Product datasheet Characteristics

BCH1801N02F1C

servo motor BCH - no oil seal - smooth - 20-bit encoder - w 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	11.22 A	
Continuous power	2 kW	
Shaft end	Smooth shaft	
Second shaft	Without second shaft end	
Shaft diameter	35 mm	
Shaft length	73 mm	
Feedback type	20 bits incremental encoder	
Holding brake	With	
Holding torque	25 N.m	
Mounting support	Asian standard flange	
Motor flange size	180 mm	
Torque constant	0.85 N.m/A	
Back emf constant	31.4 V/krpm at 20 °C	
Rotor inertia	37.86 kg.cm ²	
Stator resistance	0.238 Ohm at 20 °C	
Stator inductance	5.68 mH at 20 °C	
Stator electrical time constant	23.87 ms at 20 °C	
Maximum radial force Fr	1176 N	
Maximum axial force Fa	490 N	:
Brake pull-in power	20.4 W	
Type of cooling	Natural convection	
Length	203.1 mm	i
Number of motor stacks	1	

Centring collar diameter	114.3 mm
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	17.5 kg

Environment

IP degree of protection	IP40
Ambient air temperature for operation	040 °C

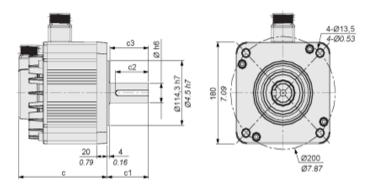
Contractual warranty

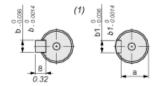
Warranty	18 months	
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Dimensions







(1) Shaft end, keyed slot (optional)

Dimensions in mm

Ø	а	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	c3
35	30	10	10	169	203.1	79	63	73

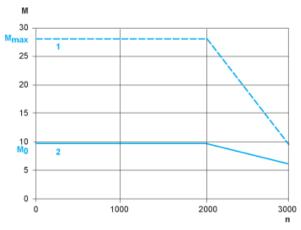
Dimensions in in.

Ø	а	b	b1	c (without holding brake)	c (with holding brake)	c1	c2	с3
1.38	1.18	0.39	0.39	6.65	8.00	3.11	2.48	2.87

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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