



## Fotoprzełączniki V12-2, Fotoprzełącznik odbiciowy, energetyczny

VT12T-2P430



Nazwa modelu > **VT12T-2P430**

Numer części > **6026216**



#### At a glance

- Sensing distance up to 115 mm or 340 mm (90% remission)
- 2 teach-in modes: Standard teach mode for basic applications, precise teach mode with small hysteresis for special applications
- Adjustable light or dark switching as complementary outputs
- PNP or NPN output available
- Complements inductive sensor portfolio
- M12 housing
- 4-pin M12 connector or 2 m cable

#### Your benefits

- Standard M12 miniature housing saves installation space on the machine
- Simple design and time-saving installation due to a standard M12 housing
- Operating reserve display simplifies commissioning and saves maintenance time
- Cost-effective solution due to simple mounting, standardized connection technology and broad application use
- Fast response times ensure reliable detection of objects at high speeds, increasing machine throughput
- Tough metal housing provides a long service life, reducing maintenance time and costs



#### Cechy

|                                            |                                                                      |
|--------------------------------------------|----------------------------------------------------------------------|
| Zasada działania czujnika/Sposób detekcji: | Fotoprzełącznik odbiciowy, energetyczny                              |
| Housing design (light emission):           | Cylindrical, straight                                                |
| Długość obudowy:                           | 65,5 mm                                                              |
| Thread diameter (housing):                 | M12 x 1                                                              |
| Maks. strefa działania:                    | 0 mm ... 340 mm <sup>1)</sup>                                        |
| Strefa działania:                          | 2 mm ... 300 mm                                                      |
| Rodzaj światła:                            | Światło podczerwone                                                  |
| Nadajnik światła:                          | LED <sup>2)</sup>                                                    |
| Light spot (distance):                     | 28 mm (300 mm)                                                       |
| Długość fali:                              | 880 nm                                                               |
| Nastawienie czułości:                      | Manual, via teach-in button<br>electronic, via control input C (0 V) |
| Kąt promieniowania:                        | 5,3 °                                                                |

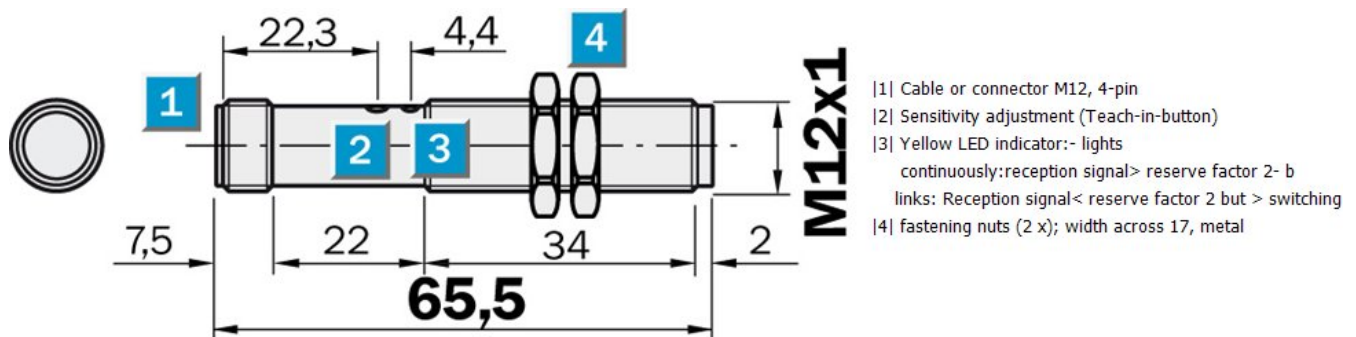
<sup>1)</sup> Obiekt odbijający 90% światła (standardowy biały zgodnie z normą DIN 5033) <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

## Mechanika/elektronika

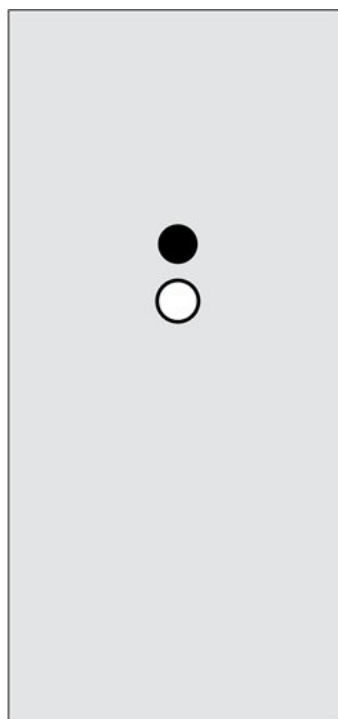
|                                   |                                                                           |
|-----------------------------------|---------------------------------------------------------------------------|
| Napięcie zasilania:               | 10 V DC ... 30 <sup>1)</sup>                                              |
| Tętnienia resztkowe:              | $\leq 10\%$ <sup>2)</sup>                                                 |
| Pobór prądu:                      | 20 <sup>3)</sup>                                                          |
| Wyjście przełączające:            | PNP, przełączanie jasno/ciemno, wybierane, Selectable via control input C |
| Output current I <sub>max</sub> : | 100 <sup>4)</sup>                                                         |
| Czas reakcji:                     | $\leq 1,25\text{ ms}$ <sup>5)</sup>                                       |
| Switching frequency:              | 400 <sup>6)</sup>                                                         |
| Typ połączenia:                   | Wtyk M12, 4-pin                                                           |
| Układ zabezpieczenia::::          | A, B, C, D <sup>7)</sup> <sup>8)</sup> <sup>9)</sup> <sup>10)</sup>       |
| Klasa ochronności:                | III                                                                       |
| Ciężar:                           | 18 g                                                                      |
| Tworzywo, obudowa:                | Nickel-plated brass/PA                                                    |
| Tworzywo, układ optyczny:         | PMMA                                                                      |
| Rodzaj zabezpieczenia:            | IP 67                                                                     |
| Ambient operating temperature:    | -25 ... 70 °C                                                             |
| Ambient storage temperature:      | -25 ... 70 °C                                                             |

<sup>1)</sup> Limit values   <sup>2)</sup> May not exceed or fall short of  $V_S$    <sup>3)</sup> Bez obciążenia   <sup>4)</sup> Without load   <sup>5)</sup> Signal transit time with resistive load   <sup>6)</sup> With light/dark ratio 1:1   <sup>7)</sup> A =  $V_S$   
connections reverse-polarity protected   <sup>8)</sup> B = inputs and output reverse-polarity protected   <sup>9)</sup> C = interference suppression   <sup>10)</sup> D = outputs overcurrent and short-circuit protected

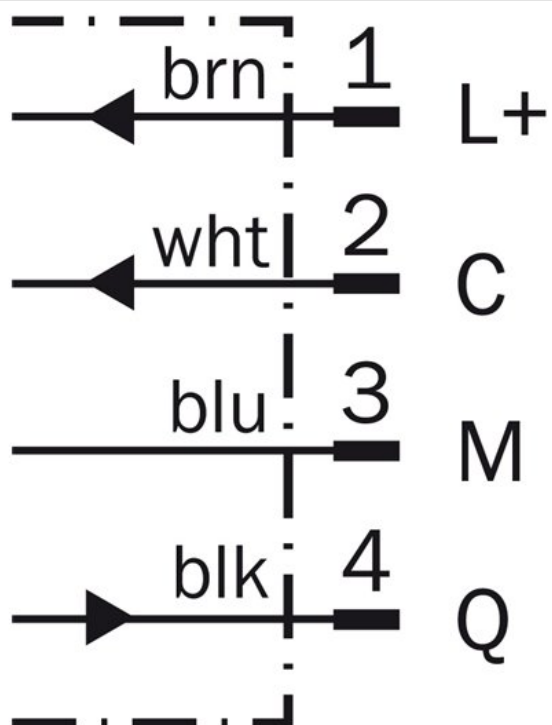
## Dimensional drawing



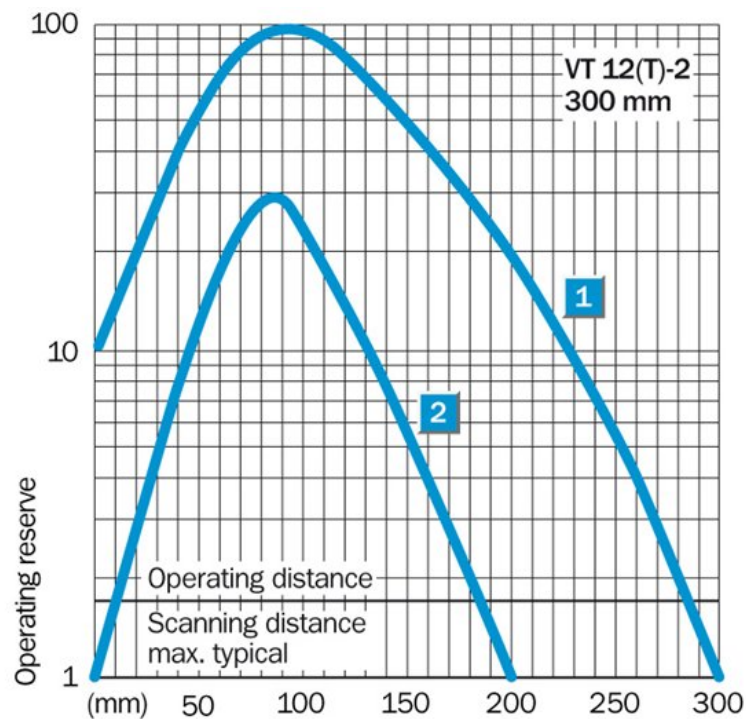
## Adjustments possible



## Connection diagram



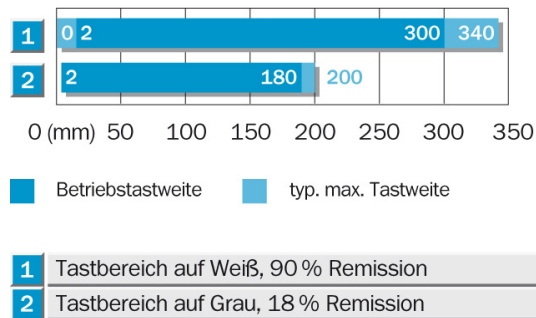
Characteristic curve



Connection type



Sensing range diagram



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