

servo motor BMH - 6 Nm - 6000 rpm - keyed shaft - without brake - IP54

BMH1002T17A2A

Product or component type	Servo motor			
Device short name	вмн			
Maximum mechanical speed	6000 rpm			
Continuous stall torque	6 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase			
Peak stall torque	10.3 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 18.4 N.m for LXM32.D30M2 at 10 A, 230 V, single phase			
Nominal output power	750 W for LXM32.D30M2 at 10 A, 115 V, single phase 1450 W for LXM32.D30M2 at 10 A, 230 V, single phase			
Nominal torque	3.5 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 4.6 N.m for LXM32.D30M2 at 10 A, 230 V, single phase			
Nominal speed	2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase 3000 rpm for LXM32.D30M2 at 10 A, 230 V, single phase			
Product compatibility	LXM32.D30M2 at 115 V single phase LXM32.D30M2 at 230 V single phase			
Shaft end	Keyed			
IP degree of protection	IP54 standard			
Speed feedback resolution 32768 points/turn x 4096 turns				
Holding brake	Without			
Mounting support	International standard flange			
Electrical connection	Rotatable right-angled connectors			

Complementary

Range compatibility	Lexium 32	
[Us] rated supply voltage	240 V	
Network number of phases	Three phase	
Continuous stall current	8.65 A	
Continuous power	2.39 W	
Maximum current Irms	15 A for LXM32.D30M2 at 115 V 30 A for LXM32.D30M2 at 230 V	
Maximum permanent current	30.24 A	
Second shaft	Without second shaft end	
Shaft diameter	19 mm	

