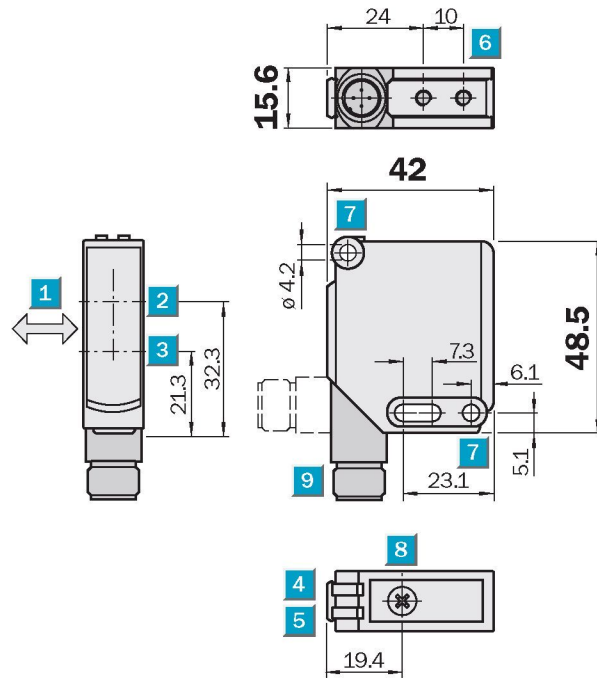


Scanning distance
20 ... 350 mm

Photoelectric proximity switch

- Robust metal housing with dovetail mounting clamps
- High device availability in industrial environments; in case of ambient light, optical reflections and devices mounted opposite one another
- Range between -40 °C ... +60 °C

Dimensional drawing



Adjustments possible

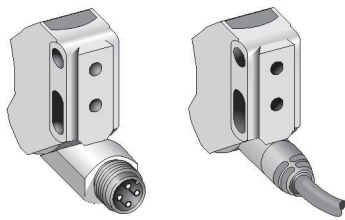


- 1 Preferred direction of the objects to be detected
- 2 Optical axis, receiver
- 3 Optical axis, sender
- 4 LED indicator green, supply voltage active
- 5 LED indicator yellow, status: light reception
- 6 Mounting thread M4 ñ 4 mm deep
- 7 Mounting thread, Ø 4.2 mm
- 8 Scanning distance adjuster, potentiometer
- 9 Connection

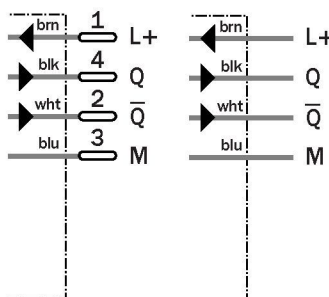


Connection type

WTB12-3N2431	WTB12-3N1131
WTB12-3P2431	WTB12-3N1231
	WTB12-3P1131
	WTB12-3P1231



M12, 4-pin 4 x 0.25 mm²



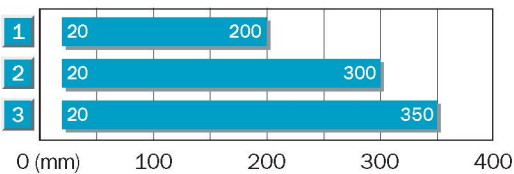
Accessories

Connector, M12, 4-pin
Mounting systems

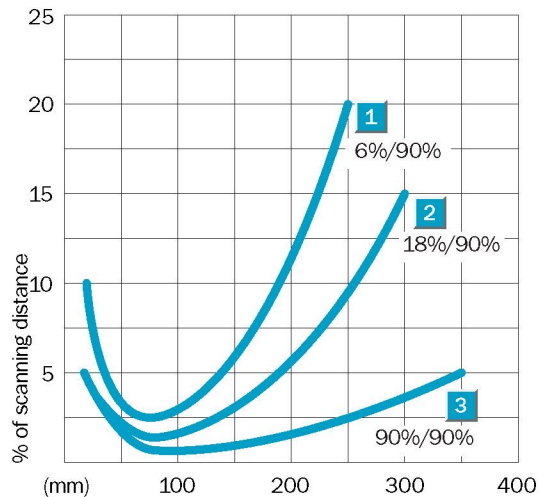
	WTB12-3	N1131	N1231	N2431	P1131	P1231	P2431				
Scanning distance typ. max.	20 ... 350 mm ¹⁾										
Operating distance	20 ... 350 mm ¹⁾										
Adjustment of operating distance	Potentiometer										
Light source, light type	LED, Red light, 640 nm ²⁾										
Light spot diameter	Ø 6.0 mm at 200 mm distance										
Supply voltage V_s	DC 10 ... 30 V ³⁾										
Ripple	≤ 5 V _{ss} ⁴⁾										
Power consumption	≤ 45 mA ⁵⁾										
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	≤ 330 µs ⁶⁾										
Switching frequency	1,500 Hz ⁷⁾										
Connection type	Cable, PVC, 2 m ⁸⁾										
	Cable, PVC, 5 m ⁸⁾										
	Connector, M12, 4-pin										
VDE protection class	□ ⁹⁾										
Circuit protection	V _s connections reverse-polarity protected/All outputs short-circuit protected/Interference suppression										
Enclosure rating	IP 66, IP 67, IP 69K										
Ambient temperature operation	-40 °C ... +60 °C										
Ambient temperature storage	-40 °C ... +75 °C										
Weight	Approx. 200 g										
	Approx. 280 g										
	Approx. 120 g										
Housing material	Zinc die-cast ¹⁰⁾										

¹⁾ Object with 90 % remission (based on standard white to DIN 5033)
²⁾ Average service life 100,000 h at T_a = +25 °C
³⁾ Limit values, reverse-polarity protected operation in short-circuit protected network max. 8 A
⁴⁾ May not exceed or fall short of V_s tolerance
⁵⁾ Without load
⁶⁾ Signal transit time with resistive load
⁷⁾ With light/dark ratio 1:1
⁸⁾ Do not bend below 0 °C
⁹⁾ Reference voltage 50 V DC
¹⁰⁾ Teflon-coated housing available on request

Scanning distance



- 1 Scanning distance on black, 6 % Remission
- 2 Scanning distance on grey, 18 % Remission
- 3 Scanning on white, 90 % Remission



Order information	
Type	Order no.
WTB12-3N1131	1041418
WTB12-3N1231	1041419
WTB12-3N2431	1041416
WTB12-3P1131	1041413
WTB12-3P1231	1041415
WTB12-3P2431	1041411