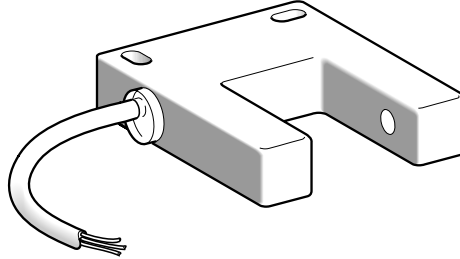


# Photo-electric sensors

Osiris® Application, mechanical handling series  
Optical fork type with integral amplifier  
d.c. supply. Solid-state output

## Fork design



System	Thru-beam
Type of transmission	Infrared
Nominal sensing distance (Sn)	30 mm

## References

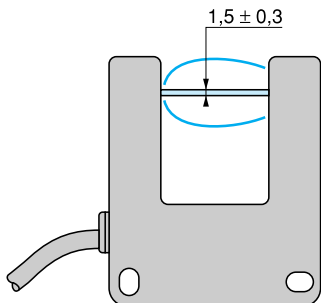
3-wire, PNP	Dark switching	XUV H0312
3-wire, NPN	Dark switching	XUV J0312
Weight (kg)		0.130

## Characteristics

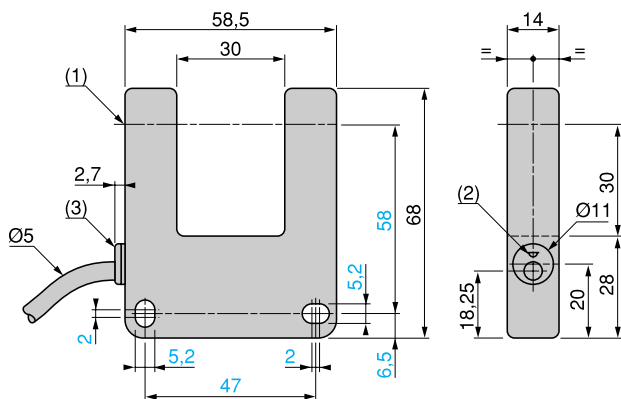
Product certifications		CE
Ambient air temperature	Operation	- 5...+ 55 °C
	Storage	- 20...+ 70 °C
Vibration resistance	Conforming to IEC 60068-2-6	Amplitude ± 1 mm at up to 42 Hz, 7 gn (f = 10...42 Hz)
Shock resistance	Conforming to IEC 60068-2-27	30 gn, duration 11 ms
Degree of protection	Conforming to IEC 529	IP 54
Connection		Pre-cabled, diameter 5 mm, length 2 m, wire c.s.a. : 3 x 0,34 mm <sup>2</sup>
Materials	Case	PC/ABS
	Lens	PMMA
	Cable	PvR
Rated supply voltage		≡ 24 V with protection against reverse polarity
Voltage limits		≡ 19...38 V (including ripple)
Switching capacity (sealed)		≤ 150 mA with overload and short-circuit protection
Voltage drop, closed state		≤ 1.5 V
Current consumption, no-load		≤ 20 mA
Maximum switching frequency		1000 Hz
Delays	First-up	≤ 30 ms
	Response	500 μs
	Recovery	500 μs

Function table Dark switching	Thru-beam system	
	No object present in the beam	Object present in the beam
Output state (PNP or NPN) LED (illuminated when detector output is ON)		

## Detection curve



## Dimensions



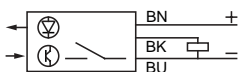
- (1) Optical axis
- (2) LED
- (3) Diffuser

Maximum tightening torque of fixing screws : 3 N.m

## Wiring schemes (3-wire ---)

### Dark switching (no object present)

#### PNP output



#### NPN output

