



## Czujniki widelkowe WF, WFnext

WF120-60B410



Nazwa modelu > **WF120-60B410**

Numer cz ci > **6028442**



#### At a glance

- Infrared light source
- Simple and accurate adjustment via teach-in or manually via "+"/"-" buttons
- Fast response time (max. 100 µs)
- PNP and NPN switching output
- Light/dark switching function
- 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



#### Cechy

Sposób działania:	Optical detection principle
Fork width:	120 mm
Fork depth:	59 mm
MDO <sup>1)</sup> :	0,2 mm
Label detection:	-
Nadajnik światła:	LED, infrared
Nastawa:	Manual ("+"/"-" button)
Tryb przełączania:	Light/darkswitching, selectable via button

<sup>1)</sup> Najmniejszy wykrywalny obiekt

#### Mechanika/elektronika

Napięcie zasilania VS <sup>1)</sup> :	DC 10 V ... 30 V
Tętnienia resztkowe <sup>2)</sup> :	< 10 %
Pobór prądu <sup>3)</sup> :	40 mA
Switching frequency <sup>4)</sup> :	10 kHz
Czas reakcji <sup>5)</sup> :	100 µs
Stability of response time:	± 20 µs

Wyjście przełączające:	NPN: HIGH = approx. $V_S$ / LOW $\leq 2$ V PNP: HIGH = $V_S - 2$ V / LOW approx. 0 V
Tryb przełączania:	PNP/NPN
Output current I <sub>max</sub> ·:	100 mA
Initialization time:	100 ms
Sposób przyłączenia:	Connector M8, 4-pin
Bezpieczna jasność oświetlenia:	Sunlight: $\leq 10.000$ klx
Klasa ochronności <sup>6)</sup> :	III
Układ zabezpieczenia:	Vs connections reverse-polarity protected Wyjście Q zabezpieczone przed zwarciami Tłumienie interferencji
Rodzaj zabezpieczenia:	IP 65
Ciężar:	Ca. 36 g ... 160 g <sup>7)</sup>
Housing material:	Aluminium

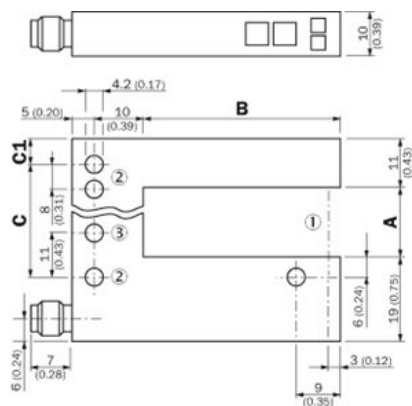
1) Limit values, reverse-polarity protected, operation in short-circuit protected network, max. 8 A<sup>2)</sup> May not exceed or fall short of  $V_S$  tolerances<sup>3)</sup> Bez obciążenia<sup>4)</sup>  
 With light/dark ratio 1:1<sup>5)</sup> Signal transit time with resistive load<sup>6)</sup> Reference voltage DC 50 V<sup>7)</sup> Depending on fork width

## Dane otoczenia

Ambient temperature <sup>1)</sup> :	Operation: -20 ... 60 °C Storage: -30 ... 80 °C
Obciążenie uderzeniowe:	According to EN 60068-2-27
UL File-No.:	UL Nr. NRKH.E191603

1) Do not bend below 0 °C

## Dimensional drawing



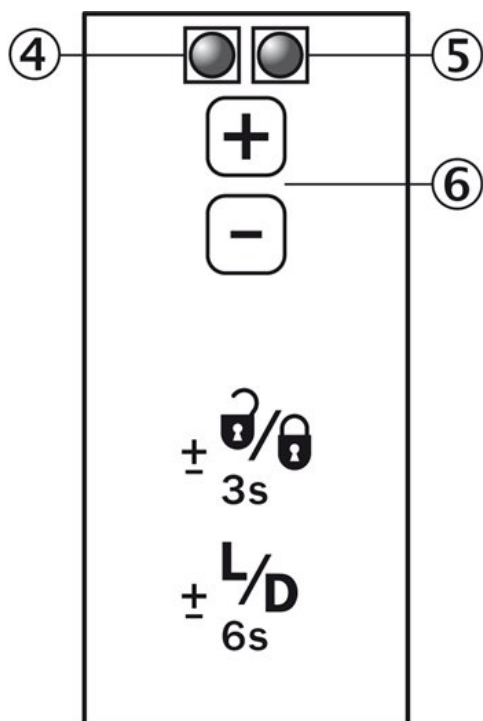
All dimensions in mm (inch)

### Dimensions in mm (inch)

	A Fork width	B Fork depth	C	C1
WF2	2 (0.08)	42/59/95 (1.65/2.32/3.74)	14 (0.55)	5 (0.20)
WF5	5 (0.20)	42/59/95 (1.65/2.32/3.74)	14 (0.55)	6.5 (0.20)
WF15	15 (0.59)	42/59/95 (1.65/2.32/3.74)	27 (1.06)	5 (0.20)
WF30	30 (1.18)	42/59/95 (1.65/2.32/3.74)	42 (1.65)	5 (0.20)
WF50	50 (1.97)	42/59/95 (1.65/2.32/3.74)	51 (2.01)	16 (0.63)
WF80	80 (3.15)	42/59/95 (1.65/2.32/3.74)	81 (3.19)	16 (0.63)
WF120	120 (4.72)	42/59/95 (1.65/2.32/3.74)	121 (4.76)	16 (0.63)

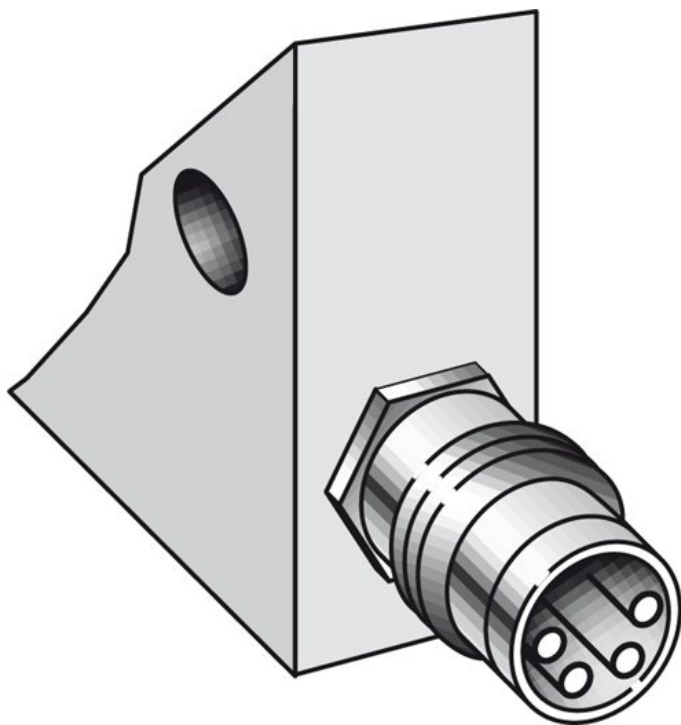
- |1| Optical axis
- |2| Mounting hole,  $\varnothing$  4.2 mm
- |3| WF50/80/120 only

## Adjustments



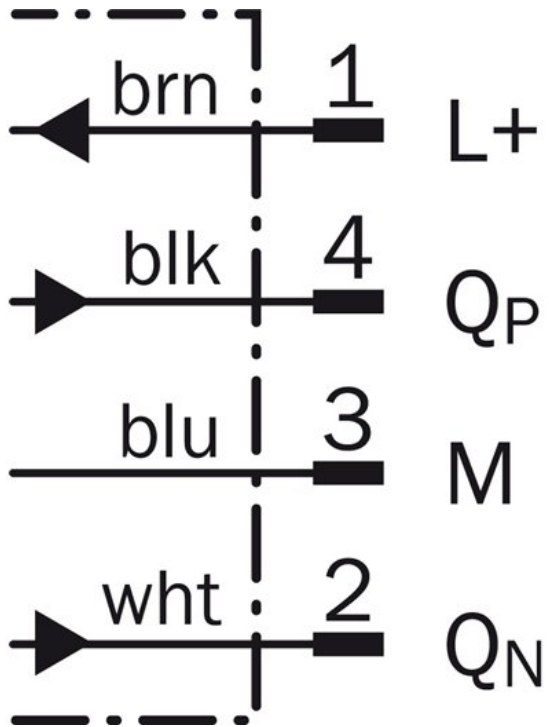
- |4| Function signal indicator (yellow), switching output
- |5| Function indicator (red)
- |6| "+" "-" buttons and function button

## Connection type



Connection diagram

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