RS10-M111S03

RS10

CONTRAST SENSORS

SICK
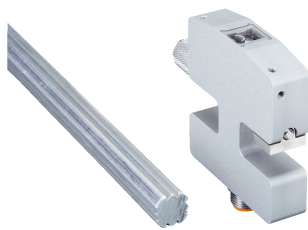Sensor Intelligence.

Ordering information

Type	Part no.
RS10-M111S03	1061518

Other models and accessories ➜ www.sick.com/RS10

Illustration may differ

CE

Detailed technical data

Features

Dimensions (W x H x D)	15 mm x 62 mm x 60 mm
Sensing distance	≤ 13 mm
Sensing distance tolerance	± 1 mm
Housing design	Large
Light source	LED, white [1]
Wave length	450 nm … 650 nm
Light spot size	0.8 mm x 3 mm

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

Mechanics/electronics

Supply voltage	4.6 V DC … 30 V DC [1]
Ripple	≤ 5 V_{pp} [2]
Current consumption	< 100 mA [3]
Response time	≤ 20 µs [4]
Jitter	≤ 10 µs
Switching output	PNP/NPN, push-pull: PNP/NPN
Switching output (voltage)	PNP/NPN, push-pull
Input, teach-in (ET)	Run: U < 2 V Teach: U = 4.6 V … < U_V
Connection type	Male connector M12, 8-pin
Protection class	II [5]
Circuit protection	U_V connections, reverse polarity protected Interference pulse suppression Outputs overcurrent and short-circuit protected
Enclosure rating	IP67

[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.

Weight	400 g
Housing material	Metal, 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.
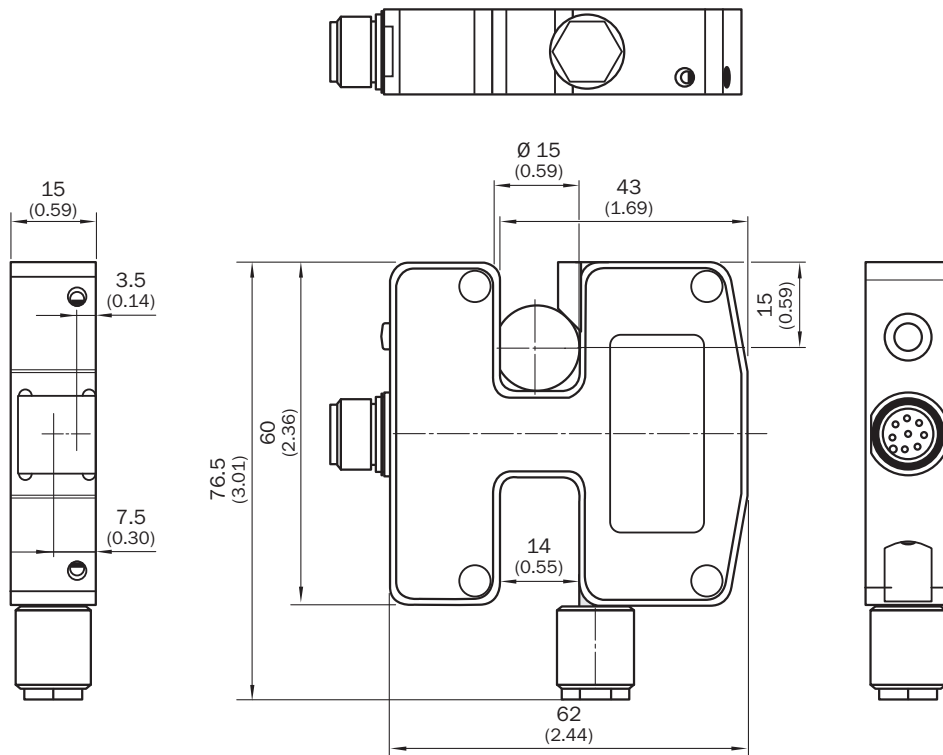
[5] Reference voltage DC 32 V.

