

1. Standard Kit = Sensor, Display & Tank connector.

AC Mains power supplies are available for 90 vac to 250 vac. Power supply to the standard unit is 12 to 24 vdc.

Options include:

- “EJ” which is an IP67 ATEX junction box assembly, 3 x 20mm entry, “NJ” is a 1” BSPT tank connection. (See 4 below)
- “M1” mounting kit, (See section 3)
- “B8-ATEX” bund alarm probe system with ATEX Barrier..

Tank connection may be one of two methods.

1/ Top entry by way of an existing free connection. The minimum size we need is 1” BSPT or NPT.

2/ Where no free access is available, the OLE 30 mm expanding seal is ideal. “OJ” Cold Bore tank top with a hole cutter 30 mm clearance hole. (zone 2 / safe area only) Insert the expanding fitting and tighten, ensuring the O-ring makes a suitable seal on the tank surface. (This fitting is suitable for Tank Testing up to 10psi / 0.7bar)



3. Display mounting.

The displays may be mounted on walls or panels by utilising the displays own mount holes. These will retain the IP65 integrity. Allen Cap or Cross Head M4 is ideal for this. (Hole positions are shown on back moulding)

The universal mount bracket available from OLE allows for wall mounting as well as 2” pipe mounting, and 3” pipe mounting. The design allows for either Single display mount, or power box and single display mount. or Single display and T3100 remote monitor, or a Dual display. (Code M1)



2. Probe installation. Top of Tank.

** Make sure the probe you have is right for the tank.

Measure the depth of the tank, **Confirm the tank is vented to Atmosphere.**

Install the probe onto the bottom of the tank in water based products, or suspended 50 mm above the bottom in Fuel oils and lubricants, to avoid the possible water interface areas. (This may avoid possible water / sludge effects on the probe sensor).

Tighten the Cable gland to suspend the sensor. Either run the remaining cable direct to the Gauge unit or **If using a junction box assembly**, (EJ) ensure this is mounted to avoid water ingress. The junction box has an IP66 vent gland to allow pressure equalisation unless submerged when it self seals.

If cutting the sensor cable, strip back 200 mm of outer sheath to ensure free and easy termination without pulling on the cables.



Cut the vent tube to around 30 mm long, and cut the conductors to 200 mm long. If the cable is to be extended. This should be twisted screened pairs, back to the display. (Max cable length with mA sensor is 200 meters) Option to join using OLE Vented cable (Available per meter) Silica gel packs to be fitted to absorb any moisture. **BROWN** = Pressure sensor +24vdc **WHITE** = Not Used **GREEN** = Pressure sensor signal (-ve) See Wiring Diagram.

Z2000 is for Zone 2 and Safe area applications only Suitable EexiallcT4 sensors can be connected to Zone 0/1 areas.

CAUTION: Do not damage the outer sheath of the sensor. This may cause liquid to enter the cable and damage the transmitter circuit.

To test the sensor Output. Measure with a multi-meter set to 20 mA DC range. Disconnect the GREEN sensor connection, and measure in series. The sensor should read between 3.90 mA and 4.15 mA when out of the tank, and between 4.0 and 20.0 mA when in the tank with product present. If the gauge cannot see the sensor, the display will say so.

Sensors should exceed tank height and product. Specific gravity must be considered here.

ATEX Sensors & Cable L

Milliamp Sensors
Model. Range. Cable L
A12 =0-3.0 Meter 10M
A14 =0-5.0 Meter 10M
A16 =0-10 Meter 10M



4. Features The Z2000 comes in 3 forms.

Z2000-A-ATEX-A12 is a standard Gauge with Alarms and a 3 meter ranged tank sensor.

Z2000-A-ATEX-A14 is a standard Gauge with Alarms and a 5 meter ranged tank sensor.

Z2000-A-ATEX-A14 is a standard Gauge with Alarms and a 10 meter ranged tank sensor.

Additional Options

B8-ATEX = Bund Alarm Probe

The Bund Alarm is a mechanical Switch Float. This is fail safe, opening to Alarm. The Bund alarm comes with 10 meters cable and a 1” BSPT Tank connector.

The standard gauge is supplied with a Link wire where the Bund Alarm would be connected. Remove this link and connect the **2 wires from the Barrier.** (This is not polarity sensitive)

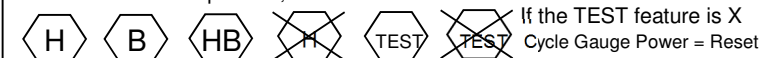
EJ, Junction Box a Extra fittings.



5. Operation

The Z2000 is very simple to operate. There is a Scroll button, which shows Tank Capacity and Ullage space. This will show for 5 seconds before reverting to the standard display. There is an Alarm / Test-Mute button. Press to test the alarm (If fitted). This self resets in 5 seconds.

If an alarm has been 'Muted' the Alarm symbol shows a crossed out image. If a Bund Alarm is incorporated, this shows as a 'B' on screen



**H = High Alarm, L = Low Alarm
B = Bund Alarm**



Calibration: See the separate sheet for calibration set-up. A Jumper / Switch needs to be installed in the “CAL” position and then the various settings screens can be adjusted.

Note: The sensor settings screens are factory set and should not need changing, but can be adjusted to improve accuracy