

# BCH2HF0731CA5C

servo motor BCH, Lexium 28, 80mm, 750W, 1.54kg.cm<sup>2</sup>, without oil seal, with key, leads connection



## 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<br>110 V                                                                                                                                                                         |
| Phase                     | Three phase<br>Single phase                                                                                                                                                            |
| Continuous stall current  | 4.01 A                                                                                                                                                                                 |
| Continuous stall torque   | 21.15 Lbf.in (2.39 N.m) LXM28... 4.5 A, 220 V, single phase<br>21.15 Lbf.in (2.39 N.m) LXM28... 4.5 A, 220 V, three phase<br>21.15 lbf.in (2.39 N.m) LXM28... 9 A, 110 V, single phase |
| Continuous power          | 750 W                                                                                                                                                                                  |
| Peak stall torque         | 63.37 Lbf.in (7.16 N.m) LXM28... 4.5 A, 220 V, single phase<br>63.37 Lbf.in (7.16 N.m) LXM28... 4.5 A, 220 V, three phase<br>63.37 lbf.in (7.16 N.m) LXM28... 9 A, 110 V, single phase |
| Nominal output power      | 750 W LXM28... 4.5 A, 220 V, single phase<br>750 W LXM28... 4.5 A, 220 V, three phase<br>750 W LXM28... 9 A, 110 V, single phase                                                       |
| Nominal torque            | 21.15 Lbf.in (2.39 N.m) LXM28... 4.5 A, 220 V, single phase<br>21.15 Lbf.in (2.39 N.m) LXM28... 4.5 A, 220 V, three phase<br>21.15 lbf.in (2.39 N.m) LXM28... 9 A, 110 V, single phase |
| Nominal speed             | 3000 rpm LXM28... 4.5 A, 220 V, single phase<br>3000 rpm LXM28... 4.5 A, 220 V, three phase<br>3000 rpm LXM28... 9 A, 110 V, single phase                                              |
| Maximum current Irms      | 13.23 A LXM28... 0.75 kW, 220 V<br>13.23 A LXM28... 0.75 kW, 110 V                                                                                                                     |
| Maximum permanent current | 4.29 A                                                                                                                                                                                 |
| Product compatibility     | LXM28... servo drive 0.75 kW, 220 V, single phase<br>LXM28... servo drive 0.75 kW, 220 V, three phase<br>LXM28... servo drive 0.75 kW, 110 V, single phase                             |
| Shaft end                 | Keyed                                                                                                                                                                                  |
| Shaft diameter            | 0.75 in (19 mm)                                                                                                                                                                        |
| Shaft length              | 1.38 in (35 mm)                                                                                                                                                                        |
| Key width                 | 0.24 in (6 mm)                                                                                                                                                                         |
| Feedback type             | 20 bits single turn absolute encoder                                                                                                                                                   |
| Holding brake             | Without                                                                                                                                                                                |
| Mounting Support          | Asian standard flange                                                                                                                                                                  |
| Motor flange size         | 3.15 in (80 mm)                                                                                                                                                                        |
| Electrical connection     | Free lead                                                                                                                                                                              |

|                                       |                         |
|---------------------------------------|-------------------------|
| Torque constant                       | 0.6 N.m/A 68 °F (20 °C) |
| Back emf constant                     | 36 V/krpm 68 °F (20 °C) |
| Rotor inertia                         | 1.54 kg.cm <sup>2</sup> |
| Stator resistance                     | 1.5 Ohm 68 °F (20 °C)   |
| Stator inductance                     | 6.1 mH 68 °F (20 °C)    |
| Stator electrical time constant       | 4.07 ms 68 °F (20 °C)   |
| Maximum radial force Fr               | 332 N 3000 rpm          |
| Maximum axial force Fa                | 115 N                   |
| Brake pull-in power                   | 10.2 W                  |
| Type of cooling                       | Natural convection      |
| Length                                | 5.43 in (138 mm)        |
| Number of motor stacks                | 2                       |
| Centring collar diameter              | 2.76 in (70 mm)         |
| Centring collar depth                 | 0.16 in (4 mm)          |
| Number of mounting holes              | 4                       |
| Mounting holes diameter               | 0.26 in (6.6 mm)        |
| Circle diameter of the mounting holes | 3.54 in (90 mm)         |
| Distance shaft shoulder-flange        | 0.16 in (4 mm)          |
| Net Weight                            | 6.39 lb(US) (2.9 kg)    |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP Degree of Protection               | IP54 IM B5, IM V1<br>IP50 IM V3 |
| Ambient Air Temperature for Operation | -4...104 °F (-20...40 °C)       |

