

YSI Spot Checking

When using a YSI Water Quality Meter we recommend a spot check at the beginning and end of every sampling set to ensure the validity of your results and determine acceptable drift of a meter.

When spot checking. The probe and calibration cup should be rinsed with clean water and then rinsed again with the calibration solution for the selected probe.

The tips below indicate expected values for each parameter (using our YSI unit and supplied reagents). It is very unusual for a well calibrated meter to return these exact values. It is your responsibility to determine the acceptable amount of drift. If you consider one or more parameters to have unacceptable drift please contact Van Walt Ltd for advice.

Fresh quantities of Calibration solution should always be used. NEVER return used solutions into the bottle and please do not return open bottles to us.

Spot checks should be carried out onsite in the same atmospheric conditions that the sampling is to be carried out.

1. EC: Add enough EC solution to cover the large hole towards the top of the EC probe. Ensure there are no air bubbles. Allow to stabilise (1 to 2min). The readout unit should display Specific conductivity in Micro Siemens of 1413. As indicated on the bottle, this is the specific conductivity as if at 25 degrees Celsius
2. pH: Add enough pH solution to cover the pH probe. Allow to stabilise (1 to 2min). pH should display value as indicated on bottle.
3. Redox: Add enough Redox (ORP) solution to cover the ORP probe. Allow to stabilise (3 to 5min). The unit should display ORP in Millivolts. The expected value is dependent on the temperature of the solution. Refer to the chart below for these values.

Temp °C	10	15	20	25	30
YSI Reference	271.4	262.5	255.8	247.6	240.2

4. Dissolved Oxygen: Allow warm up time of 5 to 15 minutes from turning on meter. Ensure DO cap and thermistor are clean and free of water droplets. Add a small amount of water to the calibration cup (not enough to touch the sensors). Partially screw the probe onto the calibration cup (do not screw up tight). Allow atmosphere and temperature to stabilise (10 to 15min) in the cup. Local DO% should display 100%.

