Data sheet

VS/VE18-2T1132

V18

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	part no.
VS/VE18-2T1132	6021162

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

Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	18 mm x 18 mm x 88 mm
Housing design (light emission)	Cylindrical
Housing length	88 mm
Thread diameter (housing)	M18 x 1
Optical axis	Axial
Sensing range max.	0 m ... 22 m
Sensing range	0 m ... 16 m
Focus	2.9°
Type of light	Infrared light
Light source	LED [1]
Light spot size (distance)	Ø 800 mm (16 m)
Angle of dispersion	2.9°
Adjustment	None

[1] Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage U_B	20 V AC ... 253 V AC [1]
Mains frequency	50 Hz, 60 Hz

[1] Limit values.
[2] Without load.
[3] Depending on supply voltage VS.
[4] Signal transit time with resistive load.
[5] With light/dark ratio 1:1.
[6] Sender: 2-wire cable.
[7] Do not bend below 0 °C.
[8] C = interference suppression.

Current consumption	45 mA [2]
Switching output	TRIAC
Switching mode	Light switching
Output current $I_{max.}$	≤ 300 mA [3]
Response time	≤ 20 ms [4]
Switching frequency	25 Hz [5]
Connection type	Cable, 3-wire, 2 m [6] [7]
Cable material	Plastic, PVC
Conductor cross section	0.34 mm²
Cable diameter	Ø 4.7 mm
Circuit protection	C [8]
Protection class	II
Weight	190 g
Housing material	Plastic, PBT/PC
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +70 °C
UL File No.	NMFT2.E175606

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Certificates

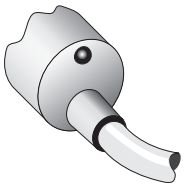
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cRUus certificate	✓

Classifications

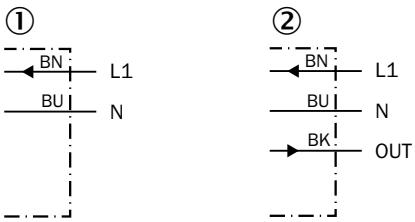
ECLASS 5.0	27270901
ECLASS 5.1.4	27270901
ECLASS 6.0	27270901
ECLASS 6.2	27270901
ECLASS 7.0	27270901
ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901

ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 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

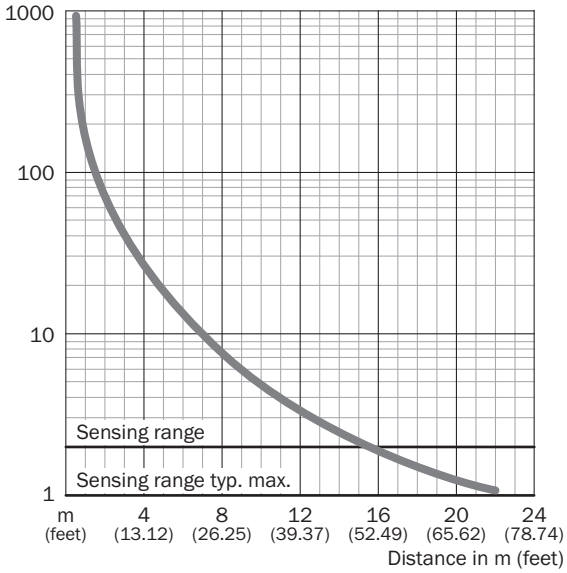


Connection diagram Cd-222

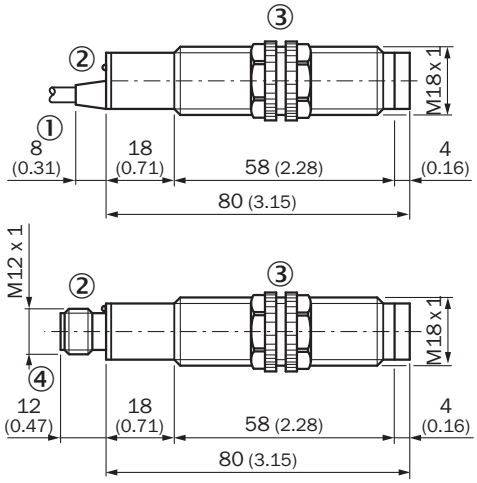


① sender
② receiver

Characteristic curve



Dimensional drawing



Dimensions in mm (inch)
① Connection cable
② LED signal strength indicator
③ Fastening nuts, 22 mm hex (included)
④ Connector M12, 4- pin

Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	• **Description:** Mounting bracket for M18 sensors • **Material:** Steel • **Details:** Steel, zinc coated • **Items supplied:** Without mounting hardware • **Suitable for:** GR18, V180-2, V18, W15, Z1, Z2	BEF-WN-M18	5308446
	• **Description:** Plate N11N for universal clamp bracket • **Material:** Stainless steel • **Details:** Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp) • **Items supplied:** Universal clamp (5322627), mounting hardware • **Usable for:** DeltaPac, Glare, WTD20E	BEF-KHS-N11N	2071081
connectors and cables			
	• **Connection type head A:** Male connector, M8, 3-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** 0.14 mm² ... 0.5 mm²	STE-0803-G	6037322

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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.”

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