

# BSH0552T02A2A

AC servo motor BSH - 0.9 N.m - 6000 rpm -  
untapped shaft - without brake - IP50





## Main

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

Nominal output power	<p>570 W for LXM15LD13M3 at 230 V three phase</p> <p>450 W for LXM05CD10M3X at 200...240 V three phase</p> <p>450 W for LXM05BD10M3X at 200...240 V three phase</p> <p>450 W for LXM05AD10M3X at 200...240 V three phase</p> <p>450 W for LXM32.U90M2 3 A at 230 V single phase</p> <p>250 W for LXM32.U90M2 3 A at 115 V single phase</p> <p>450 W for LXM15LD13M3 at 230 V single phase</p> <p>450 W for LXM05CD10M2 at 200...240 V single phase</p> <p>450 W for LXM05BD10M2 at 200...240 V single phase</p> <p>450 W for LXM05AD10M2 at 200...240 V single phase</p> <p>250 W for LXM05CD17F1 at 110...120 V single phase</p> <p>250 W for LXM05CD10F1 at 110...120 V single phase</p> <p>250 W for LXM05BD17F1 at 110...120 V single phase</p> <p>250 W for LXM05BD10F1 at 110...120 V single phase</p> <p>250 W for LXM05AD17F1 at 110...120 V single phase</p> <p>250 W for LXM05AD10F1 at 110...120 V single phase</p> <p>240 W for LXM05CU70M2 at 200...240 V single phase</p>
Nominal torque	<p>0.9 N.m for LXM05CD10M3X 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 LXM05AD10M3X at 200...240 V three phase</p> <p>0.68 N.m for LXM15LD13M3 at 230 V three phase</p> <p>0.74 N.m for LXM32.U90M2 3 A at 230 V single phase</p> <p>0.77 N.m for LXM32.U90M2 3 A at 115 V single phase</p> <p>0.9 N.m for LXM05CD17F1 at 110...120 V single phase</p> <p>0.9 N.m for LXM05CD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05CD10F1 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 LXM05BD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05BD10F1 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 LXM05AD10M2 at 200...240 V single phase</p> <p>0.9 N.m for LXM05AD10F1 at 110...120 V single phase</p> <p>0.77 N.m for LXM05CU70M2 at 200...240 V single phase</p> <p>0.72 N.m for LXM15LD13M3 at 230 V single phase</p>

Nominal speed	6000 rpm for LXM32.U90M2 3 A at 230 V single phase 6000 rpm for LXM15LD13M3 at 230 V single phase 3000 rpm for LXM05CD17F1 at 110...120 V single phase 3000 rpm for LXM05BD17F1 at 110...120 V single phase 3000 rpm for LXM05AD17F1 at 110...120 V single phase 8000 rpm for LXM15LD13M3 at 230 V three phase 6000 rpm for LXM05CD10M3X at 200...240 V three phase 6000 rpm for LXM05BD10M3X at 200...240 V three phase 6000 rpm for LXM05AD10M3X at 200...240 V three phase 3000 rpm for LXM32.U90M2 3 A at 115 V single phase 6000 rpm for LXM05CD10M2 at 200...240 V single phase 6000 rpm for LXM05BD10M2 at 200...240 V single phase 6000 rpm for LXM05AD10M2 at 200...240 V single phase 3000 rpm for LXM05CU70M2 at 200...240 V single phase 3000 rpm for LXM05CD10F1 at 110...120 V single phase 3000 rpm for LXM05BD10F1 at 110...120 V single phase 3000 rpm for LXM05AD10F1 at 110...120 V single phase
Product compatibility	LXM15LD13M3 at 230 V three phase LXM05CD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05AD10M3X at 200...240 V three phase LXM32.U90M2 at 230 V single phase LXM32.U90M2 at 115 V single phase LXM15LD13M3 at 230 V single phase LXM05CU70M2 at 200...240 V single phase LXM05CD17F1 at 110...120 V single phase LXM05CD10M2 at 200...240 V single phase LXM05CD10F1 at 110...120 V single phase LXM05BD17F1 at 110...120 V single phase LXM05BD10M2 at 200...240 V single phase LXM05BD10F1 at 110...120 V single phase LXM05AD17F1 at 110...120 V single phase LXM05AD10M2 at 200...240 V single phase LXM05AD10F1 at 110...120 V single phase
Shaft end	Untapped
IP degree of protection	IP50 (standard)
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	2.2 A
Maximum continuous power	0.67 W

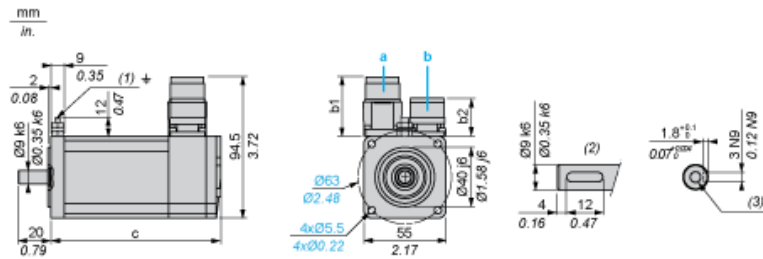
Maximum current Irms	8.8 A for LXM32.U90M2 at 230 V 6 A for LXM32.U90M2 at 115 V 8.8 A for LXM05CD10M3X 8.8 A for LXM05CD10M2 8.8 A for LXM05CD17F1 8.8 A for LXM05CD10F1 8.8 A for LXM05BD10M3X 8.8 A for LXM05BD10M2 8.8 A for LXM05BD17F1 8.8 A for LXM05BD10F1 8.8 A for LXM05AD10M3X 8.8 A for LXM05AD10M2 8.8 A for LXM05CU70M2 8.8 A for LXM05AD17F1 8.8 A for LXM05AD10F1 10.3 A for LXM15LD13M3
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
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	0.096 kg.cm <sup>2</sup>
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	370 N at 1000 rpm 290 N at 2000 rpm 260 N at 3000 rpm 230 N at 4000 rpm 220 N at 5000 rpm 200 N at 6000 rpm 190 N at 8000 rpm 190 N at 7000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	154.4 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	1.5 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0850 - <a href="#">Schneider Electric declaration of conformity</a>
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Need no specific recycling operations

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

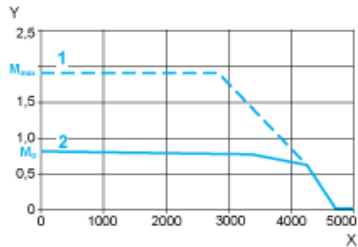
Dimensions in in.

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

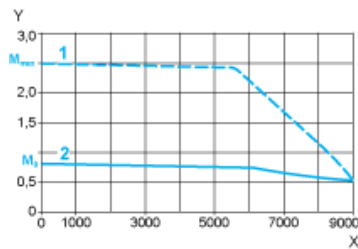


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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