

Product data sheet

Specifications



servo motor BMH, Lexium 32,
3.4Nm, 6000rpm, keyed shaft, with
brake, IP65/IP67, 128bit encoder,
straight

BMH1001T31F1A

Discontinued on: 30 June 2023

Discontinued

Main

Product or component type	Servo motor
Device short name	BMH
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	Keyed
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	240 V
Network number of phases	Three phase
Continuous stall current	5.11 A
Continuous power	1.74 W
Maximum current Irms	15 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
Key width	30 mm
Feedback type	Single turn 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	10
Rotor inertia	3.68 kg.cm²
Stator resistance	1.19 Ohm at 20 °C
Stator inductance	5.3 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
Product weight	4.8 kg

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

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration

RoHS exemption information	Yes
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
PVC free	Yes
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

Contractual warranty

Warranty	18 months
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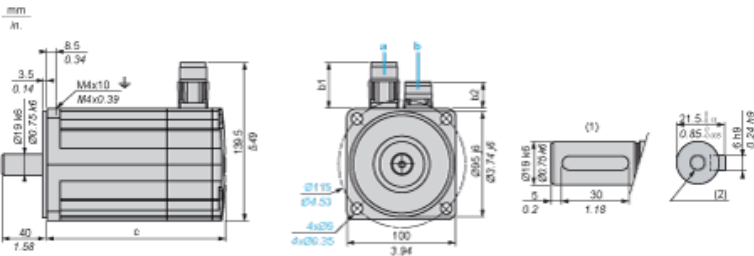
Product data sheet

Dimensions Drawings

BMH1001T31F1A

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

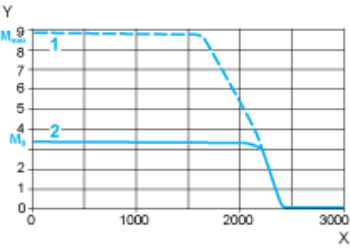
Dimensions in in.

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

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

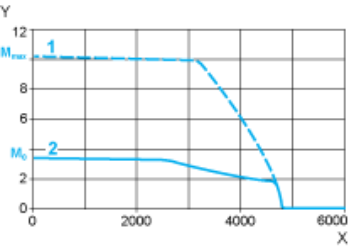


- XSpeed in rpm
- YTorque in Nm
- 1Peak torque
- 2Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



- XSpeed in rpm
- YTorque in Nm
- 1Peak torque
- 2Continuous torque

Recommended replacement(s)

BMH1001T31F1A is replaced by the following product range:



Lexium 32 & Motors

Servo drives and servo motors from 0.15 to 11 kW

Products: 1602