# BMH1002P02F1A

servo motor BMH, Lexium 32, 6.2Nm, 6000rpm, untapped shaft, with brake, IP54, 128 multiturn encoder, straight





Main				
Product or Component Type	Servo motor			
Device short name	ВМН			
Maximum mechanical speed	6000 rpm			
Continuous stall torque	54.87 Lbf.In (6.2 N.m) LXM32.D18N4 6 A, 400 V, three phase 54.87 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Peak stall torque	162.85 Lbf.In (18.4 N.m) LXM32.D18N4 6 A, 400 V, three phase 162.85 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Nominal output power	1600 W LXM32.D18N4 6 A, 400 V, three phase 1600 W LXM32.D18N4 6 A, 480 V, three phase			
Nominal torque	34.52 Lbf.In (3.9 N.m) LXM32.D18N4 6 A, 400 V, three phase 34.52 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 480 V, three phase			
Nominal speed	4000 rpm LXM32.D18N4 6 A, 400 V, three phase 4000 rpm LXM32.D18N4 6 A, 480 V, three phase			
Product compatibility	LXM32.D18N4 400480 V three phase			
Shaft end	Smooth shaft			
IP Degree of Protection	IP54 standard			
Speed feedback resolution	131072 points/turn x 4096 turns			
Holding brake	With			
Mounting Support	International standard flange			

Straight connectors

#### Complementary

Complementary			
Range Compatibility	Lexium 32		
[Us] rated supply voltage	480 V		
Phase	Three phase		
Continuous stall current	5.04 A		
Continuous power	2.36 W		
Maximum current Irms	18 A LXM32.D18N4		
Maximum permanent current	18.23 A		
Second shaft	Without second shaft end		
Shaft diameter	0.75 in (19 mm)		
Shaft length	1.57 in (40 mm)		
Feedback type	Multiturn 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	2		
Torque constant	1.2 N.m/A 248 °F (120 °C)		
Back emf constant	77 V/krpm 248 °F (120 °C)		
Number of motor poles	10	10	
Rotor inertia	6.77 kg.cm²		

**Electrical Connection** 

Stator resistance	1.51 Ohm 68 °F (20 °C)		
Stator inductance	7.5 mH 68 °F (20 °C)		
Stator electrical time constant	5 ms 68 °F (20 °C)		
Maximum radial force Fr	990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm 580 N 5000 rpm		
Maximum axial force Fa	0.2 x Fr		
Brake pull-in power	12 W		
Type of cooling	Natural convection		
Length	7.96 in (202.3 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	14.11 lb(US) (6.4 kg)		

#### Ordering and shipping details

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Category	18282-LEXIUM 32 MOTORS		
Discount Schedule	PC53		
GTIN 3606485195919			
Returnability	No		
Country of origin	DE		

## Packing Units

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	14.82 lb(US) (6.720 kg)	
Unit Type of Package 2	S04	
Number of Units in Package 2	2	
Package 2 Height	11.81 in (30 cm)	
Package 2 Width	15.75 in (40 cm)	
Package 2 Length	23.62 in (60 cm)	
Package 2 Weight	31.06 lb(US) (14.090 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	141.89 lb(US) (64.360 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)		
Mercury free	Yes		
China RoHS Regulation	☑ China RoHS Declaration		

RoHS exemption information	₫Yes			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	No need of specific recycling operations			
WEEE	The product must be disposed on European Union markets following spec waste collection and never end up in rubbish bins.			
PVC free	Yes			

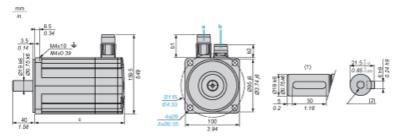
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Warranty	18 months

# Product data sheet **Dimensions Drawings**

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#### 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	S	Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	160	202

#### 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	6.29	7.95

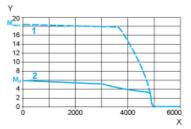
# Product data sheet Performance Curves

# BMH1002P02F1A

#### 400 V 3-Phase Supply Voltage

#### Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

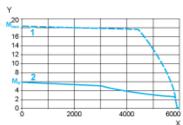


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

### 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