

Product data sheet

Specifications



servo motor BCH, no oil seal, w key, 20-bit encoder, w/o brake-straight con

BCH1303N12A1C

⚠ Discontinued on: 31 December 2018

⚠ End-of-service on: 14 April 2021

⚠ Discontinued

Main

Range compatibility	Lexium 23 Plus
Product or component type	Servo motor
Device short name	BCH

Complementary

Maximum mechanical speed	3000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Single phase
Continuous stall current	8.3 A
Continuous power	1.5 kW
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	22 mm
Shaft length	47 mm
Key width	8 mm
Feedback type	20 bits incremental encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	130 mm
Torque constant	0.87 N.m/A
Back emf constant	31.8 V/krpm at 20 °C
Rotor inertia	11.18 kg.cm²
Stator resistance	0.52 Ohm at 20 °C
Stator inductance	8.02 mH at 20 °C
Stator electrical time constant	15.31 ms at 20 °C
Maximum radial force Fr	490 N
Maximum axial force Fa	98 N
Brake pull-in power	19 W

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

Type of cooling	Natural convection
Length	167.5 mm
Number of motor stacks	3
Centring collar diameter	110 mm
Centring collar depth	6 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	145 mm
Distance shaft shoulder-flange	47 mm
Net weight	7.5 kg

Environment

IP degree of protection	IP40
Ambient air temperature for operation	0...40 °C

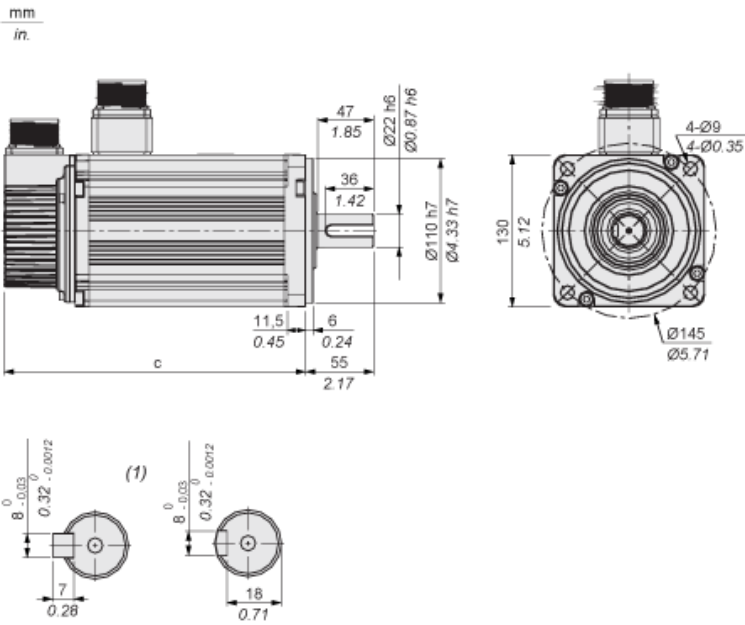
Packing Units

Package 1 Weight	8.990 kg
Package 1 Height	2.500 dm
Package 1 width	3.000 dm
Package 1 Length	3.700 dm

Contractual warranty

Warranty	18 months
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Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

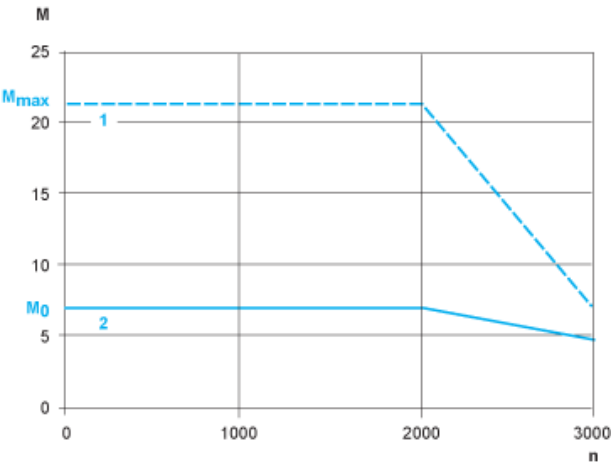
c (without holding brake)	c (with holding brake)
167.5	202

Dimensions in in.

c (without holding brake)	c (with holding brake)
6.59	7.95

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U15M3X Servo Drive



- M :

Torque in Nm
- n :

Speed in rpm
- 1 :

Peak torque
- 2 :

Continuous torque

Recommended replacement(s)

BCH1303N12A1C is replaced by:

1x



servo motor BCH, 130mm, 1500W, no oil seal, w key, straight con

BCH2MM1521CA6C