

# Product datasheet

Specifications



servo motor BCH, Lexium 23 Plus,  
smooth, 20 bit encoder, straight  
connection

BCH1301N11F1C

! Discontinued

! Discontinued on: 27 Aug 2020

! End-of-service on: 21 Jan 2021

## 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        | Single phase                |
| Continuous stall current        | 0.9 A                       |
| Continuous power                | 0.1 kW                      |
| Shaft end                       | Smooth shaft                |
| Second shaft                    | Without second shaft end    |
| Shaft diameter                  | 8 mm                        |
| Shaft length                    | 20 mm                       |
| Feedback type                   | 20 bits incremental encoder |
| Holding brake                   | Without                     |
| Mounting support                | Asian standard flange       |
| Motor flange size               | 40 mm                       |
| Torque constant                 | 0.36 N.m/A                  |
| Back emf constant               | 13.6 V/krpm at 20 °C        |
| Rotor inertia                   | 0.037 kg.cm <sup>2</sup>    |
| Stator resistance               | 18.6 Ohm at 20 °C           |
| Stator inductance               | 48 mH at 20 °C              |
| Stator electrical time constant | 2.58 ms at 20 °C            |
| Maximum radial force Fr         | 78.4 N                      |
| Maximum axial force Fa          | 39.2 N                      |
| Brake pull-in power             | 7.3 W                       |
| Type of cooling                 | Natural convection          |
| Length                          | 100.6 mm                    |
| Number of motor stacks          | 1                           |

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 diameter              | 30 mm  |
| Centring collar depth                 | 2.5 mm |
| Number of mounting holes              | 4      |
| Mounting holes diameter               | 4.5 mm |
| Circle diameter of the mounting holes | 46 mm  |
| Distance shaft shoulder-flange        | 20 mm  |
| Net weight                            | 0.5 kg |

## Environment

|                                       |           |
|---------------------------------------|-----------|
| IP degree of protection               | IP65      |
| 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             | 23.8 cm |
| Package 1 Width              | 29.2 cm |
| Package 1 Length             | 36.6 cm |
| Package 1 Weight             | 8.5 kg  |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |