Product datasheet Characteristics

BSH1002T22A1A

AC servo motor BSH - 5.5 N.m - 4000 rpm - untapped shaft - without brake - IP65



Main							
Product or component type	Servo motor						
Device short name	BSH						
Maximum mechanical speed	6000 rpm						
Continuous stall torque	5.8 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 5.5 N.m for LXM15LD28M3, 230 V, three phase 5.5 N.m for LXM05AD42M3X, 200240 V, three phase 5.5 N.m for LXM05BD42M3X, 200240 V, three phase 5.5 N.m for LXM05CD42M3X, 200240 V, three phase						
Peak stall torque	16.4 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 11.59 N.m for LXM15LD28M3, 230 V, three phase 16 N.m for LXM05AD42M3X, 200240 V, three phase 16 N.m for LXM05BD42M3X, 200240 V, three phase 16 N.m for LXM05CD42M3X, 200240 V, three phase						
Nominal output power	1500 W for LXM32.D30M2 at 10 A, 230 V, single phase 1400 W for LXM05AD42M3X, 200240 V, three phase 1400 W for LXM05BD42M3X, 200240 V, three phase 1400 W for LXM05CD42M3X, 200240 V, three phase 1700 W for LXM15LD28M3, 230 V, three phase						
Nominal torque	3.7 N.m for LXM32.D30M2 at 10 A, 230 V, single phase 4 N.m for LXM15LD28M3, 230 V, three phase 4.4 N.m for LXM05AD42M3X, 200240 V, three phase 4.4 N.m for LXM05BD42M3X, 200240 V, three phase 4.4 N.m for LXM05CD42M3X, 200240 V, three phase						
Nominal speed	4000 rpm for LXM32.D30M2 at 10 A, 230 V, single phase 3000 rpm for LXM05AD42M3X, 200240 V, three phase 3000 rpm for LXM05BD42M3X, 200240 V, three phase 3000 rpm for LXM05CD42M3X, 200240 V, three phase 4000 rpm for LXM15LD28M3, 230 V, three phase						
Product compatibility	LXM32.D30M2 at 230 V single phase LXM05AD42M3X at 200240 V three phase LXM05BD42M3X at 200240 V three phase LXM05CD42M3X at 200240 V three phase LXM15LD28M3 at 230 V three phase						
Shaft end	Untapped						
IP degree of protection	IP65 standard IP67 with IP67 kit						
Speed feedback resolution	131072 points/turn x 4096 turns						
Holding brake	Without						
Mounting support	International standard flange						

Electrical connection	Straight connectors
Complementary	
Range compatibility	Lexium 05
	Lexium 32 Lexium 15
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	9.9 A
Maximum continuous power	2.51 W
Maximum current Irms	31.2 A for LXM15LD28M3
	35.4 A for LXM05AD42M3X
	35.4 A for LXM05BD42M3X 35.4 A for LXM05CD42M3X
	30 A for LXM32.D30M2
Maximum permanent current	35.4 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	100 mm
Number of motor stacks	2
Torque constant	0.59 N.m/A at 120 °C
Back emf constant	37 V/krpm at 120 °C
Number of motor poles	8
Rotor inertia	2.31 kg.cm ²
Stator resistance	0.56 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	5.36 ms at 20 °C
Maximum radial force Fr	620 N at 4000 rpm
	690 N at 3000 rpm 790 N at 2000 rpm
	990 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	204.5 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
Product weight	5.9 kg
Contractual warranty	
Warranty	18 months

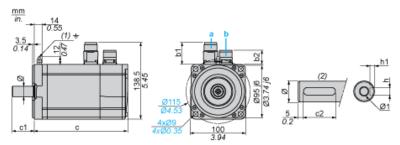
Contractadi Warranty	
Warranty	18 months

Product datasheet Dimensions Drawings

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Servo Motors Dimensions

Example with Straight Connectors



- Power supply for servo motor brake a:
- b: Power supply for servo motor encoder
- (1) (2) Shaft end, keyed slot (optional)

Dimensions in mm

Straight of	connectors	Rotatable	angled co	c (without bra	c (with bral	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
39.5	25.5	39.5	39.5	205	236	40	30	6 N9	3.5 ^{+0.1} ₀	19 k6	M6 x 16

Dimensions in in.

	Straight co	raight connector Rotatable angled co			c (without bra	c (with brak	c1	c2	h	h1	Ø	Ø1 for screws
Î	b1	b2	b1	b2								
	1.55	1.00	1.55	1.55	8.07	9.29	1.57	1.18	0.24 N9	0.14 ^{+0.1} ₀	0.75 k6	M6 x 0.63

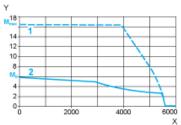
Product datasheet Performance Curves

BSH1002T22A1A

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