

Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4000 rpm
Continuous stall torque	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 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
Peak stall torque	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 524.78 lbf.in (59.3 N.m) LXM32.D72N4 24 A at 400 V three phase 524.78 lbf.in (59.3 N.m) LXM32.D72N4 24 A at 480 V three phase
Nominal output power	2900 W LXM05AD42M3X at 200...240 V three phase 2900 W LXM05BD42M3X at 200...240 V three phase 2900 W LXM05CD42M3X at 200...240 V three phase 3900 W LXM32.D72N4 24 A at 400 V three phase 3900 W LXM32.D72N4 24 A at 480 V three phase
Nominal torque	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 V three phase 108.85 lbf.in (12.3 N.m) LXM32.D72N4 24 A at 400 V three phase 108.85 lbf.in (12.3 N.m) LXM32.D72N4 24 A at 480 V three phase
Nominal speed	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 phase 3000 rpm LXM32.D72N4 24 A at 400 V three phase 3000 rpm LXM32.D72N4 24 A at 480 V three phase
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
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	Straight connectors

The information provided in this documentation contains general descriptions and/or technical characteristics 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 05 Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	22.5 A
Continuous power	4.2 W
Maximum current I _{rms}	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	Single turn SinCos Hiperface
Holding torque	203.54 lbf.in (23 N.m) (holding brake)
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	14.48 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
Brake pull-in power	24 W
Type of cooling	Natural convection
Length	12.22 in (310.5 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	39.02 lb(US) (17.7 kg)

Environment

Offer Sustainability

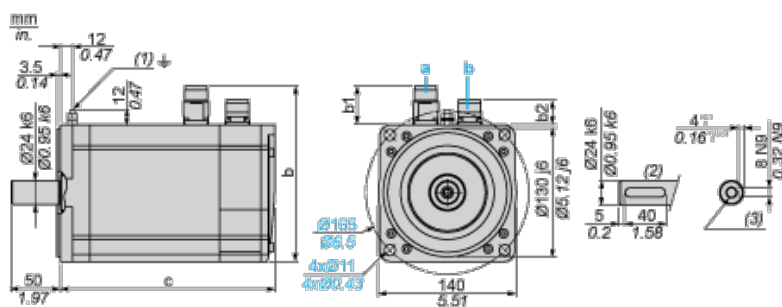
Green Premium product	Green Premium product
Compliant - since 1018 - Schneider Electric declaration of conformity	Compliant - since 1018 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations

Contractual warranty

Warranty period	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	273	311

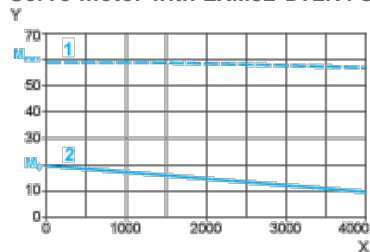
Dimensions in in.

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

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

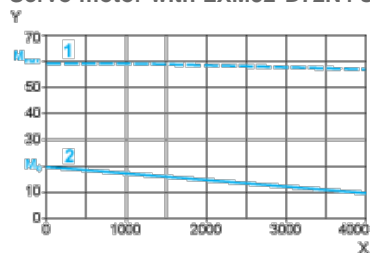


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|----------|-------------------|
| X | Speed in rpm |
| Y | Torque in Nm |
| 1 | Peak torque |
| 2 | Continuous torque |

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