

BMH1901P31F2A

servo motor BMH - 30 Nm - 5000 rpm - keyed
shaft - with brake - IP65/IP67





Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	4000 rpm
Continuous stall torque	30 N.m for LXM32.D72N4 24 A at 400 V three phase 30 N.m for LXM32.D72N4 24 A at 480 V three phase 30 N.m for LXM32MD85N4 32 A at 400 V three phase 30 N.m for LXM32MD85N4 32 A at 480 V three phase 30 N.m for LXM32MC10N4 40 A at 400 V three phase 30 N.m for LXM32MC10N4 40 A at 480 V three phase
Peak stall torque	77.7 N.m for LXM32.D72N4 24 A at 400 V three phase 77.7 N.m for LXM32.D72N4 24 A at 480 V three phase 86.6 N.m for LXM32MD85N4 32 A at 400 V three phase 86.6 N.m for LXM32MD85N4 32 A at 480 V three phase 89.7 N.m for LXM32MC10N4 40 A at 400 V three phase 89.7 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal output power	4800 W for LXM32.D72N4 24 A at 400 V three phase 4800 W for LXM32.D72N4 24 A at 480 V three phase 5180 W for LXM32MD85N4 32 A at 400 V three phase 5180 W for LXM32MD85N4 32 A at 480 V three phase 5180 W for LXM32MC10N4 40 A at 400 V three phase 5180 W for LXM32MC10N4 40 A at 480 V three phase
Nominal torque	18.4 N.m for LXM32.D72N4 24 A at 400 V three phase 18.4 N.m for LXM32.D72N4 24 A at 480 V three phase 16.5 N.m for LXM32MD85N4 32 A at 400 V three phase 16.5 N.m for LXM32MD85N4 32 A at 480 V three phase 16.5 N.m for LXM32MC10N4 40 A at 400 V three phase 16.5 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal speed	2500 rpm for LXM32.D72N4 24 A at 400 V three phase 2500 rpm for LXM32.D72N4 24 A at 480 V three phase 3000 rpm for LXM32MD85N4 32 A at 400 V three phase 3000 rpm for LXM32MD85N4 32 A at 480 V three phase 3000 rpm for LXM32MC10N4 40 A at 400 V three phase 3000 rpm for LXM32MC10N4 40 A at 480 V three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	131072 points/turn

Holding brake	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

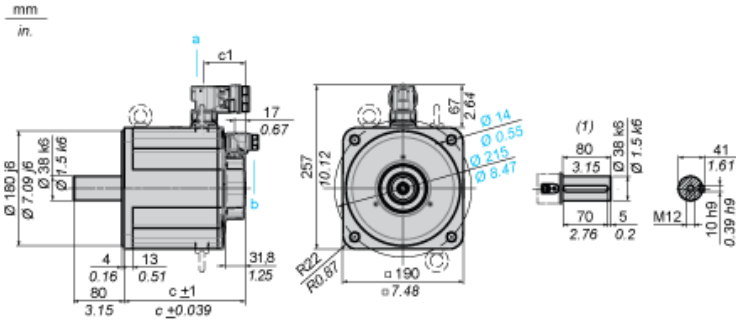
Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	23.2 A
Continuous power	5.24 W
Maximum current Irms	72 A for LXM32.D72N4
Maximum permanent current	89.6 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	70 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	80 N.m (holding brake)
Motor flange size	190 mm
Number of motor stacks	1
Torque constant	1.3 N.m/A at 120 °C
Back emf constant	87.6 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	71.7 kg.cm ²
Stator resistance	0.24 Ohm at 20 °C
Stator inductance	5.08 mH at 20 °C
Stator electrical time constant	21.2 ms at 20 °C
Maximum radial force Fr	3730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	250 mm
Centring collar diameter	180 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Product weight	20.5 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1101 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Need no specific recycling operations

Servo Motors Dimensions



- a Power supply for servo motor brake
b Power supply for servo motor encoder
(1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
190	248	65	123

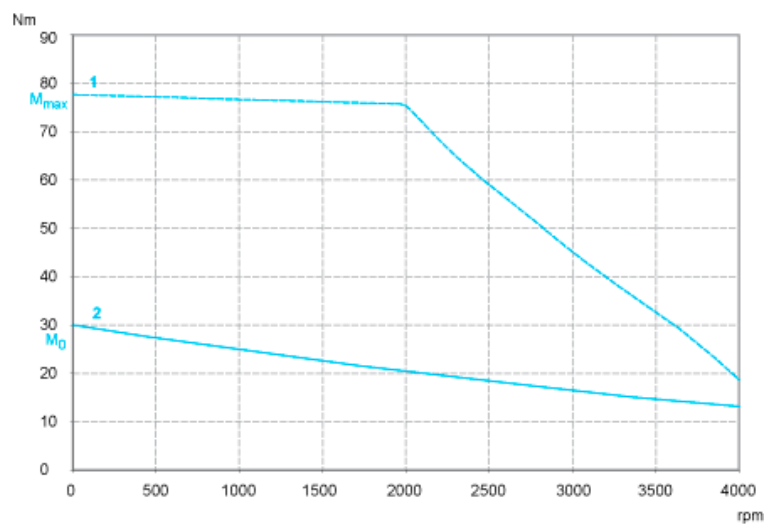
Dimensions in in.

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
7.48	9.76	2.56	4.84

Torque/Speed Curves

400 V 3-Phase Supply Voltage

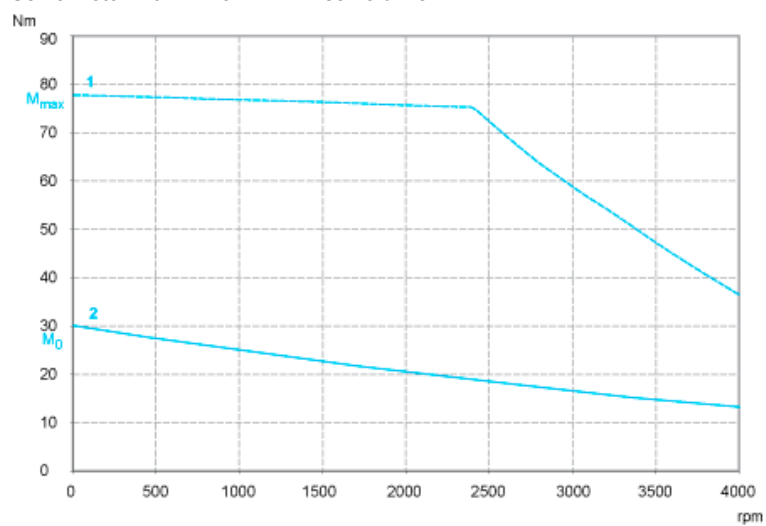
Servo motor with LXM32-D72N4 servo drive



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

480 V 3-Phase Supply Voltage

Servo motor with LXM32-D72N4 servo drive



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