

Product datasheet

Specifications



servo motor BMH, Lexium 32,
3.4Nm, 6000rpm, untapped shaft,
with brake, IP54, 128 multiturn
encoder, straight

BMH1001T02F1A

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	3.4 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 3.4 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Peak stall torque	8.9 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 10.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal output power	700 W for LXM32.D30M2 at 10 A, 115 V, single phase 900 W for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal torque	3.3 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 2.8 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal speed	2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase 3000 rpm for LXM32.D18M2 at 6 A, 230 V, single phase
Product compatibility	LXM32.D30M2 at 115 V single phase LXM32.D18M2 at 230 V single phase
Shaft end	Smooth shaft
IP degree of protection	IP54 standard
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
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	5.11 A
Continuous power	1.74 W
Maximum current Irms	18.2 A for LXM32.D30M2 19.4 A for LXM32.D18M2
Maximum permanent current	19.38 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface

Holding torque	5.5 N.m holding brake
Motor flange size	100 mm
Number of motor stacks	1
Torque constant	0.67 N.m/A at 120 °C
Back emf constant	43.3 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	3.68 kg.cm ²
Stator resistance	1.19 Ohm at 20 °C
Stator inductance	2.72 mH at 20 °C
Stator electrical time constant	4.5 ms at 20 °C
Maximum radial force Fr	900 N at 1000 rpm 720 N at 2000 rpm 630 N at 3000 rpm 570 N at 4000 rpm 530 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	170.3 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	4.8 kg
Sizing reference	BMH1001T
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	135 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C
Output current 3s peak	18.2 A
Inertia	0.49 kg.cm ² of brake 3.186 kg.cm ² of motor

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	5.1 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	36.1 kg

Contractual warranty

Warranty (in months)	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 >](#)



Environmental footprint

Total lifecycle Carbon footprint	1 017 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	37 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	979 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

End of life manual availability	No need of specific recycling operations
Take-back	Yes
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	128	170

Dimensions in in.

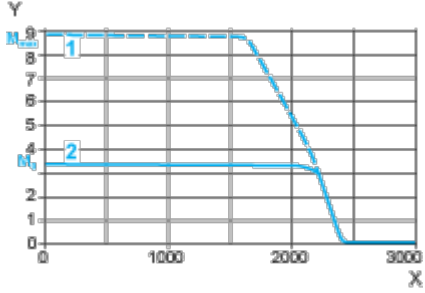
Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	5.03	6.69

Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive



X Speed in rpm

Y Torque in Nm

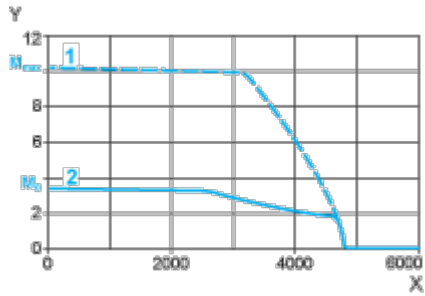
1 Peak torque

2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque