



## Conductivity, pH & Analytical

In this section

Conductivity Cells  
Conductivity Meters  
Dissolved Oxygen Meters  
Distillation Units  
Dry Block Kjeldahl ( and COD )  
Electrodes  
Extractors ( Fat and Fibre )  
Industrial Sensors  
Ion Selective Electrodes  
N<sub>2</sub> Steam Distillation and Titration  
pH Meters and Electrodes  
Viscometers





# Electrochemical Sensors

## Electrode Selection Chart

| Sample Type     | P11 | P11HA | P12 | P13 | P14 | P16 | P17 | P18 | P19 | P10 | P20 | P21 |
|-----------------|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Agar            | NS  | NS    | NS  | NS  | NS  | NS  | R   | NS  | NS  | NS  | NS  | NS  |
| Akalines (High) | NS  | R     | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  |
| Beer            | R   | NS    | R   | R   | R   | NS  | R   | NS  | NS  | R   | R   | R   |
| Blood Product   | R   | NS    | R   | R   | S   | S   | R   | NS  | NS  | R   | S   | R   |
| Bread, Dough    | NS  | NS    | NS  | NS  | NS  | NS  | S   | R   | R   | NS  | NS  | NS  |
| Cement          | R   | R     | S   | S   | S   | NS  | S   | S   | S   | S   | S   | S   |
| Cosmetics       | R   | NS    | R   | R   | R   | NS  | R   | S   | S   | S   | S   | R   |
| Dairy Product   | R   | NS    | R   | R   | S   | NS  | R   | S   | R   | S   | NS  | NS  |
| Education       | R   | S     | S   | S   | R   | S   | R   | S   | S   | R   | R   | S   |
| Fats / Creams   | S   | NS    | S   | NS  | NS  | NS  | S   | S   | R   | S   | NS  | NS  |
| Field Use       | S   | NS    | NS  | NS  | R   | NS  | R   | R   | S   | NS  | R   | NS  |
| Fish products   | S   | NS    | S   | S   | S   | NS  | R   | S   | R   | S   | NS  | S   |
| Lab Flasks      | NS  | NS    | R   | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  |
| Low Ionic       | R   | NS    | S   | NS  | NS  | NS  | NS  | NS  | NS  | S   | NS  | R   |
| Meat, Cheese    | NS  | NS    | NS  | NS  | NS  | NS  | R   | S   | R   | NS  | NS  | NS  |
| Micro Samples   | NS  | NS    | S   | R   | NS  | S   | S   | NS  | S   | NS  | NS  | NS  |
| Paint           | NS  | NS    | R   | R   | NS  | NS  | R   | NS  | NS  | R   | NS  | NS  |
| Photographic    | NS  | R     | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  | NS  |
| Soil            | S   | NS    | S   | S   | S   | NS  | NS  | R   | R   | S   | NS  | NS  |
| Surface         | NS  | NS    | NS  | NS  | NS  | NS  | R   | NS  | NS  | NS  | NS  | NS  |
| Test Tubes      | NS  | NS    | R   | S   | NS  | R   | NS  | NS  | NS  | NS  | NS  | NS  |
| Tris Buffer     | NS  | NS    | NS  | NS  | NS  | NS  | R   | NS  | NS  | NS  | NS  | NS  |
| Viscose Samples | NS  | NS    | NS  | NS  | NS  | NS  | R   | S   | S   | NS  | NS  | NS  |

**R = Recommended**

**S = Satisfactory**

**NS = Not Suitable**

**Note :**

**For Emulsions, Liquors, Non-Aqueous samples and oils use Type P11-5050.**

**For Hydrofluoric Acid samples use Type P14-ANT**



# Electrochemical Sensors

## pH Electrodes

All pH electrodes are supplied with 1 metre of cable and a BNC plug as standard.

If an additional cable length or alternative plug is required, please specify when ordering.

P11 - this electrode can be supplied with a robust tip. Order number: P11-ROD.

P13 - this electrode can be supplied 3.7mm diameter/180mm length. Order number: P13-3.7-180-NMR.

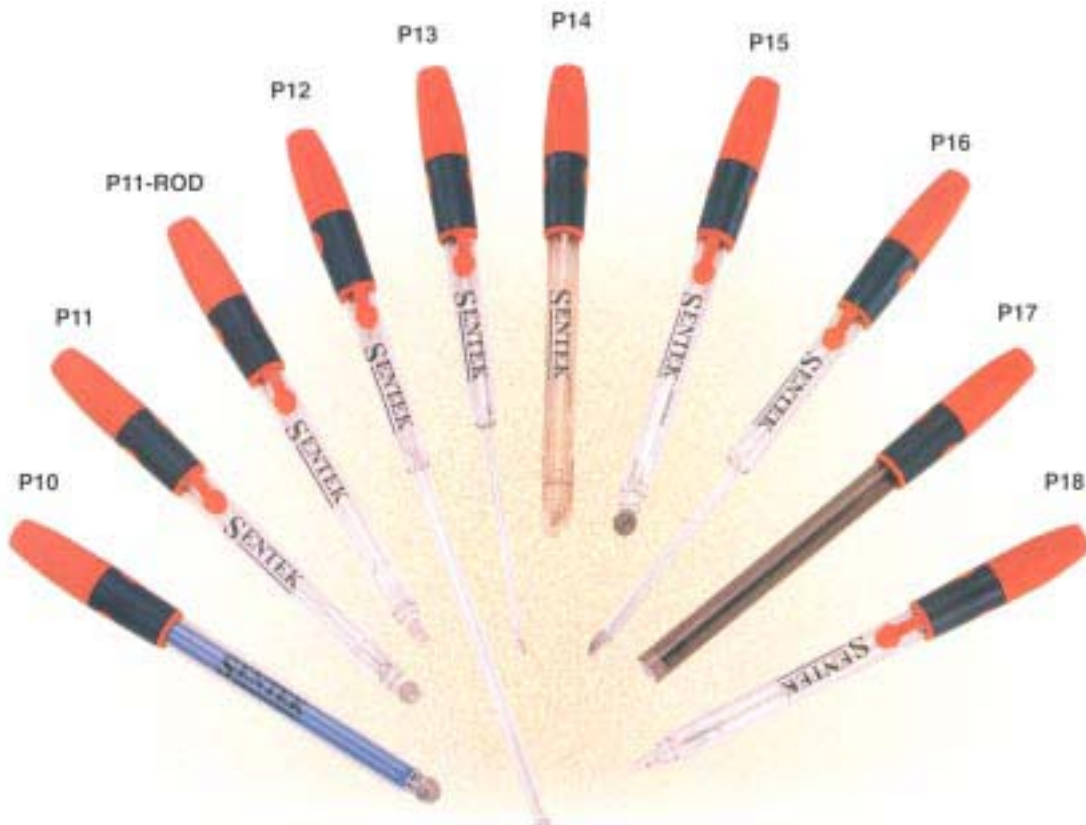
P20 - this electrode is supplied with integral temperature compensation.

Industrial pH sensors (P10 and P11) are supplied with 5 metres of cable as standard.

If additional length is required, please specify when ordering.

Automatic Temperature Control (ATC) can be built in. Please specify when ordering.

Reference Cells (R1 - R4) are supplied with 1 metre of cable and a 2mm plug as standard.



| Part No. | pH Range | Temp Range | Ref Type | Junction Type   | Dims mm  | Stem mm  | Combination | Body Type | Application     |
|----------|----------|------------|----------|-----------------|----------|----------|-------------|-----------|-----------------|
| P10      | 0-14     | 0-80       | -        | -               | 120 x 12 | -        | No          | Glass     | General         |
| P11*     | 0-14     | 0-80       | AgCl     | Annular Ceramic | 120 x 12 | -        | Yes         | Glass     | Liquids         |
| P12      | 0-14     | 0-80       | AgCl     | Frit Ceramic    | -        | 150 x 6  | Yes         | Glass     | Liquids         |
| P13**    | 0-14     | 0-80       | AgCl     | Frit Ceramic    | -        | 90 x 4.5 | Yes         | Glass     | Liquids         |
| P14      | 0-14     | 0-60       | AgCl     | Porous Teflon   | 120 x 12 | -        | Yes         | Glass     | General         |
| P15      | 0-14     | 0-50       | HgCl     | Annular Ceramic | 120 x 12 | -        | Yes         | Epoxy     | Low Cond Waters |
| P16      | 0-14     | 0-50       | HgCl     | Frit Ceramic    | -        | 90 x 6   | Yes         | Glass     | Tris            |
| P17      | 0-14     | 0-80       | HgCl     | Porous Teflon   | 120 x 12 | -        | Yes         | Glass     | Surface         |
| P18      | 0-14     | 0-80       | HgCl     | Annular Ceramic | 120 x 12 | -        | Yes         | Glass     | Slurries        |

\* P11 - This electrode can be supplied with a robust tip. Order ref. P11-ROD.

\*\* P13 - This electrode can be supplied 3.7mm diameter / 180mm length. Order ref. P13-3.7-180-NMR.



# Electrochemical Sensors

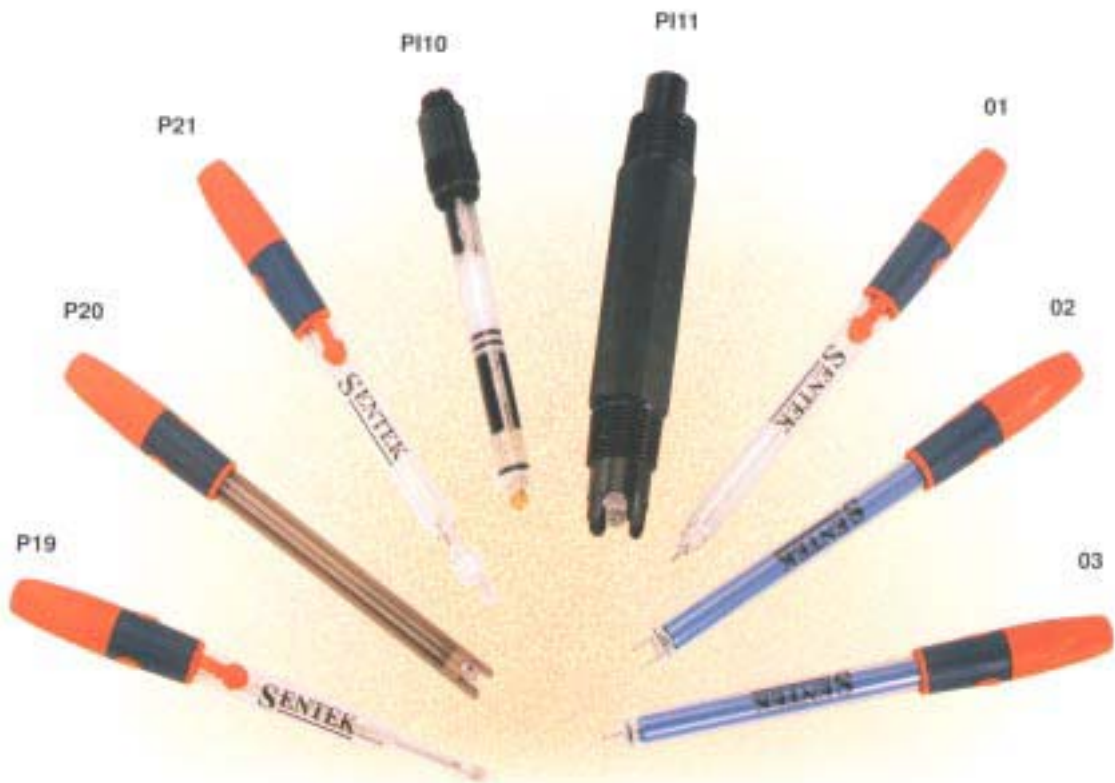
## Industrial Sensors - PI10, PI11, KI10, KI11 Metal Electrodes

PI10 and KI10 are detachable lead electrodes. PI11 and KI11 are supplied with 5 meters of cable as standard. If additional length is required please specify when ordering. Automatic Temperature Control (ATC) can be built in. Please specify when ordering.

Types 01 and 03 are supplied with 1 metre of cable and a BNC plug as standard. Type 02 is supplied with 1 metre of cable and 2 x 4mm plugs as standard.

PI10 / KI10 - 13.5 PG thread  
PI11 and KI11 - 3/4" NPT

Note : Type 01 and 03 are available in silver and gold - add suffice S or G when ordering.



| Part No. | pH Range | Temp Range | Ref Type | Junction Type   | Dims mm    | Stem mm | Combination | Body Type | Application                 |
|----------|----------|------------|----------|-----------------|------------|---------|-------------|-----------|-----------------------------|
| P19      | 0-14     | 0-80       | AgCl     | Frit Ceramic    | 120 x 12   | 40 x 6  | Yes         | Glass     | Semi Solids                 |
| P20*     | 0-14     | 0-100      | AgCl     | Porous Teflon   | 120 x 12   | -       | Yes         | Epoxy     | General                     |
| P21      | 0-14     | 0-80       | AgCl     | Sleeve          | 120 x 12   | -       | Yes         | Glass     | Colloids / Low Conductivity |
| PI10     | 0-14     | 0-130      | AgCl     | Porous Teflon   | 120 x 12   | -       | Yes         | Glass     | Industrial Pipeline         |
| PI11     | 0-14     | 0-100      | AgCl     | Porous Teflon   | 150 x 25.9 | -       | Yes         | Ryton     | Industrial Dip              |
| 01       | -        | 0-80       | HgCl     | Annular Ceramic | 120 x 12   | -       | Yes         | Glass     | General                     |
| 02**     | -        | 0-80       | -        | -               | 120 x 12   | -       | Yes         | Glass     | Karl Fischer                |
| 03***    | -        | 0-80       | -        | -               | 120 x 12   | -       | No          | Glass     | General                     |

\* P20 - Has integral temperature compensation.

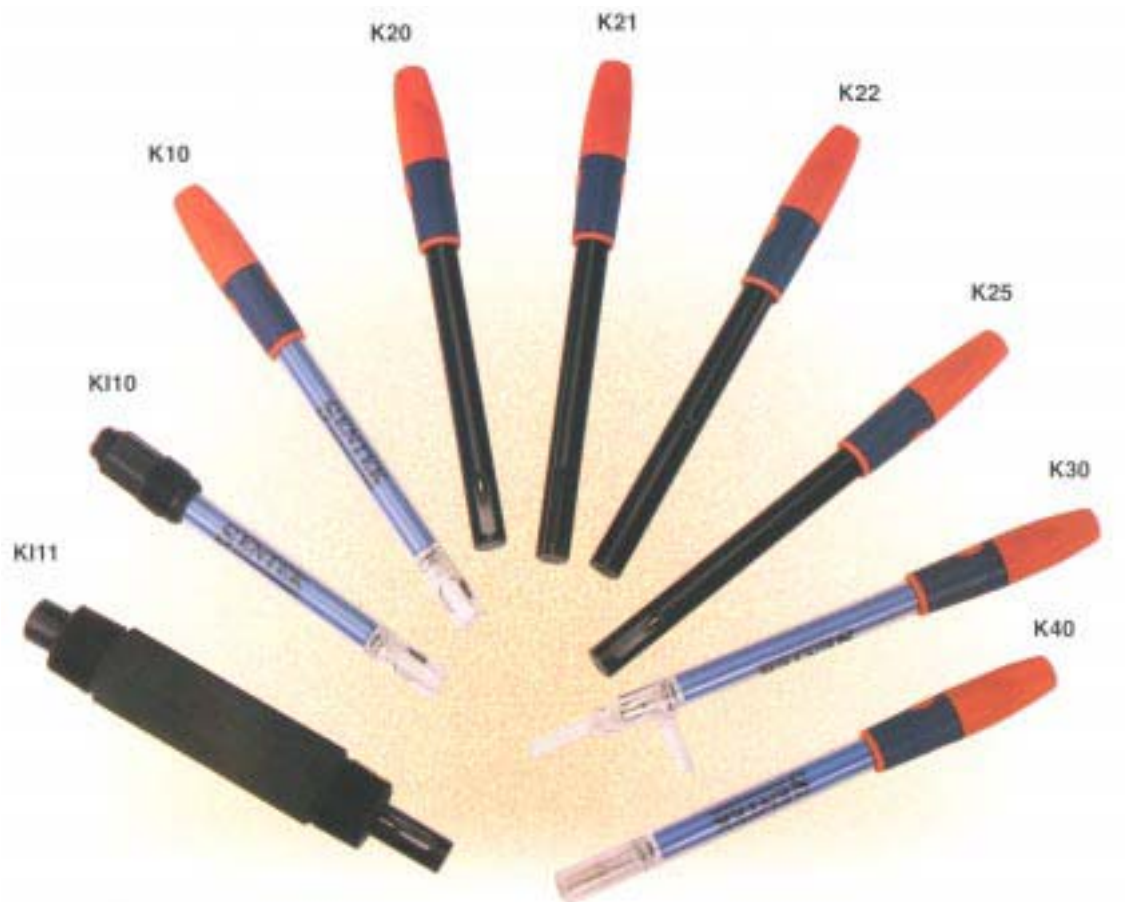
\*\* 02 - Double platinum electrode.. \*\*\* 03 - Requires a separate reference.



# Electrochemical Sensors

## Laboratory Conductivity Cells

Supplied with 1 metre of cable. ATC optional. Please specify when ordering.  
Types K20, K21, K22 and K25 are glass free. Type K25 is 4 ring.



| Part No. | Range   | Temp Range | Plate Material | Body Type | Dims mm    | Pressure (psi) | Cell Constant | Application                    |
|----------|---------|------------|----------------|-----------|------------|----------------|---------------|--------------------------------|
| K10      | 0-150mS | 0-50       | Pt             | Glass     | 120 x 12   | -              | K=1           | General                        |
| K20      | 0-10mS  | 0-50       | Carbon         | Epoxy     | 100 x 12   | -              | K=1           | Paints, Inks, Dyes, Foodstuffs |
| K21      | 0-500µS | 0-50       | Carbon         | Epoxy     | 120 x 12   | -              | K=0.1         | Pure Water                     |
| K22      | 0-0.5S  | 0-50       | Carbon         | Epoxy     | 120 x 12   | -              | K=10          | Solutions with High Cond.      |
| K25*     | 0-1S    | 0-50       | Carbon         | Epoxy     | 150 x 12   | -              | K=0.55        | Aqueous /Non Aqueous           |
| K30      | 0-150mS | 0-50       | Pt             | Glass     | 120 x 12   | -              | K=1           | Flow Through                   |
| K40      | 0-500µS | 0-50       | Pt             | Glass     | 120 x 12   | -              | K=0.1         | Pure Water                     |
| KI10     | 0-200µS | 0-100      | Pt             | Glass     | 120 x 12   | 100            | K=1           | Industrial Pipeline            |
| KI11     | 0-10µS  | 0-50       | Carbon         | Ryton     | 150 x 25.4 | 100            | K=1           | Industrial Dip                 |

Note : When ordering conductivity cells please specify make and model of conductivity meter.  
\* Of particular interest to instrument manufacturers.



# Electrochemical Sensors

## Ion Selective Electrodes and Accessories



### Combination Ion Selective Electrodes

Main Features and Benefits include :

- \* No reference electrode needed.
- \* Available in fully submersible and waterproof format.
- \* Solid state sensors.
- \* Ideal for unskilled operatives.
- \* No filling solution
- \* Virtually unbreakable.
- \* Can be left dry for long periods.
- \* Long lifetime.

Cable length can be specified at the time of ordering. Maximum length is 10 metres. Standard products are fitted with 1 metre of cable terminated with a BNC connector. Dimensions 120 x 12 mm.

These electrodes can be used with any conventional laboratory or hand held pH meter with a millivolt mode. Please specify the type of connector or meter used when ordering.

| Part No. | Description                              | Concentration Range (Mol/L)                 | Limits (ppm)   | Temp Range(°C) | Main Interferences   | pH Range | ISAB   |
|----------|--|---|----------------|----------------|--|----------|--|
| 3051     | Ammonium (NH <sub>4</sub> <sup>+</sup> ) | 0.5 - 5 x 10 <sup>-5</sup>                  | 9,000 - 0.9    | 0 - 50         | K <sup>+</sup> , Na <sup>+</sup>                                     | 0 - 8.5  | CH <sub>3</sub> COOH                               |
| 3081     | Barium (Ba <sup>2+</sup> )               | 10 <sup>-1</sup> - 10 <sup>-5</sup>         | 13,700 - 1.4   | 0 - 50         | Sr <sup>++</sup> , K <sup>+</sup> , Na <sup>+</sup>                  | 3 - 10   | CuSO <sub>4</sub>                                  |
| 3271     | Bromide (Br)                             | 1 - 5 - 10 <sup>-6</sup>                    | 81,000 - 0.4   | 5 - 50         | I <sup>-</sup> , CN <sup>-</sup> , S <sup>2-</sup>                   | 1 - 12   | 5M KNO <sub>3</sub>                                |
| 3241     | Cadmium (Cd <sup>2+</sup> )              | 10 <sup>-1</sup> - 1 x 10 <sup>-6</sup>     | 11,200 - 0.1   | 5 - 50         | Hg <sup>++</sup> , Ag <sup>+</sup> , Cu <sup>++</sup>                | 3 - 7    | 5M KNO <sub>3</sub>                                |
| 3041     | Calcium (Ca <sup>2+</sup> )              | 10 <sup>-1</sup> - 5 x 10 <sup>-7</sup>     | 4,010 - 0.02   | 0 - 50         | Ba <sup>++</sup> , Al <sup>+++</sup> , Sr <sup>++</sup>              | 3.5 - 11 | KCl  |
| 3261     | Chloride (Cl <sup>-</sup> )              | 1 - 3 x 10 <sup>-6</sup>                    | 35,500 - 1     | 5 - 50         | I <sup>-</sup> , Br <sup>-</sup> , CN <sup>-</sup> , S <sup>2-</sup> | 1 - 12   | 5M KNO <sub>3</sub>                                |
| 3227     | Cupric (Cu <sup>2+</sup> )               | 10 <sup>0</sup> - 1 x 10 <sup>-7</sup>      | 64,000 - 0.006 | 5 - 50         | Hg <sup>++</sup> , Ag <sup>+</sup> , S <sup>2-</sup>                 | 2 - 7    | 5M KNO <sub>3</sub>                                |
| 3291     | Cyanide (CN)                             | 10 <sup>-2</sup> - 1 x 10 <sup>-6</sup>     | 260 - 0.03     | 5 - 50         | I <sup>-</sup> , S <sup>2-</sup> , Br <sup>-</sup>                   | 11 - 13  | 10M NaOH   |
| 3221     | Fluoride (F)                             | 10 <sup>-1</sup> - 1 x 10 <sup>-6</sup>     | 1,900 - 0.02   | 5 - 50         | OH <sup>-</sup>  | 4 - 8    | TISAB  |
| 3281     | Iodide (I <sup>-</sup> )                 | 1 - 5 x 10 <sup>-7</sup>                    | 127,000 - 0.06 | 5 - 50         | CN <sup>-</sup> , S <sup>2-</sup>                                    | 2 - 12   | 5M KNO <sub>3</sub>                                |
| 3231     | Lead (Pb <sup>2+</sup> )                 | 10 <sup>-1</sup> - 1 x 10 <sup>-6</sup>     | 20,800 - 0.2   | 5 - 50         | Hg <sup>++</sup> , Ag <sup>+</sup> , Cu <sup>++</sup>                | 3 - 7    | LiAC   |
| 3021     | Nitrate (NO <sub>3</sub> )               | 1 - 7 x 10 <sup>-6</sup>                    | 62,000 - 0.4   | 0 - 50         | Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup>                       | 2 - 11   | 4M (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> |
| 3071     | Nitrite (NO <sub>2</sub> )               | 10 <sup>-2</sup> - 10 <sup>-5</sup>         | 460 - 0.5      | 0 - 50         | CN <sup>-</sup>  | 4.6 - 8  | K <sub>2</sub> SO <sub>4</sub>                     |
| 3061     | Perchlorate (ClO <sub>4</sub> )          | 1 - 2 x 10 <sup>-6</sup>                    | 99,500 - 0.2   | 0 - 50         | I <sup>-</sup> , SCN <sup>-</sup> , NO <sub>3</sub> <sup>-</sup>     | 0 - 11   | CH <sub>3</sub> COONa                              |
| 3031     | Potassium (K <sup>+</sup> )              | 1 - 10 <sup>-6</sup>                        | 39,000 - 0.04  | 0 - 50         | Cs <sup>+</sup> , NH <sub>4</sub> <sup>+</sup>                       | 1 - 9    | TEAC   |
| 3211     | Silver (Ag <sup>+</sup> )                | 10 <sup>0</sup> - 1 x 10 <sup>-7</sup>      | 107,900 - 0.01 | 5 - 50         | S <sup>2-</sup> , Hg <sup>++</sup>                                   | 1 - 9    | 5M KNO <sub>3</sub>                                |
| 3315     | Sodium (Na <sup>+</sup> )                | 3 - 10 <sup>-7</sup>                        | 69,000         | 0 - 50         | Ba <sup>++</sup> , Li <sup>+</sup> , K <sup>+</sup>                  | 9 - 12   | SISAB  |
| 3225     | Sulphide (S <sup>2-</sup> )              | 1 - 1 x 10 <sup>-7</sup>                    | 32,000 - 0.003 | 5 - 50         | Ag <sup>+</sup> , Hg <sup>++</sup>                                   | 13 - 14  | 10M NaOH   |
| 3229     | Thiocyanate (SCN <sup>-</sup> )          | 10 <sup>-1</sup> - 2 x 10 <sup>-8</sup>     | 5,800 - 1      | 5 - 50         | I <sup>-</sup> , Cl <sup>-</sup> , S <sup>2-</sup> , Br <sup>-</sup> | 2 - 12   | 5M KNO <sub>3</sub>                                |
| 3100     | Water Hardness                           | 2 x 10 <sup>-1</sup> - 5 x 10 <sup>-5</sup> | -              | 0 - 50         | Ba <sup>++</sup> , Cd <sup>++</sup> , Cu <sup>++</sup>               | 4.5 - 10 | LiAC   |



## Electrochemical Sensors

### Standard Range Mono Ion Selective Electrodes

| Part No. | Description                 | Concentration Range (Mol/L)            | Lower Limits (ppm) | Temp Range(°C) | Ref Elec. | Main Interferences  | pH Range | ISAB                               |
|----------|-----------------------------|--|--------------------|----------------|-----------|---|----------|------------------------------------|
| 321-75   | Ammonia (NH <sub>3</sub> )  | 1M - 10 <sup>-6</sup> M                | 0-02               | 0 - 50         | None      | Hydrazine & Aliphatic Amines  | 11 - 13  | 1M NaOH                            |
| 334-75   | Ammonium (NH <sub>4</sub> ) | 10 <sup>-1</sup> - 10 <sup>-6</sup> M  | 0.02               | 0 - 50         | R2        | K <sup>+</sup> =1.2x10 <sup>-1</sup> , Na <sup>+</sup> =2.0x10 <sup>-3</sup>  | 5 - 8    | 4M LiAc                            |
| 312-75   | Barium (Ba <sup>2+</sup> )  | 1M-5x10 <sup>-6</sup> M                | 10                 | 0 - 50         | R2        | Na <sup>+</sup> =4x10 <sup>-4</sup> , K <sup>+</sup> =9x10 <sup>-3</sup>  | 5 - 9    | 4M LiAc                            |
| 312-75   | Bromide (Br)                | 1M-5x10 <sup>-6</sup> M                | 0.4                | 0 - 80         | R2        | I <sup>-</sup> , S <sup>2-</sup> , CN <sup>-</sup> must be absent   | 2 - 12   | 5M NaNO <sub>3</sub>               |
| 309-75   | Cadmium (Cd <sup>2+</sup> ) | 10 <sup>-1</sup> - 10 <sup>-6</sup> M  | 0.2                | 0 - 80         | R1        | Ag <sup>+</sup> , Hg <sup>2+</sup> , Cu <sup>2+</sup> < 10 <sup>-7</sup> M  | 3 - 7    | 5M NaNO <sub>3</sub>               |
| 310-75   | Calcium (Ca <sup>2+</sup> ) | 1M-5x10 <sup>-7</sup> M                | 0.02               | 0 - 50         | R2        | Mg <sup>2+</sup> , Ba <sup>2+</sup> , Pb <sup>2+</sup> , Zn <sup>2+</sup>   | 4 - 9    | 4M KCl                             |
| 301-75   | Chloride (Cl <sup>-</sup> ) | 1M-5x10 <sup>-6</sup> M                | 1.8                | 0 - 80         | R2        | Br <sup>-</sup> , I <sup>-</sup> , CN <sup>-</sup> must be absent   | 2 - 11   | 5M NaNO <sub>3</sub>               |
| 306-75   | Copper (Cu <sup>2+</sup> )  | 1M-5x10 <sup>-6</sup> M                | 0.3                | 0 - 80         | R2        | S <sup>2-</sup> , Ag <sup>+</sup> , Hg <sup>2+</sup> should be absent   | 0 - 7    | 5M NaNO <sub>3</sub>               |
| 304-75   | Cyanide (CN)                | 10 <sup>-2</sup> - 10 <sup>-6</sup> M  | 0.03               | 0 - 80         | R2        | S <sup>2-</sup> must be < 10 <sup>-7</sup> M / 1=1.0  | 10 - 14  | 5M NaOH                            |
| 333-75   | Fluoride (F)                | 1M <sup>5</sup> x10 <sup>-7</sup> M    | 0.01               | 0 - 80         | R1        | OH <sup>-</sup> =10 <sup>-1</sup>   | 5 - 8    | TISAB                              |
| 303-75   | Iodide (I <sup>-</sup> )    | 1M-10 <sup>-7</sup> M                  | 0.02               | 0 - 80         | R2        | S <sup>2-</sup> must be < 10 <sup>-7</sup> M / CN=1.0   | 3 - 12   | 5M NaNO <sub>3</sub>               |
| 307-75   | Lead (Pb <sup>2+</sup> )    | 10 <sup>-1</sup> -5x10 <sup>-6</sup> M | 1.0                | 0 - 50         | R2        | S <sup>2-</sup> , Ag <sup>+</sup> , Hg <sup>2+</sup> should be absent   | 0 - 9    | 5M KNO <sub>3</sub>                |
| 311-75   | Nitrate (NO <sub>3</sub> )  | 1M-5x10 <sup>-6</sup> M                | 0.08               | 0 - 50         | R1/R2     | Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , SO <sub>4</sub> <sup>2-</sup> , F <sup>-</sup> , ClO <sub>3</sub> <sup>-</sup> , ClO <sub>4</sub> <sup>-</sup> | 3 - 10   | 1M KH <sub>2</sub> PO <sub>4</sub> |
| 314-75   | Potassium (K <sup>+</sup> ) | 1M - 10 <sup>-6</sup> M                | 0.04               | 0 - 80         | R2        | Na <sup>+</sup> , Ca <sup>2+</sup> , Rb <sup>+</sup> , Mg <sup>2+</sup> , Cs <sup>+</sup> , NH <sub>4</sub> <sup>+</sup>  | 4 - 9    | TEAC                               |
| 308-75   | Silver (Ag <sup>+</sup> )   | 1M - 10 <sup>-7</sup> M                | 0.01               | - 5 - +70      | R2        | S <sup>2-</sup> , Hg <sup>2+</sup> must be absent   | 2 - 9    | 5M NaNO <sub>3</sub>               |
| 315-75   | Sodium (Na <sup>+</sup> )   | Sat - 10 <sup>-6</sup> M               | 1ppb               | 0 - 80         | R2        | Li <sup>+</sup> , K <sup>+</sup> , NH <sub>4</sub> <sup>+</sup> / Ag should be absent   | 9 - 12   | SISAB                              |
| 305-75   | Sulphide (S <sup>2-</sup> ) | 1M - 10 <sup>-7</sup> M                | 0.003              | 0 - 80         | R1        | Hg <sup>2+</sup> , Ag <sup>+</sup> must be absent   | 12 - 14  | SAOB                               |
| 331-75   | Voltammetric Ind.           | -                                      | -                  | 0 - 80         | R1        | -   | -        | -                                  |

Note : For full details on interferences and recommended solutions, please consult your dealer.

### Reference Cells



Supplied with 1 metre of cable and a 2mm plug as standard. (R1, R2, R3 and R4). Dimensions 120 x 12mm.

| Order Ref.    | R1           | R2           | R3        | R4      |
|---------------|--------------|--------------|-----------|---------|
| Temp Range °C | 0 - 50       | 0 - 50       | 0 - 50    | 0 - 100 |
| Ref Type      | HgCl         | AgCl         | HgCl      | AgCl    |
| Junc Type     | Frit Ceramic | Frit Ceramic | Capillary | Teflon  |

These mono ion selective electrodes are ideal for applications where high accuracy is required, particularly where the ion levels are low (<1ppm).



## Electrochemical Sensors

### Consumables



Swing Arm Electrode Holder  
Part No. 521-13

### pH Buffer Capsules - supplied per box of 50 (100mls per capsule )

| Part No. | Description | Order Ref. | Description |
|----------|-------------|------------|-------------|
| 790-13   | pH 4        | 790-17     | pH 7        |
| 790-20   | pH 9        | 790-21     | pH 10       |

### pH Buffer Capsules - supplied per box of 50 (100mls per capsule )

|        |                             |        |                 |
|--------|-----------------------------|--------|-----------------|
| 788-11 | pH 4(500ml)                 | 788-14 | pH 7 (500ml)    |
| 788-12 | pH 4 (1 litre)              | 788-15 | pH 7 (1 litre)  |
| 788-13 | pH 4(5 litres)              | 788-16 | pH 7 5 litres)  |
| 788-17 | pH 9(500ml)                 | 788-20 | pH 10 (500ml)   |
| 788-18 | pH 9 (1 litre)              | 788-21 | pH 10 (1 litre) |
| 788-19 | pH 9(5 litres)              | 788-22 | pH 10 5 litres) |
| 791-95 | Electrode Cleaning Solution |        |                 |
| 791-65 | Electrode Storage Solution  |        |                 |

### Conductivity Standards (500ml)

|        |              |
|--------|--------------|
| 789-11 | 1413 $\mu$ S |
| 789-12 | 12.88mS      |
| 789-13 | 111.8mS      |

### Reference Electrode Filling Solutions (100ml)

|        |   |        |                    |
|--------|---|--------|--------------------|
| 551-53 | LiAc  | 551-54 | TEAC               |
| 551-55 | LiCl  | 551-56 | NH <sub>4</sub> Cl |
| 551-64 | KCl   | 551-65 | KNO <sub>3</sub>   |
| 551-66 | NaNO <sub>3</sub>                               | 551-68 | 3M KCl / AgCl      |
| 551-69 | (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> |        |                    |

### Ion Selective Electrode Consumables

A comprehensive range of fill solutions, calibration standards, ionic strength adjustment buffers (ISAB) and replacement membranes are available. Details upon request.