

The SICK logo is displayed in a bold, blue, sans-serif font. It is centered within a white rectangular box, which is itself centered on a light gray background.

DATA SHEET

VS/VE180-N430

V180
Photoelectric sensors

The SICK logo is shown in a large, bold, blue, sans-serif font. To its right, the words "Sensor Intelligence" are written in a smaller, blue, sans-serif font.



Illustration may differ

PHOTOELECTRIC SENSORS

VS/VE180-N430

ORDERING INFORMATION

Type	part no.
VS/VE180-N430	6008867

Further device versions and accessories at www.sick.com/V180

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	18 mm x 18 mm x 69 mm
Housing design (light emission)	Cylindrical
Housing length	69 mm
Thread diameter (housing)	M18 x 1
Optical axis	Axial
Sensing range max.	0 m ... 15 m
Sensing range	0 m ... 15 m ¹⁾
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 800 mm (15 m)
Wave length	920 nm
Adjustment	Potentiometer, 270° (Sensitivity)

¹⁾ The sensing range is reduced to 10 m with right-angle adapter.

²⁾ Average service life: 100,000 h at T_u = +25 °C.

MECHANICS/ELECTRONICS

Supply voltage U_s	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Power consumption, sender	25 mA ³⁾
Power consumption, receiver	25 mA ³⁾
Switching output	NPN ⁴⁾
Switching mode	Light/dark switching ⁴⁾
Switching mode selector	Selectable via L/D control cable
Signal voltage NPN HIGH/LOW	Approx. V_S / < 1.0 V
Output current I_{max}	≤ 100 mA
Response time	≤ 1.5 ms ⁵⁾
Switching frequency	333 Hz ⁶⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	III
Weight	130 g
Housing material	Metal, Nickel-plated brass, PBT/PC
Optics material	Plastic, PMMA
Enclosure rating	IP66
Items supplied	Fastening nuts (4 x)
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

¹⁾ Limit values.

²⁾ May not fall below or exceed U_s tolerances.

³⁾ Without load.

⁴⁾ Control wire open: light switching LON.

⁵⁾ Signal transit time with resistive load.

⁶⁾ With light/dark ratio 1:1.

⁷⁾ A = V_s connections reverse-polarity protected.

⁸⁾ C = interference suppression.

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

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6008867



SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK
Sensor Intelligence