

Product data sheet

Specifications



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

BCH1302N12A1C

⚠ Discontinued on: 31 December 2018

⚠ To be end-of-service on: 31 December 2023

⚠ Discontinued - Service only

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	5.6 A
Continuous power	1 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	0.85 N.m/A
Back emf constant	31.9 V/krpm at 20 °C
Rotor inertia	8.41 kg.cm²
Stator resistance	0.94 Ohm at 20 °C
Stator inductance	11.98 mH at 20 °C
Stator electrical time constant	12.88 ms at 20 °C
Maximum radial force Fr	490 N
Maximum axial force Fa	98 N
Brake pull-in power	19 W

Type of cooling	Natural convection
Length	147.5 mm
Number of motor stacks	2
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 kg

Environment

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

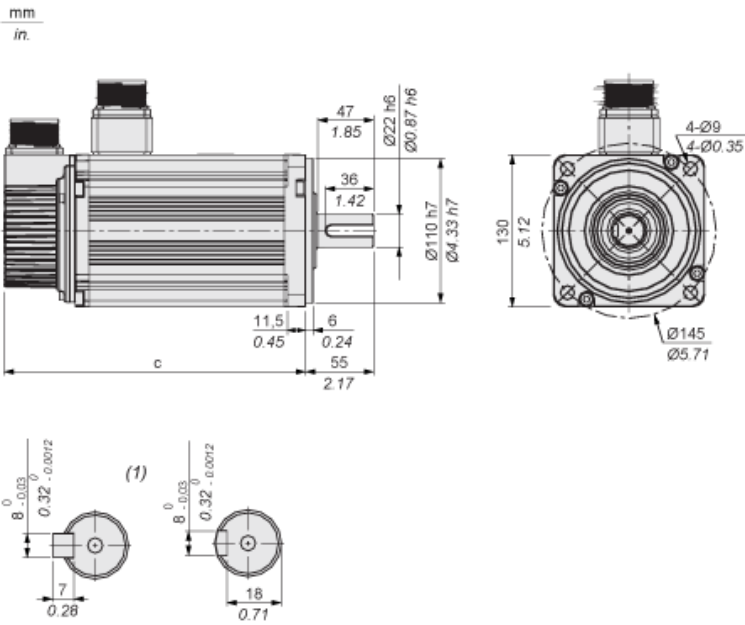
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	7.582 kg
Package 1 Height	24.5 cm
Package 1 width	29 cm
Package 1 Length	36.5 cm
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Weight	43.328 kg
Package 2 Height	73.5 cm
Package 2 width	60 cm
Package 2 Length	80 cm

Contractual warranty

Warranty	18 months
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Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

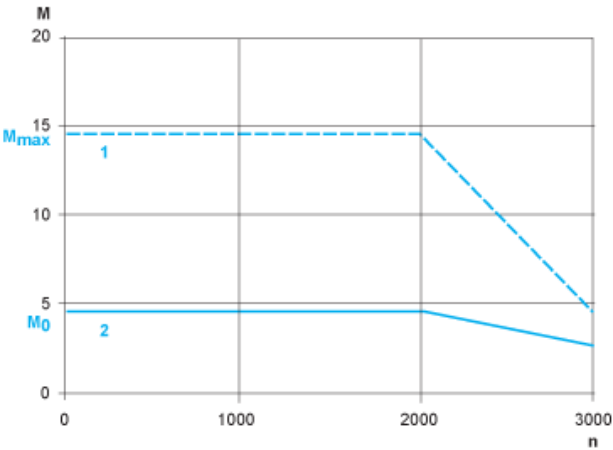
c (without holding brake)	c (with holding brake)
147.5	183.5

Dimensions in in.

c (without holding brake)	c (with holding brake)
5.81	7.22

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U10M3X Servo Drive



- M : Torque in Nm
- n : Speed in rpm
- 1 : Peak torque
- 2 : Continuous torque

Recommended replacement(s)

BCH1302N12A1C is replaced by:

1x



servo motor BCH, 130mm, 1000W, no oil seal, w key, straight con
BCH2MM1021CA6C