

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
2.5Nm, 8000rpm, keyed shaft,  
without brake, IP54, 16 multturn  
encoder, 3 phases

BMH0702P17A2A

## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	2.5 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 2.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Peak stall torque	7.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 7.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal output power	700 W for LXM32.D12N4 at 3 A, 400 V, three phase 700 W for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal torque	2.2 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 2.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal speed	3000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 3000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
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
Network number of phases	Three phase
Continuous stall current	2.94 A
Continuous power	1.51 W
Maximum current Irms	9.7 A for LXM32.D12N4
Maximum permanent current	9.68 A
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Key width	18 mm
Feedback type	Multiturn SinCos Hiperface

<b>Motor flange size</b>	70 mm
<b>Number of motor stacks</b>	2
<b>Torque constant</b>	0.84 N.m/A at 120 °C
<b>Back emf constant</b>	54.08 V/krpm at 120 °C
<b>Number of motor poles</b>	10
<b>Rotor inertia</b>	1.13 kg.cm <sup>2</sup>
<b>Stator resistance</b>	3.8 Ohm at 20 °C
<b>Stator inductance</b>	12.2 mH at 20 °C
<b>Stator electrical time constant</b>	3.2 ms at 20 °C
<b>Maximum radial force Fr</b>	710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Type of cooling</b>	Natural convection
<b>Length</b>	154 mm
<b>Centring collar diameter</b>	60 mm
<b>Centring collar depth</b>	2.5 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	5.5 mm
<b>Circle diameter of the mounting holes</b>	82 mm
<b>Net weight</b>	2.3 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	11.0 cm
<b>Package 1 Width</b>	40.0 cm
<b>Package 1 Length</b>	20.0 cm
<b>Package 1 Weight</b>	2.0 kg

## Contractual warranty

<b>Warranty</b>	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

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](#)

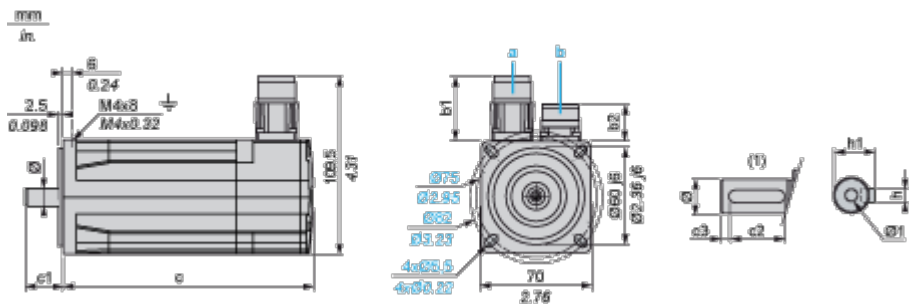
Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile No need of specific recycling operations

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	154	193	23	18	2.5	4 h9	12.5 <sup>+0</sup> <sub>-0.13</sub>	11 k6	M4 x 14

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	6.06	7.59	0.90	0.70	0.09	0.16 h9	0.49 <sup>+0</sup> <sub>-0.0051</sub>	0.43 k6	M4 x 0.55

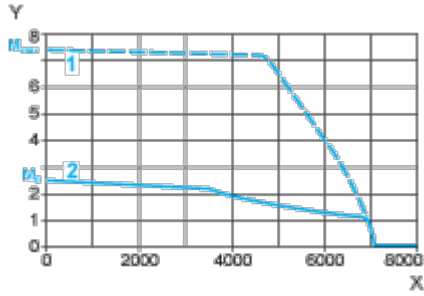
Performance Curves

400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D12N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

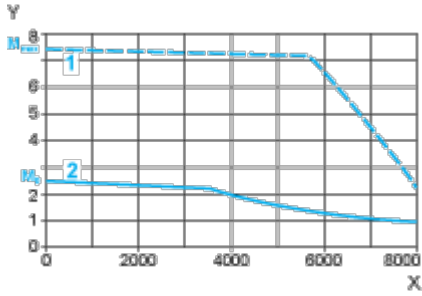
2 Continuous torque

480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque