

# BMH1903P36F2A

servo motor BMH - 65 Nm - 3500 rpm - keyed  
shaft - with brake - IP65/IP67





## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	3500 rpm
Continuous stall torque	43.2 N.m for LXM32.D72N4 24 A at 400 V three phase 43.2 N.m for LXM32.D72N4 24 A at 480 V three phase 57.6 N.m for LXM32MD85N4 32 A at 400 V three phase 57.6 N.m for LXM32MD85N4 32 A at 480 V three phase 65 N.m for LXM32MC10N4 40 A at 400 V three phase 65 N.m for LXM32MC10N4 40 A at 480 V three phase
Peak stall torque	122.8 N.m for LXM32.D72N4 24 A at 400 V three phase 122.8 N.m for LXM32.D72N4 24 A at 480 V three phase 141.3 N.m for LXM32MD85N4 32 A at 400 V three phase 141.3 N.m for LXM32MD85N4 32 A at 480 V three phase 162.7 N.m for LXM32MC10N4 40 A at 400 V three phase 162.7 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal output power	5700 W for LXM32.D72N4 24 A at 400 V three phase 5700 W for LXM32.D72N4 24 A at 480 V three phase 7330 W for LXM32MD85N4 32 A at 400 V three phase 7330 W for LXM32MD85N4 32 A at 480 V three phase 7750 W for LXM32MC10N4 40 A at 400 V three phase 7750 W for LXM32MC10N4 40 A at 480 V three phase
Nominal torque	36 N.m for LXM32.D72N4 24 A at 400 V three phase 36 N.m for LXM32.D72N4 24 A at 480 V three phase 35 N.m for LXM32MD85N4 32 A at 400 V three phase 35 N.m for LXM32MD85N4 32 A at 480 V three phase 37 N.m for LXM32MC10N4 40 A at 400 V three phase 37 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal speed	1500 rpm for LXM32.D72N4 24 A at 400 V three phase 1500 rpm for 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
Shaft end	Keyed
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	32768 points/turn

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

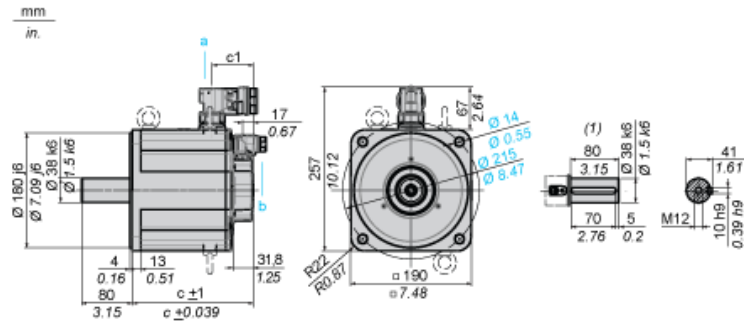
## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	36.1 A
Continuous power	7.95 W
Maximum current Irms	72 A for LXM32.D72N4
Maximum permanent current	124.5 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	3
Torque constant	1.8 N.m/A at 120 °C
Back emf constant	129.2 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	208.8 kg.cm <sup>2</sup>
Stator resistance	0.13 Ohm at 20 °C
Stator inductance	3.62 mH at 20 °C
Stator electrical time constant	27.8 ms at 20 °C
Maximum radial force Fr	4500 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	370 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	44.5 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1401 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
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)
310	368	65	123

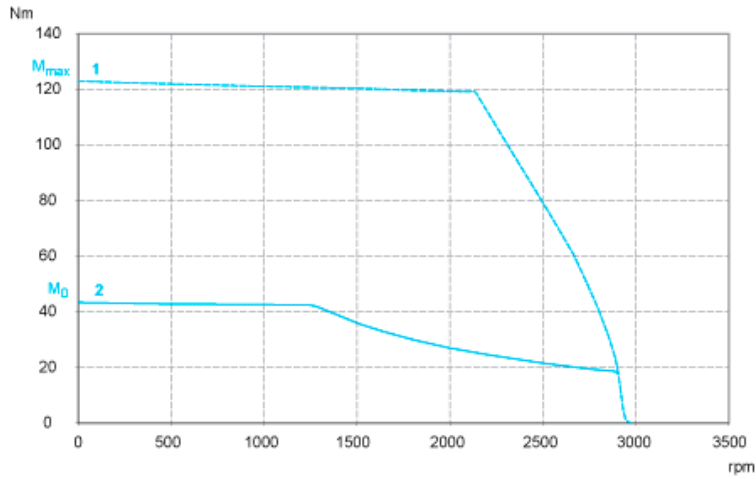
Dimensions in in.

c (without brake)	c (with brake)	c1 (without brake)	c1 (with brake)
12.20	14.45	2.56	4.84

Torque/Speed Curves

400 V 3-Phase Supply Voltage

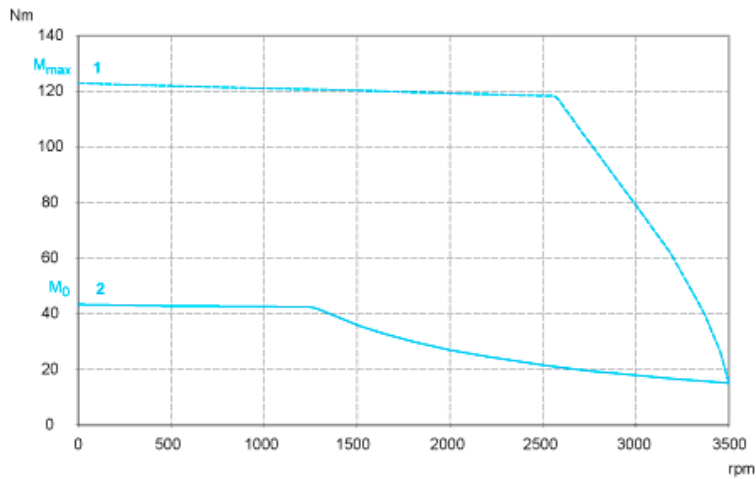
Servo motor with LXM32-D72N4 servo drive



- (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