

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
3.4Nm, 8000rpm, untapped shaft,  
with brake, IP54, 16bit encoder,  
straight, 3 phases

BMH0703P06F1A

! Discontinued

! Discontinued on: 18 Apr 2024

! To be end-of-service on: 18 Apr 2026

## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	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	10.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 10.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal output power	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	2.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 2.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal speed	5000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 5000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase
Product compatibility	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	With
mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	3.91 A
Continuous power	1.68 W
Maximum current Irms	12.6 A for LXM32.D18N4
Maximum permanent current	12.57 A
Second shaft	Without second shaft end
Shaft diameter	14 mm

Shaft length	30 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	3 N.m holding brake
Motor flange size	70 mm
Number of motor stacks	3
Torque constant	0.87 N.m/A at 120 °C
Back emf constant	55.8 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	1.78 kg.cm <sup>2</sup>
Stator resistance	2.65 Ohm at 20 °C
Stator inductance	8.6 mH at 20 °C
Stator electrical time constant	3.2 ms at 20 °C
Maximum radial force Fr	730 N at 1000 rpm 580 N at 2000 rpm 510 N at 3000 rpm 460 N at 4000 rpm 430 N at 5000 rpm 400 N at 6000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	7 W
Type of cooling	Natural convection
Length	225 mm
Centring collar diameter	60 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	82 mm
Net weight	4 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	20.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	3.2 kg

## Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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

**Eu Rohs Directive** Pro-active compliance (Product out of EU RoHS legal scope)

**China Rohs Regulation** [China RoHS declaration](#)

**Environmental Disclosure** [Product Environmental Profile](#)

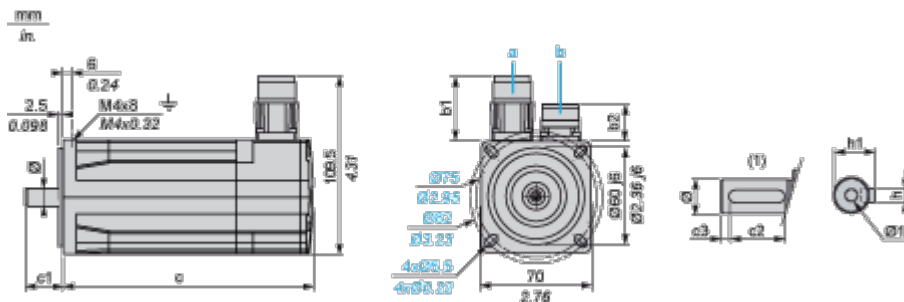
**Weee** The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

**Circularity Profile** No need of specific recycling operations

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)

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
39.5	25.5	39.5	39.5	186	225	30	20	5	5 h9	16 <sup>+0</sup> <sub>-0.13</sub>	14 k6	M5 x 17

Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
1.55	1	1.55	1.55	7.32	8.85	1.18	0.78	0.19	0.20 h9	0.63 <sup>+0</sup> <sub>-0.0051</sub>	0.55 k6	M5 x 0.67

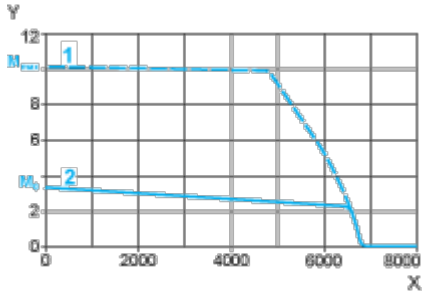
Performance Curves

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

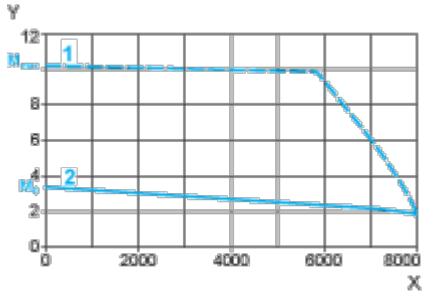
2 Continuous torque

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