CEDES
The Sensor Pioneers.

RDS 100

Technical data

FEATURES

- Easy mounting concept without expensive kits
- Adjustable detection angle
- Wide detection area
- Very compact sensor



MICROWAVE / RADAR

Technology	Microwave Doppler radar
Transmitter frequency	24.150 GHz
Transmitter radiated power	< 20 dBm EIRP
Transmitter power density	< 5 mW/cm²
Min. detection speed	5 cm/s
Detection area	4 m × 2 m at 2.2 m

MECHANICAL

Mounting height	From 1.8 m up to 4 m
Dimensions (w × h × l)	76 × 48 × 116 mm
Housing material	PP
Enclosure rating	IP54
Temperature range	-20°C … +55°C
Operating humidity level	< 95% RH
Tilt angles	0° to 90° vertical -30° to +30° lateral

ELECTRICAL

Supply voltage U_{SP}		10 ... 30 VDC / 12 ... 24 VAC
Typ. current consumption at 24 VDC		< 30 mA
Output		Solid-state relay
Max. switching voltage		50 V
Max. switching current		250 mA
Max. release time		1.5 s
Indication LED (red):	LED on	Object detected
	LED off	No object detected

CONNECTION CABLE AND ELECTRICAL CONNECTION

Length	2.2 m
Diameter	Ø 4 mm
Material	PVC, gray
Wires	AWG26
• red	$+U_{SP}$ / Vcc
• black	GND (0 V) / Vcc
• blue	Output COM
• green	Output NO

GENERAL

EMC emission	EN 61000-6-3:2007, EN 12015:2014
EMC immunity	EN 61000-6-2:2005, EN 12016:2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificate	CE

CE RoHS

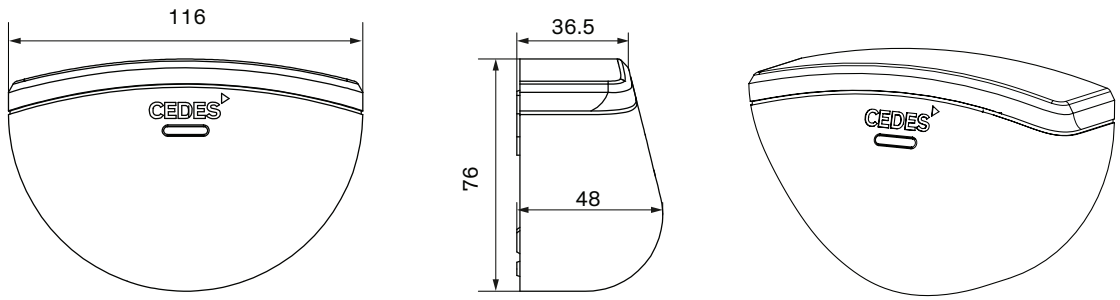
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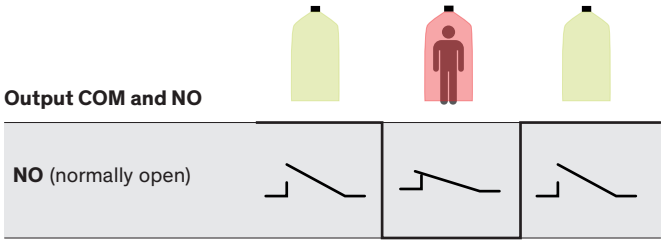
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Dimensions

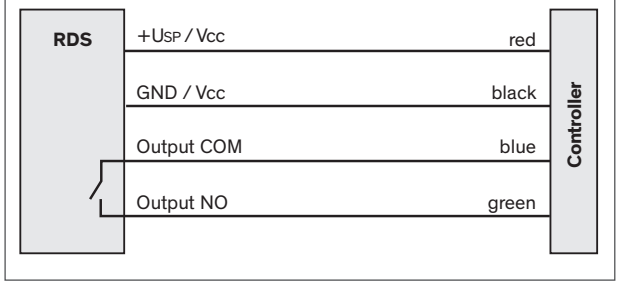
All dimensions in mm
Proportions not to scale



