Product data sheet





servo motor BMH, Lexium 32, 3.4Nm, 8000rpm, keyed shaft, with brake, IP65, IP67, 128bit encoder, straight, 3 phases

BMH0703P31F1A

! Discontinued on: Oct 9, 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	8000 rpm
Continuous Stall Torque	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	90.28 lbf.in (10.2 N.m) LXM32.D18N4 6 A, 400 V, three phase 90.28 lbf.in (10.2 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal Output Power	1300 W LXM32.D18N4 6 A, 400 V, three phase 1300 W LXM32.D18N4 6 A, 480 V, three phase
Nominal Torque	21.24 lbf.in (2.4 N.m) LXM32.D18N4 6 A, 400 V, three phase 21.24 lbf.in (2.4 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal Speed	5000 rpm LXM32.D18N4 6 A, 400 V, three phase 5000 rpm LXM32.D18N4 6 A, 480 V, three phase
Product Compatibility	LXM32.D18N4 400480 V three phase
Shaft End	Keyed
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
Continuous Stall Current	3.91 A
Continuous Power	1.68 W
Maximum Current Irms	12.6 A LXM32.D18N4
Maximum Permanent Current	12.57 A
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	0.55 in (14 mm)					
Shaft Length	1.18 in (30 mm)					
Key Width	0.79 in (20 mm)					
Feedback Type	Single turn SinCos Hiperface					
Holding Torque	26.55 lbf.in (3 N.m) holding brake					
Motor Flange Size	2.76 in (70 mm)					
Number Of Motor Stacks	3					
Torque Constant	0.87 N.m/A 248 °F (120 °C)					
Back Emf Constant	55.8 V/krpm 248 °F (120 °C)					
Number Of Motor Poles	10					
Rotor Inertia	1.78 kg.cm²					
Stator Resistance	2.65 Ohm 68 °F (20 °C)					
Stator Inductance	8.6 mH 68 °F (20 °C)					
Stator Electrical Time Constant	3.2 ms 68 °F (20 °C)					
Maximum Radial Force Fr	730 N 1000 rpm 580 N 2000 rpm 510 N 3000 rpm 460 N 4000 rpm 430 N 5000 rpm 400 N 6000 rpm					
Maximum Axial Force Fa	0.2 x Fr					
Brake Pull-In Power	7 W					
Type Of Cooling	Natural convection					
Length	8.86 in (225 mm)					
Centring Collar Diameter	2.36 in (60 mm)					
Centring Collar Depth	0.10 in (2.5 mm)					
Number Of Mounting Holes	4					
Mounting Holes Diameter	0.22 in (5.5 mm)					
Circle Diameter Of The Mounting Holes	3.23 in (82 mm)					
Net Weight	8.82 lb(US) (4 kg)					

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
Gtin	3606485199108
Returnability	No
Country Of Origin	DE

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.33 in (11.0 cm)
Package 1 Width	7.87 in (20.0 cm)

Package 1 Length	15.75 in (40.0 cm)
Package 1 Weight	7.05 lb(US) (3.2 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

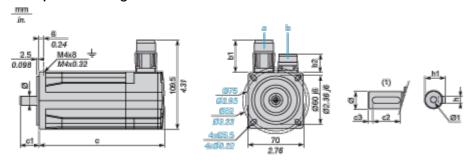
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection 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

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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) Shaft end, keyed slot (optional)

Dimensions in mm

Straight Rotatable ang connectors		•	c (without	c (with	c1	c2	сЗ	h	h1	Ø	Ø1 for	
b1	b2	b1	b2	brake)	brake)							screws
39.5	25.5	39.5	39.5	186	225	30	20	5	5 h9	16 ⁺⁰ _ 0.13	14 k6	M5 x 17

Dimensions in in.

Straigh		Rotata angled connec		c (without	c (with brake)	c1	c2	с3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2	brake)								
1.55	1	1.55	1.55	7.32	8.85	1.18	0.78	0.19	0.20 h9	0.63 ⁺⁰ _ 0.0051	0.55 k6	M5 x 0.67

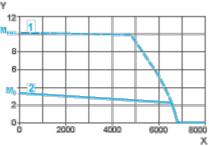
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

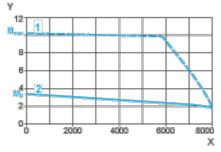


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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