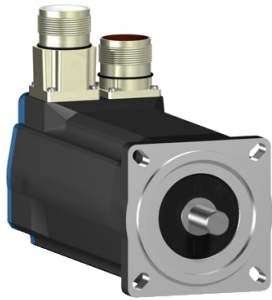


# Product data sheet

Specifications



servo motor BSH, Lexium 05,  
2.12N.m, 6000rpm, 70mm, keyed  
shaft, Sincos multi turn, with brake,  
IP65, straight

BSH0702T32F1A

⚠ Discontinued

⚠ Discontinued on: Jun 30, 2023

**Product availability: Stock - Normally stocked in distribution facility**

## Main

Device short name	BSH
Product or Component Type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	19.5 lbf.in (2.2 N.m) LXM32.D30M2 10 A, 115 V, single phase 18.76 lbf.in (2.12 N.m) LXM05AD17M2, 200...240 V, single phase 18.76 lbf.in (2.12 N.m) LXM05BD17M2, 200...240 V, single phase 18.76 lbf.in (2.12 N.m) LXM05CD17M2, 200...240 V, single phase 19.5 lbf.in (2.2 N.m) LXM32.D18M2 6 A, 230 V, single phase 18.76 lbf.in (2.12 N.m) LXM05AD17F1, 110...120 V, single phase 18.76 lbf.in (2.12 N.m) LXM05AD28M2, 200...240 V, single phase 18.76 lbf.in (2.12 N.m) LXM05BD17F1, 110...120 V, single phase 18.76 lbf.in (2.12 N.m) LXM05BD28M2, 200...240 V, single phase 18.76 lbf.in (2.12 N.m) LXM05CD17F1, 110...120 V, single phase 18.76 lbf.in (2.12 N.m) LXM05CD28M2, 200...240 V, single phase 18.76 lbf.in (2.12 N.m) LXM15LD17N4 6 A, 230 V, three phase 18.76 lbf.in (2.12 N.m) LXM15LD21M3, 230 V, three phase 18.76 lbf.in (2.12 N.m) LXM05AD42M3X, 200...240 V, three phase 18.76 lbf.in (2.12 N.m) LXM05BD42M3X, 200...240 V, three phase 18.76 lbf.in (2.12 N.m) LXM05CD42M3X, 200...240 V, three phase
Peak stall torque	54.0 lbf.in (6.1 N.m) LXM32.D30M2 10 A, 115 V, single phase 63.7 lbf.in (7.2 N.m) LXM32.D18M2 6 A, 230 V, single phase 36.64 lbf.in (4.14 N.m) LXM05AD17F1, 110...120 V, single phase 36.64 lbf.in (4.14 N.m) LXM05AD17M2, 200...240 V, single phase 36.64 lbf.in (4.14 N.m) LXM05BD17F1, 110...120 V, single phase 36.64 lbf.in (4.14 N.m) LXM05BD17M2, 200...240 V, single phase 36.64 lbf.in (4.14 N.m) LXM05CD17F1, 110...120 V, single phase 36.64 lbf.in (4.14 N.m) LXM05CD17M2, 200...240 V, single phase 60.2 lbf.in (6.8 N.m) LXM05AD28M2 6 A, 200...240 V, single phase 60.2 lbf.in (6.8 N.m) LXM05BD28M2, 200...240 V, single phase 60.2 lbf.in (6.8 N.m) LXM05CD28M2, 200...240 V, single phase 39.56 lbf.in (4.47 N.m) LXM15LD17N4, 230 V, three phase 48.24 lbf.in (5.45 N.m) LXM15LD21M3, 230 V, three phase 60.2 lbf.in (6.8 N.m) LXM05AD42M3X, 200...240 V, three phase 60.2 lbf.in (6.8 N.m) LXM05BD42M3X, 200...240 V, three phase 60.2 lbf.in (6.8 N.m) LXM05CD42M3X, 200...240 V, three phase
Nominal output power	550 W LXM32.D30M2 10 A, 115 V, single phase 600 W LXM05AD17M2, 200...240 V, single phase 600 W LXM05BD17M2 6 A, 200...240 V, single phase 600 W LXM05CD17M2, 200...240 V, single phase 570 W LXM05AD17F1, 110...120 V, single phase 570 W LXM05BD17F1, 110...120 V, single phase 570 W LXM05CD17F1, 110...120 V, single phase 600 W LXM05AD28M2, 200...240 V, single phase 600 W LXM05BD28M2, 200...240 V, single phase 600 W LXM05CD28M2, 200...240 V, single phase 950 W LXM32.D18M2 6 A, 230 V, single phase 1000 W LXM15LD17N4, 230 V, three phase 1000 W LXM15LD21M3, 230 V, three phase 600 W LXM05AD42M3X, 200...240 V, three phase 600 W LXM05BD42M3X, 200...240 V, three phase 600 W LXM05CD42M3X, 200...240 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.

<b>Nominal torque</b>	<p>18.32 lbf.in (2.07 N.m) LXM32.D30M2 10 A, 115 V, single phase  16.8 lbf.in (1.9 N.m) LXM05AD17M2, 200...240 V, single phase  16.8 lbf.in (1.9 N.m) LXM05BD17M2 6 A, 200...240 V, single phase  16.8 lbf.in (1.9 N.m) LXM05CD17M2, 200...240 V, single phase  16.20 lbf.in (1.83 N.m) LXM05AD17F1, 110...120 V, single phase  16.20 lbf.in (1.83 N.m) LXM05BD17F1, 110...120 V, single phase  16.20 lbf.in (1.83 N.m) LXM05CD17F1, 110...120 V, single phase  16.8 lbf.in (1.9 N.m) LXM05AD28M2, 200...240 V, single phase  16.8 lbf.in (1.9 N.m) LXM05BD28M2, 200...240 V, single phase  16.8 lbf.in (1.9 N.m) LXM05CD28M2, 200...240 V, single phase  15.9 lbf.in (1.8 N.m) LXM32.D18M2 6 A, 230 V, single phase  14.69 lbf.in (1.66 N.m) LXM15LD17N4, 230 V, three phase  14.69 lbf.in (1.66 N.m) LXM15LD21M3, 230 V, three phase  16.8 lbf.in (1.9 N.m) LXM05AD42M3X, 200...240 V, three phase  16.8 lbf.in (1.9 N.m) LXM05BD42M3X, 200...240 V, three phase  16.8 lbf.in (1.9 N.m) LXM05CD42M3X, 200...240 V, three phase</p>
-----------------------	--

<b>Nominal speed</b>	<p>2500 rpm LXM32.D30M2 10 A, 115 V, single phase  3000 rpm LXM05AD17F1, 110...120 V, single phase  3000 rpm LXM05BD17F1 6 A, 110...120 V, single phase  3000 rpm LXM05CD17F1, 110...120 V, single phase  3000 rpm LXM05AD17M2, 200...240 V, single phase  3000 rpm LXM05BD17M2, 200...240 V, single phase  3000 rpm LXM05CD17M2, 200...240 V, single phase  3000 rpm LXM05AD28M2, 200...240 V, single phase  3000 rpm LXM05BD28M2, 200...240 V, single phase  3000 rpm LXM05CD28M2, 200...240 V, single phase  5000 rpm LXM32.D18M2 6 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  6000 rpm LXM15LD17N4, 230 V, three phase  6000 rpm LXM15LD21M3, 230 V, three phase</p>
----------------------	--

<b>Product compatibility</b>	<p>LXM05AD17F1 110...120 V single phase  LXM05AD17M2 200...240 V single phase  LXM05AD28M2 200...240 V single phase  LXM05BD17F1 110...120 V single phase  LXM05BD17M2 200...240 V single phase  LXM05BD28M2 200...240 V single phase  LXM05CD17F1 110...120 V single phase  LXM05CD17M2 200...240 V single phase  LXM05CD28M2 200...240 V single phase  LXM32.D30M2 115 V single phase  LXM32.D18M2 230 V single phase  LXM15LD21M3 230 V three phase  LXM05AD42M3X 200...240 V three phase  LXM05BD42M3X 200...240 V three phase  LXM05CD42M3X 200...240 V three phase  LXM15LD17N4 230 V three phase</p>
------------------------------	---

<b>Shaft end</b>	Keyed
------------------	-------

<b>IP Degree of Protection</b>	<p>IP65 standard  IP67 with IP67 kit</p>
--------------------------------	--

<b>Speed feedback resolution</b>	131072 points/turn x 4096 turns
----------------------------------	---------------------------------

