MINIVAP

MINI LPG VAPORIZER

EQUIPMENTS

MINIVAP 40A/E
PATENTED REGULATION THERMOSTATIC VALVE, TO CONTROL THE LPG FLOW ACCORDING TO WATER OUTPUT TEMPERATURE
SAFETY VALVE ON LPG OUTPUT
WATER THERMOMETER
CLOSED WATER EXPANSION VESSELS (ONLY MINIVAP 40E)

ELECTRIC VERSION (40 E)

HOT WATER VERSION (40 A)

PEGORARO PRODUCTS AND SERVICES

High technology gas equipment and systems. Quality service, in Italy and abroad. International patent on LPG Regulation's Thermostatic Valve.

REDUCING AND METERING STATIONS - METAL CABINETS - PRESSURE REGULATORS AND STABILIZERS - VALVES AND SOLENOID VALVES - CARTRIDGE FILTERS - ACCESSORIES
RECONDITIONING SERVICES FOR EQUIPMENT OF THE BEST BRANDS - SPARE PARTS - LPG REFUELLING UNIT FOR VEHICLES (SKID) - GAS COMPRESSORS

UNI EN ISO 9001:2008(Quality System certified since 1997)
Certification according to the 97/23/CE PED directive for: Gas pressure reducing units Cartridge filters - Gas heat exchangers - LPG vaporizers - LPG refuelling units for vehicles

PEGORARO
GAS INNOVATIVE TECHNOLOGIES

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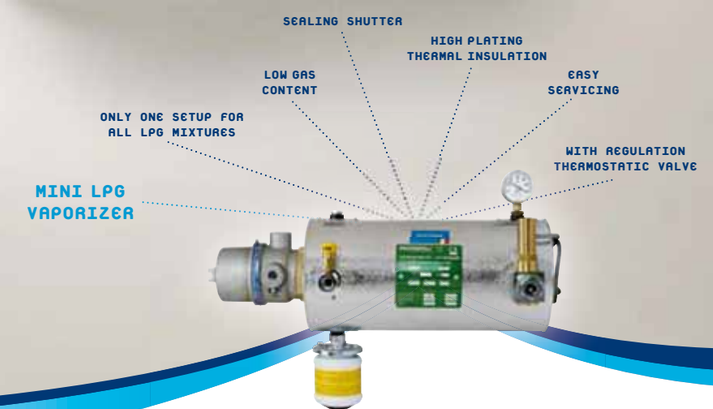
ed. 09 - 10

ITALIAN TECHNOLOGY

[MINIVAP. THE ONE IN THE WORLD.]

A jewel of technology.



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GAS INNOVATIVE TECHNOLOGIES

MINIVAP

MINI LPG VAPORIZER

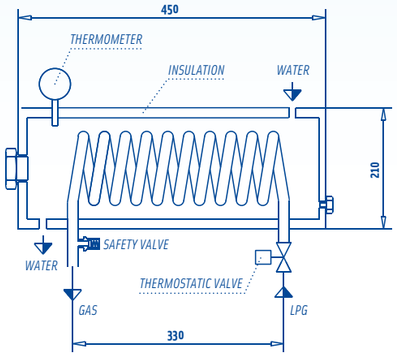
MINIVAP

Water bath LPG vaporizer 40 Kg/h, electric and hot water versions.

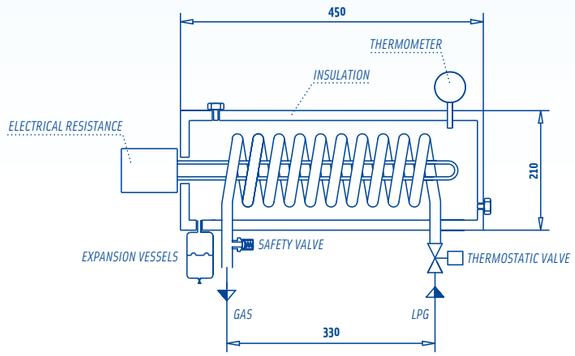
Horizontal execution and without level's regulation.

With Patented Regulation Thermostatic Valve that controls liquid gas flow according to the water temperature.

MODELS
MINIVAP 40E: water preheat by 5 KW three-phase 380/400 V Eexd electrical resistance with 2 thermostats, one of regulation, one of safety.
MINIVAP 40A: water preheat from external boiler.



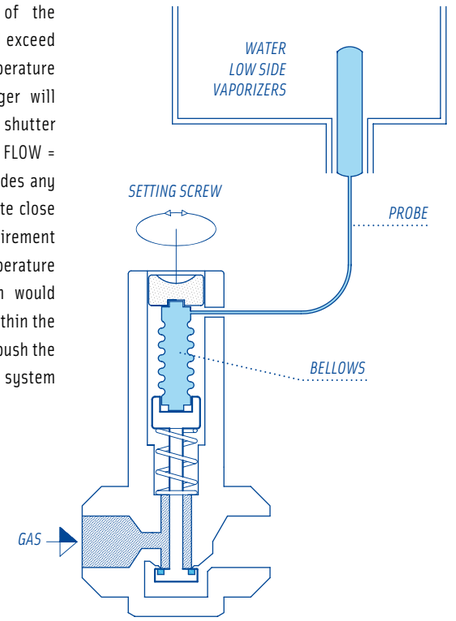
MINIVAP 40A



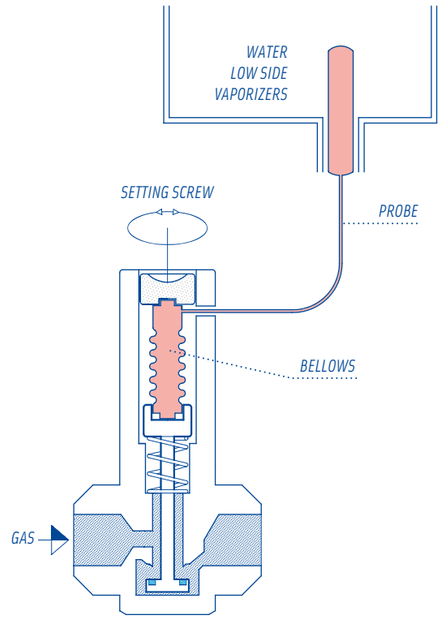
MINIVAP 40E

THERMOSTATIC VALVE

The flow of gas happens by our patented Thermostatic Regulation Valve. It works on the basic concept that, reaching a certain temperature, the LPG enters a gaseous state. The liquid gas, coming from the tank, enters into the valve and comes to the shutter which is closed. If the temperature of the water leaving the exchanger is recorded as being > 50°C, the expansion of the bellows will make the shutter open and let the gas enter into the heat exchanger. As the user's requirements vary so does the temperature of the water and consequently also the opening of the shutter. If the need for gas should exceed the heat exchanger's rating, the temperature of the water leaving the exchanger will fall and the bellows will make the shutter close to reach an equilibrium "GAS FLOW = HEAT REQUIRED". This system excludes any possibility of taking up gas in a state close to its re-liquefying. If the requirement for gas was nil and the water temperature remained within the values which would ensure evaporation, the pressure within the heat exchanger would increase and push the gas towards the tank, bringing the system back into equilibrium.



OUTLET WATER TEMPERATURE < 45-50°C THE VALVE IS CLOSED



OUTLET WATER TEMPERATURE > 45-50°C THE VALVE IS OPEN

ITALIAN TECHNOLOGY

ADVANTAGES

1) Minivap has a balanced inlet flow valve: this means that the shutter of the valve is subjected only to the two forces of a preset spring and of the membrane of the thermostatic valve; the forces due to the different pressures upstream and downstream is balanced. This configuration permits the flow valve a more accurate modulation. Other vaporizers use a not balanced valve, which is subjected to the pressure difference between upstream and downstream: hence its flow modulation is less easy.
2) Direct consequence of being equipped with balanced flow valve is that Minivap can be employed with all mixtures of propane and butane. Minivap has no problem to work with 80% butane mixture.
3) The inlet flow valve of Minivap is composed by a rubber gasket which insists to a metal seat: this sealing coupling assures no leakage. The inlet flow valve of others vaporizers uses instead a metal ball that insists on a metal seat: this sealing couplet needs to be cleaned periodically (once a year).
4) The shutter stroke of Minivap is longer than other vaporizers: thanks to this Minivap could reach even higher values of flow rate than the indicated range.

MAIN FEATURES		
TYPE OF VAPORIZER	WATER VAPORIZER WITH ELECTRIC PREHEAT	
FLOW [KG/H] / [LB/HR]	40 KG / 88.19 LB	
POWER [KW]	5	
VOLTAGE [V]	380	
CONNECTION IN/OUT GAS DN [IN]	IN: 1/2" - PN40 OUT: 1/2" - PN40	
OVERALL DIMENSIONS	LENGTH [MM] / [IN]	620 / 24.56"
	WIDTH [MM] / [IN]	220 / 8.66"
	HEIGHT [MM] / [IN]	220 / 8.66"
	WEIGHT [KG] / [LB]	20 / 44.1
SHIPPING DIMENSIONS	LENGTH [MM] / [IN]	630 / 24.08"
	WIDTH [MM] / [IN]	420 / 16.54"
	HEIGHT [MM] / [IN]	350 / 13.78"
	WEIGHT [KG] / [LB]	23 / 50.7

ELECTRICAL INFO	
MODEL	MINIVAP 40
VOLTAGE, [V]	380
PHASE	3
POWER, [KW]	5
CURRENT ABSORPTION, [A]	7.60
ATEX EQUIPMENT CLASSIFICATION	EEX de IIC T4 Ⓔx II2GD
ATEX HAZARDOUS AREA CLASSIFICATION	CLASS I / ZONE 1 OR 2 / T(ROOM) -20/40°C / TMAX 99°C

HEAT EXCHANGER FEATURES		
MODEL	MINIVAP 40	
	TANK (WATER SIDE)	SERPENTINE (GAS SIDE)
EXCHANGE AREA, [M2] / [IN2]	---	0.28 / 434.0
DESIGN PRESSURE [BAR]	2	20
PROOF PRESSURE [BAR]	3	30
TEMPERATURE [°C]	-20 / 100	-25 / 100
CAPACITY [LITERS]	5.1	0.8
MATERIALS	ALUMINUM WITH POLYURETHANE INSULATION	STEEL, ST 37.4 OR SA179