

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

BMH1003P16A2A

# Main

Device short name	вмн	
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 400480 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

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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	26.71 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	1.17 N.m/A at 120 °C		
Back emf constant	63.5 V/krpm at 120 °C		
Number of motor poles	5.0		
Rotor inertia	9.37 kg.cm <sup>2</sup>		
Stator resistance	0.63 Ohm at 20 °C		
Stator inductance	2.615 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		
Sizing reference	BMH1003P		
Network number of phases	3		
Accuracy error [angular]	4.8 °		
Temperature copper hot	135 °C		
Temperature magnet hot	100 °C		
Temperature magnet rt	20 °C		

# **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	7.576 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

# **Contractual warranty**

Warranty

18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	Environmental footprint			
Total lifecycle Carbon footprint	2966			
Environmental Disclosure	Product Environmental Profile			

#### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACh Regulation	REACh Declaration
PVC free	Yes

# Use Again

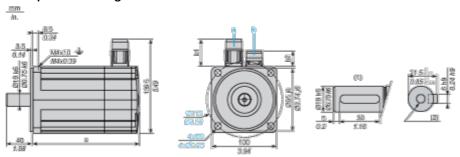
○ Repack and remanufacture				
End of life manual availability	No need of specific recycling operations			
Take-back	No			

# BMH1003P16A2A

# **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)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

#### Dimensions in mm

Straight o	Straight connectors Rotatable angled connectors		a (with and bunder)	a (with handsa)	
b1	b2	b1	b2 c (without brake)	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	192	234

#### Dimensions in in

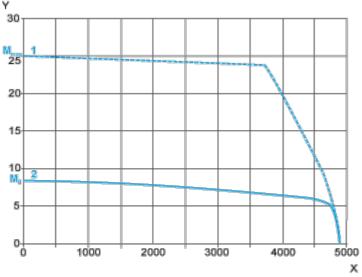
Zillionololo III III					
Straight c	traight connectors Rotatable angled connectors		a (with and breaks)	a (with broke)	
b1	b2	b1	b2	c (without brake)	c (with brake)
1.55	1.00	1.55	1.55	7.55	9.21

#### Performance Curves

# 400 V 3-Phase Supply Voltage

# **Torque/Speed Curves**

Servo motor with LXM32•D30N4 servo drive

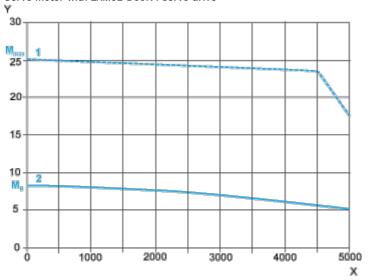


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

# 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