# **Product datasheet**





## servo motor BCH, Lexium 28, 180mm, 3000W, without oil seal, smooth, brake, straight connection

BCH2MR3020CF6C

Discontinued on: 1 Nov 2020

! Discontinued

## Main

| Range compatibility       | Lexium 28   |
|---------------------------|-------------|
| Device short name         | BCH2        |
| Product or component type | Serve motor |

## Complementary

| Maximum mechanical speed  | 3000 rpm  |
|---------------------------|---|
| [Us] rated supply voltage | 220 V   |
| Network number of phases  | Three phase   |
| Continuous stall current  | 16.33 A   |
| Continuous stall torque   | 14.32 N.m for LXM28 at 19.8 A, 220 V, three phase   |
| Continuous power          | 3000 W  |
| Peak stall torque         | 42.97 N.m for LXM28 at 19.8 A, 220 V, three phase   |
| Nominal output power      | 3000 W for LXM28 at 19.8 A, 220 V, three phase      |
| Nominal torque            | 14.32 N.m for LXM28 at 19.8 A, 220 V, three phase   |
| Nominal speed             | 2000 rpm for LXM28 at 19.8 A, 220 V, three phase    |
| Maximum current Irms      | 53.9 A for LXM28 at 3 kW, 220 V                     |
| Maximum permanent current | 18.8 A  |
| Product compatibility     | LXM28 servo drive motor at 3 kW, 220 V, three phase |
| Shaft end                 | Smooth shaft  |
| Shaft diameter            | 35 mm   |
| Shaft length              | 79 mm   |
| Feedback type             | 20 bits single turn absolute encoder                |
| Holding brake             | With  |
| Holding torque            | 48 N.m built-in                                     |
| mounting support          | Asian standard flange                               |
| Motor flange size         | 180 mm  |
| Electrical connection     | Connector MIL                                       |
| Torque constant           | 0.88 N.m/A at 20 °C                                 |
| Back emf constant         | 53 V/krpm at 20 °C                                  |
| Rotor inertia             | 54.1 kg.cm²   |

| Stator resistance                     | 0.131 Ohm at 20 °C |
|---------------------------------------|--------------------|
| Stator inductance                     | 2.7 mH at 20 °C    |
| Stator electrical time constant       | 20.61 ms at 20 °C  |
| Maximum radial force Fr               | 1200 N at 2000 rpm |
| Maximum axial force Fa                | 497 N              |
| Brake pull-in power                   | 49.6 W             |
| Type of cooling                       | Natural convection |
| Length                                | 235 mm             |
| Number of motor stacks                | 2                  |
| Centring collar diameter              | 114.3 mm           |
| Centring collar depth                 | 4 mm               |
| Number of mounting holes              | 4                  |
| Mounting holes diameter               | 13.5 mm            |
| Circle diameter of the mounting holes | 200 mm             |
| Distance shaft shoulder-flange        | 4 mm               |
| Net weight                            | 23 kg              |

## **Environment**

| IP degree of protection               | IP54 IM B5, IM V1<br>IP50 IM V3 |
|---------------------------------------|---------------------------------|
| Ambient air temperature for operation | 040 °C                          |

# **Packing Units**

| Unit Type of Package 1       | PCE      |
|------------------------------|----------|
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 24.5 cm  |
| Package 1 Width              | 29.0 cm  |
| Package 1 Length             | 58.5 cm  |
| Package 1 Weight             | 24.63 kg |



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Transparency RoHS/REACh

## Well-being performance

| <b>⊘</b> | Reach Free Of Svhc         |     |
|----------|----------------------------|-----|
| <b>⊘</b> | Mercury Free               |     |
| <b>⊘</b> | Rohs Exemption Information | Yes |

## **Certifications & Standards**

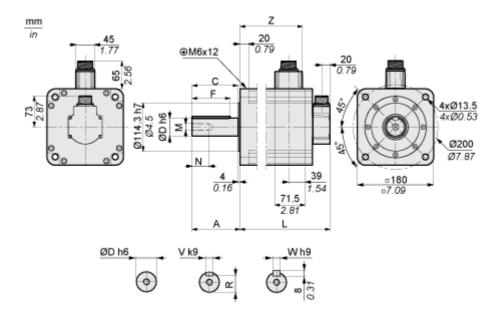
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)  |  |
|--------------------------|---|--|
| China Rohs Regulation    | China RoHS declaration  |  |
| Environmental Disclosure | Product Environmental Profile   |  |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |  |
| Circularity Profile      | End of Life Information   |  |

## BCH2MR3020CF6C

## **Dimensions Drawings**

## **Dimensions**

#### **Dimensions of Motor**



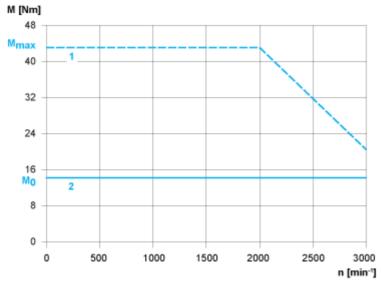
|                           | mm  | in.  |
|---------------------------|-----|------|
| L (without holding brake) | 202 | 7.95 |
| L (with holding brake)    | 235 | 9.25 |
| A                         | 79  | 3.11 |
| С                         | 73  | 2.87 |
| D                         | 35  | 1.38 |
| F                         | 63  | 2.48 |
| N                         | 28  | 1.10 |
| М                         | M12 |      |
| R                         | 30  | 1.18 |
| V                         | 10  | 0.39 |
| W                         | 10  | 0.39 |
| Z                         | 136 | 5.35 |

## BCH2MR3020CF6C

#### Performance Curves

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

## Servo Motor with LXM28AU30●●● Servo Drive



- 1: Peak torque
- 2: Continuous torque