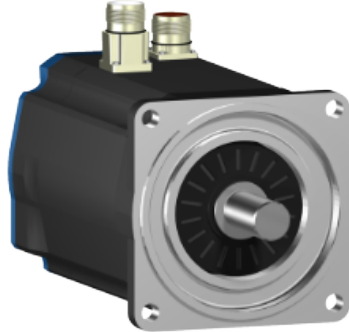


# BSH1402P21A1A

AC servo motor BSH - 14.9 N.m - 1500 rpm -  
untapped shaft - without brake - IP50



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4000 rpm
Continuous stall torque	19.5 N.m for LXM15MD40N4, 400 V, three phase 19.5 N.m for LXM15MD40N4, 480 V, three phase 14.9 N.m for LXM15LD28M3, 230 V, three phase 14.9 N.m for LXM15MD28N4, 230 V, three phase 14.9 N.m for LXM15MD28N4, 400 V, three phase 14.9 N.m for LXM15MD28N4, 480 V, three phase 19.5 N.m for LXM15MD40N4, 230 V, three phase 19.5 N.m for LXM15MD56N4, 230 V, three phase 19.5 N.m for LXM15MD56N4, 400 V, three phase 19.5 N.m for LXM15MD56N4, 480 V, three phase 19.2 N.m for LXM05AD42M3X, 200...240 V, three phase 19.2 N.m for LXM05AD57N4, 380...480 V, three phase 19.2 N.m for LXM05BD42M3X, 200...240 V, three phase 19.2 N.m for LXM05BD57N4, 380...480 V, three phase 19.2 N.m for LXM05CD42M3X, 200...240 V, three phase 19.2 N.m for LXM05CD57N4, 380...480 V, three phase
Peak stall torque	28.71 N.m for LXM15LD28M3, 230 V, three phase 28.71 N.m for LXM15MD28N4, 230 V, three phase 28.71 N.m for LXM15MD28N4, 400 V, three phase 28.71 N.m for LXM15MD28N4, 480 V, three phase 39.3 N.m for LXM15MD40N4, 230 V, three phase 39.3 N.m for LXM15MD40N4, 400 V, three phase 39.3 N.m for LXM15MD40N4, 480 V, three phase 47.5 N.m for LXM15MD56N4, 230 V, three phase 47.5 N.m for LXM15MD56N4, 400 V, three phase 47.5 N.m for LXM15MD56N4, 480 V, three phase 41.94 N.m for LXM05AD42M3X, 200...240 V, three phase 47.5 N.m for LXM05AD57N4, 380...480 V, three phase 41.94 N.m for LXM05BD42M3X, 200...240 V, three phase 47.5 N.m for LXM05BD57N4, 380...480 V, three phase 41.94 N.m for LXM05CD42M3X, 200...240 V, three phase 47.5 N.m for LXM05CD57N4, 380...480 V, three phase
Nominal output power	2350 W for LXM05AD42M3X, 200...240 V, three phase 2350 W for LXM05BD42M3X, 200...240 V, three phase 2350 W for LXM05CD42M3X, 200...240 V, three phase 2350 W for LXM15LD28M3, 230 V, three phase 2350 W for LXM15MD28N4, 230 V, three phase 2350 W for LXM15MD40N4, 230 V, three phase 2350 W for LXM15MD56N4, 230 V, three phase 3350 W for LXM15MD28N4, 480 V, three phase

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

	<p>3350 W for LXM15MD40N4, 480 V, three phase  3400 W for LXM05AD57N4, 380...480 V, three phase  3400 W for LXM05BD57N4, 380...480 V, three phase  3400 W for LXM05CD57N4, 380...480 V, three phase  3400 W for LXM15MD28N4, 400 V, three phase  3400 W for LXM15MD40N4, 400 V, three phase  3400 W for LXM15MD56N4, 400 V, three phase  3400 W for LXM15MD56N4, 480 V, three phase</p>
Nominal torque	<p>8 N.m for LXM15MD40N4, 480 V, three phase  10.8 N.m for LXM05AD57N4, 380...480 V, three phase  10.8 N.m for LXM05BD57N4, 380...480 V, three phase  10.8 N.m for LXM05CD57N4, 380...480 V, three phase  10.8 N.m for LXM15MD28N4, 400 V, three phase  10.8 N.m for LXM15MD40N4, 400 V, three phase  10.8 N.m for LXM15MD56N4, 400 V, three phase  10.8 N.m for LXM15MD56N4, 480 V, three phase  15 N.m for LXM05AD42M3X, 200...240 V, three phase  15 N.m for LXM05BD42M3X, 200...240 V, three phase  15 N.m for LXM05CD42M3X, 200...240 V, three phase  15 N.m for LXM15LD28M3, 230 V, three phase  15 N.m for LXM15MD28N4, 230 V, three phase  15 N.m for LXM15MD40N4, 230 V, three phase  15 N.m for LXM15MD56N4, 230 V, three phase  8 N.m for LXM15MD28N4, 480 V, three phase</p>
Nominal speed	<p>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  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  4000 rpm for LXM15MD28N4, 480 V, three phase  1500 rpm for LXM15LD28M3, 230 V, three phase  1500 rpm for LXM15MD56N4, 230 V, three phase  3000 rpm for LXM15MD56N4, 400 V, three phase  3000 rpm for LXM15MD56N4, 480 V, three phase  4000 rpm for LXM15MD40N4, 480 V, three phase</p>
Product compatibility	<p>LXM05AD42M3X at 200...240 V three phase  LXM05BD42M3X at 200...240 V three phase  LXM05CD42M3X at 200...240 V three phase  LXM15LD28M3 at 230 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  LXM05AD57N4 at 380...480 V three phase  LXM05BD57N4 at 380...480 V three phase  LXM05CD57N4 at 380...480 V three phase  LXM15MD28N4 at 230 V three phase  LXM15MD40N4 at 230 V three phase  LXM15MD56N4 at 230 V three phase  LXM15MD56N4 at 400 V three phase  LXM15MD56N4 at 480 V three phase</p>
Shaft end	Untapped
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
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	13.2 A
Maximum continuous power	4.2 W
Maximum current Irms	44.1 A for LXM15LD28M3 44.1 A for LXM15MD28N4 44.1 A for LXM15MD40N4 44.1 A for LXM15MD56N4 44.1 A for LXM05AD42M3X 44.1 A for LXM05AD57N4 44.1 A for LXM05BD42M3X 44.1 A for LXM05BD57N4 44.1 A for LXM05CD42M3X 44.1 A for LXM05CD57N4 72 A for LXM32.D72N4
Maximum permanent current	44.1 A
Switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	24 mm
Shaft length	50 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	140 mm
Number of motor stacks	2
Torque constant	1.47 N.m/A at 120 °C
Back emf constant	101 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	12.68 kg.cm <sup>2</sup>
Stator resistance	0.6 Ohm at 20 °C
Stator inductance	7.4 mH at 20 °C
Stator electrical time constant	12.33 ms at 20 °C
Maximum radial force Fr	1680 N at 3000 rpm 1930 N at 2000 rpm 2430 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	272.5 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Product weight	16.6 kg

### Contractual warranty

Warranty	18 months
----------	-----------