Product datasheet Characteristics

BMH1403P36A1A

servo motor BMH - 24 Nm - 4000 rpm - keyed shaft - without 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	Without	
Mounting support	International standard flange	
Electrical connection	Straight connectors	

Complementary

Range compatibility	Lexium 32	<u>.</u> 2
[Us] rated supply voltage	480 V	
Network number of phases	Three phase	a
Continuous stall current	18 A	, i
Continuous power	4.8 W	į.
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
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	47.5 kg.cm²
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
Type of cooling	Natural convection
Length	232 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	16 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

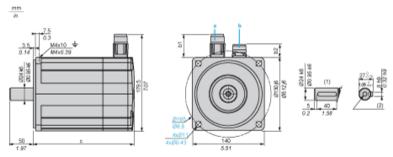
Contractual warranty

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

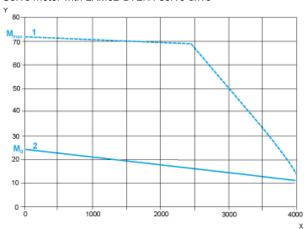
Product datasheet Performance Curves

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400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



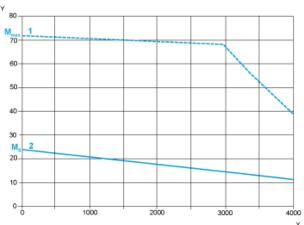
- X Speed in rpm Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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