<b>Holding brake</b>	With
----------------------	------

<b>Mounting Support</b>	International standard flange
-------------------------	-------------------------------

<b>Electrical Connection</b>	Straight connectors
------------------------------	---------------------

## Complementary

<b>Range Compatibility</b>	<p>Lexium 05  Lexium 15  Lexium 32</p>
----------------------------	--

<b>supply voltage max</b>	480 V
---------------------------	-------

<b>Phase</b>	Three phase
--------------	-------------

<b>Continuous stall current</b>	4.9 A
---------------------------------	-------

<b>maximum continuous power</b>	1.51 W
---------------------------------	--------

<b>Maximum current Irms</b>	20.6 A LXM15LD21M3 20.6 A LXM15LD17N4 19.9 A LXM05AD17F1 19.9 A LXM05AD17M2 19.9 A LXM05AD28M2 19.9 A LXM05AD42M3X 19.9 A LXM05BD17F1 19.9 A LXM05BD17M2 19.9 A LXM05BD28M2 19.9 A LXM05BD42M3X 19.9 A LXM05CD17F1 19.9 A LXM05CD17M2 19.9 A LXM05CD28M2 19.9 A LXM05CD42M3X 15 A LXM32.D30M2 18 A LXM32.D18M2
<b>Maximum permanent current</b>	19.9 A
<b>Switching frequency</b>	8 kHz
<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	0.4 in (11 mm)
<b>Shaft length</b>	0.9 in (23 mm)
<b>Key width</b>	0.7 in (18 mm)
<b>Feedback type</b>	Multiturn SinCos Hiperface
<b>Holding torque</b>	17.7 lbf.in (2 N.m) holding brake
<b>Motor flange size</b>	2.8 in (70 mm)
<b>Number of motor stacks</b>	2
<b>Torque constant</b>	0.45 N.m/A 248 °F (120 °C)
<b>Back emf constant</b>	28 V/krpm 248 °F (120 °C)
<b>Rotor inertia</b>	0.482 kg.cm <sup>2</sup>
<b>Stator resistance</b>	1.5 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	6.7 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	4.47 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	390 N 6000 rpm 410 N 5000 rpm 450 N 4000 rpm 490 N 3000 rpm 560 N 2000 rpm 710 N 1000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Brake pull-in power</b>	10 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	8.4 in (212.5 mm)
<b>Centring collar diameter</b>	2.4 in (60 mm)
<b>Centring collar depth</b>	0.10 in (2.5 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.2 in (5.5 mm)
<b>Circle diameter of the mounting holes</b>	3.2 in (82 mm)
<b>Net Weight</b>	6.6 lb(US) (3 kg)
<b>Sizing reference</b>	BSH0702T
<b>Network number of phases</b>	3

Accuracy error [angular]	1.4 °
Temperature copper hot	248 °F (120 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)

## Ordering and shipping details

Category	18282-LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	3389118136786
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.8 in (12.3 cm)
Package 1 Width	5.04 in (12.8 cm)
Package 1 Length	14.8 in (37.7 cm)
Package weight(Lbs)	7.17 lb(US) (3.25 kg)

## Contractual warranty

Warranty (in months)	18
----------------------	----



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better

#### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

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](http://www.P65Warnings.ca.gov)

### Use Longer

#### Lifetime extension

Repair

No

### Use Again

#### Repack and remanufacture

Circularity Profile

No need of specific recycling operations



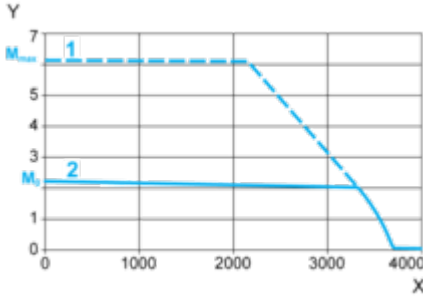
Performance Curves

115 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

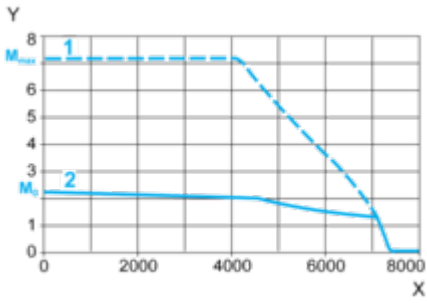
2 Continuous torque

230 V Single-Phase Supply Voltage

---

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque