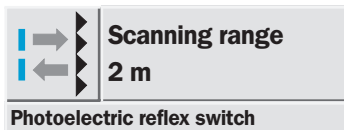


WL 12G

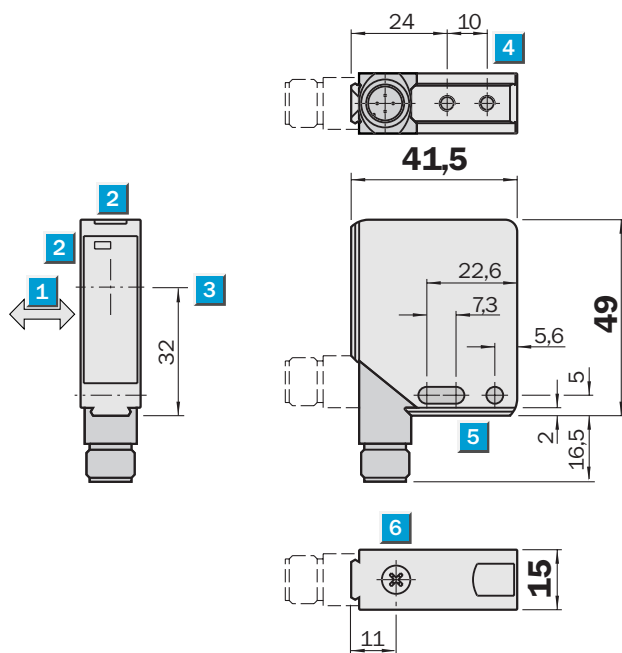
Photoelectric Reflex Switch for transparent Objects



- 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



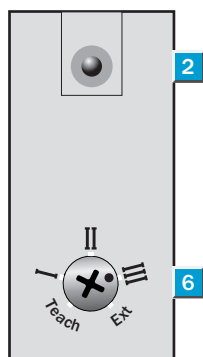
Dimension illustration



Setting options

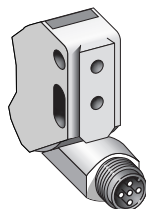
WL 12G-P 510	WL 12G-V 530
WL 12G-P 530	WL 12G-W 530
WL 12G-N 530	

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

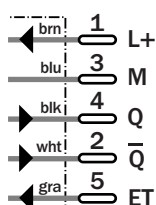


Connection type

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



5 pin, M 12



WL 12G Photoelectric reflex switch

Technical data		WL 12G-	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 ¹⁾	LED, infrared light												
	LED, red light												
Light spot diameter	Approx. 8 x 13 mm at 200 mm distance												
Supply voltage V_s	10 ... 30 V DC ²⁾												
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 M 12, 5 pin												
VDE protection class ⁷⁾	☐												
Circuit protection ⁸⁾	A, B, C												
Enclosure rating	IP 67												
Ambient temperature	Operation -25 °C ... $+60$ °C												
	Storage -40 °C ... $+75$ °C												
Weight	With plug 120 g												
Polfilter													
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 $T_U = +25$ °C
²⁾ Limit values
³⁾ Must be within V_s tolerances

- ⁴⁾ Without load
⁵⁾ With resistive load
⁶⁾ With light/dark time ratio 1:1
⁷⁾ Withstand voltage 50 V DC

- ⁸⁾ A = Supply connections reverse polarity protected
B = Outputs Q and $\bar{Q}$ short circuit protected
C = Interference suppression

- ⁹⁾ Impulse length via ET (control wire); setting length via rotary control switch approx. 2 s

Scanning range		Order information	
		Type	Order no.
		WL 12G-P 510	1 016 731
		WL 12G-P 530	1 016 289
		WL 12G-N 530	1 016 309
		WL 12G-V 530	1 016 310
		WL 12G-W 530	1 016 311

SICK

Great Britain
Erwin Sick Ltd.
Waldkirch House
39 Hedley Road, St. Albans
Hertfordshire AL 1 5BN
☎ +44 17 27-83 11 21
Fax +44 17 27-85 67 67
erwin@sick.co.uk

USA
SICK, Inc.
6900 West 110th Street
Bloomington, MN 55438
☎ +1 952 941-67 80
Fax +1 952 941-92 87
WATS: 1-800-325-7425
info@sickoptic.com

Australia
Erwin Sick Optic-Electronic
Pty. Ltd. Head Office, P.O. Box 214
899 Heidelberg Road
Ivanhoe, Vic. 3079, Australia
☎ +61 39 49 74 10 0
(0 08) 33 48 02 - toll free
Fax +61 39 49 71 18 7
sick@werple.net.au