

Product data sheet

Characteristics

XCC1514TS25Y

Opto-electronic rotary encoders XCC,
incremental encoder Ø 58, through shaft 14
mm, 2500 points, push pull



Main

| | |
|------------------------------|-------------------------------------|
| Range of product | OsiSense XCC |
| Encoder type | Incremental encoder |
| Encoder name | XCC |
| Product specific application | - |
| Diameter | 58 mm |
| Shaft diameter | 14 mm |
| Shaft type | Through shaft |
| Resolution | 2500 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 ² |
| Torque value | 0.006 N.m |
| Maximum load | 2 daN axial 5 daN radial |
| Output frequency | 300 kHz |
| Number of channels | 3 |
| Current consumption | 0...75 mA no-load |
| Protection type | Reverse polarity protection Short-circuit protection |
| Maximum output current | 40 mA |
| Output level | Low level: 0.5 V maximum 20 mA High level: V supply - 2.5 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 | 6803ZZ |
| Net weight | 0.435 kg |

Environment

| | |
|---------------------------------------|--|
| Marking | CE |
| Ambient air temperature for operation | -30...100 °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 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 2 kV power ports level 3 conforming to IEC 61000-4-4 |

Packing Units

| | |
|------------------------------|--------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.5 cm |
| Package 1 Width | 14 cm |
| Package 1 Length | 27 cm |
| Package 1 Weight | 435 g |

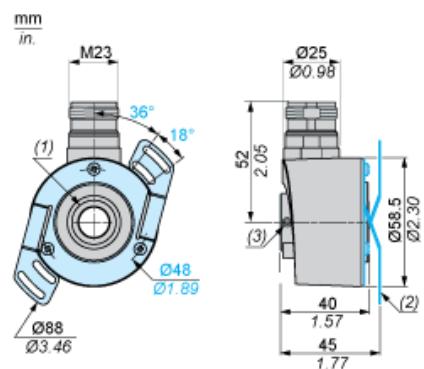
Offer Sustainability

| | |
|--|---|
| Toxic heavy metal free | Yes |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| For all Reach Rohs enquiries contact us at | sustainability@tesensors.com |

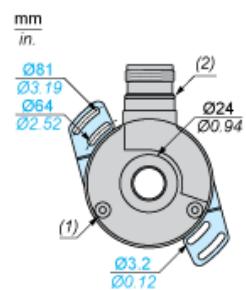
Contractual warranty

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

Dimensions



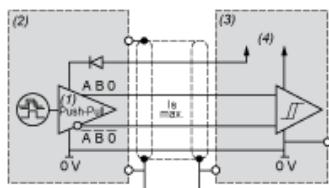
- (1) Through shaft, Ø 14 (H7)
- (2) Flexible mounting kit, 1 x XCCRF5N mounted
- (3) 2 HC M4 x 4 locking screws



- (1) Hole for M3 x 6 self-threading screw
- (2) Nitrile seal

[Wiring Diagram](#)

Type Y Output Stage

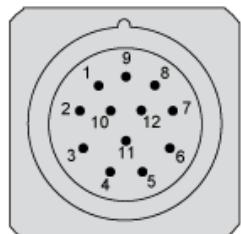


- (1) RS 422 compatible on 5 V supply
- (2) Encoder
- (3) Processing
- (4) Supply 5 V/30 V

[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 ⁻ | +V | 0 | 0 ⁻ | B | B ⁻ | R | A | R | 0 V | 0 V | +V |

R = reserved, do not connect