

BSH1001P32A1A

AC servo motor BSH - 2.7 Nm - 6000 rpm - key
shaft - without brake - IP65



Main

Product or component type	Servo motor
Maximum mechanical speed	6000 rpm
Continuous stall torque	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 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, 200...240 V, three phase 3.4 N.m for LXM05AD22N4, 380...480 V, three phase 3.4 N.m for LXM05BD17M3X, 200...240 V, three phase 3.4 N.m for LXM05BD22N4, 380...480 V, three phase 3.4 N.m for LXM05CD17M3X, 200...240 V, three phase 3.4 N.m for LXM05CD22N4, 380...480 V, three phase
Peak stall torque	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 6.19 N.m for LXM15LD10N4, 480 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, 400 V, three phase 7.08 N.m for LXM15LD17N4, 480 V, three phase 7.1 N.m for LXM05AD17M3X, 200...240 V, three phase 7.1 N.m for LXM05AD22N4, 380...480 V, three phase 7.1 N.m for LXM05BD17M3X, 200...240 V, three phase 7.1 N.m for LXM05BD22N4, 380...480 V, three phase 7.1 N.m for LXM05CD17M3X, 200...240 V, three phase 7.1 N.m for LXM05CD22N4, 380...480 V, three phase
Nominal output power	1300 W for LXM15LD17N4, 400 V, three phase 1500 W for LXM15LD10N4, 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, 200...240 V, three phase 500 W for LXM05BD17M3X, 200...240 V, three phase 500 W for LXM05CD17M3X, 200...240 V, three phase

	850 W for LXM15LD10N4, 230 V, three phase 900 W for LXM05AD22N4, 380...480 V, three phase 900 W for LXM05BD22N4, 380...480 V, three phase 900 W for LXM05CD22N4, 380...480 V, three phase 950 W for LXM15LD17N4, 230 V, three phase 950 W for LXM15LD21M3, 230 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, 380...480 V, three phase 2.92 N.m for LXM05BD22N4, 380...480 V, three phase 2.92 N.m for LXM05CD22N4, 380...480 V, three phase 3 N.m for LXM15LD17N4, 230 V, three phase 3 N.m for LXM15LD21M3, 230 V, three phase 3.16 N.m for LXM05AD17M3X, 200...240 V, three phase 3.16 N.m for LXM05BD17M3X, 200...240 V, three phase 3.16 N.m for LXM05CD17M3X, 200...240 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, 380...480 V, three phase 3000 rpm for LXM05BD22N4, 380...480 V, three phase 3000 rpm for LXM05CD22N4, 380...480 V, three phase 3000 rpm for LXM15LD17N4, 230 V, three phase 3000 rpm for LXM15LD21M3, 230 V, three phase 1500 rpm for LXM05AD17M3X, 200...240 V, three phase 1500 rpm for LXM05BD17M3X, 200...240 V, three phase 1500 rpm for LXM05CD17M3X, 200...240 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
Product compatibility	LXM15LD21M3 at 230 V single phase LXM15LD10N4 at 400 V three phase LXM05AD17M3X at 200...240 V three phase LXM05BD17M3X at 200...240 V three phase LXM05CD17M3X at 200...240 V three phase LXM15LD10N4 at 230 V three phase LXM15LD10N4 at 480 V three phase LXM15LD21M3 at 230 V three phase LXM15LD17N4 at 230 V three phase LXM05AD22N4 at 380...480 V three phase LXM05BD22N4 at 380...480 V three phase LXM05CD22N4 at 380...480 V three phase LXM15LD17N4 at 400 V three phase LXM15LD17N4 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	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 05 Lexium 15
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	3.5 A
Maximum continuous power	1.6 W
Maximum permanent current	12 A
Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm

Key width	30 mm
Feedback type	Multiturn SinCos Hiperface
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	1.4 kg.cm ²
Stator resistance	3.8 Ohm at 20 °C
Stator inductance	17.6 mH at 20 °C 19 mH at 20 °C
Stator electrical time constant	4.63 ms at 20 °C 5 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
Type of cooling	Natural convection
Length	168.5 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	4.2 kg

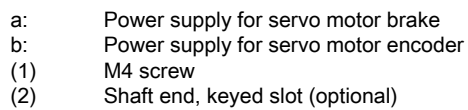
Offer Sustainability

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
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Example with Straight Connectors



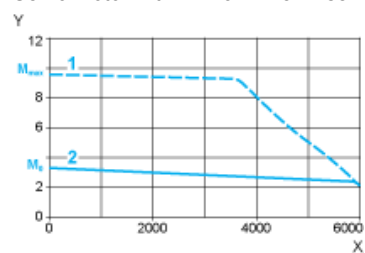
Straight connectors		Rotatable angled connectors		c (without bracket)	c (with bracket)	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
39.5	25.5	39.5	39.5	169	200	40	30	6 N9	3.5 ^{+0.1} ₀	19 k6	M6 x 16

Straight connector		Rotatable angled connector (without bracket)		Rotatable angled connector (with bracket)		c1	c2	h	h1	Ø	Ø1 for screws
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

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

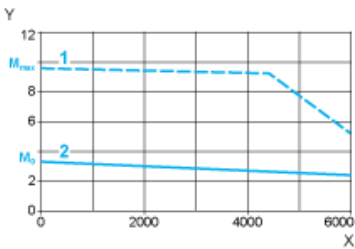


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 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