

# Product datasheet

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: 30 June 2022

! 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.cm <sup>2</sup>
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

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

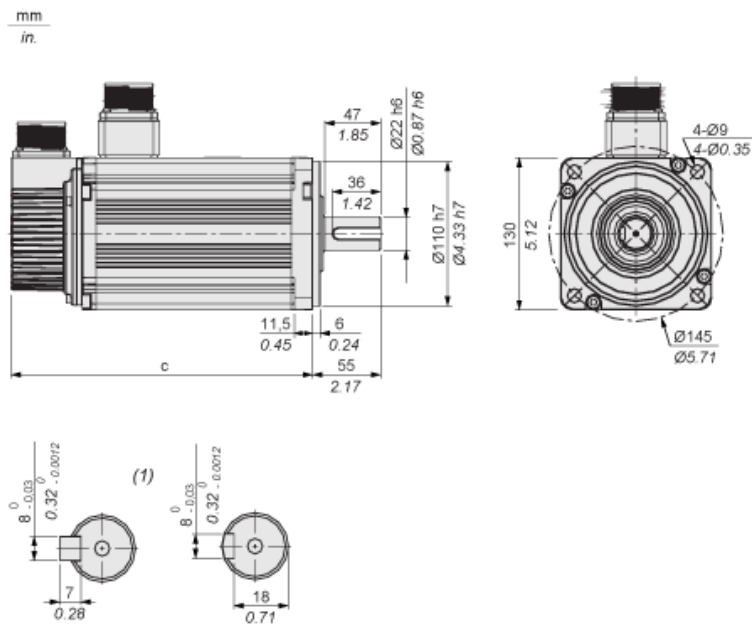
## Environment

<b>IP degree of protection</b>	IP40
<b>Ambient air temperature for operation</b>	0...40 °C

## Contractual warranty

<b>Warranty</b>	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

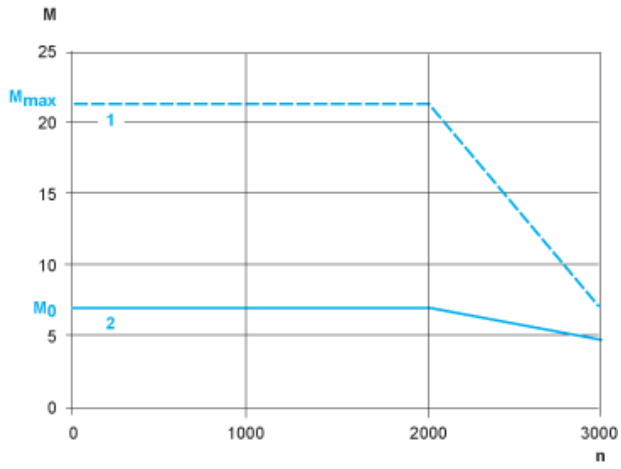
Dimensions in in.

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

**Torque/Speed Curves with 220 V Single Phase Supply Voltage**

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Servo Motor with LXM23•U15M3X Servo Drive



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

**Recommended replacement(s)**