

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
3.3Nm, 6000rpm, untapped shaft,  
without brake, IP54, 16bit encoder

BMH1001P06A2A

## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	3.3 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 3.3 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 3.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Peak stall torque	10.8 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 10.8 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 10.8 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 10.8 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal output power	800 W for LXM32.D12N4 at 3 A, 400 V, three phase 800 W for LXM32.D12N4 at 3 A, 480 V, three phase 1300 W for LXM32.D18N4 at 6 A, 400 V, three phase 1300 W for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal torque	1.9 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 1.9 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 3.1 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.1 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal speed	4000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 4000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase LXM32.D18N4 at 400...480 V three phase
Shaft end	Smooth shaft
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	3.15 A
Continuous power	1.76 W
Maximum current Irms	11.2 A for LXM32.D12N4 11.9 A for LXM32.D18N4

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum permanent current	11.93 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	100 mm
Number of motor stacks	1
Torque constant	1.08 N.m/A at 120 °C
Back emf constant	70.3 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	3.19 kg.cm²
Stator resistance	3.1 Ohm at 20 °C
Stator inductance	7.45 mH at 20 °C
Stator electrical time constant	4.5 ms at 20 °C
Maximum radial force Fr	900 N at 1000 rpm 720 N at 2000 rpm 630 N at 3000 rpm 570 N at 4000 rpm 530 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	128.6 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	3.34 kg
Sizing reference	BMH1001P
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	19.500 cm
Package 1 Width	21.800 cm
Package 1 Length	40.000 cm
Package 1 Weight	4.578 kg
Unit Type of Package 2	S04

Number of Units in Package 2	2
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	9.806 kg
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	47.224 kg

## Contractual warranty

Warranty	18 months
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Environmental Data

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	
Total lifecycle Carbon footprint	1441
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACH Regulation	<a href="#">REACH Declaration</a>
PVC free	Yes

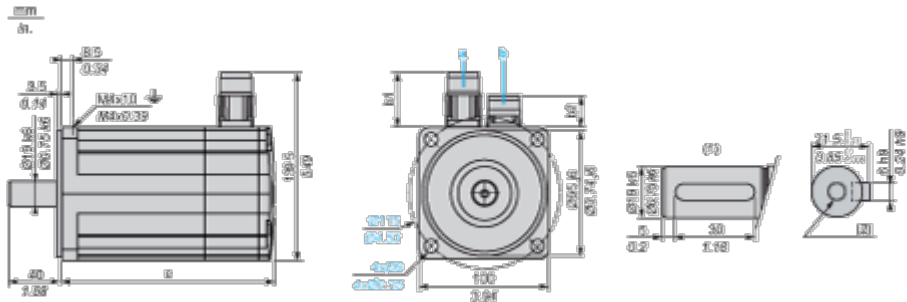
Use Again

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

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 connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	128	170

Dimensions in in.

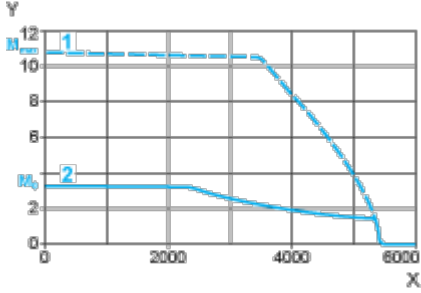
Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	5.03	6.69

Performance Curves

400 V 3-Phase Supply Voltage

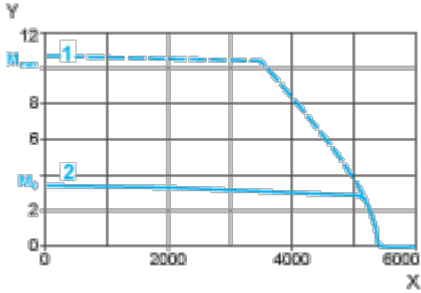
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive

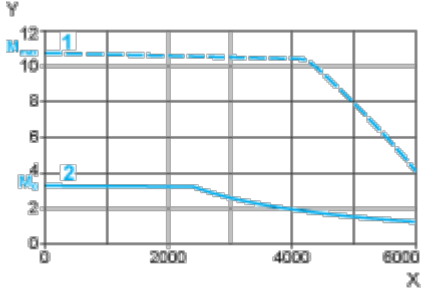


- X    Speed in rpm
- Y    Torque in Nm
- 1    Peak torque
- 2    Continuous torque

480 V 3-Phase Supply Voltage

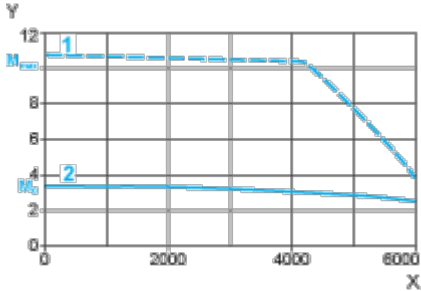
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive



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