

# Product datasheet

Specifications



servo motor BCH2, Lexium, 130mm,  
500W, with oil seal, with key, 20 bit  
MT encoder, straight connection

BCH2MM0523MA6C

## Main

**Range compatibility** Easy Lexium 26  
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** 2.89 A

**Continuous stall torque** 2.39 N.m for LXM26D at 4.5 A, 220 V, single phase  
2.39 N.m for LXM26D at 4.5 A, 220 V, three phase  
2.39 N.m for LXM28 at 4.5 A, 220 V, single phase  
2.39 N.m for LXM28 at 4.5 A, 220 V, three phase  
2.39 N.m for LXM28 at 9 A, 110 V, single phase

**Continuous power** 500 W

**Peak stall torque** 7.16 N.m for LXM26D at 4.5 A, 220 V, single phase  
7.16 N.m for LXM26D at 4.5 A, 220 V, three phase  
7.16 N.m for LXM28... at 4.5 A, 220 V, single phase  
7.16 N.m for LXM28... at 4.5 A, 220 V, three phase  
7.16 N.m for LXM28... at 9 A, 110 V, single phase

**Nominal output power** 500 W for LXM26D at 4.5 A, 220 V, single phase  
500 W for LXM26D at 4.5 A, 220 V, three phase  
500 W for LXM28... at 4.5 A, 220 V, single phase  
500 W for LXM28... at 4.5 A, 220 V, three phase  
500 W for LXM28... at 9 A, 110 V, single phase

**Nominal torque** 2.39 N.m for LXM26D at 4.5 A, 220 V, single phase  
2.39 N.m for LXM26D at 4.5 A, 220 V, three phase  
2.39 N.m for LXM28... at 4.5 A, 220 V, single phase  
2.39 N.m for LXM28... at 4.5 A, 220 V, three phase  
2.39 N.m for LXM28... at 9 A, 110 V, single phase

**Nominal speed** 2000 rpm for LXM26D at 4.5 A, 220 V, single phase  
2000 rpm for LXM26D at 4.5 A, 220 V, three phase  
2000 rpm for LXM28... at 4.5 A, 220 V, single phase  
2000 rpm for LXM28... at 4.5 A, 220 V, three phase  
2000 rpm for LXM28... at 9 A, 110 V, single phase

**Maximum current Irms** 9.18 A for LXM28... at 0.5 kW, 220 V  
9.18 A for LXM28... at 0.5 kW, 110 V

**Maximum permanent current** 3.24 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

<b>Product compatibility</b>	LXM26D servo drive motor at 0.5 kW, 220 V, single phase LXM26D servo drive motor at 0.5 kW, 220 V, three phase LXM28... servo drive motor at 0.5 kW, 220 V, single phase LXM28... servo drive motor at 0.5 kW, 220 V, three phase LXM28... servo drive motor at 0.5 kW, 110 V, single phase
<b>Shaft end</b>	Keyed
<b>Shaft diameter</b>	22 mm
<b>Shaft length</b>	45 mm
<b>Key width</b>	8 mm
<b>Feedback type</b>	20 bits multi turn absolute encoder
<b>Holding brake</b>	Without
<b>Mounting support</b>	Asian standard flange
<b>Motor flange size</b>	130 mm
<b>Electrical connection</b>	Connector MIL
<b>Torque constant</b>	0.83 N.m/A at 20 °C
<b>Back emf constant</b>	50 V/krpm at 20 °C
<b>Number of motor poles</b>	5.0
<b>Rotor inertia</b>	6.63 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.62 Ohm at 20 °C
<b>Stator inductance</b>	7.14 mH at 20 °C
<b>Stator electrical time constant</b>	11.94 ms at 20 °C
<b>Maximum radial force Fr</b>	670 N at 2000 rpm
<b>Maximum axial force Fa</b>	200 N
<b>Brake pull-in power</b>	19.7 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	147 mm
<b>Number of motor stacks</b>	1
<b>Centring collar diameter</b>	110 mm
<b>Centring collar depth</b>	8 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	9.2 mm
<b>Circle diameter of the mounting holes</b>	145 mm
<b>Distance shaft shoulder-flange</b>	8 mm
<b>Net weight</b>	7 kg
<b>Sizing reference</b>	BCH2
<b>Network number of phases</b>	1
<b>Accuracy error [angular]</b>	0.044 °
<b>Temperature copper hot</b>	135 °C
<b>Temperature magnet hot</b>	100 °C
<b>Temperature magnet rt</b>	20 °C
<b>Inertia</b>	0.0 kg.cm <sup>2</sup> of brake 6.62 kg.cm <sup>2</sup> of motor

## Environment

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IP degree of protection	IP50 IM V3 IP65 IM B5, IM V1
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Ambient air temperature for operation	-20...40 °C
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	18.1 cm
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Package 1 Width	23.0 cm
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Package 1 Length	36.0 cm
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Package 1 Weight	7.95 kg
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## Contractual warranty

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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	2 482 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Carbon footprint of the manufacturing phase [A1 to A3]	46 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]	2 434 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.9 kg CO2 eq.

### Use Better



### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	<a href="#">REACH Declaration</a>
PVC free	Yes

### Use Longer



### Lifetime extension

Repair	No
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### Use Again



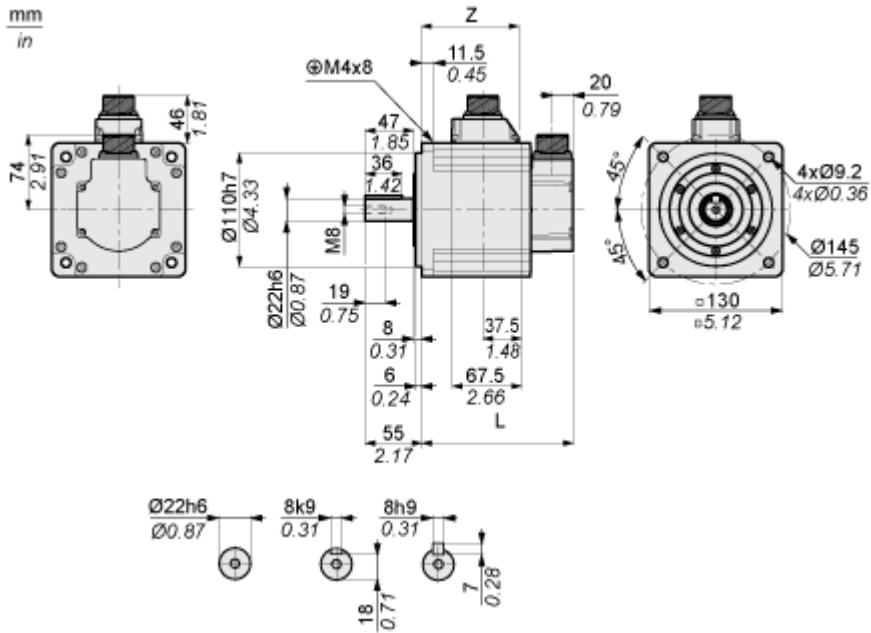
### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No

Dimensions Drawings

Dimensions

Dimensions of Motor



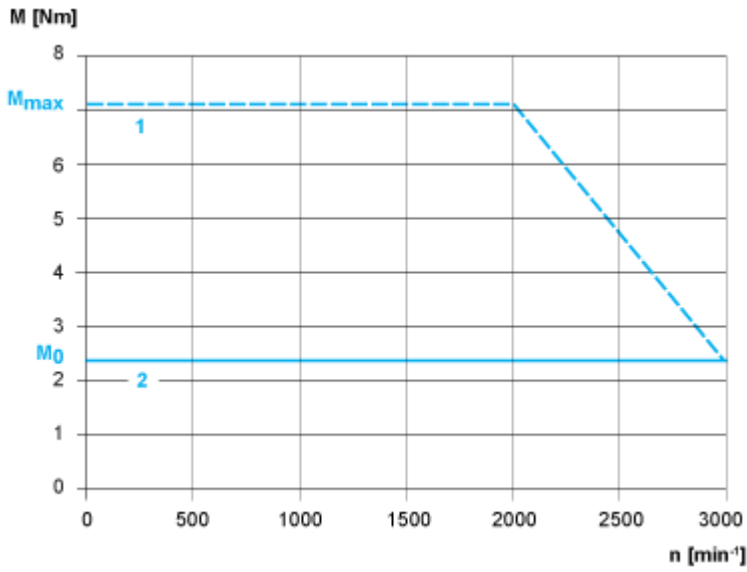
	mm	in.
L (without holding brake)	147	5.79
L (with holding brake)	183	7.2
Z	94.5	3.72

Performance Curves

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

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Servo Motor with LXM28AU04 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque