Product data sheet

Specification





AC servo motor BSH, Lexium 32, 32.1N.m, 3000rpm, untapped shaft, with brake, IP65

BSH1404P21F1P

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

Price*: 5,122.50 USD

Main

Product Or Component Type	Servo motor				
Device Short Name	BSH				
Maximum Mechanical Speed	4000 rpm				
Continuous Stall Torque	295.61 lbf.in (33.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 295.61 lbf.in (33.4 N.m) LXM32.D72N4 24 A, 480 V, three phase 284.11 lbf.in (32.1 N.m) LXM05AD57N4, 380480 V, three phase 284.11 lbf.in (32.1 N.m) LXM05BD57N4, 380480 V, three phase 284.11 lbf.in (32.1 N.m) LXM05BD57N4, 380480 V, three phase 284.11 lbf.in (32.1 N.m) LXM05CD57N4, 380480 V, three phase				
Peak Stall Torque	916.94 lbf.in (103.6 N.m) LXM32.D72N4 24 A, 400 V, three phase 916.94 lbf.in (103.6 N.m) LXM32.D72N4 24 A, 480 V, three phase 558.39 lbf.in (63.09 N.m) LXM05AD57N4, 380480 V, three phase 558.39 lbf.in (63.09 N.m) LXM05BD57N4, 380480 V, three phase 558.39 lbf.in (63.09 N.m) LXM05CD57N4, 380480 V, three phase				
Nominal Output Power	5000 W LXM32.D72N4 24 A, 400 V, three phase 5000 W LXM32.D72N4 24 A, 480 V, three phase 3400 W LXM05AD57N4, 380480 V, three phase 3400 W LXM05BD57N4, 380480 V, three phase 3400 W LXM05CD57N4, 380480 V, three phase				
Nominal Torque	168.16 lbf.in (19 N.m) LXM32.D72N4 24 A, 400 V, three phase 168.16 lbf.in (19 N.m) LXM32.D72N4 24 A, 480 V, three phase 95.59 lbf.in (10.8 N.m) LXM05AD57N4, 380480 V, three phase 95.59 lbf.in (10.8 N.m) LXM05BD57N4, 380480 V, three phase 95.59 lbf.in (10.8 N.m) LXM05CD57N4, 380480 V, three phase				
Nominal Speed	2500 rpm LXM32.D72N4 24 A, 400 V, three phase 2500 rpm LXM32.D72N4 24 A, 480 V, three phase 3000 rpm LXM05AD57N4, 380480 V, three phase 3000 rpm LXM05BD57N4, 380480 V, three phase 3000 rpm LXM05CD57N4, 380480 V, three phase				
Product Compatibility	LXM05AD57N4 380480 V three phase LXM05BD57N4 380480 V three phase LXM05CD57N4 380480 V three phase LXM32.D72N4 400 V three phase LXM32.D72N4 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	With				
Mounting Support	International standard flange				
Electrical Connection	Straight connectors				

Complementary

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

Range Compatibility	Lexium 32 Lexium 05				
Supply Voltage Max	480 V				
Phase	Three phase				
Continuous Stall Current	21.3 A				
Maximum Continuous Power	4.33 W				
Maximum Current Irms	72 A LXM32.D72N4 95.6 A LXM05AD57N4 95.6 A LXM05BD57N4 95.6 A LXM05CD57N4				
Maximum Permanent Current	95.6 A				
Switching Frequency	8 kHz				
Second Shaft	Without second shaft end				
Shaft Diameter	0.94 in (24 mm)				
Shaft Length	1.97 in (50 mm)				
Feedback Type	Single turn 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	4				
Torque Constant	1.57 N.m/A 248 °F (120 °C)				
Back Emf Constant	104 V/krpm 248 °F (120 °C)				
Number Of Motor Poles	10				
Rotor Inertia	29.2 kg.cm²				
Stator Resistance	0.28 Ohm 68 °F (20 °C)				
Stator Inductance	3.9 mH 68 °F (20 °C)				
Stator Electrical Time Constant	13.93 ms 68 °F (20 °C)				
Maximum Radial Force Fr	1840 N 3000 rpm 2110 N 2000 rpm 2660 N 1000 rpm				
Maximum Axial Force Fa	0.2 x Fr				
Brake Pull-In Power	26 W				
Type Of Cooling	Natural convection				
Length	16.56 in (420.5 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	61.29 lb(US) (27.8 kg)				

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
Gtin	3389118361577

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	23.86 in (60.6 cm)		
Package 1 Weight	45.42 lb(US) (20.6 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

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				

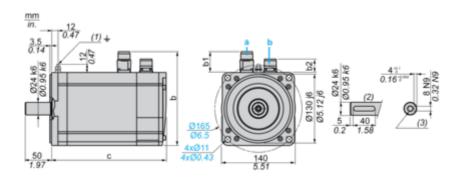
Apr 25, 2024

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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		ors Rotatable angled connectors		a (itha atha aadaa)	- (ith hards-)		
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
192.5	54	25.5	198.5	60	39.5	383	421

Dimensions in in.

Straight connectors		Rotatable angled connectors		a (itha atha aadaa)	(د ا د د ا داند د ا		
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.57	2.12	1.00	7.81	2.36	1.55	15.07	16.57

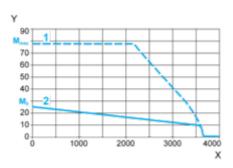
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

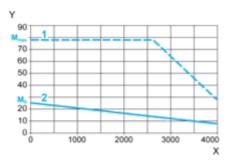


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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