

Product datasheet

Specifications



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

BCH1002O12F1C

⚠ Discontinued on: Dec 31, 2018 AD

⚠ End-of-service on: Dec 31, 2023 AD

⚠ Discontinued

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	Three phase
Continuous stall current	12.05 A
Continuous power	2 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	With
Holding torque	8 N.m
Mounting support	Asian standard flange
Motor flange size	100 mm
Torque constant	0.53 N.m/A
Back emf constant	19.2 V/krpm at 20 °C
Rotor inertia	4.953 kg.cm²
Stator resistance	0.26 Ohm at 20 °C
Stator inductance	3 mH at 20 °C
Stator electrical time constant	11.4 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

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

Length	226 mm
Number of motor stacks	2
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	7.2 kg

Environment

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

Packing Units

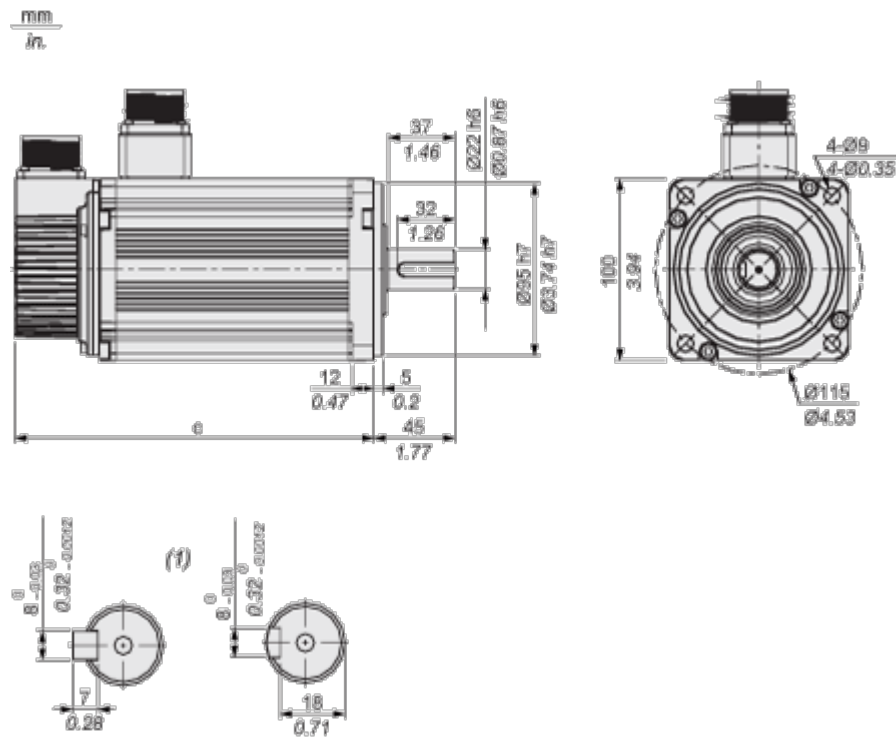
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	19.6 cm
Package 1 Width	27.6 cm
Package 1 Length	35.0 cm
Package 1 Weight	7.5 kg
Unit Type of Package 2	CAR
Number of Units in Package 2	2
Package 2 Height	19.6 cm
Package 2 Width	27.6 cm
Package 2 Length	35.0 cm
Package 2 Weight	15.0 kg

Contractual warranty

Warranty	18 months
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Dimensions Drawings

Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

c (without holding brake)	c (with holding brake)
199	226

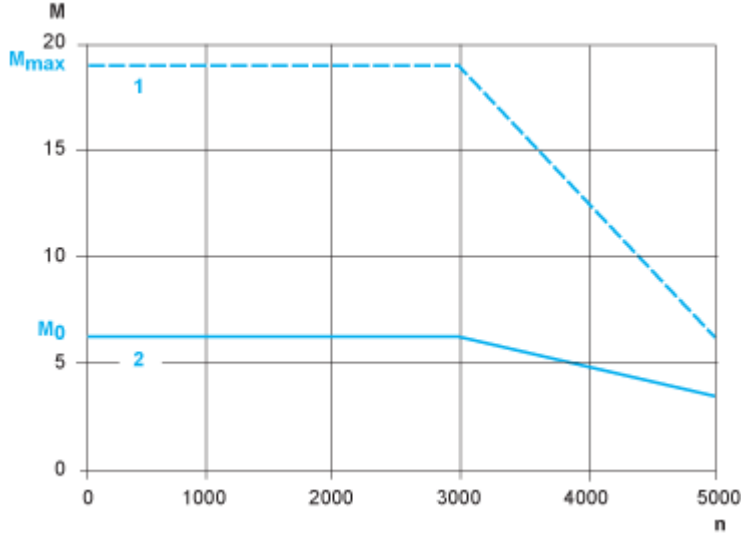
Dimensions in in.

c (without holding brake)	c (with holding brake)
7.83	8.90

Performance Curves

Torque/Speed Curves with 220 V Three Phase Supply Voltage

Servo Motor with LXM23•U20M3X Servo Drive



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