Product datasheet

Specifications





AC servo motor BSH, Lexium 05, 9.31N.m, 1500rpm, untapped shaft, with brake, IP50

BSH1004P01F2A

Main

Device short name	BSH					
Product or component type	Servo motor					
	00.10 1110.01					
Maximum mechanical speed	6000 rpm					
Continuous stall torque	8 N.m for LXM32.D30N4 at 10 A, 400 V, three phase					
	8 N.m for LXM32.D30N4 at 10 A, 480 V, three phase					
	9.31 N.m for LXM15MD40N4, 400 V, three phase					
	9.31 N.m for LXM15MD40N4, 480 V, three phase					
	9.31 N.m for LXM15MD28M3, 230 V, three phase					
	9.31 N.m for LXM15MD28N4, 230 V, three phase					
	9.31 N.m for LXM15MD28N4, 400 V, three phase					
	9.31 N.m for LXM15MD28N4, 480 V, three phase					
	9.31 N.m for LXM15MD40N4, 230 V, three phase					
	9.31 N.m for LXM05AD34N4, 380480 V, three phase					
	9.31 N.m for LXM05AD42M3X, 200240 V, three phase					
	9.31 N.m for LXM05AD57N4, 380480 V, three phase					
	9.31 N.m for LXM05BD34N4, 380480 V, three phase					
	9.31 N.m for LXM05BD42M3X, 200240 V, three phase					
	9.31 N.m for LXM05BD57N4, 380480 V, three phase					
	9.31 N.m for LXM05CD34N4, 380480 V, three phase					
	9.31 N.m for LXM05CD42M3X, 200240 V, three phase					
	9.31 N.m for LXM05CD57N4, 380480 V, three phase					
Peak stall torque	37.9 N.m for LXM32.D30N4 at 10 A, 400 V, three phase					
	37.9 N.m for LXM32.D30N4 at 10 A, 480 V, three phase					
	25.7 N.m for LXM15MD28M3, 230 V, three phase					
	25.7 N.m for LXM15MD28N4, 230 V, three phase					
	25.7 N.m for LXM15MD28N4, 400 V, three phase					
	25.7 N.m for LXM15MD28N4, 480 V, three phase					
	33.83 N.m for LXM15MD40N4, 230 V, three phase					
	33.83 N.m for LXM15MD40N4, 400 V, three phase					
	33.83 N.m for LXM15MD40N4, 480 V, three phase					

23.47 N.m for LXM05AD34N4, 380...480 V, three phase 35.7 N.m for LXM05AD42M3X, 200...240 V, three phase $35.7\ \text{N.m}$ for LXM05AD57N4, $380...480\ \text{V},$ three phase $23.47\ \text{N.m}$ for LXM05BD34N4, $380...480\ \text{V},$ three phase 35.7 N.m for LXM05BD42M3X, 200...240 V, three phase 35.7 N.m for LXM05BD57N4, 380...480 V, three phase 23.47 N.m for LXM05CD34N4, 380...480 V, three phase

