

# Product datasheet

Specifications



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

BCH0601O12A1C

! Discontinued - Service only

! Discontinued on: 31-Dec-2023

! End-of-service on: 31-Dec-2023

## 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	1.55 A
Continuous Power	0.2 kW
Shaft End	Keyed
Second Shaft	Without second shaft end
Shaft Diameter	14 mm
Shaft Length	24 mm
Key Width	5 mm
Feedback Type	20 bits incremental encoder
Holding Brake	Without
Mounting Support	Asian standard flange
Motor Flange Size	60 mm
Torque Constant	0.41 N.m/A
Back Emf Constant	17.4 V/krpm at 20 °C
Rotor Inertia	0.177 kg.cm <sup>2</sup>
Stator Resistance	5.58 Ohm at 20 °C
Stator Inductance	24.14 mH at 20 °C
Stator Electrical Time Constant	4.3 ms at 20 °C
Maximum Radial Force Fr	196 N
Maximum Axial Force Fa	68 N
Brake Pull-In Power	6.5 W
Type Of Cooling	Natural convection
Length	105.5 mm

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

Number Of Motor Stacks	1
Centring Collar Diameter	50 mm
Centring Collar Depth	3 mm
Number Of Mounting Holes	4
Mounting Holes Diameter	5.5 mm
Circle Diameter Of The Mounting Holes	70 mm
Distance Shaft Shoulder-Flange	24 mm
Net Weight	1.2 kg

## Environment

Ip Degree Of Protection	IP40
Ambient Air Temperature For Operation	0...40 °C

## Packing Units

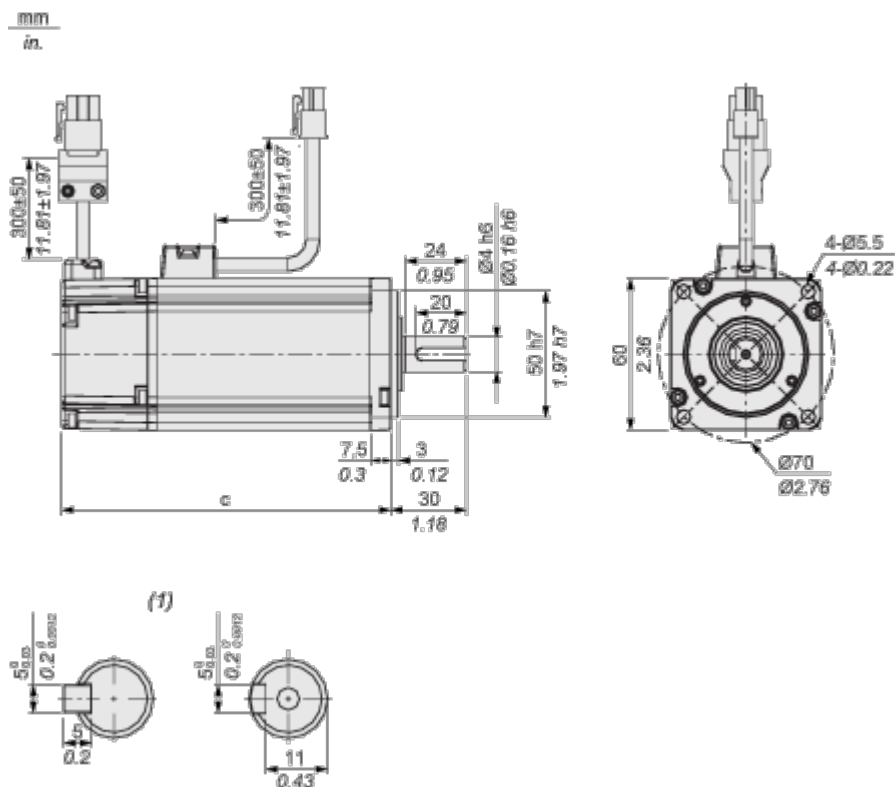
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	17.6 cm
Package 1 Width	14.2 cm
Package 1 Length	25.7 cm
Package 1 Weight	1.47 kg
Unit Type Of Package 2	S06
Number Of Units In Package 2	30
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	57.1 kg

## Contractual warranty

Warranty	18 months
----------	-----------

## Dimensions Drawings

## Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without holding brake)	c (with holding brake)
105.5	141.6

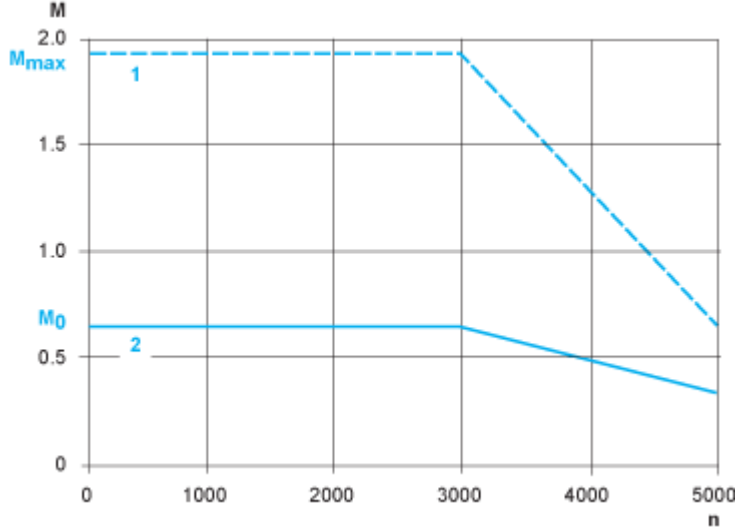
Dimensions in in.

c (without holding brake)	c (with holding brake)
4.15	5.57

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U02M3X Servo Drive



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