

# Product datasheet

Specifications



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

BCH0802O12A1C

! Discontinued - Service only

! Discontinued on: 31-Dec-2023

! 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	5.1 A
Continuous Power	0.75 kW
Shaft End	Keyed
Second Shaft	Without second shaft end
Shaft Diameter	19 mm
Shaft Length	37 mm
Key Width	6 mm
Feedback Type	20 bits incremental encoder
Holding Brake	Without
Mounting Support	Asian standard flange
Motor Flange Size	80 mm
Torque Constant	0.47 N.m/A
Back Emf Constant	17.2 V/krpm at 20 °C
Rotor Inertia	1.13 kg.cm²
Stator Resistance	0.84 Ohm at 20 °C
Stator Inductance	7.06 mH at 20 °C
Stator Electrical Time Constant	8.37 ms at 20 °C
Maximum Radial Force Fr	245 N
Maximum Axial Force Fa	98 N
Brake Pull-In Power	8.2 W
Type Of Cooling	Natural convection
Length	138.3 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	2
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	29.5 mm
Net Weight	3 kg

## Environment

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

## Packing Units

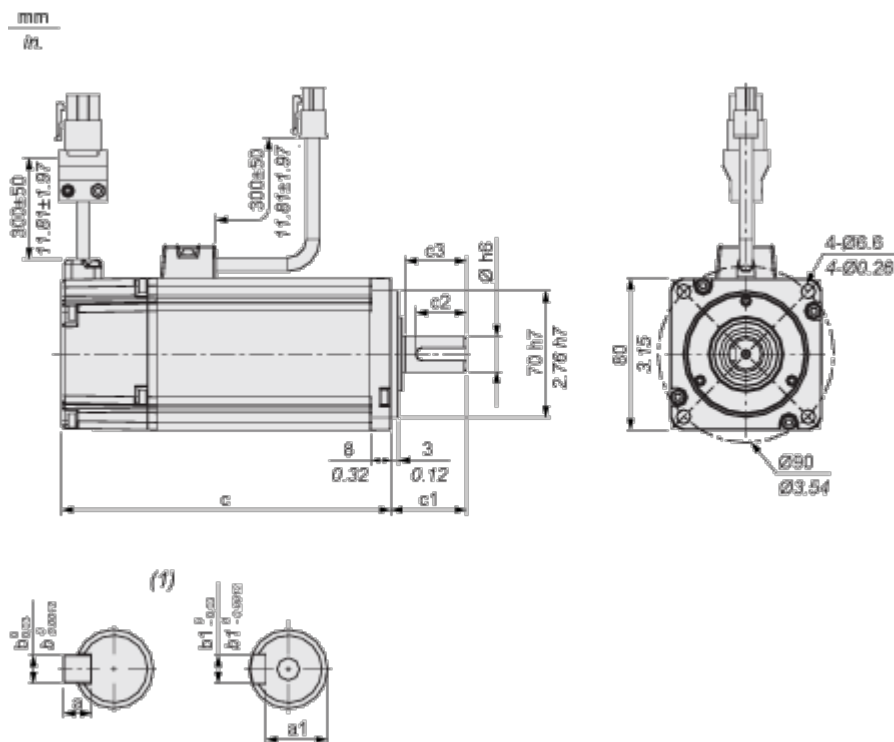
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	18.6 cm
Package 1 Width	14.2 cm
Package 1 Length	25.7 cm
Package 1 Weight	3.286 kg

## Contractual warranty

Warranty	18 months
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## Dimensions Drawings

## 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
19	6	15.5	6	6	130.7	166.8	35	25	29.5

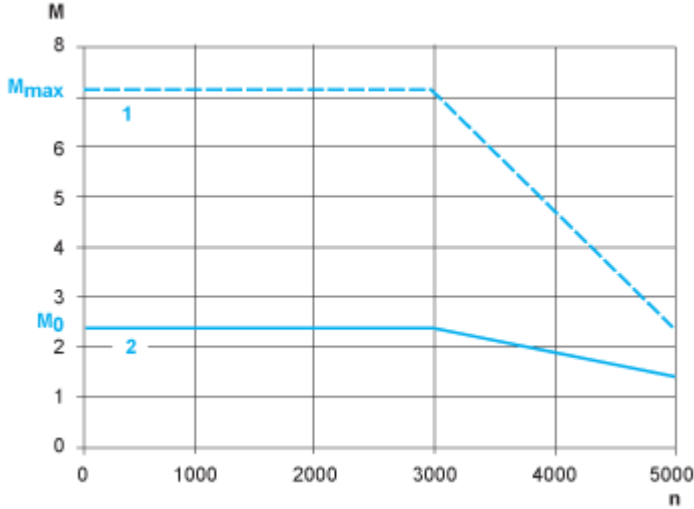
Dimensions in in.

Ø	a	a1	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
0.75	0.24	0.61	0.24	0.24	5.14	6.57	1.38	0.98	1.16

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U07M3X Servo Drive



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