

Product datasheet

Specifications



servo motor BCH, Lexium 28,
40mm, 50W, 0.054kg.cm², with oil
seal, smooth, leads connection

BCH2MBA532CA5C

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	0.54 A
Continuous stall torque	0.16 N.m for LXM28... at 0.64 A, 220 V, single phase 0.16 N.m for LXM28... at 0.64 A, 220 V, three phase 0.16 N.m for LXM28... at 1.2 A, 110 V, single phase
Continuous power	50 W
Peak stall torque	0.48 N.m for LXM28... at 0.64 A, 220 V, single phase 0.48 N.m for LXM28... at 0.64 A, 220 V, three phase 0.48 N.m for LXM28... at 1.2 A, 110 V, single phase
Nominal output power	50 W for LXM28... at 0.64 A, 220 V, single phase 50 W for LXM28... at 0.64 A, 220 V, three phase 50 W for LXM28... at 1.2 A, 110 V, single phase
Nominal torque	0.16 N.m for LXM28... at 0.64 A, 220 V, single phase 0.16 N.m for LXM28... at 0.64 A, 220 V, three phase 0.16 N.m for LXM28... at 1.2 A, 110 V, single phase
Nominal speed	3000 rpm for LXM28... at 0.64 A, 220 V, single phase 3000 rpm for LXM28... at 0.64 A, 220 V, three phase 3000 rpm for LXM28... at 1.2 A, 110 V, single phase
Maximum current Irms	1.77 A for LXM28... at 0.05 kW, 220 V 1.77 A for LXM28... at 0.05 kW, 110 V
Maximum permanent current	0.59 A
Product compatibility	LXM28... servo drive motor at 0.05 kW, 220 V, single phase LXM28... servo drive motor at 0.05 kW, 220 V, three phase LXM28... servo drive motor at 0.05 kW, 110 V, single phase
Shaft end	Smooth shaft
Shaft diameter	8 mm
Shaft length	25 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	Without
Mounting support	Asian standard flange

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

Motor flange size	40 mm
Electrical connection	Free lead
Torque constant	0.3 N.m/A at 20 °C
Back emf constant	18 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	0.054 kg.cm²
Stator resistance	31 Ohm at 20 °C
Stator inductance	24.7 mH at 20 °C
Stator electrical time constant	0.8 ms at 20 °C
Maximum radial force Fr	85 N at 3000 rpm
Maximum axial force Fa	40 N
Brake pull-in power	4.35 W
Type of cooling	Natural convection
Length	82 mm
Number of motor stacks	1
Centring collar diameter	30 mm
Centring collar depth	3 mm
Number of mounting holes	4
Mounting holes diameter	4.5 mm
Circle diameter of the mounting holes	46 mm
Distance shaft shoulder-flange	3 mm
Net weight	0.4 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
Inertia	0.0 kg.cm² of brake 0.044 kg.cm² of motor

Environment

IP degree of protection	IP50 IM V3 IP65 IM B5, IM V1
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	8.500 cm
Package 1 Width	13.500 cm
Package 1 Length	24.500 cm

Package 1 Weight	660.000 g
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Contractual warranty

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	568 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	4 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	564 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Compliant
REACH Regulation	Free of Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



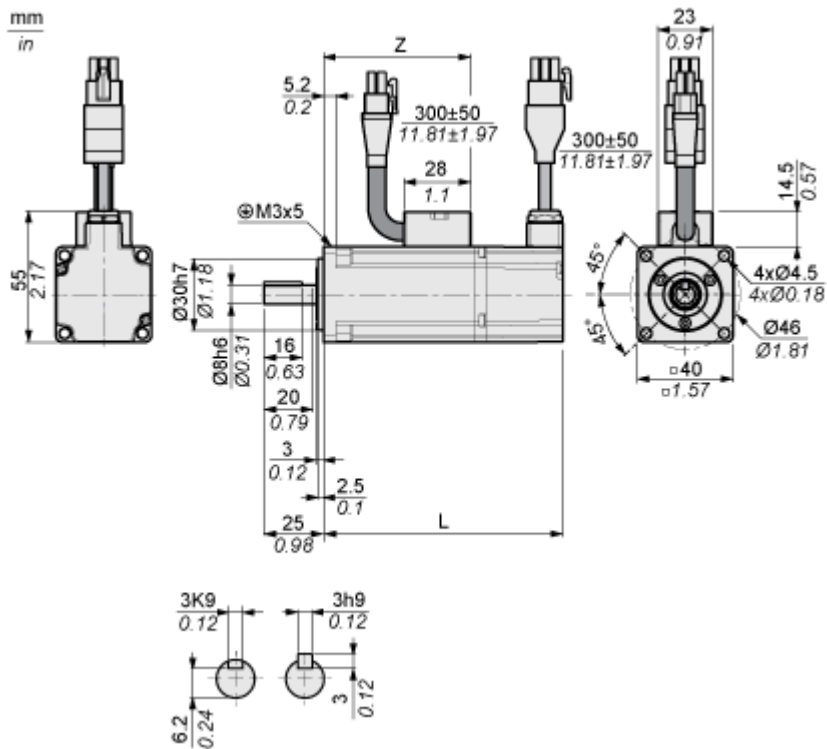
Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

Dimensions

Dimensions of Motor

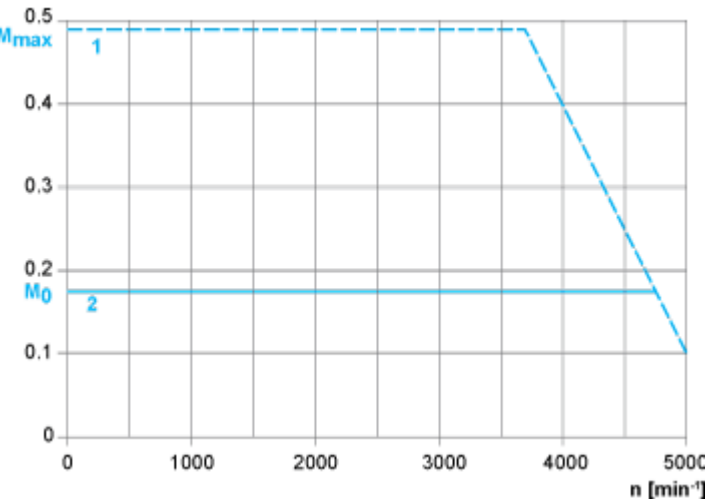


	mm	in.
L (without holding brake)	82	3.23
L (with holding brake)	112	4.41
Z	43.5	1.71

Performance Curves

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

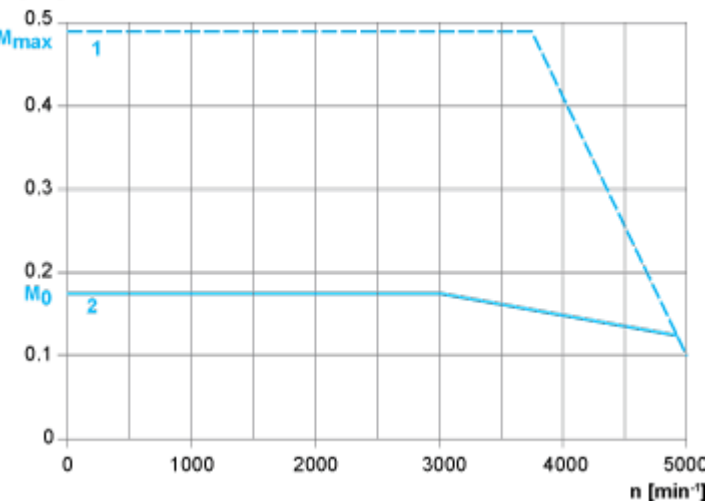
Servo Motor Without Shaft Sealing Ring and LXM28AUA5 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque

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

Servo Motor with shaft sealing ring and LXM28AUA5 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque