

# BSH1002P32A2A

AC servo motor BSH - 3.4 N.m - 2500 rpm -  
keyed shaft - without brake - IP65



Product availability: Non-Stock - Not normally stocked in distribution facility

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Price\*: 1905.00 USD



### Main

Commercial Status	Commercialised
Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	6000
Continuous stall torque	51.33 lbf.in (5.8 N.m) for LXM32.D18N4 6 A at 480 V three phase 51.33 lbf.in (5.8 N.m) for LXM32.D18N4 6 A at 400 V three phase 48.67 lbf.in (5.5 N.m) for LXM05CD28M2 at 200...240 V single phase 48.67 lbf.in (5.5 N.m) for LXM05CD22N4 at 380...480 V three phase 48.67 lbf.in (5.5 N.m) for LXM05CD17M3X at 200...240 V three phase 48.67 lbf.in (5.5 N.m) for LXM05BD28M2 at 200...240 V single phase 48.67 lbf.in (5.5 N.m) for LXM05BD22N4 at 380...480 V three phase 48.67 lbf.in (5.5 N.m) for LXM05BD17M3X at 200...240 V three phase 48.67 lbf.in (5.5 N.m) for LXM05AD28M2 at 200...240 V single phase 48.67 lbf.in (5.5 N.m) for LXM05AD22N4 at 380...480 V three phase 48.67 lbf.in (5.5 N.m) for LXM05AD17M3X at 200...240 V three phase 51.33 lbf.in (5.8 N.m) for LXM15LD21M3 at 230 V three phase 51.33 lbf.in (5.8 N.m) for LXM15LD17N4 at 480 V three phase 51.33 lbf.in (5.8 N.m) for LXM15LD17N4 at 400 V three phase 30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 480 V three phase 30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 400 V three phase 30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 230 V three phase 30.09 lbf.in (3.4 N.m) for LXM15LD13M3 at 230 V three phase 39.82 lbf.in (4.5 N.m) for LXM15LD21M3 at 230 V single phase

Peak stall torque	<p>161.95 lbf.in (18.3 N.m) for LXM32.D18N4 6 A at 480 V three phase</p> <p>161.95 lbf.in (18.3 N.m) for LXM32.D18N4 6 A at 400 V three phase</p> <p>141.59 lbf.in (16 N.m) for LXM05CD28M2 at 200...240 V single phase</p> <p>123.19 lbf.in (13.92 N.m) for LXM05CD22N4 at 380...480 V three phase</p> <p>99.38 lbf.in (11.23 N.m) for LXM05CD17M3X at 200...240 V three phase</p> <p>141.59 lbf.in (16 N.m) for LXM05BD28M2 at 200...240 V single phase</p> <p>123.19 lbf.in (13.92 N.m) for LXM05BD22N4 at 380...480 V three phase</p> <p>99.38 lbf.in (11.23 N.m) for LXM05BD17M3X at 200...240 V three phase</p> <p>141.59 lbf.in (16 N.m) for LXM05AD28M2 at 200...240 V single phase</p> <p>123.19 lbf.in (13.92 N.m) for LXM05AD22N4 at 380...480 V three phase</p> <p>99.38 lbf.in (11.23 N.m) for LXM05AD17M3X at 200...240 V three phase</p> <p>130.88 lbf.in (14.79 N.m) for LXM15LD21M3 at 230 V three phase</p> <p>107.35 lbf.in (12.13 N.m) for LXM15LD17N4 at 480 V three phase</p> <p>107.35 lbf.in (12.13 N.m) for LXM15LD17N4 at 400 V three phase</p> <p>70.8 lbf.in (8 N.m) for LXM15LD10N4 at 480 V three phase</p> <p>70.8 lbf.in (8 N.m) for LXM15LD10N4 at 400 V three phase</p> <p>70.8 lbf.in (8 N.m) for LXM15LD10N4 at 230 V three phase</p> <p>49.56 lbf.in (5.6 N.m) for LXM15LD13M3 at 230 V three phase</p> <p>83.1 lbf.in (9.39 N.m) for LXM15LD21M3 at 230 V single phase</p>
Nominal output power	<p>1700 W for LXM32.D18N4 6 A at 480 V three phase</p> <p>1700 W for LXM32.D18N4 6 A at 400 V three phase</p> <p>890 W for LXM15LD10N4 at 230 V three phase</p> <p>840 W for LXM15LD13M3 at 230 V three phase</p> <p>780 W for LXM05CD17M3X at 200...240 V three phase</p> <p>780 W for LXM05BD17M3X at 200...240 V three phase</p> <p>780 W for LXM05AD17M3X at 200...240 V three phase</p> <p>2150 W for LXM15LD10N4 at 480 V three phase</p> <p>1950 W for LXM15LD17N4 at 480 V three phase</p> <p>1700 W for LXM15LD17N4 at 400 V three phase</p> <p>1600 W for LXM15LD10N4 at 400 V three phase</p> <p>1400 W for LXM05CD22N4 at 380...480 V three phase</p> <p>1400 W for LXM05BD22N4 at 380...480 V three phase</p> <p>1400 W for LXM05AD22N4 at 380...480 V three phase</p> <p>780 W for LXM05CD28M2 at 200...240 V single phase</p> <p>780 W for LXM05BD28M2 at 200...240 V single phase</p> <p>780 W for LXM05AD28M2 at 200...240 V single phase</p> <p>950 W for LXM15LD21M3 at 230 V three phase</p> <p>950 W for LXM15LD21M3 at 230 V single phase</p>

