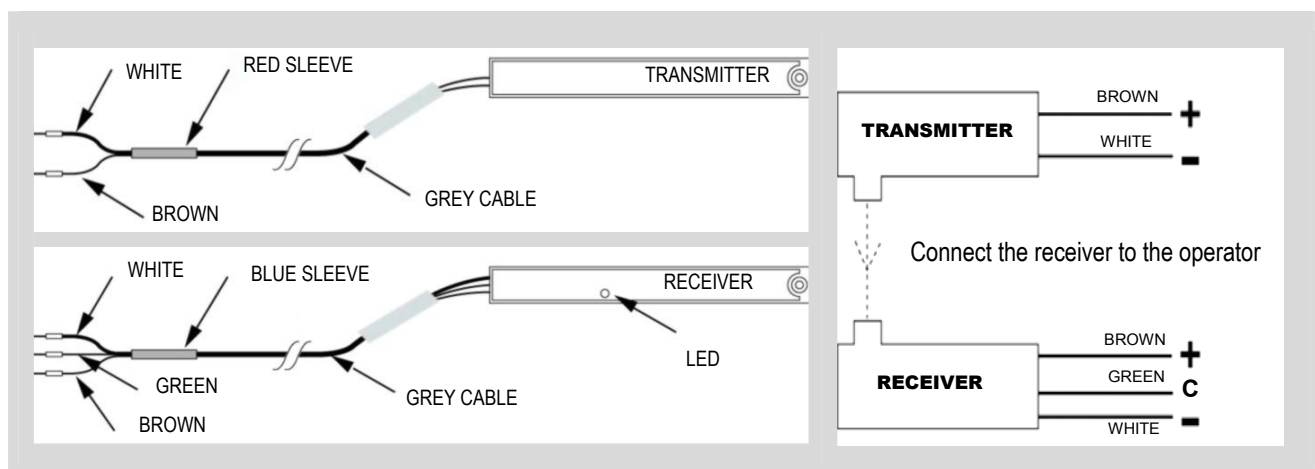
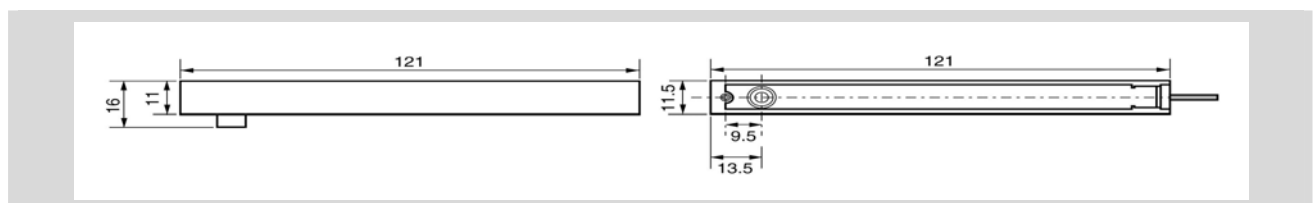




