
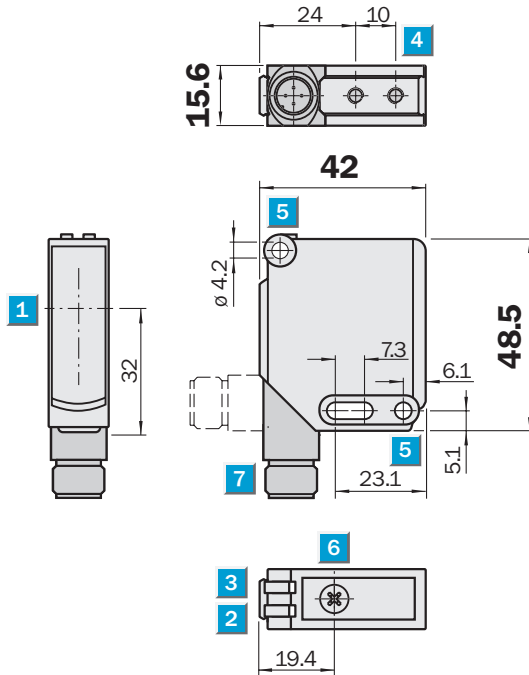


Photoelectric reflex switch, WL12G-3, for transparent objects, red light

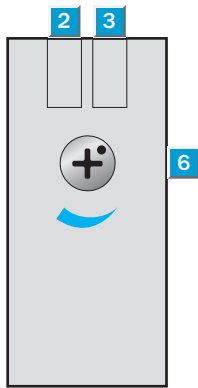

Scanning range
0 ... 4 m
Photoelectric reflex switch

- Robust metal housing with dovetail mounting clamps
- Reliable detection of glass and transparent films
- Adjustable sensitivity
- High device availability in industrial environments
- Range between $-40\text{ }^{\circ}\text{C}$... $+60\text{ }^{\circ}\text{C}$

Dimensional drawing



Adjustments possible

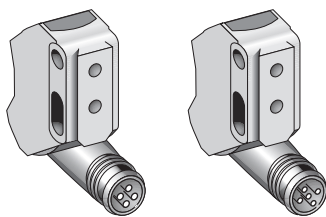


- 1** Optical axis
- 2** LED indicator yellow, status: light reception
- 3** LED indicator green, supply voltage active
- 4** Mounting thread M4 – 4 mm deep
- 5** Mounting thread, \varnothing 4.2 mm
- 6** Scanning range adjuster, potentiometer
- 7** Connection



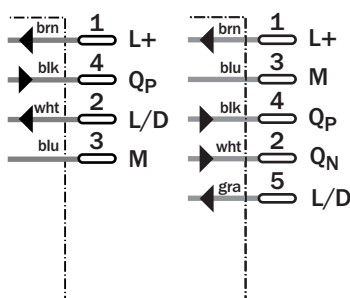
Connection type

WL12G-302431 WL12G-3B2581



M12, 4-pin

M12, 5-pin



Accessories

- Connector, M12, 4-pin
- Connector, M12, 5-pin
- Mounting systems

Technical data		WL12G-3	B2531	O2431										
Scanning range typ. max.	0 ... 4 m													
Scanning range, recommended	0 ... 2.5 m													
Relating to	Reflector PL80A													
Sensitivity adjustment	Potentiometer (11 turn)													
Light source, light type	LED, Red light, 640 nm ¹⁾													
Light spot diameter	Approx. 25 mm at 1.5 m distance													
Angle of dispersion	Approx. 1.5°													
Polarisation filter	✓													
Supply voltage V _s	DC 10 ... 30 V ²⁾													
Ripple	≤ 5 V _{pp} ³⁾													
Power consumption	≤ 30 mA ⁴⁾													
Switching outputs	Q _{PNP} and Q _{NPN}													
	PNP													
Signal voltage PNP HIGH/LOW	> V _s - 3 V/approx. 0 V													
Signal voltage NPN HIGH/LOW	Approx. > V _s / < 3 V													
Switching mode	Light-/dark-switching, switchable ⁵⁾													
Output current I _a max	100 mA													
Response time	≤ 330 μs ⁶⁾													
Switching frequency	1,500 Hz ⁷⁾													
Connection type	Connector, M12, 5-pin													
	Connector, M12, 4-pin													
VDE protection class	□ ⁸⁾													
Circuit protection	V _s connections reverse-polarity protected/All outputs short-circuit protected/Interference suppression													
Enclosure rating	IP 66, IP 67, IP 69 K													
Ambient temperature operation	-40 °C ... +60 °C													
Ambient temperature storage	-40 °C ... +75 °C													
Weight	Approx. 120 g													
Housing material	Zinc die-cast ⁹⁾													

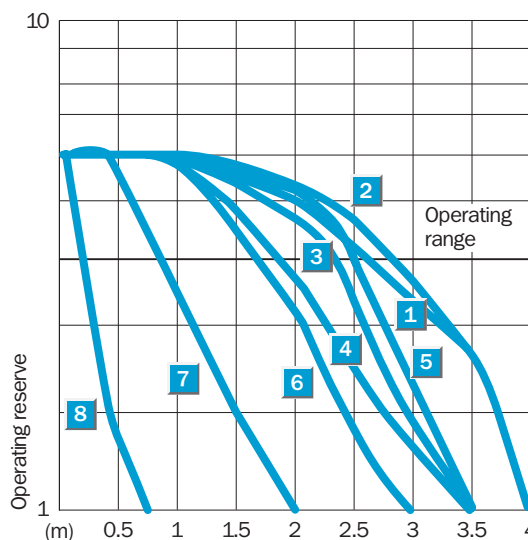
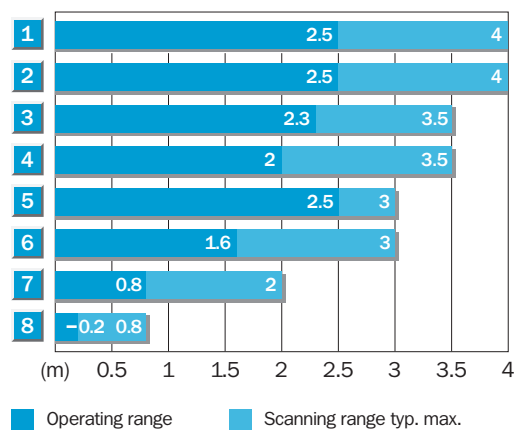
1) Average service life 100,000 h at T_a = +25 °C
 2) Limit values, operation in short-circuit protected network max. 8 A

3) May not exceed or fall short of V_s tolerances
 4) Without load

5) Control cable 0 V or open-circuited = light-switching. Control cable V_s = dark-switching
 6) Signal transit time with resistive load

7) With light/dark ratio 1:1 in switching mode
 8) Reference voltage 50 V DC
 9) Teflon-coated housing available on request

Scanning range and operating reserve



Reflector type	Operating range
1 PL80A	0 ... 2.5 m
2 C110A	0 ... 2.5 m
3 P250F	0 ... 2.3 m
4 PL50A	0 ... 2.0 m
5 PL40A	0 ... 2.5 m
6 PL30A	0 ... 1.6 m
7 PL20A	0 ... 0.8 m
8 Reflective tape Diamond Grade	0 ... 0.2 m

Order information	
Type	Order no.
WL12G-3B2531	1041456
WL12G-302431	1041457