

Product datasheet

Specifications



servo motor BCH, Lexium 28,
180mm, 4500W, with oil seal,
smooth, straight connection

BCH2MR4512CA6C

⚠ Discontinued on: 1 Nov 2020

⚠ Discontinued

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	19.68 A
Continuous stall torque	28.65 N.m for LXM28... at 22.9 A, 220 V, three phase
Continuous power	4500 W
Peak stall torque	71.62 N.m for LXM28... at 22.9 A, 220 V, three phase
Nominal output power	4500 W for LXM28... at 22.9 A, 220 V, three phase
Nominal torque	28.65 N.m for LXM28... at 22.9 A, 220 V, three phase
Nominal speed	1500 rpm for LXM28... at 22.9 A, 220 V, three phase
Maximum current Irms	57.6 A for LXM28... at 4.5 kW, 220 V
Maximum permanent current	22.8 A
Product compatibility	LXM28... servo drive motor at 4.5 kW, 220 V, three phase
Shaft end	Smooth shaft
Shaft diameter	35 mm
Shaft length	79 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	Without
mounting support	Asian standard flange
Motor flange size	180 mm
Electrical connection	Connector MIL
Torque constant	1.46 N.m/A at 20 °C
Back emf constant	88 V/krpm at 20 °C
Rotor inertia	73.32 kg.cm ²
Stator resistance	0.199 Ohm at 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

Stator inductance	3.8 mH at 20 °C
Stator electrical time constant	19.1 ms at 20 °C
Maximum radial force Fr	1200 N at 1500 rpm
Maximum axial force Fa	497 N
Brake pull-in power	49.6 W
Type of cooling	Natural convection
Length	235 mm
Number of motor stacks	3
Centring collar diameter	114.3 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	13.5 mm
Circle diameter of the mounting holes	200 mm
Distance shaft shoulder-flange	4 mm
Net weight	23.64 kg

Environment

IP degree of protection	IP50 IM V3 IP65 IM B5, IM V1
Ambient air temperature for operation	-20...40 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.5 cm
Package 1 Width	29.0 cm
Package 1 Length	58.5 cm
Package 1 Weight	25.18 kg

Sustainability

Green Premium™ label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓	Reach Free Of Svhc	
✓	Mercury Free	
✓	Rohs Exemption Information	Yes

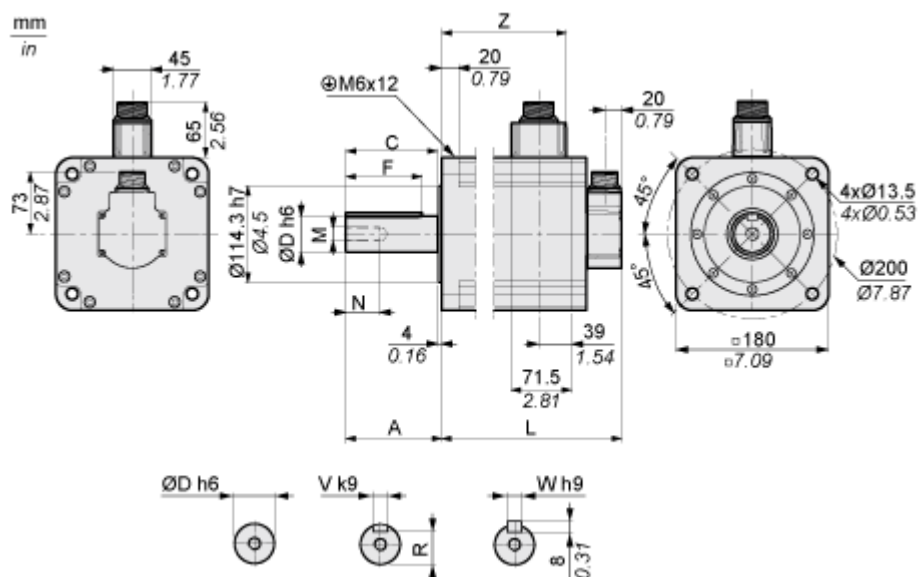
Certifications & Standards

Reach Regulation	REACH Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

Dimensions

Dimensions of Motor

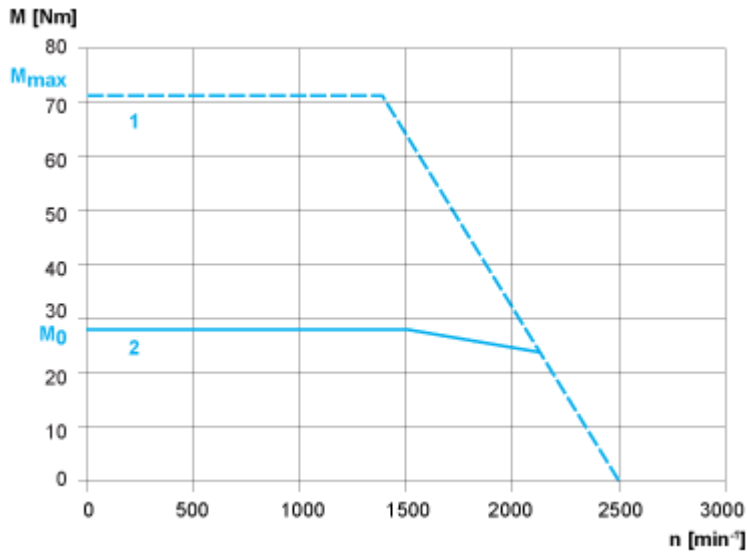


	mm	in.
L (without holding brake)	235	9.25
L (with holding brake)	279	10.98
A	79	3.11
C	73	2.87
D	35	1.38
F	63	2.48
N	28	1.10
M	M12	
R	30	1.18
V	10	0.39
W	10	0.39
Z	169	6.65

Performance Curves

Torque/Speed Curves with 230 V Three Phase Supply Voltage

Servo Motor with LXM28AU45 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque