



VTE18-4P2440

V18

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
VTE18-4P2440	6013443

Other models and accessories → www.sick.com/V18

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	18 mm x 18 mm x 75 mm
Housing design (light emission)	Cylindrical
Housing length	75 mm
Thread diameter (housing)	M18 x 1
Optical axis	Radial
Sensing range max.	3 mm ... 200 mm ¹⁾
Sensing range	3 mm ... 170 mm
Focus	Approx. 2.8°
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 10 mm (200 mm)
Angle of dispersion	Approx. 2.8°
Adjustment	Potentiometer, 270° (Sensing range)

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 ¹⁾
Ripple	$\pm 10\%$ ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP ⁴⁾
Switching mode	Light/dark switching ⁴⁾
Switching mode selector	Selectable via L/D control cable
Output current $I_{max.}$	≤ 100 mA
Response time	≤ 2 ms ⁵⁾
Switching frequency	250 Hz ⁶⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁷⁾ B ⁸⁾ C ⁹⁾ D ¹⁰⁾
Protection class	III
Weight	120 g
Housing material	Metal, Nickel-plated brass
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-25 °C ... +70 °C
UL File No.	NMFT2.E175606

¹⁾ Limit values.

²⁾ May not exceed or fall below U_V 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_S connections reverse-polarity protected.

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

⁹⁾ C = interference suppression.

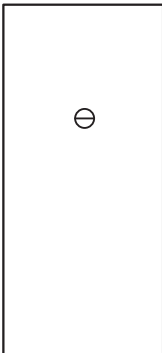
¹⁰⁾ D = outputs overcurrent and short-circuit protected.

Classifications

eCl@ss 5.0	27270903
eCl@ss 5.1.4	27270903
eCl@ss 6.0	27270903
eCl@ss 6.2	27270903
eCl@ss 7.0	27270903
eCl@ss 8.0	27270903
eCl@ss 8.1	27270903
eCl@ss 9.0	27270903
eCl@ss 10.0	27270904
eCl@ss 11.0	27270904

eCl@ss 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Adjustments

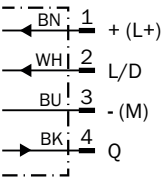


Connection type

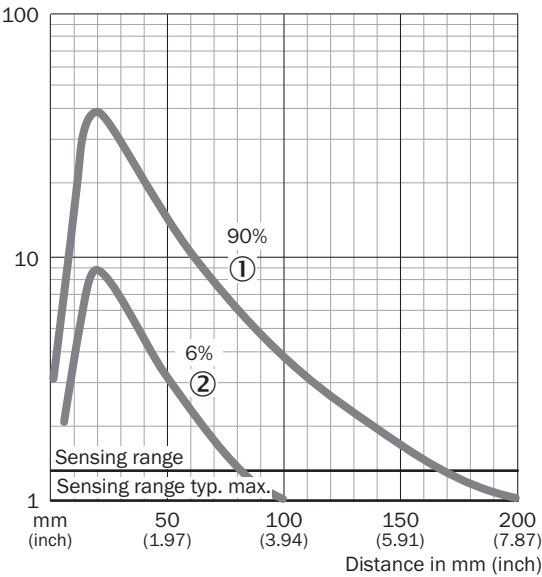


Connection diagram

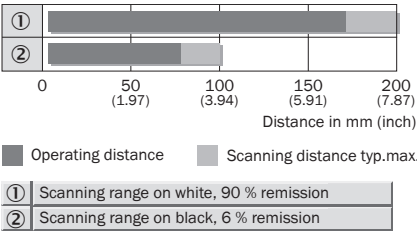
Cd-087



Characteristic curve



Sensing range diagram



Technical drawings of two types of hydraulic hose end fittings, showing side and end views with dimensions in millimeters (mm) and inches (in).

Top Drawing (Standard Fitting):

- Side View (Left):** Dimensions include 3 (0.12), 12.2 (0.48), 1.2 (0.05), 17.6 (0.69), 42.5 (1.67), 2.3 (0.09), and 63.6 (2.50). The hose diameter is M18 x 1.
- End View (Right):** Dimensions include 3 (0.12), 8 (0.31), 1.2 (0.05), 12.2 (0.48), 27.6 (1.09), 23.8 (0.94), 60.6 (2.39), and Ø 18 (0.71). The hose diameter is M18 x 1.

Bottom Drawing (Fitting with 45° Chamfer):

- Side View (Left):** Dimensions include 1.4 (0.06), 11 (0.43), 15.6 (0.61), 17.6 (0.69), 42.5 (1.67), 2.3 (0.09), and 78 (3.07). The hose diameter is M12 x 1.
- End View (Right):** Dimensions include 1.4 (0.06), 8 (0.31), 11 (0.43), 15.6 (0.61), 27.6 (1.09), 23.8 (0.94), 75 (2.95), and Ø 18 (0.71). The hose diameter is M12 x 1.

The drawings are labeled with circled numbers 1 through 6, indicating specific components or features.

- Product data sheet | 2024-01-29 17:44:27
Subject to change without notice

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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.

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