

BSH1004P22A1A

AC servo motor BSH - 9.31 N.m - 1500 rpm -
untapped shaft - without brake - IP65



Main

Product or component type	Servo motor
Device short name	BSH
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, 380...480 V, three phase 9.31 N.m for LXM05AD42M3X, 200...240 V, three phase 9.31 N.m for LXM05AD57N4, 380...480 V, three phase 9.31 N.m for LXM05BD34N4, 380...480 V, three phase 9.31 N.m for LXM05BD42M3X, 200...240 V, three phase 9.31 N.m for LXM05BD57N4, 380...480 V, three phase 9.31 N.m for LXM05CD34N4, 380...480 V, three phase 9.31 N.m for LXM05CD42M3X, 200...240 V, three phase 9.31 N.m for LXM05CD57N4, 380...480 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 N.m for LXM05AD57N4, 380...480 V, three phase 23.47 N.m for LXM05BD34N4, 380...480 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
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, 200...240 V, three phase 1300 W for LXM05BD42M3X, 200...240 V, three phase

	1300 W for LXM05CD42M3X, 200...240 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, 380...480 V, three phase 2200 W for LXM05AD57N4, 380...480 V, three phase 2200 W for LXM05BD34N4, 380...480 V, three phase 2200 W for LXM05BD57N4, 380...480 V, three phase 2200 W for LXM05CD34N4, 380...480 V, three phase 2200 W for LXM05CD57N4, 380...480 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, 380...480 V, three phase 7.1 N.m for LXM05AD57N4, 380...480 V, three phase 7.1 N.m for LXM05BD34N4, 380...480 V, three phase 7.1 N.m for LXM05BD57N4, 380...480 V, three phase 7.1 N.m for LXM05CD34N4, 380...480 V, three phase 7.1 N.m for LXM05CD57N4, 380...480 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, 200...240 V, three phase 8.22 N.m for LXM05BD42M3X, 200...240 V, three phase 8.22 N.m for LXM05CD42M3X, 200...240 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, 200...240 V, three phase 1500 rpm for LXM05BD42M3X, 200...240 V, three phase 1500 rpm for LXM05CD42M3X, 200...240 V, three phase 3000 rpm for LXM05AD34N4, 380...480 V, three phase 3000 rpm for LXM05BD34N4, 380...480 V, three phase 3000 rpm for LXM05CD34N4, 380...480 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, 380...480 V, three phase 3000 rpm for LXM05BD57N4, 380...480 V, three phase 3000 rpm for LXM05CD57N4, 380...480 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 200...240 V three phase LXM05BD42M3X at 200...240 V three phase LXM05CD42M3X at 200...240 V three phase LXM05AD34N4 at 380...480 V three phase LXM05BD34N4 at 380...480 V three phase LXM05CD34N4 at 380...480 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 380...480 V three phase LXM05BD57N4 at 380...480 V three phase LXM05CD57N4 at 380...480 V three phase LXM15MD28M3 at 230 V three phase LXM15MD28N4 at 230 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

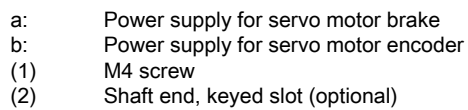
Complementary

Range compatibility	Lexium 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 LXM05CD34N4 32.3 A for LXM05CD57N4 30 A for LXM32.D30N4
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	Multiturn SinCos Hiperface
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	4.22 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
Type of cooling	Natural convection
Length	276.5 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	9.5 kg

Contractual warranty

Warranty	18 months
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Example with Straight Connectors



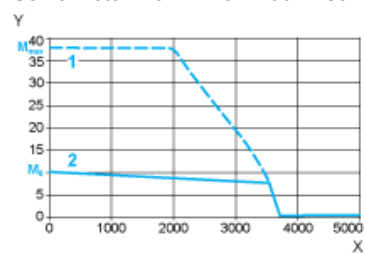
Straight connectors		Rotatable angled connectors		c (without bracket)	c (with bracket)	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
39.5	25.5	39.5	39.5	277	308	50	40	8 N9	4 ^{+0.1} ₀	24 k6	M8 x 19

Straight connector		Rotatable angled connector		c (without bracket)	c (with bracket)	c1	c2	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2								
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

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive

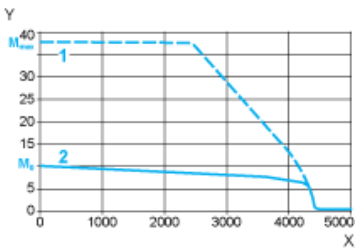


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

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