

BMH1904P21F2A

servo motor BMH - 100 Nm - 3000 rpm -
untapped shaft - with brake - IP65/IP67



Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	3000 rpm
Continuous stall torque	100 N.m for LXM32MC10N4 40 A at 400 V three phase 100 N.m for LXM32MC10N4 40 A at 480 V three phase
Peak stall torque	230 N.m for LXM32MC10N4 40 A at 400 V three phase 230 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal output power	9800 W for LXM32MC10N4 40 A at 400 V three phase 9800 W for LXM32MC10N4 40 A at 480 V three phase
Nominal torque	46.8 N.m for LXM32MC10N4 40 A at 400 V three phase 46.8 N.m for LXM32MC10N4 40 A at 480 V three phase
Nominal speed	2000 rpm for LXM32MC10N4 40 A at 400 V three phase 2000 rpm for LXM32MC10N4 40 A at 480 V three phase
Shaft end	Untapped
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	40 A
Maximum current I _{rms}	100 A for LXM32MC10N4 100 A
Maximum permanent current	100 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	10 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	80 N.m (holding brake)
Motor flange size	190 mm
Number of motor stacks	4
Torque constant	2.5 N.m/A at 120 °C

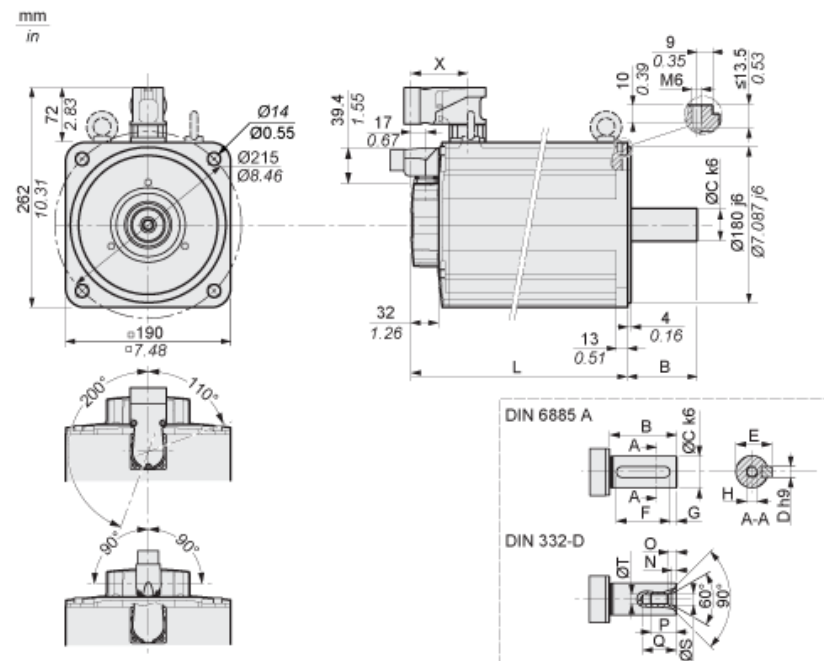
Back emf constant	168 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	298.2 kg.cm ²
Stator resistance	0.16 Ohm at 20 °C
Stator inductance	4.74 mH at 20 °C
Stator electrical time constant	29.6 ms at 20 °C
Maximum radial force Fr	3800 N at 1000 rpm 3700 N at 2000 rpm 3600 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	456 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	62.6 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1611 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

Servo Motor Dimensions

For Servo Motor without Cooling Fan



Dimensions in mm

Length	Length	Shaft length	Shaft diameter	Width of parallel key	Shaft width with parallel key	Length of parallel key	Distance parallel key to shaft end	Female thread of shaft
L	X	B	C	D	E	F	G	H
456	123	80	38	10	41	70	5	M12

N	O	P	Q	S	T
4.4	9.5	28	37	13	10.2

Dimensions in in.

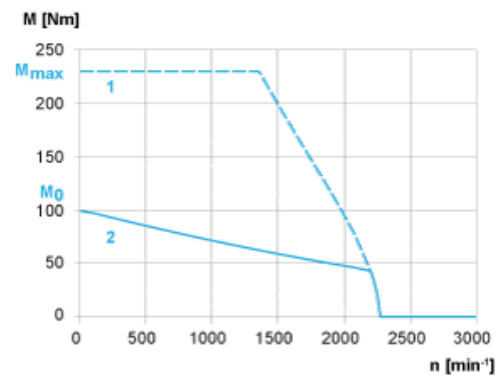
Length	Length	Shaft length	Shaft diameter	Width of parallel key	Shaft width with parallel key	Length of parallel key	Distance parallel key to shaft end	Female thread of shaft
L	X	B	C	D	E	F	G	H
17.95	4.84	3.15	1.5	0.39	1.61	2.76	0.2	M12

N	O	P	Q	S	T
0.17	0.37	1.1	1.46	0.51	0.4

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32MC10N4 servo drive

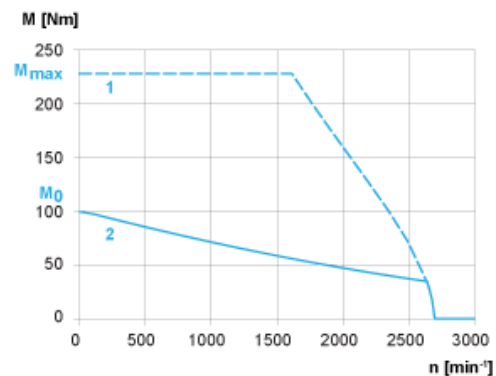


- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32MC10N4 servo drive



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