



Photoelectric sensors  
W18-3, Photoelectric proximity sensor,  
Background suppression

WT18-3P130



**Model Name** > [WT18-3P130](#)  
**Part No.** > [1025895](#)



*Illustration may differ*

**At a glance**

- Sender LED with visible red light
- Precise background suppression
- Sensing range adjustment via potentiometer
- Immune to ambient light
- Rugged plastic housing

**Your benefits**

- Fast installation due to highly visible red light saves time
- Reliable object detection with high-precision background suppression due to second sender LED
- Quick and easy sensing distance adjustment due to 4-turn potentiometer
- Crosstalk and ambient light immunity reduce false readings and downtime
- High availability in the field



**Features**

Dimensions (W x H x D):	17.6 mm x 75.5 mm x 33.5 mm
Sensing range max.:	10 mm ... 600 mm <sup>1)</sup>
Sensing range:	50 mm ... 600 mm <sup>2)</sup>
Housing desig (light emission):	Cuboid, Slim
Light source:	LED <sup>3)</sup>
Type of light:	visible red light
Wave length:	675 nm
Sensitivity adjustment:	Potentiometer, 4-turn
Sensor/detection principle:	Photoelectric proximity sensor, Background suppression
Light spot (distance):	15 mm (300 mm)

<sup>1) 2)</sup> Object with 90 % reflectance (referred to standard white DIN 5033) <sup>3)</sup> Average service life 100,000 h at Ta = +25 °C

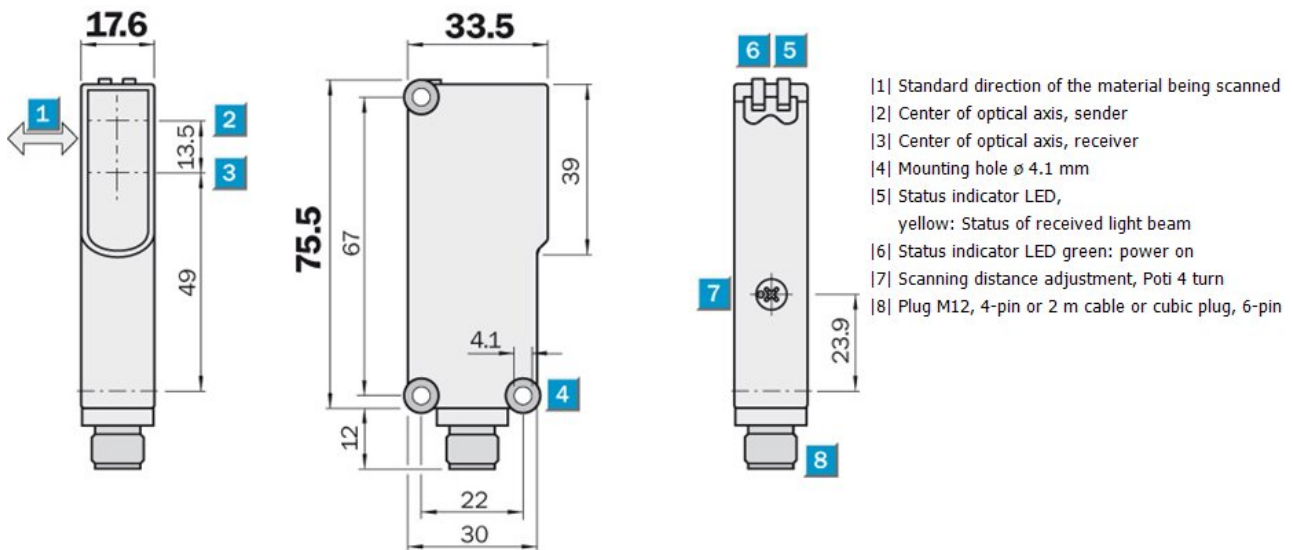
**Mechanics/electronics**

Enclosure rating:	IP 67
Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Residual ripple:	< 5 Vpp <sup>2)</sup>
Power consumption:	40 mA <sup>3)</sup>
Switching output:	PNP, light/dark-switching
Output current I <sub>max.</sub> :	100 mA
Response time:	< 700 µs <sup>4)</sup>

Switching frequency:	700 Hz <sup>5)</sup>
Connection type:	Cable, 4-wire, 2 m <sup>6)</sup>
Cable material:	PVC
Circuit protection:::	A C <sup>7) 8) 9)</sup> D
Weight:	120 g
Housing material:	ABS
Optics material:	PMMA
Ambient temperature, operation:	-40 °C ... 60 °C
Ambient temperature, storage:	-40 °C ... 75 °C
Voltage supply-LED:	✓
Output state-LED:	✓
UL File-No.:	UL No. NRKH.E181493 & cUL No. NRKH7.E181493

1) Limit values, operation in short-circuit protected network max. 8 A <sup>2)</sup> May not exceed or fall short of  $V_S$  <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> Do not bend below 0 °C <sup>7)</sup> A =  $V_S$  connections reverse-polarity protected <sup>8)</sup> S C = interference suppression <sup>9)</sup> D = outputs overcurrent and short-circuit protected

### Dimensional drawing

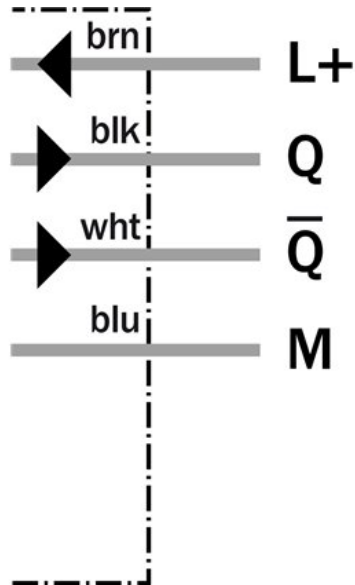


## Einstell-Möglichkeiten

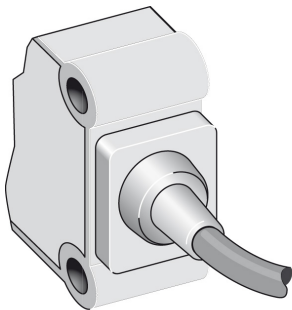


[7] Scanning distance adjustment, Poti 4 turn

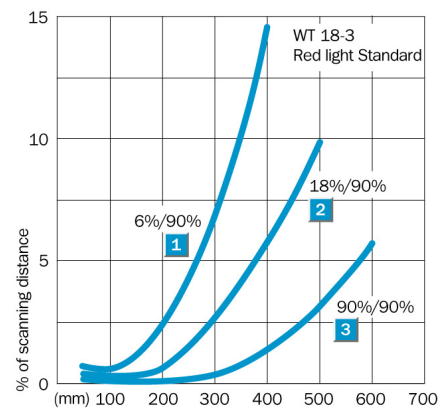
## Connection diagram



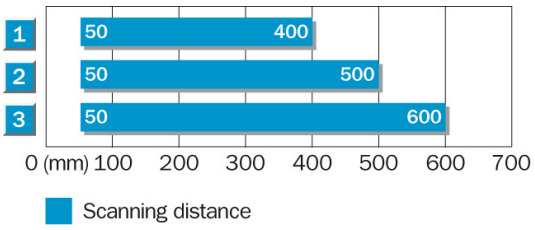
## Connection type



## Characteristic curve



## Sensing range diagram



1	Scanning distance on black, 6 % remission
2	Scanning distance on grey, 18 % remission
3	Scanning distance on white, 90 % remission

**Australia**

Phone +61 3 9497 4100  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +852-2763 6966  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-999-0590  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7 495 775 05 30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82-2 786 6321/4  
E-Mail info@sickkorea.net

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 216 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)