



## Main

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

## Complementary

|                           |                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum mechanical speed  | 3000 rpm                                                                                                                                                                                                                                                                  |
| [Us] rated supply voltage | 220 V                                                                                                                                                                                                                                                                     |
| Network number of phases  | Three phase<br>Single phase                                                                                                                                                                                                                                               |
| Continuous stall current  | 1.88 A                                                                                                                                                                                                                                                                    |
| Continuous stall torque   | 2.86 N.m for LXM26D at 2.6 A, 220 V, single phase<br>2.86 N.m for LXM26D at 2.6 A, 220 V, three phase<br>2.86 N.m for LXM28... at 2.6 A, 220 V, single phase<br>2.86 N.m for LXM28... at 2.6 A, 220 V, three phase<br>2.86 N.m for LXM28... at 5.7 A, 110 V, single phase |
| Continuous power          | 300 W                                                                                                                                                                                                                                                                     |
| Peak stall torque         | 8.59 N.m for LXM26D at 2.6 A, 220 V, single phase<br>8.59 N.m for LXM26D at 2.6 A, 220 V, three phase<br>8.59 N.m for LXM28... at 2.6 A, 220 V, single phase<br>8.59 N.m for LXM28... at 2.6 A, 220 V, three phase<br>8.59 N.m for LXM28... at 5.7 A, 110 V, single phase |
| Nominal output power      | 300 W for LXM26D at 2.6 A, 220 V, single phase<br>300 W for LXM26D at 2.6 A, 220 V, three phase<br>300 W for LXM28... at 2.6 A, 220 V, single phase<br>300 W for LXM28... at 2.6 A, 220 V, three phase<br>300 W for LXM28... at 5.7 A, 110 V, single phase                |
| Nominal torque            | 2.86 N.m for LXM26D at 2.6 A, 220 V, single phase<br>2.86 N.m for LXM26D at 2.6 A, 220 V, three phase<br>2.86 N.m for LXM28... at 2.6 A, 220 V, single phase<br>2.86 N.m for LXM28... at 2.6 A, 220 V, three phase<br>2.86 N.m for LXM28... at 5.7 A, 110 V, single phase |
| Nominal speed             | 1000 rpm for LXM26D at 2.6 A, 220 V, single phase<br>1000 rpm for LXM26D at 2.6 A, 220 V, three phase<br>1000 rpm for LXM28... at 2.6 A, 220 V, single phase<br>1000 rpm for LXM28... at 2.6 A, 220 V, three phase<br>1000 rpm for LXM28... at 5.7 A, 110 V, single phase |
| Maximum current Irms      | 5.98 A for LXM28... at 0.3 kW, 220 V<br>5.98 A for LXM28... at 0.3 kW, 110 V                                                                                                                                                                                              |

|                                       |                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum permanent current             | 2.09 A                                                                                                                                                                                                                                                                                                  |
| Product compatibility                 | LXM26D servo drive motor at 0.3 kW, 220 V, single phase<br>LXM26D servo drive motor at 0.3 kW, 220 V, three phase<br>LXM28... servo drive motor at 0.3 kW, 220 V, single phase<br>LXM28... servo drive motor at 0.3 kW, 220 V, three phase<br>LXM28... servo drive motor at 0.3 kW, 110 V, single 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                        | 9.6 N.m built-in                                                                                                                                                                                                                                                                                        |
| Mounting support                      | Asian standard flange                                                                                                                                                                                                                                                                                   |
| Motor flange size                     | 130 mm                                                                                                                                                                                                                                                                                                  |
| Electrical connection                 | Connector MIL                                                                                                                                                                                                                                                                                           |
| Torque constant                       | 1.52 N.m/A at 20 °C                                                                                                                                                                                                                                                                                     |
| Back emf constant                     | 92 V/krpm at 20 °C                                                                                                                                                                                                                                                                                      |
| Rotor inertia                         | 6.91 kg.cm <sup>2</sup>                                                                                                                                                                                                                                                                                 |
| Stator resistance                     | 1.93 Ohm at 20 °C                                                                                                                                                                                                                                                                                       |
| Stator inductance                     | 24.9 mH at 20 °C                                                                                                                                                                                                                                                                                        |
| Stator electrical time constant       | 12.9 ms at 20 °C                                                                                                                                                                                                                                                                                        |
| Maximum radial force Fr               | 670 N at 1000 rpm                                                                                                                                                                                                                                                                                       |
| Maximum axial force Fa                | 200 N                                                                                                                                                                                                                                                                                                   |
| Brake pull-in power                   | 19.7 W                                                                                                                                                                                                                                                                                                  |
| Type of cooling                       | Natural convection                                                                                                                                                                                                                                                                                      |
| Length                                | 183 mm                                                                                                                                                                                                                                                                                                  |
| Number of motor stacks                | 1                                                                                                                                                                                                                                                                                                       |
| Centring collar diameter              | 110 mm                                                                                                                                                                                                                                                                                                  |
| Centring collar depth                 | 8 mm                                                                                                                                                                                                                                                                                                    |
| Number of mounting holes              | 4                                                                                                                                                                                                                                                                                                       |
| Mounting holes diameter               | 9.2 mm                                                                                                                                                                                                                                                                                                  |
| Circle diameter of the mounting holes | 145 mm                                                                                                                                                                                                                                                                                                  |
| Distance shaft shoulder-flange        | 8 mm                                                                                                                                                                                                                                                                                                    |
| Product weight                        | 8.2 kg                                                                                                                                                                                                                                                                                                  |

## Environment

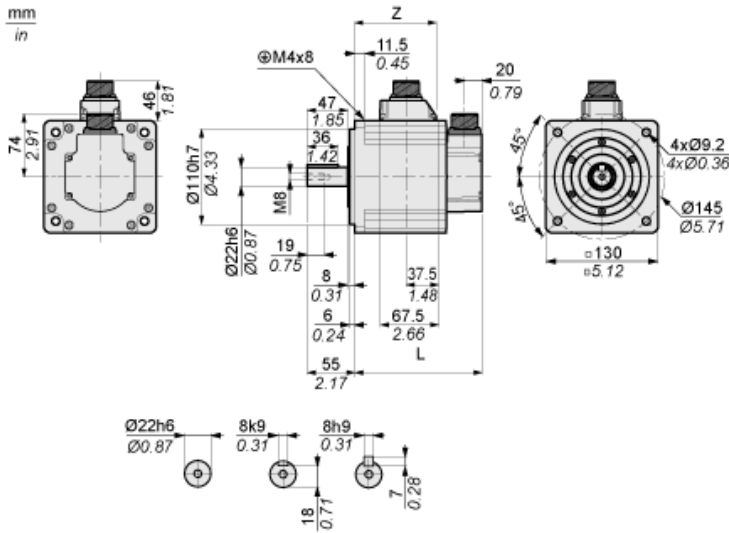
|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP degree of protection               | IP50 IM V3<br>IP65 IM B5, IM V1 |
| Ambient air temperature for operation | 0...40 °C                       |

## Contractual warranty

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

Dimensions

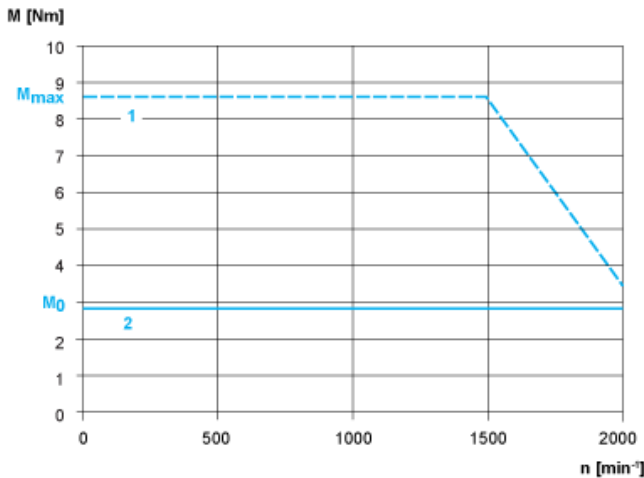
Dimensions of Motor



|                           | mm   | in.  |
|---------------------------|------|------|
| L (without holding brake) | 147  | 5.79 |
| L (with holding brake)    | 183  | 7.2  |
| Z                         | 94.5 | 3.72 |

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

Servo Motor with LXM28AU04 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque