

AC servo motor BSH - 0.9 N.m - 4000 rpm - keyed shaft - with brake - IP50

BSH0552P12F2A

! Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3389118158795

Main

Device short name	BSH Servo motor 9000 rpm				
Product or component type					
Maximum mechanical speed					
Continuous stall torque	0.8 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase				
	0.8 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase				
	0.9 N.m for LXM05CU70M2, 200240 V, single phase				
	0.9 N.m for LXM05AD10M2, 200240 V, single phase				
	0.9 N.m for LXM05BD10M2, 200240 V, single phase				
	0.9 N.m for LXM05CD10M2, 200240 V, single phase				
	0.9 N.m for LXM05AD10M3X, 200240 V, three phase				
	0.9 N.m for LXM05BD10M3X at 1.5 A, 200240 V, three phase				
	0.9 N.m for LXM05CD10M3X, 200240 V, three phase				
	0.9 N.m for LXM15LD13M3, 230 V, single phase				
	0.9 N.m for LXM15LD13M3, 230 V, three phase				
	0.9 N.m for LXM15LU60N4, 230 V, three phase				
	0.9 N.m for LXM05AD14N4, 380480 V, three phase				
	0.9 N.m for LXM05BD14N4, 380480 V, three phase				
	0.9 N.m for LXM05CD14N4, 380480 V, three phase				
Peak stall torque	2.5 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase				
	2.5 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase				
	2.5 N.m for LXM15LD13M3, 230 V, single phase				
	2.17 N.m for LXM05CU70M2, 200240 V, single phase				
	2.7 N.m for LXM05AD10M2, 200240 V, single phase				
	2.7 N.m for LXM05BD10M2, 200240 V, single phase				
	2.7 N.m for LXM05CD10M2, 200240 V, single phase				
	2.5 N.m for LXM15LD13M3 at 1.5 A, 230 V, three phase				
	2.26 N.m for LXM15LU60N4, 230 V, three phase				
	2.7 N.m for LXM05AD10M3X, 200240 V, three phase				
	2.7 N.m for LXM05AD14N4, 380480 V, three phase				
	2.7 N.m for LXM05BD10M3X, 200240 V, three phase				
	2.7 N.m for LXM05BD14N4, 380480 V, three phase				
	2.7 N.m for LXM05CD10M3X, 200240 V, three phase				
	2.7 N.m for LXM05CD14N4, 380480 V, three phase				
Nominal output power	400 W for LXM32.U60N4 at 1.5 A, 400 V, three phase				
	400 W for LXM32.U60N4 at 1.5 A, 480 V, three phase				
	250 W for LXM05AD10M2, 200240 V, single phase				
	250 W for LXM05BD10M2, 200240 V, single phase				
	250 W for LXM05CD10M2, 200240 V, single phase				
	250 W for LXM05CU70M2, 200240 V, single phase				
	310 W for LXM15LD13M3, 230 V, single phase				
	250 W for LXM05AD10M3X at 1.5 A, 200240 V, three phase				
	250 W for LXM05AD14N4, 380480 V, three phase				
	250 W for LXM05BD10M3X, 200240 V, three phase				
	250 W for LXM05BD14N4, 380480 V, three phase				
	250 W for LXM05CD10M3X, 200240 V, three phase				
	250 W for LXM05CD14N4, 380480 V, three phase				
	310 W for LXM15LD13M3, 230 V, three phase				
	240 M for I VM4ELLICONA 220 V three phase				

310 W for LXM15LU60N4, 230 V, three phase

Nominal torque	0.65 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase				
	0.65 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase				
	0.75 N.m for LXM15LD13M3, 230 V, single phase				
	2.17 N.m for LXM05CU70M2, 200240 V, single phase 2.7 N.m for LXM05AD10M2, 200240 V, single phase				
	2.7 N.m for LXM05BD10M2, 200240 V, single phase				
	2.7 N.m for LXM05CD10M2, 200240 V, single phase				
	0.75 N.m for LXM15LD13M3 at 1.5 A, 230 V, three phase				
	0.75 N.m for LXM15LU60N4, 230 V, three phase				
	2.7 N.m for LXM05AD10M3X, 200240 V, three phase 2.7 N.m for LXM05AD14N4, 380480 V, three phase				
	2.7 N.m for LXM05BD10M3X, 200400 V, three phase				
	2.7 N.m for LXM05BD14N4, 380480 V, three phase				
	2.7 N.m for LXM05CD10M3X, 200240 V, three phase				
	2.7 N.m for LXM05CD14N4, 380480 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				
	3000 rpm for LXM05CU70M2, 200240 V, single phase 3000 rpm for LXM05AD10M2, 200240 V, single phase				
	3000 rpm for LXM05BD10M2, 200240 V, single phase				
	3000 rpm for LXM05CD10M2 at 1.5 A, 200240 V, single phase				
	3000 rpm for LXM05AD10M3X, 200240 V, three phase				
	3000 rpm for LXM05AD14N4, 380480 V, three phase				
	3000 rpm for LXM05BD10M3X, 200240 V, three phase				
	3000 rpm for LXM05BD14N4, 380480 V, three phase 3000 rpm for LXM05CD10M3X, 200240 V, three phase				
	3000 rpm for LXM05CD14N4, 380240 V, three phase				
	4000 rpm for LXM15LD13M3, 230 V, three phase				
Product compatibility	LXM05AD10M2 at 200240 V single phase				
	LXM05BD10M2 at 200240 V single phase				
	LXM05CD10M2 at 200240 V single phase				
	LXM05CU70M2 at 200240 V single phase				
	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				
	LXM05AD10M3X at 200240 V three phase				
	LXM05BD10M3X at 200240 V three phase				
	LXM05CD10M3X at 200240 V three phase				
	LXM15LD13M3 at 230 V three phase				
	LXM05AD14N4 at 380480 V three phase LXM05BD14N4 at 380480 V three phase				
	LXM05CD14N4 at 380480 V three phase				
Shaft end	Keyed				
IP degree of protection	IP50 standard				
Speed feedback resolution	131072 points/turn x 4096 turns				
Holding brake	With				
Mounting support	International standard flange				
Electrical connection					
Liecti icai connection	Rotatable right-angled connectors				
Complementary					
Range compatibility	Lexium 15				
	Lexium 32				
	Lexium 05				
supply voltage max	480 V				
Network number of phases	Three phase				
Continuous stall current	1.2 A				
maximum continuous power	0.67 W				

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Maximum current Irms	5.9 A for LXM15LD13M3 5.9 A for LXM05CU70M2 4.8 A for LXM05AD10M2 4.8 A for LXM05AD10M3X 4.8 A for LXM05AD14N4 4.8 A for LXM05BD10M2 4.8 A for LXM05BD10M3X 4.8 A for LXM05BD10M3X 4.8 A for LXM05BD10M3X 4.8 A for LXM05BD10M3X 4.8 A for LXM05CD10M2 4.8 A for LXM05CD10M2 4.8 A for LXM05CD10M4 4.8 A for LXM05CD10M3X 4.8 A for LXM05CD10M3X 4.8 A for LXM05CD10M3X 4.8 A for LXM05CD14N4 4.8 A for LXM05CD14N4					
Maximum permanent current	4.8 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					
Holding torque	0.8 N.m holding brake					
Motor flange size	55 mm					
Number of motor stacks	2					
Torque constant	0.7 N.m/A at 120 °C					
Back emf constant	40 V/krpm at 120 °C					
Number of motor poles	3.0					
Rotor inertia	0.1173 kg.cm²					
Stator resistance	17.4 Ohm at 20 °C					
Stator inductance	18.2 mH at 20 °C					
Stator electrical time constant	2.03 ms at 20 °C					
Maximum radial force Fr	190 N at 7000 rpm 190 N at 8000 rpm 200 N at 6000 rpm 220 N at 5000 rpm 230 N at 4000 rpm 260 N at 3000 rpm 290 N at 2000 rpm 370 N at 1000 rpm					
Maximum axial force Fa	0.2 x Fr					
Brake pull-in power	10 W					
type of cooling	Natural convection					
Length	181 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	1.6 kg					
Sizing reference	BSH0552P					
Network number of phases	3					

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Accuracy error [angular]	1.4 °	
Temperature copper hot	120 °C	
Temperature magnet hot	100 °C	
Temperature magnet rt	20 °C	

Packing Units

Unit Type of Package 1	PCE
Office Type of Fackage 1	FOE
Number of Units in Package 1	1
Package 1 Height	12.3 cm
Package 1 Width	12.8 cm
Package 1 Length	37.7 cm
Package 1 Weight	1.25 kg

Contractual warranty

Warranty 18 months



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.eq.CO2 per CR, Total Life cycle)	452
Environmental Disclosure	Product Environmental Profile

Use Better

⊗ Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	8c11b0c9-e501-4810-83eb-05fc6605ede4
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

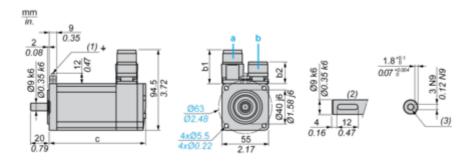
○ Repack and remanufacture						
Circularity Profile	No need of specific recycling operations					
Take-back	No					
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins					

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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 c	onnectors	Rotatable angled connectors		- (i4b4 bl)	a (with hards)
b	b1	b	b1	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	154.5	181

Dimensions in in.

Difficiolorio III III.						
Straight connectors		Rotatable angled connectors		- (itht hl)	- (ith huales)	
b	b1	b	b1	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	6.08	7.12	

Product datasheet

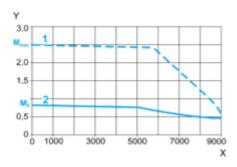
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive

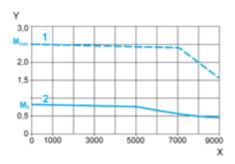


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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