

# BSH0551P11F2A

servo motor BSH, Lexium 15, 0.5N.m,  
4000rpm, 55mm, keyed shaft, Sincos single  
turn, with brake, IP50



## Main

Device short name	BSH
Product or Component Type	Servo motor
Maximum mechanical speed	9000 rpm
Continuous stall torque	4.4 Lbf.In (0.5 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 4.4 Lbf.In (0.5 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 4.4 Lbf.In (0.5 N.m) LXM15LD13M3, 230 V, single phase 4.4 lbf.in (0.5 N.m) LXM15LU60N4, 230 V, three phase
Peak stall torque	13.3 Lbf.In (1.5 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 13.3 Lbf.In (1.5 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 12.4 Lbf.In (1.4 N.m) LXM15LD13M3, 230 V, single phase 12.4 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	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting Support	International standard flange
Electrical Connection	Rotatable right-angled connectors

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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	0.4 in (9 mm)
Shaft length	0.8 in (20 mm)
Key width	0.5 in (12 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	7.08 lbf.in (0.8 N.m) holding brake
Motor flange size	2.2 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 <sup>2</sup>
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	6.3 in (159 mm)
Centring collar diameter	1.6 in (40 mm)
Centring collar depth	0.08 in (2 mm)
Number of mounting holes	4
Mounting holes diameter	0.2 in (5.5 mm)
Circle diameter of the mounting holes	2.5 in (63 mm)
Net Weight	2.9 lb(US) (1.3 kg)

## Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3389118198616
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 in (11.5 cm)
Package 1 Width	7.5 in (19.0 cm)
Package 1 Length	15.6 in (39.5 cm)
Package 1 Weight	3.7 lb(US) (1.7 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	"WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> "
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

Warranty	18 months
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