

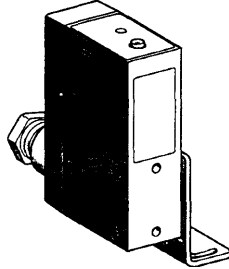
Photo-electric detectors

Osiris® specific application detectors, mechanical handling series
 With analogue output signal (1)
 d.c. supply. Solid state output

Accessories
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References, characteristics

Compact design



2

System	Diffuse
Type of transmission	Infra-red
Nominal sensing distance (Sn)	20...80 cm

References

3-wire, PNP	XUJ-K803538
Weight (kg)	0,200

Characteristics

Product certifications	CE, CSA, UL
Ambient air temperature	Operation : - 25...+ 60 °C. Storage : - 40...+ 80 °C
Vibration resistance	7 gn, amplitude ± 1.5 mm (f = 10...55 Hz), conforming to IEC 68-2-6
Shock resistance	20 gn, duration 11 ms, conforming to IEC 68-2-27
Degree of protection	IP 67 conforming to IEC 529 and IP 671 conforming to NF C 20-010
Connection	Screw terminals, capacity : 2 x 1.5 mm ² or 1 x 2.5 mm ²
Materials	Case : PEI (2)
Rated supply voltage	== 24 V
Voltage limits	== 20...30 V (including ripple)
Output current	maximum minimum
	20 mA 4 mA
Output voltage (Vs)	== 0...10 V
Output voltage drift in relation to temperature	< 10 % between - 25 and + 60 °C
Output voltage drift in relation to object colour	< 10 %
Current consumption, no-load	≤ 35 mA
Maximum switching frequency	10 Hz (for an output voltage variation of 1 V)
Delays	First-up : ≤ 150 ms
Indicator light	The luminosity of the LED is proportional to the output voltage

(1) Applications : position control, monitoring of concentricity or eccentricity, closed loop regulation, monitoring of displacement, etc.

(2) PEI : high quality synthetic resin providing excellent withstand to shocks, vibration and the effects of external agents frequently encountered in industry : alcohol, salts, petroleum, oils, grease, washing agents (diluted sodium carbonate 4%, nitric acid 2%), formaldehyde vapour, splashing lactic acid, etc.

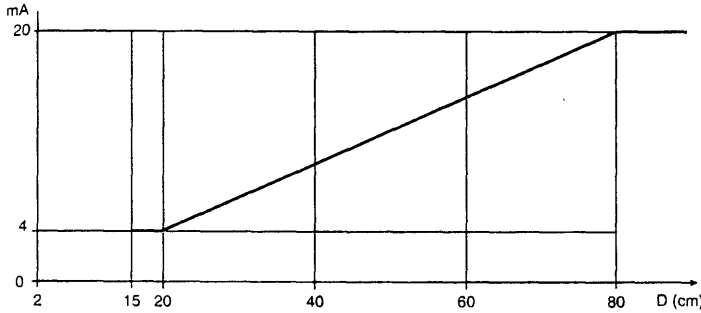
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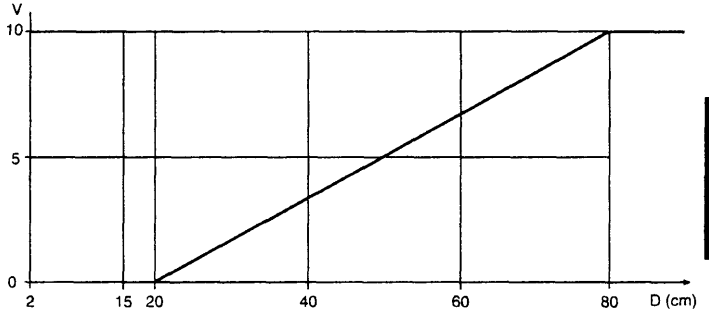
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Curves, dimensions, schemes

Output signal (related to distance of object)
 Test performed with 20 x 20 cm, white 90 % object
 Output current

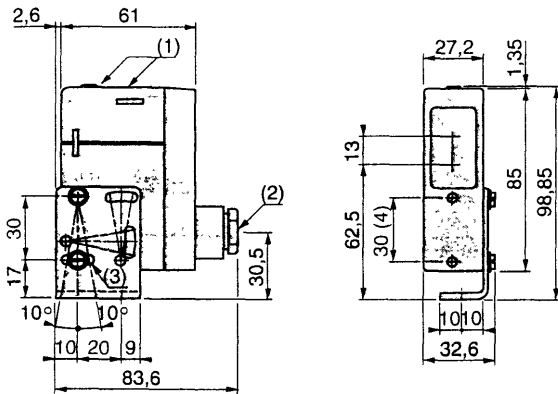


Output voltage



Adjustment not recommended in this zone

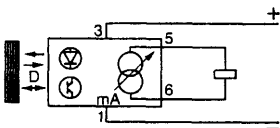
Dimensions



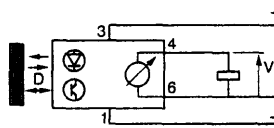
- (1) LED
- (2) n° 11 plastic cable gland
- (3) 1 elongated hole Ø 4.2 x 14
- (4) Front fixing (Ø 4 screws and inserts supplied)

Wiring schemes (3-wire ---)

Diffuse system
 Output current



Output voltage



Load characteristics

- Output current : the output current varies between 4 and 20 mA depending on the distance of the object and therefore, the load must be less than 1 kΩ.
- Output voltage : since the minimum rated output current of the detector is 10 mA, the load must always have a resistive value of more than 1 kΩ.

Terminal connections

- 1 ⌀ - (-)
- 2 ⌀
- 3 ⌀ - (+)
- 4 ⌀ - Output voltage
- 5 ⌀ - Output current
- 6 ⌀ - (-)

Terminals 1 and 6 connected internally.