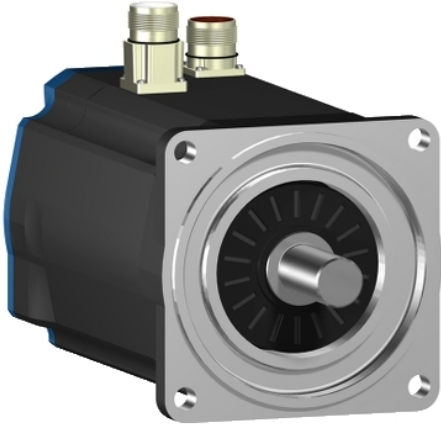


# BSH1001P22F1A

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



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000 rpm
Continuous stall torque	<p>30.00 Lbf.In (3.39 N.m) LXM15LD21M3, 230 V, single phase</p> <p>23.90 Lbf.In (2.7 N.m) LXM15LD10N4, 230 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD10N4, 400 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD10N4, 480 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD21M3, 230 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD17N4, 230 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD17N4, 400 V, three phase</p> <p>30.00 Lbf.In (3.39 N.m) LXM15LD17N4, 480 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05AD17M3X, 200...240 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05AD22N4, 380...480 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05BD17M3X, 200...240 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05BD22N4, 380...480 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05CD17M3X, 200...240 V, three phase</p> <p>30.09 Lbf.In (3.4 N.m) LXM05CD22N4, 380...480 V, three phase</p> <p>29.21 Lbf.In (3.3 N.m) LXM32.D18N4 6 A, 400 V, three phase</p> <p>29.21 lbf.in (3.3 N.m) LXM32.D18N4 6 A, 480 V, three phase</p>
Peak stall torque	<p>62.66 Lbf.In (7.08 N.m) LXM15LD21M3, 230 V, single phase</p> <p>54.79 Lbf.In (6.19 N.m) LXM15LD10N4, 230 V, three phase</p> <p>54.79 Lbf.In (6.19 N.m) LXM15LD10N4, 400 V, three phase</p> <p>54.79 Lbf.In (6.19 N.m) LXM15LD10N4, 480 V, three phase</p> <p>62.66 Lbf.In (7.08 N.m) LXM15LD21M3, 230 V, three phase</p> <p>62.66 Lbf.In (7.08 N.m) LXM15LD17N4, 230 V, three phase</p> <p>62.66 Lbf.In (7.08 N.m) LXM15LD17N4, 400 V, three phase</p> <p>62.66 Lbf.In (7.08 N.m) LXM15LD17N4, 480 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05AD17M3X, 200...240 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05AD22N4, 380...480 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05BD17M3X, 200...240 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05BD22N4, 380...480 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05CD17M3X, 200...240 V, three phase</p> <p>62.84 Lbf.In (7.1 N.m) LXM05CD22N4, 380...480 V, three phase</p> <p>84.97 Lbf.In (9.6 N.m) LXM32.D18N4 6 A, 400 V, three phase</p> <p>84.97 lbf.in (9.6 N.m) LXM32.D18N4 6 A, 480 V, three phase</p>

Nominal output power	<p>1300 W LXM15LD17N4, 400 V, three phase  1500 W LXM15LD10N4, 480 V, three phase  950 W LXM15LD21M3, 230 V, single phase  1300 W LXM15LD10N4, 400 V, three phase  1500 W LXM15LD17N4, 480 V, three phase  500 W LXM05AD17M3X, 200...240 V, three phase  500 W LXM05BD17M3X, 200...240 V, three phase  500 W LXM05CD17M3X, 200...240 V, three phase  850 W LXM15LD10N4, 230 V, three phase  900 W LXM05AD22N4, 380...480 V, three phase  900 W LXM05BD22N4, 380...480 V, three phase  900 W LXM05CD22N4, 380...480 V, three phase  950 W LXM15LD17N4, 230 V, three phase  950 W LXM15LD21M3, 230 V, three phase  1100 W LXM32.D18N4 6 A, 400 V, three phase  1100 W LXM32.D18N4 6 A, 480 V, three phase</p>
Nominal torque	<p>26.55 Lbf.In (3 N.m) LXM15LD21M3, 230 V, single phase  22.13 Lbf.In (2.5 N.m) LXM15LD10N4, 480 V, three phase  22.13 Lbf.In (2.5 N.m) LXM15LD17N4, 480 V, three phase  23.90 Lbf.In (2.7 N.m) LXM15LD10N4, 230 V, three phase  23.90 Lbf.In (2.7 N.m) LXM15LD10N4, 400 V, three phase  23.90 Lbf.In (2.7 N.m) LXM15LD17N4, 400 V, three phase  25.84 Lbf.In (2.92 N.m) LXM05AD22N4, 380...480 V, three phase  25.84 Lbf.In (2.92 N.m) LXM05BD22N4, 380...480 V, three phase  25.84 Lbf.In (2.92 N.m) LXM05CD22N4, 380...480 V, three phase  26.55 Lbf.In (3 N.m) LXM15LD17N4, 230 V, three phase  26.55 Lbf.In (3 N.m) LXM15LD21M3, 230 V, three phase  27.97 Lbf.In (3.16 N.m) LXM05AD17M3X, 200...240 V, three phase  27.97 Lbf.In (3.16 N.m) LXM05BD17M3X, 200...240 V, three phase  27.97 Lbf.In (3.16 N.m) LXM05CD17M3X, 200...240 V, three phase  23.90 Lbf.In (2.7 N.m) LXM32.D18N4 6 A, 400 V, three phase  23.90 lbf.in (2.7 N.m) LXM32.D18N4 6 A, 480 V, three phase</p>
Nominal speed	<p>3000 rpm LXM15LD10N4, 230 V, three phase  3000 rpm LXM15LD21M3, 230 V, single phase  3000 rpm LXM05AD22N4, 380...480 V, three phase  3000 rpm LXM05BD22N4, 380...480 V, three phase  3000 rpm LXM05CD22N4, 380...480 V, three phase  3000 rpm LXM15LD17N4, 230 V, three phase  3000 rpm LXM15LD21M3, 230 V, three phase  1500 rpm LXM05AD17M3X, 200...240 V, three phase  1500 rpm LXM05BD17M3X, 200...240 V, three phase  1500 rpm LXM05CD17M3X, 200...240 V, three phase  4500 rpm LXM15LD10N4, 400 V, three phase  4500 rpm LXM15LD17N4, 400 V, three phase  6000 rpm LXM15LD10N4, 480 V, three phase  6000 rpm LXM15LD17N4, 480 V, three phase  4000 rpm LXM32.D18N4 6 A, 400 V, three phase  4000 rpm LXM32.D18N4 6 A, 480 V, three phase</p>

