



VTE18L-3F324

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|--------------|----------|
| VTE18L-3F324 | 6027594 |

Other models and accessories → www.sick.com/

Detailed technical data

Features

| | |
|--|--------------------------------|
| Functional principle | Photoelectric proximity sensor |
| Housing design (light emission) | Cylindrical, straight |
| Sensing range max. | 0 mm ... 400 mm ¹⁾ |
| Sensing range | 5 mm ... 300 mm ¹⁾ |
| Type of light | Visible red light |
| Light source | LED ²⁾ |
| Wave length | 650 nm |
| Adjustment | Single teach-in button |

¹⁾ Object with 90% remission (based on standard white, DIN 5033).

²⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

| | |
|--------------------------------------|-------------------------------------|
| Supply voltage U_B | 10 V DC ... 30 V DC |
| Ripple | ± 10 % |
| Current consumption | 30 mA ¹⁾ |
| Switching output | PNP |
| Switching mode | Light switching |
| Response time | ≤ 625 ms ²⁾ |
| Connection type | Male connector M12, 4-pin |
| Housing material | Metal, Brass nickel-plated, plastic |
| Optics material | Plastic, PMMA |
| Enclosure rating | IP67 |
| Ambient operating temperature | -15 °C ... +55 °C |
| Ambient temperature, storage | -25 °C ... +70 °C |

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

| | |
|--------------------|---|
| UL File No. | NRKH.E181493, CDRH-conform (0312012-00) |
|--------------------|---|

- 1) Without load.
- 2) Signal transit time with resistive load.

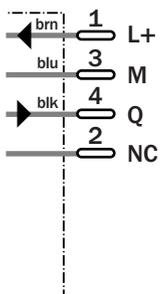
Classifications

| | |
|-----------------------|----------|
| eCl@ss 5.0 | 27270904 |
| eCl@ss 5.1.4 | 27270904 |
| eCl@ss 6.0 | 27270904 |
| eCl@ss 6.2 | 27270904 |
| eCl@ss 7.0 | 27270904 |
| eCl@ss 8.0 | 27270904 |
| eCl@ss 8.1 | 27270904 |
| eCl@ss 9.0 | 27270904 |
| eCl@ss 10.0 | 27270904 |
| eCl@ss 11.0 | 27270904 |
| ETIM 5.0 | EC002719 |
| ETIM 6.0 | EC002719 |
| ETIM 7.0 | EC002719 |
| ETIM 8.0 | EC002719 |
| UNSPSC 16.0901 | 39121528 |

Connection type

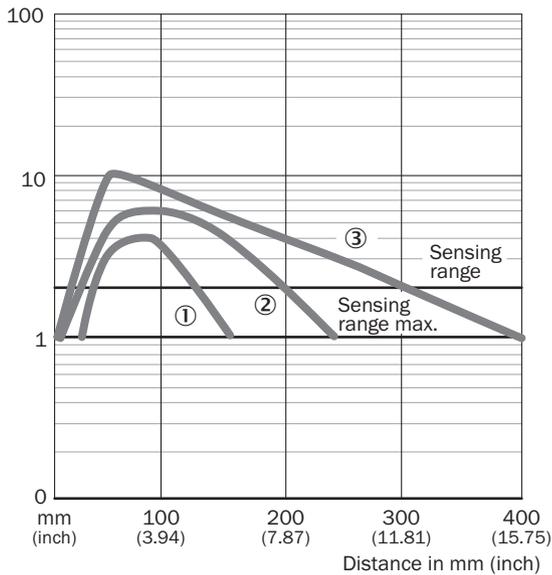


Connection diagram



Characteristic curve

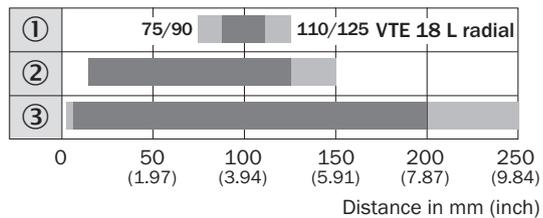
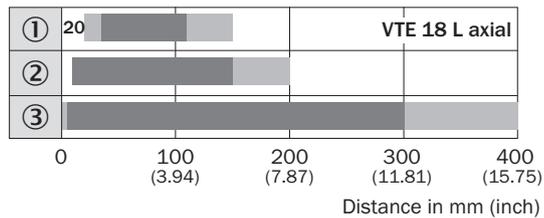
Operating reserve



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

Sensing range diagram

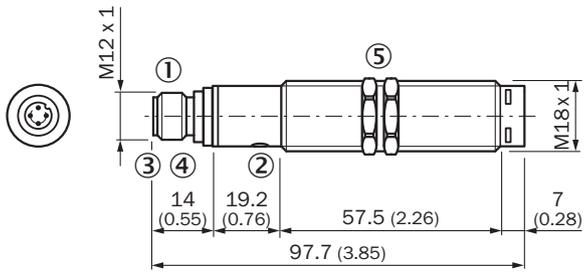
VTE18L



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

Dimensional drawing (Dimensions in mm (inch))

Axial



- ① M12 male device connector, 4-pin
- ② Sensitivity setting: single teach-in button
- ③ Green LED indicator: V_S Supply voltage feed
- ④ Yellow LED indicator: lights continuously: Reception signal > reserve factor 2 - blinks: Reception signal < reserve factor 2 but > switching threshold 1
- ⑤ Fastening nuts (2 x); width across 24, metal (included with delivery)

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com