

FLO-TRACER™

Tracer dilution flow meter



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The FLO-TRACER™ is a complete and simple-to-use device allowing measuring a flow in just a few minutes using the tracer dilution method.

This method consists to inject a quantity of salt into the stream and to measure its concentration downstream. The result can be calculated in function of the injected tracer quantity and the concentration measurements.

The tracing

The measuring probe is placed into the water course. At a sufficiently large distance upstream so that the tracer mixes perfectly with the water, a known amount of salt is injected, previously diluted in a container with the river water (5-20 grams per l/s of estimated flow). The device records the passing of the tracer and provides the flow in litres per second immediately at the end of the operation.

Technical Specifications

Features

- Gauging by dilution method
- Takes just a few minutes
- In high flow water courses up to 50.000 l/s
- Operates with cooking salt
- Measures by integrating the salinity
- Non-polluting tracer
- Software for visualization and treatment of gauging curves
- 15 freely programmable measuring sites can be stored
- Probe with 10 meter length cable
- Delivered in rugged case with calibration accessories

Device

Gauging Range	0,01 l/s to 999.900 l/s (4 significant figures with floating decimal point)
Gauging Accuracy	< 5 % (with optimum mix of tracer)
Gauging Repeatability	± 1 %
Tracer Type	Cooking salt (NaCl)
Tracer Quantity	1 g to 1.000 kg of salt
Tracer Ideal Mix	Between 5 and 20 g of salt per l/s of estimated flow (Ex: ~300 l/s -> 2 kg)
Supply	4 x 1,5 V alkaline batteries, AA, LR6 type
Autonomy	About 30 hours (under normal conditions)
Communication	RS-232 serial link
Dimensions/weight	Complete case: 450 x 360 x 106 mm / 2,7 kg Device with probe: 250 x 120 x 55 mm / 1,6 kg
Protection	IP65
Salinity	
Measuring Range	Salinity: 0 to 2.000 mg/l Conductivity: 0 to 3.600 µS/cm
Sensitivity	1 mg/l
Precision	< 1 %
Temperature	
Measuring Range	0 to +40 °C
Precision	± 0,2 °C

Technical Specifications

The FLO-TRACER™ is delivered with software for PC. Before gauging, 15 measuring sites can be prepared with different information.

These data are loaded into the device, either at the office or onsite with a laptop. It contains among others the name of the site, the location, the operator, the measuring interval, the limnigraphic height, the amount of injected salt and the injection distance. These last four parameters can be modified on site when acquiring a gauging reading directly by using the unit's keyboard.

Back at the office, it offers the opportunity to analyze the graphics and export data as spreadsheet. The visualization of the gauging curves is recommended to ensure that measurements were done correctly or to detect possible errors. Some tools are available to recalculate the flow after parameters' changes and to print the results.

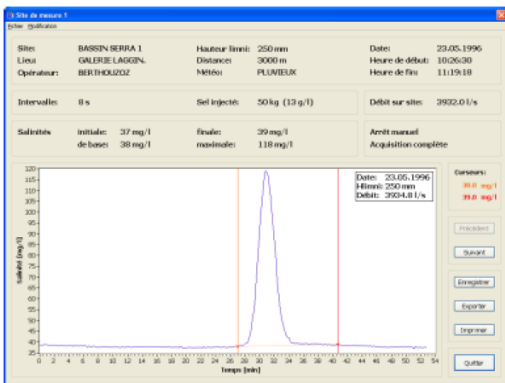
Accessories

The FLO-TRACER™ is supplied with its accessories (sensor with 10 m of cable, PC connection cable, calibration solution, software etc.) in a rugged case, providing effective protection for the units during transport.

Site de mesure 1

Nom du site: BASSIN SERRA 1
Conditions météo: PLUVIEUX
Nom du lieu: GALERIE LAGGIN.
Hauteur limnigraphique: 0 m
Nom de l'opérateur: BERTHOUDZ
Quantité de sel: 50 kg
Intervalle de mesure: 8 secondes
Distance d'injection: 3000 m

Précédent
Suivant
Enregistrer
Charger
Annuler



FLO-TRACER™ software



Specifications are subject to change without notice
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