Nominal torque	<p>35.4 lbf.in (4 N.m) for LXM32.D18N4 6 A at 480 V three phase</p> <p>35.4 lbf.in (4 N.m) for LXM32.D18N4 6 A at 400 V three phase</p> <p>51.33 lbf.in (5.8 N.m) for LXM15LD21M3 at 230 V three phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05CD17M3X at 200...240 V three phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05BD17M3X at 200...240 V three phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05AD17M3X at 200...240 V three phase</p> <p>38.94 lbf.in (4.4 N.m) for LXM05CD22N4 at 380...480 V three phase</p> <p>38.94 lbf.in (4.4 N.m) for LXM05BD22N4 at 380...480 V three phase</p> <p>38.94 lbf.in (4.4 N.m) for LXM05AD22N4 at 380...480 V three phase</p> <p>35.4 lbf.in (4 N.m) for LXM15LD17N4 at 400 V three phase</p> <p>32.74 lbf.in (3.7 N.m) for LXM15LD17N4 at 480 V three phase</p> <p>30.09 lbf.in (3.4 N.m) for LXM15LD13M3 at 230 V three phase</p> <p>30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 480 V three phase</p> <p>30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 400 V three phase</p> <p>30.09 lbf.in (3.4 N.m) for LXM15LD10N4 at 230 V three phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05CD28M2 at 200...240 V single phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05BD28M2 at 200...240 V single phase</p> <p>43.89 lbf.in (4.96 N.m) for LXM05AD28M2 at 200...240 V single phase</p> <p>39.82 lbf.in (4.5 N.m) for LXM15LD21M3 at 230 V single phase</p>
Nominal speed	<p>5000 rpm for LXM15LD17N4 at 480 V three phase</p> <p>4000 rpm for LXM15LD17N4 at 400 V three phase</p> <p>2500 rpm for LXM15LD13M3 at 230 V three phase</p> <p>2500 rpm for LXM15LD10N4 at 230 V three phase</p> <p>2000 rpm for LXM15LD21M3 at 230 V three phase</p> <p>2000 rpm for LXM15LD21M3 at 230 V single phase</p> <p>1500 rpm for LXM05CD28M2 at 200...240 V single phase</p> <p>1500 rpm for LXM05BD28M2 at 200...240 V single phase</p> <p>1500 rpm for LXM05AD28M2 at 200...240 V single phase</p> <p>4000 rpm for LXM32.D18N4 6 A at 480 V three phase</p> <p>4000 rpm for LXM32.D18N4 6 A at 400 V three phase</p> <p>6000 rpm for LXM15LD10N4 at 480 V three phase</p> <p>4500 rpm for LXM15LD10N4 at 400 V three phase</p> <p>1500 rpm for LXM05CD17M3X at 200...240 V three phase</p> <p>1500 rpm for LXM05BD17M3X at 200...240 V three phase</p> <p>1500 rpm for LXM05AD17M3X at 200...240 V three phase</p> <p>3000 rpm for LXM05CD22N4 at 380...480 V three phase</p> <p>3000 rpm for LXM05BD22N4 at 380...480 V three phase</p> <p>3000 rpm for LXM05AD22N4 at 380...480 V three phase</p>

Product compatibility	LXM32.D18N4 at 480 V three phase LXM32.D18N4 at 400 V three phase LXM15LD17N4 at 480 V three phase LXM15LD17N4 at 400 V three phase LXM05CD22N4 at 380...480 V three phase LXM05BD22N4 at 380...480 V three phase LXM05AD22N4 at 380...480 V three phase LXM15LD21M3 at 230 V three phase LXM15LD10N4 at 480 V three phase LXM15LD10N4 at 230 V three phase LXM05CD17M3X at 200...240 V three phase LXM05BD17M3X at 200...240 V three phase LXM05AD17M3X at 200...240 V three phase LXM15LD10N4 at 400 V three phase LXM15LD13M3 at 230 V three phase LXM15LD21M3 at 230 V single phase LXM05CD28M2 at 200...240 V single phase LXM05BD28M2 at 200...240 V single phase LXM05AD28M2 at 200...240 V single phase
Shaft end	Keyed
IP degree of protection	IP67 (with IP67 kit) IP65 (standard)
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## Complementary

Range compatibility	Lexium 05 Lexium 15 Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	4.8 A
Continuous power	2.51 W
Maximum current Irms	17.1 A for LXM32.D18N4 17.1 A for LXM05CD22N4 17.1 A for LXM05CD17M3X 17.1 A for LXM05CD28M2 17.1 A for LXM05BD22N4 17.1 A for LXM05BD17M3X 17.1 A for LXM05BD28M2 17.1 A for LXM05AD22N4 17.1 A for LXM05AD17M3X 17.1 A for LXM05AD28M2 17.1 A for LXM15LD17N4 17.1 A for LXM15LD10N4 17.1 A for LXM15LD21M3 17.1 A for LXM15LD13M3
Maximum permanent current	17.1 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)
Key width	1.18 in (30 mm)
Feedback type	Multiturn SinCos Hiperface
Motor flange size	3.94 in (100 mm)
Number of motor stacks	2
Torque constant	1.21 N.m/A at 248 °F (120 °C)
Back emf constant	77 V/krpm at 248 °F (120 °C)
Number of motor poles	8
Rotor inertia	2.31 kg.cm <sup>2</sup>

Stator resistance	2.4 Ohm at 68 °F (20 °C)
Stator inductance	12.7 mH at 68 °F (20 °C)
Stator electrical time constant	5.29 ms at 68 °F (20 °C)
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	8.05 in (204.5 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)
Product weight	13.01 lb(US) (5.9 kg)

### Ordering and shipping details

Category	18310 - MOTION CONTROL MOTORS & ACCESS
Discount Schedule	PC53
GTIN	00785901671749
Nbr. of units in pkg.	1
Package weight(Lbs)	12.80
Product availability	Non-Stock - Not normally stocked in distribution facility
Returnability	N
Country of origin	DE

### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0850 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Need no specific recycling operations

### Contractual warranty

Period	18 months
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