

## MICROPROCESSOR-BASED SLOT SENSORS FOR LABELLING AND PACKAGING



- *High 25 kHz switching frequency*
- *IR or red/green light models*
- *Detection of semi-transparent labels*
- *Detection of register marks on transparents*
- *4 wire antivalent NPN and PNP output*

## SR21 SERIES

The slot sensors of the **SR21** series, with 2 mm slot width, are characterised by a high 12 bit (4096 steps) resolution, a low 20  $\mu$ s response time and a switching frequency reaching 25 kHz.

The setting of the switching threshold is carried-out automatically by simply pressing a push-button, or dynamically during label (or other reference) movement.

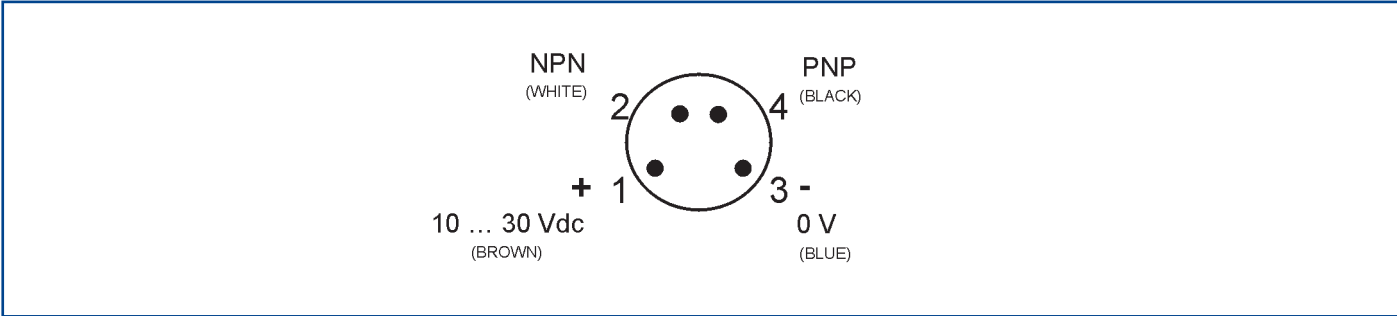
The **SR21-IR** model with infrared emission is ideal for label or hole detection on continuous surfaces, while the **SR21-RG** model with double red or green emission suits colour print register mark detection on transparent films for automatic packaging.



