




# W 36: Mastering complex tasks reliably

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



electric proximity switch, which also offers adjustable scanning distance and background suppression.

Great demands are often placed on the mechanical endurance of sensors. Suitable enclosure ratings (depending on the type of connection) of IP 65 and IP 67, robust plastic housings, pre-failure signalling output and indicator, and insensitivity to ambient light ensure reliable switching in hostile industrial environments.

Users have long appreciated the benefits of the W 36 series of photoelectric switches. Thanks to their design, the devices can be used both indoors and outdoors, since all DC types are suitable for temperatures ranging from  $-40$  to  $+55$  °C and polarising filters also make it possible to detect shiny surfaces. The scanning ranges of the W 36 series speak for themselves: 60 metres for the WS/WE 36 through-beam photoelectric switch, 22 metres for the WL 36 photoelectric reflex switch and 800 mm for the WT 36 photo-

Universal voltage versions, time delay, test input and selectable light- or dark-switching are additional characteristic features of the W 36 series.



◀ Making sure that crates are full: WL 36 photoelectric reflex switches used to count coloured bottles before packaging.



▲ WL 36 sensors used to detect mesh baskets in front of a goods lift.



◀ WL 36 photoelectric reflex switches checking the presence of beer crates before automatic removal of the bottle caps.

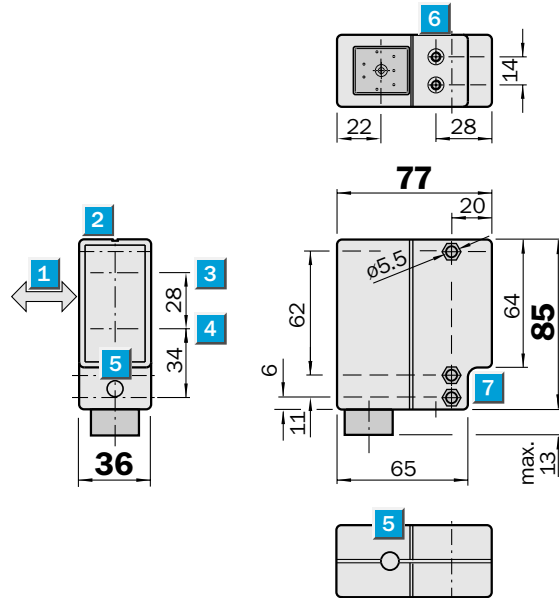
► Hot or cold, wet, dry or dusty – WL 36 photoelectric reflex switches are designed for use under hostile operating conditions indoors and outdoors – here they are being used on the roll-up gate of a carwash.



**Scanning distance**  
 200...800 mm  
**Photoelectric proximity switches**

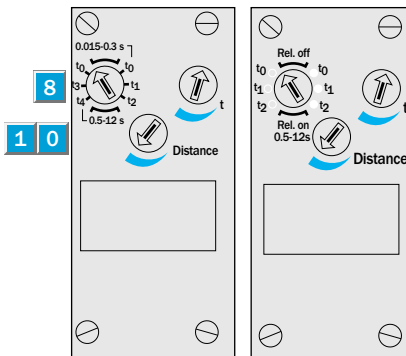
- Robust plastic housing
- Infrared light
- Selectable time delay

**Dimensional drawing**



**Adjustments possible**

WT 36-N 410	WT 36-R 710
WT 36-P 410	
WT 36-N 710	
WT 36-P 710	



- 1** Standard direction of the material being scanned
- 2** Alignment sight
- 3** Centre of optical axis, receiver
- 4** Centre of optical axis, sender
- 5** LED signal strength indicator
- 6** M5 threaded mounting hole – 5.5 mm deep
- 7** Mounting holes, recesses on both sides for M5 hex nuts
- 8** Time delay selector switch with DC, time delay and light-/dark-switching selector switches with UC
- Light-switching
- Dark-switching
- 9** Time control
- 1 0** Scanning distance adjustment

**Switch-selectable time delay**

**0.015 – 0.3 s with DC only**

$t_0$  without time delay  
 $t_1$  ON-delay  
 $t_2$  OFF-delay

**0.5 – 12 s with DC**

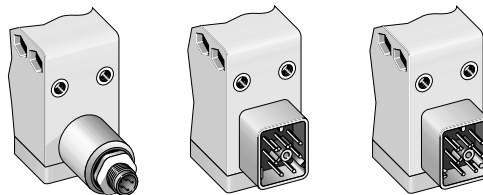
$t_0$  without time delay  
 $t_3$  ON-delay  
 $t_4$  OFF-delay

**0.5 – 12 s with UC**

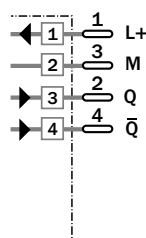
$t_0$  without time delay  
 $t_1$  ON-delay  
 $t_2$  OFF-delay

**Connection types**

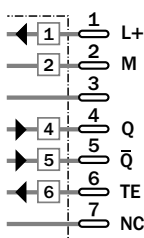
WT 36-N 410	WT 36-N 710	WT 36-R 710
WT 36-P 410	WT 36-P 710	



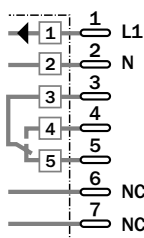
**4-pin, M 12**



**7-pin**



**7-pin**



<b>Accessories</b>	page
Cable receptacles	496
Mounting brackets	510

Technical data		WT 36-	N 410	P 410	N 710	P 710	R 710
<b>Scanning distance</b>	200...800 mm, adjustable						
<b>Light source<sup>1)</sup>, light type</b>	LED, infrared light						
Light spot diameter	Approx. 15 mm at 800 mm						
<b>Supply voltage <math>V_S</math></b>	10...30 V DC <sup>2)</sup>						
	24...240 V UC (+ 10 % / - 25 %)						
Ripple <sup>3)</sup>	$\leq 5 V_{SS}$						
Current consumption <sup>4)</sup>	$\leq 50$ mA						
Power consumption	$< 2$ VA						
<b>Switching outputs</b>	PNP, Q and $\bar{Q}$						
	NPN, Q and $\bar{Q}$						
	SPDT, isolated <sup>5)</sup>						
Output current $I_A$ max.	200 mA						
Max. switching voltage	AC: 250 V / DC: 120 V						
Switching current	4 A / 240 V AC or 24 V DC						
Max. switching capacity	AC: 1000 VA / DC: 100 W						
Response time <sup>6)</sup>	2 ms						
	6 ms						
Max. switching frequency <sup>7)</sup>	250/s						
	10/s						
<b>Test input "TE", sender OFF</b>	PNP: Test input to 0 V						
	NPN: Test input to $V_S$						
<b>Connection types</b>	Plug						
<b>VDE protection class<sup>8)</sup></b>	<input type="checkbox"/>						
<b>Circuit protection<sup>9)</sup></b>	A, B, C						
	A, C						
<b>Enclosure rating</b>	IP 65						
	IP 67						
<b>Ambient temperature <math>T_A</math></b>	Operation - 40 °C...+ 55 °C						
	Operation - 25 °C...+ 55 °C						
	Storage - 25 °C...+ 75 °C						
<b>Weight</b>	Approx. 200 g						
<b>Housing material</b>	Glass-fibre-reinforced plastic						

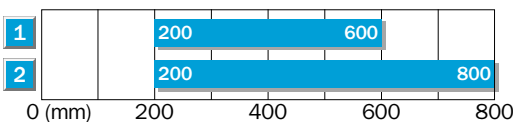
- 1) Average service life 100,000 h at  $T_A = + 25$  °C
- 2) Limit values
- 3) May not exceed or fall short of  $V_S$  tolerances

- 4) Without load
- 5) Provide suitable spark suppression for inductive or capacitive loads

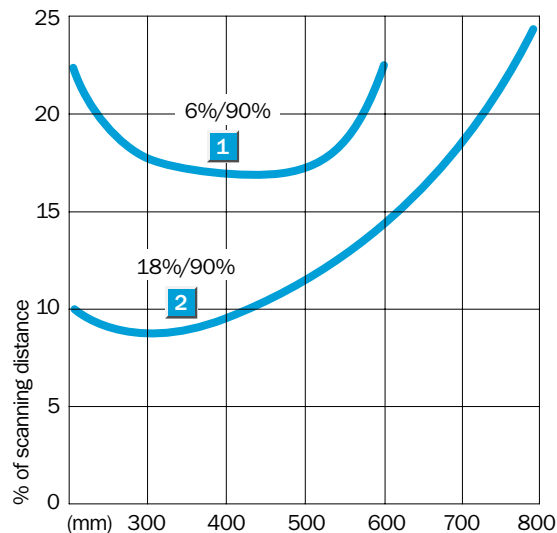
- 6) Signal transit time with resistive load
- 7) With light/dark ratio 1:1
- 8) Reference voltage 50 V DC, 250 V AC

- 9) A =  $V_S$  connections reverse-polarity protected
- B = Output  $Q_N$  and  $Q_P$  short-circuit protected
- C = Interference pulse suppression

**Scanning distance**




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



**Order information**

Type	Part no.
WT 36-N 410	1 011 109
WT 36-P 410	1 011 108
WT 36-N 710	1 006 370
WT 36-P 710	1 006 047
WT 36-R 710	1 005 927

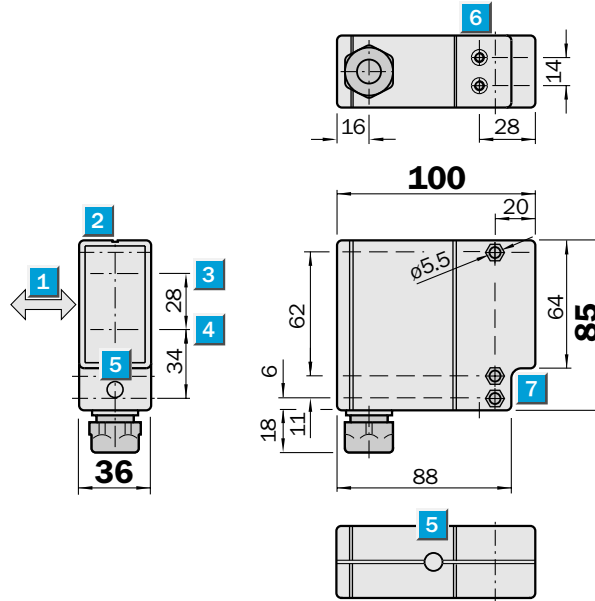

**Scanning distance**  
 200...800 mm

Photoelectric proximity switches

- Robust plastic housing
- Infrared
- Adjustable background suppression
- Easily accessible terminal chamber
- Selectable time delay

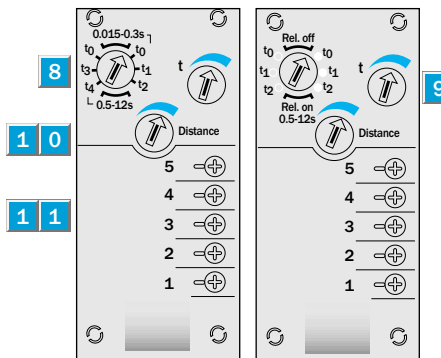


**Dimensional drawing**



**Adjustments possible**

WT 36-N 210	WT 36-R 210
WT 36-P 210	



- 1** Standard direction of the material being scanned
- 2** Alignment sight
- 3** Centre of optical axis, receiver
- 4** Centre of optical axis, sender
- 5** LED signal strength indicator
- 6** M5 threaded mounting hole – 5.5 mm deep
- 7** Mounting holes, recesses on both sides for M5 hex nuts
- 8** Time delay selector switch with DC, time delay and light-/dark-switching selector switches with UC
- Light-switching
- Dark-switching
- 9** Time control
- 1 0** Scanning distance adjustment
- 1 1** Terminal connection

**Switch-selectable time delay**

**0.015 – 0.3 s with DC only**

$t_0$  without time delay  
 $t_1$  ON-delay  
 $t_2$  OFF-delay

**0.5 – 12 s with DC**

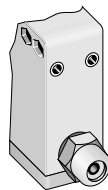
$t_0$  without time delay  
 $t_3$  ON-delay  
 $t_4$  OFF-delay

**0.5 – 12 s with UC**

$t_0$  without time delay  
 $t_1$  ON-delay  
 $t_2$  OFF-delay

**Connection types**

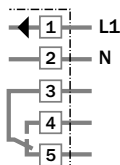
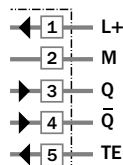
WT 36-N 210	WT 36-R 210
WT 36-P 210	



PG 11, terminals



PG 11, terminals

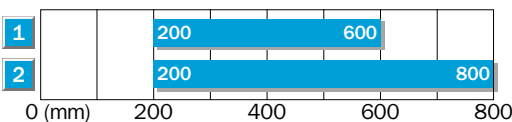


<b>Accessories</b>	page
Mounting brackets	510

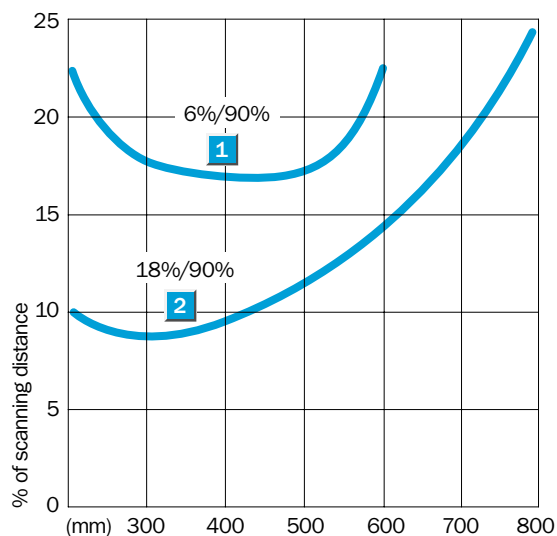
Technical data		WT 36-	N 210	P 210	R 210						
<b>Scanning distance</b>	200...800 mm, adjustable										
<b>Light source<sup>1)</sup>, light type</b>	LED, infrared light										
Light spot diameter	Approx. 15 mm at 800 mm										
<b>Supply voltage <math>V_S</math></b>	10...30 V DC <sup>2)</sup>										
	24...240 V UC (+ 10 % / - 25 %)										
Ripple <sup>3)</sup>	$\leq 5 V_{SS}$										
Current consumption <sup>4)</sup>	$\leq 50$ mA										
Power consumption	$< 2$ VA										
<b>Switching outputs</b>	PNP, Q and $\bar{Q}$										
	NPN, Q and $\bar{Q}$										
	SPDT, isolated <sup>5)</sup>										
Output current $I_A$ max.	200 mA										
Max. switching voltage	AC: 250 V / DC: 120 V										
Switching current	4 A / 240 V AC or 24 V DC										
Max. switching capacity	AC: 1000 VA / DC: 100 W										
Response time <sup>6)</sup>	2 ms										
	6 ms										
Max. switching frequency <sup>7)</sup>	250/s										
	10/s										
<b>Test input "TE", sender OFF</b>	PNP: Test input to 0 V										
	NPN: Test input to $V_S$										
<b>Connection types</b>	Terminal connection										
<b>VDE protection class<sup>8)</sup></b>	<input type="checkbox"/>										
<b>Circuit protection<sup>9)</sup></b>	A, B, C										
	A, C										
<b>Enclosure rating</b>	IP 67										
<b>Ambient temperature <math>T_A</math></b>	Operation - 40 °C...+ 55 °C										
	Operation - 25 °C...+ 55 °C										
	Storage - 25 °C...+ 70 °C										
<b>Weight</b>	Approx. 200 g										
<b>Housing material</b>	Glass-fibre-reinforced plastic										

- 1) Average service life 100,000 h at  $T_A = + 25$  °C
- 2) Limit values
- 3) May not exceed or fall short of  $V_S$  tolerances
- 4) Without load
- 5) Provide suitable spark suppression for inductive or capacitive loads
- 6) Signal transit time with resistive load
- 7) With light/dark ratio 1:1
- 8) Reference voltage 50 V DC, 250 V AC
- 9) A =  $V_S$  connections reverse-polarity protected  
 B = Output  $Q_N$  and  $Q_P$  short-circuit protected  
 C = Interference pulse suppression

**Scanning distance**




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



**Order information**

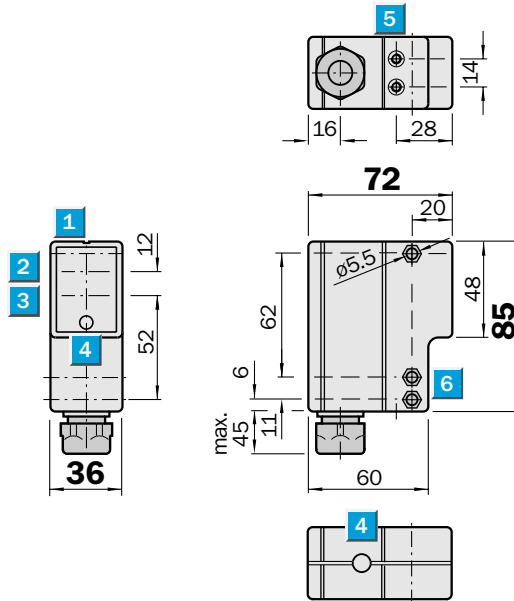
Type	Part no.
WT 36-N 210	1 010 109
WT 36-P 210	1 010 108
WT 36-R 210	1 010 110


**Scanning range**  
**22 m**

Photoelectric reflex switches

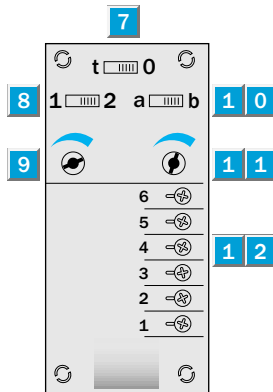
- Robust plastic housing
- Visible red light
- Selectable time delay

### Dimensional drawing



### Adjustments possible

WL 36-B 230
WL 36-B 430
WL 36-B 730
WL 36-B 330

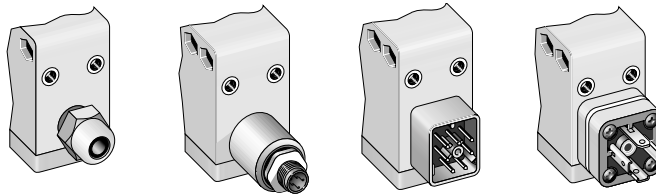


- 1** Alignment sight
- 2** Centre of optical axis, receiver
- 3** Centre of optical axis, sender
- 4** LED signal strength indicator
- 5** M5 threaded mounting hole – 5.5 mm deep
- 6** Mounting holes  
recesses on both sides for M5 hex nuts
- 7** ON/OFF timer switch  
t = Time ON, 0 = Time OFF
- 8** Time delay  
1 ON-delay  
2 OFF-delay
- 9** Time control 0.02 to 1 s
- 1 0** Light/dark selector  
a = Light-switching, b = Dark-switching
- 1 1** Sensitivity adjustment
- 1 2** Terminal connections

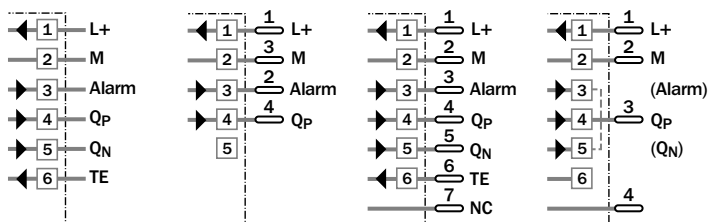


### Connection types

WL 36-B 230	WL 36-B 430	WL 36-B 730	WL 36-B 330
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PG 11, terminals	4-pin, M 12	7-pin	3-pin
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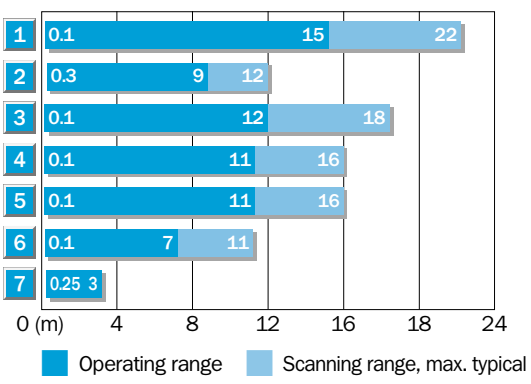


Accessories	page
Cable receptacles	496
Mounting brackets	510
Reflectors	520
Attachable heated cover	556

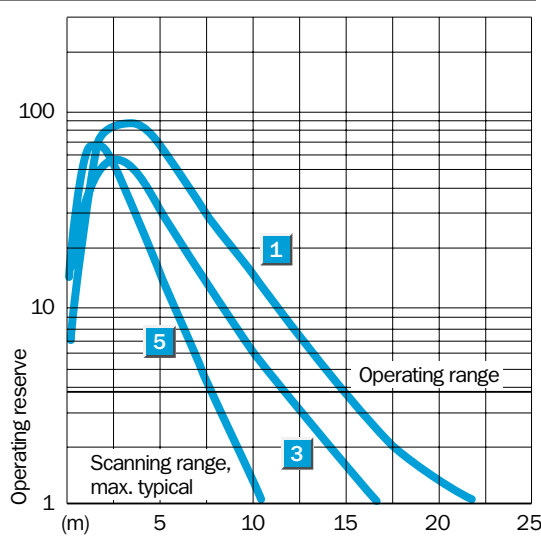
Technical data		WL 36-	B 230	B 430	B 730	B 330
<b>Scanning range</b> , max. typ./on reflector	22 m/PL 80 A					
Sensitivity	Adjustable					
<b>Light source<sup>1)</sup>, light type</b>	LED, red light					
Light spot diameter	Approx. 50 mm at 3 m					
<b>Supply voltage V<sub>S</sub></b>	10...30 V DC <sup>2)</sup>					
Ripple <sup>3)</sup>	≤ 5 V <sub>SS</sub>					
Current consumption <sup>4)</sup>	≤ 40 mA					
<b>Switching outputs</b>	PNP: Q <sub>P</sub> and NPN Q <sub>N</sub>					
	PNP: Q <sub>P</sub>					
	PNP: Q <sub>P</sub> or NPN Q <sub>N</sub>					
<b>Light-/dark-switching</b>	Switch-selectable					
Output current I <sub>A</sub> max.	200 mA					
Response time <sup>5)</sup>	≤ 1.25 ms					
Max. switching frequency <sup>6)</sup>	400/s					
<b>Pre-failure signalling output</b>	Alarm, PNP, open collector					
Internal resistance	≥ 1.5 kΩ ± 5 %					
Operating condition "correct" <sup>7)</sup>	Output HIGH (V <sub>S</sub> - 1.5 V)					
Operating condition "faulty"	Switching periodically at 5/s to V <sub>S</sub>					
<b>Test input "TE"</b>	Sender switched off					
Sender OFF	Test input to 0 V					
<b>Connection type</b>	PG cable gland					
	Plug					
<b>VDE protection class<sup>8)</sup></b>	□					
<b>Circuit protection<sup>9)</sup></b>	A, B, C					
<b>Enclosure rating</b>	IP 67					
	IP 65					
<b>Ambient temperature T<sub>A</sub></b>	Operation -40 °C...+55 °C					
	Storage -40 °C...+70 °C					
<b>Weight</b>	Approx. 165 g					
<b>Polarising filter</b>						
<b>Housing material</b>	Glass-fibre-reinforced plastic					

- 1) Average service life 100,000 h at T<sub>A</sub> = +25 °C
- 2) Limit values
- 3) May not exceed or fall short of V<sub>S</sub> tolerances
- 4) Without load
- 5) Signal transit time with resistive load
- 6) With light/dark ratio 1:1
- 7) Signal reserve ≥ 50 %
- 8) Reference voltage 50 V DC
- 9) A = V<sub>S</sub> connections reverse-polarity protected  
 B = Output Q<sub>N</sub> and Q<sub>P</sub> short-circuit protected  
 C = Interference pulse suppression

**Operating range and operating reserve**



Reflector type	Operating range
1 PL 80 A	0.1...15.0 m
2 C 110	0.3...9.0 m
3 PL 50 A	0.1...12.0 m
4 PL 40 A	0.1...11.0 m
5 PL 30 A	0.1...11.0 m
6 PL 20 A	0.1...7.0 m
7 Reflective tape	0.25...3.0 m
«Diamond Grade»	



**Order information**

Type	Part no.
WL 36-B 230	1 005 385
WL 36-B 430	1 010 612
WL 36-B 730	1 008 848
WL 36-B 330	1 005 787

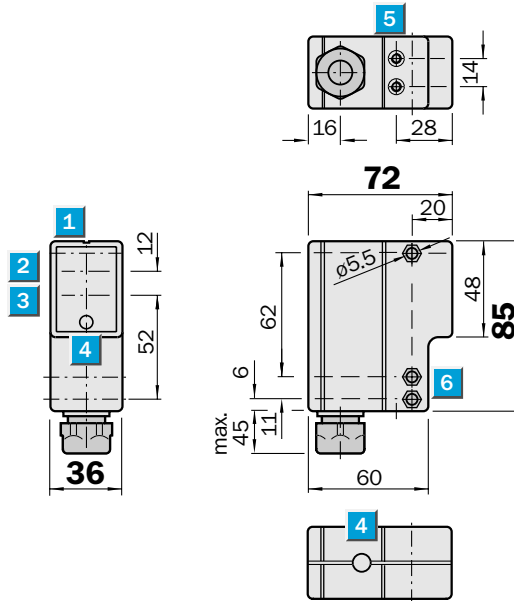


**Scanning range**  
22 m

Photoelectric reflex switches

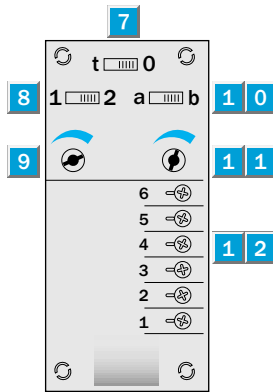
- Robust plastic housing
- Visible red light
- Easily accessible terminal chamber
- Selectable time delay

### Dimensional drawing



### Adjustments possible

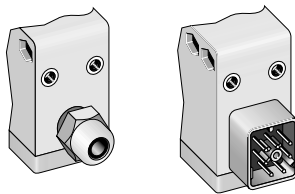
WL 36-R 230  
WL 36-R 230



- 1 Alignment sight
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
- 4 LED signal strength indicator
- 5 M5 threaded mounting hole – 5.5 mm deep
- 6 Mounting holes  
recesses on both sides for M5 hex nuts
- 7 ON/OFF timer switch  
t = Time ON, 0 = Time OFF
- 8 Time delay  
1 ON-delay  
2 OFF-delay
- 9 Time control 0.5 to 12 s
- 1 0 Light/dark selector  
a = Light-switching, b = Dark-switching
- 1 1 Sensitivity adjustment
- 1 2 Terminal connections

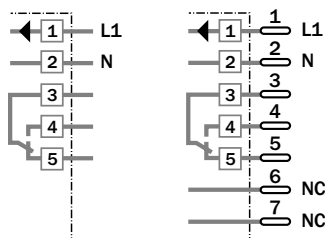
### Connection types

WL 36-R 230    WL 36-R 730



PG 11, terminals

7-pin



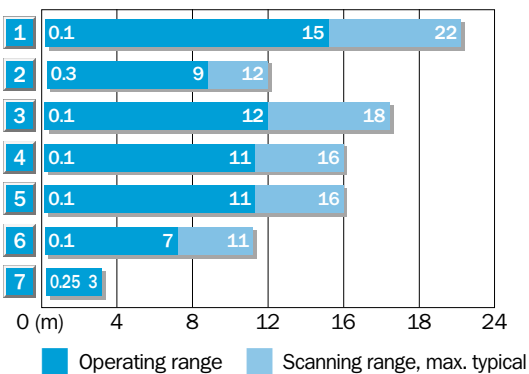
Accessories	page
Cable receptacles	496
Mounting brackets	510
Reflectors	520
Attachable heated cover	556



