

# 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	1.2 N.m for LXM32.U60N4 1.5 A at 400 V three phase 1.2 N.m for LXM32.U60N4 1.5 A at 480 V three phase 1.4 N.m for LXM32.D12N4 3 A at 400 V three phase 1.4 N.m for LXM32.D12N4 3 A at 480 V three phase
Peak stall torque	4.2 N.m for LXM32.U60N4 1.5 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.D12N4 3 A at 400 V three phase 4.2 N.m for LXM32.D12N4 3 A at 480 V three phase
Nominal output power	350 W for LXM32.U60N4 1.5 A at 400 V three phase 350 W for LXM32.U60N4 1.5 A at 480 V three phase 700 W for LXM32.D12N4 3 A at 400 V three phase 700 W for LXM32.D12N4 3 A at 480 V three phase
Nominal torque	1.1 N.m for LXM32.U60N4 1.5 A at 400 V three phase 1.1 N.m for LXM32.U60N4 1.5 A at 480 V three phase 1.3 N.m for LXM32.D12N4 3 A at 400 V three phase 1.3 N.m for LXM32.D12N4 3 A at 480 V three phase
Nominal speed	3000 rpm for LXM32.U60N4 1.5 A at 400 V three phase 3000 rpm for LXM32.U60N4 1.5 A at 480 V three phase 5000 rpm for LXM32.D12N4 3 A at 400 V three phase 5000 rpm for LXM32.D12N4 3 A at 480 V three phase
Product compatibility	LXM32.U60N4 at 400...480 V three phase LXM32.D12N4 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.U60N4 6 A for LXM32.D12N4

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 <sup>2</sup>
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	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
Product weight	2.6 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0936 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
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 <sup>+0</sup> <sub>-0.13</sub>	11 k6	M4 x 14

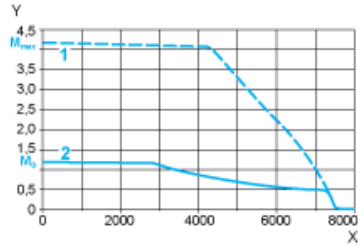
Dimensions in in.

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 <sup>+0</sup> <sub>-0.0051</sub>	0.43 k6	M4 x 0.55

400 V 3-Phase Supply Voltage

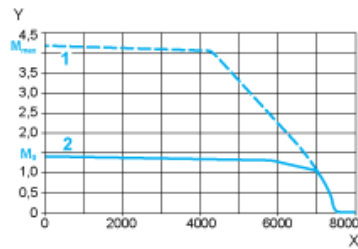
Torque/Speed Curves

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

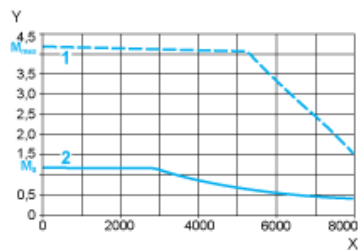


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

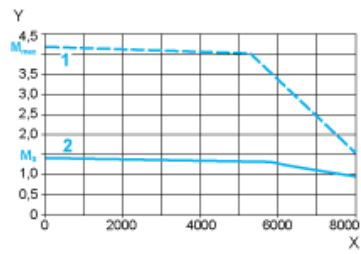
Torque/Speed Curves

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