

Products catalogue

CLESE NOVACOMET



CLESSE World Wide

Part of the Aalberts group, CLESSE INDUSTRIES designs, manufactures, and supplies products serving LPGas, Natural Gas and Synthetic Natural Gas installations.

Our product range is based on gas regulators, tank equipment, valves, and accessories and is proposed under our world renowned brands: **CLESSE**, **NOVACOMET** and **COMAP**.

Our organization revolves around 5 industrial and logistic sites with key facilities located in France, Italy, United Kingdom, China and Brazil, coupled by a complete sales network boasting a leading presence on all continents.

With more than 60 years experience, CLESSE INDUSTRIES is recognized as the reference for professionals in the gas industry, and is proud to offer the widest range of products available on the market.



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This catalogue presents the basic range of Clesse and Novacommet regulators and accessories. Upon request personalised products can be developed to satisfy any particular application.

WARNING

The content of this document is presented solely as information, as despite efforts to ensure its correctness, it should not be interpreted as an explicit or implicit cover guarantee for the products or services described or for their use or applicability. We reserve the right to change or improve product design or specifications at any moment and without notice. The photos and the datas presented in this document are not contractual.

Terminology, advice and warnings

○ Connections

The inlet or outlet connections are described by:

- A code and a condensed description in the product tables.
- A code and a full description in the connection table.

WARNING

There are so many types of connections that we recommend carefully checking the full description, using the connection code and the table.

○ Regulation stages

In an LPG installation, there can be one, two or three pressure regulation stages. Depending on the number of stages and on the relative position, the regulator or the automatic changeover function is called:

- **Single stage:** the regulator or the automatic changeover reduces the pressure from the vessel pressure directly down to the appliance pressure.
- **First stage:** the regulator or the automatic changeover reduces the pressure from the vessel pressure down to an intermediate pressure.
- **Second stage:** the regulator reduces the pressure from the intermediate pressure down to the appliance pressure or to a second intermediate pressure.
- **Third stage:** the regulator reduces the pressure from the second intermediate pressure down to the appliance pressure.

○ High or low pressure regulator, governors

For LPG installations the regulators families are generally defined as follows:

- **High pressure regulators:** regulators delivering an outlet pressure (fixed or variable) higher than 500mbar (7psig). They are defined as single or first stage regulators.
- **Low pressure regulators:** Regulators delivering an outlet pressure (fixed, adjustable or variable) lower than 500mbar (7psig). They are defined as single, second or third stage regulators.
- **Governors:** Special type of regulators installed close to or in a gas appliance. Supplied with a low pressure (less than 500mbar (7psig)) they deliver a very stable pressure to the gas appliance. They are normally defined as third stage regulators.

○ Automatic changeover devices

- Automatic changeover devices are used mainly with 2 LPG cylinders or 2 LPG cylinder batteries. Large capacity models can also be used with 2 LPG tanks
- The first cylinder (or cylinder battery) is called "service" the second is called "reserve". The automatic changeover firstly takes the gas from the "service" cylinder. When the "service" cylinder is empty or when its vaporising capacity is not sufficient (high flow rate during a long time, use of butane-propane mixture, low temperature, low level in the cylinder,...) it automatically changes to and takes the main flow from the reserve cylinder. An indicator (on the device or installed on the gas line) shows that the "service" cylinder is empty.
- This provides the following benefits:
 - continuous flow of gas, no more risk to run out of gas
 - use of 100% of the gas in the cylinder
 - high capacity with the minimum number of cylinders.
- The automatic changeover device also provides a first stage regulation function.

Some automatic changeover devices are equipped with an integral second stage regulator providing a single stage function.

○ Limitors

The limiter is a high pressure regulator mounted in series with the normal high pressure regulator (or the high pressure automatic changeover device) for safety purpose. Its outlet pressure is set to a pressure which is slightly above that of the latter. It allows continuous running of the installation even if the normal high pressure regulator (or automatic changeover device) is faulty. When the installation includes a limiter, the guaranteed flow rate of the assembly (regulator+limitor) is reduced (-35% approx.).

○ Inlet pressure

The inlet pressure (P_e) can be expressed in minimum and maximum values.

When supplied with whatever pressure within the declared range of inlet pressure, the regulator is able to deliver a stable outlet pressure with the specified type of gas and with whatever flow rate less than the declared one.

For LPG first or single stage regulators, the maximum inlet pressure is often declared at 16bar (230psig), as defined in the EN standard, but all these LPG regulators withstand inlet pressures up to 20bar (290psig).

○ Type of nominal outlet pressure setting

The nominal outlet pressure ($P_{a.nom}$) can be:

- **"Fixed"**: outlet pressure is factory preset, with no possibility of readjustment.
 - ☞ *Example: 37mbar*
- **"Adjustable"**: the outlet pressure is factory set; it can be readjusted internally, after having disassembled the cap.
 - ☞ *Example: 30(20-40) mbar means preset at 30mbar, adjustable between 20 and 40mbar.*
 - The cap can be:
 - Hand screwed, non sealable
 - Hand screwed, sealable
 - Dismountable only with a special spanner
- **"Variable"**: the outlet pressure can be set using external means.
 - ☞ *Example:*
 - 20-300mbar means: minimum setting 20mbar, maximum setting 300mbar
 - (0)1-3bar: The recommended (for guaranteed performances) setting range is between 1 and 3 bar; in certain circumstances the outlet pressure can reach 0 bar (no flow).

External means can be:

- A multi-turn screw with hexagonal head
Recommended when no frequent setting is requested. A manometer is recommended
- A multi-turn screw with handwheel
Recommended when frequent setting is requested. A manometer is recommended.
- A one-turn hand wheel with positioning figures
Recommended when frequent setting is requested. A manometer is not necessary.

WARNING

- *Setting shall not be used to shut off the gas flow*
- *Setting means must not be replaced*

Terminology, advice and warnings

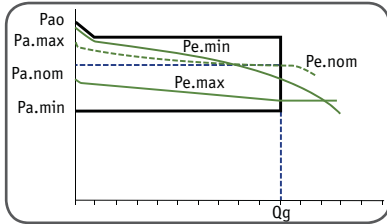
Outlet pressure - "european" flow rate declaration

For whatever inlet pressure (P_e) within the declared range, for whatever flow rate less than the declared guaranteed flow rate (Q_g) and with the declared gas, the outlet pressure (P_a) is stabilised between the following limits:

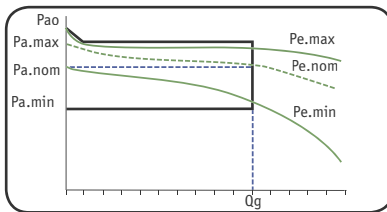
- Pa.min: minimum outlet pressure
- Pa.max: maximum outlet pressure
- Pa.o: lock-up pressure

Typical curves:

High pressure regulators



Low pressure regulators



For low pressure LPG regulators supplying directly to gas appliances complying with EN437, limits are:

Gas	Regulator outlet pressure (mbar)				Max. pressure loss ⁽¹⁾ (mbar)	Appliance Categories
	Pa.nom	Pa.min	Pa.max	Pa.o		
Butane	29 (28-30)	22	35	40	2	3B and 3+
Butane	50	47,5	57,5	62,5	5	3+
Butane	112	65	140	145	5	3+
LPG	29 (28-30)	27	35	40	2	3B/P
LPG	50	47,5	57,5	62,5	5	3B/P
Propane	37	27	45	50	2	3P AND 3+
Propane	50	47,5	57,5	62,5	5	3P
Propane	67	55	80	85	5	3+
Propane	148	105	180	185	5	3+

⁽¹⁾ maximum pressure loss between the regulator and the appliance

For intermediate LPG outlet pressures limits are:

- $P_{a.min} = P_{a.nom} \times 0,7$
- $P_{a.max} = P_{a.nom} \times 1,2$
- $P_{a.o} = P_{a.nom} \times 1,3$

For first stage automatic changeover devices:

The outlet pressure is noted with "service" and "reserve" values. Example: 1,5-0,8 bar means that the nominal outlet pressure are:

- 1,5 bar when running on the "service" vessel
- 0,8 bar when running on the "reserve" vessel

Outlet pressure - "U.S." flow rate declaration

The rules differ from European flow rate declaration ones. For instance for first stage LPG "variable" pressure regulator the rule is generally:

- set pressure declared and established with $P_e=100\text{psig}$ and $Q=500\text{kBTU/hr}$
- capacity measured when P_a dropped 20% under set pressure, with $P_e = P_a \text{ set} + 20\text{psig}$.

Guaranteed flow rate – type of gas

Capacity declarations are done mainly with propane gas and some with natural gas (H).

Capacity conversion : to get the "used gas" capacity, multiply the "declared gas" capacity by the coefficient

Declared gas		Used gas						
		Butane kg/h	Propane kg/h	Natural gas H (n)m ³ /h	Natural gas L (n)m ³ /h	SNG -Air propane (n)m ³ /h	Air (n)m ³ /h	Nitro- gen (n)m ³ /h
Natural gas-H (n)m ³ /h		1,42	1,25	1,00	0,98	0,69	0,78	0,80
	Propane kg/h	1,15	1,00	0,80	0,78	0,55	0,62	0,63

Rubber material – gas quality

All the regulators are built to withstand the use of LPG (liquefied petroleum gas) in vapour phase, NG (natural gas), air, nitrogen. In order to ensure correct operation and a long life expectancy, the gases employed should be sufficiently pure, and should contain no aggressive components (sulphurous compounds, phthalic compounds, etc.).

In the case of suspicious presence of aggressive components, regulators using FPM rubber components (membrane, valve pad,...) are proposed or can be provided.

Temperature

Regulators equipped with membranes and valve pads made in NBR are suitable for temperatures (ambient or gas) between -20°C (-4°F) and +60°C (+140°F).

Note: the maximum temperature declaration is often limited at 50°C, for compliance with the maximum temperature written in the European standards, but all our regulators withstand 60°C.

Regulators equipped with membranes and valve pads made in FPM are suitable for temperatures (ambient or gas) between -10°C (-4°F) and +80°C (+175°F).

Warning: gas close downstream to an LPG vaporiser can reach high temperatures.

Pressure relief valve

It is a safety device for the relief of excess pressure.

Excess pressure can result from:

- a- Thermal expansion of trapped gas
- b- Creeping lock-up pressure due to dirt between seat and pad
- c- Breakage of regulator components

There are two types of relief valves:

- Limited relief valve ("LRV") which relieves a low flow (less than 10% of nominal regulator flow rate) and answers to excess pressures a & b.
- Full relief valve ("FRV") which relieves a high flow (100% of the nominal regulator flow rate), keeping the outlet pressure generally below 140mbar (2psig) for low pressure regulators. It answers to excess pressures a, b & c.

Full relief valves are designed in accordance with US standards (UL-ANSI).

Construction can be:

- Internal ("Int"): relief through the vent.
- External ("Ext"): special device fitted on the regulator.

Terminology, advice and warnings

○ Vent

- Vent position

When necessary, the position of the regulator vent is defined by a clock position looking from the top and starting from the outlet connection.

0h = over the outlet connection, 6h = opposite to the outlet connection

- Vent connection

On certain regulators the vent can be connected to a pipe. The connection of a pipe is recommended (or mandatory, depending on local regulations) when the regulator is installed indoors, in order to convey any possible gas leakage outside.

○ OPSO safety device

The OPSO (Over Pressure ShutOff) safety device, cuts off the gas flow in the event of abnormal overpressure that can be caused, for example, by an operating fault in a regulator (impurities on the valve seat or deterioration of a part) or by a defect in installation.

OPSO safety devices can apply either on high or low pressure regulators.

The triggering pressure of OPSO safety devices is adjustable.

Note: In the event that the installation is pressurized but without any gas flow for a certain time, the temperature of the gas trapped in the tubes and regulators may rise, thus leading to an overpressure level that can trigger the OPSO safety valve.

To avoid this problem, and provided that the solution is authorized, we recommend the use of a relief valve (separate or integrated in the regulator), especially for low pressure levels.

○ UPSO safety device

The UPSO (Under Pressure ShutOff) function, cuts off the gas flow in the event of an abnormal fall in pressure that can be caused, for example, by:

- Flow rate exceeding the capacity of the gas installation (tank, piping, regulator,...)
- A leak into the open air, rupture of the pipe downstream
- A lack of pressure upstream.

The UPSO safety device applies on low pressure regulators.

The UPSO triggering pressure is not adjustable (except on BP2402F).

On regulators provided with an adjustable outlet pressure, the triggering pressure is automatically adapted to the pressure setting.

WARNING

The UPSO safety device does not provide protection from all the risks stemming from leaks or ruptures in the installation downstream from the pressure regulator.

○ Installation

- Piping must be correctly sized in order to keep the pressure losses within acceptable limits.

- The inlet pressure of a regulator must be kept within the declared limits taking into account:

- The vaporising capacity of LPG vessels or of the vaporiser
- The pressure loss of the pipes
- The pressure loss of the other gas equipment (meter, filter, valve,...)

- Welding / soldering on pipes must not be carried out when the regulator is installed.

- The full gas piping must be carefully cleaned before the regulator is installed

- It is recommended to install a filter upstream from the regulators.

The dimension of the filter must be such to induce acceptable pressure loss. The filter must be cleaned periodically.

- The regulator vent shall always be kept clear and protected from rain. Take the necessary precautions to prevent it from being obstructed by external elements such as ice, snow, etc.

WARNING

- LPG or Natural Gas leaks can cause death from fires or explosions. Install the regulators in a risk-free location.

- All installation, adjustment and maintenance work must be carried out by persons who have acquired the necessary skills in relation to the type of gas and the function provided.

- The installation must be fitted, adjusted, used and maintained in conformity with the regulations in force in the country concerned.

○ Conformity with standards and regulations

- European pressure equipment directive - 97/23/CE (PED)

All the regulators and accessories used with pressures higher than 0,5bar (7,2psig) are manufactured in conformity with this directive.

In accordance with this directive, only regulators with at least one connection with a dimension larger than DN25 (or 1") are marked **CE**

- European gas appliance directives – 2009/142/EC (GAD)

Regulators and governors intended to be installed in a gas appliance, are manufactured in conformity with this directive.

○ Maintenance and durability

Normally the regulators do not require any maintenance.

Functionality of the product and of the gas installation must be checked periodically.

We recommend replacing the regulator after 10 years of use.

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Tables explanations

for complementary information, see "terminology, advice and warnings"

○ Inlet code, inlet connection - outlet code, outlet connection

"Code" is from our own codification system.

"Connection" is a condensed description.

A complete description (type, dimensions, European Standard codes, gaskets,..) of the connection is given in chapter "Connections table".

○ Inlet pressure (pe)

Range of inlet pressure ($P_{e \text{ min}}$ - $P_{e \text{ max}}$) which allows the regulator to deliver a stable outlet pressure for whatever flow rate less than the declared one.

For regulators provided with a variable outlet pressure, the minimum inlet pressure depends on the outlet pressure setting (Pa).

Example:

Pa+0,5-16bar means:

minimum inlet pressure: 0,5bar in excess of Pa

maximum inlet pressure: 16bar

Inlet pressures are expressed in bar (or mbar) and psig (or inch water column).

○ Type of adjustment

When different types of outlet pressure adjustments are used on products of the same family, they are indicated:

"FIX": fixed setting, no possible adjustment

"VAR-HWMT": variable with a multiturn handwheel

"VAR-HEX": variable with a hexagonal bolt

"ADJ-NSL": adjustable internally, non sealable tap

"ADJ-SL": adjustable internally, sealable tap.

○ Outlet pressure (pa)

For the regulators, the type of writing depends on the type of pressure setting:

- Fixed setting: one single value. Example: 37mbar
- Adjustable (internal adjustment mean): preset value and range of adjustment, between brackets. Example: "30(25-45) mbar"
- Variable (external setting mean): range of settings.

Example 1: "0,5-4bar", possible setting between 0,5 and 4bar

Example 2: "(0)1-3bar", recommended setting for guaranteed performances between 1 and 3bar, in certain circumstances setting can be between 0 and 1bar.

For the automatic changeover devices the couple of values refers to "service" and "reserve" nominal outlet pressures.

Outlet pressures are expressed in bar (or mbar) and psig (or inch water column).

○ Flow rate

This is the maximum flow rate for which a stable outlet pressure is guaranteed for whatever inlet pressure in the declared range.

Flow rate is expressed in:

- kg/h and kBTU/hr for regulators mainly intended to be used for LPGas
- (n)m³/h and SCFH for regulators mainly intended to be used for Natural Gas.

○ PRV (type)

When regulators are equipped with a Pressure Relief Valve, the type can be:

- "LRV": Limited Relief Valve
- "FRV": Full relief Valve

○ Vent (position - connection)

When necessary, the position and the type of possible connection of the vent are indicated.

Angular position is a clock reading, from the top of the regulator starting from the outlet. For example: "0h" means on the outlet.

Connection: "DH" means small holes on the cover, "NC" means non connectable.

○ UPSO

"Y"(yes) written when the regulator is equipped with an UnderPressure Shut Off safety device.

○ OPSO

The OverPressure Shut Off safety device can be equipped:

- to the entire family of regulators: it is written in the family title for example: "BP2402/OPSO".
- to part of the product family: there is an "OPSO" column and Y/U (valve upstream) or Y/D (valve downstream).

○ Filter

"Y"(yes) written when the regulator is equipped with a filter on the inlet.

○ Manometer / inlet or outlet (connection-type)

- For regulators:
 - "Mano": the regulator is equipped with a manometer. The manometer type can be: "Dry" or "Oil" (filled with oil).
 - "Plug": the regulator is equipped with a plug which allows further mounting of a manometer.The type of plug or manometer connection is written at the end, for example: "G1/4".
- For automatic changeovers:
 - "MAGISCOPE" or "VIS" are indicators for empty service cylinders.

○ Pad material - diaphragm material

When different materials are used on products of the same family, they are indicated:

"NBR": nitril rubber, "NBR-R": reinforced nitril rubber, "FPM": fluoropolymer elastomer, "FPM-R": reinforced fluoropolymer elastomer.

Inlet and outlet connection tables

- Code

From our own codification system.

- Designation

Condensed description of the connection.

- Drawing

Sketch of the connection for positioning the dimensions.

- Type

Complementary information about the connection.

- EN inlet code and EN outlet code

Codes of connections described in the European Standards: EN12864, EN13785 and EN13786.

Not all the world-wide connections are described in these standards.

- D-H-S-C-L

Dimensions of the sketches.

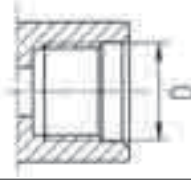
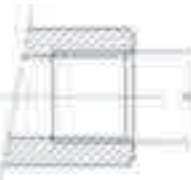
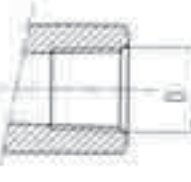
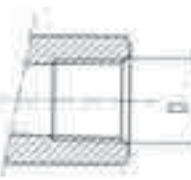
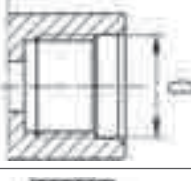
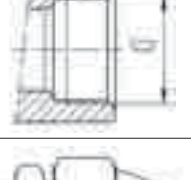
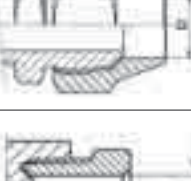

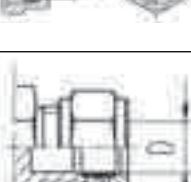

- Gasket


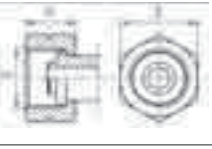
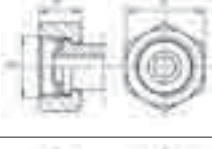



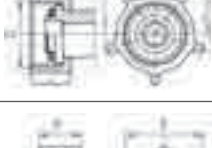





Describes, when appropriate, the material of the gasket:

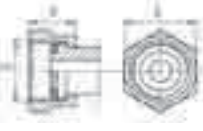




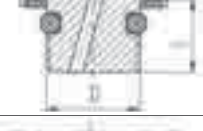
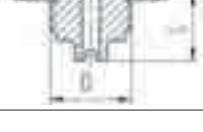





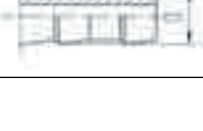
. NBR: nitril rubber

. SALPA: non elastomeric compound.

Code	Connection	Drawing	Type	EN Inlet code	EN Outlet code	D (mm)	H (mm)	S (mm)	C (mm)	L (mm)	Gasket
C1A C1C C1D	CLIP-20 CLIP-21 CLIP-22		For Clip cylinder valve	G.52 G.53 G.54	-	Ø20 mm Ø21 mm Ø22 mm	-	-	-	-	-
C1K	CLIP-27		For Clip cylinder valve	G.59	-	Ø27 mm	-	-	-	-	-
E1A E1B E1D E1E	MAL-G1/8RH MAL-G1/4RH MAL-G1/2RH MAL-G3/4RH		ISO 228	-	-	G1/8RH-ISO228 G1/4RH-ISO228 G1/2RH-ISO228 G3/4RH-ISO228	-	-	-	-	-
E2A E2B E2C E2D	MAL-R1/8 MAL-R1/4 MAL-R3/8 MAL-R1/2		BSP-ISO7 (conical)	-	-	R1/8-ISO7 R1/4-ISO7 R3/8-ISO7 R1/2-ISO7	-	-	-	-	-
E5A E5B E5D	MAL-1/8NPT MAL-1/4NPT MAL-1/2NPT		NPT	-	-	1/8NPT 1/4NPT 1/2NPT	-	-	-	-	-
E6A	MAL-M10X1RH		Manometer	-	-	M10X1RH	-	-	-	-	-
E6B	MAL-M20x1,5RH		French Type	G.13	H.1	M20x1,5RH	-	-	-	-	-
E6D	MAL-M26x1,5RH		NTC type	-	-	M26x1,5RH	-	-	-	-	-
E7A E7B E7C	MAL-1/4LH-DIN MAL-3/8LH-DIN MAL-1/2LH-DIN		German type	G.20 G.11 G.24	H.4 H.6 H.5	1/4LH-DIN 3/8LH-DIN 1/2LH-DIN	-	-	-	-	-

Code	Connection	Drawing	Type	EN Inlet code	EN Outlet code	D (mm)	H (mm)	S (mm)	C (mm)	L (mm)	Gasket
F1B F1D	FEM-G1/4RH FEM-G1/2RH		ISO 228	-	-	G1/4RH-ISO228 G1/2RH-ISO228	-	-	-	-	-
F2A F2B F2C F2D F2E F2F F2J F2K F2L	FEM-Rp1/8 FEM-Rp1/4 FEM-Rp3/8 FEM-Rp1/2 FEM-Rp3/4 FEM-Rp1 FEM-Rp1.1/4 FEM-Rp1.1/2 FEM-Rp2		BSP-ISO7-Cylindrical	G.14	H.7	Rp1/8-ISO7 Rp1/4-ISO7 Rp3/8-ISO7 Rp1/2-ISO7 Rp3/4-ISO7 Rp1-ISO7 Rp1.1/4-ISO7 Rp1.1/2-ISO7 Rp2-ISO7	-	-	-	-	-
F3B F3C F3D F3E F3F F3J	FEM-Rc1/4 FEM-Rc3/8 FEM-Rc1/2 FEM-Rc3/4 FEM-Rc1 FEM-Rc1.1/4		BSP-ISO7-Conical	G.23	H.56	Rc1/4-ISO7 Rc3/8-ISO7 Rc1/2-ISO7 Rc3/4-ISO7 Rc1-ISO7 Rc1.1/4-ISO7	-	-	-	-	-
F5A F5B F5C F5D F5E F5F F5J F5K F5L	FEM-1/8NPT FEM-1/4NPT FEM-3/8NPT FEM-1/2NPT FEM-3/4NPT FEM-1NPT FEM-1.1/4NPT FEM-1.2/4NPT FEM-2NPT		NPT	G.18	H.11	1/8NPT 1/4NPT 3/8NPT 1/2NPT 3/4NPT 1NPT 1.1/4NPT 1.2/4NPT 2NPT	-	-	-	-	-
F6D	FEM-M14x1,5RH		Small cylinder valve	-	-	M14x1,5	-	-	-	-	-
F6L	FEM-M24X1,5RH		Special	-	-	M24X1,5RH	-	-	-	-	-
K1D K1F	PIPE-10-RC PIPE-14-RC		Flare	-	-	Ø10 mm Ø14 mm	-	-	-	-	-
K2B	PIPE-1/4-INV. FLARE		Inverted Flare	-	-	1/4"	-	-	-	-	-
K3E	PIPE-12-CTS		Copper Tube	-	-	M20x1,5RH	-	23	-	-	NBR
K4B K4C K4D	PIPE-6-OG PIPE-8-OG PIPE10-OG		Biconical compression fitting	-	-	Ø6 mm Ø8 mm Ø10 mm	-	-	-	-	-

Code	Connection	Drawing	Type	EN Inlet code	EN Outlet code	D (mm)	H (mm)	S (mm)	C (mm)	L (mm)	Gasket
L1A L2A	MAL-W20LH-UNI MAL-NF21,7LH		For cylinder valve Italian type	G.1 G.2	- H.17	W20LH-UNI NF21,7LH	-	-	-	-	-
N1A	NUT-W20LH-25-UNI		For cylinder valve Italian type	-	-	W20x1/14"L.H.	16	25	-	-	-
N1B	NUT-W20LH-25x13,5		For cylinder valve Italian type	-	-	W20x1/14"L.H.	13,5	25	-	-	-
N1C N1D	NUT-W20LH-25x13,5-G/G NUT-W20LH-25x13,5-G/S		For cylinder valve Italian type	-	-	W20x1/14"L.H.	13,5 13,5	25 25	-	-	NBR SALPA
N1E	NUT-W20LH-UNI-G/G		For cylinder valve Italian type	G.1	-	W20x1/14"L.H.	16	25	-	-	NBR
N2A	NUT-NF21,8LH-27x14-G/G		For cylinder valve French type	-	-	NF21,8x1/14"L.H.	14	27	-	-	NBR
N2C	NUT-NF21,8LH-R5NF		For cylinder valve French type	G.2	-	NF21,8x1/14"L.H.	13	-	32,5	-	NBR
N3A	NUT-M21,8LH-30,5BS		For cylinder valve UK Butane type	G.8	-	M21,8x1/14"L.H.	17	30,5	-	-	NBR
N4B	NUT-W21,8LH-30x21KBI		For cylinder valve German type KLF	G.12	-	W21,8x1/14"L.H.	18	-	32	-	NBR
N4D	NUT-W21,8LH-30x21KBI		For cylinder valve German Kombi type	G.5	-	W21,8x1/14"L.H.	21	30	-	-	NBR
N4J N4K	NUT-W21,8LH-28x16,5CH NUT-W21,8LH-27x17MSZ		For cylinder valve Swiss type For cylinder valve Hungarian type	-	-	W21,8x1/14"L.H.	16,5 17	28 27	-	-	NBR
N5E	NUT-G3/4RH		ISO 228	G.17	-	G3/4RH-ISO228	18	32	-	-	NBR

Code	Connection	Drawing	Type	EN Inlet code	EN Outlet code	D (mm)	H (mm)	S (mm)	C (mm)	L (mm)	Gasket
N6A	NUT-M20x1,5RH		French type	-	-	M20x1,5RH	14,5	23	-	-	NBR
N7C	NUT-G3/4LH-DIN		German type	-	-	G3/4LH-DIN	16	19	-	-	-
P1A P2A	POLM-5/8LH-BS-HN POLM-USA-25x23,5-HN		POL UK hard nose POL USA hard nose	G.7 -	- -	G5/8LH-ISO228 0,880"-14NGO-L.H	- -	30 25	-	28,5 23,5	-
P2C	POLS-USA-R2-SN		POL USA soft nose	-	-	0,880"-14NGO-L.H	-	-	-	24,5	NBR
P2D	POLS-USA-R6-SN		POL USA soft nos	-	-	0,880"-14NGO-L.H	-	-	47	27	NBR
P5C	MAL-M14x1,5RH		For small cylinder ty	-	-	M14x1,5RH	-	-	-	11	NBR
P5D	MAL-M16x1,5RH		For small cylinder type	G.3	-	M16x1,5RH	-	-	-	13,5	NBR
P7B	POLM-DIN-24X28,5-HN		POL Germany hard no	-	-	0,880"-14NGO-L.H	-	24	-	28,5	-
Q9A	Q9A FEM-5/8-18 UNF		Conical pipe fitting	-	-	5/8-18 UNF	17,5	19	-	-	-
Z1D	HNZ-10-EN		Hose nozzle France-UK type	-	H.50	Ø10 mm	-	-	-	23,5	-
Z1E	HNZ-10-UNI		Hose nozzle UNI	-	H.53	Ø10 mm	-	-	-	29	-
Z2A	HNZ-13,5-DS		Conical hose nozzle	-	H.51	Ø13,5 mm	-	-	-	23	-
Z9A	HNZ-11,7-MSZ		Hose nozzle Hungary type	-	-	Ø11,7 mm	-	-	-	28,5	-

High pressure regulators

APR85 - APR85EFV

Application

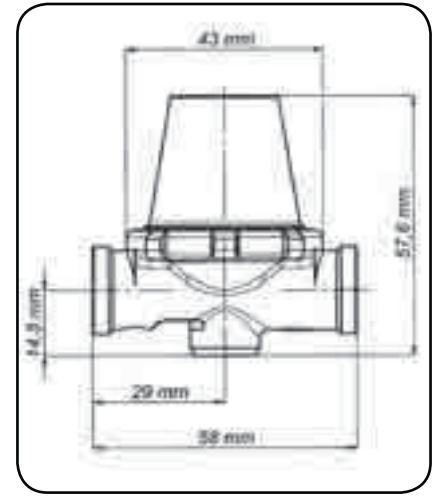
- These fixed pressure regulators are mainly used in small LPG cylinder installations
- They can also be used in small LPG tank installation.
They can be used in specific installations, with Natural gas, air, nitrogen and other non aggressive gases.
- The maximum capacity is 8 kg/h (380 kBTU/hr) of LPG
- They can supply directly gas appliances such as: special cookers, blow torches, roofing torches, warm air generators and special technical burners.
- They can also be used as a first stage regulator in a small 2 stages installation.
- The APR85EFV is recommended when a safety against hose cutting is requested.

Features

- Compact and robust design
- Numerous possible types of inlet and outlet connections - upon request-
- Possible nominal outlet pressures from 0.3 to 4 bar (4 to 59 psig) –upon request-
- A filter equips the inlet connections for cylinders.
- The APR85EFV provides an efficient safety against excess flows which can be generated by hose cutting.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



002007XX



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Filter
					bar	psig	bar	psig	kg/h	kBTU/hr	
APR85											
002007C	F2B	FEM-Rp1/4	F2B	FEM-Rp1/4	1,2-16	17-230	1	14	5	240	-
002007XX	F2B	FEM-Rp1/4	F2B	FEM-Rp1/4	1,7-16	25-230	1,5	22	7	330	-
002032B	P1A	POLM-5/8LH-BS-HN	E1B	MAL-G1/4RH	2-16	29-230	1,5	22	8	380	Y
002045D	N4D	NUT-W21,8LH-30x21KBI	E7B	MAL-3/8LH-DIN	1,7-16	25-230	1,5	22	7	330	Y
002048S	N4D	NUT-W21,8LH-30x21KBI	E7B	MAL-3/8LH-DIN	2,2-16	32-230	2	29	8	380	Y
APR85EFV											
004740GA	N4D	NUT-W21,8LH-30x21KBI	E7B	MAL-3/8LH-DIN	0,7-16	10-230	0,5	7	3	140	Y
004740GE	N4D	NUT-W21,8LH-30x21KBI	E7B	MAL-3/8LH-DIN	2-16	29-230	1,5	22	6	290	Y
004740GH	P1A	POLM-5/8LH-BS-HN	E7B	MAL-3/8LH-DIN	2-16	29-230	1,5	22	6	290	Y
004740GL	N4D	NUT-W21,8LH-30x21KBI	E7B	MAL-3/8LH-DIN	1,5-16	22-230	1	14	5	240	Y

High pressure regulators

APR85R - 1333

Application

- These variable, multi-turns, pressure regulators are mainly used in small LPG cylinder installations. They can also be used in small LPG tank installation.
They can be used in specific installations, with Natural gas, air, nitrogen and other non aggressive gases.
- The maximum capacity is 10 kg/h (480 kBTU/hr) of LPG

- They can supply directly gas appliances such as: special cookers, blow torches, roofing torches, warm air generators, poultry heating systems, and special technical burners.
- They can also be used as a first stage regulator in a small 2 stages installation.

Features

- Precise pressure multi-turns adjustment
- The setting can be blocked with the locking nut
- Compact and robust design
- Numerous possible types of inlet and outlet connections - upon request-

- A filter equips the inlet connections for cylinders.
- Certain models are equipped with a manometer or with a plug for possible mounting of manometer

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R (FPM upon request)

- Valve pad: NBR (FPM upon request)



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Manometer on Outlet	Filter
					bar	psig	bar	psig	kg/h	kBTU/hr		
APR85R												
002005	F2B	FEM-Rp1/4	F2B	FEM-Rp1/4	Pa+0,2-16	Pa+3-230	(0)1-3	(0)14-44	5-10	240-475	MANO-DRY G1/8	-
002010XZ	N1C	NUT-W20LH-25x13,5-G/G	Z1D	HNZ-10-EN	Pa+0,2-16	Pa+3-230	(0)1-3	(0)14-44	5-10	240-475	-	Y
002012AA	N2C	NUT-NF21,8LH-R5NF	Z1D	HNZ-10-EN	Pa+0,2-16	Pa+3-230	1-3	14-44	5-10	240-475	-	Y
002020BA	N2C	NUT-NF21,8LH-R5NF	Z1D	HNZ-10-EN	Pa+0,2-16	Pa+3-230	1-3	14-44	5-10	240-475	MANO-DRY G1/8	Y
002150AX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+0,2-16	Pa+3-230	(0)1-3	(0)14-44	5-10	240-475	PLUG 1/8NPT	-
002150BX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+0,2-16	Pa+3-230	(0)0,5-1,5	(0)7-22	3-8	140-380	PLUG 1/8NPT	-
1333												
1333002	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1,7-16	25-230	0,5-1,5	7-22	8	380	PLUG G1/8	-
1333105	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	1,7-16	25-230	0,5-1,5	7-22	3-8	140-380	MANO-DRY G1/8	Y

High pressure regulators

APR8510 - APR8510EFV - 6343C

Application

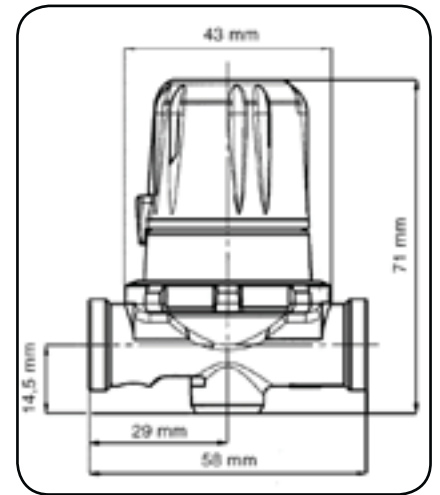
- These variable, single turn, pressure regulators are mainly used in small LPG cylinder installations.
They can be used in specific installations, with Natural gas, air, nitrogen and other non aggressive gases.
- The maximum capacity is 10 kg/h (475 kBTU/hr) of LPG
- They can supply directly gas appliances such as: special cookers, blow torches, roofing torches, warm air generators, poultry heating systems, and special technical burners.
- The APR8510EFV or 6343C are recommended when a safety against hose cutting is requested.

Features

- Indexed position of the adjustment
- Compact and robust design
- Numerous possible types of inlet and outlet connections - upon request-
- A filter equips the inlet connections for cylinders.
- The APR8510EFV and 6343C provide an efficient safety against excess flows which can be generated by hose cutting.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



002050CX



APR8510
002050CX



APR8510EFV - 6343C
004740FC

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Filter	
					bar	psig	bar	psig	kg/h	kBTU/hr		
APR8510												
002050CX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+0,2-16	Pa+3-230	0,5-4	7-58	3-8	140-380	-	
002064AA	N2C	NUT-NF21,8LH-R5NF	Z1D	HNZ-10-EN	4,5-16	65-230	0,5-4	7-58	3-8	140-380	Y	
002070CX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+0,2-16	Pa+3-230	0,4-1,5	6-22	2-7	90-330	-	
APR8510EFV - 6343C												
004740AB	P1A	POLM-5/8LH-BS-HN	E7B	MAL-3/8LH-DIN	Pa+0,5-16	Pa+7-230	1,5-3,5	22-51	8-10	380-475	Y	
004740FC	F2B	FEM-Rp1/4	E7B	MAL-3/8LH-DIN	4-16	58-230	1,5-3,5	22-51	8-10	380-475	-	
004744AB	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	4,5-16	65-230	0,7-4	10-58	4-8	190-380	Y	

High pressure regulators

APO

Application

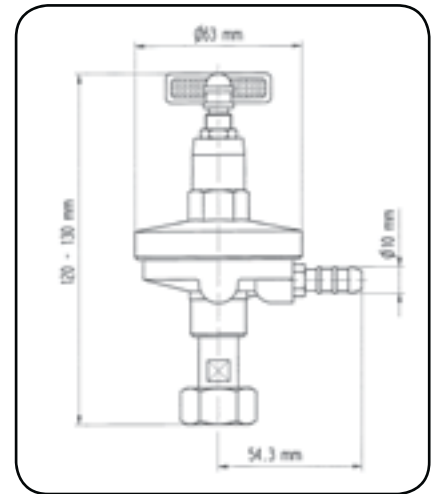
- These variable, multi-turns, pressure regulators are mainly used in small LPG cylinder installations and can operate in harsh conditions (road works, agriculture,...).
They can be used in specific installations, with Natural gas, air, nitrogen and other non aggressive gases.
- The maximum capacity is 10 kg/h (480 kBTU/hr) of LPG
- They can supply directly gas appliances such as: special cookers, blow torches, roofing torches, warm air generators, poultry heating systems, and special technical burners.

Features

- Heavy duty design
- Vertical inlet connection equipped with a filter
- Certain models are equipped with a manometer other with a plug for possible mounting of manometer

Construction

- Body and cover: hot stamped brass
- Diaphragm: NBR-R
- Valve pad: NBR



002100XZ



APO

002110XZ



APO

002100XZ

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Manometer on outlet
					bar	psig	bar	psig	kg/h	kBTU/hr	
APO											
002141BA	N2C	NUT-NF21,8LH-R5NF	F2A	FEM-Rp1/8	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	6-10	285-475	MANO-DRY G1/8
002100XZ	N1D	NUT-W20LH-25x13,5-G/S	Z1D	HNZ-10-EN	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	6-10	285-475	PLUG G1/8
002110XZ	N1D	NUT-W20LH-25x13,5-G/S	Z1D	HNZ-10-EN	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	6-10	285-475	MANO-DRY G1/8

High pressure regulators

APZ120 - APZE - APZ120R

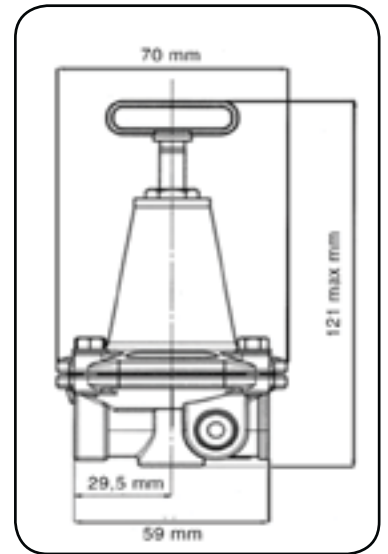
Application

- APZ120: fixed pressure regulators**
 They are mainly used as first stage regulators in small domestic or commercial LPG installations (multi-cylinder or tank).
 They can also be used as single stage regulators to supply gas appliances
- APZ120R: multi-turns pressure regulators**
 They are used:
 - as first stage regulators in small domestic or commercial LPG installations (multi-cylinder or tank)
 - as single or second stage regulators to supply special cookers, poultry heating systems, and special technical burners.
- APZE: multi-turns pressure regulators**
 They are typically used to supply special cookers from LPG cylinders.

All these regulators can be used in specific installations, with Natural gas, air, nitrogen and other non aggressive gases.

Features

- All product families:**
 - Certain models are equipped with a manometer other with a plug for possible mounting of manometer
 - A filter equips the inlet connections for cylinders
- APZ120R and APZE:**
 - Precise pressure multi-turns adjustment, thanks to a calibrated seat (APZ120R and APZE)
 - The setting can be blocked with the locking nut



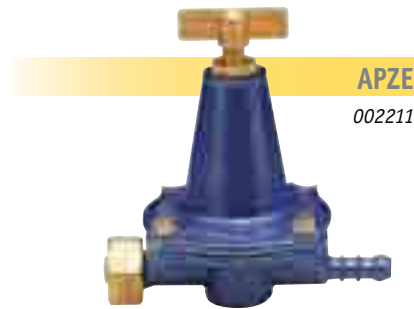
002201

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R or FPM
- Valve pad: NBR or FPM



APZ120
002285



APZE
002211



APZ120R
002230

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV (Type)	Manometer on outlet	Filter	PAD material	Diaphragm material
					bar	psig	bar	psig	kg/h	kBTU/hr					
APZ120															
002217AE	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+1-16	Pa+14-230	1-3	14-44	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002281MX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	1,5-16	22-230	0,5	7	8,5	400	-	PLUG G1/4	-	FPM	FPM-R
002283MX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	2,5-16	36-230	1,5	22	12	570	-	PLUG G1/4	-	FPM	FPM-R
002283PX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	2,5-16	36-230	1,5	22	12	570	-	PLUG G1/4	-	NBR	NBR-R
002285	F3B	FEM-Rc1/4	F3B	FEM-Rc1/4	2,5-16	36-230	1,5	22	12	570	-	PLUG G1/4	-	NBR	NBR-R
APZE															
002211	N1B	NUT-W20LH-25x13,5	Z1D	HNZ-10-EN	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	-	Y	NBR	NBR-R
002212	N1B	NUT-W20LH-25x13,5	Z1D	HNZ-10-EN	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	MANO-DRY G1/4	Y	NBR	NBR-R
APZ120R															
002200	F3B	FEM-Rc1/4	F3B	FEM-Rc1/4	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002201	F3B	FEM-Rc1/4	F3B	FEM-Rc1/4	Pa+1-16	Pa+14-230	(0)0,5-2	(0)7-29	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002205	F3B	FEM-Rc1/4	F3B	FEM-Rc1/4	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	MANO-DRY G1/4	Y	NBR	NBR-R
002210	N1B	NUT-W20LH-25x13,5	Z1D	HNZ-10-EN	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002216AT	F3B	FEM-Rc1/4	F3B	FEM-Rc1/4	Pa+1-16	Pa+14-230	(0)0,5-1,4	(0)7-20	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002217AA	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	MANO-DRY G1/4	-	NBR	NBR-R
002217AX	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	Pa+1-16	Pa+14-230	(0)0,5-2	(0)7-29	12-18	570-860	-	PLUG G1/4	-	NBR	NBR-R
002223	N1B	NUT-W20LH-25x13,5	F2C	FEM-Rp3/8	Pa+1-16	Pa+14-230	(0)0,5-2	(0)7-29	12-18	570-860	LRV	MANO-DRY G1/4	Y	NBR	NBR-R
002230	N1B	NUT-W20LH-25x13,5	F3B	FEM-Rc1/4	Pa+1-16	Pa+14-230	(0)1-3	(0)14-44	12-18	570-860	-	MANO-DRY G1/4	Y	NBR	NBR-R

High pressure regulators

APZ250 - APZ250R

Application

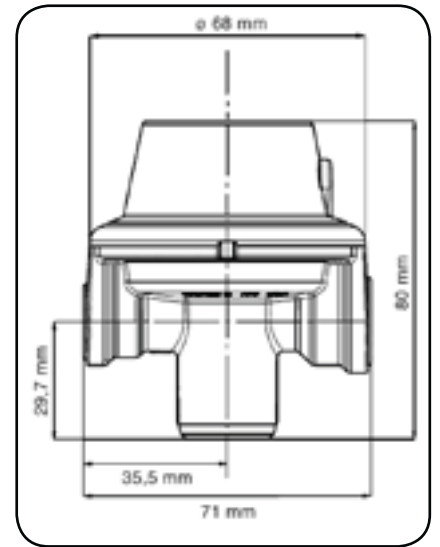
- These fixed or variable regulators are mainly used in domestic or commercial LPG tank or multi-cylinders installations.
- They generally provide the first stage regulation function and are directly fitted onto the tank valve.
- They are also used in other LPG installations (industrial, agriculture, process control, ...) and in SNG or Natural Gas installations.
- LPG capacities are between 25 kg/h and 50kg/h (1.2 and 2.4 MBTU/hr)
They can be used in specific installation with air, nitrogen and other non aggressive gases.

Features

- Compact and robust design
- Numerous possible types of inlet and outlet connections - upon request-
- The APR250R regulated pressure setting can be blocked with the locking nut.
- Certain models are equipped with a limited flow safety relief valve (LRV).
- Certain models are equipped with a dry manometer or with a plug for manometer.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



002307AB



APZ250
002307AB



APZ250R
002311AD



APZ250R
002300AA

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Type of outlet pressure	Outlet pressure (Pa)		Flow rate (LPG)		PRV (type)	Manometer on outlet	PAD material	Diaphragm material
					bar	psig		bar	psig	kg/h	kBTU/hr				
APZ250															
002307AB	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	2-16	29-230	FIX	1,5	22	30	1400	LRV	PLUG G1/4	NBR	NBR-R
002307AC	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	2-16	29-230	FIX	1,5	22	30	1400	LRV	MANO-DRY G1/4	NBR	NBR-R
002307AD	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	2-16	29-230	FIX	1,5	22	30	1400	LRV	PLUG G1/4	NBR	NBR-R
APZ250R															
002300AA	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	1-3	14-44	30-50	1400-2400	-	PLUG G1/4	NBR	NBR-R
002300AB	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	1-3	14-44	30-50	1400-2400	-	MANO-DRY G1/4	NBR	NBR-R
002300AE	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	1-3	14-44	30-50	1400-2400	-	MANO-DRY G1/4	NBR	NBR-R
002300AP	P2A	POLM-USA-25x23,5-HN	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	1-3	14-44	30-50	1400-2400	-	MANO-DRY G1/4	NBR	NBR-R
002311AA	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	1-3	14-44	30-50	1400-2400	-	PLUG G1/4	NBR	NBR-R
002311AD	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	0,5-2	7-29	25-40	1200-1900	LRV	MANO-DRY G1/4	NBR	NBR-R
002311AF	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	VAR-HEX	0,5-1,4	7-20	25-40	1200-1900	-	PLUG G1/4	NBR	NBR-R

High pressure regulators

APZ400 - APZ400V - APZ400R - APZ400/OPSO

Application

- These fixed or variable regulators are mainly used in domestic or commercial LPG tank or multi-cylinders installations.
- They generally provide the first stage regulation function and are directly fitted onto the tank valve.
- They are also used in other LPG installations (industrial, agriculture, process control, ...) and in SNG or Natural Gas installations.
- LPG capacities are between 30 kg/h and 80kg/h (1.4 and 3.8 MBTU/hr)

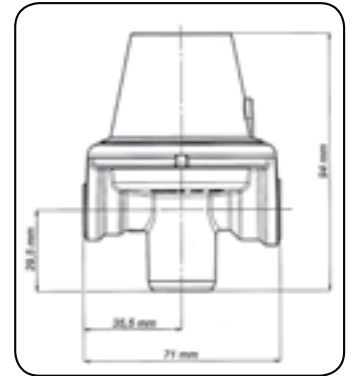
They can be used in specific installation with air, nitrogen and other non aggressive gases.

Features

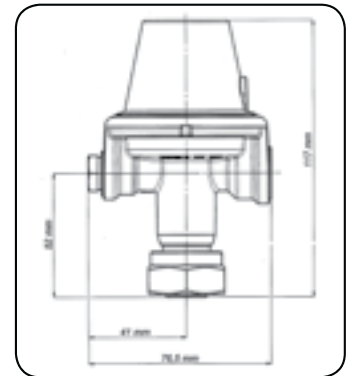
- Certain models are equipped with a limited flow safety relief valve (LRV).
 - Certain models are equipped with a dry manometer or with a plug for manometer.
 - The APZ400V regulators are equipped with a vertical inlet connection for assembly on vertical tank valve.
 - The APZ400/OPSO regulators are equipped with an Over Pressure Shut-Off valve. An indicator shows the state of the valve.
- This OPSO valve can be located either upstream (Y/U) or downstream (Y/D) the regulator. APZ400/OPSO regulators are generally provided with a pressure test point.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



002713AC



002730AA



APZ400

002713AC



APZ400R

002711AF



APZ400/OPSO

006865FE

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV type	OPSO position	Manometer on outlet
					bar	psig	bar	psig	kg/h	kBTU/hr			
APZ400													
002707AD	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	40	1900	LRV	-	MANO-DRY G1/4
002713AC	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	1,5-16	22-230	1	14	40	1900	-	-	PLUG G1/4
002713AE	P2F	POLM-USA-28x28,5-HN	F2C	FEM-Rp3/8	1,25-16	18-230	0,75	11	40	1900	-	-	PLUG G1/4
APZ400V													
002730AA	N5E	NUT-G3/4RH-T	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	40	1900	LRV	-	PLUG G1/4
002732AA	N5E	NUT-G3/4RH-T	F2C	FEM-Rp3/8	2,5-16	36-230	0,5-2	7-29	30-60	1400-2900	LRV	-	MANO-DRY G1/4
002730AB	N5E	NUT-G3/4RH-T	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	40	1900	LRV	-	MANO-DRY G1/4
APZ400R													
002700AB	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	0,5-2	7-29	30-60	1400-2900	-	-	PLUG G1/4
002700AD	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	1-3	14-44	40-80	1900-3800	-	-	PLUG G1/4
002700AE	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	Pa+0,5-16	Pa+7-230	1-3	14-44	40-80	1900-3800	-	-	PLUG G1/4
002700AF	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	Pa+0,5-16	Pa+7-230	0,5-2	7-29	30-60	1400-2900	-	-	PLUG G1/4
002700AH	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	Pa+0,5-16	Pa+7-230	1-3	14-44	40-80	1900-3800	-	-	PLUG G1/4
002711AF	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	0,5-2	7-29	30-60	1400-2900	LRV	-	MANO-DRY G1/4
APZ400/OPSO													
006861FA	F3D	FEM-Rc1/2	F2C	FEM-Rp3/8	1,25-16	18-230	0,5-2	7-29	40	1900	-	Y/U	-
006865FE	F2B	FEM-Rp1/4	F3E	FEM-Rc3/4	1,25-16	18-230	0,5-2	7-29	40	1900	-	Y/D	-
006865FG	F2B	FEM-Rp1/4	F3D	FEM-Rc1/2	1,25-16	18-230	0,5-2	7-29	40	1900	-	Y/D	-

High pressure regulators

AP40 -AP40V - AP40R - AP40/OPSO

Application

- These fixed or variable regulators are mainly used in domestic and commercial LPG tank or multi-cylinders installations.
- They generally provide the first stage regulation function and are directly fitted onto the tank valve.
- They are also used in other LPG installations (industrial, agriculture, process control, ...) and in SNG or Natural Gas installations.
- LPG capacities are between 25 kg/h and 60 kg/h (1.2 and 2.9 MBTU/hr).

They can be used in specific installation with air, nitrogen and other non aggressive gases.

Features

- Certain models are equipped with a limited flow safety relief valve (LRV).
- Certain models are equipped with a dry manometer or with a plug for manometer.
- AP40V models are equipped with a vertical inlet connection for assembly on vertical tank valve.
- The AP40/OPSO regulators are equipped with an Over Pressure Shut-Off valve. An indicator shows the state of the valve. This OPSO valve can be located either upstream(Y/U) or downstream (Y/D) the regulator.
- AP40/OPSO regulators are generally provided with a pressure test point.

Construction

- Body and cover: die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV type	OPSO position	Manometer on outlet
					bar	psig	bar	psig	kg/h	kBTU/hr			
AP40													
002802AA	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	40	1900	LRV	-	PLUG G1/4
002821AA	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	50	2400	LRV	-	MANO-DRY G1/4
AP40V													
002855AC	N5E	NUT-G3/4RH-T	F2C	FEM-Rp3/8	2-16	29-230	1,5	22	50	2400	LRV	-	PLUG G1/4
002855MA	N5E	NUT-G3/4RH-T	F3D	FEM-Rc1/2	2-16	29-230	1,5	22	50	2400	LRV	-	MANO-DRY G1/4
AP40R													
002800AA	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	1-3	14-44	40-60	1900-2900	-	-	PLUG G1/4
002801AA	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	0,5-2	7-29	20-40	950-1900	LRV	-	PLUG G1/4
002810AC	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	1-3	14-44	40-60	1900-2900	-	-	MANO-DRY G1/4
002811AA	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	0,5-2	7-29	40-60	1900-2900	LRV	-	MANO-DRY G1/4
002836AA	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	Pa+0,5-16	Pa+7-230	1-3	14-44	40-60	1900-2900	-	-	MANO-DRY G1/4
002860AB	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	Pa+0,5-18	Pa+7-260	0,3-2	4-29	40-70	1900-3300	-	-	PLUG G1/4
AP40/OPSO													
006861AM	N1A	NUT-W20LH-25-UNI	F2C	FEM-Rp3/8	1-16	14-230	0,5	7	20	950	-	Y/U	MANO-DRY G1/4
006861FB	F3D	FEM-Rc1/2	F3D	FEM-Rc1/2	1,25-16	18-230	0,5-2	7-29	60	2900	-	Y/U	-
006864BA	F2B	FEM-Rp1/4	F3D	FEM-Rc1/2	1,25-16	18-230	0,75	11	25	1200	-	Y/D	-
006864BB	F2B	FEM-Rp1/4	F3D	FEM-Rc1/2	Pa+0,5-16	Pa+7-230	1-3	14-44	25	1200	-	Y/D	MANO-DRY G1/4

High pressure regulators

APS1000 - APS1000 V - APS1000/OPSO

Application

- These fixed or variable regulators are mainly used in industrial, agriculture or commercial LPG installations.
- They are also used in SNG or Natural Gas installations.
- They are ideal as a first stage regulator in small domestic networks and in all other types of operations.
- They are perfect for tough jobs such as directly supplying crop dryers and large industrial heavy duty burners.

- Maximum LPG capacities are declared:
 - 250 kg/h (12 MBTU/hr) following US rules
 - 120 kg/h (5.7 MBTU/hr) following EU rules

They can be used in specific installation with air, nitrogen and other non aggressive gases.

Features

- Strong design
- All models are equipped either with manometers (dry or oil filled) or with a plug for manometer, on both inlet and outlet.
- APS1000V models are equipped with a vertical inlet connection for assembly on vertical tank valve.

- The APS1000/OPSO regulators are equipped with an Over Pressure Shut-Off valve located upstream the regulator. An indicator shows the state of the valve.

APS1000/OPSO regulators are generally provided with a pressure test point

Construction

- Body and cover: die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)

- Valve pad: NBR (FPM upon request)



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)			Manometer	
					bar	psig	bar	psig	kg/h	kBTU/hr	Rule *	Inlet	Outlet
APS1000													
002513AA	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	max17,5	max250	0,2-2	3-29	230	11000	US-20	PLUG G1/4	PLUG G1/4
002513BA	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	max17,5	max250	1-3	14-44	250	12000	US-30	PLUG G1/4	PLUG G1/4
002513AB	F5F	FEM-1NPT	F5F	FEM-1NPT	max17,5	max250	0,2-2	3-29	230	11000	US-20	PLUG G1/4	PLUG G1/4
002513BB	F5F	FEM-1NPT	F5F	FEM-1NPT	max17,5	max250	1-3	14-44	250	12000	US-30	PLUG G1/4	PLUG G1/4
002500AA	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	PLUG G1/4	PLUG G1/4
002510AA	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	PLUG G1/4	MANO-DRY G1/4
002530AA	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	MANO-DRY G1/4	MANO-DRY G1/4
002540AA	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	MANO-OIL G1/4	MANO-OIL G1/4
002506AA	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	2-16	29-230	1,5	22	120	5700	EU	PLUG G1/4	PLUG G1/4
002503AA	F3F	FEM-Rc1	F3F	FEM-Rc1	3,5-16	51-230	1-3	14-44	120	5700	EU	PLUG G1/4	PLUG G1/4
APS1000V													
002506VA	N5E	NUT-G3/4RH-T	F3E	FEM-Rc3/4	2-16	29-230	1,5	22	120	5700	EU	PLUG G1/4	PLUG G1/4
002540VA	N5E	NUT-G3/4RH-T	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	MANO-OIL G1/4	MANO-OIL G1/4
APS1000/OPSO													
006869FF	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	2-16	29-230	1,5	22	120	5700	EU	PLUG G1/4	PLUG G1/4
006869FG	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	3,5-16	51-230	1-3	14-44	120	5700	EU	PLUG G1/4	PLUG G1/4

* Rules for capacity declaration:

- US-Rule: The outlet pressure is set at 20 or 30 psig, with 100 psig inlet pressure and 500kBTU/hr flow rate. The capacity is measured for an outlet pressure 20% less than the set pressure and with the inlet pressure 20psig higher than set outlet pressure.

- EU-Rule: Maximum flow rate for which the outlet pressure remains within -30% and +20% (+30% for lock-up) of the set pressure, for whatever inlet pressure in the declared range.

High pressure regulators

1391 - 1392 - 1391/OPSO - 1392/OPSO

Application

- These high capacity, high pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural gas installations. They can also be used with other non aggressive gases (air, nitrogen,...).
- In LPG installation they are often used as first stage regulators.
- Maximum capacity in LPG: 400kg/h (19 MBTU/hr)
- Special active monitor models can be provided upon request

Features

- Female threaded or flange connections.
- Internal impulse (no external impulse line)
- Heavy duty design.
- Comply with PED 97/23/CE European directive.
- OPSO valve preassembled on model without OPSO (excepted 1392HE) and OPSO valve 6592H can be fitted.
- Certain models are equipped with a manometer on outlet

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		OPSO	Manometer on outlet
					bar	psig	bar	psig	kg/h	kBTU/hr	(n)m ³ /h	SCFH		
1391HF														
051001AA	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	300	14000	240	8470	-	-
1392HF														
051002AA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	-	-
051002AC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	-	-
1392HB														
051002MB	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	-	MANO-DRY G1/4
051002MM	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	-	MANO-DRY G1/4
1392HE														
051002ME	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	-	MANO-DRY G1/4
051002ML	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	-	MANO-DRY G1/4
051002MN	B4L	FFLG ANSI 300-DN50	B6L	RFLG PN40-DN50	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	-	MANO-DRY G1/4
051002MP	B4L	FFLG ANSI 300-DN50	B6L	RFLG PN40-DN50	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	-	MANO-DRY G1/4
1391/OPSO														
051081AB	F2F	FEM-Rp1	F2F	FEM-Rp1	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	300	14000	240	8470	2(1-3)	-
1392HF/OPSO														
051082AA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	2(1-3)	-
051082AC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	4(2,5-4,5)	-
1392HB/OPSO														
051082MB	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	2,5-16	36-230	1,5(1,4-1,9)	22(20-28)	400	19000	320	11300	2(1-3)	MANO-DRY G1/4
051082MM	B6L	RFLG PN40-DN50	B6L	RFLG PN40-DN50	4-16	58-230	3(2-3,2)	44(29-47)	400	19000	320	11300	4(2,5-4,5)	MANO-DRY G1/4

High pressure regulators

🔥 1395 -1395/OPSO

○ Application

- These very high capacity, high pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural gas installations. They can also be used with other non aggressive gases (air, nitrogen,...).
- In LPG installation they are often used as first stage regulators.
- Maximum capacity in LPG: 1200kg/h (57 MBTU/hr)
- Special active monitor models can be provided upon request

○ Features

- Heavy duty design.
- External impulse connection
- CE marked following PED 97/23/CE European directive.
- OPSO valve preassembled
On model without OPSO excepted 1392HE and OPSO valve 6595H can be fitted

○ Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



1395HB
051005AB



1395HB/OPSO
051085AA

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		OPSO bar
					bar	psig	bar	psig	kg/h	kBTU/hr	(n)m ³ /h	SCFH	
1395HB													
051005AA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	36-230	1,5(1,1-1,9)	22(16-28)	1200	57000	1000	35300	-
051005AB	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	4-16	58-230	3(1,5-3,5)	44(22-51)	1200	57000	1000	35300	-
1395HB/OPSO													
051085AA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	2,5-16	36-230	1,5(1,1-1,9)	22(16-28)	1200	57000	1000	35300	2(1-3)
051085AB	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	4-16	58-230	3(1,5-3,5)	44(22-51)	1200	57000	1000	35300	4(2,5-4,5)

High pressure automatic changeovers

175B - 175C - 175 - AC2600

Application

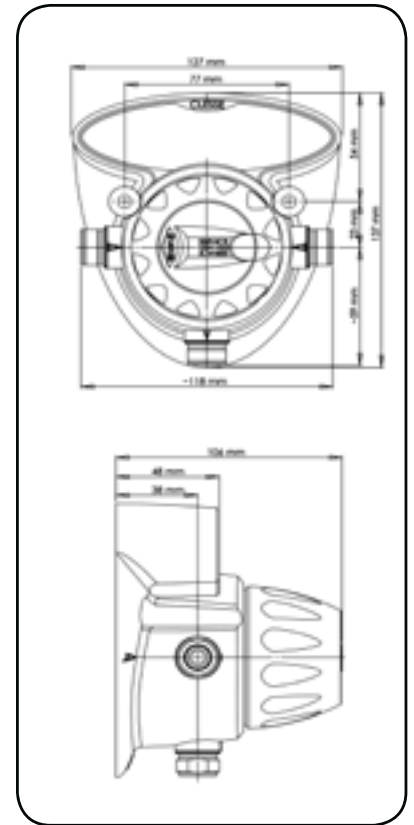
- These first stage automatic changeovers are used with 2 LPG cylinders or 2 batteries of LPG cylinders. They provide the first stage regulation function of the installation.
- They are used in domestic, commercial or agriculture applications up to 20kg/h (950kBTU/hr).

Features

- Excellent "change-over performances". The large pressure gap between "service" and "reserve" (more than 15% of nominal regulated pressure) insures full use of the LPgas from the "service" cylinder.
- Non return valves to prevent any leakage when changing the cylinders.
- Filters in both inlet connections
- Reserve indicator built in the knob.
- Certain models are provided with a complementary indicator ("Magiscope P95") to be installed on the downstream piping.
- Certain models are delivered with fittings for copper brazing.
- 175 models are provided with a protecting and wall-mounting casing wich include instruction display.
- AC2600 models are provided with a metallic bracket.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R
- Valve pads: NBR
- Casing (175): ABS



0175B00



175B
0175B00



AC2600
002635AE



175C
0175C02

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Magiscope	Accessories
					bar	psig	bar	psig	kg/h	kBTU/hr		
175B												
0175B00	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,7-7,5	10-110	0,5	7	2,6	124	-	1x12mm Braz Fit
175C												
0175C00	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12,5	600	P95	1x12mm Braz Fit
0175C02	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12,5	600	P95	-
0175C20	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12,5	600	-	-
175												
0175BS2	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,8-12,5	12-180	0,5	7	6	290	-	-
0175C01	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	1,7-20	25-290	1,2	17	10	475	-	-
0175C12	F1B	FEM-G1/4RH	F1B	FEM-G1/4RH	1,7-20	25-290	1,2	17	10	475	-	-
0175C90	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12,5	600	-	1x12mm Braz Fit
0175C92	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12,5	600	-	-
0175CS1	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	3,5-16	51-230	3	44	20	950	-	-
0175CS4	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	3,5-16	51-230	3	44	20	950	-	-
0175CS5	F1B	FEM-G1/4RH	F1D	FEM-G1/2RH	3,5-16	51-230	3	44	20	950	-	-
AC2600												
002635AA	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	2-16	29-230	1,5	22	12	570	-	-
002635AE	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	2-16	29-230	1,5	22	12	570	-	-

High pressure automatic changeovers

126 - 126CS

Application

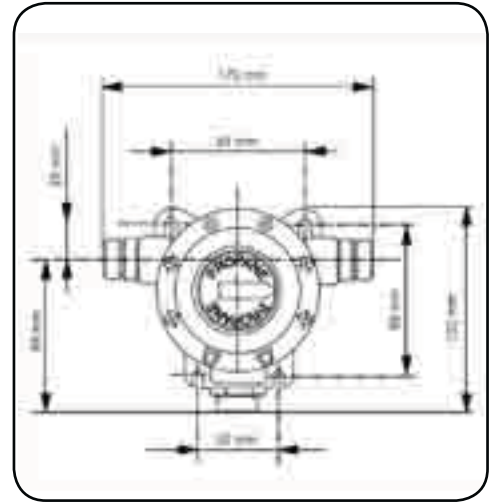
- These first stage, high capacity automatic changeovers are used with 2 batteries of LPG cylinders or with 2 LPG tanks. They provide the first stage regulation function of the installation.
- They are used in domestic, commercial or agriculture applications up to 50kg/h (2.4 MBTU/hr)

Features

- Extremely robust products made of brass
- Delivered with visual indicator to show empty vessel.
- Strong wall-mounting bracket
- Equipped with a filter in both inlet connection
- Certain models are equipped with an internal Non Return Valve (NRV) in both inlet connection.

