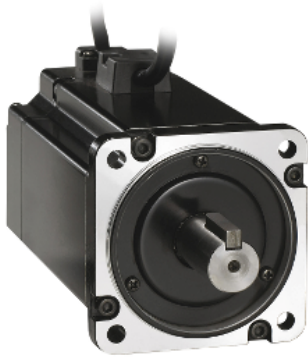


# Product datasheet

Specifications



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

BCH0801O12A1C

! To be discontinued on: 31 December 2023

! 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	5000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Single phase
Continuous stall current	2.6 A
Continuous power	0.4 kW
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	14 mm
Shaft length	24.5 mm
Key width	5 mm
Feedback type	20 bits incremental encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	80 mm
Torque constant	0.49 N.m/A
Back emf constant	18.5 V/krpm at 20 °C
Rotor inertia	0.68 kg.cm <sup>2</sup>
Stator resistance	1.86 Ohm at 20 °C
Stator inductance	14.78 mH at 20 °C
Stator electrical time constant	7.96 ms at 20 °C
Maximum radial force Fr	245 N
Maximum axial force Fa	98 N
Brake pull-in power	8.3 W

Type of cooling	Natural convection
Length	112.3 mm
Number of motor stacks	1
Centring collar diameter	70 mm
Centring collar depth	3 mm
Number of mounting holes	4
Mounting holes diameter	6.6 mm
Circle diameter of the mounting holes	90 mm
Distance shaft shoulder-flange	24.5 mm
Net weight	2.1 kg

## Environment

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

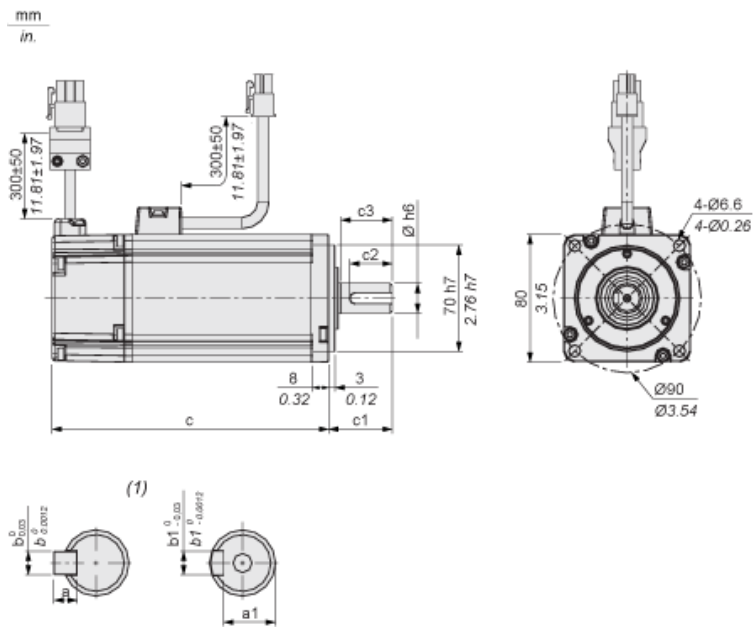
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	18.6 cm
Package 1 Width	14.2 cm
Package 1 Length	25.7 cm
Package 1 Weight	2.51 kg
Unit Type of Package 2	S06
Number of Units in Package 2	30
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	88.3 kg

## Contractual warranty

Warranty	18 months
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Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

Ø	a	a1	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
14	5	11	5	5	105.5	141.6	30	20	24.5

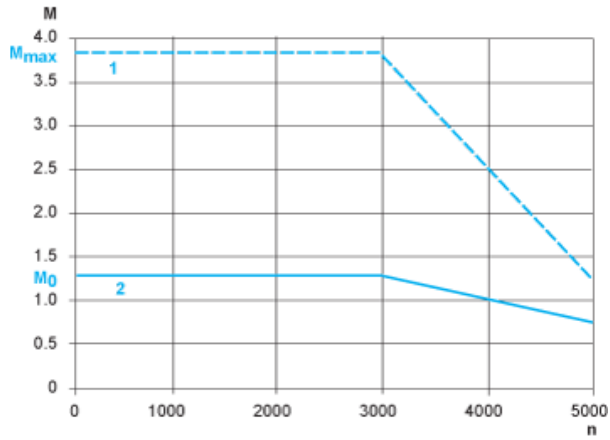
Dimensions in in.

Ø	a	a1	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
0.55	0.20	0.43	0.20	0.20	4.15	5.57	1.18	0.79	0.96

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

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Servo Motor with LXM23•U04M3X Servo Drive



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

**Recommended replacement(s)**