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Product data sheet



VS/VE12-2P132

V12

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

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VS/VE12-2P132 | V12

CYLINDRICAL PHOTOELECTRIC SENSORS



Illustration may differ

Ordering information

Type	Part no.
VS/VE12-2P132	6026223

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

Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	12 mm x 12 mm x 55.3 mm
Housing design (light emission)	Cylindrical
Housing length	55.3 mm
Thread diameter (housing)	Round connector M12 x 1
Sensing range max.	0 m ... 5 m
Sensing range	0 m ... 4 m
Focus	Approx. 1.4°
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_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	± 10 % [2]
Current consumption	20 mA [3]

[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] Do not bend below 0 °C.
[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.

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Switching output	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via L/D control cable
Output current $I_{max.}$	≤ 100 mA [3]
Response time	≤ 2 ms [4]
Switching frequency	250 Hz [5]
Connection type	Cable, 4-wire, 2 m [6]
Cable material	PVC
Conductor cross section	0.14 mm²
Cable diameter	Ø 3.75 mm
Circuit protection	A [7] B [8] C [9] D [10]
Protection class	III
Weight	108 g
Housing material	Metal, Nickel-plated brass/PA
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +70 °C
Ambient temperature, storage	–25 °C ... +70 °C
UL File No.	NMFT2.E175606

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Classifications

eCl@ss 5.0	27270901
eCl@ss 5.1.4	27270901
eCl@ss 6.0	27270901
eCl@ss 6.2	27270901
eCl@ss 7.0	27270901
eCl@ss 8.0	27270901
eCl@ss 8.1	27270901
eCl@ss 9.0	27270901
eCl@ss 10.0	27270901
eCl@ss 11.0	27270901

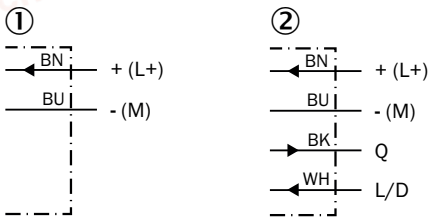
eCl@ss 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection type



Connection diagram

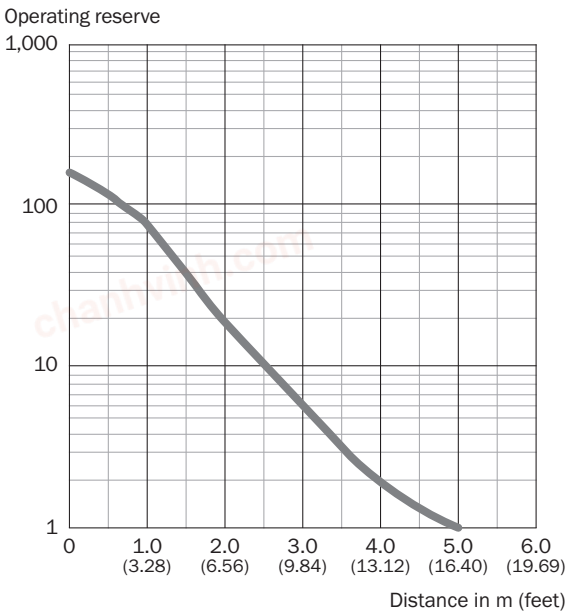
Cd-058



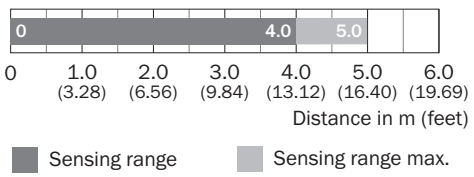
① Sender
② Receiver

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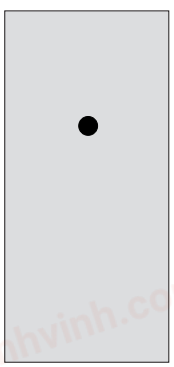
Characteristic curve



Sensing range diagram

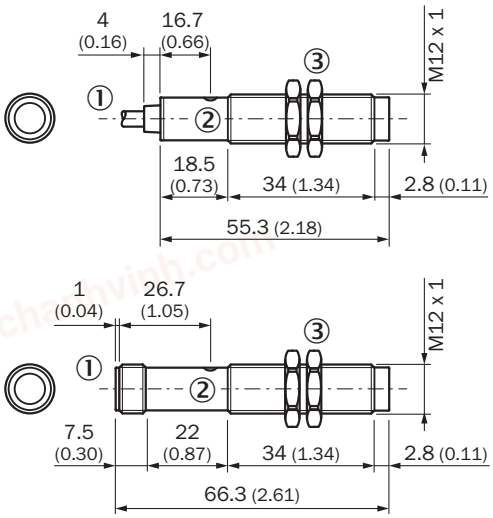


Adjustments



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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

Recommended accessories

Other models and accessories ➜ www.sick.com/V12

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, straight Cable: unshielded	STE-1204-G	6009932

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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:

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