BMH1003P17F2A

servo motor BMH, Lexium 32, 8.4Nm, 6000rpm, keyed shaft, with brake, IP54, 16 multiturn encoder





Main	
Product or Component Type	Servo motor
Device short name	ВМН
Maximum mechanical speed	6000 rpm
Continuous stall torque	74.35 Lbf.In (8.4 N.m) LXM32.D30N4 10 A, 400 V, three phase 74.35 lbf.in (8.4 N.m) LXM32.D30N4 10 A, 480 V, three phase
Peak stall torque	222.15 Lbf.In (25.1 N.m) LXM32.D30N4 10 A, 400 V, three phase 222.15 lbf.in (25.1 N.m) LXM32.D30N4 10 A, 480 V, three phase
Nominal output power	2700 W LXM32.D30N4 10 A, 400 V, three phase 2700 W LXM32.D30N4 10 A, 480 V, three phase
Nominal torque	54.87 Lbf.In (6.2 N.m) LXM32.D30N4 10 A, 400 V, three phase 54.87 lbf.in (6.2 N.m) LXM32.D30N4 10 A, 480 V, three phase
Nominal speed	4000 rpm LXM32.D30N4 10 A, 400 V, three phase 4000 rpm LXM32.D30N4 10 A, 480 V, three phase
Product compatibility	LXM32.D30N4 400480 V three phase
Shaft end	Keyed
IP Degree of Protection	IP54 standard
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	With
Mounting Support	International standard flange

Rotatable right-angled connectors

Complementary

o implementary		
Range Compatibility	Lexium 32	
[Us] rated supply voltage	480 V	
Phase	Three phase	
Continuous stall current	7.69 A	
Continuous power	3.3 W	
Maximum current Irms	29.1 A LXM32.D30N4	
Maximum permanent current	29.1 A	
Second shaft	Without second shaft end	
Shaft diameter	0.75 in (19 mm)	
Shaft length	1.57 in (40 mm)	
Key width	1.18 in (30 mm)	
Feedback type	Multiturn SinCos Hiperface	
Holding torque	79.66 lbf.in (9 N.m) holding brake	
Motor flange size	3.94 in (100 mm)	
Number of motor stacks	3	
Torque constant	1 N.m/A 248 °F (120 °C)	
Back emf constant	63.5 V/krpm 248 °F (120 °C)	
Number of motor poles	10	

Electrical Connection

Rotor inertia	10.3 kg.cm ²		
Stator resistance	0.63 Ohm 68 °F (20 °C)		
Stator inductance	4 mH 68 °F (20 °C)		
Stator electrical time constant	6.3 ms 68 °F (20 °C)		
Maximum radial force Fr	1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm 610 N 5000 rpm		
Maximum axial force Fa	0.2 x Fr		
Brake pull-in power	18 W		
Type of cooling	Natural convection		
Length	9.22 in (234.3 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)		
Product Weight	17.97 lb(US) (8.15 kg)		

Ordering and shipping details

Category	18282-LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	3606485196794
Returnability	Yes
Country of origin	DE

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.68 in (19.500 cm)
Package 1 Width	8.66 in (22.000 cm)
Package 1 Length	15.55 in (39.500 cm)
Package 1 Weight	19.00 lb(US) (8.620 kg)
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	15.75 in (40.000 cm)
Package 2 Length	23.62 in (60.000 cm)
Package 2 Weight	39.44 lb(US) (17.890 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	31.50 in (80.000 cm)
Package 3 Length	23.62 in (60.000 cm)
Package 3 Weight	175.40 lb(US) (79.560 kg)

Offer Sustainability

Sustainable offer status Green Premium product			
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		
REACh Regulation	REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration		
Mercury free	Yes		

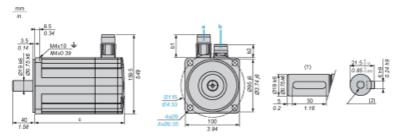
[™] China RoHS Declaration
₫Yes
Product Environmental Profile
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Yes
18 months

Product data sheet **Dimensions Drawings**

BMH1003P17F2A

Servo Motors Dimensions

Example with Straight Connectors



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

Dimensions in mm

Straight connectors	5	Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	192	234

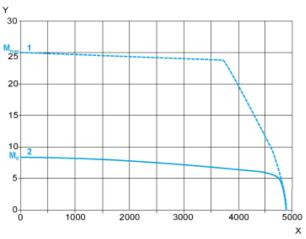
Dimensions in in.

Straight connectors	3	Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	7.55	9.21

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

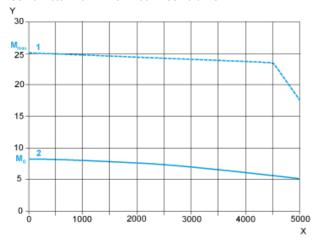


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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