

## Fork Sensors WF

WF5-40B410



Nazwa modelu > **WF5-40B410**

Numer części > **6028429**

#### At a glance

- Infrared light source
- Adjustment via teach-in or manually via +/- buttons
- Light/dark switching output
- PNP and NPN switching output
- Fast response time (max. 100 µs)
- 21 different models with different fork widths and depths
- Rugged, IP 65 aluminum housing

#### Your benefits

- Fast response time and fine resolution ensure reliable detection even at high speeds
- Infrared light source provides excellent ambient light immunity
- User friendly setting via teach-in or +/- button
- A wide range of different fork sizes enables flexible installation
- The aluminum housing meets all requirements for use in harsh industrial conditions



#### !Features!

|                   |                                       |
|-------------------|---------------------------------------|
| Sposób działania: | Optical detection principle           |
| Fork width:       | 5 mm                                  |
| Fork depth:       | 42 mm                                 |
| MDO:              | 0,2 mm<br>(Minimum detectable object) |
| Label detection:  | ✓                                     |
| Nadajnik światła: | LED, infrared modulated               |
| Rodzaj światła:   | Infrared                              |

#### !Mechanics/electronics!

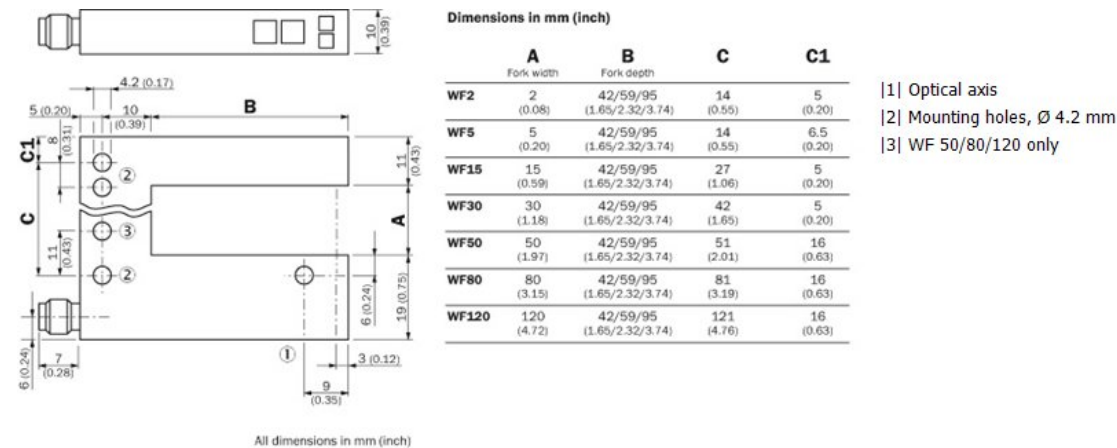
|                             |                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------|
| Napięcie zasilania VS:      | 10 V ... 30 V                                                                    |
| Tętnienia resztkowe:        | < 10 % (May not exceed or fall short of $V_S$ tolerances)                        |
| Pobór prądu:                | 40 mA (bez obciążenia)                                                           |
| Wyjście przełączające:      | NPN: HIGH = approx. VS / LOW = < 2 V<br>PNP: HIGH = VS - < 2 V / LOW approx. 0 V |
| Tryb przełączania:          | PNP/NPN                                                                          |
| Switching frequency:        | 10 kHz (With light/dark ratio 1:1, no time delay)                                |
| Czas reakcji:               | 100 µs (Signal transit time with resistive load)                                 |
| Stability of response time: | ± 20 µs                                                                          |

|                                   |                                                                                                                     |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Tryb przełączania:                | Light-/dark-switching, selectable via button                                                                        |
| Initialisation time:              | 100 ms                                                                                                              |
| Sposób przyłączenia:              | Złącze M8, 4-pinowe                                                                                                 |
| Ambient light safety:             | incandescent lamp: 5.000 lx<br>Sunlight: 10.000 lx                                                                  |
| VDE protection class:             | III (Reference voltage 50 V DC)                                                                                     |
| Układ zabezpieczenia:             | A = VS connections reverse-polarity protected<br>Wyjście Q zabezpieczone przed zwarciami<br>Tłumienie interferencji |
| Rodzaj zabezpieczenia:            | IP 65                                                                                                               |
| Ciężar:                           | ca. 36 g ... 160 g                                                                                                  |
| Housing material:                 | ABS                                                                                                                 |
| Output current I <sub>max</sub> : | 100 mA                                                                                                              |
| Teach-in:                         | 0                                                                                                                   |

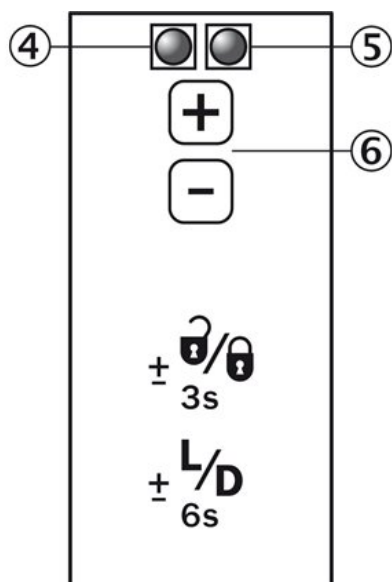
!Ambient data!

|                      |                                                                                     |
|----------------------|-------------------------------------------------------------------------------------|
| Ambient temperature: | Operation: -20 ... 60 °C<br>Storage area: -30 ... 80 °C<br>(Do not bend below 0 °C) |
|----------------------|-------------------------------------------------------------------------------------|

Rysunek techniczny

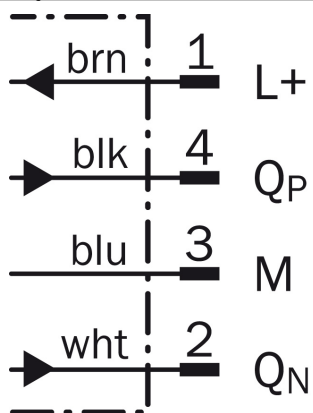


## Adjustments



- [4] Function indicator (red)
- [5] Function indicator (yellow), switching output
- [6] "+" and "-" buttons and function button

## Schemat połączenia



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