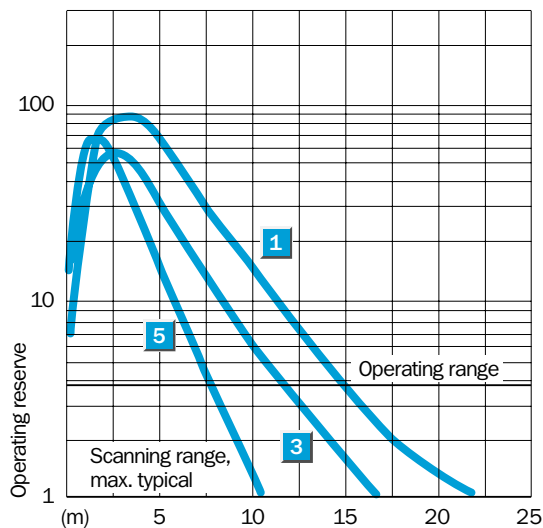
Technical data		WL 36-	R 230	R 730										
<b>Scanning range</b> , max. typ./on reflector	22 m/PL 80 A													
Sensitivity	Adjustable													
<b>Light source<sup>1)</sup>, light type</b>	LED, red light													
Light spot diameter	Approx. 50 mm at 3 m													
<b>Supply voltage V<sub>S</sub></b>	24...240 V UC (+ 10 %/– 25 %)													
Power consumption	< 2 VA													
<b>Switching output</b>	SPDT, isolated <sup>2)</sup>													
Max. switching voltage	AC: 250 V / DC: 120 V													
Max. switching current	4 A / 240 V AC or 24 V DC													
Max. switching capacity	AC: 1000 VA / DC: 100 W													
Response time	≤ 20 ms													
Max. switching frequency <sup>3)</sup>	10/s													
<b>Light-/dark-switching</b>	Switch-selectable													
<b>Connection types</b>	PG cable gland													
	Plug													
<b>VDE protection class<sup>4)</sup></b>	<input type="checkbox"/>													
<b>Circuit protection<sup>5)</sup></b>	A, C													
<b>Enclosure rating</b>	IP 67													
	IP 65													
<b>Ambient temperature T<sub>A</sub></b>	Operation – 25 °C...+ 55 °C													
	Storage – 40 °C...+ 70 °C													
<b>Weight</b>	Approx. 165 g													
<b>Polarising filter</b>														
<b>Housing material</b>	Glass-fibre-reinforced plastic													

- 1) Average service life 100,000 h at T<sub>A</sub> = + 25 °C
- 2) Provide suitable spark suppression for inductive or capacitive loads
- 3) With light/dark ratio 1:1
- 4) Reference voltage 250 V AC
- 5) A = V<sub>S</sub> connections reverse-polarity protected  
C = Interference pulse suppression

**Operating range and operating reserve**



Reflector type	Operating range
1 PL 80 A	0.1...15.0 m
2 C 110	0.3...9.0 m
3 PL 50 A	0.1...12.0 m
4 PL 40 A	0.1...11.0 m
5 PL 30 A	0.1...11.0 m
6 PL 20 A	0.1...7.0 m
7 Reflective tape «Diamond Grade»	0.25...3.0 m



**Order information**

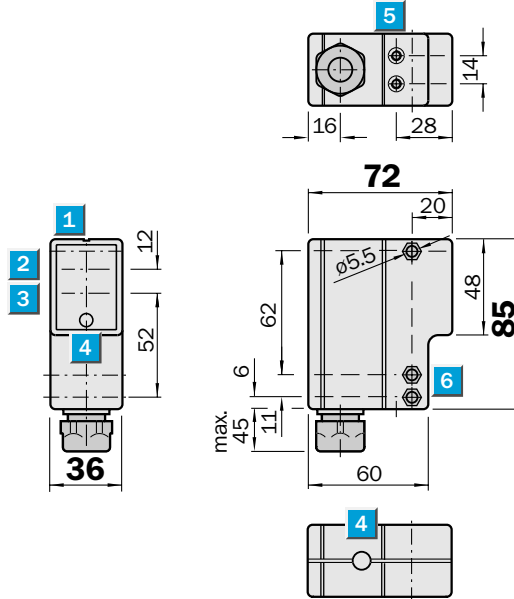
Type	Part no.
WL 36-R 230	1 005 387
WL 36-R 730	1 008 849

**Scanning range**  
60 m

Through-beam photoelectric switches

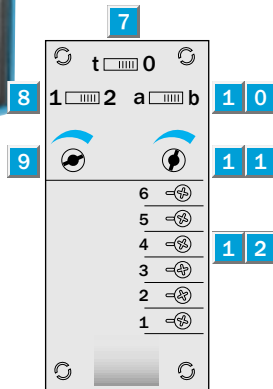
- Robust plastic housing
- Infrared light
- Selectable time delay

**Dimensional drawing**



**Adjustments possible**

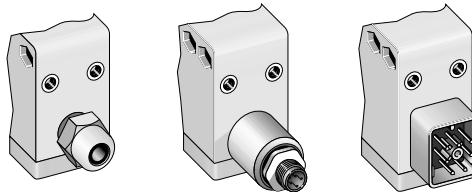
- WS/WE 36-B 230
- WS/WE 36-B 430
- WS/WE 36-B 730



- 1** Alignment sight
- 2** Centre of optical axis, receiver
- 3** Centre of optical axis, sender
- 4** LED signal strength indicator, top and front
- 5** M5 threaded mounting hole – 5.5 mm deep
- 6** Mounting holes  
recesses on both sides for M5 hex nuts
- 7** ON/OFF timer switch  
t = Time ON, 0 = Time OFF
- 8** Time delay  
1 ON-delay  
2 OFF-delay
- 9** Time control 0.02 to 1 s
- 1 0** Light/dark selector  
a = Light-switching, b = Dark-switching
- 1 1** Sensitivity adjustment
- 1 2** Terminal connections

