



Photoelectric sensors  
W280L-2 Long Range, Photoelectric proximity  
sensor, Background suppression

WLT280L-2N2536



**Model Name** > [WLT280L-2N2536](#)  
**Part No.** > [6048070](#)



*Illustration may differ*

**At a glance**

- WLT280L-2: Sensing distance up to 18 m with reflector P250
- Visible red Class 1 laser
- 2 x switching outputs and light/dark switch
- Disable laser by wire

**Your benefits**

- One sensor with two outputs and two status LEDs improves application flexibility and reduces the number of sensors needed
- Quick and easy commissioning with sensing range adjustment potentiometers and status LEDs - one for each output
- Quick and easy alignment with a red Class 1 laser
- Rotatable connector and light/dark switch for mounting and installation flexibility



**Features**

Sensor/detection principle:	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D):	23.5 mm x 76 mm x 55.8 mm
Housing design (light emission):	Rectangular
Sensing range max.:	200 mm ... 18,000 mm <sup>1)</sup>
Sensing range:	200 mm ... 18,000 mm
Type of light:	Visible red light
Light source:	Laser <sup>2)</sup>
Laser class:	1 (EN 60825-1:2008-5, IEC 60825-1:2007-03)
Light spot diameter (distance):	Ø 50 mm (18 m)
Adjustment of operating distance:	Potentiometer

<sup>1)</sup> Reflector P250, PL80A <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

**Mechanics/electronics**

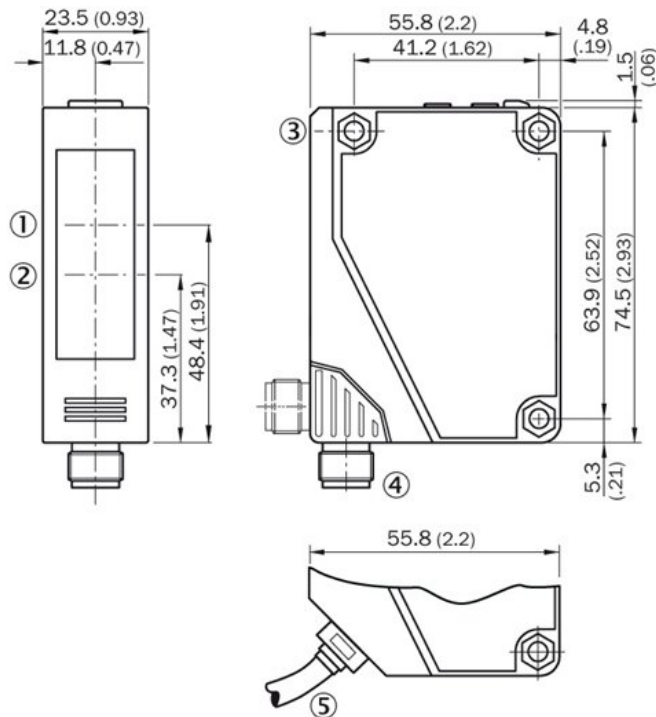
Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	≤ 3 V <sub>pp</sub> <sup>2)</sup>
Power consumption:	≤ 70 mA <sup>3)</sup>
Output type:	2 x NPN, Light/dark-switching, selectable via light/dark rotary switch, open collector
Switching mode selector:	Selectable via light/dark rotary switch
Output current I <sub>max.</sub> :	≤ 100 mA

Response time:	≤ 2 ms <sup>4)</sup>
Switching frequency:	250 Hz <sup>5)</sup>
Connection type:	Connector M12, 5-pin
Circuit protection:::	A, B, C, D <sup>6) 7) 8) 9)</sup>
Protection class:	III
Weight:	120 g
Housing material:	ABS
Optics material:	PMMA
Enclosure rating:	IP 67
Items supplied:	Mounting bracket BEF-W280
EMC:	EN 60947-5-2 <sup>10)</sup>
Ambient operating temperature:	-10 °C ... 50 °C
Ambient storage temperature:	-40 °C ... 70 °C
Switching mode characteristic:	Open collector

1) Limit values, 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> Without load <sup>4)</sup> Signal transit time with resistive load <sup>5)</sup> With light/dark ratio 1:1 <sup>6)</sup> A =  $V_S$  connections reverse-polarity protected <sup>7)</sup> B = output reverse-polarity protected <sup>8)</sup> C = interference suppression <sup>9)</sup> D = outputs overcurrent and short-circuit protected <sup>10)</sup> The devices meet the interference suppression requirements for industrial use (interference suppression class A).

