# Product data sheet Characteristics

# BSH0551P11A2A

servo motor BSH, Lexium 15, 0.5N.m, 4000rpm, 55mm, keyed shaft, Sincos single turn, without 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	Without
Mounting Support	International standard flange
Electrical Connection	Rotatable right-angled connectors

#### Complementary

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
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	0.059 kg.cm²
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
Type of cooling	Natural convection
Length	5.2 in (132.5 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	2.6 lb(US) (1.2 kg)

## Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3389118198593
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	3.5 lb(US) (1.6 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 www.P65Warnings.ca.gov"
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	€Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
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

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Warranty		18 months