

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
80mm, 400W, 0.67kg.cm<sup>2</sup>, without  
oil seal, with key, leads connection

BCH2LF0431CA5C

## Main

Range Compatibility	Lexium 28
Product Or Component Type	Servo motor
Device Short Name	BCH2

## Complementary

Maximum Mechanical Speed	5000 rpm
[Us] Rated Supply Voltage	220 V 110 V
Network Number Of Phases	Single phase Three 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	Keyed
Shaft Diameter	14 mm
Shaft Length	30 mm
Key Width	5 mm
Feedback Type	20 bits single turn absolute encoder
Holding Brake	Without

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

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
Rotor Inertia	0.67 kg.cm²
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
Net Weight	2 kg

## Environment

Ip Degree Of Protection	IP54 IM B5, IM V1 IP50 IM V3
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	2475 g

## 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](#)

✓ Pvc Free

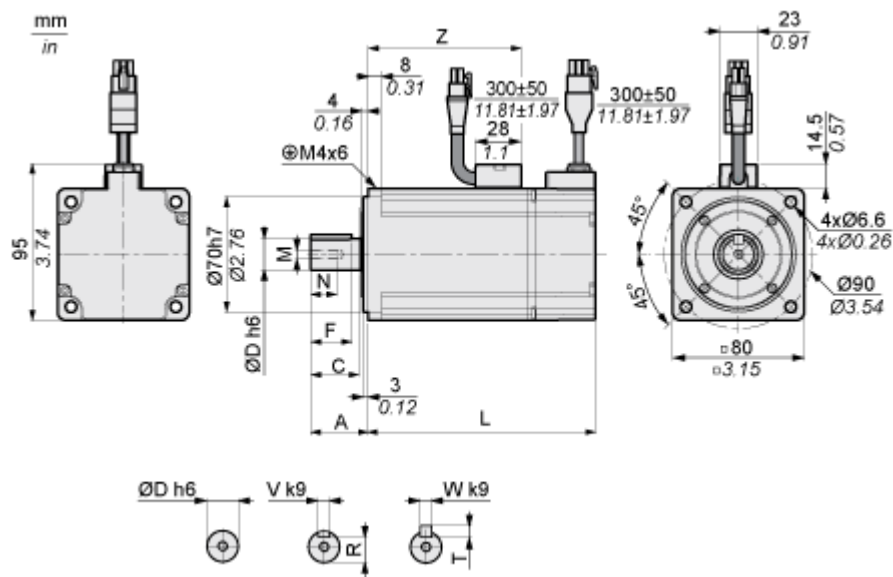
## Certifications & Standards

Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	<a href="#">End of Life Information</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Dimensions Drawings

Dimensions

Dimensions of Motor

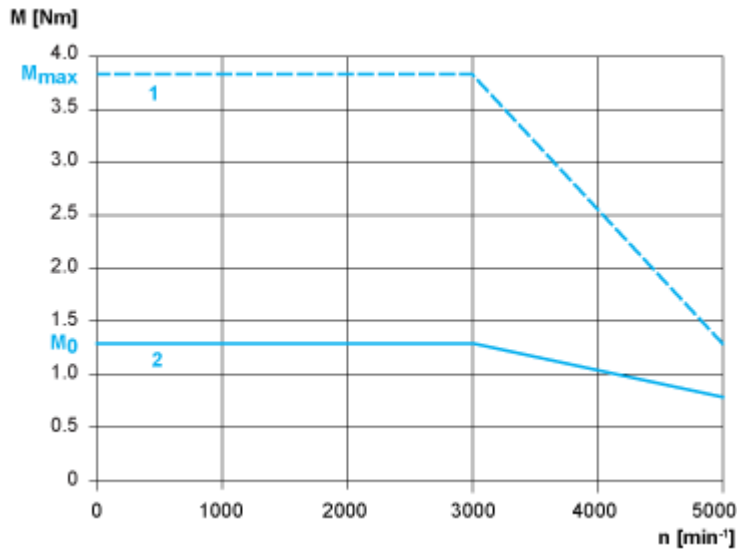


	mm	in.
L (without holding brake)	112	4.41
L (with holding brake)	152	5.98
A	30	1.18
C	24.5	0.96
D	14	0.55
F	20	0.79
R	11	0.43
T	5	0.2
V	5	0.2
W	5	0.2
Z	68	2.68

Performance Curves

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

Servo Motor with LXM28AU02 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque