Product data sheet





servo motor BSH, Lexium 32, 27.8N.m, 3000rpm, 140mm, keyed shaft, Sincos single turn, without brake, IP65

BSH1403T31A2P

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

Price*: 2,576.00 USD

Main

Product Or Component Type	Servo motor				
Device Short Name	BSH				
Maximum Mechanical Speed	4800 rpm				
Continuous Stall Torque	246.05 lbf.in (27.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 246.05 lbf.in (27.8 N.m) LXM32.D72N4 24 A, 480 V, three phase				
Peak Stall Torque	798.34 lbf.in (90.2 N.m) LXM32.D72N4 24 A, 400 V, three phase 798.34 lbf.in (90.2 N.m) LXM32.D72N4 24 A, 480 V, three phase				
Nominal Output Power	4100 W LXM32.D72N4 24 A, 400 V, three phase 4100 W LXM32.D72N4 24 A, 480 V, three phase				
Nominal Torque	114.17 lbf.in (12.9 N.m) LXM32.D72N4 24 A, 400 V, three phase 114.17 lbf.in (12.9 N.m) LXM32.D72N4 24 A, 480 V, three phase				
Nominal Speed	3000 rpm LXM32.D72N4 24 A, 400 V, three phase 3000 rpm LXM32.D72N4 24 A, 480 V, three phase				
Product Compatibility	LXM32.D72N4 400 V three phase LXM32.D72N4 480 V three phase				
Shaft End	Keyed				
Ip Degree Of Protection	IP65 standard IP67 with IP67 kit				
Speed Feedback Resolution	131072 points/turn				
Holding Brake	Without				
Mounting Support	International standard				
Electrical Connection	Rotatable right-angled connectors				

Complementary

Range Compatibility	Lexium 32			
Supply Voltage Max	480 V			
Phase	Three phase			
Continuous Stall Current	22.3 A			
Maximum Continuous Power	3.3 W			
Maximum Current Irms	72 A LXM32.D72N4			
Maximum Permanent Current	81.3 A			
Switching Frequency	8 kHz			

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

Second Shaft	Without second shaft end					
Shaft Diameter	0.94 in (24 mm)					
Shaft Length	1.97 in (50 mm)					
Key Width	1.57 in (40 mm)					
Feedback Type	Single turn SinCos Hiperface					
Motor Flange Size	5.51 in (140 mm)					
Number Of Motor Stacks	3					
Torque Constant	1.58 N.m/A 248 °F (120 °C)					
Back Emf Constant	105 V/krpm 248 °F (120 °C)					
Number Of Motor Poles	10					
Rotor Inertia	12.68 kg.cm²					
Stator Resistance	0.4 Ohm 68 °F (20 °C)					
Stator Inductance	5.1 mH 68 °F (20 °C)					
Stator Electrical Time Constant	12.75 ms 68 °F (20 °C)					
Maximum Radial Force Fr	1780 N 3000 rpm 2030 N 2000 rpm 2560 N 1000 rpm					
Maximum Axial Force Fa	0.2 x Fr					
Type Of Cooling	Natural convection					
Length	12.89 in (327.5 mm)					
Centring Collar Diameter	5.12 in (130 mm)					
Centring Collar Depth	0.14 in (3.5 mm)					
Number Of Mounting Holes	4					
Mounting Holes Diameter	0.43 in (11 mm)					
Circle Diameter Of The Mounting Holes	6.50 in (165 mm)					
Net Weight	46.74 lb(US) (21.2 kg)					

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
Gtin	3606485201535
Returnability	No
Country Of Origin	DE

Packing Units

Unit Type Of Package 1	PCE		
Number Of Units In Package 1	1		
Package 1 Height	10.63 in (27.0 cm)		
Package 1 Width	10.63 in (27.0 cm)		
Package 1 Length	18.98 in (48.2 cm)		
Package 1 Weight	25.35 lb(US) (11.5 kg)		

Contractual warranty

Warranty

Apr 25, 2024

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

Ø	Mercury Free	
	Rohs Exemption Information	Yes
②	Pvc Free	

Certifications & Standards

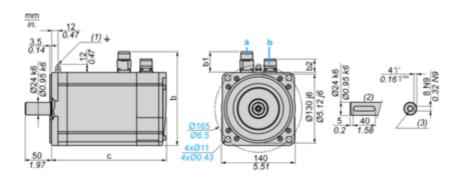
Reach Regulation	Pro-active compliance (Product out of EU RoHS legal scope)				
Eu Rohs Directive					
China Rohs Regulation	China RoHS declaration				
Environmental Disclosure	Product Environmental Profile				
Weee	The product must be disposed on European Union markets following specific waste collection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

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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 Ro			Rotatable angled connectors			- (-:46461)	- (:th- h1)
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
192.5	54	25.5	198.5	60	39.5	328	366

Dimensions in in.

Straig	Straight connectors Rotatable angled connectors			a (with a state and sa)	- (ith hards)		
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.57	2.12	1.00	7.81	2.36	1.55	12.91	14.40

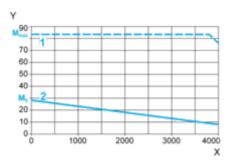
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

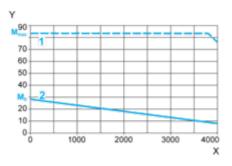


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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