

# Ready-to-fit and Standard-compliant - Cat. 3D/3G Photoelectric Switches for Explosive Areas

	Photoelectric proximity switches BGS
	Photoelectric reflex switches
	Through-beam photoelectric switches



The Category 3D/3G photoelectric switches from SICK are equipped with a metal housing. This housing meets the demanding requirements of the Standard and therefore offers a ready-to-fit solution in respect of the standard.

#### Product range:

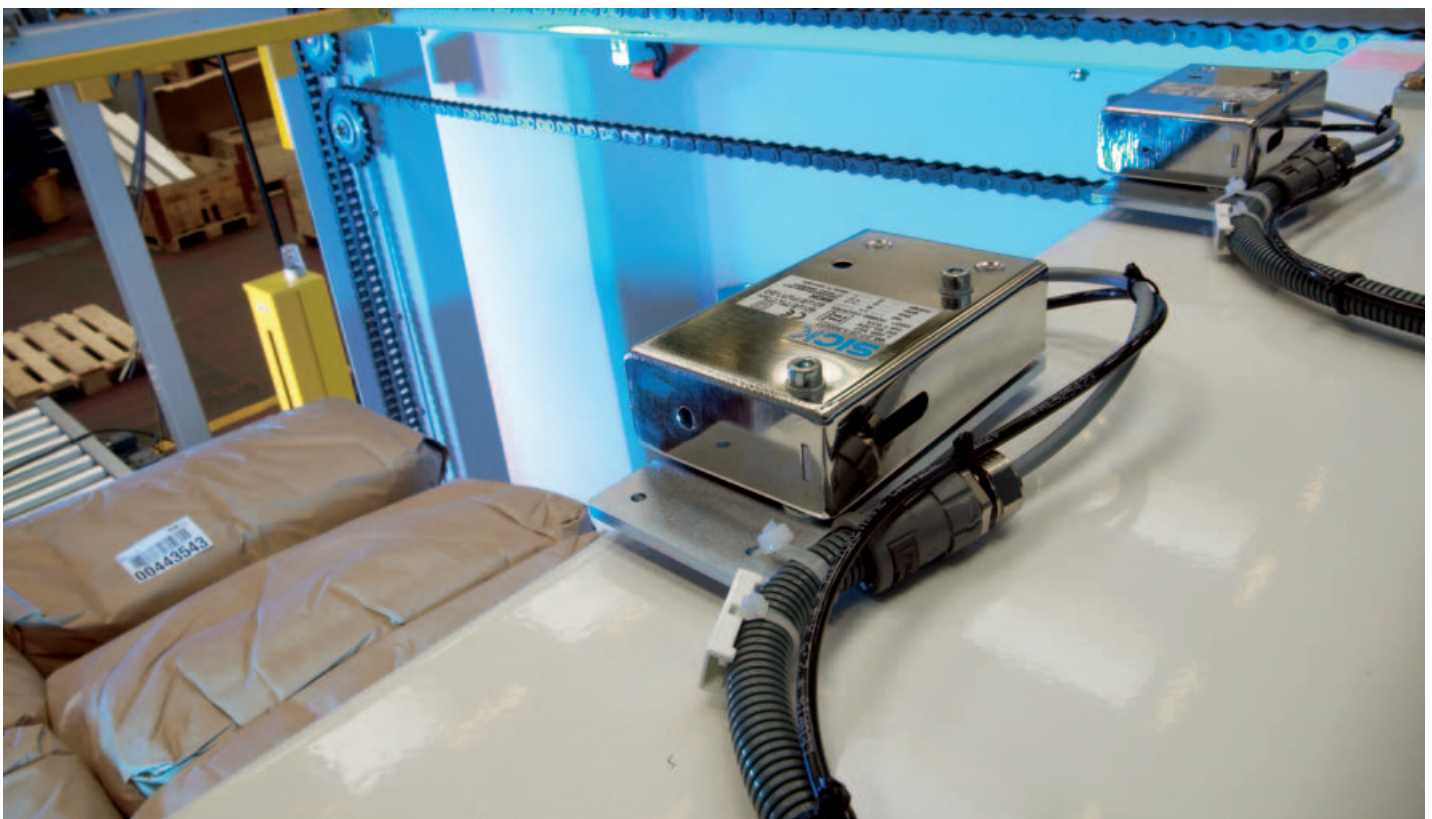
- **W18-3Ex:** Compact dimensions, accurate background suppression, insensitive to optical interference, sensor range up to 1,000 mm and up to 7m as a photoelectric reflex switch,
- **W27-3Ex:** Complete range of photoelectric switches: scanning distance up to 1,500 mm, range up to 14 m on a reflector and 35 m as a through-beam photoelectric switch,
- **WTR2Ex:** Economical solution for scanning distances up to 900 mm,
- **WL24-2Ex:** The powerful photoelectric switch with a range of up to 22 m.

**E**"Ex" series modules are designed for explosive areas in ignition protection Type "n" according to EN 50021. Hence, they conform to Categories 3G and 3D, based on the new 94/9/EC (ATEX) Directive, and can be used in the areas "Zone 2 (gas)" and "Zone 22 (non-conductive dust)".

In addition to limit values for temperature, performance or UV resistance, the Standard stipulates a mechanical strength which cannot be achieved with standard sensors.

► Filling of building material.

▼ WTB27-3Ex photoelectric proximity switch detects the presence of pallets.



▲ Smart solution: WTB27-3Ex photoelectric proximity switch and protection housing.

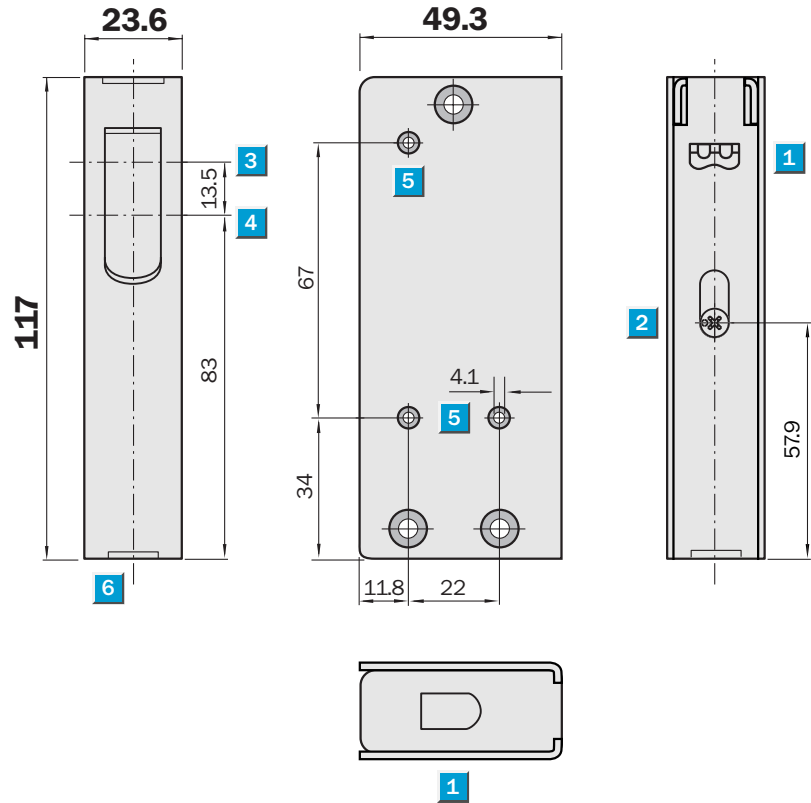
# Photoelectric proximity switch, WT18-3Ex, BGS

