# **Product data sheet**

Specification





servo motor BSH, Lexium 05, 1.4N.m, 3000rpm, 70mm, untapped shaft, Sincos single turn, without brake, IP50

BSH0701P01A2A

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

Price\*: 1,060.00 USD

#### Main

Device short name	BSH						
Product or Component Type	Servo motor						
Maximum mechanical speed	8000 rpm						
Continuous stall torque	12.4 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 400 V, three phase						
	12.4 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 480 V, three phase						
	12.4 lbf.in (1.4 N.m) LXM05AD10M3X, 200240 V, three phase						
	12.4 lbf.in (1.4 N.m) LXM05BD10M3X, 200240 V, three phase						
	12.4 lbf.in (1.4 N.m) LXM05CD10M3X, 200240 V, three phase						
	12.4 lbf.in (1.4 N.m) LXM15LD13M3, 230 V, single phase						
	12.4 lbf.in (1.4 N.m) LXM05AD10M2, 200240 V, single phase						
	12.4 lbf.in (1.4 N.m) LXM05BD10M2, 200240 V, single phase						
	12.4 lbf.in (1.4 N.m) LXM05CD10M2, 200240 V, single phase						
	12.4 lbf.in (1.4 N.m) LXM15LU60N4, 230 V, three phase						
Peak stall torque	31.0 lbf.in (3.5 N.m) LXM32.D12N4 3 A, 400 V, three phase						
	31.0 lbf.in (3.5 N.m) LXM32.D12N4 3 A, 480 V, three phase						
	23.54 lbf.in (2.66 N.m) LXM05AD10M3X, 200240 V, three phase						
	23.54 lbf.in (2.66 N.m) LXM05BD10M3X, 200240 V, three phase						
	23.54 lbf.in (2.66 N.m) LXM05CD10M3X, 200240 V, three phase						
	23.54 lbf.in (2.66 N.m) LXM15LD13M3, 230 V, single phase						
	23.54 lbf.in (2.66 N.m) LXM05AD10M2, 200240 V, single phase						
	23.54 lbf.in (2.66 N.m) LXM05BD10M2, 200240 V, single phase						
	23.54 lbf.in (2.66 N.m) LXM05CD10M2, 200240 V, single phase						
	23.54 lbf.in (2.66 N.m) LXM15LU60N4, 230 V, three phase						
Nominal output power	700 W LXM32.D12N4 3 A, 400 V, three phase						
	700 W LXM32.D12N4 3 A, 480 V, three phase						
	400 W LXM05AD10M2, 200240 V, single phase						
	400 W LXM05BD10M2, 200240 V, single phase						
	400 W LXM05CD10M2, 200240 V, single phase						
	411 W LXM15LD13M3, 230 V, single phase						
	400 W LXM05AD10M3X, 200240 V, three phase						
	400 W LXM05BD10M3X, 200240 V, three phase						
	400 W LXM05CD10M3X, 200240 V, three phase						
	411 W LXM15LU60N4, 230 V, three phase						
Nominal torque	11.68 lbf.in (1.32 N.m) LXM32.D12N4 3 A, 400 V, three phase						
	11.68 lbf.in (1.32 N.m) LXM32.D12N4 3 A, 480 V, three phase						
	11.5 lbf.in (1.3 N.m) LXM05AD10M2, 200240 V, single phase						
	11.5 lbf.in (1.3 N.m) LXM05BD10M2, 200240 V, single phase						
	11.5 lbf.in (1.3 N.m) LXM05CD10M2, 200240 V, single phase						
	11.59 lbf.in (1.31 N.m) LXM15LD13M3, 230 V, single phase						
	11.5 lbf.in (1.3 N.m) LXM05AD10M3X, 200240 V, three phase						
	11.5 lbf.in (1.3 N.m) LXM05BD10M3X, 200240 V, three phase						
	11.5 lbf.in (1.3 N.m) LXM05CD10M3X, 200240 V, three phase						
	11.59 lbf.in (1.31 N.m) LXM15LU60N4, 230 V, three phase						

