

GA 302-8

*Service Pressure
Regulator*



GASCAT

APPLICATIONS

This regulator was designed to attend a wide range of applications in commercial, industrial and gas distribution areas.

The GA 302-8 regulator can be used for all types of gases and equipment, such as combustion (boilers), burners, ovens, stoves, heaters, gas motors, air conditioning, hotels, buildings and commercial installations, shopping centers, etc.

Its is very easy to install, to fit and inspect. Inspection can be easily performed without any need removing the regulator body from the line.

- Basic models: 302-8-2 Regulator with internal relief valve
- 302-8-3 Regulator with built-in overpressure blocking valve (IPS)
- 302-8-4 Regulator with built-in overpressure blocking valve and relief valve

MATERIALS

	GA 302-8	SSV INCORPORATED
BODY MATERIAL	Nodular cast iron	
DIAPHRAGM	BUNA-N with Nylon screen	BUNA-N with Nylon screen
DIAPHRAGM COVER	ALUMINUM	ALUMINUM DIE CASTING
SHUTTER	BUNA-N	BUNA-N
SEAT(*)	ALUMINUM	ALUMINUM

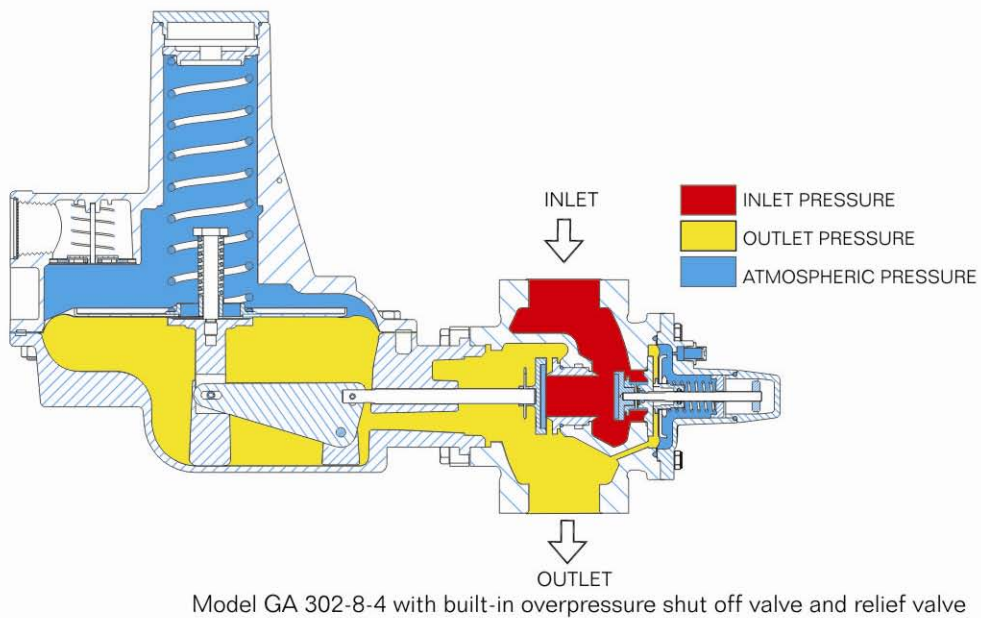
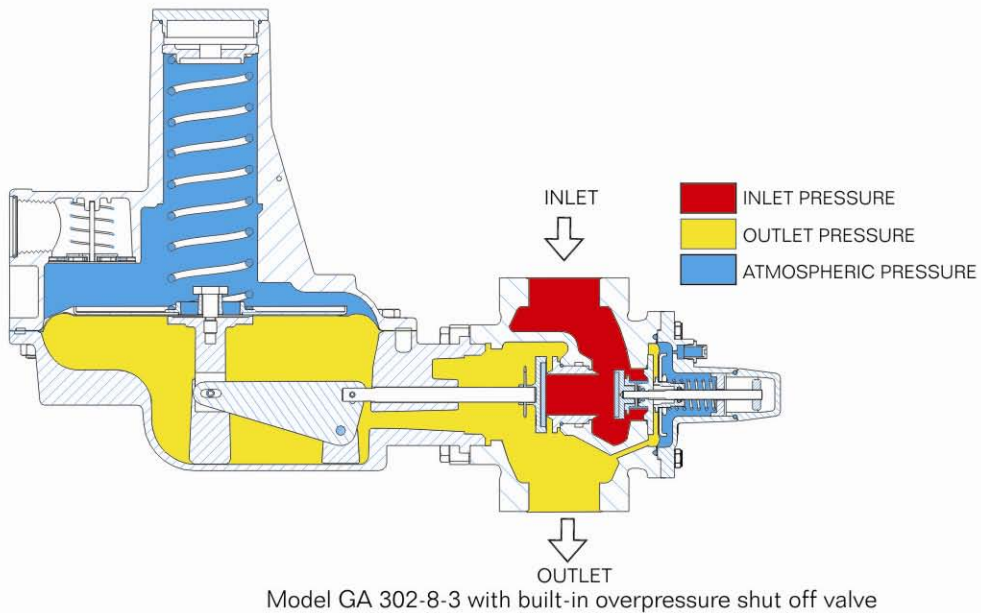
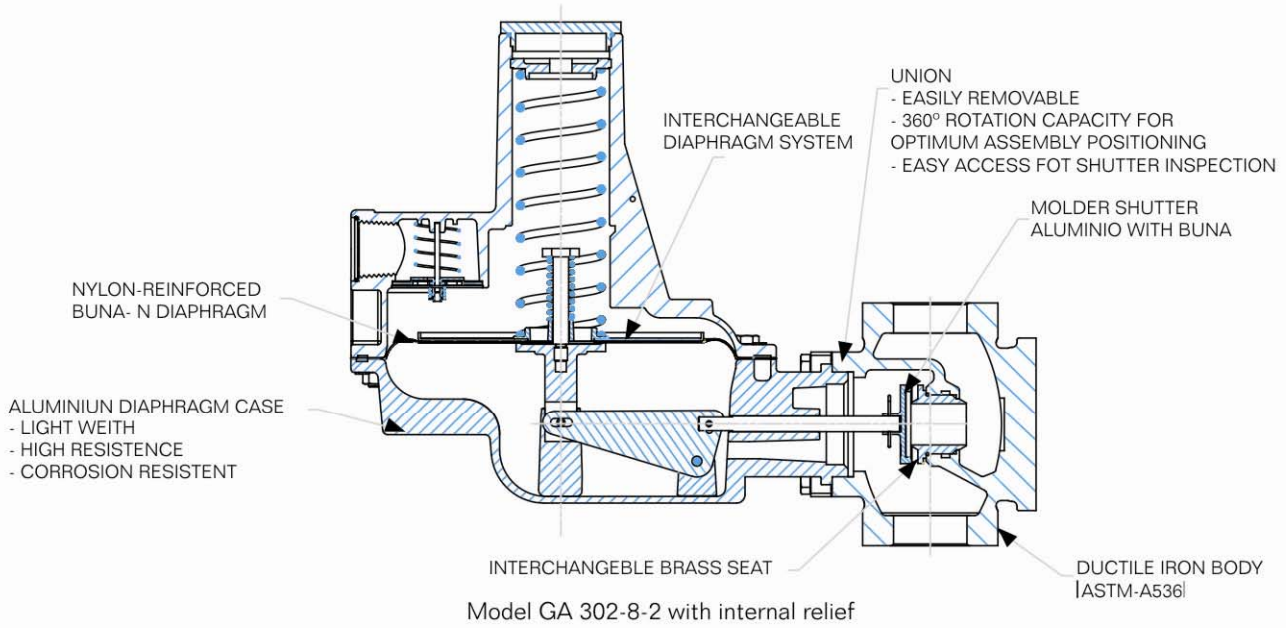
(*) Optionally in stainless steel

OPERATIONS LIMITS

MAXIMUN INLET PRESSURE (bar)	SEAT DIAMETER (inches)	OUTLET PRESSURE (bar)
1.75	1"	8 mbar - 315 mbar
2.8	3/4"	
6.4	1/2"	
6.4	3/8"	
8.0	1/4"	
10,0 (*)	1/4"	

(*) Can only be used with green, orange, or black springs

CONFIGURATIONS



REGULATORS' FLOW CAPACITY IN Nm³/hr FOR NATURAL GAS (DENSITY = 0.6)

