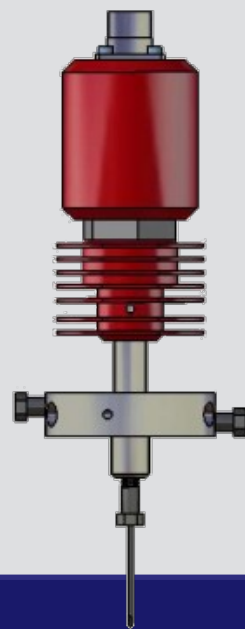


ROLSI® CONTROLLER



Contacts

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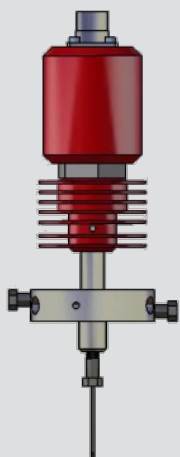
ROLSI®

The ROLSI® sampler-injector has been specially developed for sampling fluids under pressure and analyzing samples by gas chromatography. Directly connected to a reactor or a "process line", it allows the in-situ sampling of repeatable and representative samples of the medium to be analyzed without any pollution. Thanks to its incorporated heating system, it allows to vaporizing instantaneously a liquid sample or to maintaining in vapor phase a sample.

PRINCIPLES OF OPERATION

The ROLSI® (Rapid On-Line Sampler-Injector), whose free side of the capillary is connected to the sampling site, is permanently traversed by a flow of carrier gas from the gas chromatograph (GC).

The sample is taken by soliciting the electromagnet which attracts the moving part and causes a break in the seal between the fixed capillary and the moving part. The size of the samples taken, under given conditions of pressure and temperature, is directly proportional to the time of rupture of the seal (sampling time). This time is controllable as well as the duration between two sampling (sampling frequency).



MAIN FEATURES

- No dead volume
- Compact and easily automated
- Reliable and representative sampling of the analyzed medium
- Adjustable sample volume from 0.1 mg to a few mg
- Integrated heating for instant vaporization of liquids
- Temperature range: from cryogenic to 250 °C continuously
- Pressure range: 0.5 bar above carrier gas pressure to 600 bar
- 316 stainless steel body as standard (other materials on request)
- 316 L stainless steel capillary, 1/16" outside diameter; 0.13 mm inside diameter

ELECTRONIC CONTROLLER

PRINCIPLES OF OPERATION

An electronic controller has been developed for managing the operation of up to 2 ROLSI®. The controller integrates a GC automatic starting option and offers 4 independent customizable heating zones; in the basic configuration, 2 are used for the 2 ROLSI®, 2 are used for 2 transfer lines (1 for each ROLSI®).

The electronic controller communicates with a dedicated piloting Software by means of an Ethernet/IP connection offering remote control of the ROLSI®.

- Heating zone: J-type thermocouples and resistive cartridges
- Ethernet/IP communication
- Switch mode for GC
- 115-230 V power

ADVANTAGES

Compact system
Ready to use
Network connection



Option : A motor driving system controlling the vertical displacement of mobile liquid ROLSI® can be integrated in the controller.

SOFTWARE

The piloting software: a key asset for increasing the productivity of your daily experimental work thanks to simplified, automatic, and optimized control of routine sampling on a 24/7 basis.

PRINCIPLES OF OPERATION

The Software allows setting operative conditions of the ROLSI® (opening time, sampling frequency), of the heating zones (set temperatures, auto-tuning mode), choosing a ROLSI® between the 2, and operating sampling in a manual mode and an automatic programming mode.



ADVANTAGES

- Everything can be done from the computer. Ideal for deported system
- Manual and automatic modes
- Programming of sampling
- Saving and sharing of sampling procedures

SOFTWARE DETAILS



Control parameters

Procedure parameterization

IP **192.168.1.64**

Connected

TL 1-2	ROLSI 1		ROLSI 2
100.4 °C	99.2 °C		101.8 °C
100 °C	100 °C		100 °C
0 %H	0.2 %H		0 %H

Bride	
57 °C	57 °C
57 °C	57 °C
0 %H	0 %H

N Sample	ROLSI 1 or 2	Duration /ms	Delay /s	GC START 0 or 1
0	2	350	2	<input checked="" type="checkbox"/> 0

▶ Launch samplings
(Manual mode)

File : VLLE

1	1	1	1	0
3	1	400	600	1
4	2	600	800	1
3	1	500	600	1
4	2	800	800	1
3	1	600	600	1
4	2	1000	800	1

▶ Launch a procedure
(Automatic mode)

🗑️ Delete procedure

📁 Open a procedure

📄 Save as new procedure