# **Chlorine Dosing Panels**





Chlorine Dosing and pH Correction with Data Logging



Chlorine Dioxide Dosing, pH Neutralisation Turbidity Monitoring with Recording and Data Logging



Chlorine Dosing and pH with Self Cleaning Pre-Filter



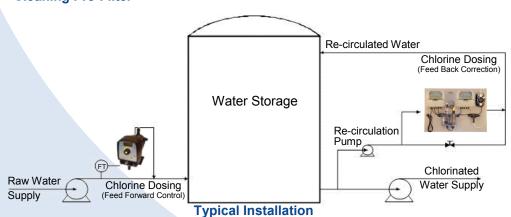
Chlorine Dosing and pH Correction with Turbidity Monitoring



Chlorine Dosing and pH Monitoring



Chlorine Dosing with Self Cleaning Pre-Filter



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# **Chlorine Sensors**





- ACG5 With Cu/Pt cell for amperometric measurement
  - With flow sensor for interlock needle valve for flow adjustment
  - Non-return flow function
  - 80 micron washable filter
  - SS earth electrode
  - Combination connection for 10/14 tube & with 1/2" BSP-M
  - Capability to accept pH probe
  - Capability to accept 1/2" CD or temperature probe

ACG6 - With Cu/Pt cell for amperometric measurement - As for ACG5 but with additional module for additional probe

#### **Electrolytic Chlorine Sensor**

- With membrane & electrolyte.
- Ranges: 0-2 ppm chlorine
- 0-5 ppm chlorine 0-10 ppm chlorine Note: Not compatible with AW96 electronics. Requires SRP and/or CMC Electronics.

#### **Electrolytic Chlorine Dioxide Sensor**

- With membrane & electrolyte.
- Ranges: 0-2 ppm chlorine dioxide
- 0-10 ppm chlorine - Note: Not compatible with AW96 electronics.
- Requires SRP and/or CMC electronics.



#### **CLX OnLine Residual Chlorine Analyzer**

The CLX comes with 4-20 mA & RS-485 Modbus, Backlight display, inline pressure regulator, power supply, replacement tubing / cuvette kit (one year supply) & owners manual. Reagents purchased separately.



#### Chlorine Pocket Photometer - Instrument Each unit includes: 4 measuring cuvettes w/caps, 4 AAA batteries, rugged carrying case & instructions.

# **Probes**





#### 12mm Epoxy Probes

- pH, ORP + conductivity
- Single junction
- Low cost, low pressure
- Easy install & removal through compression fitting
- Without temperature compensation

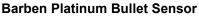


- Long life threaded probe
- pH only
- With temperature compensation
- Immersion or in-line installation

#### Barben 7 Long Life Probe with Nut Lock Adaptor

- Quick & easy remove & install for checking & calibration
  - pH or ORP





- Solid platinum billet non-glass electrode
- Flat tip eliminates breakage, reduces build up and simplifies cleaning.
- Longer lasting, minimal maintenance and customer convenience
- Patented ultra-stable Axial Ion Path reference cell.

K Factor

100

- Sulfide, oxidizer, and poison proof

### FLS SS Conductivity Electrodes

**FLS Graphite Conductivity Electrodes** 

Model No. K Factor   C100.01 (TC) 10   C100.02 (TC) 5   C300.1 (TC) 1	<b>Range</b> 1 - 1,000μs 5 – 5,000μs 10 - 10,000μs	TC is with PT100 for Temperature Compensation
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Model No. C3.30.01 C3.30.02 C3.30.03

Model No.

