

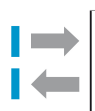


Photoelectric sensors  
Energetic, Photoelectric proximity sensor,  
Product group W160T

WTE160T-N432



**Model Name** > [WTE160T-N432](#)  
**Part No.** > [6021890](#)



- Horizontal models
- Large scanning distance
- Red light variant for standard applications
- 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: | 0 mm ... 700 mm, 0 mm ... 900 mm                                    |
| Light source:              | LED                                                                 |
| Type of light:             | Red light                                                           |
| Light spot diameter:       | Approx. 45 mm at 700 mm distance                                    |
| Laser:                     | Red light                                                           |
| Sensing range max.:        | 0 mm ... 700 mm, 0 mm ... 900 mm                                    |
| Relating to:               | Object with 90 % reflectance (referred to standard white, DIN 5033) |
| Adjustment.:               | Teach-in: single teach-in button & cable                            |
| Wave length:               | 680 nm                                                              |

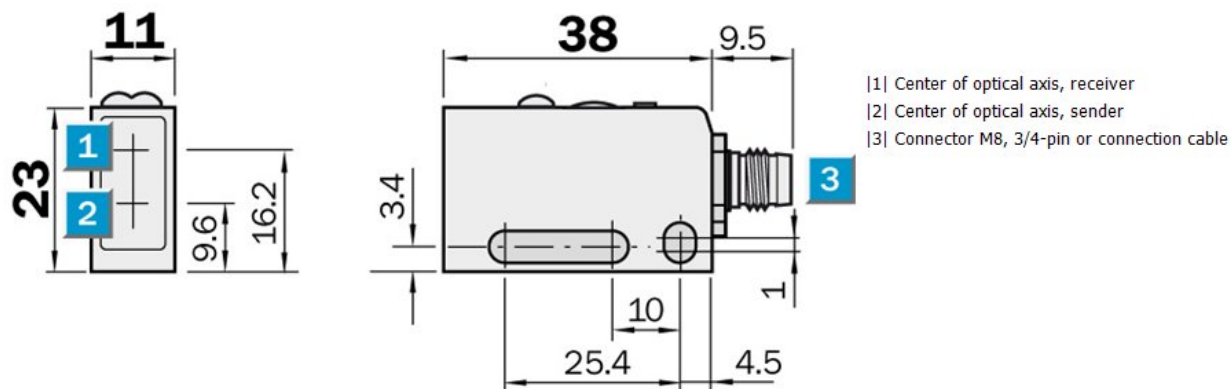
#### Technical data

|                                             |                                                                                                                                                                    |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design:                                     | Rectangular                                                                                                                                                        |
| Dimensions (W x H x D):                     | 11 mm x 38 mm x 23 mm                                                                                                                                              |
| Supply voltage min ... max:                 | DC 10 ... 30 V <sup>1)</sup>                                                                                                                                       |
| 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:                              | ≤ 0.5 ms                                                                                                                                                           |
| Switching frequency:                        | 1,000 Hz                                                                                                                                                           |
| Connection type:                            | Connector, M8, 4-pin                                                                                                                                               |
| Circuit protection:                         | V <sub>S</sub> 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                                                                                                                                                 |

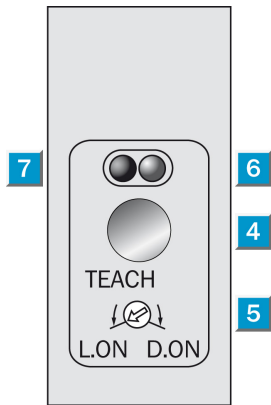
|                                           |                                 |
|-------------------------------------------|---------------------------------|
| Ambient storage temperature, min ... max: | -40 °C ... ++70 °C              |
| Weight:                                   | Ca. 20 g                        |
| Housing material:                         | PBT                             |
| Series:                                   | W160T                           |
| Optics material:                          | PMMA                            |
| Front screen heating:                     | -                               |
| Polarisation filter:                      | -                               |
| Housing design:                           | Horizontal                      |
| UL File No.:                              | NRNT2.E128350 & NRNT8.E128350   |
| Signal voltage NPN HIGH/LOW:              | Approx. $V_S / < 1.8 \text{ V}$ |

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

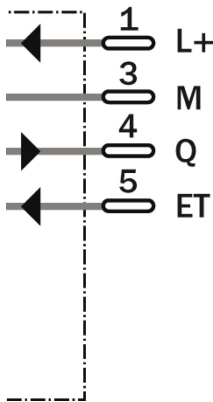
## Masszeichnung



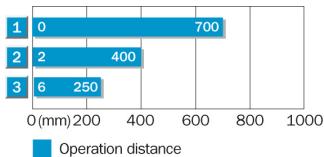
Einstell-Möglichkeiten



Anschluss-Schema

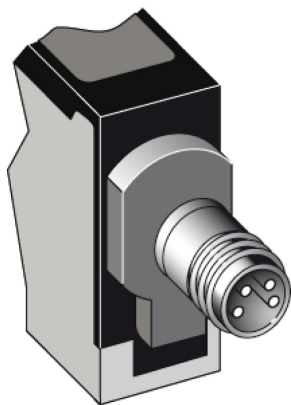


Schaltabstand-Diagramm

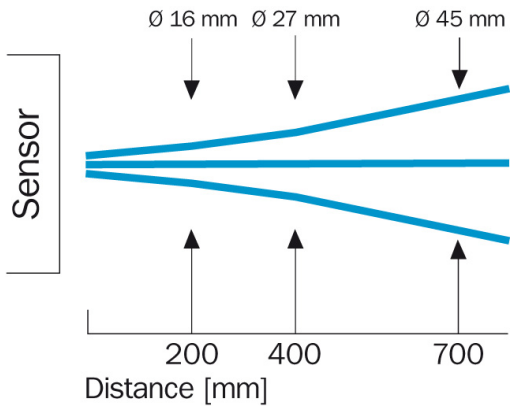


|   |                                           |
|---|-------------------------------------------|
| 1 | Scanning range on white, 90 % reflectance |
| 2 | Scanning range on grey, 18 % reflectance  |
| 3 | Scanning range on black, 6 % reflectance  |

Anschlussart



Light spot diameter



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