Scanning distance  
50 ... 1,000 mm

Photoelectric proximity switch

- Ready-to-fit, Standard-compliant design: sensor + protective housing
- Complies with Categories 3D and 3G according to 94/9/EC (ATEX) Directive
- Accurate background suppression
- Insensitive to optical interference

## Dimensional drawing



## Adjustments possible

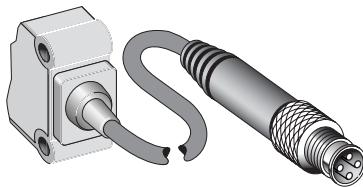
WT18X-3P920

- 1 Status indicator LEDs
- 2 Scanning distance adjustment
- 3 Middle of optical axis, sender
- 4 Middle of optical axis, receiver
- 5 Mounting holes Ø 4.1 mm
- 6 Connector

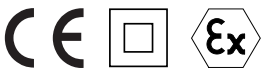
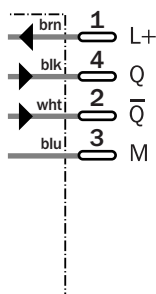


## Connection type

WT18X-3P920



M12, 4-pin



## See chapter Accessories

Connector, M12, 4-pin

Mounting systems

WT18X-3		P920									
<b>Scanning distance typ. max.</b>	50 ... 1,000 mm <sup>1)</sup>										
Adjustment of operating distance	Potentiometer										
<b>Light source, light type</b>	LED, infrared light <sup>2)</sup>										
Light spot diameter	30 mm at 600 mm distance										
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>3)</sup>										
Ripple	< 5 V <sub>ss</sub> <sup>4)</sup>										
Power consumption	< 45 mA <sup>5)</sup>										
<b>Switching outputs</b>	PNP antivalent										
Output current I <sub>a</sub> max	< 100 mA										
Response time	< 700 μs <sup>6)</sup>										
Switching frequency	700 Hz <sup>7)</sup>										
<b>Connection type</b>	Cable with plug, M12, 4-pin, 290 mm <sup>8)</sup>										
<b>Ex marking (ATEX)</b>	EX II 3G EEx nA II T4 X EX II 3D IP67 T70 °C <sup>9)</sup>										
<b>VDE protection class</b>	□ <sup>10)</sup>										
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression										
<b>Enclosure rating</b>	IP 67										
<b>Ambient temperature operation</b>	-20 °C ... +50 °C										
<b>Ambient temperature storage</b>	-40 °C ... +75 °C										
<b>Weight</b>	Approx. 300 g										
<b>Housing material</b>	ABS / stainless steel 1.4301										

<sup>1)</sup> Object with 90 % remission (based on standard white to DIN 5033)

<sup>2)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C

<sup>3)</sup> Limit values, reverse-polarity protected operation in short-circuit protected network max. 8 A

<sup>4)</sup> may not exceed or fall short of

V<sub>s</sub> tolerances

<sup>5)</sup> without load

<sup>6)</sup> Signal transit time with resistive load

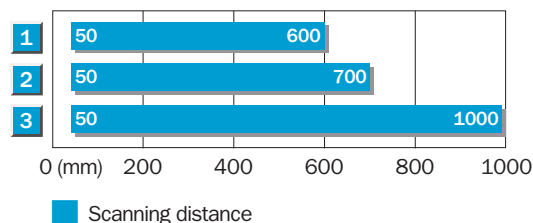
<sup>7)</sup> with light/dark ratio 1:1

<sup>8)</sup> do not bend below 0 °C

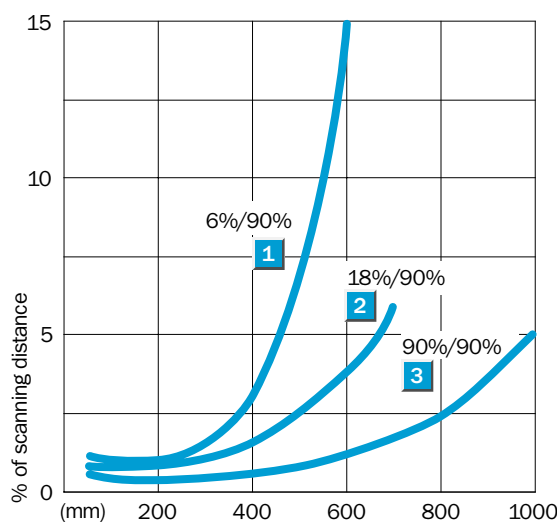
<sup>9)</sup> conformity with directives. Explosion prevention: Directive 94/9/EC