Ambient data

Ambient operating temperature	−10 °C … +60 °C
Ambient temperature, storage	−25 °C … +75 °C
Shock load	According to IEC 60068

Classifications

ECLASS 5.0	27270906
ECLASS 5.1.4	27270906
ECLASS 6.0	27270906
ECLASS 6.2	27270906
ECLASS 7.0	27270906
ECLASS 8.0	27270906
ECLASS 8.1	27270906
ECLASS 9.0	27270906
ECLASS 10.0	27270906
ECLASS 11.0	27270906
ECLASS 12.0	27270906
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	39121528

Dimensional drawing (Dimensions in mm (inch))

Connection diagram

Cd-533

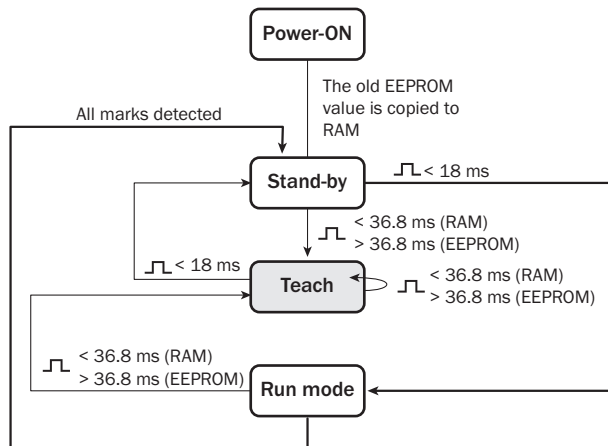| Wire	Pin	Signal
BN	2	+(L+) (4.6 V ... 30 V)
BU	7	-(M)
WH	1	Trigger Input
RD	8	Q
GY	5	Input
GN	3	Error OUT
PK	6	Input
YE	4	Error OUT

R_L
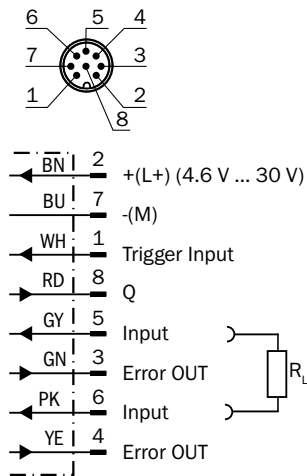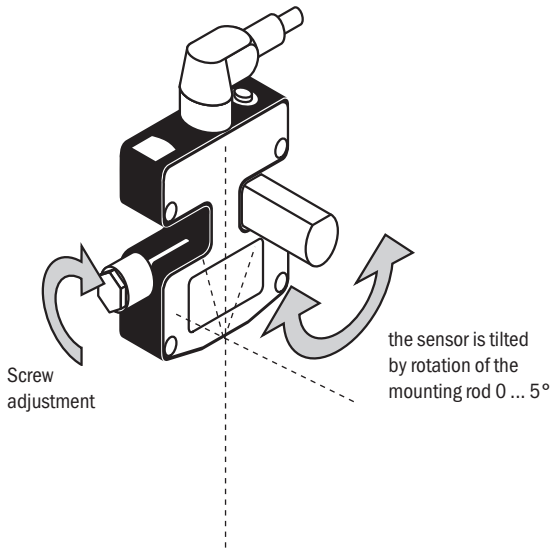
Sensing distance

