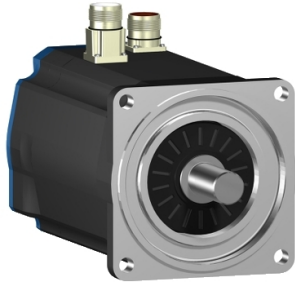


# Product data sheet

Specifications



## AC servo motor BSH, Lexium 05, 9.31N.m, 1500rpm, keyed shaft, with brake, IP65

BSH1004P32F1A

⚠ Discontinued on: Jun 30, 2023

⚠ Discontinued

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

### Main

Device short name	BSH
Product or Component Type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	<p>70.8 lbf.in (8 N.m) LXM32.D30N4 10 A, 400 V, three phase</p> <p>70.8 lbf.in (8 N.m) LXM32.D30N4 10 A, 480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD40N4, 400 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD40N4, 480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD28M3, 230 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD28N4, 230 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD28N4, 400 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD28N4, 480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM15MD40N4, 230 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05AD34N4, 380...480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05AD42M3X, 200...240 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05AD57N4, 380...480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05BD34N4, 380...480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05BD42M3X, 200...240 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05BD57N4, 380...480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05CD34N4, 380...480 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05CD42M3X, 200...240 V, three phase</p> <p>82.40 lbf.in (9.31 N.m) LXM05CD57N4, 380...480 V, three phase</p>
Peak stall torque	<p>335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 400 V, three phase</p> <p>335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 480 V, three phase</p> <p>227.5 lbf.in (25.7 N.m) LXM15MD28M3, 230 V, three phase</p> <p>227.5 lbf.in (25.7 N.m) LXM15MD28N4, 230 V, three phase</p> <p>227.5 lbf.in (25.7 N.m) LXM15MD28N4, 400 V, three phase</p> <p>227.5 lbf.in (25.7 N.m) LXM15MD28N4, 480 V, three phase</p> <p>299.42 lbf.in (33.83 N.m) LXM15MD40N4, 230 V, three phase</p> <p>299.42 lbf.in (33.83 N.m) LXM15MD40N4, 400 V, three phase</p> <p>299.42 lbf.in (33.83 N.m) LXM15MD40N4, 480 V, three phase</p> <p>207.73 lbf.in (23.47 N.m) LXM05AD34N4, 380...480 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05AD42M3X, 200...240 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05AD57N4, 380...480 V, three phase</p> <p>207.73 lbf.in (23.47 N.m) LXM05BD34N4, 380...480 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05BD42M3X, 200...240 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05BD57N4, 380...480 V, three phase</p> <p>207.73 lbf.in (23.47 N.m) LXM05CD34N4, 380...480 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05CD42M3X, 200...240 V, three phase</p> <p>316.0 lbf.in (35.7 N.m) LXM05CD57N4, 380...480 V, three phase</p>

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

<b>Nominal output power</b>	<p>2600 W LXM32.D30N4 10 A, 480 V, three phase  2100 W LXM32.D30N4 10 A, 400 V, three phase  1300 W LXM05AD42M3X, 200...240 V, three phase  1300 W LXM05BD42M3X, 200...240 V, three phase  1300 W LXM05CD42M3X, 200...240 V, three phase  1300 W LXM15MD28M3, 230 V, three phase  1300 W LXM15MD28N4, 230 V, three phase  1300 W LXM15MD40N4, 230 V, three phase  2200 W LXM05AD34N4, 380...480 V, three phase  2200 W LXM05AD57N4, 380...480 V, three phase  2200 W LXM05BD34N4, 380...480 V, three phase  2200 W LXM05BD57N4, 380...480 V, three phase  2200 W LXM05CD34N4, 380...480 V, three phase  2200 W LXM05CD57N4, 380...480 V, three phase  2200 W LXM15MD28N4, 400 V, three phase  2300 W LXM15MD40N4, 400 V, three phase  2400 W LXM15MD40N4, 480 V, three phase  2700 W LXM15MD28N4, 480 V, three phase</p>
<b>Nominal torque</b>	<p>73.5 lbf.in (8.3 N.m) LXM32.D30N4 10 A, 400 V, three phase  73.5 lbf.in (8.3 N.m) LXM32.D30N4 10 A, 480 V, three phase  57.5 lbf.in (6.5 N.m) LXM15MD28N4, 480 V, three phase  59.21 lbf.in (6.69 N.m) LXM15MD40N4, 480 V, three phase  62.0 lbf.in (7 N.m) LXM15MD28N4, 400 V, three phase  62.8 lbf.in (7.1 N.m) LXM05AD34N4, 380...480 V, three phase  62.8 lbf.in (7.1 N.m) LXM05AD57N4, 380...480 V, three phase  62.8 lbf.in (7.1 N.m) LXM05BD34N4, 380...480 V, three phase  62.8 lbf.in (7.1 N.m) LXM05BD57N4, 380...480 V, three phase  62.8 lbf.in (7.1 N.m) LXM05CD34N4, 380...480 V, three phase  62.8 lbf.in (7.1 N.m) LXM05CD57N4, 380...480 V, three phase  63.46 lbf.in (7.17 N.m) LXM15MD40N4, 400 V, three phase  72.40 lbf.in (8.18 N.m) LXM15MD40N4, 230 V, three phase  72.75 lbf.in (8.22 N.m) LXM05AD42M3X, 200...240 V, three phase  72.75 lbf.in (8.22 N.m) LXM05BD42M3X, 200...240 V, three phase  72.75 lbf.in (8.22 N.m) LXM05CD42M3X, 200...240 V, three phase  72.75 lbf.in (8.22 N.m) LXM15LD28M3, 230 V, three phase  72.75 lbf.in (8.22 N.m) LXM15MD28N4, 230 V, three phase</p>
<b>Nominal speed</b>	<p>2500 rpm LXM32.D30N4 10 A, 400 V, three phase  3000 rpm LXM32.D30N4 10 A, 480 V, three phase  1500 rpm LXM05AD42M3X, 200...240 V, three phase  1500 rpm LXM05BD42M3X, 200...240 V, three phase  1500 rpm LXM05CD42M3X, 200...240 V, three phase  3000 rpm LXM05AD34N4, 380...480 V, three phase  3000 rpm LXM05BD34N4, 380...480 V, three phase  3000 rpm LXM05CD34N4, 380...480 V, three phase  1500 rpm LXM15MD28M3, 230 V, three phase  1500 rpm LXM15MD28N4, 230 V, three phase  1500 rpm LXM15MD40N4, 230 V, three phase  3000 rpm LXM05AD57N4, 380...480 V, three phase  3000 rpm LXM05BD57N4, 380...480 V, three phase  3000 rpm LXM05CD57N4, 380...480 V, three phase  3000 rpm LXM15MD28N4, 400 V, three phase  3000 rpm LXM15MD40N4, 400 V, three phase  3500 rpm LXM15MD40N4, 480 V, three phase  4000 rpm LXM15MD28N4, 480 V, three phase</p>
<b>Product compatibility</b>	<p>LXM05AD42M3X 200...240 V three phase  LXM05BD42M3X 200...240 V three phase  LXM05CD42M3X 200...240 V three phase  LXM05AD34N4 380...480 V three phase  LXM05BD34N4 380...480 V three phase  LXM05CD34N4 380...480 V three phase  LXM15MD28N4 400 V three phase  LXM15MD28N4 480 V three phase  LXM15MD40N4 400 V three phase  LXM15MD40N4 480 V three phase  LXM32.D30N4 400 V three phase  LXM32.D30N4 480 V three phase  LXM05AD57N4 380...480 V three phase  LXM05BD57N4 380...480 V three phase  LXM05CD57N4 380...480 V three phase  LXM15MD28M3 230 V three phase  LXM15MD28N4 230 V three phase  LXM15MD40N4 230 V three phase</p>
<b>Shaft end</b>	Keyed