Output logic



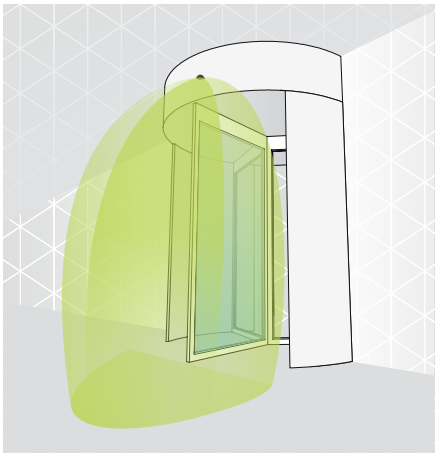
Electrical connection



Applications



Door activation for sliding doors



Door activation for revolving doors



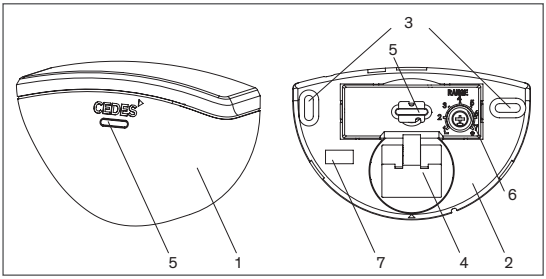
Door activation for industrial doors

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RDS 100

Installation guide

Overview



1 Cover

2 Mounting plate with sensor

3 Mounting holes

4 Sensor antenna

5 Status LED

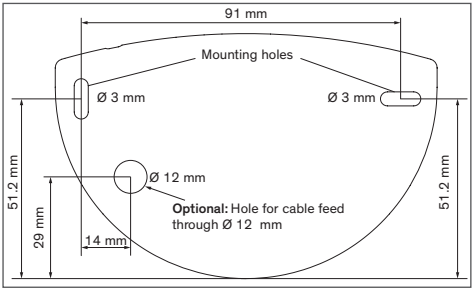
6 Potentiometer for range

7 Cable introduction

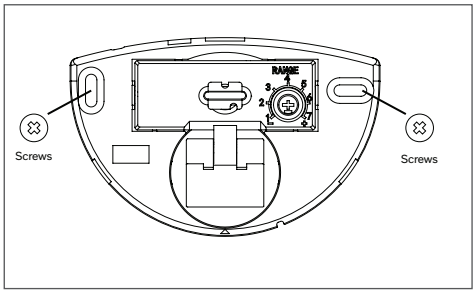
Installation

Delivery package:
Cover, mounting plate with sensor, connection cable, drilling template and installation guide

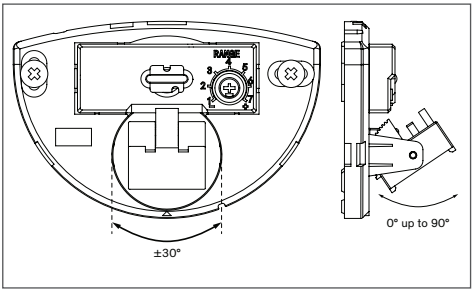
Assembly preparation:
Drill holes according to drilling template



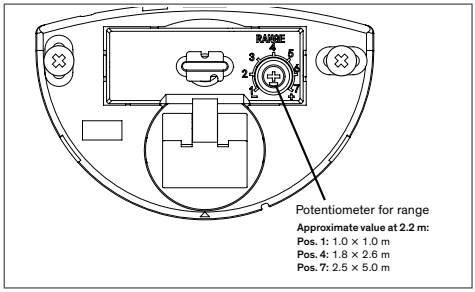
Mount plate with sensor



Align sensor antenna



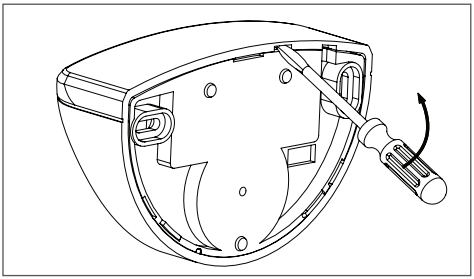
Set potentiometer



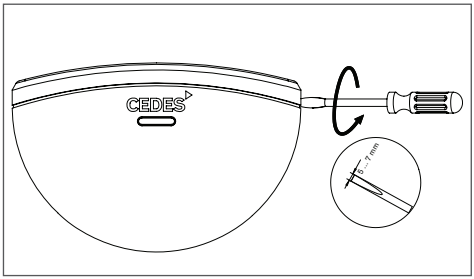
Close sensor cover, wire according to connection diagram and start control unit.

Open sensor:

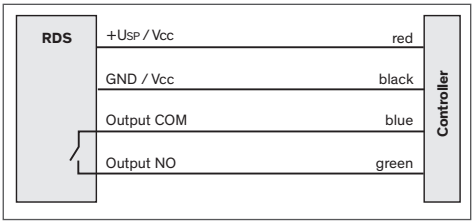
Not mounted



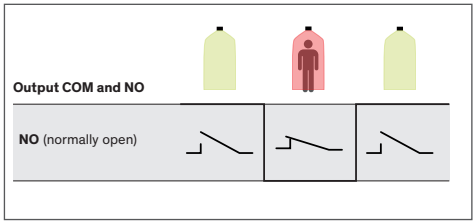
Mounted



Electrical connection



Output logic



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