

# PROXIMITY DETECTION "SHUT-OFF" VALVES



**Save Water: Automatic Water Shut-Off Control**

**Save Water + Energy: Control both the Water Supply & Lights etc.**

**Can help achieve BREEAM Credits\***

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**The Problem:** Leaking and damaged ball valves (taps etc.) are not only an expensive waste of water, but also pose a possible risk of damage from flooding.

**The Solution:** A PIR switch is used to control the water supply (+ lights etc.) into a room. When the PIR switch detects that the room is occupied, it will automatically turn the water supply (+ lights etc.) "ON" so the appliances work as normal.

Once the washroom has been unoccupied for a pre-set but adjustable time, the system will automatically turn the water supply (+ lights etc.) "OFF" again, thus saving water if the appliances are prone to leak, or are deliberately left on. As such it is ideal in commercial buildings with public toilets (e.g. Office Blocks, Hotel Rooms, Swimming Pools etc.) or where there is a risk of vandalism (e.g. Schools, Municipal Public Toilets, Universities, Military Barracks etc.).

This system can also be used to control special indoor water features that you only want to operate when the room is occupied (e.g. pre-swim showers for swimming pools).

## Pilot Operated "Normally Closed" HP Solenoid Valves



### Order Codes:

1/2" 230v/NC/HP Valve  
 3/4" 230v/NC/HP Valve  
 1" 230v/NC/HP Valve  
 1 1/4" 230v/NC/HP Valve  
 1 1/2" 230v/NC/HP Valve  
 2" 230v/NC/HP Valve

NC = Normally closed

HP = Rated up to 10 bar.

**Minimum pressure differential required to operate:**

1/2", 3/4" and 1" require 0.35 bar

1 1/4", 1 1/2" and 2" require 0.5 bar

Temperature up to 80°C



### Power Absorption:

Pilot Operated HP Valves

For valve sizes 1/2", 3/4" & 1"

Inrush	Holding	DC
12 va	6 va	5.5W

For valve sizes 1 1/4", 1 1/2" & 2"

Inrush	Holding	DC
23 va	14 va	9W

- Strainers are recommended to protect the valves from debris
- Optional 24v Valve available on request (please specify AC or DC).
- **Optional manual override available. Must be specified at time of order.**
- Optional magnetic valve opener (to temporarily energise valves if there is currently no electricity provided on site [see page 2]).
- Optional "Normally Open" valves also available on request (need to be controlled by remote switch rather than PIR).

## Direct Acting "Normally Closed" LP Solenoid Valves

### Order Codes:

½" 230v/NC/LP Valve  
 ¾" 230v/NC/LP Valve  
 1" 230v/NC/LP Valve

0 Bar – 3 Bar (DC Coils)  
 0 Bar – 10 Bar (AC Coils)

### Order Codes:

1¼" 230v/NC/LP Valve  
 1½" 230v/NC/LP Valve  
 2" 230v/NC/LP Valve

0 Bar – 5 Bar (DC Coils)  
 0 Bar – 7 Bar (AC Coils)

### Power Absorption:

Direct Acting LP Valves

For valve sizes ½" & ¾"

Inrush	Holding	c.c (W)
44 va	24 va	13

For valve size 1"

Inrush	Holding	c.c (W)
65 va	33 va	17

For valve size 1¼" – 2"

Inrush	Holding	c.c (W)
18.7 va	15.3 va	18

- Strainers are recommended to protect the valves from debris
- Optional 24v Valve available on request (please specify AC or DC).
- Optional magnetic valve opener.
- Optional "Normally Open" valves also available on request (need to be controlled by remote switch rather than PIR).

## Magnetic Valve Openers

**To operate MVO, remove coil to access valve-stem**



### Order Codes:

<b>MVO/10mm</b>	½" – 1" NCHP
<b>MVO/15mm</b>	1¼" – 2" NCHP ½" – ¾" NCLP
<b>MVO/18mm</b>	1" – 2" NCLP

**Applications:** Suitable for all industrial and commercial systems where solenoid valves are fitted.

**Operation:** Ensure that power is switched off before removing the electrically operated valve coil.

Place the Solenoid Valve Operating Magnet fully over the valve-stem.

You will hear a click - This indicates the valve is now open.

When the manual operation is complete, remove the Solenoid Valve Operating Magnet and reinstate the electrically operated valve coil normally.

