



- *Microprocessor-based Teach-in setting*
- *Infrared or automatic selection of red/green emission*
- *Double NPN and PNP output on orientable M8 connector*
- *Metal housing with glass lenses*

## SR21 SERIES

The microprocessor-controlled slot sensors of the **SR21** series offer high precision and low response time inside a practical and sturdy metal housing, that always guarantees a perfect emitter-receiver alignment, even in presence of strong machine vibrations where installed.

All data necessary for a rapid and precise detection can be acquired and memorised by simply pressing twice the setting push-button, in presence and in absence of the object inside the slot; the dark or light operating mode is obtained inverting the sequence.

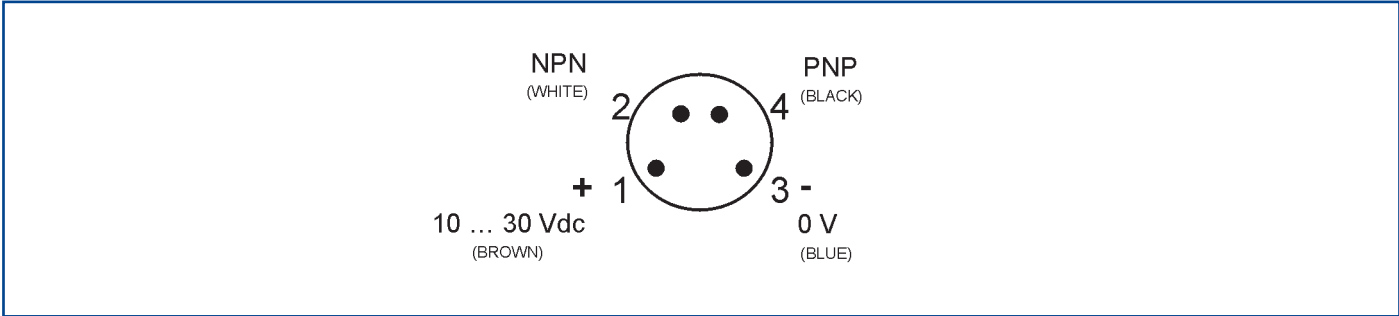
The **SR21-AR** model, with switching frequency that reaches 7.5 kHz and the **SR21-AS** model that operates upto 15 kHz are available for the detection of labels or holes on continuous ribbon supports.

The **SR21-AH** model with double green/red emission has been developed to detect coloured marks on transparent films for automatic packaging, while the **SR21-AV** model with low hysteresis can be used for the presence detection of transparent films or translucent labels on neutral transparent support.

