

Product data sheet

Specifications



servo motor BCH, Lexium 28,
180mm, 3500W, 54.1kg.cm²,
without oil seal, with key, brake,
straight connection

BCH2MR3521CF6C

! Discontinued

! Discontinued on: Jun 30, 2023

Main

Range compatibility	Lexium 28
Device short name	BCH2
Product or component type	Servo motor

Complementary

Maximum mechanical speed	3000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Three phase
Continuous stall current	16.55 A
Continuous stall torque	147.8 lbf.in (16.7 N.m) LXM28 22.9 A, 220 V, three phase
Continuous power	3500 W
Peak stall torque	445.2 lbf.in (50.3 N.m) LXM28... 22.9 A, 220 V, three phase
Nominal output power	3500 W LXM28... 22.9 A, 220 V, three phase
Nominal torque	147.8 lbf.in (16.7 N.m) LXM28... 22.9 A, 220 V, three phase
Nominal speed	2000 rpm LXM28... 22.9 A, 220 V, three phase
Maximum current Irms	57.8 A LXM28... 3.5 kW, 220 V
Maximum permanent current	19 A
Product compatibility	LXM28... servo drive 3.5 kW, 220 V, three phase
Shaft end	Keyed
Shaft diameter	1.4 in (35 mm)
Shaft length	3.1 in (79 mm)
Key width	0.4 in (10 mm)
Feedback type	20 bits single turn absolute encoder
Holding brake	With
Holding torque	424.8 lbf.in (48 N.m) built-in
Mounting support	Asian standard flange
Motor flange size	7.09 in (180 mm)
Electrical connection	Connector MIL
Torque constant	1.01 N.m/A 68 °F (20 °C)
Back emf constant	61 V/krpm 68 °F (20 °C)

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

Rotor inertia	54.1 kg.cm²
Stator resistance	0.157 Ohm 68 °F (20 °C)
Stator inductance	2.93 mH 68 °F (20 °C)
Stator electrical time constant	18.66 ms 68 °F (20 °C)
Maximum radial force Fr	1200 N 2000 rpm
Maximum axial force Fa	497 N
Brake pull-in power	49.6 W
Type of cooling	Natural convection
Length	9.3 in (235 mm)
Number of motor stacks	2
Centring collar diameter	4.5 in (114.3 mm)
Centring collar depth	0.2 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.5 in (13.5 mm)
Circle diameter of the mounting holes	7.9 in (200 mm)
Distance shaft shoulder-flange	0.2 in (4 mm)
Net weight	50.7 lb(US) (23 kg)
Sizing reference	BCH2
Network number of phases	3
Accuracy error [angular]	0.044 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)

Environment

IP degree of protection	IP54 IM B5, IM V1 IP50 IM V3
Ambient air temperature for operation	32...104 °F (0...40 °C)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.6 in (24.5 cm)
Package 1 Width	11.4 in (29.0 cm)
Package 1 Length	23.03 in (58.5 cm)
Package 1 Weight	54.30 lb(US) (24.63 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant By Exemption](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

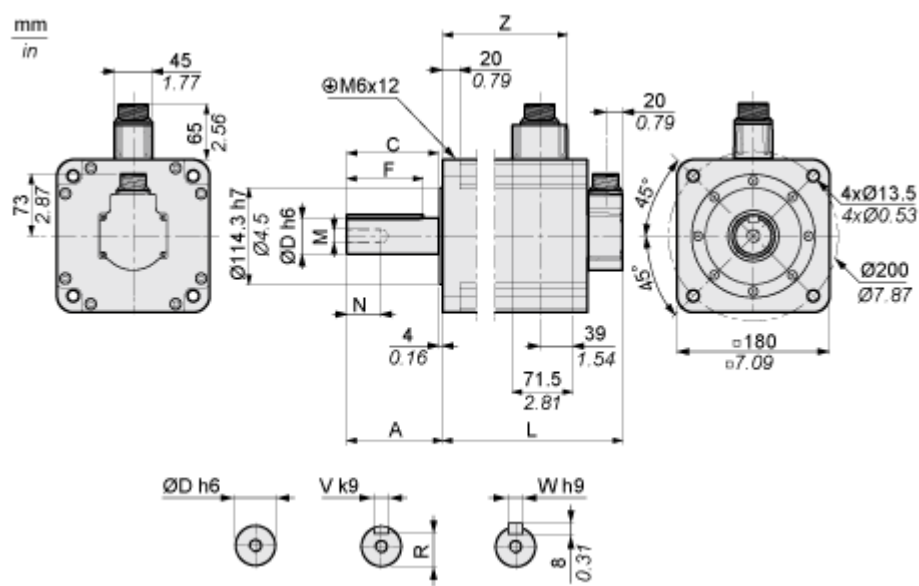
Circularity Profile

[End of Life Information](#)

Dimensions Drawings

Dimensions

Dimensions of Motor

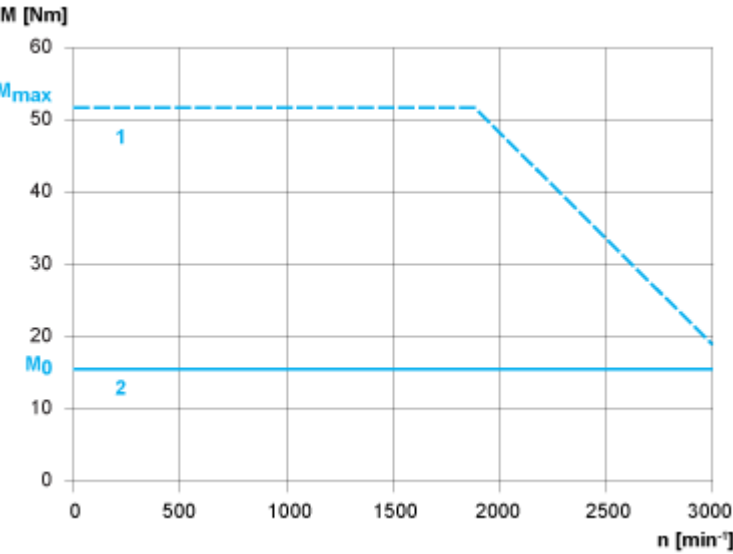


	mm	in.
L (without holding brake)	202	7.95
L (with holding brake)	235	9.25
A	79	3.11
C	73	2.87
D	35	1.38
F	63	2.48
N	28	1.10
M	M12	
R	30	1.18
V	10	0.39
W	10	0.39
Z	136	5.35

Performance Curves

Torque/Speed Curves with 230 V Single/Three Phase Supply Voltage

Servo Motor with LXM28AU45 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque