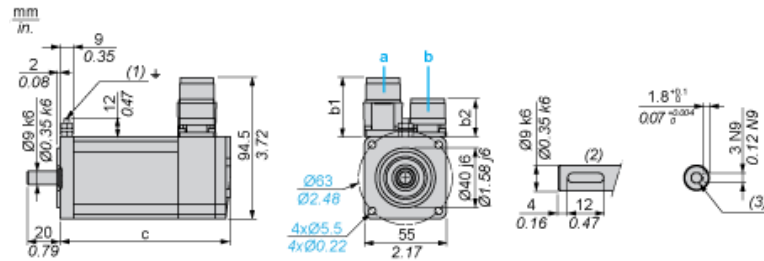
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0850 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental 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)
- (3) For screw M3 x 9 mm/M3 x 0.35 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
39.5	25.5	39.5	39.5	154.5	181

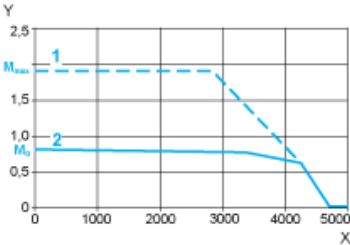
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	6.08	7.12

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-U90M2 servo drive

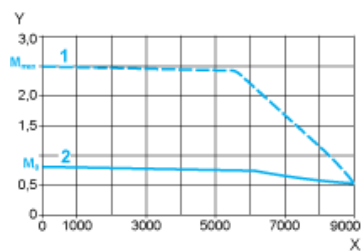


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-U90M2 servo drive



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