

BSH0553T01A2A

AC servo motor BSH - 1.3 N.m - 3000 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	1.3 N.m for LXM05CD17M3X at 200...240 V three phase 1.3 N.m for LXM05BD17M3X at 200...240 V three phase 1.3 N.m for LXM05AD17M3X at 200...240 V three phase 1.2 N.m for LXM32.U90M2 3 A at 230 V single phase 1.2 N.m for LXM32.D18M2 6 A at 115 V single phase 1.3 N.m for LXM05CD17M2 at 200...240 V single phase 1.3 N.m for LXM05CD17F1 at 110...120 V single phase 1.3 N.m for LXM05BD17M2 at 200...240 V single phase 1.3 N.m for LXM05BD17F1 at 110...120 V single phase 1.3 N.m for LXM05AD17M2 at 200...240 V single phase 1.3 N.m for LXM05AD17F1 at 110...120 V single phase
Peak stall torque	3.31 N.m for LXM05CD17M3X at 200...240 V three phase 3.31 N.m for LXM05BD17M3X at 200...240 V three phase 3.31 N.m for LXM05AD17M3X at 200...240 V three phase 3 N.m for LXM32.U90M2 3 A at 230 V single phase 3.3 N.m for LXM32.D18M2 6 A at 115 V single phase 3.31 N.m for LXM05CD17M2 at 200...240 V single phase 3.31 N.m for LXM05CD17F1 at 110...120 V single phase 3.31 N.m for LXM05BD17M2 at 200...240 V single phase 3.31 N.m for LXM05BD17F1 at 110...120 V single phase 3.31 N.m for LXM05AD17M2 at 200...240 V single phase 3.31 N.m for LXM05AD17F1 at 110...120 V single phase
Nominal output power	350 W for LXM05CD17M3X at 200...240 V three phase 350 W for LXM05BD17M3X at 200...240 V three phase 350 W for LXM05AD17M3X at 200...240 V three phase 550 W for LXM32.U90M2 3 A at 230 V single phase 350 W for LXM32.D18M2 6 A at 115 V single phase 350 W for LXM05CD17M2 at 200...240 V single phase 350 W for LXM05CD17F1 at 110...120 V single phase 350 W for LXM05BD17M2 at 200...240 V single phase 350 W for LXM05BD17F1 at 110...120 V single phase 350 W for LXM05AD17M2 at 200...240 V single phase 350 W for LXM05AD17F1 at 110...120 V single phase

Nominal torque	1.1 N.m for LXM05CD17M3X at 200...240 V three phase 1.1 N.m for LXM05BD17M3X at 200...240 V three phase 1.1 N.m for LXM05AD17M3X at 200...240 V three phase 0.84 N.m for LXM32.U90M2 3 A at 230 V single phase 1.14 N.m for LXM32.D18M2 6 A at 115 V single phase 1.1 N.m for LXM05CD17M2 at 200...240 V single phase 1.1 N.m for LXM05CD17F1 at 110...120 V single phase 1.1 N.m for LXM05BD17M2 at 200...240 V single phase 1.1 N.m for LXM05BD17F1 at 110...120 V single phase 1.1 N.m for LXM05AD17M2 at 200...240 V single phase 1.1 N.m for LXM05AD17F1 at 110...120 V single phase
Nominal speed	3000 rpm for LXM05CD17M3X at 200...240 V three phase 3000 rpm for LXM05BD17M3X at 200...240 V three phase 3000 rpm for LXM05AD17M3X at 200...240 V three phase 3000 rpm for LXM32.D18M2 6 A at 115 V single phase 3000 rpm for LXM05CD17M2 at 200...240 V single phase 3000 rpm for LXM05BD17M2 at 200...240 V single phase 3000 rpm for LXM05AD17M2 at 200...240 V single phase 6000 rpm for LXM32.U90M2 3 A 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
Product compatibility	LXM05CD17M3X at 200...240 V three phase LXM05BD17M3X at 200...240 V three phase LXM05AD17M3X at 200...240 V three phase LXM32.D18M2 at 115 V single phase LXM32.U90M2 at 230 V single phase LXM05CD17M2 at 200...240 V single phase LXM05CD17F1 at 110...120 V single phase LXM05BD17M2 at 200...240 V single phase LXM05BD17F1 at 110...120 V single phase LXM05AD17M2 at 200...240 V single phase LXM05AD17F1 at 110...120 V single phase
Shaft end	Untapped
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 32
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	3.1 A
Maximum continuous power	0.97 W

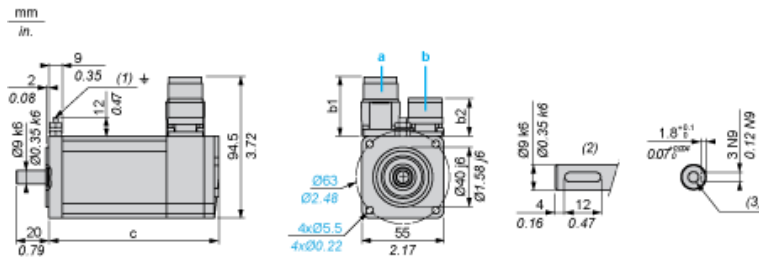
Maximum current Irms	9 A for LXM32.U90M2 10 A for LXM32.D18M2 11.9 A for LXM05CD17M3X 11.9 A for LXM05CD17M2 11.9 A for LXM05CD17F1 11.9 A for LXM05BD17M3X 11.9 A for LXM05BD17M2 11.9 A for LXM05BD17F1 11.9 A for LXM05AD17M3X 11.9 A for LXM05AD17M2 11.9 A for LXM05AD17F1
Maximum permanent current	11.9 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	20 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	55 mm
Number of motor stacks	3
Torque constant	0.39 N.m/A at 120 °C
Back emf constant	22 V/krpm at 120 °C
Number of motor poles	6
Rotor inertia	0.134 kg.cm ²
Stator resistance	3.1 Ohm at 20 °C
Stator inductance	7.4 mH at 20 °C
Stator electrical time constant	2.39 ms at 20 °C
Maximum radial force Fr	390 N at 1000 rpm 310 N at 2000 rpm 270 N at 3000 rpm 240 N at 4000 rpm 230 N at 5000 rpm 210 N at 6000 rpm 200 N at 7000 rpm 190 N at 8000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	176.5 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	1.76 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0850 - Schneider Electric declaration of conformity
Product environmental profile	Available Download Product Environmental
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	176.5	203

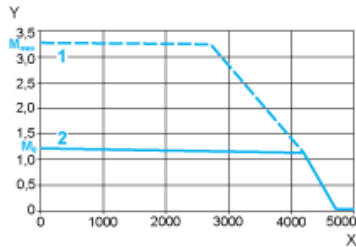
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	6.94	7.99

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18M2 servo drive

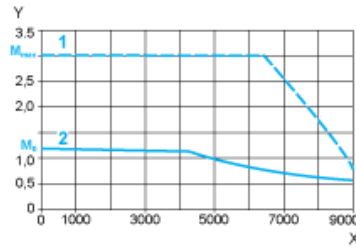


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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