Product datasheet Characteristics

BSH1002T22F1A

AC servo motor BSH - 5.5 N.m - 4000 rpm - untapped shaft - with 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	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Complementary	
Range compatibility	Lexium 32 Lexium 05 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
Holding torque	9 N.m holding brake
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	2.928 kg.cm²
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
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	235.5 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	6.3 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

Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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Contractual warranty	

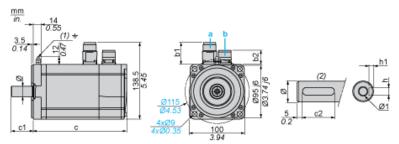
Warranty	18 months

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

Stra	aight c	onnectors	Rotatable	angled co	c (without bral	c (with brake	с1	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.

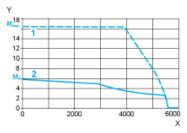
Straight of	Straight connector Rotatable angled co		c (without br	c (with brak	c1	c2	h	h1	Ø	Ø1 for screws	
b1	b2	b1	b2								
1.55	1.00	1.55	1.55	8.07	9.29	1.57	1.18	0.24 N9	0.14 ^{+0.1} ₀	0.75 k6	M6 x 0.63

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230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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