

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

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

Ambient temperature, storage	-25 °C ... +70 °C
UL File No.	NRKH.E181493, CDRH-conform (0312012-00)

1) Without load.

2) Signal transit time with resistive load.

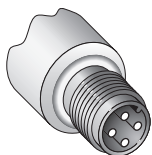
Classifications

ECLASS 5.0	27270904
ECLASS 5.1.4	27270904
ECLASS 6.0	27270904
ECLASS 6.2	27270904
ECLASS 7.0	27270904
ECLASS 8.0	27270904
ECLASS 8.1	27270904
ECLASS 9.0	27270904
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

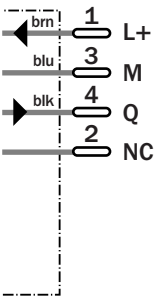
Certificates

EU declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓

Connection type

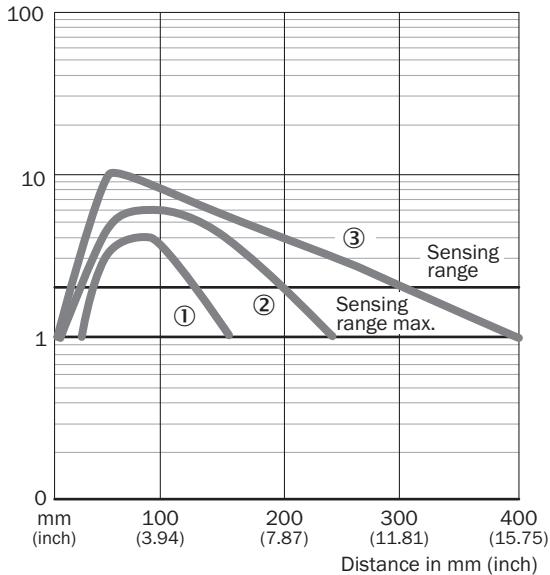


Connection diagram



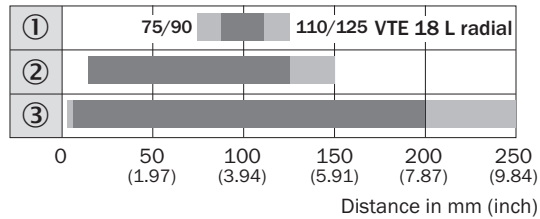
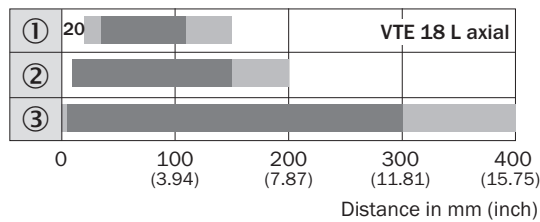
Characteristic curve

Operating reserve



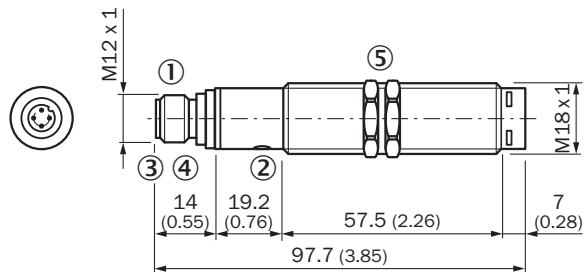
- ① Sensing range on black, 6% remission factor
- ② Sensing range on gray, 18% remission factor
- ③ Sensing range on white, 90% remission factor

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 Axial



- Dimensions in mm (inch)
- 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:
 ④ - lights continuously:
 ④ reception signal > reserve factor 2
 ④ - blinks: Reception signal < reserve factor 2 but > switching threshold 1
 ⑤ fastening nuts (2 x); width across 24, metal
 ⑤ (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