

Product data sheet

Characteristics

BMH1401P11A2A

servo motor BMH - 10.3 Nm - 4000 rpm - keyed shaft - without brake - IP54



Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	4000 rpm
Continuous stall torque	10.3 N.m for LXM32.D30M2 10 A at 230 V single phase 10.3 N.m for LXM32.D30N4 10 A at 400 V three phase 10.3 N.m for LXM32.D30N4 10 A at 480 V three phase
Peak stall torque	30.8 N.m for LXM32.D30M2 10 A at 230 V single phase 30.8 N.m for LXM32.D30N4 10 A at 400 V three phase 30.8 N.m for LXM32.D30N4 10 A at 480 V three phase
Nominal output power	1450 W for LXM32.D30M2 10 A at 230 V single phase 2400 W for LXM32.D30N4 10 A at 400 V three phase 2400 W for LXM32.D30N4 10 A at 480 V three phase
Nominal torque	6.9 N.m for LXM32.D30M2 10 A at 230 V single phase 7.7 N.m for LXM32.D30N4 10 A at 400 V three phase 7.7 N.m for LXM32.D30N4 10 A at 480 V three phase
Nominal speed	2000 rpm for LXM32.D30M2 10 A at 230 V single phase 3000 rpm for LXM32.D30N4 10 A at 400 V three phase 3000 rpm for LXM32.D30N4 10 A at 480 V three phase
Product compatibility	LXM32.D30M2 at 230 V single phase LXM32.D30N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 (standard)
Speed feedback resolution	131072 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	8.58 A
Continuous power	2.85 W
Maximum current Irms	29.8 A for LXM32.D30M2 29.8 A for LXM32.D30N4
Maximum permanent current	29.8 A

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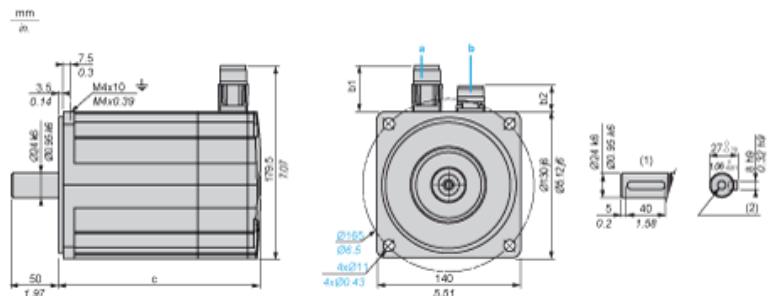
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Key width	40 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	140 mm
Number of motor stacks	1
Torque constant	1.2 N.m/A at 120 °C
Back emf constant	77.4 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	16.46 kg.cm²
Stator resistance	0.69 Ohm at 20 °C
Stator inductance	6.7 mH at 20 °C
Stator electrical time constant	9.7 ms at 20 °C
Maximum radial force Fr	1930 N at 1000 rpm 1530 N at 2000 rpm 1340 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	152 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Product weight	8 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0936 -  Schneider Electric declaration of conformity
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)
- (2) For screw M8 x 25 mm/M8 x 0.98 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
39.5	25.5	39.5	39.5	152	187

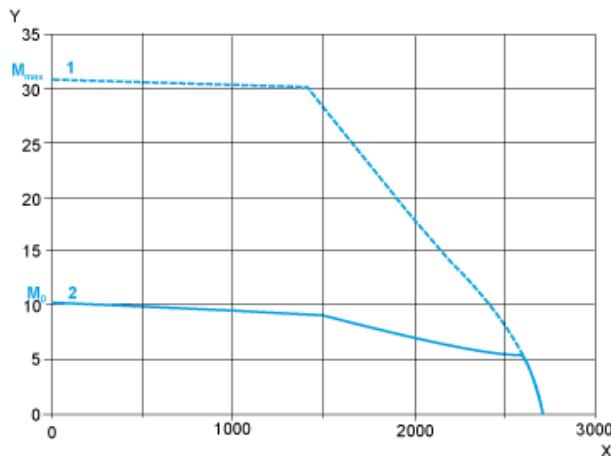
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b	b1	b	b1		
1.55	1.00	1.55	1.55	5.98	7.36

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive



X Speed in rpm

Y Torque in Nm

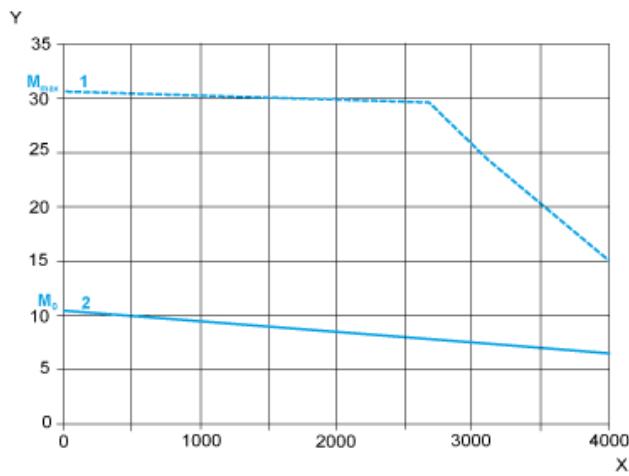
1 Peak torque

2 Continuous torque

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30N4 servo drive



X Speed in rpm

Y Torque in Nm

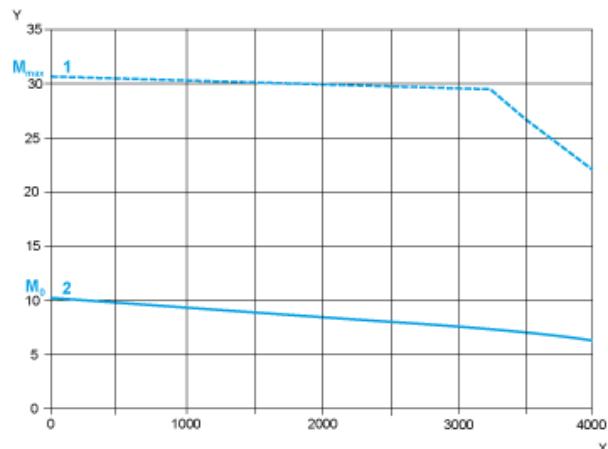
1 Peak torque

2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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