

BMH0703T27F1A

servo motor BMH - 3.4 Nm - 8000 rpm -
untapped shaft - with brake - IP65/IP67



Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	8000 rpm
Continuous stall torque	3.4 N.M for LXM32.D30M2 at 10 A, 115 V, single phase 3.4 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Peak stall torque	8.7 N.M for LXM32.D30M2 at 10 A, 115 V, single phase 10.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal output power	650 W for LXM32.D30M2 at 10 A, 115 V, single phase 900 W for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal torque	3.1 N.M for LXM32.D30M2 at 10 A, 115 V, single phase 2.9 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal speed	2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase 3000 rpm for LXM32.D18M2 at 6 A, 230 V, single phase
Product compatibility	LXM32.D30M2 at 115 V single phase LXM32.D18M2 at 230 V single phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary






Range compatibility	Lexium 32
[Us] rated supply voltage	240 V
Network number of phases	Three phase
Continuous stall current	5.55 A
Continuous power	1.68 W
Maximum current Irms	15 A for LXM32.D30M2 17.8 A for LXM32.D18M2
Maximum permanent current	17.84 A
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	0.61 N.m/A at 120 °C

Back emf constant	39.3 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	1.78 kg.cm ²
Stator resistance	1.32 Ohm at 20 °C
Stator inductance	4.3 mH at 20 °C
Stator electrical time constant	3.3 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
Net weight	4 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	3.2 kg
Package 1 Height	11 cm
Package 1 width	20 cm
Package 1 Length	40 cm

Offer Sustainability

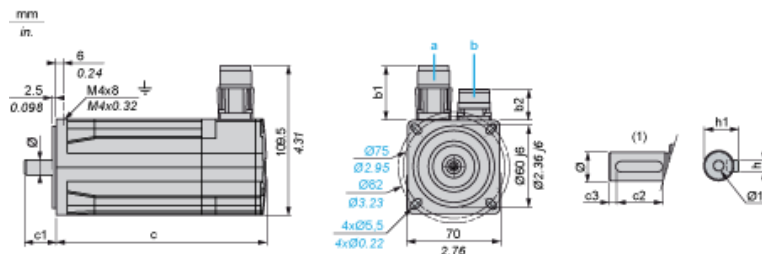
Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	 Yes
China RoHS Regulation	 China RoHS Declaration
Environmental Disclosure	 Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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)

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	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

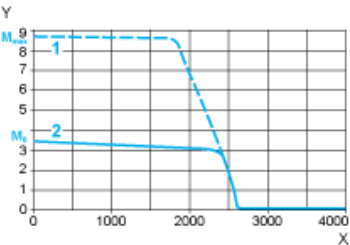
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	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

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

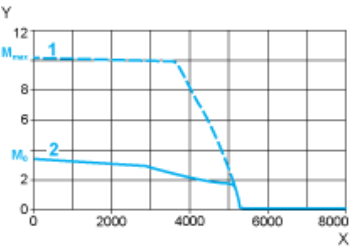


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



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