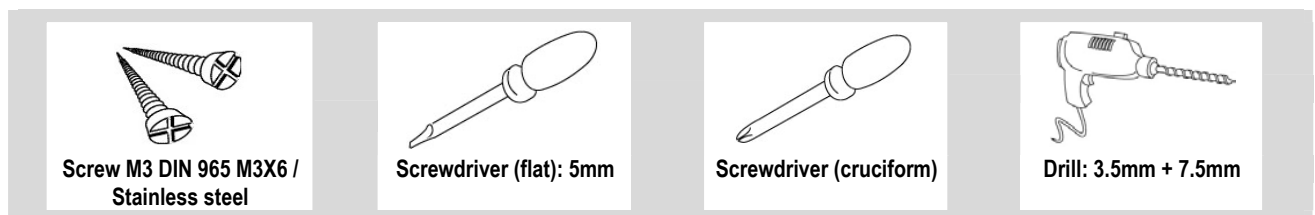
1 General Information



2 Dimensions



3 Accessories & Tools



4 Technical Specifications

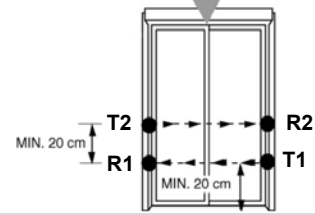
| | | | |
|-------------------------------|--|---------------------|----------------------------------|
| Supply voltage | 12 to 24 V DC -5/+20% | TRANSMITTER | |
| Allowed ripple | 1 Vpp at 24 V DC | Consumption | < 30mA |
| Polarity reversion | protected | Frequency | 833 pulses/sec. |
| Half-angle opening | 8° | Connections | Dual conductor cable (Vcc + GND) |
| Material | ABS | Weight | 125 gr |
| Housing tightness | IP65 | RECEIVER | |
| Length of cable | 10m | Consumption | < 10mA |
| Colour of cable | grey | Indicator | red LED |
| Immunity | Sun light : 100 000 LUX Incandescent lamp : 33 000 LUX 8° angle | Output | Transistor |
| Range | min 0.3m, max 5m | Max voltage | 30 V DC |
| Height of installation | min 0.2m above floor | Max current | 20 mA |
| Distance between beams | min 0.2m (beams inverted) | Voltage drop | 2 V at 20 mA |
| Response time | < 5ms (after switch on/off) | Connections | 3 conductor cables |
| Temperature range | -20°C to +55°C | Weight | 160 gr |

5 Installation

1 Installation height

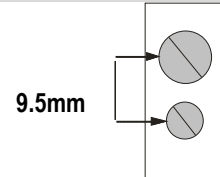
Select the installation height.
Mark the position (or stick on holder).

When installing **double barriers**, make sure that the 2 barriers are at least 20 cm apart.



2 Drilling

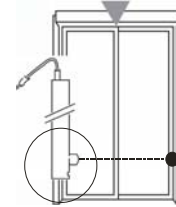
Drill 1 hole of 7.5 mm and 1 hole of 3.5 mm into each door upright.



3 Mounting

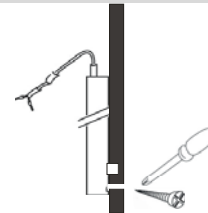
Insert the heads and the cables in the profiles.

When installing **double barriers**, make sure that the direction of the beam propagation is inverted by sliding 1 transmitter and 1 receiver into each upright. Check that each transmitter is facing a receiver. Identify the wires of each transmitter-receiver pair.



4 Fixation

Fasten the transmitter and receiver by using the double-sided tape and the M3 screw.



6 Troubleshooting

Please note that the back of the receiver is fitted with a red LED to check the operation of the barrier.

 LED ON : barrier is established  LED OFF : barrier is interrupted

Before assembly is completed and this LED is visible, it is possible to use the LED's indications to adjust the angles and test the barrier function.

What to do in case of malfunction?

- 1 Use a voltmeter to check whether the supply voltage (12 to 24 VDC (-5 % + 20 %)) between the + and - terminals of each transmitter and each receiver in fact exists.
- 2 Check the wiring and components as described in the application instructions.
- 3 Check the alignment of the transmitter with the receiver; a tolerance of $2 \times 8^\circ$ is normally possible.
- 4 Check whether the range is not too excessive (it cannot exceed 5 m).
- 5 Check whether the lower barrier is not too close to the ground (20 cm min.).
- 6 If 2 barriers are used, check whether there is at least 20 cm between them.
- 7 If 2 barriers are used, check whether they cross properly; the transmitter of one barrier and the receiver of the other barrier must be installed in the same upright. Check whether the wiring links the transmitter with the receiver facing it.
- 8 If all previous checks are positive, place a voltmeter between the C output and the - terminal of the receiver. Check the displayed voltage:

| | |
|---------------------|--------------------------|
| barrier established | +/- 0V |
| barrier interrupted | +/- Vcc (supply voltage) |
- 9 If the last check is also negative, either the transmitter or the receiver has broken down. To check the transmitter, use a spare receiver as test instrument. Use an independent source of supply, for example, a 12 or 24 VDC battery connected between + and -; the C output may remain disconnected. Place the test receiver 30 cm in front of the transmitter and align it well. Check whether the receiver's red LED changes when it is disaligned. If not, the transmitter has broken down and must be replaced.
- 10 To check the receiver, use a spare transmitter as test instrument. Use an independent source of supply. Before starting the test, mask the barrier transmitter using black tape, for example. Place the transmitter 30 cm in front of the receiver and align it well. Check whether the red LED of the receiver changes when the transmitter is disaligned. If the red LED on the receiver is not reacting, check the receiver as indicated in point 7 above. If the receiver does not function with this test barrier, it has broken down and must be replaced.