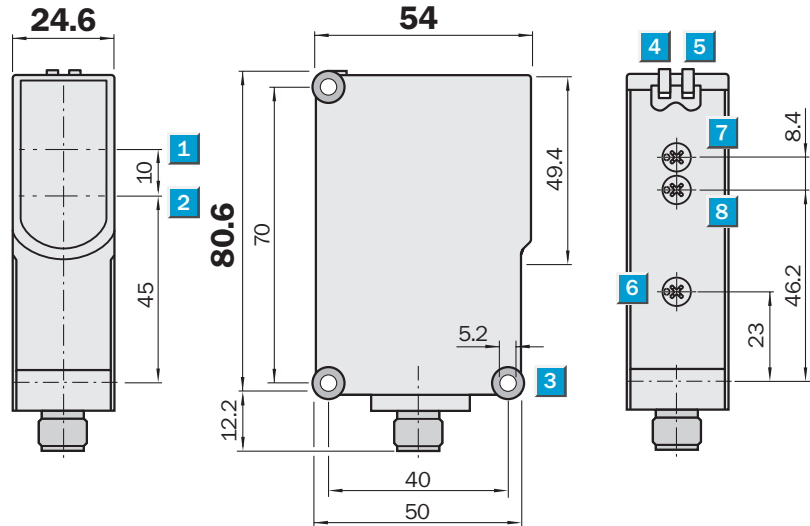


- Red light for easier alignment
- Long range, high operating reserve
- Reliable in industrial environments; secure against the effects of ambient light, other sensors mounted adjacently and temperatures from -40 °C ... +60 °C
- Front screen heating, time delays

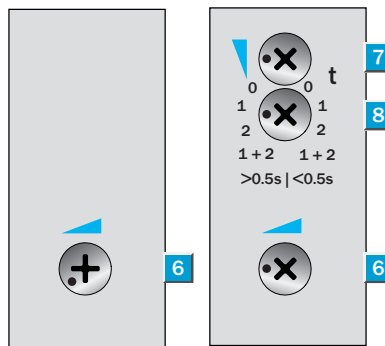
Dimensional drawing



Adjustments possible

WL27-3P1131	WL27-3E2631
WL27-3P2431	WL27-3F2631
WL27-3P2451	

- 1 Optical axis sender
- 2 Optical axis receiver
- 3 Mounting hole Ø 5.2 mm
- 4 LED indicator green; power on
- 5 LED indicator yellow; status of received light beam
- 6 Sensitivity adjustment: Poti
- 7 Time control
- 8 Time delay selector switch



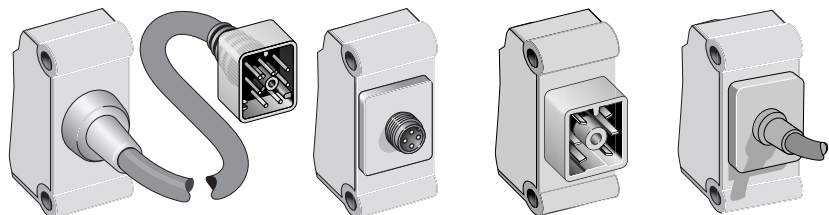
Switch-selectable time delay

0.02 - 0.5s or 0.5 - 10s

- 0 Without time delay
- 1 Time delay from trailing edge of object
- 2 Time delay from leading edge of object
- 1 + 2 Time delay from trailing and leading edge of object

Connection type

WL27-3P3730	WL27-3P2430	WL27-3E2631	WL27-3P1131
	WL27-3P2431	WL27-3F2631	
	WL27-3P2450		
	WL27-3P2451		

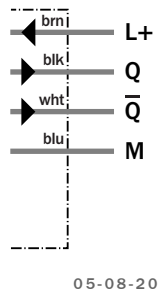
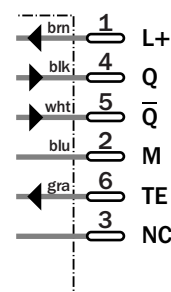
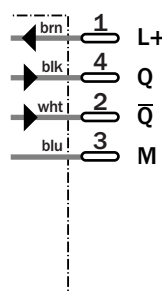
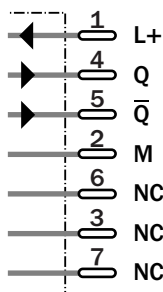


