

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
130mm, 500W, 6.63kg.cm<sup>2</sup>, with oil  
seal, smooth, straight connection

BCH2MM0522CA6C

## 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 110 V
Network number of phases	Three phase Single phase
Continuous stall current	2.89 A
Continuous stall torque	2.39 N.m for LXM28 at 4.5 A, 220 V, single phase 2.39 N.m for LXM28 at 4.5 A, 220 V, three phase 2.39 N.m for LXM28 at 9 A, 110 V, single phase
Continuous power	500 W
Peak stall torque	7.16 N.m for LXM28... at 4.5 A, 220 V, single phase 7.16 N.m for LXM28... at 4.5 A, 220 V, three phase 7.16 N.m for LXM28... at 9 A, 110 V, single phase
Nominal output power	500 W for LXM28... at 4.5 A, 220 V, single phase 500 W for LXM28... at 4.5 A, 220 V, three phase 500 W for LXM28... at 9 A, 110 V, single phase
Nominal torque	2.39 N.m for LXM28... at 4.5 A, 220 V, single phase 2.39 N.m for LXM28... at 4.5 A, 220 V, three phase 2.39 N.m for LXM28... at 9 A, 110 V, single phase
Nominal speed	2000 rpm for LXM28... at 4.5 A, 220 V, single phase 2000 rpm for LXM28... at 4.5 A, 220 V, three phase 2000 rpm for LXM28... at 9 A, 110 V, single phase
Maximum current Irms	9.18 A for LXM28... at 0.5 kW, 220 V 9.18 A for LXM28... at 0.5 kW, 110 V
Maximum permanent current	3.24 A
Product compatibility	LXM28... servo drive motor at 0.5 kW, 220 V, single phase LXM28... servo drive motor at 0.5 kW, 220 V, three phase LXM28... servo drive motor at 0.5 kW, 110 V, single phase
Shaft end	Smooth shaft
Shaft diameter	22 mm
Shaft length	45 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	Without
Mounting support	Asian standard flange

Motor flange size	130 mm
Electrical connection	Connector MIL
Torque constant	0.83 N.m/A at 20 °C
Back emf constant	50 V/krpm at 20 °C
Number of motor poles	5.0
Rotor inertia	6.63 kg.cm <sup>2</sup>
Stator resistance	0.62 Ohm at 20 °C
Stator inductance	7.14 mH at 20 °C
Stator electrical time constant	11.94 ms at 20 °C
Maximum radial force Fr	670 N at 2000 rpm
Maximum axial force Fa	200 N
Brake pull-in power	19.7 W
Type of cooling	Natural convection
Length	147 mm
Number of motor stacks	1
Centring collar diameter	110 mm
Centring collar depth	8 mm
Number of mounting holes	4
Mounting holes diameter	9.2 mm
Circle diameter of the mounting holes	145 mm
Distance shaft shoulder-flange	8 mm
Product weight	7 kg
Sizing reference	BCH2
Network number of phases	1
Accuracy error [angular]	0.044 °
Temperature copper hot	135 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C

## 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	18.1 cm
Package 1 Width	23.0 cm
Package 1 Length	36.0 cm
Package 1 Weight	7.91 kg

## 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

Total lifecycle Carbon footprint 2482

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard No

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation [REACH Declaration](#)

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)

## Use Again

### Repack and remanufacture

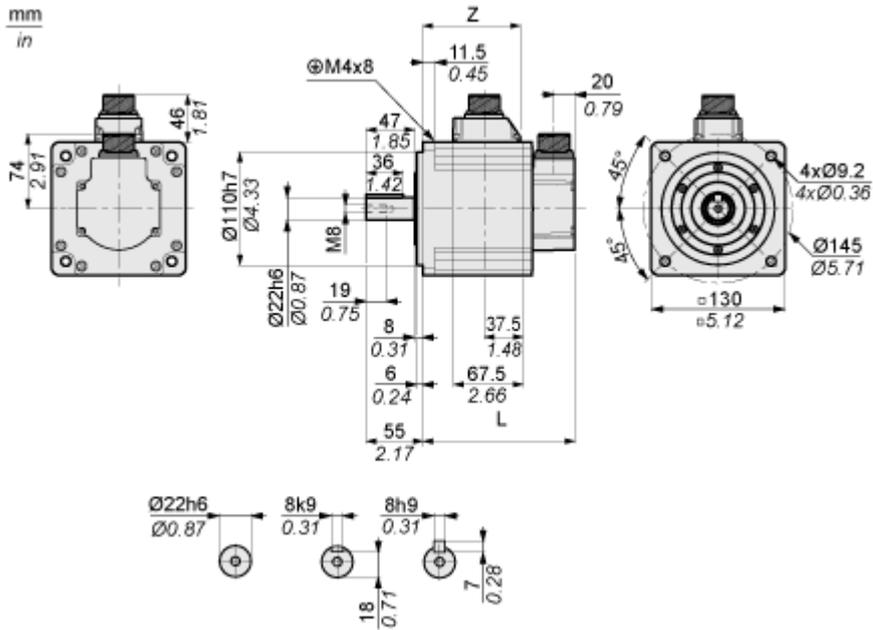
End of life manual availability [End of Life Information](#)

Take-back No

Dimensions Drawings

Dimensions

Dimensions of Motor



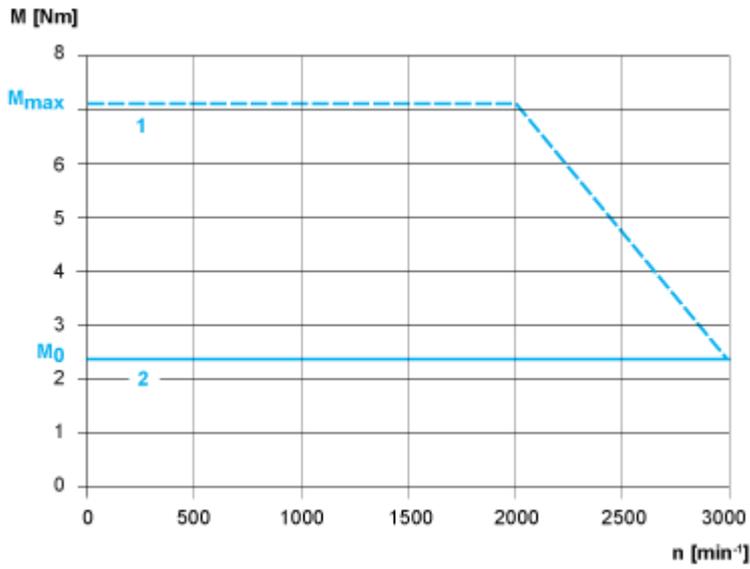
	mm	in.
L (without holding brake)	147	5.79
L (with holding brake)	183	7.2
Z	94.5	3.72

## Performance Curves

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

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Servo Motor with LXM28AU04••• Servo Drive



- 1 : Peak torque
- 2 : Continuous torque