

MICROFLOW SYSTEM

Type : MFS.*



Description

The microfluidic capillary arrangement allows precise and constant flow of the liquid onto the active surface of the electrochemical sensor. This means there exists a high level of repeatability and sensitivity in the measurements carried out using the system. The module has an integrated chamber in which the sensor can be easily placed or replaced. The system is equipped with special two channel pump. The first channel assures the flow through channel with sensor. The second channel is used for mixing of sample. I/O signals are on standard 7 poles BVT connector.

Physical Parameters

Dimensions		
Length	Height	Width
165 mm	150 mm	120 mm

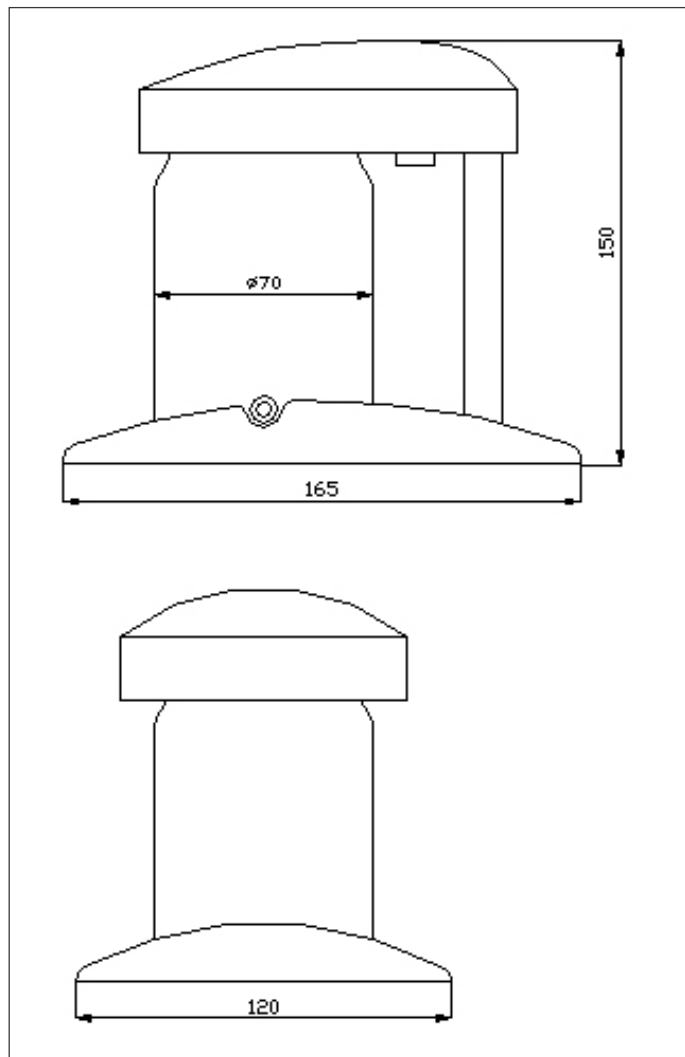
Weight = 900 gms

Set of device

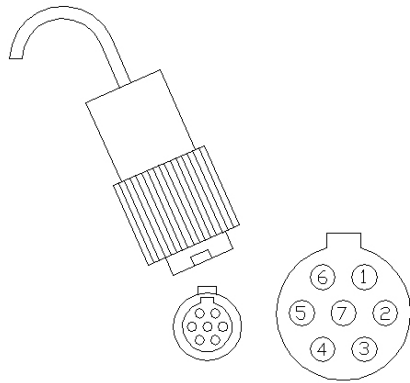
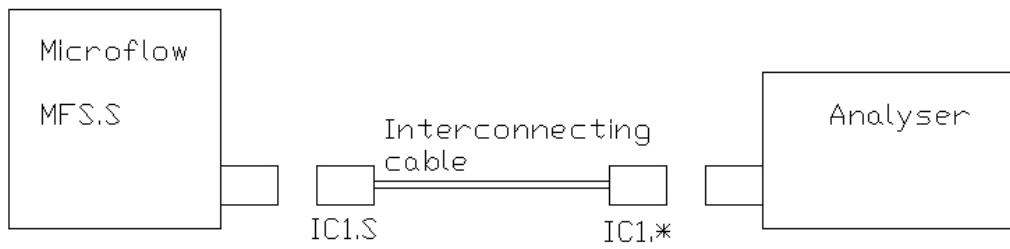
Whole device consists of microfluidic unit MFS.* , interconnecting cable IC1.* and glass thermostated cell TC2.S. Disposable cells can be delivered too. The flow of sample is same as in FC2.S

Inter connecting cables IC1.*

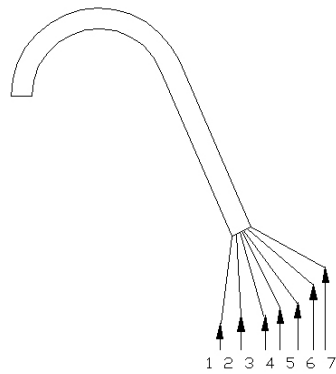
Model	Termination
IC1.S	Single conductors
IC1.1	Banana plugs
IC1.2	7 poles BVT connector
IC1.3	Triad01 Palminstruments + 4x Single conductors
IC1.4	Triad01 Palminstruments + 4x Banana plugs
IC1.5	3x BNC + 4x Single conductors
IC1.6	3x BNC + 4x Banana plugs



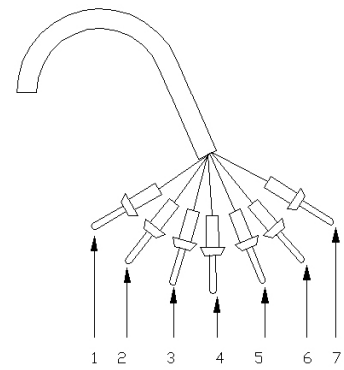
Internal Wiring



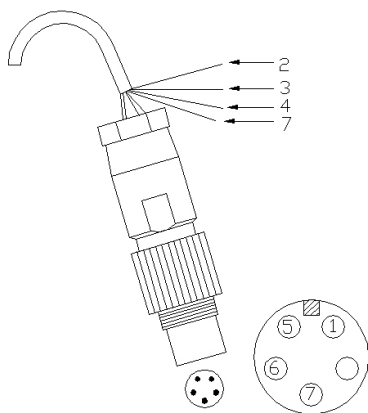
IC1.2



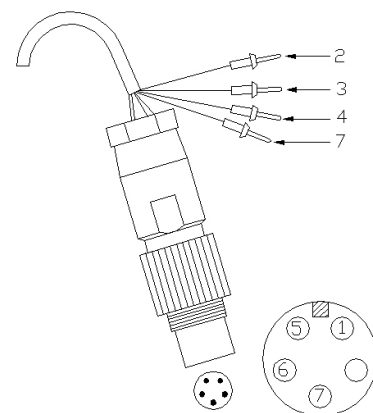
IC1.S



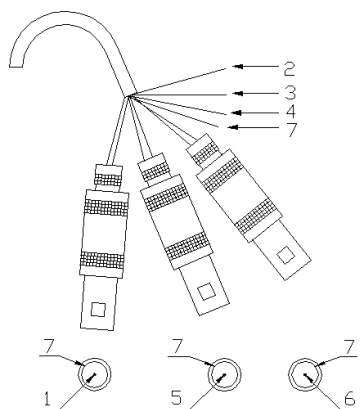
IC1.1



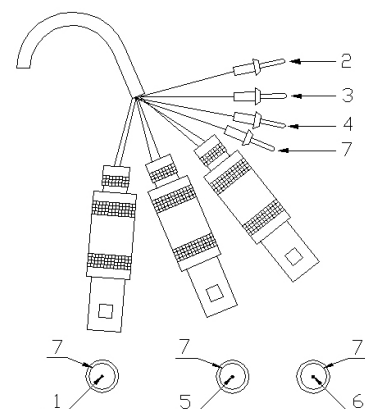
IC1.3



IC1.4



IC1.5



IC1.6

1-white-Working; 2-red-Control signal (light, switch, ...); 3-yellow-Pump; 4-grey-Pump; 5-green-Ref.; 6-brown-Aux; 7-blue-GND

Optional Equipment

Evaluating Units:

- BA1.*
- BA2.*
- BA3.*
- BA4.*
- BA5.*
- BA6.*
- BA7.*
- Palmsens from Palminstruments B.V.
- AEW2 from Sycopel

Accessories and Spare Parts:

- IC1.* - interconnecting cable
- TC2.S - thermostated cell
- DC1.S - disposable cell

Device Usage

This specific range of MFS system enables the measurement of:

- Basic electrochemical and bio-electrochemical techniques
- H₂O₂ concentration
- Glucose
- Ferricyanide
- Toxicity caused by pesticides
- Enzyme activity
- Enzyme activity and Michaelis Menten constant

Software Packs

These are available for:

- Basic evaluation
- Measurement of enzyme activity and Michaelis Menten constant

Warnings

The parts of device which are in contact with analyzed solutions are made from polymethylmethacrylate (PMMA). Some solution components can damage the device. Following solutions were proved to damage it:

- Solutions containing chloroform
- Solutions of p-benzoquinone cause the induced creep of PMMA (approximately after 6 month of use)
- Solutions of HCl with tetraethyl orthosilicate causes induced creep of PMMA and metal parts corrosion.

Related patents and publications

CZ 287676/2001

Ordering Information

- The order is specified by whole product code
- Minimum order quantity – 1 microflow system
- Delivery time for standard MFS.S system is 4 weeks from receipt of order
- Delivery time for non-standard MFS.S system depends on final technical specification of order

Example of Order:

- 10 pieces – MFS.S