Product data sheet





AC servo motor BSH, Lexium 05, 2.83N.m, 6000rpm, untapped shaft, without brake, IP65

BSH0703T22A1A

! Discontinued on: Oct 9, 2023



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

Main

Product Or Component Type	Servo motor
Device Short Name	BSH
Maximum Mechanical Speed	8000 rpm
Continuous Stall Torque	24.78 lbf.in (2.8 N.m) LXM05AD28M2, 200240 V, single phase 24.78 lbf.in (2.8 N.m) LXM05BD28M2, 200240 V, single phase 24.78 lbf.in (2.8 N.m) LXM05CD28M2, 200240 V, single phase 23.01 lbf.in (2.6 N.m) LXM05CD28M2, 200240 V, single phase 23.01 lbf.in (2.6 N.m) LXM32.D18M2 6 A, 230 V, single phase 25.05 lbf.in (2.83 N.m) LXM15LD28M3, 230 V, three phase 24.78 lbf.in (2.8 N.m) LXM05AD28F1, 110120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05AD42M3X, 200240 V, three phase 24.78 lbf.in (2.8 N.m) LXM05BD28F1, 110120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05BD42M3X, 200240 V, three phase 24.78 lbf.in (2.8 N.m) LXM05CD28F1, 110120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05CD28F1, 110120 V, single phase 24.78 lbf.in (2.8 N.m) LXM05CD42M3X, 200240 V, three phase
Peak Stall Torque	65.32 lbf.in (7.38 N.m) LXM05AD28F1, 110120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05AD28M2, 200240 V, single phase 65.32 lbf.in (7.38 N.m) LXM05BD28F1, 110120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05BD28M2, 200240 V, single phase 65.32 lbf.in (7.38 N.m) LXM05CD28F1, 110120 V, single phase 65.32 lbf.in (7.38 N.m) LXM05CD28M2, 200240 V, single phase 65.32 lbf.in (7.38 N.m) LXM05CD28M2, 200240 V, single phase 65.50 lbf.in (7.4 N.m) LXM05CD28M3, 230 V, single phase 65.32 lbf.in (7.38 N.m) LXM15LD28M3, 230 V, three phase 90.72 lbf.in (10.25 N.m) LXM05AD42M3X, 200240 V, three phase 90.72 lbf.in (10.25 N.m) LXM05BD42M3X, 200240 V, three phase 90.72 lbf.in (10.25 N.m) LXM05CD42M3X, 200240 V, three phase
Nominal Output Power	750 W LXM05AD28M2, 200240 V, single phase 750 W LXM05BD28M2, 200240 V, single phase 750 W LXM05CD28M2, 200240 V, single phase 750 W LXM05CD28M2, 200240 V, single phase 750 W LXM05AD28F1, 110120 V, single phase 750 W LXM05BD28F1, 110120 V, single phase 750 W LXM05CD28F1, 110120 V, single phase 900 W LXM32.D18M2 6 A, 230 V, single phase 1250 W LXM15LD28M3, 230 V, three phase 750 W LXM05AD42M3X, 200240 V, three phase 750 W LXM05BD42M3X, 200240 V, three phase 750 W LXM05CD42M3X, 200240 V, three phase
Nominal Torque	21.24 lbf.in (2.4 N.m) LXM05AD28M2, 200240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05BD28M2, 200240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05CD28M2, 200240 V, single phase 21.24 lbf.in (2.4 N.m) LXM05AD28F1, 110120 V, single phase 21.24 lbf.in (2.4 N.m) LXM05AD28F1, 110120 V, single phase 21.24 lbf.in (2.4 N.m) LXM05D28F1, 110120 V, single phase 21.24 lbf.in (2.4 N.m) LXM05CD28F1, 110120 V, single phase 18.59 lbf.in (2.1 N.m) LXM32.D18M2 6 A, 230 V, single phase 17.70 lbf.in (2 N.m) LXM15LD28M3, 230 V, three phase 21.24 lbf.in (2.4 N.m) LXM05AD42M3X, 200240 V, three phase 21.24 lbf.in (2.4 N.m) LXM05BD42M3X, 200240 V, three phase 21.24 lbf.in (2.4 N.m) LXM05BD42M3X, 200240 V, three phase 21.24 lbf.in (2.4 N.m) LXM05CD42M3X, 200240 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	3000 rpm LXM05AD28M2, 200240 V, single phase							
	3000 rpm LXM05BD28M2, 200240 V, single phase							
	3000 rpm LXM05CD28M2, 200240 V, single phase							
	3000 rpm LXM05AD42M3X, 200240 V, three phase							
	3000 rpm LXM05BD42M3X, 200240 V, three phase 3000 rpm LXM05CD42M3X, 200240 V, three phase							
	3000 rpm LXM05AD28F1, 110120 V, single phase							
	3000 rpm LXM05BD28F1, 110120 V, single phase							
	3000 rpm LXM05CD28F1, 110120 V, single phase							
	4000 rpm LXM32.D18M2 6 A, 230 V, single phase							
	6000 rpm LXM15LD28M3, 230 V, three phase							
Product Compatibility	LXM05AD28F1 110120 V single phase							
	LXM05AD28M2 200240 V single phase							
	LXM05BD28F1 110120 V single phase							
	LXM05BD28M2 200240 V single phase LXM05CD28F1 110120 V single phase							
	LXM05CD28M2 200240 V single phase							
	LXM32.D18M2 230 V single phase							
	LXM05AD42M3X 200240 V three phase							
	LXM05BD42M3X 200240 V three phase							
	LXM05CD42M3X 200240 V three phase LXM15LD28M3 230 V three phase							
	<u> </u>							
Shaft End	Untapped							
Ip Degree Of Protection	IP65 standard							
	IP67 with IP67 kit							
Speed Feedback Resolution	131072 points/turn x 4096 turns							
Holding Brake	Without							
Mounting Support	International standard flange							
Electrical Connection	Straight connectors							
Complementary								
Range Compatibility	Lexium 32							
	Lexium 05							
	Lexium 05							
Range Compatibility	Lexium 05 Lexium 15							
Range Compatibility Supply Voltage Max	Lexium 05 Lexium 15 480 V							
Range Compatibility Supply Voltage Max Phase	Lexium 05 Lexium 15 480 V Three phase							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current	Lexium 05 Lexium 15 480 V Three phase 7 A							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD28M2 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD28M2 29.2 A LXM05AD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X 29.2 A LXM05BD42M3X 29.2 A LXM05BD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD28M2 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28F1 29.2 A LXM05AD28B1 29.2 A LXM05AD28B1 29.2 A LXM05BD28B1 29.2 A LXM05BD28F1 29.2 A LXM05BD28H1 29.2 A LXM05BD28M2 29.2 A LXM05BD4M3X 29.2 A LXM05CD28F1 29.2 A LXM05CD28F1 29.2 A LXM05CD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD42M3X 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X 29.2 A LXM05BD42M3X 29.2 A LXM05CD28F1 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD42M3X 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28B1 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD42M3X 29.2 A LXM05BD42M3X 29.2 A LXM05CD28F1 29.2 A LXM05CD28F1 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency Second Shaft	Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD42M3X 29.2 A LXM05AD42M3X 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05CD28F1 29.2 A LXM05CD28F1 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency Second Shaft Shaft Diameter	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD28M2 29.2 A LXM05AD2BM2 29.2 A LXM05BD28B1 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05BD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD28M1 29.2 A LXM05CD42M3X							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency Second Shaft Shaft Diameter Shaft Length	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28H1 29.2 A LXM05AD28H2 29.2 A LXM05AD28B1 29.2 A LXM05AD28B1 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 1.18 in (30 mm)							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency Second Shaft Shaft Diameter Shaft Length Feedback Type	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28F1 29.2 A LXM05AD28M2 29.2 A LXM05AD28M2 29.2 A LXM05BD28H1 29.2 A LXM05BD28H1 29.2 A LXM05BD28H1 29.2 A LXM05BD42M3X 29.2 A LXM05CD28F1 29.2 A LXM05CD28F1 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 10.55 in (14 mm) 1.18 in (30 mm) Multiturn SinCos Hiperface							
Range Compatibility Supply Voltage Max Phase Continuous Stall Current Maximum Continuous Power Maximum Current Irms Maximum Permanent Current Switching Frequency Second Shaft Shaft Diameter Shaft Length	Lexium 05 Lexium 15 480 V Three phase 7 A 1.7 W 18 A LXM32.D18M2 30.9 A LXM15LD28M3 29.2 A LXM05AD28H1 29.2 A LXM05AD28H2 29.2 A LXM05AD28B1 29.2 A LXM05AD28B1 29.2 A LXM05BD28F1 29.2 A LXM05BD28F1 29.2 A LXM05BD28M2 29.2 A LXM05CD28M2 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 29.2 A LXM05CD42M3X 1.18 in (30 mm)							

Torque Constant	0.44 N.m/A 248 °F (120 °C)						
Back Emf Constant	29 V/krpm 248 °F (120 °C)						
Number Of Motor Poles	6						
Rotor Inertia	0.58 kg.cm²						
Stator Resistance	0.91 Ohm 68 °F (20 °C)						
Stator Inductance	4.4 mH 68 °F (20 °C)						
Stator Electrical Time Constant	4.84 ms 68 °F (20 °C)						
Maximum Radial Force Fr	400 N 6000 rpm 430 N 5000 rpm 460 N 4000 rpm 510 N 3000 rpm 580 N 2000 rpm 730 N 1000 rpm						
Maximum Axial Force Fa	0.2 x Fr						
Type Of Cooling	Natural convection						
Length	8.66 in (220 mm)						
Centring Collar Diameter	2.36 in (60 mm)						
Centring Collar Depth	0.10 in (2.5 mm)						
Number Of Mounting Holes	4						
Mounting Holes Diameter	0.22 in (5.5 mm)						
Circle Diameter Of The Mounting Holes	3.23 in (82 mm)						
Net Weight	7.98 lb(US) (3.62 kg)						

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
Gtin	3389118137646
Returnability	No
Country Of Origin	DE

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.84 in (12.3 cm)
Package 1 Width	5.04 in (12.8 cm)
Package 1 Length	14.84 in (37.7 cm)
Package 1 Weight	7.94 lb(US) (3.6 kg)

Contractual warranty

Warranty 18 months

Sustainability Screen Premium*

Green PremiumTM **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-CO₂ 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



Certifications & Standards

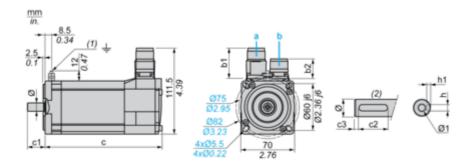
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection 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

BSH0703T22A1A

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 Rotatable angled connectors		•	c (without	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	220	254	30	20	5	5 N9	3 ^{+0.1} 0	14 k6	M5 x 12.5

Dimensions in in.

Straigh	ctors	connectors		c (without brake)	c (with brake)	с1	c2	с3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
1.55	1.00	1.55	1.55	8.66	10.00	1.18	0.78	0.19	0.20 N9	0.12 ^{+0.004} 0	0.55 k6	M5 x 0.49

Product data sheet

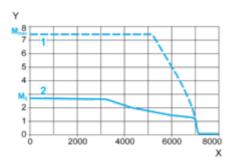
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Performance Curves

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