



# VTE18-4P4240

V18

PRODUCT PORTFOLIO

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
VTE18-4P4240	6013263

Other models and accessories → [www.sick.de/V18](http://www.sick.de/V18)

### Detailed technical data

#### Features

<b>Sensor/detection principle</b>	Photoelectric proximity sensor, energetic
<b>Housing design (light emission)</b>	Cylindrical, straight
<b>Housing length</b>	78 mm
<b>Thread diameter (housing)</b>	M18 x 1
<b>Optical axis</b>	Axial
<b>Sensing range max.</b>	5 mm ... 400 mm <sup>1)</sup>
<b>Sensing range</b>	5 mm ... 350 mm
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>2)</sup>
<b>Light spot size (distance)</b>	Ø 20 mm (400 mm)
<b>Angle of dispersion</b>	Approx. 2.8°
<b>Adjustment</b>	Fix

<sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033)

<sup>2)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	≤ 10 % <sup>2)</sup>
<b>Power consumption</b>	≤ 30 mA <sup>3)</sup>
<b>Output type</b>	PNP, open collector <sup>4)</sup>

<sup>1)</sup> Limit values.

<sup>2)</sup> May not exceed or fall below U<sub>V</sub> tolerances.

<sup>3)</sup> Without load.

<sup>4)</sup> Control wire open: dark switching D.ON.

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

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

<sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>8)</sup> B = inputs and output reverse-polarity protected.

<sup>9)</sup> C = interference suppression.

<sup>10)</sup> D = outputs overcurrent and short-circuit protected.

<b>Switching mode</b>	Light/dark switching <sup>4)</sup>
<b>Switching mode selector</b>	Selectable via L/D control wire
<b>Output current I<sub>max</sub></b>	100 mA
<b>Response time</b>	≤ 2 ms <sup>5)</sup>
<b>Switching frequency</b>	250 Hz <sup>6)</sup>
<b>Connection type</b>	Connector M12, 4-pin
<b>Circuit protection</b>	A <sup>7)</sup> B <sup>8)</sup> C <sup>9)</sup> D <sup>10)</sup>
<b>Protection class</b>	III
<b>Weight</b>	120 g
<b>Housing material</b>	Nickel-plated brassMetal
<b>Optics material</b>	PMMA
<b>Enclosure rating</b>	IP 67
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>UL File No.</b>	NMFT2.E175606

1) Limit values.

2) May not exceed or fall below U<sub>v</sub> tolerances.

3) Without load.

4) Control wire open: dark switching D.ON.

5) Signal transit time with resistive load.

6) With light/dark ratio 1:1.

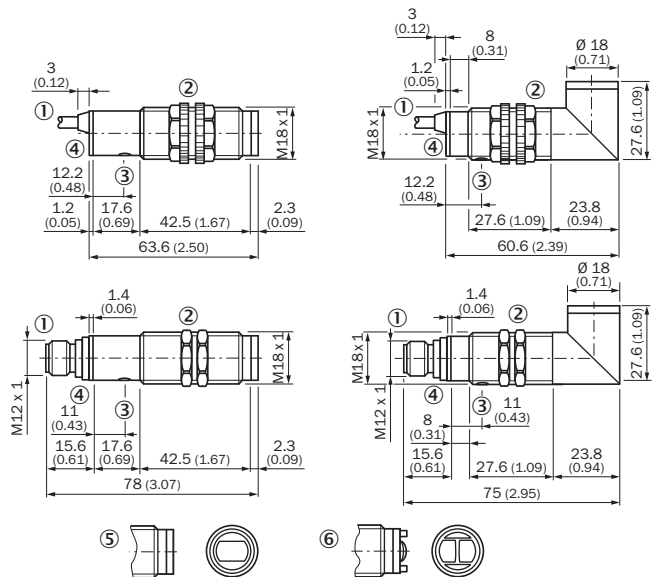
7) A = V<sub>S</sub> connections reverse-polarity protected.

8) B = inputs and output reverse-polarity protected.

9) C = interference suppression.

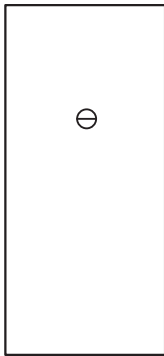
10) D = outputs overcurrent and short-circuit protected.

### Dimensional drawing (dimensions in mm (inch))



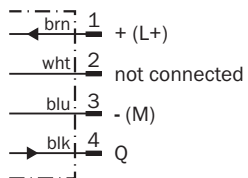
- ① Connecting cable or connector
- ② Fastening nut, 22 mm hex, made of plastic for equipment with plastic housing / Fastening nut, 24 mm hex, made of metal for equipment with metal housing
- ③ Sensitivity adjustment
- ④ Signal strength indicator, LED, yellow

### Adjustments possible

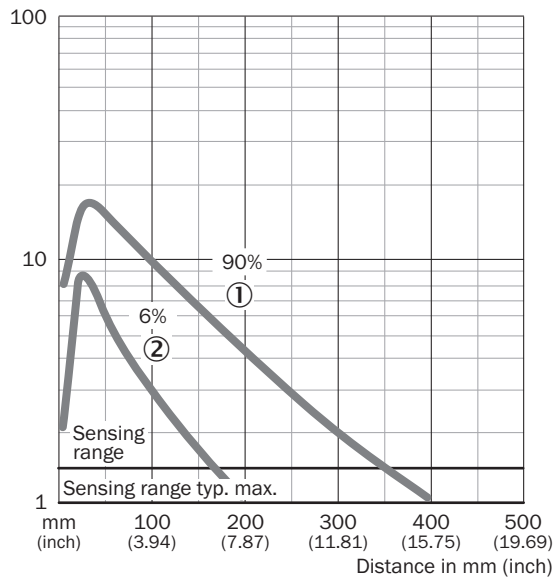


### Connection diagram

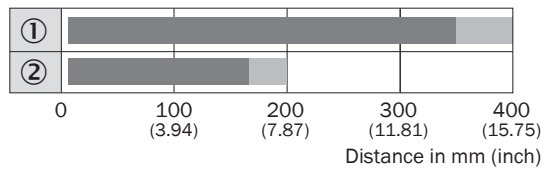
Cd-066



### Characteristic curve



### Sensing range diagram



■ Operating distance    ■ Scanning distance typ. max.

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