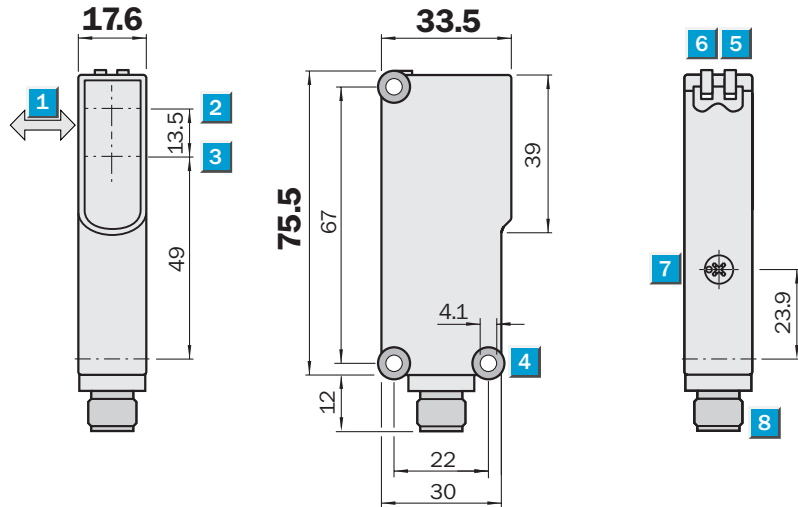
 **Scanning distance**  
50 ... 700 mm

Photoelectric proximity switches

- Precise background suppression; suitable for high demanding applications
- Scanning range adjustable via potentiometer
- Insensitive to external light sources (HF lamps)
- Operation reliability with equipment facing each other
- Permissible ambient operating temperature -40 °C ... +60 °C

**Dimensional drawing**



**Adjustments possible**

All types

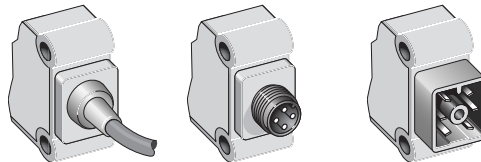


- 1 Standard direction of the material being scanned
- 2 Optical axis sender
- 3 Optical axis receiver
- 4 Mounting hole Ø 4.1 mm
- 5 LED indicator, yellow; status of received light beam
- 6 LED indicator, green; power on
- 7 Scanning distance adjustment, Poti 4 turn
- 8 Plug M12, 4-pin or 2 m cable or cubic plug, 6-pin



**Connection types**

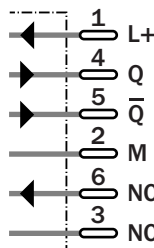
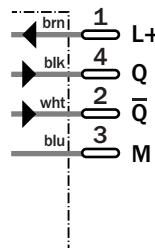
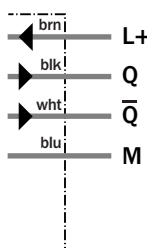
WT18-3P110	WT18-3P410	WT18-3P610
WT18-3N110	WT18-3N410	WT18-3N610



4 x 0.25 mm<sup>2</sup>

4-pin, M12

6-pin



**See chapter Accessories**

Connectors
Mounting systems

Technical data		WT18-3	P110	P410	P610	N110	N410	N610				
<b>Scanning distance</b> , adjustable <sup>1)</sup>	50 ... 700 mm, 90 % remission											
<b>Visible range</b> <sup>1)</sup>	10 ... 700 mm											
<b>Adjustment</b>	Poti, 4 turn											
<b>Light source</b> <sup>2)</sup> , light type	LED, infrared light											
Light spot diameter	20 mm at 400 mm											
<b>Supply voltage</b> V <sub>S</sub>	10 ... 30 V DC <sup>3)</sup>											
Residual ripple <sup>4)</sup>	< 5 V <sub>SS</sub>											
Current consumption <sup>5)</sup>	< 55 mA											
Output current I <sub>A</sub> max.	< 100 mA											
<b>Switching outputs</b>	PNP, antivalent											
	NPN, antivalent											
Response time <sup>6)</sup>	< 700 μs											
Switching frequency max. <sup>7)</sup>	700/s											
<b>Connection types</b>	Cable <sup>8)</sup> , 2 m, 4 wire											
	M12 plug, 4-pin											
	Cubic plug, 6-pin											
<b>VDE protection class</b> cable <sup>9)</sup>	<input type="checkbox"/>											
<b>Circuit protection</b> <sup>10)</sup>	A, B, C											
<b>Enclosure rating</b>	IP 67											
	IP 65											
<b>Ambient temperature</b>	Operation -40 °C ... +60 °C											
	Storage -40 °C ... +75 °C											
<b>Weight</b>	With cable, 2 m, approx. 120 g											
	With M12 plug, approx. 40 g											
	With cubic plug, approx. 40 g											
<b>Housing material</b>	ABS											

1) Object with 90 % remission (according to standard white DIN 5033)  
 2) Average service life 100,000 h at T<sub>A</sub> = +25 °C

3) Limit values; Operation in short-circuit protected network max. 8 A  
 4) Must be within V<sub>S</sub> tolerances  
 5) Without load

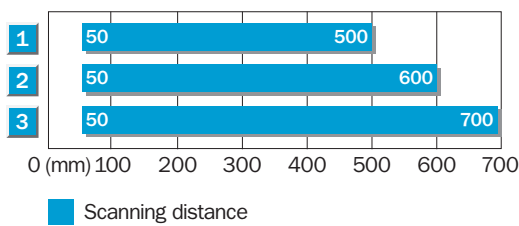
6) Signal transit time with resistive load  
 7) With light/dark ratio 1:1  
 8) Do not bend below 0 °C  
 9) Reference voltage 50 V DC

10) A = V<sub>S</sub> connection reverse-polarity protected  
 B = Outputs short-circuit protected  
 C = Interference pulse suppression

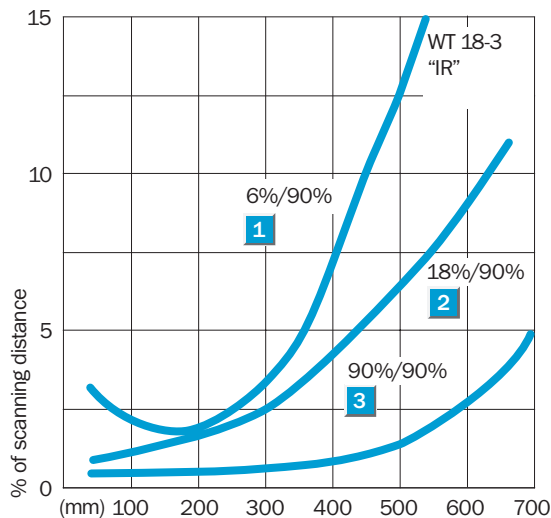
### Adjustment via Poti

- Position the object in the path of the beam.
- By rotating the potentiometer to the right until the yellow LED illuminates continuously = object is positively detected.
- If necessary, fine adjustments to the scanning distance can be made to suit the conditions of the application: minimal rotation of the potentiometer to the right = scanning distance will be increased, minimal rotation of the potentiometer to the left = scanning distance will be decreased.

### Scanning distance



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



### Order information

Type	Order no.
WT18-3P110	1025887
WT18-3P410	1025889
WT18-3P610	1025890
WT18-3N110	1025891
WT18-3N410	1025893
WT18-3N610	1025894