

# BCH2LD0431CA5C

servo motor BCH, Lexium 28, 60mm, 400W, 0.27kg.cmÂ², without oil seal, with key, leads connection



## 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<br>110 V                                                                                                                                                                     |
| Network number of phases  | Single phase<br>Three phase                                                                                                                                                        |
| Continuous stall current  | 2.19 A                                                                                                                                                                             |
| Continuous stall torque   | 1.27 N.M for LXM28... at 2.6 A, 220 V, single phase<br>1.27 N.M for LXM28... at 2.6 A, 220 V, three phase<br>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<br>3.81 N.M for LXM28... at 2.6 A, 220 V, three phase<br>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<br>400 W for LXM28... at 2.6 A, 220 V, three phase<br>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<br>1.27 N.M for LXM28... at 2.6 A, 220 V, three phase<br>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<br>3000 rpm for LXM28... at 2.6 A, 220 V, three phase<br>3000 rpm for LXM28... at 5.7 A, 110 V, single phase                   |
| Maximum current Irms      | 7.76 A for LXM28... at 0.4 kW, 220 V<br>7.76 A for LXM28... at 0.4 kW, 110 V                                                                                                       |
| Maximum permanent current | 2.5 A                                                                                                                                                                              |
| Product compatibility     | LXM28... servo drive motor at 0.4 kW, 220 V, single phase<br>LXM28... servo drive motor at 0.4 kW, 220 V, three phase<br>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                                                                                                                                                                            |
| Mounting support          | Asian standard flange                                                                                                                                                              |
| Motor flange size         | 60 mm                                                                                                                                                                              |

|                                       |                         |
|---------------------------------------|-------------------------|
| Electrical connection                 | Free lead               |
| Torque constant                       | 0.58 N.m/A at 20 °C     |
| Back emf constant                     | 35 V/krpm at 20 °C      |
| Rotor inertia                         | 0.27 kg.cm <sup>2</sup> |
| Stator resistance                     | 5.2 Ohm at 20 °C        |
| Stator inductance                     | 12 mH at 20 °C          |
| Stator electrical time constant       | 2.31 ms at 20 °C        |
| Maximum radial force Fr               | 200 N at 3000 rpm       |
| Maximum axial force Fa                | 70 N                    |
| Brake pull-in power                   | 11.2 W                  |
| Type of cooling                       | Natural convection      |
| Length                                | 129 mm                  |
| Number of motor stacks                | 2                       |
| Centring collar diameter              | 50 mm                   |
| Centring collar depth                 | 5.5 mm                  |
| Number of mounting holes              | 4                       |
| Mounting holes diameter               | 5.5 mm                  |
| Circle diameter of the mounting holes | 70 mm                   |
| Distance shaft shoulder-flange        | 5.5 mm                  |
| Net weight                            | 1.45 kg                 |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP degree of protection               | IP54 IM B5, IM V1<br>IP50 IM V3 |
| Ambient air temperature for operation | -20...40 °C                     |

## Packing Units

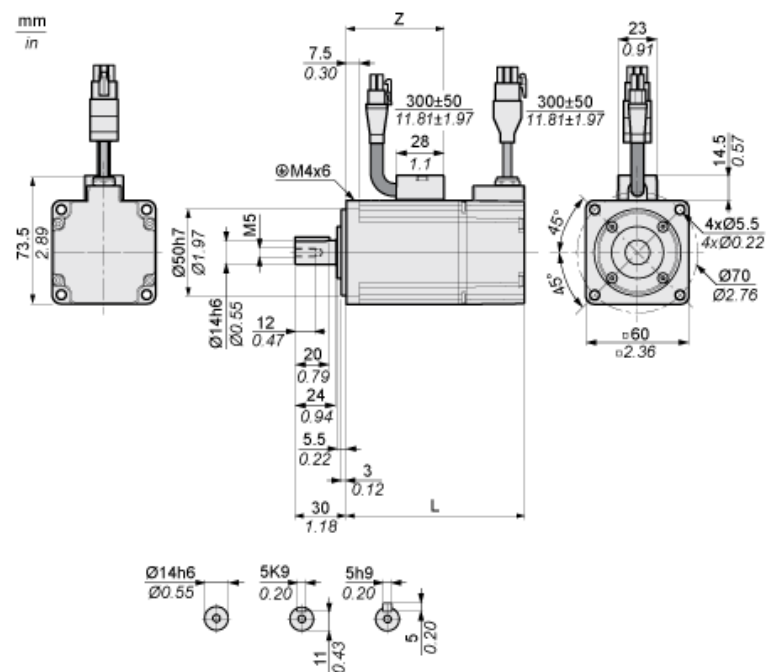
|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.1 cm |
| Package 1 Width              | 14.5 cm |
| Package 1 Length             | 26.5 cm |
| Package 1 Weight             | 2.08 kg |

## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| REACH free of SVHC         | Yes                                                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)                                                                        |
| Mercury free               | Yes                                                                                                                               |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information |  <a href="#">Yes</a>                           |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile        |  <a href="#">End Of Life Information</a>       |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins       |
| PVC free                   | Yes                                                                                                                               |

## Dimensions

### Dimensions of Motor



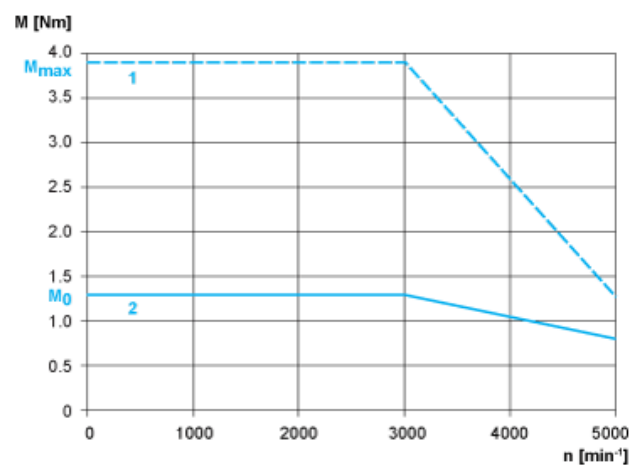
|                           | mm  | in.  |
|---------------------------|-----|------|
| L (without holding brake) | 129 | 5.08 |
| L (with holding brake)    | 165 | 6.5  |
| Z                         | 82  | 3.23 |

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

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Servo Motor with LXM28AU04●●● Servo Drive



- 1 : Peak torque  
2 : Continuous torque