

BSH1002T21F2A

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	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, 200...240 V, three phase 48.68 Lbf.In (5.5 N.m) LXM05BD42M3X, 200...240 V, three phase 48.68 lbf.in (5.5 N.m) LXM05CD42M3X, 200...240 V, three phase
Peak stall torque	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, 200...240 V, three phase 141.61 Lbf.In (16 N.m) LXM05BD42M3X, 200...240 V, three phase 141.61 lbf.in (16 N.m) LXM05CD42M3X, 200...240 V, three phase
Nominal output power	1500 W LXM32.D30M2 10 A, 230 V, single phase 1400 W LXM05AD42M3X, 200...240 V, three phase 1400 W LXM05BD42M3X, 200...240 V, three phase 1400 W LXM05CD42M3X, 200...240 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, 200...240 V, three phase 38.94 Lbf.In (4.4 N.m) LXM05BD42M3X, 200...240 V, three phase 38.94 lbf.in (4.4 N.m) LXM05CD42M3X, 200...240 V, three phase
Nominal speed	4000 rpm LXM32.D30M2 10 A, 230 V, single phase 3000 rpm LXM05AD42M3X, 200...240 V, three phase 3000 rpm LXM05BD42M3X, 200...240 V, three phase 3000 rpm LXM05CD42M3X, 200...240 V, three phase 4000 rpm LXM15LD28M3, 230 V, three phase
Product compatibility	LXM32.D30M2 230 V single phase LXM05AD42M3X 200...240 V three phase LXM05BD42M3X 200...240 V three phase LXM05CD42M3X 200...240 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
Holding brake	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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	Single turn 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.cm ²
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

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	03389118139541
Nbr. of units in pkg.	1
Package weight(Lbs)	14.2 lb(US) (6.44 kg)
Returnability	No
Country of origin	DE

Packing Units

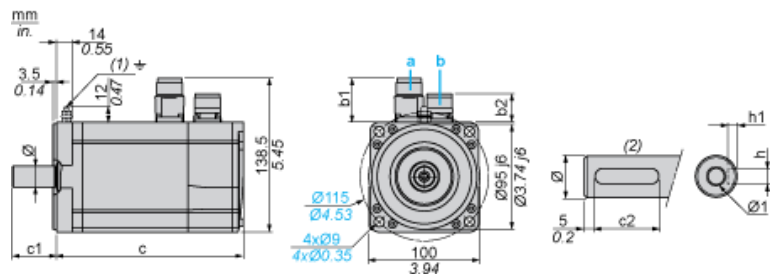
Unit Type of Package 1	PCE
Package 1 Height	6.06 in (15.4 cm)
Package 1 width	6.42 in (16.3 cm)
Package 1 Length	16.02 in (40.7 cm)

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)

Dimensions in mm

Straight connectors		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

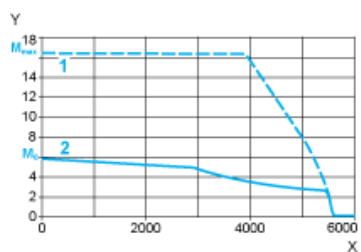
Dimensions in in.

Straight connectors		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

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