

# BSH0701P22F1A

AC servo motor BSH - 1.4 N.m - 3000 rpm -  
untapped shaft - with brake - IP65



## Main

Product or component type	Servo motor
Device short name	BSH
Maximum mechanical speed	8000 rpm
Continuous stall torque	1.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 1.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 1.4 N.m for LXM05AD10M3X, 200...240 V, three phase 1.4 N.m for LXM05BD10M3X, 200...240 V, three phase 1.4 N.m for LXM05CD10M3X, 200...240 V, three phase 1.4 N.m for LXM15LD13M3, 230 V, single phase 1.4 N.m for LXM05AD10M2, 200...240 V, single phase 1.4 N.m for LXM05BD10M2, 200...240 V, single phase 1.4 N.m for LXM05CD10M2, 200...240 V, single phase 1.4 N.m for LXM15LU60N4, 230 V, three phase
Peak stall torque	3.5 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 3.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 2.66 N.m for LXM05AD10M3X, 200...240 V, three phase 2.66 N.m for LXM05BD10M3X, 200...240 V, three phase 2.66 N.m for LXM05CD10M3X, 200...240 V, three phase 2.66 N.m for LXM15LD13M3, 230 V, single phase 2.66 N.m for LXM05AD10M2, 200...240 V, single phase 2.66 N.m for LXM05BD10M2, 200...240 V, single phase 2.66 N.m for LXM05CD10M2, 200...240 V, single phase 2.66 N.m for LXM15LU60N4, 230 V, three phase
Nominal output power	700 W for LXM32.D12N4 at 3 A, 400 V, three phase 700 W for LXM32.D12N4 at 3 A, 480 V, three phase 400 W for LXM05AD10M2, 200...240 V, single phase 400 W for LXM05BD10M2, 200...240 V, single phase 400 W for LXM05CD10M2, 200...240 V, single phase 411 W for LXM15LD13M3, 230 V, single phase 400 W for LXM05AD10M3X, 200...240 V, three phase 400 W for LXM05BD10M3X, 200...240 V, three phase 400 W for LXM05CD10M3X, 200...240 V, three phase 411 W for LXM15LU60N4, 230 V, three phase
Nominal torque	1.32 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 1.32 N.m for LXM32.D12N4 at 3 A, 480 V, three phase 1.3 N.m for LXM05AD10M2, 200...240 V, single phase 1.3 N.m for LXM05BD10M2, 200...240 V, single 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

	1.3 N.m for LXM05CD10M2, 200...240 V, single phase 1.31 N.m for LXM15LD13M3, 230 V, single phase 1.3 N.m for LXM05AD10M3X, 200...240 V, three phase 1.3 N.m for LXM05BD10M3X, 200...240 V, three phase 1.3 N.m for LXM05CD10M3X, 200...240 V, three phase 1.31 N.m for LXM15LU60N4, 230 V, three phase
Nominal speed	5000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 5000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase 3000 rpm for LXM05AD10M2, 200...240 V, single phase 3000 rpm for LXM05BD10M2, 200...240 V, single phase 3000 rpm for LXM05CD10M2, 200...240 V, single phase 3000 rpm for LXM05AD10M3X, 200...240 V, three phase 3000 rpm for LXM05BD10M3X, 200...240 V, three phase 3000 rpm for LXM05CD10M3X, 200...240 V, three phase 3000 rpm for LXM15LD13M3, 230 V, single phase 3000 rpm for LXM15LU60N4, 230 V, three phase
Product compatibility	LXM05AD10M2 at 200...240 V single phase LXM05BD10M2 at 200...240 V single phase LXM05CD10M2 at 200...240 V single phase LXM15LD13M3 at 230 V single phase LXM15LU60N4 at 230 V three phase LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase LXM32.D12N4 at 400 V three phase LXM32.D12N4 at 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 32 Lexium 05 Lexium 15
Supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	1.8 A
Maximum continuous power	1.06 W
Maximum current Irms	5.7 A for LXM05AD10M3X 5.7 A for LXM05BD10M2 5.7 A for LXM05BD10M3X 5.7 A for LXM05CD10M2 5.7 A for LXM05CD10M3X 5.3 A for LXM15LD13M3 5.3 A for LXM15LU60N4 5.7 A for LXM05AD10M2 5.7 A for LXM32.D12N4
Maximum permanent current	5.7 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	2 N.m holding brake
Motor flange size	70 mm
Number of motor stacks	1
Torque constant	0.8 N.m/A at 120 °C
Back emf constant	46 V/krpm at 120 °C
Number of motor poles	6

Rotor inertia	0.322 kg.cm <sup>2</sup>
Stator resistance	10.4 Ohm at 20 °C
Stator inductance	38.8 mH at 20 °C
Stator electrical time constant	3.73 ms at 20 °C
Maximum radial force Fr	360 N at 6000 rpm 380 N at 5000 rpm 410 N at 4000 rpm 460 N at 3000 rpm 520 N at 2000 rpm 660 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	10 W
Type of cooling	Natural convection
Length	179.5 mm
Centring collar diameter	60 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	82 mm
Product weight	2.3 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) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</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

### Contractual warranty

Warranty	18 months
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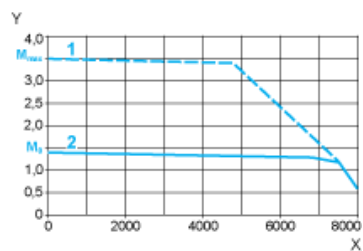
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400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive

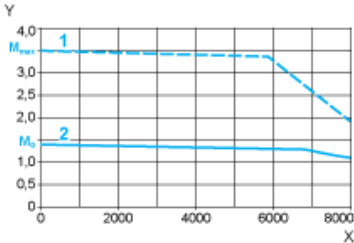


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D12N4 servo drive



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