

Product datasheet

Specifications



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

BCH0401O12A1C

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 | Keyed |
| Second shaft | Without second shaft end |
| Shaft diameter | 8 mm |
| Shaft length | 20 mm |
| Key width | 3 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.cm² |
| 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 | IP40 |
| Ambient air temperature for operation | 0...40 °C |

Packing Units

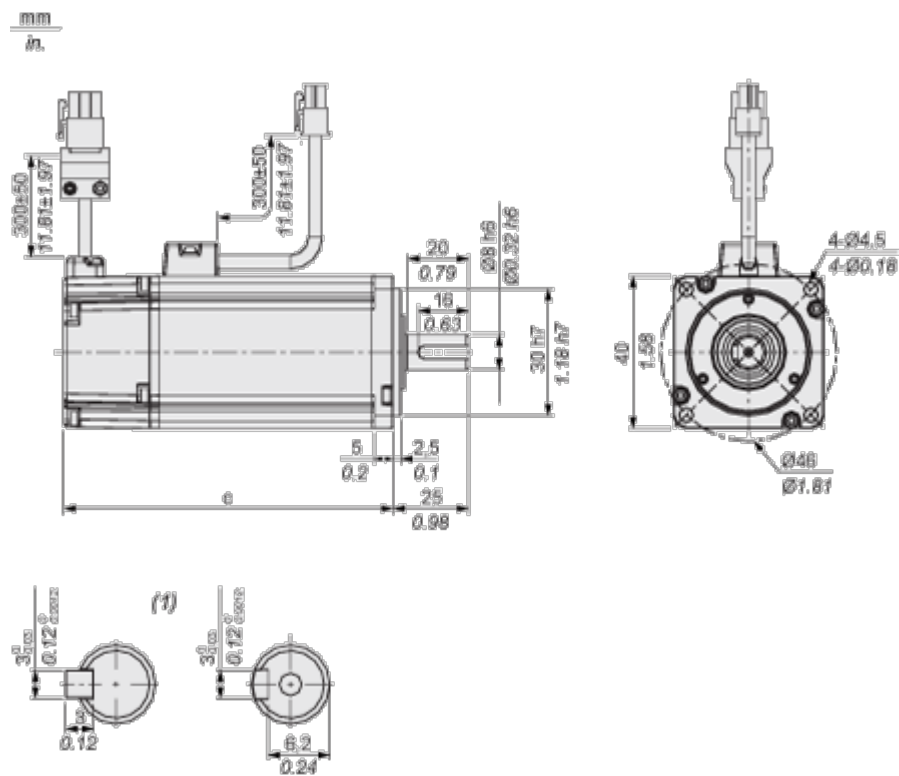
| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.0 cm |
| Package 1 Width | 12.0 cm |
| Package 1 Length | 17.0 cm |
| Package 1 Weight | 682.0 g |

Contractual warranty

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

Dimensions Drawings

Dimensions



(1) Shaft end, keyed slot (optional)

Dimensions in mm

| c (without holding brake) | c (with holding brake) |
|---------------------------|------------------------|
| 100.6 | 136.6 |

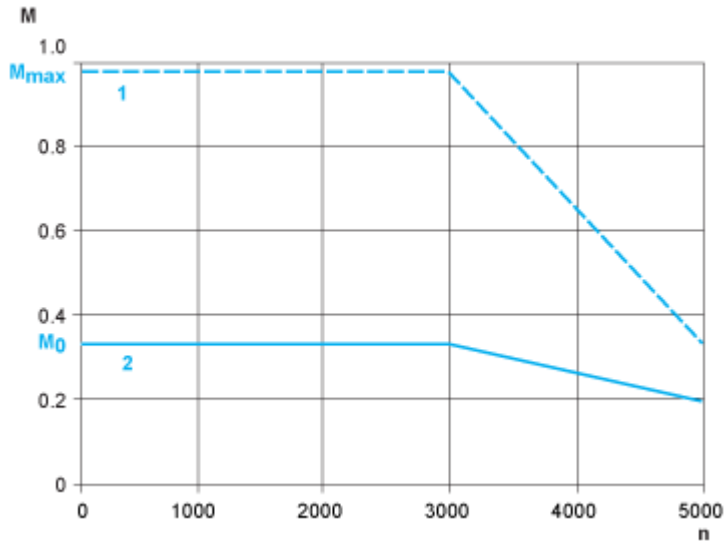
Dimensions in in.

| c (without holding brake) | c (with holding brake) |
|---------------------------|------------------------|
| 3.96 | 5.38 |

Performance Curves

Torque/Speed Curves with 220 V Single Phase Supply Voltage

Servo Motor with LXM23•U01M3X Servo Drive



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