

# Diffuse Ref. Photoelectric Sensors



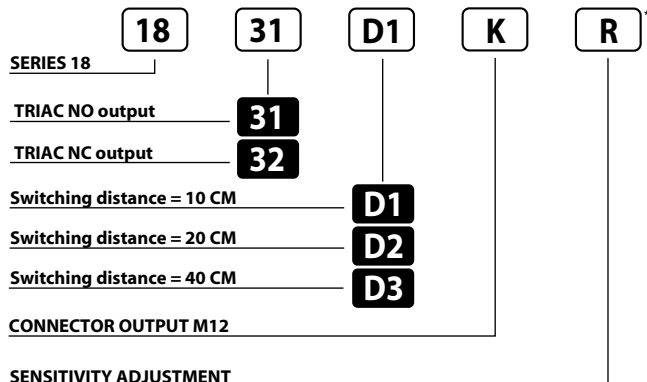
PHOTOELECTRIC SENSORS IN PLASTIC HOUSING 24 ÷ 230 V AC TRIAC NC OUTPUT

- Short housing
- Leakage <math>< 1.5 \text{ mA}</math> @ 220 V AC
- Models w/o pots for simple installation
- Cable or M12 quick connect models
- Models with 9-turn pot

## 18 Series



### Identification code



AVAILABLE	D1	D2	D3
SWITCHING DISTANCE	10 cm <sup>(1)</sup>	20 cm <sup>(1)</sup>	40 cm <sup>(1)</sup>
HYSTERESIS	10%		
EMISSION	Infrared (875 nm)		
NOMINAL VOLTAGE	24 ÷ 230VAC (-15 /+10%)		
MAINS FREQUENCY	50 ÷ 60 Hz		
MAX. OUTPUT CURRENT	150 mA		
LEAKAGE CURRENT	≤ 1.5mA (at 220VAC)		
ABSORPTION	1 W		
VOLTAGE DROP (Sensor ON)	< 2.5 V		
OPERATION LED	Yellow		
SWITCHING FREQUENCY	10 Hz		
RESPONSE TIME	100 mS		
START UP DELAY	300 mS		
ELECTRIC PROTECTIONS	Against inductive loads		
TEMPERATURE LIMITS	-10 ÷ +60 °C		
LIGHT IMMUNITY	5000 Lux <sup>(2)</sup>		
PROTECTION DEGREE	IP 67 (IP 65 for models with sensitivity adjustment)		
CABLE LENGTH	2 m		
CABLE SECTION	3 x 0.35 mm <sup>2</sup>		
HOUSING MATERIAL	Housing: nylon loaded with fiberglass - Lenses: methacrylate		
WEIGHT - cable output -	120 g		

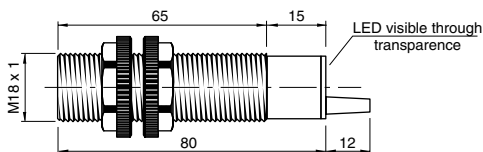
<sup>(1)</sup> Determined with a white mat paper (cm 10 x 10).

<sup>(2)</sup> Determined with halogen tungsten lamp 3000 °K.

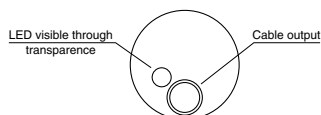
Note: for a proper use see norms at pages 7, 8, 9 and 10.

### Dimensions (mm)

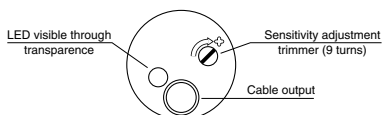
Configuration with cable



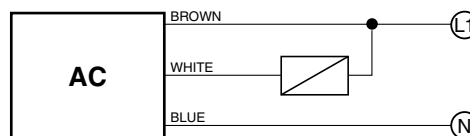
Configuration with cable - Back view



Configuration with sensitivity adjustment



### Wiring diagrams

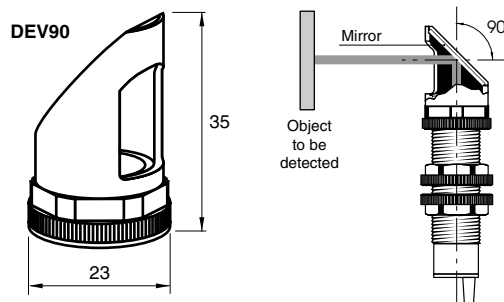


**WARNING:** Short circuit in the output is not possible. Wrong supply cables connections can irreparably damage the detector. Therefore sensors whose output status is short-circuited will not be substituted under warranty.

### CONNECTIONS IN PARALLEL

In parallel connections with multiple outputs, the maximum leakage current (<math>< 1.5 \text{ mA}</math> at 220 VAC) referring to the load and the supply should be taken into account when calculating the max. quantity of connectable sensors. It is important in this connection that the sensors are connected at the same phase.

### Accessories



### Characteristic curves

