BSH1402T12A2P

Main

AC servo motor BSH - 14.4 N.m - 3000 rpm keyed shaft - without brake - IP50



Product availability: Non-Stock - Not normally stocked in distribution facility



Product or component Servo motor type Device short name **BSH** Maximum mechanical 4000 rpm speed Continuous stall torque 172.57 lbf.in (19.5 N.m) LXM32.D72N4 24 A at 400 V three phase 172.57 lbf.in (19.5 N.m) LXM32.D72N4 24 A at 480 V three phase 127.43 lbf.in (14.4 N.m) LXM05AD42M3X at 200...240 V three phase 127.43 lbf.in (14.4 N.m) LXM05BD42M3X at 200...240 V three phase 127.43 lbf.in (14.4 N.m) LXM05CD42M3X at 200...240 V three phase 524.78 lbf.in (59.3 N.m) LXM32.D72N4 24 A at 400 Peak stall torque V three phase 524.78 lbf.in (59.3 N.m) LXM32.D72N4 24 A at 480 V three phase 217.35 lbf.in (24.56 N.m) LXM05AD42M3X at 200...240 V three phase 217.35 lbf.in (24.56 N.m) LXM05BD42M3X at 200...240 V three phase 3900 W LXM32.D72N4 24 A at 400 V three phase Nominal output power 3900 W LXM32.D72N4 24 A at 480 V three phase 2900 W LXM05AD42M3X at 200...240 V three phase 2900 W LXM05BD42M3X at 200...240 V three 2900 W LXM05CD42M3X at 200...240 V three phase 108.85 lbf.in (12.3 N.m) LXM32.D72N4 24 A at 400 Nominal torque V three phase 108.85 lbf.in (12.3 N.m) LXM32.D72N4 24 A at 480 V three phase 81.42 lbf.in (9.2 N.m) LXM05AD42M3X at 200...240 V three phase 81.42 lbf.in (9.2 N.m) LXM05BD42M3X at 200...240 V three phase 81.42 lbf.in (9.2 N.m) LXM05CD42M3X at 200...240 Nominal speed 3000 rpm LXM32.D72N4 24 A at 400 V three phase 3000 rpm LXM32.D72N4 24 A at 480 V three phase 3000 rpm LXM05AD42M3X at 200...240 V three phase 3000 rpm LXM05BD42M3X at 200...240 V three phase 3000 rpm LXM05CD42M3X at 200...240 V three Product compatibility LXM05AD42M3X at 200...240 V three phase LXM05BD42M3X at 200...240 V three phase LXM05CD42M3X at 200...240 V three phase Shaft end Keyed

IP50 (standard)

Without

131072 points/turn x 4096 turns

International standard flange

Rotatable right-angled connectors

IP degree of protection

Speed feedback resolu-

Holding brake

Mounting support

Electrical connection

documentation

this

Complementary

Complementary					
Range compatibility	Lexium 05 Lexium 32				
Supply voltage max	480 V				
Phase	Three phase				
Continuous stall current	22.5 A				
Maximum continuous power	4.2 W				
Maximum current Irms	75.2 A LXM05AD42M3X 75.2 A LXM05BD42M3X 75.2 A LXM05CD42M3X 72 A LXM32.D72N4				
Maximum permanent current	75.2 A				
Switching frequency	8 kHz				
Second shaft	Without second shaft end				
Shaft diameter	0.94 in (24 mm)				
Shaft length	1.97 in (50 mm)				
Key width	1.57 in (40 mm)				
Feedback type	Multiturn SinCos Hiperface				
Motor flange size	5.51 in (140 mm)				
Number of motor stacks	2				
Torque constant	1.47 N.m/A at 248 °F (120 °C)				
Back emf constant	101 V/krpm at 248 °F (120 °C)				
Number of motor poles	10				
Rotor inertia	12.68 kg.cm ²				
Stator resistance	0.6 Ohm at 68 °F (20 °C)				
Stator inductance	7.4 mH at 68 °F (20 °C)				
Stator electrical time constant	12.1 ms at 68 °F (20 °C)				
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm				
Maximum axial force Fa	0.2 x Fr				
Type of cooling	Natural convection				
Length	10.73 in (272.5 mm)				
Centring collar diameter	5.12 in (130 mm)				
Centring collar depth	0.14 in (3.5 mm)				
Number of mounting holes	4				
Mounting holes diameter	0.43 in (11 mm)				
Circle diameter of the mounting holes	6.5 in (165 mm)				
Product weight	36.6 lb(US) (16.6 kg)				

Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS				
Discount Schedule	PC53				
GTIN	003389118361201				
Nbr. of units in pkg.	1				
Package weight(Lbs)	25.3000000000001				
Returnability	N				
Country of origin	DE				

Offer Sustainability

Sustainable offer status	Green Premium product				
RoHS (date code: YYWW)	Compliant - since 1018 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity				
REACh	Reference not containing SVHC above the threshold				
Product environmental profile	Available				
Product end of life instructions	Need no specific recycling operations				

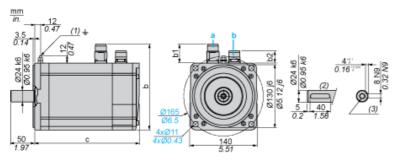
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov				
Substance 1					
More information					
Contractual warranty					
Warranty period	18 months				

Product data sheet Dimensions Drawings

BSH1402T12A2P

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)
- (3) For screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

Straight connectors		Rotatable angled connectors			c (without brake)	c (with brake)	
b	b1	b2	b	b1	b2		
192.5	54	25.5	198.5	60	39.5	273	311

Dimensions in in.

Straight connectors		Rotatable angled connectors			c (without brake)	c (with brake)	
b	b1	b2	b	b1	b2		
7.57	2.12	1.00	7.81	2.36	1.55	10.74	12.24

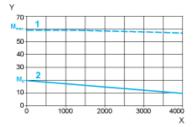
Product data sheet Performance Curves

BSH1402T12A2P

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

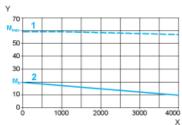


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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