

Product datasheet

Specifications



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

BCH1303N12F1C

⚠ Discontinued on: 31-Dec-2018

⚠ End-of-service on: 31-Dec-2023

⚠ Discontinued

Main

Range compatibility	Lexium 23 Plus
Device short name	BCH
Product or component type	Servo motor

Complementary

Maximum mechanical speed	3000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Single phase
Continuous stall current	8.3 A
Continuous power	1.5 kW
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft diameter	22 mm
Shaft length	47 mm
key width	8 mm
Feedback type	20 bits incremental encoder
Holding brake	With
Holding torque	10 N.m
Mounting support	Asian standard flange
Motor flange size	130 mm
Torque constant	0.87 N.m/A
Back emf constant	31.8 V/krpm at 20 °C
Rotor inertia	11.9 kg.cm²
Stator resistance	0.52 Ohm at 20 °C
Stator inductance	8.02 mH at 20 °C
Stator electrical time constant	15.31 ms at 20 °C
Maximum radial force Fr	490 N
Maximum axial force Fa	98 N
Brake pull-in power	19 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	202 mm
Number of motor stacks	3
Centring collar diameter	110 mm
centring collar depth	6 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	145 mm
Distance shaft shoulder-flange	47 mm
Net weight	8.9 kg

Environment

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

Packing Units

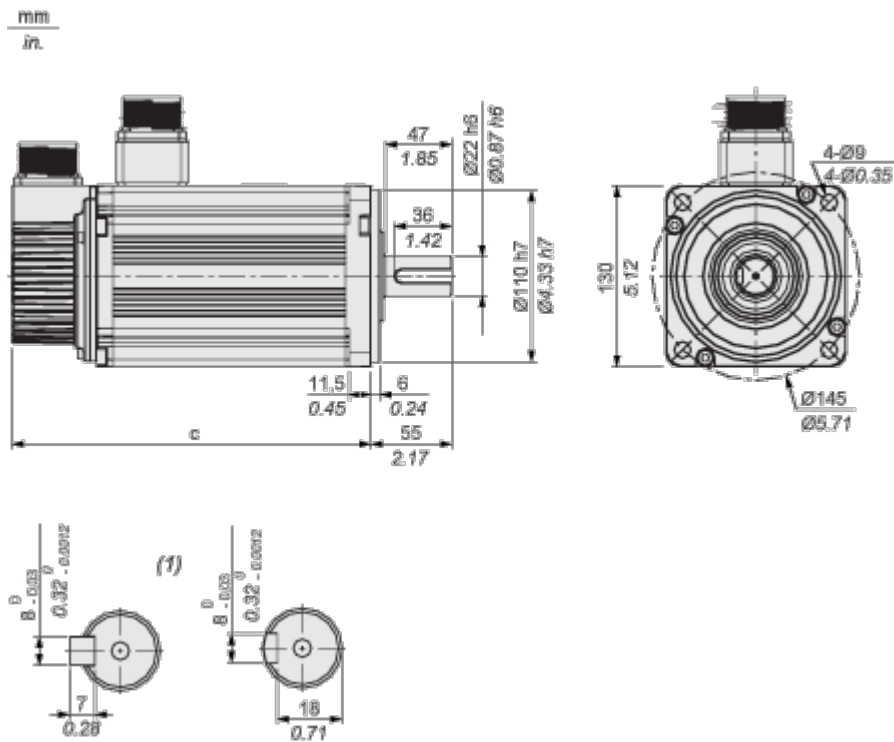
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.0 cm
Package 1 Width	30.0 cm
Package 1 Length	36.0 cm
Package 1 Weight	9.198 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	49.792 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)
167.5	202

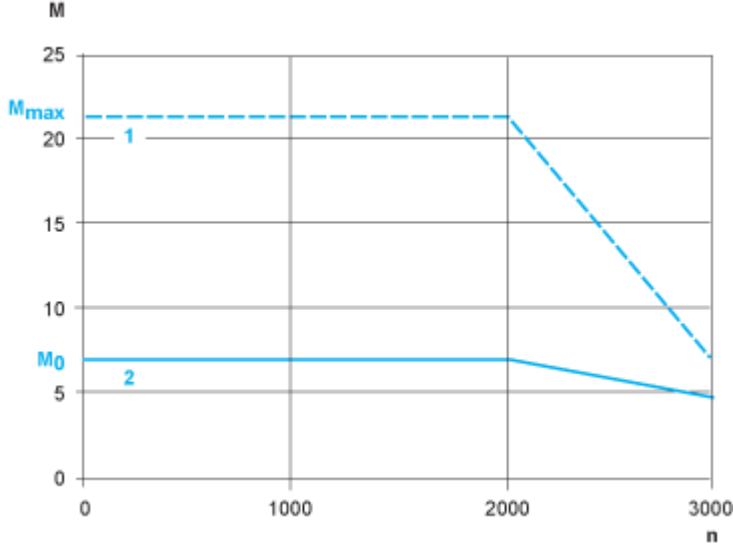
Dimensions in in.

c (without holding brake)	c (with holding brake)
6.59	7.95

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U15M3X Servo Drive



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