Product datasheet

Specification





AC servo motor BSH, Lexium 05, 11.1N.m, 1500rpm, untapped shaft, without brake, IP65

BSH1401P22A1A

Main

Device short name	BSH				
Product or component type	Servo motor				
Maximum mechanical speed	11.1 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 11.1 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 11.1 N.m for LXM15MD28N4, 400 V, three phase 11.1 N.m for LXM15MD28N4, 480 V, three phase 11.1 N.m for LXM15MD28N4, 230 V, three phase 11.1 N.m for LXM15MD40N4, 400 V, three phase 11.1 N.m for LXM15MD40N4, 480 V, three phase 11.1 N.m for LXM15MD40N4, 480 V, three phase 11.1 N.m for LXM15LD28M3, 230 V, three phase 11.4 N.m for LXM05AD34N4, 380480 V, three phase				
Continuous stall torque					
	11.4 N.m for LXM05BD34N4, 380480 V, three phase 11.4 N.m for LXM05CD34N4, 380480 V, three phase				
Peak stall torque	27 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 27 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 23.33 N.m for LXM15MD28N4, 230 V, three phase 23.33 N.m for LXM15MD28N4, 400 V, three phase 23.33 N.m for LXM15MD28N4, 480 V, three phase 23.33 N.m for LXM15MD40N4, 400 V, three phase 23.33 N.m for LXM15MD40N4, 480 V, three phase 23.33 N.m for LXM15MD40N4, 480 V, three phase 23.8 N.m for LXM15LD28M3, 230 V, three phase 23.33 N.m for LXM05AD34N4, 380480 V, three phase 23.33 N.m for LXM05BD34N4, 380480 V, three phase 23.33 N.m for LXM05BD34N4, 380480 V, three phase 23.33 N.m for LXM05CD34N4, 380480 V, three phase				
Nominal output power	2500 W for LXM32.D30N4 at 10 A, 400 V, three phase 3000 W for LXM32.D30N4 at 10 A, 480 V, three phase 2000 W for LXM15MD28N4, 400 V, three phase 2000 W for LXM15MD40N4, 400 V, three phase 2200 W for LXM05AD34N4, 380480 V, three phase 2200 W for LXM05BD34N4, 380480 V, three phase 2200 W for LXM05BD34N4, 380480 V, three phase 2200 W for LXM05CD34N4, 380480 V, three phase 1400 W for LXM15LD28M3, 230 V, three phase 1400 W for LXM15MD28N4, 230 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD28N4, 480 V, three phase 2150 W for LXM15MD40N4, 480 V, three phase				
Nominal torque	9.5 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 9.5 N.m for LXM32.D30N4 at 10 A, 480 V, three phase 6.8 N.m for LXM15MD28N4, 480 V, three phase 6.8 N.m for LXM15MD40N4, 480 V, three phase 6.9 N.m for LXM05AD34N4, 380480 V, three phase 6.9 N.m for LXM05BD34N4, 380480 V, three phase 6.9 N.m for LXM05CD34N4, 380480 V, three phase 7.63 N.m for LXM15MD28N4, 400 V, three phase 7.63 N.m for LXM15MD28N4, 400 V, three phase 9.1 N.m for LXM15D28M3, 230 V, three phase 9.1 N.m for LXM15D28M3, 230 V, three phase 9.1 N.m for LXM15MD28N4, 230 V, three phase				

Nominal speed Product compatibility	2500 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 3000 rpm for LXM32.D30N4 at 10 A, 480 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 3000 rpm for LXM05CD34N4, 380480 V, three phase 1500 rpm for LXM15MD28N4, 230 V, three phase 1500 rpm for LXM15LD28M3, 230 V, three phase 2500 rpm for LXM15MD28N4, 400 V, three phase 2500 rpm for LXM15MD40N4, 400 V, three phase 3000 rpm for LXM15MD40N4, 480 V, three phase 3000 rpm for LXM15MD40N4, 480 V, three phase LXM15LD28M3 at 230 V three phase LXM15LD28M3 at 230 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 LXM15MD28N4 at 480 V three phase LXM15MD40N4 at 400 V three phase LXM15MD40N4 at 480 V three phase LXM15MD40N4 at 230 V three phase					
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 05 Lexium 32 Lexium 15					
supply voltage max	480 V					
Network number of phases	Three phase					
Continuous stall current	7.8 A					
maximum continuous power	3.6 W					
Maximum current Irms	20.8 A for LXM15LD28M3 20.8 A for LXM15MD28N4 20.8 A for LXM15MD40N4 20.8 A for LXM05AD34N4 20.8 A for LXM05BD34N4 20.8 A for LXM05CD34N4 20.8 A for LXM05CD34N4					
Maximum permanent current	20.8 A					
Switching frequency	8 kHz					
Second shaft	Without second shaft end					
Shaft diameter	24 mm					
Shaft length	50 mm					
Feedback type	Multiturn SinCos Hiperface					
Motor flange size	140 mm					
Number of motor stacks	1					
Torque constant	1.43 N.m/A at 120 °C					
Back emf constant	100 V/krpm at 120 °C					
Number of motor poles	10					

Rotor inertia	7.41 kg.cm²				
Stator resistance	1.41 Ohm at 20 °C				
Stator inductance	15.6 mH at 20 °C				
Stator electrical time constant	11.06 ms at 20 °C				
Maximum radial force Fr	1530 N at 3000 rpm 1760 N at 2000 rpm 2210 N at 1000 rpm				
Maximum axial force Fa	0.2 x Fr				
Type of cooling	Natural convection				
Length	217.5 mm				
Centring collar diameter	130 mm				
Centring collar depth	3.5 mm				
Number of mounting holes	4				
Mounting holes diameter	11 mm				
Circle diameter of the mounting holes	165 mm				
Net weight	11.9 kg				

Packing Units

Unit Type of Package 1	PCE				
Number of Units in Package 1	1				
Package 1 Height	27.0 cm				
Package 1 Width	27.0 cm				
Package 1 Length	48.2 cm				
Package 1 Weight	8.0 kg				

Contractual warranty

Warranty 18 months

Sustainability Green 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

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			

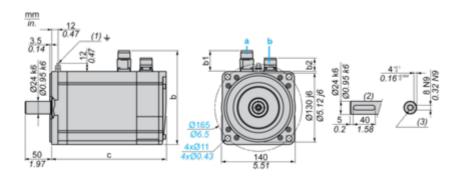
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BSH1401P22A1A

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)
- (3) For screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

Straight connectors		traight connectors Rotatable angled connectors			a (itha atha aadaa)	- (ith hands-)	
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
178	39.5	25.5	178	39.5	39.5	218	256

Dimensions in in.

Straig	traight connectors Rotatable angled connectors		a (itha atha aadaa)	a (with harden)			
b	b1	b2	b	b1	b2	c (without brake)	c (with brake)
7.00	1.55	1.00	7.00	1.55	1.55	8.58	10.07

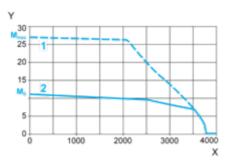
BSH1401P22A1A

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

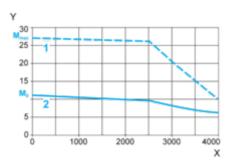


- **X** Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



- X Speed in rpm
- ${\bf Y}$ Torque in Nm
- 1 Peak torque
- 2 Continuous torque