<b>IP Degree of Protection</b>	IP65 standard IP67 with IP67 kit
<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>	Lexium 15 Lexium 32 Lexium 05
<b>supply voltage max</b>	480 V
<b>Phase</b>	Three phase
<b>Continuous stall current</b>	6.2 A
<b>maximum continuous power</b>	3.64 W
<b>Maximum current Irms</b>	34.8 A LXM15LD28M3 34.8 A LXM15MD28N4 34.8 A LXM15MD40N4 32.3 A LXM05AD42M3X 32.3 A LXM05AD34N4 32.3 A LXM05AD57N4 32.3 A LXM05BD42M3X 32.3 A LXM05BD34N4 32.3 A LXM05BD57N4 32.3 A LXM05CD42M3X 32.3 A LXM05CD34N4 32.3 A LXM05CD57N4 30 A LXM32.D30N4
<b>Maximum permanent current</b>	32.3 A
<b>Switching frequency</b>	8 kHz
<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	0.9 in (24 mm)
<b>Shaft length</b>	2.0 in (50 mm)
<b>Key width</b>	1.6 in (40 mm)
<b>Feedback type</b>	Multiturn SinCos Hiperface
<b>Holding torque</b>	106.2 lbf.in (12 N.m) holding brake
<b>Motor flange size</b>	3.9 in (100 mm)
<b>Number of motor stacks</b>	4
<b>Torque constant</b>	1.62 N.m/A 248.0000000000 °F (120 °C)
<b>Back emf constant</b>	103 V/krpm 248.0000000000 °F (120 °C)
<b>Number of motor poles</b>	8
<b>Rotor inertia</b>	5.245 kg.cm <sup>2</sup>
<b>Stator resistance</b>	1.81 Ohm 68.0000000000 °F (20 °C)
<b>Stator inductance</b>	11.8 mH 68.0000000000 °F (20 °C)
<b>Stator electrical time constant</b>	6.52 ms 68.0000000000 °F (20 °C)
<b>Maximum radial force Fr</b>	1070 N 1000 rpm 740 N 3000 rpm 850 N 2000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr

<b>Brake pull-in power</b>	17 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	12.1 in (307.5 mm)
<b>Centring collar diameter</b>	3.7 in (95 mm)
<b>Centring collar depth</b>	0.1 in (3.5 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.4 in (9 mm)
<b>Circle diameter of the mounting holes</b>	4.5 in (115 mm)
<b>Net Weight</b>	21.8 lb(US) (9.9 kg)

## Ordering and shipping details

<b>Category</b>	US1PC5318282
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3389118140721
<b>Returnability</b>	No
<b>Country of origin</b>	DE

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	7.2 in (18.3 cm)
<b>Package 1 Width</b>	6.4 in (16.3 cm)
<b>Package 1 Length</b>	19.4 in (49.2 cm)
<b>Package 1 Weight</b>	17.97 lb(US) (8.15 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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

Mercury Free

Rohs Exemption Information [Yes](#)

Pvc Free

## Certifications & Standards

**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.

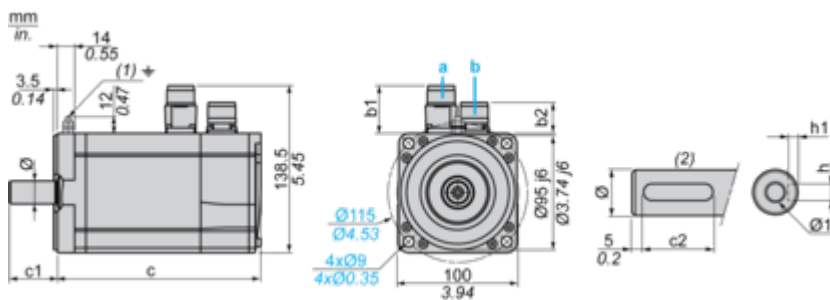
**Circularity Profile** No need of specific recycling operations

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

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 brake)	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
39.5	25.5	39.5	39.5	277	308	50	40	8 N9	4 <sup>+0.1</sup> <sub>0</sub>	24 k6	M8 x 19

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	10.90	12.12	1.96	1.57	0.31 N9	0.16 <sup>+0.1</sup> <sub>0</sub>	0.94 k6	M8 x 0.75

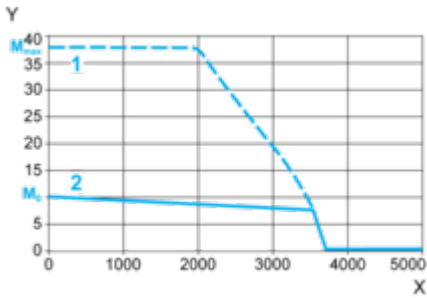
Performance Curves

400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D30N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

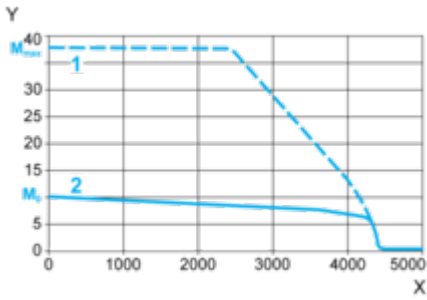
2 Continuous torque

480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque