

BSH1403T31A1P

AC servo motor BSH - 27.8 N.m - 3000 rpm -
keyed shaft - without brake - IP65



Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4800 rpm
Continuous stall torque	27.8 N.m for LXM32.D72N4 24 A at 400 V three phase 27.8 N.m for LXM32.D72N4 24 A at 480 V three phase
Peak stall torque	90.2 N.m for LXM32.D72N4 24 A at 400 V three phase 90.2 N.m for LXM32.D72N4 24 A at 480 V three phase
Nominal output power	4100 W for LXM32.D72N4 24 A at 400 V three phase 4100 W for LXM32.D72N4 24 A at 480 V three phase
Nominal torque	12.9 N.m for LXM32.D72N4 24 A at 400 V three phase 12.9 N.m for LXM32.D72N4 24 A at 480 V three phase
Nominal speed	3000 rpm for LXM32.D72N4 24 A at 400 V three phase 3000 rpm for LXM32.D72N4 24 A at 480 V three phase
Product compatibility	LXM32.D72N4 at 400 V three phase LXM32.D72N4 at 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 32
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	22.3 A
Maximum continuous power	3.3 W
Maximum current Irms	72 A for LXM32.D72N4
Maximum permanent current	81.3 A
Switching frequency	8 kHz
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	140 mm

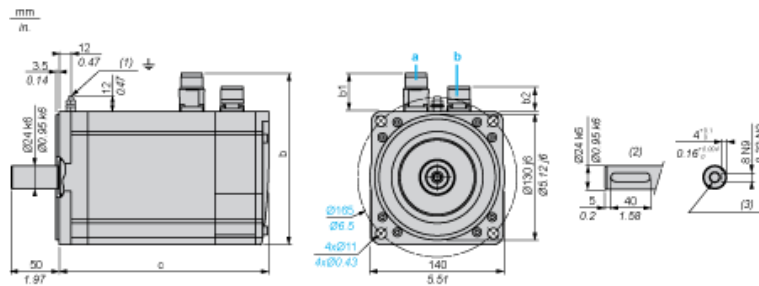
Number of motor stacks	3
Torque constant	1.58 N.m/A at 120 °C
Back emf constant	105 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	12.68 kg.cm ²
Stator resistance	0.4 Ohm at 20 °C
Stator inductance	5.1 mH at 20 °C
Stator electrical time constant	12.75 ms at 20 °C
Maximum radial force Fr	1780 N at 3000 rpm 2030 N at 2000 rpm 2560 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	327.5 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Product weight	21.2 kg

Offer Sustainability

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

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	328	366

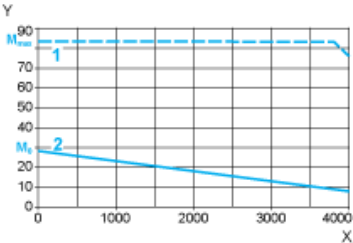
Dimensions in in.

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	12.91	14.40

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

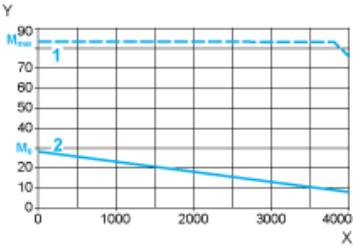


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

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