Product datasheet Characteristics

BSH1004T11A1A

AC servo motor BSH - 8.18 N.m - 3500 rpm - keyed shaft - without brake - IP50





Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	9.31 N.m for LXM15MD40N4, 230 V, three phase 8.18 N.m for LXM15LD28M3, 230 V, three phase
Peak stall torque	15.7 N.m for LXM15LD28M3, 230 V, three phase 21.04 N.m for LXM15MD40N4, 230 V, three phase
Nominal output power	2500 W for LXM15LD28M3, 230 V, three phase 2500 W for LXM15MD40N4, 230 V, three phase
Nominal torque	7 N.m for LXM15LD28M3, 230 V, three phase 7 N.m for LXM15MD40N4, 230 V, three phase
Nominal speed	3500 rpm for LXM15LD28M3, 230 V, three phase 3500 rpm for LXM15MD40N4, 230 V, three phase
Product compatibility	LXM15LD28M3 at 230 V three phase LXM15MD40N4 at 230 V three phase
Shaft end	Keyed
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 15	
Supply voltage max	480 V	ra Tari
Network number of phases	Three phase	——————————————————————————————————————
Continuous stall current	12.7 A	ii ob
Maximum continuous power	3.64 W	i i
Maximum current Irms	34.8 A for LXM15LD28M3	<u></u>

61 A for LXM15MD40N4

Second shaft Without second shaft end Shaft diameter 24 mm Shaft length 50 mm Key width 40 mm Feedback type Single turn SinCos Hiperface Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N m/A at 120 °C .068 N m/A at 120 °C Back emf constant 103 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mH at 20 °C .9 mt at 2000 °C .1 m s at 200 °C .1 m s at 200 °C .1 m s at 200 °C	Maximum permanent current	66.3 A
Shaft diameter 24 mm Shaft length 50 mm Key width 40 mm Feedback type Single turn SinCos Hiperface Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C Back emf constant 103 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 1.3 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 450 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	- <u></u>	2212.1
Shaft length 50 mm Key width 40 mm Feedback type Single turn SinCos Hiperface Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C .82 ke mf constant 103 V/krpm at 120 °C Back emf constant 103 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C Stator electrical time constant 6.44 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 40 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 mm Centring collar depth 3.5 mm Number of mounting holes 4 Mounting holes diameter 9 mm Gircle diameter of the mounting holes 115 mm		
Key width 40 mm Feedback type Single turn SinCos Hiperface Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C 0.86 N.m/A at 120 °C 50 V/krpm at 1	-	
Feedback type Single turn SinCos Hiperface Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C Back emf constant 103 V/krpm at 120 °C Sto V/krpm at 120 °C Sto V/krpm at 120 °C Stator inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 1.81 Ohm at 20 °C 2.9 m H at 20 °C 2.9 m H at 20 °C 2.9 m H at 20 °C 7.18 ms at 20 °C To cooling Natural convection Length 276.5 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		
Motor flange size 100 mm Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C Back emf constant 103 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C 2.9 mH at 20 °C 2.9 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C 7.18 ms at 20 °C 7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 440 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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		
Number of motor stacks 4 Torque constant 1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C 0.86 N.m/A at 120 °C Back emf constant 103 V/krpm at 120 °C 50 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C 2.9 mH at 20 °C 2.9 mH at 20 °C 3.44 ms at 20 °C 7.18 ms at 20 °C The maximum radial force Fr 1070 N at 1000 rpm 850 N at 2000 rpm Centring collar diameter 95 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	·	
Torque constant 1.62 N.m/A at 120 °C 0.86 N.m/A at 120 °C Back emf constant 103 V/krpm at 120 °C 50 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C 2.9 mH at 20 °C 2.9 mH at 20 °C 3.1 mH at 20 °C 2.9 mH at 20 °C 3.1 mH at 20 °C 3.2 mH at 20 °C 3.3 mH at 20 °C 3.4 ms at 20 °C 7.18 ms at 20 °C 7.18 ms at 20 °C 7.18 ms at 20 °C 7.19 ms at 20 °C Topo or pm 740 N at 3000 rpm 850 N at 2000 rpm 850 N at 2000 rpm Corling Natural convection Length 276.5 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	·	100 mm
Back emf constant 103 V/krpm at 120 °C 50 V/krpm at 120 °C Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C 2.9 mH at 20 °C 2.9 mH at 20 °C 3.18 ms at 20 °C 7.18 ms at 20 °C 7.19 or New 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Naximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Number of motor stacks	4
Number of motor poles 8 Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C 2.9 mH at 20 °C 2.9 mH at 20 °C 3.44 ms at 20 °C 7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr 7ype of cooling Natural convection Length 276.5 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	Torque constant	
Rotor inertia 4.22 kg.cm² Stator resistance 1.81 Ohm at 20 °C Stator inductance 2.9 mH at 20 °C 2.9 mH at 20 °C 7.18 ms at 20 °C 7.19 ms at 20 °C 7.19 ms at 20 °C 7.10 ns at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm 850 N at 2000 rpm Naximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Back emf constant	
Stator resistance 1.81 Ohm at 20 °C Stator inductance 13 mH at 20 °C 2.9 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C 7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Number of motor poles	8
Stator inductance 13 mH at 20 °C 2.9 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C 7.18 ms at 20 °C 7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Rotor inertia	4.22 kg.cm²
2.9 mH at 20 °C Stator electrical time constant 6.44 ms at 20 °C 7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Stator resistance	1.81 Ohm at 20 °C
7.18 ms at 20 °C Maximum radial force Fr 1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Stator inductance	
740 N at 3000 rpm 850 N at 2000 rpm Maximum axial force Fa 0.2 x Fr Type of cooling Natural convection Length 276.5 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	Stator electrical time constant	
Type of cooling Natural convection Length 276.5 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	Maximum radial force Fr	740 N at 3000 rpm
Length 276.5 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	Maximum axial force Fa	0.2 x Fr
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	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	Length	276.5 mm
Number of mounting holes 4 Mounting holes diameter 9 mm Circle diameter of the mounting holes 115 mm	Centring collar diameter	95 mm
Mounting holes diameter 9 mm Circle diameter of the mounting holes 115 mm	Centring collar depth	3.5 mm
Circle diameter of the mounting holes 115 mm	Number of mounting holes	4
	Mounting holes diameter	9 mm
Product weight 9.2 kg	Circle diameter of the mounting holes	115 mm
	Product weight	9.2 kg

Offer Sustainability

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