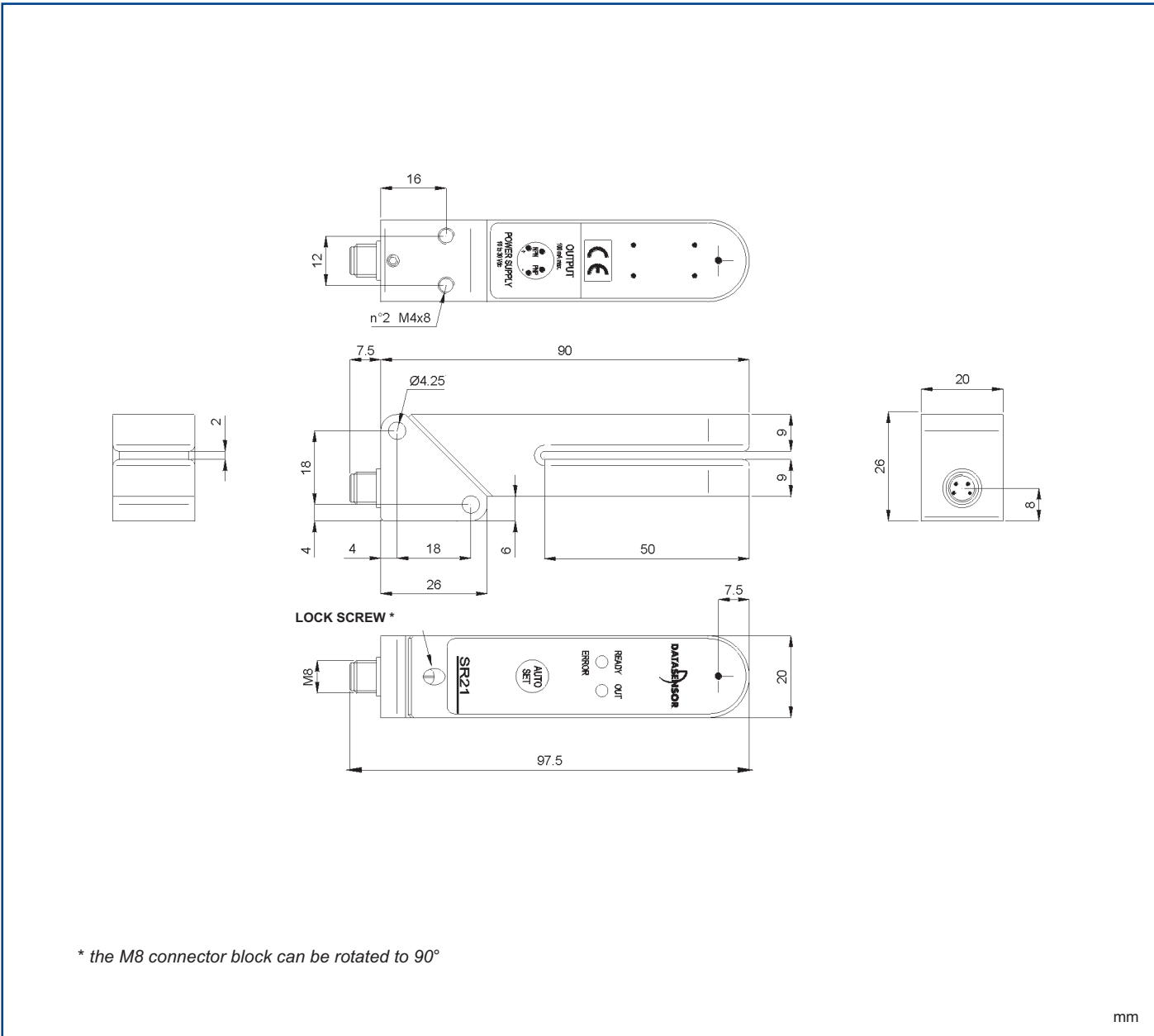
## TECHNICAL DATA

<b>Power supply:</b> .....	10 ... 30 Vdc, reverse polarity protection
<b>Consumption:</b> .....	55 mA max.
<b>Light emission:</b> .....	infrared LED 880 nm (IR vers.) red 635 nm/green LED 535 nm (RG vers.)
<b>Resolution:</b> .....	0.5 mm
<b>Slot width:</b> .....	2 mm
<b>Slot depth:</b> .....	50 mm
<b>Detection point depth:</b> .....	7.5 mm
<b>Setting:</b> .....	AUTO SET push-button
<b>Indicators:</b> .....	yellow OUTPUT LED green/red bicolour READY/ERROR LED
<b>Output type:</b> .....	NPN and PNP, Rpull-down/up 10 k $\Omega$
<b>Saturation voltage:</b> .....	2 V max.
<b>Output current:</b> .....	100 mA max., short-circuit protection
<b>Response time:</b> .....	20 $\mu$ s max.
<b>Switching frequency:</b> .....	25 kHz
<b>Operating mode:</b> .....	dark/light configurable
<b>Connection:</b> .....	M8 4-pole connector
<b>Electrical protection:</b> .....	class 1
<b>Mechanical protection:</b> .....	IP65
<b>Housing material:</b> .....	ZAMA
<b>Lens material:</b> .....	glass
<b>Weight:</b> .....	120 g max.
<b>Operating temperature:</b> .....	-20 ... +60°C
<b>Storage temperature:</b> .....	-20 ... +70°C
<b>Reference standard:</b> .....	EN 60947-5-2
<b>Certifications:</b> .....	<b>CE</b>

## CONNECTIONS



## DIMENSIONS





## MODEL SELECTION AND ORDER INFORMATION

MODEL	EMISSION	FREQUENCY	ORDER N°
SR21-IR	infrared	25 KHz	953151070
SR21-RG	red/green	25 KHz	953151080

**Distributed by:**

Datasensor SpA endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use Datasensor SpA can guarantee only the data indicated in the instruction manual supplied with the products.

Printed in Italy in January 2006  
Rev. 05

**SLOT SENSORS**