35.7 N.m for LXM05CD42M3X, 200...240 V, three phase 35.7 N.m for LXM05CD57N4, 380...480 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 for LXM32.D30N4 at 10 A, 480 V, three phase
	2100 W for LXM32.D30N4 at 10 A, 400 V, three phase
	1300 W for LXM05AD42M3X, 200240 V, three phase
	1300 W for LXM05BD42M3X, 200240 V, three phase
	1300 W for LXM05CD42M3X, 200240 V, three phase 1300 W for LXM15MD28M3, 230 V, three phase
	1300 W for LXM15MD28N4, 230 V, three phase
	1300 W for LXM15MD40N4, 230 V, three phase
	2200 W for LXM05AD34N4, 380480 V, three phase
	2200 W for LXM05AD57N4, 380480 V, three phase
	2200 W for LXM05BD34N4, 380480 V, three phase
	2200 W for LXM05BD57N4, 380480 V, three phase
	2200 W for LXM05CD34N4, 380480 V, three phase
	2200 W for LXM05CD57N4, 380480 V, three phase
	2200 W for LXM15MD28N4, 400 V, three phase
	2300 W for LXM15MD40N4, 400 V, three phase
	2400 W for LXM15MD40N4, 480 V, three phase
	2700 W for LXM15MD28N4, 480 V, three phase
Nominal torque	8.3 N.m for LXM32.D30N4 at 10 A, 400 V, three phase
•	8.3 N.m for LXM32.D30N4 at 10 A, 480 V, three phase
	6.5 N.m for LXM15MD28N4, 480 V, three phase
	6.69 N.m for LXM15MD40N4, 480 V, three phase
	7 N.m for LXM15MD28N4, 400 V, three phase
	7.1 N.m for LXM05AD34N4, 380480 V, three phase
	7.1 N.m for LXM05AD57N4, 380480 V, three phase
	7.1 N.m for LXM05BD34N4, 380480 V, three phase
	7.1 N.m for LXM05BD57N4, 380480 V, three phase
	7.1 N.m for LXM05CD34N4, 380480 V, three phase
	7.1 N.m for LXM05CD57N4, 380480 V, three phase
	7.17 N.m for LXM15MD40N4, 400 V, three phase
	8.18 N.m for LXM15MD40N4, 230 V, three phase
	8.22 N.m for LXM05AD42M3X, 200240 V, three phase
	8.22 N.m for LXM05BD42M3X, 200240 V, three phase
	8.22 N.m for LXM05CD42M3X, 200240 V, three phase 8.22 N.m for LXM15LD28M3, 230 V, three phase
	8.22 N.m for LXM15MD28N4, 230 V, three phase
Nominal speed	2500 rpm for LXM32.D30N4 at 10 A, 400 V, three phase
	3000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase
	1500 rpm for LXM05AD42M3X, 200240 V, three phase
	1500 rpm for LXM05BD42M3X, 200240 V, three phase
	1500 rpm for LXM05CD42M3X, 200240 V, three phase 3000 rpm for LXM05AD34N4, 380480 V, three phase
	3000 rpm for LXM05BD34N4, 380480 V, three phase
	3000 rpm for LXM05CD34N4, 380480 V, three phase
	1500 rpm for LXM15MD28M3, 230 V, three phase
	1500 rpm for LXM15MD28N4, 230 V, three phase
	1500 rpm for LXM15MD40N4, 230 V, three phase
	3000 rpm for LXM05AD57N4, 380480 V, three phase
	3000 rpm for LXM05BD57N4, 380480 V, three phase
	3000 rpm for LXM05CD57N4, 380480 V, three phase
	3000 rpm for LXM15MD28N4, 400 V, three phase
	3000 rpm for LXM15MD40N4, 400 V, three phase
	3500 rpm for LXM15MD40N4, 480 V, three phase
	4000 rpm for LXM15MD28N4, 480 V, three phase
Product compatibility	LXM05AD42M3X at 200240 V three phase
	LXM05BD42M3X at 200240 V three phase
	LXM05CD42M3X at 200240 V three phase
	LXM05AD34N4 at 380480 V three phase
	LXM05BD34N4 at 380480 V three phase
	LXM05CD34N4 at 380480 V three phase
	LXM15MD28N4 at 400 V three phase
	LXM15MD28N4 at 480 V three phase
	LXM15MD40N4 at 400 V three phase
	LXM15MD40N4 at 480 V three phase
	LXM32.D30N4 at 400 V three phase
	LXM32.D30N4 at 480 V three phase
	LXM05AD57N4 at 380480 V three phase
	LXM05BD57N4 at 380480 V three phase
	LXM05CD57N4 at 380480 V three phase
	LXM15MD28M3 at 230 V three phase
	LXM15MD28N4 at 230 V three phase LXM15MD40N4 at 230 V three phase
	Editoria forti de 200 y dilos pridos
Shaft end	Untapped
ID degree of protection	IDEO atandard
IP degree of protection	IP50 standard

Speed feedback resolution	131072 points/turn					
Holding brake	With					
mounting support	International standard flange					
Electrical connection	Rotatable right-angled connectors					
Complementary						
Range compatibility	Lexium 32 Lexium 15 Lexium 05					
supply voltage max	480 V					
Network number of phases	Three phase					
Continuous stall current	6.2 A					
maximum continuous power	3.64 W					
Maximum current Irms	34.8 A for LXM15LD28M3 34.8 A for LXM15MD28N4 34.8 A for LXM15MD40N4 32.3 A for LXM05AD42M3X 32.3 A for LXM05AD34N4 32.3 A for LXM05AD57N4 32.3 A for LXM05BD42M3X 32.3 A for LXM05BD34N4 32.3 A for LXM05BD57N4 32.3 A for LXM05CD42M3X 32.3 A for LXM05CD42M3X 32.3 A for LXM05CD42M3X 32.3 A for LXM05CD57N4 30.3 A for LXM05CD57N4					
Maximum permanent current	32.3 A					
Switching frequency	8 kHz					
Second shaft	Without second shaft end					
Shaft diameter	24 mm					
Shaft length	50 mm					
Feedback type	Single turn SinCos Hiperface					
Holding torque	12 N.m holding brake					
Motor flange size	100 mm					
Number of motor stacks	4					
Torque constant	1.62 N.m/A at 120 °C					
Back emf constant	103 V/krpm at 120 °C					
Number of motor poles	8					
Rotor inertia	5.245 kg.cm ²					
Stator resistance	1.81 Ohm at 20 °C					
Stator inductance	11.8 mH at 20 °C					
Stator electrical time constant	6.52 ms at 20 °C					
Maximum radial force Fr	1070 N at 1000 rpm 740 N at 3000 rpm 850 N at 2000 rpm					
Maximum axial force Fa	0.2 x Fr					
Brake pull-in power	17 W					
Type of cooling	Natural convection					
Length	307.5 mm					

Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Net weight	9.9 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	18.3 cm
Package 1 Width	16.3 cm
Package 1 Length	49.2 cm
Package 1 Weight	8.15 kg

Contractual warranty

Warranty 18 months



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

Ø	Mercury Free	
	Rohs Exemption Information	Yes
②	Pvc Free	

Certifications & Standards

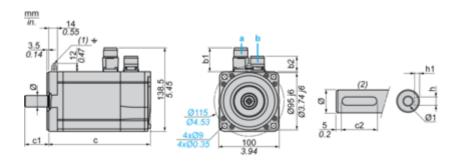
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

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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 as 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

Product datasheet

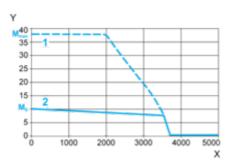
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Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

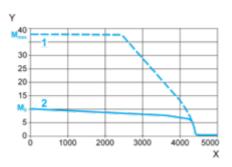


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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