<sup>10)</sup> Reference voltage 50 V DC

**Scanning range**




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



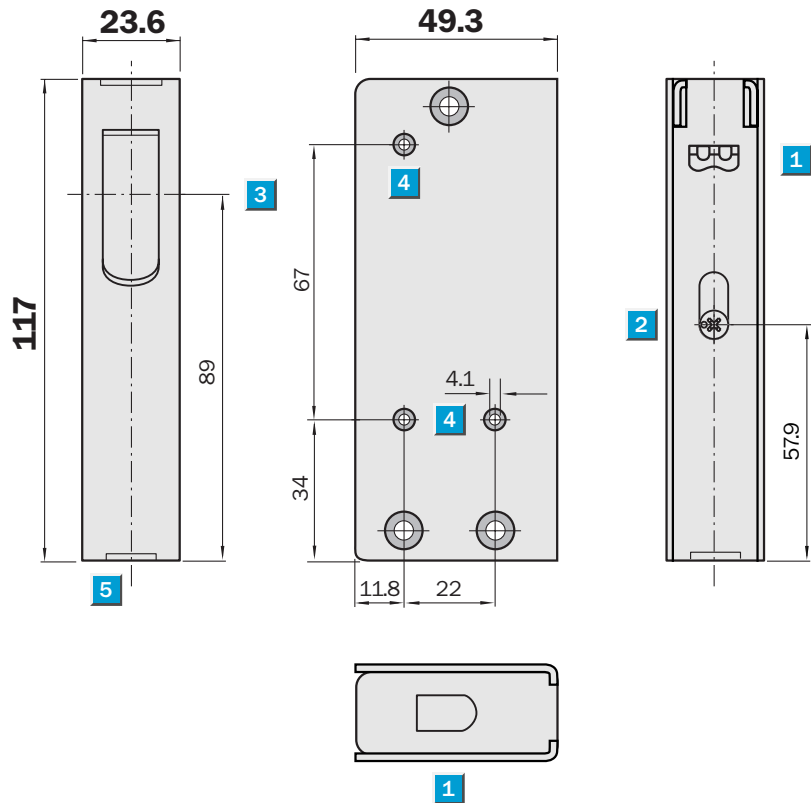
**Ordering information**

Type	Order no.
WT18X-3P920	1 029 901


**Scanning range**  
 0 ... 7 m  
**Photoelectric reflex switch**

- Ready-to-fit, Standard-compliant design: sensor + protective housing
- Complies with Categories 3D and 3G according to 94/9/EC (ATEX) Directive
- Autocollimation principle
- Insensitive to optical interference

Dimensional drawing



Adjustments possible

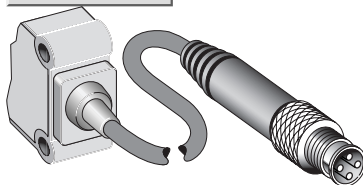
WL18X-3P930



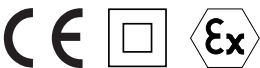
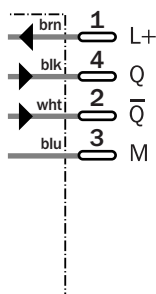
- 1 Status indicator LEDs
- 2 Sensitivity control
- 3 Middle of optical axis
- 4 Mounting holes  $\varnothing$  4.1 mm
- 5 Connector

Connection type

WL18X-3P930



M12, 4-pin



See chapter Accessories

Connector, M12, 4-pin

Mounting systems

Reflectors

WL18X-3

P930

<b>Scanning range typ. max.</b>	0 ... 7 m	
Relating to	Reflector PL80A	
Sensitivity adjustment	Potentiometer	
<b>Light source, light type</b>	LED, visible red light <sup>1)</sup>	
Light spot diameter	40 mm at 2 m distance	
Angle of dispersion	1.5 °	
Polarisation filter	✓	
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>2)</sup>	
Ripple	< 5 V <sub>ss</sub> <sup>3)</sup>	
Power consumption	< 30 mA <sup>4)</sup>	
<b>Switching outputs</b>	PNP antivalent	
Output current I <sub>a</sub> max	< 100 mA	
Response time	500 µs <sup>5)</sup>	
Switching frequency	1,000 Hz <sup>6)</sup>	
<b>Connection type</b>	Cable with plug, M12, 4-pin, 290 mm <sup>7)</sup>	
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C EX II 3G EEx nA II T4 X <sup>8)</sup>	
<b>VDE protection class</b>	□ <sup>9)</sup>	
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression	
<b>Enclosure rating</b>	IP 67	
<b>Ambient temperature operation</b>	-20 °C ... +50 °C	
<b>Ambient temperature storage</b>	-40 °C ... +75 °C	
<b>Weight</b>	Approx. 300 g	
<b>Housing material</b>	ABS / stainless steel 1.4301	
<b>Included with delivery</b>	Securing clip for connector	

<sup>1)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C

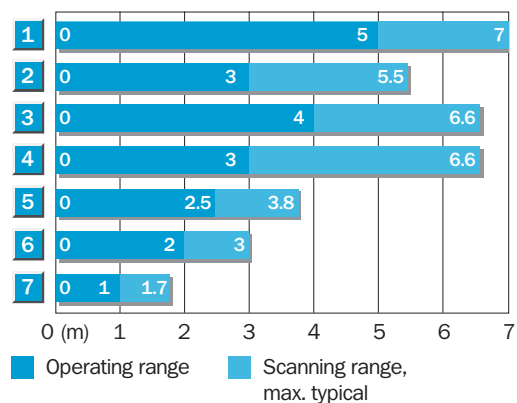
<sup>2)</sup> Limit values, reverse-polarity protected operation in short-circuit protected

network max. 8 A  
<sup>3)</sup> may not exceed or fall short of V<sub>s</sub> tolerances

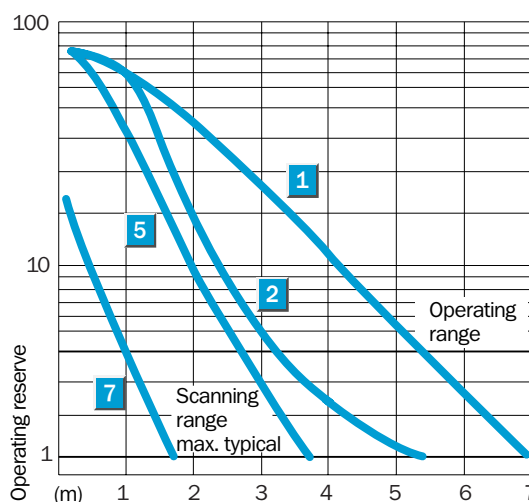
<sup>4)</sup> without load  
<sup>5)</sup> Signal transit time with resistive load  
<sup>6)</sup> with light/dark ratio 1:1  
<sup>7)</sup> do not bend below 0 °C

<sup>8)</sup> Conformity with directives. Explosion prevention: Directive 94/9/EC  
<sup>9)</sup> Reference voltage 50 V DC

**Scanning range and operating reserve**



Reflector type	Operating range
1 PL 80 A	0 ... 5.0 m
2 C 110	0 ... 3.0 m
3 PL 50 A	0 ... 4.0 m
4 PL 40 A	0 ... 3.0 m
5 PL 30 A	0 ... 2.5 m
6 PL 20 A	0 ... 2.0 m
7 Reflective tape Diamond Grade	0 ... 1.0 m



**Ordering information**

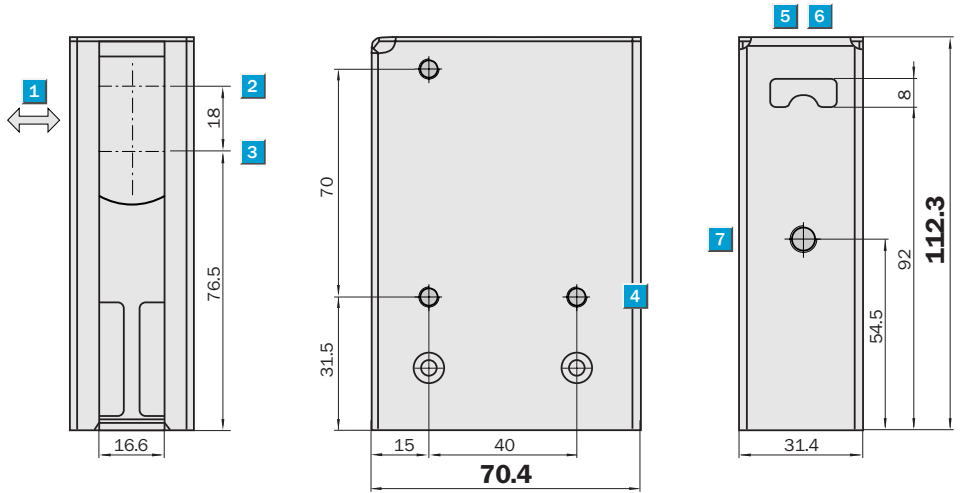
Type	Order no.
WL18X-3P930	1 029 902

Scanning distance  
30 ... 1,600 mm

Photoelectric proximity switch

- Category 3D and 3G (ATEX)
- Standard-compliant:  
sensor + protective housing
- Infrared light,  
very long scanning distance
- Reliable in industrial  
environments; secure against the  
effects of ambient light, unwanted  
optical reflections and other  
sensors mounted adjacently

Dimensional drawing



Adjustments possible

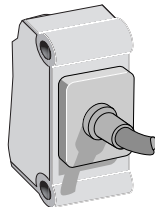
WTB27X-3P1811



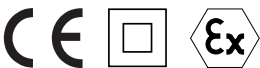
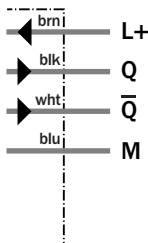
- 1 Standard direction of the material being scanned
- 2 Optical axis sender
- 3 Optical axis receiver
- 4 Mounting hole  $\varnothing$  5.2 mm
- 5 LED indicator green; power on
- 6 LED indicator yellow; status of received light beam
- 7 Adjustment of operating distance: Poti

Connection type

WTB27X-3P1811



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



See chapter Accessories

Mounting systems

WTB27X-3

P1811

<b>Scanning distance typ. max.</b>	30 ... 1,600 mm <sup>1)</sup>
<b>Operating distance</b>	100 ... 1,600 mm <sup>1)</sup>
Adjustment of operating distance	Potentiometer
<b>Light source, light type</b>	LED, infrared light, 880 nm <sup>2)</sup>
Light spot diameter	Approx. 25 mm at 800 mm distance
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>3)</sup>
Ripple	≤ 5 V <sub>SS</sub> <sup>4)</sup>
Power consumption	≤ 40 mA <sup>5)</sup>
<b>Switching outputs</b>	PNP antivalent
Signal voltage PNP HIGH / LOW	> V <sub>s</sub> - 2.5 V / approx. 0 V
Output current I <sub>a</sub> max	100 mA
Response time	≤ 1.5 ms <sup>6)</sup>
Switching frequency	350 Hz <sup>7)</sup>
<b>Connection type</b>	Cable, PVC, 10 m <sup>8)</sup>
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C EX II 3G EEx nA II T4 X <sup>9)</sup>
<b>VDE protection class</b>	□ <sup>10)</sup>
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression
<b>Enclosure rating</b>	IP 67
<b>Ambient temperature operation</b>	-20 °C ... +50 °C
<b>Ambient temperature storage</b>	-40 °C ... +75 °C
<b>Weight</b>	Approx. 750 g
<b>Housing material</b>	ABS / stainless steel 1.4301, PMMA

<sup>1)</sup> Object with 90 % remission (based on standard white to DIN 5033)

<sup>2)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C

<sup>3)</sup> Limit values, reverse-polarity protected operation in short-circuit protected network max. 8 A

<sup>4)</sup> may not exceed or fall short of

V<sub>s</sub> tolerances

<sup>5)</sup> without load

<sup>6)</sup> Signal transit time with resistive load

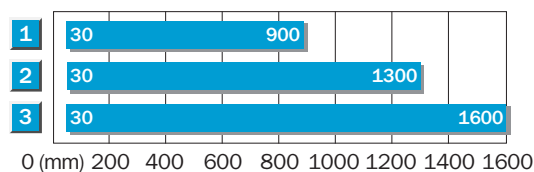
<sup>7)</sup> with light/dark ratio 1:1

<sup>8)</sup> do not bend below 0 °C

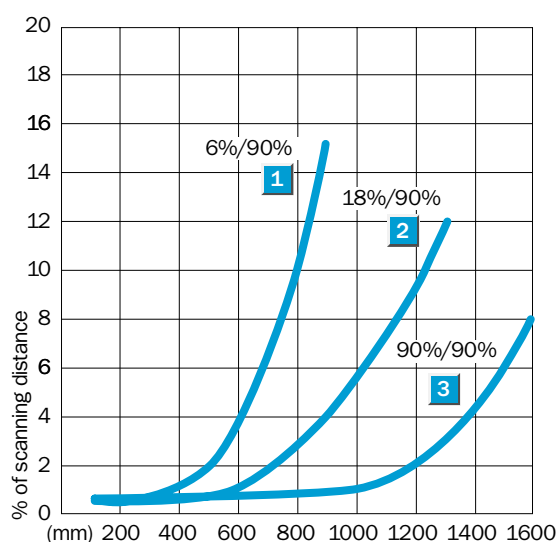
<sup>9)</sup> conformity with directives. Explosion prevention: Directive 94/9/EC

<sup>10)</sup> Reference voltage 50 V DC

**Scanning distance**




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



**Ordering information**

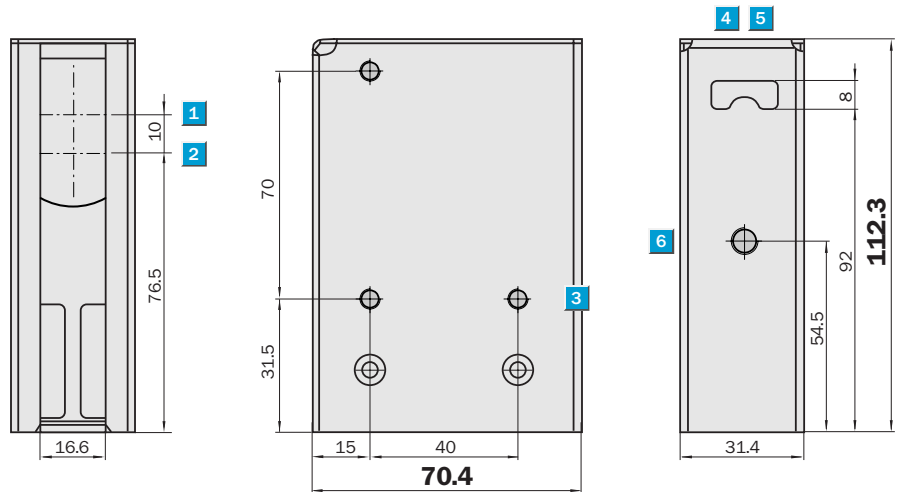
<b>Type</b>	<b>Order no.</b>
WTB27X-3P1811	1 027 988




