

# Product data sheet

Specifications



servo motor BCH; Lexium 28;  
80mm; 400W; 0.67kg.cm<sup>2</sup>; with oil  
seal; with key; leads connection

BCH2LF0433CA5C

## Main

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

## Complementary

Maximum mechanical speed	5000 rpm
[Us] rated supply voltage	220 V 110 V
Network number of phases	Single phase Three phase
Continuous stall current	2.29 A
Continuous stall torque	1.27 N.m for LXM26D at 2.6 A, 220 V, single phase 1.27 N.m for LXM26D at 2.6 A, 220 V, three phase 1.27 N.m for LXM28 at 2.6 A, 220 V, single phase 1.27 N.m for LXM28 at 2.6 A, 220 V, three phase 1.27 N.m for LXM28 at 5.7 A, 110 V, single phase
Continuous power	400 W
Peak stall torque	3.81 N.m for LXM26D at 2.6 A, 220 V, single phase 3.81 N.m for LXM26D at 2.6 A, 220 V, three phase 3.81 N.m for LXM28... at 2.6 A, 220 V, single phase 3.81 N.m for LXM28... at 2.6 A, 220 V, three phase 3.81 N.m for LXM28... at 5.7 A, 110 V, single phase
Nominal output power	400 W for LXM26D at 2.6 A, 220 V, single phase 400 W for LXM26D at 2.6 A, 220 V, three phase 400 W for LXM28... at 2.6 A, 220 V, single phase 400 W for LXM28... at 2.6 A, 220 V, three phase 400 W for LXM28... at 5.7 A, 110 V, single phase
Nominal torque	1.27 N.m for LXM26D at 2.6 A, 220 V, single phase 1.27 N.m for LXM26D at 2.6 A, 220 V, three phase 1.27 N.m for LXM28... at 2.6 A, 220 V, single phase 1.27 N.m for LXM28... at 2.6 A, 220 V, three phase 1.27 N.m for LXM28... at 5.7 A, 110 V, single phase
Nominal speed	3000 rpm for LXM26D at 2.6 A, 220 V, single phase 3000 rpm for LXM26D at 2.6 A, 220 V, three phase 3000 rpm for LXM28... at 2.6 A, 220 V, single phase 3000 rpm for LXM28... at 2.6 A, 220 V, three phase 3000 rpm for LXM28... at 5.7 A, 110 V, single phase
Maximum current Irms	7.73 A for LXM28... at 0.4 kW, 220 V 7.73 A for LXM28... at 0.4 kW, 110 V
Maximum permanent current	2.52 A

<b>Product compatibility</b>	LXM26D servo drive motor at 0.4 kW, 220 V, single phase LXM26D servo drive motor at 0.4 kW, 220 V, three phase LXM28... servo drive motor at 0.4 kW, 220 V, single phase LXM28... servo drive motor at 0.4 kW, 220 V, three phase LXM28... servo drive motor at 0.4 kW, 110 V, single phase
<b>Shaft end</b>	Keyed
<b>Shaft diameter</b>	14 mm
<b>Shaft length</b>	30 mm
<b>Key width</b>	5 mm
<b>Feedback type</b>	20 bits single turn absolute encoder
<b>Holding brake</b>	Without
<b>Mounting support</b>	Asian standard flange
<b>Motor flange size</b>	80 mm
<b>Electrical connection</b>	Free lead
<b>Torque constant</b>	0.55 N.m/A at 20 °C
<b>Back emf constant</b>	33.5 V/krpm at 20 °C
<b>Number of motor poles</b>	4.0
<b>Rotor inertia</b>	0.67 kg.cm <sup>2</sup>
<b>Stator resistance</b>	3.2 Ohm at 20 °C
<b>Stator inductance</b>	11.3 mH at 20 °C
<b>Stator electrical time constant</b>	3.53 ms at 20 °C
<b>Maximum radial force Fr</b>	332 N at 3000 rpm
<b>Maximum axial force Fa</b>	115 N
<b>Brake pull-in power</b>	10.2 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	112 mm
<b>Number of motor stacks</b>	1
<b>Centring collar diameter</b>	70 mm
<b>Centring collar depth</b>	4 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	6.6 mm
<b>Circle diameter of the mounting holes</b>	90 mm
<b>Distance shaft shoulder-flange</b>	4 mm
<b>Net weight</b>	2 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

## Environment

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

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<b>Unit Type of Package 1</b>	PCE
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<b>Number of Units in Package 1</b>	1
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<b>Package 1 Height</b>	13.8 cm
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<b>Package 1 Width</b>	17.5 cm
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<b>Package 1 Length</b>	29.6 cm
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<b>Package 1 Weight</b>	2.475 kg
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<b>Unit Type of Package 2</b>	CAR
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<b>Number of Units in Package 2</b>	24
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<b>Package 2 Height</b>	73.5 cm
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<b>Package 2 Width</b>	60.0 cm
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<b>Package 2 Length</b>	80.0 cm
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<b>Package 2 Weight</b>	59.4 kg
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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 2405

Environmental Disclosure [Product Environmental Profile](#)

## 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](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

PVC free Yes

## Use Again

### Repack and remanufacture

End of life manual availability [End of Life Information](#)

Take-back No

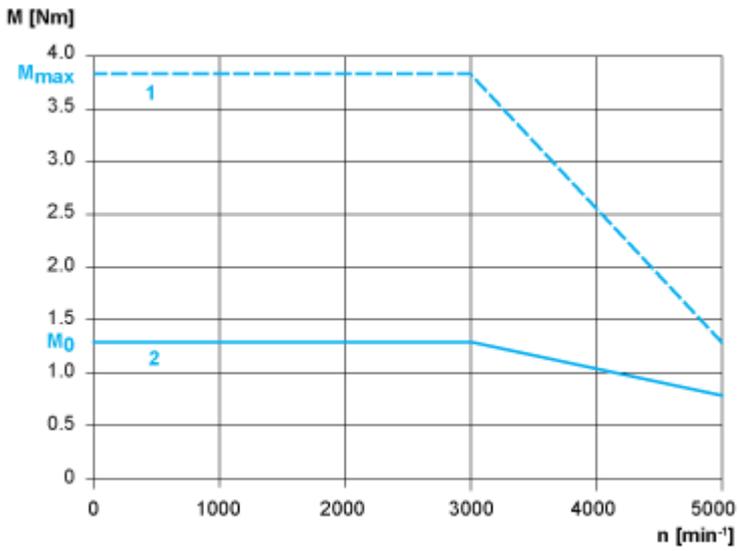


Performance Curves

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

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Servo Motor with LXM28AU02••• Servo Drive



- 1 : Peak torque
- 2 : Continuous torque