




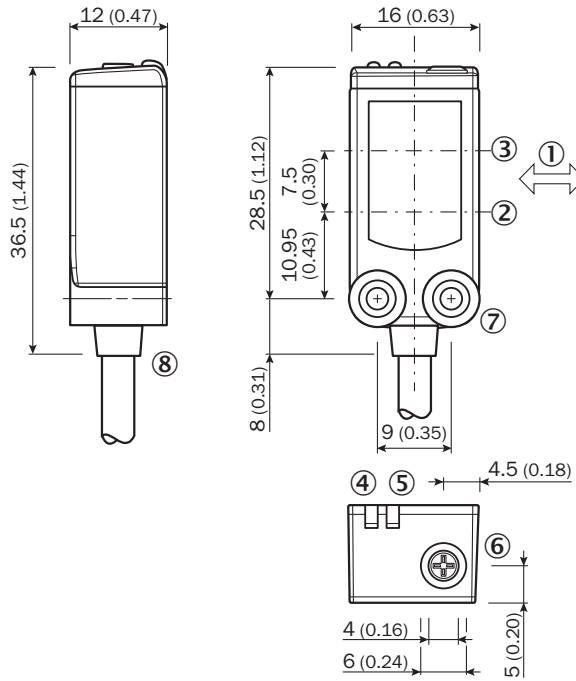
WTV4-3

 Sensing distance
2 ... 50 mm

Photoelectric proximity sensor

- Designed to detect deep black objects according to a high-power IR LED
- Reliable background suppression
- IR light means no influence to vision systems
- Best detection of low remission objects < 1 % in 15 to 20 mm

Dimensional drawing

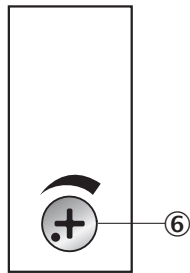


All dimensions in mm (inch)



Adjustment

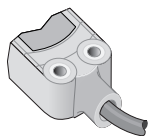
All types



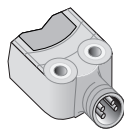
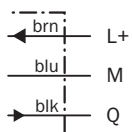
- ① Standard direction of the material being scanned
- ② Optical axis, sender
- ③ Optical axis, receiver
- ④ LED-indicator yellow, status of receiving light beam
- ⑤ LED-indicator green, power-on
- ⑥ Potentiometer 5 turns or teach-in button
- ⑦ M3 threaded metal mounting hole
- ⑧ Connector/cable/cable connector



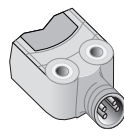
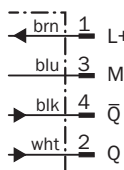
Connection type				
WTV4-3P1321	WTV4-3N2221S58	WTV4-3N2221	WTV4-3P3121 WTV4-3P3122	WTV4-3P3222S60



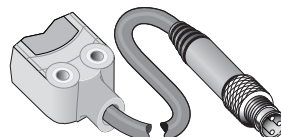
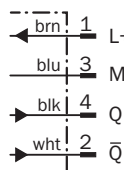
3 x 0.14 mm²



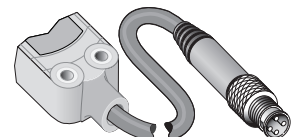
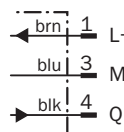
M8, 4-pin



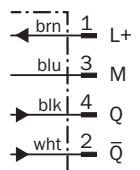
M8, 4-pin



M8, 3-pin



M8, 4-pin



Technical data		WTV4-3	P3121	P1321	P3222S60	N2221S58	N2221	P3122				
Maximum sensing distance	70 mm											
Typ. operating distance	2 ... 50 mm											
Adjustable of operating distance	5 ... 70 mm											
Pre-adjusted	25 mm											
Adjustment of operating distance	Potentiometer 5 resolutions											
	Teach-in button											
Light source, light type ¹⁾	Pin-Point-LED, IR light 880 nm											
Light spot dimensions	Approx. Ø 7 mm in 50 mm											
Supply voltage V_s	10 ... 30 V DC ²⁾											
Ripple ³⁾	< 5 V _{SS}											
Power consumption ⁴⁾	≤ 30 mA											
Switching output	PNP, light switching											
	PNP, complementary output											
	NPN, complementary output											
	NPN, complementary output inverted											
Output current I _A max.	< 100 mA											
Response time ⁵⁾	< 0.5 ms											
Switching frequency, max. ⁶⁾	1000/s											
Connection type	2 m cable, PVC ⁷⁾ , 3 wire											
	100 mm cable with plug M8, 3-pin											
	100 mm cable with plug M8, 4-pin											
	Housing connector M8, 4-pin											
Circuit protection ⁸⁾	A, B, C											
Enclosure rating	IP 66, IP 67											
Ambient temperature operation	-40 °C ... +60 °C											
Ambient temperature storage	-40 °C ... +75 °C											
Housing material	ABS											

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

²⁾ Limit values

³⁾ May not exceed or fall short V_s

⁴⁾ Without load

⁵⁾ Signal transit time with resistive load

⁶⁾ With light/dark ratio 1:1

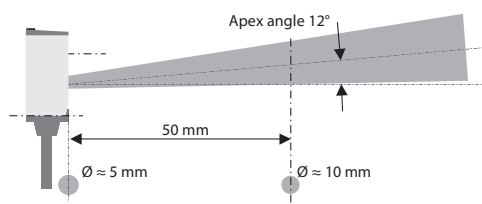
⁷⁾ Do not bend below 0 °C

⁸⁾ A = V_s reverse polarity protected

B = Outputs short-circuit protected

C = Interference pulse suppression

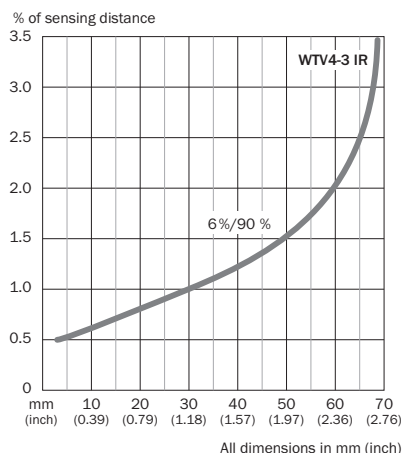
Optical characteristic



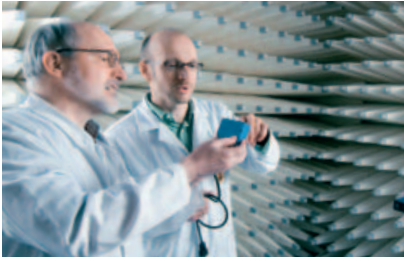
Ordering information

Model name	Part no.
WTV4-3P3121	1042191
WTV4-3P1321	1029888
WTV4-3P3222S60	1052426
WTV4-3N2221S58	1051471
WTV4-3N2221	1048995
WTV4-3P3122	1046411

Sensing distance

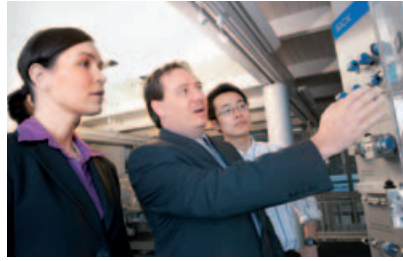


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