Q7, 7-pin, DC

M12, 4-pin

Q6, 6-pin, DC

4 x 0.25 mm²



See chapter Accessories

Connector, M12, 4-pin
Connector, Q6, 6-pin, DC-coding
Connector, Q7, 7-pin, DC-coding
Mounting systems
Reflectors
Weather protection

Technical data		WL27-3	E2631	F2631	P1131	P2430	P2431	P2450	P2451	P3730		
Scanning range typ. max.	0.1 ... 15 m											
Scanning range, recommended	0.1 ... 11 m											
Relating to	Reflector PL80 A											
Sensitivity adjustment	Potentiometer											
Light source, light type	LED, Red light, 660 nm ¹⁾											
Light spot diameter	Approx. 220 mm at 10 m distance											
Angle of dispersion	Approx. 1.5 °											
Polarisation filter	✓											
Supply voltage V_s	10 ... 30 V DC ²⁾											
Ripple	≤ 5 V _{pp} ³⁾											
Power consumption	≤ 45 mA ⁴⁾											
	≤ 30 mA ⁴⁾											
Switching outputs	NPN antivalent											
	PNP antivalent											
Signal voltage PNP HIGH / LOW	> V _s - 2.5 V / approx. 0 V											
Signal voltage NPN HIGH / LOW	Approx. V _s / < 2.5 V											
Output current I _a max	100 mA											
Response time	≤ 500 μs ⁵⁾											
Switching frequency	1,000 Hz ⁶⁾											
Time delay	Selectable: 0.5 ... 10 s / 0.02 ... 0.5 s											
Time type	OFF, T _{off} , T _{on} , T _{off} + T _{on}											
Test input sender off	TE to V _s											
	TE to 0 V											
Connection type	Connector, Q6, 6-pin, DC											
	Cable, PVC, 2 m ⁷⁾											
	Connector, M12, 4-pin											
	Cable with plug, Q7, 7-pin, DC, PVC,											
VDE protection class	□ ⁸⁾											
Circuit protection	V _s connections reverse-polarity protected / All outputs short-circuit protected / Interference suppression											
Enclosure rating	IP 65											
	IP 66, IP 67											
Ambient temperature operation	-40 °C ... +60 °C											
Ambient temperature storage	-40 °C ... +75 °C											
Weight	Approx. 100 g											
	Approx. 180 g											
	Approx. 120 g											
Front screen heating	✓											
Housing material	ABS, PMMA											

¹⁾ Average service life 100,000 h at T_a = +25 °C

²⁾ Limit values, operation in short-circuit

³⁾ may not exceed or fall short of protected network max. 8 A

V_s tolerances

⁴⁾ without load

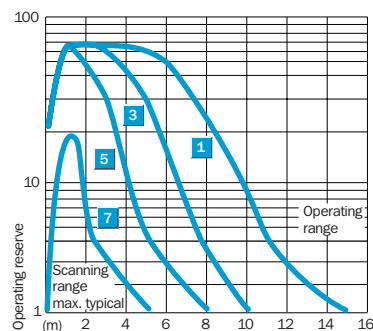
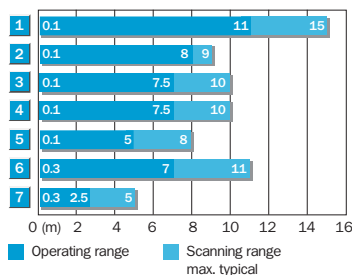
⁵⁾ Signal transit time with resistive load

⁶⁾ with light/dark ratio 1:1

⁷⁾ do not bend below 0 °C

⁸⁾ Reference voltage 50 V DC

Scanning range and operating reserve



Order information

Type	Order no.
WL27-3E2631	1 027 773
WL27-3F2631	1 027 772
WL27-3P1131	1 027 768
WL27-3P2430	1 027 769
WL27-3P2431	1 027 982
WL27-3P2450	1 027 771
WL27-3P2451	1 027 770
WL27-3P3730	1 027 774