Product datasheet Characteristics

BMH0703P07F1A

servo motor BMH - 3.4 Nm - 8000 rpm - untapped shaft - with brake - IP54





Main

Product or component type	Servo motor	
Device short name	ВМН	
Maximum mechanical speed	8000 rpm	
Continuous stall torque	3.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase	
Peak stall torque	10.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 10.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase	:
Nominal output power	1300 W for LXM32.D18N4 at 6 A, 400 V, three phase 1300 W for LXM32.D18N4 at 6 A, 480 V, three phase	
Nominal torque	2.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 2.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase	
Nominal speed	5000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 5000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase	
Product compatibility	LXM32.D18N4 at 400480 V three phase	
Shaft end	Smooth shaft	
IP degree of protection	IP54 standard	·
Speed feedback resolution	32768 points/turn x 4096 turns	
Holding brake	With	
Mounting support	International standard flange	
Electrical connection	Straight connectors	

Complementary

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Range compatibility	Lexium 32	to the state of th
[Us] rated supply voltage	480 V	ido Ri
Network number of phases	Three phase	en and a second and a second a
Continuous stall current	3.91 A	
Continuous power	1.68 W	
Maximum current Irms	12.6 A for LXM32.D18N4	
Maximum permanent current	12.57 A	oc Sc

Second shaft	Without second shaft end
Shaft diameter	14 mm
Shaft length	30 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	3 N.m holding brake
Motor flange size	70 mm
Number of motor stacks	3
Torque constant	0.87 N.m/A at 120 °C
Back emf constant	55.8 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	1.78 kg.cm²
Stator resistance	2.65 Ohm at 20 °C
Stator inductance	8.6 mH at 20 °C
Stator electrical time constant	3.2 ms at 20 °C
Maximum radial force Fr	730 N at 1000 rpm 580 N at 2000 rpm 510 N at 3000 rpm 460 N at 4000 rpm 430 N at 5000 rpm 400 N at 6000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	7 W
Type of cooling	Natural convection
Length	225 mm
Centring collar diameter	60 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	82 mm
Product weight	4 kg

Offer Sustainability

Green Premium product							
REACh Declaration							
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration							
Yes							
China RoHS declaration							
Product Environmental Profile							
No need of specific recycling operations							
collection and							

Contractual warranty

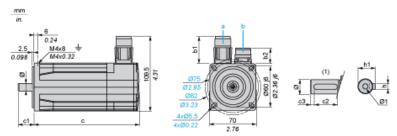
	Warranty	18 months
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Product datasheet Dimensions Drawings

BMH0703P07F1A

Servo Motors Dimensions

Example with Straight Connectors



a: Power supply for servo motor brakeb: Power supply for servo motor encoder

(1) Shaft end, keyed slot (optional)

Dimensions in mm

Straight	t connect	Rotatab	le angled	c (without brake)	c (with brake	с1	c2	с3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
39.5	25.5	39.5	39.5	186	225	30	20	5	5 h9	16 ⁺⁰ _{-0.13}	14 k6	M5 x 17

Dimensions in in.

Straight	conne	Rotatab	le angled	c (without br	c (with bra	c1	c2	с3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
1.55	1	1.55	1.55	7.32	8.85	1.18	0.78	0.19	0.20 h9	0.63 ⁺⁰ _0.0051	0.55 k6	M5 x 0.67

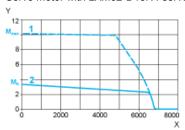
Product datasheet Performance Curves

BMH0703P07F1A

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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

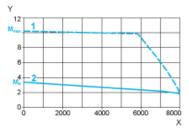
Product datasheet Performance Curves

BMH0703P07F1A

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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