

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
180mm, 4500W, without oil seal,  
with key, brake, straight  
connection

BCH2MR4511CF6C

! Discontinued

! Discontinued on: Jun 30, 2023

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## 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
Phase	Three phase
Continuous stall current	19.68 A
Continuous stall torque	253.57 lbf.in (28.65 N.m) LXM28... 22.9 A, 220 V, three phase
Continuous power	4500 W
Peak stall torque	633.89 lbf.in (71.62 N.m) LXM28... 22.9 A, 220 V, three phase
Nominal output power	4500 W LXM28... 22.9 A, 220 V, three phase
Nominal torque	253.57 lbf.in (28.65 N.m) LXM28... 22.9 A, 220 V, three phase
Nominal speed	1500 rpm LXM28... 22.9 A, 220 V, three phase
Maximum current Irms	57.6 A LXM28... 4.5 kW, 220 V
Maximum permanent current	22.8 A
Product compatibility	LXM28... servo drive 4.5 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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Torque constant</b>	1.46 N.m/A 68 °F (20 °C)
<b>Back emf constant</b>	88 V/krpm 68 °F (20 °C)
<b>Rotor inertia</b>	74 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.199 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	3.8 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	19.1 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	1200 N 1500 rpm
<b>Maximum axial force Fa</b>	497 N
<b>Brake pull-in power</b>	49.6 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	11.0 in (279 mm)
<b>Number of motor stacks</b>	3
<b>Centring collar diameter</b>	4.5 in (114.3 mm)
<b>Centring collar depth</b>	0.2 in (4 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.5 in (13.5 mm)
<b>Circle diameter of the mounting holes</b>	7.9 in (200 mm)
<b>Distance shaft shoulder-flange</b>	0.2 in (4 mm)
<b>Net Weight</b>	61.7 lb(US) (28 kg)

## Environment

<b>IP Degree of Protection</b>	IP54 IM B5, IM V1 IP50 IM V3
<b>Ambient Air Temperature for Operation</b>	32...104 °F (0...40 °C)

## Ordering and shipping details

<b>Category</b>	US1PC5318281
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3606480735035
<b>Returnability</b>	No
<b>Country of origin</b>	CN

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	9.6 in (24.5 cm)
<b>Package 1 Width</b>	11.4 in (29.0 cm)
<b>Package 1 Length</b>	23.03 in (58.5 cm)
<b>Package 1 Weight</b>	65.32 lb(US) (29.63 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-CO<sub>2</sub> 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

**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.

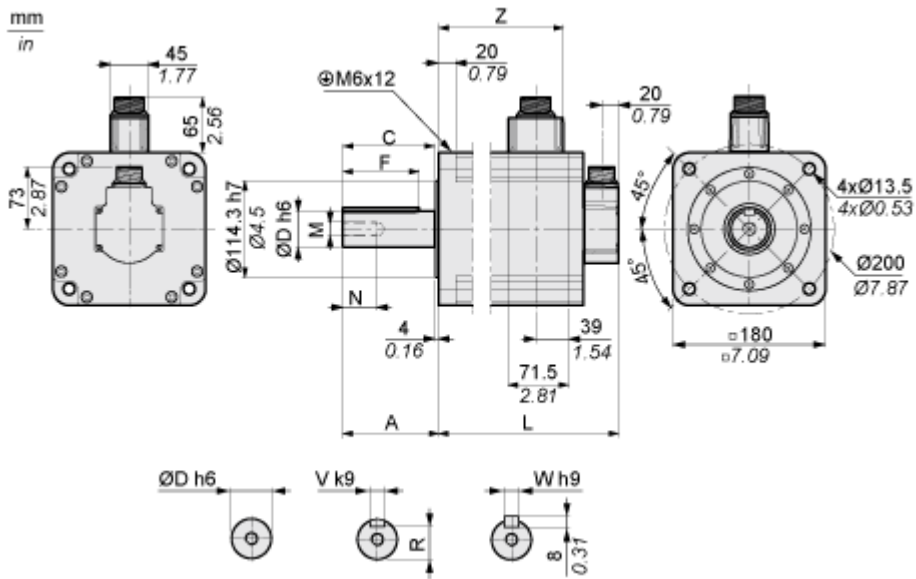
**Circularity Profile** [End of Life Information](#)

**California Proposition 65** **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Dimensions Drawings

Dimensions

Dimensions of Motor



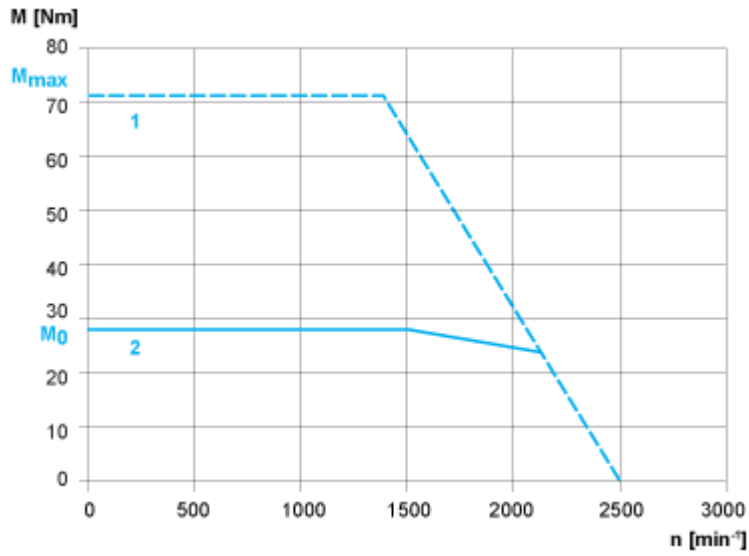
	mm	in.
L (without holding brake)	235	9.25
L (with holding brake)	279	10.98
A	79	3.11
C	73	2.87
D	35	1.38
F	63	2.48
N	28	1.10
M	M12	
R	30	1.18
V	10	0.39
W	10	0.39
Z	169	6.65

Performance Curves

Torque/Speed Curves with 230 V Three Phase Supply Voltage

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Servo Motor with LXM28AU45••• Servo Drive



- 1 : Peak torque
- 2 : Continuous torque