



Natural Gas Solutions

Pressure Regulators for Natural Gas

2022-2023 EDITION



A Cavagna Group Company

Solutions



LPG SOLUTIONS

COMPRESSED GASES SOLUTIONS

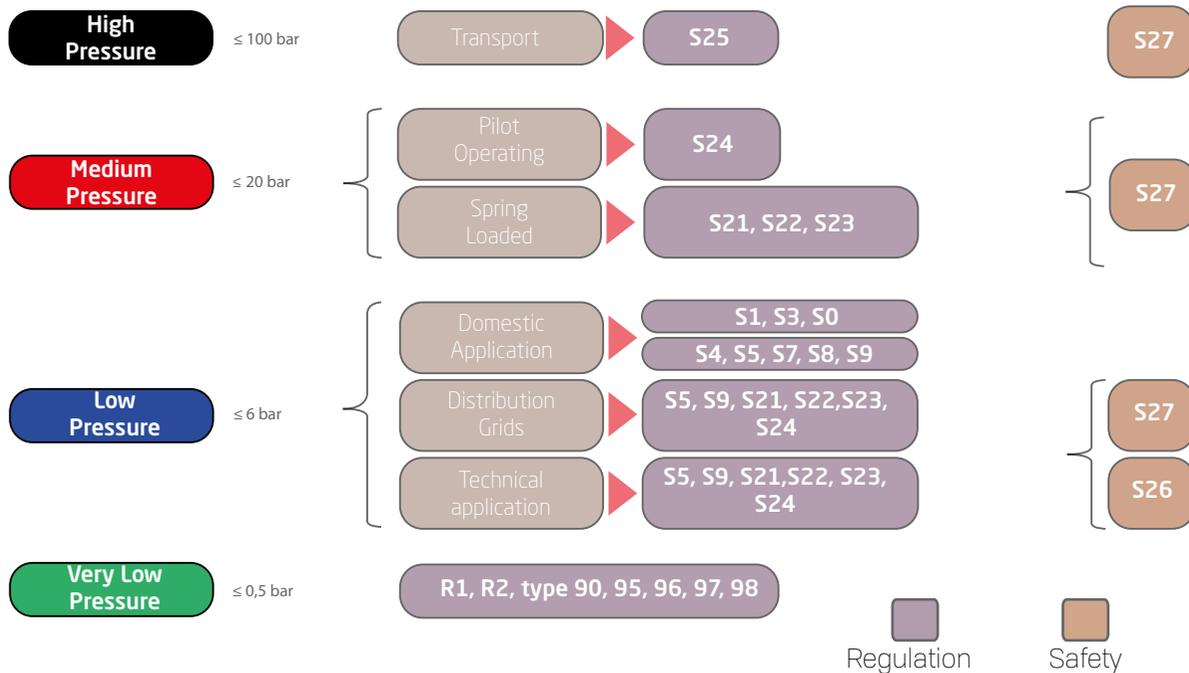
NATURAL GAS SOLUTIONS

ALTERNATIVE FUEL SYSTEMS

GAS METERING SOLUTIONS

INDUSTRIAL PROCESS MANAGEMENT





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About Mesura

Mesura SaS was founded in Forbach in 1949. Over the years, this family-owned company from eastern France has acquired a proven know-how in the field of gas regulators for every type of application. With more than 70 years of experience, Mesura has built up a solid reputation both nationally and internationally and is now recognized throughout the world.

Today, Mesura SaS is a company of the Cavagna Group, one of the top manufacturers of solutions for all types of gas. Since the acquisition in 2012, leveraging the production, research and development capabilities of the Cavagna Group, the product range has expanded throughout the whole Natural Gas supply chain. Therefore, becoming the reference brand of the Cavagna Group for the line of products and solutions for Natural Gas and sustainable energy measurement and regulating.

With manufacturing facilities in France, Italy and a dedicated production in India for the Eastern markets.

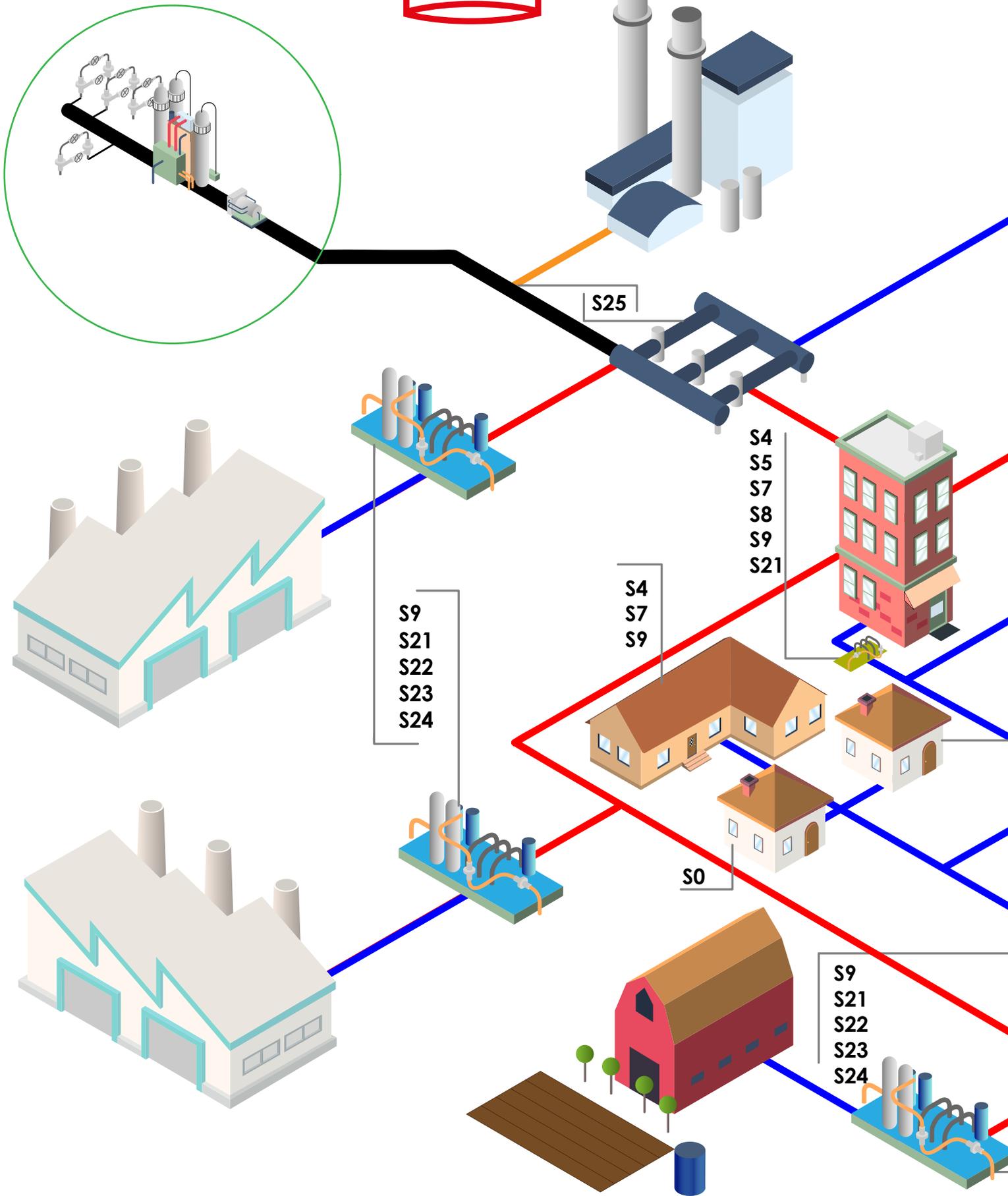
About Cavagna Group

Founded and run as a family run business, the Cavagna Group has been in operation since 1949, carrying the mechanical excellence of the 'Made in Italy' essence and authenticity around all continents of the Globe.

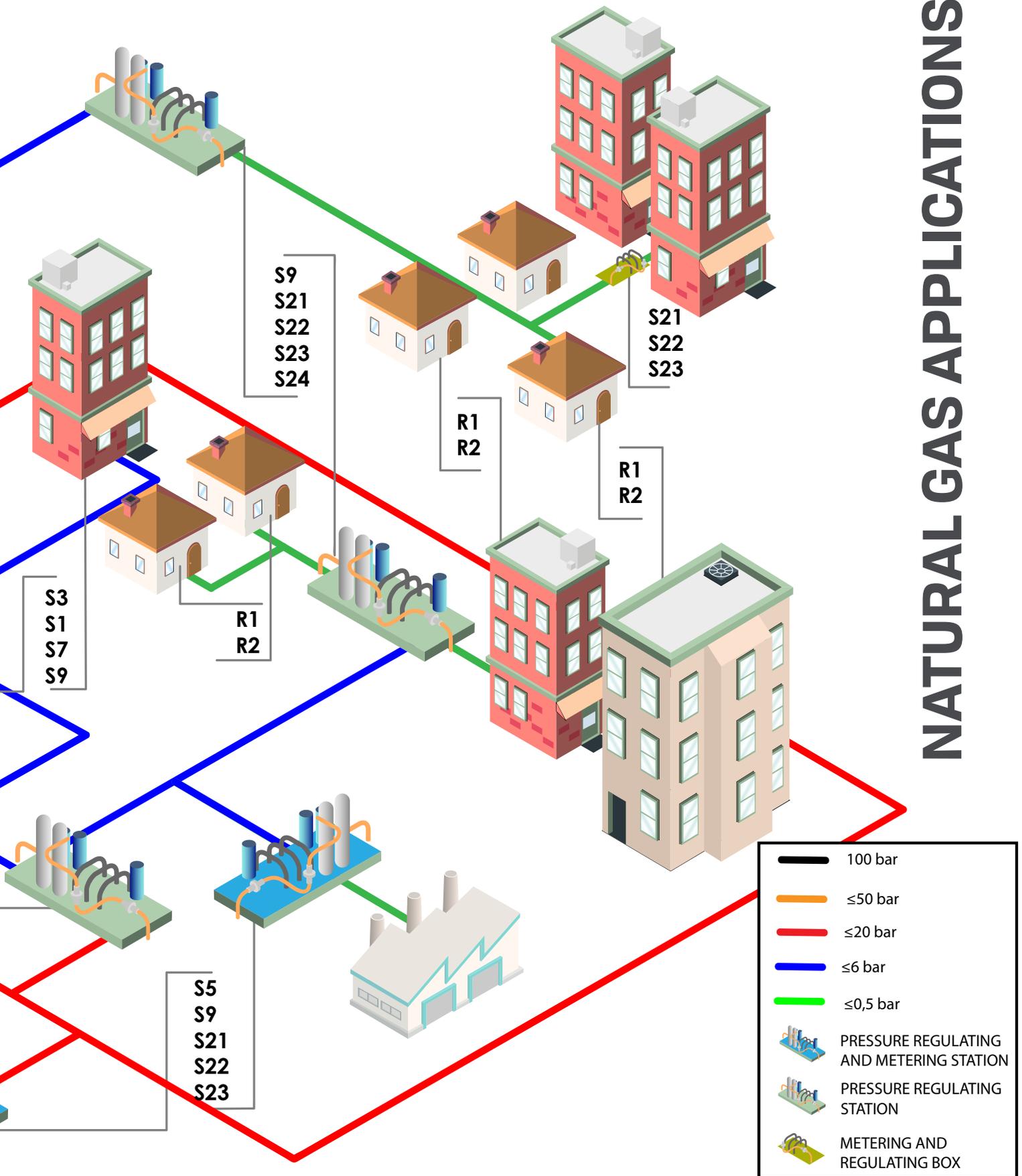
Cavagna Group is a key industrial partner and enabler for the regulation, control, Industrial Process Management and metering being safely used in all types of gases, in every step of different supply chains, with a continued 'big picture' view of the Future of Energy. Embedded with the social conscience and responsibility to provide products of the utmost dependable quality whether it be for Energy gases, Renewable, Alternative Fuels, Hydrogen, Compressed or Medical gases.

Using the Group's 70 plus years of experience to drive meaningful innovations in the fields of IoT and digitisation towards a sustainable Energy Transition. Recognizing the importance of the gas molecule in everyday business practices and vision for the future of gas. Keeping consistency in the presence everywhere gas fuels life, together with a progressive vision on the future Energy Outlook, while staying devoted to the mission:

wherever gas is used, we are there



NATURAL GAS APPLICATIONS





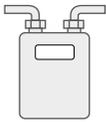
Line Pressure Regulator Type 90

Product description

Type 90 line pressure regulators are manufactured to supply the highest performance both as Line Pressure Regulators (in compliance with ANSI Z21.18 CGA 6.3.) and Gas Appliance Regulators, in compliance with ANSI Z21.80 CSA 6.22. They feature precise regulating control from down to tiny pilot flow. This model is available in fixed or adjustable outlet pressures where small adjustments can be made to the outlet pressure on installation with the appliance.



Installation system



N-02



D-28

Materials

Body: Aluminium / Painted
Spring: Steel
Diaphragm: Nitrile Rubber

Technical features

Gas	Inlet Pressure	Outlet Pressure	Capacity Range	Working Temperature	Inlet Connections	Outlet Connections
Natural Gas LPG	2 PSI	min 7" w.c. (18mbar) min 12" w.c. (30mbar)	500.000 BTU/h	-40 ÷ +96 °C	1/2" NPT G 1/2 L.H.	1/2" NPT G 1/2 L.H.

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



Line Pressure Regulator

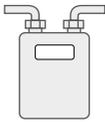
Type 95

Product description

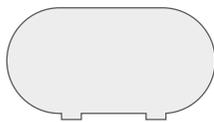
Type 95 line pressure regulators are manufactured to supply the highest performance both as Line Pressure Regulators (in compliance with ANSI Z21.18 CGA 6.3.) and Gas Appliance Regulators, in compliance with ANSI Z21.80 CSA 6.22. They feature precise regulating control from down to tiny pilot flow. This model is available in fixed or adjustable outlet pressures where small adjustments can be made to the outlet pressure on installation with the appliance.



Installation system



N-02



D-28

Materials

Body: Aluminium / Painted
Spring: Steel
Diaphragm: Nitrile Rubber

Technical features

Gas	Inlet Pressure	Outlet Pressure	Capacity Range	Working Temperature	Inlet Connections	Outlet Connections
Natural Gas LPG	2 PSI	7" w.c. (18mbar) 12" w.c. (30mbar)	960.000 BTU/h	-40 ÷ +96 °C	3/4" NPT G 3/4 L.H. 1" NPT G 1 L.H.	3/4" NPT G 3/4 L.H. 1" NPT G 1 L.H.

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



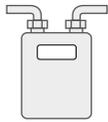
Line Pressure Regulator Type 96

Product description

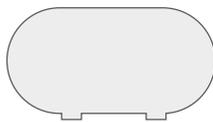
Type 96 appliance stabilizers are manufactured to supply the highest performance both as Gas Appliance Regulators, in compliance with ANSI Z21.18 CSA 6.3. Type 96 pressure governors are intended for use in main burner and pilot load applications, they feature precise regulating control from full flow down to tiny pilot flows. This model is available in fixed or adjustable outlet pressure where small adjustments can be made to the outlet pressures on installation with the appliance.



Installation system



N-01



D-28

Materials

Body: Aluminium / Painted
Spring: Steel
Diaphragm: Nitrile Rubber

Technical features

Gas	Inlet Pressure	Outlet Pressure	Capacity Range	Working Temperature	Inlet Connections	Outlet Connections
Natural Gas LPG	1/2 PSI (34.5bar) 2 PSI (138 mbar)	min 2.8" w.c. (7mbar) min 12" w.c. (30mbar)	150 ÷ 65.000 BTU/h	-40 ÷ +96 °C	1/4" NPT G 1/4 L.H. 3/8" NPT G 3/8 L.H.	1/4" NPT G 1/4 L.H. 3/8" NPT G 3/8 L.H.

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



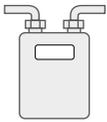
Line Pressure Regulator Type 97

Product description

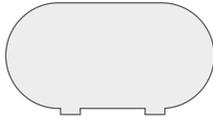
Type 97 appliance stabilizers are manufactured to supply the highest performance both as Gas Appliance Regulators, in compliance with ANSI Z21.18 CSA 6.3. Type 97 pressure governors are intended for use in main burner and pilot load applications, they feature precise regulating control from full flow down to tiny pilot flows. This model is available in fixed or adjustable outlet pressure where small adjustments can be made to the outlet pressures on installation with the appliance.



Installation system



N-01



D-28

Materials

Body: Aluminium
Spring: Steel
Diaphragm: Nitrile Rubber

Technical features

Gas	Inlet Pressure	Outlet Pressure	Capacity Range	Working Temperature	Inlet Connections	Outlet Connections
Natural Gas LPG	1/2 PSI (34.5mbar)	min 2.8" w.c. (7mbar) max 12" w.c. (30mbar)	150 ÷ 120.000 BTU/h	-40 ÷ +96 °C	3/8" NPT G 3/8 L.H. 1/2" NPT G 1/2 L.H.	3/8" NPT G 3/8 L.H. 1/2" NPT G 1/2 L.H.

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



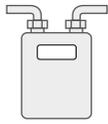
Line Pressure Regulator Type 98

Product description

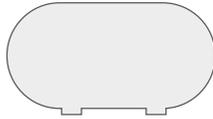
Type 98 appliance stabilizers are manufactured to supply the highest performance both as Gas Appliance Regulators, in compliance with ANSI Z21.18 CSA 6.3. Type 98 pressure governors are intended for use in main burner and pilot load applications, they feature precise regulating control from full flow down to tiny pilot flows. This model is available in fixed or adjustable outlet pressure where small adjustments can be made to the outlet pressures on installation with the appliance.



Installation system



N-01



D-28

Materials

Body: Aluminium
Spring: Steel
Diaphragm: Nitrile Rubber

Technical features

Gas	Inlet Pressure	Outlet Pressure	Capacity Range	Working Temperature	Inlet Connections	Outlet Connections
Natural Gas LPG	1/2 PSI (34.5bar)	min 3.3" w.c. (8.2mbar) min 12" w.c. (30mbar)	150 ÷ 240.000 BTU/h	-40 ÷ +96 °C	1/2" NPT G 1/2 L.H. 3/4" NPT G 3/8 L.H.	1/2" NPT G 1/2 L.H. 3/4" NPT G 3/8 L.H.

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



Line Pressure Regulator

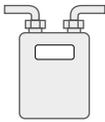
Type R1 - R2

Product description

The R1 and R2 series regulators are a line of direct action type pressure governors, normally used for domestic applications, generally installed directly to the meter or in installations in gas grids for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



Installation system



N-03

Materials

Body: Aluminium / Painted
 Spring: Steel
 Diaphragm: Approved NBR

Safety devices & Accessories

UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
R1	N	0.4	12 ÷ 55	6 - 12.5	10	20 (P=0.2) 30 (P=0.4)	-20(-40) ÷ +60	1/2" 3/4" 7/8" 1"
	M							
R2	N	0.075	12 ÷ 37	2.5	10	20	-20(-40) ÷ +60	1/2" 3/4" 7/8" 1"
	M							
	H							
	N	0.2	6	10	20	-20(-40) ÷ +60	1/2" 3/4" 7/8" 1"	
	M							
H								

Available layout: M - Straight connection / N - Angle connection / H - Angle Horizontal connection



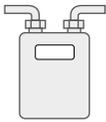
Single Stage Pressure Regulator Type S0

Product description

The S0 series regulators are a line of direct action type pressure governors, normally used for domestic applications, generally installed directly to the meter or in installations in gas grids for natural and manufactured gas, lpg, or other noncorrosive preliminarily treated stable gas.



