

# IRM90 Motion Detector

## Passive Infrared Optical Sensor

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.



- Certified Explosion-proof Class 1, Div 1
- Normally closed relay contacts for connection to alarm circuitry or other devices. Contacts open when motion is detected or detector power is lost
- Factory sealed enclosure eliminates the need for conduit seals in the field
- Included swivel mount simplifies installation and makes angle adjustments fast and easy

Operating Voltage Range	24 Vdc. Device can operate between 15 and 28 Vdc
Power Consumption (24 V dc)	21 mA /510 mW nominal   30 mA/ 720 mW maximum
Operating Temperature Range	-10°C to +50°C (+14F to +122F)
Relay Output	Normally closed relay contacts with an 18 Ohm resistor in series. Rated 24 V dc, 0.1 Amp resistive. The relay output opens 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 - Part # IRM90-R (optional stainless steel - P/N IRM90-R-SS)
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 6 metres.

**HEADQUARTERS:**  
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°Please refer to manuals for complete specifications.