

# CATALOGUE

2026 JANUARY

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For Water Treatment  
Effluent Treatment  
& Process Industries



**AWE**



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Chemical dosing of hazardous chemicals acid or alkali is dangerous. Automated Water and Effluent Ltd. recommend any pump be installed inside a sealed enclosure and any chemical dosing lines should be installed inside a second chemical resistant tube or pipe. An injection fitting should be shielded so in the unfortunate event of a leakage of any chemical there is no risk whatsoever of persons coming into contact with any chemicals being dosed or mixed. This should also provide mechanical protection for the dosing equipment.

The wetted parts of the dosing pumps and hoses are clearly listed, please check with your chemical supplier the suitability of the materials for handling the chemicals in use. Automated Water and Effluent Ltd. or its suppliers accept no liability of our products as being suitable for handling any chemical or mixture of chemicals. For more concentrated chemicals we are able to offer PVDF heads, PTFE ball valves and PVDF dosing hoses.

# PORTABLE INSTRUMENTS

## Portable Instruments

New for 2026 a range of high quality pH, conductivity and dissolved oxygen meters supplied in robust moulded carrying cases intended for on site use with sensor connection by IP rated "O" sealed connections.

**Model AP200** - portable pH/mV/oC meter range 01-14pH, 0 - ±1000mV meter range, - 30 to 150oC supplied with pH electrode and carrying case

**Model AEC200** - portable conductivity, TDS, resistivity salinity and temperature meter supplied with K=1.0 cell and carrying case

**Model ADO200** - portable DO2 meter 0-200% or 0-20mg/l supplied with galvanic dissolved oxygen probe with 2 metre connecting cable

## Spares

**9652-10D** - Combo pH electrode with BNC connector

**3551-10D** - Condy Cell K=0.1 Glass & Platinum

**9383-10D** - Condy Cell Titanium & Platinum Black K=1.0

**3553-10D** - Condy Cell K = 10 Glass & Platinum



## Stick Meters

**pH Testr 10** - Waterproof Portable pH tester range 0- 14.0 pH with buffer recognition and Auto Temp comp.

**EC Testr 11** - Waterproof Portable  $\mu$ S tester ranges 0- 2000 $\mu$ S and 0 - 20.00mS with ATC.

## Spares & Accessories

**7005-3B** - Plastic bodied pH combination electrode  
**7006-3B** - Plastic bodied Redox combination electrode

**A8000** - Replacement Stainless steel temp sensor

**A1003** - Epoxy cell 12mm  $\varnothing$  K= 1.0 with ATC

**A1000** - Heavy duty PVC cell K= 1.0 with ATC

**A1000** - Heavy duty PVC cell K= 0.1 with ATC

**pHWPSen** - Replacement electrode with ATC

# CALIBRATION SOLUTIONS

## pH Buffer Station

**PPBS-479** - Take the hard work out of buffering your pH electrodes with our new pH buffer station comprising of corrosion resistant, Custom made polypropylene housing with wide necked 500ml plastic bottles. To contain 4, 7 & 9 colours coded pH buffers 500ml to hold user supplied cleaning solution and a wash bottle

## pH Buffer Powders

pH Buffers in sealed sachets for exceptional shelf life. The free flowing powder makes 500ml of buffer solution. Supplied with indicator- preservative to identify the pH of the solution and inhibit mould growth. Each sachet makes up 500ml of buffer when dissolved in deionised water.

- BPB 4** - Box pH buffer 4pH makes 5 x 500 ml
- BPB 7** - Box pH buffer 7pH makes 5 x 500 ml.
- BPB 10** - Box pH buffer 10pH makes 5 x 500 ml.



## pH Calibration Solutions

pH Buffer or calibration solutions ready made up in 250 ml. plastic bottles. For the calibration of all pH instruments using combination electrodes.

- pHBS 4** - 4.00 pH ready made up in 250 ml plastic bottles
- pHBS 7** - 7.00 pH ready made up in 250 ml plastic bottles
- pHBS 9** - 9.00 pH ready made up in 250 ml plastic bottles
- pHBS 10** - 10.00 pH ready made up in 250 ml plastic bottles



## Redox Calibration Solutions

Millivolt calibration solutions ready made up in 250 ml. plastic bottles. For the calibration of all Redox controllers.

### RBS

- Redox buffer solution 616 mV - 250 ml
- Redox buffer solution 220 mV - 250 ml
- Redox buffer solution 468 mV - 250 ml



## Conductivity Calibration Solutions

Conductivity calibration solutions ready made up in 250 ml plastic bottles.

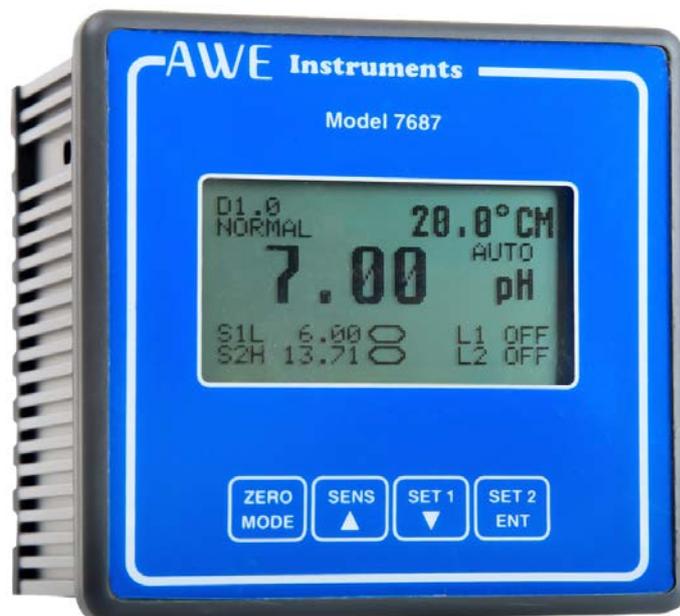
- C1000** - 1000  $\mu$ S at 25°C
- C2000** - 2000  $\mu$ S at 25°C
- C10,000** - 10,000  $\mu$ S at 25°C

# pH & REDOX PANEL MOUNTING INSTRUMENTS

## P7687 Series Controllers

When precise control is required the microprocessor based P7687 is ideal featuring two full PID controllers specially designed for pH control, selectable for p, P+, P+D or PID control. PFM pulse frequency modulation for proportional control of our electronic dosing pumps with adjustable set points and proportional band selectable for either one acid and one alkali-dosing pump. Duty and assist acid pumps or duty and assist alkali pumps. PWM pulse width modulation for proportional control solenoid valves as above

**P7687** - pH/mV controller with two control relays on/off PFM for proportional control of dosing pumps or PWM for proportional or PID control solenoid valves, alarm relay, auto clean relay with freeze and hold & isolated 0 - 20 / 4 -20mA current outputs selectable for 2 x pH or pH & °C



The microprocessor based P7635 & P7687 series of instruments have a very short case length allowing mounting in a shallow panel and wall mounting housing where 2 or more instruments are to be mounted together.



## P7687.103

New panel mounting controller with 4 inputs one for conductivity which maybe selected or turned off two additional inputs selectable for either pH or redox & a common temperature input for °C & auto temp comp. Allowing 2 x pH, 2 x mV or pH & mV inputs plus the conductivity if selected. With two control relays on/off, PFM or PWM, an alarm relay, auto clean relay & two isolated current outputs



## P7635 Series Controllers

**P7635** - pH / mV controller range 0 - 14.00 pH or 0 - ±1000 mV, 2 control relays one alarm relay, logic input & isolated 0-20 / 4-20mA output, mains supply 86 - 264 VAC

**AK96** - Instrument door to IP55 for the P7600 range.

**P7335** - As above in 96 x 48 Din enclosure spec as P7635

**AK48** - Instrument door to IP55 for the P7300 range.

# pH & REDOX SURFACE MOUNTING INSTRUMENTS

## P6587 Series Controllers

The microprocessor based 6587 series of instruments featuring a new design of IP65 surface mounting housing. The 6587 series will have all the functions of the 7687 series of instruments.

**P6587** - pH / mV controller with two control relays on / off, PFM for proportional control of dosing pumps, or PWM for proportional or PID control solenoid valves, alarm relay, auto clean relay with freeze and hold & isolated 0-20 / 4-20mA

**P6587.103** - New surface mounting controller with 4 inputs one for conductivity which maybe selected or turned off two addition inputs selectable for either pH or redox & a common temperature input for oC and auto temp comp. Allowing 2 x pH, 2 x mV or pH & mV inputs plus the conductivity if selected. With two control relays on/off, PFM or PWM, an alarm relay, auto clean relay & two isolated current outputs.



## Surface Mounting Transmitter & Controllers

The P3436 Two wire digital transmitter is user selectrable for pH or redox (orp) millivolts is ideal for converting the pH or redox electrode signal into an industry standard 4 - 20 mA signal and featurers a RS485 digital signal for connection to PLCs or dataloggers etc. The P3647 & R3647 controllers offer cost effective pH or redox control of a wide selection of industrial process.



### Two Wire pH & Redox Transmitters

**P3436-W** - Microprocessor pH / mV two wire transmitter, isolated 4 - 20 mA output and RS485 digital connection power supply 24VDC. Deduct £34.00 if Waterproof enclosure is not required.

**P3630-W** - Two wire pH transmitter isolated 4 - 20 mA O/P, power supply 24VDC in IP55 enclosure.

**R3630-W** - Two wire mV. transmitter isolated 4 - 20 mA O/P, power supply 24VDC in IP55 enclosure.



### pH & Redox Controllers

**P3647W** - pH Controller with 2 set points & 4 - 20 mA output in an IP55 w'proof enclosure.

**R3647W** - Redox meter range 0 - 1000 mV as P3647 Mains supply 115/230 VAC

### P7635-W & P7335-W Controllers

**P7635-W** - P7635 pH/mV controller fitted into a surface mounting enclosure fitted with an AK48 door.

**P7335-W** - As P7635-W with the P7335 controller

# pH & REDOX ELECTRODE SYSTEMS



## Dip Electrode Systems

Dip or submersion electrodes are designed to be submerged into unpressurised vessels, tanks, sumps or pits for use in industrial wastewater treatment or process control where continuous pH or Redox monitoring is required. The P36 & R36 are supplied 36" long and have fixed electrodes which can not be replaced, the PS90S & RS90S can be made any length up to 3m long and have replaceable electrodes.

**P36-10B** - Disposable sealed pH dip system in PVC. 900 mm long

**R36-10B** - Disposable sealed Redox dip system in P.V.C. 900 mm

**PS90S** - Dip pH electrode system in PVC. 1000 mm long with sealed glass electrode and mounting flange

**PS90TBS** - Dip pH electrode system in PVC. 1000 mm long with sealed thick bulb glass electrode and mounting flange

**RS90S** - Dip Redox millivolt system in PVC. 1000 mm long with sealed platinum electrode and mounting flange

**AS90S** - Dip Antimony system in PVC. 1000 mm long with sealed antimony electrode and mounting flange

**PTT90S** - Dip pH electrode system in PVC. 1000 mm long with *Tuff Tip* pH electrode and magna flow liquid junction

**RTT90S** - Dip Redox mV electrode system in PVC. 1000 mm long with *Tuff Tip* pH electrode and magna flow liquid junction

**-AC** - Auto clean air blast nozzle, J-box solenoid valve & 5m cables and hoses requires compressed air supply for PS90S RS90S PTT90S RTS90S

**PES4** - Dip pH electrode system in cPVC 1000 mm long with *Tuff Tip* style pH electrode fitted ATC & 5 m cable

**RES4** - Dip Redox millivolt electrode system in cPVC 1000 mm long with *Tuff Tip* style platinum electrode & 5 m cable



## Replacement Electrodes

Electrode insert with fixed length of cable which screws into the bottom of the electrode dip or riser tube

**PS183-20B** - PS90S pH electrode insert 6m cable & BNC plug

**PS183TB-20B** - PS90S Thicker bulb pH electrode 6m cable & BNC plug

**RS183-20B** - RS90S Redox electrode insert 6m cable & BNC plug

**AS183-20B** - AS90S Antimony electrode insert 6m cable & BNC plug

**PTT183-20B** - PTT90S pH electrode insert 6m cable & BNC plug

**RTT183-20B** - RTT90S Redox electrode insert 6m cable & BNC plug

**9092-V12-20B** - pH electrode, with ATC and 6m cable

**9086-20B** - Redox mV electrode with 6m cable

# pH & REDOX ELECTRODE SYSTEMS

## Inline Electrode Systems

Inline electrodes are used for installation into pipework usually in a "Tee" the pipe should be fitted with isolating and drain valves for safe & easy removal of the electrode for calibration. In installations where this is not possible the Lock -N-Load electrode system should be used as this electrode system seals itself on removal from the pipe or vessel.

**RPS90S** - Retractable pH electrode system flange mounting with PVC ball valve. The electrode can be withdrawn the valve closed and the electrode removed for cleaning and calibration without draining the tank or flume scrubber supplied with PS183-20B electrode

**RRS90S** - Retractable redox electrode system system flange mounting with PVC ball valve. The electrode can be withdrawn the valve closed and the electrode removed for cleaning and calibration without draining the tank or flume scrubber supplied with RS183-20B electrode



## Inline Electrodes

**PES 1-QR** - Flow line system 3/4" in PVC. tee with quick release fitting & 9069 glass combination pH electrode.

**RES 1-QR** - Flow line system 3/4" in PVC. tee with quick release fitting & 9065-10B platinum combination redox electrode

**PES 2-QR** - Flow line system 2" in PVC. Tee with quick release fitting & PTT183-20B electrode

**RES 2-QR** - Flow line system 2" in PVC. tee with quick release fitting & RS183-20B platinum redox electrode



## Lock-n-Load Electrodes

**LNL-P** - Lock-n-load on line retractable pH electrode holder in 1 1/2" BSP with DJ. combination pH electrode

**LNL-SS-P** - Lock-n-load on line retractable pH electrode holder in 316 stainless steel. 1" BSP with DJ. combo pH electrode

# pH & REDOX ELECTRODES & ACCESSORIES

## Series 9000 Replacement Electrodes

Our 9000 series of electrodes are traditional glass bodied electrodes 110 mm long by 12 mm Ø fitted with 3 m connecting cable. The cap is in ryton with a small flange for mounting the electrode into our PES style holders. The 9000 series electrodes maybe used as replacements for many OM electrodes often out performing the original electrodes.



**7017-10B** - Epoxy bodied flat glass pH electrode 3 m cable  
**7018-10B** - Epoxy bodied mV electrode 3 m cable



**7015-10B** - Epoxy bodied pH electrode with 3 m cable  
**7016-10B** - Epoxy bodied mV electrode with 3 m cable



**9069-10B** - Glass bodied pH electrode with 3 m cable  
**9065-10B** - Glass bodied Redox electrode with 3 m cable



**9092-10B** - Peripheric DJ. pH electrode with 3 m cable  
**9086-10B** - Peripheric DJ. Redox electrode with 3 m cable



**9093-10TV12** - pH electrode with built in Pt100 fitted 3 m cable



**9072-10B** - Low conductivity water pH electrode 3 m cable



**9044-10B** - Peripheric DJ high temp pH electrode 3 m cable



**9392-10B** - Long body pH electrode for Lock-n-load DJ.  
**-SS** - Stainless Steel sheath on L-N-L electrode (add)



## Euro Style Electrodes

**9015-S8** - Plastic bodied pH electrode with S8 connector  
**9016-S8** - Plastic bodied Redox electrode S8 connector



**9069-S8** - Sealed pH electrode with S8 connector  
**9065-S8** - Sealed Redox electrode with S8 connector

**9001098-10T** - Lead for S8 connector stripped and tinned



## Accessories

**pH-Ex** - Ex-cables ready made up with connectors  
**LMK1** - Special pH extension cable cost per metres  
**PJ-B** - W'proof pH J-box for use with ATC electrodes  
**LMK3** -pH extension cable with ATC cost per metre



## pH Simulators

**APS2** - AWE Instruments pH & mV simulator with special function for testing the input inpeadence of the instrument and testing the impeadence of the pH extension cable between the instrument and pH or redox electrode.

# pH & REDOX ELECTRODES

## Insertion Electrodes

Our insertion electrodes are designed to screw directly into a pipe or vessel which can be easily isolated or drained for electrode maintenance. Insertion electrodes like all electrodes should be mounted at least 10° angle up from horizontal for best performance.



**9027-10B** - pH electrode 1/2" male thread sealed reference temp range 0-100°C pH range 0-13 pH



**9126-10B** - Redox (ORP) electrode large Platinum band, sealed reference with annular junction



**PES1-10B** - Flat glass pH electrode with epoxy body in PVC housing with guard 1/2" BSP thread 0 - 50°C pH 0 - 12 pH.



**RES1-10B** - Flat Platinum Redox (ORP.) electrode with epoxy body in PVC housing with 10' cable and BNC connector.



**R8134-20B** - pH electrode in PVDF housing with ceramic reference junction 3/4" thread 0 - 100°C pH range 0 - 13 pH.



**R8294-20B** - Redox electrode in PVDF housing with ceramic reference junction 3/4" thread 0 - 100°C range



**P8361-20B** - Flat glass pH electrode with Kynar (PVDF) housing good chemical resistance pH range 0 - 13 pH.



**R8391-20B** - Flat Platinum Redox (ORP.) electrode with Kynar (PVDF) housing DJ temperature range 0 - 100°C.



**P8362-TC1-20B** - pH electrode PVDF housing, porous teflon reference junction mounting 3/4" thread pH range 0 - 13 pH



**R8392-20B** - Redox electrode PVDF housing porous teflon reference junction mounting 3/4" thread temprange 0 - 100°C



**PES3** - Electrode holder in 316 stainless steel for greater mechanical strength and high temperature use in the Dairy and Brewing supplied with 9044-10B electrode



**RES3** - Electrode holder in 316 stainless steel with 9086-10B combination redox electrode.

## Automatic Temperature Compensation

Many modern pH controllers also read solution temperature and have auto temperature compensation fitted as standard. We are able to supply pH electrodes with built in ATC and we are also able to supply separate stainless steel auto temperature compensators.



**ATP100-10ST** - Stainless steel automatic temperature compensator temperature range 0 - 100°C mounting by 1/4" BSP male thread, length 100 mm cable length 3m

# PANEL MOUNTING CONDUCTIVITY INSTRUMENTS

## Panel Mounting Controllers

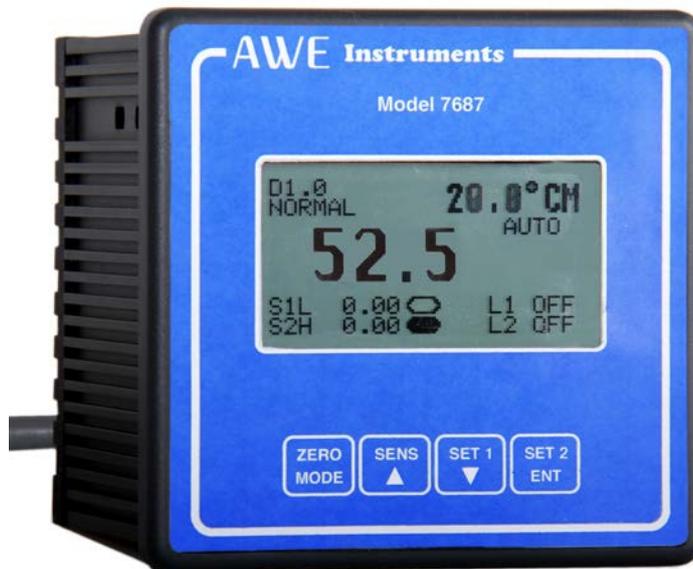
C7335, C7635 and the new C7687 Conductivity controllers all feature a Din enclosure with a very short case length of only 95 mm ideal when compact dimensions are required. Featuring a switched mode power supply 86 - 264 VAC and user selectable conductivity ranges, make these an ideal instrument to hold in stock.

## C7687 Series Controllers

The microprocessor based 7687 series of instruments featuring the short case length of the C7635 series instruments but with all the functions and more of the 7685 series of instruments.

**C7687** - Microprocessor conductivity & °C meter selectable ranges 0 - 20.00  $\mu$ S, 200.0  $\mu$ S, 2000  $\mu$ S, 20.00 mS & 200.0 mS Selectable cell constants k= 1.0, 0.1 or 10.0 increases or decreases the range by 10 fixed or auto ranging. Two set points, alarm relay, auto temp comp & 2 isolated current outputs, supply 86 - 264 VAC

**AK96** - Instrument door to IP55 for the C7600 range



## C7635 & C7335 Series Controller

**C7635** - Conductivity controller with user selectable ranges 0 - 20.00  $\mu$ S, 200.0  $\mu$ S, 2000  $\mu$ S, 20.00 mS & 200.0 mS. Selectable cell constants k= 1.0, 0.1 or 10.0. Two control relays one alarm relay & isoated 0 - 20 / 4 - 20mA output, supply 86 - 264 VAC

**AK96** - Instrument door to IP55 for the P7600 range

**C7335** - As above in 96 x 48 enclosure spec as C7635 Instrument door to IP55 for the C7300 range



## C7685 Series Controllers

For those more demanding applications measuring higher conductivities the C7685 and micro transmitter pre amplifier which increases the measuring range by a factor of 100

**C7685** - Conductivity / °C meter with 4 ranges 0-20.00, 0-200.0, 0-200 $\mu$ S & 0-20.00 mS Two control relays, alarm relay, ATC & isolated current output. *No photo*

**MTEC** - Electrodeless cell preamplifier ranges 0 - 2.0, 0 - 20.0 0- 200.0 & 2000 mS. *C7685-001 Now replaced by the C7687*

# SURFACE MOUNTING CONDUCTIVITY INSTRUMENTS

## Surface Mounting Transmitter & Controllers

The C3645 controller offer cost effective control of a wide selection of industrial process. Supplied as either DIN rail mounting or in a weatherproof enclosure.

C3630 & C3436 two wire transmitters are ideal for converting a solution conductivity into an industry standard 4 - 20 mA signal for connection to PLCs or dataloggers etc. The C3436 microprocessor conductivity two wire transmitter offers touch button controls and can be supplied in a weatherproof enclosure.

## C6587 Series Controllers

The microprocessor based 6587 series of instruments featuring IP65 surface mounting housing. The 6587 series will have all the functions of the 7687 series of instruments in a surface mounting housing.

**C6587** - Conductivity controller with two control relays on / off, PFM for proportional control of dosing pumps or PWM for proportional or PID control solenoid valves, alarm relay, auto clean relay



## Conductivity Controllers

**C3645-W** - Conductivity controller, ranges 0-200  $\mu$ S, 0-2000  $\mu$ S or 0-20.00 mS, select the range when ordering. One set point with a 0 - 40 sec delay timer & 4 - 20 mA current output supplied in an IP55 enclosure



## Two Wire Transmitters

**C3630-W** - Two wire conductivity transmitter ranges 0-200  $\mu$ S, 0-2000  $\mu$ S or 0-20.00 mS, to be selected when ordering. Output isolated 4 - 20 mA O/P. Supply 24 VDC same two wires, mounted in an IP55 W'proof enclosure

-W - Deduct W'proof enclosure if not required

**C3436-W** - Microprocessor conductivity two wire transmitter, with user selectable ranges isolated 4 - 20 mA output, power supply 24VDC in IP55 enclosure.

-W -Deduct W'proof enclosure if not required



## C7335-W & C7635-W Controllers

**C7335-W** - C7335 Conductivity controller in a surface mounting inclosure fitted with an AK48 door.

**C7635-W** - C7635 Conductivity controller in a surface mounting inclosure fitted with an AK96 door

# CONDUCTIVITY CELLS



## Dip Conductivity Cells

Dip conductivity cells for installation in open vessels. The D1 cells are high linearity cells with  $k = 1.0$  and  $10.0$  with either cPVC, PVDF or SS riser tubes. Max conductivity of  $100 \text{ mS } k = 1.0$  or  $1000 \text{ mS } k = 10.0$  depending upon the instrument in use. The D2 range cells are standard cells with  $k = 1.0$  or  $0.1$  with uPVC riser tubes max temperature is  $50^\circ\text{C}$  max conductivity of  $50 \text{ mS}$  depending upon the instrument in use.

**D1-10** - Dip cell  $k = 1.0$  in epoxy 600 mm long cPVC riser tube max temp  $80^\circ\text{C}$

**D1-100** - Dip cell  $k = 10.0$  in epoxy 600 mm long cPVC riser tube max temp  $80^\circ\text{C}$

**D2-01** - Dip cell  $k = 0.1$  in epoxy 600 mm long PVC riser tube max temp  $50^\circ\text{C}$

**D2-10** - Dip cell  $k = 1.0$  in epoxy 600 mm long PVC riser tube max temp  $50^\circ\text{C}$

- cPVC - cPVC riser tube on D1 cells per metre
- SS - SS riser tube on D1 cell per metre
- F - P.V.C. Mounting flange for dip cells
- T - Auto Temperature comp fitted to cell



## High Temperature Conductivity Insertion Cell

**PSE4 10-HT** - High temp insertion cell  $K = 1.0$  in stainless steel with  $3/4"$  thread

## Accessories

Insertion conductivity cells are easily converted into flow line cells by installing the insertion cell into a "Tee" we recommend that a "Tee" of at least one size larger than the thread on the cell that is used (except the IN5 cell) so as not to restrict the flow through the Tee.



-T- PVC - PVC Tee with adaptors to  $3/4"$  BSP max temp  $50^\circ\text{C}$  pressure 3 bar

-T- PP - Polypropylene Tee with adaptors to  $3/4"$  BSP max temp  $80^\circ\text{C}$

-T- SS - Stainless Steel Tee with adaptors  $3/4"$  BSP (see cell for limits)

# CONDUCTIVITY CELLS



## Insertion Conductivity Cells

Insertion conductivity cells are for installation into pipework to measure the conductivity either in bypass pipe work or into large diameter pipes or vessels.

**IN5-01** - Insertion cell  $k=0.1$  In PVC with graphite electrodes and BSP 3/4" thread

**IN5-10** - Insertion cell  $k=1.0$  In PVC with graphite electrodes and BSP 3/4" thread

**CP621-10** - Insertion cell  $k=1.0$  In cPVC epoxy and graphite with 3/4" thread

**CP621-01** - Insertion cell  $k=0.1$  In cPVC epoxy and graphite with 3/4" thread

**CP721-10** - Insertion cell  $k=1.0$  In Peek and graphite with 3/4" thread max temp 120°C

**IN2-10** - High linearity cell  $k=1.0$  In Peek & epoxy, graphite electrodes 3/4" BSP thread

**IN2-100** - High linearity cell  $k=10.0$  In Peek & epoxy, graphite electrodes 3/4" BSP thread.

**PSE-01** - Insertion cell  $k=0.1$  In S'steel 3/4" thread

**PSE-001** - Insertion cell  $k=0.01$  In S'steel 3/4" thread



## Flow Line Conductivity Cells

**FL3 01** - Flow Line cell  $K=0.1$  in P.V.C. fitted 2m cable for low temperature / pressure use

**FL3 10** - Flow Line cell  $K=1.0$  in P.V.C. fitted 2m



## Accessories

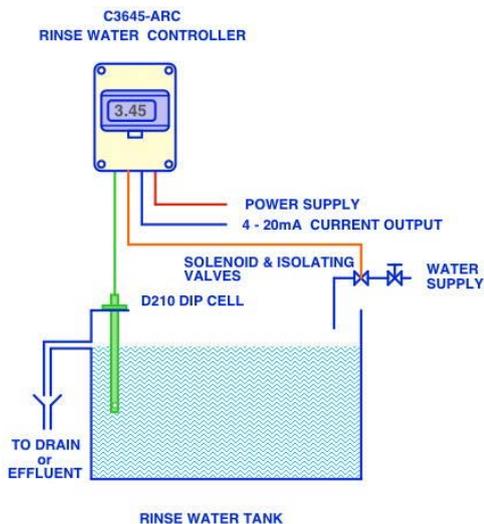
**ACS1** - Conductivity simulator 11 switched outputs from 1-100,000  $\mu\text{S}$ .

**LMK2** - Connecting cable no ATC per metre

**LMK4** - Connecting cable with ATC per metre

**LMK7** - Connecting cable for electrodeless cells and MTEC per metre

# CONDUCTIVITY CONTROL KITS



## Auto Rinse Water Control Kits

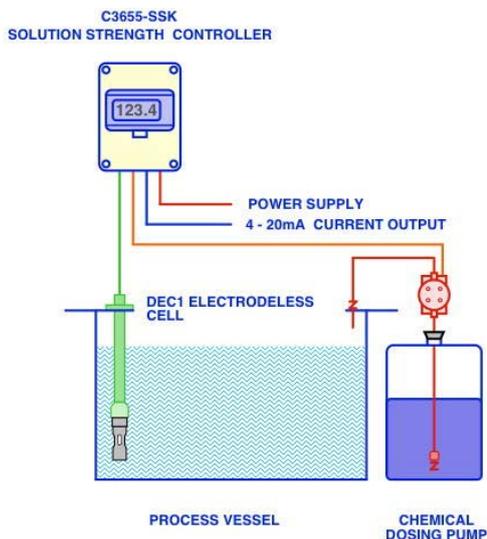
The metal finishing industry uses vast quantities of both town supply and demin water to rinse components after chemical processing. Savings in water can be achieved by only adding water when the rinse tank is contaminated which can be controlled by conductivity.

**C3645-ARC** C3645-W controller ranges 0-200 $\mu$ S, 0-2,000 $\mu$ S & 0-20mS with ATC mains supply 115/230 VAC

D210T10KF 600mm long dip cell with ATC, mounting flange & 3 m cable, max temp 50°C  
BSV050-00 brass solenoid valve 1/2" B.S.P.

As above with BSV075-00 Brass solenoid valve 3/4" B.S.P. with w'proof coil

As above with BSV075-00 Brass solenoid valve 1" B.S.P. with w'proof coil



## Solution Strength Control Kit

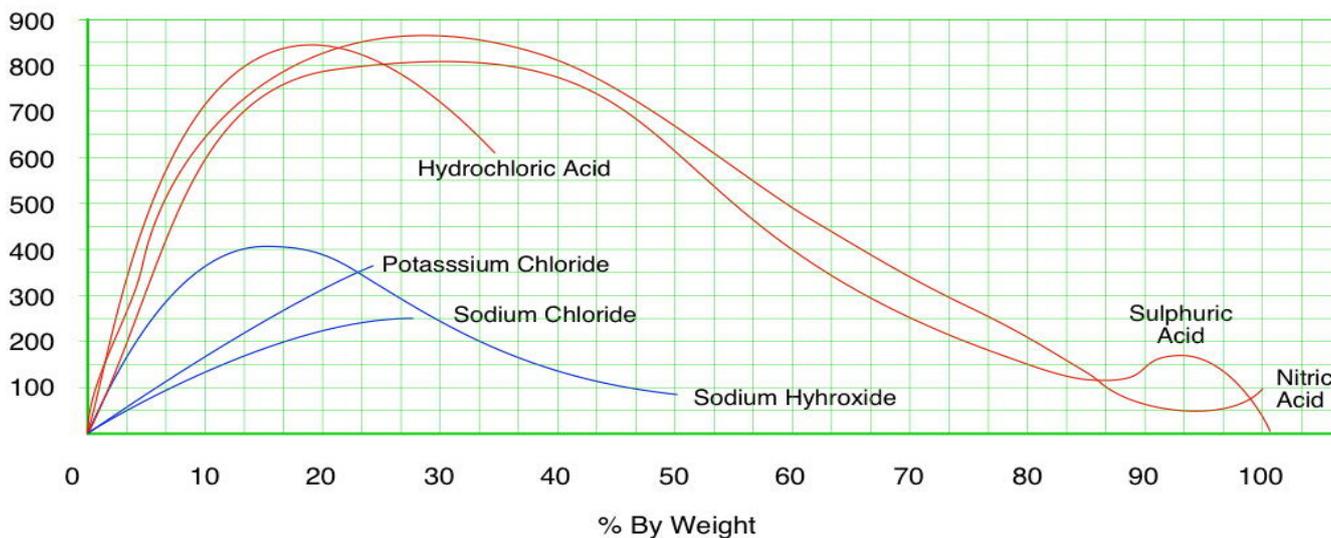
**C3655-SSK** C3655 electrodeless conductivity controller range 0 - 20, 0 - 200 or 0 - 2000mS. TBA with order.

DEC1 600 mm dip cell in PVDF with cPVC riser tube fitted ATC, mounting flange & 2 m cable.

AT4-BL 01-60 dosing pump 0 - 60 l/Hr with suction lance, hose & injection fitting

**Kits can be made up with any of our cells or pumps to suit your application, please call our sales office for details.**

## Conductivity at 25°C in millisiemens



# ELECTRODELESS CONDUCTIVITY CONTROL



## Electrodeless Conductivity Control

The strength of acid and alkali solutions may be accurately controlled by using conductivity. As the solution strength increases the electrical resistance decreases (conductivity is the reciprocal of resistance). Care must be taken as most solutions reach a peak where the conductivity decreases again. This is shown on our solution strength Vs conductivity graph. Our electrodeless conductivity systems feature sensors which are unaffected by fouling. Typical applications are the control of processing solutions in the metal finishing industry and the control of CIP solutions in the food & brewing industries.

## Electrodeless Conductivity Controllers

**C3655W** - Electrodeless or (Torroidal) conductivity controller in surface mounting enclosure, range 0-20, 0-200 or 0-2000mS TBA with order. Control relay and 4 - 20 mA output mains supply 115/230 VAC.

**C7685-MT** - Panel mounting electrodeless conductivity controller selectable ranges 0-20, 0-200 or 0-2000mS with 2 control relays, alarm relay & 4 - 20 mA output, cell preamplifier, mains supply 115/230 VAC.

**DEC1** - Dip cell in 600mm long in PVDF with PVC riser tube, fitted ATC mounting flange & 2 m cable max temp 50°C

-cPVC - Fitted cPVC riser tube max temp 85oC add

-SS - Fitted Stainless riser tube max temp 100oC add

## Two Wire Electrodeless Conductivity Transmitters

Electrodeless conductivity transmitter in cPVC with built in electronics to provide a temperature compensated isolated 4-20mA signal. The same two wires that power the transmitter also carry the current signal allowing the transmitter to be mounted up to 1000 metres away from the receiving instrument with just our LMK2 connecting cable.

**BCT10** - Two wire electrodeless conductivity transmitter in cPVC range 0 - 10mS

**BCT100** - Two wire electrodeless conductivity transmitter in cPVC range 0 - 100mS

**BCT1000** - Two wire electrodeless conductivity transmitter in cPVC range 0 - 1000mS

**BCT1000-K** - Two wire electrodeless conductivity transmitter in PVDF range 0 - 1000mS

**RT90** - Riser tube with mounting adaptor 600mm add.

**BC7635** - Panel mounting controller with loop power supply 2 set points & 4 - 20mA output



# DISSOLVED OXYGEN

## DO<sub>2</sub> Controllers & Sensors

Our traditional dissolved oxygen controllers offer a simple cost-effective solution to your dissolved oxygen measurement and control application. Employing our well-established OD7635 panel mounting controller which features two control relays, one alarm relay, logic input which may be used as a duty standby input and an isolated 0 - 20 mA / 4 - 20 mA current output.

The power supply is 86 to 264 VAC by a switch mode power supply. Like all the series 7635 instruments which include pH, redox (ORP) millivolts, conductivity, residual chlorine and a slave controller which accepts a 4 - 20 mA input the 7635 can be supplied in a surface mounting weather proof housing. This is made possible because of the short case length of the 7635 series instruments.



## DO<sub>2</sub> Controllers

**OD7635** - DO<sub>2</sub> controller 96 x 96 with two control relays, alarm relay, & isolated 4-20mA output, mains supply 86 - 264 VAC

**DES 2** - Galvanic DO<sub>2</sub> sensor for measurement of dissolved oxygen with auto temp compensation built into the sensor fitted 5m connecting cable supplied with guard and transit pot. To include 1000 mm long riser tube and mounting flange

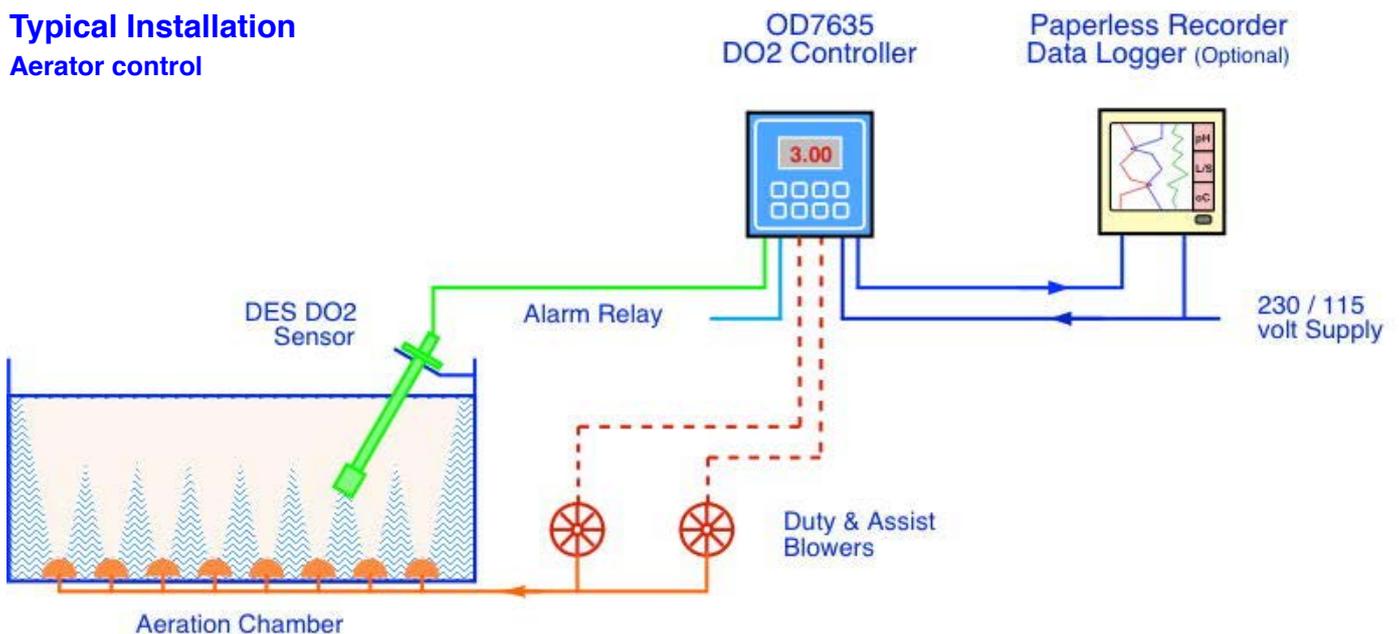
**DES-2RPS** - Replacement plugin sensor

**DES-2Refirb** - Refurbished plugin sensor returned to factory fitted. New anode, new membrane & "O" rings, new electrolyte

**-PF** - Float 600 mm Ø for use where the liquid level changes.

**LMK6** - DO<sub>2</sub> connecting cable per metre length

## Typical Installation Aerator control



# DISSOLVED OXYGEN OPTICAL



## Optical DO<sub>2</sub> Two Wire Transmitter

These unique sensors have been specially designed to measure dissolved oxygen using the fluorescent technology or optical principal of measurement. Sensors are available for inline applications where the sensor is mounted in line in a large bore pipe or off line in a sample cell. For dip applications in pits sumps or tanks with auto clean by the air blast method.

## Inline DO<sub>2</sub> Two Wire Transmitter

**OD8525** - Two wire optical DO<sub>2</sub> transmitter for inline installation, ranges 0 - 20ppm or 0 - 200% sat air TBA with order, output 4 - 20 mA power supply 24 VDC

**FES2-QR** - Inline flow cell in PVC add.

## Submersion DO<sub>2</sub> Two Wire Transmitter

**OD8325** - Two wire optical DO<sub>2</sub> transmitter, submersible with auto clean air blast nozzle. ranges 0 - 20ppm or 0 - 200% sat TBA output 4 - 20 mA power supply 24 VDC

**RT90** - Riser/dip tube with mounting adaptor upto 1000mm add.

**-ACK** - Auto clean kit for OD or TU 2 wire sensor cleaning with 230 VAC air compressor valves & hoses etc. add



## Slave Control instruments

Either of the sensors can be connected to a controller which powers the 4-20mA loop and provides a read out and two control relays, an alarm relay and 4-20 mA output available for panel or surface mounting as follows.