Installation system



N-03

Materials

Body: Aluminium / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S0	H	0.2 ÷ 5	12 ÷ 50	4	up to 10	up to 20	-20 ÷ +60	1/2" 3/4"
	M			6				
	H	1 ÷ 5	150 ÷ 400	15				
	M							

Available Layout: H - Angle Horizontal connection / M - Straight connection



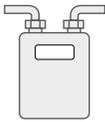
Double Stage Pressure Regulator Type S1

Product description

The S1 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



Installation system



N-03

Materials

Body: Die Cast Zinc / Painted
Spring: Steel
Diaphragm: Approved NBR & HNBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve, OPSO, UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S1	N	0.5 ÷ 5	11 ÷ 100	6	up to 5	up to 10	-40 ÷ +60	See specific datasheet
	M			10	up to 10	up to 20		
	U			25				

Available layout: N - Angle connection / M - Straight connection / U - Bottom entry

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP

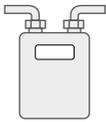
Double Stage Pressure Regulator Type S3

Product description

The S3 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas. Only one fully crimped design without screws.



Installation system



N-03

Materials

Body: Die Cast Zinc
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S3	N	0.5 ÷ 5	11 ÷ 37	6	up to 5	up to 10	-20 ÷ +60	See specific datasheet
			11 ÷ 100 (adjustable version)	10	up to 10	up to 20		

Available layout: N - Angle connection



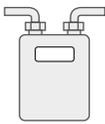
Double Stage Pressure Regulator Type S4

Product description

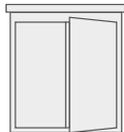
The S4 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



Installation system



N-03



Cabin

Materials

Body: Die Cast Zinc
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve, OPSO, UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S4	N	0.5 ÷ 5	14 ÷ 100	25 ÷ 60	up to 5	up to 10	-20 ÷ +60	See specific datasheet
	M							
S4 BCH	N	0.8 ÷ 5	100 ÷ 500	30 ÷ 100	up to 5	up to 10	-20 ÷ +60	See specific datasheet
	M							

Available layout: M - Straight connection / N - Angle connection

Spring Loaded Pressure Regulator

Type S5



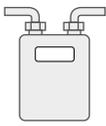
EN334 + EN14382 certified

Product description

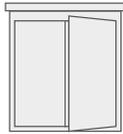
The S5 regulator due to their operating specifications are mainly used in those system where sudden capacity variations are required, or else, where the cut-off of the gas distribution is controlled by solenoid valve. They can be used with natural gas, air, propane and other gases, as long as they do not contain a high percentage of benzole.



Installation system



N-03



Cabin

Materials

Body: Aluminium / Iron / Painted
 Spring: Steel
 Diaphragm: Approved NBR

Safety devices & Accessories

Pressure Relief Valve, OPSO, UPSO, Thermal shut off valve, Balanced System

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
		bar	mbar					
S5	Inline	0.1 ÷ 8.6	9 ÷ 380	up to 5	up to 10	-20 ÷ +60	105	See specific datasheet
							209	

Available versions: A - unbalanced / L - balanced / H - balanced + OPSO shut-off valve / I - balanced + OPSO/USPO shut-off valve



Double Stage Pressure Regulator Type S7

Product description

The S7 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



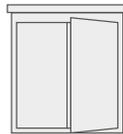
EN88-2 Certified



Installation system



N-03



Cabin

Dimensions

Materials

Body: Aluminium / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve, OPSO, UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S7	M	0.5 ÷ 8.6	14 ÷ 150(BP) 100 ÷ 500(MP)	6	up to 5	up to 10	-30 ÷ +60	See specific datasheet
	N			10				
	X			25				
	U			50				
	Q	1 ÷ 8.6	70	up to 10	up to 20			

Available layout: M - Straight connection / N - Angle connection - Inlet on the left
X - Angle connection - Inlet on the bottom / U - Bottom entry / Q - Modular Configuration

Spring Loaded Pressure Regulator

Type S8

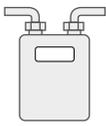


Product description

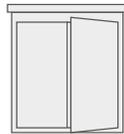
The S8 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



Installation system



N-03



Cabin

Materials

Body: Aluminium Zinc / Painted
 Spring: Steel
 Diaphragm: Approved NBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve, OPSO, UPSO, Balanced System

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections	
		bar	mbar					Inlet	Outlet
S8	U	0.5 ÷ 5	11 ÷ 100	100	up to 5	up to 10	-20 ÷ +60	3/4"	1" 1/2
	Eq							1"	2"
S8 BCH	E	0.8 ÷ 5	120	125				1" 1/4	2" 1/4

Available layout: U - Parallel connection / Eq - Angle connection / E - Underground

