BSH1002T22F1A

AC servo motor BSH - 5.5 N.m - 4000 rpm untapped shaft - with brake - IP65





Main PTC

Product or Component Type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque Peak stall torque	51.33 Lbf.In (5.8 N.m) LXM32.D30M2 10 A, 230 V, single phase 48.68 Lbf.In (5.5 N.m) LXM15LD28M3, 230 V, three phase 48.68 Lbf.In (5.5 N.m) LXM05AD42M3X, 200240 V, three phase 48.68 Lbf.In (5.5 N.m) LXM05BD42M3X, 200240 V, three phase 48.68 lbf.in (5.5 N.m) LXM05BD42M3X, 200240 V, three phase 48.68 lbf.in (5.5 N.m) LXM05CD42M3X, 200240 V, three phase 145.15 Lbf.In (16.4 N.m) LXM32.D30M2 10 A, 230 V, single phase 102.58 Lbf.In (11.59 N.m) LXM15LD28M3, 230 V, three phase 141.61 Lbf.In (16 N.m) LXM05AD42M3X, 200240
	V, three phase 141.61 Lbf.In (16 N.m) LXM05BD42M3X, 200240 V, three phase 141.61 lbf.in (16 N.m) LXM05CD42M3X, 200240 V, three phase
Nominal output power	1500 W LXM32.D30M2 10 A, 230 V, single phase 1400 W LXM05AD42M3X, 200240 V, three phase 1400 W LXM05BD42M3X, 200240 V, three phase 1400 W LXM05CD42M3X, 200240 V, three phase 1700 W LXM15LD28M3, 230 V, three phase
Nominal torque	32.75 Lbf.In (3.7 N.m) LXM32.D30M2 10 A, 230 V, single phase 35.40 Lbf.In (4 N.m) LXM15LD28M3, 230 V, three phase 38.94 Lbf.In (4.4 N.m) LXM05AD42M3X, 200240 V, three phase 38.94 Lbf.In (4.4 N.m) LXM05BD42M3X, 200240 V, three phase 38.94 lbf.in (4.4 N.m) LXM05CD42M3X, 200240 V, three phase
Nominal speed	4000 rpm LXM32.D30M2 10 A, 230 V, single phase 3000 rpm LXM05AD42M3X, 200240 V, three phase 3000 rpm LXM05BD42M3X, 200240 V, three phase 3000 rpm LXM05CD42M3X, 200240 V, three phase 4000 rpm LXM15LD28M3, 230 V, three phase
Product compatibility	LXM32.D30M2 230 V single phase LXM05AD42M3X 200240 V three phase LXM05BD42M3X 200240 V three phase LXM05CD42M3X 200240 V three phase LXM15LD28M3 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				
Phase	Three phase				
Continuous stall current	9.9 A				
Maximum continuous power	2.51 W				
Maximum current Irms	31.2 A LXM15LD28M3 35.4 A LXM05AD42M3X 35.4 A LXM05BD42M3X 35.4 A LXM05CD42M3X 30 A LXM32.D30M2				
Maximum permanent current	35.4 A				
Switching frequency	8 kHz				
Second shaft	Without second shaft end				
Shaft diameter	0.75 in (19 mm)				
Shaft length	1.57 in (40 mm)				
Feedback type	Multiturn SinCos Hiperface				
Holding torque	79.66 lbf.in (9 N.m) holding brake				
Motor flange size	3.94 in (100 mm)				
Number of motor stacks	2				
Torque constant	0.59 N.m/A 248 °F (120 °C)				
Back emf constant	37 V/krpm 248 °F (120 °C)				
Number of motor poles	8				
Rotor inertia	2.928 kg.cm²				
Stator resistance	0.56 Ohm 68 °F (20 °C)				
Stator inductance	3 mH 68 °F (20 °C)				
Stator electrical time constant	5.36 ms 68 °F (20 °C)				
Maximum radial force Fr	620 N 4000 rpm 690 N 3000 rpm 790 N 2000 rpm 990 N 1000 rpm				
Maximum axial force Fa	0.2 x Fr				
Brake pull-in power	18 W				
Type of cooling	Natural convection				
Length	9.27 in (235.5 mm)				
Centring collar diameter	3.74 in (95 mm)				
Centring collar depth	0.14 in (3.5 mm)				
Number of mounting holes	4				
Mounting holes diameter	0.35 in (9 mm)				
Circle diameter of the mounting holes	4.53 in (115 mm)				
Net Weight	13.89 lb(US) (6.3 kg)				

Ordering and shipping details

<u> </u>		
Category	18282-LEXIUM 32 MOTORS	
Discount Schedule	PC53	
GTIN	3389118139565	
Returnability	No	
Country of origin	DE	

Packing Units

Unit Type of Package 1	PCE			
Number of Units in Package 1	1			
Package 1 Height	6.06 in (15.4 cm)			
Package 1 Width	6.42 in (16.3 cm)			
Package 1 Length	16.02 in (40.7 cm)			
Package 1 Weight	14.22 lb(US) (6.45 kg)			

Offer Sustainability

Sustainable offer status	Green Premium product					
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					
REACh Regulation	REACh Declaration					
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EPEU RoHS Declaration					
Mercury free	Yes					
China RoHS Regulation	China RoHS Declaration					
RoHS exemption information	₫Yes					
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					

Contractual warranty

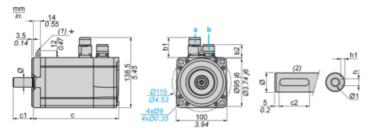
Contractual warranty		
Warranty	18 months	

Product data sheet Dimensions Drawings

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Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) M4 screw
- (2) Shaft end, keyed slot (optional)

Dimensions in mm

Straight connecto	Straight Rotatable angled connectors		c (without brake)	c (with brake)	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.

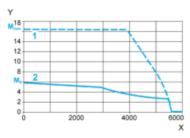
Straight connecto	Straight Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	h	h1	Ø	Ø1 for screws	
b1	b2	b1	b2								
1.55	1.00	1.55	1.55	8.07	9.29	1.57	1.18	0.24 N9	0.14 ^{+0.1} ₀	0.75 k6	M6 x 0.63

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230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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