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## Drain Testing 'U' Gauge Kit



**Code: 67190**

## Operating Instructions

# Drain Testing 'U' Gauge Kit



## 'U' Gauge Kit consists of:

'U' Gauge	Calibrated to 100mm above and below zero
Hand Bellows	For pumping the drain under test with air
3x 10mm Rubber Hose	3m. Sold separately per metre
'T' Piece	For connecting hose to U gauge, hand bellows and drain plug
1/2" Nipple Cap	To replace the top cap of 1/2" BSP outlet drain plugs
1" Nipple Cap	To replace the top cap of 1" BSP outlet drain plugs

## To Air Test Drains or Pipes

- The drain to be tested is completely sealed off using drain testing plugs (or air bag stoppers) in the conventional way.  
NOTE: Always test through a drain plug wherever possible
- Replace the top cap of one convenient drain testing plug with either the 1/2" or 1" BSP nipple cap.  
NOTE: Check that the washer supplied with the nipple cap is in the threaded end of the nipple cap.
- Connect together the bellows, U gauge and drain testing plug using the tee piece, as illustrated. Fill the U gauge with water to the zero level on the scale.
- In order for air to flow through the tube of the bellows into the drain and U gauge release the shut off clip.  
NOTE: The shut off clip is fitted to the bellows in front of the bulb.
- A positive pressure should be applied to the bulb of the bellows to allow sufficient volume of air to raise the liquid column of the U gauge to the 100 mark on the open side of the U gauge (and 100 below on the closed side).
- Close the shut off clip and then release the bulb.  
NOTE: if the bulb is released first, the column of water will fall on the open side of the U gauge - but if the shut off clip is closed first, the column should remain static. If the column has been raised to a higher reading than required, a gentle manipulation of the shut off clip, will allow the column to fall and closing the shut off clip should cause the column to stop falling.
- If the system under test leaks the water will quickly return to the zero level.
- If there are no leaks in the system under test, the column will remain at the 100 mark.
- With both the columns on the 100 mark; the test pressure is 100mm water gauge pressure (10mb (1 kPa)).

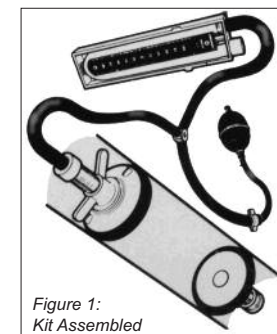


Figure 1:  
Kit Assembled

1 bar = 1000 mbar = 100 kPa = 100 kN/m<sup>2</sup> = 14.5 psi = 145 lbf/in<sup>2</sup> = 33.45 ft 'head of water' = 102 m 'head of water'  
 1 mbar = 100 Pa = 100 N/m<sup>2</sup> = 0.0145 psi = 0.0145 lbf/in<sup>2</sup> = 0.4 in 'head of water' = 10.2 mm 'head of water'  
 1 psi = 1 lbf/in<sup>2</sup> = 68.97 mbar = 6897 Pa = 6897 N/m<sup>2</sup> = 2.3 ft 'head of water' = 701 mm 'head of water'  
 1 in 'head of water' = 25.4 mm 'head of water' = 0.036 psi = 0.036 lbf/in<sup>2</sup> = 2.48 mbar = 248 Pa = 248 N/m<sup>2</sup>

**NOTE: Drain test plugs or bag stoppers are not supplied in the kit.**

## Drain Testing & Associated Equipment

York Survey Supply Centre carry a range of items, from Manhole keys to drain dyes and water pumps. Please call for details.