

# BMH1001P27A2A

servo motor BMH - 3.3 Nm - 6000 rpm -  
untapped shaft - without brake - IP65/IP67



## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	6000 rpm
Continuous stall torque	3.3 N.m for LXM32.D12N4 3 A at 400 V three phase 3.3 N.m for LXM32.D12N4 3 A at 480 V three phase 3.4 N.m for LXM32.D18N4 6 A at 400 V three phase 3.4 N.m for LXM32.D18N4 6 A at 480 V three phase
Peak stall torque	10.8 N.m for LXM32.D12N4 3 A at 400 V three phase 10.8 N.m for LXM32.D12N4 3 A at 480 V three phase 10.8 N.m for LXM32.D18N4 6 A at 400 V three phase 10.8 N.m for LXM32.D18N4 6 A at 480 V three phase
Nominal output power	800 W for LXM32.D12N4 3 A at 400 V three phase 800 W for LXM32.D12N4 3 A at 480 V three phase 1300 W for LXM32.D18N4 6 A at 400 V three phase 1300 W for LXM32.D18N4 6 A at 480 V three phase
Nominal torque	1.9 N.m for LXM32.D12N4 3 A at 400 V three phase 1.9 N.m for LXM32.D12N4 3 A at 480 V three phase 3.1 N.m for LXM32.D18N4 6 A at 400 V three phase 3.1 N.m for LXM32.D18N4 6 A at 480 V three phase
Nominal speed	4000 rpm for LXM32.D12N4 3 A at 400 V three phase 4000 rpm for LXM32.D12N4 3 A at 480 V three phase 4000 rpm for LXM32.D18N4 6 A at 400 V three phase 4000 rpm for LXM32.D18N4 6 A at 480 V three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase LXM32.D18N4 at 400...480 V three phase
Shaft end	Untapped
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
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	480 V
Network number of phases	Three phase
Continuous stall current	3.15 A
Continuous power	1.76 W
Maximum current Irms	11.9 A for LXM32.D12N4 11.9 A for LXM32.D18N4
Maximum permanent current	11.93 A
Second shaft	Without second shaft end

Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	100 mm
Number of motor stacks	1
Torque constant	1.1 N.m/A at 120 °C
Back emf constant	70.3 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	3.19 kg.cm <sup>2</sup>
Stator resistance	3.1 Ohm at 20 °C
Stator inductance	13.9 mH at 20 °C
Stator electrical time constant	4.5 ms at 20 °C
Maximum radial force Fr	900 N at 1000 rpm 720 N at 2000 rpm 630 N at 3000 rpm 570 N at 4000 rpm 530 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	128.6 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Product weight	3.34 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)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	128	170

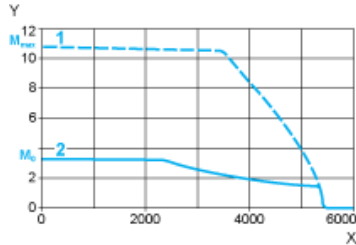
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	5.03	6.69

400 V 3-Phase Supply Voltage

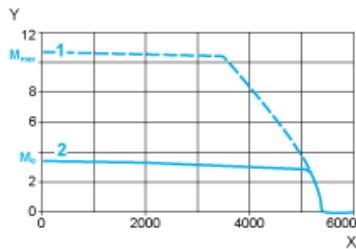
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive

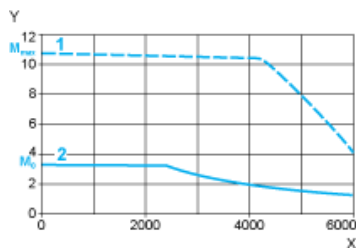


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

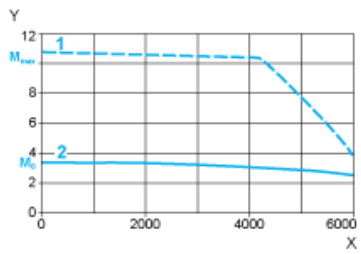
Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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

Servo motor with LXM32•D18N4 servo drive



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