

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
8.2Nm, 6000rpm, untapped shaft,  
without brake, IP54, 16 multiturn  
encoder, straight

BMH1003T07A1A

! Discontinued

! Discontinued on: 30 Jun 2023

## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	8.2 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Peak stall torque	22.8 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal output power	1450 W for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal torque	5.6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase
Nominal speed	2500 rpm for LXM32.D30M2 at 10 A, 230 V, single phase
Product compatibility	LXM32.D30M2 at 230 V single phase
Shaft end	Smooth shaft
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	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	240 V
Network number of phases	Three phase
Continuous stall current	10 A
Continuous power	2.62 W
Maximum current Irms	30 A for LXM32.D30M2
Maximum permanent current	33.85 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	100 mm
Number of motor stacks	3

Torque constant	0.851 N.m/A at 120 °C
Back emf constant	54.8 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	9.37 kg.cm <sup>2</sup>
Stator resistance	0.47 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	6.4 ms at 20 °C
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm 610 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	192.6 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	6.5 kg
Sizing reference	BMH1003T
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	22.0 cm
Package 1 Width	20.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	6.8 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	37.8 kg

## Contractual warranty





## 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

[Compliant By Exemption](#)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No

### Use Again



#### Repack and remanufacture

End of life manual availability

No need of specific recycling operations

WEEE Label

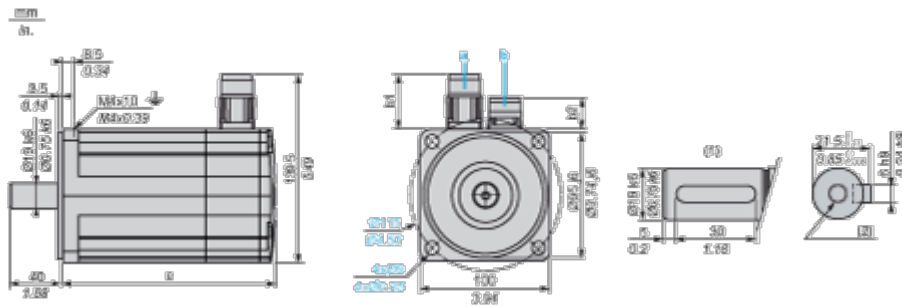


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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	192	234

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	7.55	9.21

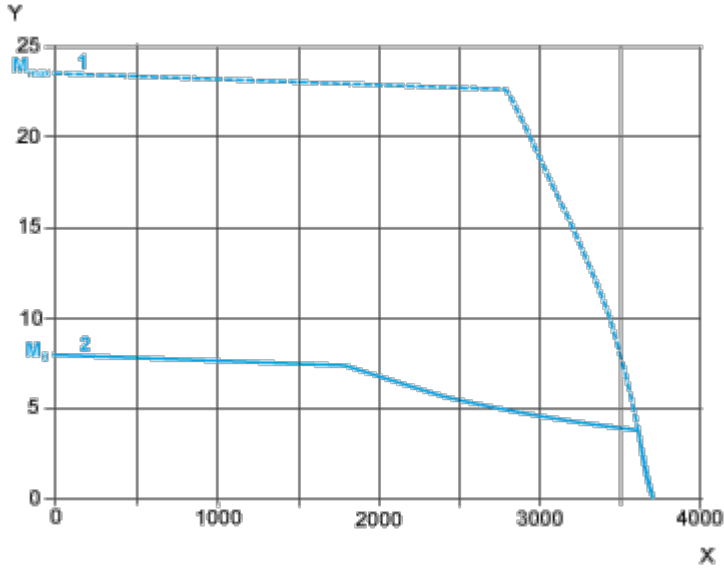
Performance Curves

230 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive



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