



VL18L-3P344

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
VL18L-3P344	6027597

Other models and accessories → www.sick.com/

Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Photoelectric retro-reflective sensor
Housing design (light emission)	Cylindrical, straight
Sensing range max.	0 m ... 25 m
Sensing range	0.1 m ... 35 m ¹⁾
Type of light	Visible red light
Light source	Laser
Wave length	650 nm
Adjustment	Potentiometer

¹⁾ Reflector P250F.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Power consumption	20 mA ¹⁾
Switching output	PNP
Switching mode	Dark switching
Response time	≤ 625 ms ²⁾
Connection type	Male connector M12, 4-pin ³⁾
Housing material	Metal, Brass nickel-plated, plastic
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-15 °C ... +55 °C
Ambient storage temperature	-25 °C ... +70 °C

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

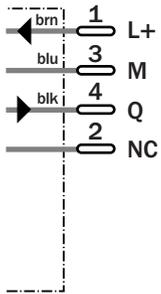
³⁾ Do not bend below 0 °C.

UL File No.

NRKH.E181493, CDRH-conform (0312012-00)

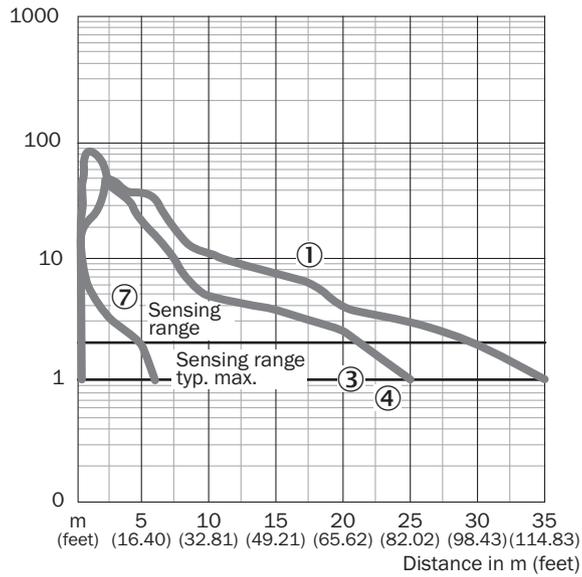
- 1) Without load.
- 2) Signal transit time with resistive load.
- 3) Do not bend below 0 °C.

Connection diagram



Characteristic curve

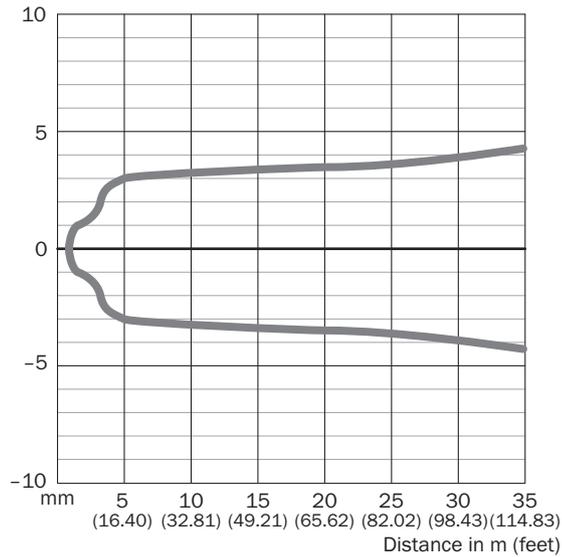
VL18L



- ① Reflector P250F
- ③ Reflector PL80A
- ④ Reflector P250
- ⑦ Reflective tape Diamond Grade

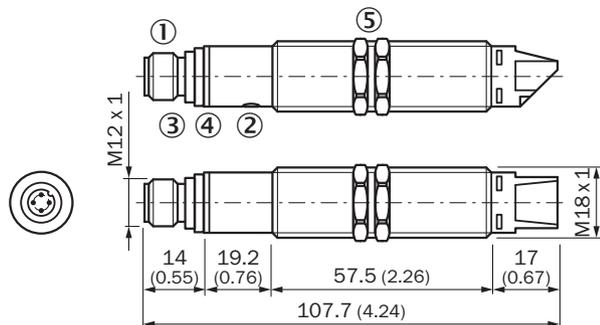
Light spot size

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Dimensional drawing (Dimensions in mm (inch))

Radial



- 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