

# Product datasheet

Specifications



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

BCH1001O12A1C

! Discontinued - Service only

! Discontinued on: 31 Dec 2018

! End-of-service on: 31 Dec 2023

## Main

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

## Complementary

Maximum mechanical speed	5000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Single phase
Continuous stall current	7.3 A
Continuous power	1 kW
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	22 mm
Shaft length	37 mm
Key width	8 mm
Feedback type	20 bits incremental encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	100 mm
Torque constant	0.43 N.m/A
Back emf constant	16.8 V/krpm at 20 °C
Rotor inertia	2.65 kg.cm <sup>2</sup>
Stator resistance	0.4 Ohm at 20 °C
Stator inductance	3.62 mH at 20 °C
Stator electrical time constant	9.3 ms at 20 °C
Maximum radial force Fr	490 N
Maximum axial force Fa	98 N
Brake pull-in power	19.4 W
Type of cooling	Natural convection
Length	153.5 mm

Number of motor stacks	1
Centring collar diameter	95 mm
Centring collar depth	5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Distance shaft shoulder-flange	37 mm
Net weight	4.3 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 Height	18.0 cm
Package 1 Width	24.0 cm
Package 1 Length	32.0 cm
Package 1 Weight	4.597 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	68.164 kg

## 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

[Environmental Disclosure](#)

[Product Environmental Profile](#)

## Use Longer



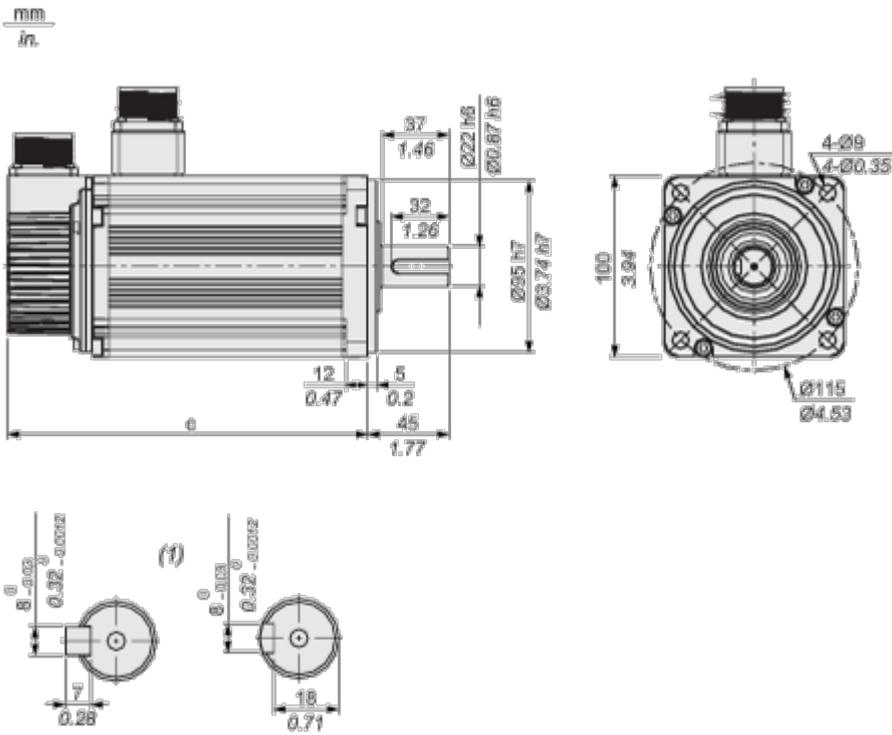
### Lifetime extension

[Repair](#)

[No](#)

Dimensions Drawings

Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without holding brake)	c (with holding brake)
153.5	192.5

Dimensions in in.

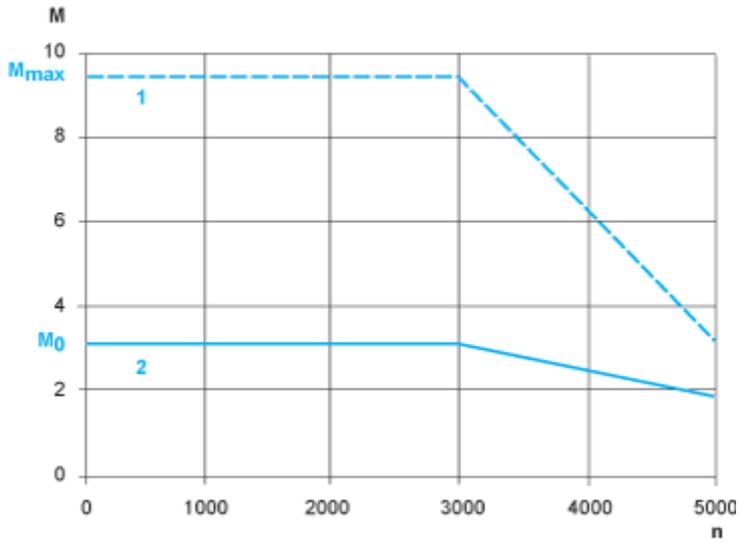
c (without holding brake)	c (with holding brake)
6.04	7.58

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

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Servo Motor with LXM23•U10M3X Servo Drive



M : Torque in Nm

n : Speed in rpm

1 : Peak torque

2 : Continuous torque