**Scanning range**  
**0.1 ... 15 m**  
 Photoelectric reflex switch

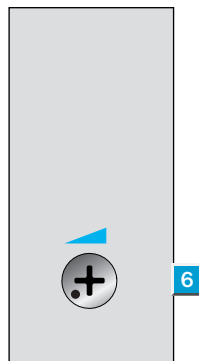
- Category 3D and 3G (ATEX)
- Standard-compliant:  
sensor + protective housing
- Red light for easier alignment
- Long range, high operating reserve

**Dimensional drawing**

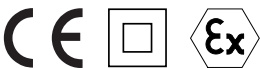


**Adjustments possible**

WL27X-3P1831

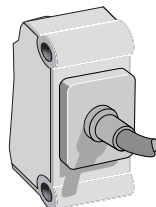


- 1 Optical axis sender
- 2 Optical axis receiver
- 3 Mounting hole  $\varnothing$  5.2 mm
- 4 LED indicator green; power on
- 5 LED indicator yellow; status of received light beam
- 6 Sensitivity adjustment: Poti

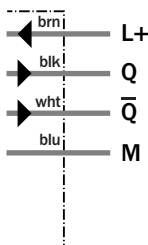


**Connection type**

WL27X-3P1831



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



**See chapter Accessories**

- Mounting systems
- Reflectors

WL27X-3

P1831

<b>Scanning range typ. max.</b>	0.1 ... 15 m	
<b>Scanning range, recommended</b>	0.1 ... 11 m	
Relating to	Reflector PL80A	
Sensitivity adjustment	Potentiometer	
<b>Light source, light type</b>	LED, red light, 660 nm <sup>1)</sup>	
Light spot diameter	Approx. 220 mm at 10 m distance	
Angle of dispersion	Approx. 1.5 °	
Polarisation filter	✓	
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>2)</sup>	
Ripple	≤ 5 V <sub>SS</sub> <sup>3)</sup>	
Power consumption	≤ 30 mA <sup>4)</sup>	
<b>Switching outputs</b>	PNP antivalent	
Signal voltage PNP HIGH / LOW	> V <sub>s</sub> - 2.5 V / approx. 0 V	
Output current I <sub>a</sub> max	100 mA	
Response time	≤ 500 μs <sup>5)</sup>	
Switching frequency	1,000 Hz <sup>6)</sup>	
<b>Connection type</b>	Cable, PVC, 10 m <sup>7)</sup>	
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C EX II 3G EEx nA II T4 X <sup>8)</sup>	
<b>VDE protection class</b>	□ <sup>9)</sup>	
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression	
<b>Enclosure rating</b>	IP 67	
<b>Ambient temperature operation</b>	-20 °C ... +50 °C	
<b>Ambient temperature storage</b>	-40 °C ... +75 °C	
<b>Weight</b>	Approx. 750 g	
<b>Housing material</b>	ABS / stainless steel 1.4301, PMMA	

<sup>1)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C

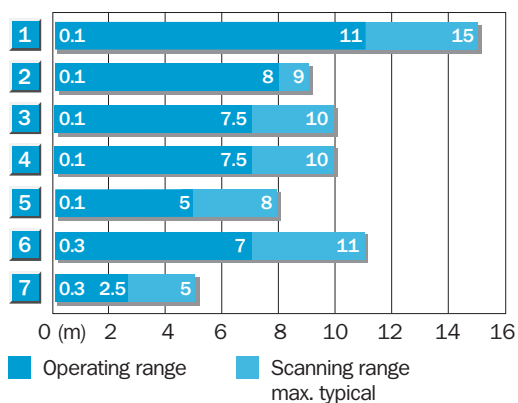
<sup>2)</sup> Limit values, reverse-polarity protected operation in short-circuit protected

network max. 8 A  
<sup>3)</sup> may not exceed or fall short of V<sub>s</sub> tolerances

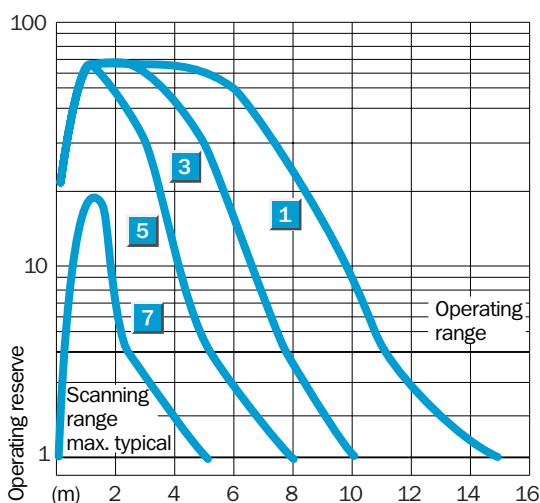
<sup>4)</sup> without load  
<sup>5)</sup> Signal transit time with resistive load  
<sup>6)</sup> with light/dark ratio 1:1  
<sup>7)</sup> do not bend below 0 °C

<sup>8)</sup> conformity with directives. Explosion prevention: Directive 94/9/EC  
<sup>9)</sup> Reference voltage 50 V DC

**Scanning range and operating reserve**



Reflector type	Operating range
1 PL 80 A	0.1 ... 11.0 m
2 PL 50 A	0.1 ... 8.0 m
3 PL 40 A	0.1 ... 7.5 m
4 PL 30 A	0.1 ... 7.5 m
5 PL 20 A	0.1 ... 5.0 m
6 C 110	0.3 ... 7.0 m
7 Reflective tape Diamond Grade	0.3 ... 2.5 m



