



Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	4000 rpm
Continuous stall torque	37.4 N.m for LXM32.D72N4 24 A at 400 V three phase 37.4 N.m for LXM32.D72N4 24 A at 480 V three phase 48 N.m for LXM32MD85N4 32 A at 400 V three phase 48 N.m for LXM32MD85N4 32 A at 480 V three phase 48 N.m for LXM32MC10N4 40 A at 400 V three phase 48 N.m for LXM32MC10N4 40 A at 480 V three phase
Peak stall torque	893.81 lbf.in (101 N.m) for LXM32.D72N4 24 A at 400 V three phase 893.81 lbf.in (101 N.m) for LXM32.D72N4 24 A at 480 V three phase 115.5 N.m for LXM32MD85N4 32 A at 400 V three phase 115.5 N.m for LXM32MD85N4 32 A at 480 V three phase 130.7 N.m for LXM32MC10N4 40 A at 400 V three phase 130.7 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal output power	5900 W for LXM32.D72N4 24 A at 400 V three phase 5900 W for LXM32.D72N4 24 A at 480 V three phase 6070 W for LXM32MD85N4 32 A at 400 V three phase 6070 W for LXM32MD85N4 32 A at 480 V three phase 6070 W for LXM32MC10N4 40 A at 400 V three phase 6070 W for LXM32MC10N4 40 A at 480 V three phase
Nominal torque	22.3 N.m for LXM32.D72N4 24 A at 400 V three phase 22.3 N.m for LXM32.D72N4 24 A at 480 V three phase 29 N.m for LXM32MD85N4 32 A at 400 V three phase 29 N.m for LXM32MD85N4 32 A at 480 V three phase 29 N.m for LXM32MC10N4 40 A at 400 V three phase 29 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal speed	2500 rpm LXM32.D72N4 24 A at 400 V three phase 2500 rpm LXM32.D72N4 24 A at 480 V three phase 2000 rpm for LXM32MC10N4 40 A at 400 V three phase 2000 rpm for LXM32MC10N4 40 A at 480 V three phase 2000 rpm for LXM32MD85N4 32 A at 400 V three phase 2000 rpm for LXM32MD85N4 32 A at 480 V three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase

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Shaft end	Smooth shaft
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	Rotatable right-angled connectors

Complementary

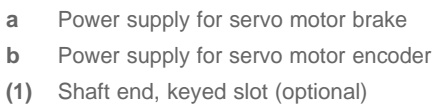
Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	30.8 A
Continuous power	6.1 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	114 A
Second shaft	Without second shaft end
Shaft diameter	1.5 in (38 mm)
Shaft length	3.15 in (80 mm)
Feedback type	Single turn SinCos Hiperface
Motor flange size	7.48 in (190 mm)
Number of motor stacks	2
Torque constant	1.56 N.m/A at 248 °F (120 °C)
Back emf constant	108.3 V/krpm at 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	130.1 kg.cm ²
Stator resistance	0.15 Ohm at 68 °F (20 °C)
Stator inductance	3.86 mH at 68 °F (20 °C)
Stator electrical time constant	25.7 ms at 68 °F (20 °C)
Maximum radial force Fr	4200 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	9.84 in (250 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.16 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.55 in (14 mm)
Circle diameter of the mounting holes	8.46 in (215 mm)
Product weight	68.34 lb(US) (31 kg)

Environment

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 1101 - Schneider Electric declaration of conformity	Compliant - since 1101 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations

Servo Motors Dimensions



c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
250	308	65	123

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
9.84	12.12	2.56	4.84

400 V 3-Phase Supply Voltage

The graph shows the torque-speed characteristics of a servo motor. The y-axis represents torque in Nm, ranging from 0 to 120. The x-axis represents speed in rpm, ranging from 0 to 4000. Two curves are plotted:

- Curve 1 (M_{max}):** This curve represents the maximum torque. It starts at 100 Nm at 0 rpm and remains constant until approximately 2200 rpm. After this point, it decreases linearly, reaching 0 Nm at 3500 rpm.
- Curve 2 (M₀):** This curve represents the zero-speed torque. It starts at 40 Nm at 0 rpm and remains constant until approximately 1200 rpm. After this point, it decreases gradually, reaching 0 Nm at 3500 rpm.

Speed (rpm)	M _{max} (Nm)	M ₀ (Nm)
0	100	40
500	100	40
1000	100	40
1500	100	35
2000	98	30
2500	80	25
3000	50	20
3500	0	0

- ## 480 V 3-Phase Supply Voltage

- (1) Peak torque
- (2) Continuous torque