Product datasheet Characteristics

BMH1403P02F1A

servo motor BMH - 24 Nm - 4000 rpm - untapped shaft - with brake - IP54





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	
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	Smooth shaft	
IP degree of protection	IP54 standard	
Speed feedback resolution	131072 points/turn x 4096 turns	
Holding brake	With	
Mounting support	International standard flange	
Electrical connection	Straight connectors	

Complementary

Range compatibility	Lexium 32	o
[Us] rated supply voltage	480 V	ition———————————————————————————————————
Network number of phases	Three phase	enta
Continuous stall current	18 A	
Continuous power	4.8 W	iFi O
Maximum current Irms	62.3 A for LXM32.D72N4	
Maximum permanent current	62.3 A	isolari:

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Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Feedback type	Multiturn 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.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
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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

Sustainable offer status	atus 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	ofile 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		

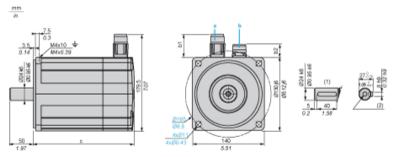
Contractual warranty

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

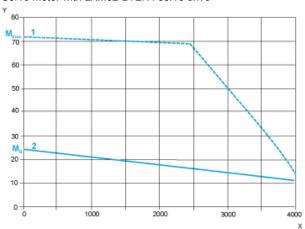
Product datasheet Performance Curves

BMH1403P02F1A

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



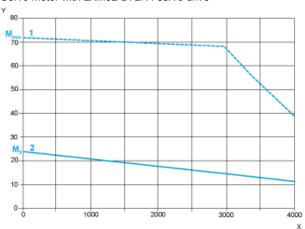
- X Speed in rpm Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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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