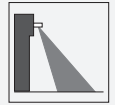


Radar motion sensor ECHO-D silver



- Standard radar motion sensor
- Detection of people and objects for automatic doors
- Bidirectional sensing and adjustment of detection field
- Remote control or push button for functionality setting
- Wall and ceiling mountable

Standard radar motion sensor with basic functionality, detection range 2 m x 4.5 m, max. installation height 4 m, silver housing, solid-state relay, cable connection



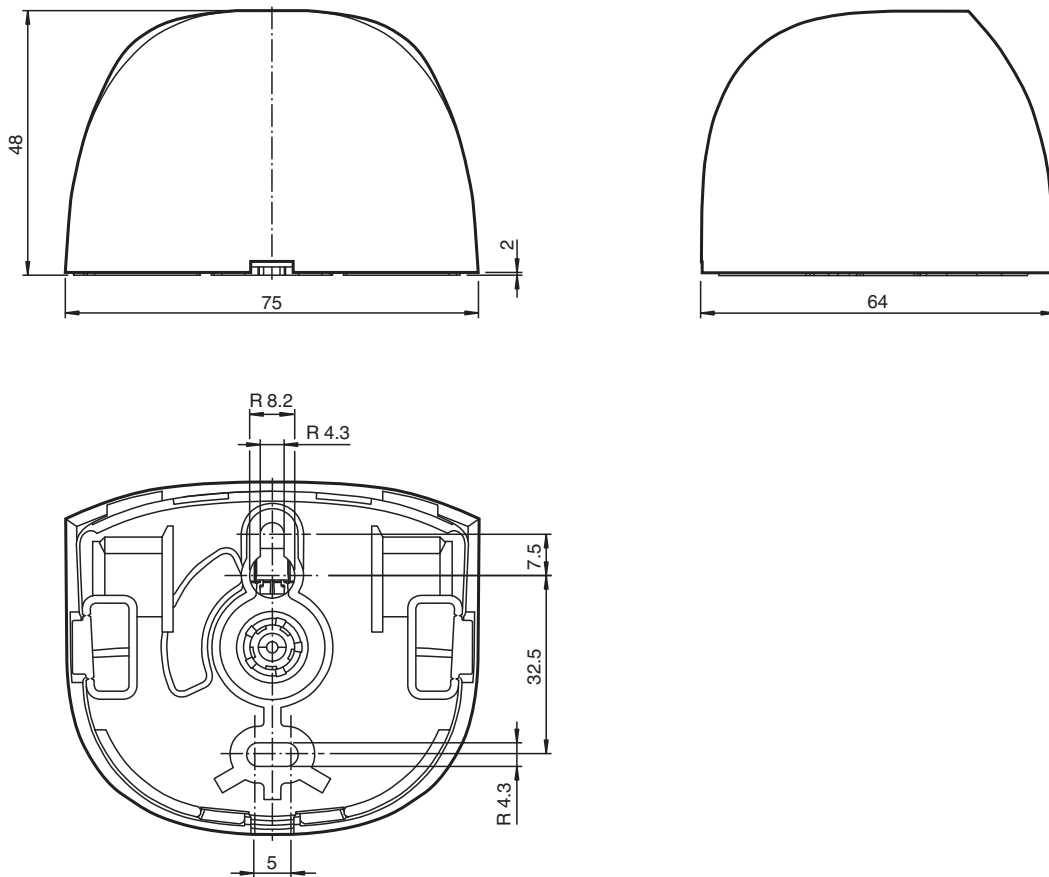
Function

This device is a radar motion sensor with basic functionality. The functionality is based on the 24 GHz radar technology. The basic functionality which can be activated includes among others direction detection, cross-traffic suppression, and immunity. The sensor is integrated in a simple and well-designed housing. The opening impulse sensor is easy to mount and to commission. The built-in antenna enables bidirectional sensing. This version has a wide detection area.

Application

- Opening impulse sensors for automatic doors and industrial doors
- Monitoring approach areas to elevators
- Motion sensors for people and objects
- Impulse sensors for escalators

