

Product datasheet

Specifications



servo motor BCH2, Lexium, 80mm,
400W, with oil seal, with key, 20 bit
MT encoder, leads connection

BCH2LF0433MA5C

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	2.29 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	7.73 A for LXM28... at 0.4 kW, 220 V 7.73 A for LXM28... at 0.4 kW, 110 V
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Maximum permanent current	2.52 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

Product compatibility	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
Shaft end	Keyed
Shaft diameter	14 mm
Shaft length	30 mm
Key width	5 mm
Feedback type	20 bits multi turn absolute encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	80 mm
Electrical connection	Free lead
Torque constant	0.55 N.m/A at 20 °C
Back emf constant	33.5 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	0.67 kg.cm ²
Stator resistance	3.2 Ohm at 20 °C
Stator inductance	11.3 mH at 20 °C
Stator electrical time constant	3.53 ms at 20 °C
Maximum radial force Fr	332 N at 3000 rpm
Maximum axial force Fa	115 N
Brake pull-in power	10.2 W
Type of cooling	Natural convection
Length	112 mm
Number of motor stacks	1
Centring collar diameter	70 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	6.6 mm
Circle diameter of the mounting holes	90 mm
Distance shaft shoulder-flange	4 mm
Net weight	2 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.cm ² of brake 0.66 kg.cm ² of motor

Environment

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

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	13.9 cm
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Package 1 Width	17.2 cm
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Package 1 Length	29.5 cm
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Package 1 Weight	2.47 kg
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Unit Type of Package 2	S03
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Number of Units in Package 2	2
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Package 2 Height	30 cm
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Package 2 Width	30 cm
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Package 2 Length	40 cm
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Package 2 Weight	5.413 kg
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Unit Type of Package 3	P06
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Number of Units in Package 3	16
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Package 3 Height	80 cm
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Package 3 Width	60 cm
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Package 3 Length	72 cm
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Package 3 Weight	50.304 kg
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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	2 405 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	15 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 390 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.

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
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



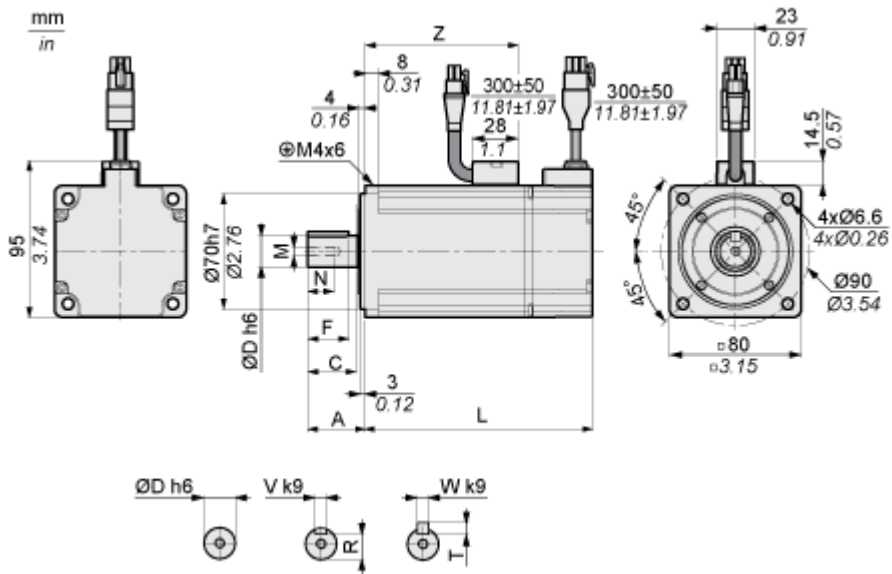
Repack and remanufacture

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

Dimensions Drawings

Dimensions

Dimensions of Motor

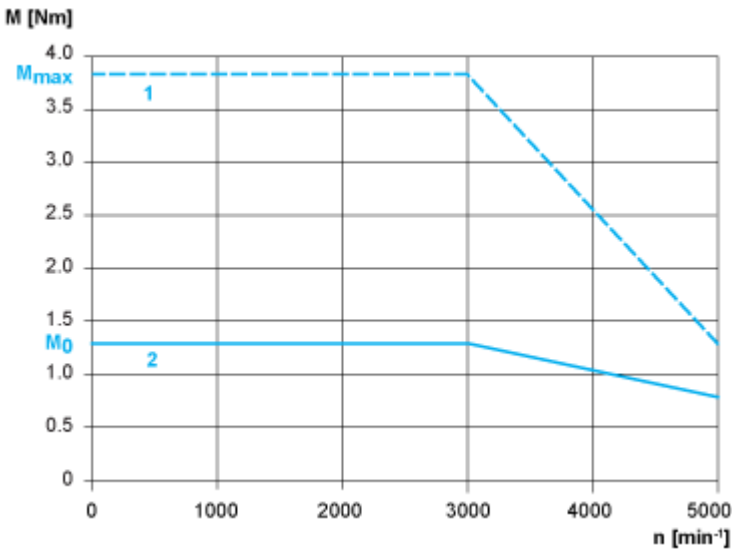


	mm	in.
L (without holding brake)	112	4.41
L (with holding brake)	152	5.98
A	30	1.18
C	24.5	0.96
D	14	0.55
F	20	0.79
R	11	0.43
T	5	0.2
V	5	0.2
W	5	0.2
Z	68	2.68

Performance Curves

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

Servo Motor with LXM28AU02••• Servo Drive



- 1 : Peak torque
- 2 : Continuous torque