

# Product datasheet

Specifications



servo motor BCH16, Lexium 16D,  
40mm, 100W, Light inertia, 3000rpm

BCH16LB01330A5C

⚠ Discontinued on: 23 Jan 2021

⚠ Discontinued

## Main

|                           |                |
|---------------------------|----------------|
| Range compatibility       | Easy Lexium 16 |
| Device short name         | BCH16          |
| Product or component type | Servo motor    |

## Complementary

|                           |                                                                 |
|---------------------------|-----------------------------------------------------------------|
| Maximum mechanical speed  | 5000 rpm                                                        |
| [Us] rated supply voltage | 220 V                                                           |
| Network number of phases  | 3 phases                                                        |
| Continuous stall current  | 1.0 A                                                           |
| Continuous stall torque   | 0.32 N.m for LXM16D at 1.34 A, 220 V, single phase              |
| Continuous power          | 100 W                                                           |
| Peak stall torque         | 0.95 N.m for LXM16D at 1.34 A, 220 V, single phase              |
| Nominal output power      | 100 W for LXM16D at 1.34 A, 220 V, single phase                 |
| Nominal torque            | 0.32 N.m for LXM16D at 1.34 A, 220 V, single phase              |
| Nominal speed             | 3000 rpm for LXM16D at 1.34 A, 220 V, single phase              |
| Maximum current Irms      | 2.7 A for LXM16D at 0.1 kW, 220 V                               |
| Maximum permanent current | 3 A                                                             |
| Product compatibility     | LXM16D motion servo motors motor at 0.1 kW, 220 V, single phase |
| Shaft end                 | Parallel key                                                    |
| Second shaft              | Without second shaft end                                        |
| Shaft diameter            | 8 mm                                                            |
| Shaft length              | 12.5 mm                                                         |
| Key width                 | 3 mm                                                            |
| Feedback type             | 2500 incremental encoder                                        |
| Holding brake             | Without                                                         |
| Holding torque            | 0.32 N.m                                                        |
| Mounting support          | Asian standard flange                                           |
| Motor flange size         | 40 mm                                                           |
| Electrical connection     | Free lead                                                       |
| Torque constant           | 0.32 N.m/A at 20 °C                                             |

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

|                                       |                      |
|---------------------------------------|----------------------|
| Back emf constant                     | 23.7 V/krpm at 20 °C |
| Rotor inertia                         | 0.041 kg.cm²         |
| Stator resistance                     | 25.4 Ohm at 20 °C    |
| Stator inductance                     | 26.5 mH at 20 °C     |
| Stator electrical time constant       | 1.04 ms at 20 °C     |
| Maximum radial force Fr               | 73.5 N at 3000 rpm   |
| Maximum axial force Fa                | 12.74 N              |
| Type of cooling                       | Natural convection   |
| Length                                | 98.2 mm              |
| Centring collar diameter              | 30 mm                |
| Centring collar depth                 | 2.5 mm               |
| Number of mounting holes              | 2                    |
| Mounting holes diameter               | 4.5 mm               |
| Circle diameter of the mounting holes | 46 mm                |
| Distance shaft shoulder-flange        | 19.8 mm              |
| Width                                 | 40 mm                |
| Height                                | 55 mm                |
| Depth                                 | 98.2 mm              |
| Net weight                            | 0.480 kg             |

## Environment

|                                       |                                 |
|---------------------------------------|---------------------------------|
| IP degree of protection               | IP65 IM B5, IM V1<br>IP65 IM V3 |
| 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             | 11.0 cm |
| Package 1 Width              | 25.8 cm |
| Package 1 Length             | 6.4 cm  |
| Package 1 Weight             | 650.0 g |
| Unit Type of Package 2       | S03     |
| Number of Units in Package 2 | 12      |
| Package 2 Height             | 30.0 cm |
| Package 2 Width              | 30.0 cm |
| Package 2 Length             | 40.0 cm |
| Package 2 Weight             | 7.8 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 >](#)



### Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

## Use Better



### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

End of life manual availability

[End of Life Information](#)

WEEE Label

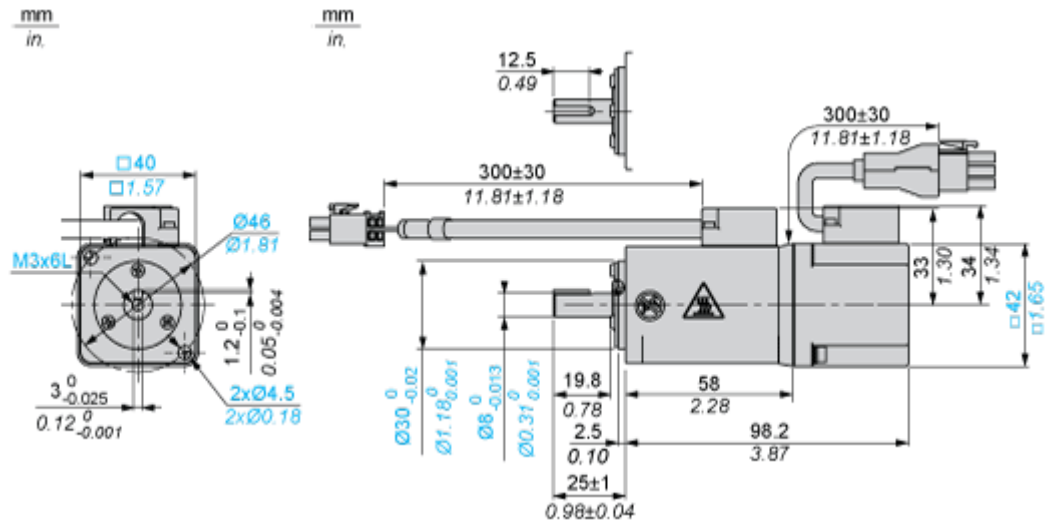


The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Dimensions Drawings

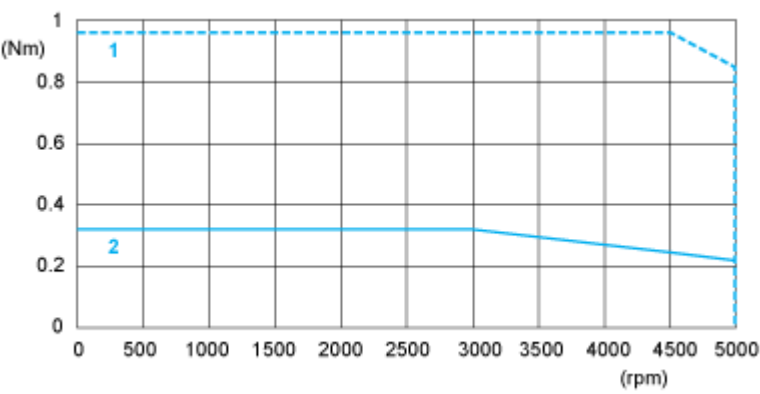
### Motor Dimension

### Front and Left Views



Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage



- 1 : Peak torque
- 2 : Continuous torque