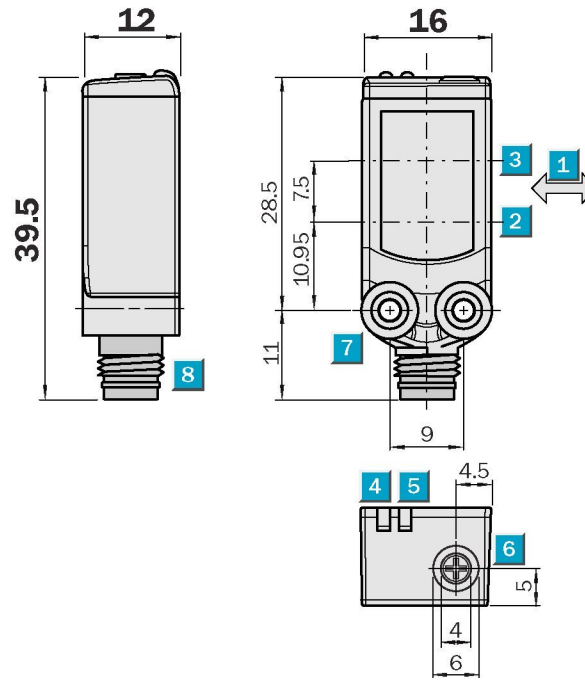


Scanning distance
4 ... 150 mm

Photoelectric proximity switch

- High-precision setting of scanning distance thanks to 5-turn potentiometer
- Object detection almost irrespective of colour and background consistency
- Secure function when mounted opposite other sensors

Dimensional drawing



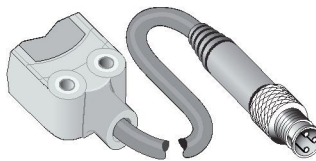
Adjustments possible



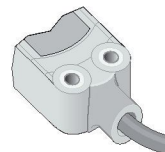
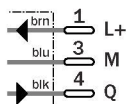
- 1 Standard direction of the material being scanned
- 2 Optical axis, sender
- 3 Optical axis, receiver
- 4 LED indicator yellow, status of received light beam
- 5 LED indicator green, power on
- 6 Potentiometer
- 7 Mounting hole M3
- 8 Connector

Connection type

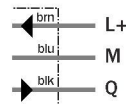
WTB4-3N3161	WTB4-3N1361	WTB4-3N2161	WTB4-3P2261
WTB4-3P3161	WTB4-3P1361	WTB4-3P2161	



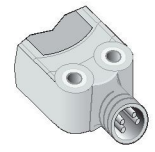
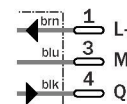
M8, 3-pin



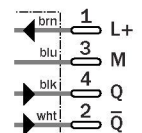
3 x 0.14 mm²



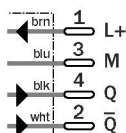
M8, 3-pin



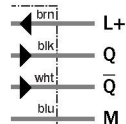
M8, 4-pin



M8, 4-pin
WTB4-3P3261



4 x 0.14 mm²
WTB4-3N1161
WTB4-3P1161



See Accessories chapter

Connector, M8, 3-pin

Connector, M8, 4-pin

Mounting systems

WTB4-3		N1161	N1361	N2161	N3161	P1161	P1361	P2161	P2261	P3161	P3261
Scanning distance typ. max.	4 ... 150 mm										
Operating distance	15 ... 150 mm										
Adjustment of operating distance	Potentiometer, 5 revolutions										
Light source, light type	Pin Point LED, red light, 650 nm ¹⁾										
Light spot diameter	7 mm at 50 mm distance										
Supply voltage V_s	DC 10 ... 30 V ²⁾										
Ripple	< 5 V _{SS} ³⁾										
Power consumption	≤ 30 mA ⁴⁾										
Switching outputs	NPN antivalent										
	NPN, Q										
	PNP antivalent										
	PNP, Q										
Switching mode	Complementary										
	Light-switching										
Output current I _{a,max}	≤ 100 mA										
Response time	< 0.5 ms ⁵⁾										
Switching frequency	1,000 Hz ⁶⁾										
Connection type	Cable, PVC, 2 m ⁷⁾										
	Connector, M8, 3-pin										
	Cable with plug, M8, 3-pin, PVC, 100 mm ⁷⁾										
	Connector, M8, 4-pin										
	Cable with plug, M8, 4-pin, PVC, 100 mm ⁷⁾										
VDE protection class	⊕										
Circuit protection	V _s connections reverse-polarity protected / Output Q and Q not short-circuit protected / Interference suppression										
Enclosure rating	IP 66, IP 67										
Ambient temperature operation	-40 °C ... +60 °C										
Ambient temperature storage	-40 °C ... +75 °C										
Weight	Ca. 20 g										
Housing material	Bayblend, PMMA										

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

²⁾ Limit values

³⁾ May not exceed or fall short of

V_s tolerances

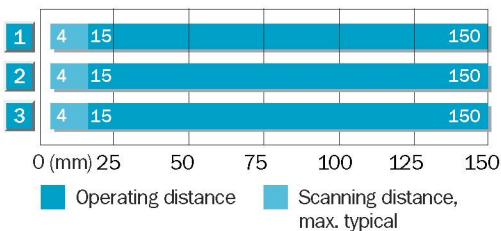
⁴⁾ Without load

⁵⁾ Signal transit time with resistive load

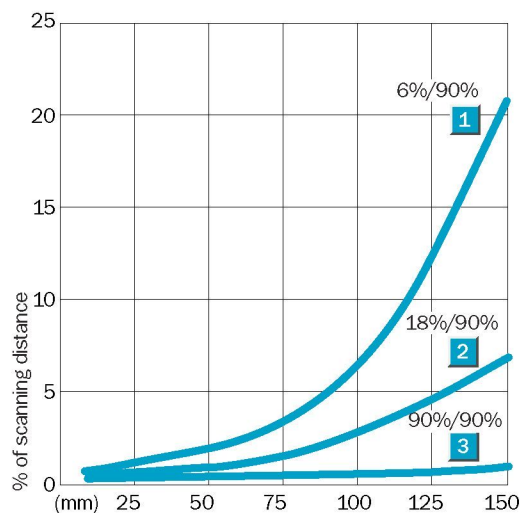
⁶⁾ With light/dark ratio 1:1

⁷⁾ Do not bend below 0 °C

Scanning distance



- 1 Scanning range on black, 6% remission
- 2 Scanning range on grey, 18% remission
- 3 Scanning range on white, 90% remission



Ordering information

Model Name	Part Number
WTB4-3N1161	1 028 102
WTB4-3N1361	1 028 101
WTB4-3N2161	1 028 104
WTB4-3N3161	1 028 103
WTB4-3P1161	1 028 096
WTB4-3P1361	1 028 094
WTB4-3P2161	1 028 099
WTB4-3P2261	1 028 100
WTB4-3P3161	1 028 097
WTB4-3P3261	1 028 098