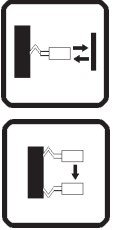


SENSORS WITH μ P-BASED DOUBLE CHANNEL



- *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.

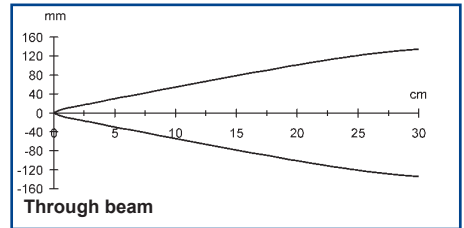
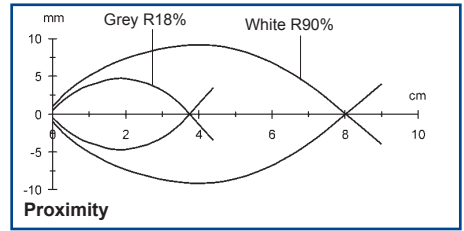
The power supply is in common for both channels, while the outputs are placed on different poles that can be connected together in parallel, obtaining an 'OR' function. This means that the common output is activated even if only one of the two fibre-optics has detected the object.

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

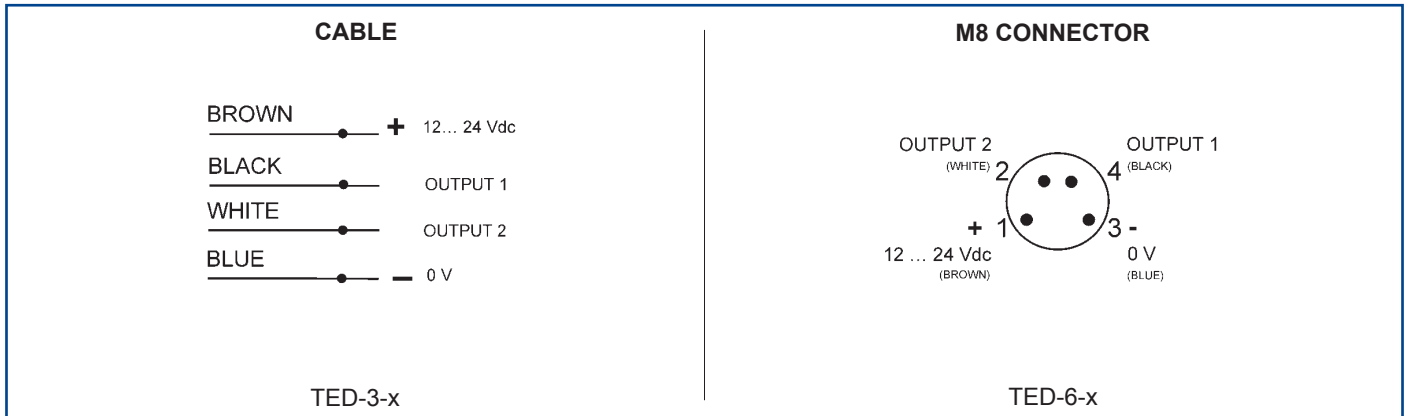
DETECTION DIAGRAMS



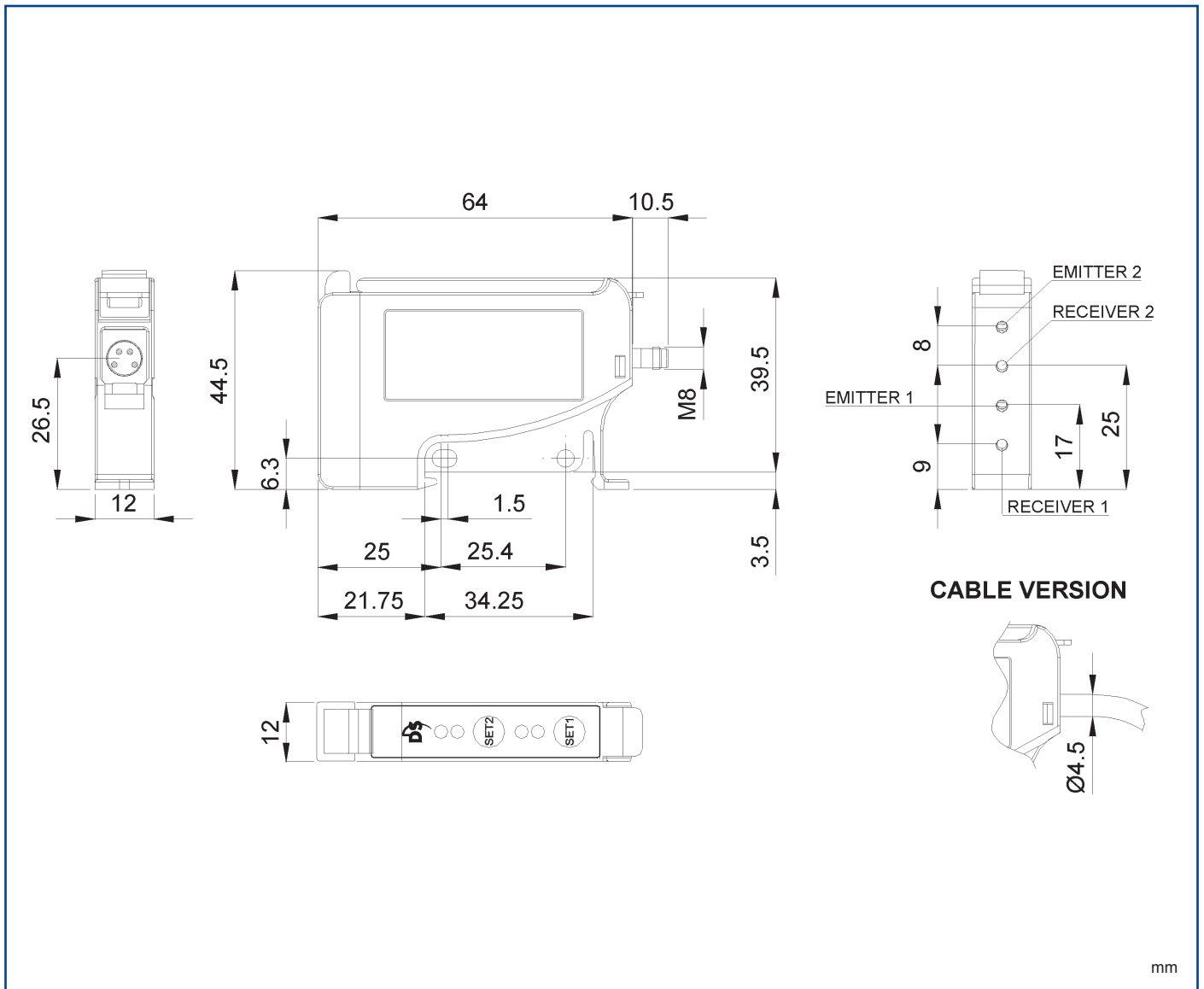
The operating distances indicate the detection distance with standard fibre-optics (refer to OF series) and excess gain 2.

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

CONNECTIONS



DIMENSIONS





MODELS

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

ACCESSORIES

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**

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HEADQUARTERS

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FIBRE-OPTIC SENSORS