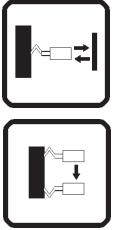


SENSORS WITH μ P-BASED DOUBLE CHANNEL



- *Double input for fibre-optics and two independent outputs*
- *Total anti-interference between the fibre-optics*
- *EASYtouch™ microprocessor-based setting*
- *Patent-covered CLEARLOCK™ fibre fixing system*

TED SERIES

Reduction of installation costs, space and time are only a few of the advantages offered by **TED** series, that presents two fibre-optic amplifiers inside a single housing with only a 12 mm depth, suitable for both fixing bracket or DIN rail mounting.

The sensors have four input holes for the emission and receiver terminals of the two independent fibre-optics, that can be positioned either separately at long distances or close to each other without any interference.


The *EASYtouch*™ setting push-buttons, the indication LEDs and the NPN or PNP outputs are all double and independent.

The power supply is in common for both channels, while the outputs are placed on different poles that can be connected together in parallel, obtaining an 'OR' function. This means that the common output is activated even if only one of the two fibre-optics has detected the object.

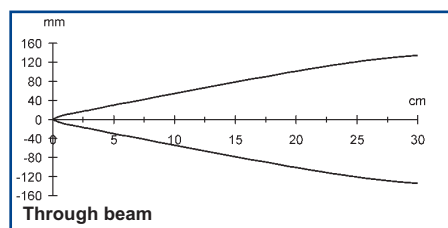
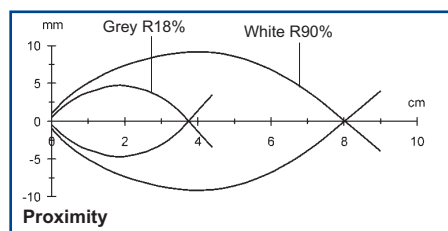
The **TED** sensors are available with cable or M8 connection.



TECHNICAL DATA

| | |
|--|---|
| Power supply: | 12 ... 24 Vdc \pm 10%, reverse polarity protection |
| Consumption: | 60 mA max. |
| Light emission: | red 660 nm |
| Diffuse proximity operating distance: | 0 ... 70 mm |
| Through beam operating distance: | 0 ... 280 mm |
| Setting: | automatic with SET 1 and SET 2 buttons |
| Indicators: | 2 yellow OUT 1 and OUT 2 LEDs 2 bicolour green/red SET/ERROR LEDs |
| Output type: | NPN or PNP, open collector |
| Saturation voltage: | 1.2 V max. |
| Output current: | 150 mA max., short-circuit protection |
| Response time: | 250 μ s max. |
| Switching frequency: | 2 KHz max. |
| Operating mode: | dark/light selectable |
| Connection: | M8 4-pole connector (TED-6) 2 m \varnothing 4.5 mm cable (TED-3) |
| Electrical protection: | class 2 |
| Mechanical protection: | IP65 |
| Housing material: | polycarbonate |
| Weight: | 30 g max. (connector vers.) 115 g max. (cable vers.) |
| Operating temperature: | -10 ... +55°C |
| Storage temperature: | -25 ... +70°C |
| Connectable fibre-optics: | plastic fibre-optics with \varnothing 2.0 ... 2.2 mm diameter or \varnothing 1.0 with adapter (refer to OF fibre-optic series) |
| Reference standard: | EN 60947-5-2 |
| Certifications: | CE  US LISTED |

DETECTION DIAGRAMS

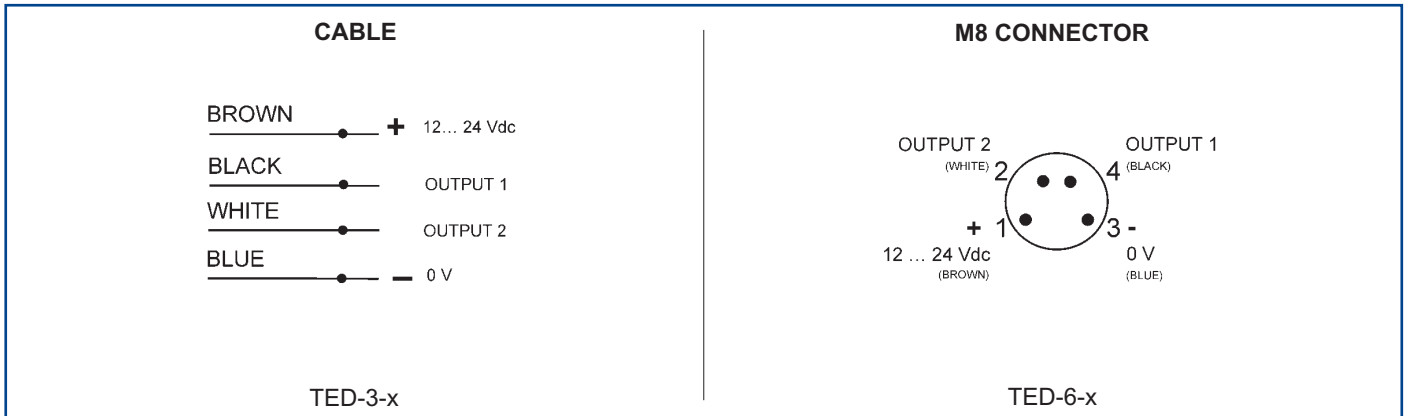


The operating distances indicate the detection distance with standard fibre-optics (refer to OF series) and excess gain 2.

