

# Product data sheet

Specifications



servo motor BCH, Lexium 28,  
100mm, 1000W, 2.45kg.cm<sup>2</sup>,  
without oil seal, with key, brake,  
straight connection

BCH2LH1031CF6C

! Discontinued

! Discontinued on: Jul 28, 2023

## 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   |
| Network Number Of Phases  | Three phase<br>Single phase   |
| Continuous Stall Current  | 5.83 A  |
| Continuous Stall Torque   | 3.18 N.m for LXM28... at 7 A, 220 V, single phase<br>3.18 N.m for LXM28... at 7 A, 220 V, three phase             |
| Continuous Power          | 1000 W  |
| Peak Stall Torque         | 9.54 N.m for LXM28... at 7 A, 220 V, single phase<br>9.54 N.m for LXM28... at 7 A, 220 V, three phase             |
| Nominal Output Power      | 1000 W for LXM28... at 7 A, 220 V, single phase<br>1000 W for LXM28... at 7 A, 220 V, three phase                 |
| Nominal Torque            | 3.18 N.m for LXM28... at 7 A, 220 V, single phase<br>3.18 N.m for LXM28... at 7 A, 220 V, three phase             |
| Nominal Speed             | 3000 rpm for LXM28... at 7 A, 220 V, single phase<br>3000 rpm for LXM28... at 7 A, 220 V, three phase             |
| Maximum Current Irms      | 18.9 A for LXM28... at 1 kW, 220 V  |
| Maximum Permanent Current | 6.64 A  |
| Product Compatibility     | LXM28... servo drive motor at 1 kW, 220 V, single phase<br>LXM28... servo drive motor at 1 kW, 220 V, three phase |
| Shaft End                 | Keyed   |
| Shaft Diameter            | 22 mm   |
| Shaft Length              | 45 mm   |
| Key Width                 | 8 mm  |
| Feedback Type             | 20 bits single turn absolute encoder  |
| Holding Brake             | With  |
| Holding Torque            | 6.5 N.m built-in  |
| Mounting Support          | Asian standard flange   |

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

|                                       |                     |
|---------------------------------------|---------------------|
| Motor Flange Size                     | 100 mm              |
| Electrical Connection                 | Connector MIL       |
| Torque Constant                       | 0.55 N.m/A at 20 °C |
| Back Emf Constant                     | 33 V/krpm at 20 °C  |
| Rotor Inertia                         | 2.45 kg.cm²         |
| Stator Resistance                     | 0.67 Ohm at 20 °C   |
| Stator Inductance                     | 4.2 mH at 20 °C     |
| Stator Electrical Time Constant       | 6.27 ms at 20 °C    |
| Maximum Radial Force Fr               | 570 N at 3000 rpm   |
| Maximum Axial Force Fa                | 200 N               |
| Brake Pull-In Power                   | 10.4 W              |
| Type Of Cooling                       | Natural convection  |
| Length                                | 180.5 mm            |
| Number Of Motor Stacks                | 1                   |
| Centring Collar Diameter              | 95 mm               |
| Centring Collar Depth                 | 7 mm                |
| Number Of Mounting Holes              | 4                   |
| Mounting Holes Diameter               | 9.2 mm              |
| Circle Diameter Of The Mounting Holes | 115 mm              |
| Distance Shaft Shoulder-Flange        | 7 mm                |
| Net Weight                            | 5.1 kg              |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| Ip Degree Of Protection               | IP54 IM B5, IM V1<br>IP50 IM V3 |
| Ambient Air Temperature For Operation | 0...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             | 7.23 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](#)

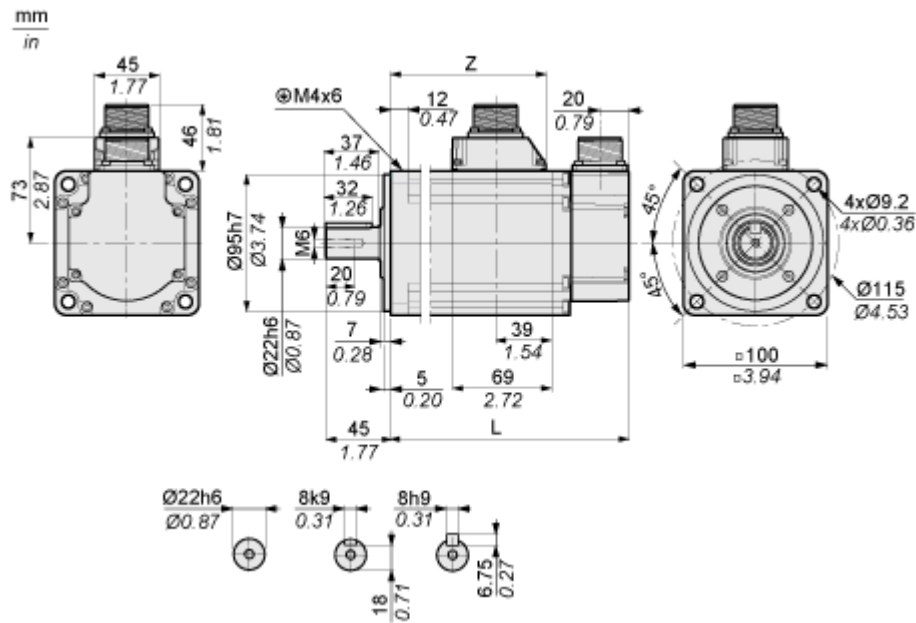
## Certifications & Standards

|                           |   |
|---------------------------|---|
| 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

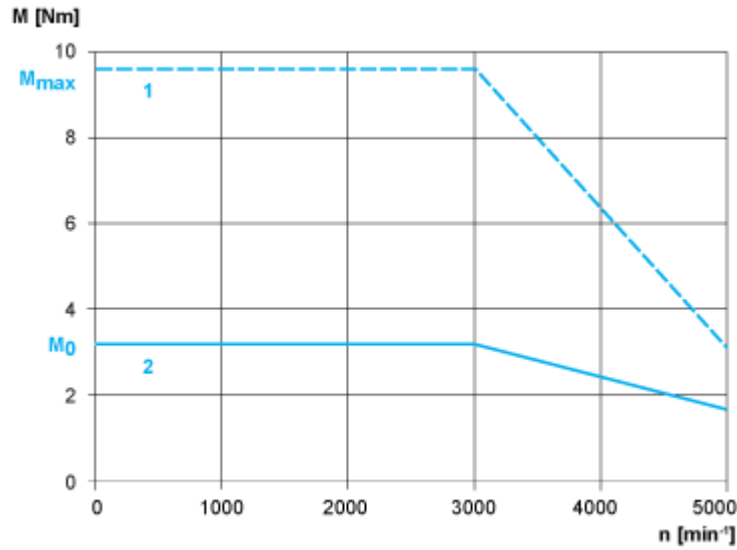


|                           | mm    | in.  |
|---------------------------|-------|------|
| L (without holding brake) | 153.5 | 6.04 |
| L (with holding brake)    | 180.5 | 7.11 |
| Z                         | 96    | 3.78 |

Performance Curves

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

Servo Motor with LXM28AU10 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque