

Product datasheet

Specifications



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

BCH1304N12F1C

- ⚠ Discontinued on: 23 January 2021
- ⚠ To be end-of-service on: 31 December 2023

⚠ Discontinued - Service only

Main

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

Complementary

Maximum mechanical speed	3000 rpm
[Us] rated supply voltage	220 V
Network number of phases	Three phase
Continuous stall current	11.01 A
Continuous power	2 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	15.88 kg.cm²
Stator resistance	0.348 Ohm at 20 °C
Stator inductance	5.52 mH at 20 °C
Stator electrical time constant	15.86 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
Length	216 mm
Number of motor stacks	4
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	9.2 kg

Environment

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

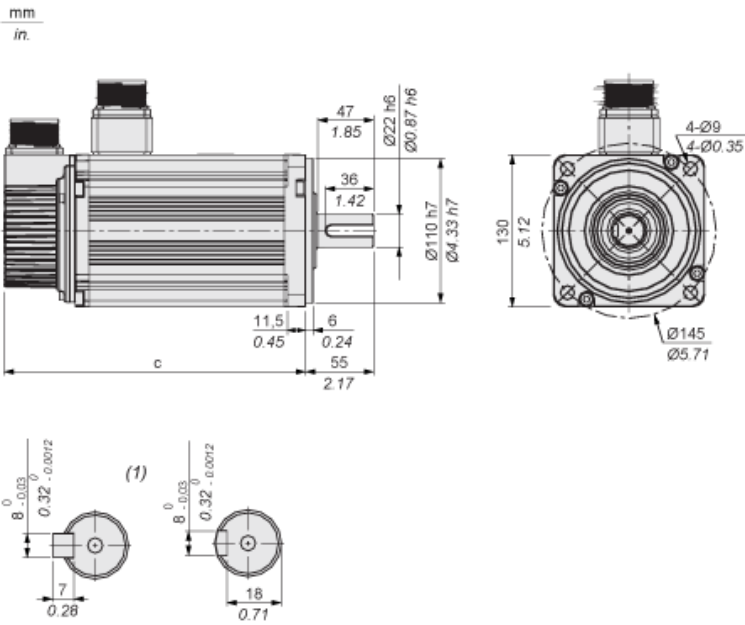
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	9.5 kg
Package 1 Height	23.8 cm
Package 1 width	29.2 cm
Package 1 Length	36.6 cm

Contractual warranty

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

Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

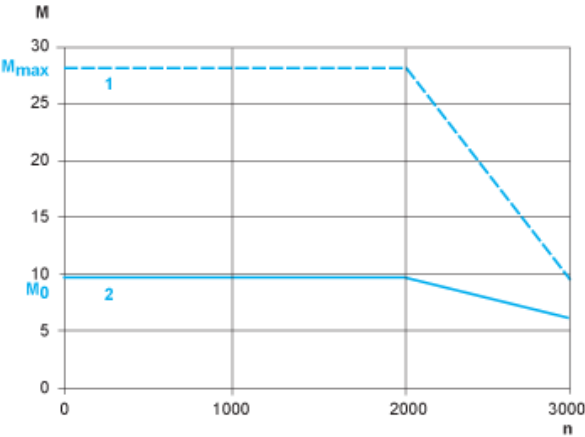
c (without holding brake)	c (with holding brake)
187.5	216

Dimensions in in.

c (without holding brake)	c (with holding brake)
7.38	8.50

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