

# LEAK-STOP SPECIFICATION

## Single Zone Water Leak Detection Alarm

At a glance:

Can be used with:

- Sensor Tape
  - Sensor Probes
  - Sensor Pads
  - In-line sensors
- or a combination of these.

Audio and visual alarm as soon as a water leak occurs.

Dedicated N/C or N/O valve connection for automatically switching off the water supply if there's a leak.

2 x Volt free relay for switching an external device or connecting to a BMS.

Dedicated connection for an optional external beacon or beacon/sounder.

Useful test button to ensure functionality of the alarm.

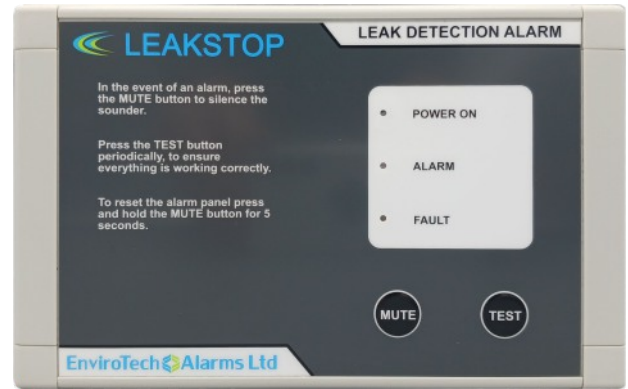
Mute button to silence the sounder during an alarm.

Line fault monitoring

Optional battery backup

### Product Overview:

The LeakStop is a water leak detection alarm panel designed to notify that a water leak has occurred. Each alarm panel has the capability to connect to sensor tape, sensor probes, sensor pads and/or inline sensors.



### Detecting Water:

Water (unless purified) contains contaminants such as ions and salts and it's these within the water that are conductive. The sensors (conductors) used for leak detection are separated by a carrier and the water acts as a path for a very low electrical signal to pass from one to the other, this action that triggers the alarm.

### Specification

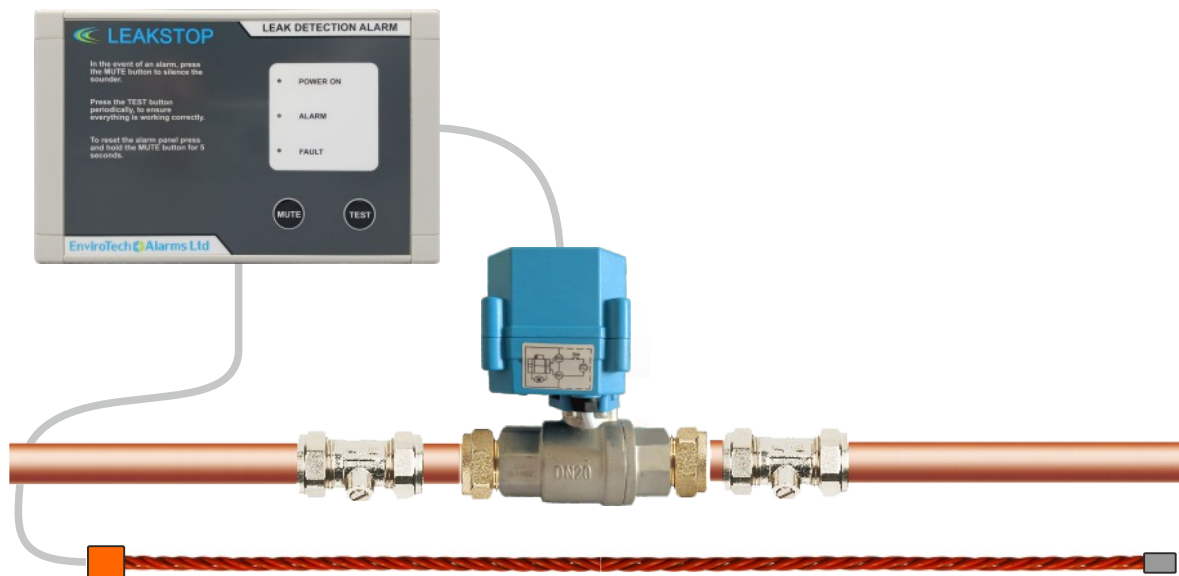
#### Main alarm panel:

Input voltage	230VAC	Current rating	5W in standby and 14W active
Power supply rating			2 Amp
Zones			1
Panel dimensions			190mm x 100mm x 80mm
Panel mounting			Surface mounted
Enclosure rating			IP65 (before cable entry holes)
Operating temperature			0 - 55°C
Output 1			Dedicated 230VAC valve connection N/O or N/C
Output 2			Dedicated beacon/sounder, beacon only connection 12VDC
Output 3			Volt free changeover relay rated at 230VAC / 8Amp
Output 4			Volt free changeover relay rated at 230VAC / 2Amp

