# BMH1003P11F2A

servo motor BMH - 8.4 Nm - 6000 rpm - keyed shaft - with brake - IP54





#### Main Product or component Servo motor type ВМН Device short name Maximum mechanical 6000 rpm speed Continuous stall torque 8.4 N.M for LXM32.D30N4 at 10 A, 400 V, three 8.4 N.m for LXM32.D30N4 at 10 A, 480 V, three Peak stall torque 25.1 N.M for LXM32.D30N4 at 10 A, 400 V, three 25.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 2700 W for LXM32.D30N4 at 10 A, 400 V, three Nominal output power phase 2700 W for LXM32.D30N4 at 10 A, 480 V, three phase Nominal torque 6.2 N.M for LXM32.D30N4 at 10 A, 400 V, three 6.2 N.m for LXM32.D30N4 at 10 A, 480 V, three phase Nominal speed 4000 rpm for LXM32.D30N4 at 10 A, 400 V, three 4000 rpm for LXM32.D30N4 at 10 A, 480 V, three Product compatibility LXM32.D30N4 at 400...480 V three phase

Keyed

With

IP54 standard

131072 points/turn

International standard flange

Rotatable right-angled connectors

#### Complementary

Complementary			
Range compatibility	Lexium 32		
[Us] rated supply voltage	480 V		
Network number of phases	Three phase		
Continuous stall current	7.69 A		
Continuous power	3.3 W		
Maximum current Irms	29.1 A for LXM32.D30N4		
Maximum permanent current	29.1 A		
Second shaft	Without second shaft end		
Shaft diameter	19 mm		
Shaft length	40 mm		
Key width	30 mm		
Feedback type	Single turn SinCos Hiperface		
Holding torque	9 N.m holding brake		
Motor flange size	100 mm		
Number of motor stacks	3		
Torque constant	1 N.m/A at 120 °C		
Back emf constant	63.5 V/krpm at 120 °C		

Shaft end

resolution
Holding brake

IP degree of protection

Speed feedback

Mounting support

Electrical connection

Number of motor poles	10		
Rotor inertia	10.3 kg.cm²		
Stator resistance	0.63 Ohm at 20 °C		
Stator inductance	4 mH at 20 °C		
Stator electrical time constant	6.3 ms at 20 °C		
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm		
Maximum axial force Fa	0.2 x Fr		
Brake pull-in power	18 W		
Type of cooling	Natural convection		
Length	234.3 mm		
Centring collar diameter	95 mm		
Centring collar depth	3.5 mm		
Number of mounting holes	4		
Mounting holes diameter	9 mm		
Circle diameter of the mounting holes	115 mm		
Net weight	8.15 kg		

## **Packing Units**

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	8.45 kg	
Package 1 Height	22.0 cm	
Package 1 width	20.0 cm	
Package 1 Length	40.0 cm	

# Offer Sustainability

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

#### Contractual warranty

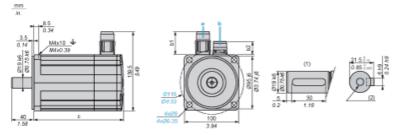
Contraction Warranty	
Warranty	18 months

# Product data sheet Dimensions Drawings

# BMH1003P11F2A

## 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		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		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

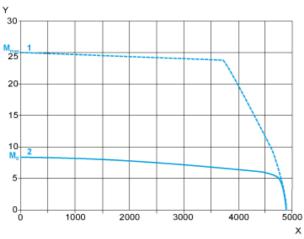
# Product data sheet **Performance Curves**

# BMH1003P11F2A

#### 400 V 3-Phase Supply Voltage

## Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

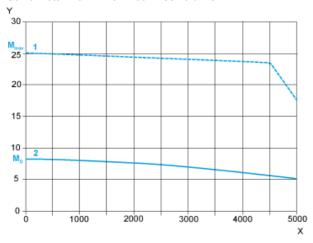


- X Y Speed in rpm
- Torque in Nm
- Peak torque
- Continuous torque

## 480 V 3-Phase Supply Voltage

## Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



- Speed in rpm
- Torque in Nm
- Peak torque 1
- Continuous torque