Product compatibility	LXM15LD21M3 230 V single phase LXM15LD10N4 400 V three phase LXM05AD17M3X 200...240 V three phase LXM05BD17M3X 200...240 V three phase LXM05CD17M3X 200...240 V three phase LXM15LD10N4 230 V three phase LXM15LD10N4 480 V three phase LXM15LD21M3 230 V three phase LXM15LD17N4 230 V three phase LXM05AD22N4 380...480 V three phase LXM05BD22N4 380...480 V three phase LXM05CD22N4 380...480 V three phase LXM15LD17N4 400 V three phase LXM15LD17N4 480 V three phase LXM32.D18N4 400 V three phase LXM32.D18N4 480 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	With
Mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
Supply voltage max	480 V
Phase	Three phase
Continuous stall current	3.5 A
Maximum continuous power	1.6 W
Maximum current Irms	12 A LXM15LD21M3 12 A LXM15LD10N4 12 A LXM15LD17N4 12 A LXM05AD17M3X 12 A LXM05AD22N4 12 A LXM05BD17M3X 12 A LXM05BD22N4 12 A LXM05CD17M3X 12 A LXM05CD22N4 12 A LXM32.D18N4
Maximum permanent current	12 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	0.75 in (19 mm)
Shaft length	1.57 in (40 mm)
Feedback type	Multiturn SinCos Hiperface
Holding torque	79.66 lbf.in (9 N.m) holding brake
Motor flange size	3.94 in (100 mm)
Number of motor stacks	1
Torque constant	0.89 N.m/A 248 °F (120 °C)
Back emf constant	60 V/krpm 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	2.018 kg.cm <sup>2</sup>
Stator resistance	3.8 Ohm 68 °F (20 °C)
Stator inductance	17.6 mH 68 °F (20 °C)
Stator electrical time constant	4.63 ms 68 °F (20 °C)
Maximum radial force Fr	530 N 5000 rpm 570 N 4000 rpm 630 N 3000 rpm 720 N 2000 rpm 900 N 1000 rpm
Maximum axial force Fa	0.2 x Fr

Brake pull-in power	18 W
Type of cooling	Natural convection
Length	7.85 in (199.5 mm)
Centring collar diameter	3.74 in (95 mm)
Centring collar depth	0.14 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.35 in (9 mm)
Circle diameter of the mounting holes	4.53 in (115 mm)
Net weight	10.58 lb(US) (4.8 kg)

### Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	03389118138346
Nbr. of units in pkg.	1
Package weight(Lbs)	10.9 lb(US) (4.94 kg)
Returnability	No
Country of origin	DE

### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	6.06 in (15.4 cm)
Package 1 width	6.42 in (16.3 cm)
Package 1 Length	16.02 in (40.7 cm)

### Contractual warranty

Warranty	18 months
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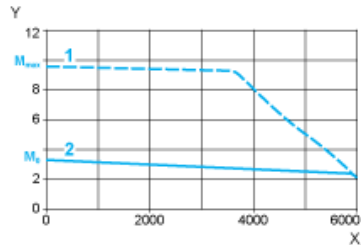
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400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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

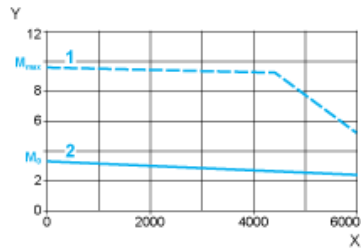
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480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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