Product data sheet Characteristics

BMH1903P27A2A

servo motor BMH - 65 Nm - 3500 rpm - untapped shaft - without brake - IP65/IP67



Main			
Product or component type	Servo motor		
Device short name	ВМН		
Maximum mechanical speed	3500 rpm		
Continuous stall torque	43.2 N.m for LXM32.D72N4 24 A at 400 V three phase 43.2 N.m for LXM32.D72N4 24 A at 480 V three phase 57.6 N.m for LXM32MD85N4 32 A at 400 V three phase 57.6 N.m for LXM32MD85N4 32 A at 480 V three phase 65 N.m for LXM32MC10N4 40 A at 400 V three phase 65 N.m for LXM32MC10N4 40 A at 480 V three phase 65 N.m for LXM32MC10N4 40 A at 480 V three		
	phase		
Peak stall torque	122.8 N.m for LXM32.D72N4 24 A at 400 V three phase 122.8 N.m for LXM32.D72N4 24 A at 480 V three phase 141.3 N.m for LXM32MD85N4 32 A at 400 V three phase 141.3 N.m for LXM32MD85N4 32 A at 480 V three phase 141.3 N.m for LXM32MD85N4 32 A at 480 V three phase 162.7 N.m for LXM32MC10N4 40 A at 400 V three phase 162.7 N.m for LXM32MC10N4 40 A at 480 V three phase		
Nominal output power	5700 W for LXM32.D72N4 24 A at 400 V three phase 5700 W for LXM32.D72N4 24 A at 480 V three phase 7330 W for LXM32MD85N4 32 A at 400 V three phase 7330 W for LXM32MD85N4 32 A at 480 V three phase 7750 W for LXM32MC10N4 40 A at 400 V three phase 7750 W for LXM32MC10N4 40 A at 480 V three phase		
Nominal torque	36 N.m for LXM32.D72N4 24 A at 400 V three phase 36 N.m for LXM32.D72N4 24 A at 480 V three phase 35 N.m for LXM32MD85N4 32 A at 400 V three phase 35 N.m for LXM32MD85N4 32 A at 480 V three phase 37 N.m for LXM32MC10N4 40 A at 400 V three phase 37 N.m for LXM32MC10N4 40 A at 480 V three phase		
Nominal speed	1500 rpm for LXM32.D72N4 24 A at 400 V three phase 1500 rpm for LXM32.D72N4 24 A at 480 V three phase 2000 rpm for LXM32MC10N4 40 A at 400 V three phase 2000 rpm for LXM32MC10N4 40 A at 480 V three phase 2000 rpm for LXM32MD85N4 32 A at 400 V three phase 2000 rpm for LXM32MD85N4 32 A at 480 V three phase 2000 rpm for LXM32MD85N4 32 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

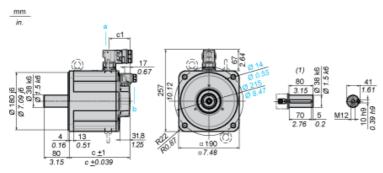
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Range compatibility	Lexium 32	
[Us] rated supply voltage	480 V	
Network number of phases	Three phase	
Continuous stall current	36.1 A	
Continuous power	7.95 W	
Maximum current Irms	72 A for LXM32.D72N4	
Maximum permanent current	124.5 A	
Second shaft	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	3	
Torque constant	1.8 N.m/A at 120 °C	
Back emf constant	129.2 V/krpm at 120 °C	
Number of motor poles	10	
Rotor inertia	194.1 kg.cm²	
Stator resistance	0.13 Ohm at 20 °C	
Stator inductance	3.62 mH at 20 °C	
Stator electrical time constant	27.8 ms at 20 °C	
Maximum radial force Fr	4500 N at 1000 rpm	
Maximum axial force Fa	0.2 x Fr	
Type of cooling	Natural convection	
Length	310 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	43 kg	



Product data sheet Dimensions Drawings

BMH1903P27A2A

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)
310	368	65	123

Dimensions in in.

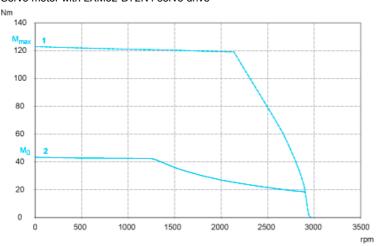
c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
12.20	14.45	2.56	4.84

BMH1903P27A2A

Torque/Speed Curves

400 V 3-Phase Supply Voltage

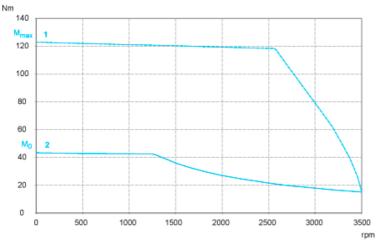
Servo motor with LXM32•D72N4 servo drive



- (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