Product data sheet

Specifications





servo motor BSH, Lexium 05, 9.31N.m, 1500rpm, 100mm, keyed shaft, Sincos single turn, with brake, IP50

BSH1004P11F2A

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

Price*: 2,340.00 USD

Main

Device short name	BSH						
Product or Component Type	Servo motor						
Maximum mechanical speed	6000 rpm						
Continuous stall torque	70.8 lbf.in (8 N.m) LXM32.D30N4 10 A, 400 V, three phase						
	70.8 lbf.in (8 N.m) LXM32.D30N4 10 A, 480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD40N4, 400 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD40N4, 480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD28M3, 230 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD28N4, 230 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD28N4, 400 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD28N4, 480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM15MD40N4, 230 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05AD34N4, 380480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05AD42M3X, 200240 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05AD57N4, 380480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05BD34N4, 380480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05BD42M3X, 200240 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05BD57N4, 380480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05CD34N4, 380480 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05CD42M3X, 200240 V, three phase						
	82.40 lbf.in (9.31 N.m) LXM05CD57N4, 380480 V, three phase						
Peak stall torque	335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 400 V, three phase						
	335.4 lbf.in (37.9 N.m) LXM32.D30N4 10 A, 480 V, three phase						
	227.5 lbf.in (25.7 N.m) LXM15MD28M3, 230 V, three phase						
	227.5 lbf.in (25.7 N.m) LXM15MD28N4, 230 V, three phase						
	227.5 lbf.in (25.7 N.m) LXM15MD28N4, 400 V, three phase						
	227.5 lbf.in (25.7 N.m) LXM15MD28N4, 480 V, three phase						
	299.42 lbf.in (33.83 N.m) LXM15MD40N4, 230 V, three phase						
	299.42 lbf.in (33.83 N.m) LXM15MD40N4, 400 V, three phase						
	299.42 lbf.in (33.83 N.m) LXM15MD40N4, 480 V, three phase						
	207.73 lbf.in (23.47 N.m) LXM05AD34N4, 380480 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05AD42M3X, 200240 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05AD57N4, 380480 V, three phase						
	207.73 lbf.in (23.47 N.m) LXM05BD34N4, 380480 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05BD42M3X, 200240 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05BD57N4, 380480 V, three phase						
	207.73 lbf.in (23.47 N.m) LXM05CD34N4, 380480 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05CD42M3X, 200240 V, three phase						
	316.0 lbf.in (35.7 N.m) LXM05CD57N4, 380480 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.

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Nominal output power	2600 W LXM32.D30N4 10 A, 480 V, three phase
	2100 W LXM32.D30N4 10 A, 400 V, three phase
	1300 W LXM05AD42M3X, 200240 V, three phase 1300 W LXM05BD42M3X, 200240 V, three phase
	1300 W LXM05CD42M3X, 200240 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, 380480 V, three phase 2200 W LXM05AD57N4, 380480 V, three phase
	2200 W LXM05BD34N4, 380480 V, three phase
	2200 W LXM05BD57N4, 380480 V, three phase
	2200 W LXM05CD34N4, 380480 V, three phase
	2200 W LXM05CD57N4, 380480 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
Nominal torque	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, 380480 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) LXM05AD57N4, 380480 V, three phase 62.8 lbf.in (7.1 N.m) LXM05BD34N4, 380480 V, three phase
	62.8 lbf.in (7.1 N.m) LXM05BD57N4, 380480 V, three phase
	62.8 lbf.in (7.1 N.m) LXM05CD34N4, 380480 V, three phase
	62.8 lbf.in (7.1 N.m) LXM05CD57N4, 380480 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, 200240 V, three phase
	72.75 lbf.in (8.22 N.m) LXM05BD42M3X, 200240 V, three phase
	72.75 lbf.in (8.22 N.m) LXM05CD42M3X, 200240 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
Nominal speed	2500 rpm LXM32.D30N4 10 A, 400 V, three phase
	3000 rpm LXM32.D30N4 10 A, 480 V, three phase
	1500 rpm LXM05AD42M3X, 200240 V, three phase
	1500 rpm LXM05BD42M3X, 200240 V, three phase 1500 rpm LXM05CD42M3X, 200240 V, three phase
	3000 rpm LXM05AD34N4, 380480 V, three phase
	3000 rpm LXM05BD34N4, 380480 V, three phase
	3000 rpm LXM05CD34N4, 380480 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, 380480 V, three phase
	3000 rpm LXM05BD57N4, 380480 V, three phase
	3000 rpm LXM05CD57N4, 380480 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
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Product compatibility	LXM05AD42M3X 200240 V three phase
	LXM05BD42M3X 200240 V three phase
	LXM05CD42M3X 200240 V three phase LXM05AD34N4 380480 V three phase
	LXM05BD34N4 380480 V three phase
	LXM05CD34N4 380480 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 380480 V three phase
	LXM05BD57N4 380480 V three phase
	LXM05CD57N4 380480 V three phase
	LXM15MD28M3 230 V three phase
	LXM15MD28N4 230 V three phase LXM15MD40N4 230 V three phase
Shaft end	Keyed
IP Degree of Protection	IP50 standard

