Product datasheet Characteristics

BMH1403P36F1A

servo motor BMH - 24 Nm - 4000 rpm - keyed shaft - with brake - IP65/IP67





Main

Product or component type	Servo motor		
Device short name	вмн		
Maximum mechanical speed	4000 rpm		
Continuous stall torque	24 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 24 N.m for LXM32.D72N4 at 24 A, 480 V, three phase		
Peak stall torque	71.8 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 71.8 N.m for LXM32.D72N4 at 24 A, 480 V, three phase	<u>:</u>	
Nominal output power	4700 W for LXM32.D72N4 at 24 A, 400 V, three phase 4700 W for LXM32.D72N4 at 24 A, 480 V, three phase		
Nominal torque	14.3 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 14.3 N.m for LXM32.D72N4 at 24 A, 480 V, three phase		
Nominal speed	3000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 3000 rpm for LXM32.D72N4 at 24 A, 480 V, three phase		
Product compatibility	LXM32.D72N4 at 400480 V three phase		
Shaft end	Keyed		
IP degree of protection	IP65 standard IP67 with IP67 kit		
Speed feedback resolution	32768 points/turn		
Holding brake	With		
Mounting support	International standard flange		
Electrical connection	Straight connectors		

Complementary

Range compatibility	Lexium 32	 2
[Us] rated supply voltage	480 V	na Pari
Network number of phases	Three phase	——————————————————————————————————————
Continuous stall current	18 A	
Continuous power	4.8 W	
Maximum current Irms	62.3 A for LXM32.D72N4	<u> </u>

Maximum permanent current	62.3 A
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Key width	40 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	23 N.m holding brake
Motor flange size	140 mm
Number of motor stacks	3
Torque constant	1.34 N.m/A at 120 °C
Back emf constant	85.9 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	50.27 kg.cm ²
Stator resistance	0.22 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	13.6 ms at 20 °C
Maximum radial force Fr	2420 N at 1000 rpm 1920 N at 2000 rpm 1680 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	19 W
Type of cooling	Natural convection
Length	267 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	18.5 kg

Offer Sustainability

Green Premium product		
REACh Declaration		
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration		
Yes		
Yes		
China RoHS declaration		
Product Environmental Profile		
No need of specific recycling operations		
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		

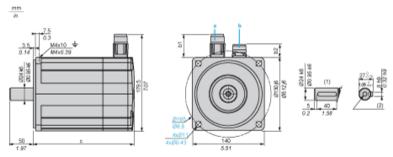
Contractual warranty

Warranty	18 months

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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	232	267

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	9.13	10.51

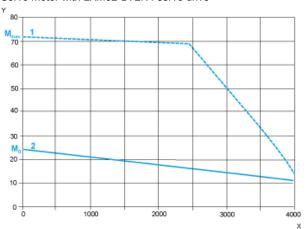
Product datasheet Performance Curves

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400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



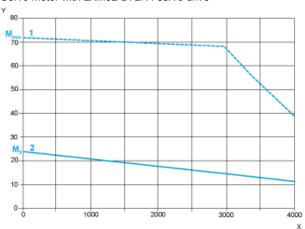
- X Speed in rpm Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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