Construction

- Body and cover: hot stamped brass
- Diaphragm: NBR-R
- Valve pads: NBR



0126002



126

0126002



126CS

0126CS2

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		NRV	Manometer on outlet	Magiscope
					bar	psig	bar	psig	kg/h	kBTU/hr			
126													
0126002	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	2-16	29-230	1,5	22	50	2400	-	-	P96
0126003	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	1,7-20	25-290	1,2	17	50	2400	Y	MANO S/R	-
126CS													
0126CS2	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	4-16	58-230	3	44	50	2400	Y	MANO S/R	-

Low pressure automatic changeovers

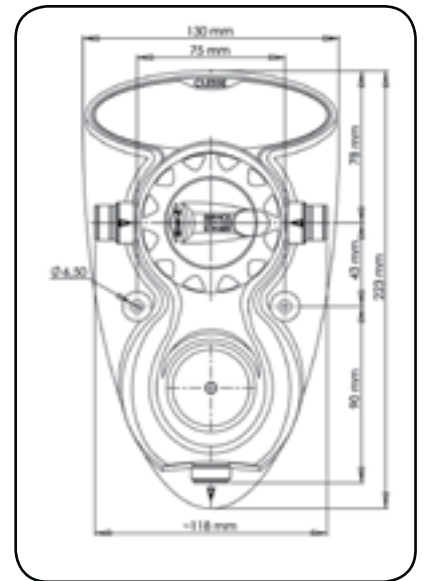
5175 - 5175C - COMPACT80

Application

- These double stage low pressure automatic changeovers are used with 2 LPG cylinders or 2 LPG batteries of cylinders (see functioning and benefits in the "user's guide"). They combine a first stage automatic changeover and a second stage regulator.
- They are used in domestic or commercial applications up to 5 kg/h (240 kBTU/hr).
- The Compact80 changeover is equipped with an OPSO (Over Pressure Shut Off) safety device, an OPSO indicator and seal means for OPSO reset button.

Features

- Excellent "change-over performances". The low change-over pressure (Pdi) and the large pressure gap between "service" and "reserve" (more than 15% of nominal regulated pressure) insure full use of the LPgas from the "service" cylinder.
- Protection and wall mounting casing (5175) with engraved instructions.
- Wall-mounting bracket (Compact 80)
- Non return valves to prevent any leakage when changing the cylinders.
- Filters in both inlet connections
- Reserve indicator built in the knob
- Compact 80 are equipped with a limited flow safety relief valve (LRV)



5175BS1

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R
- Valve pads: NBR
- Casing (5175): ABS



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Pdi		Outlet pressure (Pa)		Flow rate (LPG)	
					bar	psig	bar	psig	mbar	"wc	kg/h	kBTU/hr
5175												
5175BS1	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1-16	14-230	0,5	7	29	12	4	190
5175C												
5175C01	E6B	MAL-M20x1,5RH	F1D	FEM-G1/2RH	1-16	14-230	0,8	12	37	15	4	190
5175C02	E6B	MAL-M20x1,5RH	F1D	FEM-G1/2RH	1-16	14-230	0,8	12	50	20	4	190
COMPACT80												
8436005	E6B	MAL-M20x1,5RH	E7C	MAL-1/2LH-DIN	1-16	14-230	0,8	12	50	20	4	190
8436014	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,7-20	10-290	0,8	12	30	12	5	240

Low pressure regulators

T - S - S5 - RPBS

Application

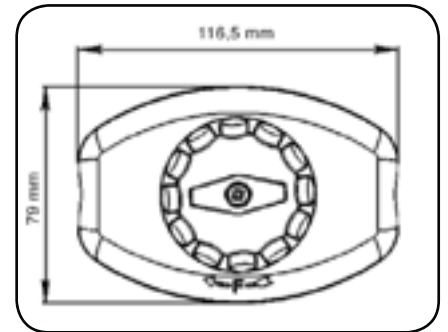
- Installed close to the gas appliance, these regulators combine the final regulation stage, the manual shut off valve and the UPSO (Under Pressure Shut-Off) safety.
- The T regulators provide also an excess flow safety which stops the gas flow in case of rupture or disconnection of the downstream hose.
- T and S regulators are often used as second stage regulator in LPG installations to supply gas appliances up to 5 kg/h (240 kBTU/hr).
- RPBS regulators are used as third stage regulators in canalised installation and can be adapted either to LPG (37 mbar) or to Natural Gas – SNG (22 mbar)

Features

- Compact and pleasant design
- Wall-mounting bracket
- Filter in the inlet connection
- Certain models are delivered with fittings for copper brazing
- Combine 3 or 4 functions (regulation, manual valve, UPSO, Excess flow safety)
- RPBS: Unique adaptable (LPG-NG-SNG) regulator.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pads: NBR
- Casing : ABS



6455600



T

6445005



S5

6455300



RPBS

6455600

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		Accessories
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m3/h	SCFH	
T													
6445005	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	37	15	1,3	62	-	-	
6445056	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	50	20	1,3	62	-	-	
S													
6455053	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-4	7-58	50	20	4	190	-	-	
S5													
6455300	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	37	15	5	240	-	-	2x12mm Braz Fit
6455303	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	37	15	5	240	-	-	
6455353	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	148	60	5	240	-	-	
6455453	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	50	20	5	240	-	-	
RPBS													
6455600	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,1-0,4	1,5-6	PR: 37 NG: 22	PR: 15 NG: 9	4	190	4	140	

Low pressure regulators

426 - 6426 - 1426

Application

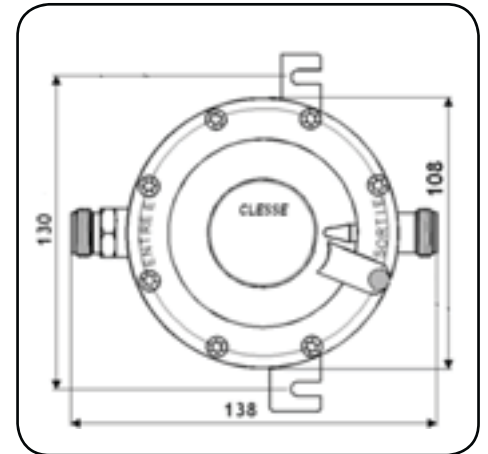
- These products are mainly used as second stage regulators in LPG installations up to 8 kg/h (380 kBTU/hr). They can also be used Natural gas, SNG, air, nitrogen and other non aggressive gases.
- 426 and 6426 models are mainly used in commercial installations to supply large gas appliances.
- 6426 models are equipped with UPSO (Under Pressure Shut-Off) safety device.
- 1426 models are currently used in industrial applications which require a fine pressure adjustment

Features

- Strong and reliable design
- Wall-mounting bracket
- Filter in the inlet connection
- Easy UPSO reset by lever
- Precise manometers fitted on 1426 models

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR



0426B02



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)	
					bar	psig	mbar	"wc	kg/h	kBTU/hr
426										
0426B51	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,3-4	4-58	28	11	6	290
0426B02	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-4	7-58	37	15	8	380
0426B53	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-4	7-58	50	20	8	380
0426B54	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-4	7-58	148	60	8	380
6426										
6426700	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,3-1,75	4-25	28	11	6	290
6426708	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,3-1,75	4-25	112	45	6	290
6426002	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	37	15	8	380
6426202	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	50	20	8	380
6426102	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	148	60	8	380
1426										
1426B03	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	Pa+0,5-4	Pa+7-58	20-60	8-24	8	380
1426B04	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	Pa+0,5-4	Pa+7-58	50-150	20-60	8	380
1426B02	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	Pa+0,5-4	Pa+7-58	100-300	40-120	8	380
1426B22	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	Pa+0,5-4	Pa+7-58	160-500	65-200	8	380

Low pressure regulators

427 - 3427 - 1427

Application

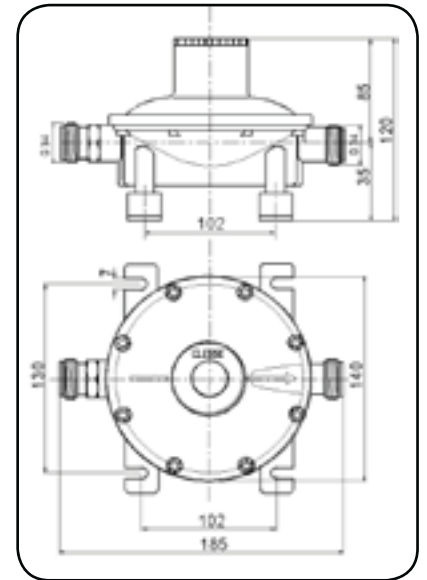
- These products are mainly used as second stage regulators in LPG installations up to 25kg/h (1.2 MBTU/hr). They can also be used Natural gas, SNG, air, nitrogen and other non aggressive gases.
- 427 and 3427 models are mainly used in commercial and industrial installations to supply large gas appliances.
- 3427 models are equipped with UPSO (Under Pressure Shut-Off) safety device.
- 1426 models are currently used in industrial applications which require a fine pressure adjustment.

Features

- Strong and reliable design
- Wall-mounting bracket for
- Easy UPSO reset by knob
- Precise manometers fitted on 1427 models

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR



0427B02



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)	
					bar	psig	mbar	"wc	kg/h	kBTU/hr
427										
0427B02	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-4	7-58	37	15	20	950
0427B35	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-4	7-58	148	60	20	950
0427B37	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-4	7-58	400	160	20	950
3427										
3427005	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-1,75	7-25	37	15	20-25	950-1200
3427206	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-1,75	7-25	148	60	20-25	950-1200
1427										
1427B00	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	Pa+0,5-4	Pa+7-58	20-60	8-24	15	710
1427B24	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	Pa+0,5-4	Pa+7-58	50-150	20-60	15	710
1427B02	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	Pa+0,5-4	Pa+7-58	100-300	40-120	15	710
1427B22	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	Pa+0,5-4	Pa+7-58	160-500	65-200	15	710

Low pressure regulators

BP2

Application

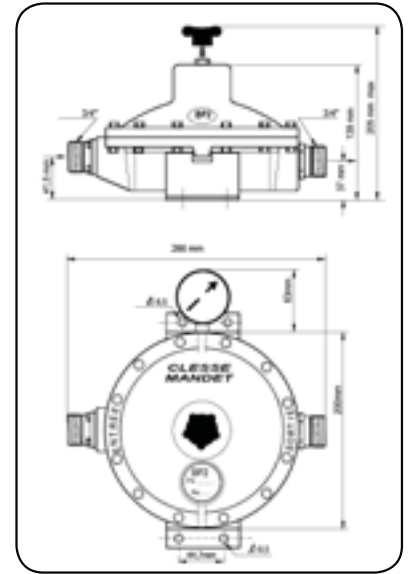
- These products are mainly used to control high power industrial processes using LPG, Natural gas, SNG, air, nitrogen or other non-aggressive gases.
- Each regulator is manufactured following precise specifications (range of inlet and outlet pressure, type of gas, flow rate) to be given when ordering.

Features

- Heavy duty application
- Precise pressure adjustment
- Manometer

Construction

- Body and cover: die cast aluminium alloy
- Connections: brass
- Diaphragm: NBR
- Valve pad: NBR



1438150

Capacity table (kg/h in propane)

Outlet pressure range mbar	Inlet pressure																										
	21 mbar			50 mbar			100 mbar			300 mbar			500 mbar			1 bar			1,5 bar			4 bar			6 bar		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
4 à 12	3	3	2	7	3,5	3	9,5	6	5	17	8,5	7,5	20	13	10	27	16	14	31	20	17		26	25			27
7 à 21				10	6,5	5	16	9,5	8	26	19	15	30	22	19	34	27	26	38	31	30		42	43			48
9 à 28				16	9	6	25	16	10	44	29	24	50	38	31	60	50	45	66	55	51		68	72			78
12 à 37				14	9	5,5	25	16	13	45	31	26	57	40	34	68	56	50	73	65	59		84	84			96
16 à 50							22	15	13	45	34	26	60	42	36	74	58	53	90	68	63		101	89			96
26 à 80							25	14	20	50	32	26	67	45	36	92	67	54	106	77	68		109	112			137
33 à 100										45	29	23	61	41	34	87	60	52	108	70	61		119	108			130
50 à 150										46	27	22	60	37	32	87	62	52	115	80	63		133	117			152
66 à 200											28	22	73	28	34	109	73	45	137	93	66		168	142			181
100 à 300													57	25	28	92	51	50	120	65	68		133	139			198
130 à 400																85	52	47	114	70	63		146	134			189
166 à 500																79	53	45	108	75	60		159	130			180
265 à 800																			110	68	50		138	127			181
0,3 à 1000																							151	129			185



BP2A

1438150

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure * (Pa)		Flow rate* (LPG)	
					bar	psig	mbar	"wc	kg/h	kBTU/hr
BP2A										
1438150	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	max1,75	max25	4-1000	2-400	3-110	140-5220
BP2B										
1438400	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	max4	max58	4-1000	2-400	3-151	140-7170
BP2C										
1438600	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	max6	max87	4-1000	2-400	2-185	95-8800

* see capacity table

Low pressure regulators

BP1803 - BP1803FV

Application

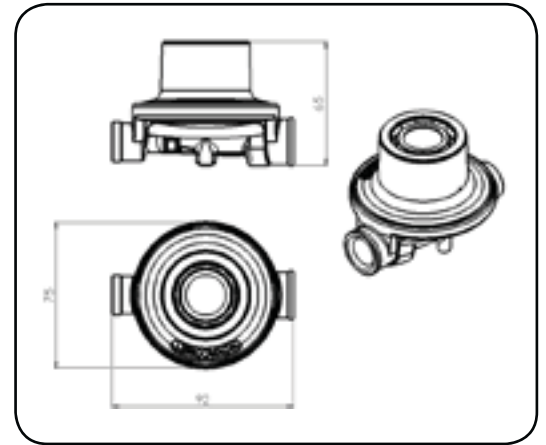
- These products are mainly used in small LPG installations (domestic or commercial) as single or second stage regulators.
- All these regulators can be used in specific installations, with Natural gas, SNG, air, nitrogen and other non aggressive gases*
- Maximum capacity 5 kg/h (240 kBTU/hr).
- BP1803FV models are equipped with a full relief valve which ensures that the outlet pressure cannot exceed a defined value (generally 140 mbar - 2 psig) in the event of malfunctions or breakage in the regulator.

Features

- Simple and efficient
- Possible pressure adjustment on certain models
- Numerous possible types of inlet and outlet connections - upon request-
- Filter in the inlet connections intended to be fitted onto a cylinder valve.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR, NBR-R or FPM
- Valve pad: NBR or FPM



001820AC



BP1803
001820AC



BP1803FV
001877BA

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Filter	PAD material	Diaphragm material
					bar	psig	mbar	"wc	kg/h	kBTU/hr			
BP1803													
001820AA	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	max16	max230	30	12	4	190	-	NBR	NBR
001820AC	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	max16	max230	30	12	4	190	-	NBR	NBR
001820AE	N2A	NUT-NF21,8LH-27x14-G/G	Z1D	HNZ-10-EN	max16	max230	30	12	4	190	Y	NBR	NBR
001820AG	N1B	NUT-W20LH-25x13,5	F2C	FEM-Rp3/8	max16	max230	30	12	4	190	Y	NBR	NBR
001820AM	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,5-4	7-58	30(26-46)	12(10-18)	5	240	-	NBR	NBR
001820AR	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,5-4	7-58	30(20-70)	12(8-28)	5	240	-	NBR	NBR
001820AT	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,3-1,5	4-22	37(25-45)	15(10-18)	4,9	232	-	NBR	NBR
001821AA	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	0,5-4	7-58	37	15	5	240	-	FPM	FPM
001821AG	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	37	15	4	190	-	NBR	NBR
001821AN	P1A	POLM-5/8LH-BS-HN	F2C	FEM-Rp3/8	1-16	14-230	37	15	4	190	Y	NBR	NBR
001821AP	N6A	NUT-M20x1,5RH	E6B	MAL-M20x1,5RH	1,3-4	19-58	800	320	4	190	Y	NBR	NBR-R
001823AA	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	0,5-4	7-58	50	20	4	190	-	FPM	FPM
001823AB	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	30(20-70)	12(8-28)	4	190	-	NBR	NBR
BP1803FV													
001877BA	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,5-8	7-116	30(25-38)	12(10-15)	4	190	-	NBR	NBR
001877BB	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,5-8	7-116	100	40	4	190	-	NBR	NBR

Low pressure regulators

BP1813

Application

- These products with variable pressure are mainly used as single or second stage LPG regulator for agricultural (poultry heating), industrial or craft (radiant panels, air heaters...) uses.

All these regulators can be used in specific installations, with Natural gas, SNG, air, nitrogen and other non aggressive gases

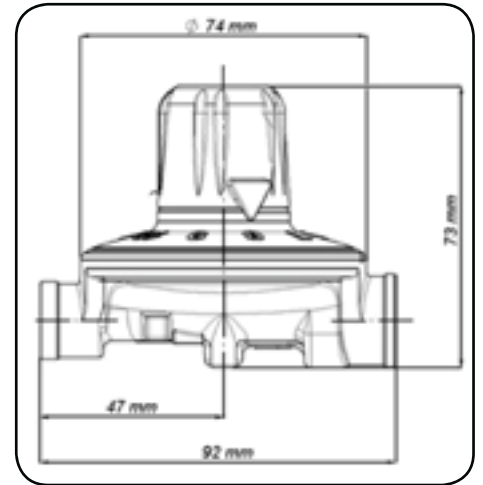
- Maximum capacity 4 kg/h (190 kBTU/hr)

Features

- Indexed position of the hand-wheel for a better set control
- Numerous possible types of inlet and outlet connections (upon request).
- Filter in the inlet connections intended to be fitted onto a cylinder valve.

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR or NBR-R (FPM upon request)
- Valve pad: NBR (FPM upon request)



000780AC



BP1813
000780AP



BP1813
000780AS

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Filter	PAD material	Diaphragm material
					bar	psig	mbar	"wc	kg/h	kBTU/hr			
BP1813													
000780AA	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	1-16	14-230	50-150	20-60	4	190	-	NBR	NBR
000780AB	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	1-16	14-230	20-300	8-120	4	190	-	NBR	NBR-R
000780AC	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	20-90	8-36	4	190	-	NBR	NBR
000780AD	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	5-200	2-80	4	190	-	NBR	NBR
000780AE	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	50-150	20-60	4	190	-	NBR	NBR
000780AF	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	50-200	20-80	4	190	-	NBR	NBR
000780AG	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	20-300	8-120	4	190	-	NBR	NBR-R
000780AH	F2B	FEM-Rp1/4	F2C	FEM-Rp3/8	1-16	14-230	5-300	2-120	4	190	-	NBR	NBR-R
000780AN	N2A	NUT-NF21,8LH-27x14-G/G	F2C	FEM-Rp3/8	1-16	14-230	50-150	20-60	4	190	Y	NBR	NBR
000780AP	N2A	NUT-NF21,8LH-27x14-G/G	E6B	MAL-M20x1,5RH	1-16	14-230	50-150	20-60	4	190	Y	NBR	NBR
000780AS	P1A	POLM-5/8LH-BS-HN	Z1D	HNZ-10-EN	1-16	14-230	50-150	20-60	4	190	Y	NBR	NBR
000780AT	P2A	POLM-USA-25x23,5-HN	F2C	FEM-Rp3/8	1-16	14-230	50-150	20-60	4	190	Y	NBR	NBR

Low pressure regulators

BP2202FV

Application

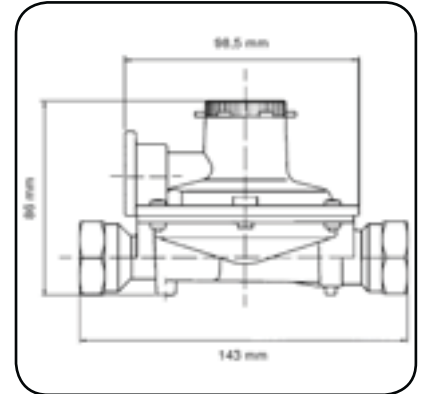
- These regulators are used in domestic or commercial installations with Natural Gas, SNG or LPG.
- They are installed as final stage or intermediate stage regulators.
- The maximum capacity is:
 - 12 kg/h (570 kBTU/hr) of LPG
 - 10 (n)m³/h (350 SCFH) of Natural gas
- They are equipped with a full relief valve which ensures that the outlet pressure cannot exceed a defined value (generally 140 mbar - 2 psig) in the event of malfunctions or breakage in the regulator.

Features

- Numerous possible types of inlet and outlet connections (upon request).
- Possible pressure adjustment through a sealable cap (certain models).
- Vent connectable to a pipe (certain models)
- Filter in the inlet connection (certain models)

Construction

- Body and cover: die cast zinc or aluminium alloy
- Diaphragm: NBR
- Valve pad: NBR



000815BH



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		Filter
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH	
BP2202FV													
000815AS	F5B	FEM-1/4NPT	F5C	FEM-3/8NPT	0,5-2	7-29	30(29-38)	12(11,5-15)	7	330	-	-	-
000815AV	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,5-2	7-29	30(22-38)	12(9-15)	12	570	-	-	-
000815AY	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,6-6	9-87	105(85-125)	42(34-50)	12	570	-	-	-
000815AD	E6D	MAL-M26x1,5RH	F5D	FEM-1/2NPT	1,7-4	25-58	21(19-26)	8,5(7,5-10,5)	-	-	4	140	Y
000815AZ	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	1,4-4	20-58	100(90-115)	40(36-46)	-	-	10	350	-
000815BH	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	1,4-4	20-58	23(18-26)	9(7-10)	-	-	5,2	182	Y
000815MA	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	0,2-1	3-14	19(18-23)	8(7-9)	-	-	5	175	Y

Low pressure regulators

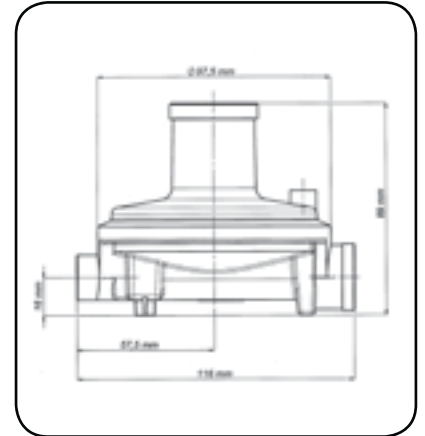
BP2205 - BP2205G - 465 - 456

Application

- These products are mainly used in small LPG installations (domestic or commercial) as second stage regulators.
- Maximum capacity 10 kg/h (475 kBTU/hr).
- BP2205G regulators are provided with a rotating special device called "GIRO" which protects 4 vent holes and allows the regulator to be installed in all positions.
- BP2205 and BP2205G regulators are equipped with a limited capacity relief valve (LRV).
- 465 and 456 regulators have no relief valve and are equipped with a filter in the inlet connection.

Features

- "GIRO" system provides:
 - The best protection against water entering through the vent holes
 - The perfect drainage of moisture condensation which may occur above the diaphragm



000860

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR or FPM



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Filter	PAD material
					bar	psig	mbar	"wc	kg/h	kBTU/hr		
BP2205												
000860	F3B	FEM-Rc1/4	F2D	FEM-Rp1/2	0,5-4	7-58	30(25-45)	12(10-18)	10	475	-	FPM
000862	F3B	FEM-Rc1/4	F2D	FEM-Rp1/2	0,5-4	7-58	37(33-45)	15(13-18)	10	475	-	NBR
000868	F2D	FEM-Rp1/2	F2D	FEM-Rp1/2	0,7-4	10-58	37(33-45)	15(13-18)	10	475	-	NBR
000865	N1A	NUT-W20LH-25-UNI	F2D	FEM-Rp1/2	0,5-4	7-58	30(25-45)	12(10-18)	10	475	-	NBR
000876AX	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,5-4	7-58	30(25-45)	12(10-18)	10	475	-	NBR
BP2205G												
000860AA	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,5-4	7-58	37(33-45)	15(13-18)	10	475	-	FPM
000860ZX	F3B	FEM-Rc1/4	F2D	FEM-Rp1/2	0,5-4	7-58	30(25-45)	12(10-18)	10	475	-	NBR
000865ZX	N1A	NUT-W20LH-25-UNI	F2D	FEM-Rp1/2	0,5-4	7-58	30(25-45)	12(10-18)	10	475	-	NBR
465												
000890	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	0,3-7,5	4-110	28	11	2,6	124	Y	NBR
000890AX	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	0,3-7,5	4-110	112	45	2,6	124	Y	NBR
456												
000892AB	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	0,5-2,1	7-30	37	15	10	475	Y	NBR

Low pressure regulators

BP2203/OPSO

Application

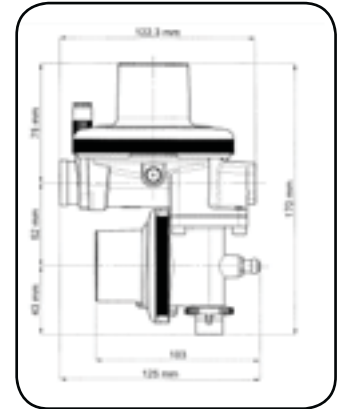
- These products mainly used in domestic or commercial LPGs installations where they provide the second stage regulation function. They can also be used with: Natural Gas, SNG, air, nitrogen and other non-aggressive gases...
- They can be integrated in a complete double stage unit.
- Special models can be used as single or third stage regulator.

Features

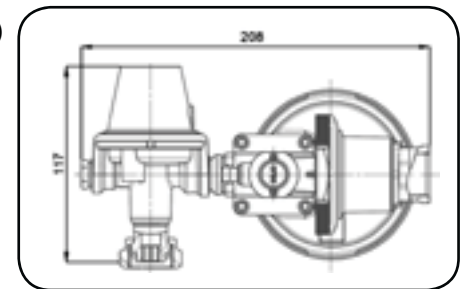
- OPSO** Over Pressure Shut Off safety: visual indicator displays the open-close state. Easy resetting: cap rotation allows pressure balancing before complete resetting. Sealing wire (optional). Test point
- UPSO** Under Pressure Shut Off safety (optional): easy resetting, independent from OPSO resetting. Visual indicator.
- PRV** Pressure relief valve (on certain models): a limited capacity pressure relief valve (LRV) discharges thermal expansion over pressures and avoids any unnecessary OPSO triggering.
- Vent** "Giro" ring (multi-position) or classical piped vent (positioned toward earth) provide:
 - the best protection against water penetration
 - the perfect drainage of humidity condensation
- Accessories: wall bracket

Construction

- Bodies and covers: die cast zinc alloy
- Diaphragm: NBR or NBR-R
- Valve pad: NBR (FPM upon request)



006827BA



006881BA



BP2203/OPSO

006827AB



APZ400-BP2203/OPSO GROUP

006881BA

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV (Type)	Vent (Position-Connection)	UPSO	Test Point	Wall Bracket
					bar	psig	mbar	"wc	kg/h	kBTU/hr					
BP2203/OPSO															
006827AB	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,45-2	6-29	37	15	10,5	500	LRV	GIRO-tube Ø6	Y	Y	Y
006827AC	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,45-2	6-29	37	15	10,5	500	LRV	3h-G1/8-tube Ø6	Y	Y	-
006827AD	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,6-2	9-29	75	30	12	570	LRV	GIRO-tube Ø6	-	Y	-
006827AF	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,6-2	9-29	37	15	10,5	500	LRV	0h-G1/8-tube Ø6	Y	Y	-
006827BA	F3D	FEM-Rc1/2	F3D	FEM-Rc1/2	0,5-2	7-29	29	12	10,5	500	LRV	GIRO-tube Ø6	-	Y	-
006827BB	F3D	FEM-Rc1/2	F3D	FEM-Rc1/2	0,5-4	7-58	20	8	10,5	500	LRV	GIRO-tube Ø6	-	Y	-
006827CD	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,6-1,2	9-17	30	12	10,5	500	-	GIRO-tube Ø6	-	Y	-
006827CE	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	0,6-6	9-87	105	42	10,5	500	-	GIRO-tube Ø6	-	Y	-
APZ400-BP2203/OPSO GROUP															
006881AA	F2B	FEM-Rp1/4	F3E	FEM-Rc3/4	1,5-16	22-230	37	15	10,5	500	LRV	GIRO-tube Ø6	Y	Y	-
006881BA	N5E	NUT-G3/4RH-T	F3E	FEM-Rc3/4	2-16	29-230	29	12	10,5	500	LRV	GIRO-tube Ø6	-	Y	-

Low pressure regulators

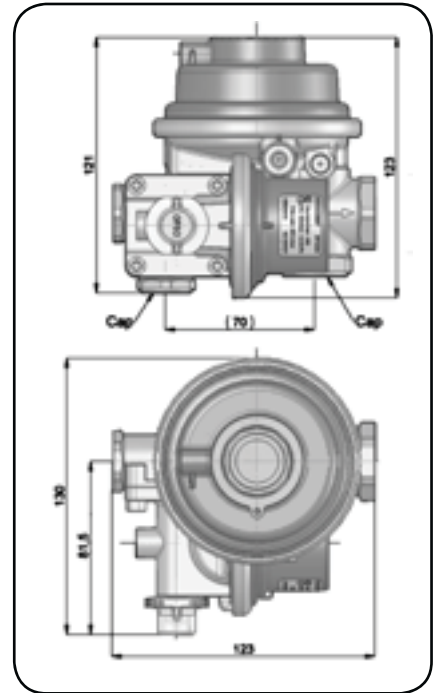
BP2204/OPSO - BP2284

Application

- These low pressure regulators with OPSO safety valve are mainly dedicated to meter box installations. Thanks to their dual inlet and outlet connections they can be used in all types of installation geometry.
- BP2204/OPSO is typically design for LPGas second stage application and BP2284 for Natural Gas, but both can be used with all type of gases: Natural gas, LPGas, SNG and also other non aggressive gases (air, nitrogen ,...)

Features

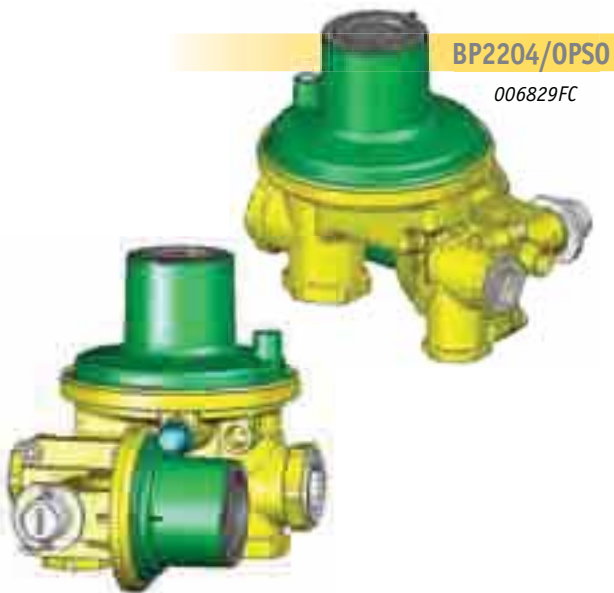
- Compact design
- Dual inlet and outlet connections. The plugs, factory fitted on one of these inlets and outlets, can be unscrewed and moved so as to achieve the desired geometry.
- OPSO: Over Pressure Shut-Off safety device:
 - Visual indicator displays the open-close state.
 - Easy resetting: cap rotation allows pressure balancing before complete resetting.
 - Sealing wire (optional).
- UPSO: Under Pressure Shut Off safety (optional)
Push button easy resetting, independent from OPSO resetting.
- PRV: Pressure relief valve (optional)
A limited capacity pressure relief valve (LRV) discharges thermal expansion over pressures and avoids any unnecessary OPSO triggering.
- Vent: the vent can be connected to a pipe (to be used when the regulator is installed in a not ventilated or safe area).
- Test point (optional): a "hose" type test point allows controlling the regulated pressure.



006829SP

Construction

- Body and cover: die cast zinc alloy
- Valve pad: NBR
- Diaphragm: NBR



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		PRV mbar	VENT (Position-Connection)	OPSO mbar	UPSO mbar	Test point
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH					
BP2204/OPSO																	
006829FC	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,45-2	6-29	37	15	10,5	500	-	-	75	6h-G1/8-tube Ø6	100	28	Y
BP2284																	
006829SP	F2D	FEM-Rp1/2	F2E	FEM-Rp3/4	0,5-5	7-72	22	9	-	-	6	210	-	6h-G1/8-tube Ø6	70	-	-
006829ES	F2D	FEM-Rp1/2	F2E	FEM-Rp3/4	0,5-5	7-72	100	40	-	-	6	210	-	6h-G1/8-tube Ø6	250	-	-

Low pressure regulators

BP2210

Application

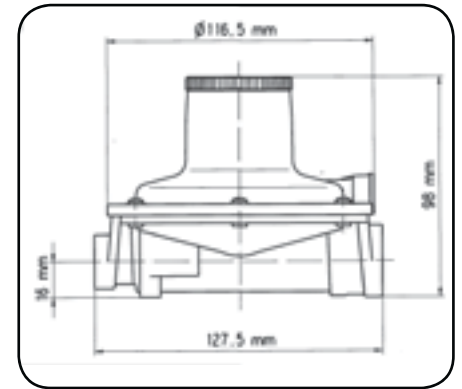
- These products are mainly used in LPG installations (domestic or commercial) as second stage regulators.
- They can be used as single stage regulator in certain applications.
- Maximum capacity 12 kg/h (570 kBTU/hr).
- Certain models are equipped with an UPSO (Under Pressure Shut Off) safety device.

Features

- Robust construction
- The UPSO safety device (certain models) is provided with an indicator
- The vent can be connected to a pipe
- Filter in the inlet connection (certain models)

Construction

- Body and cover: die cast aluminium alloy
- Diaphragm: NBR
- Valve pad: NBR



000900



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV (Type)	VENT (Position-Connection)	UPSO	Filter
					bar	psig	mbar	"wc	kg/h	kBTU/hr				
BP2210														
000900	F3B	FEM-Rc1/4	F2D	FEM-Rp1/2	0,5-4	7-58	30(25-45)	12(10-18)	12	570	LRV	0h-tube Ø6	-	-
000919	F3B	FEM-Rc1/4	F2D	FEM-Rp1/2	0,5-4	7-58	50(40-100)	20(16-40)	12	570	LRV	0h-tube Ø6	-	-
000950	F2D	FEM-Rp1/2	F2D	FEM-Rp1/2	0,5-7,5	7-110	30(25-45)	12(10-18)	12	570	LRV	0h-tube Ø6	-	-
000975	N6A	NUT-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-4	7-58	50(40-100)	20(16-40)	12	570	LRV	0h-tube Ø6	-	Y
000978AX	F5B	FEM-1/4NPT	F5D	FEM-1/2NPT	0,5-7,5	7-110	30(25-45)	12(10-18)	10	475	LRV	0h-tube Ø6	-	-
000982	N6A	NUT-M20x1,5RH	E6B	MAL-M20x1,5RH	0,5-1,75	7-25	37(33-45)	15(13-18)	10	475	-	0h-tube Ø6	Y	-

Low pressure regulators

BP2303 - BP2303R - BP2303/OPSO

Application

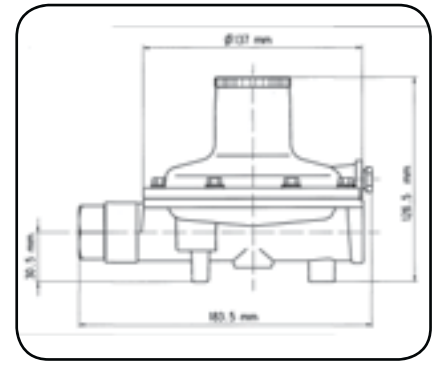
- These products are mainly used in medium power LPG installations (domestic, commercial or industrial) as final stage or intermediate stage, regulators. They can also be used with Natural gas, SNG, air, nitrogen and other non aggressive gases.
- Maximum capacity: 50 kg/h (2.5 MBTU/hr)
- BP2303R models are commonly used in industrial applications which require a fine pressure adjustment.
- BP2303/OPSO are equipped with an Over Pressure Shut-Off safety device located upstream the regulator.

Features

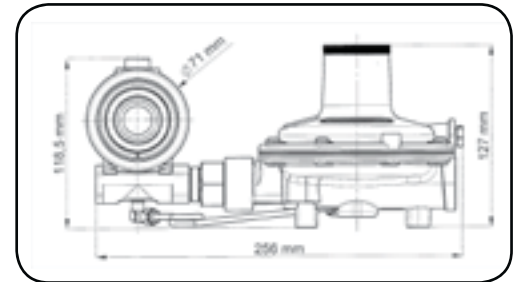
- Accurate pressure control
- The vent can be connected to a pipe
- OPSO with visual indicator and test point(optional). Easily resettable. Possible sealing means.
- Certain model are equipped with UPSO safety device.
- Certain BP2303R models are equipped with a double spring which ensures a stable minimum regulated pressure in all conditions.
- Low capacity pressure relief valve on certain models

Construction

- Body and cover: die cast aluminium alloy
- Valve pad: NBR or FPM
- Diaphragm: NBR-R



001050AA



006830BA

BP2303

001050AA



BP2303/OPSO

006830BA



BP2303R

001070BA



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV (Type)	Vent (Position-Connection)	UPSO	PAD material
					bar	psig	mbar	"wc	kg/h	kBTU/hr				
BP2303														
001050AA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	0,5-4	7-58	30(27-36)	12(11-14)	30	1400	LRV	0h-G1/4-tube Ø8	-	NBR
001050BA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	0,5-7,5	7-110	30(25-45)	12(10-18)	20	950	LRV	0h-G1/4-tube Ø8	-	NBR
001053AA	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,5-4	7-58	30(27-36)	12(11-14)	30	1400	LRV	0h-G1/4-tube Ø8	-	FPM
001060AA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	0,5-4	7-58	30(27-36)	12(11-14)	25	1200	LRV	0h-G1/4-tube Ø8	Y	NBR
001060AB	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,5-4	7-58	30(27-36)	12(11-14)	25	1200	LRV	0h-G1/4-tube Ø8	Y	NBR
BP2303R														
001070AA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	Pa+0,5-4	Pa+7-58	10-200	4-80	30	1400	LRV	0h-G1/4-tube Ø8	-	NBR
001070BA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	Pa+1-7,5	Pa+14-110	10-200	4-80	20	950	LRV	0h-G1/4-tube Ø8	-	NBR
001071AA	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	Pa+0,5-4	Pa+7-58	20-300	8-120	30	1400	LRV	0h-G1/4-tube Ø8	-	FPM
BP2303/OPSO														
006830AD	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,7-3	10-44	500	200	25	1200	LRV	0h-G1/4-tube Ø8	-	NBR
006830BA	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,5-4	7-58	29(27-36)	12(11-14)	30	1400	LRV	0h-G1/4-tube Ø8	-	NBR
006835BA	F3D	FEM-Rc1/2	F3E	FEM-Rc3/4	0,5-4	7-58	29(27-36)	12(11-14)	25	1200	LRV	0h-G1/4-tube Ø8	Y	NBR
006835BB	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,5-4	7-58	29(27-36)	12(11-14)	25	1200	LRV	0h-G1/4-tube Ø8	Y	NBR
006836BA	F2D	FEM-Rp1/2	F3E	FEM-Rc3/4	0,5-7,5	7-110	29(27-36)	12(11-14)	18	860	LRV	0h-G1/4-tube Ø8	Y	NBR
006836RB	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	0,6-2	9-29	37	15	30	1400	LRV	6h-G1/4-tube Ø8	Y	NBR
006837AA	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,8-2	12-29	350	140	50	2400	-	6h-G1/4-tube Ø8	Y	NBR

High & Low pressure regulators

2303AP - 2303BP

Application

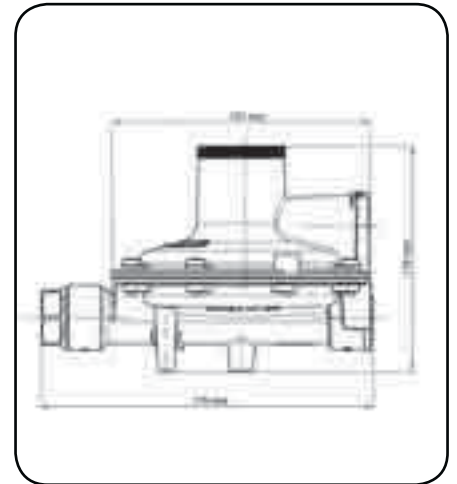
- Mainly used in LPGas Two Stage systems for residential or commercial installations.
- Can also be used with Natural Gas, SNG and other non-aggressive gases
- 2303AP are high pressure first stage regulators
maximum capacity 80 kg/h (3,8 MBTU/hr)
- 2303BP are low pressure second stage regulators
maximum capacity 30 kg/h (1,4 MBTU/hr)
- Certain models are equipped with a full relief valve which ensures that the outlet pressure cannot exceed a defined value in the event of malfunctions or breakage in the regulator.

Features

- Vent equipped with 3/4 " NPT pipe connection
- Plug for manometer connection

Construction

- Body and cover: die cast zinc alloy
- Connections: brass
- Diaphragm: NBR-R
- Valve pad: NBR



001080CC

2303AP

001080CC



2303AP

001090BC



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Vent (Position-Connection)	Manometer on outlet	Filter
					bar	psig	bar	psig	kg/h	kBTU/hr			
2303AP													
001080CC	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	1,7-17	25-250	0,7(0,55-0,75) bar	10(8-11) psig	60	2900	0h-3/4NPT	PLUG 1/8NPT	Y
001081FB	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	1-16	14-230	0,5 bar	7 psig	80	3800	3h-3/4NPT	PLUG 1/8NPT	-
2303BP													
001090BC	F5D	FEM-1/2NPT	F5E	FEM-3/4NPT	0,35-1	5-15	27(25-36) mbar	11(10-14)wc"	30	1400	6h-3/4NPT	PLUG 1/8NPT	-

Low pressure regulators

BP2402 - BP2402R - BP2402/OPSO

Application

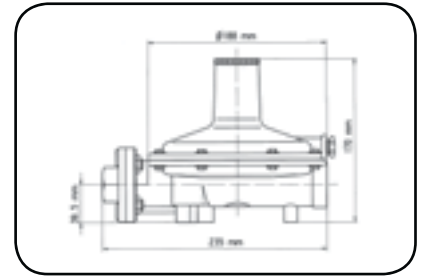
- These products are mainly used in large power LPG, Natural gas or SNG installations (commercial, agriculture or industrial) as final stage or intermediate stage, regulators. They can also be used with air, nitrogen and other non aggressive gases.
- Maximum capacity: 50 kg/h (2.5 MBTU/hr)
- BP2402R models are commonly used in industrial applications which require a fine pressure adjustment.
- BP2402/OPSO are equipped with an Over Pressure Shut-Off safety device located upstream the regulator.

Features

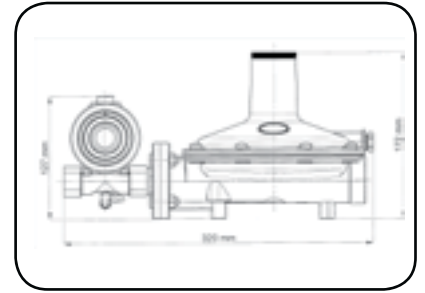
- Accurate pressure control
- The vent can be connected to a pipe
- OPSO with visual indicator and test point. Easily resettable. Possible sealing means.
- Certain models are equipped with UPSO safety device.
- Low capacity pressure relief valve (LRV) on certain models

Construction

- Body and cover: die cast aluminium alloy
- Valve pad: NBR or FPM
- Diaphragm: NBR-R



001100XX



006840BA

BP2402

001107AB



BP2402/OPSO

006846RB



BP2402R

001112AA



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		PRV type	UPSO	PAD materiel
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH			
BP2402															
001100XX	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,5-4	7-58	30(25-45)	12(10-18)	40	1900	-	-	LRV	-	NBR
001107AA	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,5-2,1(0,3)	7-30(4)	37(28-39)	15(11-16)	40(30)	1900(1400)	-	-	-	-	NBR
001107AB	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,24-0,5	4-7	21(19-23)	8(7-9)	-	-	25	880	-	-	NBR
001107AC	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,7-5	10-72	148(130-180)	60(52-72)	45	2140	35	1240	-	-	NBR
001107AD	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,8-5	12-72	300(280-400)	120(110-160)	50	2400	40	1410	-	-	NBR
001114AR	F5D	FEM-1/2NPT	F5F	FEM-1NPT	1,4-4	20-58	350	140	-	-	60	2120	LRV	-	NBR
001120	F2D	FEM-Rp1/2	F3F	FEM-Rc1	0,5-4	7-58	30(25-45)	12(10-18)	35	1660	-	-	LRV	Y	FPM
001130PX	F5D	FEM-1/2NPT	F5F	FEM-1NPT	0,5-4	7-58	30(25-45)	12(10-18)	40	1900	-	-	LRV	-	NBR
BP2402R															
001110	F2D	FEM-Rp1/2	F3F	FEM-Rc1	Pa+0,5-4	Pa+7-58	10-200	4-80	40	1900	-	-	LRV	-	NBR
001111AX	F5D	FEM-1/2NPT	F5F	FEM-1NPT	Pa+0,5-4	Pa+7-58	20-300	8-120	50	2400	-	-	LRV	-	NBR
001111XX	F2D	FEM-Rp1/2	F3F	FEM-Rc1	Pa+0,5-4	Pa+7-58	20-300	8-120	50	2400	-	-	LRV	-	NBR
001112AA	F2D	FEM-Rp1/2	F3F	FEM-Rc1	Pa+0,5-4	Pa+7-58	100-300	40-120	40	1900	-	-	-	-	NBR
BP2402/OPSO															
006840BA	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,5-2	7-29	29(25-45)	12(10-18)	35	1660	-	-	LRV	-	NBR
006842BA	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,7-5	10-72	148(130-180)	60(52-72)	40	1900	30	1060	-	-	NBR
006842BC	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,8-5	12-72	300(280-400)	120(110-160)	45	2140	35	1240	-	-	NBR
006842RB	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,6-2	9-29	75	30	40	1900	-	-	LRV	-	NBR
006845BA	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,5-2	7-29	29(25-45)	12(10-18)	35	1660	-	-	LRV	Y	NBR
006845BB	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,24-0,5	4-7	21(19-23)	8(7-9)	-	-	20	710	LRV	Y	NBR
006846RB	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,6-2,1(0,3)	9-30(4)	37(28-39)	15(11-16)	40(25)	1900(1200)	-	-	LRV	Y	NBR
006846RC	F3E	FEM-Rc3/4	F3F	FEM-Rc1	0,6-2	9-29	100	40	40	1900	-	-	LRV	-	NBR

Low pressure regulators

BP2402L - BP2402FC - BP2402FC/OPSO

Application

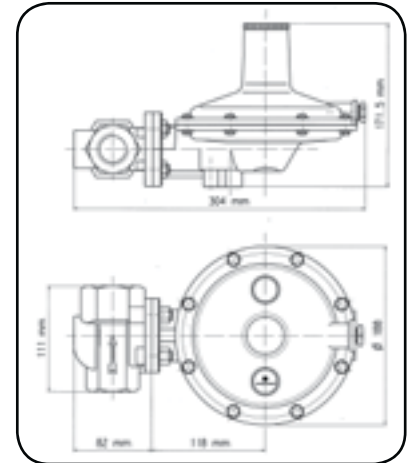
- These products are mainly used in large power LPG, Natural gas or SNG installations (domestic networks, commercial, agriculture or industrial) as final stage or intermediate stage, regulators. They can also be used with air, nitrogen and other non aggressive gases.
- Capacity up to 250 kg/h (12 MBTU/hr)
- BP2402FC/OPSO regulators are equipped with an Over Pressure Shut-Off safety device located upstream the regulator.

Features

- Internal sensing (no special sensing pipe connection required)
- Accurate pressure control
- Certain models are equipped with UPSO safety device.
- Low capacity pressure relief valve (LRV) on certain models
- CE marked following PED 97/23/CE European directive.
- The regulator vent can be connected to a pipe

Construction

- Valve body: spheroidal cast iron GS400 (BP2402FC) or die cast aluminium alloy (BP2402L)
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R
- Valve pad: NBR or FPM



001200



BP2402L
001206AA



BP2402FC
001250FG



BP2402FC/OPSO
006895FG

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		PRV type	UPSO	PAD material
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH			
BP2402L															
001200	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,5-4	7-58	30(25-45)	12(10-18)	60	2900	-	-	LRV	-	NBR
001205	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,5-4	7-58	37(25-45)	15(10-18)	60	2900	-	-	LRV	-	NBR
001206AA	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,24-0,5	4-7	21(19-23)	8(7-9)	-	-	40	1410	-	-	NBR
001210AX	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	0,5-4	7-58	20-300	8-120	60	2900	-	-	LRV	-	FPM
001210XX	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,5-4	7-58	20-300	8-120	60	2900	-	-	LRV	-	NBR
001211AA	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	1-5	14-72	50(38-55)	20(15-22)	150	7100	120	4240	LRV	-	NBR
001211AB	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	1-5	14-72	75(50-100)	30(20-40)	150	7100	120	4240	LRV	-	NBR
001211AC	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	1-5	14-72	125(80-180)	50(32-72)	150	7100	120	4240	LRV	-	NBR
001212AA	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,5-2,1(0,3)	7-30(4)	37(28-39)	15(11-16)	65(50)	3100(2380)	-	-	-	-	NBR
001215AA	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,7-2,1	10-30	148(130-180)	60(52-72)	65	3100	50	1770	-	-	NBR
001216AA	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,8-2,1	12-30	300(280-400)	120(110-160)	70	3300	55	1940	-	-	NBR
001230PX	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	0,5-4	7-58	30(25-45)	12(10-18)	60	2900	-	-	LRV	-	NBR
001240AA	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,24-0,5	4-7	21(20-27)	8,5(8-11)	-	-	30	1060	-	Y	NBR
001240AB	F3F	FEM-Rc1	F3J	FEM-Rc1.1/4	0,5-2,1(0,3)	7-30(4)	37(28-39)	15(11-16)	55(35)	2600(1660)	-	-	-	Y	NBR
BP2402FC															
001250FA	F2F	FEM-Rp1	F3J	FEM-Rc1.1/4	0,5-4	7-58	30(25-40)	12(10-16)	120	5700	-	-	LRV	-	NBR
001250FB	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	0,5-4	7-58	30(25-40)	12(10-16)	120	5700	-	-	LRV	-	NBR
001250FC	F2F	FEM-Rp1	F3J	FEM-Rc1.1/4	0,8-4	12-58	20-300	8-120	120	5700	-	-	LRV	-	NBR
001250FD	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	0,8-4	12-58	20-300	8-120	120	5700	-	-	LRV	-	NBR
001250FG	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,5-5(0,3)	7-72(4)	21(19-23)	8(7-9)	-	-	100(65)	3530(2300)	-	-	NBR
001250FH	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,7-5	10-72	150(130-180)	60(52-72)	130	6200	110	3900	-	-	NBR
001250FJ	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,5-2,1(0,3)	7-30(4)	37(28-39)	15(11-16)	120(80)	5700(3800)	-	-	-	-	NBR
001250FK	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,8-5	12-72	300(280-400)	120(110-160)	150	7100	120	4240	-	-	NBR
BP2402FC/OPSO															
006895FC	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,6-2	9-29	37	15	120	5700	-	-	LRV	Y	NBR
006895FE	F5F	FEM-1NPT	F5J	FEM-1.1/4NPT	0,7-2	10-29	345(250-350)	138(100-140)	250	12000	-	-	LRV	Y	NBR
006895FG	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,5-5(0,3)	7-72(4)	21(19-23)	8(7-9)	-	-	100(65)	3530(2300)	LRV	Y	NBR
006895FH	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,7-5	10-72	150(130-180)	60(52-72)	130	6200	110	3900	-	Y	NBR
006895FJ	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,8-5	12-72	300(280-400)	120(110-160)	150	7100	120	4240	-	-	NBR
006895FK	F2F	FEM-Rp1	F2J	FEM-Rp1.1/4	0,5-2,1(0,3)	7-30(4)	37(28-39)	15(11-16)	120(80)	5700(3800)	-	-	LRV	Y	NBR

Low pressure regulators

1492 - 1495 - 1492/OPSO - 1495/OPSO

Application

- These very high capacity, medium and low pressure regulators and their associated safety devices are used in industrial and networks applications.
- They are used in LPG, SNG or Natural gas installations. They can also be used with other non aggressive gases (air, nitrogen,...).

- Maximum capacity in LPG: 800kg/h (38 MBTU/hr), in Natural Gas: 640 (n)m³/h (226000SCFH)
- Special active monitor models can be provided upon request.

Features

- Balanced seat design and external impulse connection provide an accurate pressure control.
- Integral limited capacity relief valve (LRV) on certain 1492 models.

- CE marked following PED 97/23/CE European directive. OPSO valve preassembled.
- OPSO valve can integrate an UPSO function (certain models)

Construction

- Valve body: spheroidal cast iron GS400
- Regulating units (body and cover): die cast aluminium alloy
- Diaphragm: NBR-R

- Valve pad: NBR



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		PRV type
					bar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH	
1492MF													
051002AJ	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	14-72	150(100-180)	60(40-72)	250	12000	200	7060	-
051002AG	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	14-72	300(250-400)	120(100-160)	250	12000	200	7060	-
1492BF													
051002DA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	0,5-5(0,3)	7-72(4)	21(18-26)	8(7-10)	-	-	120(80)	4240(2820)	LRV
051002DC	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	0,5-5(0,3)	7-72(4)	37(32-45)	15(13-18)	150(100)	7100(4750)	-	-	LRV
1495MB													
051005DG	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	14-72	150(110-400)	60(44-160)	800	38000	640	22600	-
051005AC	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	14-72	300(110-400)	120(44-160)	800	38000	640	22600	-
1495BB													
051005AE	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,5-5(0,3)	7-72(4)	21(18-24)	8(7-9)	500(320)	24000(15000)	400	14120	-
051005DF	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,5-5(0,3)	7-72(4)	37(28-42)	15(11-17)	500(320)	24000(15000)	400	14120	-
1492MF/OPSO													
051082DJ	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	14-72	150(100-180)	60(40-72)	250	12000	200	7060	-
051082DK	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	1-5	14-72	300(250-400)	120(100-160)	250	12000	200	7060	-
1492BF/OPSO													
051082DA	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	0,5-5(0,3)	7-72(4)	21(18-26)	8(7-10)	-	-	120(80)	4240(2820)	LRV
051082BB	F2F	FEM-Rp1	F2K	FEM-Rp1.1/2	0,5-5(0,3)	7-72(4)	37(32-45)	15(13-18)	150(100)	7100(4750)	-	-	LRV
1495MB/OPSO													
051085DK	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	14-72	150(110-400)	60(44-160)	800	38000	640	22600	-
051085DL	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	1-5	14-72	300(110-400)	120(44-160)	800	38000	640	22600	-
1495BB/OPSO													
051085DA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,5-5(0,3)	7-72(4)	21(18-24)	8(7-9)	500(320)	'24000(15000)	400	14120	-
051085DH	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	0,5-5(0,3)	7-72(4)	37(28-42)	15(11-17)	500(320)	'24000(15000)	400	14120	-

STB27L - STB27R

Application

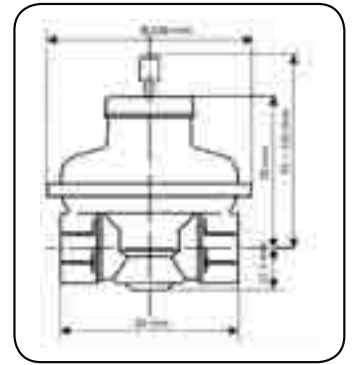
- These service governors regulate the gas pressure from a 500 mbar maximum supply pressure to the appliance service pressure (in the range 9 to 50 mbar).
- They are mainly used in residential and commercial gas installations and are commonly located upstream to a gas meter.
- They are suitable for Natural gas, LPGs and Synthetic Natural Gas. For special applications they can also be used with other non-aggressive gases (air, nitrogen,...)

Features

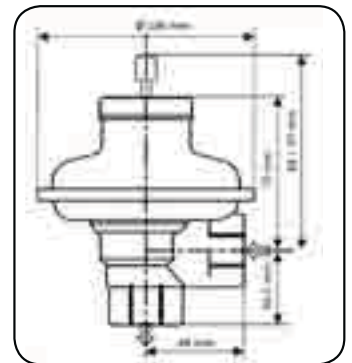
- Geometry adapted to the mounting in line or right angle
- Excellent pressure control: thanks to the fully balanced seat design, the regulated pressure is stable for all variation of the supply pressure.
- High capacity: depending on inlet pressure range and requested accuracy of regulated pressure, models can deliver up to 12,5 (n)m³/h for natural gas and 15 kg/h for LPG
- Filter: on certain models a mesh filter is mounted in the inlet connection.
- Under Pressure Shut Off (UPSO): Automatic or manual reset UPSO are available on certain models.
- The typical resetting flow for automatically resettable models is 6.4l/h of air.

Construction

- Body: die cast aluminium
- Cover: steel
- Protection: high resistance cataphoresis coating
- Diaphragm: NBR
- Valve pad: NBR



052320AB



052321AB



STB27L
052322AB



STB27R
052323AB

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		Flow rate (NG)		UPS0			Filter
					mbar	psig	mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH	Type	mbar	"wc	
STB27L																
052320AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	Manual	12,5	5	Y
052320AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	60-90	0,9-1,3	37	15	7,2	340	-	-	Manual	27,5	11	Y
052322AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	Auto	12,5	5	Y
052322AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	55-400	0,8-6	37	15	7,2	340	-	-	Auto	27,5	11	Y
052324AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	-	-	-	Y
052324AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	55-400	0,8-6	37	15	7,2	340	-	-	-	-	-	Y
STB27R																
052321AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	Manual	12,5	5	Y
052321AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	55-400	0,8-6	37	15	7,2	340	-	-	Manual	27,5	11	Y
052323AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	Auto	12,5	5	Y
052323AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	55-400	0,8-6	37	15	7,2	340	-	-	Auto	27,5	11	Y
052325AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	25-400	0,4-6	21	8	-	-	6	220	-	-	-	Y
052325AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	55-400	0,8-6	37	15	7,2	340	-	-	-	-	-	Y

Cylinder low pressure regulators & adaptors

CLIP REGULATORS

Application

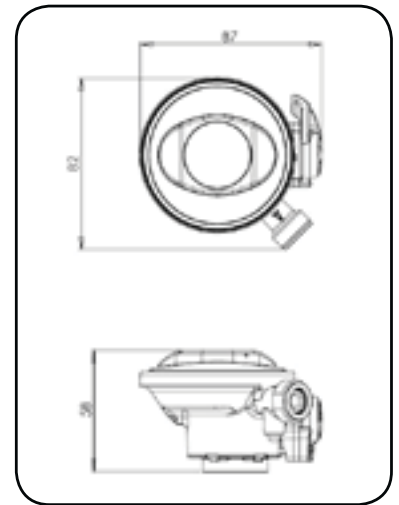
Connected to the automatic valve of LPG cylinders these regulators supply low pressure domestic appliances: stoves, cookers, cabinet heaters, patio heaters, BBQ,...

Features

- Double shut-off: when turning off the lever, both the cylinder valve and a complementary internal valve stop the gas flow.
- Disconnection safety: disconnection possible only when the lever is turn-off
- Excess flow safety EFV (on certain models): in case of disconnection or rupture of the appliance hose, the EFV stops the gas flow.
Depending on models, resetting is either automatic (A) or manual (M).
- Thermal safety device (on certain models): the cylinder valve is closed in case of abnormal temperature rise

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR or NBR-R
- Valve pad: NBR



001557XD

CLIP20 - 21 - 22 - 27

001580PF



001557XD



001590AE



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		EFV	Diaphragm material
					bar	psig	mbar	"wc	kg/h	kBTU/hr		
CLIP20 - 21 - 22 - 27												
001580PF	C1A	CLIP-20	Z2A	HNZ-13,5-DS	0,5-12	7-175	30	12	1,5	71	A	NBR
001590AF	C1A	CLIP-20	Z1D	HNZ-10-EN	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001557XD	C1A	CLIP-20	E6B	MAL-M20x1,5RH	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	M	NBR
001557YD	C1A	CLIP-20	E6B	MAL-M20x1,5RH	1-16	14-230	37	15	1,5	71	M	NBR
001590AD	C1C	CLIP-21	Z1D	HNZ-10-EN	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR-R
001590AG	C1C	CLIP-21	Z1D	HNZ-10-EN	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001590CA	C1C	CLIP-21	Q9A	FEM-5/8-18 UNF (1)	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001590CB	C1C	CLIP-21	Q9A	FEM-5/8-18 UNF (2)	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001590CC	C1C	CLIP-21	Q9A	FEM-5/8-18 UNF (3)	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001557XE	C1D	CLIP-22	E6B	MAL-M20x1,5RH	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	NBR
001590AE	C1K	CLIP-27	Z1D	HNZ-10-EN	1-16	14-230	37	15	1,5	71	-	NBR-R
001580AC	C1K	CLIP-27	Z2A	HNZ-13,5-DS	1-16	14-230	30	12	1,5	71	A	NBR

(1) (2) (3) Regulators equipped with a non dismantlable hose BS 3212

(1) 60 cm

(2) 70 cm

(3) 75 cm

Cylinder low pressure regulators & adaptors

ZP10 REGULATORS

Application

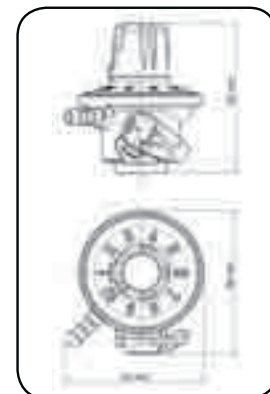
The ZP10 Regulators are used on LPG cylinders with automatic connecting valve in agricultural (poultry heating), industrial or craft applications.

Features

- The outlet pressure is adjustable on full rotation of the hand wheel which is indexed for a better control.
- Double shut-off.
- Disconnection safety

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR-R
- Valve pad: NBR



001520AB

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)	
					bar	psig	mbar	"wc	kg/h	kBTU/hr
ZP10										
001520AA	C1A	CLIP-20	Z1D	HNZ-10-EN	1-16	14-230	50-150	20-60	2	95
001520AB	C1C	CLIP-21	Z1D	HNZ-10-EN	1-16	14-230	50-150	20-60	2	95
001520AC	C1K	CLIP-27	Z1D	HNZ-10-EN	1-16	14-230	50-150	20-60	2	95



001520AB

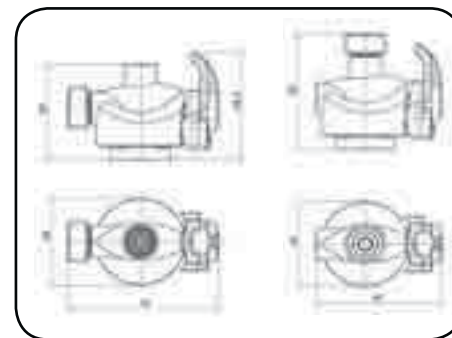
CLIP ADAPTORS

Application

- Connected to the automatic valve of LPG cylinders these adaptors supply gas to high pressure hoses for manifolds or automatic changeovers.

Features

- Double shut off
- Disconnection safety
- Maximum pressure 20 bar (290psig)
- Non return valve (NRV) on certain models
- Horizontal (H) or vertical (V) outlet position



003250

003251AB

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	NRV	Outlet position
ADC20H - 20V - 21H - 21V - 27H						
003250	C1A	CLIP-20	L2A	MAL-NF21,7LH	Y	H
003250AF	C1A	CLIP-20	E6B	MAL-M20x1,5RH	Y	H
003250BC	C1A	CLIP-20	F1B	FEM-G1/4RH	-	H
003251AA	C1A	CLIP-20	F6D	FEM-M14x1,5RH	-	V
003251AB	C1A	CLIP-20	L2A	MAL-NF21,7LH	Y	V
003250AG	C1C	CLIP-21	E6B	MAL-M20x1,5RH	Y	H
003251AC	C1C	CLIP-21	F6D	FEM-M14x1,5RH	-	V
003251AD	C1C	CLIP-21	L2A	MAL-NF21,7LH	Y	V
003250AR	C1C	CLIP-21	L2A	MAL-NF21,7LH	Y	H
003257AB	C1K	CLIP-27	E6B	MAL-M20x1,5RH	Y	H
003257AE	C1K	CLIP-27	L2A	MAL-NF21,7LH	Y	H



003251AB



003250

Cylinder low pressure regulators & adaptors

EUROPA 2S

Application

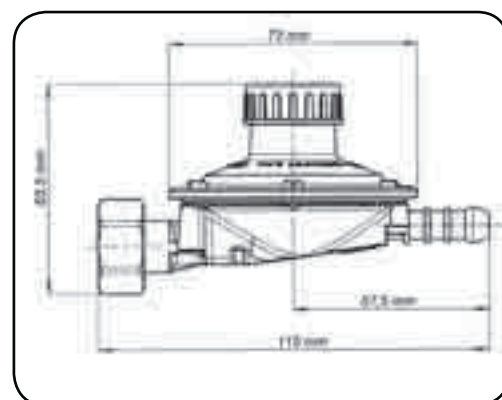
Used for LPG cylinders with a hand wheel cylinder valve, these regulators with variable outlet pressure supply low pressure domestic appliances such as stoves and cookers.

