

Product datasheet

Specifications



servo motor BCH, Lexium 28,
130mm, 300W, 6.63kg.cm², with oil
seal, with key, straight connection

BCH2MM0313CA6C

⚠ Discontinued on: 27 Aug 2020

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Main

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

Complementary

Maximum mechanical speed	3000 rpm
[Us] rated supply voltage	220 V 110 V
Network number of phases	Single phase Three phase
Continuous stall current	1.88 A
Continuous stall torque	2.86 N.m for LXM26D at 2.6 A, 220 V, single phase 2.86 N.m for LXM26D at 2.6 A, 220 V, three phase 2.86 N.m for LXM28 at 2.6 A, 220 V, single phase 2.86 N.m for LXM28 at 2.6 A, 220 V, three phase 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 8.59 N.m for LXM26D at 2.6 A, 220 V, three phase 8.59 N.m for LXM28... at 2.6 A, 220 V, single phase 8.59 N.m for LXM28... at 2.6 A, 220 V, three phase 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 300 W for LXM26D at 2.6 A, 220 V, three phase 300 W for LXM28... at 2.6 A, 220 V, single phase 300 W for LXM28... at 2.6 A, 220 V, three phase 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 2.86 N.m for LXM26D at 2.6 A, 220 V, three phase 2.86 N.m for LXM28... at 2.6 A, 220 V, single phase 2.86 N.m for LXM28... at 2.6 A, 220 V, three phase 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 1000 rpm for LXM26D at 2.6 A, 220 V, three phase 1000 rpm for LXM28... at 2.6 A, 220 V, single phase 1000 rpm for LXM28... at 2.6 A, 220 V, three phase 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 5.98 A for LXM28... at 0.3 kW, 110 V
Maximum permanent current	2.09 A

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Product compatibility	LXM26D servo drive motor at 0.3 kW, 220 V, single phase LXM26D servo drive motor at 0.3 kW, 220 V, three phase LXM28... servo drive motor at 0.3 kW, 220 V, single phase LXM28... servo drive motor at 0.3 kW, 220 V, three phase 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	Without
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
Number of motor poles	5.0
Rotor inertia	6.63 kg.cm ²
Stator resistance	1.93 Ohm at 20 °C
Stator inductance	23.91 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	147 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
Net weight	7 kg
Sizing reference	BCH2
Network number of phases	1
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 6.62 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	30.000 cm
Package 1 Width	30.000 cm
Package 1 Length	40.000 cm
Package 1 Weight	8.560 kg

Contractual warranty

Warranty (in months)	18
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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	1 673 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	45 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 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]	1 626 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.8 kg CO2 eq.

Use Better



Materials and Packaging

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



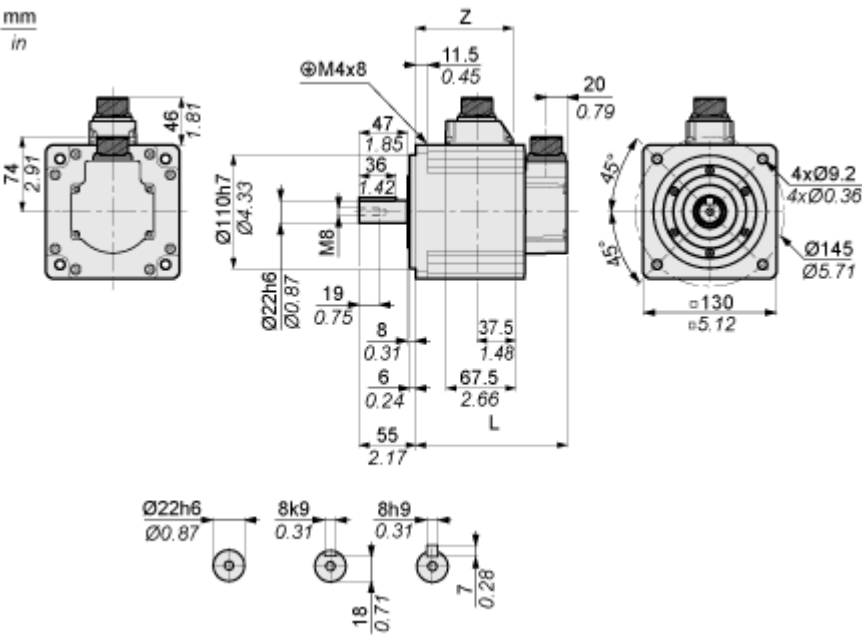
Repack and remanufacture

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

Dimensions Drawings

Dimensions

Dimensions of Motor

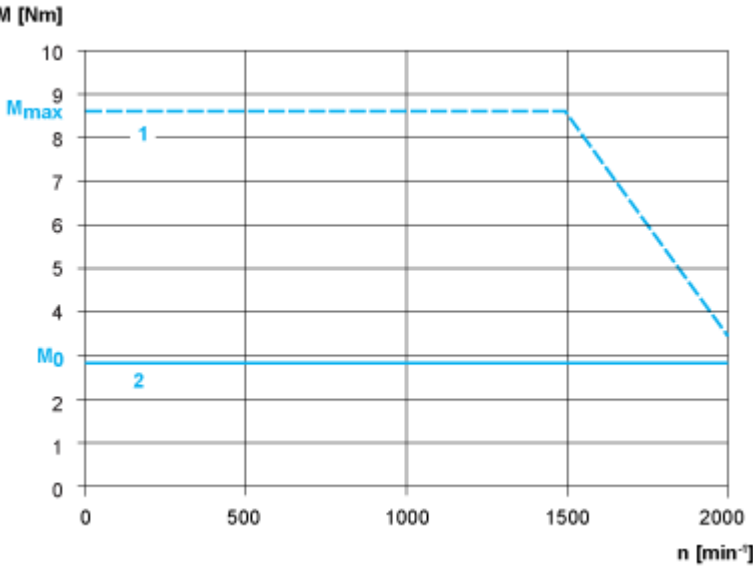


	mm	in.
L (without holding brake)	147	5.79
L (with holding brake)	183	7.2
Z	94.5	3.72

Performance Curves

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

Servo Motor with LXM28AU04 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque