

Product datasheet

Specifications



servo motor BCH, no oil seal,
smooth, 20-bit encoder, w brake-
straight con

BCH0401002F1C

! Discontinued

! Discontinued on: Dec 31, 2018 AD

! End-of-service on: Dec 15, 2025 AD

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	0.9 A
Continuous power	0.1 kW
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	8 mm
Shaft length	20 mm
Feedback type	20 bits incremental encoder
Holding brake	With
Holding torque	0.3 N.m
Mounting support	Asian standard flange
Motor flange size	40 mm
Torque constant	0.36 N.m/A
Back emf constant	13.6 V/krpm at 20 °C
Rotor inertia	0.04 kg.cm ²
Stator resistance	18.6 Ohm at 20 °C
Stator inductance	48 mH at 20 °C
Stator electrical time constant	2.58 ms at 20 °C
Maximum radial force Fr	78.4 N
Maximum axial force Fa	39.2 N
Brake pull-in power	7.3 W
Type of cooling	Natural convection
Length	136.6 mm

Number of motor stacks	1
Centring collar diameter	30 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	4.5 mm
Circle diameter of the mounting holes	46 mm
Distance shaft shoulder-flange	20 mm
Product weight	0.8 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

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](#)

Use Again



Repack and remanufacture

[WEEE Label](#)

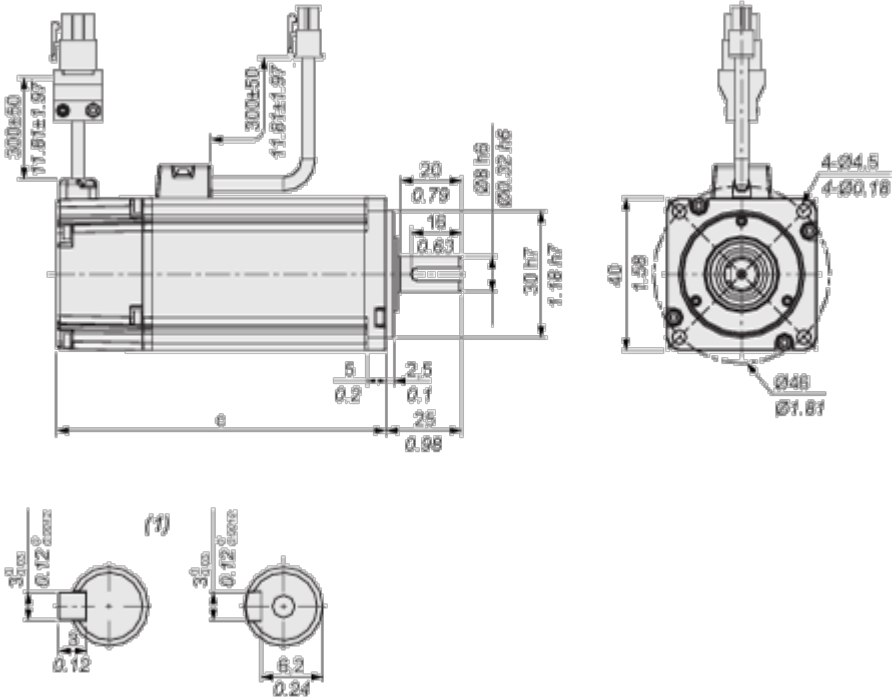


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

mm
in.



(1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without holding brake)	c (with holding brake)
100.6	136.6

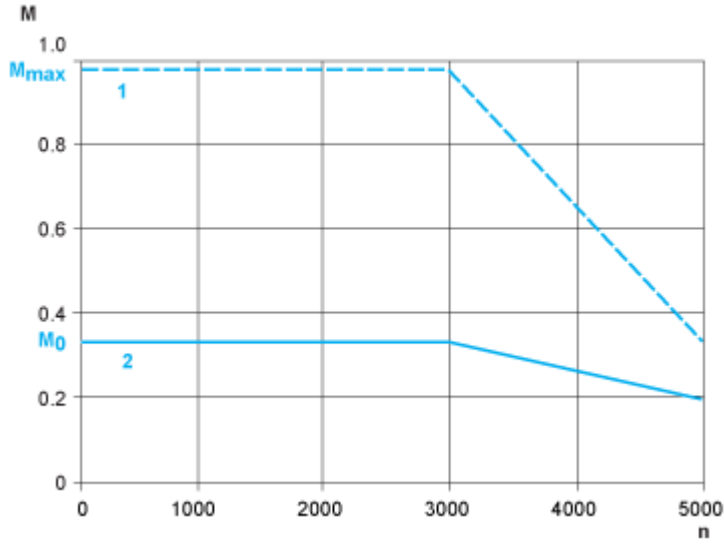
Dimensions in in.

c (without holding brake)	c (with holding brake)
3.96	5.38

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U01M3X Servo Drive



M : Torque in Nm

n : Speed in rpm

1 : Peak torque

2 : Continuous torque