Features

- Fine pressure adjustment
- Filter in the inlet connection

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR
- Nut : brass
- Nut washer: NBR



000200SCN



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)	
					bar	psig	mbar	"wc	kg/h	kBTU/hr
EUROPA 2S										
000200SCN	N1C	NUT-W20LH-25x13,5-G/G	Z1D	HNZ-10-EN	0,2-7,5	3-110	20-80	8-32	1,1	52
000230SCN	N2A	NUT-NF21,8LH-27x14-G/G	Z1D	HNZ-10-EN	0,2-7,5	3-110	20-80	8-32	1,1	52

Cylinder low pressure regulators & adaptors

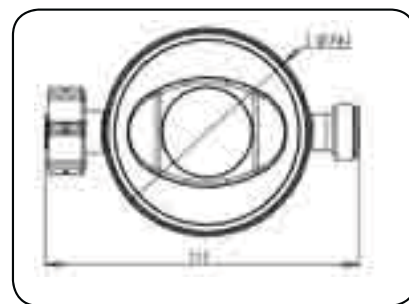
EUROPA 7 - 425

Application

Used for LPG cylinders with a hand wheel cylinder valve, these regulators with fixed outlet pressure supply low pressure domestic appliances such as stoves, cookers, cabinet heaters, BBQ, patio heaters.

Features

- Numerous possible types of inlet and outlet connections (upon request).
- Filter (on certain models) in the inlet connection
- Excess flow safety (EFV) with manual reset, on 425 models
- In case of disconnection or rupture of the appliance hose, the EFV stops the gas flow.



001950CS

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR
- Nut : brass
- Nut washer: NBR



EUROPA 7
001651



425
001950CS

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		EFV	Filter
					bar	psig	mbar	"wc	kg/h	kBTU/hr		
EUROPA 7												
001610AA	N1E	NUT-W20LH-UNI-G/G	Z1E	HNZ-10-UNI	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1	47	-	Y
001660FE	P2D	POLS-USA-R6-SN	Z1D	HNZ-10-EN	0,3-7,5	4-110	30	12	1,1	52	-	-
001668	N4D	NUT-W21,8LH-30x21KBI	E7A	MAL-1/4LH-DIN	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	Y
001604AA	N2A	NUT-NF21,8LH-27x14-G/G	E7A	MAL-1/4LH-DIN	0,3-7,5	4-110	30	12	1	47	-	Y
001608N	N4J	NUT-W21,8LH-28x16,5CH	Z1D	HNZ-10-EN	0,5-7,5	7-110	50	20	1	47	-	Y
001630CD	N4B	NUT-W21,8LH-R5DIN/KLF	E7A	MAL-1/4LH-DIN	0,5-10	7-145	50	20	1	47	-	Y
001614	N1D	NUT-W20LH-25x13,5-G/S	Z1D	HNZ-10-EN	0,3-7,5	4-110	30	12	1	47	-	Y
001630C	N4B	NUT-W21,8LH-R5DIN/KLF	E7A	MAL-1/4LH-DIN	1-16	14-230	50	20	1	47	-	Y
001643AA	N4K	NUT-W21,8LH-27x17MSZ	Z1D	HNZ-10-EN	1-8	14-116	30	12	1,2	57	-	Y
001644	N4K	NUT-W21,8LH-27x17MSZ	Z1D	HNZ-10-EN	1-8	14-116	30	12	1	47	-	Y
001650	N3A	NUT-M21,8LH-30,5BS	Z1D	HNZ-10-EN	0,3-7,5	4-110	29(28-30)	11,5(11-12)	1,3	62	-	Y
001651	P1A	POLM-5/8LH-BS-HN	Z1D	HNZ-10-EN	1-16	14-230	37	15	1,3	62	-	Y
001652	P1A	POLM-5/8LH-BS-HN	Z1D	HNZ-10-EN	1-16	14-230	50	20	1,1	52	-	Y
001660	P2C	POLS-USA-R2-SN	Z1D	HNZ-10-EN	0,3-7,5	4-110	30	12	1,1	52	-	-
001600DL	N2C	NUT-NF21,8LH-R5NF	Z1D	HNZ-10-EN	0,3-7,5	4-110	28	11	1,3	62	-	Y
001601DL	N2C	NUT-NF21,8LH-R5NF	Z1D	HNZ-10-EN	1-16	14-230	37	15	1,5	71	-	Y
425												
001950BS	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	0,3-7,5	4-110	28	11	1,3	62	M	Y
001950CS	N2C	NUT-NF21,8LH-R5NF	E6B	MAL-M20x1,5RH	1-16	14-230	37	15	1,5	71	M	Y

Multi-cylinder systems

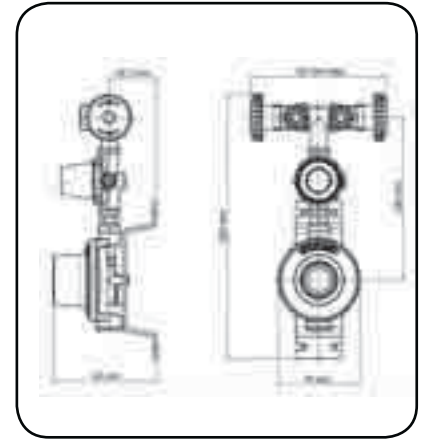
MCH6795-4100 - MCTR6700-6702 - CTR6600

Application

These multi-cylinder systems are used for domestic and commercial LPG multi-cylinder applications.

Features

- These products are all equipped with a bracket for a correct and safe installation on a wall.
- The MCTR6700 and CTR6600 are equipped with an internal non return valve in the inlet connections to avoid any leakage whilst the cylinders are changed.
- Certain regulators are equipped with a low capacity relief valve (LPV)
- Certain manifolds are equipped with a high pressure relief valve (PRV)



006728AB

Construction

- Regulator's body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valves: brass
- Valve pad: NBR or PA (on handweel valves)



MCH6795

006795AB



MCTR6700

006726



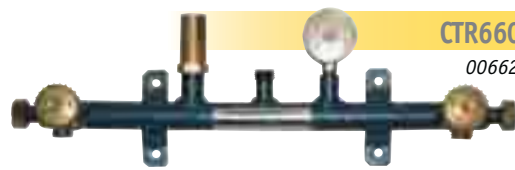
MCTR6702

006728AB



MCH4100

004160



CTR6600

006625

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Outlet pressure (Pa)		Flow rate (LPG)		PRV (Type)	Manometer on outlet	Diaphragm material	Notes
					bar	psig	mbar	"wc	kg/h	kBTU/hr				
MCH6795														
006795AB	E6B	MAL-M20x1,5RH	F2D	FEM-Rp1/2	1-16	14-230	37	15	5	240	LRV	-	NBR	Ball valve
MCH4100														
004160	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	-	-	-	
004161	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	max20	max290	=Pe	=Pe	-	-	-	-	-	
004162	E6B	MAL-M20x1,5RH	E2B	MAL-R1/4	max20	max290	=Pe	=Pe	-	-	-	-	-	
MCTR6700														
006708	L1A	MAL-W20LH-UNI	F2C	FEM-Rp3/8	max16	max230	30(25-45)	12(10-18)	4	190	-	-	NBR	
006726	L1A	MAL-W20LH-UNI	F2D	FEM-Rp1/2	max16	max230	30(25-45)	12(10-18)	10	475	PRV	-	NBR	
MCTR6702														
006728AB	L1A	MAL-W20LH-UNI	F2C	FEM-Rp3/8	max16	max230	29(28-30)	11,5(11-12)	4	190	-	-	NBR	2 Stages
CTR6600														
006624	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	-	-	-	2Cyl-30outlets
006625	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	2Cyl-30outlets
006627	L2A	MAL-NF21,7LH	L2A	MAL-NF21,7LH	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	2Cyl-30outlets
006643	L2A	MAL-NF21,7LH	L2A	MAL-NF21,7LH	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	3Cyl-30outlets
006652	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	-	-	-	3Cyl-30outlets
006653	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	3Cyl-30outlets
006682	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	-	-	-	4Cyl-30outlets
006683	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	4Cyl-30outlets
006684	L2A	MAL-NF21,7LH	L2A	MAL-NF21,7LH	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	4Cyl-30outlets
006692	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	5Cyl-30outlets
006693	L1A	MAL-W20LH-UNI	L1A	MAL-W20LH-UNI	max20	max290	=Pe	=Pe	-	-	-	-	-	5Cyl-30outlets
006694	L2A	MAL-NF21,7LH	L2A	MAL-NF21,7LH	max20	max290	=Pe	=Pe	-	-	PRV	MANO-DRY G1/4	-	5Cyl-30outlets

492 MEDIUM CAPACITY OPSO VALVES

Application

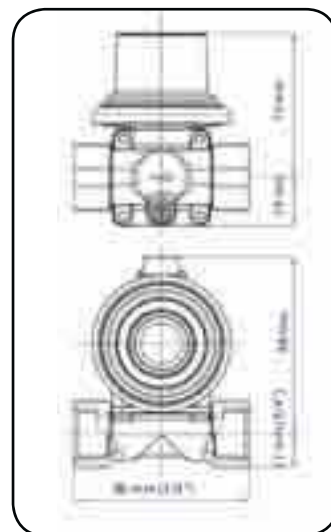
- These OPSO valves are used LPG, Natural gas or SNG installations. They can also be used with other non aggressive gases (air, nitrogen,...).
- They protect from overpressures generated by a malfunctioning of the regulator (debris on the seat, ice blocking,...) or a re-liquefaction of LPG in the pipes.
- Low pressure models (492L) are generally installed upstream the regulator and a sensing pipe is connected to the downstream pressure (external sensing).
- High pressure models (492H) are installed either upstream the regulator (external sensing) or downstream the regulator (internal sensing)
- Capacity: up 100 kg/h LPG at 2 bar supply pressure and 50 kg/h at 0,75 bar.

Features

- Operation indicator
- Easy reset system. Sealable
- Test point (optional)
- Vent protection

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Valve pad: NBR



004394AB



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Maximum supply pressure (Open valve)		Maximum supply pressure (Closed valve)		Impulse	Impulse connection	OPSO	
					bar	psig	bar	psig			bar or mbar	psig or "wc
OPSO492H												
004393AA	F3D	FEM-Rc1/2	F3D	FEM-Rc1/2	4	58	18	250	Internal	-	2,5(2-4)bar	36(29-58)psig
004393AB	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	4	58	18	250	Internal	-	2,5(2-4)bar	36(29-58)psig
004393AC	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	4	58	18	250	Internal	-	2,5(2-4)bar	36(29-58)psig
004393AD	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	4	58	18	250	Internal	-	2,5(2-4)bar	36(29-58)psig
004393AE	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	18	250	18	250	External	PLUG G1/8	2,5(2-4)bar	36(29-58)psig
OPSO492L												
004394AA	F3D	FEM-Rc1/2	F3D	FEM-Rc1/2	18	250	18	250	External	PLUG G1/8	100(80-140)mbar	40(32-56)"wc
004394AB	F3E	FEM-Rc3/4	F3E	FEM-Rc3/4	18	250	18	250	External	PLUG G1/8	100(80-140)mbar	40(32-56)"wc
004394AC	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	18	250	18	250	External	PLUG G1/8	100(80-140)mbar	40(32-56)"wc
004394AD	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	18	250	18	250	External	PLUG G1/8	100(80-140)mbar	40(32-56)"wc

6592 - 6595 LARGE CAPACITY OPSO VALVES

○ Application

These OPSO valve can be mounted on industrial regulators 1391-1392-1395-1492-1495 and BP2402FC in order to protect the installation from overpressures generated by

a malfunctioning of the regulator (debris on the seat, ice blocking,...) or a re-liquefaction of LPG in the pipes.

○ Features

- 6592BM and 6595BM can also provide an UPSO safety.
- Impulse connection: pipe 6mm
- Easy mounting
- CE marked following PED 97/23/CE European directive

○ Construction

- Body and cover: die cast aluminum alloy
- Diaphragm: NBR
- Valve pad: NBR



6592H
051008AB



6595H
051008AD

Code	OPSO		UPSO		Compatible regulators
	bar or mbar	psig or "wc	mbar	psig or "wc	
6592H					
051008AB	2(1-3)bar	29(14-44)psig	-	-	1391HF, 1392HF, 1392HB
051008AL	3(2,5-4)bar	44(36-58)psig	-	-	1391HF, 1392HF, 1392HB
6595H					
051008AD	2(1-3)bar	29(14-44)psig	-	-	1395HB
051008AH	3(2,5-4)bar	44(36-58)psig	-	-	1395HB
6592BM					
051008AA	70(40-90)mbar	28(16-36)"wc	15(10-90)	6(4-36)"wc	BP2402FC, 1492BF
051008AR	100(60-160)mbar	1,5(1-2,3)psig	28(10-90)	11(4-36)"wc	BP2402FC, 1492BF
051008AE	450(250-650)mbar	6,5(3,5-9,5)psig	-	-	BP2402FC, 1492MF
051008AG	450(250-650)mbar	6,5(3,5-9,5)psig	220(90-550)	3,2(1,3-8)psig	BP2402FC, 1492MF
6595BM					
051008BB	70(40-90)mbar	28(16-36)"wc	15(10-90)	6(4-36)"wc	1495BF
051008BC	100(60-160)mbar	1,5(1-2,3)psig	28(10-90)	11(4-36)"wc	1495BF
051008AF	450(250-650)mbar	6,5(3,5-9,5)psig	-	-	1495MB
051008BA	450(250-650)mbar	6,5(3,5-9,5)psig	220(90-550)	3,2(1,3-8)psig	1495MB

3814 UPSO VALVES

Application

- This UPSO safety valve is mainly used to protect one single gas appliance, supplied with Natural Gas, LPGas or SNG.
- It provides 2 functions:
 - 1) manually operated shut off valve
 - 2) manually resettable shut-off valve which stops the gas flow when:

- the upstream gas supply pressure is too low (lack of gas supply, clogged filter,...).
- an excess of flow-rate occurs (rupture of downstream pipes or hoses, oversized appliance,...).

Features

- Filter in the inlet connection
- Manual resetting by knob rotation
- Possible lock-sealing of the knob

Construction

- Body and cover: die cast zinc alloy
- Diaphragm: NBR
- Seat pad: NBR



3814

3814010

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Flow rate (LPG)		Flow rate (NG)		UPSO	
					mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH	mbar	"wc
3814												
3814010	E1D	MAL-G1/2RH	E1D	MAL-G1/2RH	19-50	8-20	1,8	86	1,5	53	8-14	3,2-5,6
3814004	F2C	FEM-Rp3/8	F2C	FEM-Rp3/8	19-50	8-20	1,8	86	1,5	53	8-14	3,2-5,6

SMP27 UPSO VALVES

Application

- This UPSO safety valve is mainly used to protect a complete domestic or commercial gas installation supplied by Natural Gas, LPGas or SNG.
- It stops the gas flow when:
 - the upstream gas supply pressure is too low.
 - an excess of flow-rate occurs (rupture of downstream pipes or hoses, oversized appliance,...).

Features

- Geometry adapted to the mounting:
 - in line: SMP27L
 - right angle: SMP27R
- Types or resetting: Automatic (A) or manual (M).

Construction

- Body: die cast aluminium alloy
- Cover: steel
- Protection: high resistance cataphoresis coating
- Diaphragm: NBR
- Seat pad: NBR



SMP27L

052392AB



SMP27R

052393AA

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Flow rate (LPG)		Flow rate (NG)		UPSO		
					mbar	"wc	kg/h	kBTU/hr	(n)m ³ /h	SCFH	Type	mbar	"wc
SMP27L													
052390AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	19-27	8-11	-	-	6	220	M	12,5	5
052390AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	37-50	15-20	7,2	340	-	-	M	27,5	11
052392AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	19-27	8-11	-	-	6	220	A	12,5	5
052392AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	37-50	15-20	7,2	340	-	-	A	27,5	11
SMP27R													
052391AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	19-27	8-11	-	-	6	220	M	12,5	5
052391AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	37-50	15-20	7,2	340	-	-	M	27,5	11
052393AB	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	19-27	8-11	-	-	6	220	A	12,5	5
052393AA	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	37-50	15-20	7,2	340	-	-	A	27,5	11

Safety devices

HP RELIEF VALVES

Application

- These high pressure relief valves are mainly used in LPG installations.
- They are generally fitted on a pipe where gas or liquid LPG can be trapped between 2 valves (e.g. multicylinder manifold)
- They can also be used, downstream a high pressure regulator, to discharge overpressures due debris on the seat, reliquefaction or icing

Construction

- Body: brass
- Seat pad: NBR

Code	Inlet code	Inlet connection	Inlet pressure (Pe)		PRV (Opening pressure)	
			bar	psig	bar	psig
HP RELIEF VALVE						
004301	E2C	MAL-R3/8	max25	max360	3	44
004302	E2D	MAL-R1/2	max25	max360	18	260
004303	E2C	MAL-R3/8	max25	max360	18	260
004304AA	E5B	MAL-1/4NPT	max25	max360	17	245



HP RELIEF VALVE

004301

LP RELIEF VALVES

Application

- These low pressure relief valves are mainly used in high capacity LPG, Natural gas or SNG installations when this function is not provided by the regulator (1395BB for instance).
- They discharge overpressures due to thermal expansion and avoid any unnecessary OPSO triggering.

Construction

- Body and cover: die cast aluminium alloy
- Diaphragm: NBR
- Seat pad: NBR

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	PRV (Opening pressure)	
					mbar	"wc
LP RELIEF VALVE						
051101BA	F2F	FEM-Rp1	F2F	FEM-Rp1	50(26-63)	20(10-25)
051101BB	F2F	FEM-Rp1	F2F	FEM-Rp1	70(60-130)	28(24-52)



LP RELIEF VALVE

051101BA

BACK CHECK VALVE

Application

- These non return valves are mainly used in high pressure LPG piping

Construction

- Body: brass
- Seat pad: NBR

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)	
					bar	psig
BACK CHECK VALVE						
005659	F3B	FEM-Rc1/4	E2B	MAL-R1/4	max16	max230



BACK CHECK VALVE

005659

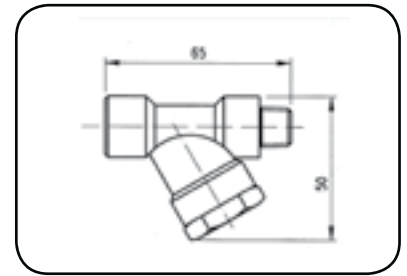
FILTERS AND CARTRIDGES

Application

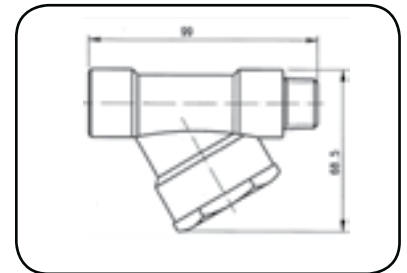
- Used with LPG, natural gas, nitrogen and air.
- They are intended to be installed upstream to the regulator in order to protect them from dirt entering.
- Their robust construction allows the products to withstand pressures above 20 bar (290 psig). Test pressure 50 bar.
- Certain models are equipped with a magnet which traps magnetic metallic swarfs.
- The cartridges are delivered with an O-ring.

Construction

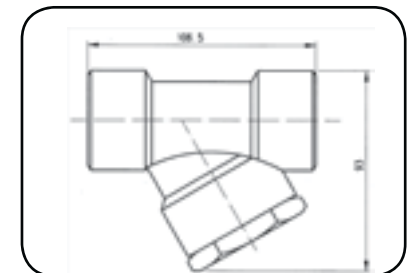
- Body :hot stamped brass
- Cartridge: sintered brass



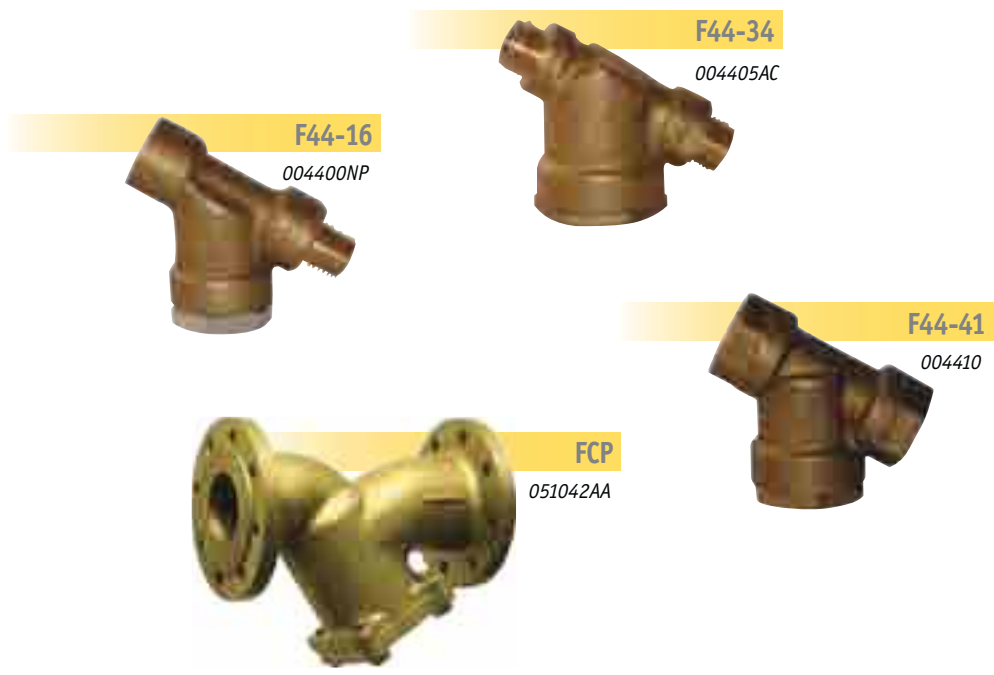
004400



004401



004410



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Filter µm
					bar	psig	
F44-16							
004400	F2B	FEM-Rp1/4	E2B	MAL-R1/4	max20	max290	80
004400M	F2B	FEM-Rp1/4	E2B	MAL-R1/4	max20	max290	80 + MAGNET
004400NP	F5B	FEM-1/4NPT	E5B	MAL-1/4NPT	max20	max290	80
004405	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	max20	max290	80
004405AB	N6A	NUT-M20x1,5RH	E6B	MAL-M20x1,5RH	max20	max290	50
004405M	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	max20	max290	80 + MAGNET
F44-34							
004401	F2D	FEM-Rp1/2	E2D	MAL-R1/2	max20	max290	80
004401NP	F5D	FEM-1/2NPT	E5D	MAL-1/2NPT	max20	max290	80
004405AC	E1D	MAL-G1/2RH	E1D	MAL-G1/2RH	max20	max290	80
004405AE	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	max20	max290	80
F44-41							
004410	F2F	FEM-Rp1	F2F	FEM-Rp1	max20	max290	80
004410NP	F5F	FEM-1NPT	F5F	FEM-1NPT	max20	max290	80
FCP							
051042AA	B2L	FFLG PN40-DN50	B2L	FFLG PN40-DN50	max16	max230	200



004450

Code	Filter µm	To be used with
FC44		
004450	80	F44-16
004451	80	F44-34
004452	80	F44-41
004454	50	F44-16

PRESSURE GAUGES

Application

- These gauges (manometers) can be installed on a regulator or on piping in LPG, Natural gas, SNG installations.
- Certain models have a multi-scale (bar – psig) display.
- For a better reliability, certain models have the housing filled with oil.