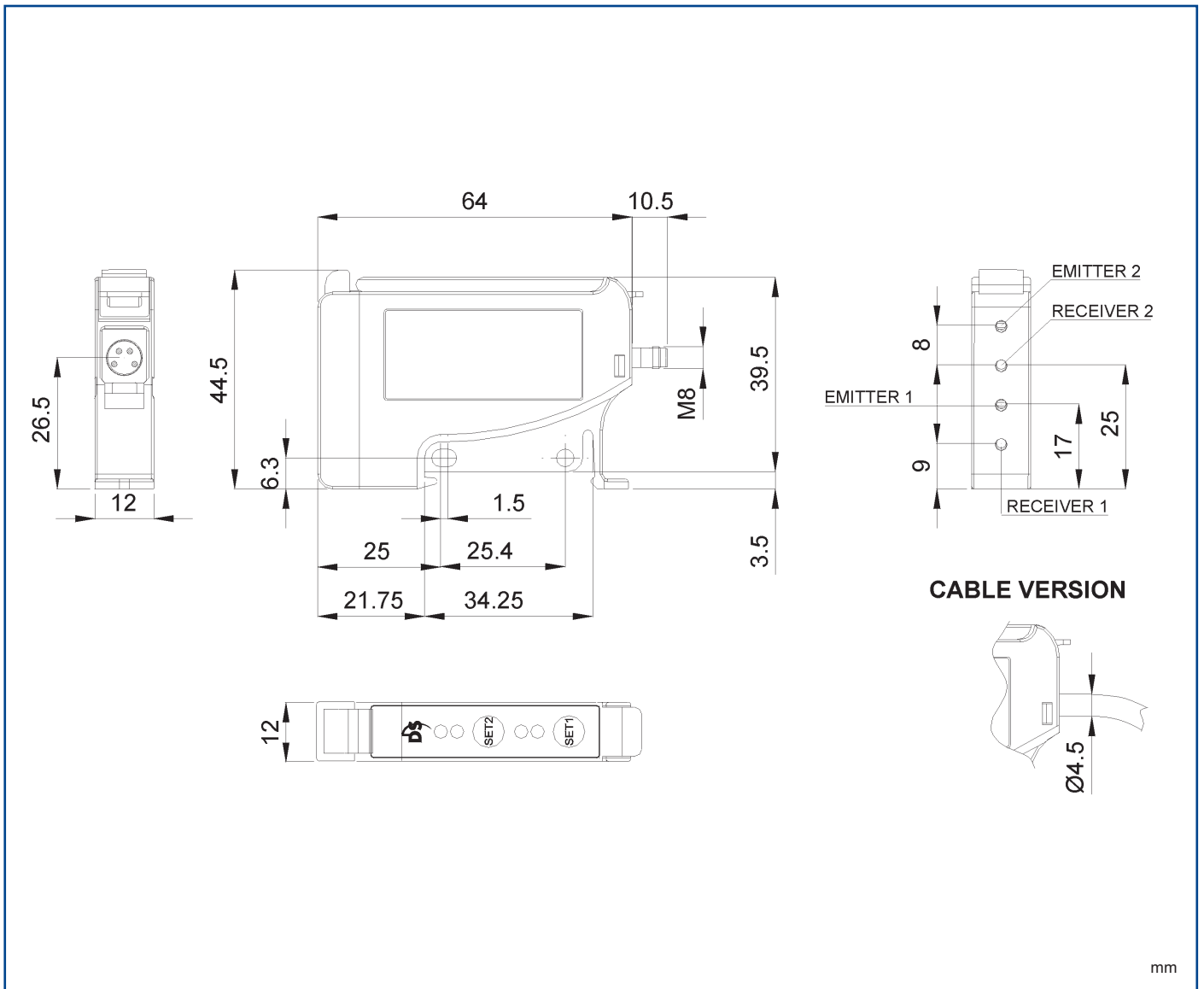
The detection diagrams indicate the typical operating distance with excess gain 1.



CONNECTIONS



DIMENSIONS





MODEL SELECTION AND ORDER INFORMATION

| MODEL | CONNECTION | OUTPUT | CODE N° |
|---------|---------------------|--------|-----------|
| TED-3-N | 4-pole cable | NPN | 950451200 |
| TED-3-P | 4-pole cable | PNP | 950451210 |
| TED-6-N | M8 4-pole connector | NPN | 950451220 |
| TED-6-P | M8 4-pole connector | PNP | 950451230 |

ACCESSORY SELECTION AND ORDER INFORMATION

| MODEL | DESCRIPTION | CODE N° |
|----------|--------------------------------|-----------|
| ST-505 | 1 pc 'L' shaped fixing bracket | 95ACC1300 |
| CRD-5000 | 1 pc DIN rail fixing bracket | 95ACC1290 |

Please refer also to **Sensor Accessories**

CTi Automation - Phone: 800.894.0412 - Fax: 208.368.0415
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