BSH0551P01F2A

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





Main

Product or component type	Servo motor		
Device short name	BSH		
Maximum mechanical speed	9000 rpm		
Continuous stall torque	0.5 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.5 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.5 N.M for LXM15LD13M3, 230 V, single phase 0.5 N.M for LXM15LU60N4, 230 V, three phase		
Peak stall torque	1.5 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.5 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.4 N.M for LXM15LD13M3, 230 V, single phase 1.4 N.m for LXM15LU60N4, 230 V, three phase		
Nominal output power	300 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 300 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 170 W for LXM15LD13M3, 230 V, single phase 170 W for LXM15LU60N4, 230 V, three phase		
Nominal torque	0.48 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.48 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.46 N.M for LXM15LD13M3, 230 V, single phase 0.46 N.m for LXM15LU60N4, 230 V, three phase		
Nominal speed	6000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase 6000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 4000 rpm for LXM15LD13M3, 230 V, single phase 4000 rpm for LXM15LU60N4, 230 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	Untapped		
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		

Complementary

Range compatibility	Lexium 32	
	Lexium 15	
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 Irms	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		
Feedback type	Single turn SinCos Hiperface		
Holding torque	0.8 N.m holding brake		
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	0.083 kg.cm ²		
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		
Brake pull-in power	10 W		
Type of cooling	Natural convection		
Length	159 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		
Net weight	1.3 kg		

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	11.5 cm	
Package 1 Width	19.0 cm	
Package 1 Length	39.5 cm	
Package 1 Weight	1.7 kg	

Offer Sustainability

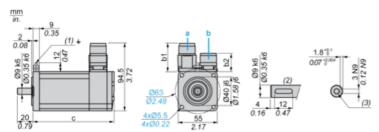
Sustainable offer status	Green Premium product		
REACh Regulation	REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Mercury free	Yes		
China RoHS Regulation	China RoHS Declaration		
RoHS exemption information	€Yes		
Environmental Disclosure	Product Environmental 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		
PVC free	Yes		
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 connector	ors	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 connecto	ors	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

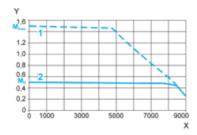
Product data sheet Performance Curves

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400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

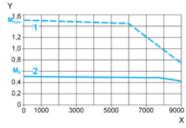


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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