

## **SIR.M-25**

INFRARED SENSOR



- ✓ Detects the edge of soundtransparent materials
- ✓ Measuring range of 5 mm
- ✓ 0,0025 mm of resolution
- Compact design for very narrow frames
- Available with air connection for cleaning the reading area
- ✓ IP54 protection class

The infrared SIR sensors are specifically designed for detecting of the edges of soundtransparent materials or with very thick weaves.

The compact design, the membrane keyboard integrated on the sensor and the LED strip, to read the level of coverage, guarantee an easy installation in all kind of applications, most of all on very narrow frames, such us Re Skuba webguide.

Moreover 2 buttons make the calibration and operation very quick, smart and easy.

SIR.m-25 is equipped with a LED transmitter and a PSD receiver that guarantees a measuring range of 5 mm with a resolution of 0.0025 mm.

The sensor can be used in conjunction with Re webguiding system or with a normal PLC, using the  $4\div20$  mA or  $0\div20$  mA current output and the broad  $12\div24$  V power range.

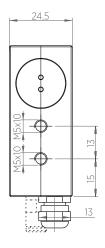
SIR.m-25 uses CAN communication bus to transform the signal in digital output.

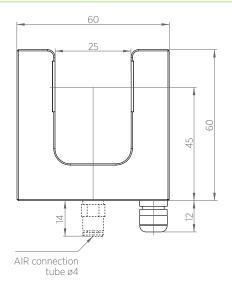
The sensor is available also with the pneumatic connection to clean automatically the reading area frome machining residues.





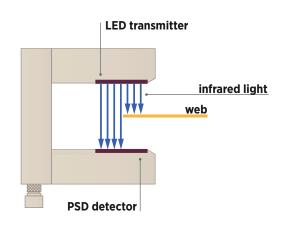
## **TECHNICAL DRAWING**







## **FUNCTIONING**



SIR.m-25 is equipped with a PSD detector and infrared LEDs on the opposite side that generate infrared light which is converted by the PSD into electric signals. According to the intensity of the signal received, the microprocessor can identify how much of the sensitive surface of the capsule is covered by the material inserted in the fork and calculate the position of the web edge.

## **TECHNICAL CHARACTERISTICS**

Power supply	12÷24 Vdc
Power consumption	< 70 mA
Measuring range	± 2,5 mm
Fork width	30 mm
Accuracy	0,0025 mm
Infrared wavelength	950 nm
Response time	1 msec
Analog outputs	0÷5 Vdc 4÷20 mA
Max cable length	30 m
Pneumatic connection	optional
Working temperature	10÷50° C
Protection class	IP40 (IP54 for SKB version)
Dimensions	60 x 24,5 x 60 mm
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 $<sup>\</sup>ensuremath{^{*}\text{Data}}$  are subject to technical change without notice





Assistenza tecnica