Product datasheet Characteristics

BSH1001P32F1A

AC servo motor BSH - 2.7 N.m - 3000 rpm - keyed shaft - with brake - IP65





Main

BSH 6000 rpm 3.39 N.m for LXM15LD21M3, 230 V, single phase 2.7 N.m for LXM15LD10N4, 230 V, three phase	
3.39 N.m for LXM15LD21M3, 230 V, single phase 2.7 N.m for LXM15LD10N4, 230 V, three phase	
2.7 N.m for LXM15LD10N4, 230 V, three phase	
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0.00 N (LVM45LD40N4 400 V (b b	
3.39 N.m for LXM15LD10N4, 400 V, three phase	
3.39 N.m for LXM15LD10N4, 480 V, three phase	
3.39 N.m for LXM15LD21M3, 230 V, three phase	
3.39 N.m for LXM15LD17N4, 230 V, three phase	
3.39 N.m for LXM15LD17N4, 400 V, three phase	
3.39 N.m for LXM15LD17N4, 480 V, three phase	
3.4 N.m for LXM05AD17M3X, 200240 V, three phase	
3.4 N.m for LXM05AD22N4, 380480 V, three phase	
3.4 N.m for LXM05BD17M3X, 200240 V, three phase	
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3.3 N.m for LXM32.D18N4 at 6 A, 400 V, three phase	
3.3 N.m for LXM32.D18N4 at 6 A, 480 V, three phase	
7.08 N.m for LXM15LD21M3, 230 V, single phase	
6.19 N.m for LXM15LD10N4, 230 V, three phase	
6.19 N.m for LXM15LD10N4, 400 V, three phase	
7.08 N.m for LXM15LD21M3, 230 V, three phase	
7.08 N.m for LXM15LD17N4, 230 V, three phase	
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9.6 N.m for LXM32.D18N4 at 6 A, 480 V, three phase	
1300 W for LXM15LD17N4, 400 V, three phase	
1500 W for LXM15LD10N4, 480 V, three phase	
	3.39 N.m for LXM15LD21M3, 230 V, three phase 3.39 N.m for LXM15LD17N4, 230 V, three phase 3.39 N.m for LXM15LD17N4, 480 V, three phase 3.39 N.m for LXM05AD17M3X, 200240 V, three phase 3.4 N.m for LXM05AD22N4, 380480 V, three phase 3.4 N.m for LXM05AD22N4, 380480 V, three phase 3.4 N.m for LXM05BD17M3X, 200240 V, three phase 3.4 N.m for LXM05BD22N4, 380480 V, three phase 3.4 N.m for LXM05CD17M3X, 200240 V, three phase 3.4 N.m for LXM05CD17M3X, 200240 V, three phase 3.3 N.m for LXM05CD22N4, 380480 V, three phase 3.3 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 3.3 N.m for LXM32.D18N4 at 6 A, 480 V, three phase 6.19 N.m for LXM15LD21M3, 230 V, single phase 6.19 N.m for LXM15LD10N4, 230 V, three phase 6.19 N.m for LXM15LD10N4, 400 V, three phase 7.08 N.m for LXM15LD21M3, 230 V, three phase 7.08 N.m for LXM15LD17N4, 230 V, three phase 7.08 N.m for LXM15LD17N4, 480 V, three phase 7.08 N.m for LXM15LD17N4, 480 V, three phase 7.1 N.m for LXM05AD17M3X, 200240 V, three phase 7.1 N.m for LXM05AD2N4, 380480 V, three phase 7.1 N.m for LXM05BD17M3X, 200240 V, three phase 7.1 N.m for LXM05BD17M3X, 200240 V, three phase 7.1 N.m for LXM05CD17M3X, 200240 V, three phase 9.6 N.m for LXM32.D18N4 at 6 A, 480 V, three phase 9.6 N.m for LXM32.D18N4 at 6 A, 480 V, three phase 9.6 N.m for LXM32.D18N4 at 6 A, 480 V, three phase

	950 W for LXM15LD21M3, 230 V, single phase 1300 W for LXM15LD10N4, 400 V, three phase 1500 W for LXM15LD17N4, 480 V, three phase 500 W for LXM05AD17M3X, 200240 V, three phase 500 W for LXM05BD17M3X, 200240 V, three phase 500 W for LXM05CD17M3X, 200240 V, three phase 850 W for LXM05CD17M3X, 200240 V, three phase 900 W for LXM05AD22N4, 380480 V, three phase 900 W for LXM05BD22N4, 380480 V, three phase 900 W for LXM05CD22N4, 380480 V, three phase 900 W for LXM05CD22N4, 380480 V, three phase 950 W for LXM15LD17N4, 230 V, three phase 950 W for LXM15LD21M3, 230 V, three phase 1100 W for LXM32.D18N4 at 6 A, 400 V, three phase 1100 W for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal torque	3 N.m for LXM15LD21M3, 230 V, single phase 2.5 N.m for LXM15LD10N4, 480 V, three phase 2.5 N.m for LXM15LD17N4, 480 V, three phase 2.7 N.m for LXM15LD10N4, 230 V, three phase 2.7 N.m for LXM15LD10N4, 400 V, three phase 2.7 N.m for LXM15LD17N4, 400 V, three phase 2.92 N.m for LXM05AD22N4, 380480 V, three phase 2.92 N.m for LXM05BD22N4, 380480 V, three phase 2.92 N.m for LXM05CD22N4, 380480 V, three phase 3 N.m for LXM05CD22N4, 380480 V, three phase 3 N.m for LXM15LD17N4, 230 V, three phase 3 N.m for LXM15LD21M3, 230 V, three phase 3 N.m for LXM05AD17M3X, 200240 V, three phase 3.16 N.m for LXM05BD17M3X, 200240 V, three phase 3.16 N.m for LXM05CD17M3X, 200240 V, three phase 2.7 N.m for LXM32.D18N4 at 6 A, 400 V, three phase 2.7 N.m for LXM32.D18N4 at 6 A, 480 V, three phase
Nominal speed	3000 rpm for LXM15LD10N4, 230 V, three phase 3000 rpm for LXM15LD21M3, 230 V, single phase 3000 rpm for LXM05AD22N4, 380480 V, three phase 3000 rpm for LXM05BD22N4, 380480 V, three phase 3000 rpm for LXM05CD22N4, 380480 V, three phase 3000 rpm for LXM15LD17N4, 230 V, three phase 3000 rpm for LXM15LD21M3, 230 V, three phase 1500 rpm for LXM05AD17M3X, 200240 V, three phase 1500 rpm for LXM05AD17M3X, 200240 V, three phase 1500 rpm for LXM05CD17M3X, 200240 V, three phase 1500 rpm for LXM05CD17M3X, 200240 V, three phase 4500 rpm for LXM15LD10N4, 400 V, three phase 4500 rpm for LXM15LD17N4, 400 V, three phase 6000 rpm for LXM15LD10N4, 480 V, three phase 6000 rpm for LXM15LD17N4, 480 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 400 V, three phase 4000 rpm for LXM32.D18N4 at 6 A, 480 V, three phase
Product compatibility	LXM15LD21M3 at 230 V single phase LXM15LD10N4 at 400 V three phase LXM05AD17M3X at 200240 V three phase LXM05BD17M3X at 200240 V three phase LXM05CD17M3X at 200240 V three phase LXM15LD10N4 at 230 V three phase LXM15LD10N4 at 480 V three phase LXM15LD10N4 at 480 V three phase LXM15LD21M3 at 230 V three phase LXM15LD17N4 at 230 V three phase LXM05AD22N4 at 380480 V three phase LXM05BD22N4 at 380480 V three phase LXM05CD22N4 at 380480 V three phase LXM15LD17N4 at 400 V three phase LXM15LD17N4 at 480 V three phase LXM15LD17N4 at 480 V three phase LXM32.D18N4 at 480 V three phase LXM32.D18N4 at 480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

o o mpio mo mary							
Range compatibility	Lexium 15 Lexium 32 Lexium 05						
Supply voltage max	480 V						
Network number of phases	Three phase						
Continuous stall current	3.5 A						
Maximum continuous power	1.6 W						
Maximum current Irms	12 A for LXM15LD21M3 12 A for LXM15LD10N4 12 A for LXM15LD17N4 12 A for LXM05AD17M3X 12 A for LXM05AD22N4 12 A for LXM05BD17M3X 12 A for LXM05BD22N4 12 A for LXM05CD17M3X 12 A for LXM05CD17M3X 14 A for LXM05CD17M3X 15 A for LXM05CD17M3X 16 A for LXM05CD18N4						
Maximum permanent current	12 A						
Switching frequency	8 kHz						
Second shaft	Without second shaft end						
Shaft diameter	19 mm						
Shaft length	40 mm						
Key width	30 mm						
Feedback type	Multiturn SinCos Hiperface						
Holding torque	9 N.m holding brake						
Motor flange size	100 mm						
Number of motor stacks	1						
Torque constant	0.89 N.m/A at 120 °C						
Back emf constant	60 V/krpm at 120 °C						
Number of motor poles	8						
Rotor inertia	2.018 kg.cm ²						
Stator resistance	3.8 Ohm at 20 °C						
Stator inductance	17.6 mH at 20 °C						
Stator electrical time constant	4.63 ms at 20 °C						
Maximum radial force Fr	530 N at 5000 rpm 570 N at 4000 rpm 630 N at 3000 rpm 720 N at 2000 rpm 900 N at 1000 rpm						
Maximum axial force Fa	0.2 x Fr						
Brake pull-in power	18 W						
Type of cooling	Natural convection						
Length	199.5 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						
Product weight	4.8 kg						

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration

Mercury free	Yes					
RoHS exemption information	Yes					
China RoHS Regulation	China RoHS declaration					
Environmental Disclosure	Product Environmental Profile					
Circularity Profile	No need of specific recycling operations					
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins					

Contractual warranty

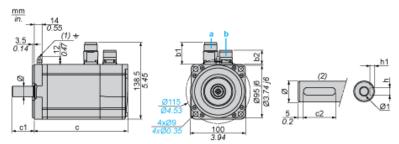
Warranty	18 months

Product datasheet Dimensions Drawings

BSH1001P32F1A

Servo Motors Dimensions

Example with Straight Connectors



- Power supply for servo motor brake a:
- b: Power supply for servo motor encoder
- (1) (2) Shaft end, keyed slot (optional)

Dimensions in mm

Straight of	connectors	Rotatable	angled co	c (without bra	c (with bral	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
39.5	25.5	39.5	39.5	169	200	40	30	6 N9	3.5 ^{+0.1} ₀	19 k6	M6 x 16

Dimensions in in.

	Straight co	connector Rotatable angled co		c (without bra	c (with brak	c1	c2	h	h1	Ø	Ø1 for screws	
Î	b1	b2	b1	b2								
	1.55	1.00	1.55	1.55	6.65	7.87	1.57	1.18	0.24 N9	0.14 ^{+0.1} ₀	0.75 k6	M6 x 0.63

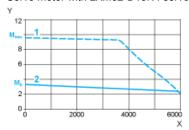
Product datasheet Performance Curves

BSH1001P32F1A

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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

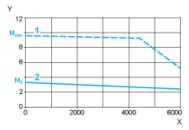
Product datasheet Performance Curves

BSH1001P32F1A

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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