Code	Inlet code	Inlet connection	Inlet pressure (Pe)		Type	Diameter
			bar	psig		
MANO-HP						
006956BX	E2B	MAL-R1/4	0-4	0-58	OIL	68
006956XX	E5B	MAL-1/4NPT	0-4	0-58	OIL	68
006958BX	E2B	MAL-R1/4	0-4	0-58	DRY	52
006958XX	E5B	MAL-1/4NPT	0-4	0-58	DRY	52
006960XX	E5B	MAL-1/4NPT	0-16	0-230	OIL	68
006901	E1B	MAL-G1/4RH	0-4	0-58	DRY	52
006901AP	E1B	MAL-G1/4RH	0-4	0-58	DRY	42
006902AB	E1B	MAL-G1/4RH	0-25	0-360	DRY	42
P164100	E6A	MAL-M10X1RH	0-3	0-44	DRY	52
P162400	E6A	MAL-M10X1RH	0-10	0-145	DRY	52
P162100	E6A	MAL-M10X1RH	0-1,5	0-22	DRY	52
P162300	E6A	MAL-M10X1RH	0-6	0-87	DRY	52
P160420	E1B	MAL-G1/4RH	0-6	0-87	DRY	52
006955AX	E5B	MAL-1/4NPT	0-25	0-360	OIL	68



MANO-HP
006956BX

Code	Inlet code	Inlet connection	Inlet pressure (Pe) mbar	Type	Diameter
006903	E1B	MAL-G1/4RH	0-250	DRY	62
006904	E1B	MAL-G1/4RH	0-100	DRY	62
006903AC	E1B	MAL-G1/4RH	0-400	DRY	62
P160440	E1B	MAL-G1/4RH	0-60	DRY	52
P161800	E6A	MAL-M10X1RH	0-150	DRY	62
P161900	E6A	MAL-M10X1RH	0-300	DRY	62
P162000	E6A	MAL-M10X1RH	0-500	DRY	62
P162800	E6A	MAL-M10X1RH	0-60	DRY	62



MANO-BP

P161900

CHANGEOVER INDICATORS

Application

- They are installed on the piping, between the high-pressure automatic changeover and the second stage (low-pressure) regulator.
- These indicators allow a remote observation of the empty "service" cylinder.

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Service - Reserve pressures	
					bar	psig
P95						
P009502	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	S:1,5-R:0,8	S:22-R:12
P96						
P009600	E6A	MAL-M10X1RH	-	-	S:1,5-R:0,8	S:22-R:12



P95
P009502



P96
P009600

RM1 GAUGE VALVE

Features

This gauge valve, when closed, allows depressurising of the gauge.

Code	Inlet code	Inlet connection	Outlet code	Outlet connection
RM1				
051064AA	E1B	MAL-G1/4RH	F2B	FEM-Rp1/4



RM1
051064AA

METERS

Application

- These gas meters can be used with LPG in vapour phase, Natural gas or SNG.
 - They measure volume of gas (Vm) in m3/h.
 - The conversion to volume in "normal" conditions is:
 $V_n = V_m \times 273 \times (P_{abs}) / (1013 \times (273 + T_m))$
 - The conversion to volume in "standard" conditions is:
 $V_s = V_m \times 288 \times (P_{abs}) / (1013 \times (273 + T_m))$
- where:
- Vm is the measured volume
 - Pabs is the absolute pressure (ambient pressure + relative pressure) in mbar.
 - Tm is the temperature of the gas in °C

DIAPHRAGM METERS



ROTARY METERS



Code	Type	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		Flow rate	
						bar	psig	m3/h	CFH
DIAPHRAGM METERS									
P038000	G4	-	JPC DN20	-	JPC DN20	max0,5	max7	6	210
P038002	G6	-	JPC DN32	-	JPC DN32	max0,5	max7	10	350
P038003	G10	-	JPC DN32	-	JPC DN32	max0,5	max7	16	560
P038004	G16	-	JPC DN50	-	JPC DN50	max0,2	max3	25	880
P038005	G16	B1L	FFLG PN16-DN50	B1L	FFLG PN16-DN50	max0,5	max7	25	880
P038006	G25	-	JPC DN50	-	JPC DN50	max0,2	max3	40	1410
P038007	G25	B1L	FFLG PN16-DN50	B1L	FFLG PN16-DN50	max0,5	max7	40	1410
P038010	G40	B1P	FFLG PN16-DN80	B1P	FFLG PN16-DN80	max0,2	max3	65	2300
P038009	G40	B1P	FFLG PN16-DN80	B1P	FFLG PN16-DN80	max0,5	max7	65	2300
6100022	G2,5	E8E	MAL-G3/4-JSC-CONE-DN16	E8E	MAL-G3/4-JSC-CONE-DN16	max1,5	max22	4	140
P038211	G1,6	E6Q	MAL-M30X2RH	E6Q	MAL-M30X2RH	max0,1	max1,5	2,5	90
ROTARY METERS									
P039000	G16 H & V	F2K	FEM-Rp1.1/2	F2K	FEM-Rp1.1/2	max12	max175	25	880
P039001	G25 H & V	F2K	FEM-Rp1.1/2	F2K	FEM-Rp1.1/2	max12	max175	40	1410
P039002	G40 H & V	F2K	FEM-Rp1.1/2	F2K	FEM-Rp1.1/2	max12	max175	65	2300
P039003	G65 H	B1L	FFLG PN16-DN50	B1L	FFLG PN16-DN50	max16	max230	100	3530
P039004	G65 V	B1L	FFLG PN16-DN50	B1L	FFLG PN16-DN50	max16	max230	100	3530
FITTING									
Z0600001	-	F6Q	FEM-M30X2RH	E5D	MAL-1/2NPT	-	-	-	-

HOSES

○ Application

- RPGT6400 are high pressure hoses (pigtailes) used to connect LPG cylinders to manifolds, automatic changeovers or multicylinders systems.
- P032 is a low pressure tube used to connect low pressure regulators to gas appliances.

RPGT6400

006400



P032

P032100



Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)		length cm
					bar	psig	
RPGT6400							
006400	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	50
006425	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	60
006402	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	70
006426	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	90
006404	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	100
006415	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	120
006405	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	150
006406	N1B	NUT-W20LH-25x13,5	N1B	NUT-W20LH-25x13,5	max16	max230	200
P032							
P032100	-	∅ int. 6 - ∅ ext. 12	-	∅ int. 6 - ∅ ext. 12	max0,2	max3	25m

MANUALLY OPERATED VALVES

620 BALL VALVES

Application

- Used for LPG, natural gas, nitrogen, air
- Pressure: from 6 mbar to 20 bar (2,4 wc" to 290 psig)
- MOP 5-20

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)	
					bar	psig
620 BALL VALVES						
6200120	F2B	FEM-Rp1/4	F2B	FEM-Rp1/4	max20	max290
6200130	F2C	FEM-Rp3/8	F2C	FEM-Rp3/8	max20	max290
6200140	F2D	FEM-Rp1/2	F2D	FEM-Rp1/2	max20	max290
6200160	F2E	FEM-Rp3/4	F2E	FEM-Rp3/4	max20	max290
6200180	F2F	FEM-Rp1	F2F	FEM-Rp1	max20	max290
6200200	F2J	FEM-Rp1.1/4	F2J	FEM-Rp1.1/4	max20	max290
6200220	F2K	FEM-Rp1.1/2	F2K	FEM-Rp1.1/2	max20	max290
6200260	F2L	FEM-Rp2	F2L	FEM-Rp2	max20	max290

Construction

- Body and ball: brass
- Ball seat: PTFE
- O ring: NBR



621 BALL VALVES

Application

- Used for LPG, natural gas, nitrogen, air
- Pressure: 17, 25 bar (250 psig) max. 600 WOG
- UL listed 61 WL

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)	
					bar	psig
621 BALL VALVES						
6210020	F5B	FEM-1/4NPT	F5B	FEM-1/4NPT	max17,25	max250
6210030	F5C	FEM-3/8NPT	F5C	FEM-3/8NPT	max17,25	max250
6210040	F5D	FEM-1/2NPT	F5D	FEM-1/2NPT	max17,25	max250
6210060	F5E	FEM-3/4NPT	F5E	FEM-3/4NPT	max17,25	max250
6210080	F5F	FEM-1NPT	F5F	FEM-1NPT	max17,25	max250
6210100	F5J	FEM-1.1/4NPT	F5J	FEM-1.1/4NPT	max17,25	max250
6210120	F5K	FEM-1.1/2NPT	F5K	FEM-1.1/2NPT	max17,25	max250
6210160	F5L	FEM-2NPT	F5L	FEM-2NPT	max17,25	max250

Construction

- Body and ball: brass
- Ball seat: PTFE
- O ring: NBR



812 - 8121 - 813 PAD VALVES

Application

- Used mainly for LPG, can also be used with Natural gas and SNG.
- Pressure: 20mbar (8"wc) to 20bar (290 psig)
- 812 valve is provided with a "child" safety. The hand wheel must be pushed before rotation.

Construction

- Body : brass
- Pad: NBR

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Flow rate in kg/h (depending on pressure)						Accessories
					Butane		Propane				
					28mbar	112mbar	37mbar	148mbar	1,5bar	3bar	
812											
0812000	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1,5	4	1,5	4	20	40	2x12mm Braz Fit
0812023	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1,5	4	1,5	4	20	40	-
8121											
3812000	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1,5	4	1,5	4	20	40	2x12mm Braz Fit
3812023	E6B	MAL-M20x1,5RH	E6B	MAL-M20x1,5RH	1,5	4	1,5	4	20	40	-
813											
0813000	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	4	8	4	8	40	70	2x18mm Braz Fit
0813002	E1E	MAL-G3/4RH	E1E	MAL-G3/4RH	4	8	4	8	40	70	-



FITTINGS

Application

- These fittings can be used in LPG, Natural gas and SNG installations.

Compression fitting for copper

Code	Inlet code	Inlet connection	Outlet code	Outlet connection	Inlet pressure (Pe)	
					bar	psig
RC-BC5000						
005000	E2C	MAL-R3/8	K1D	PIPE-10-RC	max16	max230
005002	E2C	MAL-R3/8	K1F	PIPE-14-RC	max16	max230
005011	E2D	MAL-R1/2	K1F	PIPE-14-RC	max16	max230
005033	E2B	MAL-R1/4	K1F	PIPE-14-RC	max16	max230



Hose nozzle

RC-HN5400						
005420XZ	E1C	MAL-G3/8RH	Z1D	HNZ-10-EN	max16	max230
005425	E2D	MAL-R1/2	Z1D	HNZ-10-EN	max16	max230



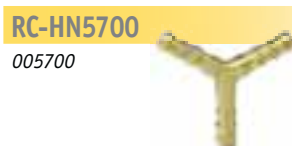
Hose nozzle (nut)

RC-HN5600						
005600	N1B	NUT-W20LH-25x13,5	Z1D	HNZ-10-EN	max16	max230
005602	N7C	NUT-G3/8LH-DIN	Z1D	HNZ-10-EN	max16	max230



T and Y hose nozzle

RC-HN5700						
005700	Z1D	HNZ-10-EN	Z1D	HNZ-10-EN	max16	max230
005720	Z1D	HNZ-10-EN	Z1D	HNZ-10-EN	max16	max230



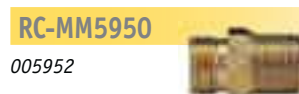
Cylinder connection

RC-EM5900						
005900	N1B	NUT-W20LH-25x13,5	E2B	MAL-R1/4	max16	max230
005902	N1E	NUT-W20LH-UNI-G/G	E2B	MAL-R1/4	max16	max230
005905	N2A	NUT-NF21,8LH-27x14-G/G	E2B	MAL-R1/4	max16	max230



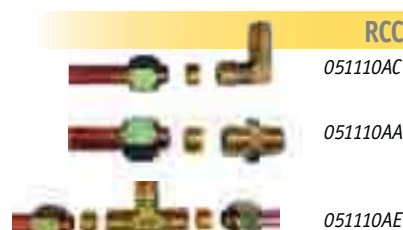
Male adaptators

RC-MM5950						
005950	E2B	MAL-R1/4	L1A	MAL-W20LH-UNI	max16	max230
005951	E2C	MAL-R3/8	L1A	MAL-W20LH-UNI	max16	max230
005952	E2D	MAL-R1/2	L1A	MAL-W20LH-UNI	max16	max230



Oggiva compression fitting (copper tube)

RCC							
051110AA	E1B	MAL-G1/4RH	K4B	PIPE-6-OG-COP	max16	max230	in line
051110AB	E1B	MAL-G1/4RH	K4D	PIPE-10-OG-COP	max16	max230	in line
051110AC	E1B	MAL-G1/4RH	K4B	PIPE-6-OG-COP	max16	max230	90°
051110AD	E1B	MAL-G1/4RH	K4D	PIPE-10-OG-COP	max16	max230	90°
051110AE	E1B	MAL-G1/4RH	K4D	PIPE-10-OG-COP	max16	max230	T



Oggiva compression fitting (stainless steel tube)

RCA							
051110AF	E1B	MAL-G1/4RH	K6B	PIPE-6-OG-STEEL	max16	max230	in line
051110AG	E1B	MAL-G1/4RH	K6D	PIPE-10-OG-STEEL	max16	max230	in line
051110AH	E1B	MAL-G1/4RH	K6B	PIPE-6-OG-STEEL	max16	max230	90°
051110AJ	E1B	MAL-G1/4RH	K6D	PIPE-10-OG-STEEL	max16	max230	90°
051110AL	E1B	MAL-G1/4RH	K6D	PIPE-10-OG-STEEL	max16	max230	T

POULTRY EQUIPMENT

Application

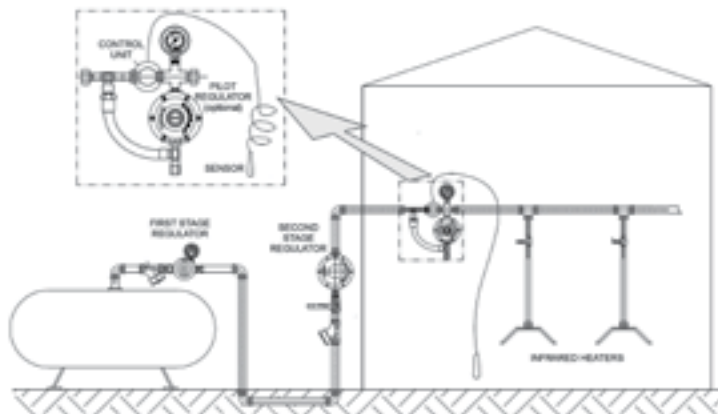
- These products are mainly used in poultry, pig and greenhouse farming to control the room temperature generated by LPG or
- Natural gas heaters.
- They can be used in other similar temperature control applications. For basic installations a thermostatic head without capillary tube and sensor, is proposed.
- The sensing element is integrated in the thermostatic head.

Features

- Very simple and reliable system
- No electricity required
- Accurate control of the temperature
- Temperature range: 15 to 38°C

Functioning

- The liquid in the sensor expands proportionally to the room temperature.
- The liquid expansion is transmitted to the thermostatic head via a capillary tube.
- The thermostatic head pushes on the control valve, proportionally to the difference between the set temperature and the room temperature. Then, the gas flow rate is regulated proportionally to this difference of temperature.



Typical tank LPG poultry installation

- In order to maintain the burners lighted, a pilot flow rate is given either by a pilot regulator or by a calibrated hole drilled in the control valve.
- The calibrated hole dimension must be specify when ordering.

THERMOSTATIC HEAD AND SENSING

803710



CB55002



CONTROL VALVE

VPD00C29



VPG95B01



Code	Description
Thermostatic head and sensing	
803710	Thermostatic head with integral sensing (no capillary tube and no sensor)
VPD00C29	Thermostatic head with 1.25 m capillary tube and with sensor
VPD00C30	Thermostatic head with 8 m capillary tube and with sensor
Control valve	
VBG95B01	Control valve, connection F2C (FEM Rp 3/8) without pilot hole (diam. 0,2 to 0,3mm)
CB55002	Control valve, connection F2C (FEM Rp 3/8) with pilot hole (diam. 0,2 to 0,3mm)

GAS LEAK DETECTORS

LD73 - KT73 - LPG - SNG - Natural gas Detectors

Application

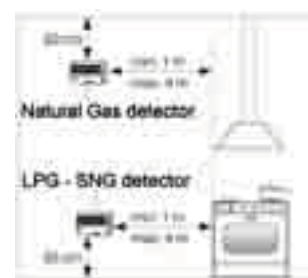
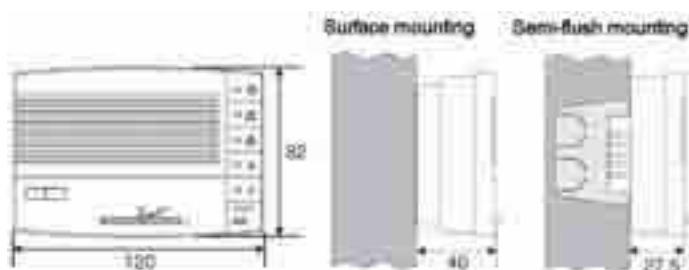
- These products are installed indoor to prevent against gas leakages.
- Gas detector installation can be done with a "single" detector or by a "master" and several "slave" detectors.

Features

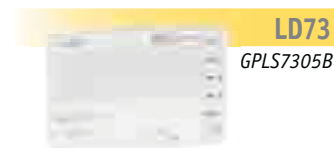
- These products comply with the most severe standards and use the last generation sensor technology.
- They can be semi-flush mounted, using the optional support GSPE7390B.
- Certain models can provide:
 - 3 levels of gas concentration indication by buzzer and LED
 - an alarm memory
 - an appliance replacement warning
 - a fault indicator
 - a relay for Normally Open or Normally Closed solenoid valves
 - a Normally Open solenoid valve Rp1/2 or Rp3/4

Technical characteristics

Supply voltage	230V (50 or 60 Hz)
Relay contact capacity (if any)	8 (2) A / 250V 6 (2) A/250V when semi-flush mounted
Protection category	IP42 IP40 when semi-flush mounted
Insulation	Double insulation (Class 2)
Operating temperature	-10°C to +40°C
Operation humidity	90% RH max
Alarm level	10% LEL (Lower Explosive Limit)
Sensor warm-up time	1 minute
Sensor life time	5 years
Buzzer sound level	85 dB at 1m
Maximum BUS connections (if any)	1 master unit, 14 slave units
Maximum BUS connection length	1km with 2 wires of 1.5 mm2 section
Reference standards for CE marking	LVD EN50194 EMC EN 50270 CEI 216-8 (semi-flush mounted)
Maximum BUS connection length	1km with 2 wires of 1.5 mm2 section



Code	Type of gas	Single-Master-Slave	Bus	Relay	Solenoid valve	Concentration levels	Replacement warning	Fault indication	Alarm memory
LD73									
GPLS7305B	LPG or SNG	Single-Slave	YES	NO	NO	3	YES	YES	YES
GPLR7306B	LPG or SNG	Single-Master	YES	YES	NO	3	YES	YES	YES
GPLR7307B	LPG or SNG	Single	NO	YES	NO	1	NO	YES	NO
GNS7305B	Natural Gas	Single-Slave	YES	NO	NO	3	YES	YES	YES
GNR7306B	Natural Gas	Single-Master	YES	YES	NO	3	YES	YES	YES
GNR7307B	Natural Gas	Single	NO	YES	NO	1	NO	YES	NO
KT73 (LD73 + solenoid valve)									
GPL7306K34	LPG or SNG	Single-Master	YES	YES	Rp 3/4	3	YES	YES	YES
GPL7306K12	LPG or SNG	Single-Master	YES	YES	Rp 1/2	3	YES	YES	YES



... GAS LEAK DETECTORS

LD74 : Carbon monoxide detectors

○ Application

- These products are installed indoor to prevent against dangerous concentration of carbon monoxide (CO).
- Carbon monoxide is generally generated by non-correctly ventilated combustion. It is an odourless gas and it is a strong poison which can cause severe diseases or death.

○ Features

- Equipped with a relay to monitor a fan
- Fault indicator
- Test button



Technical characteristics

Product code	COR7304
Supply voltage	230V (50 or 60 Hz)
Relay contact capacity (if any)	5 (2) A / 250V
Protection category	IP42
Insulation	Double insulation (Class 2)
Operating temperature	-10°C to +40°C
Operation humidity	90% RH max
Alarm level and time	50ppm: 90 minutes 300ppm: 3 minutes
Sensor life time	5 years
Buzzer sound level	85 dB at 1m
Reference standards for CE marking	LVD EN50191 EMC EN 50270

