

# Product datasheet

## Characteristics

# BCH1802M32A1C

servo motor BCH - w oil seal - w key - 20-bit  
encoder - w/o brake-straight con



### 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	19.4 A
Continuous power	3 kW
Shaft end	Keyed
Second shaft	Without second shaft end
Shaft length	73 mm
Key width	10 mm
Feedback type	20 bits incremental encoder
Holding brake	Without
Mounting support	Asian standard flange
Motor flange size	180 mm
Torque constant	0.98 N.m/A
Back emf constant	35 V/kg.rpm at 20 °C
Rotor inertia	54.95 kg.cm²
Stator resistance	0.154 Ohm at 20 °C
Stator inductance	2.54 mH at 20 °C
Stator electrical time constant	16.5 ms at 20 °C
Maximum radial force Fr	1470 N
Maximum axial force Fa	490 N
Brake pull-in power	20.4 W
Type of cooling	Natural convection
Length	202.1 mm
Number of motor stacks	2
Centring collar diameter	114.3 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

Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	13.5 mm
Circle diameter of the mounting holes	200 mm
Distance shaft shoulder-flange	73 mm
Product weight	18.5 kg

## Environment

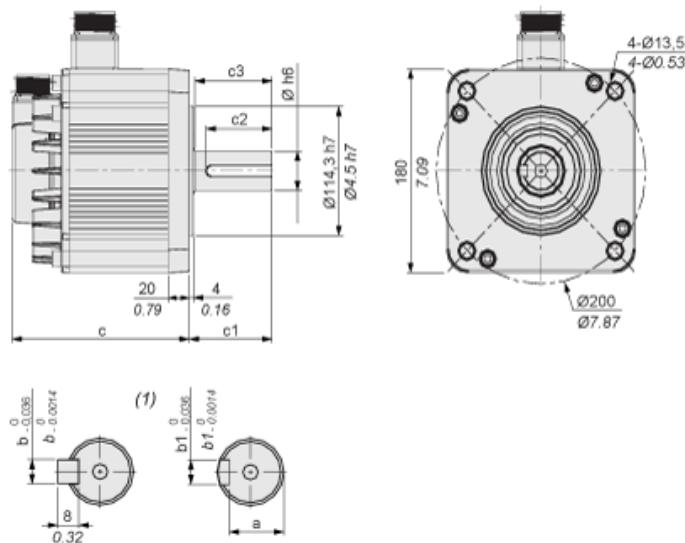
IP degree of protection	IP65
Ambient air temperature for operation	0...40 °C

## Contractual warranty

Warranty	18 months
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Dimensions

mm  
in.



(1) Shaft end, keyed slot (optional)

Dimensions in mm

Ø	a	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
35	30	10	10	202.1	235.3	79	63	73

Dimensions in in.

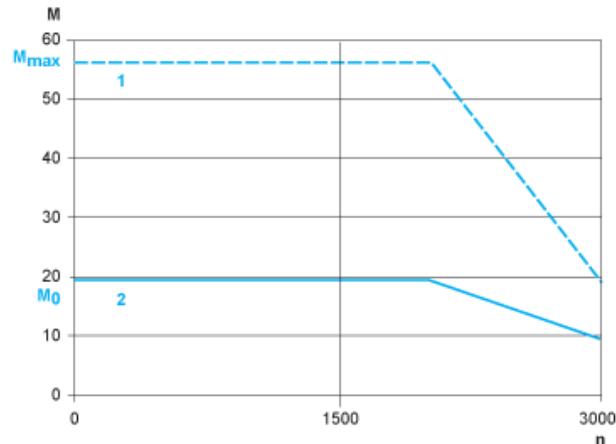
Ø	a	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
1.38	1.18	0.39	0.39	7.96	9.26	3.11	2.48	2.87

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Torque/Speed Curves with 220 V Three Phase Supply Voltage

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Servo Motor with LXM23-U30M3X Servo Drive



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