**Ordering information**

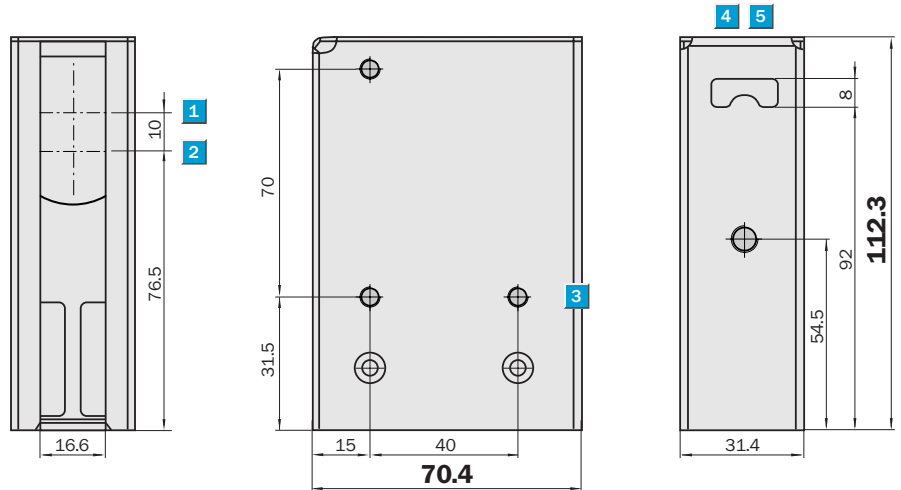
Type	Order no.
WL27X-3P1831	1 027 989

**Scanning range**  
0 ... 35 m

Through-beam photoelectric switch

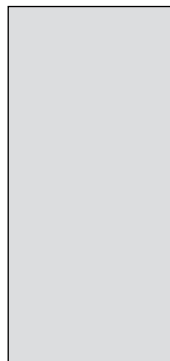
- Category 3D and 3G (ATEX)
- Standard-compliant:  
sensor + protective housing
- High intensity red light  
for easier alignment
- Long range,  
high operating reserve

### Dimensional drawing



### Adjustments possible

WSE27X-3P1830

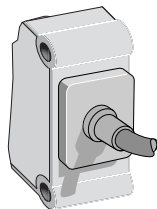


- 1 Optical axis sender
- 2 Optical axis receiver
- 3 Mounting hole  $\varnothing$  5.2 mm
- 4 LED indicator green; power on
- 5 LED indicator yellow; status of received light beam

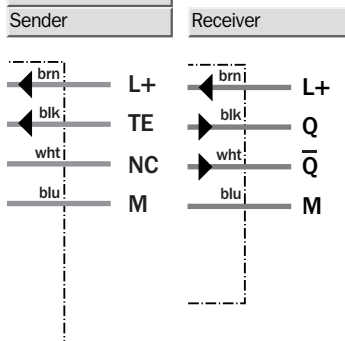


### Connection type

WSE27X-3P1830

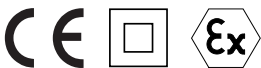


4 x 0.25 mm<sup>2</sup>



See chapter Accessories

Mounting systems



WSE27X-3

P1830

<b>Scanning range typ. max.</b>	0 ... 35 m
<b>Scanning range, recommended</b>	0 ... 25 m
<b>Light source, light type</b>	LED, red light, 645 nm <sup>1)</sup>
Light spot diameter	Approx. 600 mm at 25 m distance
Angle of dispersion	Approx. 1.5 °
Angle of reception	Approx. 3 °
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>2)</sup>
Ripple	≤ 5 V <sub>SS</sub> <sup>3)</sup>
Power consumption, sender	≤ 35 mA <sup>4)</sup>
Power consumption, receiver	≤ 20 mA <sup>4)</sup>
<b>Switching outputs</b>	PNP antivalent
Signal voltage PNP HIGH / LOW	> V <sub>s</sub> - 2.5 V / approx. 0 V
Output current I <sub>a</sub> max	100 mA
Response time	≤ 500 μs <sup>5)</sup>
Switching frequency	1,000 Hz <sup>6)</sup>
<b>Test input sender off</b>	TE to 0 V
<b>Connection type</b>	Cable, PVC, 10 m <sup>7)</sup>
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C EX II 3G EEx nA II T4 X <sup>8)</sup>
<b>VDE protection class</b>	□ <sup>9)</sup>
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression
<b>Enclosure rating</b>	IP 67
<b>Ambient temperature operation</b>	-20 °C ... +50 °C
<b>Ambient temperature storage</b>	-40 °C ... +75 °C
<b>Weight</b>	Approx. 1,500 g
<b>Housing material</b>	ABS / stainless steel 1.4301, PMMA

<sup>1)</sup> Average service life 100,000 h  
at T<sub>a</sub> = +25 °C

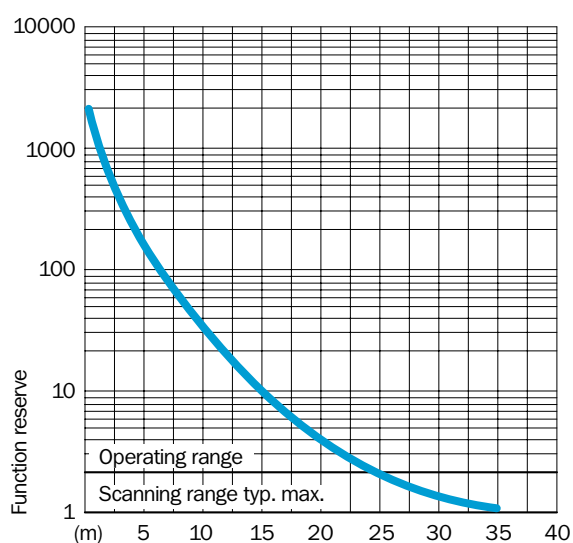
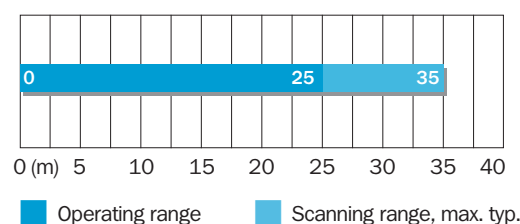
<sup>2)</sup> Limit values, reverse-polarity protected  
operation in short-circuit protected

network max. 8 A  
<sup>3)</sup> may not exceed or fall short of  
V<sub>s</sub> tolerances

<sup>4)</sup> without load  
<sup>5)</sup> Signal transit time with resistive load  
<sup>6)</sup> with light/dark ratio 1:1  
<sup>7)</sup> do not bend below 0 °C

<sup>8)</sup> conformity with directives. Explosion  
prevention: Directive 94/9/EC  
<sup>9)</sup> Reference voltage 50 V DC


