



## Fotoprzełączniki W24-2, Fotoprzełącznik odbiciowy, Tłumienie tła

WT24-2R210

Nazwa modelu > **WT24-2R210**

Numer części > **1016932**



#### At a glance

- Precise background suppression at ranges up to 2500 mm
- Immune to ambient light and crosstalk from another photoelectric sensor
- Switch selectable PNP or NPN output, Switch selectable Light or Dark operating mode
- Variants with DC voltage and universal AC/DC voltage with UL approval
- Optional test input, adjustable ON and OFF time delays, alarm output and front screen heating also available in high-power version
- M12 or terminal chamber connection: 90° rotatable
- Red light or long-range IR

#### Your benefits

- Metal housing that has been IP 69K tested provides reliability and a long service life
- Immune to ambient light and crosstalk, reducing sensor downtime
- Precise detection at long sensing ranges
- User interface is stored under a durable protection hood to prevent unwanted tampering and protect vital components
- Selectable output type, operating mode, and adjustable time delays makes integration easier and reduce the number of devices needed
- Variants with DC voltage and universal AC/DC voltage provide installation flexibility



#### Cechy

|                                            |                                          |
|--------------------------------------------|------------------------------------------|
| Zasada działania czujnika/Sposób detekcji: | Fotoprzełącznik odbiciowy, Tłumienie tła |
| Wymiary (Szer. x Wys. x Głęb.):            | 27 mm x 87,5 mm x 65 mm                  |
| Housing design (light emission):           | Prostopadłościenna                       |
| Maks. strefa działania:                    | 100 mm ... 2.500 mm <sup>1)</sup>        |
| Sensing range:                             | 100 mm ... 2.500 mm                      |
| Rodzaj światła:                            | Światło podczerwone                      |
| Nadajnik światła:                          | LED <sup>2)</sup>                        |
| Light spot diameter (distance):            | Ø 80 mm (2.500 mm)                       |
| Adjustment of operating distance:          | Potentiometer                            |

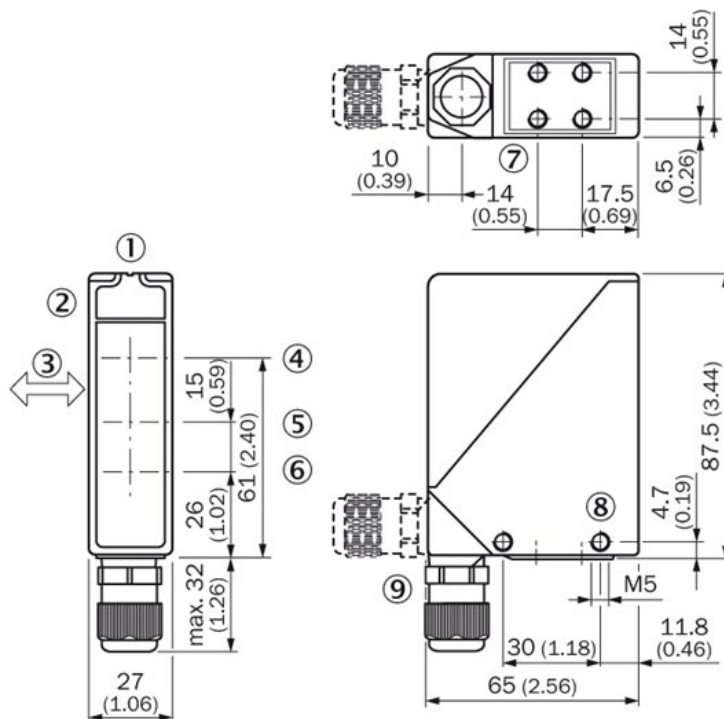
<sup>1)</sup> Obiekt odbijający 90% światła (standardowy biały zgodnie z normą DIN 5033) <sup>2)</sup> Average service life 100,000 h at Ta = +25 °C

#### Mechanika/elektronika

|                                |                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Napięcie zasilania::           | 12 V DC ... 240 V DC <sup>1) 2)</sup>                                                                                                      |
| Pobór mocy:                    | < 2 VA                                                                                                                                     |
| Wyjście przełączające:         | Relay, przełączanie jasno/ciemno, wybierane, selectable via light/dark selector, change-over contacts, electrically isolated <sup>3)</sup> |
| Tryb przełączania:             | Change-over contacts                                                                                                                       |
| Switching mode selector:       | Selectable via light/dark selector                                                                                                         |
| Maks. prąd łączeniowy:         | 4 A (24 V DC), 4 A (250 V AC)                                                                                                              |
| Czas reakcji:                  | ≤ 10 ms                                                                                                                                    |
| Switching frequency:           | 10 Hz <sup>4)</sup>                                                                                                                        |
| Sposób przyłączenia:           | Terminal connection with M16 gland <sup>5)</sup>                                                                                           |
| Układ zabezpieczenia::         | A, C <sup>6) 7)</sup>                                                                                                                      |
| Klasa ochronności:             | II <sup>8)</sup>                                                                                                                           |
| Ciężar:                        | 330 g                                                                                                                                      |
| Tworzywo, obudowa:             | Cynkowa, odlewana                                                                                                                          |
| Tworzywo, układ optyczny:      | PMMA                                                                                                                                       |
| Rodzaj zabezpieczenia:         | IP 69K                                                                                                                                     |
| Usage category:                | AC-15, DC-13, According to EN 60947-1                                                                                                      |
| Ambient operating temperature: | -40 °C ... 60 °C                                                                                                                           |
| Ambient storage temperature:   | -40 °C ... 75 °C                                                                                                                           |
| Switching mode characteristic: | Electrically isolated                                                                                                                      |

