

# BSH1402P01F2A

AC servo motor BSH, Lexium 05, 14.9N.m,  
1500rpm, untapped shaft, with brake, IP50





## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	4000 rpm
Continuous stall torque	<p>19.5 N.M for LXM15MD40N4, 400 V, three phase</p> <p>19.5 N.M for LXM15MD40N4, 480 V, three phase</p> <p>14.9 N.M for LXM15LD28M3, 230 V, three phase</p> <p>14.9 N.M for LXM15MD28N4, 230 V, three phase</p> <p>14.9 N.M for LXM15MD28N4, 400 V, three phase</p> <p>14.9 N.M for LXM15MD28N4, 480 V, three phase</p> <p>19.5 N.M for LXM15MD40N4, 230 V, three phase</p> <p>19.5 N.M for LXM15MD56N4, 230 V, three phase</p> <p>19.5 N.M for LXM15MD56N4, 400 V, three phase</p> <p>19.5 N.M for LXM15MD56N4, 480 V, three phase</p> <p>19.2 N.M for LXM05AD42M3X, 200...240 V, three phase</p> <p>19.2 N.M for LXM05AD57N4, 380...480 V, three phase</p> <p>19.2 N.M for LXM05BD42M3X, 200...240 V, three phase</p> <p>19.2 N.M for LXM05BD57N4, 380...480 V, three phase</p> <p>19.2 N.M for LXM05CD42M3X, 200...240 V, three phase</p> <p>19.2 N.m for LXM05CD57N4, 380...480 V, three phase</p>
Peak stall torque	<p>28.71 N.M for LXM15LD28M3, 230 V, three phase</p> <p>28.71 N.M for LXM15MD28N4, 230 V, three phase</p> <p>28.71 N.M for LXM15MD28N4, 400 V, three phase</p> <p>28.71 N.M for LXM15MD28N4, 480 V, three phase</p> <p>39.3 N.M for LXM15MD40N4, 230 V, three phase</p> <p>39.3 N.M for LXM15MD40N4, 400 V, three phase</p> <p>39.3 N.M for LXM15MD40N4, 480 V, three phase</p> <p>47.5 N.M for LXM15MD56N4, 230 V, three phase</p> <p>47.5 N.M for LXM15MD56N4, 400 V, three phase</p> <p>47.5 N.M for LXM15MD56N4, 480 V, three phase</p> <p>41.94 N.M for LXM05AD42M3X, 200...240 V, three phase</p> <p>47.5 N.M for LXM05AD57N4, 380...480 V, three phase</p> <p>41.94 N.M for LXM05BD42M3X, 200...240 V, three phase</p> <p>47.5 N.M for LXM05BD57N4, 380...480 V, three phase</p> <p>41.94 N.M for LXM05CD42M3X, 200...240 V, three phase</p> <p>47.5 N.m for LXM05CD57N4, 380...480 V, three phase</p>
Nominal output power	<p>2350 W for LXM05AD42M3X, 200...240 V, three phase</p> <p>2350 W for LXM05BD42M3X, 200...240 V, three phase</p> <p>2350 W for LXM05CD42M3X, 200...240 V, three phase</p> <p>2350 W for LXM15LD28M3, 230 V, three phase</p> <p>2350 W for LXM15MD28N4, 230 V, three phase</p> <p>2350 W for LXM15MD40N4, 230 V, three phase</p> <p>2350 W for LXM15MD56N4, 230 V, three phase</p> <p>3350 W for LXM15MD28N4, 480 V, three phase</p> <p>3350 W for LXM15MD40N4, 480 V, three phase</p> <p>3400 W for LXM05AD57N4, 380...480 V, three phase</p> <p>3400 W for LXM05BD57N4, 380...480 V, three phase</p> <p>3400 W for LXM05CD57N4, 380...480 V, three phase</p> <p>3400 W for LXM15MD28N4, 400 V, three phase</p> <p>3400 W for LXM15MD40N4, 400 V, three phase</p> <p>3400 W for LXM15MD56N4, 400 V, three phase</p> <p>3400 W for LXM15MD56N4, 480 V, three phase</p>