1½" GA 302-8 REGULATOR

	Inlet Pressure	Seat Diam. and Shutter Angle				
		1" 10°	¾" 30°	½" 10°	⅜" 10°	¼" 10°
SPRING RANGE 15-35 mbar	70 mbar	44	31	27	17	8
	140 mbar	72	53	37	27	12
	350 mbar	127	103	69	48	24
SET POINT 25 mbar	700 mbar	189	146	113	75	35
	1.0 bar	241	198	146	94	46
	1.75 bar	293	237	202	137	64
	2.8 bar		283	259	189	86
PRESSURE DROP 5 bar	4.2 bar			292	250	118
	6.4 bar			306	283	151
	8.0 bar					212

	Inlet Pressure	Seat Diam. and Shutter Angle				
		1" 10°	¾" 10°	½" 10°	⅜" 10°	¼" 10°
SPRING RANGE 70-140 mbar	140 mbar	54	44	32	22	12
	350 mbar	108	86	56	35	22
	700 mbar	175	141	83	58	35
	1.0 bar	227	175	118	82	45
SET POINT 70 mbar	1.75 bar	293	231	175	113	64
	2.8 bar		293	231	179	86
	4.2 bar			279	264	118
	6.4 bar			307	283	151
PRESSURE DROP 14 mbar	8.0 bar					212

	Inlet Pressure	Seat Diam. and Shutter Angle				
		1" 10°	¾" 10°	½" 10°	⅜" 10°	¼" 10°
SPRING RANGE 140-315 mbar	350 mbar	85	50	35	30	25
	115 mbar	115	70	50	45	30
	1.0 bar	150	115	80	60	40
SET POINT 200 mbar	1.75 bar	200	150	100	90	50
	2.8 bar		250	140	120	60
	4.2 bar			235	185	85
PRESSURE DROP 35 mbar	6.4 bar				255	170
	8.0 bar					230

	Inlet Pressure	Seat Diam. and Shutter Angle				
		1" 10°	¾" 30°	½" 10°	⅜" 10°	¼" 10°
SPRING RANGE 140-315 mbar	350 mbar	118	91	64	43	21
	700 mbar	189	156	99	64	35
	1.0 bar	260	198	127	90	46
SET POINT 200 mbar	1.75 bar	335	283	175	132	66
	2.8 bar		350	255	189	86
	4.2 bar			335	250	118
PRESSURE DROP 42 mbar	6.4 bar			364	293	151
	8.0 bar					212

2" GA 302-8 REGULATOR

	Inlet Pressure	Seat Diam. and Shutter Angle					
		1" 30°	3/4" 30°	3/4" 10°	1/2" 10°	3/8" 10°	1/4" 10°
SPRING RANGE 30-70 mbar	70 mbar	40	32	29	21	16	-
	140m bar	64	48	46	34	25	14
	350 mbar	146	99	93	61	37	24
	700 mbar	255	255	160	99	64	37
SET POINT 45 mbar	1.0 bar	321	322	217	151	104	45
	1.75 bar	387	468	269	222	151	64
	2.8 bar		536	321	307	198	90
PRESSURE DROP 7.5 bar	4.2 bar				364	269	122
	6.4 bar				373	293	151
	8.0 bar						212
	10.0 bar						280

	Inlet Pressure	Seat Diam. and Shutter Angle					
		1" 30°	3/4" 30°	3/4" 10°	1/2" 10°	3/8" 10°	1/4" 10°
SPRING RANGE 70-140 mbar	140 mbar	64	48	45	32	22	12
	350 mbar	108	91	88	58	35	24
	700 mbar	189	160	146	93	58	37
	1.0 bar	293	241	189	122	83	46
SET POINT 70 mbar	1.75 bar	387	400	269	198	127	64
	2.8 bar		470	321	283	189	91
	4.2 bar				355	255	122
PRESSURE DROP 14 mbar	6.4 bar				364	279	151
	8.0 bar						212
	10.0 bar						282

	Inlet Pressure	Seat Diam. and Shutter Angle					
		1" 30°	3/4" 30°	3/4" 10°	1/2" 10°	3/8" 10°	1/4" 10°
SPRING RANGE 140-315 mbar	350 mbar	60	45	45	40	30	15
	700 mbar	115	85	85	60	40	30
	1.0 bar	165	120	115	75	60	45
	1.75 bar	210	150	140	110	75	70
SET POINT 210 mbar	2.8 bar		260	250	180	165	90
	4.2 bar				285	215	130
	6.4 bar					340	200
PRESSURE DROP 24 mbar	8.0 bar						255
	10.0 bar						280

	Inlet Pressure	Seat Diam. and Shutter Angle					
		1" 30°	3/4" 30°	3/4" 10°	1/2" 10°	3/8" 10°	1/4" 10°
SPRING RANGE 140-315 mbar	350 mbar	118	91	87	64	43	21
	700 mbar	203	160	156	99	64	35
	1.0 bar	293	241	198	127	93	45
	1.75 bar	402	400	283	212	137	64
SET POINT 210 mbar	2.8 bar		470	350	293	189	91
	4.2 bar				373	260	122
	6.4 bar				402	293	151
PRESSURE DROP 42 mbar	8.0 bar						212
	10.0 bar						284

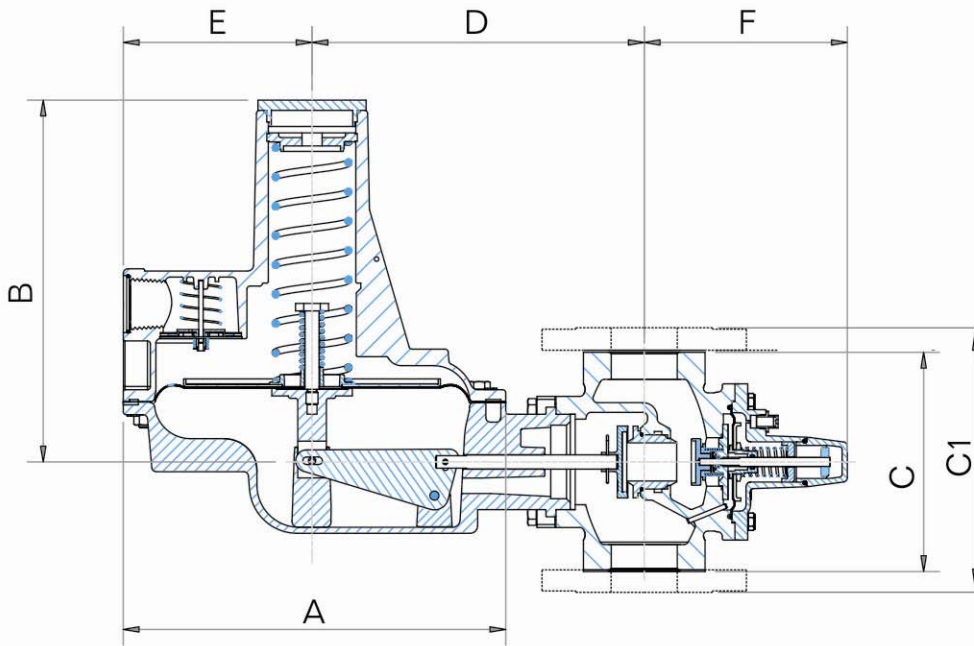
NOTES:

1. The choice of a proper seat is based on the minimum inlet pressure available, maximum outlet pressure and maximum operational flow.
2. The maximum allowable inlet pressure for each seat is shown on the tables. Seats that do not show capacities shall not be used due to the high lock up.
3. For active/ monitor configurations, please consider a 30% capacity loss in the monitor regulator.

DIMENSIONS AND CONNECTIONS

REGULATOR	CONNECTIONS		A	B	C	C1	D	E	F	Weight (Kg)
	Threaded	Flanged								
302-8-2	1½" and 2" NPT		260	265	146		221	120		11
302-8-2		2" 150# RF	260	265		193.7	221	120		15
302-8-3	1½" and 2" NPT		260	265	146		221	120	135	12
302-8-3		2" 150# RF	260	265		193.7	221	120	135	16
302-8-4	1½" and 2" NPT		260	265	146		221	120	135	12
302-8-4		2" 150# RF	260	265		193.7	221	120	135	16

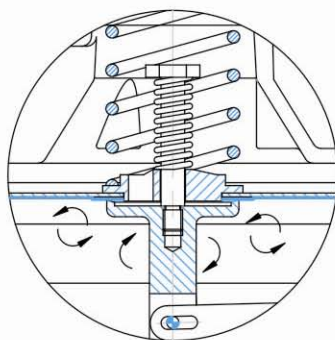
CONNECTIONS



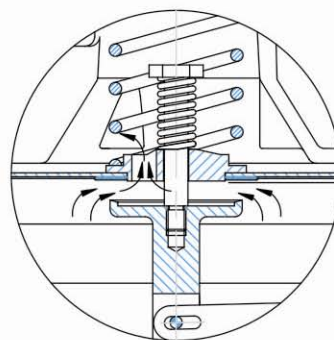
OPERATION AND PERFORMANCE OF THE RELIEF VALVE

The built-in relief valve is fitted at the middle of the diaphragm and opens when the outlet pressure exceeds the adjusted pressure by 225 to 500 mWC, thus allowing the gas to escape through the vent.

