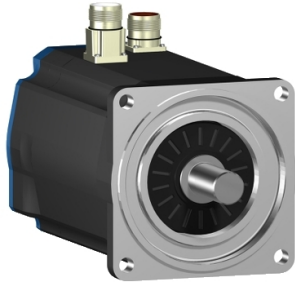


Product data sheet

Specifications



servo motor BSH, Lexium 05,
5.5N.m, 4000rpm, 100mm,
untapped shaft, Sincos single turn,
without brake, IP65, straight

BSH1002T21A1A

! Discontinued

! Discontinued on: Jun 30, 2023

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	51.3 lbf.in (5.8 N.m) LXM32.D30M2 10 A, 230 V, single phase 48.7 lbf.in (5.5 N.m) LXM15LD28M3, 230 V, three phase 48.7 lbf.in (5.5 N.m) LXM05AD42M3X, 200...240 V, three phase 48.7 lbf.in (5.5 N.m) LXM05BD42M3X, 200...240 V, three phase 48.7 lbf.in (5.5 N.m) LXM05CD42M3X, 200...240 V, three phase
Peak stall torque	145.2 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 141.6 lbf.in (16 N.m) LXM05AD42M3X, 200...240 V, three phase 141.6 lbf.in (16 N.m) LXM05BD42M3X, 200...240 V, three phase 141.6 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	32.7 lbf.in (3.7 N.m) LXM32.D30M2 10 A, 230 V, single phase 35.4 lbf.in (4 N.m) LXM15LD28M3, 230 V, three phase 38.9 lbf.in (4.4 N.m) LXM05AD42M3X, 200...240 V, three phase 38.9 lbf.in (4.4 N.m) LXM05BD42M3X, 200...240 V, three phase 38.9 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	Without
Mounting Support	International standard flange
Electrical Connection	Straight connectors

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

Complementary

Range Compatibility	Lexium 05 Lexium 15 Lexium 32
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	0.7 in (19 mm)
Shaft length	1.6 in (40 mm)
Feedback type	Single turn SinCos Hiperface
Motor flange size	3.9 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	2.31 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
Type of cooling	Natural convection
Length	8.05 in (204.5 mm)
Centring collar diameter	3.7 in (95 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (9 mm)
Circle diameter of the mounting holes	4.5 in (115 mm)
Net Weight	13.007 lb(US) (5.9 kg)
Sizing reference	BSH1002T
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	248 °F (120 °C)

Temperature magnet hot	212 °F (100 °C)
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Temperature magnet rt	68 °F (20 °C)
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Ordering and shipping details

Category	US1PC5318282
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Discount Schedule	PC53
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GTIN	3389118139626
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Returnability	No
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Packing Units

Unit Type of Package 1	PCE
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Nbr. of units in pkg.	1
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Package 1 Height	6.06 in (15.4 cm)
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Package 1 Width	6.4 in (16.3 cm)
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Package 1 Length	16.02 in (40.7 cm)
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Package weight(Lbs)	12.8 lb(US) (5.8 kg)
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Contractual warranty

Warranty (in months)	18
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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

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

Circularity Profile

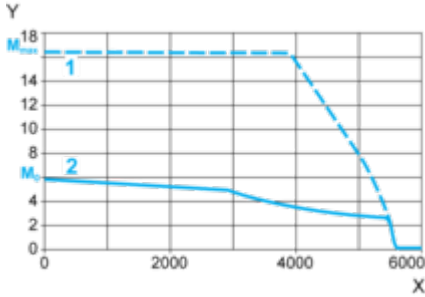
No need of specific recycling operations

Performance Curves

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