Product datasheet





servo motor BCH, Lexium 28, 40mm, 100W, 0.076kg.cm², without oil seal, with key, brake, leads connection

BCH2MB0131CF5C



! Discontinued on: Aug 27, 2020



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	0.81 A
Continuous stall torque	0.32 N.m for LXM28 at 0.9 A, 220 V, single phase 0.32 N.m for LXM28 at 0.9 A, 220 V, three phase 0.32 N.m for LXM28 at 1.8 A, 110 V, single phase
Continuous power	100 W
Peak stall torque	0.96 N.m for LXM28 at 0.9 A, 220 V, single phase 0.96 N.m for LXM28 at 0.9 A, 220 V, three phase 0.96 N.m for LXM28 at 1.8 A, 110 V, single phase
Nominal output power	100 W for LXM28 at 0.9 A, 220 V, single phase 100 W for LXM28 at 0.9 A, 220 V, three phase 100 W for LXM28 at 1.8 A, 110 V, single phase
Nominal torque	0.32 N.m for LXM28 at 0.9 A, 220 V, single phase 0.32 N.m for LXM28 at 0.9 A, 220 V, three phase 0.32 N.m for LXM28 at 1.8 A, 110 V, single phase
Nominal speed	3000 rpm for LXM28 at 0.9 A, 220 V, single phase 3000 rpm for LXM28 at 0.9 A, 220 V, three phase 3000 rpm for LXM28 at 1.8 A, 110 V, single phase
Maximum current Irms	2.65 A for LXM28 at 0.1 kW, 220 V 2.65 A for LXM28 at 0.1 kW, 110 V
Maximum permanent current	0.89 A
Product compatibility	LXM28 servo drive motor at 0.1 kW, 220 V, single phase LXM28 servo drive motor at 0.1 kW, 220 V, three phase LXM28 servo drive motor at 0.1 kW, 110 V, single phase
Shaft end	Keyed
Shaft diameter	8 mm
Shaft length	25 mm
Key width	3 mm

Feedback type	20 bits single turn absolute encoder
Holding brake	With
Holding torque	0.32 N.m built-in
mounting support	Asian standard flange
Motor flange size	40 mm
Electrical connection	Free lead
Torque constant	0.4 N.m/A at 20 °C
Back emf constant	24 V/krpm at 20 °C
Rotor inertia	0.076 kg.cm²
Stator resistance	23.4 Ohm at 20 °C
Stator inductance	20.6 mH at 20 °C
Stator electrical time constant	0.88 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	130 mm
Number of motor stacks	2
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	0.77 kg

Environment

IP degree of protection	IP54 IM B5, IM V1 IP50 IM V3
Ambient air temperature for operation	040 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	13.0 cm
Package 1 Length	24.0 cm
Package 1 Weight	933.0 g



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Transparency RoHS/REACh

Well-being performance

	Reach Free Of Svhc	
⊘	Mercury Free	
⊘	Rohs Exemption Information	Yes

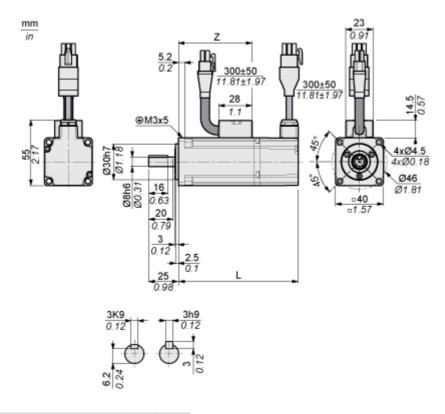
Certifications & Standards

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
Circularity Profile	End of Life Information	

Dimensions Drawings

Dimensions

Dimensions of Motor

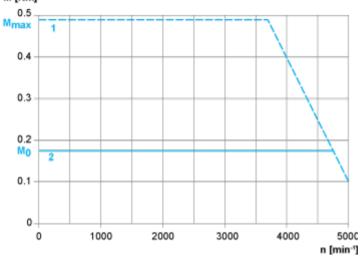


	mm	in.
L (without holding brake)	100	3.94
L (with holding brake)	130	5.12
Z	61.5	2.42

Performance Curves

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

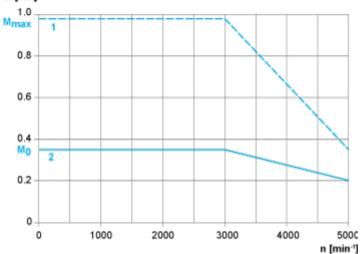
Servo Motor without shaft sealing ring and LXM28AU01●●● Servo Drive M [Nm]



- 1: Peak torque
- 2: Continuous torque

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

Servo Motor with shaft sealing ring and LXM28AU01●●● Servo Drive M [Nm]



- 1: Peak torque
- 2: Continuous torque