



Photoelectric sensors  
Z2, Photoelectric proximity sensor, energetic

ZT2-P4228



**Model Name** > ZT2-P4228  
**Part No.** > 1045477



Illustration may differ

**At a glance**

- Sensing distances of 50 mm, 60 mm, 100 mm or 155 mm, which are non-adjustable
- Infrared LED emitter
- Compact, transparent housing with 360° status indication
- M18 front mount and 24-25.4 mm slotted side through holes compatible with competitor devices
- Connection system: angled cable outlet (60°) or M12 or M8 plug connector

**Your benefits**

- Low-cost proximity sensor for standard applications with small sensing distances
- Suitable for applications where the light spot needs to be invisible
- Clear housing provides 360° status indication for simple troubleshooting
- Simple and unique mounting options lower installation costs
- Compatibility with competitor products for easy integration into existing systems



**Features**

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Dimensions (W x H x D):	13.6 mm x 45.2 mm x 31.7 mm
Housing design (light emission):	Hybrid
Thread diameter (housing):	M18 x 1
Sensing range max.:	1 mm ... 100 mm <sup>1)</sup>
Sensing range:	1 mm ... 100 mm
Type of light:	Infrared light
Light source:	LED <sup>2)</sup>
Wave length:	880 nm
Light spot size (distance):	20 mm (100 mm)

<sup>1)</sup> Object with 90 % reflectance (referred to standard white DIN 5033) <sup>2)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

**Mechanics/electronics**

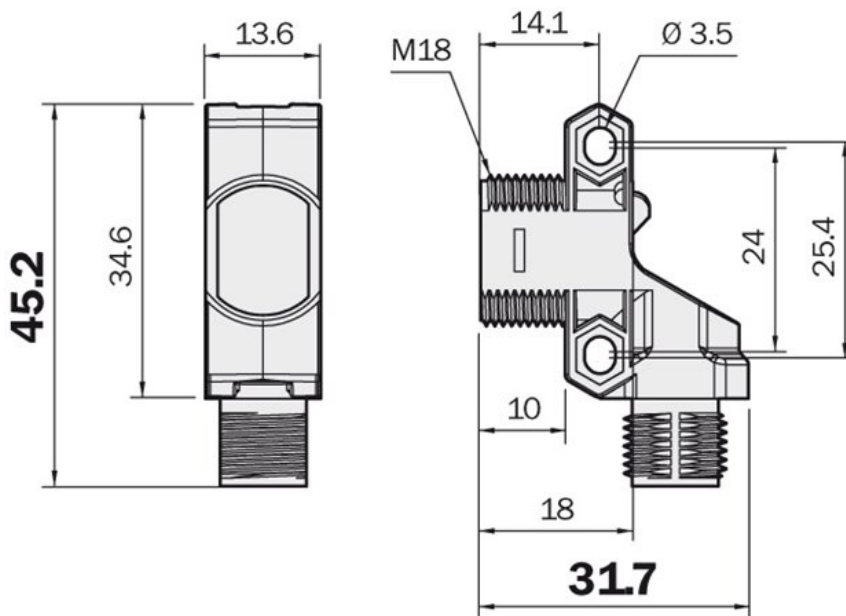
Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Power consumption:	< 20 mA <sup>2)</sup>
Output type:	PNP
Switching mode:	Light switching
Output current I <sub>max.</sub> :	50 mA
Switching frequency:	200 Hz <sup>3)</sup>

Connection type:	Connector M12, 4-pin
Circuit protection:	A, D <sup>4) 5)</sup>
Protection class:	III <sup>6)</sup>
Housing material:	Glass fiber reinforced ABS plastic, Plastic
Enclosure rating:	IP 67
Items supplied:	Mounting nut M18
Ambient operating temperature:	-25 °C ... 50 °C
Ambient storage temperature:	-40 °C ... 70 °C

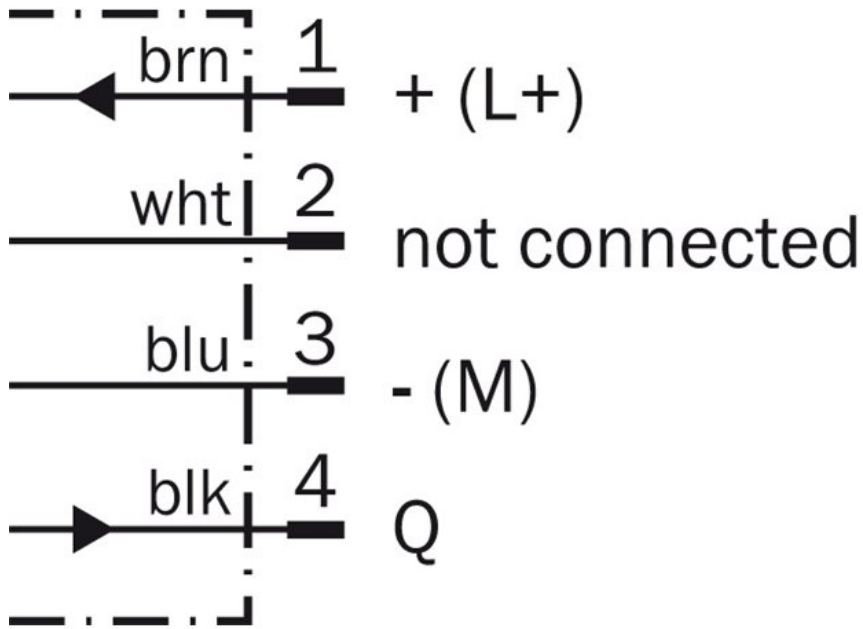
1) Limit values 2) Without load 3) With light/dark ratio 1:1 4) A = V<sub>S</sub> connections reverse-polarity protected 5) D = outputs overcurrent and short-circuit protected 6)

Reference voltage 50 V DC

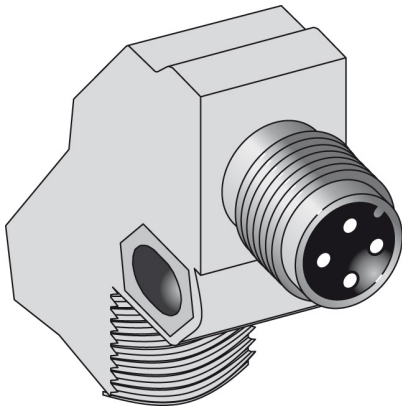
### Dimensional drawing



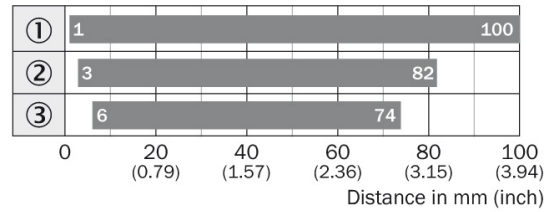
### Connection diagram



### Connection type



### Sensing range diagram



■ Sensing range    ■ Sensing range typ. max.

- ① Sensing range on white, 90 % remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on black, 6 % remission

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