

The Watermark

The Newsletter From

Automated Water & Effluent Ltd

Winter 2017/18

New IP65 pH/Redox Controller.



The model P6587 is a surface mounting microprocessor pH, mV, and °C instrument featuring a multi-line graphic display. The instrument displays both pH and temperature along with status information on the

graphic display.

The P6587 is housed in a custom moulded housing designed to IP65 specification for mounting on a flat vertical surface, in effect saving the cost of a control panel, which is ideal when

mounting one instrument close to your process.

The model P6587 maybe user configured for a pH input with a glass pH electrode, antimony electrode or a Redox millivolt electrode. The temperature sensor provides both the automatic temperature compensation for glass pH electrodes and a temperature readout.

The P6587 has two control relays, one alarm relay and an auto-clean relay. The control relays can be user configured for either on / off control, PWM control which is for controlling solenoid valves, or PFM control which is for controlling electronic solenoid dosing pumps with an external pacing input. When using the PFM control, as the pH deviates from the set-point the PFM signal causes the pump speed to increase.

The model P6587 has two isolated current outputs selectable for either 0-20mA or 4-20mA which maybe user configured for either 2 x pH, 2 x mV, or pH and °C.

The P6587 is designed to provide reliable accurate and dependable measurements and control of many industrial processes.

STOP PRESS

To compliment our new P7687 and P6587 pH controllers we will be adding to our range some brand new pH electrodes featuring built in automatic temperature compensation and readout of solution temperature. This is a really useful addition as both the P7687 and P6587 pH controllers can be user programmed to have one of the two isolated 0-20mA / 4-20mA signal configured as a temperature output.

This is extremely useful if you're connecting to online data logger our model CMC99 or CMC141 paperless recorder / data-logger or a PLC with analogue inputs.

2018 CATALOGUE NOW OUT

We are pleased to announce our 2018 catalogue is now available. It already have been sent to our regular customers, and if you would like any information on any of our products, call our sales team on **01785 254 597**.

The 2018 Catalogue features our new P7687 and C7687 pH controllers and conductivity controllers and our P3646 pH transmitters and conductivity transmitters. The catalogue also includes all of our traditional products, which includes our red dosing pumps including our electronic mechanical diaphragm pumps and piston dosing pump versions.

With many of our products exclusive to Automated Water & Effluent Ltd you can be certain that we can provide almost everything required for your process control, water treatment or effluent treatment project.



If you haven't already had a copy of our new catalogue, or would like a colleague to receive one, then please contact Mrs. Vera Young by telephone **01785 254597**. or e-mail vyoung@awe-ltd.co.uk.

Technical Tips

Winter Is Here

With the sudden return of sub-zero winter temperatures and with the wind chill factor bringing about a negative temperatures into double digits, it's a good time to revisit the caustic freezing charts. (A full size caustic free chart can be accessed by clicking on the image to the right).

In Winter we normally have several calls regarding dosing pumps struggling to cope when dosing caustic. The cause is usually customers trying to dose 47% caustic with a dosing pump installed outside with no trace heating. Some purchasing departments buy the strongest caustic they can order, as they feel that with dilute caustic solutions they are paying for water & also paying for shipping water around the country. Correcting a lightly buffered solution with a very strong reagent like Sodium Hydroxide is always going to be

difficult due to the logarithmic nature of the pH titration curve.

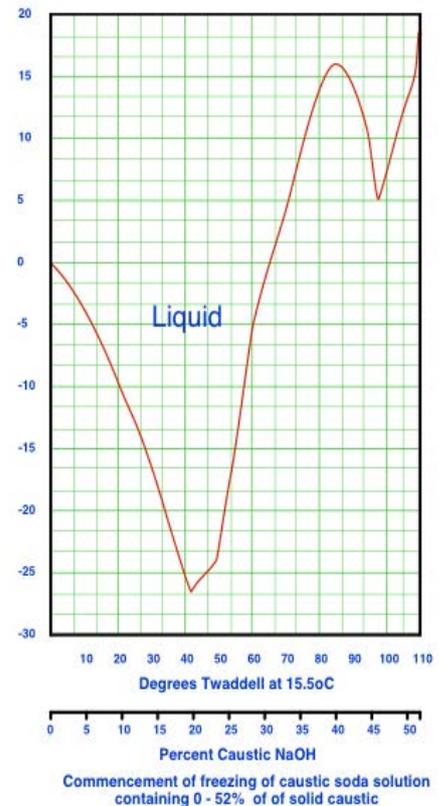
Also strong caustic freezes at a higher temperature than water freezes:- thus requiring the pumps and dosing lines to be trace heated and lagged to prevent freezing.

Our suggestion is to purchase your Caustic Soda at a suitable strength to resist freezing. This will also offer better control of the process, preventing overdosing.

Our full size caustic freezing chart is available to download or print out.

If you need a full sized copy of the caustic Vs freezing point graph then please contact Mrs. Vera Young by telephone **01785 254597**, or e-mail vyoung@awe-ltd.co.uk with your email address and we will email you an A4 sized copy in a pdf. format

Graph Showing the Freezing Point of Caustic



Amperehours Meters



We are pleased to say that many of our customers involved in metal finishing are saving money on chemical reagents and electricity by using our model AH555 Ampere Hour meter meters to measure the current flowing through the rectifiers to a plating vessel.

As there is a relationship between the areas being plated, the current flow, and the volume of chemical reagent consumed deposited, by measuring the amps which are flowing through the plating vessel and the time, we have the ampere hours.

The solution strength can be kept at the optimum strength by dosing proportional to the current flowing during the plating process, hence keeping the plating solution at the optimum strength.

Ampere Hour Meter model AH555.2

The Ampere Hour meter totalises the

current flow. The user can set a current flow set-point, say 1000 amp hours, and a timer which the user can set from between 0 - 99 seconds. When the current flow set-point (1000 amp hours) is reached, a control relay is activated for the desired time, this can be used to operate one of our red dosing pumps to add the required amount of plating solution to keep the plating tank at the optimum level.

We are able to supply polypropylene skid mounted units (ampere hour meter dosing station) with a bunded area to hold 2 x 25 Litre chemical containers, one for use fitted with a red dosing pump with suction lance assembly to fit your 25 Litre drum and a spare to hold the replacement chemical.

Make your site installation simple with an AWE Ltd dosing station, remember you heard it on the AWE grapevine.

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