Product data sheet





servo motor BMH, Lexium 32, 3.3Nm, 6000rpm, untapped shaft, with brake, IP65, IP67, 128bit encoder, straight

BMH1001P21F1A

! 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	ВМН			
Maximum Mechanical Speed	6000 rpm			
Continuous Stall Torque	29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 400 V, three phase			
	29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 480 V, three phase			
	30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 400 V, three phase			
	30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Peak Stall Torque	95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 400 V, three phase			
	95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 480 V, three phase			
	95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 400 V, three phase			
	95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Nominal Output Power	800 W LXM32.D12N4 3 A, 400 V, three phase			
	800 W LXM32.D12N4 3 A, 480 V, three phase			
	1300 W LXM32.D18N4 6 A, 400 V, three phase			
	1300 W LXM32.D18N4 6 A, 480 V, three phase			
Nominal Torque	16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 400 V, three phase			
·	16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 480 V, three phase			
	27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 400 V, three phase			
	27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Nominal Speed	4000 rpm LXM32.D12N4 3 A, 400 V, three phase			
	4000 rpm LXM32.D12N4 3 A, 480 V, three phase			
	4000 rpm LXM32.D18N4 6 A, 400 V, three phase			
	4000 rpm LXM32.D18N4 6 A, 480 V, three phase			
Product Compatibility	LXM32.D12N4 400480 V three phase			
. ,	LXM32.D18N4 400480 V three phase			
	<u> </u>			
Shaft End	Smooth shaft			
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

Range Compatibility	Lexium 32		
[Us] Rated Supply Voltage	480 V		
Phase	Three phase		

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

Continuous Stall Current	3.15 A		
Continuous Power	1.76 W		
Maximum Current Irms	11.9 A LXM32.D12N4 11.9 A LXM32.D18N4		
Maximum Permanent Current	11.93 A		
Second Shaft	Without second shaft end		
Shaft Diameter	0.75 in (19 mm)		
Shaft Length	1.57 in (40 mm)		
Feedback Type	Single turn SinCos Hiperface		
Holding Torque	48.68 lbf.in (5.5 N.m) holding brake		
Motor Flange Size	3.94 in (100 mm)		
Number Of Motor Stacks	1		
Torque Constant	1.1 N.m/A 248 °F (120 °C)		
Back Emf Constant	70.3 V/krpm 248 °F (120 °C)		
Number Of Motor Poles	10		
Rotor Inertia	3.68 kg.cm ²		
Stator Resistance	3.1 Ohm 68 °F (20 °C)		
Stator Inductance	13.9 mH 68 °F (20 °C)		
Stator Electrical Time Constant	4.5 ms 68 °F (20 °C)		
Maximum Radial Force Fr	900 N 1000 rpm 720 N 2000 rpm 630 N 3000 rpm 570 N 4000 rpm 530 N 5000 rpm		
Maximum Axial Force Fa	0.2 x Fr		
Brake Pull-In Power	12 W		
Type Of Cooling	Natural convection		
Length	6.70 in (170.3 mm)		
Centring Collar Diameter	3.74 in (95 mm)		
Centring Collar Depth	0.14 in (3.5 mm)		
Number Of Mounting Holes	4		
Mounting Holes Diameter	0.35 in (9 mm)		
Circle Diameter Of The Mounting Holes	4.53 in (115 mm)		
Net Weight	10.58 lb(US) (4.8 kg)		

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
Gtin	3606485200224
Returnability	No
Country Of Origin	DE

Packing Units

Unit Type Of Package 1	PCE		
Number Of Units In Package 1	1		
Package 1 Height	8.66 in (22.0 cm)		
Package 1 Width	7.87 in (20.0 cm)		
Package 1 Length	15.75 in (40.0 cm)		
Package 1 Weight	11.24 lb(US) (5.1 kg)		

Contractual warranty

Warranty 18 months

Sustainability Green 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

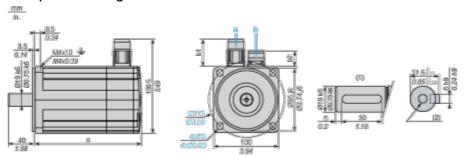
Reach Regulation	REACh Declaration			
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)			
China Rohs Regulation	China RoHS declaration			
Environmental Disclosure	Product Environmental Profile			
Weee	The product must be disposed on European Union markets following specific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

BMH1001P21F1A

Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) Shaft end, keyed slot (optional)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		- (i4b4 bl)	a (with handsa)
b1	b2	b1	b2	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	128	170

Dimensions in in.

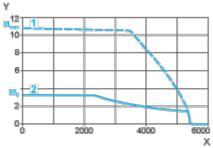
Straight connectors		Rotatable angled connectors		c (without brake)	(درامیرها والمنین)	
b1	b2	b1	b2	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	5.03	6.69	

Performance Curves

400 V 3-Phase Supply Voltage

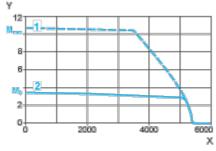
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive

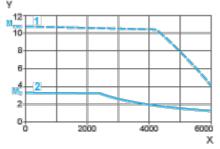


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

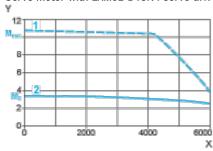
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive



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