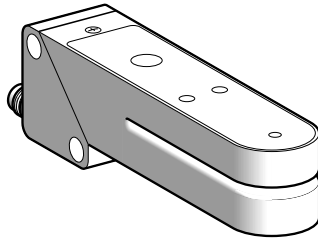# Photo-electric sensors
Osiris® Application, packaging series
For label detection (1)
d.c. supply. Solid-state output

Fork design

System	**Thru-beam**	
Type of transmission	Infrared	Red/green
Nominal sensing distance (Sn)	**2 mm**	**2 mm**

References

3-wire PNP and NPN	Light of dark programmable switching (2)	**XUV K0252S**	**XUV K0252VS**
Weight (kg)		0.085	0.085

Characteristics

Product certifications	C€
Ambient air temperature	Operation : 0…+ 55 °C. Storage : - 20…+ 70 °C
Vibration resistance	Amplitude ± 1.5 mm up to 55 Hz, 7 gn (f = 10…55 Hz), conforming to IEC 60068-2-6
Shock resistance	30 gn, duration 11 ms, conforming to IEC 60068-2-27
Degree of protection	IP 65 conforming to IEC 529
Connection	M8 connector (suitable female connectors, see page 30210/2)
Materials	Case : zinc alloy ; lens : glass
Rated supply voltage	**⎓ 12…24 V with protection against reverse polarity**
Voltage limits	⎓ 10…30 V (including ripple)
Switching capacity (sealed)	**≤ 100 mA with overload and short-circuit protection**
Voltage drop, closed state	≤ 1.5 V
Output clamping resistor	10 kΩ
Current consumption, no-load	≤ 50 mA
Maximum switching frequency	10 kHz
Delays	First-up : ≤ 30 ms ; response < 100 μs ; recovery < 100 μs

Function table

Function	Thru-beam system	
	Absence of label in the beam	Presence of label in the beam
Light switching	⌐‾ ☼	⌐‾ ⊗
Dark switching	═══ ⊗	═--═ ☼

Output state (PNP or NPN) indicator (illuminated when detector output is ON)

(1) Applications : the infrared transmission beam detector **XUV K0252S** is suitable for the detection of all types of opaque legends ; the red/green transmission beam detector **XUV K0252VS** is suitable for the detection of all types of legends of different colours.
(2) The detector incorporates "self-teaching" setting : the light or dark switching function is selected when performing the first stage of the "self-teaching" setting procedure during set-up of the detector (see "self-teaching" setting procedure, page 30164/3).

Telemecanique

Schneider Electric

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Presentation

1 mm

2
1
3
4
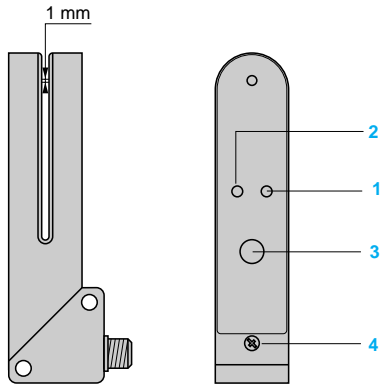
### "Self-teaching" setting procedure
● Place the label to be detected in the beam of the optical fork. Press the SET button and hold down until the green LED **2** goes out.
● When the green LED **2** flashes, the detector has "learnt" the label. Following this, place the item to which the label is affixed in the beam of the optical fork. Press the SET button and hold down until the green LED **2** goes out.
● When the green LED **2** illuminates as a steady light, the "self-teaching" setting procedure is completed and the detector is ready for operation.

1 Yellow LED - output state indicator
2 Double colour green/red LED - Ready/Error
3 "Self-teaching" SET button
4 Locking screw

Dimensions
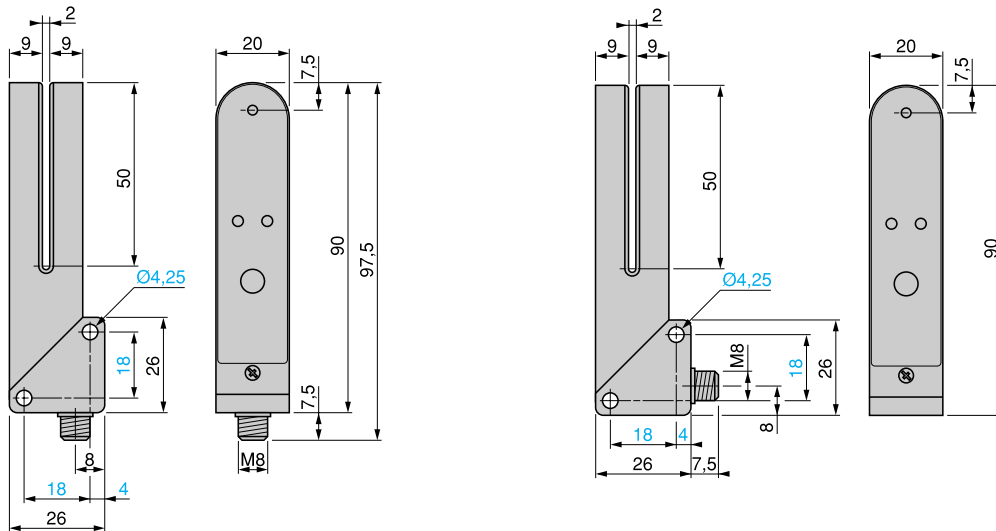
Connector scheme (detector connector pin view)

NPN output 2   4 PNP output
1   3
+   −
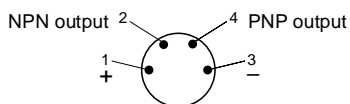
Depending on connector page 30210/2.