



VT18-2T1112

V18

CYLINDRICAL PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
VT18-2T1112	6011370

Other models and accessories → [www.sick.com/V18](http://www.sick.com/V18)

Illustration may differ



### Detailed technical data

#### Features

<b>Functional principle</b>	Photoelectric proximity sensor
<b>Functional principle detail</b>	Energetic
<b>Dimensions (W x H x D)</b>	18 mm x 18 mm x 88 mm
<b>Housing design (light emission)</b>	Cylindrical
<b>Housing length</b>	88 mm
<b>Thread diameter (housing)</b>	M18 x 1
<b>Optical axis</b>	Axial
<b>Sensing range max.</b>	2 mm ... 100 mm <sup>1)</sup>
<b>Sensing range</b>	3 mm ... 90 mm
<b>Focus</b>	Approx. 3.5°
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>2)</sup>
<b>Light spot size (distance)</b>	Ø 12 mm (100 mm)
<b>Angle of dispersion</b>	Approx. 3.5°
<b>Adjustment</b>	None

<sup>1)</sup> Object with 90% remission (based on standard white, DIN 5033).

<sup>2)</sup> Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

#### Mechanics/electronics

<b>Supply voltage U<sub>B</sub></b>	20 V AC ... 253 V AC <sup>1)</sup>
<b>Mains frequency</b>	50 Hz, 60 Hz

<sup>1)</sup> Limit values.

<sup>2)</sup> Without load.

<sup>3)</sup> Depending on supply voltage VS.

<sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

<sup>6)</sup> Do not bend below 0 °C.

<sup>7)</sup> C = interference suppression.

<b>Current consumption</b>	30 mA <sup>2)</sup>
<b>Switching output</b>	TRIAC
<b>Switching mode</b>	Light switching
<b>Output current I<sub>max.</sub></b>	≤ 300 mA <sup>3)</sup>
<b>Response time</b>	≤ 20 ms <sup>4)</sup>
<b>Switching frequency</b>	25 Hz <sup>5)</sup>
<b>Connection type</b>	Cable, 3-wire, 2 m <sup>6)</sup>
<b>Cable material</b>	Plastic, PVC
<b>Conductor cross section</b>	0.34 mm <sup>2</sup>
<b>Cable diameter</b>	Ø 4.7 mm
<b>Circuit protection</b>	C <sup>7)</sup>
<b>Protection class</b>	III
<b>Weight</b>	95 g
<b>Housing material</b>	Plastic, PBT/PC
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP67
<b>Ambient operating temperature</b>	-25 °C ... +70 °C
<b>UL File No.</b>	NMFT2.E175606

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.

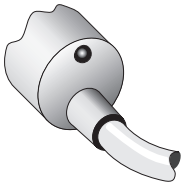
6) Do not bend below 0 °C.

7) C = interference suppression.

## Classifications

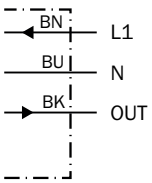
<b>ECLASS 5.0</b>	27270903
<b>ECLASS 5.1.4</b>	27270903
<b>ECLASS 6.0</b>	27270903
<b>ECLASS 6.2</b>	27270903
<b>ECLASS 7.0</b>	27270903
<b>ECLASS 8.0</b>	27270903
<b>ECLASS 8.1</b>	27270903
<b>ECLASS 9.0</b>	27270903
<b>ECLASS 10.0</b>	27270904
<b>ECLASS 11.0</b>	27270904
<b>ECLASS 12.0</b>	27270903
<b>ETIM 5.0</b>	EC001821
<b>ETIM 6.0</b>	EC001821
<b>ETIM 7.0</b>	EC002719
<b>ETIM 8.0</b>	EC002719
<b>UNSPSC 16.0901</b>	39121528

Connection type

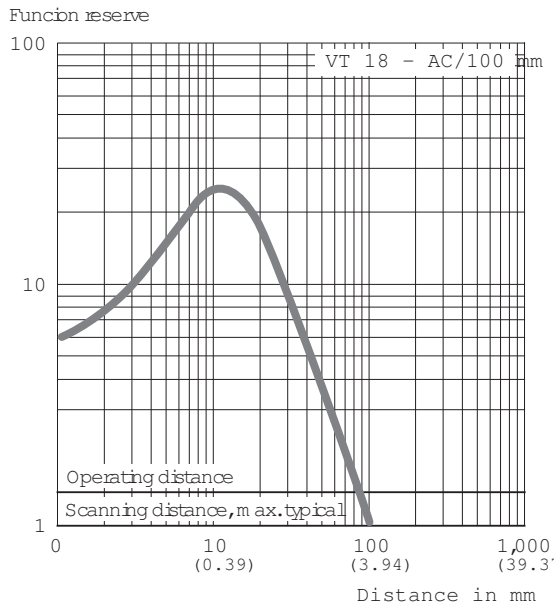


Connection diagram

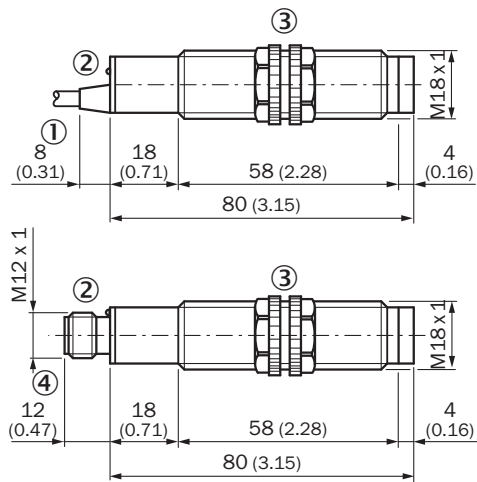
Cd-063



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](http://www.sick.com/V18)

	Brief description	Type	Part no.
<b>Mounting brackets and plates</b>			
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
<b>Others</b>			
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, M8, 3-pin, straight, A-coded</li> <li>• <b>Description:</b> Unshielded</li> <li>• <b>Connection systems:</b> Screw-type terminals</li> <li>• <b>Permitted cross-section:</b> 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></li> </ul>	STE-0803-G	6037322

## 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](http://www.sick.com)