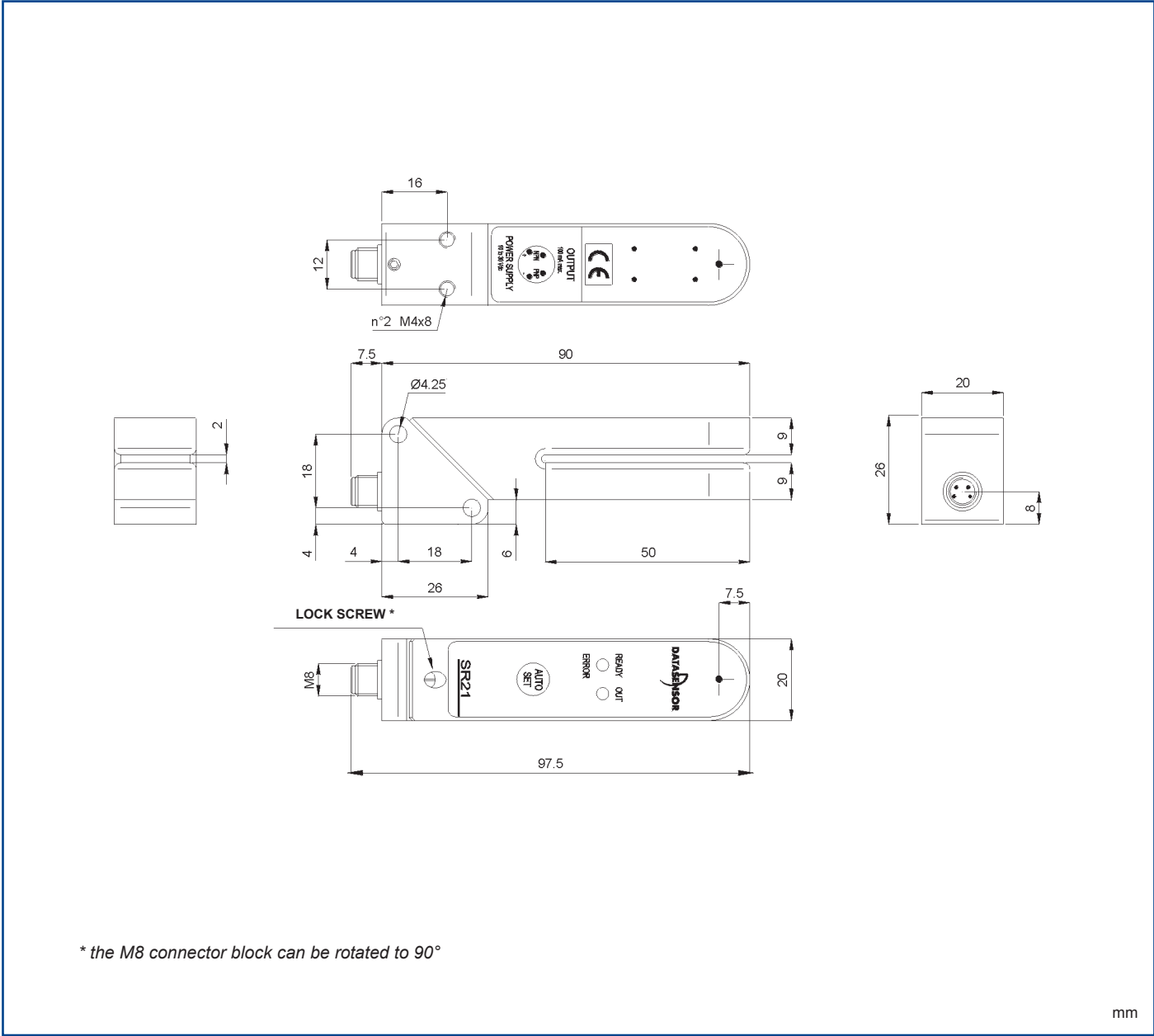
## TECHNICAL DATA

<b>Power supply:</b> .....	10 ... 30 Vdc, reverse polarity protection
<b>Consumption:</b> .....	55 mA max.
<b>Light emission:</b> .....	infrared LED 880 nm (AR/AS/AV vers.) red 635 nm/green LED 535 nm (vers. AH)
<b>Resolution:</b> .....	0.5 mm (AH/AR vers.) 0.25 mm (AS/AV vers.)
<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. (PNP vers.) 1 V max. (NPN vers.)
<b>Output current:</b> .....	100 mA max., short-circuit protection
<b>Response time:</b> .....	66 $\mu$ s max. (AH/AR/AV vers.) 33 $\mu$ s max. (AS vers.)
<b>Switching frequency:</b> .....	7.5 kHz (AH/AR/AV vers.) 15 kHz (AS vers.)
<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> .....	0 ... +55°C
<b>Storage temperature:</b> .....	-20 ... +70°C
<b>Reference standard:</b> .....	EN 60947-5-2
<b>Certifications:</b> .....	<b>CE</b>

## CONNECTIONS



## DIMENSIONS



## MODELS

MODEL	EMISSION	FREQ.	DETECTABLE OBJECT <sup>(*)</sup>	CODE N°
SR21-AV	infrared	7.5 KHz	neutral transparent (presence/absence), translucid on neutral transparent background	953151040
SR21-AR	infrared	7.5 KHz	opaque on translucid or transparent background	963261000
SR21-AS	infrared	15 KHz	opaque on translucid or transparent background, holes on opaque or translucid background	953151060
SR21-AH	red/green	7.5 KHz	coloured translucid on transparent background different-coloured or neutral background	963261010

<sup>(\*)</sup> *Transparent: object that integrally transmits the incident light without evident alterations.  
Translucid: object that partially transmits and diffuses the incident light.  
Opaque: object that does not transmit the incident light.*

## ACCESSORIES

Please refer to **Sensor Accessories**

**Distributed by:**

### HEADQUARTERS

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