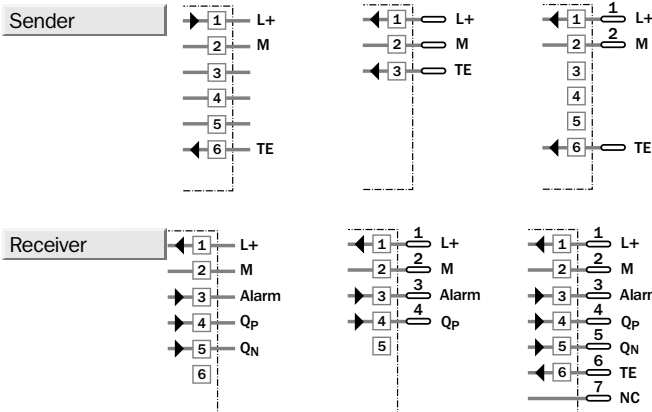
**Connection types**

- WS/WE 36-B 230
- WS/WE 36-B 430
- WS/WE 36-B 730



PG 11, terminals      4-pin, M 12      7-pin

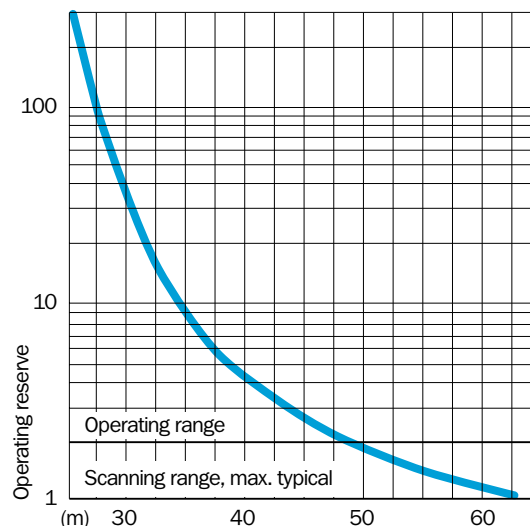
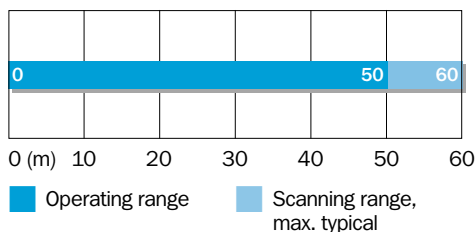
Accessories	page
Cable receptacles	496
Mounting brackets	510
Attachable heated cover	556



Technical data		WS/WE 36-	B 230	B 430	B 730
<b>Scanning range</b> , max. typical	60 m				
Sensitivity	Adjustable				
<b>Light source<sup>1)</sup>, light type</b>	LED, infrared light				
Light spot diameter	Approx. 1300 mm at 25 m				
<b>Supply voltage <math>V_S</math></b>	10...30 V DC <sup>2)</sup>				
Ripple <sup>3)</sup>	$\leq 5 V_{SS}$				
Current consumption <sup>4)</sup>	$\leq 40$ mA				
<b>Switching outputs</b>	PNP: $Q_P$ and NPN $Q_N$				
	PNP: $Q_P$				
<b>Light-/dark-switching</b>	Switch-selectable				
Output current $I_A$ max.	200 mA				
Response time <sup>5)</sup>	$\leq 2.5$ ms				
Max. switching frequency <sup>6)</sup>	400/s				
<b>Pre-failure signalling output</b>	Alarm, PNP, open collector				
Internal resistance	$\geq 1.5$ k $\Omega \pm 5\%$				
Operating condition "correct" <sup>7)</sup>	Output HIGH ( $V_S - 1.5$ V)				
Operating condition "faulty"	Switching periodically at 5/s to $V_S$				
<b>Test input "TE"</b>	Sender switched off				
Sender OFF	Test input to 0 V				
<b>Connection types</b>	PG cable gland				
	Plug				
<b>VDE protection class<sup>8)</sup></b>	□				
<b>Circuit protection<sup>9)</sup></b>	A, B, C				
<b>Enclosure rating</b>	IP 67				
	IP 65				
<b>Ambient temperature <math>T_A</math></b>	Operation $-40$ °C...+55 °C				
	Storage $-40$ °C...+70 °C				
<b>Weight</b>	Approx. 160 g				
<b>Housing material</b>	Glass-fibre-reinforced plastic				

- 1) Average service life 100,000 h at  $T_A = +25$  °C
- 2) Limit values
- 3) May not exceed or fall short of  $V_S$  tolerances
- 4) Without load
- 5) Signal transit time with resistive load
- 6) With light/dark ratio 1:1
- 7) Signal reserve  $\geq 50\%$
- 8) Reference voltage 50 V DC
- 9) A =  $V_S$  connections reverse-polarity protected  
 B = Output  $Q_N$  and  $Q_P$  short-circuit protected  
 C = Interference pulse suppression

**Operating range and operating reserve**



**Order information**

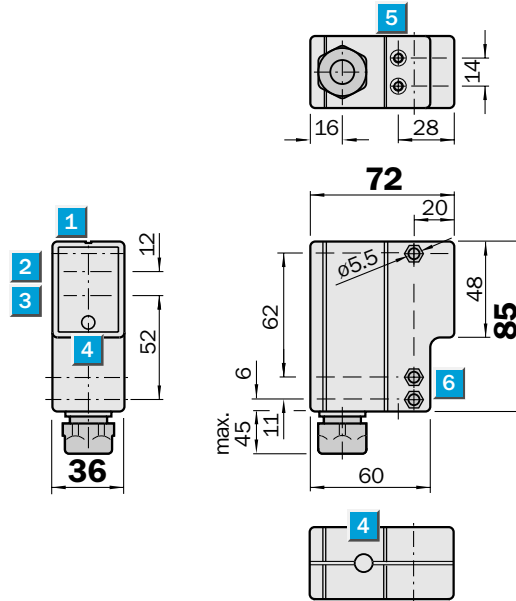
Type	Part no.
WS/WE 36-B 230	1 010 922
WS/WE 36-B 430	1 011 107
WS/WE 36-B 730	1 011 114