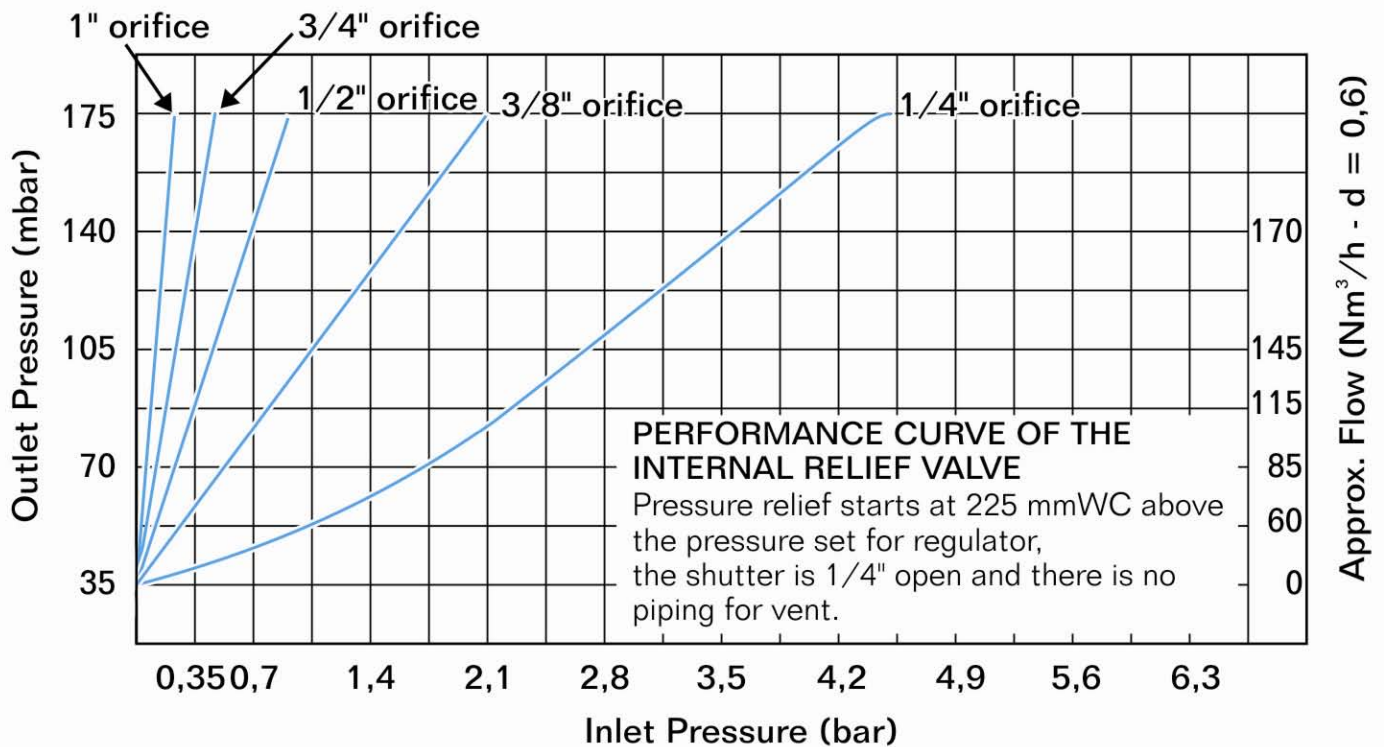
This relief valve will avoid the outlet pressure to exceed the pressure values of the curves as follows, in the event of a regulator failure.



INTERNAL RELIEF CLOSED



INTERNAL RELIEF OPEN



SPRING RANGES - REGULATOR AND SHUT OFF VALVE

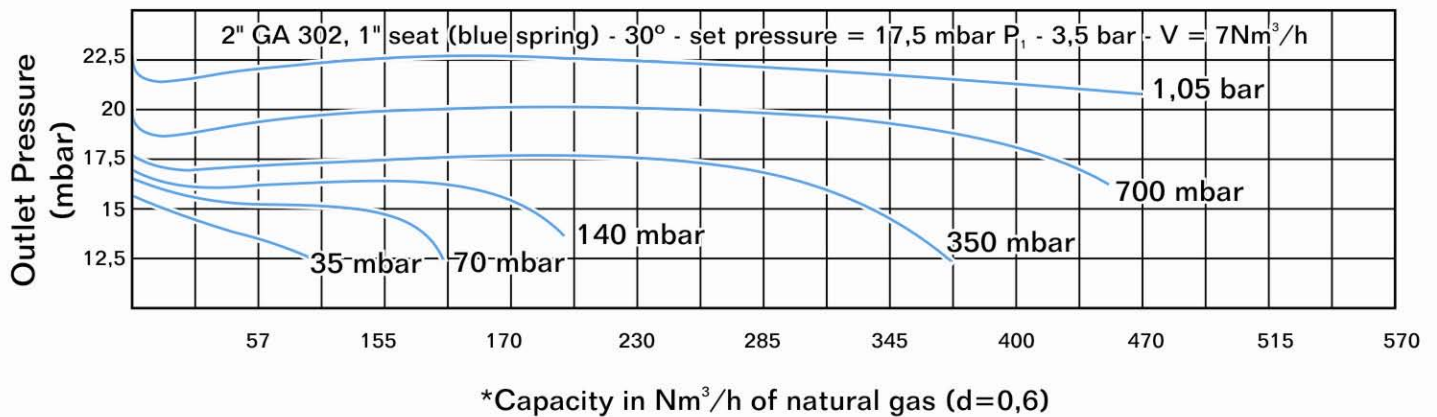
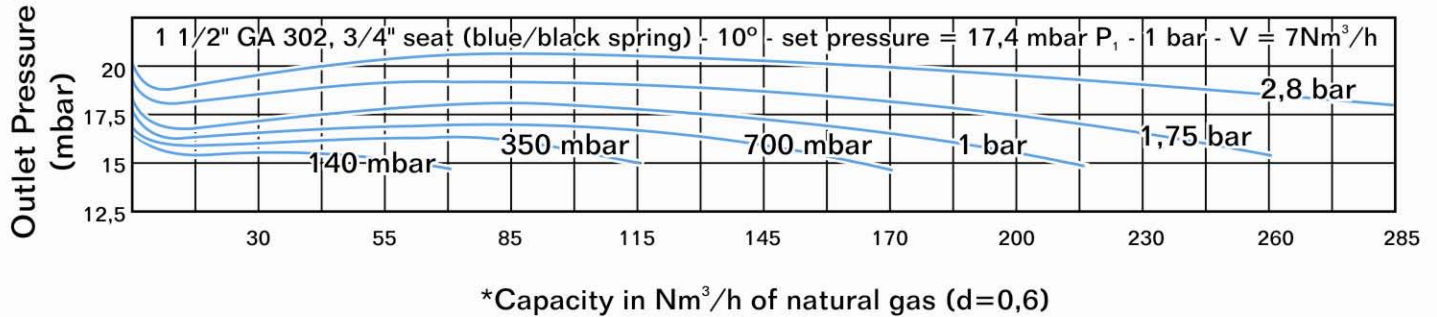
GA 302-8 REGULATOR

Spring Range (mbar)	Color	Code
8 - 16.5	Red / Black	01.50.86
12.5 - 21	Blue / Black	01.50.87
15 - 35	Green / Black	01.50.85
30 - 70	Green	01.50.59
70 - 140	Orange	01.50.61
140 - 315	Black	01.50.62

OVER PRESSURE SHUT OFF VALVE

Spring Range (mbar)	Color	Code
12 - 35	Red	01.50.03
18 - 50	Green	01.49.23
33 - 75	Yellow	01.50.04
50 - 150	Black	01.49.25
100 - 250	White	01.49.49
200 - 500	Blue	01.49.11

PROFILE OF THE REGULATOR CURVE WITH VARIATIONS OF THE INLET PRESSURE



CERTIFICATIONS

ISO 9001



ASME - U-STAMP



NATIONAL BOARD



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The Gascap policy is one of continuous improvement and development. The Company reserves the right to change specifications and introduce improved designs without previous notice.

Representative/Distributor