

MYVAP

AUTOMATIC VAPORIZER FOR LPG ANALYSIS

Unsurpassed performance for GC LPG analysis

Gas Chromatography is commonly used to determine the composition of LPG after vaporization of the sample.

This vaporization phase is often a source of errors and bias. Most of the methods are offline and operator-dependent, resulting in problems of reproducibility and repeatability of analyses.

SRA Instruments has developed MyVAP, a vaporizer and sampler, both independent and automatic, which extracts LPG through a heated stainless steel chamber controlled by electronic pressure and temperature sensors in accordance with the UOP 539 method.

As described in the method, the cylinder has an open/closed valve which allows the LPG to be sprayed in a very reproducible manner, independently of the operator.



Main page of Web interface

Embedded software

The embedded software, developed by SRA Instruments, extends the capabilities of MyVAP, including security, remote management and GC launch characteristics. Free software, it allows you to start and program your vaporizer with a simple web browser.



The system's performance is based on very precise control of pressure and temperature during the sample vaporization phase. The spray cycle is easily programmable via the MyVAP web interface. It also includes purging the GC sampling system and valve to reduce sample-to-sample memory effects.

Before injection, the gas is sampled at the set pressure and GC analysis is automatically initiated by an external start.

All operations are fully automated and controlled by the integrated web interface. MyVAP is made from high quality materials and components using safety fittings and a safety valve that ensures safe operation.





Application:

Detailed composition of hydrocarbons in LPG
 Analysis of non-condensable in LPG



Vaporization cycle fully automated



Unsurpassed reproducibility & repeatability



Automatic launch of GC sequences



Ethernet communication



GC multi-brand compatibility





MYVAP TECHNICAL SPECIFICATIONS

General specifications:

Dimensions (mm): H 450; D 430; W 300

Weight: 15 Kg

Chassis: Aluminium / Steel / Stainless Steel Sample path material: Stainless steel

Conditions of use: Temperature: 0°C à 40°C

Relative Humidity: 5 à 95% no condensation

Altitude: jusqu'à 2000m max.

Use:indoor

Power:

Power Supply: 230 VDC, 50Hz Power consumption: 6 A max

Sample:

Nature: Liquefied Petroleum Gas, C3 and C4 mixtures

Pressure: 50 bar max.

 $\textbf{Safety}: expansion \ chamber \ volume = 1 \ Liter. \ Overpressure \ prevented$

by CE type relief valve 30PSI

Connection:

 $\textbf{Inlet:} Swagelok \ fast \ connector \ 1/8''$

Outlet to GC: 1/16" Diam. ext., 0.98mm Diam. int.

Vent: 1/4" Swagelok

 $Chromatographic\ specifications:$

Repeatability : < 0.5 % RSD on C3 and C4

GC configuration: Heated gas sampling valve installed on the GC Compatibility: compatible with any GC type equipped with Gas

Sampling Valve

Communication:

Ethernet: fixed IP or DHCP (IP 10.1.1.113 by default)
Operating system: any OS with web browser

Supported web-browser:

- Internet Explorer revision 10 or higher

- Chrome revision 28 or higher

Data System: SRA embedded web software. No installation required

I/O (Remote):

Contacts: GC External device not ready/Start/GC ready Input

Miscellaneous:

Valves: 4 electro-valves

Internal vacuum pump: Before vaporization, to clean the cylinder

ssembly

Vaporization temperature: from 50°C to 200 °C

Pressure sensor range: 0 to 5 bar

Mode of operation: Automatic via software, programmable sequence Optional transfer line: Heated transfer line to GC. $L = 1.5 \text{m} / 150 ^{\circ}\text{C}$ Optional coating: Inerting for the analysis of H,S, sulphurous or sensitive

compounds.

Applications:

Analysis of composition of liquefied petroleum gases LPG

The SRA MyVAP is composed of:

- A sample inlet with valve to fast loop (liquid vent)

- A heated main vaporization chamber

- A needle valve for optimum vaporization time control

- An electronic pressure sensor 0-5 bar

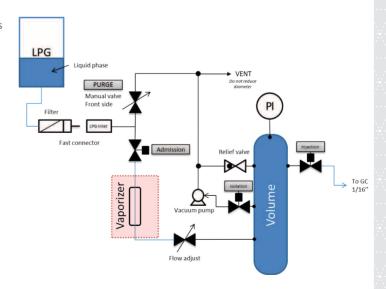
- A heated tank for vaporized gas (1L)

- A vacuum pump

- A relief valve to protect overpressure in the vaporization chamber

- Isolation electrovalves for each system part for automatic operation

- System self-monitoring at startup and error reporting for easy maintenance.



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