Product data sheet

Specifications

servo motor BMH - 6.2 Nm - 6000 rpm - keyed shaft - with brake - IP65/IP67

BMH1002P31F1A

Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	6000 rpm
Continuous stall torque	6.2 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 6.2 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Peak stall torque	18.4 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 18.4 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal output power	1600 W for LXM32.D18N4 at 6 A, 400 V, three phase 1600 W for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal torque	3.9 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.9 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal speed	4000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase
Product compatibility	LXM32.D18N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	5.04 A
Continuous power	2.36 W
Maximum current Irms	18 A for LXM32.D18N4
Maximum permanent current	18.23 A
Second shaft	Without second shaft end
Shaft diameter	19 mm

Shaft length	40 mm
Key width	30 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	5.5 N.m holding brake
Motor flange size	100 mm
Number of motor stacks	2
Torque constant	1.2 N.m/A at 120 °C
Back emf constant	77 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	6.77 kg.cm²
Stator resistance	1.51 Ohm at 20 °C
Stator inductance	7.5 mH at 20 °C
Stator electrical time constant	5 ms at 20 °C
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm 580 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	202.3 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Net weight	6.4 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	6.68 kg
Package 1 Height	22 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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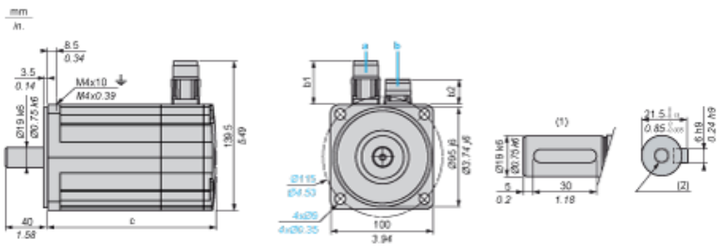
Dimensions Drawings

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 M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
39.5	25.5	39.5	39.5	160	202

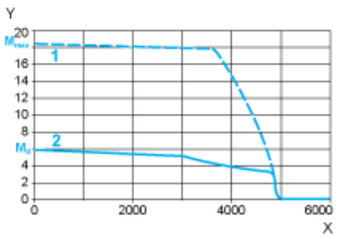
Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)
b1	b2	b1	b2		
1.55	1.00	1.55	1.55	6.29	7.95

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

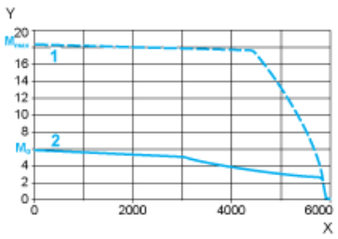


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 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
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