Nominal torque	<p>8 N.M for LXM15MD40N4, 480 V, three phase</p> <p>10.8 N.M for LXM05AD57N4, 380...480 V, three phase</p> <p>10.8 N.M for LXM05BD57N4, 380...480 V, three phase</p> <p>10.8 N.M for LXM05CD57N4, 380...480 V, three phase</p> <p>10.8 N.M for LXM15MD28N4, 400 V, three phase</p> <p>10.8 N.M for LXM15MD40N4, 400 V, three phase</p> <p>10.8 N.M for LXM15MD56N4, 400 V, three phase</p> <p>10.8 N.M for LXM15MD56N4, 480 V, three phase</p> <p>15 N.M for LXM05AD42M3X, 200...240 V, three phase</p> <p>15 N.M for LXM05BD42M3X, 200...240 V, three phase</p> <p>15 N.M for LXM05CD42M3X, 200...240 V, three phase</p> <p>15 N.M for LXM15LD28M3, 230 V, three phase</p> <p>15 N.M for LXM15MD28N4, 230 V, three phase</p> <p>15 N.M for LXM15MD40N4, 230 V, three phase</p> <p>15 N.M for LXM15MD56N4, 230 V, three phase</p> <p>8 N.m for LXM15MD28N4, 480 V, three phase</p>
Nominal speed	<p>1500 rpm for LXM05AD42M3X, 200...240 V, three phase</p> <p>1500 rpm for LXM05BD42M3X, 200...240 V, three phase</p> <p>1500 rpm for LXM05CD42M3X, 200...240 V, three phase</p> <p>1500 rpm for LXM15MD28N4, 230 V, three phase</p> <p>1500 rpm for LXM15MD40N4, 230 V, three phase</p> <p>3000 rpm for LXM05AD57N4, 380...480 V, three phase</p> <p>3000 rpm for LXM05BD57N4, 380...480 V, three phase</p> <p>3000 rpm for LXM05CD57N4, 380...480 V, three phase</p> <p>3000 rpm for LXM15MD28N4, 400 V, three phase</p> <p>3000 rpm for LXM15MD40N4, 400 V, three phase</p> <p>4000 rpm for LXM15MD28N4, 480 V, three phase</p> <p>1500 rpm for LXM15LD28M3, 230 V, three phase</p> <p>1500 rpm for LXM15MD56N4, 230 V, three phase</p> <p>3000 rpm for LXM15MD56N4, 400 V, three phase</p> <p>3000 rpm for LXM15MD56N4, 480 V, three phase</p> <p>4000 rpm for LXM15MD40N4, 480 V, three phase</p>
Product compatibility	<p>LXM05AD42M3X at 200...240 V three phase</p> <p>LXM05BD42M3X at 200...240 V three phase</p> <p>LXM05CD42M3X at 200...240 V three phase</p> <p>LXM15LD28M3 at 230 V three phase</p> <p>LXM15MD28N4 at 400 V three phase</p> <p>LXM15MD28N4 at 480 V three phase</p> <p>LXM15MD40N4 at 400 V three phase</p> <p>LXM15MD40N4 at 480 V three phase</p> <p>LXM05AD57N4 at 380...480 V three phase</p> <p>LXM05BD57N4 at 380...480 V three phase</p> <p>LXM05CD57N4 at 380...480 V three phase</p> <p>LXM15MD28N4 at 230 V three phase</p> <p>LXM15MD40N4 at 230 V three phase</p> <p>LXM15MD56N4 at 230 V three phase</p> <p>LXM15MD56N4 at 400 V three phase</p> <p>LXM15MD56N4 at 480 V three phase</p>
Shaft end	Untapped
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## Complementary

Range compatibility	Lexium 15 Lexium 05
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
Holding torque	23 N.m holding brake
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	14.48 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
Brake pull-in power	24 W
Type of cooling	Natural convection
Length	310.5 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
Net weight	17.7 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	27.0 cm
Package 1 Width	27.0 cm
Package 1 Length	48.2 cm
Package 1 Weight	13.29 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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
PVC free	Yes

## Contractual warranty

Warranty	18 months
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