

# Product datasheet

Specifications



servo motor BCH2, Lexium, 60mm,  
400W, with oil seal, with key, 20 bit  
MT encoder, leads connection

BCH2LD0433MA5C

## Main

Range compatibility	Lexium 28 Easy Lexium 26
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Device short name	BCH2
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Product or component type	Servo motor
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## Complementary

Maximum mechanical speed	5000 rpm
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[Us] rated supply voltage	220 V 110 V
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Network number of phases	Three phase Single phase
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Continuous stall current	2.19 A
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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
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Continuous power	400 W
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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
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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
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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
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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
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Maximum current Irms	7.76 A for LXM28... at 0.4 kW, 220 V 7.76 A for LXM28... at 0.4 kW, 110 V
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Maximum permanent current	2.5 A
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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 0.4 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 multi turn absolute encoder
<b>Holding brake</b>	Without
<b>Mounting support</b>	Asian standard flange
<b>Motor flange size</b>	60 mm
<b>Electrical connection</b>	Free lead
<b>Torque constant</b>	0.58 N.m/A at 20 °C
<b>Back emf constant</b>	35 V/krpm at 20 °C
<b>Number of motor poles</b>	4.0
<b>Rotor inertia</b>	0.27 kg.cm <sup>2</sup>
<b>Stator resistance</b>	5.2 Ohm at 20 °C
<b>Stator inductance</b>	12.0 mH at 20 °C
<b>Stator electrical time constant</b>	2.31 ms at 20 °C
<b>Maximum radial force Fr</b>	200 N at 3000 rpm
<b>Maximum axial force Fa</b>	70 N
<b>Brake pull-in power</b>	11.2 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	129 mm
<b>Number of motor stacks</b>	2
<b>Centring collar diameter</b>	50 mm
<b>Centring collar depth</b>	5.5 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	5.5 mm
<b>Circle diameter of the mounting holes</b>	70 mm
<b>Distance shaft shoulder-flange</b>	5.5 mm
<b>Net weight</b>	1.45 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 0.26 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	11.2 cm
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Package 1 Width	14.5 cm
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Package 1 Length	26.5 cm
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Package 1 Weight	1.78 kg
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Unit Type of Package 2	S06
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Number of Units in Package 2	40
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Package 2 Height	80 cm
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Package 2 Width	60 cm
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Package 2 Length	72 cm
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Package 2 Weight	82.2 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	2 969 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	11 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 958 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Free of Substances of Very High Concern above the threshold</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



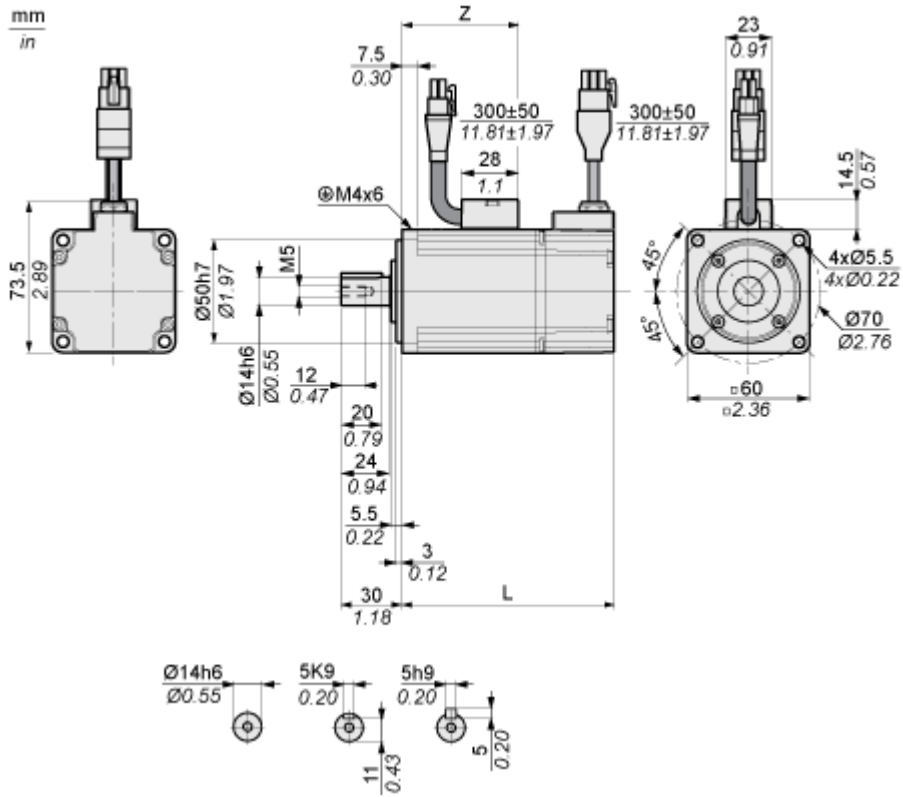
### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
Take-back	Nej

Dimensions Drawings

Dimensions

Dimensions of Motor



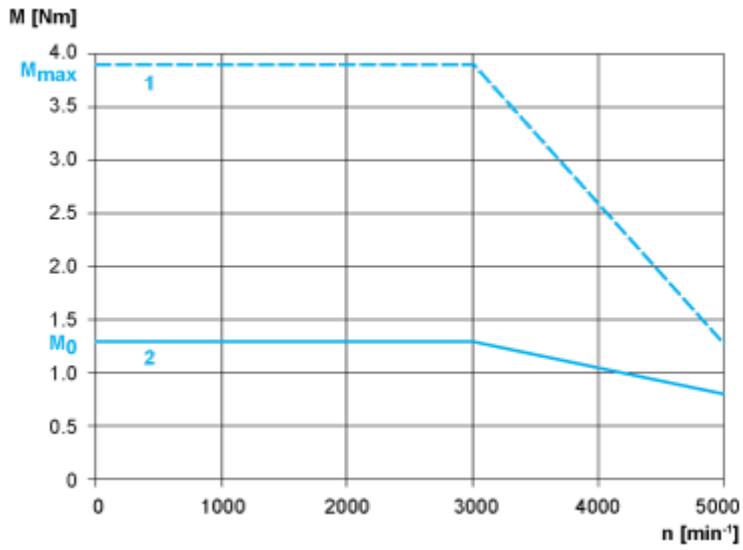
	mm	in.
L (without holding brake)	129	5.08
L (with holding brake)	165	6.5
Z	82	3.23

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