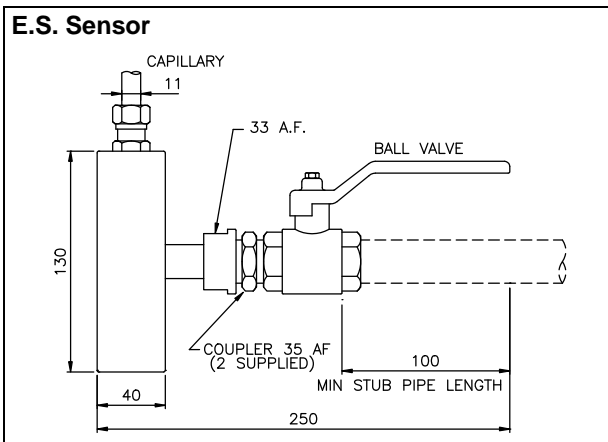


ES HYDROSTATIC SENSOR

The E.S. (External) sensor is an externally mounted hydrostatic sensor which is attached at the base of the tank being measured (above the sludge level) via a 3/4" BSP stub pipe. A ball valve and two male-male couplers are required to allow isolation of the sensor. This makes the installation very straightforward. Please contact sales for ball associated ball valve and couplers.

The sensor is supplied fitted with a length of capillary and is filled with dry Nitrogen gas to eliminate moisture from the system.

The sensor is designed for use with Landon Kingsway hydrostatic gauges, level switches (LK400 series) or the LK10 transducer.



INSTALLATION

Unpack the sensor and capillary **ensuring that the rubber end cap on the capillary is NOT disturbed as this would cause the loss of the Nitrogen gas inside the sensor.** The end of the capillary MUST be kept clean and free from moisture at all times until the system is sealed.

In order to fit the sensor the tank MUST be completely empty of liquid so the ball valve can be fitted onto the stub pipe. Note that the stub pipe should be sufficiently long so that the lever of the ball valve is not obstructed (see diagram above).

The system MUST be sealed before fitting the sensor to the tank. To seal the system, attach the end of the capillary to the sensor. Remove the cap from the capillary and the cap from the socket, fit the supplied O-ring (see diagram) and tighten up the nut using a 20mm spanner. Do not over-tighten.

Before attaching the sensor to the ball valve the valve should be opened to prevent pressure building up when the sensor is tightened onto the stub pipe. A fibre sealing ring is supplied which MUST be fitted inside the sensor coupling when attaching it to the

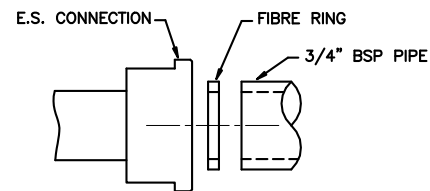
Technical Specification

Standard Material	Mild steel with Viton diaphragm. Also available in brass, stainless steel and UPVC.
Dimensions	Ø130mm x 40mm sensor
Assembled length	250mm
Mounting Connection	3/4" BSP
Max Capillary length	50m to LK400 series, 100m to LK10 or gauge.
Capillary Diameter	11mm
Capillary Nut	22mm
Min Bend Radius	50mm

ball valve. The coupling should be tightened up using a 33mm spanner. **Do not over-tighten.**

Route the capillary to its destination avoiding kinks and sharp bends. We recommend installing the capillary in a conduit not smaller than 2" diameter.

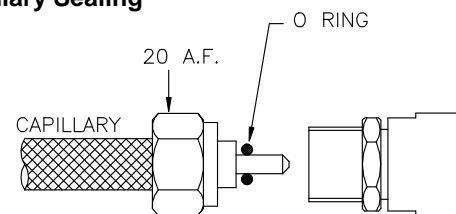
Sensor Connection



IMPORTANT POINTS

- **Do not apply ANY pressure to the sensor until the system is sealed.**
- **The capillary end cap MUST be kept clean and dry until the system is sealed.**
- **Do NOT remove the end caps until ready to seal the system.**
- The system is only as accurate as the tank

Capillary Sealing



information supplied.

If you have any questions or need any help then please contact our sales office.

Failure to follow these installation instructions will result in the warranty becoming void.