### Scanning range and function reserve



### Ordering information

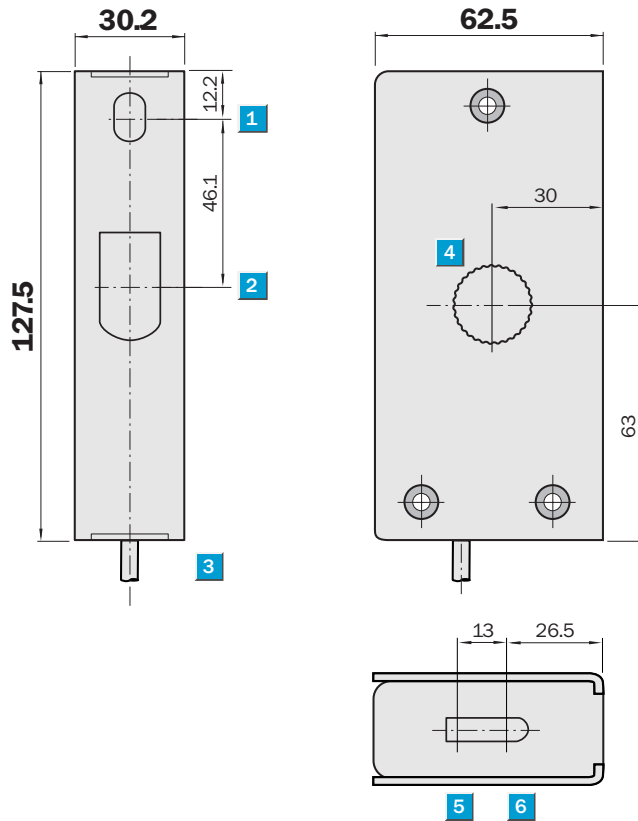
Type	Order no.
WSE27X-3P1830	1 027 991

# Photoelectric proximity switch, WTR2Ex for roller conveyors


**Scanning distance**  
**300 ... 900 mm**  
**Photoelectric proximity switch**

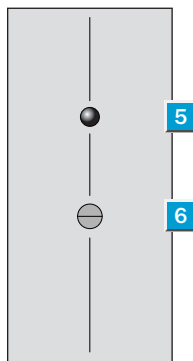
- Ready-to-fit, Standard-compliant design: sensor + protective housing
- Complies with Categories 3D and 3G according to 94/9/EC (ATEX) Directive
- Accurate background suppression
- Fixing hole for clamp holder

## Dimensional drawing



## Adjustments possible

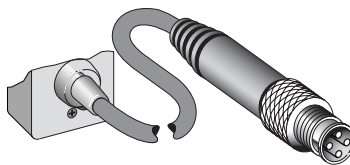
WTR2-P511S21



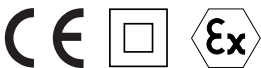
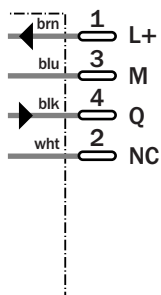
- 1 Middle optical axis, sender
- 2 Middle optical axis, receiver
- 3 Connection
- 4 Fixing hole for clamp holder
- 5 Reception display
- 6 Scanning distance adjustment

## Connection type

WTR2-P511S21



M12, 4-pin



## See chapter Accessories

Connector, M12, 4-pin

Mounting systems

WTR2-P5

11S21

<b>Scanning distance typ. max.</b>	300 ... 900 mm
<b>Light source, light type</b>	LED, infrared light
Light spot diameter	Approx. 40 mm
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V <sup>1)</sup>
Ripple	< 5 V <sub>ss</sub> <sup>2)</sup>
Power consumption	≤ 25 mA <sup>3)</sup>
<b>Switching outputs</b>	PNP
Switching mode	Light-switching
Output current $I_a$ max	100 mA
Switching frequency	250 Hz
<b>Connection type</b>	Cable with plug, M12, 4-pin, 270 mm <sup>4)</sup>
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C <sup>5)</sup>
<b>VDE protection class</b>	□
<b>Circuit protection</b>	In-/outputs short-circuit protected / All outputs short-circuit protected / Interference suppression
<b>Enclosure rating</b>	IP 54
<b>Ambient temperature operation</b>	-20 °C ... +50 °C
<b>Ambient temperature storage</b>	-40 °C ... +75 °C
<b>Weight</b>	Approx. 550 g
<b>Housing material</b>	ABS / stainless steel 1.4301
<b>Included with delivery</b>	Securing clip for connector

<sup>1)</sup> Limit values

<sup>2)</sup> may not exceed or fall short of

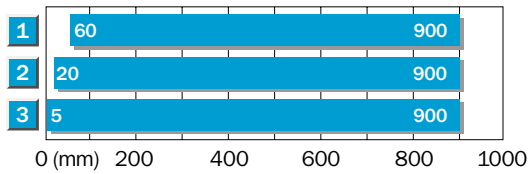
$V_s$  tolerances

<sup>3)</sup> without load

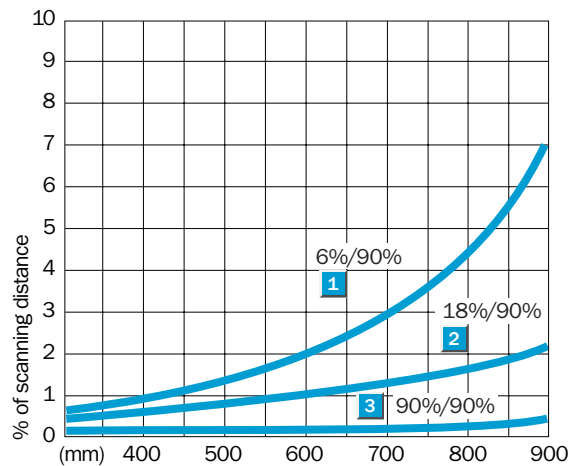
<sup>4)</sup> do not bend below 0 °C

<sup>5)</sup> conformity with directives. Explosion prevention: Directive 94/9/EC