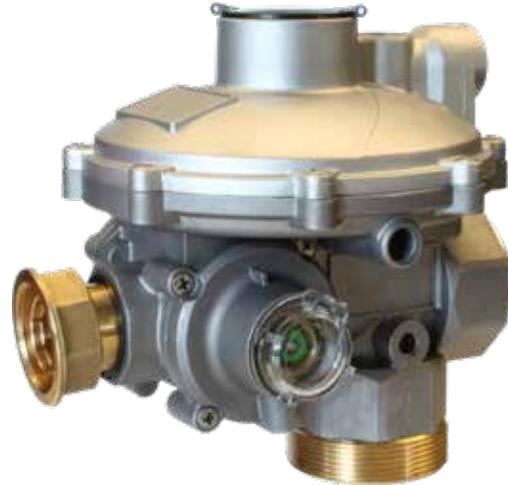


Spring Loaded Pressure Regulator

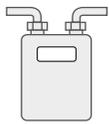
Type S9

Product description

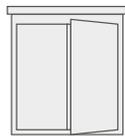
The S9 series regulators are a line of direct action type pressure regulators, double stage, normally used for domestic applications, if directly assembled to the meter or in decompression installations in gas grids and industrial uses for natural and manufactured gas, lpg, or other non-corrosive preliminarily treated stable gas.



Installation system



N-03



Cabin

Materials

Body: Aluminium / Painted
 Spring: Steel
 Diaphragm: Approved NBR

Safety devices & Accessories

Excess Flow Valve (Manual or Automatic), Pressure Relief Valve, OPSO, UPSO

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Nominal Capacity (m ³ /h)	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	Connections
		bar	mbar					
S9	M	0.04 ÷ 8.6	15 ÷ 100(BP)	70	up to 5	up to 10	-30 ÷ +60	See specific datasheet
	N		100 ÷ 300(MP)	100				
			300 ÷ 500 (MPTP)	150				

Available layout: M - Straight connection / N - Angle connection - Inlet on the left

SAFETIES

PILOT OPERATED

DIRECT ACTION

DOUBLE STAGE

SINGLE STAGE

LP



Spring Loaded Pressure Regulator Type S21

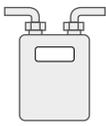
Product description

The S21 regulators are a new line of pressure regulators – direct operating type – designed to guarantee a high regulation accuracy and a utmost easiness in use. These devices are usually used in distribution and industrial systems and are designed to be installed in regulation units in gas grids of natural, manufactured and lpg gas or other non corrosive gases, filtered at first.

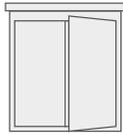


EN334 + EN14382 certified

Installation system



N-03



Cabin

Materials

Body: Aluminium/ Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Pressure Relief Valve, OPSO, UPSO, Monitor, Balanced System

Technical features

	Inlet Pressure			Outlet Pressure				Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
	BP, MP, AP	APS	APA	BP	MP	AP,APS	AP,APA					
	bar			mbar								
S21	6	20		10 ÷ 150	150 ÷ 500	500÷4000	500÷4000	up to 5	up to 10	-20(-30) ÷ +60	160	1" x 1"
			20								281	1" x 1 1/2"

Available versions: A - unbalanced / L - balanced / H - balanced + OPSO shut-off valve / I - balanced + OPSO/USPO shut-off valve



Spring Loaded Pressure Regulator Type S22

Product description

The S22 are a new line of pressure regulator – spring loaded – suitable for use in canalized nets of low and medium pressure with non-corrosive gas filtered at first. The feature peculiar to S22 regulators is the trivalent operating, i.e. in a single body is united the following operations: main regulator, monitor, shut-off valve. Special use of a single body allows to reduce overall dimensions of regulation units and solve problems of replacement or conversion of existing units out of standard.

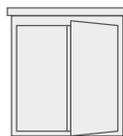


EN334 + EN14382 certified

Installation system



N-03



Cabin

Materials

Body: Aluminium / Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

OPSO, UPSO, Monitor, Balanced System

Technical features

	Inlet Pressure		Outlet Pressure			Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
	BP, MP, AP	APA	BP	MP	AP,APA					
	bar		mbar							
S22	6	20	10 ÷ 150	150 ÷ 500	500÷4000	up to 5	up to 10	-20(-30) ÷ +60	574	DN40
									1160	DN50

Available versions: M - With built-in emergency regulator / B - with OPSO/USPO shut-off valve



Spring Loaded Pressure Regulator Type S23

Product description

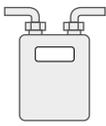
The S23 Regulators are a new line of pressure regulators – direct operating type – designed to guarantee a high regulation accuracy and a utmost easiness in use. These devices are usually used in distribution and industrial systems and are designed to be installed in regulation units in gas grids of natural, manufactured and lpg gas or other non corrosive gases, filtered at first.



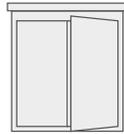
LP Version

HP Version

Installation system



N-03



Cabin

Materials

Body: Aluminium/ Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

OPSO, UPSO, Monitor, Balanced System

Technical features

	Inlet Pressure		Outlet Pressure				Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
	BP, MP, AP	APA	BP	MP	AP	APA					
	bar		mbar								
S23	6	20	10 ÷ 80	75 ÷ 500	470÷2000	2000÷4000	up to 5	up to 10	-20(-30) ÷ +60	3380	DN80

Available versions: B - with built-in OPSO/USPO shut-off valve / M - with built-in Monitor / MB - with Monitor and shut-off valve

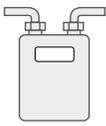
Pilot Operating Pressure Regulator Type S24

Product description

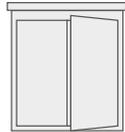
S24 are a new line of pressure regulator – pilot-controlled – suitable for use in canalized nets of low and medium pressure with non-corrosive gas filtered at first. The feature peculiar of S24 regulators is the trivalent operating, i.e. in a single body is united the following operations: main regulator, monitor, shut-off valve. Special use of a single body allows to reduce overall dimensions of regulation units and solve problems of replacement or conversion of existing units out of standard.



Installation system



N-03



Cabin

Materials

Body: Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Shut off valve, OPSO, UPSO, Monitor

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
		bar	mbar					
S24	M	20	10÷12000	up to 1	up to 5	-20 ÷ +60	500	DN25
	B						1050	DN40
	X						2100	DN50
							4200	DN80

Available versions: B - with built-in OPSO/USPO shut-off valve / M - with built-in Monitor / MB - with Monitor and shut-off valve

Pilot Operating Pressure Regulator Type S25

EN14382 certified

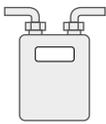
Product description

S25 are a new line of pressure regulator – pilot-controlled – suitable for use in high pressure gas network with noncorrosive gas filtered at first.

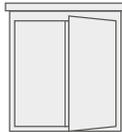
The feature peculiar to S25 regulators is the trivalent operating, i.e. in a single body is united the following operations: main regulator, monitor, shut-off valve. Special use of a single body allows to reduce overall dimensions of regulation units and solve problems of replacement or conversion of existing units out of standard.



Installation system



N-03



Cabin

Materials

Body: Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

Shut off valve, OPSO, UPSO, Monitor

Technical features

	Layout	Inlet Pressure	Outlet Pressure	Regulating class (AC)	Closing pressure class (SG)	Working temp. (°C)	CG (valve coefficient)	Connections
		bar	bar					
S25	M	100	0.5 ÷ 40	up to 1	up to 5	-20 ÷ +60	500	DN25
	B						1050	DN40
	X						2100	DN50
							4200	DN80

Available versions: M - With built-in emergency regulator / B - With built-in OPSO/USPO shut-off valve / X - With monitor and shut-off valve

Safety devices

Type S26

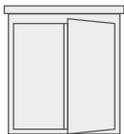
Product description

S26 safety valves are a new line of products – direct operating type – designed to guarantee a utmost easiness in use.

These devices are usually used in distribution and industrial systems and are designed to be installed in regulation units in gas grids of natural, manufactured and lpg gas or other non corrosive gases, filtered at first.



Installation system



Cabin

Materials

Body: Aluminium / Iron / Painted
Spring: Steel
Diaphragm: Approved NBR

Safety devices & Accessories

OPSO, UPSO

Technical features

	Inlet Pressure	Outlet Pressure	Working temp. (°C)	CG (valve coefficient)	Connections
	bar	bar			
S26	6 or 20	10 ÷ 4000	-20(-30) ÷ +60	160	1" x 1"
				281	1" x 1" 1/2
				410	1" x 1" 1/2
				574	DN40
				1160	DN50
				3380	DN80

Safety devices

Type S27

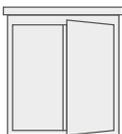
Product description

The Relief valves S27 are devices which function is to maintain the pressure in the system or in pressure vessels within the limit set for the intervention.

These devices intervene following short-term events, providing to discharge externally a certain quantity of gas when the grid pressure exceeds the calibration pressure, thus avoiding or postponing the intervention of the slam shut devices.



Installation system



Cabin

Materials

Body: Aluminium Zinc / Painted

Spring: Steel

Diaphragm: Approved NBR

Safety devices & Accessories

Pressure Relief Valve

Technical features

	Inlet Pressure (bar)	Pressure range (bar)				Seat diameter (mm)	Working temp. (°C)
		BP	MP	AP	APtr		
S27	5	0 ÷ 0.15	0.15 ÷ 0.7	0.5 ÷ 1.3	1 ÷ 2.8	20	-20 ÷ +60
	10			2 ÷ 7			

Regulators equipped with anti-flooding hood

Underground Version "E"

We have conceived an anti-flood system, covering a surface of 10600 mm², to be fitted to the whole range of the regulators designed for residential applications, buried version (regulator with capacity equal to or below 50m³/h). The "anti-flooding hood" system described above is therefore adaptable to all our models for series S1, S3, S4 and S8

Thanks to this system, the gas-regulator can be easily reset or put into service and the connections can be disassembled without any need of system dismantling. An identification plate, identical to that of the regulator, can be positioned into the anti-flooding hood. Some materials composing the regulator and in contact with the surrounding atmosphere shall be submitted to surface treatment in order to increase the product longevity in a very humid environment or subject to flood.

The parts in contact with the atmosphere made of: - Zamak will be covered with an electrolytic protective layer (dichromated zinc coating 18μ); - Aluminium shall undergo a chemical reaction (anodizing). The springs in contact with the atmosphere must be in stainless steel. (resetting lever, first and second stage pressure regulating spring).

The designs of these regulators foresee that all vents will be protected by this system.





Conversion Table

CONVERSION FACTORS

Multiply	By	To Obtain
LENGTH & AREA		
Millimeters	0.0394	Inches
Meters	3.2808	Feet
Sq. Centimeters	0.155	Sq. Inches
Sq. Meters	10.764	Sq. Feet
VOLUME & MASS		
Cubic Meters	35.315	Cubic Feet
Liters	0.0353	Cubic Feet
Gallons	0.1337	Cubic Feet
Cubic cm.	0.061	Cubic Inches
Liters	2.114	Pints (US)
Liters	0.2642	Gallons (US)
Kilograms	2.2046	Pounds
Tonnes	1.1024	Tons (US)
PRESSURE & FLOW RATE		
Millibars	0.4018	Inches w.c.
Ounces/sq. in.	1.733	Inches w.c.
Inches w.c.	0.0361	Pounds/sq. in.
Bars	14.50	Pounds/sq. in.
Kilopascals	0.1450	Pounds/sq. in.
Kilograms/sq. cm.	14.222	Pounds/sq. in.
Pounds/sq. in.	0.068	Atmospheres
Liters/hr.	0.0353	Cubic Feet/hr.
Cubic Meters/hr.	4.403	Gallons/min.
MISCELLANEOUS		
Kilojoules	0.9478	BTU
Calories, kg	3.968	BTU
Watts	3.414	BTU/HR
BTU	0.00001	Therms
Megajoules	0.00948	Therms

CONVERSION FACTORS

Multiply	By	To Obtain
LENGTH & AREA		
Inches	25.4	Millimeters
Feet	0.3048	Meters
Sq. Inches	6.4516	Sq. Centimeters
Sq. Feet	0.0929	Sq. Meters
VOLUME & MASS		
Cubic Feet	0.0283	Cubic Meters
Cubic Feet	28.316	Liters
Cubic Feet	7.481	Gallons
Cubic Inches	16.387	Cubic cm.
Pints (US)	0.473	Liters
Gallons (US)	3.785	Liters
Pounds	0.4535	Kilograms
Tons (US)	0.9071	Tonnes
PRESSURE & FLOW RATE		
Inches w.c.	2.488	Millibars
Inches w.c.	0.577	Ounces/sq. in.
Pounds/sq. in.	27.71	Inches w.c.
Pounds/sq. in.	0.0689	Bars
Pounds/sq. in.	6.895	Kilopascals
Pounds/sq. in.	0.0703	Kilograms/sq. cm.
Atmospheres	14.696	Pounds/sq. in.
Cubic Feet/hr.	28.316	Liters/hr.
Gallons/min.	0.2271	Cubic Meters/hr.
MISCELLANEOUS		
BTU	1.055	Kilojoules
BTU	0.252	Calories, kg
BTU/HR	0.293	Watts
Therms	100,000	BTU
Therms	105.5	Megajoules

FLOW EQUIVALENTS

To convert flow capacities of one kind of gas to flow capacities of a different kind of gas.

	MULTIPLY BY:
If you have a flow capacity (CFH, etc.) in NATURAL GAS and want to know equivalent flow capacity of—	Propane: 0.63 Butane: 0.55 Air: 0.77
If you have BUTANE and want to know equivalent flow capacity of—	Propane: 1.15 Butane: 1.83 Air: 1.42
If you have AIR and want to know equivalent flow capacity of—	Propane: 0.81 Butane: 0.71 Air: 1.29
If you have PROPANE and want to know equivalent flow capacity of—	Propane: 0.87 Butane: 1.59 Air: 1.23

FLOW EQUIVALENTS

	MULTIPLY BY:
If you have 1Kg of LPG(*) and want to know equivalent flow capacity of—	m ³ Natural Gas: 1.333 litre of LPG(*): 1.770
If you have 1 m ³ of Natural Gas and want to know equivalent flow capacity of—	kg of LPG(*): 0.750 litre of LPG(*): 0.692
If you have 1litre of LPG(*) and want to know equivalent flow capacity of—	m ³ Natural Gas: 1.446 kg of LPG(*): 0.565

(*) LPG is a commercial mixture of Propane and Butane in different percentages so, the correction factor may vary according to specific composition.



CAVAGNA group

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Manufacturing Facilities





Natural Gas Solutions

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