

Flow Plus Combination ISE's

directION

Sensors that make sense

Flow Plus combinations



5041 Calcium & 5221 Fluoride Flow Plus Combination ISE's

Electrode components



5051 Ammonium Flow Plus Combination ISE



Each Flow Plus ISE is supplied with an optimised filling solution in an easy to use 30ml bottle

The **directION** Flow Plus range incorporates two solid state ISE's in one 12mm epoxy body. One acts as the sensor whilst the other is incorporated into the reference system.

All Flow Plus Electrodes have the following advantages over conventional ISE's:

- Solid State Sensor
- Unlimited shelf life
- Variable flow Reference system for greater stability
- Rounded solid state reference ISE for smooth electrolyte delivery
- Liquid junction provides rapid response
- Adjustable electrolyte flow for awkward applications
- Construction allows easy cleaning of components

Principle of Operation

The **directION** solid state sensor provides rapid analysis as it does not require pre-conditioning or an internal solution. Its shelf life is also longer than that of standard ISE's.

The Flow Plus reference system has a liquid junction provided by a conical plug which is opened or closed by rotation of the electrode cap.

The wider the gap between the plug and the epoxy body the faster the flow of electrolyte from the electrodes liquid junction.

The electrolyte passes over a rounded, polished solid state ISE incorporated into the electrodes inner shaft. The internal ISE varies in type according to the ion being used as the sensor. The electrolyte and the internal ISE therefore always have the same potential and contact is made between the two ISE's by the flowing electrolyte.

Flow Plus combination ISEs have several technical advantages over conventional combination electrodes. These are clearly demonstrated upon use of the electrodes in real situations with awkward samples or in cases where stability, response times or drift cause a problem.

Ordering Information

Part No.	Description	Price(UK £)
5021	Nitrate directION Flow Plus Combination ISE Range 0.4 to 62000 ppm Complete with filling solution, one metre cable and BNC connector	£ 395.00
5031	Potassium directION Flow Plus Combination ISE Range 0.04 to 39000 ppm Complete with filling solution, one metre cable and BNC connector.	£ 395.00
5041	Calcium directION Flow Plus Combination ISE Range 0.02 to 4010 ppm Complete with filling solution, one metre cable and BNC connector.	£ 395.00
5051	Ammonium directION Flow Plus Combination ISE Range 0.9 to 9000 ppm Complete with filling solution, one metre cable and BNC connector.	£ 395.00
5221	Fluoride directION Flow Plus Combination ISE Range 0.02 to 1900ppm Complete with filling solution, one metre cable and BNC connector	£ 395.00
5261	Chloride directION Flow Plus Combination ISE Range 1 to 35500 ppm Complete with filling solution, one metre cable and BNC connector	£ 395.00
6021	Filling solution for Nitrate directION Flow Plus ISE	£ 30.00
6031	Filling solution for Potassium directION Flow Plus ISE	£ 30.00
6041	Filling solution for Calcium directION Flow Plus ISE	£ 30.00
6051	Filling solution for Ammonium directION Flow Plus ISE	£ 30.00
6221	Filling solution for Fluoride directION Flow Plus ISE	£ 30.00
6261	Filling solution for Chloride directION Flow Plus ISE	£ 30.00

Other ISE's available from **directION**

Submersibles	Flow Cells	Flow Plus	Micro 3mm	Solid State
• Applications	• Methods	• Support	• Custom Design	