Product data sheet Characteristics

BMH1901P27A2A

servo motor BMH - 30 Nm - 5000 rpm - untapped shaft - without brake- IP65/IP67



Main		
Product or component type	Servo motor	
Device short name	ВМН	
Maximum mechanical speed	4000 rpm	
Continuous stall torque	30 N.m for LXM32.D72N4 24 A at 400 V three phase 30 N.m for LXM32.D72N4 24 A at 480 V three phase	
	30 N.m for LXM32MD85N4 32 A at 400 V three phase 30 N.m for LXM32MD85N4 32 A at 480 V three	
	phase 30 N.m for LXM32MC10N4 40 A at 400 V three phase	
	30 N.m for LXM32MC10N4 40 A at 480 V three phase	
Peak stall torque	77.7 N.m for LXM32.D72N4 24 A at 400 V three phase 77.7 N.m for LXM32.D72N4 24 A at 480 V three	
	phase 86.6 N.m for LXM32MD85N4 32 A at 400 V three	
	phase 86.6 N.m for LXM32MD85N4 32 A at 480 V three phase	
	89.7 N.m for LXM32MC10N4 40 A at 400 V three phase 89.7 N.m for LXM32MC10N4 40 A at 480 V three	
Nominal output power	phase 4800 W for LXM32.D72N4 24 A at 400 V three	
Nonlina output power	phase 4800 W for LXM32.D72N4 24 A at 480 V three	
	phase 5180 W for LXM32MD85N4 32 A at 400 V three phase	
	5180 W for LXM32MD85N4 32 A at 480 V three phase	
	5180 W for LXM32MC10N4 40 A at 400 V three phase 5180 W for LXM32MC10N4 40 A at 480 V three	
Newinal torque	phase 18.4 N.m for LXM32.D72N4 24 A at 400 V three	
Nominal torque	phase 18.4 N.m for LXM32.D72N4 24 A at 480 V three	
	phase 16.5 N.m for LXM32MD85N4 32 A at 400 V three	
	phase 16.5 N.m for LXM32MD85N4 32 A at 480 V three phase	
	16.5 N.m for LXM32MC10N4 40 A at 400 V three phase	
	16.5 N.m for LXM32MC10N4 40 A at 480 V three phase	
Nominal speed	2500 rpm for LXM32.D72N4 24 A at 400 V three phase 2500 rpm for LXM32.D72N4 24 A at 480 V three	
	phase 3000 rpm for LXM32MD85N4 32 A at 400 V three	
	phase 3000 rpm for LXM32MD85N4 32 A at 480 V three phase	
	3000 rpm for LXM32MC10N4 40 A at 400 V three phase	
	3000 rpm for LXM32MC10N4 40 A at 480 V three phase	

Product compatibility	LXM32.D72N4 at 400480 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

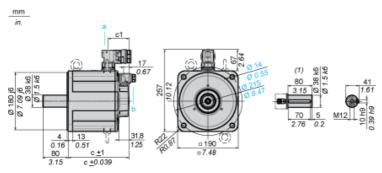
Complementary		
Range compatibility	Lexium 32	
[Us] rated supply voltage	480 V	
Network number of phases	Three phase	
Continuous stall current	23.2 A	
Continuous power	5.24 W	
Maximum current Irms	72 A for LXM32.D72N4	
Maximum permanent current	89.6 A	
Second shaft	Without second shaft end	
Shaft diameter	38 mm	
Shaft length	80 mm	
Feedback type	Multiturn SinCos Hiperface	
Motor flange size	190 mm	
Number of motor stacks	1	
Torque constant	1.3 N.m/A at 120 °C	
Back emf constant	87.6 V/krpm at 120 °C	
Number of motor poles	10	
Rotor inertia	67.7 kg.cm²	
Stator resistance	0.24 Ohm at 20 °C	
Stator inductance	5.08 mH at 20 °C	
Stator electrical time constant	21.2 ms at 20 °C	
Maximum radial force Fr	3730 N at 1000 rpm	
Maximum axial force Fa	0.2 x Fr	
Type of cooling	Natural convection	
Length	190 mm	
Centring collar diameter	180 mm	
Centring collar depth	4 mm	
Number of mounting holes	4	
Mounting holes diameter	14 mm	
Circle diameter of the mounting holes	215 mm	
Product weight	19 kg	



Product data sheet Dimensions Drawings

BMH1901P27A2A

Servo Motors Dimensions



- a Power supply for servo motor brake
- b Power supply for servo motor encoder
- (1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
190	248	65	123

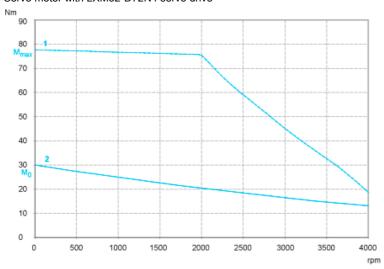
Dimensions in in.

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
7.48	9.76	2.56	4.84

Torque/Speed Curves

400 V 3-Phase Supply Voltage

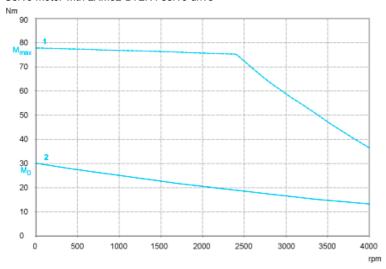
Servo motor with LXM32•D72N4 servo drive



- (1) Peak torque
- (2) Continuous torque

480 V 3-Phase Supply Voltage

Servo motor with LXM32•D72N4 servo drive



- (1) Peak torque
- (2) Continuous torque