

## AT-WM Water Monitor

### Product Overview

The Aquitron AT-WM is a leak monitoring system that has been specifically designed to comply with the requirements of BREEAM (BRE Environmental Assessment Method) Credit Criteria assessment applications, Wat 03 – Water Leak Detection and prevention. The AT-WM system will allow designers, M&E contractors and developers to achieve the “Credit” available for water leak detection and prevention. The system is designed to monitor water flowing through a pulsed water meter. If the volume of water reaches the preset limit (customer adjustable) the system can isolate the mains water pipe therefore limiting the amount of water and leak damage.



The AT-WM comprises of a control panel linked to one or two pulsed water meters. For a typical BREEAM installation a meter would be fitted just after the utilities companies’ water meter at the boundary and covering the entire pipe within the grounds up to the point the water enters the building. A second water meter would be fitted adjacent the main isolation valve or stop-cock inside the building. This would monitor for any potential leaks within the building. The system is provided with visual and audible alarms combined with a set of volt free alarm contacts for use when the flow exceeds the pre-set limits. The contacts can be used to link into a BMS or remote alarm monitoring systems. The panel can operate AT-VXX solenoid valve(s) to isolate the water; these are typically installed adjacent to the water meter. These are supplied as part of the system if required.

### Features

- ◆ Mains water pipes ranging from 22mm to 150mm
- ◆ Programmable for different flow (leakage) rates
- ◆ Two levels of monitoring (e.g. occupied and unoccupied building)
- ◆ Programmable time periods to determine alarm levels
- ◆ Automatic setting of alarm levels via a door entry or intruder alarm

## Technical Information

|                                       |  |
|---------------------------------------|--|
| <b>Size</b>                           | <b>(WxHxD) 145 x 85 x 50mm</b>                         |
| <b>Power</b>                          | <b>12Vdc 250mA (Transformer Included)</b>              |
| <b>Volt Free Relay</b>                | <b>24Vdc, 1 amp</b>                                    |
| <b>Solenoid valve (20mm to 40mm)</b>  | <b>6Vdc derived from the control panel</b>             |
| <b>Solenoid valve (50mm to 150mm)</b> | <b>230Vac controlled through a separate relay unit</b> |

## Water Meter 20 - 40 mm

| <b>Pipe Sizes Copper/MDPE (mm)</b>        | <b>15/20</b>     | <b>22/25</b> | <b>28/32</b> | <b>35/40</b> | <b>42/50</b> |
|---|------------------|--------------|--------------|--------------|--------------|
| <b>Imperial</b>                           | <b>½"</b>        | <b>¾"</b>    | <b>1"</b>    | <b>1¼"</b>   | <b>1½"</b>   |
| <b>Meter Size (DN)</b>                    | <b>15</b>        | <b>20</b>    | <b>25</b>    | <b>30</b>    | <b>40</b>    |
| <b>Meter Thread (mm) TSNxTVM</b>          | <b>20x27</b>     | <b>26x34</b> | <b>33x42</b> | <b>40x49</b> | <b>50x60</b> |
| <b>Meter Length (mm) Excluding Unions</b> | <b>133</b>       | <b>190</b>   | <b>260</b>   | <b>260</b>   | <b>300</b>   |
| <b>Meter Height (mm) (inc. Cyble)</b>     | <b>141</b>       | <b>163</b>   | <b>163</b>   | <b>163</b>   | <b>181</b>   |
| <b>Meter Depth (mm)</b>                   | <b>88</b>        | <b>88</b>    | <b>110</b>   | <b>110</b>   | <b>110</b>   |
| <b>Weight (kg)</b>                        | <b>1.6</b>       | <b>1.6</b>   | <b>3.5</b>   | <b>3.6</b>   | <b>6.2</b>   |
| <b>Body Material</b>                      | <b>Composit*</b> |              |              | <b>Brass</b> |              |

\* Brass available to order

## Water Meter 50 - 150 mm

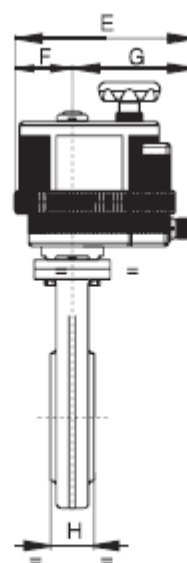
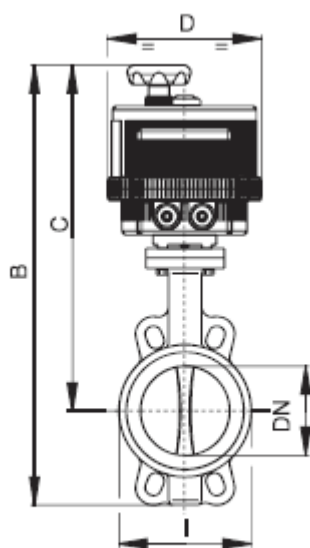
| Pipe Sizes Copper/MDPE (mm)    | 54/63 | 67/75 | 76/90 | 108/125 | 159/180 |
|--------------------------------|-------|-------|-------|---------|---------|
| Imperial                       | 2"    | 2 ½"  | 3"    | 4"      | 6"      |
| Meter Size (DN)                | 50    | 65    | 80    | 100     | 150     |
| Meter Length (mm)              | 200   | 200   | 200   | 250     | 300     |
| Meter Height (mm) (inc. Cyble) | 252   | 258   | 264   | 284     | 385     |
| Dismantling Height (mm)        | 200   | 200   | 270   | 270     | 350     |
| Weight (kg)                    | 6.3   | 8.6   | 10.6  | 15      | 30      |
| Flange Type                    | PN16  |       |       |         |         |

## Solenoid Valve 6V DC - 15 - 54mm

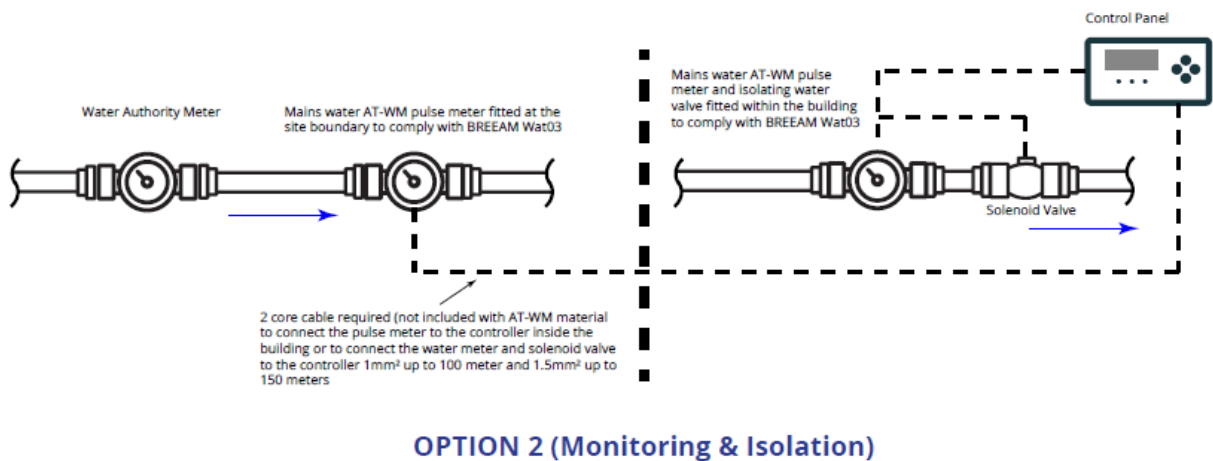
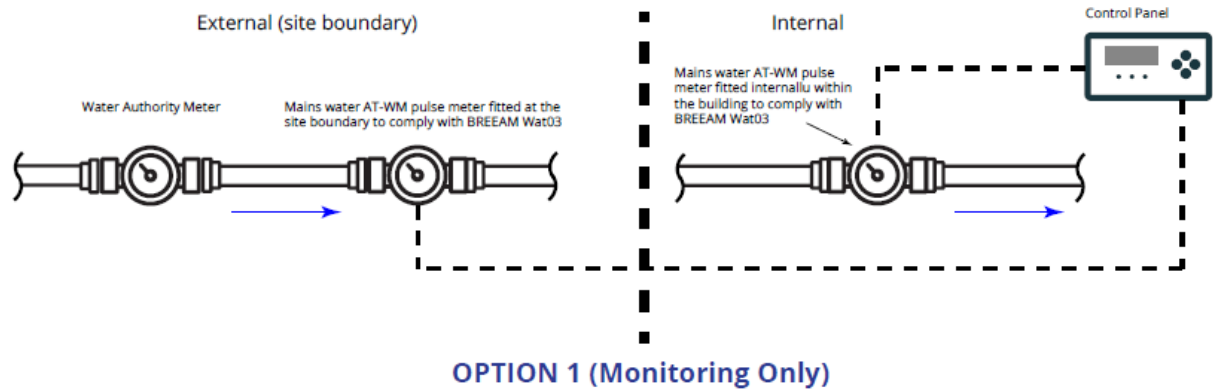
| Pipe Sizes Copper/MDPE (mm) | 22/25 | 28/32 | 35/40 | 42/50 | 54/63 |
|-----------------------------|-------|-------|-------|-------|-------|
| Imperial                    | 1"    | 1¼"   | 1½"   | 2"    | 2½"   |
| Body Thread (mm)            | 19    | 25    | 32    | 38    | 51    |
| Length (mm)                 | 71    | 95    | 95    | 111   | 129   |
| Height (mm)                 | 108   | 160   | 160   | 173   | 207   |
| Depth (mm)                  | 58    | 75    | 85    | 100   | 120   |
| Weight (kg)                 | 0.8   | 1.8   | 2     | 2.5   | 5.5   |
| Material                    | Brass |       |       |       |       |
| Manual Override             | No    |       |       |       |       |

## Dimensions

| DN   | 65     | 80     | 100    | 150    |
|------|--------|--------|--------|--------|
| PN   | 16     | 16     | 16     | 16     |
| B    | 432    | 472    | 500    | 579    |
| C    | 354    | 383    | 398    | 441    |
| D    | 157    | 185    | 185    | 211    |
| F    | 191    | 215    | 215    | 237    |
| G    | 61     | 68     | 68     | 84     |
| H    | 130    | 147    | 147    | 153    |
| I    | 120    | 127    | 161    | 215    |
| ACT. | VB 030 | VB 030 | VB 030 | VB 030 |
| RI   | 3836   | 3883   | 3884   | 3887   |



## Configuration Examples



It is important for accurate leak detection control and correct operation that the time clock is checked for accuracy after changes to BST (British Summer Time) and GMT (Greenwich Mean Time).

## Important

All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application.