

Price\* : 441.05 GBP



### Main

|                              |                                     |
|------------------------------|-------------------------------------|
| Range of product             | OsiSense XCC                        |
| Encoder type                 | Incremental encoder                 |
| Encoder name                 | XCC                                 |
| Product specific application | -                                   |
| Diameter                     | 58 mm                               |
| Complementary function       | Parameterable                       |
| Shaft diameter               | 14 mm                               |
| Shaft type                   | Through shaft                       |
| Resolution                   | 1024...16384 points                 |
| Output stage                 | Type Y                              |
| Type of output stage         | Driver push-pull                    |
| Electrical connection        | 1 male connector M23 radial 12 pins |
| [Us] rated supply voltage    | 5...30 V DC                         |
| Enclosure material           | Zamak                               |

### Complementary

|                          |  |
|--------------------------|--|
| Shaft tolerance          | H7   |
| Residual ripple          | 500 mV   |
| Maximum revolution speed | 6000 rpm   |
| Shaft moment of inertia  | 22 g.cm <sup>2</sup>   |
| Torque value             | 0.006 N.m  |
| Maximum load             | 2 daN axial<br>5 daN radial  |
| Output frequency         | 300 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: 0.5 V maximum 20 mA<br>High level: V supply - 2.5 V minimum 20 mA |

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

|                       |   |
|-----------------------|---|
| Surge withstand       | 1 kV, level 2 conforming to IEC 61000-4-5 |
| Base material         | Aluminium                                 |
| Shaft material        | Stainless steel                           |
| Type of ball bearings | 6803ZZ                                    |
| Product weight        | 0.435 kg                                  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Marking                               | CE   |
| Ambient air temperature for operation | -30...70 °C  |
| Ambient air temperature for storage   | -30...85 °C  |
| IP degree of protection               | IP65 conforming to IEC 60529   |
| Vibration resistance                  | 10 gn (f= 55...2000 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            |

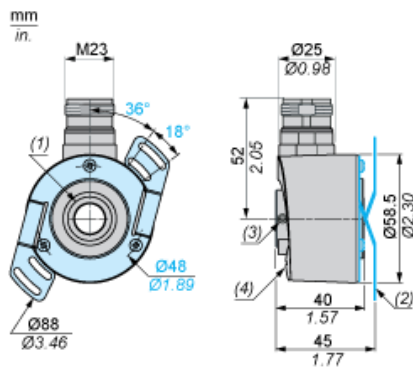
## Offer Sustainability

|                            |   |
|----------------------------|---|
| 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>   |

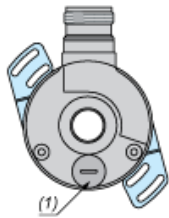
## Contractual warranty

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

Dimensions



- (1) Through shaft, Ø 14 (H7)
- (2) Flexible mounting kit, 1 x XCCRF5N mounted
- (3) 2 HC M4 x 4 locking screws
- (4) Blanking plug



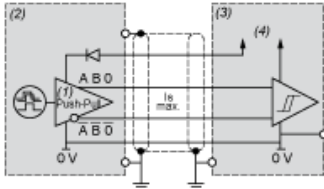
- (1) Blanking plug

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Wiring Diagram

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Type Y Output Stage

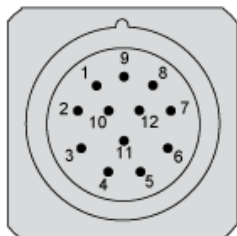


- (1) RS 422 compatible on 5 V supply
- (2) Encoder
- (3) Processing
- (4) Supply 5 V/30 V

## Wiring Diagram

### M23, 12-pin Connector Connections

Male Connector on Encoder

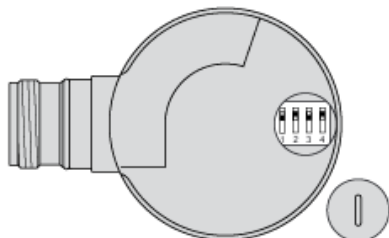


| Pin number    | 1              | 2  | 3 | 4              | 5 | 6              | 7 | 8 | 9 | 10  | 11  | 12 |
|---------------|----------------|----|---|----------------|---|----------------|---|---|---|-----|-----|----|
| Signal Supply | A <sup>-</sup> | +V | 0 | 0 <sup>-</sup> | B | B <sup>-</sup>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

R = reserved, do not connect

## Wiring Diagram

### Resolutions for Parameterable Ø 58 mm Encoders



| Interpolation factor |       | Basic resolution |      |      |        |        | Position of dip switches |     |     |     |
|----------------------|-------|------------------|------|------|--------|--------|--------------------------|-----|-----|-----|
| Counting             | Speed | 256              | 360  | 500  | 1024   | 5000   | 1                        | 2   | 3   | 4   |
| x1                   | x1    | 256              | 360  | 500  | 1024   | 5000   | Off                      | On  | Off | On  |
| x2                   | x2    | 512              | 720  | 1000 | 2048   | 10,000 | On                       | On  | Off | On  |
| x3                   | x3    | 768              | 1080 | 1500 | 3072   | 15,000 | On                       | Off | Off | On  |
| x4                   | x4    | 1024             | 1440 | 2000 | 4096   | 20,000 | Off                      | On  | On  | On  |
| x5                   | -     | 1280             | 1800 | 2500 | 5120   | 25,000 | On                       | On  | On  | On  |
| x8                   | -     | 2048             | 2880 | 4000 | 8192   | 40,000 | On                       | Off | On  | On  |
| x10                  | -     | 2560             | 3600 | 5000 | 10,240 | 50,000 | Off                      | On  | On  | Off |
| x12                  | -     | 3072             | 4320 | 6000 | 12,288 | 60,000 | On                       | On  | On  | Off |
| x16                  | -     | 4096             | 5760 | 8000 | 16,384 | 80,000 | On                       | Off | On  | Off |