

Product data sheet

Specifications



servo motor BCH, Lexium 28,
60mm, 400W, 0.27kg.cmÂ², without
oil seal, with key, leads connection

BCH2LD0431CA5C

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	2.19 A
Continuous stall torque	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 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 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 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 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	7.76 A for LXM28... at 0.4 kW, 220 V 7.76 A for LXM28... at 0.4 kW, 110 V
Maximum permanent current	2.5 A
Product compatibility	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
Shaft end	Keyed
Shaft diameter	14 mm
Shaft length	30 mm
key width	5 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	Without

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

Mounting support	Asian standard flange
Motor flange size	60 mm
Electrical connection	Free lead
Torque constant	0.58 N.m/A at 20 °C
Back emf constant	35 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	0.27 kg.cm²
Stator resistance	5.2 Ohm at 20 °C
Stator inductance	12.0 mH at 20 °C
Stator electrical time constant	2.31 ms at 20 °C
Maximum radial force Fr	200 N at 3000 rpm
Maximum axial force Fa	70 N
Brake pull-in power	11.2 W
Type of cooling	Natural convection
Length	129 mm
Number of motor stacks	2
Centring collar diameter	50 mm
Centring collar depth	5.5 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	70 mm
Distance shaft shoulder-flange	5.5 mm
Product weight	1.45 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

Environment

IP degree of protection	IP54 IM B5, IM V1 IP50 IM V3
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	11.1 cm
Package 1 Width	14.5 cm
Package 1 Length	26.5 cm

Package 1 Weight	2.08 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	2970
Environmental Disclosure	Product Environmental Profile

Use Better

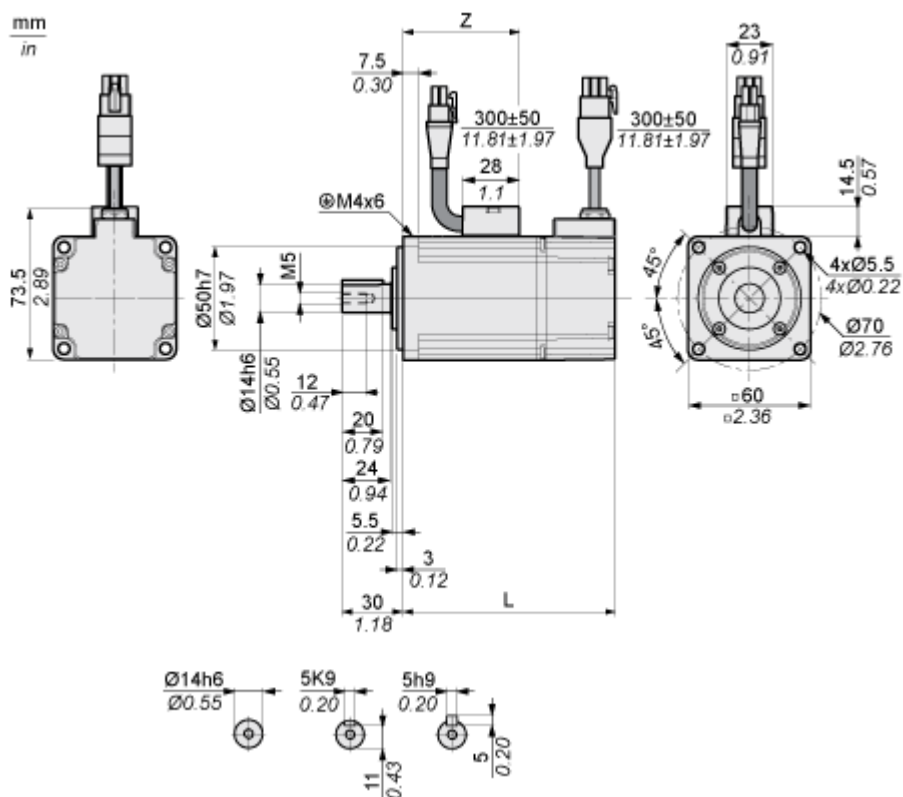
 Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: 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
PVC free	Yes

Use Again

 Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

BCH2LD0431CA5C

Dimensions

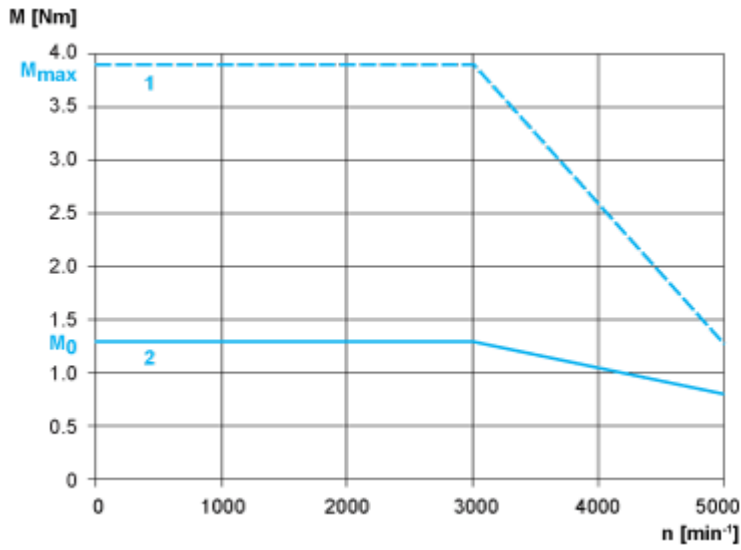


	mm	in.
L (without holding brake)	129	5.08
L (with holding brake)	165	6.5
Z	82	3.23

Performance Curves

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

Servo Motor with LXM28AU04 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque