Product data sheet





AC servo motor BSH, Lexium 32, 27.8N.m, 3000rpm, untapped shaft, with brake, IP50

BSH1403T02F2P

! Discontinued on: Jun 30, 2023



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

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	Untapped				
Ip Degree Of Protection	on IP50 standard				
Speed Feedback Resolution	131072 points/turn x 4096 turns				
Holding Brake	With				
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		
Second Shaft	Without second shaft end		

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

Shaft Diameter	0.94 in (24 mm)			
Shaft Length	1.97 in (50 mm)			
Feedback Type	Multiturn SinCos Hiperface			
Holding Torque	318.63 lbf.in (36 N.m) holding brake			
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	14.48 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			
Brake Pull-In Power	26 W			
Type Of Cooling	Natural convection			
Length	14.39 in (365.5 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	50.71 lb(US) (23 kg)			

Ordering and shipping details

Category	US1PC5318282		
Discount Schedule	PC53		
Gtin	3606485201351		
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	29.30 lb(US) (13.29 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



Certifications & Standards

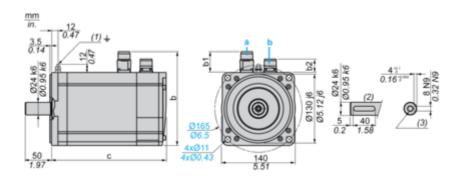
Reach Regulation	Pro-active compliance (Product out of EU RoHS legal scope)				
Eu Rohs Directive					
China Rohs Regulation	China RoHS declaration				
Environmental Disclosure	Product Environmental Profile				
Weee	The product must be disposed on European Union markets following specific waste collection 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		Rotatable angled connectors			a (itha atha aadaa)	- (ith hands-)	
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.

Straight connectors Rotatable angled connectors		- (iththl)	a (with harden)				
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

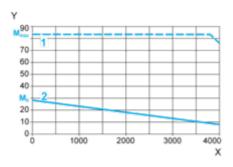
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

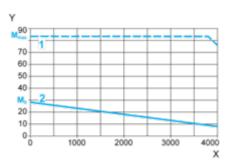


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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