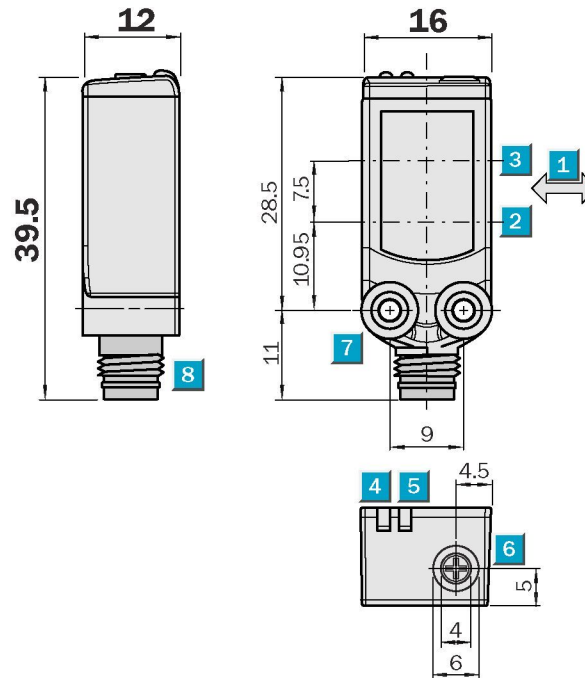


**Scanning distance**  
4 ... 150 mm

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



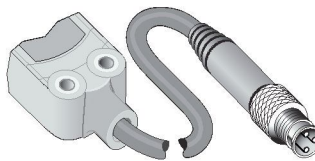
Adjustments possible



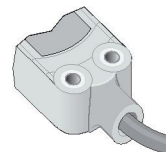
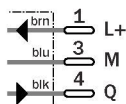
- 1 Standard direction of the material being scanned
- 2 Optical axis, sender
- 3 Optical axis, receiver
- 4 LED indicator yellow, status of received light beam
- 5 LED indicator green, power on
- 6 Potentiometer
- 7 Mounting hole M3
- 8 Connector

Connection type

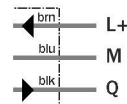
WTB4-3N3161	WTB4-3N1361	WTB4-3N2161	WTB4-3P2261
WTB4-3P3161	WTB4-3P1361	WTB4-3P2161	



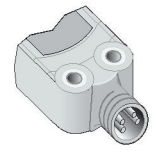
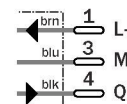
M8, 3-pin



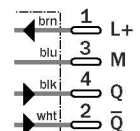
3 x 0.14 mm<sup>2</sup>



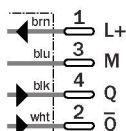
M8, 3-pin



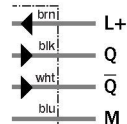
M8, 4-pin



M8, 4-pin  
WTB4-3P3261



4 x 0.14 mm<sup>2</sup>  
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
<b>Scanning distance typ. max.</b>	4 ... 150 mm										
<b>Operating distance</b>	15 ... 150 mm										
Adjustment of operating distance	Potentiometer, 5 revolutions										
<b>Light source, light type</b>	Pin Point LED, red light, 650 nm <sup>1)</sup>										
Light spot diameter	7 mm at 50 mm distance										
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V <sup>2)</sup>										
Ripple	< 5 V <sub>SS</sub> <sup>3)</sup>										
Power consumption	≤ 30 mA <sup>4)</sup>										
<b>Switching outputs</b>	NPN antivalent										
	NPN, Q										
	PNP antivalent										
	PNP, Q										
Switching mode	Complementary										
	Light-switching										
Output current I <sub>a,max</sub>	≤ 100 mA										
Response time	< 0.5 ms <sup>5)</sup>										
Switching frequency	1,000 Hz <sup>6)</sup>										
<b>Connection type</b>	Cable, PVC, 2 m <sup>7)</sup>										
	Connector, M8, 3-pin										
	Cable with plug, M8, 3-pin, PVC, 100 mm <sup>7)</sup>										
	Connector, M8, 4-pin										
	Cable with plug, M8, 4-pin, PVC, 100 mm <sup>7)</sup>										
<b>VDE protection class</b>	⊕										
<b>Circuit protection</b>	V <sub>s</sub> connections reverse-polarity protected / Output Q and Q not short-circuit protected / Interference suppression										
<b>Enclosure rating</b>	IP 66, IP 67										
<b>Ambient temperature operation</b>	-40 °C ... +60 °C										
<b>Ambient temperature storage</b>	-40 °C ... +75 °C										
<b>Weight</b>	Ca. 20 g										
<b>Housing material</b>	Bayblend, PMMA										

<sup>1)</sup> Average service life 100,000 h at T<sub>a</sub> = +25 °C

<sup>2)</sup> Limit values

<sup>3)</sup> May not exceed or fall short of

V<sub>s</sub> tolerances

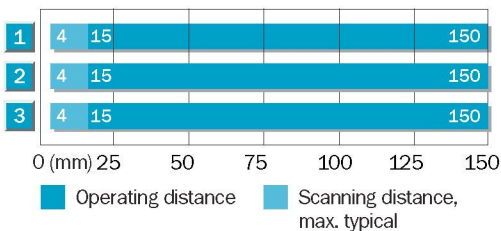
<sup>4)</sup> Without load

<sup>5)</sup> Signal transit time with resistive load

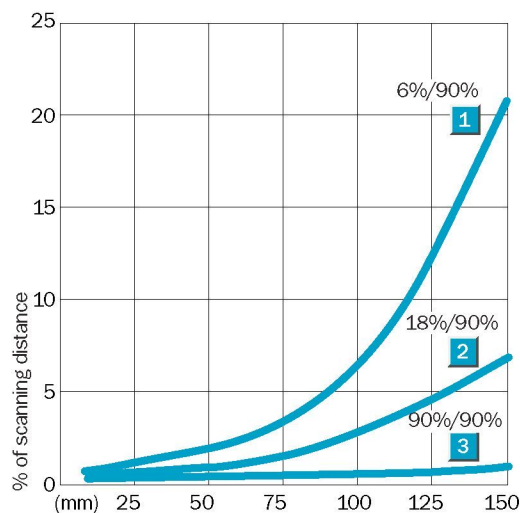
<sup>6)</sup> With light/dark ratio 1:1

<sup>7)</sup> 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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Photoelectric Sensors](#) category:*

*Click to view products by [Sick](#) manufacturer:*

Other Similar products are found below :

[E3JM-DS70R4T-US](#) [E3L2DC4](#) [E3RA-DN12 2M](#) [E3RA-DP12 2M](#) [E3S5LE4S](#) [E3S-AD38](#) [E3S-CR11 5M](#) [E3SCT11D5M](#) [E3SCT11M1J03M](#)  
[E3T-SL14R](#) [E3T-SL24 5M](#) [E3T-ST12R](#) [E3X-CN02](#) [E3X-CN11 5M](#) [E3X-CN21 10M](#) [E3ZM-B66](#) [E3ZM-CL81H 2M](#) [E3Z-T62 2M](#)  
[NJL5303R-TE1](#) [PB10CNT15PO](#) [PD60CNX20BP](#) [CX-491-P-J](#) [CX-491-Z](#) [XUM2BKCNL2T](#) [XUM2BKCNL2T](#) [XUM2BNANL2R](#) [Y92E-](#)  
[ES30M](#) [Y92E-GS08SS](#) [ZXTDS04T](#) [ZX-XC4A 4M](#) [E3E23Y2US](#) [E3JM-DS70S4-US](#) [E3RA-RN11 2M](#) [E3S5LE42M](#) [E3S-LS20XB4 5M](#)  
[E3TFD14N](#) [E3T-FD14R](#) [E3T-SL21 5M](#) [E3T-SL21M](#) [E3T-ST11R](#) [E3T-ST12 5M](#) [E3X-DA41-S-M1J 0.3M](#) [E3X-DAB6](#) [E3X-DAG8](#) [E3ZM-](#)  
[B86](#) [E3ZM-CR81 2M](#) [E3ZM-CR86](#) [E3Z-T61A-L 2M](#) [ZX-XGC2R](#) [ZX-XB1A](#)