

Product datasheet

Specifications



servo motor BCH2, Lexium, 180mm,
3500W, with oil seal, with key, 20 bit
MT encoder, straight connection

BCH2MR3523MA6C

Main

Range compatibility Lexium 28
Easy Lexium 26

Device short name BCH2

Product or component type Servo motor

Complementary

Maximum mechanical speed 3000 rpm

[Us] rated supply voltage 220 V

Network number of phases Three phase

Continuous stall current 16.55 A

Continuous stall torque 16.7 N.m for LXM26D at 22.9 A, 220 V, three phase
16.7 N.m for LXM28 at 22.9 A, 220 V, three phase

Continuous power 3500 W

Peak stall torque 50.3 N.m for LXM26D at 22.9 A, 220 V, three phase
50.3 N.m for LXM28... at 22.9 A, 220 V, three phase

Nominal output power 3500 W for LXM26D at 22.9 A, 220 V, three phase
3500 W for LXM28... at 22.9 A, 220 V, three phase

Nominal torque 16.7 N.m for LXM26D at 22.9 A, 220 V, three phase
16.7 N.m for LXM28... at 22.9 A, 220 V, three phase

Nominal speed 2000 rpm for LXM26D at 22.9 A, 220 V, three phase
2000 rpm for LXM28... at 22.9 A, 220 V, three phase

Maximum current Irms 57.8 A for LXM26D at 3.5 kW, 220 V
57.8 A for LXM28... at 3.5 kW, 220 V

Maximum permanent current 19 A

Product compatibility LXM26D servo drive motor at 3.5 kW, 220 V, three phase
LXM28... servo drive motor at 3.5 kW, 220 V, three phase

Shaft end Keyed

Shaft diameter 35 mm

Shaft length 79 mm

Key width 10 mm

Feedback type 20 bits multi turn absolute encoder

Holding brake Without

Mounting support Asian standard flange

Motor flange size 180 mm

Electrical connection Connector MIL

| | |
|---------------------------------------|----------------------------------------------------------------------|
| Torque constant | 1.01 N.m/A at 20 °C |
| Back emf constant | 61 V/krpm at 20 °C |
| Number of motor poles | 5.0 |
| Rotor inertia | 53.56 kg.cm ² |
| Stator resistance | 0.157 Ohm at 20 °C |
| Stator inductance | 2.57 mH at 20 °C |
| Stator electrical time constant | 18.66 ms at 20 °C |
| Maximum radial force Fr | 1200 N at 2000 rpm |
| Maximum axial force Fa | 497 N |
| Brake pull-in power | 49.6 W |
| Type of cooling | Natural convection |
| Length | 202 mm |
| Number of motor stacks | 2 |
| Centring collar diameter | 114.3 mm |
| Centring collar depth | 4 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 13.5 mm |
| Circle diameter of the mounting holes | 200 mm |
| Distance shaft shoulder-flange | 4 mm |
| Net weight | 18.5 kg |
| Sizing reference | BCH2 |
| Network number of phases | 3 |
| Accuracy error [angular] | 0.044 ° |
| Temperature copper hot | 135 °C |
| Temperature magnet hot | 100 °C |
| Temperature magnet rt | 20 °C |
| Inertia | 0.0 kg.cm ² of brake 53.55 kg.cm ² of motor |

Environment

| | |
|---------------------------------------|---------------------------------|
| IP degree of protection | IP50 IM V3 IP65 IM B5, IM V1 |
| 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 | 24.5 cm |
| Package 1 Width | 29.0 cm |
| Package 1 Length | 58.5 cm |
| Package 1 Weight | 20.5 kg |

Contractual warranty

Warranty (in months)

18



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

| | |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint | 9 172 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Carbon footprint of the manufacturing phase [A1 to A3] | 117 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 3 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.1 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 9 050 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 2 kg CO2 eq. |

Use Better



Materials and Substances

| | |
|----------------------------------------|------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | No |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| REACH Regulation | REACH Declaration |
| PVC free | Yes |