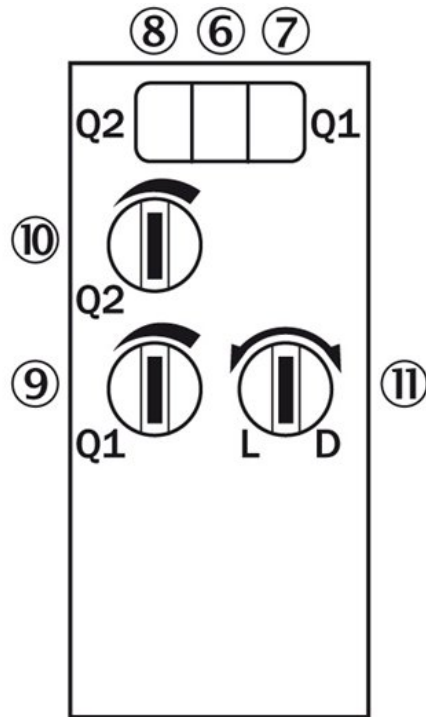
When used in residential areas it can cause interference.

## Dimensional drawing



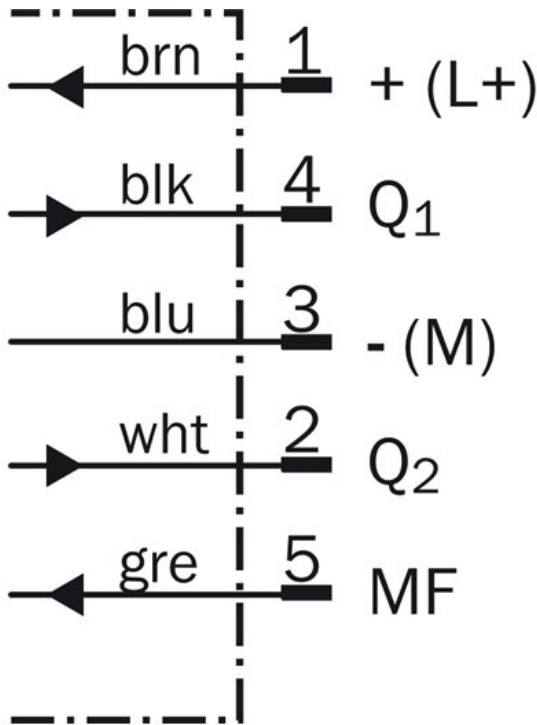
- [1] Center of optical axis, receiver
- [2] Center of optical axis, sender
- [3] Mounting hole, Ø 4.3 mm
- [4] Connector M12, 5-pin, rotatable by 90°
- [5] Cable, 2 m, 5-wire, Ø 3,8 mm

Adjustments possible



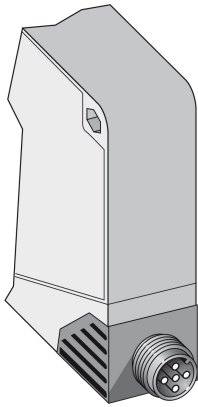
- |6| LED indicator green: Stability indicator
- |7| Status indicator LED, yellow: Status of received light beam (switching output 1)
- |8| Status indicator LED, yellow: Status of received light beam (switching output 2)
- |9| Sensing range adjustment: potentiometer for switching output 1
- |10| Sensing range adjustment: potentiometer for switching output 2
- |11| Light/dark selector

Connection diagram



**Connection type**

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