

Product data sheet

Specifications



servo motor BMH, Lexium 32,
1.2Nm, 8000rpm, keyed shaft,
without brake, IP65, IP67, 16bit
encoder

BMH0701P36A2A

Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	8000 rpm
Continuous stall torque	10.62 lbf.in (1.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 10.62 lbf.in (1.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 12.39 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 400 V, three phase 12.39 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 480 V, three phase
Peak stall torque	37.17 lbf.in (4.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 37.17 lbf.in (4.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 37.17 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 400 V, three phase 37.17 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal output power	350 W LXM32.U60N4 1.5 A, 400 V, three phase 350 W LXM32.U60N4 1.5 A, 480 V, three phase 700 W LXM32.D12N4 3 A, 400 V, three phase 700 W LXM32.D12N4 3 A, 480 V, three phase
Nominal torque	9.74 lbf.in (1.1 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 9.74 lbf.in (1.1 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 11.51 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 400 V, three phase 11.51 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal speed	3000 rpm LXM32.U60N4 1.5 A, 400 V, three phase 3000 rpm LXM32.U60N4 1.5 A, 480 V, three phase 5000 rpm LXM32.D12N4 3 A, 400 V, three phase 5000 rpm LXM32.D12N4 3 A, 480 V, three phase
Product compatibility	LXM32.U60N4 400...480 V three phase LXM32.D12N4 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	1.78 A

Continuous power	1.05 W
Maximum current Irms	6 A LXM32.U60N4 6 A LXM32.D12N4
Maximum permanent current	5.97 A
Second shaft	Without second shaft end
Shaft diameter	0.43 in (11 mm)
Shaft length	0.91 in (23 mm)
Key width	0.71 in (18 mm)
Feedback type	Single turn SinCos Hiperface
Motor flange size	2.76 in (70 mm)
Number of motor stacks	1
Torque constant	0.79 N.m/A 248 °F (120 °C)
Back emf constant	50.72 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	0.59 kg.cm²
Stator resistance	8.3 Ohm 68 °F (20 °C)
Stator inductance	23.4 mH 68 °F (20 °C)
Stator electrical time constant	2.8 ms 68 °F (20 °C)
Maximum radial force Fr	660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	4.80 in (122 mm)
Centring collar diameter	2.36 in (60 mm)
Centring collar depth	0.10 in (2.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.22 in (5.5 mm)
Circle diameter of the mounting holes	3.23 in (82 mm)
Net weight	3.53 lb(US) (1.6 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.33 in (11.0 cm)
Package 1 Width	7.87 in (20.0 cm)
Package 1 Length	15.75 in (40.0 cm)
Package 1 Weight	3.97 lb(US) (1.8 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

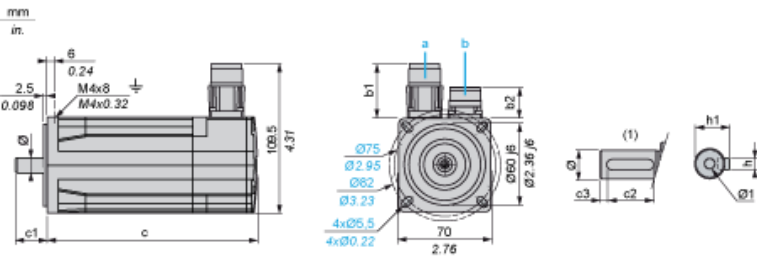
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months
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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 connect		Rotatable angled		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

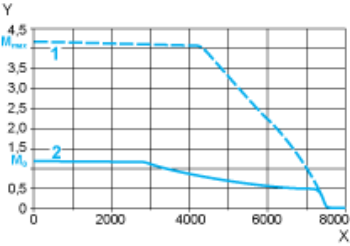
Dimensions in in.

Straight connect		Rotatable angled		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

400 V 3-Phase Supply Voltage

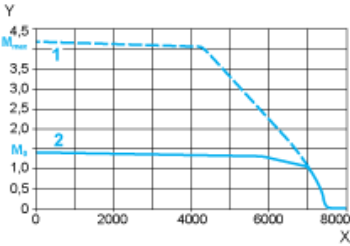
Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

Servo motor with LXM32•D12N4 servo drive

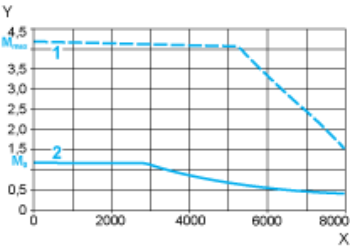


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

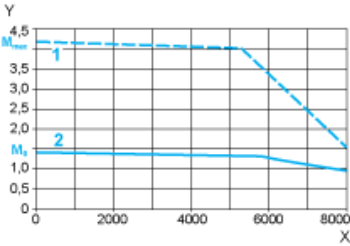
Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



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

Servo motor with LXM32•D12N4 servo drive



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

Recommended replacement(s)