

BSH1403T01A2P

AC servo motor BSH, Lexium 32, 27.8N.m,
3000rpm, untapped shaft, without brake, IP50



Main

Device short name	BSH
Product or Component Type	Servo motor
Maximum mechanical speed	4800 rpm
Continuous stall torque	246.05 Lbf.in (27.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 246.05 lbf.in (27.8 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	798.3 Lbf.in (90.2 N.m) LXM32.D72N4 24 A, 400 V, three phase 798.3 lbf.in (90.2 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal output power	4100 W LXM32.D72N4 24 A, 400 V, three phase 4100 W LXM32.D72N4 24 A, 480 V, three phase
Nominal torque	114.2 Lbf.in (12.9 N.m) LXM32.D72N4 24 A, 400 V, three phase 114.2 lbf.in (12.9 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal speed	3000 rpm LXM32.D72N4 24 A, 400 V, three phase 3000 rpm LXM32.D72N4 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 400 V three phase LXM32.D72N4 480 V three phase
Shaft end	Untapped
IP Degree of Protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting Support	International standard
Electrical Connection	Rotatable right-angled connectors

Complementary

Range Compatibility	Lexium 32
Supply voltage max	480 V
Phase	Three phase
Continuous stall current	22.3 A
Maximum continuous power	3.3 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	81.3 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 mm)
Feedback type	Single turn SinCos Hiperface
Motor flange size	5.5 in (140 mm)
Number of motor stacks	3
Torque constant	1.58 N.m/A 248.0000000000 °F (120 °C)
Back emf constant	105 V/krpm 248.0000000000 °F (120 °C)
Number of motor poles	10
Rotor inertia	12.68 kg.cm ²

Stator resistance	0.4 Ohm 68.0000000000 °F (20 °C)
Stator inductance	5.1 mH 68.0000000000 °F (20 °C)
Stator electrical time constant	12.75 ms 68.0000000000 °F (20 °C)
Maximum radial force Fr	1780 N 3000 rpm 2030 N 2000 rpm 2560 N 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	12.9 in (327.5 mm)
Centring collar diameter	5.1 in (130 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (11 mm)
Circle diameter of the mounting holes	6.5 in (165 mm)
Product Weight	46.7 lb(US) (21.2 kg)

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606485201290
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	10.6 in (27 cm)
Package 1 Width	10.6 in (27 cm)
Package 1 Length	19.0 in (48.2 cm)
Package 1 Weight	25.4 lb(US) (11.5 kg)

Offer Sustainability

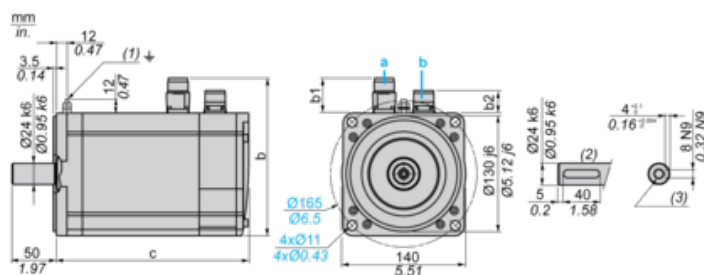
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
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.

Contractual warranty

Warranty	18 months
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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)

(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

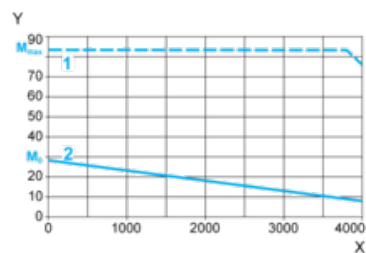
Dimensions in in.

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

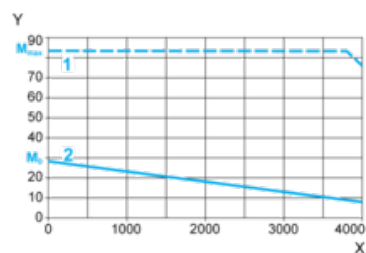
1 Peak torque

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