

# BSH0551P32A2A

AC servo motor BSH - 0.5 N.m - 4000 rpm -  
keyed shaft - without brake - IP65



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	9000 rpm
Continuous stall torque	0.5 N.m for LXM15LD13M3 at 230 V single phase 0.5 N.m for LXM15LU60N4 at 230 V three phase 0.5 N.m for LXM32.U60N4 1.5 A at 400 V three phase 0.5 N.m for LXM32.U60N4 1.5 A at 480 V three phase
Peak stall torque	1.4 N.m for LXM15LD13M3 at 230 V single phase 1.4 N.m for LXM15LU60N4 at 230 V three phase 1.5 N.m for LXM32.U60N4 1.5 A at 400 V three phase 1.5 N.m for LXM32.U60N4 1.5 A at 480 V three phase
Nominal output power	170 W for LXM15LD13M3 at 230 V single phase 170 W for LXM15LU60N4 at 230 V three phase 300 W for LXM32.U60N4 1.5 A at 400 V three phase 300 W for LXM32.U60N4 1.5 A at 480 V three phase
Nominal torque	0.46 N.m for LXM15LD13M3 at 230 V single phase 0.46 N.m for LXM15LU60N4 at 230 V three phase 0.48 N.m for LXM32.U60N4 1.5 A at 400 V three phase 0.48 N.m for LXM32.U60N4 1.5 A at 480 V three phase
Nominal speed	4000 rpm for LXM15LD13M3 at 230 V single phase 4000 rpm for LXM15LU60N4 at 230 V three phase 6000 rpm for LXM32.U60N4 1.5 A at 400 V three phase 6000 rpm for LXM32.U60N4 1.5 A at 480 V three phase
Product compatibility	LXM15LD13M3 at 230 V single phase LXM15LU60N4 at 230 V three phase LXM32.U60N4 at 400 V three phase LXM32.U60N4 at 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
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 15 Lexium 32
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	0.73 A
Maximum continuous power	0.45 W

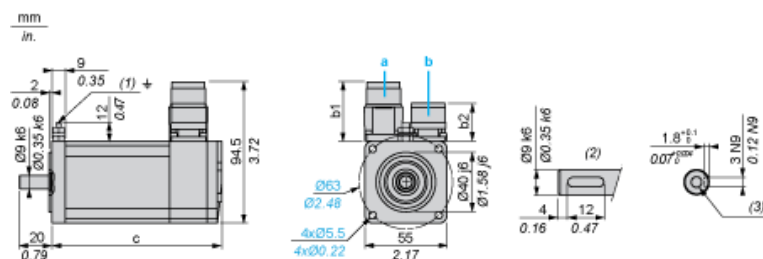
Maximum current I <sub>rms</sub>	3.5 A for LXM15LD13M3 3.5 A for LXM15LU60N4 2.9 A for LXM32.U60N4
Maximum permanent current	2.9 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	9 mm
Shaft length	20 mm
Key width	12 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	55 mm
Number of motor stacks	1
Torque constant	0.7 N.m/A at 120 °C
Back emf constant	40 V/krpm at 120 °C
Number of motor poles	6
Rotor inertia	0.059 kg.cm <sup>2</sup>
Stator resistance	41.8 Ohm at 20 °C
Stator inductance	71.5 mH at 20 °C
Stator electrical time constant	1.09 ms at 20 °C
Maximum radial force Fr	170 N at 8000 rpm 180 N at 7000 rpm 190 N at 6000 rpm 200 N at 5000 rpm 220 N at 4000 rpm 240 N at 3000 rpm 270 N at 2000 rpm 340 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	132.5 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	1.2 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1018 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
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	132.5	159

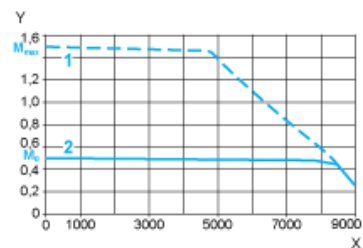
Dimensions in in.

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

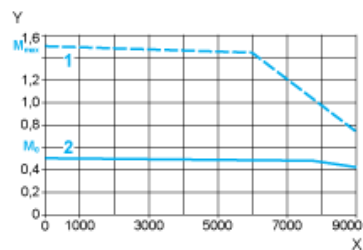


- X Speed in rpm  
Y Torque in Nm  
1 Peak torque  
2 Continuous torque

## 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