C150.01 (TC)

Range 0-10 mS 0-100mS 0-1,000mS

**Range** 0.02 - 2,000µs

0.2 - 10,000µs

0.2 - 2,000µs

0.2 - 10,000µs

2 - 200,000µs

TC is with

PT100 for

Temperature

Compensation

### **AQUA Conductivity Probes**

Model	K Factor	Range
PACD	K1	0-20,000 µS
PACD	K5	0-200/0-2,000 μS
PACCD	K1	0-20,000 µS
PACCD	K5	0-200/0-2,000 µS





# **Turbidity Measurement**





### All MicroTOL Models include:

Backlight display, 4-20 mA, RS-485/Modbus, inline pressure regulator, desiccant, universal power supply (100-240VAC), & operator's manual. MicroTOL 2 also includes spare measuring cuvette with light shield. Calibration kits must be ordered separately. *Pro Cal* custom NTU values available.

### Online Turbidmeter

#### Model MicroTOL3 (code 20055)

- Designed for filtered water, raw water, waste water final effluent and industrial applications.

- Nephelometry measurement principal.
- 0 100 NTU range.
- Fast response and easy calibration.
- Accurate, reliable and cost effective.
- Certified to CE, UL, CSA (ETL, ETLc).
- With ultrasonic cleaning

### MicroTOL – Laboratory Turbidity

#### Micro100 - Instruments.

Includes a complete set of calibration standards (0.02, 10 & 1000 NTU), two measuring cuvettes with light shield cap & operator's manual.

- Micro 100 WL Laboratory Turbidimeter, 0-1000 NTU, 120V 60 Hz.
- Micro 100 WL Laboratory Turbidimeter, 0-1000 NTU, Universal Power 100 240V 50-60 Hz.
- Micro 100 IR Laboratory Turbidimeter, 0-1000 NTU, 100-240V Universal Power 50-60 Hz.

#### Micro1000 – Instruments.

Includes a complete set of calibration standards (.02, 10, 100 & 1750 NTU), two measuring cuvettes with light shield caps, operator's manual & plug-in power adaptor.

- Micro 1000 WL Laboratory Turbidimeter, 0-10,000 NTU, 100 240V Universal Power 50-60 Hz.
- Micro 1000 IR Laboratory Turbidimeter, 0-10,000 NTU, 100 240V Universal Power 50-60 Hz.



#### MicroTOL – Field Turbidity MicroTPW / TPI – Instruments.

Includes carrying case, one set of calibration standards, indexing rings, 4AAA alkaline batteries operator's manual & measuring cuvettes with light shield caps.

- MicroTPW Portable Turbidimeter (White Light) 0-1,100 NTU
- MicroTPI Portable Turbidimeter (IR) 0-1,100 NTU



# MicroTOL – Field Turbidity

### DRT -15CE - Instruments.

Includes carrying case, one set of calibration standards, indexing rings, 4AAA alkaline batteries operator's manual & measuring cuvettes with light shield caps.

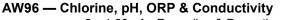
- MicroTPW Portable Turbidimeter (White Light) 0-1,100 NTU
- MicroTPI Portable Turbidimeter (IR) 0-1,100 NTU

# Electronics, Data Recorders & Displays









- 2 x 4-20mA Recording & Proportional Control
- 3 x relay—2 x alarm & 1 x pulse width modulation
- Sample flow interlock for AW96CL
- Manual temperature compensation only
- 240 Vac

### ADIN20 — PH, CD, RX, CL

- 1 x 4-20mA output (fixed range)
- 2 x relay, alarm or On/Off control
- Manual temperature compensation only
- 240 Vac

#### AR96— Chlorine, pH, ORP & Conductivity

As for AW96, but panel mount.

### FLS ChemX — pH/ORP Conductivity Controller

- 1 x 4-20mA—Recording
- 240 Vac, or 24 Vdc/ac
- 2 x Relay or OC, Configurable
- IP 67
- Manual or auto temperature compensation (PT100/PT1000)
  - Alarm
    - Control On/Off, Pulse Width Modulation or Frequency
    - Auto calibration routine
    - Simulating Mode
    - Direct reading of raw probe response for diagnostic purpose & probe condition

#### Enteq Enteq



#### Simex CMC-99 MultiCon (inputs)

- Traditional graphs & status displays
- Data logging
- Installed in IP65 enclosure with clear lid
- Option control & alarm function
- Optional remote access via Modbus or internet
- 240 Vac or 24 Vdc

#### Simex SRP

Controller with calibration routine for 2 wire, 4-20mA instruments,

- with scaleable 4-20mA output
- -24 Vdc or 240 Vac
- 2 x relay outputs for control or alarm functions.



### FineTek PB Bar Graph Controller & Display

- Single or dual channel
- With 4, 6 or 8 relays for control or alarm function
- 24 Vdc or 240 Vac

# **Dosing Pumps**





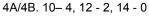
#### HC897 - ON/OFF Control

- Adjustable stroke rate
  - 0-20% 0-100%
  - PVDF head
  - Input for interlock
  - 4 Sizes (l/hr-Bar): 1.2 8,5 5,7 2
    - 2. 7 4, 8 2, 10 0
    - 3. 3 12, 4 10, 5 8
    - 4. 10–4, 12 2, 14 0



#### HC997 - Proportional Dosing

- PVDF head, viton seals
- Pulse input
- 4-20 mA timer
- 7 Day timer
- 4 Sizes (l/hr-Bar): 1A/1B. 2 8, 5 5, 7 2
  - 2A/2B. 7 4, 8 2, 10 0
  - 3A/3B. 3 12, 4 10, 5 8





### HC201 - Proprtional Dosing

- PP head, viton seals
  - Pulse input & 4-20 mA input
  - 7 day timer
  - Settable in ppm
  - Stroke length & frequency adjustment
  - Input for interlock
  - Size (l/hr bar)



### HC200PH/RX - Proportional Dosing

- pH & ORP sensor input
  - Stroke length & frequency adjustment
  - Input for interlock

### **Options**

De-gassing head (Auto Bleed Valve) in PVC

Dutral/EPDM valves

#### **PVC** head

DIN plug connection for power lead (HC200 series only)







### F1: Inline Filter in ACG5

- 80 Micron washable
  - for clean applications as safeguard function only



### F3: A-FV3 - 80µm basket filter

- Washable filter, 5"
  - Combination tube & thread connector for 10/14 tube on 1/2" BSP thread
  - Transparent housing



#### F4: AP Pro - In line self cleaning 90µm filter

- Manual action flushes & brushes filter
- Cleans filter online without disrupting service
- Transparent housing
- Brass union style connections
- Configurable orientation for vertical or horizontal pipe

# **Other Sensors & Fittings**





#### Water Meter

With pulse output for connection to dosing pumps - 4 impulses/litre - sizes 1/2", 3/4", 1", 1 1/4", 1 1/2" & 2"



**Blind Insertion MAG Flow Meter** 



**Insertion MAG Flow Meter** 

Insertion Paddle Wheel Flow Sensors

- 1/2" connection - Range 0-100°C - PVC or PTFE body

- 1/2" to 1.1/2"

- Range 0-100°C - PVC or PTFE body

- 4-20 mA signal or frequency output

- PT100 temperature probes

- PVC, CPVC, PP and PVDF

- Solvent and thread connections











Saddle Clamp - CPVC

**Tee Fittings** 

**Temperature Probe** 

- 2" to 12"



A-PSL Installation Fitting for 12mm Probe



A-PSV Off-line Electrode for Two Electrodes



**Twin Injection Point with Tube Connection** 

# **General Accessories**





**DB-3 Flow Switches** - Brass with SS paddle - Sizes 3/8". 1/2". 3/4". 1". 1 1/4", 1 1/2", 2"



#### ph Calibration Starter Kits

- 75 ml bottle of pH 7 buffer

- 75 ml bottle of pH 4 buffer
- 75 ml empty bottle for probe wash



**ORP Calibration Starter Kits** - 75 ml bottle of 465 mv solution



#### **Chlorine Starter Test Kit**

- Colour chart
- Sample vial
- Pack of 10 tablets



#### Level Probes for Pump Interlock

- With DIN plug, tinned connections or terminal housing
- Option for clip for mounting on foot filter
- Option for top mounting or tank



### PE Tanks with Large (150mm) Cap for Easy Filling/Access

- 3 sizes: 100, 220, 330L.
- suitable to accept stirrers/mixers
- suitable to accept level switches & ports for suction/ bleed tubing
- suitable to accept HC200 mounted on top



Mixers/Stirrers, Motor Driven - Fast & Slow

- Single phase & 3 phase
- SS & PVC



- Sizes: 100 ml up to 5 l/hr 250 ml up to 15 l/hr 500 ml up to 30 l/hr

1,000 ml up to 60 l/hr 2,000 ml up to 120 l/hr 4,000 ml up to 250 l/hr



Calibration Cylinder Manifold on **Base Plate** - Options:

- 10 x 14mm tube connections
- 4 x 6mm tube connection 1/2" BSP - F connections



#### Static Mixers for Blending Injected **Chemicals into Pipes** - Sizes 1", 1 1/2", 2", 2 1/2" & 3".

- Injection port 1/2" thread



#### Enclosures

- Plastic enclosures as junction box for user termination to alarm & signal outputs
  - Plastic enclosure for panel mounted instruments
  - Powder coated steel enclosures for complete panels

# **Chlorine Accessories**





### **Turbidity Calibration Kit**

Pro Cal model 39953 0.02, 10 & 100 NTU

#### Spares

- Desiccant pouch, code 21555R
- Pressure reducing valve, code 243065
- Tubing kit, code 21062



## PPD-2 DPD Powder Pop® Dispenser

The HF PPD-2 DPD Dispenser is compatible with HF & many non-HF scientific photometers.



**DPD Powder Pops**®



Chlorine Micro Check Test Strips (bottle of 50 strips)



pH Buffers

# **Turbidity Accessories**





ProCal gallon For Hach® 1720



### *Pro Cal* **Primary Turbidity Standards (for Hach® instruments)** ProCal primary turbidity standards are pre-diluted, factory certified\*, & ready

for use with Hach® process, laboratory & field instruments as well as the HF scientific product line & other manufacturer's instrumentation. The ProCal standard formulation utilizes a preservative that enhances stability, yet it is safe & biodegrades rapidly. Custom NTU values available. Available pre-diluted standard: 0.0, 1.0, 10, 20, 100, 200, 800, 1000, & 4000.

Standards certified \* for use with the Hach® Company's turbidimeters.

Hach® 1720 c/d/e Process Turbidimeter Hach® 2100N Laboratory Turbidimeter Hach® 2100Q Portable Field Turbidimeter

ProCal litre For Hach® 1720



Standards certified \* for use with the Hach® Company's 2100AN turbidimeter. Hach® 2100AN Laboratory Turbidimeter



Standards certified \* for use with the Hach® Company's 2100P turbidimeter. Hach® 2100P Portable Field Turbidimeter

# **About PCS**



For more than twenty years Process Control Services (PCS) have provided Measurement & Dosing equipment to an extensive range of industries, varying in size, throughout Australasia.

Continuous growth over the past twenty years driven predominately through word of mouth referrals has led to PCS achieving an outstanding market profile. With offices in Sydney, Brisbane and Melbourne combined with a network of over twenty regional sales outlets PCS is able to deliver top quality international brands at very competitive prices, backed by an outstanding level of customer service throughout Australia and New Zealand.

Process Control Services (PCS) are renowned for their industry expertise together with their extensive choice and range of equipment. Their highly trained engineers are able to offer extraordinary levels of expert service and advice through combining their extensive product knowledge with industry experience that extends in many cases beyond the life of the company.

We supply Flow, Level, Pressure, Temperature and Specialty Measurement Equipment and Chemical Dosing Equipment to the following industries:

- Water and Waste Water Treatment
- Mining and Mineral Processing
- Chemical and Petrochemical
- Sugar, Food and Beverage

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