#### Sensors:

Sensor Tape	100m max length (including connection cable)
Sensor Probe	Two point sensing with height adjustable between 0mm and 25mm
Sensor Pad	Low profile ideal for installing in areas with limited space
In-line sensor probe	Fits in the pipe, ideal for overflow pipes (15mm - 28mm)

### Typical Configuration



# Sensors

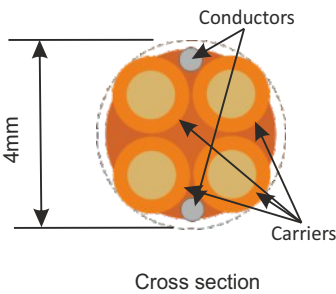
## TECHNICAL SPECIFICATION

### Sensor Tape

The sensor tape used with the LeakStop water leak detection alarms has been specifically designed to detect the presence of water at any point along its' length. Sensor tape can be laid directly on the floor or strapped under pipework (braided sensor tape is required). A specific length of sensor tape can be used to cover the area requiring water leak detection. It is possible to connect more than one length of sensor tape in parallel, using start and end of line junction boxes. When installing the sensor tape on a floor, self adhesive floor clips can be used to hold it in place.



<b>Category Type:</b>	4C Sensor Cable Orange
<b>Conductor Material:</b>	Stainless steel wire
<b>Conductor Diameter:</b>	0.40mm
<b>Insulation Material:</b>	PVC
<b>Insulation Diameter:</b>	1.8mm(+/-0.10mm) x 4 twisted
<b>Compliant:</b>	RoHS2 (2011/65/EU)
<b>Temperature rating:</b>	-20°C to +80°C
<b>Voltage rating:</b>	5Volts @ 10 Milliamps

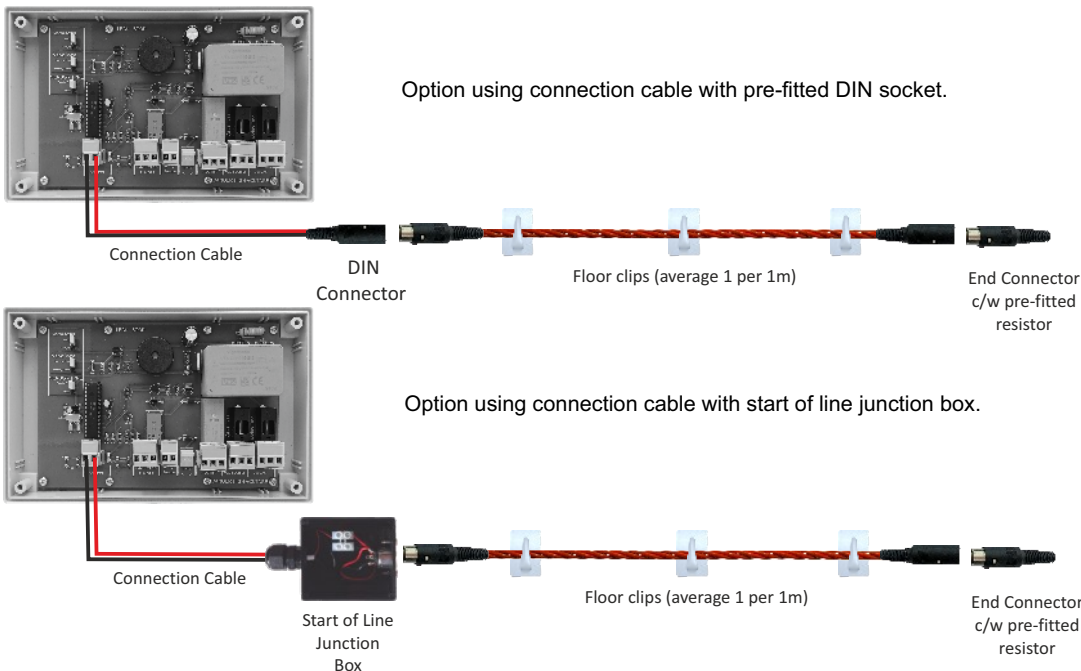


(Connectors are pre-wired in the factory)

### Installation Notes::

Sensor tape can be laid directly on the floor or strapped under pipework (braided sensor tape is required). A specific length of sensor tape can be used to cover the area requiring water leak detection. Lengths up to 100m are available (this is combined with the length of the connection cable).

### Installing the sensor tape



### Applications:

Under raised floors

In data centres

Comms rooms

Plant rooms

Tea points

Kitchen areas

Coffee Stations

Under pipes (a braided version is available for this)

Behind splash panels in toilet areas

Pub Cellars

Basements



Start of Line Junction Box



Self Adhesive Floor Clip

PLEASE NOTE THAT WHEN THE LEAKSTOP ALARM PANEL IS PART OF A PACKAGE THE CONNECTION CABLE IS TERMINATED AT A PRE-DEFINED LENGTH WITH A NON LOCKING CONNECTOR

## Applications:

Plantrooms

Cleaners cupboards

Basements

Under manifolds

Inside water meter cupboards

## Sensor Probe

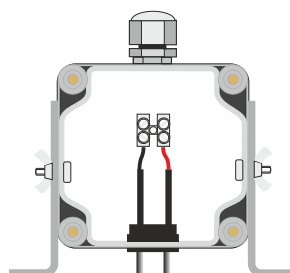
### Probe Overview:

The sensor probe is a height adjustable water leak detection sensor for use in areas susceptible to leaks. It's contained in a rigid plastic housing to offer protection against possible damage. The floor brackets allow for vertical adjustment of the sensor height from the floor. This is particularly useful if the probes are used in an environment where a small amount of liquid is permissible due to a manufacturing or cleaning process.

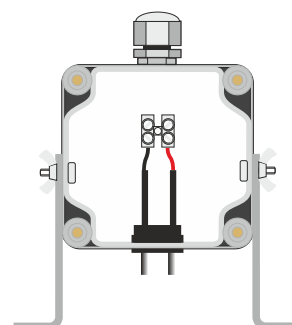


### Probe Specification:

<b>Enclosure:</b> .....	High impact ABS plastic, 2.5mm thick, lid and base incorporates tongue and groove sealing system with neoprene gasket.
<b>Enclosure dimensions:</b> .....	82mm x 80mm x 55mm
<b>Enclosure rating:</b> .....	IP65 and NEMA4 (dust and hose proof)
<b>Height Adjustment:</b> .....	0mm to 25mm
<b>Probe Material:</b> .....	Stainless steel
<b>Probe Diameter:</b> .....	3mm
<b>Voltage at probe:</b> .....	5 volts @ 10 micro amps
<b>Temperature rating:</b> .....	-10°C to +40°C



Height adjusted to 0mm

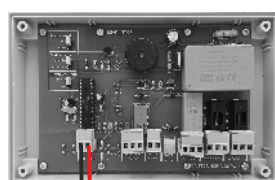


Height adjusted to 25mm

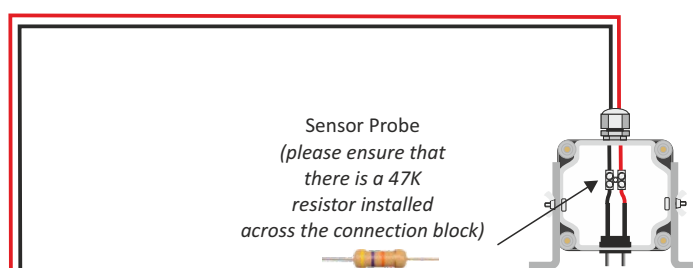
### Installation Notes:

Position the sensor probe on the floor under the area where a potential water leak may occur. Screw the two floor brackets to the floor using appropriate fixings. Adjust the height of the probes to the desired level and tighten the locking nuts on each side to secure.

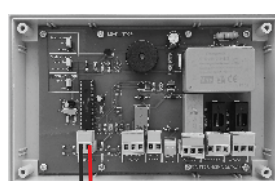
### Installing the sensor probes



Connection Cable



### Installing the sensor probes in parallel



Connection Cable



## Sensor Pad Overview:

The sensor pad is ideal for using in confined areas such as drip trays that have been installed under FCUs where fluid could collect and cause damage if left unchecked. Typically used where air cooling is fundamental to keeping an environments stable such as data centres or comms rooms.

A number of pads can be connected in parallel to allow several areas to be monitored by the LeakStop alarm panel.



## Product Specification:

**Enclosure:** ..... ABS  
**Enclosure dimensions:** ..... 55mm x 55mm x 40mm  
**Pad Material:** ..... Tinned Copper  
**Pad Dimensions:** ..... 55mm x 55mm  
**Voltage at probe:** ..... 5 volts @ 10 micro amps  
**Temperature rating:** ..... -10°C to +40°C

## Installation Notes::

The pad sensor is positioned with the printed circuit is facing down onto the surface. Care should be taken to ensure the face of the pad isn't in contact with any conductive material.

- Applications:**
- Comms Rooms
  - Server Rooms
  - Drip Trays
  - FCU overflow trays

## Inline pipe sensors

The in-line tee sensor has been designed to go into the over flow pipes on break tanks, toilet cistern and header tanks. The sensor is located inside the tee piece and gets installed on the overflow pipe with the sensor at the bottom. Any water that travels down the pipe and into the tee sensor will make contact with the conductors of the sensor and set off the alarm.

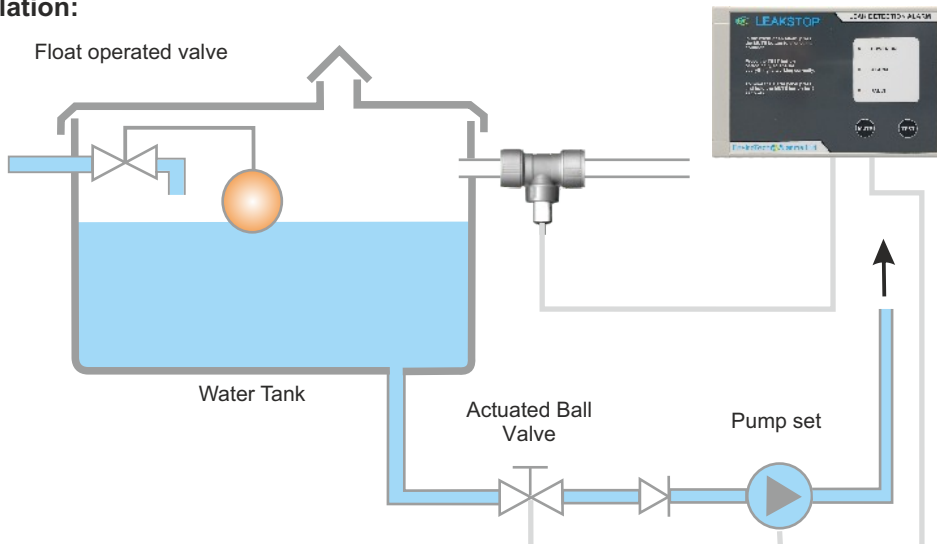


## Product Specification:

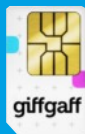
**Tee Piece:** ..... Speed-fit plumbing fitting  
**Tee Piece Sizes:** ..... 15mm, 22mm, 28mm (other sizes are available)  
**Tee Piece Materials:** ..... Plastic  
**Probe Material:** ..... Stainless steel  
**Probe Diameter:** ..... 3mm  
**Voltage at probe:** ..... 5 volts @ 10 micro amps  
**Temperature rating:** ..... -10°C to +40°C

- Applications:**
- Water tanks
  - Break tanks
  - Header tanks
  - Fish tanks
  - Toilet cisterns

## Typical Installation:







## SMS TEXT DIALLER

### SUMMARY OF FEATURES

- Easy to install.
- Simple programming via text messaging.
- 4 inputs available.
- Up to 5 telephone number can be programmed.
- Separate text messages can be set up for each channel.
- Volt free relays for connecting external devices.
- Excellent mobile phone network coverage.



The SMS Autodialer acts like a mobile phone sending a bespoke text message to 5 different telephones. It has four inputs available that allow different devices to be linked to the dialler and a different message set for each.

The SMS Autodialer uses a SIM card inserted into the PCB and most larger network providers will work perfectly well (please check the signal strength and network availability for the area where the text dialler will be installed). Setting up the system is done by texting simple commands to the unit. Contract and PAYG SIMs can both be used, when using a PAYG the unit can be set up to send an automatic text periodically to prevent the SIM from expiring.

## BEACONS, SOUNDERS AND BEACON/SOUNDERS

Both the Beacon Alarm and the Beacon/Sounder Alarm can be connected to any Envirotech alarm panel. Should the main alarm panel detect a leak, the beacon will flash and the sounder sound.

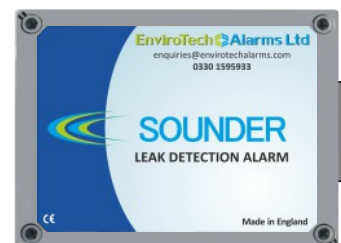
These panels simply plug straight into the LeakStop alarm panel using a 2 core alarm cable. Should a leak be detected an alarm will trigger and a signal is sent straight to the Beacon alarm illuminating the ultra bright beacon and sounding the 102 dB sounder.

### SUMMARY OF FEATURES

Very bright LED beacon (visible for 30m plus), 102 dB sounder, No local power required as power is taken directly from the master panel. Automatically resets as soon as the master panel resets.

### PRODUCT SPECIFICATION

Beacon .....	Super Bright LED
Sounder .....	102dB @ 1m
Input Voltage .....	12VDC (selv) 50mA
Operating Temperature .....	-18°C to 50°C
Connection Cable .....	2 or 4 core 0.2mm <sup>2</sup>
IP Rating conductor .....	65
Dimensions .....	155mm x 115mm x 75mm
Dimensions including beacon .....	155mm x 160mm x 75mm



### Key Features:

102 dB sounder

Super bright beacon

Ideal for otherwise noisy areas

Powered directly from the main alarm panel

Auto resets once leak has been fixed

Ideal for positioning outside of a comms room where access to the room is limited

## Actuated Ball Valve

1/2" - 1"

**NORMALLY OPEN  
ZERO RATED  
0 - 10 Bar**



Media: air - water -gas - light oil  
 Pressure range: 0 to 10 Bar max  
 Media temp: -15°C to +100°C  
 Ambient temp: -15°C to +50°C  
 Media viscosity: 500 centistokes max  
 Mounting: Any Position  
 Open/Close time: 5 Secs max  
 Voltage: 230VAC  
 Power Consumption: 5 Watts (moving)  
 Enclosure: IP67  
 Connections: 3 wire control (0.5m lead)  
 Duty Cycles: 100,000  
 Seals: PTFE  
 Moulded coil: ABS plastic

### Key Features:

**230VAC**

**Available in 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"**

**Full bore diameter**

**Standard BSP fittings**

**Not affected by low water pressure**

**Capable of working with water pressures up to 10 Bar**

**Operates with water temperatures of between -15C to +100C**

**Can be mounted in any position**

**Normally closed version available**

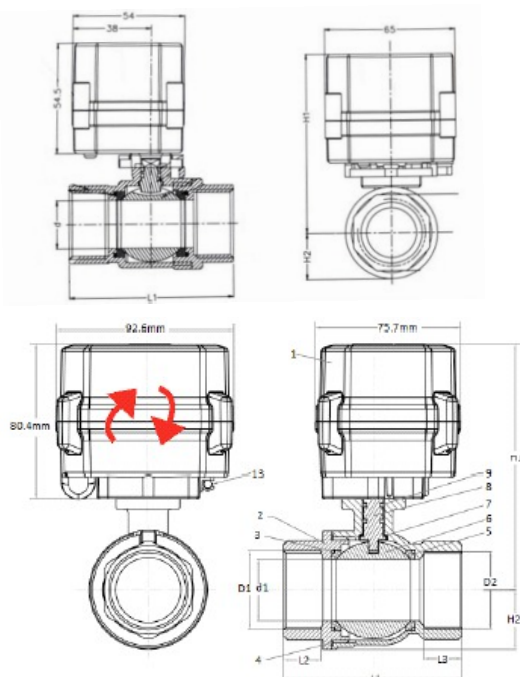
1 1/4" - 2"

**NORMALLY OPEN  
ZERO RATED  
0 - 10 Bar**



Media: air - water -gas - light oil  
 Pressure range: 0 to 10 Bar max  
 Media temp: -0°C to +90°C  
 Ambient temp: -15°C to +50°C  
 Media viscosity: 500 centistokes max  
 Mounting: Any Position  
 Open/Close time: 10 Secs max  
 Voltage: 230VAC  
 Power Consumption: 5 Watts (moving)  
 Enclosure: IP67  
 Connections: 3 wire control (0.5m lead)  
 Duty Cycles: 100,000  
 Seals: PTFE  
 Moulded coil: ABS plastic

Port BSP	Orifice (mm)	Torque Nm	Pressure Rating (Bar)		Sec Max		Voltage
			Min	Max	Open	Close	
1/2"	15	2	0	10	5	5	AC
3/4"	20	2	0	10	5	5	AC
1"	25	2	0	10	5	5	AC
1 1/4"	32	16.3	0	10	10	10	AC
1 1/2"	40	16.3	0	10	10	10	AC
2"	50	16.3	0	10	10	10	AC



Port D1/D2	d	L1	L2	E1	H1	H2	Kg
1/2	15	63	14	25	83	17	0.4
3/4	20	72	17	31	87	20	0.5
1	25	81	18	38	95	24	0.6

Port	Bore D1	L1	L2 / L3	E1	H1	H2	KG
1 1/4	32	102	23	47	122	31	1.4
1 1/2	38	115	25	52	130	36	1.7
2	50	130	25	66	141.4	44.5	2.3