



## 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  | Single phase<br>Three phase  |
| Continuous stall current  | 4.01 A   |
| Continuous stall torque   | 2.39 N.m for LXM28... at 4.5 A, 220 V, single phase<br>2.39 N.m for LXM28... at 4.5 A, 220 V, three phase<br>2.39 N.m for LXM28... at 9 A, 110 V, single phase |
| Continuous power          | 750 W  |
| Peak stall torque         | 7.16 N.m for LXM28... at 4.5 A, 220 V, single phase<br>7.16 N.m for LXM28... at 4.5 A, 220 V, three phase<br>7.16 N.m for LXM28... at 9 A, 110 V, single phase |
| Nominal output power      | 750 W for LXM28... at 4.5 A, 220 V, single phase<br>750 W for LXM28... at 4.5 A, 220 V, three phase<br>750 W for LXM28... at 9 A, 110 V, single phase          |
| Nominal torque            | 2.39 N.m for LXM28... at 4.5 A, 220 V, single phase<br>2.39 N.m for LXM28... at 4.5 A, 220 V, three phase<br>2.39 N.m for LXM28... at 9 A, 110 V, single phase |
| Nominal speed             | 3000 rpm for LXM28... at 4.5 A, 220 V, single phase<br>3000 rpm for LXM28... at 4.5 A, 220 V, three phase<br>3000 rpm for LXM28... at 9 A, 110 V, single phase |
| Maximum current Irms      | 13.23 A for LXM28... at 0.75 kW, 220 V<br>13.23 A for LXM28... at 0.75 kW, 110 V   |
| Maximum permanent current | 4.29 A   |
| Product compatibility     | LXM28... servo drive motor at 0.75 kW, 220 V, single phase<br>LXM28... servo drive motor at 0.75 kW, 220 V, three phase  |

## LXM28... servo drive motor at 0.75 kW, 110 V, single phase

|                                       |                                      |
|---------------------------------------|--------------------------------------|
| Shaft end                             | Smooth shaft                         |
| Shaft diameter                        | 19 mm                                |
| Shaft length                          | 35 mm                                |
| Feedback type                         | 20 bits single turn absolute encoder |
| Holding brake                         | With                                 |
| Holding torque                        | 2.5 N.m built-in                     |
| Mounting support                      | Asian standard flange                |
| Motor flange size                     | 80 mm                                |
| Electrical connection                 | Free lead                            |
| Torque constant                       | 0.6 N.m/A at 20 °C                   |
| Back emf constant                     | 36 V/krpm at 20 °C                   |
| Rotor inertia                         | 1.24 kg.cm <sup>2</sup>              |
| Stator resistance                     | 1.5 Ohm at 20 °C                     |
| Stator inductance                     | 6.1 mH at 20 °C                      |
| Stator electrical time constant       | 4.07 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                                | 178 mm                               |
| Number of motor stacks                | 2                                    |
| 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                                 |
| Product weight                        | 3.6 kg                               |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP degree of protection               | IP54 IM B5, IM V1<br>IP50 IM V3 |
| Ambient air temperature for operation | 0...40 °C                       |

## Offer Sustainability

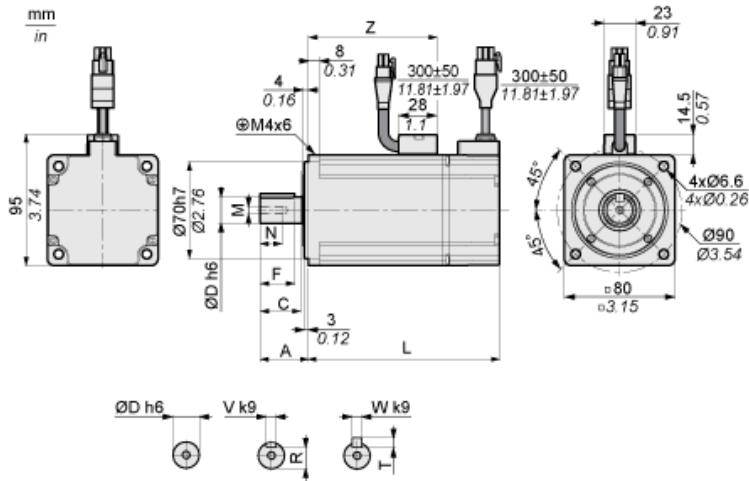
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| RECh Regulation            | <a href="#">RECh Declaration</a>  |
| RECh free of SVHC          | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | No need of specific recycling operations  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions

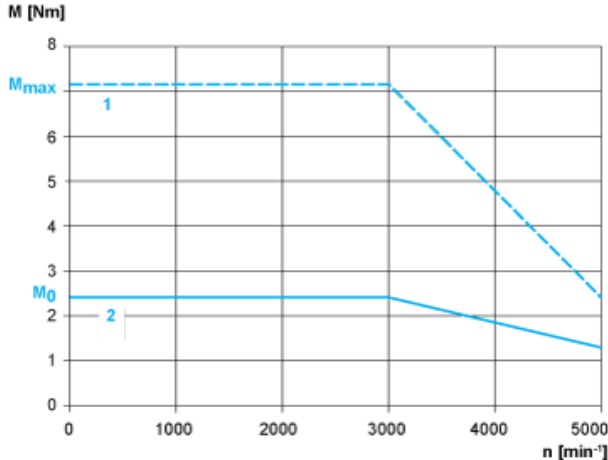
Dimensions of Motor



|                           | 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 LXM28AU02 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque