Product data sheet

Specifications

servo motor BCH, Lexium 28, 130mm, 600W, 6.91kg.cm², with oil seal, smooth, brake, straight connection

BCH2MM0612CF6C

Discontinued

Discontinued on: Jun 30, 2023

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	Three phase Single phase
Continuous stall current	3.77 A
Continuous stall torque	50.71 lbf.in (5.73 N.m) LXM28 4.5 A, 220 V, single phase 50.71 lbf.in (5.73 N.m) LXM28 4.5 A, 220 V, three phase 50.71 lbf.in (5.73 N.m) LXM28 9 A, 110 V, single phase
Continuous power	600 W
Peak stall torque	152.14 lbf.in (17.19 N.m) LXM28... 4.5 A, 220 V, single phase 152.14 lbf.in (17.19 N.m) LXM28... 4.5 A, 220 V, three phase 152.14 lbf.in (17.19 N.m) LXM28... 9 A, 110 V, single phase
Nominal output power	600 W LXM28... 4.5 A, 220 V, single phase 600 W LXM28... 4.5 A, 220 V, three phase 600 W LXM28... 9 A, 110 V, single phase
Nominal torque	50.71 lbf.in (5.73 N.m) LXM28... 4.5 A, 220 V, single phase 50.71 lbf.in (5.73 N.m) LXM28... 4.5 A, 220 V, three phase 50.71 lbf.in (5.73 N.m) LXM28... 9 A, 110 V, single phase
Nominal speed	1000 rpm LXM28... 4.5 A, 220 V, single phase 1000 rpm LXM28... 4.5 A, 220 V, three phase 1000 rpm LXM28... 9 A, 110 V, single phase
Maximum current Irms	13.44 A LXM28... 0.6 kW, 220 V 13.44 A LXM28... 0.6 kW, 110 V
Maximum permanent current	4.1 A
Product compatibility	LXM28... servo drive 0.6 kW, 220 V, single phase LXM28... servo drive 0.6 kW, 220 V, three phase LXM28... servo drive 0.6 kW, 110 V, single phase
Shaft end	Smooth shaft
Shaft diameter	0.9 in (22 mm)
Shaft length	1.8 in (45 mm)
Feedback type	20 bits single turn absolute encoder

Holding brake	With
Holding torque	85.0 lbf.in (9.6 N.m) built-in
Mounting support	Asian standard flange
Motor flange size	5.1 in (130 mm)
Electrical connection	Connector MIL
Torque constant	1.52 N.m/A 68 °F (20 °C)
Back emf constant	92 V/krpm 68 °F (20 °C)
Number of motor poles	5.0
Rotor inertia	6.91 kg.cm²
Stator resistance	1.93 Ohm 68 °F (20 °C)
Stator inductance	23.91 mH 68 °F (20 °C)
Stator electrical time constant	12.9 ms 68 °F (20 °C)
Maximum radial force Fr	670 N 1000 rpm
Maximum axial force Fa	200 N
Brake pull-in power	19.7 W
Type of cooling	Natural convection
Length	7.2 in (183 mm)
Number of motor stacks	1
Centring collar diameter	4.3 in (110 mm)
Centring collar depth	0.3 in (8 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (9.2 mm)
Circle diameter of the mounting holes	5.7 in (145 mm)
Distance shaft shoulder-flange	0.3 in (8 mm)
Net weight	18.08 lb(US) (8.2 kg)
Sizing reference	BCH2
Network number of phases	1
Accuracy error [angular]	0.044 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)
Inertia	6.9 kg.cm² of brake 6.91 kg.cm² of motor

Environment

IP degree of protection	IP50 IM V3 IP65 IM B5, IM V1
Ambient air temperature for operation	32…104 °F (0…40 °C)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Package 1 Height	7.1 in (18.1 cm)
Package 1 Width	9.06 in (23.0 cm)
Package 1 Length	14.2 in (36.0 cm)
Package 1 Weight	20.64 lb(US) (9.36 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	**3 331 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**
Carbon footprint of the manufacturing phase [A1 to A3]	**54 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]	**3 275 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**1 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
REACh Regulation	**REACh Declaration**

Use Longer

Lifetime extension

Repair	**No**

Use Again

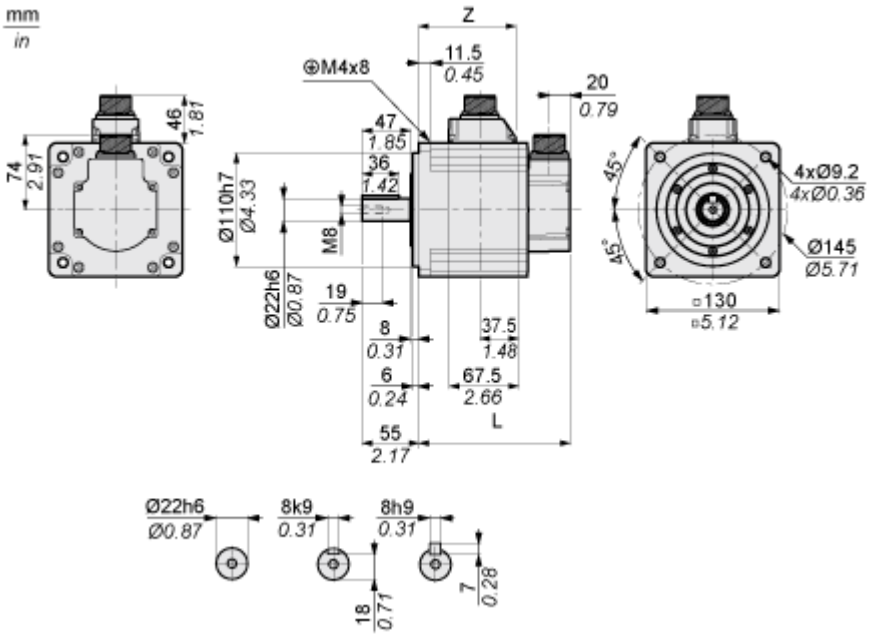
Repack and remanufacture

Circularity Profile	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Dimensions

Dimensions of Motor

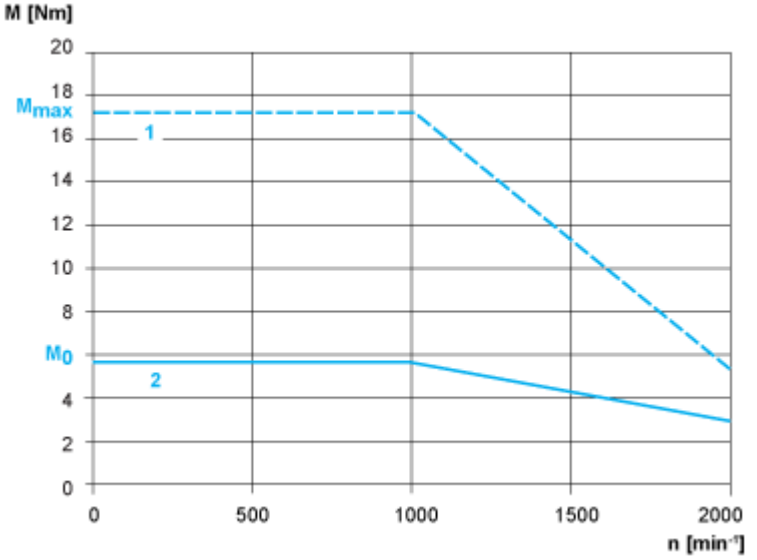


	mm	in.
L (without holding brake)	147	5.79
L (with holding brake)	183	7.2
Z	94.5	3.72

Performance Curves

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

Servo Motor with LXM28AU02●●● Servo Drive



1 : Peak torque

2 : Continuous torque