

# BMH1003P16A2A

servo motor BMH, Lexium 32, 8.4Nm,  
6000rpm, keyed shaft, without brake, IP54,  
16bit encoder



## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	8.4 N.M for LXM32.D30N4 at 10 A, 400 V, three phase 8.4 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
Peak stall torque	25.1 N.M for LXM32.D30N4 at 10 A, 400 V, three phase 25.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
Nominal output power	2700 W for LXM32.D30N4 at 10 A, 400 V, three 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 phase 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 phase 4000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase
Product compatibility	LXM32.D30N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## 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
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
Number of motor poles	10
Rotor inertia	9.37 kg.cm <sup>2</sup>
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
Type of cooling	Natural convection
Length	192.6 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	6.5 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.000 cm
Package 1 Width	19.500 cm
Package 1 Length	40.000 cm
Package 1 Weight	7.594 kg
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Height	105.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	100.876 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
Environmental Disclosure	 <a href="#">Product Environmental Profile</a>
Circularity Profile	No need of specific recycling operations
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

Warranty	18 months
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## 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

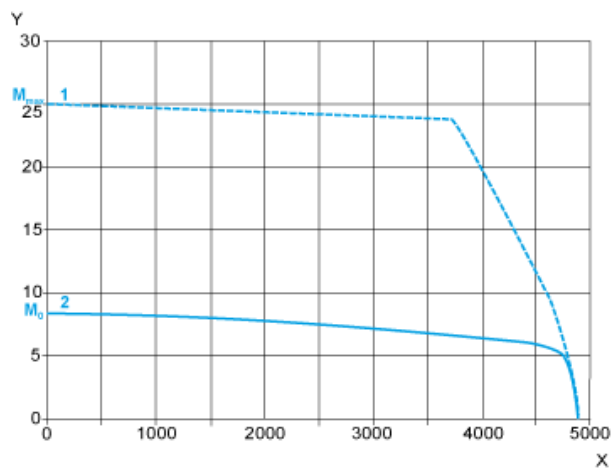
Dimensions in in.

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

### 400 V 3-Phase Supply Voltage

#### Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

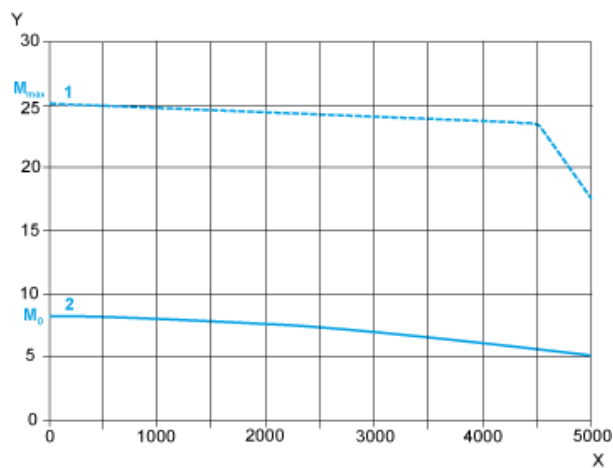


X Speed in rpm  
Y Torque in Nm  
1 Peak torque  
2 Continuous torque

### 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