

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

BMH1001P16A2A

Main

Device short name	вмн			
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 400480 V three phase LXM32.D18N4 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

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

Maximum permanent current	11.93 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	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.cm ²				
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	22.000 cm
Package 1 Width	19.000 cm
Package 1 Length	40.000 cm
Package 1 Weight	4.497 kg

Unit Type of Package 2	P06
Number of Units in Package 2	18
Package 2 Height	105.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	91.069 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	
Total lifecycle Carbon footprint	1442
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

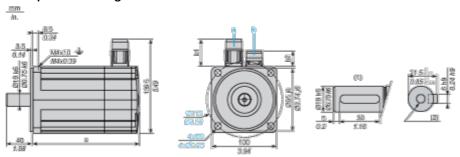
○ Repack and remanufacture						
End of life manual availability	No need of specific recycling operations					
Take-back	No					
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins					

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

Dimensions in in

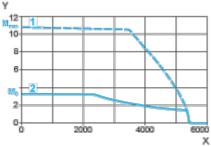
Straight c	onnectors	Rotatable angled connectors		c (without brake)	a (with hands)	
b1	b2	b1	b2	c (without brake)	c (with brake)	
1.55	1.00	1.55	1.55	5.03	6.69	

Performance Curves

400 V 3-Phase Supply Voltage

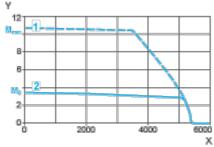
Torque/Speed Curves

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

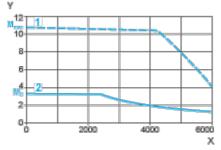


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

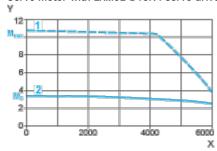
Torque/Speed Curves

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