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Nominal speed	5000 rpm LXM32.D12N4 3 A, 400 V, three phase 5000 rpm LXM32.D12N4 3 A, 480 V, three phase 3000 rpm LXM05AD10M2, 200240 V, single phase 3000 rpm LXM05BD10M2, 200240 V, single phase 3000 rpm LXM05CD10M2, 200240 V, single phase 3000 rpm LXM05CD10M3X, 200240 V, three phase 3000 rpm LXM05BD10M3X, 200240 V, three phase 3000 rpm LXM05CD10M3X, 200240 V, three phase 3000 rpm LXM05CD10M3X, 200240 V, three phase 3000 rpm LXM15LD13M3, 230 V, single phase 3000 rpm LXM15LD13M3, 230 V, three phase						
Product compatibility	LXM05AD10M2 200240 V single phase LXM05BD10M2 200240 V single phase LXM05CD10M2 200240 V single phase LXM15LD13M3 230 V single phase LXM15LU60N4 230 V three phase LXM05AD10M3X 200240 V three phase LXM05BD10M3X 200240 V three phase LXM05CD10M3X 200240 V three phase LXM05CD10M3X 200240 V three phase LXM05CD10M3X 200240 V three phase LXM32.D12N4 400 V three phase LXM32.D12N4 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 flange						
Electrical Connection	Rotatable right-angled connectors						
Complementary							
Range Compatibility	Lexium 15 Lexium 05 Lexium 32						
supply voltage max	480 V						
Phase	Three phase						
Continuous stall current	1.8 A						
maximum continuous power	1.06 W						
Maximum current Irms	5.7 A LXM05AD10M3X 5.7 A LXM05BD10M2 5.7 A LXM05BD10M3X 5.7 A LXM05CD10M2 5.7 A LXM05CD10M3X 5.3 A LXM15LD13M3 5.3 A LXM15LU60N4 5.7 A LXM05AD10M2 5.7 A LXM05AD10M2						
Maximum permanent current	5.7 A						
Switching frequency	8 kHz						
Second shaft	Without second shaft end						
Shaft diameter	0.4 in (11 mm)						
Shaft length	0.9 in (23 mm)						
Feedback type	Single turn SinCos Hiperface						
Motor flange size	2.8 in (70 mm)						
Number of motor stacks	1						
Torque constant	0.8 N.m/A 248.0000000000 °F (120 °C)						
Back emf constant	46 V/krpm 248.0000000000 °F (120 °C)						
Number of motor poles	6						

Rotor inertia	0.25 kg.cm²						
Stator resistance	10.4 Ohm 68.0000000000 °F (20 °C)						
Stator inductance	38.8 mH 68.0000000000 °F (20 °C)						
Stator electrical time constant	3.73 ms 68 °F (20 °C)						
Maximum radial force Fr	360 N 6000 rpm 380 N 5000 rpm 410 N 4000 rpm 460 N 3000 rpm 520 N 2000 rpm 660 N 1000 rpm						
Maximum axial force Fa	0.2 x Fr						
Type of cooling	Natural convection						
Length	6.06 in (154 mm)						
Centring collar diameter	2.4 in (60 mm)						
Centring collar depth	0.10 in (2.5 mm)						
Number of mounting holes	4						
Mounting holes diameter	0.2 in (5.5 mm)						
Circle diameter of the mounting holes	3.2 in (82 mm)						
Net Weight	4.9 lb(US) (2.2 kg)						

# Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3389118135550
Returnability	No
Country of origin	DE

## **Packing Units**

•	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 in (11.5 cm)
Package 1 Width	7.5 in (19 cm)
Package 1 Length	15.6 in (39.5 cm)
Package 1 Weight	5.871 lb(US) (2.663 kg)
Unit Type of Package 2	S06
Number of Units in Package 2	10
Package 2 Height	28.9 in (73.5 cm)
Package 2 Width	23.6 in (60 cm)
Package 2 Length	31.5 in (80 cm)
Package 2 Weight	87.13 lb(US) (39.52 kg)

## **Contractual warranty**

Warranty 18 months

# Sustainability Screen Premium\*

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance

<b>Ø</b>	Mercury Free	
	Rohs Exemption Information	Yes
<b>②</b>	Pvc Free	

#### **Certifications & Standards**

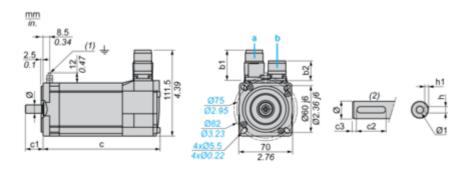
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	No need of 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"

## BSH0701P01A2A

#### **Dimensions Drawings**

#### **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	c1	c2	сЗ	h	h1	Ø	Ø1 for
b1	b2	b1	b2	brake)	brake)							screws
39.5	25.5	39.5	39.5	154	180	23	18	2.5	4 N9	2.5 <sup>+0.1</sup> <sub>0</sub>	11 k6	M4 x 10

#### Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	с1	c2	с3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2	Diake)								
1.55	1.00	1.55	1.55	6.06	7.08	0.90	0.70	0.09	0.16 N9	0.01 <sup>+0.004</sup> 0	0.43 k6	M4 x 0.39

## **Product data sheet**

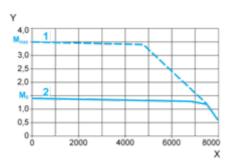
### BSH0701P01A2A

Performance Curves

### 400 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**

Servo motor with LXM32•D12N4 servo drive

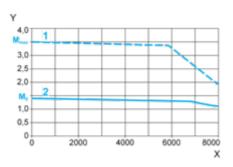


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 480 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**

Servo motor with LXM32•D12N4 servo drive



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