

Product data sheet

Specifications



servo motor BMH, Lexium 32,
1.4Nm, 8000rpm, keyed shaft,
without brake, IP54, 16 multturn
encoder

BMH0701T17A2A

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	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	240 V
Network number of phases	Three phase
Continuous stall current	2.85 A
Continuous power	1.05 W
Maximum current Irms	9.56 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
Shaft length	23 mm
Key width	18 mm

Feedback type	Multiturn SinCos Hiperface
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	5.0
Rotor inertia	0.59 kg.cm ²
Stator resistance	3.2 Ohm at 20 °C
Stator inductance	4.045 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
Type of cooling	Natural convection
Length	122 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	1.6 kg
Sizing reference	BMH0701T
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	11.0 cm
Package 1 Width	20.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	1.8 kg
Unit Type of Package 2	P06
Number of Units in Package 2	36
Package 2 Height	105.0 cm
Package 2 Width	80.0 cm

Package 2 Length	60.0 cm
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Package 2 Weight	71.8 kg
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Contractual warranty

Warranty	18 months
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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 509

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number A7df881f-135f-4256-b8c2-ea55d4c9a151

REACH Regulation [REACH Declaration](#)

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

PVC free Yes

Use Again

Repack and remanufacture

End of life manual availability No need of specific recycling operations

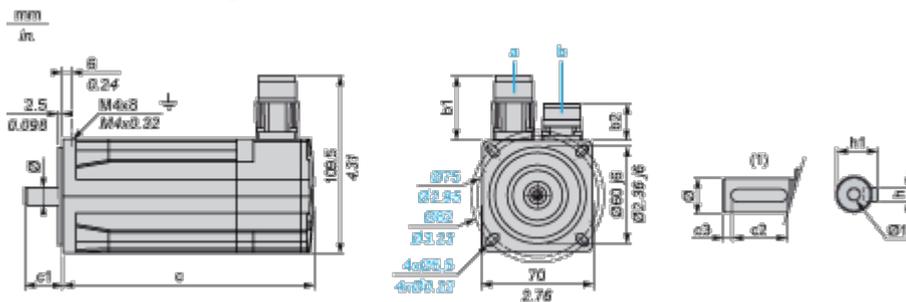
Take-back No

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)

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.

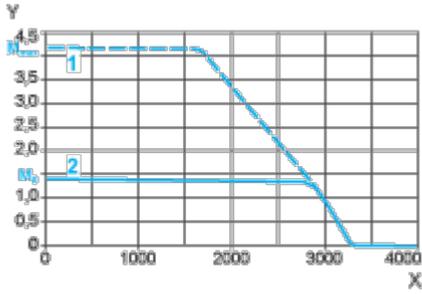
Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
1.55	1	1.55	1.55	4.80	6.33	0.90	0.70	0.09	0.16 h9	0.49 ⁺⁰ _{-0.0051}	0.43 k6	M4 x 0.55

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

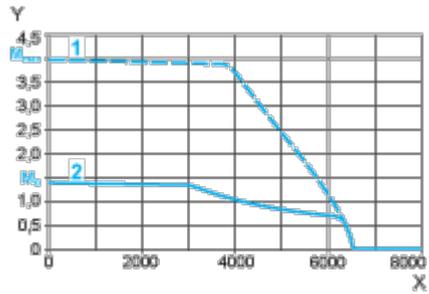
1 Peak torque

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