

BMH0701P12F2A

servo motor BMH - 1.2 Nm - 8000 rpm - keyed shaft - with brake - IP54



Main


Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	8000 rpm
Continuous stall torque	1.4 N.m for LXM32.D12N4 3 A at 480 V three phase 1.4 N.m for LXM32.D12N4 3 A at 400 V three phase 1.2 N.m for LXM32.U60N4 1.5 A at 480 V three phase 1.2 N.m for LXM32.U60N4 1.5 A at 400 V three phase
Peak stall torque	4.2 N.m for LXM32.D12N4 3 A at 480 V three phase 4.2 N.m for LXM32.D12N4 3 A at 400 V three phase 4.2 N.m for LXM32.U60N4 1.5 A at 480 V three phase 4.2 N.m for LXM32.U60N4 1.5 A at 400 V three phase
Nominal output power	700 W for LXM32.D12N4 3 A at 480 V three phase 700 W for LXM32.D12N4 3 A at 400 V three phase 350 W for LXM32.U60N4 1.5 A at 480 V three phase 350 W for LXM32.U60N4 1.5 A at 400 V three phase
Nominal torque	1.3 N.m for LXM32.D12N4 3 A at 480 V three phase 1.3 N.m for LXM32.D12N4 3 A at 400 V three phase 1.1 N.m for LXM32.U60N4 1.5 A at 480 V three phase 1.1 N.m for LXM32.U60N4 1.5 A at 400 V three phase
Nominal speed	5000 rpm for LXM32.D12N4 3 A at 480 V three phase 5000 rpm for LXM32.D12N4 3 A at 400 V three phase 3000 rpm for LXM32.U60N4 1.5 A at 480 V three phase 3000 rpm for LXM32.U60N4 1.5 A at 400 V three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase LXM32.U60N4 at 400...480 V three phase
Shaft end	Keyed
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	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 for LXM32.D12N4 6 A for LXM32.U60N4

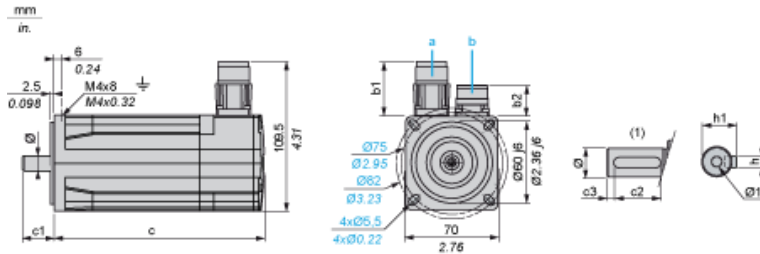
Maximum permanent current	5.97 A
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Key width	18 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	3 N.m (holding brake)
Motor flange size	70 mm
Number of motor stacks	1
Torque constant	0.79 N.m/A at 120 °C
Back emf constant	50.72 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	0.7 kg.cm ²
Stator resistance	8.3 Ohm at 20 °C
Stator inductance	23.4 mH at 20 °C
Stator electrical time constant	2.8 ms at 20 °C
Maximum radial force Fr	360 N at 6000 rpm 380 N at 5000 rpm 410 N at 4000 rpm 460 N at 3000 rpm 520 N at 2000 rpm 660 N at 1000 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
Product weight	2.6 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available  Download Product Environmental
Product end of life instructions	Need no specific recycling operations

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

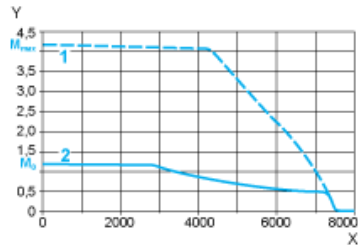
Dimensions in in.

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

400 V 3-Phase Supply Voltage

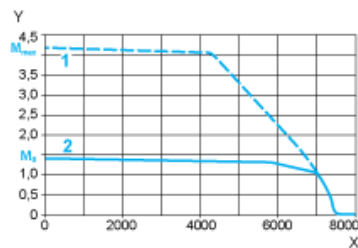
Torque/Speed Curves

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

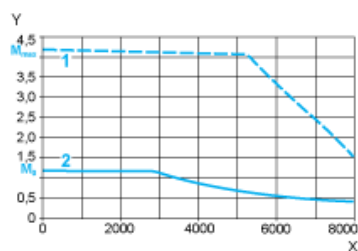


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



- 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