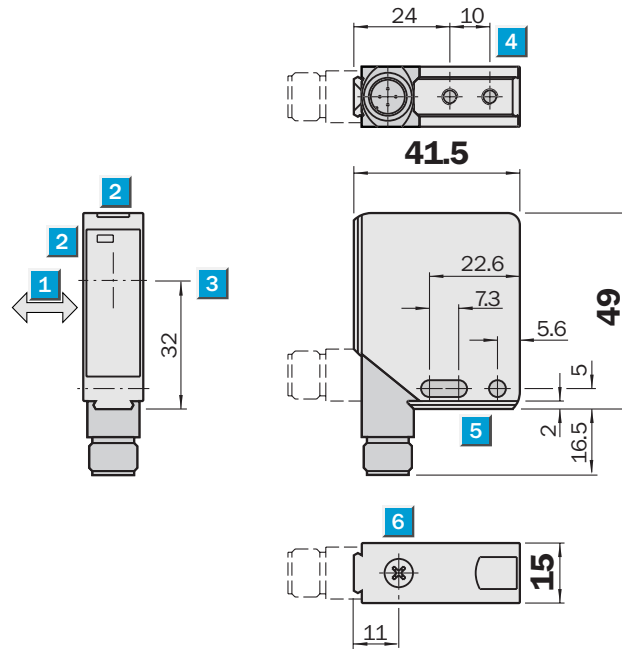


WL 12 G

Photoelectric Reflex Switch for transparent Objects

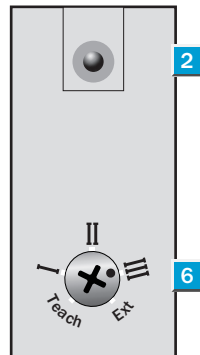
Dimensional drawing



Adjustments possible

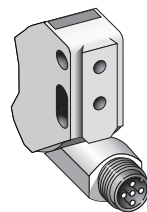
WL 12G-P 510	WL 12G-V 530
WL 12G-P 530	WL 12G-W 530
WL 12G-N 530	

- 1** Preference direction
- 2** LED signal strength indicator
- 3** Centre of optic axis
- 4** Threaded mounting hole M4 – 4 mm deep
- 5** Mounting hole Ø 4,2 mm
- 6** Sensitivity control

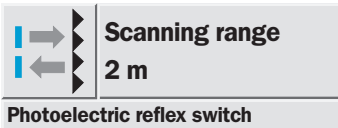
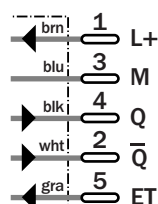


Connection type

WL 12G-P 510	WL 12G-V 530
WL 12G-P 530	WL 12G-W 530
WL 12G-N 530	



5-pin, M12



- Infrared light/red light
- Ultra-sensitivity for detection of glass/transparent objects
- Automatic sensitivity adjustment for changing conditions
- Selectable operational area via rotary control switch or external wire

WL 12 G Photoelectric reflex switch

Technical data		WL 12 G-	P 510	P 530	N 530	V 530	W 530					
Scanning range , typ. max./on reflector	2 m/PL 80 A											
Sensitivity	Adjustable											
Light source ⁴⁾	LED, infrared light											
	LED, red light											
Light spot diameter	Approx. 8 x 13 mm at 200 mm											
Supply voltage V_s	10 ... 30 V DC ²⁾											
Residual ripple ³⁾	$\leq 5 V_{pp}$											
Current consumption ⁴⁾	≤ 65 mA											
Switching outputs	PNP, Q and \bar{Q}											
	NPN, Q and \bar{Q}											
	PNP, Q and plausibility output											
	NPN, Q and plausibility output											
Output current I_A max.	100 mA											
Response time ⁵⁾	≤ 500 μ s											
Switching frequency, max. ⁶⁾	1000/s											
Operation mode	Light-switching, Q active when the light path is unobstructed to the reflector											
Plausibility output Q_p												
Reliable detection	Approx. 0 V											
	Approx. $+V_s$											
Incorrect adjustment or extreme pollution	$V_s - 2.9$ V											
	Approx. 1.8 V											
Teach-in input ET												
Teach-in	≥ 10 V to $+V_s$											
Normal operation	< 2 V or open input											
Connection type	Plug M12, 5-pin											
VDE protection class ⁷⁾	<input type="checkbox"/>											
Circuit protection ⁸⁾	A, B, C											
Enclosure rating	IP 67											
Ambient temperature T_A	Operation -25 °C ... $+60$ °C											
	Storage -40 °C ... $+75$ °C											
Weight	With plug: 120 g											
Polarising filter												
Housing material	Zinc die-cast											

Operational area is set on equipment via rotary control switch or via control wire ET ($+V_s$ on ET)

Mode I: 50 ms ⁹⁾

Mode II: 150 ms ⁹⁾

Mode III: 250 ms ⁹⁾

Switches when signal weakens $> 10\%$

Switches when signal weakens $> 18\%$

Switches when signal weakens $> 40\%$

Clean PET bottles

Clear glass bottles

Colored glass or non-transparent objects

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⁾ Reference voltage 50 V DC

⁸⁾ A = V_s connections reverse-polarity

protected

B = Outputs Q and \bar{Q} short-circuit

protected

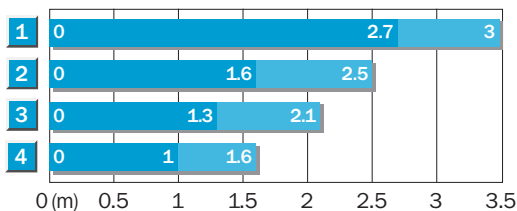
C = Interference pulse suppression

⁹⁾ Impulse length via ET (control wire);

setting length via rotary control switch

approx. 2 s

Scanning range



Reflector type	Operating range
1 PL 80 A	0 - 2.7 m
2 PL 40 A	0 - 1.6 m
3 PL 30 A	0 - 1.3 m
4 PL 20 A	0 - 1.0 m

■ Operating range

■ Scanning range, max. typical

Order information

Type	Order no.
WL12G-P510	1 016 738
WL12G-P530	1 016 289
WL12G-N530	1 016 309
WL12G-V530	1 016 310
WL12G-W530	1 016 311

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