

The tank gauging system comprises of two parts, the sensor complete with the capillary attached and the Indicator separate or the Indicator complete with the capillary attached and the sensor separate.

A detachable capillary system will always be supplied in its detached state.

A black plastic cap protects the detachable capillary connection; and a red plastic cap protects the connection on either the sensor or the Indicator.

We recommend that these caps remain in place until assembly can be made, it is important not to allow any type of foreign matter, dirt or liquid to enter the small bore capillary tube which may result in blockage and lead to inaccurate readings or failure of the gauge.

Once the capillary has been routed loosely along its path, the sensor placed at the storage vessel and the Indicator where it is to be mounted, remove the plastic caps from the Indicator or sensor and the capillary tube and fit the small "O" ring, which is stored on the gauge glass, onto the brass capillary connection and then couple it to either the Indicator or sensor.

Tighten the connection by hand first and then using two spanners, one to hold the fixed union on either the Indicator or sensors, and the other to tighten the capillary connection firmly so the "O" ring completes and maintains a sealed capillary system.

It is important to remember that should the sensor be fitted to the storage vessel prior to the capillary being fitted and tightened in the correct procedure or if the "O" ring is omitted the nitrogen filling will be expelled and the gauge will give false or inaccurate readings or may fail to work.

The Indicator houses a precision movement and metallic capsule, which has been carefully calibrated to suit the tank specification.

It should be positioned with care so that it is protected from mechanical damage by plant or machinery. Although the Indicator is weatherproof we recommend that it be positioned wherever possible in an area that is not fully open to the elements.

With the capillary now fitted to the Indicator or sensor to make the system a sealed unit, the sensor can now be fitted to the storage vessel and the Indicator fitted in its permanent position. Finally, the capillary tube can be fixed along its preferred route for which it is recommended that plastic cable ties be used.

The calibration of the Instrument will not be affected by the elevation of the Indicator in relation to the tank sensor, but it is important to remember that the gauge has been calibrated from a set datum point that was quoted at the time of order (i.e. sensor distance above tank base). Where sensors are mounted below the storage vessel the calibration will include any offset based upon the data received at the time of order.

### **AJD Instruments Ltd**

Unit 9, Lindfield Enterprise Park,  
Lewes Road, Lindfield,  
West Sussex. RH16 2LH. UK  
T +44 (0) 1444 484055  
F +44 (0) 1444 484042  
e mail: sales@ajdinstruments.co.uk  
web: www.ajdinstruments.co.uk

### Detachable capillary