**Scanning distance**




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



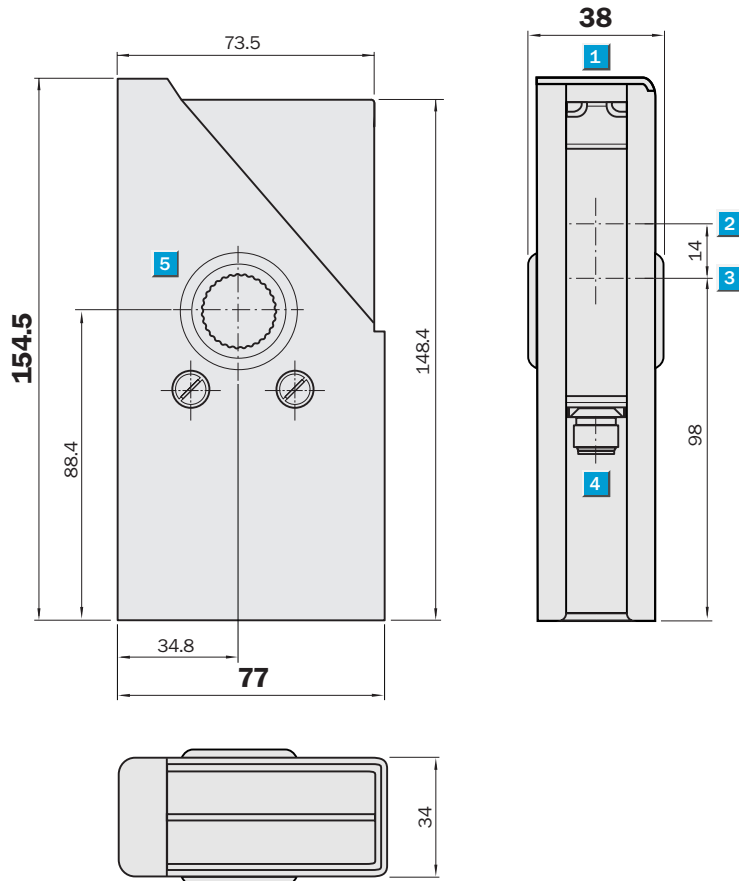
**Ordering information**

<b>Type</b>	<b>Order no.</b>
WTR2-P511S21	1 029 241


**Scanning range**  
**0 ... 22 m**  
 Photoelectric reflex switch

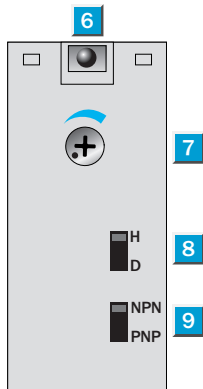
- Ready-to-fit, Standard-compliant design: sensor + protective housing
- Complies with Categories 3D and 3G according to 94/9/EC (ATEX) Directive
- Very large range
- Fixing hole for clamp holder

Dimensional drawing



Adjustments possible

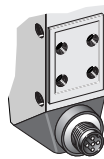
WL24-2V530S06



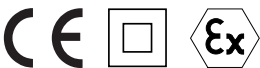
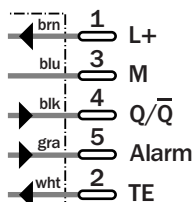
- 1 Reception display
- 2 Middle optical axis, sender
- 3 Middle optical axis, receiver
- 4 Connection
- 5 Fixing hole for clamp holder
- 6 Reception display
- 7 Sensitivity adjuster
- 8 Light/dark switch
- 9 NPN/PNP selector switch

Connection type

WL24-2V530S06



M12, 5-pin



See chapter Accessories

Connector, M12, 5-pin

Mounting systems

Reflectors

WL24-2V530

S06

<b>Scanning range typ. max.</b>	0 ... 22 m
<b>Scanning range, recommended</b>	0 ... 15 m
Relating to	Reflector PL80A
<b>Light source, light type</b>	LED, red light <sup>1)</sup>
Light spot diameter	Approx. 250 mm at 15 m distance
Polarisation filter	✓
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>2)</sup>
Ripple	< 5 V <sub>SS</sub> <sup>3)</sup>
Power consumption	≤ 50 mA <sup>4)</sup>
<b>Switching outputs</b>	PNP or NPN, Q or Q not
Output current I <sub>a,max</sub>	100 mA
Response time	≤ 500 μs <sup>5)</sup>
Switching frequency	1,000 Hz <sup>6)</sup>
<b>Test input sender off</b>	TE to 0 V
<b>Connection type</b>	Connector, M12, 5-pin
<b>Ex marking (ATEX)</b>	EX II 3D IP67 T70 °C EX II 3G EEx nA II T4 X <sup>7)</sup>
<b>VDE protection class</b>	□ <sup>8)</sup>
<b>Circuit protection</b>	Vs connections reverse-polarity protected / Output Q and Q not short-circuit protected / Interference suppression
<b>Enclosure rating</b>	IP 67
<b>Ambient temperature operation</b>	-20 °C ... +50 °C
<b>Ambient temperature storage</b>	-40 °C ... +75 °C
<b>Weight</b>	Approx. 800 g
<b>Housing material</b>	Zinc die-cast

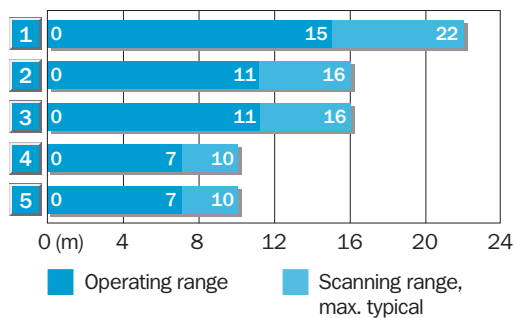
<sup>1)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C  
<sup>2)</sup> Limit values

<sup>3)</sup> may not exceed or fall short of V<sub>s</sub> tolerances  
<sup>4)</sup> without load

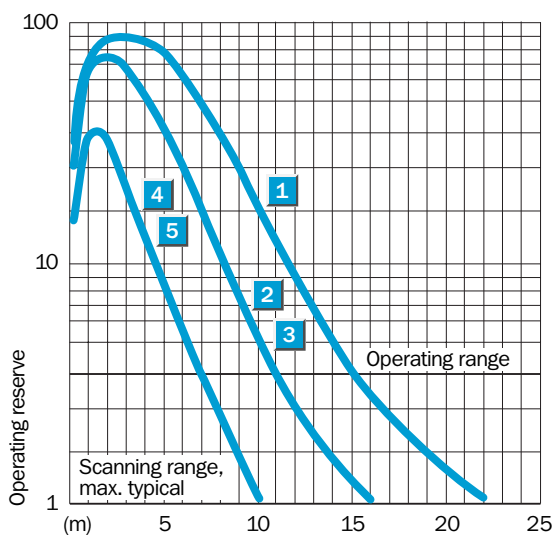
<sup>5)</sup> Signal transit time with resistive load  
<sup>6)</sup> with light/dark ratio 1:1  
<sup>7)</sup> conformity with directives, Explosion

prevention: Directive 94/9/EC  
<sup>8)</sup> Reference voltage 50 V DC

**Scanning range and operating reserve**



Reflector type	Operating range
1 PL 80 A	0 ... 15.0 m
2 PL 50 A	0 ... 11.0 m
3 PL 40 A	0 ... 11.0 m
4 PL 30 A	0 ... 7.0 m
5 PL 20 A	0 ... 7.0 m



**Ordering information**

Type	Order no.
WL24-2V530S06	1 027 613