

Product datasheet

Specifications



servo motor BMH, Lexium 32,
1.4Nm, 8000rpm, untapped shaft,
with brake, IP65, IP67, 128bit
encoder, straight

BMH0701T21F1A

! Discontinued

! Discontinued on: 30 Jun 2023

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	1.4 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 1.4 N.m for LXM32.D18M2 at 6 A, 115 V, single phase
Peak stall torque	4 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 4.2 N.m for LXM32.D18M2 at 6 A, 115 V, single phase
Nominal output power	450 W for LXM32.U90M2 at 3 A, 230 V, single phase 350 W for LXM32.D18M2 at 6 A, 115 V, single phase
Nominal torque	1.1 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 1.35 N.m for LXM32.D18M2 at 6 A, 115 V, single phase
Nominal speed	4000 rpm for LXM32.U90M2 at 3 A, 230 V, single phase 2500 rpm for LXM32.D18M2 at 6 A, 115 V, single phase
Product compatibility	LXM32.D18M2 at 115 V single phase LXM32.U90M2 at 230 V single phase
Shaft end	Smooth shaft
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	2.85 A
Continuous power	1.05 W
Maximum current Irms	9.6 A for LXM32.D18M2 9.6 A for LXM32.U90M2
Maximum permanent current	9.56 A
Second shaft	Without second shaft end
Shaft diameter	11 mm

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Shaft length	23 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	3 N.m holding brake
Motor flange size	70 mm
Number of motor stacks	1
Torque constant	0.49 N.m/A at 120 °C
Back emf constant	31.17 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	0.7 kg.cm ²
Stator resistance	3.2 Ohm at 20 °C
Stator inductance	9.1 mH at 20 °C
Stator electrical time constant	2.8 ms at 20 °C
Maximum radial force Fr	660 N at 1000 rpm 520 N at 2000 rpm 460 N at 3000 rpm 410 N at 4000 rpm 380 N at 5000 rpm 360 N at 6000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	7 W
Type of cooling	Natural convection
Length	161 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	2.6 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	1.8 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-CO₂ 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	122	161	23	18	2.5	4 h9	$12.5^{+0}_{-0.13}$	11 k6	M4 x 14

Dimensions in in.

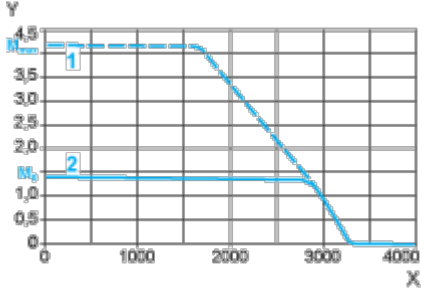
Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
1.55	1	1.55	1.55	4.80	6.33	0.90	0.70	0.09	0.16 h9	$0.49^{+0}_{-0.0051}$	0.43 k6	M4 x 0.55

Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D18M2 servo drive

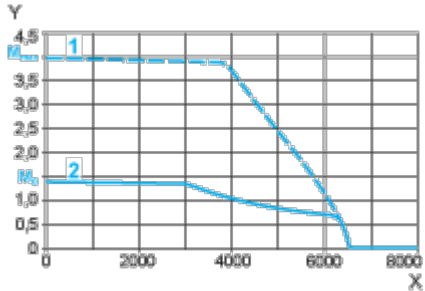


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U90M2 servo drive



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