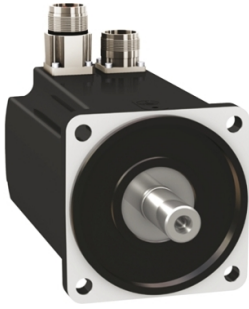


# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
6.2Nm, 6000rpm, untapped shaft,  
with brake, IP65, IP67, 128bit  
encoder, straight

BMH1002P21F1A

! Discontinued

! Discontinued on: Jun 30, 2023

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

## Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	54.9 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 400 V, three phase 54.9 lbf.in (6.2 N.m) LXM32.D18N4 6 A, 480 V, three phase
Peak stall torque	162.9 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 400 V, three phase 162.9 lbf.in (18.4 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal output power	1600 W LXM32.D18N4 6 A, 400 V, three phase 1600 W LXM32.D18N4 6 A, 480 V, three phase
Nominal torque	34.5 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 400 V, three phase 34.5 lbf.in (3.9 N.m) LXM32.D18N4 6 A, 480 V, three phase
Nominal speed	4000 rpm LXM32.D18N4 6 A, 400 V, three phase 4000 rpm LXM32.D18N4 6 A, 480 V, three phase
Product compatibility	LXM32.D18N4 400...480 V three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting Support	International standard flange
Electrical Connection	Straight connectors

## Complementary

Range Compatibility	Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	5.04 A
Continuous power	2.36 W
Maximum current Irms	18 A LXM32.D18N4
Maximum permanent current	18.23 A
Second shaft	Without second shaft end
Shaft diameter	0.7 in (19 mm)

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

Shaft length	1.6 in (40 mm)
Feedback type	Single turn SinCos Hiperface
Holding torque	48.7 lbf.in (5.5 N.m) holding brake
Motor flange size	3.9 in (100 mm)
Number of motor stacks	2
Torque constant	1.2 N.m/A 248 °F (120 °C)
Back emf constant	77 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	6.77 kg.cm <sup>2</sup>
Stator resistance	1.51 Ohm 68 °F (20 °C)
Stator inductance	7.5 mH 68 °F (20 °C)
Stator electrical time constant	5 ms 68 °F (20 °C)
Maximum radial force Fr	990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm 580 N 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	8.0 in (202.3 mm)
Centring collar diameter	3.7 in (95 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (9 mm)
Circle diameter of the mounting holes	4.5 in (115 mm)
Net Weight	14.1 lb(US) (6.4 kg)
Sizing reference	BMH1002P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)

## Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606485200385
Returnability	No

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1

<b>Package 1 Height</b>	8.7 in (22.0 cm)
<b>Package 1 Width</b>	7.9 in (20.0 cm)
<b>Package 1 Length</b>	15.7 in (40.0 cm)
<b>Package weight(Lbs)</b>	14.73 lb(US) (6.68 kg)
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	41.3 in (105.0 cm)
<b>Package 2 Width</b>	31.496 in (80.000 cm)
<b>Package 2 Length</b>	23.622 in (60.000 cm)
<b>Package 2 Weight</b>	83.07 lb(US) (37.68 kg)

## Contractual warranty

<b>Warranty (in months)</b>	18
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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 >](#)

### Use Better



#### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

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](http://www.P65Warnings.ca.gov)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No

### Use Again




#### Repack and remanufacture

Circularity Profile

No need of specific recycling operations

WEEE Label

 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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	160	202

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	6.29	7.95

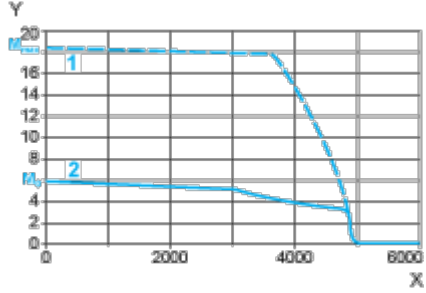
Performance Curves

400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D18N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

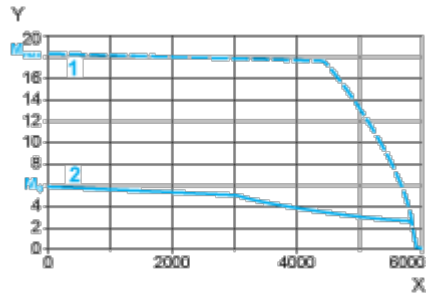
2 Continuous torque

480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque