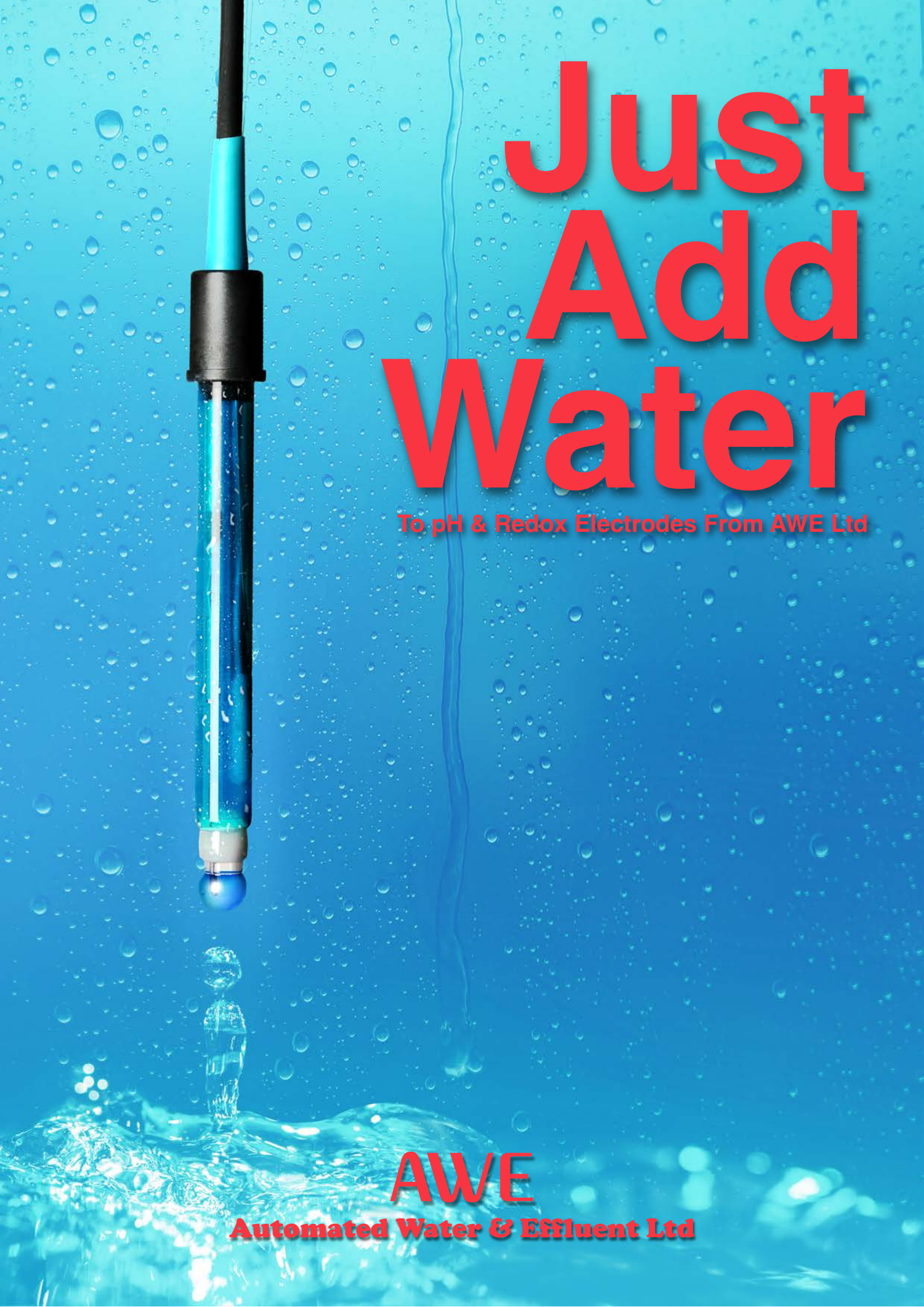
Just Add Water
To pH & Redox Electrodes From AWE Ltd
AWE
Automated Water & Effluent Ltd

Dip Electrodes

Dip electrodes or submersion electrodes are used for measuring the pH or Redox in open tanks, pit or sumps. As the standard, electrodes are manufactured in uPVC the maximum temperature should not exceed 50°C.
This covers a wide range of applications in industrial water and waste water treatment. For higher temperatures or greater chemical resistance or electrode systems with automatic temperature compensation see page 3.

* **Simple Installation**
* **Standard Output**
* **Works with most pH controllers**
* **High Quality**

P36-10B

The P36-10B and R36-10B are a low cost and disposable pH and Redox electrode. Supplied as an economic electrode to the package, metal finishing and waste water treatment plant manufacturers.
The electrode has a standard stock length of 36" and features a sealed combination glass pH electrode or platinum Redox electrode with 3m cable with BNC connector.

PS90S

The PS90S is almost the British Standard effluent plant pH electrode having been manufactured by Automated Water and Effluent Ltd since 1982.
Features a riser tube with mounting flange the PS90S available at any length 500mm to 2000mm. Fitted with PS183-20B pH electrode or RS183-20B Redox electrode with 6m cable with BNC connector.

PTT90S

The PTT90S and RTT90 are the same style of electrode as our PS90S and RS90S electrode systems but fitted with our unique tuff-tip pH or Redox electrodes the PTT183-20B or RTT183-20B lower profile glass or flat platinum disc sensor.
These electrodes are easy to clean and less likely to suffer breakage if mis handled. Both electrodes fit the same riser tube so are interchangeable.

Dip or Submersion electrodes for solutions with variable temperatures. These electrodes can be fitted with combination electrodes with automatic temperature compensation.
To accomodate higher temperatures the housing can be made from a wide range of materials such as cPVC or Polypropylene. These electrodes are compatible with our P7687 and P6587 pH controllers which also display the solutions temperature.

* **Optional Auto Temp Compensation**
* **Increased Chemical Resistance**
* **PVDF Body on 8000 Series**
* **Double Junction Reference**

P8361 **R8391**

P8134 **R8294**

PES4/RES4

The PES4 and RES4 dip or submersion electrodes are designed to hold our standard series 9000 series of pH and Redox electrodes. These are traditional glass or epoxy bodied electrodes, 12mm in diameter fitted with a flared cap and 3m connecting cable. The 9000 series electrode includes full bulb low impeadance glass and epoxy bodied electrodes, through to double junction electrodes with porous teflon junctions.

PES8

The PES8 and RES8 dip or submersion electrodes are designed to hold our standard series 8000 of pH and Redox electrodes.
The PES8 and RES8 feature sealed high performance electrodes in a PVDF housing which provide greater chemical resistance and allow higher temperature solutions to be measured. Features either low profile tuff tip or full glass bulb options.

P8361 and R8391 are high performance sealed pH and Redox electrodes featuring our tuff-tip low profile glass pH electrode or a flat platinum disc for the (ORP) Redox electrode. P8134 and R8294 are a sealed gel filled electrode with a full bulb for the pH providing a fast response.
The (ORP) Redox electrode feature a large annular platinum band both electrodes have a double junction reference in the electrode body.

Inline Electrodes Small Ø Pipes

PES1

Insertion Electrode

* **Sealed Combination Electrode**
* **Low Initial Cost**
* **Ex. Stock Deliveries**
* **Works with most pH controllers**

The PES1 is a simple cost effective pH or Redox electrode holder designed to hold any of our 9000 series of 12mm diameter epoxy or glass bodied electrodes with a flared cap.

The PES1 has a ½" BSP male thread and guard to shield the electrode bulb.

The PES1 is designed for easy electrode removal for calibration or replacement without tools and can be accomplished within a few minutes.

The PES1is designed to fit into ¾" plain tee fitted with a ½" BSP female bush solvent cemented into the tee or a ¾" BSP threaded tee with a ¾"-½" BSP threaded reducer if a threaded tee is preferred either can be supplied with the PES1.

PES1-QR

Inline Combination pH & Redox Electrodes

* **Quick Release Fitting**
* **Easy Removal and Replacement**
* **Electrodes with ATC number**
* **Simple installation and ease of use**

The PES1-QR pH electrode system or RES1-QR Redox electrode system are developed for application from swimming pool water, water treatment plants, cooling water to waste water monitoring.

The PES1-QR pH and RES1-QR Redox electrodes are simple to install inline electrode systems, for low pressure and high temperature applications using uPVC solvent pipe work.

The quick release fitting allows for easy electrode removal for cleaning and calibration or electrode replacement. The electrode guard protects the glass electrode while carrying out these operations
Remember to isolate and drain the line before electrode removal.
Any of our 9000 series electrodes will fit the PES1 or PES1-QR electrode system.

Inline Electrodes Large Ø Pipes

PES2-QR

Inline Combination pH & Redox Electrodes

* **For larger diameter pipe work**
* **PVC sizes 2” to 6”**
* **Flat tuff tip electrode**
* **Flow helps clean the electrode**

The PES2-QR pH electrode system and PES2-QR Redox electrode system feature our PTT183-20B pH electrode or RTT183-20B Redox electrode supplied with a solvent cement inline PVC tee 2” diameter through to 6” diameter.

Easy electrode removal for cleaning, calibration or electrode replacement is swiftly accomplished with the quick release fitting. An isolating valve is recommended before the electrode system to isolate the electrode for removal.

For a system with a high flow rate and an always full pipework the tuff tip electrode can be placed high up in the tee so the flow has a scouring effect on the electrode keeping it clean.

The PTT183-20B pH electrode and the RTT183-20B electrode both have a 6 metre cable and BNC connector.

LNL-PVC

Self-isolating retractable inline pH Electrode System

* **Easy Removal**
* **PVC option for 316SS**
* **No ball valves or cables**
* **No draining for pipework**

L-N-L/PVC retractable pH electrode system
The lock-and-load inserts into a 2” tee or into a tank wall with a 1½” PVC socket welded into a tank wall with the 1½” PVC socket weld on at an inclined angle of at least 10°. The simplicity of the design makes it unique.

A quarter of a turn and pull the body of L-N-L to pull the electrode out. Another quarter of a turn locks the assembly and it is sealed from the line pressure. The electrode can easily be removed for cleaning, calibration or electrode changing. The assembly is safe because the end cap seals from inside out i.e. line pressure seals the end cap.

Replace the system on line is the reverse of removal, a quarter turn to release the body insert the body and electrode into the tee and a quarter turn to lock the body in place and the job is done.

Stainless Steel Electrodes

PES3

Stainless Steel Electrodes

* **316 Stainless Steel Construction**
* **Available with Tri-Clamp Fitting**
* **1.5”, 2.0” or 2.5” can be supplied**
* **9044-10B for high temp installations**

The PES3 stainless steel electrode holder is available with a ½” BSP thread for fitting into a ¾” threaded tee with a ¾” to ½” reducing bush.

For brewery and dairy application we are able to supply the PES3 with a tri-clamp fitting and either a Viton or EPDM “O” ring to suit process chemistry.
The PES3 is designed to hold our 9000 series of 12mm diameter glass pH or Redox electrode Part No. PES3-TRIC

These are available with or without auto temperature compensation standard stock item is a PT100 to suit our pH transmitter or controllers.

LNL-SS

Self-isolating stainless steel inline pH Electrode System

* **Easily removable**
* **Simple operation**
* **All 316 stainless steel construction**
* **Ex. Stock**

The L-N-L lock and load is a pH electrode holder which does not require a ball valve, retaining wire or chain or complex hardware to insert or remove the electrode from the pipeline.

The L-N-L/SS has an insertion length of 64mm being ideal for inserting into a 2” stainless steel tee with a 2” to 1” BSP reducer or through the side of a tank with a 1” socket at least welded on at a inline angle of 10° from horizontal.

The L-N-L lock and load uses the 9300 series of electrodes which are longer than our standard 9000 series electrodes.The 9300 series electrodes have the cost extra option of a stainless steel sheath over the glass body of the electrode.

Retractable Electrodes

RPS90S

Retractable Electrode

* **Easy to use**
* **PVC Construction**
* **Replacable Sensor**
* **High Quality**

The RPS90S is an all PVC retractable electrode system designed for mounting into the side of a tank, fume scrubber or large diameter low pressure pipe which cannot be drained down easily.

The PS90S electrode is fitted through a housing sealed with dual “O” rings with a chamber for the electrode to fit in.
The ball valve can then be closed allowing the electrode to safely be removed for cleaning, calibration or electrode replacement.

The electrode system can then be reassembled and re inserted into the process.
The RPS90S or RRS90S uses our PS183-20B or RS183-20B sensors so spares are common with our dip electrode systems used on many plants.

Live Tap

Self-isolating stainless steel inline pH Electrode System

* **Simple Installation**
* **Easy to use**
* **Stainless Steel Construction**
* **Replacable Sensor**

The live tap retractable electrode system is designed for use where it is not always possible to empty the vessel or pipe work where the electrode is installed. The live tap electrode system allows for the electrode to be removed in this scenario.

Loosening the compression fitting allows for the stainless steel electrode housing to be slid through the 1½” BSP ball valve without difficulty.

You can then close the ball valve to isolate the process before removing the housing, fitting and reducer. This means the electrode can be easily removed for replacement, maintenance cleaning or calibration.

pH Accessories

pH Buffer Powders

pH Buffers in sealed sachets for exceptional shelf life allowing you to make your own buffer solution when your require it. The free flowing powder makes 500 ml of buffer solution when dissolved in deionised water. Included with a pH indicator & preservative to identify the pH of the solution and inhibit mould growth, Red for 4 pH, Green for 7 pH and Blue for 9/10 pH.

This makes for a cost effective way to buffer your pH system.

pH & Redox Calibration Solutions

A ready made pH Buffer or calibration solutions to our strict specifications for your convienience. made up in 250ml plastic bottles at the pH range of 4 pH, 7 pH and 9 pH. For the calibration of all pH instruments using combination electrodes.

We also offer Millivolt calibration solutions ready made up in the same 250ml plastic bottles for the calibration of all Redox controllers.

pH Buffer Station

Take the hard work out of buffering your pH electrodes with our new pH buffer station comprising of a corrosion resistant, custom made polypropylene housing to hold the electrodes in the included wide necked 500ml plastic bottles for a hands free and simple calibration. Each bottle then holds the colour coded solution read for the calibration process.

pH Simulator

Our AWE Instruments pH & mV simulator with a special function for testing the input impeadance of the instrument and testing the impeadance of the pH extension cable between the instrument and pH or Redox electrode.

Other Accessories

We offer 2 pH-Ex cables, our type LMK1 is especially made for our AWE Instruments. This is a low noise cable with an external conductive layer in the cable. The cable can be supplied on 500m drums for site installations or made up into pH extension cables with connectors.

For use with electrodes featuring auto temperature compensation we offer the type LMK3 cable added conductors for auto temperature compensation. Our waterproof pH-J Box is required to connect the electrode to the LMK3 pH extension cable.