Use Longer



Lifetime extension

| | |
|--------|----|
| Repair | No |
|--------|----|

Use Again



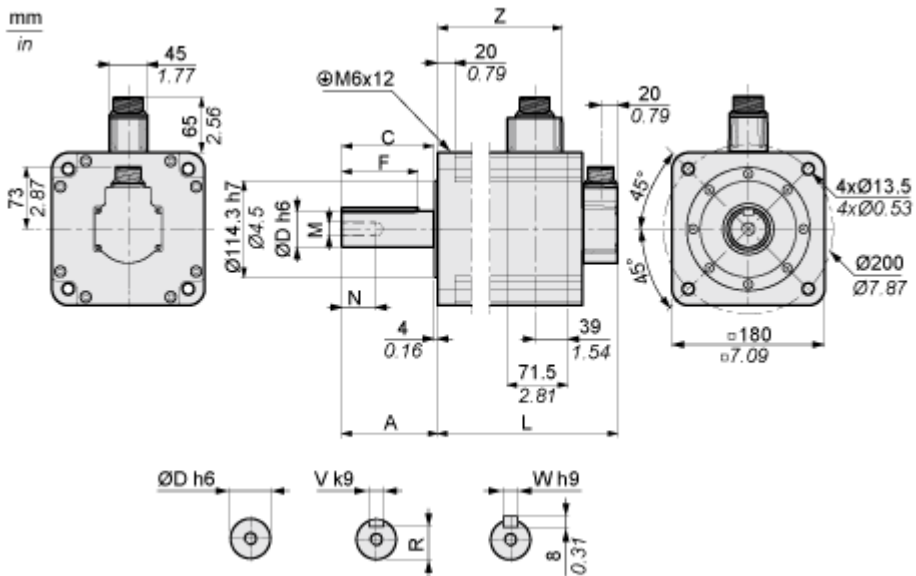
Repack and remanufacture

| | |
|---------------------------------|-----------------------------------------|
| End of life manual availability | End of Life Information |
| Take-back | No |

Dimensions Drawings

Dimensions

Dimensions of Motor

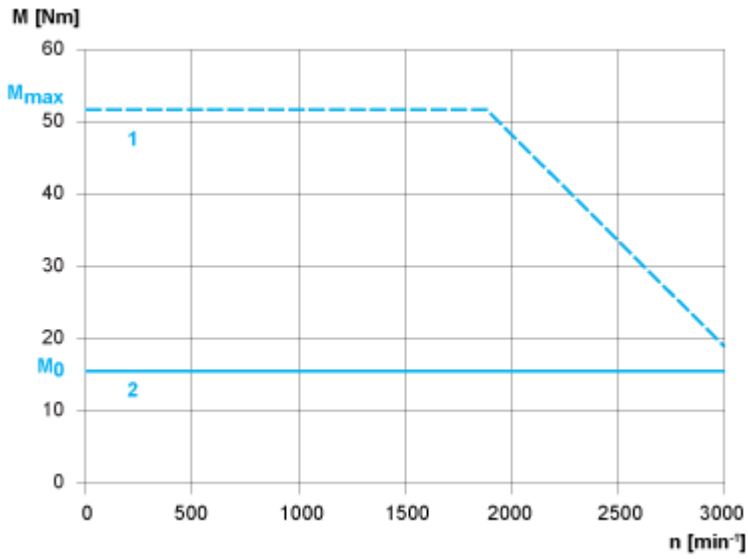


| | mm | in. |
|---------------------------|-----|------|
| L (without holding brake) | 202 | 7.95 |
| L (with holding brake) | 235 | 9.25 |
| A | 79 | 3.11 |
| C | 73 | 2.87 |
| D | 35 | 1.38 |
| F | 63 | 2.48 |
| N | 28 | 1.10 |
| M | M12 | |
| R | 30 | 1.18 |
| V | 10 | 0.39 |
| W | 10 | 0.39 |
|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

Performance Curves

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

Servo Motor with LXM28AU45••• Servo Drive



1 : Peak torque

2 : Continuous torque