

servo motor BMH, Lexium 32, 6.2Nm, 6000rpm, keyed shaft, without brake, IP65, IP67, 16bit encoder

BMH1002P36A2A

# Main

Device short name	ВМН			
Product or component type	Servo motor			
Maximum mechanical speed	6000 rpm			
Continuous stall torque	6.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 6.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase			
Peak stall torque	18.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 18.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase			
Nominal output power	1600 W for LXM32.D18N4 at 6 A, 400 V, three phase 1600 W for LXM32.D18N4 at 6 A, 480 V, three phase			
Nominal torque	3.9 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.9 N.m for LXM32.D18N4 at 6 A, 480 V, three phase			
Nominal speed	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.D18N4 at 400480 V three phase			
Shaft end	Keyed			
IP degree of protection	IP65 standard IP67 with IP67 kit			
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	5.04 A	
Continuous power	2.36 W	
Maximum current Irms	17.5 A for LXM32.D18N4	
Maximum permanent current	18.23 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	2			
Torque constant	1.19 N.m/A at 120 °C			
Back emf constant	77 V/krpm at 120 °C			
Number of motor poles	5.0			
Rotor inertia	6.28 kg.cm <sup>2</sup>			
Stator resistance	1.51 Ohm at 20 °C			
Stator inductance	4.12 mH at 20 °C			
Stator electrical time constant	5 ms at 20 °C			
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm 580 N at 5000 rpm			
Maximum axial force Fa	0.2 x Fr			
type of cooling	Natural convection			
Length	160.6 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	4.92 kg			
Sizing reference	BMH1002P			
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	20.0 cm
Package 1 Width	22.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	5.22 kg
Unit Type of Package 2	P06
Number of Units in Package 2	24
Package 2 Height	105.0 cm
Package 2 Width	80.000 cm
Package 2 Length	60.000 cm

Package 2 Weight

36.22 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	1769			
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

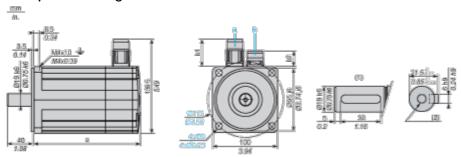
○ Repack and remanufacture		
End of life manual availability	No need of specific recycling operations	
Take-back	No	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

# BMH1002P36A2A

## **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		- (itht hl)	a (ith handsa)
b1	b2	b1	b2	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	160	202

#### Dimensions in in

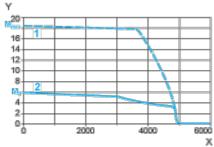
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Straight connectors		Rotatable angled connectors		c (without brake)	a (with brake)
b1	b2	b1	b2	c (without brake)	c (with brake)
1.55	1.00	1.55	1.55	6.29	7.95

#### Performance Curves

## 400 V 3-Phase Supply Voltage

## **Torque/Speed Curves**

Servo motor with LXM32•D18N4 servo drive

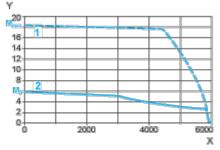


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

## 480 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**

Servo motor with LXM32•D18N4 servo drive



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