

# "ProfIC 9 – Cation" – Professional IC System for trace analysis with Inline Calibration, Sample Preconcentration and Matrix Elimination

ProfIC 9 - Cation

The Professional IC system with conductivity detection enables ultratrace analysis of cations or anions (non-suppressed) in the lowest ppt range (ng/L) in complex matrices. The "ProfIC 9" with Metrohm Inline Sample Preconcentration, Inline Calibration and Inline Matrix Elimination enables chromatography without limitation by the matrix and guarantees a long lifetime for the analytic separation column.

# Schematic diagram

Below, the accessories are grouped into Scope of delivery and Optional accessories. Please keep this printout at hand for ordering replacement material. These lists may be subject to change.

Scope of delivery ProfIC 9 - Cation



Qt.	Order no.	Description
1 PCS	2.800.0010	800 Dosino

The 800 Dosino is a drive with write/read hardware for intelligent Dosing Units. With fixed cable (length 150 cm).



#### 1 PCS 2.850.9010 IC Conductivity Detector

Compact and intelligent high performance conductivity detector for intelligent IC instruments. Outstanding temperature stability, the complete signal processing within the protected detector block and the latest generation of DSP – Digital Signal Processing – guarantee the highest precision of the measurement. No change of measuring ranges (not even automatic ones) is required, due to the dynamic working range.



#### 1 PCS 2.858.0010 858 Professional Sample Processor

The 858 Professional Sample Processor processes samples from 500  $\mu$ L to 500 mL. The sample transfer takes place either by means of a peristaltic pump on the 850 Professional IC system or with an 800 Dosino.



#### 1 PCS 6.1014.200 Metrosep I Trap 1 - 100/4.0

The Metrosep I Trap 1 - 100/4.0 column is used to eliminate ionic, i.e. cationic and anionic, contaminants from aqueous solutions. Its use is especially recommended for the purification of the transfer water in combination with "MISP" or "Metrohm Inline Sample Preparation". Using the Metrosep I Trap 1 - 100/4.0 column can significantly reduce the influence of the transfer water on the system blank.







1 PCS 6.3032.210 807 Dosing Unit 10 mL

807 Dosing Unit with integrated data chip with 10 mL glass cylinder and light protection, mountable to a reagent bottle with ISO/DIN GL 45 glass thread. FEP tubing connection, antidiffusion tip.



1 PCS 6.5330.040 IC equipment for Liquid Handling with the Dosino

Accessories set for mounting a Dosino on intelligent IC instruments for Liquid Handling.



ProfIC Vario 9 Cation "ProfIC Vario 9 Cation" – Professional IC Vario system with Metrohm's intelligent preconcentration technique and Inline Matrix Elimination (MiPCT-ME)

The Professional IC Vario system with Metrohm's intelligent inline preconcentration technique, Inline Matrix Elimination and conductivity detection enables ultratrace analysis down to the lowest ppt range (ng/L) of cations in complex matrices.

### Typical areas of application:

- Ultratrace analysis in samples from nuclear power plants and conventional power plants
- Trace and ultratrace analysis in extraction agents and organics
- Trace analysis in snow and ice

Schematic representation

Installation instructions





# Optional accessories

Order no.	Description			
6.1010.310	Metrosep C PCC 1 HC/4.0			
	For cation preconcentration and matrix elimination			
6.1050.420	Metrosep C 4 - 150/4.0			
	The Metrosep C 4 - 150/4.0 is the universal standard column in cation analysis for accomplishing high separating efficiency in a short time. The Metrosep C 4 - 150/4.0 is the ideal separation column for the analysis of alkaline and earth alkaline metals in aqueous media.			
6.1050.500	Metrosep C 4 Guard/4.0			
	The Metrosep C 4 Guard/4.0 contains the C-4 column material and is used to protect all Metrosep cation columns that have a substrate based on silica gel. Particles and contamination are reliably retained, considerably prolonging the service life of the analytical separation column. The economical price is an additional plus. The Metrosep C 4 Guard/4.0 also works based on the "On Column Guard System" and is screwed directly onto the separation column with virtually no dead volume.			
6.1608.080	Bottle / 300 mL			
	Rinsing vessel for IC Sample Processors.	0		





Sample rack for 810 Sample Changer, 814 USB Sample Processor, 855 Robotic Titrosampler "Light", suitable for 16 sample beakers. The following sample beakers can be used: 100 mL beakers, short.

Plastic: Polyvinyl chloride (PVC)



#### 6.2820.000

#### Al foil

1000 circular sheets of 80 mm diameter. Thickness: 0.010 mm. Used together with 6.2037.030 Foil holder for 6.1432.210 Sample beaker. For 674 KF Sample Changer



#### 6.5333.000

#### IQ/OQ Kit for IC

The IQ/OQ Kit contains all parts and standard solutions required for IQ/OQ in ion chromatography.



#### 6.5620.000

## Connection set to 807 Dosing Unit: Port 4

For the connection of an M6 tubing to Port 4 on an 807 Dosing Unit (transition from luer to M6), including holder safety device

