



## Wzmacniacze światłowodowe WLL170-2, Fiber-optic photoelectric sensor

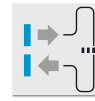
WLL170-2P430



**SICK**  
Sensor Intelligence.

Nazwa modelu > **WLL170-2P430**

Numer cz ci > **6029514**



#### At a glance

- Rapid response time (50  $\mu$ s)
- Switching threshold adjustment via potentiometer, or teach-in via button or cable
- Four different teach-in modes
- Simple installation
- Red or green LED emitter

#### Your benefits

- Reliable, rapid process detection
- Low installation costs due to short commissioning time
- Flexible teach-in modes allow the sensor to be customized according to the specific application
- Emitted light ideal for color or contrast detection
- Easy programming via simple potentiometer and switch adjustment



#### Cechy

Wymiary (Szer. x Wys. x Głęb.):	10,5 mm x 35,5 mm x 83,7 mm
Maks. strefa działania:	0 mm ... 4.000 mm, through-beam system <sup>1)</sup>
Sensing range:::	0 mm ... <sup>2)</sup> 160,4 mm, proximity system, 0 mm ... 700 mm, through-beam system <sup>5)</sup>
Nadajnik światła:	LED <sup>5)</sup>
Rodzaj światła:	Widzialne światło czerwone
Długość fali:	660 nm
Nastawienie czułości:	Potentiometer, 10-turn <sup>6)</sup>
Typ czasu:	Off-delayed
Czas opóźnienia:	Selectable by sliding switch: $\geq$ 40 ms
Indication:	LED
Zasada działania czujnika/Sposób detekcji:	Fiber-optic photoelectric sensor
Kąt promieniowania:	Ca. 65°
Housing design (light emission):	Prostopadłościenna

<sup>1)</sup> LL3-TB02 and tip adapter LL3-TA01 <sup>2)</sup> Objects to be sensed with 90% reflectivity (based on DIN 5033 white standard), sensing distance depends on fiber-optic cable <sup>3)</sup> LL3-DK06 <sup>4)</sup> LL3-TB01 <sup>5)</sup> Average service life 100,000 h at Ta = +25 °C <sup>6)</sup> Scale 270°

#### Mechanika/elektronika

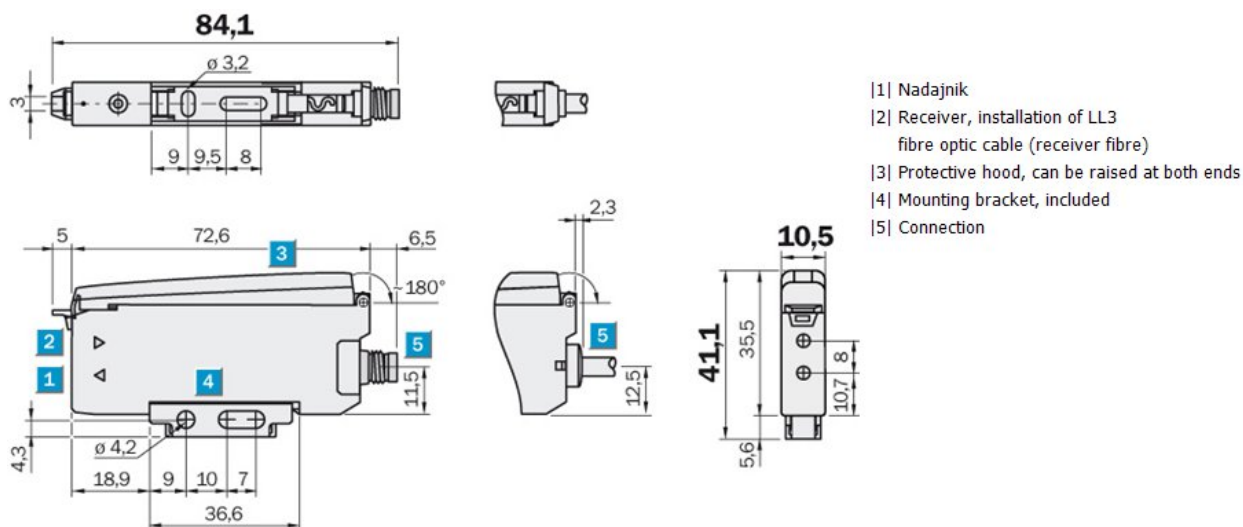
Enclosure rating:	IP 66 <sup>1)</sup>
Napięcie zasilania:	10 V DC ... 30 V DC <sup>2)</sup>

Tętnienia resztkowe:	10 % <sup>3)</sup>
Current consumption:	≤ 30 mA <sup>4)</sup>
Wyjście przełączające:	PNP, przełączanie jasno/ciemno, wybierane, selectable via light/dark selector, open collector
Output current I <sub>max</sub> .:	≤ 100 mA
Czas reakcji:	≤ 0,25 ms <sup>5)</sup>
Switching frequency:	2.000 Hz <sup>6)</sup>
Sposób przyłączenia:	Connector M8, 4-pin
Klasa ochronności:	III
Układ zabezpieczenia:::::	A, B, C, D <sup>7)</sup> <sup>8)</sup> <sup>9)</sup> <sup>10)</sup>
Tworzywo, obudowa:	ABS/PC
Ambient operating temperature:	-25 °C ... 55 °C
Ambient storage temperature:	-40 °C ... 70 °C
UL File-No.:	UL No. NRNT2.E128350 & cUL No. NRNT8.E128350

See LL3 fiber-optic data;

1) With correctly attached fibre-optic cable LL3 and closed protection hood 2) Limit values 3) May not exceed or fall short of  $V_S$  4) Without load 5) Signal transit time with resistive load 6) With light/dark ratio 1:1 7) A =  $V_S$  connections reverse-polarity protected 8) B = inputs and output reverse-polarity protected 9) C = interference suppression 10) D = outputs overcurrent and short-circuit protected

## Dimensional drawing

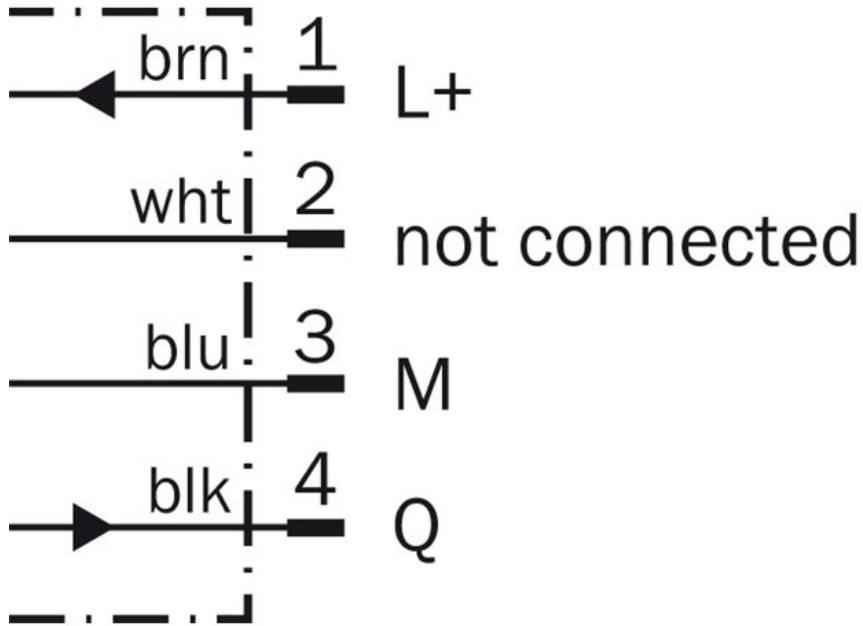


## Adjustments possible



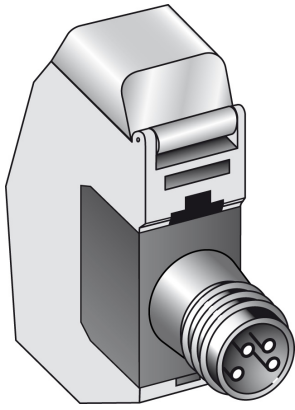
- [6] Indication of correct fibre-optic cable mounting
- [7] LED indicator orange, lights up when switching output is active
- [8] LED signal strength indicator green, lights up, when light received < 0.9 or > 1.1 (switching threshold = 1)
- [9] Sensitivity scale 270°
- [10] Sensitivity control ( 10 revolutions)
- [11] L.ON/ d.ON selection switch. "OFF DLY" (on) / "OFF", 40 ms fixed
- [12] Selector switch: "L.ON" ( light-switching) / "D.ON" ( dark-switching)

## Connection diagram



**Connection type**

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