

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
60mm, 400W, 0.28kg.cm<sup>2</sup>, without  
oil seal, with key, brake, leads  
connection

BCH2LD0431CF5C

**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	5000 rpm
[Us] rated supply voltage	220 V 110 V
Phase	Three phase Single phase
Continuous stall current	2.19 A
Continuous stall torque	11.24 lbf.in (1.27 N.m) LXM28 2.6 A, 220 V, single phase 11.24 lbf.in (1.27 N.m) LXM28 2.6 A, 220 V, three phase 11.24 lbf.in (1.27 N.m) LXM28 5.7 A, 110 V, single phase
Continuous power	400 W
Peak stall torque	33.72 lbf.in (3.81 N.m) LXM28... 2.6 A, 220 V, single phase 33.72 lbf.in (3.81 N.m) LXM28... 2.6 A, 220 V, three phase 33.72 lbf.in (3.81 N.m) LXM28... 5.7 A, 110 V, single phase
Nominal output power	400 W LXM28... 2.6 A, 220 V, single phase 400 W LXM28... 2.6 A, 220 V, three phase 400 W LXM28... 5.7 A, 110 V, single phase
Nominal torque	11.24 lbf.in (1.27 N.m) LXM28... 2.6 A, 220 V, single phase 11.24 lbf.in (1.27 N.m) LXM28... 2.6 A, 220 V, three phase 11.24 lbf.in (1.27 N.m) LXM28... 5.7 A, 110 V, single phase
Nominal speed	3000 rpm LXM28... 2.6 A, 220 V, single phase 3000 rpm LXM28... 2.6 A, 220 V, three phase 3000 rpm LXM28... 5.7 A, 110 V, single phase
Maximum current Irms	7.76 A LXM28... 0.4 kW, 220 V 7.76 A LXM28... 0.4 kW, 110 V
Maximum permanent current	2.5 A
Product compatibility	LXM28... servo drive 0.4 kW, 220 V, single phase LXM28... servo drive 0.4 kW, 220 V, three phase LXM28... servo drive 0.4 kW, 110 V, single phase
Shaft end	Keyed
Shaft diameter	0.6 in (14 mm)
Shaft length	1.2 in (30 mm)
key width	0.2 in (5 mm)

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

Feedback type	20 bits single turn absolute encoder
Holding brake	With
Holding torque	11.5 lbf.in (1.3 N.m) built-in
Mounting Support	Asian standard flange
Motor flange size	2.4 in (60 mm)
Electrical connection	Free lead
Torque constant	0.58 N.m/A 68 °F (20 °C)
Back emf constant	35 V/krpm 68 °F (20 °C)
Number of motor poles	4.0
Rotor inertia	0.28 kg.cm <sup>2</sup>
Stator resistance	5.2 Ohm 68 °F (20 °C)
Stator inductance	12.0 mH 68 °F (20 °C)
Stator electrical time constant	2.31 ms 68 °F (20 °C)
Maximum radial force Fr	200 N 3000 rpm
Maximum axial force Fa	70 N
Brake pull-in power	11.2 W
Type of cooling	Natural convection
Length	6.5 in (165 mm)
Number of motor stacks	2
Centring collar diameter	2.0 in (50 mm)
Centring collar depth	0.2 in (5.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.2 in (5.5 mm)
Circle diameter of the mounting holes	2.8 in (70 mm)
Distance shaft shoulder-flange	0.2 in (5.5 mm)
Product Weight	4.4 lb(US) (2 kg)
Sizing reference	BCH2
Network number of phases	1
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)

## Ordering and shipping details

Category	US1PC5318281
Discount Schedule	PC53

<b>GTIN</b>	3606480733598
<b>Returnability</b>	No
<b>Country of origin</b>	CN

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	4.37 in (11.1 cm)
<b>Package 1 Width</b>	5.71 in (14.5 cm)
<b>Package 1 Length</b>	10.43 in (26.5 cm)
<b>Package weight(Lbs)</b>	5.49 lb(US) (2.49 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

Carbon footprint (kg CO2 eq, Total Life cycle) **2973**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard **Yes**