**Scanning range**  
60 m

Through-beam photoelectric switches

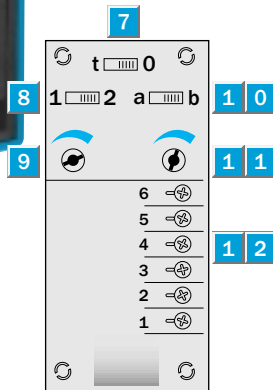
- Robust plastic housing
- Infrared light
- Easily accessible terminal chamber
- Selectable time delay

**Dimensional drawing**



**Adjustments possible**

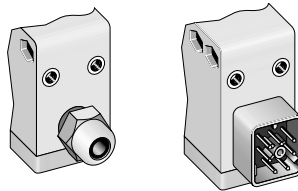
WS/WE 36-R 230  
 WS/WE 36-R 730



- 1 Alignment sight
- 2 Centre of optical axis, receiver
- 3 Centre of optical axis, sender
- 4 LED signal strength indicator, top and front
- 5 M5 threaded mounting hole – 5.5 mm deep
- 6 Mounting holes  
recesses on both sides for M5 hex nuts
- 7 ON/OFF timer switch  
t = Time ON, 0 = Time OFF
- 8 Time delay  
1 ON-delay  
2 OFF-delay
- 9 Time control 0.5 to 12 s
- 1 0 Light/dark selector  
a = Light-switching, b = Dark-switching
- 1 1 Sensitivity adjustment
- 1 2 Terminal connections

**Connection types**

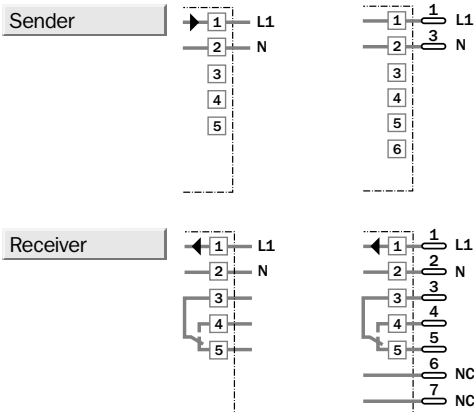
WS/WE 36-R 230    WS/WE 36-R 730



PG 11, terminals

7-pin

Accessories	page
Cable receptacles	496
Mounting brackets	510
Attachable heated cover	556



Technical data		WS/WE 36-	R 230	R 730								
<b>Scanning range</b> , max. typ./on reflector	60 m											
Sensitivity	Adjustable											
<b>Light source<sup>1)</sup>, light type</b>	LED, infrared light											
Light spot diameter	Approx. 1300 mm at 25 m											
<b>Supply voltage V<sub>S</sub></b>	24...240 V UC (+ 10 %/– 25 %)											
Power consumption	< 2 VA											
<b>Switching output</b>	SPDT, isolated <sup>2)</sup>											
Max. switching voltage	AC: 250 V / DC: 120 V											
Max. switching current	4 A / 240 V AC or 24 V DC											
Max. switching capacity	AC: 1000 VA / DC: 100 W											
Response time	≤ 20 ms											
Max. switching frequency <sup>3)</sup>	10/s											
<b>Light-/dark-switching</b>	Switch-selectable											
<b>Connection types</b>	PG cable gland											
	Plug											
<b>VDE protection class<sup>4)</sup></b>	<input type="checkbox"/>											
<b>Circuit protection<sup>5)</sup></b>	A, C											
<b>Enclosure rating</b>	IP 67											
	IP 65											
<b>Ambient temperature T<sub>A</sub></b>	Operation – 25 °C...+ 55 °C											
	Storage – 40 °C...+ 70 °C											
<b>Weight</b>	Approx. 160 g											
<b>Housing material</b>	Glass-fibre-reinforced plastic											

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

2) Provide suitable spark suppression for inductive or capacitive loads

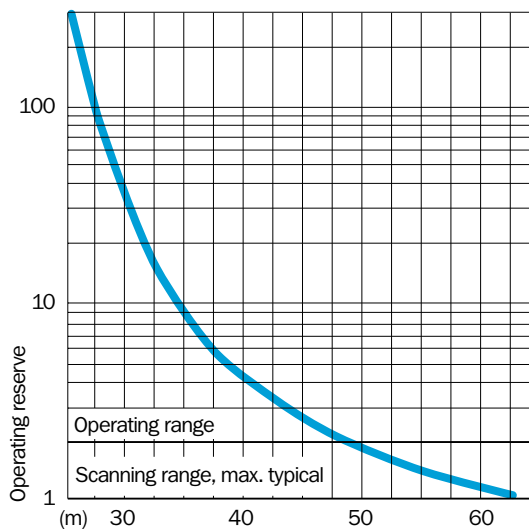
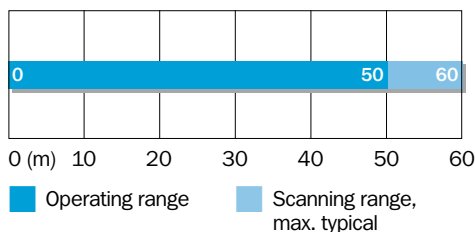
3) With light/dark ratio 1:1

4) Reference voltage 250 V AC

5) A = V<sub>S</sub> connections reverse-polarity protected

C = Interference pulse suppression

**Operating range and operating reserve**



**Order information**

Type	Part no.
WS/WE 36-R 230	1 010 978
WS/WE 36-R 730	1 010 980