



VS/VE12-2P430

V12-2

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
VS/VE12-2P430	6026224

Other models and accessories → www.sick.com/V12-2

Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Housing design (light emission)	Cylindrical
Housing length	66.3 mm
Thread diameter (housing)	Round connector M12 x 1
Sensing range max.	0 m ... 5 m
Sensing range	0 m ... 4 m
Type of light	Infrared light
Light source	LED ¹⁾
Light spot size (distance)	Ø 100 mm (4 m)
Angle of dispersion	Approx. 1.4°
Wave length	880 nm
Adjustment	None

¹⁾ Average service life: 100,000 h at T_J = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	≤ 10 % ²⁾
Power consumption	20 mA ³⁾
Switching output	PNP

¹⁾ Limit values.

²⁾ May not exceed or fall below U_V tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_S connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

Switching mode	Light/dark switching
Switching mode selector	Selectable via L/D control cable
Output current $I_{\max}$	$\leq 100 \text{ mA}$ ³⁾
Response time	$\leq 2 \text{ ms}$ ⁴⁾
Switching frequency	250 Hz ⁵⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	III
Weight	36 g
Housing material	Metal, Nickel-plated brass/PA
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-25 °C ... +70 °C
Ambient storage temperature	-25 °C ... +70 °C

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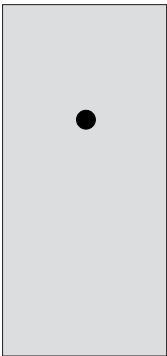
⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

Classifications

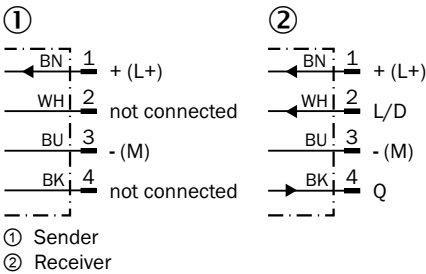
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ECI@ss 6.0	27270901
ECI@ss 6.2	27270901
ECI@ss 7.0	27270901
ECI@ss 8.0	27270901
ECI@ss 8.1	27270901
ECI@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
UNSPSC 16.0901	39121528

Adjustments possible

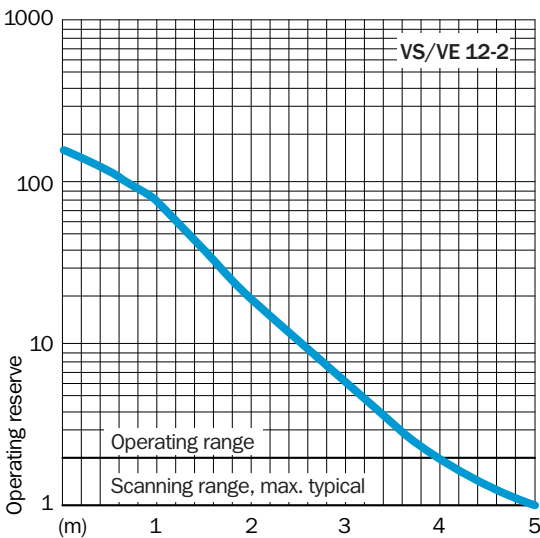


Connection diagram

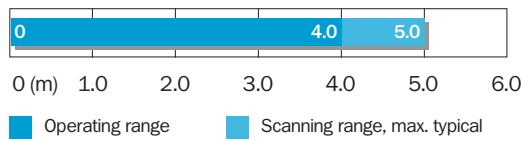
Cd-060



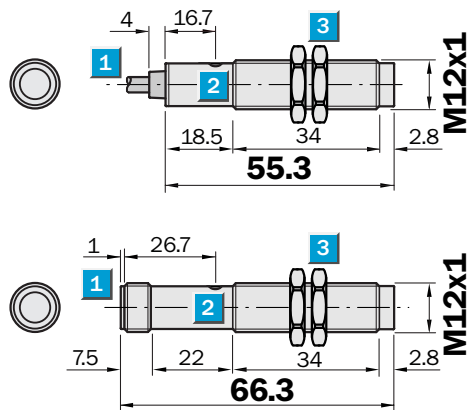
Characteristic curve



Sensing range diagram



Dimensional drawing (Dimensions in mm (inch))



- ① Cable or connector M12, 4-pin
- ② Yellow LED indicator (permanent) sender VS12-2 power on, sender active receiver VE 12-2 light reception > switching threshold 1
- ③ Fastening nuts (2x); width across 17, metal

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