## Ordering and shipping details

|                   |                           |
|-------------------|---------------------------|
| Category          | 18281-LEXIUM 23/28 MOTORS |
| Discount Schedule | PC53                      |
| GTIN              | 3606480733741             |
| Returnability     | No                        |
| Country of origin | CN                        |

## Packing Units

|                              |                       |
|------------------------------|-----------------------|
| Unit Type of Package 1       | PCE                   |
| Number of Units in Package 1 | 1                     |
| Package 1 Height             | 5.43 in (13.8 cm)     |
| Package 1 Width              | 6.89 in (17.5 cm)     |
| Package 1 Length             | 11.65 in (29.6 cm)    |
| Package 1 Weight             | 7.67 lb(US) (3.48 kg) |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| 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> |
| 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>                                                                                                                                                                                                                                                     |

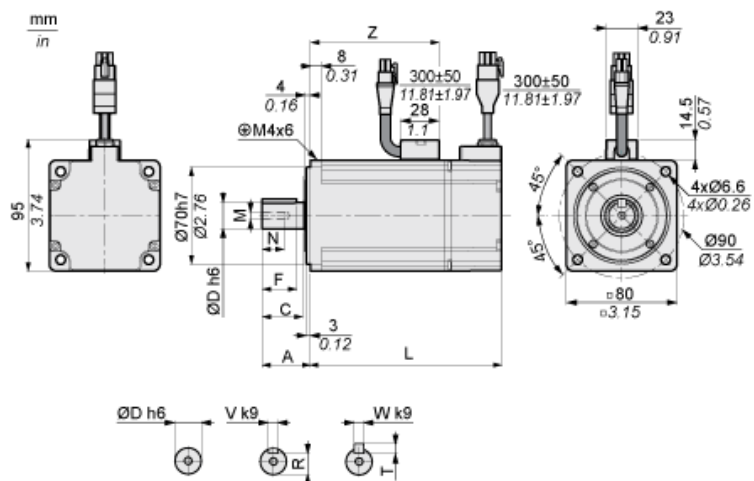
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|          |                                                                                                                              |
|----------|------------------------------------------------------------------------------------------------------------------------------|
| WEEE     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free | Yes                                                                                                                          |

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Dimensions

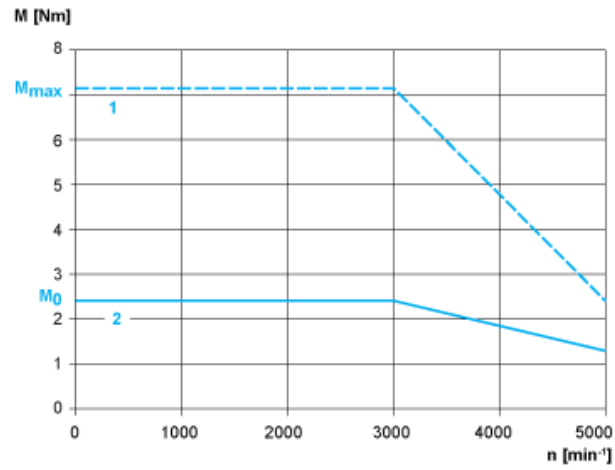
Dimensions of Motor



|                           | mm   | in.  |
|---------------------------|------|------|
| L (without holding brake) | 138  | 5.43 |
| L (with holding brake)    | 178  | 7.01 |
| A                         | 35   | 1.38 |
| C                         | 29.5 | 1.16 |
| D                         | 19   | 0.75 |
| F                         | 25   | 0.98 |
| R                         | 15.5 | 0.61 |
| T                         | 6    | 0.24 |
| V                         | 6    | 0.24 |
| W                         | 6    | 0.24 |
| Z                         | 93   | 3.66 |

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

Servo Motor with LXM28AU04●●● Servo Drive



- 1 : Peak torque
- 2 : Continuous torque