



Photoelectric sensors
Background suppression, Photoelectric proximity
sensor, Product group W160T

WTB160T-E212



Model Name > [WTB160T-E212](#)
Part No. > [6020951](#)



- Vertical models
- Very small light spot to detect smallest objects
- Scanning distance adjustable via teach-in
- Precise background suppression
- LED indicator: function reserve



The product has been discontinued on 31.07.2014. Please contact your SICK sales representative for more information about a replacement product.



Product features

Sensing range min ... max:	10 mm ... 50 mm, 15 mm ... 50 mm
Light source:	LED
Type of light:	Red light
Light spot diameter:	Approx. 1.2 mm at 40 mm distance
Laser:	Red light
Sensing range max.:	10 mm ... 50 mm, 15 mm ... 50 mm
Relating to:	Object with 90 % reflectance (referred to standard white, DIN 5033)
Adjustment.:	Teach-in: single teach-in button & cable
Wave length:	650 nm

Technical data

Design:	Rectangular
Dimensions (W x H x D):	11 mm x 38 mm x 23 mm
Supply voltage min ... max:	DC 10 ... 30 V ¹⁾
Ripple:	± 10 %
Power consumption:	≤ 40 mA
Switching output:	NPN: open collector: Q
Switching mode:	Light/dark switching via rotary switch
Output current max.:	100 mA
Response time:	≤ 0.9 ms
Switching frequency:	550 Hz
Connection type:	Cable, 2 m
Number of cores:	4
Conductor size:	0.2 mm ²

Circuit protection:

V_S connections reverse-polarity protected/In-/outputs short-circuit protected/Interference suppression/Outputs overcurrent and short-circuit protected

Enclosure rating:

IP 67: EN 60529, IP 69K: EN 40050

Ambient operation temperature, min ... max:

-25 °C ... ++55 °C

Ambient storage temperature, min ... max:

-40 °C ... ++70 °C

Weight:

Ca. 60 g

Housing material:

PBT

Series:

W160T

Optics material:

PMMA

Cable diameter:

Ø 4.2 mm

Front screen heating:

-

Polarisation filter:

-

Housing design:

Vertical

Cable material:

PVC

UL File No.:

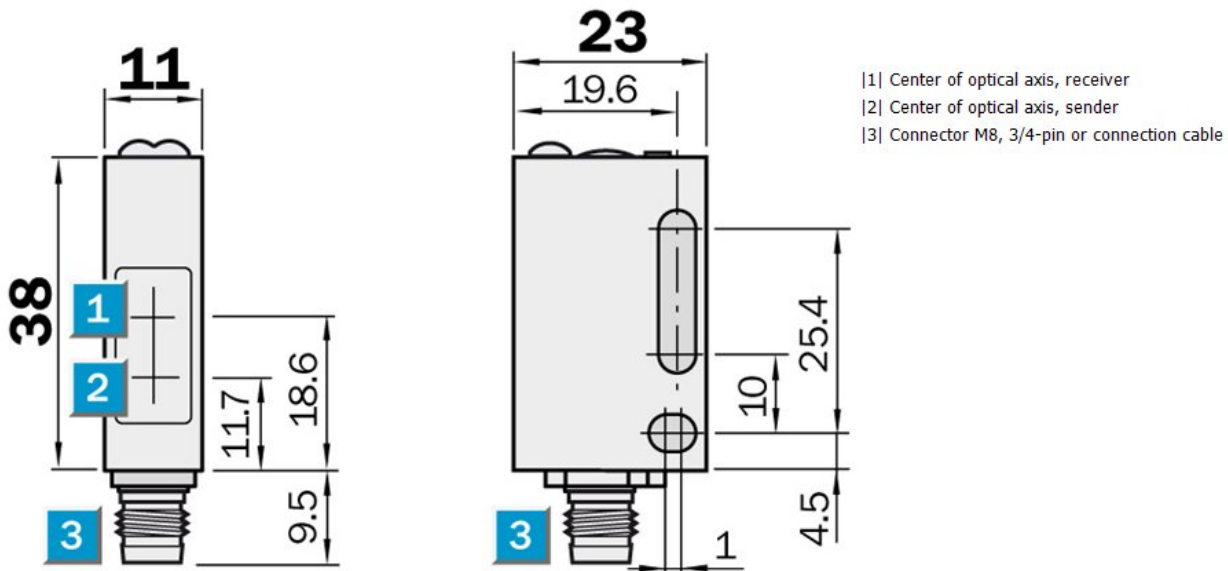
NRNT2.E128350 & NRNT8.E128350

Signal voltage NPN HIGH/LOW:

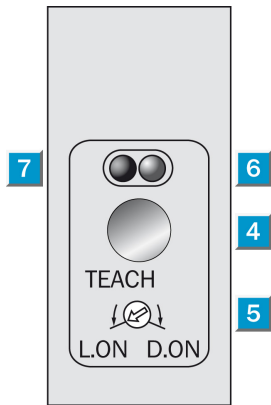
Approx. $V_S / < 1.8 \text{ V}$

1) Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A

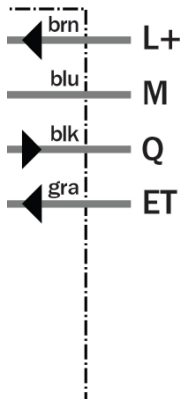
Masszeichnung



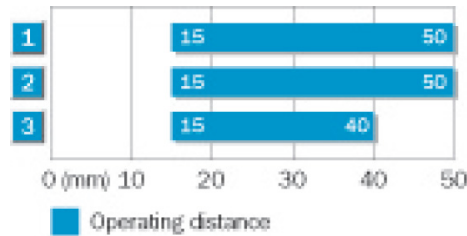
Einstell-Möglichkeiten



Anschluss-Schema

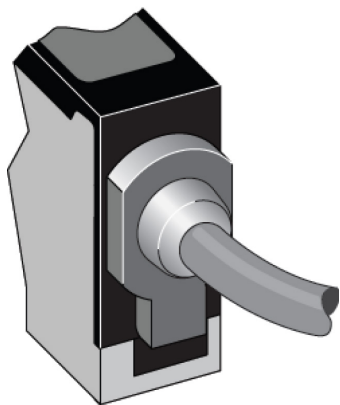


Schaltabstand-Diagramm

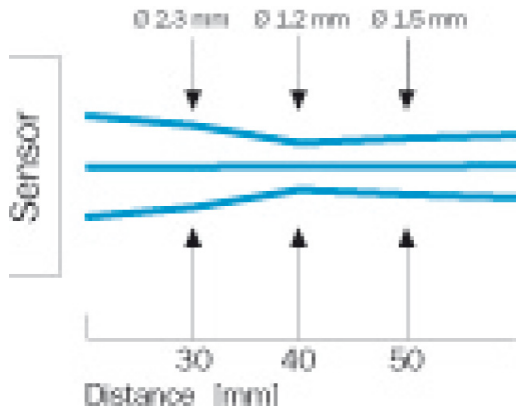


1	Scanning range on white, 90 % reflectance
2	Scanning range on grey, 18 % reflectance
3	Scanning range on black, 6 % reflectance

Anschlussart



Light spot diameter



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