Product datasheet

Specification





AC servo motor BSH, Lexium 32, 14.4N.m, 3000rpm, untapped shaft, without brake, IP65

BSH1402T22A2P

Main

IVIAIII						
Device short name	BSH					
Product or component type	Servo motor					
Maximum mechanical speed	4000 rpm					
Continuous stall torque	19.5 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 19.5 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 14.4 N.m for LXM05AD42M3X, 200240 V, three phase 14.4 N.m for LXM05BD42M3X, 200240 V, three phase 14.4 N.m for LXM05CD42M3X, 200240 V, three phase					
Peak stall torque	59.3 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 59.3 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 24.56 N.m for LXM05AD42M3X, 200240 V, three phase 24.56 N.m for LXM05BD42M3X, 200240 V, three phase					
Nominal output power	3900 W for LXM32.D72N4 at 24 A, 400 V, three phase 3900 W for LXM32.D72N4 at 24 A, 480 V, three phase 2900 W for LXM05AD42M3X, 200240 V, three phase 2900 W for LXM05BD42M3X, 200240 V, three phase 2900 W for LXM05CD42M3X, 200240 V, three phase					
Nominal torque	12.3 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 12.3 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 9.2 N.m for LXM05AD42M3X, 200240 V, three phase 9.2 N.m for LXM05BD42M3X, 200240 V, three phase 9.2 N.m for LXM05CD42M3X, 200240 V, three phase					
Nominal speed	3000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 3000 rpm for LXM32.D72N4 at 24 A, 480 V, three phase 3000 rpm for LXM05AD42M3X, 200240 V, three phase 3000 rpm for LXM05BD42M3X, 200240 V, three phase 3000 rpm for LXM05CD42M3X, 200240 V, three phase					
Product compatibility	LXM05AD42M3X at 200240 V three phase LXM05BD42M3X at 200240 V three phase LXM05CD42M3X at 200240 V three phase					
Shaft end	Untapped					
IP degree of protection	IP65 standard IP67 with IP67 kit					
Speed feedback resolution	131072 points/turn x 4096 turns					
Holding brake	Without					
mounting support	International standard flange					
Electrical connection	Rotatable right-angled connectors					

Complementary

Range compatibility	Lexium 05 Lexium 32			
supply voltage max	480 V			
Network number of phases	Three phase			

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Continuous stall current	22.5 A				
maximum continuous power	4.2 W				
Maximum current Irms	72 A for LXM32.D72N4 75.2 A for LXM05AD42M3X 75.2 A for LXM05BD42M3X 75.2 A for LXM05CD42M3X				
Maximum permanent current	75.2 A				
Switching frequency	8 kHz				
Second shaft	Without second shaft end				
Shaft diameter	24 mm				
Shaft length	50 mm				
Feedback type	Multiturn SinCos Hiperface				
Motor flange size	140 mm				
Number of motor stacks	2				
Torque constant	1.47 N.m/A at 120 °C				
Back emf constant	101 V/krpm at 120 °C				
Number of motor poles	10				
Rotor inertia	12.68 kg.cm²				
Stator resistance	0.6 Ohm at 20 °C				
Stator inductance	7.4 mH at 20 °C				
Stator electrical time constant	12.1 ms at 20 °C				
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm				
Maximum axial force Fa	0.2 x Fr				
Type of cooling	Natural convection				
Length	272.5 mm				
Centring collar diameter	130 mm				
Centring collar depth	3.5 mm				
Number of mounting holes	4				
Mounting holes diameter	11 mm				
Circle diameter of the mounting holes	165 mm				
Product weight	16.6 kg				

Packing Units

Unit Type of Package 1	PCE				
Number of Units in Package 1	1				
Package 1 Height	27.0 cm				
Package 1 Width	27.0 cm				
Package 1 Length	48.2 cm				
Package 1 Weight	11.5 kg				

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Certifications & Standards

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				

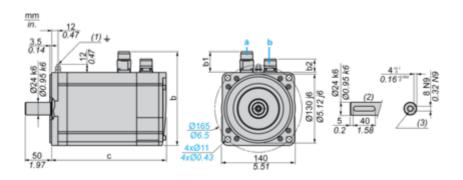
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Dimensions Drawings

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 screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors			a (itha at hanalaa)	a (with hardsa)	
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
192.5	54	25.5	198.5	60	39.5	273	311

Dimensions in in.

Straig	Straight connectors Rotatable angled connectors			c (without brake) c (with br			
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.57	2.12	1.00	7.81	2.36	1.55	10.74	12.24

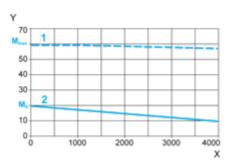
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

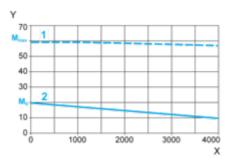


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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