

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
80mm, 400W, 0.67kg.cm<sup>2</sup>, with oil  
seal, smooth, leads connection

BCH2LF0432CA5C

## Main

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

## Complementary

Maximum mechanical speed	5000 rpm
[Us] rated supply voltage	220 V 110 V
Network number of phases	Three phase Single phase
Continuous stall current	2.29 A
Continuous stall torque	1.27 N.m for LXM28 at 2.6 A, 220 V, single phase 1.27 N.m for LXM28 at 2.6 A, 220 V, three phase 1.27 N.m for LXM28 at 5.7 A, 110 V, single phase
Continuous power	400 W
Peak stall torque	3.81 N.m for LXM28... at 2.6 A, 220 V, single phase 3.81 N.m for LXM28... at 2.6 A, 220 V, three phase 3.81 N.m for LXM28... at 5.7 A, 110 V, single phase
Nominal output power	400 W for LXM28... at 2.6 A, 220 V, single phase 400 W for LXM28... at 2.6 A, 220 V, three phase 400 W for LXM28... at 5.7 A, 110 V, single phase
Nominal torque	1.27 N.m for LXM28... at 2.6 A, 220 V, single phase 1.27 N.m for LXM28... at 2.6 A, 220 V, three phase 1.27 N.m for LXM28... at 5.7 A, 110 V, single phase
Nominal speed	3000 rpm for LXM28... at 2.6 A, 220 V, single phase 3000 rpm for LXM28... at 2.6 A, 220 V, three phase 3000 rpm for LXM28... at 5.7 A, 110 V, single phase
Maximum current Irms	7.73 A for LXM28... at 0.4 kW, 220 V 7.73 A for LXM28... at 0.4 kW, 110 V
Maximum permanent current	2.52 A
Product compatibility	LXM28... servo drive motor at 0.4 kW, 220 V, single phase LXM28... servo drive motor at 0.4 kW, 220 V, three phase LXM28... servo drive motor at 0.4 kW, 110 V, single phase
Shaft end	Smooth shaft
Shaft diameter	14 mm
Shaft length	30 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	Without
Mounting support	Asian standard flange

Motor flange size	80 mm
Electrical connection	Free lead
Torque constant	0.55 N.m/A at 20 °C
Back emf constant	33.5 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	0.67 kg.cm <sup>2</sup>
Stator resistance	3.2 Ohm at 20 °C
Stator inductance	11.3 mH at 20 °C
Stator electrical time constant	3.53 ms at 20 °C
Maximum radial force Fr	332 N at 3000 rpm
Maximum axial force Fa	115 N
Brake pull-in power	10.2 W
Type of cooling	Natural convection
Length	112 mm
Number of motor stacks	1
Centring collar diameter	70 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	6.6 mm
Circle diameter of the mounting holes	90 mm
Distance shaft shoulder-flange	4 mm
Product weight	2 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	13.8 cm
Package 1 Width	17.5 cm
Package 1 Length	29.6 cm
Package 1 Weight	2.475 kg

<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	2
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	5.54 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 2405

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

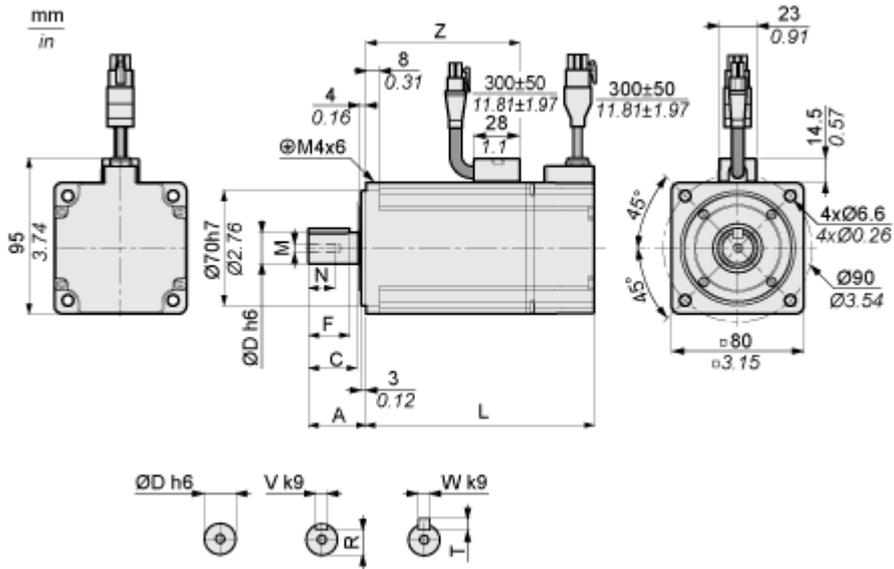
End of life manual availability [End of Life Information](#)

Take-back No

Dimensions Drawings

Dimensions

Dimensions of Motor



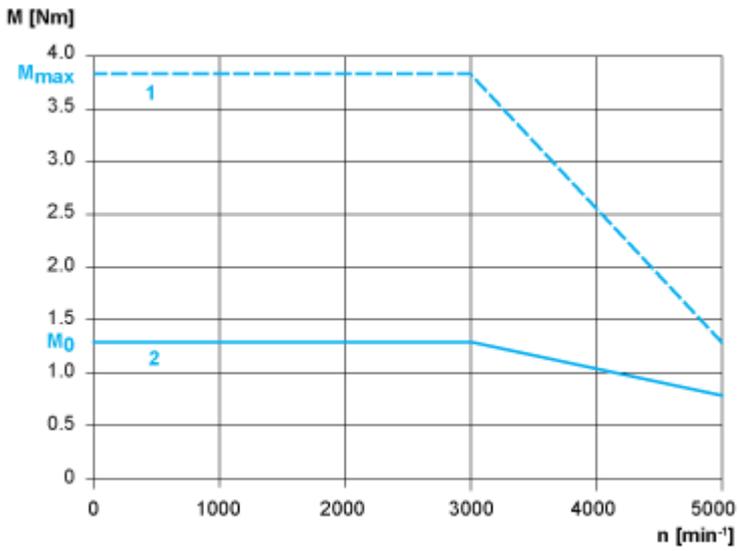
	mm	in.
L (without holding brake)	112	4.41
L (with holding brake)	152	5.98
A	30	1.18
C	24.5	0.96
D	14	0.55
F	20	0.79
R	11	0.43
T	5	0.2
V	5	0.2
W	5	0.2
Z	68	2.68

Performance Curves

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

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Servo Motor with LXM28AU02••• Servo Drive



- 1 : Peak torque
- 2 : Continuous torque