Dimensions



Technical Data

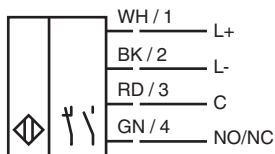
| | |
|---|---|
| General specifications | |
| Sensing range | 2000 x 4500 mm (DxW) at 2200 mm mounting height and 30° inclination angle |
| Function principle | Microwave module |
| Detection speed | min. 0.05 m/s |
| Setting angle | |
| Rotation angle | -40 ... 40 ° in 5 ° increments |
| Inclination angle | 0 ... 90 ° in 5 ° increments |
| Operating frequency | 24.15 ... 24.25 GHz K-Band |
| Operating mode | Radar motion sensor |
| Transmitter radiated power (EIRP) | < 20 dBm |
| Functional safety related parameters | |
| MTTF _d | |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |
| Indicators/operating means | |
| Function indicator | detection : LED green push button indication : LED yellow / green |
| Control elements | Push button for selection of operating modes : sensitivity , direction detection , cross-traffic suppression , slow-motion mode , relay switching type , hold time , immunity |
| Electrical specifications | |
| Operating voltage | U _B 12 ... 24 V DC ± 10 % |
| No-load supply current | I ₀ ≤ 55 mA at 24 V DC |
| Power consumption | P ₀ ≤ 1.32 W |

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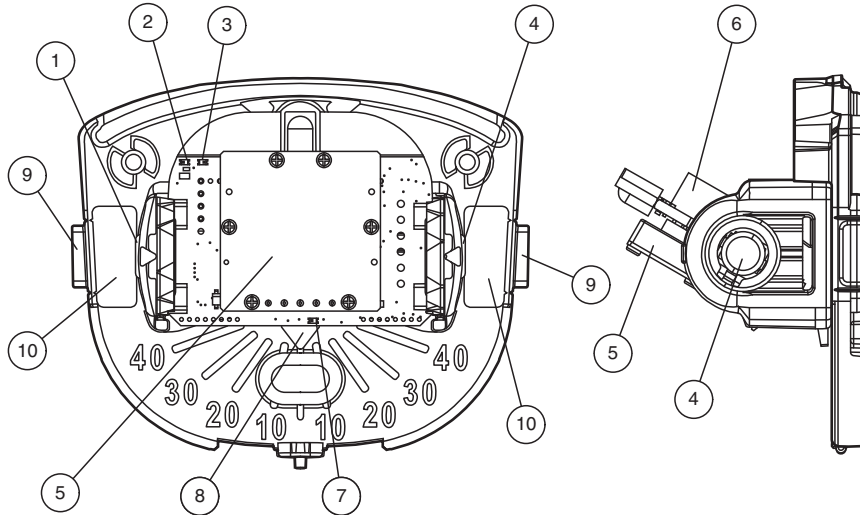
Technical Data

| | | |
|-----------------------------------|--|--|
| Output | | |
| Switching type | | Normally open/closed (NO/NC) |
| Signal output | | solid-state relay |
| Switching voltage | | max. 28 V AC / 36 V DC |
| Switching current | | max. 0.1 A AC / 0.1 A DC |
| Hold time | | 1.5 s / 3 s |
| Approvals and certificates | | |
| CE conformity | | 2014/53/EU This device can be used in all countries within the European Union. In other countries, all applicable national regulations must be observed. |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |
| Ambient conditions | | |
| Operating temperature | | -20 ... 55 °C (-4 ... 131 °F) |
| Storage temperature | | -30 ... 70 °C (-22 ... 158 °F) |
| Relative humidity | | max. 90 % non-condensing |
| Mechanical specifications | | |
| Mounting height | | max. 4 m |
| Degree of protection | | IP54 |
| Connection | | Connecting cable 2.5 m included with delivery |
| Material | | |
| Housing | | PC (Polycarbonate) |
| Mass | | approx. 70 g |
| Dimensions | | 75 mm x 64 mm x 50 mm |

Connection



Assembly



| | | | |
|---|---|----|-----------------------------|
| 1 | Push button, left: - | 6 | Connector |
| 2 | Push button and detection indication: LED green | 7 | Detection: LED green |
| 3 | Push button indication: LED yellow | 8 | Rotation angle |
| 4 | Push button, right: + | 9 | Side cable entry (optional) |
| 5 | Antenna | 10 | Cable entry (default) |



Function Principle

Microwave sensors are microwave scanners that use the principle of the Doppler radar. The most important requirement for microwave detection is that the object to be detected is moving. Some applications include controlling automatic doors and industrial doors.

The microwave sensors emit microwaves of a defined frequency to detect people and large objects moving at speeds between 0.05 m/s ... 2 m/s. Stationary people or objects are not detected.

Based on the latest 24 GHz technology with integrated microprocessor control, these sensors provide a high level of reliability, even in difficult operational conditions. The 24 GHz frequency, known as 'K-band,' is reserved by CETECOM for this application area all round the world.

Accessories

| | | |
|---|-----------------------------|---|
|  | RADAR RC | Infrared remote control for radar sensors |
|  | RADAR Ceiling Kit wh | Ceiling mount kit for RADAR sensors |
| | Radar Cable Adapter | Adapter for connecting connector socket and existing cables |

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