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Speed feedback resolution	131072 points/turn				
Holding brake	With				
Mounting Support	International standard flange				
Electrical Connection	Rotatable right-angled connectors				

Complementary

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Range Compatibility	Lexium 32 Lexium 15 Lexium 05						
supply voltage max	480 V						
Phase	Three phase						
Continuous stall current	6.2 A						
maximum continuous power	3.64 W						
Maximum current Irms	34.8 A LXM15LD28M3 34.8 A LXM15MD28N4 34.8 A LXM15MD40N4 32.3 A LXM05AD42M3X 32.3 A LXM05AD34N4 32.3 A LXM05BD42M3X 32.3 A LXM05BD42M3X 32.3 A LXM05BD57N4 32.3 A LXM05BD57N4 32.3 A LXM05D57N4 32.3 A LXM05D57N4						
	32.3 A LXM05CD34N4 32.3 A LXM05CD57N4 30 A LXM32.D30N4						
Maximum permanent current	32.3 A						
Switching frequency	8 kHz						
Second shaft	Without second shaft end						
Shaft diameter	0.9 in (24 mm)						
Shaft length	2.0 in (50 mm)						
Key width	1.6 in (40 mm)						
Feedback type	Single turn SinCos Hiperface						
Holding torque	106.2 lbf.in (12 N.m) holding brake						
Motor flange size	3.9 in (100 mm)						
Number of motor stacks	4						
Torque constant	1.62 N.m/A 248 °F (120 °C)						
Back emf constant	103 V/krpm 248 °F (120 °C)						
Number of motor poles	8						
Rotor inertia	5.245 kg.cm ²						
Stator resistance	1.81 Ohm 68 °F (20 °C)						
Stator inductance	11.8 mH 68 °F (20 °C)						
Stator electrical time constant	6.52 ms 68 °F (20 °C)						
Maximum radial force Fr	1070 N 1000 rpm 740 N 3000 rpm 850 N 2000 rpm						
Maximum axial force Fa	0.2 x Fr						
Brake pull-in power	17 W						
Type of cooling	Natural convection						

Length	12.1 in (307.5 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	21.8 lb(US) (9.9 kg)

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3389118140479
Returnability	No
Country of origin	DE

Packing Units

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

Mercury Free
Rohs Exemption Information Yes
Pvc Free

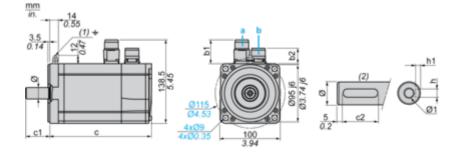
Certifications & Standards

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"					

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	c (with	c1	c2	h	h1	ø	Ø1 for
b1	b2	b1	b2	brake)	brake)						screws
39.5	25.5	39.5	39.5	277	308	50	40	8 N9	4 ^{+0.1} 0	24 k6	M8 x 19

Dimensions in in.

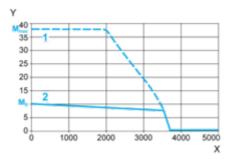
Straight Rotatable angled connectors connectors		c (without c (with		c1	c2	h	h1	ø	Ø1 for		
b1	b2	b1	b2	brake)	brake)						screws
1.55	1.00	1.55	1.55	10.90	12.12	1.96	1.57	0.31 N9	0.16 ^{+0.1} 0	0.94 k6	M8 x 0.75

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



 \boldsymbol{X} Speed in rpm

Y Torque in Nm

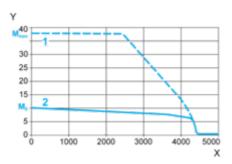
1 Peak torque

2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque