



Photoelectric sensors  
V18 Laser, Photoelectric proximity sensor,  
energetic

VTE18L-4N344



**Model Name** > [VTE18L-4N344](#)  
**Part No.** > [6027424](#)



*Illustration may differ*

**At a glance**

- Laser LED enclosed in a cylindrical M18 housing
- Sensing distance of 250 mm or 400 mm
- Laser class 1
- Fast response time
- Adjustable sensitivity via teach-in pushbutton or control input C

**Your benefits**

- Lowest-cost laser sensor in M18 cylindrical housing saves installation costs
- Time-saving installation and alignment with highly visible light spot
- Laser class 1 does not require increased safety measures or markings, reducing installation costs
- Fast response time ensures reliable object detection at high speeds and increases machine throughput



**Features**

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Housing design (light emission):	Cylindrical, angled, straight
Housing length:	107.7 mm
Thread diameter (housing):	M18 x 1
Optical axis:	radial
Sensing range max.:	2 mm ... 250 mm <sup>1)</sup>
Sensing range:	5 mm ... 200 mm
Type of light:	Visible red light
Light source:	Laser <sup>2)</sup>
Light spot (distance):	5 mm (200 mm)
Laser class:	1 (IEC 60825-1)
Wave length:	650 nm
Sensitivity adjustment:	Electronic, via control input C (0 V) manual, via teach-in button

<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

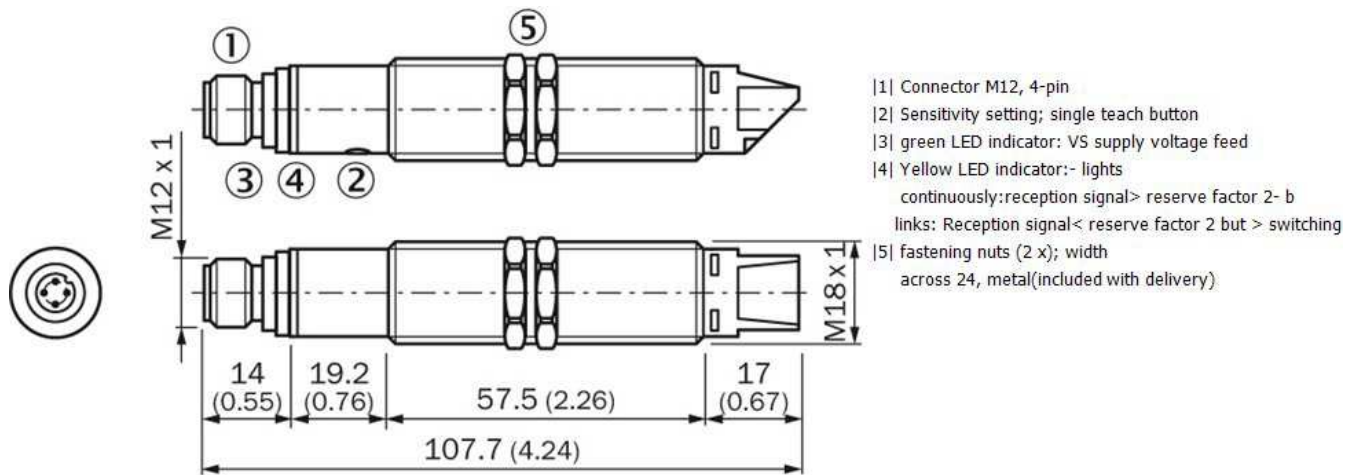
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Residual ripple:	≤ 10 % <sup>2)</sup>
Power consumption:	≤ 30 mA <sup>3)</sup>
Output type:	NPN, Light/dark-switching, Selectable via control input C

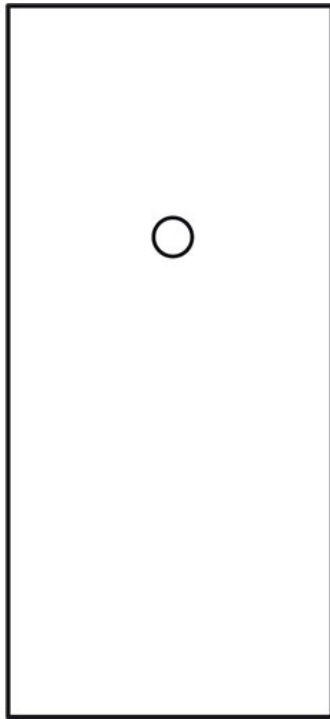
Output current I <sub>max</sub> ..:	≤ 100 mA
Response time:	≤ 0.625 ms <sup>4)</sup>
Switching frequency:	800 Hz <sup>5)</sup>
Electrical connection:	Connector M12, 4-pin
Circuit protection:::	A, B, C, D <sup>6) 7) 8) 9)</sup>
Protection class:	III
Weight:	60 g
Housing material:	Nickel-plated brass/PC
Optics material:	PC with protective glass pane
Enclosure rating:	IP 67
Special feature:	Focused optics
Ambient temperature operation:	-15 °C ... 55 °C
Ambient storage temperature:	-25 °C ... 70 °C
UL File-No.:	UL No. NRKH.E181493, CDRH-Konform (0312012-00)

1) Limit values 2) May not exceed or fall short of V<sub>S</sub> tolerances 3) Without load 4) Signal transit time with resistive load 5) With light/dark ratio 1:1 6) A = V<sub>S</sub> connections reverse-polarity protected 7) B = interference suppression 8) D = outputs overcurrent and short-circuit protected 9) D = inputs and output reverse-polarity protected

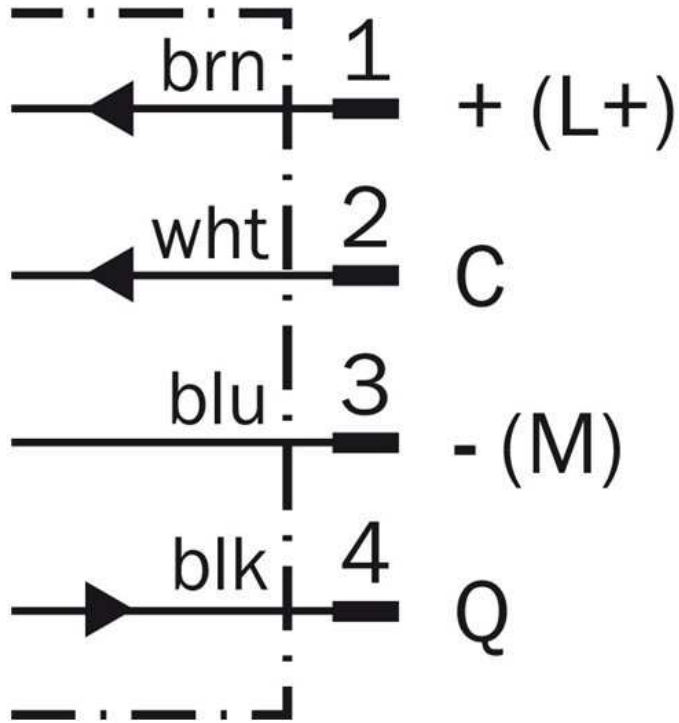
### Dimensional drawing



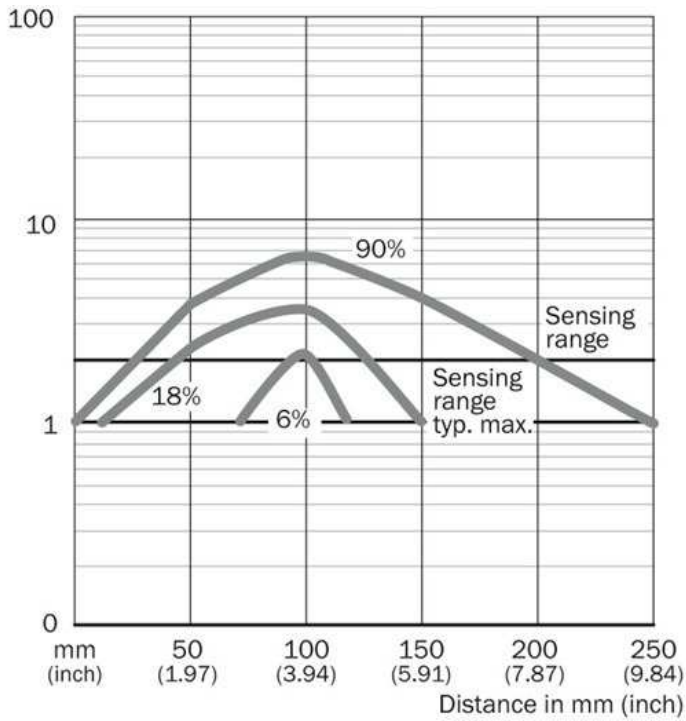
Adjustments possible



Connection diagram



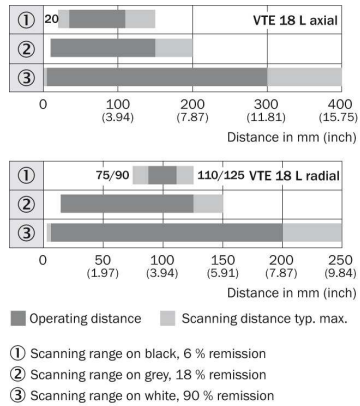
## Characteristic curve



## Connection type



## Sensing range diagram



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