



## Main

|                              |                                     |
|------------------------------|-------------------------------------|
| Range of product             | OsiSense XCC                        |
| Encoder type                 | Incremental encoder                 |
| Encoder name                 | XCC                                 |
| Product specific application | -                                   |
| Diameter                     | 90 mm                               |
| Shaft diameter               | 12 mm                               |
| Shaft type                   | Solid shaft                         |
| Resolution                   | 5000 points                         |
| Output stage                 | Type K                              |
| Type of output stage         | Driver push-pull                    |
| Electrical connection        | 1 male connector M23 radial 12 pins |
| [Us] rated supply voltage    | 11...30 V DC                        |
| Enclosure material           | Zamak                               |

## Complementary

|                          |                                                                            |
|--------------------------|----------------------------------------------------------------------------|
| Shaft tolerance          | G6                                                                         |
| Residual ripple          | 500 mV                                                                     |
| Maximum revolution speed | 6000 rpm                                                                   |
| Shaft moment of inertia  | 150 g.cm <sup>2</sup>                                                      |
| Torque value             | 0.01 N.m                                                                   |
| Maximum load             | 10 daN axial<br>20 daN radial                                              |
| Output frequency         | 100 kHz                                                                    |
| Number of channels       | 3                                                                          |
| Current consumption      | 0...75 mA no-load                                                          |
| Protection type          | Reverse polarity protection<br>Short-circuit protection                    |
| Maximum output current   | 40 mA                                                                      |
| Output level             | Low level: 1.5 V maximum 20 mA<br>High level: V supply - 3 V minimum 20 mA |
| Surge withstand          | 1 kV, level 2 conforming to IEC 61000-4-5                                  |

|                       |                 |
|-----------------------|-----------------|
| Base material         | Aluminium       |
| Shaft material        | Stainless steel |
| Type of ball bearings | 6001ZZ          |
| Product weight        | 1.36 kg         |

## Environment

|                                       |                                                                                                                          |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Marking                               | CE                                                                                                                       |
| Ambient air temperature for operation | -20...80 °C                                                                                                              |
| Ambient air temperature for storage   | -30...85 °C                                                                                                              |
| IP degree of protection               | IP66 conforming to IEC 60529                                                                                             |
| Vibration resistance                  | 10 gn (f= 10...1000 Hz) conforming to IEC 60068-2-6                                                                      |
| Shock resistance                      | 30 gn for 11 ms conforming to IEC 60068-2-27                                                                             |
| Resistance to electrostatic discharge | 4 kV (contact discharge) level 3 conforming to IEC 61000-4-2<br>8 kV (air discharge) level 3 conforming to IEC 61000-4-2 |
| Resistance to electromagnetic fields  | 10 V/m level 3 conforming to IEC 61000-4-3                                                                               |
| Resistance to fast transients         | 1 kV signal ports level 3 conforming to IEC 61000-4-4<br>2 kV power ports level 3 conforming to IEC 61000-4-4            |

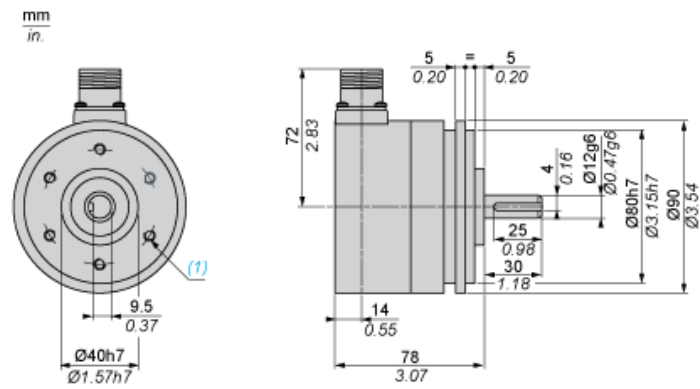
## Offer Sustainability

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| REACH free of SVHC         | Yes                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                               |
| Mercury free               | Yes                                                                                               |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |

## Contractual warranty

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

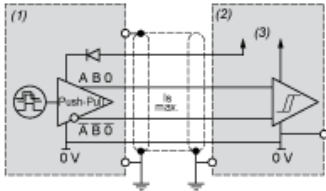
Dimensions



(1) 6 holes M6 x 1 at 120° on 60 PCD, maximum depth: 12 mm

## Wiring Diagram

### Type K Output Stage

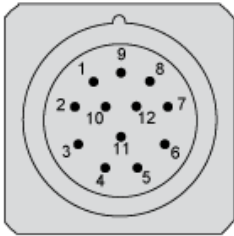


- (1) Encoder
- (2) Processing
- (3) Supply 11 V/30 V

Wiring Diagram

M23, 12-pin Connector Connections

Male Connector on Encoder



| Pin number    | 1              | 2  | 3 | 4              | 5 | 6              | 7 | 8 | 9 | 10  | 11  | 12 |
|---------------|----------------|----|---|----------------|---|----------------|---|---|---|-----|-----|----|
| Signal Supply | A <sup>-</sup> | +V | 0 | 0 <sup>-</sup> | B | B <sup>-</sup> | R | A | R | 0 V | 0 V | +V |

R = reserved, do not connect