**WARNING:** Do Not re-energize the electrically operated valve coil unless it is correctly seated on the valve stem.

# PIR SWITCHES

## 230v Standard (optional 24v on request) Indoor PIR Switches featuring:

**Adjustable overrun** time from 10 secs – 40 mins. This is the time the load will stay on for after the last time the PIR detects someone.

**Adjustable Photocell** to inhibit the lights from switching on when somebody is detected by the PIR if there is enough ambient light. Range 100 – 1000 Lux and inactive.

**NB: Photocell MUST be set to maximum/inactive when using PIR to switch valves / motor load.**

**Loading:** All models can switch up to 6 amps (1500W at 230VAC) of resistive and fluorescent lighting loads or up to 3amps (750W) of electronic and wire wound transformer loads, or up to 2amps (500W) of CFL, 2D Lamps LED Drivers and LED Lamps and fittings or up to 1 amp (250W) of valve, fan or motor loads.

**Single PIR can control several valves, or several PIRs can be wired in parallel to control the same load.**

## Ceiling PIR Switches

**Plan view of detection zone**

- Strong detection zone  
i.e. person moving arm
- Secondary detection zone  
i.e. person walking (less sensitive when walking straight towards PIR switch)

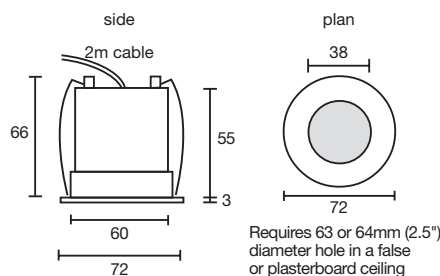
**PIR Quad detector gives 124 detection areas within the zone**

**Perspective view of detection zone**

For optimum coverage recommended mounting height between 2.4 and 5m.

**Several PIR occupancy switches**  
In open plan areas  
For best coverage the PIR occupancy switches should be spaced every 5m in either direction

## Ceiling Recessed PIR Switch



**Order Codes:**

**PIR/D/REC**

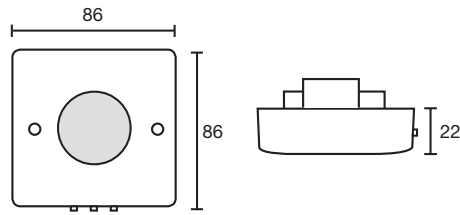
72mm diameter

**PIR/D/REC/Sealed**

IP44 rated ceiling recessed PIR

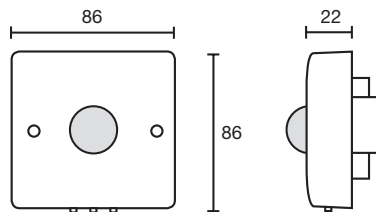
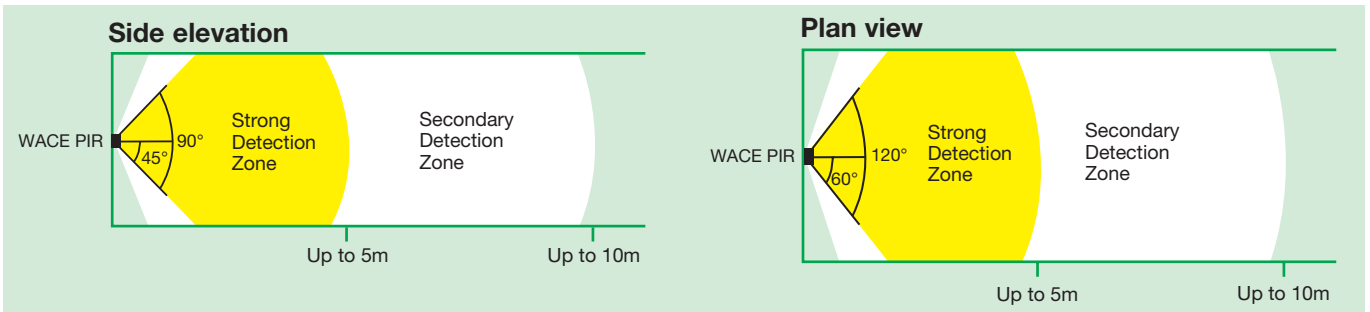
*Available on request.*

## Ceiling Mounted PIR Switch



**Order Code:**  
**PIR/D/SM**  
86mm x 86mm

## Wall Mounted PIR Switch



**Order Code:**  
**PIR/D/WM**  
86mm x 86mm



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