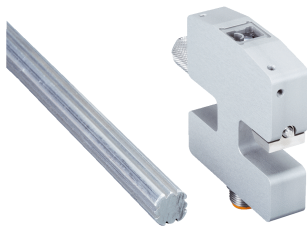


# RS10-M111

RS10

**REGISTER SENSORS**

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
RS10-M111	1060116

Other models and accessories → [www.sick.com/RS10](http://www.sick.com/RS10)



## Detailed technical data

### Features

<b>Dimensions (W x H x D)</b>	15 mm x 62 mm x 60 mm
<b>Sensing distance</b>	13 mm
<b>Sensing distance tolerance</b>	± 1 mm
<b>Housing design (light emission)</b>	Rectangular
<b>Light source</b>	LED, White <sup>1)</sup>
<b>Wave length</b>	450 nm ... 650 nm
<b>Light spot size</b>	0.8 mm x 3 mm

<sup>1)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

### Interfaces

<b>Fieldbus, industrial network</b>	-
<b>Type of fieldbus integration</b>	-

### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	≤ 5 V <sub>pp</sub> <sup>2)</sup>
<b>Power consumption</b>	< 100 mA <sup>3)</sup>
<b>Response time</b>	≤ 20 μs <sup>4)</sup>
<b>Jitter</b>	≤ 10 μs
<b>Switching output (voltage)</b>	PNP/NPN, push-pull
<b>Output current I<sub>max.</sub></b>	< 100 mA
<b>Input, teach-in (ET)</b>	Run: U < 2 V Teach: U = 10 V ... < U <sub>V</sub>
<b>Connection type</b>	Male connector M12, 8-pin
<b>Protection class</b>	II <sup>5)</sup>
<b>Circuit protection</b>	U <sub>V</sub> connections, reverse polarity protected

<sup>1)</sup> Limit values when operated in short-circuit protected network: max. 8 A.

<sup>2)</sup> May not exceed or fall below U<sub>V</sub> tolerances.

<sup>3)</sup> Without load.

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

<sup>5)</sup> Reference voltage DC 32 V.

	Interference pulse suppression Outputs overcurrent and short-circuit protected
<b>Enclosure rating</b>	IP67
<b>Weight</b>	400 g
<b>Housing material</b>	Aluminum (anodised)

1) Limit values when operated in short-circuit protected network: max. 8 A.

2) May not exceed or fall below  $U_v$  tolerances.

3) Without load.

4) Signal transit time with resistive load.

5) Reference voltage DC 32 V.

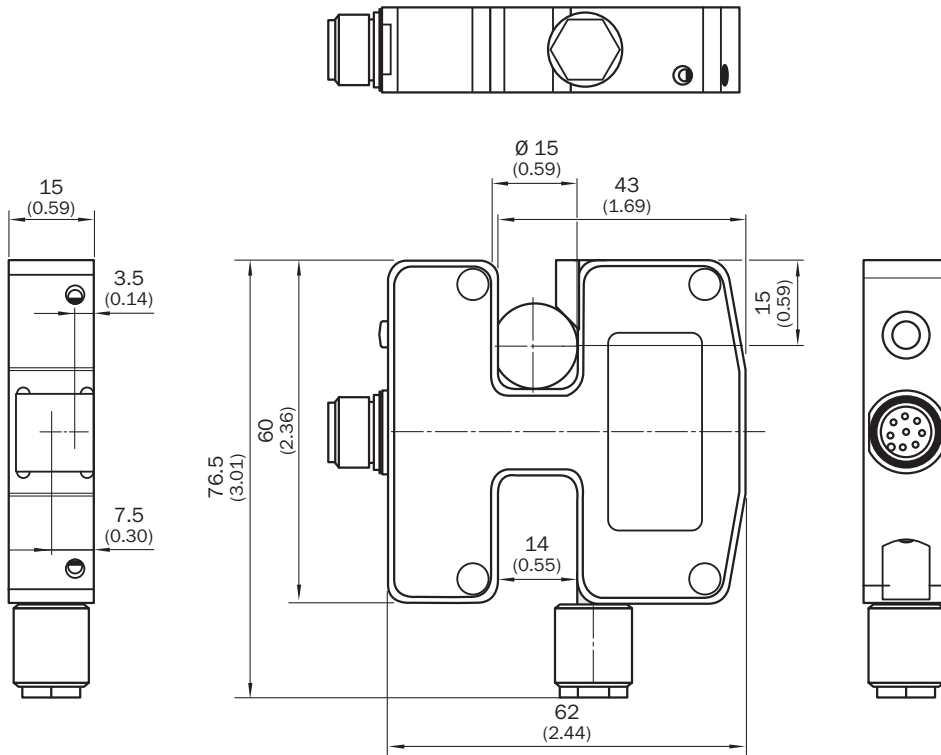
## Ambient data

<b>Ambient operating temperature</b>	-10 °C ... +60 °C
<b>Ambient storage temperature</b>	-25 °C ... +75 °C
<b>Shock load</b>	According to IEC 60068

## Classifications

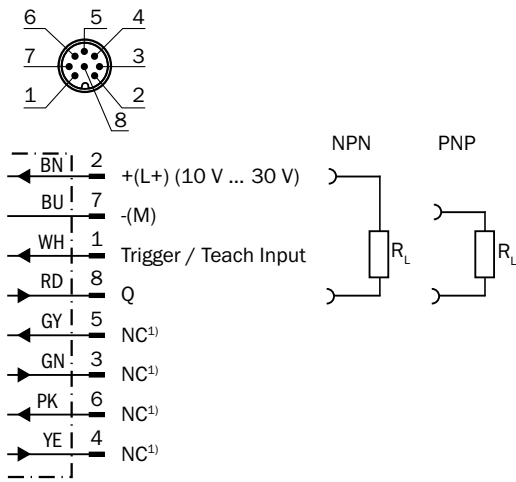
<b>ECl@ss 5.0</b>	27270906
<b>ECl@ss 5.1.4</b>	27270906
<b>ECl@ss 6.0</b>	27270906
<b>ECl@ss 6.2</b>	27270906
<b>ECl@ss 7.0</b>	27270906
<b>ECl@ss 8.0</b>	27270906
<b>ECl@ss 8.1</b>	27270906
<b>ECl@ss 9.0</b>	27270906
<b>ETIM 5.0</b>	EC001820
<b>ETIM 6.0</b>	EC001820
<b>UNSPSC 16.0901</b>	39121528

Dimensional drawing (Dimensions in mm (inch))



Connection diagram

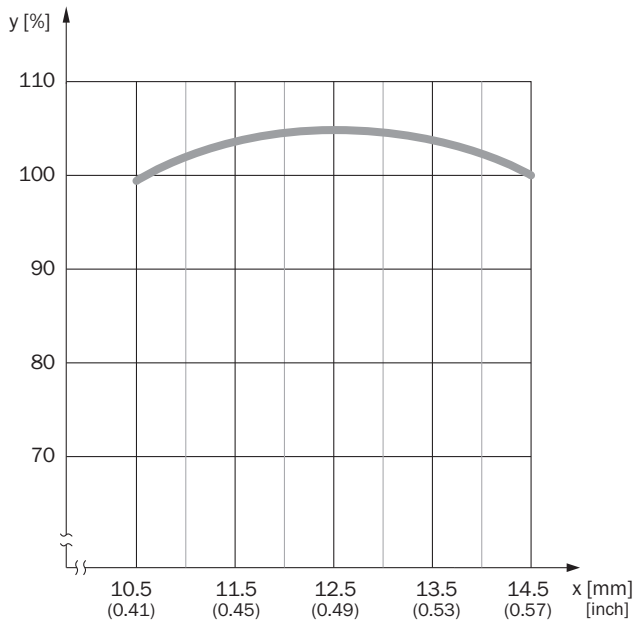
cd-316



① Not connected. Leave open, do not wire to ground.

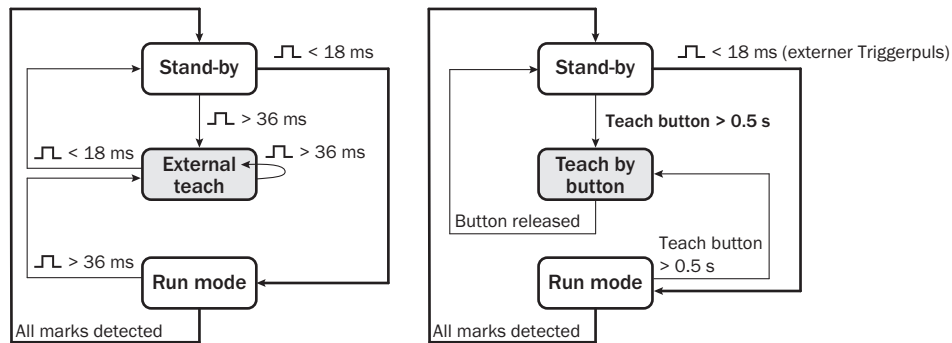
## Characteristic curve

Sensing distance



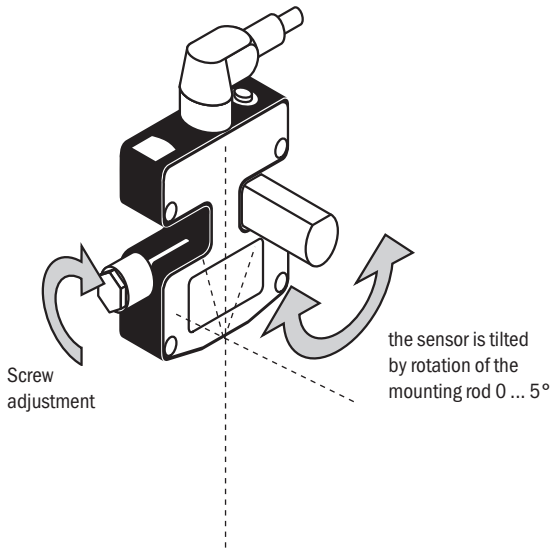
## Diagramm

Flow diagram



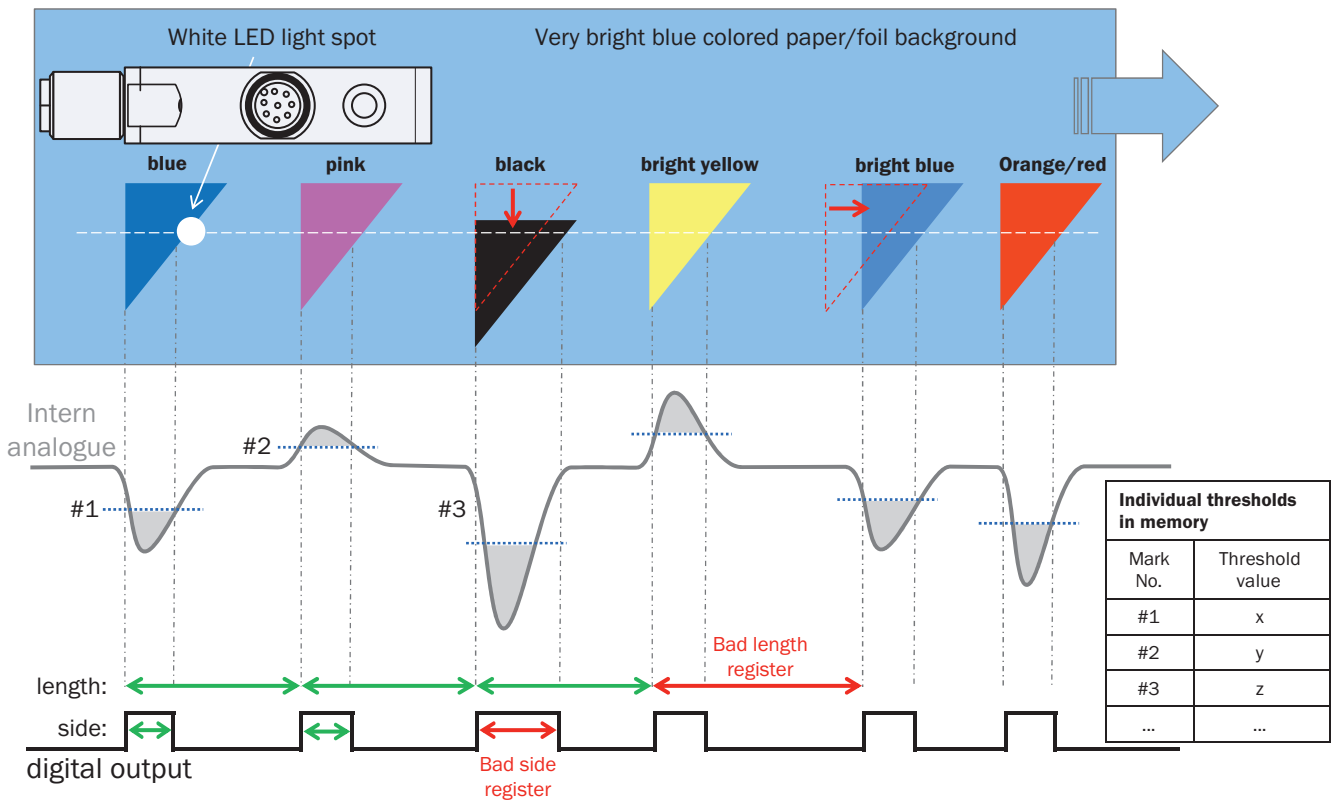
Instruction for installation

Instruction for installation



Funktionsprinzip

Functional principle



## Recommended accessories

Other models and accessories → [www.sick.com/RS10](http://www.sick.com/RS10)

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 2 m	DOL-1208-G02MAH1	6032448
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: PUR, halogen-free, shielded, 2 m	DOL-1208-W02MAS01	6029224

## 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)