

MOTION DETECTOR

Passive Infrared Monitor



- **Certified Explosion-proof Class 1, Div 1**
 - **Factory sealed enclosure eliminates the need for conduit seals in the field**
 - **Normally closed, "fail-safe" relay contacts for connection to alarm circuitry or other devices. Contacts open when motion is detected or detector power is lost**
 - **Included no-tool swivel mount simplifies installation and makes angle adjustments fast and easy**

The IRM90-R is a passive infrared (PIR) motion detector is designed to provide maximum safety and security from occupational hazards and ensure workplace safety - even in the most hazardous and remote locations.

The detector monitors infrared radiation in the 8 to 15 micrometre range and looks for changes in this radiation, such as an intruder walking through its 65 degree cone of vision, in order to relay an alarm.

The explosion-proof housing is factory sealed to simplify installation and the electronic circuitry does not require any adjustments by the user. Normally closed relay contacts allow for connection to alarm circuitry, annunciation panels or other control devices.

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| Operating Voltage Range | 24 V dc. Device can operate between 15 and 28 V dc |
| Power Consumption (at 24 V dc) | 21 mA nominal, 30 mA maximum. 720 mW maximum |
| Operating Temperature Range | -10°C to +50°C (+14F to +122F) |
| Relay Output | Normally closed fail-safe relay contacts with an 18 Ohm resistor in series. Rated 24V dc, 0.1 Amp resistive. The relay output changes when motion is detected. It reverts to a closed state 2 to 3 seconds after motion is no longer being detected. The relay will also open if power to the detector is lost. |
| Spectral Sensitivity Range | Responds to changes in infrared radiation levels between 8 to 15 micrometres |
| Weight (with swivel) | 1.6 kg (3.5 lb) |
| Enclosure Material | Powder coated or anodized aluminum - <i>Part # IRM90-R</i> (optional stainless steel - <i>Part # IRM90-R-SS</i>) |
| Certifications | Housed in a CSA, NRTL/C, NEMA 4X certified for hazardous locations Class I, Division I, Groups B, C and D |
| Cone of Vision | Nominal cone of vision of 65° provided by the fresnel lens attachment. The maximum range of detection is 8 to 10 metres. |

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