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)**

PVC free **Yes**

## Use Again

### Repack and remanufacture

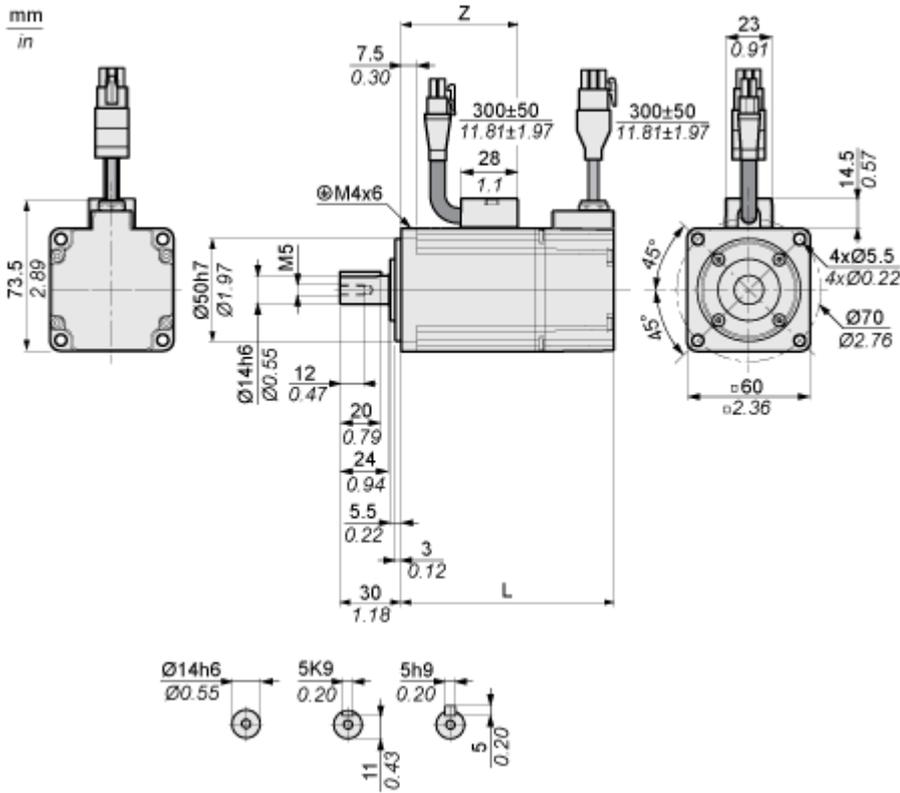
Circularity Profile [End of Life Information](#)

Take-back **No**

Dimensions Drawings

Dimensions

Dimensions of Motor

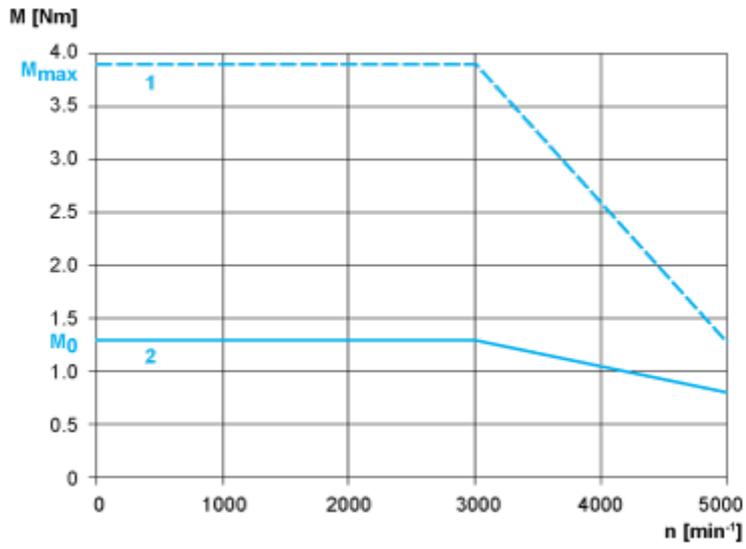


	mm	in.
L (without holding brake)	129	5.08
L (with holding brake)	165	6.5
Z	82	3.23

Performance Curves

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

Servo Motor with LXM28AU04 Servo Drive



1 : Peak torque

2 : Continuous torque