# Product data sheet

Specifications





# servo motor BMH, Lexium 32, 3.3Nm, 6000rpm, keyed shaft, without brake, IP65, IP67, 16 multiturn encoder

BMH1001P37A2A

Product availability: Non-Stock - Not normally stocked in distribution facility

## Price\*: 3,037.50 USD

## Main

Product Or Component Type	Servo motor				
Device Short Name	ВМН				
Maximum Mechanical Speed	6000 rpm				
Continuous Stall Torque	29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 400 V, three phase				
	29.21 lbf.in (3.3 N.m) LXM32.D12N4 3 A, 480 V, three phase				
	30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 400 V, three phase				
	30.09 lbf.in (3.4 N.m) LXM32.D18N4 6 A, 480 V, three phase				
Peak Stall Torque	95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 400 V, three phase				
-	95.59 lbf.in (10.8 N.m) LXM32.D12N4 3 A, 480 V, three phase				
	95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 400 V, three phase				
	95.59 lbf.in (10.8 N.m) LXM32.D18N4 6 A, 480 V, three phase				
Nominal Output Power	800 W LXM32.D12N4 3 A, 400 V, three phase				
	800 W LXM32.D12N4 3 A, 480 V, three phase				
	1300 W LXM32.D18N4 6 A, 400 V, three phase				
	1300 W LXM32.D18N4 6 A, 480 V, three phase				
Nominal Torque	16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 400 V, three phase				
	16.82 lbf.in (1.9 N.m) LXM32.D12N4 3 A, 480 V, three phase				
	27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 400 V, three phase				
	27.44 lbf.in (3.1 N.m) LXM32.D18N4 6 A, 480 V, three phase				
Nominal Speed	4000 rpm LXM32.D12N4 3 A, 400 V, three phase				
	4000 rpm LXM32.D12N4 3 A, 480 V, three phase				
	4000 rpm LXM32.D18N4 6 A, 400 V, three phase				
	4000 rpm LXM32.D18N4 6 A, 480 V, three phase				
Product Compatibility	LXM32.D12N4 400480 V three phase				
	LXM32.D18N4 400480 V three phase				
Shaft End	Keyed				
Ip Degree Of Protection	IP65 standard				
	IP67 with IP67 kit				
Speed Feedback Resolution	32768 points/turn x 4096 turns				
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	
Phase	Three phase	

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Continuous Stall Current	3.15 A		
Continuous Power	1.76 W		
Maximum Current Irms	11.9 A LXM32.D12N4 11.9 A LXM32.D18N4		
Maximum Permanent Current	11.93 A		
Second Shaft	Without second shaft end		
Shaft Diameter	0.75 in (19 mm)		
Shaft Length	1.57 in (40 mm)		
Key Width	1.18 in (30 mm)		
Feedback Type	Multiturn SinCos Hiperface		
Motor Flange Size	3.94 in (100 mm)		
Number Of Motor Stacks	1		
Torque Constant	1.1 N.m/A 248 °F (120 °C)		
Back Emf Constant	70.3 V/krpm 248 °F (120 °C)		
Number Of Motor Poles	10		
Rotor Inertia	3.19 kg.cm <sup>2</sup>		
Stator Resistance	3.1 Ohm 68 °F (20 °C)		
Stator Inductance	13.9 mH 68 °F (20 °C)		
Stator Electrical Time Constant	4.5 ms 68 °F (20 °C)		
Maximum Radial Force Fr	900 N 1000 rpm 720 N 2000 rpm 630 N 3000 rpm 570 N 4000 rpm 530 N 5000 rpm		
Maximum Axial Force Fa	0.2 x Fr		
Type Of Cooling	Natural convection		
Length	5.06 in (128.6 mm)		
Centring Collar Diameter	3.74 in (95 mm)		
Centring Collar Depth	0.14 in (3.5 mm)		
Number Of Mounting Holes	4		
Mounting Holes Diameter	0.35 in (9 mm)		
Circle Diameter Of The Mounting Holes	4.53 in (115 mm)		
Net Weight	7.36 lb(US) (3.34 kg)		

# Ordering and shipping details

Category	US1PC5318282		
Discount Schedule	PC53		
Gtin	3606485195827		
Returnability	No		
Country Of Origin	DE		

# **Packing Units**

Unit Type Of Package 1

PCE

Number Of Units In Package 1	1		
Package 1 Height	8.66 in (22.0 cm)		
Package 1 Width	7.87 in (20.0 cm)		
Package 1 Length	15.75 in (40.0 cm)		
Package 1 Weight	8.02 lb(US) (3.64 kg)		

# **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

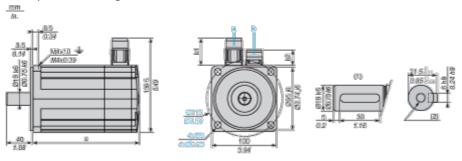
## **Certifications & Standards**

Reach Regulation	REACh Declaration			
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)			
China Rohs Regulation	China RoHS declaration			
Environmental Disclosure	Product Environmental Profile			
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.			
Circularity Profile	No need of specific recycling operations			
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov			

#### **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	nectors Rotatable angled connectors		a (without braka)	a (with broka)
b1	b2	b1	b2	c (without brake)	c (with brake)
39.5	25.5	39.5	39.5	128	170

Dimensions in in.

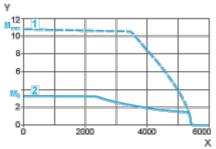
Straight c	nnectors Rotatable angled connectors		a (without braka)	a (with brake)	
b1	b2	b1	b2	c (without brake)	c (with brake)
1.55	1.00	1.55	1.55	5.03	6.69

#### Performance Curves

#### 400 V 3-Phase Supply Voltage

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

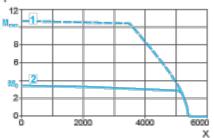
Servo motor with LXM32•D12N4 servo drive



#### X Speed in rpm

- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

# Servo motor with LXM32•D18N4 servo drive

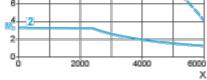


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 480 V 3-Phase Supply Voltage

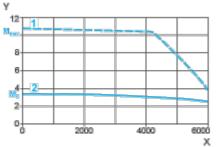
#### **Torque/Speed Curves**

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