Sensing distance
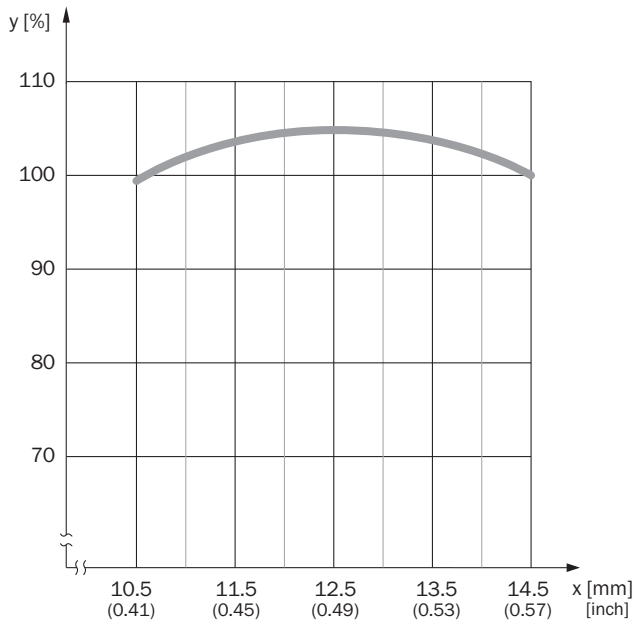
Diagramm

Flow diagram

Instruction for installation

Instruction for installation

Screw adjustment

the sensor is tilted by rotation of the mounting rod 0 ... 5°

Functional principle

Functional principle

White LED light spot

Very bright blue colored paper/foil background

blue   pink   black   bright yellow   bright blue   Orange/red

Intern analogue

#1 #2 #3

length: Bad length register

side: Bad side register

digital output

Individual thresholds in memory	
Mark No.	Threshold value
#1	x
#2	y
#3	z
...	...
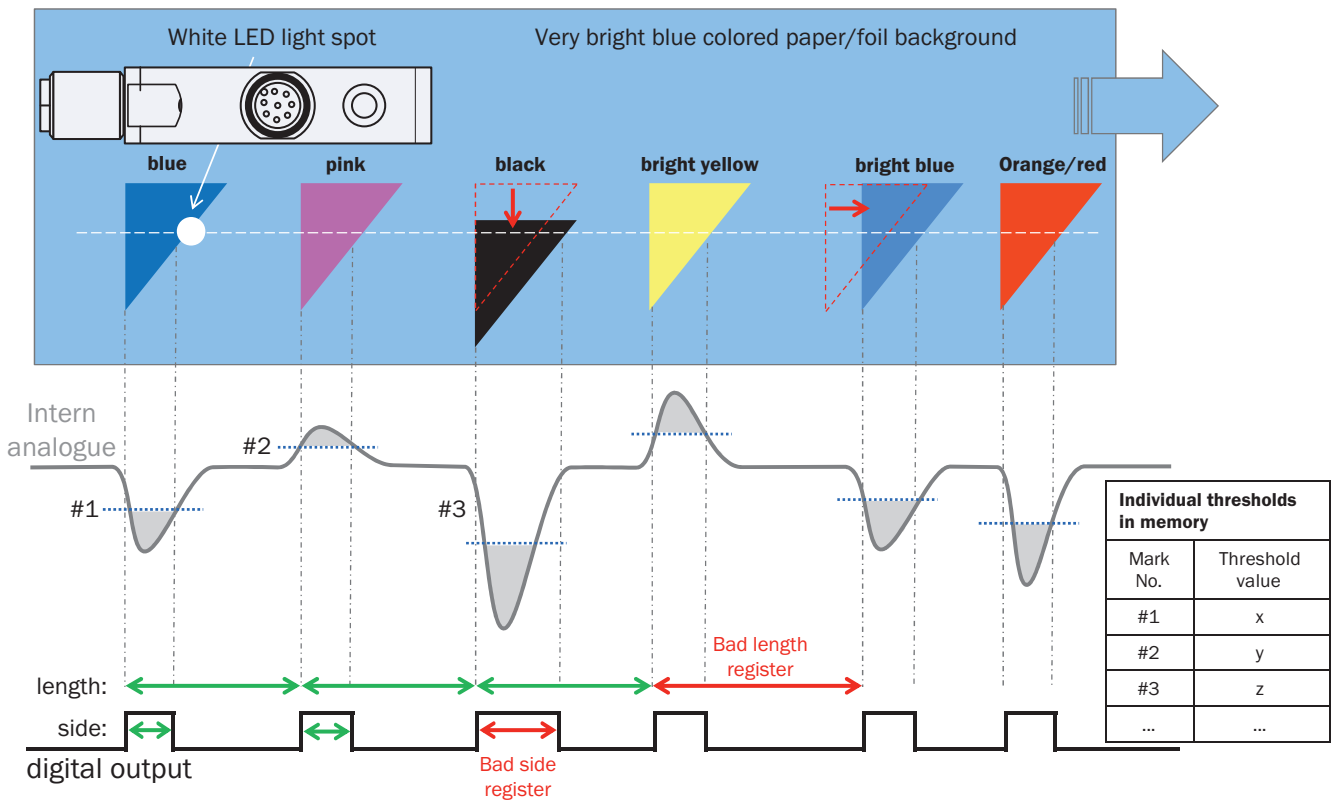
Recommended accessories

Other models and accessories ➜ www.sick.com/RS10

	Brief description	Type	Part no.
Plug connectors and cables			
	• **Connection type head A:** Female connector, M12, 8-pin, angled • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 2 m, 8-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Connection systems:** Flying leads	DOL-1208-W02MAS01	6029224
	• **Connection type head A:** Female connector, M12, 8-pin, straight • **Connection type head B:** Flying leads • **Cable:** 2 m, 8-wire, PUR, halogen-free • **Description:** Shielded • **Connection systems:** Flying leads	YF2A68-020XXXXLEAX	6032448

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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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