**BC7635** - Panel mounting indicator controller with two control relays, alarm relay and a 4 - 20mA output.

**BC7687** - Panel mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4-20mA outputs.

**AK96** - Instrument door for the 7600 series of instruments



**BC6587** - Surface mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4-20mA outputs.

# TURBIDITY

## Two Wire Transmitters

Two wire sensors are ideal for applications where the sensor is remotely mounted from the indicator, recorder/data logger or controller. As just two wires are required, see our LMK2 connecting cable which is ideal for these applications. The same two wires which carry the 24 VDC power supply also carry the analogue 4-20mA signal making a cost effective installation.

The turbidity two wire sensors are designed to measure turbidity in NTUs based on the nephelometric method using an infrared light source. Sensors are available for dip applications in pits, sumps or tanks with an optional auto clean by the air blast method.

For inline applications where the sensor may be mounted inline in a large bore pipe or off line in a flow sample cell.

## Submersion Turbidity Transmitters Two Wire

**TU8325** - Auto clean by air blast 2 wire Turbidity transmitter, ranges 0-4.000, 0-40.00 or 0-400.0 NTUs to be advised when ordering, output 4 - 20 mA supply 24 VDC

**-ACK** - Auto clean kit for OD & TU 2 wire transmitters sensor cleaning with 230VAC compressor valves & hoses etc.

**RT90** - Riser/dip tube with mounting adaptor up to 1000mm or longer to order.



## Inline Turbidity Transmitters Two Wire

**TU8525** - Two wire Turbidity transmitter for inline use ranges 0-4.000, 0-40.00 or 0-400.0 NTUs to be advised when ordering, output 4-20 mA Supply 24 VDC

**-FES1-QR** - Off line flow cell in PVC with 6 x 8 tube fittings

**-FES2-QR** - Inline flow cell in a 2" PVC Tee with quick release fitting

## Panel Mounting Turbidity Controller & Sensors

**TU7685** - Turbidity controller ranges 0 - 4.00, 0 - 40.00, 0 - 400.0 & 0 - 4000. NTU. 2 control relays, alarm relay & isolated 4 - 20mA output. Mains supply 115/230 VAC

**TU810-910** - Sample flow cell connection by 8 mm OD tubing 10m cable

**TU8182-D** - Dip sensor 600mm long in PVC mounting flange 10m cable

**LMK7-30** - Additional cost for 30 metre connecting cable & plug add



# SUSPENDED SOLIDS



## Two Wire Transmitters

Two wire sensors are ideal for applications where the sensor is remotely mounted from the indicator, recorder/data logger or controller. As just two wires are required, see our LMK2 connecting cable which is ideal for these applications. The same two wires which carry the 24 VDC power supply also carry the analogue 4-20 mA signal making a cost effective installation. The high turbidity / suspended solids sensors measure in FTUs and are based on back scattering technology.

Sensors are available for dip applications in pits, sumps or tanks with auto clean by the air blast method. For inline applications where the sensor is mounted inline in a large bore pipe we do not recommend the air blast cleaning as excess pressure may build up in the pipe work.

## Inline Suspended Solids Transmitters Two Wire

**TU8555** - High Turbidity two wire transmitter, designed for inline installations to measure high turbidity & suspended solids based on back scattering technology ranges 0 - 100, 0 - 1000 or 0 - 10,000 FTUs To be advised when ordering, output 4 - 20 mA. Power supply 24 VDC

**-FES2-QR** - Inline flow cell in a 2" PVC Tee with quick release fitting. Auto clean is not available with this option

## Submersion Suspended Solids Transmitters Two Wire

**TU8355** - High Turbidity two wire transmitter, submersible with auto clean air blast nozzle. designed to measure high turbidity & suspended solids based on back scattering technology ranges 0 - 100, 0 - 1000 or 0 - 10,000 FTUs To be advised when ordering with order, output 4 - 20 mA. Power supply 24 VDC

**-ACK** - Auto clean kit for OD & TU 2 wire transmitters sensor cleaning with 230 VAC compressor valves & hoses etc.

**-RT90** - Riser/dip tube with mounting adaptor upto 1000mm or longer to order.



## Slave Control instruments

Either of the sensors can be connected to a controller which powers the 4-20mA loop and provides a read out and two control relays, an alarm relay and 4-20 mA output available for panel or surface mounting as follows.



**BC7635** - Panel mounting indicator controller with two control relays, alarm relay and a 4 - 20mA output.

**BC7687** - Panel mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4-20mA outputs.

**AK96** - Instrument door for the 7600 series of instruments



**BC6587** - Surface mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4-20mA outputs.

# RESIDUAL CHLORINE INSTRUMENTS

## Residual Chlorine Controllers

Residual Chlorine controllers are designed for direct reading of free chlorine in ppm or mg/L, when used with either. The potentiostatic sensor that responds to Residual Chlorine, Bromine, Chlorine Dioxide or Ozone max measuring range with this sensor is 5.00 ppm. The closed amperometric residual chlorine sensor or chlorine dioxide sensor which is fitted with a semi permeable membrane which allows the ions being measured to permeate through the membrane into the sensor versions are available for residual chlorine and total chlorine the measuring range is upto 20.00 ppm. The listed instruments below will work with either of the sensors and a Pt100 for temperature measurement / auto temperature compensation.

## Two Wire Transmitter

**CL3436** - Microprocessor Residual Chlorine two wire transmitter with user selectable ranges range 0 - 2.00 or 0 - 20.00 ppm (mg/L) subject to sensor selected. Isolated 4 - 20 mA output, power supply 24VDC Supplied with in IP55 enclosure.



## Panel Mounting Controller

**CL7635** - Residual Chlorine controller panel mounting 0 - 2.00 / 0 - 20.00 (ppm) mg/l. with 2 control relays, alarm relay & 4 - 20 mA output, mains supply 86 - 264 VAC



**CL7687** - Panel mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4 - 20mA outputs, mains supply 86 - 264 VAC



## Surface Mounting Controllers

**CL6587** - Surface mounting indicator controller with PID control, two control relays, alarm relay, auto clean relay with freeze & hold and two 4 - 20mA outputs, mains supply 86 - 264 VAC

**CL6587.103** - Triple input surface mounting indicator controller with residual chlorine, pH and redox inputs. The measurement of free chlorine can be automatically compensated for changes in pH by the pH input. Temperature measurement and compensation are done by a Pt100 / Pt1000 sensor. PID control by two control relays, alarm relay, auto clean relay with freeze & hold and two 4 - 20mA outputs, mains supply 86 - 264 VAC

# RESIDUAL CHLORINE SENSORS



## Residual Chlorine Potentiostatic

Potentiostatic sensor that responds to Residual Chlorine, Bromine, Chlorine Dioxide or Ozone. The SZ283 chlorine sensor may be used with the listed flow cells. For good results the flow must be constant between 10 to 30 litres / hour.

**SZ283** - Potentiostatic chlorine sensor for use with listed flow cells

**SZ7251** - Auto clean Potentiostatic flow cell flow 15 - 40 L/Hr constant

**SZ7261** - Constant velocity flow cell of the overflowing type to for 1 electrode 12 mm Ø sample flow rate of 10 to 30 L/Hr

**SZ7263** - Constant velocity flow cell of the overflowing type to for 3 electrodes 12 mm Ø sample flow rate of 10 to 30 L/Hr

## Residual Chlorine or Chlorine Dioxide Closed Amperometric

The closed amperometric sensors are a modern design where the electrodes are located inside the sensor in an electrolyte. The sensor is fitted with a semi permeable membrane which allows the ions to be measured when permeated through the membrane into the sensor. The sensor fits into a flow cell which requires a constant flow with a max pressure of 3 bar. For the best results use a constant over flow system piped to drain with a flow rate of 30 - 60 L/Hr.



**RCS-0066** - Residual chlorine sensor closed amperometric type for use in flow cell CFC-1522 supplied with connecting cable spare membranes, "O" ring kit & 120 mls of filling solution.

**CCS-0066** - Combine chlorine sensor closed amperometric type for use in flow cell CFC-1522 supplied with connecting cable spare membranes, "O" ring kit & 120 mls of filling solution

**CDS-0066** - Chlorine Dioxide sensor closed amperometric type for use in flow cell CFC-1522 supplied with connecting cable spare membranes, "O" ring kit & 120 mls of filling solution



**SFC-1522** - Sealed flow cell which requires a constant flow, max pressure 3 bar flow rate of 30 - 60 L/Hr. For the best results use a constant over flow system piped to drain

**CHFC** - Constant head flow cell in place of the sealed flow cell

**PVC/M** - PVC Manifold with isolating valve, flow indicator and flow sensor which can be used to stop the controller dosing on no sample flow.

## Residual Chlorine Backplate System

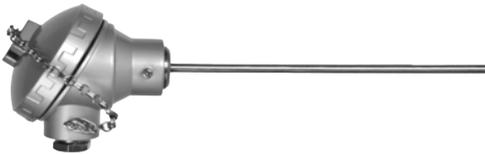
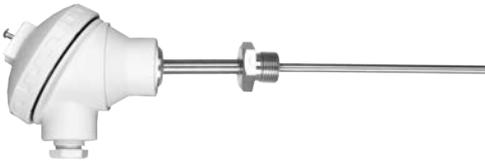
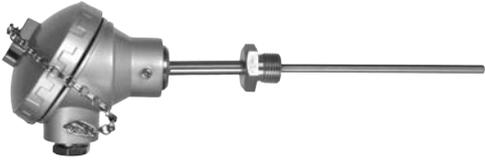
Our residual chlorine controller CL6587, SZ726 constant velocity flow cell and SZ283 potentiostatic chlorine sensor can be supplied on a back plate ready assembled and wired. Hence making site installation simple and easy and cost effective. So save time and manpower on site and let us assemble your system in our works ready for engineer to simply mount the back plate, add power a water sample ready to calibrate the system



**CL6587-BPS** - CL6587 residual chlorine controller, SZ726 constant velocity flow cell and SZ283 potentiostatic chlorine sensor ready assembled on a back with isolation valve and drain tundish.

**CL6587.103-BPS** - CL6587 Residual chlorine controller, SZ726 constant velocity flow cell pH electrode 9069-3B and SZ283 potentiostatic chlorine sensor ready assembled on a back with isolation valve and drain tundish.

# TEMPERATURE SENSORS



## Temperature Sensors

TPA range of temperature probe assemblies are three wire PRT. Platinum resistance thermometers to BS.1904. The sensors are manufactured from 316 Stainless Steel all welded construction to food grade standards.

**TPA-1-A** Insertion sensor with Aluminum head  
75 mm lagging extension up to 150 mm insertion

**TPA-1-PP** Insertion sensor with Polypropylene head  
75 mm lagging extension up to 150 mm insertion

**TPA-2-400** - Sensor 6 mm dia in 316 stainless steel with Aluminum head for use with compression fitting or submerged into an open vessel  
TPA-2-400 - 400mm long  
TPA-2-600 - 600mm long  
TPA-2-800 - 800mm long  
TPA-2-1000 - 1000mm long

**TPA-2-400** - Sensor 6 mm dia in 316 stainless steel with Polypropylene head for use with compression fitting or submerged into an open vessel  
TPA-2-400 - 400mm long  
TPA-2-600 - 600mm long  
TPA-2-800 - 800mm long  
TPA-2-1000 - 1000mm long

**TPA-2/PTFE** - As TPA-2 but fitted with a PTFE sheath for use in process chemical vessel such as acid etch baths  
TPA-2-600 - 600mm long  
TPA-2-800 - 800mm long  
TPA-2-1000 - 1000mm long

**TPA-3-400** - As TPA-2 but fitted with a connector for easy fitting not available with PTFE Sheath  
**TPA-3-600** - TPA-3 600mm long

**TPP** - Pockets in stainless steel with compression fittings and 1/2" BSP external thread for mounting TPA2 or TPA3 into your process  
**TPP 6mm x 1/2" 200mm long**

**SCF-6-050** - SS compression fitting  
6mm Ø temp probe 1/2" BSP  
**SCF-12-050** - SS compression fitting  
12mm Ø temp probe 1/2" BSP  
**SCF-12-075** - SS compression fitting  
12mm Ø temp probe 3/4" BSP

# TEMPERATURE TRANSMITTERS & CONTROLLERS



## Transmitters & Controllers

Temperature is the most widely measured and controlled industrial parameter with an application in almost every industrial facility in the world. We are mainly concerned with the measurement and control of liquid temperatures from water to process solutions which include acid and alkali solutions. We are able to supply a range of controllers that are simple to install and easy to use. For applications requiring connection to a PLC or remote instrument we have a head mounting 2 wire transmitter. While the majority of our applications use PRT sensors we are able to supply thermocouples. Please contact our sales office with your requirements.

## Temperature Indicator & Controllers

**ATC-73-2** - Panel mounting temperature controller with LED display input Pt100, Pt500 or Pt1000. or Thermocouple K,S,L,T,N,R,B or to be specified with 2 control relays, power supply 85 - 260 VAC

**ATC-N118-T** - Surface mounting w'proof temperature meter with LED display

## Temperature Transmitters

**TT100** - Two wire temperature transmitter Pt100. Input 4-20mA output. Ranges 0-100°C  
Additional ranges 0-50°C, or 0-200°C

## Process Instruments

Process controllers are for use with any of our 2 wire transmitters pH, redox, conductivity dissolved oxygen, turbidity, suspended solids, liquid level or temperature. Where the sensor is required to be mounted a long way away from the indicator/controller. This can be upto 500m using our LMK2 connecting cable making remote measure simple and easy.

**ATC-N118** - Surface mounting w'proof process meter with LED display, level transducer power supply with 2 control relays

**SUR-457-2** - Surface mounting 57 mm high LED display with built-in transducer power supply and 2 control relays

# LIQUID LEVEL CONTROLLER



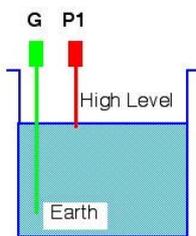
## ALC1101

### Liquid Level Controller

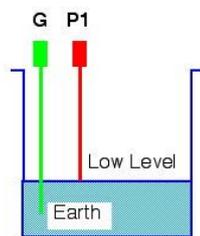
- \* Dual Voltage Supply 110/240v
- \* LED Indication of Mains supply
- \* Fail to Safe Fill or Empty
- \* Adjustable Sensitivity
- \* LED Indication of Relay State
- \* Plug in Mounting
- \* Optional IP55 Housing

The Model **ALC1101 Liquid Level Controller** is a compact, panel-mounted solution designed for dependable monitoring and control of conductive liquid levels. Built with robust electronics and a user-friendly interface, it delivers efficient and accurate liquid level management across a wide range of applications.

#### Level Alarm

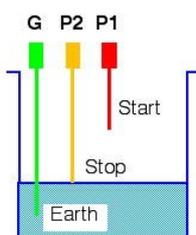


High Level Alarm

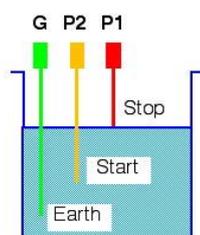


Low Level Alarm

#### Level Control



Pumping Out Between Two Levels



Pumping In Between Two Levels

This controller operates by sensing electrical resistance between electrodes positioned at user-defined levels. These electrodes connect to a low-voltage sensing circuit, which activates an internal switching relay when the liquid level makes or breaks contact. Visual indicators on the front panel show operating status—a green LED for power and a red LED for relay activation.

Whether you're managing a high or low level alarm or controlling between two levels for pumping in or out, the ALC1101 adapts seamlessly via a simple function switch.

#### The unit requires:

- 2 electrodes (alarm level + earth return) for alarm mode
- 3 electrodes (2 levels + earth return) for fill/drain control mode

With its straightforward design, durable construction, and flexible functionality, the ALC1101 provides years of reliable service in industrial and commercial fluid handling systems.

#### Key Features:

- Panel-mounted for easy installation
- Visual LED indicators for power and relay status
- Selectable alarm or pump control modes
- Works with AWE conductive level electrodes
- Simple, long-lasting design for dependable performance

Ideal for sumps, tanks, process vessels, and anywhere conductive liquid level control is essential.

# LIQUID LEVEL CONTROL

## LE24 & LE7

### Liquid Level Electrode



- \* Use with ALC1101 Controller
- \* Electrode in 316 Stainless Steel
- \* Option for other Materials
- \* Length 900 mm Cut to Length
- \* Corrosion Resistant PP Housing
- \* IP65 Weatherproof for outside use
- \* Simple to use and Install
- \* Mounting bracket available
- \* Manufactured in the UK

The **LE24 Level Electrode System** offers a complete, ready-assembled solution for automatic liquid level control in industrial and process environments. Designed specifically for use with the AWE Instruments ALC1101 controller, it provides precise pump, valve, or alarm switching for filling or emptying tanks and vessels. Supplied with three 900 mm 316 stainless steel electrodes, each PVC-insulated to minimise tracking, the LE24 features a robust moulded polypropylene housing and factory-potted, clearly labelled terminals for straightforward installation and long service life.

#### Typical LE24 applications include:

- Automatic Level Control using start, stop, and earth return electrodes
  - High/Low Level Alarms, where the high electrode triggers an alarm and the low electrode provides the reset
- A single earth (reference) electrode may be shared across multiple systems, though dedicated electrodes are recommended for consistent, reliable operation.

#### LE24 with Stainless Steel Electrode

The **LE7 Level Electrode Holder** is a compact and durable solution for single-point level sensing or automatic level control across a wide range of industrial applications. Designed to hold one 6 mm diameter electrode as standard—with ¼" or 8 mm options available by special order—it integrates seamlessly with the ALC1101 Level Controller for reliable liquid level monitoring. Electrodes are available in 316 stainless steel up to 3 metres, or in titanium or Hastelloy up to 2 metres, with optional PPA plastic coating to reduce electrical tracking. For applications deeper than 3 metres, threaded electrodes with extension connectors and steady brackets provide secure installation and extended reach.

#### Typical LE7 configurations include:

- High or Low-Level Alarms using two electrodes
- Latching High/Low Alarms using three electrodes, including a reset
- Fully Automatic Control between two points using start, stop, and earth return electrodes, selectable for fill or empty via the ALC1101 controller

# LIQUID LEVEL CONTROL

## LE8, LE10-1 & LE10-5 Liquid Level Electrode



- \* Housing in Corrosion Resistant PVC
- \* Choice of Electrode Materials
- \* Length up to 3m long Stainless Steel
- \* Designed to IP65 for Outside Use

For space-restricted installations, the LE8 and LE10 multi-electrode holders provide compact, reliable level sensing and integrate directly with controllers such as the ALC1101.

### LE8 Electrode Holder

The LE8 is designed for compact applications and accommodates 2–5 stainless-steel electrodes, 6 mm diameter, up to 3 m long. Protective coatings are recommended to minimise electrical tracking. For aggressive media, titanium or Hastelloy electrodes with PTFE insulation are available, typically up to 2 m. Mounting options include a 1½" BSP male thread, PVC flange, or PVC quick-release fitting.

### LE10 Electrode Holder

Engineered for municipal water treatment and larger installations, the LE10 range supports 1–5 electrodes of 8 mm diameter, with each model defined by the number of electrodes fitted.

**LE10-1:** Single-point configuration for simple high or low-level detection.

**LE10-5:** Multi-point configuration supporting up to five electrodes for complex level monitoring or multi-stage control.

All LE10 variants feature a 2" BSP male thread, with optional mounting flange or quick-release fitting. Cable entry is via a 20 mm female thread, suitable for 20 mm cable glands and SWA or SY cables.

### Accessories & Customisation

Both the LE8 and LE10 systems can be supplied with polypropylene mounting brackets, steady brackets, spacers, and stainless-steel couplings for electrode extension and support to match specific application requirements.

**SS-3** - 3mm Stainless rod per metre length

**SS-3PC** - 3mm Stainless rod plastic coated per metre

**SS-025** - 1/4" Stainless rod per metre length

**SS-025PC** - 1/4" Stainless rod plastic coated per metre

**TR-3** - 3mm Ø Titanium rod per metre length

**TR-3PC** - 3mm Ø Titanium rod per metre length

**TR-6** - 6mm Ø Titanium rod per metre length

**TR-6PC** - 6mm Ø Titanium rod rod plastic coated per metre

**HR-3** - 3mm Ø Hastalloy rod per 3.657 metre length

**HR-3PC** - 3mm Ø Hastalloy rod plastic coated per metre

**HR-6** - 6mm Ø Hastalloy rod per 3.657 metre length

**HR-6PC** - 6mm Ø Hastalloy rod plastic coated per metre

Stainless steel and titanium rods are stocked in three lengths and can be cut to size, charged to the next full metre. Hastalloy rod is stocked in 3.657-metre lengths, cut lengths are supplied but charged as full lengths.



# FLOAT SWITCHES



## Float Switches

Float switches are simple, reliable devices used to detect liquid levels within tanks, wells, and other fluid reservoirs. They operate by using a buoyant float connected to an internal switching mechanism that changes state as the liquid level rises or falls. Models such as LLFS units with reversible PVDF bobbin floats provide flexible high- or low-level control, while mercury-free FS10 switches offer durable polyethylene construction and come with long PVC cables for versatile installation. Optional accessories like counterweights help stabilize the float in turbulent conditions, ensuring consistent performance.

**LLFS** - Low, or high level float switch in PVC with PVDF cotton bobbin float which can be reversed for high or low operation

**-J-Box** - PP connecting head in place of fixed cable.

**FS10** - Float switch mercury free with Polyethylene body and 10 metres of PVC cable

**CW1** - Optional counter weight

**FS10** - Supplied in packs of 10 price each



## Pneumatic Level Switches

The PLS1 Pneumatic Level Switch offers a safe and reliable solution with a design that avoids direct contact with the liquid. It features a durable PVDF body with Viton® diaphragm and seals, providing excellent chemical resistance. The switch operates at very low pressures, down to just a few millimetres of water gauge, and installs easily using a 3/4" BSP mounting, with a dip tube that can be cut to the required level. It is ideal for applications involving demineralised water, foaming solutions, acids, hypochlorites, sludges, and slurries. A flange-mounted version is available for deeper vessels, and its fail-safe low-level operation helps protect heated tanks.

**PLS 1** - Pneumatic level switch for single point level control 3/4" BSP mounting wetted parts PVC viton and PVDF. Option for cPVC or polypropylene wetted parts.

# LIQUID LEVEL CONTROL PRESSURE TRANSMITTERS



## Hydrostatic Level Measurement

Liquid level can be measured by determining the hydrostatic head using a pressure transducer.

The pressure may be measured using a suspended transducer fitted to a long cable from the top of a sump, pit, or open chamber where no bottom connection is possible. The special cable incorporates a small vent tube that allows the rear of the transducer to be vented to atmosphere. Any junction box used must be fitted with a breather.

For above-ground vented tanks, a pressure transducer may be mounted at the bottom of the vessel. For tanks with a dished or conical bottom, the transducer should be installed at the bottom of the vertical section. Special electronic units can be supplied to compensate for cone- or dish-shaped tank ends.

For viscous solutions, flat-faced transducers or Tri-Clamp process fittings are available in 316 stainless steel.

When calibrating the controller in level units, remember to take into account the specific gravity (SG) of the liquid being measured.

Output signal: 4–20 mA  
Power supply: 12–36 VDC

**AIMP01** - Insertion pressure transmitter in stainless steel and ceramic mounting by 1/4" BSP male thread output 4 - 20 mA  
Ranges 0 - 0.1, 0 - 0.25, 0 - 0.5, 0 - 75, or 0 - 1.0  
Ranges 0 - 1.0, 0 - 2.0, 0 - 5.0, or 0 - 10 Bar

**ADMP331P** - Insertion pressure transmitter with flush stainless steel diaphragm mounting by 1" BSP male thread output 4 - 20 mA  
Ranges 0 - 0.1, 0 - 0.16, 0 - 0.25, 0 - 0.4, 0 - 0.6 Bar  
Ranges 0 - 1.0, or 0 - 2.5 Bar

**AIML** - Suspended pressure transmitter in stainless steel with ceramic sensor output 4 - 20 mA power supply 10 - 32 VDC  
Ranges 0 - 0.5, 0 - 1.0, 0 - 2.5, 0 - 5.0, 0 - 7.5, & 0 - 10 m  
Special vented cable add per metre

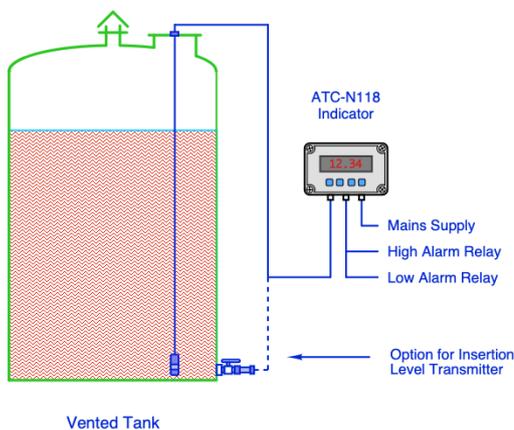
For level measurement in aggressive solutions which may not be compatible with 316 grade stainless steel we are able to supply special suspended transducers with engineered plastic bodies of PP or PVDF for greater chemical resistance.

**ALMK809** - Suspended pressure transmitter in PP with ceramic sensor output 4-20 mA power supply 12-36 VDC. Ranges 0-1.6, 0-2.5, 0 - 4.0, 0-6.0 or 0-10 meters

**-PVDF** - Additional cost for PVDF body add  
Excludes special vented cable.

## Typical Installation

Suspended Level Transmitter



# BUBBLER SYSTEMS

## HYDROSTATIC LEVEL MEASUREMENT



- \* Range up to 10 metres
- \* 4 - 20 mA Output From Transducer
- \* Mains Powered
- \* Dip tube in PVC, PP or 316 stainless
- \* Polycarbonate Housing
- \* Cost Efficient
- \* Simple Installation & Calibration
- \* Constant and Accurate Measurement
- \* Auto Air Purge Cleaning Option



### Bubbler Level Measurement

Liquid level can be measured by determining the hydrostatic head using a pressure transducer. However, this method is not suitable in all applications.

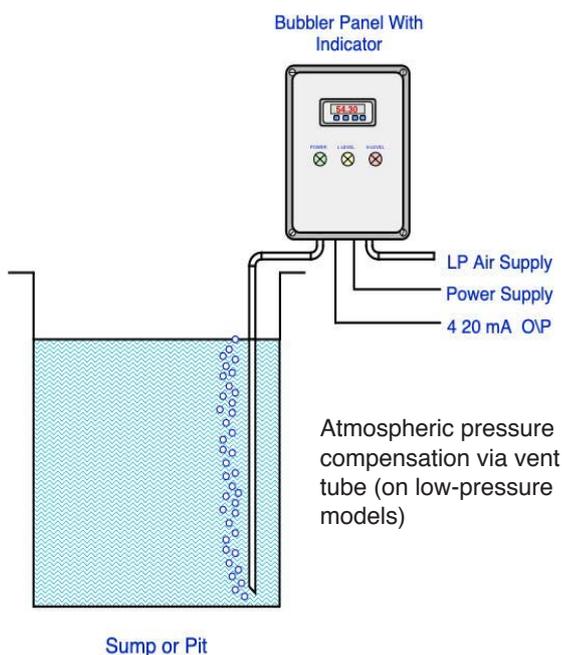
For example, a 5 m deep sump in a dye works that receives spent hot/steamy dye liquor whenever the pans are emptied presents a particularly challenging environment. This application was successfully solved some years ago using a bubbler level measurement system, comprising a 5 m long 316 stainless steel bubble tube, air regulator, and process controller to control the pumps.

Another application includes hot plating solutions, where PVDF components were required to provide the necessary chemical resistance to the aggressive mixed acid solution in use.

With a bubbler system, the stainless steel pressure transducer only comes into contact with clean, cold compressed air, which is a key advantage of this measurement technique in harsh or corrosive environments.

When calibrating the controller in level units, remember to take into account the specific gravity (SG) of the liquid being measured.

Output signal: 4–20 mA  
Power supply: 12–36 VDC



# LIQUID LEVEL TRANSMITTERS

## ULTRASONIC & RADAR

- \* Range 0.3 - 12 metres
- \* 4 - 20 mA output
- \* Two wire loop powered
- \* 2" BSP Male Thread
- \* PVC Wetted Parts
- \* Cost Efficient
- \* Simple Installation
- \* Simple Calibration



### Ultrasonic Transmitter

The AMW-12 is a two-wire ultrasonic level transmitter designed for the continuous measurement of liquid levels in vented tanks, pits, and sumps over a range of 0.3 to 12 metres.

The ultrasonic principle of measurement is based on the transducer emitting short pulses of ultrasound toward the liquid surface. These pulses are reflected back to the transducer, and the time of flight between transmission and reception is measured. This time is directly proportional to the distance between the transducer and the liquid surface, allowing the liquid level to be accurately calculated.

As a two-wire transmitter, the AMW-12 operates on an industry-standard 4–20 mA current loop, transmitting the measured level signal over distances of up to 1000 metres. The same two wires are used for both power supply and signal transmission, resulting in a simple, reliable, and highly cost-effective installation.

Ultrasonic level transmitters are best suited for foam-free, vapour-free liquids with a relatively smooth and stable surface. Care should be taken during installation to avoid locations where mixers, internal structures, or obstructions could interfere with the ultrasonic signal and affect measurement accuracy.

**AMW-12** - Level transmitter mounting by 2" BSP male thread with a low blind area of only 0.3 m full measuring range user programmable of up to 12 m isolated current output of 4-20 mA power supply 24 VDC same two wires

- \* Range 0 - 8 metres
- \* Two wire loop powered
- \* 4 - 20 mA output
- \* Bluetooth Calibration
- \* PVDF Wetted Parts
- \* Simple Calibration



### Radar Level Transmitters

The RLT1 is a compact, radar-based liquid level transmitter designed for accurate level measurement in open tanks, sumps, and pits. Operating over a standard measuring range of 0–8 metres (with extended ranges available), it utilises W-band radar technology to deliver reliable and precise level measurement.

The RLT1 provides an industry-standard 4–20 mA output, capable of transmission distances of up to 500 metres. It is loop powered, ensuring simple wiring and compatibility with any 24 VDC loop power supply.

Installation and commissioning are straightforward, with wireless calibration via Bluetooth using either iOS or Android devices. For hazardous area installations, ATEX-approved versions are available, and units can be pre-calibrated to customer specifications prior to delivery.

The RLT1 integrates seamlessly with the BC7635 indicator/controller, providing clear level indication and control functionality. With flexible mounting options and excellent chemical resistance, the RLT1 is suitable for a wide range of industrial liquid level measurement applications.

**RLT1** - Level transmitter, Bluetooth Calibration via Smartphone or Tablet, output 4-20 mA

# LIQUID LEVEL MEASUREMENT

## Controllers for use with Level Transmitters

Our two-wire level transmitters are designed for remote mounting and connect to controllers via our LMK2 cable. The same two conductors supply 24 VDC power and carry the 4–20 mA loop signal.

We offer both panel-mounted and weatherproof surface-mounted indicator/controllers, all user-configurable up to 9999 units or 0–100% of vessel contents in litres, gallons, cubic metres, or level (mm/metres).

All transducers are compatible with our AWE99, AWE141, and online data loggers. Visit our website or call our sales hotline for details.



## Surface Mounting Controllers

**BC6587** - Surface mounting indicator controller with PID control, two control relays, alarm relay, and two 4 - 20mA outputs.

**ATC-N118** - Surface mounting w'proof process meter with LED display, Level transducer power supply with 2 control relays

*Small custom built control panels for use with transducer are available*

## Panel Mounting Controllers

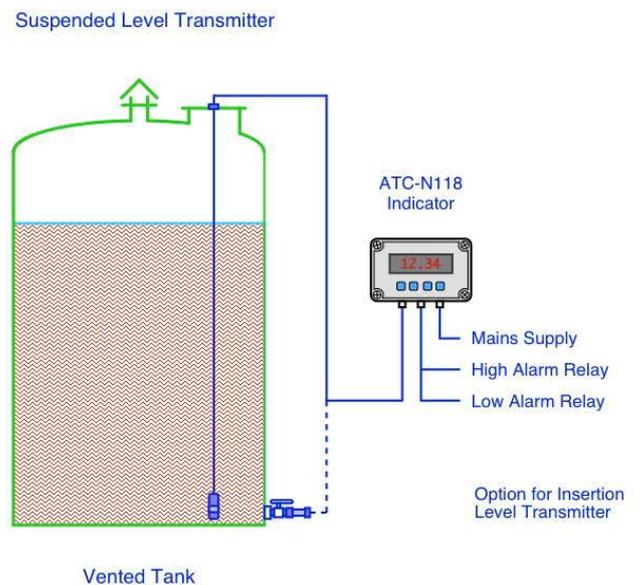
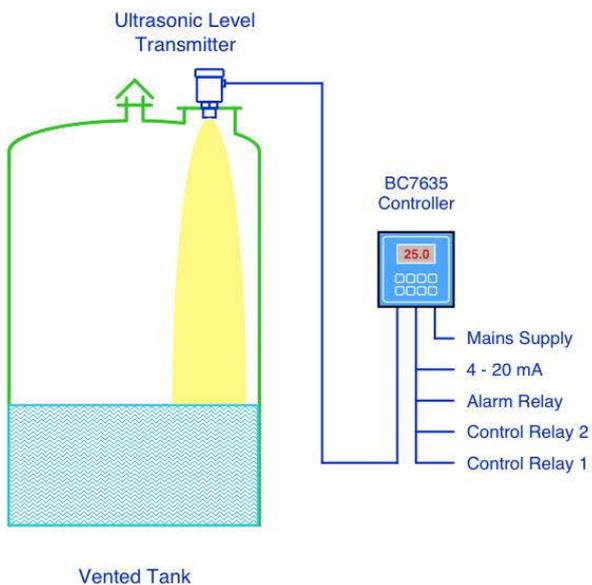
**BC7635** - Panel mounting controller scaled 0 - 100% or in engineering units with transducer loop power supply 2 control relays and an alarm relay with isolated 0 (4) - 20mA output power supply 86 - 264 VAC

**BC7687** - Panel mounting indicator controller with PID control, two control relays, alarm relay, and two 4 - 20 mA outputs

**AK96** - Instrument door for the 7600 series of instruments



## Typical Installations



# OPEN CHANNEL FLOW



Open channel flow measurement provides a reliable and cost-effective solution for monitoring wastewater discharges from industrial premises to sewers or watercourses. Flow is measured accurately in litres per second and automatically totalised in cubic metres, ensuring full compliance with discharge consent and reporting requirements.

For applications requiring flow-proportional sampling, the flow meter offers a proportional output to control an automatic effluent sampler, enabling representative sampling across multiple containers and unattended operation over weekends. The system can also be paired with our simple, robust peristaltic water sampler, delivering a practical and economical solution for routine monitoring applications.

## Open Channel Flow Measurement

**F-MTR** - Compact, non-contact ultrasonic flow transmitter for installation above V-notch weirs or flumes, providing a clear local display of instantaneous and totalised flow for immediate visibility of discharge conditions.

Powered from 24 VDC, the instrument offers flow and totaliser outputs for easy integration with sampling, recording, and control systems.

When connected to the AWE141 paperless recorder / datalogger, total and daily flows are securely recorded in cubic metres with automatic midnight reset, full time-stamping, and a live trend of flow in litres per second. Data can be downloaded via USB or transferred to a network using the optional Ethernet connection.

**PP-MKB** - Optional transducer mounting bracket.

*Shown with transducer*



## Vee Notch Tanks

**VNT** - Polypropylene Vee notch tanks can be made to order with SS vee notch plates.

**VNP30-SS** - Vee Notch Plate 30° angle in stainless steel

**VNP60-SS** - Vee Notch Plate 60° angle in stainless steel

**VNP90-SS** - Vee Notch Plate 90° angle in stainless steel

## Water Samplers

**PWS 1** - Peristaltic water sampler to take flow proportional samples from flow meter

# DATA LOGGING & RECORDING

## AWE141 Paperless Chart Recorders / Data Loggers

The AWE141 is as the AWE99 except in a 144 DIN panel mounting case which allow larger number of inputs per channel as follows.

**AWE141-IS6** - Digital recorder 6 x 4 -20mA Isolated inputs & data logging function to USB stick

**AWE141-2xIS6** - Digital recorder 12 x 4 -20mA isolated 4 - 20 mA inputs & data logging function to USB stick

**AWE141-FT4** - Digital recorder 4 x 4-20mA 4 Pulse frequency inputs for flow totalisation & data logging function to USB stick

**AWE141-RT6** - Digital recorder 6 x °C RTD I/Ps & data logging function to USB stick

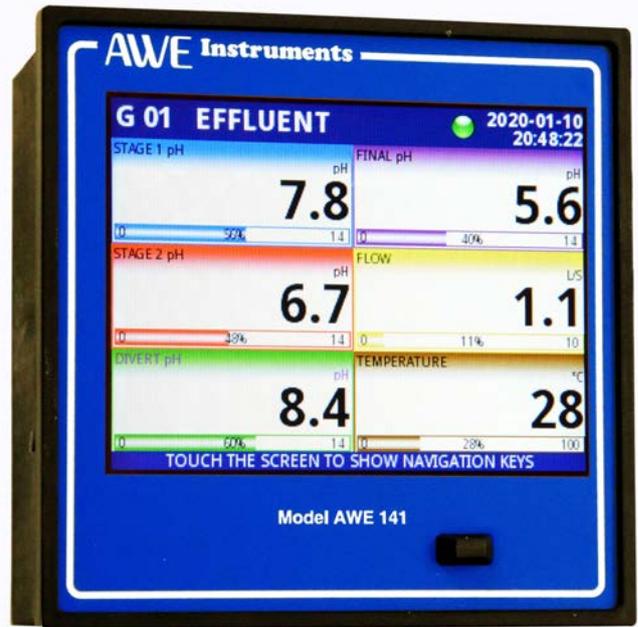
**AWE141-UN5** - Digital recorder 5 universal isolated I/Ps of current, voltage, temperature either RTD or thermocouple with data logging function to USB stick

**M99-ETU-001** - ETU module (includes 1 x USB Host, 1 x Ethernet 10 MB)

**M99-ACM-001** - ACM module (includes 1 x RS-485, 1 x RS-485/232, 1 x USB Host, 1 x Ethernet 10 MB)

**AWE-SU** - AWE factory setup of your input ranges and groups ready for installation Price per screen or group of upto 6 inputs.

Other options are available please contact our sales office for details.



## AWE 99 Paperless Chart Recorders / Data Loggers

The AWE-99 is sophisticated multichannel 96 DIN panel mounting instruments which displays data on a colour TFT touch-panel screen. As numerical values, as analogue meter movement displays, vertical or horizontal charts or graphs IE tradition chart recording with vertical or horizontal traces or as bar graphs. The data maybe data logged to the 1.5 Gb internal memory and down loaded by basic communication interfaces (USB and RS485). Prices include the data logging function for down loading.

**AWE99-IS6** - Digital recorder 6 x 4-20mA Isolated 4-20 mA inputs & data logging function to USB stick

**AWE99-FT2** - Digital recorder 2 x 4-20mA 2 Pulse frequency inputs for flow totalisation & data logging function to USB stick

**AWE99-FT4** - Digital recorder 4 x 4-20mA 4 Pulse frequency inputs for flow totalisation & data logging function to USB stick

**AWE99-RT4** - Digital recorder 4 x °C RTD I/Ps & data logging function to USB stick

**AWE99-UN3** - Digital recorder 3 universal isolated I/Ps of current, voltage, temperature either RTD or thermocouple with data logging function to USB stick

# IN PIPE FLOW CONTACTING HEAD WATER METERS



The CT Series of water meters are brass bodied watermeters intended for the measurement of clean tap water flowing into process plant requiring the volume of water flowing in it to be accurately totalised. A reed switch provides an impulse rate of either 1 impulse per litre K = 1 to 1 impulse per 100 litres K = 100 depending upon the size of meter selected. This output maybe connected to any of our dosing pumps with external pacing input to provide flow proportional chemical dosing.

## Cold Water Meters 30oC Max

Model No	Size		Flow Rate	Constant
CTFI 15	1/2"	Flow rate up to	1.5 m <sup>3</sup> / Hr	K = 1.0
CTFI 20	3/4"	Flow rate up to	2.5 m <sup>3</sup> / Hr	K = 1.0
CTFI 25	1"	Flow rate up to	3.5 m <sup>3</sup> / Hr	K = 1.0
CTFI 30	1 1/4"	Flow rate up to	5 m <sup>3</sup> / Hr	K = 1.0
CTFI 40	1 1/2"	Flow rate up to	10 m <sup>3</sup> / Hr	K = 10.0
CTFI 50	2"	Flow rate up to	15 m <sup>3</sup> / Hr	K = 10.0

## Hot Water Meters 90oC Max

CTCI 15	1/2"	Flow rate up to	1.5 m <sup>3</sup> / Hr	K = 1.0
CTCI 20	3/4"	Flow rate up to	2.5 m <sup>3</sup> / Hr	K = 1.0
CTCI 25	1"	Flow rate up to	3.5 m <sup>3</sup> / Hr	K = 1.0
CTCI 30	1 1/4"	Flow rate up to	5 m <sup>3</sup> / Hr	K = 1.0
CTCI 40	1 1/2"	Flow rate up to	10 m <sup>3</sup> / Hr	K = 10.0
CTCI 50	2"	Flow rate up to	15 m <sup>3</sup> / Hr	K = 10.0

# MAGNETIC FLOW METERS

## Magnetic Flow Meters

For liquids with a conductivity greater than 10 µS temperature up to 70°C pressures upto 16 bar. Wetted parts in PTFE and 316 Stainless steel, supply 86 to 264 VAC



- DN10/0010E2 - Mag flow meter (3/8") with DN10 flanges max flow 3.125 m<sup>3</sup> /Hr
- DN15/0015E2 - Mag flow meter (1/2") with DN15 flanges max flow 7.875 m<sup>3</sup> /Hr
- DN20/0020E2 - Mag flow meter (3/4") with DN20 flanges max flow 12.5 m<sup>3</sup> /Hr
- DN25/0025E2 - Mag flow meter (1") with DN25 flanges max flow 20 m<sup>3</sup> /Hr
- DN40/0040E1 - Mag flow meter (1 1/2") with DN40 flanges max flow 50 m<sup>3</sup> /Hr.
- DN50/0050E1 - Mag flow meter (2") with DN50 flanges max flow 66 m<sup>3</sup> /Hr
- DN55/0065E1 - Mag flow meter (2 1/2") with DN65 flanges max flow 78 m<sup>3</sup> /Hr
- DN80/0080E1 - Mag flow meter (3") with DN80 flanges max flow 200 m<sup>3</sup> /Hr
- DN100/0100E1 - Mag flow meter (4") with DN100 flanges max flow 312 m<sup>3</sup> /Hr

For for solutions upto 125°C, pressures up to 16 bar with a conductivity greater than 10 µS or concentrated acids & alkali. wetted parts PTFE and Hastelloy "C" Please contact our sales office.

- RM-BKT-K (-F) Remote mounting of the electronics so the display can be remotely mounted supplied with 2 x 5 m cable supply & return
- LMK7 Flow and return signal cables additional cost 2 x per metre add

*For larger sized mag flow meters up to 1000 mm Ø please call our sales office*

# ONLINE DATA LOGGER

The OLDL5-S is designed to connect to four devices with analogue outputs of 4 - 20 mA these may be powered or require a loop power supply IE 2 wire transmitters.

The OLDL5-S makes what is a complex process of reading the signals from a wide range of transmitters and sensors simple and cost effective. The industry standard 4 - 20 mA signals are sent to the online data logger cloud platform at regular intervals subject to which annual subscription package is selected.

## Online Data Logger

All systems have 4 analogue inputs IP67 weatherproof enclosure (138 x 76 x 68mm) with integral display. Built in GSM modem for GPRS or SMS communications, integral antenna.

**ALOD5-S** - 4 analogue inputs of 4-20 mA power supply.

6-24 VDC

**ALOD5-S-DP** - 4 x 4-20mA inputs, 5 pulsed inputs upto 10 Hz

6-24 V

**8D4272/M2** - External antenna kit for improved connection add

## Monthly Subscription

Subscription - (Basic global using Zones A & B, more than 340 networks across more than 150 countries). Recurs each month until cancellation is requested. Multi-network sim card to give best possible coverage even in rural locations. Secure web based data access - see your sensor readings on your computer, tablet or smartphone using your favourite browser.

**Data Platform 1** - Transmission every 60 mins cost per month

**Data Platform 2** - Transmission every 10 mins cost per month

**Data Platform 3** - Transmission every 5 mins cost per month



# AUTO DIALLER



## CPAA Control Panel Alert & Alarm

The CPAA is a simple device to work with your control panel designed to accept volt free contacts which close on alarm conditions. The GSM auto dialler when fitted with your supply SIM card and will call a mobile device with your alarm message. Any time anywhere with a mobile phone signal, applications are numerous from waste water discharge alarms for pH, flow, turbidity or temperature out of limits, to tank high / low level alarms.

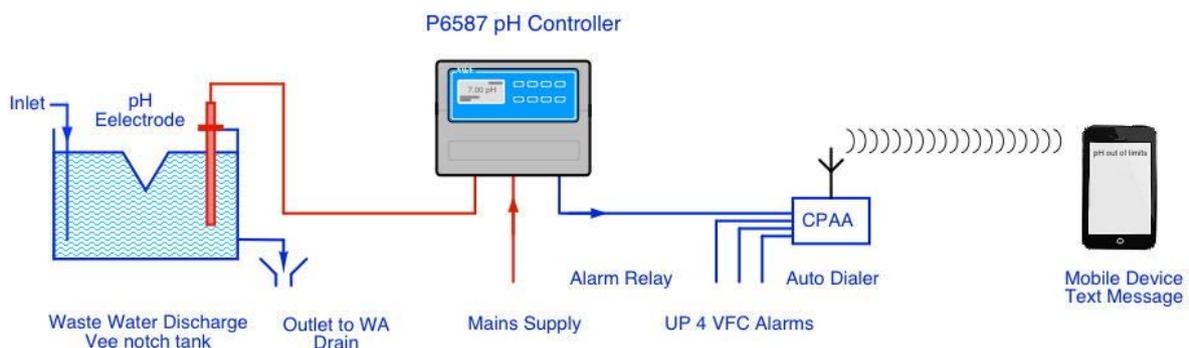
Add extra value to your control panel or retro fit on existing sites to give additional value to your customers.

**CPAA** - Alert & alarm.

**CPAA-PSU** - Alert & alarm power supply unit 24 VDC add

**CPAA-EA** - Alert & alarm external antenna add

**-CP** - Mounted in a weatherproof housing & programmed add



# MOTOR DRIVEN DOSING PUMPS

The TM-07 series are mechanical diaphragm pumps designed to offer a cost effective reliable dosing solution for dosing of process chemical reagents.

The TM-07 features a vertically mounted high efficiency 0.6 kW electric motor which can be specified when ordering as a 400 VAC three phase motor or a 230 VAC single phase motor. The motor is mounted on top of a corrosion resistant moulded polypropylene housing, designed for foot mounting on a flat level surface or on top of one of our wide range of DT dosing tanks.

TM-07 series pumps have outputs ranging from 0 - 10 L/Hr to 0 - 120 L/Hr and have the option of a stainless steel head and valves with connection by a 1/2" female gas thread. For greater chemical resistance a PVDF head is fitted as standard with ceramic valves and seals in either Viton or EPDM. Hose connections are 8 x 12 mm LDPE low density polyethylene hose which allows the use of selected accessories from our electronic pumps to be used.



## TM-07 - PVDF

Motor driven pump with PVDF head and valve housing with ceramic ball valve and either EPDM or Viton "O" rings and seals.

Model No	Output L/Hr	Pressure Bar	Hose Size	Strokes/min
TM-07-P 05-10	0 - 10	5.0	8 x 12 mm	26
TM-07-P 05-20	0 - 20	5.0	8 x 12 mm	43
TM-07-P 05-40	0 - 40	5.0	8 x 12 mm	86
TM-07-P 05-60	0 - 60	5.0	8 x 12 mm	130
TM-07-P 05-90	0 - 90	5.0	8 x 12 mm	144



## TM-07 - SS

Motor driven pump with stainless steel head and valve housing with stainless steel valves and either EPDM or Viton "O" rings and seals.

Model No	Output L/Hr	Pressure Bar	Hose Size	Strokes/min
TM-07-SS 05-10	0 - 10	5.0	8 x 12 mm	26
TM-07-SS 05-20	0 - 20	5.0	8 x 12 mm	43
TM-07-SS 05-40	0 - 40	5.0	8 x 12 mm	86
TM-07-SS 05-60	0 - 60	5.0	8 x 12 mm	130
TM-07-SS 05-90	0 - 90	5.0	8 x 12 mm	144
TM-07-SS 03-120	0 - 120	3.0	8 x 12 mm	144

## Spare Parts

**T07-DIA** - Diaphragm in PTFE fits both SS and PVDF heads

**T07-SDV-PVDF-E** - PVDF suction & delivery valves with EPDM seals

**T07-SDV-PVDF-V** - PVDF suction & delivery valves with viton seals

**T07-HD-PVDF-V** - PVDF head with suction & delivery valves viton seals

**T07-HD-PVDF-E** - PVDF head with suction & delivery valves EPDM seals

**T07-SDV-SS-E** - Stainless steel suction & delivery valves with EPDM seals

**T07-SDV-SS-V** - Stainless steel suction & delivery valve with viton seals

**T07-HD-SS-V** - Stainless steel head with suction & delivery valves viton seals

**T07-HD-SS-E** - Stainless steel head with suction & delivery valves EPDM seals



# ELECTRONIC DOSING PUMPS

## GEA Series

The GEA series of dosing pumps are designed for foot mounting on a flat level surface or on top of one of our wide range of DT dosing tanks. The pumps outputs range from 0 - 1.5 L/Hr to 0 - 60 L/Hr with PVDF installation kit & ceramic ball valves for greater chemical resistance when dosing concentrated reagents. Hose connections are either 4 x 6 mm or 8 x 12 mm LDPE low density polyethylene hose with other materials to order. GEA series pumps have a switch mode power supply allowing the pump to operate from any AC supply from 100 to 240 VAC 50/60 Hz.

### GEA-BL

The GEA-BL pumps provide a constant flow which is manually adjustable by a control dial with a selectable dual scale of 0 - 20% or 0 - 100% of the pump output.

BL series pumps have a low chemical level cutout



Model No	Output L/Hr	Pressure Bar	Hose Size	Power
GEA1-BL 20 - 025	0 - 2.5	20.0	4 x 6/7 mm	14 Watts
GEA1-BL 18 - 03	0 - 3.0	18.0	4 x 6/7 mm	14 Watts
GEA1-BL 14 - 042	0 - 4.2	14.0	4 x 6/7 mm	14 Watts
GEA2-BL 12 - 03	0 - 3.0	12.0	4 x 6 mm	20 Watts
GEA2-BL 04 - 10	0 - 4.0	10.0	4 x 6 mm	20 Watts
GEA2-BL 05 - 05	0 - 5.0	8.0	4 x 6 mm	20 Watts
GEA2-BL 02 - 08	0 - 8.0	2.0	4 x 6 mm	20 Watts
GEA3-BL 16 - 07	0 - 7.0	16.0	4 x 6 mm	40 Watts
GEA3-BL 10 - 10	0 - 10.0	10.0	4 x 6 mm	40 Watts
GEA3-BL 14 - 08	0 - 14.0	8.0	4 x 6 mm	40 Watts
GEA3-BL 02 - 16	0 - 16.0	2.0	4 x 6 mm	40 Watts
GEA4-BL 05-30	0 - 30.0	5.0	8 x 12 mm	40 Watts
GEA4-BL 04-40	0 - 40.0	4.0	8 x 12 mm	40 Watts
GEA4-BL 01-60	0 - 60.0	1.0	8 x 12 mm	40 Watts

### GEA-AM

The GEA-AM series of black dosing pumps offer external control of the pump frequency or number of strokes the pump makes per minute. The control signal may be by external pacing pulses with the ability to multiply or divide the pulsed signal or proportional to an industry standard 4 - 20 mA control signal.



Model No	Output L/Hr	Pressure Bar	Hose Size	Power
GEA1-AM 20 - 025	0 - 2.5	20.0	4 x 6/7 mm	14 Watts
GEA1-AM 18 - 03	0 - 3.0	18.0	4 x 6/7 mm	14 Watts
GEA1-AM 14 - 042	0 - 4.2	14.0	4 x 6/7 mm	14 Watts
GEA2-AM 12 - 03	0 - 3.0	12.0	4 x 6 mm	20 Watts
GEA2-AM 04 - 10	0 - 4.0	10.0	4 x 6 mm	20 Watts
GEA2-AM 05 - 08	0 - 5.0	8.0	4 x 6 mm	20 Watts
GEA2-AM 02 - 8	0 - 8.0	2.0	4 x 6 mm	20 Watts
GEA3-AM 16 - 07	0 - 7.0	16.0	4 x 6 mm	40 Watts
GEA3-AM 10 - 10	0 - 10.0	10.0	4 x 6 mm	40 Watts
GEA3-AM 14 - 08	0 - 14.0	8.0	4 x 6 mm	40 Watts
GEA3-AM 02 - 16	0 - 16.0	2.0	4 x 6 mm	40 Watts
GEA4-AM 05-30	0 - 30.0	5.0	8 x 12 mm	40 Watts
GEA4-AM 04-40	0 - 40.0	4.0	8 x 12 mm	40 Watts
GEA4-AM 01-60	0 - 60.0	1.0	8 x 12 mm	40 Watts

K-Kit - Option for adaptors & 3m of 8 x10 PVDF tubing

T-BV - Option for PTFE ball valves in the pump, foot valve and injection fitting

# RED ELECTRONIC DOSING PUMPS



## HY Series

The HY Series of Red dosing pumps offers a cost-effective and reliable dosing solution, featuring a PVDF pump head with ceramic ball valves and hose connections suitable for 4 x 6 mm LDPE dosing hose. The HY-BL model provides 0 to 100% and 0 to 20% output adjustment, with a volt-free contact input for use with an optional float switch. The HY-BC model operates proportionally to either a frequency signal from a water meter (1:1 ratio) or a 4–20 mA current signal. The HY-MT is a microprocessor-controlled pump with current or frequency input and integrated timer functions, while the HY-PR is microprocessor controlled with direct pH or Redox (mV) input from the electrode. All HY models are equipped with a power-on LED indicator, low-level input, and a switch-mode power supply operating at 100–240 VAC, 50/60 Hz.

Model No	Output L/Hr.	Pressure Bar	Hose Size	Power
HY-BL 12-1.5	0 - 1.5	12.0	4 x 6 mm	15 Watts
HY-BL 09-03	0 - 3.0	9.0	4 x 6 mm	15 Watts
HY-BL 06-06	0 - 6.0	6.0	4 x 6 mm	15 Watts
HY-BC 06-06	0 - 6.0	6.0	4 x 6 mm	15 Watts
HY-MA 06-06	0 - 6.0	6.0	4 x 6 mm	15 Watts
HY-MT 06-06	0 - 6.0	6.0	4 x 6 mm	15 Watts
HY-PR 06-06	0 - 6.0	6.0	4 x 6 mm	15 Watts

Optional low level float switch supplied with mounting bracket to fit onto the foot valve designed to fit through a standard 50mm diameter port on a chemical drum. When the chemical container is empty the pump stops.



## AT-BL Series

The AT-BL Series of red dosing pumps feature an input for a low-level cutout, designed for use with a suction lance assembly to prevent the pump from running dry. This input can also be connected to a control circuit with a volt-free contact, allowing the pump to start and stop without interrupting the mains supply, ensuring instant operation without the need for a self-checking startup cycle. The series offers outputs ranging from 0–1.5 L/hr up to 0–60 L/hr, supplied with either a PVC or optional PVDF installation kit, both equipped with ceramic ball valves for enhanced chemical resistance when handling concentrated reagents. Flow rate is constant and can be manually adjusted using a control dial with a dual-scale setting of 0–20% or 0–100% of the rated output. Hose connections are available in 4 x 6 mm or 8 x 12 mm LDPE low-density polyethylene tubing.

Model No	Output L/Hr	Pressure Bar	Hose Size
AT1-BL 20 - 015	0 - 1.5	20.0	4 x 6 / 7
AT1-BL 18 - 02	0 - 2.0	18.0	4 x 6 / 7
AT2-BL 12 - 03	0 - 3.0	12.0	4 x 6
AT2-BL 10 - 04	0 - 4.0	10.0	4 x 6
AT2-BL 08 - 05	0 - 5.0	8.0	4 x 6
AT2-BL 02 - 08	0 - 8.0	2.0	4 x 6
AT3-BL 16 - 07	0 - 7.0	16.0	4 x 6
AT3-BL 10 - 10	0 - 10	10.0	4 x 6
AT3-BL 08 - 14	0 - 14	8.0	4 x 6
AT3-BL 02 - 18	0 - 18	2.0	4 x 6
AT4-BL 05 - 20	0 - 20	5.0	8 x 12
AT4-BL 03 - 30	0 - 30	3.0	8 x 12
AT4-BL 02 - 40	0 - 40	2.0	8 x 12
AT4-BL 01 - 60	0 - 60	0.5	8 x 12



## Extras

**K-Kit** - Option for adaptors & 3m of 8 x10 PVDF tubing

**T-BV** - Option for PTFE ball valves in the pump, foot valve and injection fitting

# RED ELECTRONIC DOSING PUMPS



## AT-AM Series

The AT-AM series of red dosing pumps offer external control of the pump frequency or number of strokes the pump makes per minute. The signal may be by PFM with the ability to multiply or divide the signal. Or by an industry standard 4 - 20 mA control signal.

Model No	Output L/Hr.	Pressure	Hose Size
AT1-AM 20 -015	0 - 1.5	20.0	4 x 6 / 7
AT1-AM 18 - 02	0 - 2.0	18.0	4 x 6 / 7
AT2-AM 12 - 03	0 - 3.0	12.0	4 x 6
AT2-AM 10 - 04	0 - 4.0	10.0	4 x 6
AT2-AM 08 - 05	0 - 5.0	8.0	4 x 6
AT2-AM 02 - 08	0 - 8.0	2.0	4 x 6
AT3-AM 16 - 07	0 - 7.0	16.0	4 x 6
AT3-AM 10 - 10	0 - 10	10.0	4 x 6
AT3-AM 08 - 14	0 - 14	8.0	4 x 6
AT3-AM 02 - 18	0 - 18	2.0	4 x 6
AT4-AM 05 - 20	0 - 20	5.0	8 x 12
AT4-AM 03 - 30	0 - 30	3.0	8 x 12
AT4-AM 02 - 40	0 - 40	2.0	8 x 12
AT4-AM 01 - 60	0 - 60	0.5	8 x 12



## AT-MT Series

The AT-MT series of red dosing pumps are microprocessor controlled with an LCD back lighting display with two 16 digits rows which provide information about the pump setting, flow rate, functioning statistics and password protection. The control signal maybe by external pacing pulses from a water meter or pH controller or proportional to a 4 - 20 mA control signal. The AT-MT series are also able to batch in fixed volume of reagent or dose proportional to flow in ppm/mg/L.

Model No	Output L/Hr.	Pressure	Hose Size
AT1-MT 20 -015	0 - 1.5	20.0	4 x 6 / 7
AT1-MT 18 - 02	0 - 2.0	18.0	4 x 6 / 7
AT2-MT 12 - 03	0 - 3.0	12.0	4 x 6
AT2-MT 10 - 04	0 - 4.0	10.0	4 x 6
AT2-MT 08 - 05	0 - 5.0	8.0	4 x 6
AT2-MT 02 - 08	0 - 8.0	2.0	4 x 6
AT3-MT 16 - 07	0 - 7.0	16.0	4 x 6
AT3-MT 10 - 10	0 - 10	10.0	4 x 6
AT3-MT 08 - 14	0 - 14	8.0	4 x 6
AT3-MT 02 - 18	0 - 18	2.0	4 x 6
AT4-MT 05 - 20	0 - 20	5.0	8 x 12
AT4-MT 03 - 30	0 - 30	3.0	8 x 12
AT4-MT 02 - 40	0 - 40	2.0	8 x 12
AT4-MT 01 - 60	0 - 60	0.5	8 x 12

## AT-PR Series

The AT-PR series are as the AT-MT series but featuring a direct pH or Redox mV Input so our pH or redox electrode can be connected directly to your AT-PR red dosing pump.

Model No	Output L/Hr.	Pressure	Hose Size
AT1-PR XX - XX	AS AT1	AS AT1	4 x 6 / 7
AT2-PR XX - XX	AS AT2	AS AT2	4 x 6
AT3-PR XX - XX	AS AT3	AS AT3	4 x 6
AT4-PR XX - XX	AS AT4	AS AT4	8 x 12

# RED ELECTRONIC DOSING PUMP ACCESSORIES

To complement our range of AT1-4 Red Dosing Pump we are able to offer a wide range of accessories to help you build a complete dosing system. Every dosing system should have a foot valve comprising of filter and a non return valve so the pump does not lose its prime. An injection fitting with a non return valve to prevent any back feeding from a pressurised system, when dosing into a pipe under pressure. If dosing downhill an anti syphon valve or multi function is essential to stop the chemical reagent syphoning through the pump.



## Foot Valves AC-FP

Part No	Material	Hose	Seals	Valve
10414PVC	PVC	4x6	Viton	Ceramic
10414EPVC	PVC	4x6	EPDM	Ceramic
10414PVCGP	PVC	8x12	Viton	Ceramic
10414EPVCGP	PVC	8x12	EPDM	Ceramic
10414P	PVDF	4x6	Viton	Ceramic
10414EP	PVDF	4x6	EPDM	Ceramic
10414PGP	PVDF	8x12	Viton	Ceramic
10414EPGP	PVDF	8x12	EPDM	Ceramic



## Injection Valves AXC-V1

Part No	Material	Hose	Seals	Valve
10413PVC	PVC	4x6	Viton	Ceramic
10413EPVC	PVC	4x6	EPDM	Ceramic
10413PVCGP	PVC	8x12	Viton	Ceramic
10413EPVCGP	PVC	8x12	EPDM	Ceramic
10413P	PVDF	4x6	Viton	Ceramic
10413EP	PVDF	4x6	EPDM	Ceramic
10413GP	PVDF	8x12	Viton	Ceramic
10413EPGP	PVDF	8x12	EPDM	Ceramic



## Antisyphon / Loading Valves AC-VS

10400V - Adjustable valve in PVC with Viton seals 0.5 -10 Bar  
 10400E - Adjustable valve in PVC with EPDM seals 0.5 -10 Bar



## Multifunction Valves AC-VM-PVDF

New improved multifunction valve featuring anti-syphon, back pressure & safety valve functions in one valve with adjustable back pressure of 0 - 5.0 bar and safety valve adjustable 0 - 18.0 bar available for pumps with 6 mm and 12 mm dosing hoses with either EPDM or Viton seals.

11243-PVDF - MF valve in PVDF for 4 x 6 tubing with Viton seals  
 11243LP-PVDF - MF valve in PVDF for 4 x 6 tubing with EPDM seals  
 11243GP - MF valve in PVDF for 8 x 12 tubing with Viton seals  
 11243 - MF valve in PVDF for 8 x 12 tubing with EPDM seals

# RED ELECTRONIC DOSING PUMP ACCESSORIES



## Flow Sensors AC-SF

Flow sensor for detecting each time a red dosing pump makes a stroke by providing a volt free contact closure with adjustable sensitivity. This maybe connected to either an AT-MT series pump or remote PLC where the flow can be verified or totalised.

**AC-SF 10402** - For 4 x 6 LDPE tube with Viton seals  
**AC-SF 10402A** - For 8 x 12 LDPE tube with Viton seals



## Degassing Head

PVDF auto degassing head for models AT1, 2 or 3 automatic air bleed of the pump head flow is reduced depending upon the amount of gas in the liquid being dosed.



## Injection Quills

Part No	Material	Fitting	Seals	Valve
<b>AC-VEI 11377</b>	PVC	1/2" BSP	Viton	None
<b>AC-VEI 11376</b>	PVC	1/2" BSP	EPDM	None
<b>AC-VEI 11219FS</b>	PVC	1/2" BSP	Viton	PVC
<b>AC-VEI 11219</b>	PVC	1/2" BSP	EPDM	PVC
<b>SS-INJ-Q</b>	SS 316	1/2" BSP	PTFE	SS 316



## Suction Lance Assemblies

Suction lance assemblies are designed to go into the chemical container with a cone shaped rubber seal. The suction lance features a built-in foot valve and low level float switch.

- AC.LA.025** - For 25 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.025A** - For 25 L tank with f'switch 1/2" for 8 x 12 mm tube
- AC.LA.05** - For 50 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.05A** - For 50 L tank with f'switch 1/2" for 8 x 12 mm tube
- AC.LA.1** - For 100 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.1A** - For 100 L tank with f'switch 1/2" for 8 x 12 mm tube
- AC.LA.2** - For 200 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.2A** - For 200 L tank with f'switch 1/2" for 8 x 12 mm tube
- AC.LA.3** - For 300 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.3A** - For 300 L tank with f'switch 1/2" for 8 x 12 mm tube
- AC.LA.5/10** - For 500 L tank with f'switch 3/8" for 4 x 6 mm tube
- AC.LA.5/10A** - For 500 L tank with f'switch 1/2" for 8 x 12 mm tube

# RED ELECTRONIC DOSING PUMP SPARES

To complement our range of Dosing Pump we are able to offer spares kits to keep your dosing pump pumping, we have named these our *remake kits*, and part numbers begin with RMK. These kits are also useful where recommended spares are requested for constant use or export applications



## HY Red Electronic Dosing Pumps

**RMKHY-V** - PVDF head, ceramic valves and viton seals

**RMKHY-D** - PVDF head, ceramic valves and EPDM seals

**HY-D** - PTFE Diaphragm for HY-BL dosing pump



## AT1 to AT3 Red Electronic Dosing Pumps

**RMK123-V** - PVDF head, ceramic valves and viton seals

**RMK123-D** - PVDF head, ceramic valves and EPDM seals

**AT123-D** - PTFE Diaphragm for AT1, 2 or 3 dosing pump

**11414** - PVDF / Ceramic suction & delivery valves viton seals

**11414E** - PVDF / Ceramic suction & delivery valves EPDM seals

**12516** - PVDF / PTFE suction & delivery valves viton seals



## AT4 Red Electronic Dosing Pumps

**RMK4-V** - PVDF head, ceramic valves and viton seals

**RMK4-D** - PVDF head, ceramic valves and EPDM seals

**AT4-D** - PTFE Diaphragm for AT4 dosing pump

**11415** - PVDF / Ceramic suction & delivery valves viton seals

**11415E** - PVDF / Ceramic suction & delivery valves EPDM seals

**12522** - PVDF / PTFE suction & delivery valves viton seals



## GEA1 to GEA3 Foot Mounting Electronic Dosing Pumps

**RMK123-V** - PVDF head, ceramic valves and viton seals

**RMK123-D** - PVDF head, ceramic valves and EPDM seals

**AT123-D** - PTFE Diaphragm for GEA1, 2 or 3 dosing pump

**11414** - PVDF / Ceramic suction & delivery valves viton seals

**11414E** - PVDF / Ceramic suction & delivery valves EPDM seals

**12516** - PVDF / PTFE suction & delivery valves viton seals

## GEA4 Foot Mounting Electronic Dosing Pumps

**RMK4-V** - PVDF head, ceramic valves and viton seals

**RMK4-D** - PVDF head, ceramic valves and EPDM seals

**AT4-D** - PTFE Diaphragm for GEA4 dosing pump

**11415** - PVDF / Ceramic suction & delivery valves viton seals

**11415E** - PVDF / Ceramic suction & delivery valves EPDM seals

**12522** - PVDF / PTFE suction & delivery valves viton seals

# RED ELECTRONIC DOSING PUMP ACCESSORIES

## Dosing Hose



### Low Density Polyethylene

**4/6 LPE** - 4 x 6 mm L.D.P.E. Dosing tubing 30 metre coil

**8/12 LPE** - 8 x 12 mm L.D.P.E. Dosing tubing 30 metre coil

### Teflon/PTFE

**4/6 PTFE** - 4 x 6 mm PTFE. Dosing tubing 5 metre coil

**8/12 PTFE** - 8 x 12 mm PTFE. Dosing tubing 5 metre coil

## PVDF Dosing Tube



**4/6 PVDF** - 4 x 6 mm PVDF. Dosing tubing 5 metre coil

## Clear PVC Hose

**4/6 PVC** - 4 x 6 mm Clear PVC tubing 30 metre coil

**6/8 PVC** - 6 x 8 mm Clear PVC tubing 30 metre coil

**8/12 PVC** - 8 x 12 mm Clear PVC tubing 30 metre coil

## Clear Reinforced Braided PVC Hose



**0375RPVC** - 3/8" Ø ID Reinforced PVC tubing 30 metre coil

**0500RPVC** - 1/2" Ø ID Reinforced PVC tubing 30 metre coil

**0750RPVC** - 3/4" Ø ID Reinforced PVC tubing 30 metre coil

**100.0RPVC** - 1.0" Ø ID Reinforced PVC tubing 30 metre coil

**125.0RPVC** - 1.1/4" Ø ID Reinforced PVC tubing 30 metre coil

Dosing hose must be protected from frost and direct sunlight.  
Ensure hose is compatible with the chemical you are dosing.

*We recommend all dosing hose is installed inside a secondary pipe or hose for mechanical protection against damage.*

# PERISTALTIC PUMPS

## Peristaltic Pumps

Peristaltic pumps offer a simple solution for intermittent dosing applications where no pressure is required, dosing non hazardous chemical reagents or simple low volume pumping applications.

Sometimes referred to as hose pumps peristaltic pumps have excellent priming capabilities some pumps being able to pump up to 6 metres lift (water like solutions) We offer a simple range of low output pumps including pumps with built in timers and pumps with greater outputs up to 120 l/Hr. with greater outputs up to 120 l/hr.



**SWP1-F-3** - Small wheel peristaltic pump, fixed speed output 3.0 L/Hr, max duty cycle 30 mins fitted santoprene tubing mains supply 230 VAC



**SWP2-F-7** - Small wheel peristaltic pump fixed speed output 7.0 L/Hr max duty cycle 30 mins fitted santoprene tubing mains supply 230 VAC

**SWP2-F-7** - Small wheel peristaltic pump fixed speed output 15.0 L/H rmax duty cycle 30 mins fitted santoprene tubing mains supply 230 VAC



**BWP120** - Big wheel peristaltic pump output 30, 60, 90 or 120 L/Hr selectable via internal jumper max duty cycle 30 mins mains supply 230 VAC



**TPD-M** - Timed peristaltic dosing with 7 day real time clock providing up to 5 timed doses per day pump output 1.5 L/Hr 230 VAC mains powered Ideal for drain dosing with fat dissolving reagents.

**TPD-B** - Timed peristaltic dosing with 7 day real time clock providing up to 5 timed doses per day pump output 0.4 L/Hr battery powered. Ideal for remote dosing applications where no mains power is available such as remote camping and caravan sites.

# PERISTALTIC PUMP SPARES

## Spares and Accessories

Due to the action of the rollers on the peristaltic pump tubing which slowly push a column of liquid round the inside of the pump the pump tubing on peristaltic pump is a consumable item. We recommend to carry some spares tubing which is listed as follows.



### Small wheel pumps

**SWPP1T-SP** - Small wheel peri pump 1 tubing in Santoprene 6.5x10



**SWPP1T-EP** - Small wheel peri pump 1 tubing in EPDM 6.5x10

**SWPP1T-SC** - Small wheel peri pump 1 tubing in Silicone 6.5x10



**SWPP1T-V** - Small wheel peri pump 1 tubing in Viton 6.5x10

*Fits pumps SWP-F3, SWP-V5 and TDP-M & B*

**SWPP2T-EP** - Small wheel peri pump 1 tubing in EPDM 8x12



**SWPP2T-SC** - Small wheel peri pump 1 tubing in Silicone 8x12

*Fits pumps SWP1-F7 & SWP-V15*



### Big wheel pump

**BWPP2T-SP** - Big wheel peri pump 1 tubing in Santoprene 10x16

**BWPP2T-EP** - Big wheel peri pump 1 tubing in EPDM 10x16



**BWPP2T-SC** - Big wheel peri pump 1 tubing in Silicone 10x16

**BWPP2T-V** - Big wheel peri pump 1 tubing in Viton 10x16

*Fits pumps BWP120*



### Accessories

**4/6 PVC** - 4 x 6 mm Clear PVC tubing 30 metre coil

**8/12 PVC** - 8 x 12 mm Clear PVC tubing 30 metre coil

# MECHANICAL PISTON DOSING PUMP



## TAP 15 Series

Piston Pumps with 15mm stroke PVC/SS heads & valves with BSP connectors. Motors 400 volt three phase.

Model No	L/Hr	Bar SS	Bar PVC	Strokes Min	Connections	Motor Kw
TAP15-6-58	0 - 1.5	20.0	10.0	58	1/4" Gas	0.18 Kw
TAP15-6-116	0 - 3.0	20.0	10.0	116	1/4" Gas	0.18 Kw
TAP15-11-58	0 - 5.5	20.0	10.0	58	1/4" Gas	0.18 Kw
TAP15-11-116	0 - 10	20.0	10.0	116	1/4" Gas	0.18 Kw
TAP15-17-58	0 - 11	20.0	10.0	58	3/8" Gas	0.18 Kw
TAP15-17-116	0 - 22	20.0	10.0	116	3/8" Gas	0.18 Kw
TAP15-25-58	0 - 25	20.0	10.0	58	3/8" Gas	0.18 Kw
TAP15-25-116	0 - 50	20.0	10.0	116	3/8" Gas	0.18 Kw
TAP15-30-58	0 - 35	20.0	10.0	58	3/8" Gas	0.25 Kw
TAP15-30-116	0 - 70	20.0	10.0	116	3/8" Gas	0.25 Kw
TAP15-38-58	0 - 55	17.0	10.0	58	3/8" Gas	0.25 Kw
TAP15-38-116	0 - 110	17.0	10.0	116	3/8" Gas	0.25 Kw
TAP15-48-58	0 - 85	10.0	10.0	58	1/2" Gas	0.25 Kw
TAP15-48-116	0 - 170	10.0	10.0	116	1/2" Gas	0.25 Kw
TAP15-54-58	0 - 110	8.0	8.0	58	1/2" Gas	0.25 Kw
TAP15-54-116	0 - 220	8.0	8.0	116	1/2" Gas	0.25 Kw
TAP15-64-58	0 - 152	6.0	6.0	58	3/4" Gas	0.25 Kw
TAP15-64-116	0 - 304	6.0	6.0	116	3/4" Gas	0.25 Kw



## TAP 25 Series

Piston Pumps with 25mm stroke PVC/SS heads & valves with BSP connectors. Motors 400 volt three phase.

Model No	L/Hr	Bar SS	Bar PVC	Strokes Min	Connections	Motor Kw
TAP25-25-58	0 - 40	20.0	10.0	58	3/8" Gas	0.25 Kw
TAP25-25-116	0 - 80	20.0	10.0	116	3/8" Gas	0.25 Kw
TAP25-30-58	0 - 55	20.0	10.0	58	3/8" Gas	0.25 Kw
TAP25-30-116	0 - 112	20.0	10.0	116	3/8" Gas	0.25 Kw
TAP25-38-58	0 - 90	20.0	10.0	58	1/2" Gas	0.37 Kw
TAP25-38-116	0 - 180	20.0	10.0	116	1/2" Gas	0.37 Kw
TAP25-48-58	0 - 140	20.0	10.0	58	1/2" Gas	0.55 Kw
TAP25-48-116	0 - 284	20.0	10.0	116	1/2" Gas	0.55 Kw
TAP25-54-58	0 - 180	15.0	10.0	58	1/2" Gas	0.55 Kw
TAP25-54-116	0 - 365	15.0	10.0	116	1/2" Gas	0.55 Kw
TAP25-64-58	0 - 250	10.0	10.0	58	3/4" Gas	0.75 Kw
TAP25-64-116	0 - 505	10.0	10.0	116	3/4" Gas	0.75 Kw
TAP25-76-58	0 - 365	7.0	7.0	58	1" Gas	0.75 Kw
TAP25-76-116	0 - 730	7.0	7.0	116	1" Gas	0.75 Kw
TAP25-89-58	0 - 495	5.0	5.0	58	1" Gas	0.75 Kw
TAP25-89-116	0 - 1000	5.0	5.0	116	1" Gas	0.75 Kw

Additional cost for 230VAC single phase motors

# MECHANICAL DIAPHRAGM DOSING PUMP

## TAM 2, 4, 6 Series With Stainless steel or PP Heads

Mechanical diaphragm dosing pumps have adjustable stroke length control.

The TAM 2-4-6 series of mechanical dosing pumps are driven by an electric motor which maybe 400 volt 3 phase or optional 230 volt single phase, motors controlled by invertors are also available.

The dosing pump output is manually adjustable from 0 -100% by the stroke length micrometer adjustment dial located on pump gearbox. The dosing pump wetted parts are available in a wide range of materials to suit the chemical reagent being dosed including polypropylene, PVC, PVDF and 316 Stainless steel. The TAM series of dosing pumps offer cost effective reliable dosing solutions for many industrial process.



### Motors 400 volt three phase

Model No	L/Hr	Bar	Strokes	Connections	Motor Size
TAM2-94-58	0 - 20	10.0	58	3/8" Gas	0.25 Kw
TAM2-94-78	0 - 26	10.0	78	3/8" Gas	0.25 Kw
TAM2-94-116	0 - 40	10.0	116	3/8" Gas	0.25 Kw
TAM4-108-58	0 - 60	10.0	58	3/8" Gas	0.37 Kw
TAM4-108-78	0 - 80	10.0	78	3/8" Gas	0.37 Kw
TAM4-108-116	0 - 120	10.0	116	3/8" Gas	0.37 Kw
TAM6-138-58	0 - 155	7.0	58	3/4" Gas	0.37 Kw
TAM6-138-78	0 - 220	7.0	78	3/4" Gas	0.37 Kw
TAM6-138-116	0 - 310	7.0	116	1" Gas	0.37 Kw
TAM6-165-58	0 - 230	5.0	58	1" Gas	0.37 Kw
TAM6-165-78	0 - 330	5.0	78	1" Gas	0.37 Kw
TAM6-165-116	0 - 460	5.0	116	1" Gas	0.37 Kw

## TAM 2, 4, 6 Series With PVC or PVDF Heads

### Motors 400 volt three phase

Model No	L/Hr	Bar	Strokes	Connections	Motor
TAM2-94-58	0 - 20	10.0	58	3/8" Gas	0.25 Kw
TAM2-94-78	0 - 26	10.0	78	3/8" Gas	0.25 Kw
TAM2-94-116	0 - 40	10.0	116	3/8" Gas	0.25 Kw
TAM4-108-58	0 - 60	10.0	58	3/8" Gas	0.37 Kw
TAM4-108-78	0 - 80	10.0	78	3/8" Gas	0.37 Kw
TAM4-108-116	0 - 120	10.0	116	3/8" Gas	0.37 Kw
TAM6-138-58	0 - 155	7.0	58	3/4" Gas	0.37 Kw
TAM6-138-78	0 - 220	7.0	78	3/4" Gas	0.37 Kw
TAM6-138-116	0 - 310	7.0	116	1" Gas	0.37 Kw
TAM6-165-58	0 - 230	5.0	58	1" Gas	0.37 Kw
TAM6-165-78	0 - 330	5.0	78	1" Gas	0.37 Kw
TAM6-165-116	0 - 460	5.0	116	1" Gas	0.37 Kw

### Motor Options

Additional Cost for Single Phase Motors

- Pumps with 0.18 Kw Single phase motors
- Pumps with 0.25 Kw Single phase motors
- Pumps with 0.37 Kw Single phase motors
- Pumps with 0.55 Kw Single phase motors
- Pumps with 0.75 Kw Single phase motors

# µP CONTROLLED PISTON PUMPS

## ATP 15 Series

The ATM series comprises microprocessor-controlled piston pumps with a 15mm stroke and PVC or stainless-steel (SS) heads and valves, equipped with BSP connectors. These pumps operate on a 230 VAC single-phase power supply, with an inverter controller that generates a smooth 230 VAC three-phase output to efficiently drive the internal pump motor.

This system offers a cost-effective and energy-efficient solution, providing a wide range of control functions for precise dosing applications. Piston pumps are well-suited for a variety of dosing tasks, including the handling of high-viscosity solutions and delivering flow rates up to 1000 litres per hour.

With the available control options, these pumps are ideal for proportional dosing of polyelectrolytes, particularly when configured with stainless-steel wetted parts and installed in a flooded suction setup.



Model No	L/Hr	Bar SS	Bar PVC	Strokes Min	Connections	Motor Kw
ATP15006A	0 - 1.5	10.0	10.0	58	1/4" Gas	0.18 Kw
ATP15006C	0 - 3.0	10.0	10.0	116	1/4" Gas	0.18 Kw
ATP150011A	0 - 5.5	10.0	10.0	58	1/4" Gas	0.18 Kw
ATP150011C	0 - 10	10.0	10.0	116	1/4" Gas	0.18 Kw
ATP150017A	0 - 11	10.0	10.0	58	3/8" Gas	0.18 Kw
ATP150017C	0 - 22	10.0	10.0	116	3/8" Gas	0.18 Kw
ATP150025A	0 - 25	10.0	10.0	58	3/8" Gas	0.25 Kw
ATP150025C	0 - 50	10.0	10.0	116	3/8" Gas	0.25 Kw
ATP150030A	0 - 35	10.0	10.0	58	3/8" Gas	0.37 Kw
ATP150030C	0 - 70	10.0	10.0	116	3/8" Gas	0.37 Kw
ATP150038A	0 - 55	10.0	10.0	58	3/8" Gas	0.37 Kw
ATP150038C	0 - 110	10.0	10.0	116	3/8" Gas	0.37 Kw
ATP150048A	0 - 85	10.0	10.0	58	1/2" Gas	0.37 Kw
ATP150048C	0 - 170	10.0	10.0	116	1/2" Gas	0.37 Kw
ATP150054A	0 - 110	8.0	8.0	58	1/2" Gas	0.37 Kw
ATP150054C	0 - 220	8.0	8.0	116	1/2" Gas	0.37 Kw
ATP150064A	0 - 152	4.0	4.0	58	3/4" Gas	0.37 Kw
ATP150064C	0 - 304	4.0	4.0	116	3/4" Gas	0.37 Kw

## ATP 25 Series

Piston Pumps with 25mm stroke PVC/SS heads & valves with BSP connectors. Motors 230 volt single phase.



Model No	L/Hr	Bar SS	Bar PVC	Strokes Min	Connections	Motor Kw
ATP2500625A	0 - 40	10.0	10.0	58	3/8" Gas	0.55 Kw
ATP2500625C	0 - 80	10.0	10.0	116	3/8" Gas	0.55 Kw
ATP2500630A	0 - 55	10.0	10.0	58	3/8" Gas	0.55 Kw
ATP2500630C	0 - 112	10.0	10.0	116	3/8" Gas	0.55 Kw
ATP2500638A	0 - 90	10.0	10.0	58	1/2" Gas	0.55 Kw
ATP2500638C	0 - 180	10.0	10.0	116	1/2" Gas	0.55 Kw
ATP2500648A	0 - 140	10.0	10.0	58	1/2" Gas	0.55 Kw
ATP2500648C	0 - 284	10.0	10.0	116	1/2" Gas	0.55 Kw
ATP2500654A	0 - 180	10.0	10.0	58	1/2" Gas	0.75 Kw
ATP2500654C	0 - 365	10.0	10.0	116	1/2" Gas	0.75 Kw
ATP2500664A	0 - 250	10.0	10.0	58	3/4" Gas	0.75 Kw
ATP2500664C	0 - 505	10.0	10.0	116	3/4" Gas	0.75 Kw
ATP2500676A	0 - 365	7.0	7.0	58	1" Gas	0.75 Kw
ATP2500676C	0 - 730	7.0	7.0	116	1" Gas	0.75 Kw
ATP2500689A	0 - 495	5.0	5.0	58	1" Gas	0.75 Kw
ATP2500689C	0 - 1000	5.0	5.0	116	1" Gas	0.75 Kw

## Options

For our range of accessories including foot valves loading, pressure relief valves and injection valves please see page

# µP CONTROLLED DIAPHRAGM PUMPS

## ATM Series Pumps With Stainless Steel or PP Heads

The ATM series of microprocessor-controlled mechanical diaphragm dosing pumps feature a manually adjustable stroke length control from 10% to 100%, providing a 10:1 turndown ratio. A specialized microprocessor and inverter controller enables dosing proportional to a standard 4–20 mA control signal, dosing proportional to external pulses for either ppm or batch-controlled operation, timed dosing via the internal real-time clock, and manual dosing as required.



### Supply 230 volt single phase

Model No	L/Hr	Bar	Strokes / Min	Connections	Motor Size
ATM 020 64A	0 - 5.5	10.0	58	1/4" Gas	0.18 Kw
ATM 020 64B	0 - 8.0	10.0	78	1/4" Gas	0.18 Kw
ATM 020 64C	0 - 11.0	10.0	116	1/4" Gas	0.18 Kw
ATM 020 94A	0 - 20	10.0	58	3/8" Gas	0.25 Kw
ATM 020 94B	0 - 26	10.0	78	3/8" Gas	0.25 Kw
ATM 020 94C	0 - 40	10.0	116	3/8" Gas	0.25 Kw
ATM 040 108A	0 - 60	10.0	58	3/8" Gas	0.25 Kw
ATM 040 108B	0 - 80	10.0	78	3/8" Gas	0.25 Kw
ATM 040 108C	0 - 120	10.0	116	3/8" Gas	0.25 Kw
ATM 060 138A	0 - 155	7.0	58	3/4" Gas	0.37 Kw
ATM 060 138B	0 - 220	7.0	78	3/4" Gas	0.37 Kw
ATM 060 138B	0 - 310	7.0	116	1" Gas	0.37 Kw
ATM 060 165A	0 - 230	5.0	58	1" Gas	0.37 Kw
ATM 060 165B	0 - 330	5.0	78	1" Gas	0.37 Kw
ATM 060 165C	0 - 500	5.0	116	1" Gas	0.37 Kw

## ATM Series Pumps With PVC or PVDF Heads

### Supply 230 volt single phase



Model No	L/Hr	Bar	Strokes / Min	Connections	Motor
ATM 020 64A	0 - 5.5	10.0	58	1/4" Gas	0.18 Kw
ATM 020 64B	0 - 8.0	10.0	78	1/4" Gas	0.18 Kw
ATM 020 64C	0 - 11.0	10.0	116	1/4" Gas	0.18 Kw
ATM 020 94A	0 - 20	10.0	58	3/8" Gas	0.25 Kw
ATM 020 94B	0 - 26	10.0	78	3/8" Gas	0.25 Kw
ATM 020 94C	0 - 40	10.0	116	3/8" Gas	0.25 Kw
ATM 040 108A	0 - 60	10.0	58	3/8" Gas	0.25 Kw
ATM 040 108B	0 - 80	10.0	78	3/8" Gas	0.25 Kw
ATM 040 108C	0 - 120	10.0	116	3/8" Gas	0.25 Kw
ATM 060 138A	0 - 155	7.0	58	3/4" Gas	0.37 Kw
ATM 060 138B	0 - 220	7.0	78	3/4" Gas	0.37 Kw
ATM 060 138B	0 - 310	7.0	116	1" Gas	0.37 Kw
ATM 060 165A	0 - 230	5.0	58	1" Gas	0.37 Kw
ATM 060 165B	0 - 330	5.0	78	1" Gas	0.37 Kw
ATM 060 165C	0 - 500	5.0	116	1" Gas	0.37 Kw

# MECHANICAL DOSING PUMP ACCESSORIES



## Foot Valves

Foot valve for pumping with a suction lift from a chemical container

- FV-0375-PVC** - Foot Valve in PVC 3/8" BSP 0 - 50 L/Hr
- FV-0500-PVC** - Foot Valve in PVC 1/2" BSP 0 - 200 L/Hr
- FV-0750-PVC** - Foot Valve in PVC 3/4" BSP 0 - 400 L/Hr
- FV-1000-PVC** - Foot Valve in PVC 1" BSP 0 - 1000 L/Hr

- FV-0375-SS** - Foot Valve with filter in S' steel 3/8" BSP 0 - 50 L/Hr
- FV-0500-SS** - Foot Valve with filter in S' steel 1/2" BSP 0 - 200 L/Hr
- FV-1000-SS** - Foot Valve with filter in S' steel 1" BSP 0 - 1000 L/Hr



## Injection Valves

Injection valve with built in NRV for dosing into pipes or vessels

- IV-0375-PVC** - Injection / NRV Valve in PVC 3/8" BSP 0 - 50 L/Hr
- IV-0500-PVC** - Injection / NRV Valve in PVC 1/2" BSP 0 - 200 L/Hr
- IV-0750-PVC** - Injection / NRV Valve in PVC 3/4" BSP 0 - 400 L/Hr
- IV-1000-PVC** - Injection / NRV Valve in PVC 1" BSP 0 - 1000 L/Hr



## Loading / Pressure Relief Valves

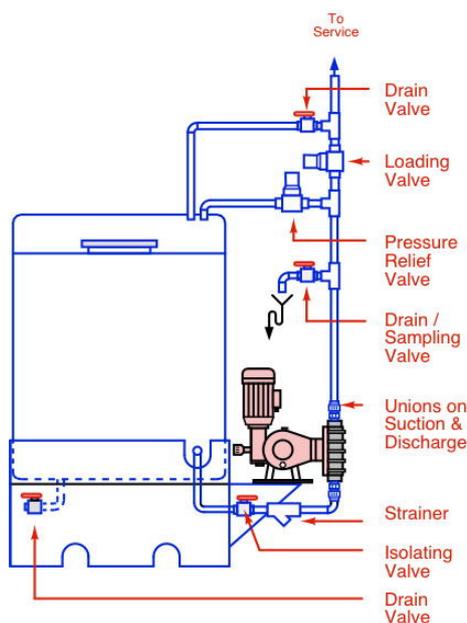
Adjustable relief / safety valve 1 - 10 bar.

- PRV-0500-PVC** - Pressure relief valve in PVC 1/2" BSP 0 - 200 L/Hr
- PRV-0750-PVC** - Pressure relief valve in PVC 3/4" BSP 0 - 500 L/Hr
- PRV-1000-PVC** - Pressure relief valve in PVC 1" BSP 0 - 1000 L/Hr

- PRV-0500-PVDF** - Pressure relief valve in PVDF 1/2" BSP 0 - 50 L/Hr
- PRV-0750-PVDF** - Pressure relief valve in PVDF 3/4" BSP 0 - 500 L/Hr
- PRV-1000-PVDF** - Pressure relief valve in PVDF 1" BSP 0 - 1000 L/Hr

- PRV-0500-SS** - Pressure relief valve in SS 3/8" BSP 0 - 200 L/Hr
- PRV-0750-SS** - Pressure relief valve in SS 3/4" BSP 0 - 500 L/Hr
- PRV-1000-SS** - Pressure relief valve in SS 1" BSP 0 - 1000 L/Hr

## Typical Installation



Typical installation of a dosing pump with flooded suction from a dosing tank. The dosing tank is mounted on one of our flooded suction kit, which incorporates a polypropylene stand to raise the tank so the reagent can flow into the pump by gravity. An isolating valve is fitted before the pump to isolate the pump for maintenance and an inline strainer to prevent any particles entering the pump.

The discharge from the pump has a sampling valve, which also maybe opened to relieve any pressure in the discharge line. The pressure relief or safety valve diverts the pump flow back into the storage tank in the event of the discharge becoming blocked.

The loading valve provides the pump with some pressure to work against and acts as an anti syphon valve when dosing to a point lower than the dosing pump and tank set IE into a pit or sump.

A second drain valve can be fitted to drain the discharge pipework where the reagent is being pumped some distance into a pipe or vessel under pressure.

Not shown is an injection fitting with a non return valve for dosing into a pipe under pressure to prevent the flow in the pipe back feeding through the pump and into the dosing tank.

# CONTROL VALVES

## SOLENOID & PNEUMATIC VALVES



### Direct Operating Brass Solenoid Valves N/C

Solenoid valve for water & air brass body with NBR diaphragms & female BSP threaded ports.

Part No	Size BSP.	Min PSI	Max PSI	Solution °C	Voltage
BSV-050-00	1/2"	0 PSI	90 PSI	90°C	24, 115, 230v AC
BSV-075-00	3/4"	0 PSI	90 PSI	90°C	24, 115, 230v AC
BSV-100-00	1"	0 PSI	90 PSI	90°C	24, 115, 230v AC

### Stainless Steel Solenoid Valves N/C

SS-SV-050-05	1/2"	8 PSI	150 PSI	90°C	24, 115, 230v AC
SS-SV-075-05	3/4"	8 PSI	150 PSI	90°C	24, 115, 230v AC
SS-SV-100-05	1"	8 PSI	150 PSI	90°C	24, 115, 230v AC



### Brass Solenoid Valve Three Port

Three port brass solenoid valve for use as a pilot valve to control air to a pneumatic valve.

BSV-025-3PT	1/4"	0 PSI	120 PSI	90°C	24, 115, 230v AC
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### Plastic Solenoid Valve Normally Closed

Servo operating Plastic bodied solenoid valve with internal components in stainless steel.

PSV-075-03	3/4" male	3 PSI	90 PSI	60°C	24, 115, 230v AC
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### Pneumatic Valves Fail Safe to Close

Pneumatic valve with PVC body & EPDM seals (option for Viton or PTFE for chemical use call for prices) all valves require a pilot solenoid valve.

PDV050	1/2"	0 PSI	50 PSI	40°C	Pneumatic
PDV075	3/4"	0 PSI	50 PSI	40°C	Pneumatic
PDV100	1"	0 PSI	50 PSI	40°C	Pneumatic
PDV150	1 1/2"	0 PSI	50 PSI	40°C	Pneumatic
PDV200	2"	0 PSI	50 PSI	40°C	Pneumatic



### Actuated Ball Valves

Stainless steel ball valves operated by either pneumatic actuator which will require a pilot solenoid valve or by servo motor, power to open and power to close.

### Electric Valves

SMV-050-00	1/2"	0 PSI	250 PSI	205°C	230 VAC
SMV-075-00	3/4"	0 PSI	250 PSI	205°C	230 VAC
SMV-100-00	1"	0 PSI	250 PSI	205°C	230 VAC



### Pneumatic Valves

SPV-050-00	1/2"	0 PSI	250 PSI	205°C	Air
SPV-075-00	3/4"	0 PSI	250 PSI	205°C	Air
SPV-100-00	1"	0 PSI	250 PSI	205°C	Air

# CHEMICAL TANK DOSING TANK

- \* Range from 50 to 1000 litres capacity
- \* Medium Density Polyethylene (MDPE)
- \* Raised top for mounting pumps
- \* Black screw top for chemical addition
- \* Gradual scale of Tank Contents
- \* Suitable for a wide range reagents

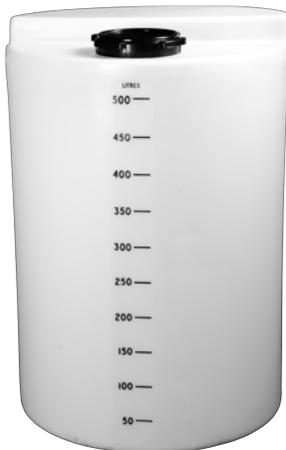
*Check with our corrosion chart before filling the tank*



Our range of chemical dosing tanks are moulded from medium-density polyethylene (MDPE), offering excellent chemical resistance and long service life. Each tank is fitted with a graduated scale, allowing the contents to be easily monitored in litres.

The tank top incorporates a raised mounting section, enabling the installation of small electronic dosing pumps without fouling the pump suction valve.

A black screw cap (approximately 150 mm Ø) is provided for filling the dosing tank. For hazardous chemical reagents, filling should be carried out by pumping directly into the tank. A high-level alarm can be fitted to assist in preventing accidental overfilling.



## Dosing Tanks

Robust moulded natural MDPE dosing tanks with black screw fitting lid with raised section to mount dosing pump, mixer and level sensors etc.

- DT25** - 25 Litre Dosing Tank Dia. 250 x 350 x 340 mm (W x H x D)
- DT50** - 50 Litre Dosing Tank Dia. 425 x 500 mm
- DT100** - 100 Litre Dosing Tank Dia. 497 x 698 mm
- DT200** - 200 Litre Dosing Tank Dia. 635 x 782 mm
- DT300** - 300 Litre Dosing Tank Dia. 660 x 1074 mm
- DT500** - 500 Litre Dosing Tank Dia. 815 x 1100 mm
- DT1000** - 1000 Litre Dosing Tank Dia. 1062 x 1350 mm

*For black tanks add 10% to above prices*



## Bund Tanks

- BT25** - 25 Litre Dosing Tank Bund Dia. 680 x 285 mm
- BT50** - 50 Litre Dosing Tank Bund Dia. 685 x 288 mm
- BT100** - 100 Litre Dosing Tank Bund Dia. 806 x 325 mm
- BT200** - 200 Litre Dosing Tank Bund Dia. 970 x 400 mm
- BT300** - 300 Litre Dosing Tank Bund Dia. 940 x 620 mm
- BT500** - 500 Litre Dosing Tank Bund Dia. 1130 x 680mm
- BT1000** - 1000 Litre Dosing Tank Bund Dia. 1560 x 770mm

*Sizes in natural MDPE with open top and rolled over top edge.*

# CHEMICAL DOSING DOSING STATIONS



We manufacture a wide range of chemical dosing stations, which can be supplied complete with dosing pumps selected from our extensive range of electronic solenoid and motor-driven dosing pumps.

## Open Dosing Stations

Open dosing stations are designed for use with non-hazardous chemicals, typically supplied in 20 or 25 litre carboys. Each station incorporates a bunded base capable of retaining 110% of the carboy contents for spill containment.

These stations can be fitted with any of our surface-mounted electronic dosing pumps, complete with suction lances for direct insertion into the chemical carboys.

## Enclosed Dosing Stations

Enclosed dosing stations are intended for use with hazardous chemicals, including concentrated acids and alkalis. The carboys are located within a bunded area, and the front of the dosing station is protected by a removable clear PVC panel, providing additional safety for site personnel while maintaining visibility.

## Custom Configurations

Both open and enclosed dosing stations can be manufactured to accommodate multiple carboys for higher-capacity applications. For larger pumps, chemical supply can be provided via flooded suction from an IBC or bulk storage tank, with the dosing station fitted with a manifold to suit your chemical supply arrangement.



## Flooded Suction Systems

For chemicals with high viscosity or low vapour pressure, we manufacture flooded suction kits in which a dosing tank is mounted above the dosing pump to ensure reliable priming and operation.

These systems are available for electronic and mechanical diaphragm dosing pumps, and can be supplied in single-pump or duty/standby configurations.

## Dosing Station

Our dosing pumps can be supplied as part of a complete dosing station to simplify and speed up site installation. Each station provides a bunded area for chemical drums, helping to contain spills and improve site safety.

Two types of dosing station are available: an open-fronted version for easy access, and a fully enclosed version fitted with a clear PVC drop-in front cover, making it ideal for use with hazardous chemical reagents.

**DSO1** - Open fronted dosing station for a single AT series pump.

**DSO2** - Open fronted dosing station for two AT series pumps.

**DSO3** - Open fronted dosing station for three AT series pumps.

**DSC1** - Clear PVC fronted dosing station for a single AT series pump.

**DSC2** - Clear PVC fronted station for for two AT series pumps.

**DSC3** - Clear PVC fronted station for a three AT series pumps.

Specials can be designed and built

*Specifications & prices are subject to change due to raw material price fluctuations*



# HIGH SPEED MIXERS & HAND MIXERS



## Hand Mixers

Hand mixers are designed for mounting on top of our DT range of MDPE dosing tanks and are manufactured in PVC. They are ideal for simple mixing applications.

Two types are available: a stumping type, where the mixer is manually moved up and down in the liquid, and a conventional rotating type for continuous agitation.

**HM-S** - Hand operated stumping mixer in PVC with mounting flange

**HM-R** - Hand operated rotating mixer in PVC with mounting flange

**BBP** - Four polypropylene nuts and bolts for mounting hand mixers

## Electric Mixers High Speed

High speed mixers for use in dosing tanks, effluent sumps, pits, or tanks. These mixers are designed for operation only in fully flooded conditions. Running a high speed mixer in a tank that is not completely full can cause serious damage to both the mixer and the tank structure. For this reason, high speed mixers must not be installed in pumping tanks where liquid levels fluctuate as the tank is emptied during operation.

## Mixers with disk type impeller & shaft in 316 stainless steel

*for mixing in DT100 & DT200 reagent tanks*

**TM00** - Mixer with 4" Ø stainless disk fitted with 0.12 kW 240 volt or 415 volt motor

## Mixers with marine type propeller & shaft in 316 stainless steel.

**TM0** - Mixer with 3" Ø stainless propeller fitted 0.18 kW 415 volt motor

**TM0-SP2** - Mixer with 3" Ø propeller fitted 0.18 kW 240 volt motor

**TM11** - Mixer with 4" Ø propeller fitted 6 pole 0.25 kW 415 volt motor

**TM1** - Mixer with 4" Ø propeller fitted 0.37 kW 415 volt motor

**TM1-SP2** - Mixer with 4" Ø propeller fitted 0.37 kW 240 volt motor

**TM2** - Mixer with 6" Ø propeller fitted 0.55 kW 415 volt motor

**TM3** - Mixer with 7" Ø propeller fitted 0.75 kW 415 volt motor

**TM4** - Mixer with 8" Ø propeller fitted 1.5 kW 415 volt motor

**-EVA** - TM shaft & propeller EVA coated add

## Pneumatic Mixers High Speed

We are also able to supply high speed pneumatic mixers please call our sales office with your requirements.



# GEARED LOW SPEED MIXERS



## Electric Mixers Geared

Geared mixers with worm-driven gearboxes are fitted with large-diameter, flat-bladed 316 stainless steel impellers. Mixers GWM11, GWM21, GWM31, and GWM41 are supplied with either a 7.5:1 or 5:1 reduction ratio, depending on the mixer duty. All other mixers in the range are fitted with 10:1 ratio gearboxes.

**GMW0-SP2** - Geared mixer with 6" Ø impeller fitted 0.25 kW motor 240 volt

**GMW1** - Geared mixer with 10" Ø impeller fitted 0.18 kW motor 415 volt

**GMW1-SP2** - Geared mixer with 10" Ø impeller fitted 0.18 kW motor 240 volt

**GMW1-SP1** - Geared mixer with 10" Ø impeller fitted 0.37 kW motor 110 volt

**GMW11** - Geared mixer with 10" Ø impeller fitted 0.37 kW motor 415 volt

**GMW11-SP2** - Geared mixer with 10" Ø impeller fitted 0.37 kW motor 240 volt

**GMW11-SP1** - Geared mixer with 10" Ø impeller fitted 0.37 kW motor 110 volt

**GMW2** - Geared mixer with 12" Ø impeller fitted 0.55 kW motor 415 volt

**GMW21** - Geared mixer with 12" Ø impeller fitted 0.75 kW motor 415 volt

**GMW3** - Geared mixer with 16" Ø impeller fitted 1.1 kW 415 volt motor

**GMW31** - Geared mixer with 16" Ø impeller fitted 1.5 kW 415 volt motor

**GMW4** - Geared mixer with 20" Ø impeller fitted 2.2 kW 415 volt motor

**GMW41** - Geared mixer with 20" Ø impeller fitted 3.0 kW 415 volt motor



## Tank Tops Mountings

Strengthened plates for dosing tank tops to hold dosing pumps and/or mixers.

**PVC-MP-A** - PVC plate for tanks DT 50 - DT300

**PVC-MP-B** - PVC plate for tank DT 500 - DT1000

**SSMB** - SS/PVC bridge DT 300 - DT1000

**-F** - Fitting charge for mixer and single pump

# MAGNETIC DRIVE PUMPS

## M-Series

### Magnetic Drive Pumps

- \* Sealless magnetic drive design
- \* Excellent chemical resistance
- \* Robust construction
- \* Wide performance range
- \* Low maintenance operation
- \* Single and three-phase motor options
- \* Designed for continuous industrial use
- \* Suitable for a wide range of applications



The M Series centrifugal magnetic drive pumps provide a safe, reliable, and maintenance-friendly solution for transferring water, wastewater, and aggressive chemical reagents, including acids and alkalis. Featuring a sealless magnetic drive design, the M Series virtually eliminates leakage risks associated with traditional mechanical seal pumps, delivering improved plant safety, reduced downtime, and lower maintenance costs.

Constructed with robust polypropylene pump housings as standard, and with PVDF options available for demanding chemical applications, the M Series offers excellent corrosion resistance and long service life across a wide range of industries.

The range includes 12 pump models with flow capacities from 0.7 m<sup>3</sup>/h up to 43 m<sup>3</sup>/h, ensuring the right pump is available for both small-scale and heavy-duty process requirements. M7 models are supplied with 240 VAC single-phase motors, while larger pumps are available with three-phase motors, making them ideal for continuous industrial operation.

Proven in applications such as swimming pool water recirculation, metal finishing wastewater transfer, chemical manufacturing, textile dyeing and finishing, brewery and dairy processing, and food processing CIP systems, the M Series pumps deliver dependable performance wherever safe, leak-free chemical handling is critical.

Choose the M Series for confidence, durability, and long-term value in chemical pumping.

Model No	M3/Hr	Head Metres	Connections	Motor
M7	0.7	4.0	Hose Tails	0.01 Kw
M15	2.0	6.0	1" Gas	0.045 Kw
M25	3.0	7.0	1.1/4" Gas	0.12 Kw
M35	3.0	10.0	1.1/4"/1" Gas	0.12 Kw
M50	5.0	10.0	1.1/2" Gas	0.18 Kw
M70	7.0	9.5	2"/1.1/2" Gas	0.25 Kw
M100	18	18	2.1/4" Gas	0.75 Kw
M140	19	19	2.1/4" Gas	1.1 Kw
M200	20	20	2.3/4" Gas	1.1 Kw
M250	19	9.5	2.3/4" Gas	1.5 Kw
M290	21.5	9.5	2.3/4" Gas	2.2 Kw
M380	22	9.5	TBC	3.0 Kw

# AODD AIR OPERATED DOUBLE DIAPHRAGM PUMPS



- \* Can run dry without damage
- \* Self-priming up to 8 meters with foot valve
- \* Variable flow adjust the air flow / pressure
- \* Composite, long life diaphragms
- \* Pumps anything water to viscous materials
- \* Compact design reduced space required
- \* Pump stalls if discharge is closed, restarts when cleared
- \* Cannot burn out air driven
- \* Safe in hazardous areas Ex versions available.
- \* Easy maintenance with very few moving parts

## Double Diaphragm Pneumatic Pumps

Our air operated double diaphragm (AODD) pumps provide a reliable and versatile solution for transferring liquids and slurries across a wide range of industrial applications. Machined from solid polyethylene and fitted with PTFE ball valves and a PTFE diaphragm, these pumps offer excellent chemical resistance and long service life when handling aggressive or abrasive media.

Available in sizes from 1/4" to 2", pump output is easily controlled by adjusting the air supply pressure, allowing precise flow regulation to suit process requirements. For safe and efficient operation, an air restrictor can be fitted to prevent overspeed under no-load conditions.

To meet demanding applications, pumps can be supplied to order in alternative materials including PVDF for enhanced chemical compatibility, as well as stainless steel and aluminium. Standard BSP female connections ensure straightforward installation, while optional stroke sensors enable accurate batching and metering of preset volumes directly into the process.



Model No	Body	Diaphragm	Size Liquid	Size Air	Max output.
DM10/25-PTFE	PE	PTFE	3/8" Threaded	1/8"	25 L/Min.
DM15/55-PTFE	PP	PTFE	1/2" Threaded	1/4"	55 L/Min.
DM15/55-PTFE	PP	PTFE	1" Threaded	1/4"	125 L/Min.
DM15/55-PTFE	PP	PTFE	1 1/2" Threded	1/2"	315 L/Min.
DM15/55-PTFE	PP	PTFE	2" Threded	1/2"	565 L/Min.

## Filter Regulator

We recommend the installation of a filter regulator to control the air pressure and needle valve to set or limit the air flow & hence no load speed.

**RFR-025** - 1/4" Filter regulator for setting air pressure / pump speed

**RFR-050** - 1/2" Filter regulator for setting air pressure / pump speed

**NV025** - 1/4" Needle Valve for flow setting

**NV050** - 1/2" Needle Valve for flow setting

# CONDITIONS OF SALE

## 1. Interpretation

The 'Buyer' means the person who accepts a quotation of the Seller  
'Goods' means the products or services which the Seller is to supply in accordance with these Conditions.  
The Seller' means Automated Water & Effluent Ltd (AWE)

## 2. Basis of the Sale

The Seller shall sell and the Buyer shall purchase the Goods in accordance with any written quotation of the Seller and the sellers conditions of sale. The Seller's employees or agents are not authorised to make any representations concerning the Goods unless confirmed by the Seller in writing.

Any typographical, clerical or other error or omission in any sales literature, quotation, price list, acceptance of offer, invoice or other document or information issued by the Seller shall be subject to correction without any liability on the part of the Seller.

## 3. Orders and Specifications

All orders must be have an official order issued by the Buyer stating order number, delivery address and invoice address

Where drawings are supplied by the Seller these are supplied free of charge for the first set with any additional copies being charged for. They are believed to be correct but the Seller cannot accept responsibility for any loss incurred through errors contained within. Drawings are indicative only.

The Seller reserves the right to charge the Buyer with all costs incurred as a result of cancellation of an order.

The Buyer is deemed to be an expert in their own specialised field, all goods are supplied on the understanding that the buyer will use their own specialised skill and judgement in assessing the fitness of the goods for their intended purpose.

We are able to advise the material of construction of our Goods it is the Buyers responsibility to ensure the compatibility of any wetted parts which come into contact with liquids or chemical solutions the seller accepts no liability for selection of wetted parts.

## 4. Price

The price of the Goods shall be the Seller's quoted price. All prices quoted are valid for 30 days only unless otherwise agreed in writing.

The Seller reserves the right to increase prices without notice to take into account any increased costs imposed upon them.  
All prices are exclusive of VAT, ex works Stafford unpacked, with packing, carriage and insurance charged extra.

## 5. Terms of Payment

Accounts shall be opened at the descretion of the seller.  
Payment is due within 30 days of the end of the month in which the Seller's invoice has been raised.

If the Buyer fails to make any payment on the due date then the Seller shall be entitled to:  
Suspend any further deliveries to the Buyer.  
Appropriate any payment made by the Buyer  
Withdraw credit facilities  
Charge the Buyer interest at the rate of 3% per cent per month or part month

## 6. Delivery

Delivery of the Goods shall be made by the Buyer collecting the Goods at the Seller's premises. Deliveries maybe made by carrier with proof of delivery being obtained.  
Where the Buyer requests delivery by the postal system the Seller accepts no responsibility for delayed, lost or damaged goods  
Any shortages must be notified in writing within 3 days  
Good signed for as received in good condition can not be returned as faulty or damaged later.  
Any dates quoted for delivery of the Goods are approximate only and the Seller shall not be liable for any delay in delivery of the Goods however caused.  
Time for delivery shall not be of the essence of the Contract. The Goods may be delivered by the Seller in advance of the quoted delivery date upon giving reasonable notice to the Buyer.

## 7. Risk and Property

Risk of damage to or loss of the Goods shall pass to the Buyer:

Goods shall not pass to the Buyer until the Seller has received cleared funds payment in full of the price of the Goods and all other goods agreed to be sold by the Seller to the Buyer for which payment is then due.

Until the property in the Goods passes to the Buyer the Seller shall be entitled at any time to require the Buyer to deliver up the Goods to the Seller.

## 8. Warranties and Liability

Subject to the conditions set out below, the Seller warrants that the goods (accepting only any Analytical Sensors in respect of which the Seller gives no warranty at all) will be free of defects in material and workmanship for a period of one year from their delivery.

The above warranty is given by the Seller subject to the following conditions:

The Seller shall be under no liability in respect of any defect arising from fair wear and tear, wilful damage, negligence, abnormal working conditions, failure to follow the Seller's instructions (whether oral or in writing), misuse or alteration or repair or maintenance of the Goods without the Sellers approval or carried out otherwise than by the Sellers personnel.

The Seller shall be under no liability if the products have not been installed and operated in accordance with the Sellers instructions and the products have received proper routine maintenance as required by such instruction.

The Seller shall be under no liability under the above warranty (or any other warranty, condition or guarantee) if the total price for the Goods has not been paid by the due date for payment;

The above warranty does not extend to parts, materials or equipment not manufactured by the Seller, in respect of which the Buyer shall only be entitled to the benefit of any such warranty or guarantee as is given by the manufacturer to the Seller.

Any claim by the Buyer which is based on any defect in the quality or condition of the Goods must be notified to the Seller within 3 days from the date of delivery, or (where the defect or failure was not apparent on reasonable inspection) within a reasonable time after discovery of the defect or failure, or one month of the date of delivery, whichever shall be the sooner.

If delivery is not refused, and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Goods and the Seller shall have no liability for such defect or failure, and the Buyer shall be bound to pay the price as if the Goods had been delivered in accordance with the Contract. Claims can only be made by returning the goods to the Sellers works securely packed and carriage paid. If the claim is not valid the Seller reserves the right to make a charge to cover all of its costs.

The buyer if returning any goods to the seller shall specify in writing the reason why the goods are being returned within 30 days of the invoice date. Goods will not be accepted for credit which have been used, are not in resalable condition have been with the buyer for in excess of 30 days or without written agreement by the seller.

A minimum restocking charge of 20% of the value of the goods will be made.

Specially manufactured goods cannot be accepted for credit.

Where any valid claim in respect of any of the Goods which is based on any defect in the quality or condition of the Goods or their failure to comply with any sample is notified to the Seller in accordance with these Conditions, the seller shall be entitled to replace the Goods (or the part in question) free of charge or, at the Seller's sole discretion, refund to the Buyer the price of the Goods (or a proportionate part of the price), but the Seller shall have no further liability to the Buyer.

If at the Buyers request the Seller agrees to rectify instruments on site the Sellers reserves the right to charge for time and all expenses incurred at the prevailing on site instruments service call out rate.

Except in respect of death or personal injury caused by the Seller's negligence, the Seller shall not be liable to the Buyer by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any indirect, special or consequential loss or damage (whether for loss or profit or otherwise), costs, expenses or other claims for compensation whatsoever (whether caused by the negligence of the Seller, its employees or agents or otherwise) which arise out of or in connection with the supply of the Goods or their use or resale by the Buyer, and the entire liability of the Seller under or in connection with the Contract shall not exceed the price of the Goods, except as expressly provided in these Conditions.

The Seller shall not be liable to the Buyer or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of the Seller's obligations in relation to the Goods, if the delay or failure was due to any cause beyond the Seller's reasonable control. Without prejudice to the generality of the foregoing, the following shall be regarded as causes beyond the Seller's reasonable control:

Act of God, explosion, flood, tempest, fire or accident;  
War or threat of war, sabotage, insurrection, civil disturbance or requisition;

Acts, restrictions, regulations, bye-laws, prohibitions or measures of any kind on the part of any governmental, parliamentary or local authority;

Import or export regulations or embargoes;  
Strikes, lock-outs or other industrial actions or trade disputes (whether involving employees of the Seller or of a third party).

Difficulties in obtaining raw materials, labour, fuel, parts or machinery;  
Power, Water, Gas failure or breakdown in machinery.  
Failure of any analytical Sensor, Instrument, Controller, Metering pump, Control valve or device.

## 9. Insolvency of Buyer

If the Buyer makes any voluntary arrangement with its creditors or (being an individual or firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation.

An encumbrancer takes possession, or a receiver is appointed, of any of the property or assets of the Buyer, or the Buyer ceases, or threatens to cease, to carry on business, or the Seller reasonably apprehends that any of the events mentioned above is about to occur in relation to the Buyer and notifies the Buyer accordingly.

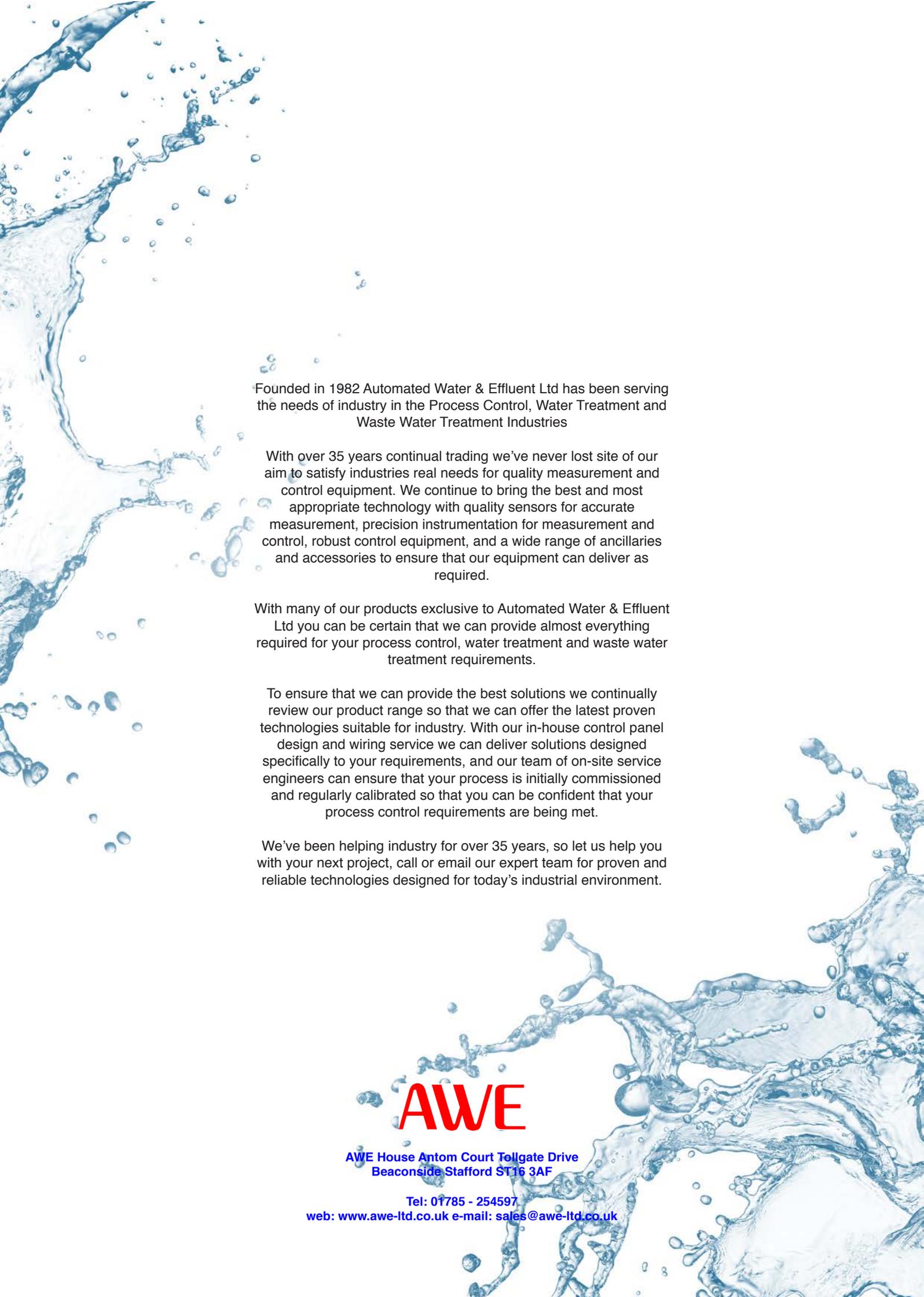
The Seller shall be entitled to cancel the contract or suspend any further deliveries under the contract without any liability to the Buyer, and if the Goods have been delivered but not paid for the price shall become immediately due and payable not withstanding any previous agreement or arrangement to the contrary.

## 10. General

The contract shall be governed by the laws of England, and the Buyer agrees to submit to the non-exclusive jurisdiction of the English courts.

This is a shortened version of our condition of sale outlining the general points full leagal version is available on request which is deemed to be the version in use.



A large, artistic splash of water in shades of blue and white, filling the background of the page. The water is captured in mid-air, creating a dynamic and textured effect.

Founded in 1982 Automated Water & Effluent Ltd has been serving the needs of industry in the Process Control, Water Treatment and Waste Water Treatment Industries

With over 35 years continual trading we've never lost sight of our aim to satisfy industries real needs for quality measurement and control equipment. We continue to bring the best and most appropriate technology with quality sensors for accurate measurement, precision instrumentation for measurement and control, robust control equipment, and a wide range of ancillaries and accessories to ensure that our equipment can deliver as required.

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 and waste water treatment requirements.

To ensure that we can provide the best solutions we continually review our product range so that we can offer the latest proven technologies suitable for industry. With our in-house control panel design and wiring service we can deliver solutions designed specifically to your requirements, and our team of on-site service engineers can ensure that your process is initially commissioned and regularly calibrated so that you can be confident that your process control requirements are being met.

We've been helping industry for over 35 years, so let us help you with your next project, call or email our expert team for proven and reliable technologies designed for today's industrial environment.

**AWE**

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