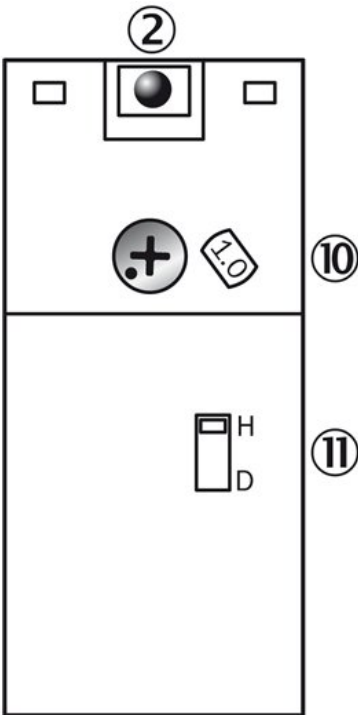
<sup>1)</sup> Limit values <sup>2)</sup> +/- 10 % <sup>3)</sup> Provide suitable spark supression for inductive or capacitive loads <sup>4)</sup> With light/dark ratio 1:1 <sup>5)</sup> Connection rotatable by 90° <sup>6)</sup> A = V <sub>S</sub>  
 connections reverse-polarity protected <sup>7)</sup> C = interference suppression <sup>8)</sup> Rated voltage 250 V AC/DC

## Dimensional drawing



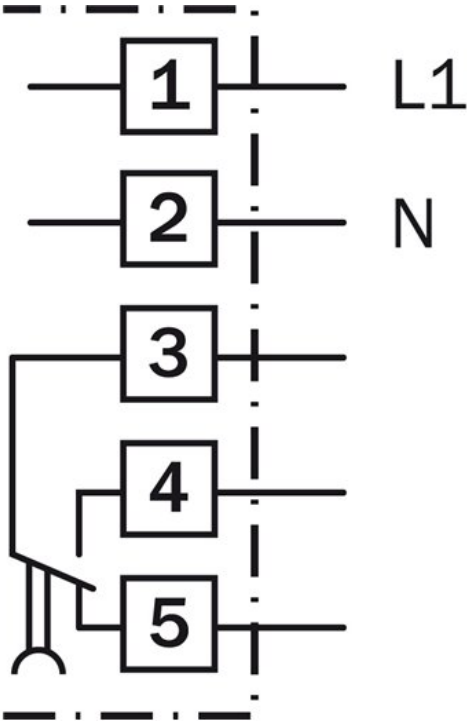
- [1] Alignment sight
- [2] LED signal strength indicator
- [3] Standard direction of the material being scanned
- [4] Center of optical axis, sender
- [5] Centre of optical axis, receiver (close range)
- [6] Centre of optical axis, receiver (far range)
- [7] M5 threaded mounting hole, 6 mm deep
- [8] M5 threaded mounting hole, through-hole
- [9] M16 screw fixing and plug rotatable by 90°

Adjustments possible

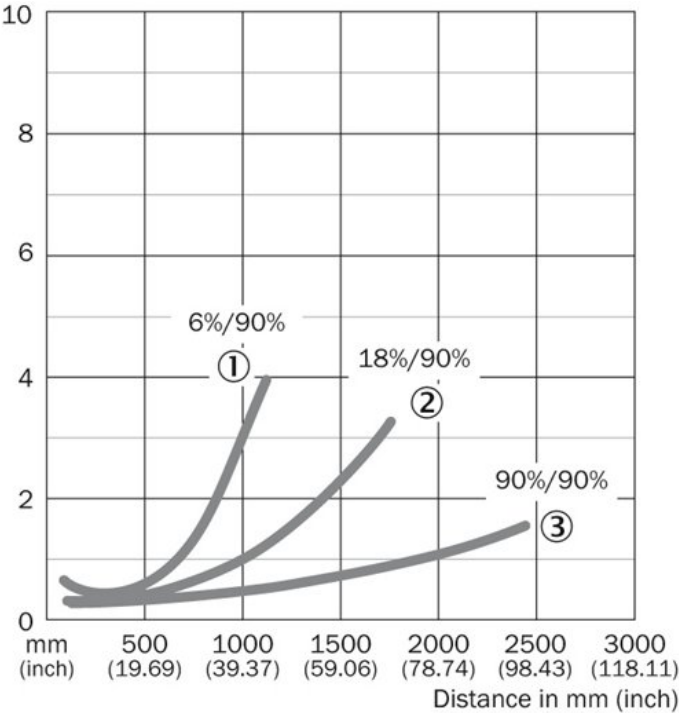


- |2| LED signal strength indicator
- |10| Sensing distance adjustment
- |11| Light/dark selector

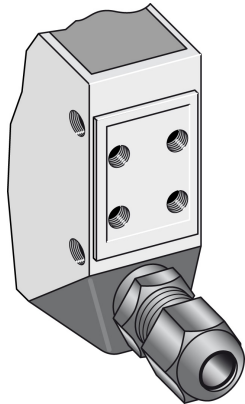
Connection diagram



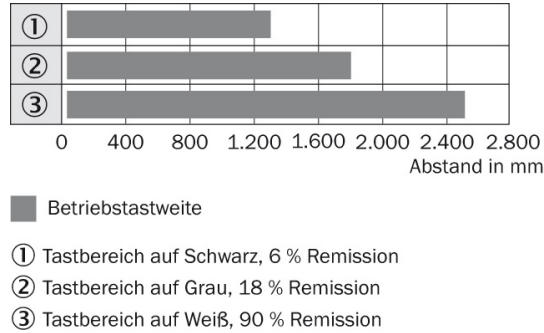
Characteristic curve



Connection type



Sensing range diagram



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