



AC servo motor BSH - 1.4 N.m - 3000 rpm - untapped shaft - without brake - IP65

BSH0701P21A2A

Main

Mani	
Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	1.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
•	1.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
	1.4 N.m for LXM05AD10M3X, 200240 V, three phase
	1.4 N.m for LXM05BD10M3X, 200240 V, three phase
	1.4 N.m for LXM05CD10M3X, 200240 V, three phase
	1.4 N.m for LXM15LD13M3, 230 V, single phase
	1.4 N.m for LXM05AD10M2, 200240 V, single phase
	1.4 N.m for LXM05BD10M2, 200240 V, single phase
	1.4 N.m for LXM05CD10M2, 200240 V, single phase
	1.4 N.m for LXM15LU60N4, 230 V, three phase
Peak stall torque	3.5 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
	3.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
	2.66 N.m for LXM05AD10M3X, 200240 V, three phase
	2.66 N.m for LXM05BD10M3X, 200240 V, three phase
	2.66 N.m for LXM05CD10M3X, 200240 V, three phase
	2.66 N.m for LXM15LD13M3, 230 V, single phase
	2.66 N.m for LXM05AD10M2, 200240 V, single phase
	2.66 N.m for LXM05BD10M2, 200240 V, single phase
	2.66 N.m for LXM05CD10M2, 200240 V, single phase
	2.66 N.m for LXM15LU60N4, 230 V, three phase
Nominal output power	700 W for LXM32.D12N4 at 3 A, 400 V, three phase
	700 W for LXM32.D12N4 at 3 A, 480 V, three phase
	400 W for LXM05AD10M2, 200240 V, single phase
	400 W for LXM05BD10M2, 200240 V, single phase
	400 W for LXM05CD10M2, 200240 V, single phase
	411 W for LXM15LD13M3, 230 V, single phase
	400 W for LXM05AD10M3X, 200240 V, three phase
	400 W for LXM05BD10M3X, 200240 V, three phase
	400 W for LXM05CD10M3X, 200240 V, three phase
	411 W for LXM15LU60N4, 230 V, three phase
Nominal torque	1.32 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
	1.32 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
	1.3 N.m for LXM05AD10M2, 200240 V, single phase
	1.3 N.m for LXM05BD10M2, 200240 V, single phase
	1.3 N.m for LXM05CD10M2, 200240 V, single phase
	1.31 N.m for LXM15LD13M3, 230 V, single phase
	1.3 N.m for LXM05AD10M3X, 200240 V, three phase
	1.3 N.m for LXM05BD10M3X, 200240 V, three phase
	1.3 N.m for LXM05CD10M3X, 200240 V, three phase
	1.31 N.m for LXM15LU60N4, 230 V, three phase
Nominal speed	5000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase
	5000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase
	3000 rpm for LXM05AD10M2, 200240 V, single phase
	3000 rpm for LXM05BD10M2, 200240 V, single phase
	3000 rpm for LXM05CD10M2, 200240 V, single phase
	3000 rpm for LXM05AD10M3X, 200240 V, three phase
	3000 rpm for LXM05BD10M3X, 200240 V, three phase
	3000 rpm for LXM05CD10M3X, 200240 V, three phase
	3000 rpm for LXM15LD13M3, 230 V, single phase
	3000 rpm for LXM15LU60N4, 230 V, three phase
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Product compatibility	LXM05AD10M2 at 200240 V single phase LXM05BD10M2 at 200240 V single phase LXM05CD10M2 at 200240 V single phase LXM15LD13M3 at 230 V single phase LXM15LU60N4 at 230 V three phase LXM05AD10M3X at 200240 V three phase LXM05BD10M3X at 200240 V three phase LXM05CD10M3X at 200240 V three phase LXM05CD10M3X at 200240 V three phase LXM05CD10M3X at 200240 V three phase LXM32.D12N4 at 400 V three phase LXM32.D12N4 at 480 V three phase								
Shaft end	Untapped								
IP degree of protection	IP65 standard IP67 with IP67 kit								
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 05								
	Lexium 32								
supply voltage max	480 V								
Network number of phases	Three phase								
Continuous stall current	1.8 A								
maximum continuous power	1.06 W								
Maximum current Irms	5.7 A for LXM05AD10M3X 5.7 A for LXM05BD10M2 5.7 A for LXM05CD10M2 5.7 A for LXM05CD10M3X 5.3 A for LXM15LD13M3 5.3 A for LXM15LU60N4 5.7 A for LXM05AD10M2 5.7 A for LXM05AD10M2								
Maximum permanent current	5.7 A								
Switching frequency	8 kHz								
Second shaft	Without second shaft end								
Shaft diameter	11 mm								
Shaft length	23 mm								
Feedback type	Single turn SinCos Hiperface								
Motor flange size	70 mm								
Number of motor stacks	1								
Torque constant	0.8 N.m/A at 120 °C								
Back emf constant	46 V/krpm at 120 °C								
Number of motor poles	6								
Rotor inertia	0.25 kg.cm²								
Stator resistance	10.4 Ohm at 20 °C								
Stator inductance	38.8 mH at 20 °C								
Stator electrical time constant	3.73 ms at 20 °C								

Maximum radial force Fr	360 N at 6000 rpm 380 N at 5000 rpm 410 N at 4000 rpm 460 N at 3000 rpm 520 N at 2000 rpm 660 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	154 mm
Centring collar diameter	60 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	82 mm
Net weight	2.2 kg

Packing Units

Unit Type of Package 1	PCE
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	2.1 kg

Contractual warranty

Warranty 18 months



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Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance

	Mercury Free	
②	Rohs Exemption Information	Yes
	Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

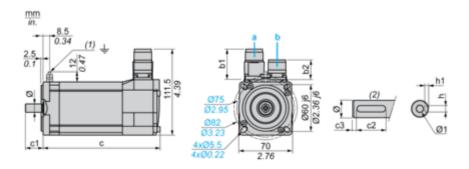
11 Sept 2024

BSH0701P21A2A

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)

Dimensions in mm

Straight Rotatable angled connectors connectors		•	c (without c (with	c1 c2	c2	c2 c3	h	h1	Ø	Ø1 for		
b1	b2	b1	b2	brake)	ake) brake)							screws
39.5	25.5	39.5	39.5	154	180	23	18	2.5	4 N9	2.5 ^{+0.1} ₀	11 k6	M4 x 10

Dimensions in in.

Straight connectors Rotatable angled connectors		c (without brake)	c (with brake)	с1	c2	с3	h	h1	Ø	Ø1 for screws		
b1	b2	b1	b2	Diake)								
1.55	1.00	1.55	1.55	6.06	7.08	0.90	0.70	0.09	0.16 N9	0.01 ^{+0.004} 0	0.43 k6	M4 x 0.39

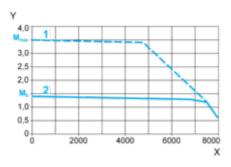
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive

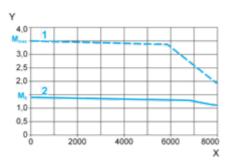


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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