Product data sheet

Specifications



servo motor BSH, Lexium 15, 0.5N.m, 4000rpm, 55mm, untapped shaft, Sincos single turn, without brake, IP50

BSH0551P01A2A

Product availability: Non-Stock - Not normally stocked in distribution facility

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	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 15 Lexium 32
supply voltage max	480 V
Phase	Three phase

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: 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

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)
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	3389118198517
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.53 in (11.500 cm)
Package 1 Width	7.48 in (19.000 cm)
Package 1 Length	15.55 in (39.500 cm)
Package 1 Weight	3.585 lb(US) (1.626 kg)
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	15.75 in (40.000 cm)
Package 2 Length	23.62 in (60.000 cm)
Package 2 Weight	9.815 lb(US) (4.452 kg)
Unit Type of Package 3	P12
Number of Units in Package 3	8
Package 3 Height	17.72 in (45.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	47.24 in (120.000 cm)
Package 3 Weight	35.627 lb(US) (16.160 kg)

Contractual warranty

Warranty	18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle)	347
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
China RoHS Regulation	China RoHS declaration
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
PVC free	Yes

Use Again

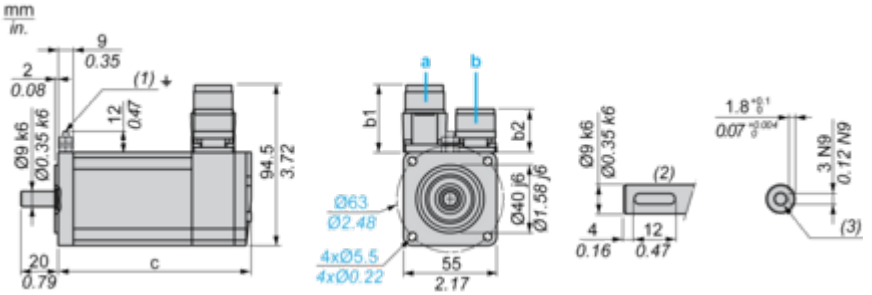
Repack and remanufacture

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.
Take-back	No

Dimensions Drawings

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.

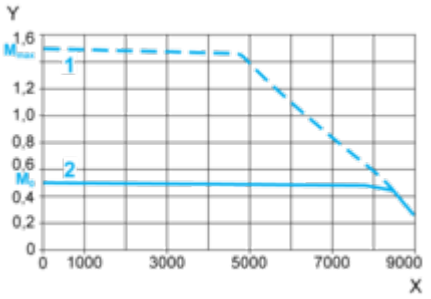
Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	5.21	6.25

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

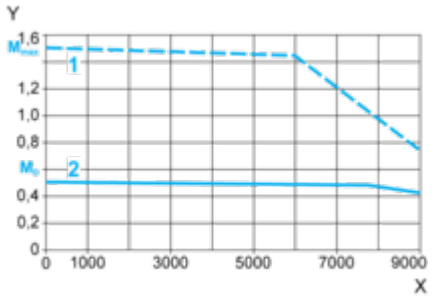


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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