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Key width 30 mm Feedback type Multitum SinCos Hiperface Motor flange size 100 mm Number of motor stacks 2 Torque constant 0.72 N m/A at 120 °C Back enf constant 48.2 V/N pm at 120 °C Number of motor poles 10 Rotor inertia 6.28 kg cm² Stator resistance 0.54 O m at 20 °C Stator resistance 2.7 mH at 20 °C Stator electrical time constant 5 ms at 20 °C Stator electrical time constant 5 ms at 20 °C Maximum radial force Fr 990 N at 10000 pm 600 N at 3000 N at			
Motor flange size 100 mm Number of motor stacks 2 Torque constant 0.72 N.mAA at 120 °C Back emf constant 46.2 V.Marpm at 120 °C Number of motor poles 10 Rotor inertia 6.28 kg.cm² Stator resistance 0.54 O.ma at 20 °C Stator inductance 2.7 mH at 20 °C Stator electrical time constant 5 ms at 20 °C Stator electrical time constant 5 ms at 20 °C Maximum radial force Fr 900 N at 1000 rpm 600 N at 3000 rpm 600 N at 5000 rpm 600 rpm 600 N at 5000 rpm 600 rpm 600 rpm 600 N at 5000 rpm 600 rp	Shaft length	40 mm	
Motor flange size 100 mm Number of motor stacks 2 Torque constant 0.72 N.mA at 120 °C Back emf constant 46.2 V/wpm at 120 °C Number of motor poles 10 Rotor inertia 6.28 kg.cm* Stator resistance 0.54 O/m at 20 °C Stator electrical time constant 5. ms at 20 °C Stator electrical time constant 5. ms at 20 °C Stator electrical time constant 5. ms at 20 °C Maximum radial force Fr 980 N at 1000 rpm 750 N at 2000 rpm 800 N at 3000 rpm 800 rpm 800 N at 3000 rpm 800	Key width	30 mm	
Number of motor stacks 2	Feedback type	Multiturn SinCos Hiperface	
Description Continue Contin	Motor flange size	100 mm	
Back enf constant 46.2 Vikpm at 120 °C Rotor inertia 5.28 kg.cm² Stator resistance 0.54 Ohm at 20 °C Stator inductance 2.7 mH at 20 °C Stator electrical time constant 5 ms at 20 °C Maximum radial force Fr 990 Nat 1000 rpm 790 Nat 2000 rpm 690 N at 3000 rpm 650 N at 5000	Number of motor stacks	2	
Number of motor poles 10	Torque constant	0.72 N.m/A at 120 °C	
Rotor inertia 6.28 kg.cm² Stator resistance 0.54 Ohm at 20 °C Stator resistance 2.7 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 800 rpm 800 N at 2000 rpm 800 rpm 800 rpm 800 N at 2000 rpm 800 rp	Back emf constant	46.2 V/krpm at 120 °C	
Stator resistance 0.54 Ohm at 20 °C Stator inductance 2.7 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 20000 rpm 690 N at 30000 rpm 690 N at 3000 rpm 690	Number of motor poles	10	
Stator inductance 2.7 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 20000 rpm 890 N at 30000 rpm 890 N at 30000 rpm 890 N at 30000 rpm 980	Rotor inertia	6.28 kg.cm ²	
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 790 N at 2000 rpm 790 N at 20	Stator resistance	0.54 Ohm at 20 °C	
Maximum radial force Fr 990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 690 N at 4000 rpm 690 N at 400 rpm 690 N at 4000 rpm 690 N at 4000 rpm 690 N at 4000 rpm 690 N	Stator inductance	2.7 mH at 20 °C	
790 N at 2000 rpm 690 N at 30000 rpm 620 N at 4000 rpm 680 N at 4000 rpm 680 N at 5000 rpm 980 N at 50	Stator electrical time constant	5 ms at 20 °C	
Type of cooling Natural convection Length 160.6 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 115 mm holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Maximum radial force Fr	790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm	
Length 160.6 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 115 mm holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Maximum axial force Fa	0.2 x Fr	
Centring collar depth 3.5 mm Number of mounting holes 4 Mounting holes diameter 9 mm Circle diameter of the mounting 115 mm holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Weight 40.0 cm Package 1 Weight 5.22 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	Type of cooling	Natural convection	
Centring collar depth 3.5 mm Number of mounting holes 4 Mounting holes diameter 9 mm Circle diameter of the mounting holes 115 mm holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Length	160.6 mm	
Mumber of mounting holes 4 Mounting holes diameter 9 mm Circle diameter of the mounting 115 mm holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Centring collar diameter	95 mm	
Mounting holes diameter 9 mm Circle diameter of the mounting holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Centring collar depth	3.5 mm	
Circle diameter of the mounting holes Net weight 4.92 kg Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Number of mounting holes	4	
Net weight 4.92 kg Packing Units Unit Type of Package 1 Package 1 Package 1 Height 22.0 cm Package 1 Width Package 1 Length Package 1 Weight 5.22 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	Mounting holes diameter	9 mm	
Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Circle diameter of the mounting holes	115 mm	
Unit Type of Package 1 Number of Units in Package 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Net weight	4.92 kg	
Unit Type of Package 1 Number of Units in Package 1 Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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			
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Package 1 Height 22.0 cm Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Unit Type of Package 1	PCE	
Package 1 Width 20.0 cm Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Number of Units in Package 1	1	
Package 1 Length 40.0 cm Package 1 Weight 5.22 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	Package 1 Height	22.0 cm	
Package 1 Weight Offer Sustainability Sustainable offer status Green Premium product REACh Regulation REACh Declaration Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope)	Package 1 Width	20.0 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	Package 1 Length	40.0 cm	
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	Package 1 Weight	5.22 kg	
REACh Regulation REACh Declaration Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	Offer Sustainability		
EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	Sustainable offer status	Green Premium product	
EU RoHS Declaration	REACh Regulation	ulation REACh Declaration	
Mercury free Yes	EU RoHS Directive		
	Mercury free	Yes	

The product must be disposed on European Union markets following specific waste collection and

China RoHS declaration

Product Environmental Profile

never end up in rubbish bins

Yes

WEEE

China RoHS Regulation

RoHS exemption information

Environmental Disclosure

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

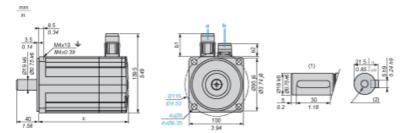
Product data sheet

BMH1002T17A2A

Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



a: Power supply for servo motor brake Power supply for servo motor encoder Shaft end, keyed slot (optional) For screw M6 x 21 mm/M6 x 0.83 in. b: (1) (2)

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		
ſ	1.55	1.00	1.55	1.55	6.29	7.95

Product data sheet

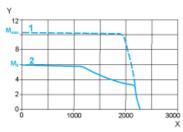
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Performance Curves

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

Product data sheet

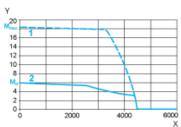
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Performance Curves

230 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

Recommended replacement(s)