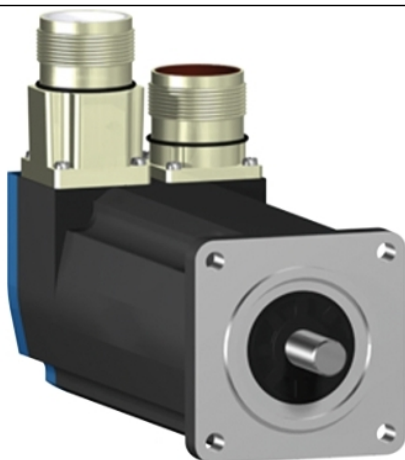


BSH0551P31F1A

AC servo motor BSH - 0.5 N.m - 4000 rpm -
keyed shaft - with brake - IP65



Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	9000 rpm
Continuous stall torque	4.43 Lbf.In (0.5 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 4.43 Lbf.In (0.5 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 4.43 Lbf.In (0.5 N.m) LXM15LD13M3, 230 V, single phase 4.43 lbf.in (0.5 N.m) LXM15LU60N4, 230 V, three phase
Peak stall torque	13.28 Lbf.In (1.5 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 13.28 Lbf.In (1.5 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 12.39 Lbf.In (1.4 N.m) LXM15LD13M3, 230 V, single phase 12.39 lbf.in (1.4 N.m) LXM15LU60N4, 230 V, three phase
Nominal output power	300 W LXM32.U60N4 1.5 A, 400 V, three phase 300 W LXM32.U60N4 1.5 A, 480 V, three phase 170 W LXM15LD13M3, 230 V, single phase 170 W LXM15LU60N4, 230 V, three phase
Nominal torque	4.25 Lbf.In (0.48 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 4.25 Lbf.In (0.48 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 4.07 Lbf.In (0.46 N.m) LXM15LD13M3, 230 V, single phase 4.07 lbf.in (0.46 N.m) LXM15LU60N4, 230 V, three phase
Nominal speed	6000 rpm LXM32.U60N4 1.5 A, 400 V, three phase 6000 rpm LXM32.U60N4 1.5 A, 480 V, three phase 4000 rpm LXM15LD13M3, 230 V, single phase 4000 rpm LXM15LU60N4, 230 V, three phase
Product compatibility	LXM15LD13M3 230 V single phase LXM15LU60N4 230 V three phase LXM32.U60N4 400 V three phase LXM32.U60N4 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 32 Lexium 15
Supply voltage max	480 V
Phase	Three phase
Continuous stall current	0.73 A
Maximum continuous power	0.45 W

Maximum current Irms	3.5 A LXM15LD13M3 3.5 A LXM15LU60N4 2.9 A LXM32.U60N4
Maximum permanent current	2.9 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	0.35 in (9 mm)
Shaft length	0.79 in (20 mm)
Key width	0.47 in (12 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	7.08 lbf.in (0.8 N.m) holding brake
Motor flange size	2.17 in (55 mm)
Number of motor stacks	1
Torque constant	0.7 N.m/A 248 °F (120 °C)
Back emf constant	40 V/krpm 248 °F (120 °C)
Number of motor poles	6
Rotor inertia	0.083 kg.cm ²
Stator resistance	41.8 Ohm 68 °F (20 °C)
Stator inductance	71.5 mH 68 °F (20 °C)
Stator electrical time constant	1.09 ms 68 °F (20 °C)
Maximum radial force Fr	170 N 8000 rpm 180 N 7000 rpm 190 N 6000 rpm 200 N 5000 rpm 220 N 4000 rpm 240 N 3000 rpm 270 N 2000 rpm 340 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	10 W
Type of cooling	Natural convection
Length	6.26 in (159 mm)
Centring collar diameter	1.57 in (40 mm)
Centring collar depth	0.08 in (2 mm)
Number of mounting holes	4
Mounting holes diameter	0.22 in (5.5 mm)
Circle diameter of the mounting holes	2.48 in (63 mm)
Net weight	2.87 lb(US) (1.3 kg)

Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	03389118198760
Nbr. of units in pkg.	1
Package weight(Lbs)	3.7 lb(US) (1.68 kg)
Returnability	No
Country of origin	DE

Packing Units

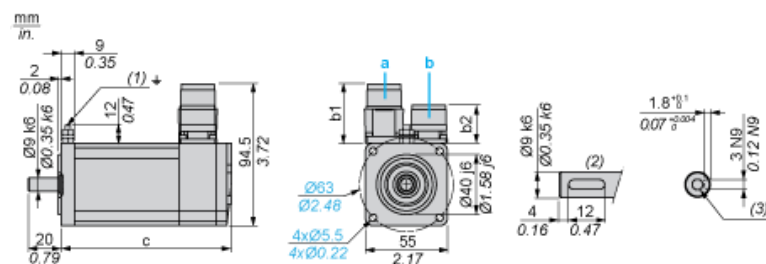
Unit Type of Package 1	PCE
Package 1 Height	4.53 in (11.5 cm)
Package 1 width	7.48 in (19 cm)
Package 1 Length	15.55 in (39.5 cm)

Contractual warranty

Warranty	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	132.5	159

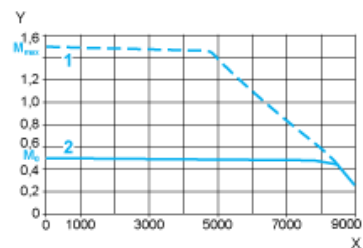
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	5.21	6.25

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

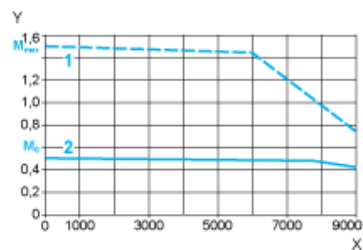


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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