



## 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                                                         |
| Phase                           | Three phase                                                   |
| Continuous stall current        | 16.33 A                                                       |
| Continuous stall torque         | 126.74 lbf.in (14.32 N.m) LXM28... 19.8 A, 220 V, three phase |
| Continuous power                | 3000 W                                                        |
| Peak stall torque               | 380.32 lbf.in (42.97 N.m) LXM28... 19.8 A, 220 V, three phase |
| Nominal output power            | 3000 W LXM28... 19.8 A, 220 V, three phase                    |
| Nominal torque                  | 126.74 lbf.in (14.32 N.m) LXM28... 19.8 A, 220 V, three phase |
| Nominal speed                   | 2000 rpm LXM28... 19.8 A, 220 V, three phase                  |
| Maximum current Irms            | 53.9 A LXM28... 3 kW, 220 V                                   |
| Maximum permanent current       | 18.8 A                                                        |
| Product compatibility           | LXM28... servo drive 3 kW, 220 V, three phase                 |
| Shaft end                       | Smooth shaft                                                  |
| Shaft diameter                  | 1.38 in (35 mm)                                               |
| Shaft length                    | 3.11 in (79 mm)                                               |
| Feedback type                   | 20 bits single turn absolute encoder                          |
| Holding brake                   | Without                                                       |
| Mounting support                | Asian standard flange                                         |
| Motor flange size               | 7.09 in (180 mm)                                              |
| Electrical connection           | Connector MIL                                                 |
| Torque constant                 | 0.88 N.m/A 68 °F (20 °C)                                      |
| Back emf constant               | 53 V/krpm 68 °F (20 °C)                                       |
| Rotor inertia                   | 53.56 kg.cm <sup>2</sup>                                      |
| Stator resistance               | 0.131 Ohm 68 °F (20 °C)                                       |
| Stator inductance               | 2.7 mH 68 °F (20 °C)                                          |
| Stator electrical time constant | 20.61 ms 68 °F (20 °C)                                        |
| Maximum radial force Fr         | 1200 N 2000 rpm                                               |
| Maximum axial force Fa          | 497 N                                                         |
| Brake pull-in power             | 49.6 W                                                        |
| Type of cooling                 | Natural convection                                            |
| Length                          | 7.95 in (202 mm)                                              |
| Number of motor stacks          | 2                                                             |
| Centring collar diameter        | 4.50 in (114.3 mm)                                            |
| Centring collar depth           | 0.16 in (4 mm)                                                |

|                                       |                        |
|---------------------------------------|------------------------|
| Number of mounting holes              | 4                      |
| Mounting holes diameter               | 0.53 in (13.5 mm)      |
| Circle diameter of the mounting holes | 7.87 in (200 mm)       |
| Distance shaft shoulder-flange        | 0.16 in (4 mm)         |
| Net Weight                            | 40.79 lb(US) (18.5 kg) |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP degree of protection               | IP50 IM V3<br>IP65 IM B5, IM V1 |
| 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                  | 03606480734809              |
| Nbr. of units in pkg. | 1                           |
| Package weight(Lbs)   | 44.5 lb(US) (20.18 kg)      |
| Returnability         | No                          |
| Country of origin     | CN                          |

## Packing Units

|                        |                    |
|------------------------|--------------------|
| Unit Type of Package 1 | PCE                |
| Package 1 Height       | 9.65 in (24.5 cm)  |
| Package 1 width        | 11.42 in (29 cm)   |
| Package 1 Length       | 23.03 in (58.5 cm) |

## Dimensions

### Dimensions of Motor



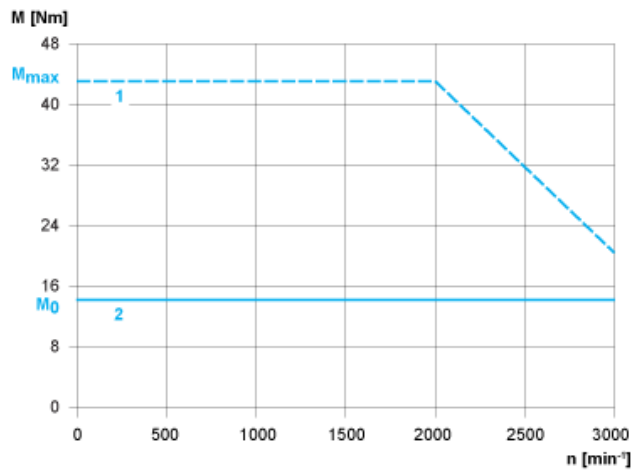
|                           | mm  | in.  |
|---------------------------|-----|------|
| L (without holding brake) | 202 | 7.95 |
| L (with holding brake)    | 235 | 9.25 |
| A                         | 79  | 3.11 |
| C                         | 73  | 2.87 |
| D                         | 35  | 1.38 |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

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Torque/Speed Curves with 230 V Three Phase Supply Voltage

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Servo Motor with LXM28AU30●●● Servo Drive



- 1 : Peak torque  
2 : Continuous torque