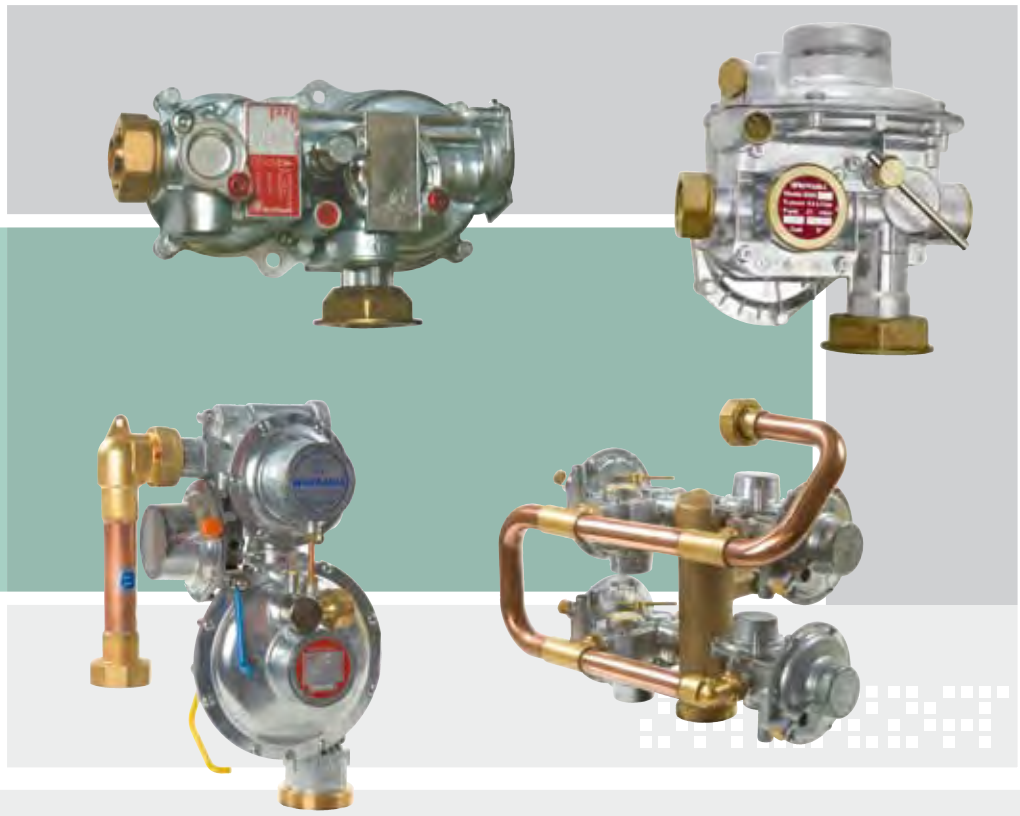
Pressure regulators

Pressure range
from 0.3 to 5 bars



Briffault®

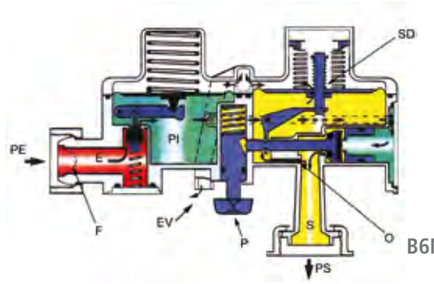
Summary

30.1 REGULATORS TYPE GAZ DE FRANCE

> Following the technical specifications « B and C »

Use and installation

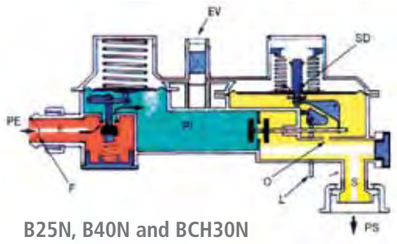
BRIFFAULT's regulators are designed to be installed on distribution networks supplied with "Medium Pressure" MP from 0.3 to 5 bars. They guarantee flow rate and regulation in "Low Pressure" LP from 9 to 50 mbars (for B and C types) and in "Medium Pressure "A-MPA from 50 to 400 mbar (for BCH and CCH types). This equipment combines cutting functions (only B6N and B10N), flow rate/regulation and security functions. To be installed in rooms, cubicles, shelters ventilated or airy, in rising ducts or in boiler rooms. In this case, the air vent MUST BE PUT IN ATMOSPHERE. In its underground version, this equipment must be installed in « plastic modules surmounted by a peep hole/ buffer » to assure their protection. The installation of this equipment must comply with « Gaz de France Supply Guidebook ».



B6N and B10N square

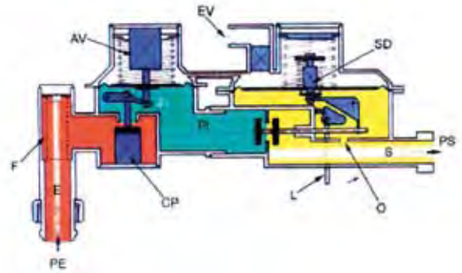
Description and operation

The « B » and « C » regulators, in elevation or underground, is an equipment with a two-stage reduction device functioning in « direct action », allowing to maintain a constant downstream pressure whatever incoming pressure variations are. At the first stage, the «Network gas» in MP-B is reduced of PE pressure in E (in red on the diagrams) to an intermediate pressure IP (in green). At the second stage, the gas with an IP pressure is reduced and regulated in LP or in MP-A (in yellow). "Outgoing pressure PS is caught on the output S by the pressure tapping O in the « venturi tube » ; this one will be affected by flow variation and will act on the second stage membrane. This system allows our regulators to guarantee an outgoing pressure stabilized at + or – 5% around nominal pressure (set point) whatever incoming pressure and gas flow rates are.

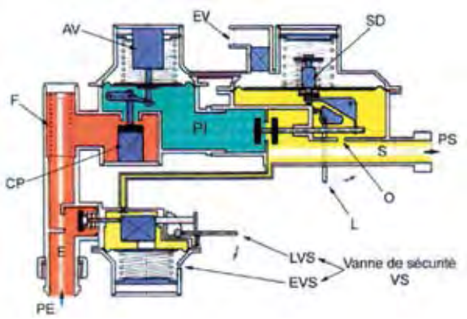


B25N, B40N and BCH30N square

B50N, B75N, B100N, BCH60N, BCH90N



C40, C65, C100, CCH50, CCH80 et CCH130



Security functions

The « B » and « C » regulators are also used for security, for installations located downstream, in the following cases:

> **Unusual drops of incoming and outgoing pressures and flow rate excess:**
Closure of the second stage and then of the first stage,

> **Outgoing pressure excess:**
Closure of the second stage and then of the first stage, opening of the discharge valve DS, driving off of gas to the air vent duct EV and closure of the safety valve SV for regulators type « C and CCH » if pressure excess lasts or increases despite discharge valve operation.

> **Membrane puncture:**
In this case, out of normal operation of the equipment, closure of the second stage because of missing pressure under its membrane. In cubicle of very low leakage « type : pinhole », opening of the discharge valve DS ,

> **Zero flow :**
Closure of the first and second stages following the « direct action » principle.

30.1 REGULATORS TYPES GAZ DE FRANCE

Air Vent EV (setup : « in elevation ») and Discharge valve DS
It is through the air vent that regulators sense the atmospheric pressure called « reference pressure ». If the discharge valve is opened or in cubicle of membrane puncture, gas is sent « out to the air » by the air vent EV. If the regulator is placed inside the houses, the air vent must be connected to the atmosphere by a manifold of a diameter determined according to its length (elimination of pumping phenomena). The trimming of temporary overpressures (dilatation of natural gas downstream – discharge instantaneous stop) is the function of the discharge valve.

Cutting and resetting system : B6N and B10N
This system allows to stop the gas supply of the downstream installation; the operation is ensured by pressing and turning the pushbutton P located on the foreside of the equipment. The commissioning of regulators, with the pushbutton P in « opening » position, is assured by pressing it until obtaining a "downstream" pressure equal to the set point. The operation is identical after a safe operation is established. This system design prohibits the resetting of equipment in cutting position.

Resetting system of B25N, B40N, BCH30N, B50N, B75N, B100N, BCH60N, BCH90N and Batteries
Regulators commissioning is assured by turning the lever L until obtaining a "downstream" pressure equal to the set point; the operation is identical after a safe operation is established. For the batteries, the resetting is executed by action on only one resetting lever (any choice can be made).

Resetting system of C40, C65, C100, CCH50, CCH80 and CCH130
Resetting of the SV by turning the lever LVS (mechanical interlocking) and turning the lever L until obtaining a "downstream" pressure equal to the set point; the operation is identical after a safe operation is established.

Filters F
To protect the equipment inside the regulators, a strainer filter retains, in the inlet connection of B6N B10N, B25N, B40N, BCH30N and batteries, impurity such as PE or metal chips coming from the drilling in charge of connections and of grains of sand coming from the embankment. For regulators, B50N, B75N, B100N, BCH60N, BCH90N, C40, C65, C100, CCH50, CCH80 and CCH130 filtering elements are not in the inlet connection. They are accessible, on all models, without having to dismantle the inlet connection having a sphero-conic joint.

Systems specific to regulators B50N, B75N, B100N, BCH60N, BCH90N, C40, C65, C100, CCH50, CCH80 and CCH130:
To suppress the impact of the incoming pressure variation PE, the first stage is « compound in pressure » by the CP system. Regulators ill-timed vibrations are eliminated by the AV system hitched to the first stage.

The «underground systems»
-their protections against corrosion:
The regulators designed for the equipping of underground gas cases, receive appropriate protections to work in «hostile environment ». Reliability, INDISPENSABLE IN TIME, led BRIFFAULT to prepare its equipment with protections against fast corrosion of internal and external components in contact with atmosphere. Engaged in fulfilling the future prohibition of using chromating with chromium VI, Briffault had GDF homologating a new chromium III based surface treatment with application of a coating varnish. The technique of "underground" gas cubicles allows to fulfill environmental constraints. That is why Briffault is continually researching processes which are best appropriate to operate, in hostile environment, their pressure regulators ; the reliability of such regulators along the time depends on them.
- their protections against water penetration and frost:
In order to offset water penetration and frost risks inside regulators, BRIFFAULT designed and patented an anti-flooding system with cover. Regulators air vents are extended by a manifold of a diameter compatible with equipment performances. Their extremities are surmounted by BRIFFAULT's anti-flooding system. The systems cubic capacity allows the operation of regulators for floods high up to 1m. When water goes out, the inside of the regulator is free from water and the filter preserves its initial state.

The B6NE and B10NE «elevation for areas undergoing flooding»
In order to answer to problems caused by floods in areas at risk, BRIFFAULT created a variant version to underground regulators by adapting the ANTI-FLOODING system of those ones to allow their assembly in elevation cubicles S2300 and S300.

30.2 PRESSURE REGULATORS TYPE «B»

30.2.1 PRESSURE REGULATORS TYPE «B6N - B10N»

NF REG-GAZ

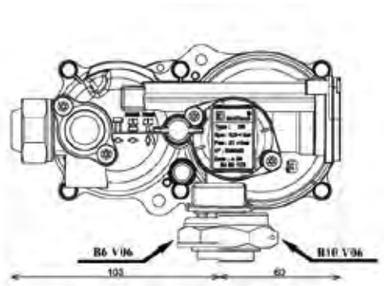
Aerial Model

Inlet and outlet connections are usable in all versions

Nipple at JSC cal 15
to braze on Cu Ø 18 mm
925 1490 10

Nipple at JSC cal 15
to weld on Ac Ø 21.3 mm
925 1520 10

Input



Output

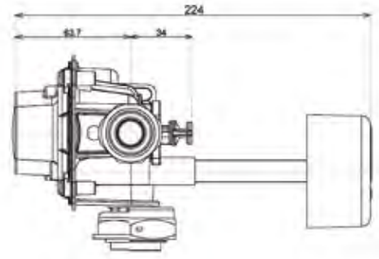
B6N
Nipple at JPC cal 20
to braze on Cu Ø 22 mm
925 1500 10
JPC 925 3420 10

B10N
Nipple at JPC cal 32
to braze on Cu Ø 35 mm
925 5160 10
JPC 925 2610 10

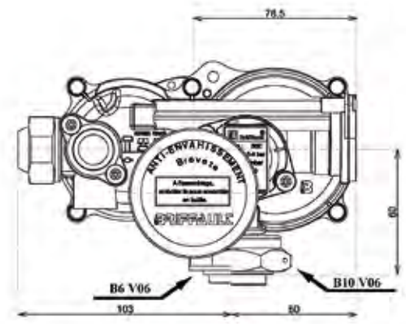
B6N
Nipple at JPC cal 20
to weld on Ac Ø 26.9 mm
925 1510 10
JPC 925 3420 10

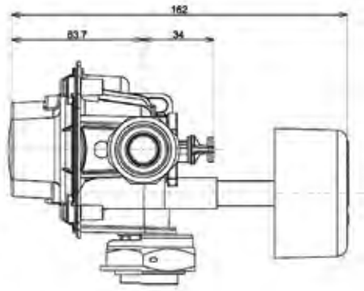
B10N
Nipple at JPC cal 32
to weld on Ac Ø 42.4 mm
925 1830 10
JPC 925 2610 10

Underground model



High cover for cubicles equipped in plant

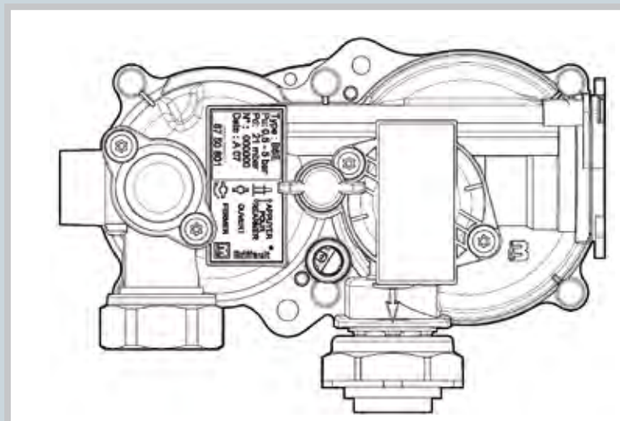




Low cover for old cubicles renewal

Possible installation in S2300 and S22 cubicles for B6N regulators and in cubicle S300, S22, multicount case for B10N regulators, in underground circular cubicle.

Also available: Model in U



30.2 PRESSURE REGULATORS TYPE «B»

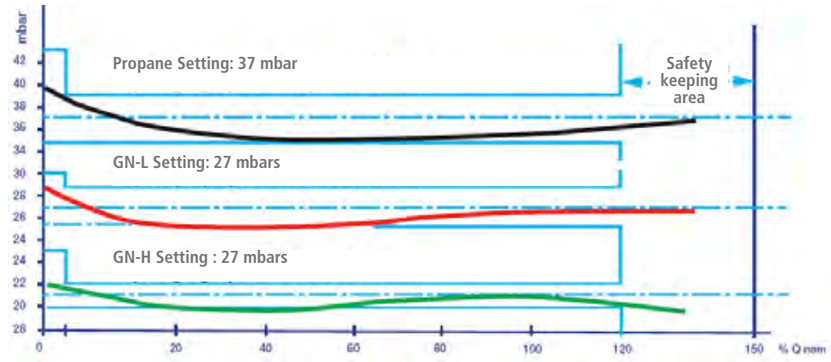
30.2.1 PRESSURE REGULATORS TYPE «B6N - B10N»

CHARACTERISTICS	B6N	B10N
Incoming pressure	0.3 to 5 bars	
Outgoing pressure Manufactured gas-(butane -propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	11 ± 0.6 mbar 21 ± 1 mbar 27 ± 1.5 mbar 37 ± 2 mbar	
Operating temperature	-20°C à + 60°C	
At upstream pressure of: **Flow rates are** Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	**300 Nominal mbar** 4.3 m3/h(n) 6 m3/h(n) 5.9 m3/h(n) 3.8 m3/h(n) or 7.6 kg/h	**500 mbar and + Guaranteed** 5.2 m3/h(n) 7.2 m3/h(n) 7.08 m3/h(n) 4.56 m3/h(n) or 9.12 kg/h
	300 Nominal mbar 7.1 m3/h(n) 10 m3/h(n) 9.8 m3/h(n) 6.3 m3/h(n) or 12.6 kg/h	**500 mbar and + Guaranteed** 8.5 m3/h(n) 12 m3/h(n) 11.76 m3/h(n) 7.56 m3/h(n) or 15.12 kg/h
Safe keeping flow	Between 110 and 150% of the nominal flow rate	
Minimal outgoing pressure of safe keeping Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	4 mbar 10 mbar 14 mbar 19 mbar	
Safety valve calibration Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	Between 30 and 40 mbar Between 40 and 50 mbar Between 45 and 55 mbar Between 50 and 60 mbar	
Connection	input: nut JSC cal.15 output: nut JPC cal.32	input: nut JSC cal.15 output: nut JPC cal.32
Weight	about 1100 g	

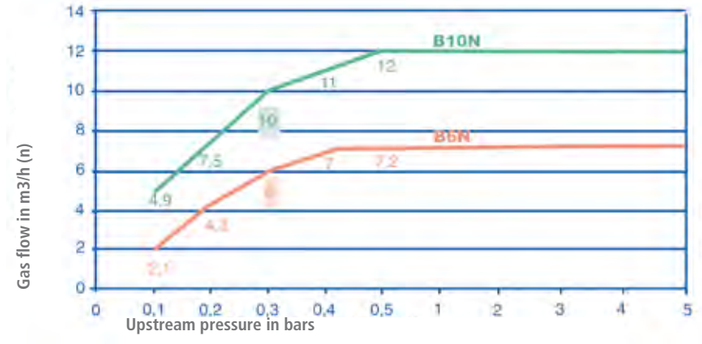
Briffault's Coding	aerial NF REG-GAZ		underground NF REG-GAZ		aerial NF REG-GAZ		underground NF REG-GAZ	
Manufactured gas-(butane-propane)	0.3 to 5 bar	0.5 to 5 bar type GDF	0.5 to 5 bars type GDF low cover	0.3 to 5 bar	0.5 to 5 bars type GDF low cover		0.5 to 5 bars type GDF low cover	
Natural gas « H »-(Lacq type)	-	005411090-84.50.121	-	-	005431090-84.50.136		-	
Natural gas « L »-(Groningue type)	005415190	005410090-84.50.123	005410190-84.50.801	005435190	005430090-84.50.138		005436190-84.50.811	
Propane	005415290	005412090-84.50.132	005412290-84.50.802	005435290	005432090-84.50.140		005436290-84.50.812	
	005415390	005414090-84.50.128	-	005435390	005434090-84.50.141		-	

For any other setting: please contact us

Outgoing pressure curves for incoming pressures ranging between 0.5 and 5 bars



Flow curves guaranteed according to the upstream pressure



B6N and B10N regulators assure their respective flow rate from an upstream pressure of 0.3 bars.

30.2 PRESSURE REGULATORS TYPE «B»

30.2.2 PRESSURE REGULATORS TYPE «B25N - B40N - BCH30N»

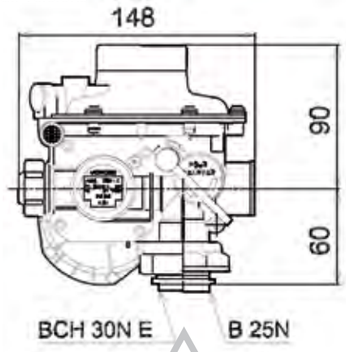
Aerial Model

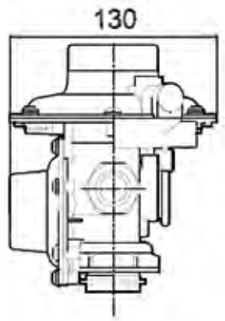
Inlet and outlet connections are usable in all versions

Nipple at JSC cal 15
to weld on Cu Ø 18 mm
925 1490 10

Nipple at JSC cal 15
to weld on Ac Ø 21.3 mm
925 1520 10

Input





Output

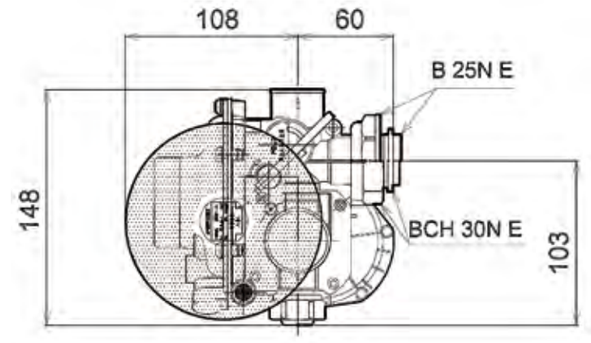
B25N / B40N
Nipple at JPC cal 32
to braze on Cu Ø 35 mm
925 5160 10
JPC 925 2610 10

B-CH30N
Nipple at JPG cal 25
to braze on Cu Ø 28 mm
925 1970 10
JPG 925 1940 10

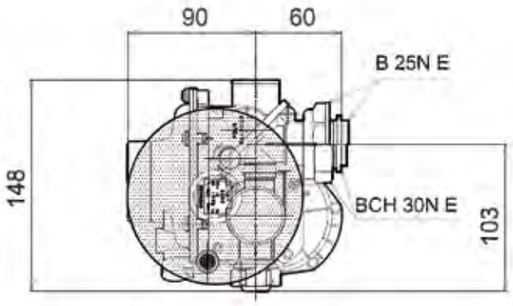
B25N / B40N
Nipple at JPC cal 32
to weld on Ac Ø 42.4 mm
925 1830 10
JPC 925 2610 10

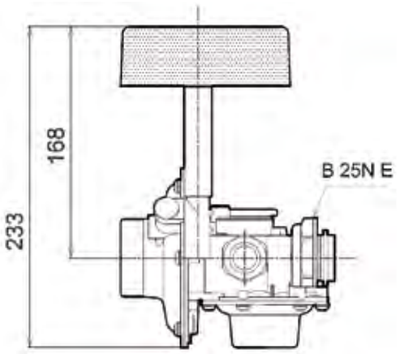
B-CH30N
Nipple at JPG cal 25
to weld on Ac Ø 33.7 mm
925 1960 10
JPG 925 1940 10

Underground model



Low cover for old cubicles renewal





High cover for cubicles equipped at the premises

Installation is possible in cubicle S2300, S22, industrial station, multi-count case (only for B25) underground circular cubicle.

30.2 PRESSURE REGULATORS TYPE «B»

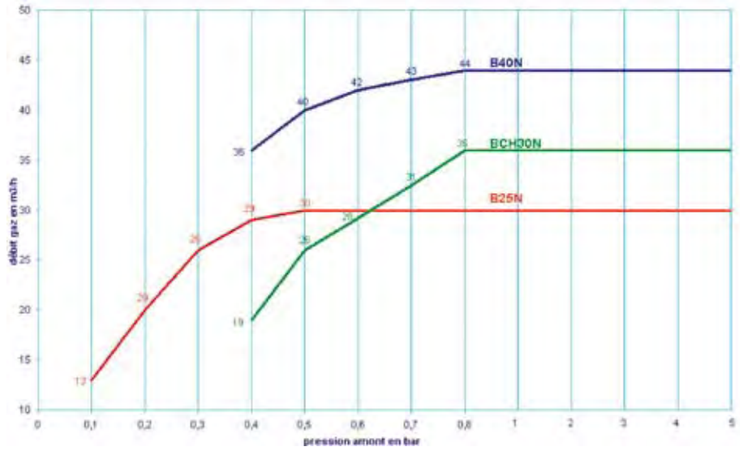
30.2.2 PRESSURE REGULATORS TYPE «B25N - B40N - BCH30N»

CHARACTERISTICS	B25N	B40N	BCH30N
Incoming pressure	0.3 to 5 bars	0.8 to 5 bars	
Outgoing pressure Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	11± 0.6 mbar 21 ± 1 mbar 27 ± 1.5 mbar 37 ± 2 mbar		300 mbar ± 15 mbar
Operating temperature	-20°C à + 60°C		
At upstream pressure of: **Flow rates are**	**300 Nominal mbar** / **500 mbar and + Guaranteed**	**500 Nominal mbar** / **800 mbar and + Guaranteed**	**650 Nominal mbar** / **800 mbar and + Guaranteed**
Manufactured gas-(butane-propane)	17.8 m3/h(n) / 21.4 m3/h(n)	- / -	
Natural gas « H »-(Lacq type)	25 m3/h(n) / 30 m3/h(n)	40 m3/h(n) / 44 m3/h(n)	30 m3/h(n) / 36 m3/h(n)
Natural gas « L »-(Groningue type)	24.4 m3/h(n) / 29 m3/h(n)	39 m3/h(n) / 43 m3/h(n)	
Propane	15.6 m3/h(n) or 31.2 kg/h / 18.7 m3/h(n) or 37.4 kg/h	25 m3/h(n) or 50 kg/h / 27.5 m3/h(n) or 55 kg/h	18.7m 3/h(n) or 37.4 kg/h / 22.5m 3/h(n) or 45 kg/h
Safe keeping flow rate	Between 110 and 150 % of the nominal flow rate		
Minimal outgoing pressure of safe keeping Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	4 mbar 15 mbar 18 mbar 25 mbar		240 mbar
Safety valve calibration Manufactured gas-(butane-propane) Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	Between 25 and 40 mbar Between 35 and 50 mbar Between 37 and 50 mbar Between 47 and 60 mbar		Between 350 and 400 mbar
Connection	input: nut JSC cal.15 - output: nut JPC cal. 32		input: nut JSC cal.15 output: nut JPC cal. 25
Weight	about 1400 g		

Briffault's Coding	**aerial**	**underground**			**aerial**	**underground**
Manufactured gas-(butane-propane)	0.3 to 5 bar	0.5 à 5 bartype GDF	0.5 to 5 bartype GDF	0.8 to 5 bar	0.8 to 5 bar	0.8 to 5 bar	0.8 to 5 low barcover
Natural gas « H »-(Lacq type)	-	005500390 84.51.056	low cover	-	-	005500590	005436190
	005515190 in square	005500090 84.51.055	005502090 84.51.151	005511090 in square	005511890	300 mbar	84.51.305
Natural gas « L »-(Groningue type)	005503490 in line	-	-	005512090 in line	-	in square	
	005515290 in square	005500190 84.51.058	005502190 84.51.152	005511190 in square	005511990	84.51.302	
Propane	005503590 in line	-	-	005512190 in line	-	005503790 in line	
	005515390 in square	005500290 84.51.061	-	005511290 in square	-	005501090 150 mbar	
	005503690 in line	-	-	005512290 in line	-		

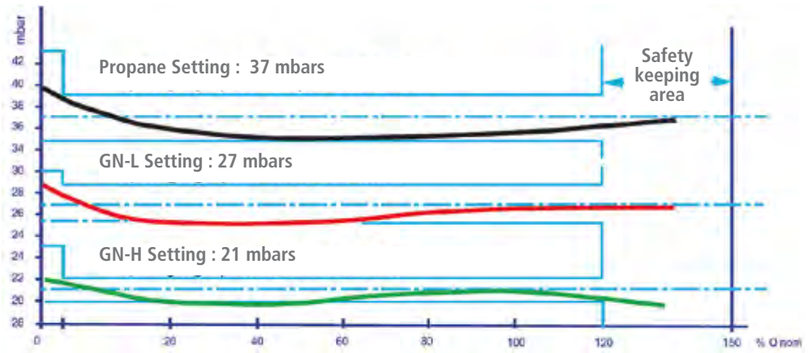
For any other setting: please contact us

Flow curves guaranteed according to the upstream pressure



B25N and B40N regulators assure the flow rate from an upstream pressure of 0.3 bars.

Outgoing pressure curves for incoming pressures ranging between 0.5 and 5 bars



30.2 PRESSURE REGULATORS TYPE «B»

30.2.3 PRESSURE REGULATORS TYPE «B50N - B75N - B100N - BCH60N - BCH90N»

Aerial Model

Nipple at JSC cal 25
to braze on Cu Ø 28 mm
925 2140 10

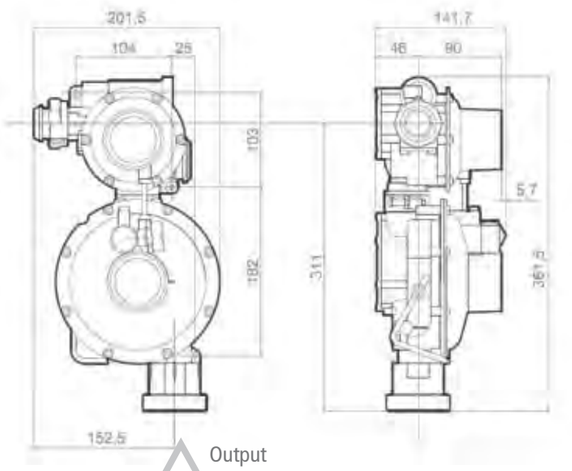
Nipple at JSC cal 25
to weld on Ac Ø 33.7 mm
925 1890 10

Cross-head for assembly in cubicle S2300

Long cross-head for input PE
954 5001 77

short cross-head for input Cu or Ac
925 2740 10

Input



Output

2 pieces connection cal.50
to braze on Cu Ø 54 mm
925 1860 10
JPG 925 2090 10

2 pieces connection cal.50
to weld on Ac Ø 60.3 mm
925.1850.10
JPG 925 2090 10

Modèle enterré

Nipple at JSC cal 25
to braze on Cu Ø 28 mm
925 2140 10

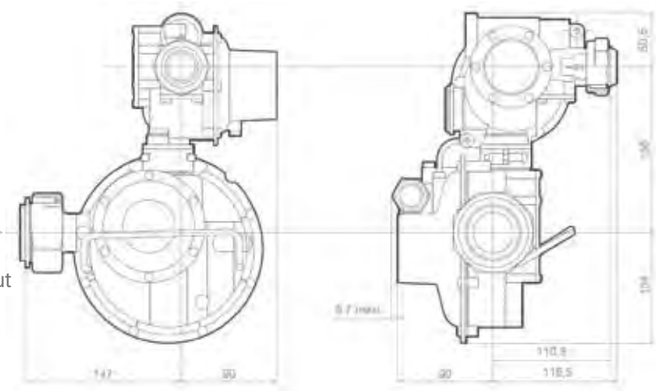
Nipple at JSC cal 25
to weld on Ac Ø 33.7 mm
925 1890 10

Input

Nipple at JPG cal 50
to braze on Cu Ø 54 mm
925 2010 10
JPG 925 2090 10

Nipple at JPG cal 50
to weld on Ac Ø 60.3 mm
925 2000 10
JPG 925 2090 10

Output



Possible installation in S2300 cubicle, industrial station, in underground circular cubicle.

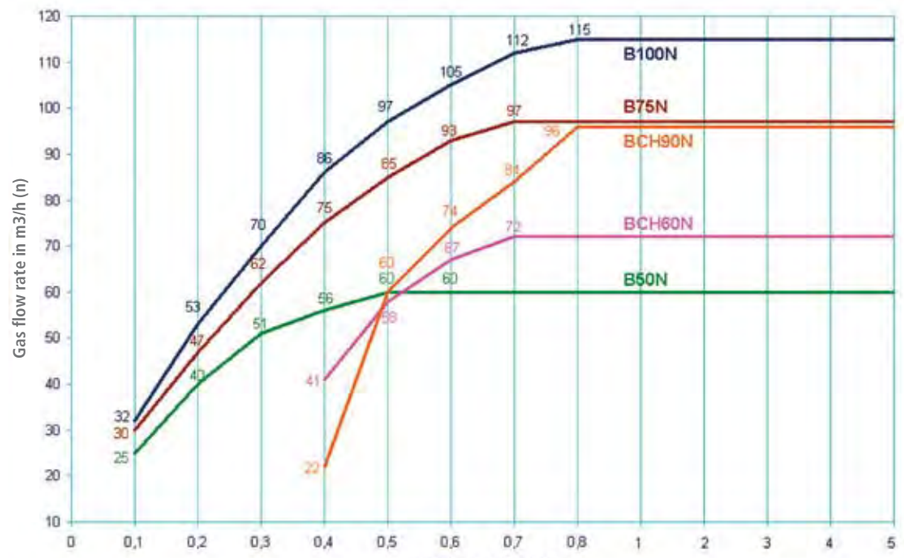
30.2 PRESSURE REGULATORS TYPE «B»

30.2.3 PRESSURE REGULATORS TYPE «B50N B75N B100N BCH60N BCH90N»

CARACTERISTIQUES	B50N	B75N	B100N	BCH60N	BCH90N
Incoming pressure	0.3 to 5 bars	0.4 to 5 bars	0.5 to 5 bars	0.8 to 5 bars	
Outgoing pressure Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	21 ± 1 mbar 27 ± 1.5 mbar 37 ± 2 mbar			300 mbar ± 15 mbar	
Operating temperature	-20°C à + 60°C				
At upstream pressure of: **Flow rates are** Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	300 Nominal mbars 50 m3/h(n) 48.8 m3/h(n) 31.2 m3/h(n) or 62.4 kg/h	500 mbars and + Guaranteed 60 m3/h(n) 58 m3/h(n) 37 m3/h(n) or 74.8 kg/h	400 Nominal mbars 75 m3/h(n) 73.2 m3/h(n) 47 m3/h(n) or 94 kg/h	700 mbars and + Guaranteed 97 m3/h(n) 94.7m3/h(n) 77.5m3/h(n) or 155 kg/h	550 Nominal mbars 100 m3/h(n) 97.6m3/h(n) 62.5m3/h(n) or 125 kg/h	800 mbars and + Guaranteed 115m3/h(n) 112m3/h(n) 72 m3/h(n) or 144 kg/h	520 Nominal mbars 60 m3/h(n) 37.5 m3/h(n) or 75 kg/h	700 mbars and + Guaranteed 72 m3/h(n) 45 m3/h(n) or 90 kg/h	650 Nominal mbars 80 m3/h(n) 50 m3/h(n) or 100 kg/h	800 mbars and + Guaranteed 96 m3/h(n) 60 m3/h(n) or 120 kg/h
Safe keeping flow rate	Between 110 and 150% of the nominal flow rate									
Minimal outgoing pressure of safe keeping Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	15 mbar 18 mbar 25 mbar		10 mbar 14 mbar 19 mbar		180 mbar					
Safety valve calibration Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	between 35 and 50 mbars between 37 and 50 mbars between 47 and 60 mbars		between 40 and 50 mbars Between 45 and 55 mbars Between 50 and 60 mbars		between 360 and 400 mbars		between 350 and 370 mbars			
Connection	input: nut JSC cal.25 – output: male JPG cal.50 (aerial model) input: nut JSC cal.25 – output: nut JPG cal.50 (underground model)									
Weight	about 8 kg									
Briffault's Coding	**aerial**	**underground**	**aerial**		**aerial**		**aerial**		**aerial**	**underground**
Natural gas « H »-(Lacq type)	005499090 84.51.020	005498590 84.52.025	005494090		005486090		005499390 84.51.302 300mbar	005498790 84.52.033	005484590	005484890 only
Natural gas « L »-(Groningue type)	005499190 84.52.021	005498690 84.52.026	005494190		005486190		005499890 150mbar			for rectangular cubicle
Propane	005499290 84.52.022	-	005494290		005486290					

For any other setting: please contact us

Flow curves guaranteed according to the upstream flow



30.3 PRESSURE REGULATORS TYPE «BATTERY»

Batteries are composed by 2 to 4 regulators type B25N or BCH30N. B25N regulators have a specific setting point to be uses in battery. They are also fitted with a pulse plug with internal diameter 6 mm allowing to take the outgoing pressure of the downstream manifold, at the opposite of BCH30N that have neither specific setting nor pulse plug. Regulators are assembled on an outlet manifold (brass) and an inlet manifold (copper). Because of their distinct positions, every regulator has its own setting, in order to obtain a stable pressure and a steady flow rate. Thus we do not recommend to interchange the regulators. Description and characteristics of the regulator alone: please see previous paragraph.

Possible installation in S2300 cubicle and industrial station.

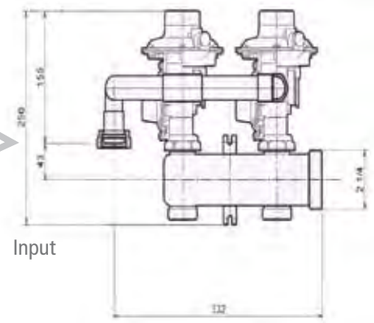
Batteries 2 x regulators

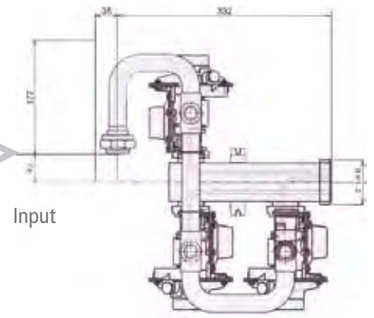
Batteries 3 x regulators

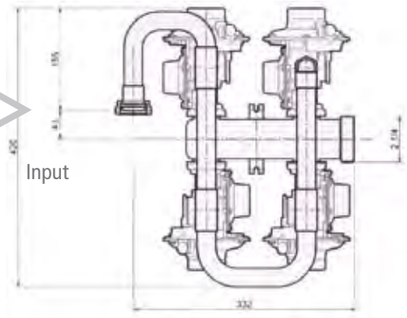
Batteries 4 x regulators

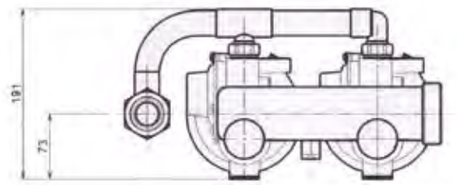
Nipple at JSC cal 25
to braze on Cu Ø 28 mm
925 2140 10

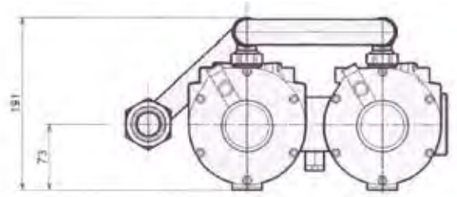
Nipple at JSC cal 25
to weld on Ac Ø 33.7 mm
925 1890 10

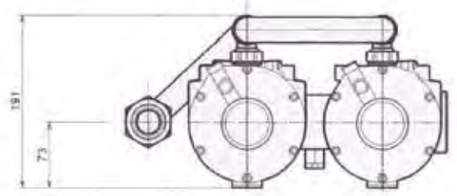












2 pieces connection cal.50
to braze on Cu Ø 54 mm
925 1860 10
JPG 925 2090 10

2 pieces connection cal.50
to weld on Ac Ø 60.3 mm
925 1850 10
JPG 925 2090 10

Output manifold
cal 50
to braze on Cu
Ø 54 mm
04 0000 922
JPG 925 2090 10

Output manifold
cal 50
to weld on Ac
Ø 60.3 mm
925.198.010
JPG 925 2090 10

30.3 PRESSURE REGULATORS TYPE «BATTERY»

30.4 PRESSURE REGULATORS TYPE «C»

CHARACTERISTICS	2 x B25N	3 x B25N	4 x B25N	2 x BCH30N	3 x BCH30N	4 x BCH30N
Incoming pressure	0.5 to 5 bars			0.8 to 5 bars		
Outgoing pressure Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	21 ± 1 mbar 27 ± 1.5 mbar 37 ± 2 mbar			300 mbar ± 15 mbar		
Operating temperature	20°C to 60°C					
At upstream pressure of: **Flow rates are** Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	**300 Nom. mbars** and+ Guaran. 41 m3/h 40 m3/h 25 m3/h or 51 kg/h	**500 mbars** and+ Guaran. 52 m3/h 50 m3/h 32 m3/h or 65 kg/h	**300 Nom. mbars** and+ Guaran. 67 m3/h 65 m3/h 41 m3/h or 83 kg/h	**500 mbars** and+ Guaran. 83 m3/h 80 m3/h 52 m3/h or 104 kg/h	**300 Nom. mbars** and+ Guaran. 90 m3/h 87 m3/h 56 m3/h or 112 kg/h	**500 mbars** and+ Guaran. 110 m3/h 107 m3/h 69 m3/h or 138 kg/h
	520 Nom. mbars and+ Guaran. 55 m3/h 35 m3/h or 70 kg/h	**700 mbars** and+ Guaran. 65 m3/h 41 m3/h or 82 kg/h	**520 Nom. mbars** and+ Guaran. 90 m3/h 56 m3/h or 112 kg/h	**700 mbars** and+ Guaran. 100 m3/h 62 m3/h or 125 kg/h	**520 Nom. mbars** and+ Guaran. 120 m3/h 75 m3/h or 150 kg/h	**700 mbars** and+ Guaran. 130 m3/h 81 m3/h or 162 kg/h
Safe keeping flow rate	between 110 and 150% of the nominal flow					
Minimal outgoing pressure of safe keeping Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	15 mbar 18 mbar 25 mbar			240 mbar		
Safety valve calibration Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	between 35 and 50 mbar between 37 and 50 mbar between 47 and 60 mbar			between 350 mbar and 400 mbar		
Connection	input: nut JSC cal.25 – output: male JPG cal.50					
Weight	approximately 10 kg	approximately 12 kg	approximately 14 kg	approximately 10 kg	approximately 12 kg	approximately 14 kg
Briffault's Coding Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	005452190 005452290 005452990	005453190 005453290 005453990	005454190 005454290 005454990	005452390	005453390	005454390

For any other setting: please contact us

Aerial model Square version

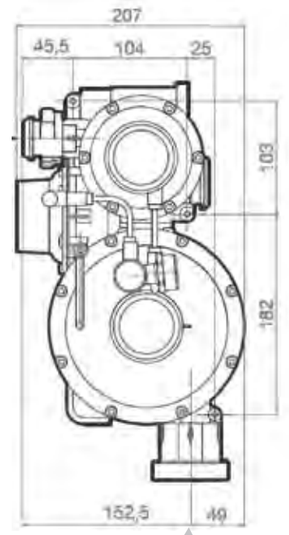
Nipple at JSC cal 25
to braze on Cu Ø 28 mm
925 2140 10

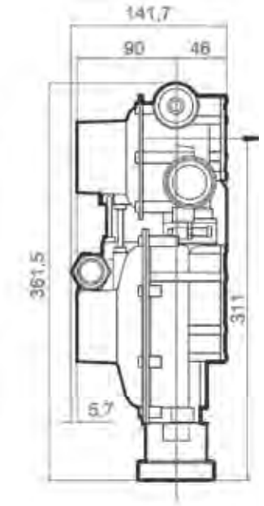
Cross-head for square version
Long cross-head for input PE 954 5001 77
Short cross-head for
input Cu or Ac 925 2740 10

Nipple at JSC cal 25
to weld on Ac Ø 33.7 mm
925 1890 10

Cross-head for
battery version
954 6201 77

Input





Output

2 pieces connection
cal.50 to braze on
Cu Ø 54 mm
925 1860 10
JPG 925 2090 10

2 pieces connection
cal.50 to weld on
Ac Ø 60.3 mm
925 1850 10
JPG 925 2090 10

Output manifold
cal 50 to braze on
Cu Ø 54 mm
04 0000 922
JPG 925 2090 10

Output manifold
cal 50 to weld
on Ac Ø 60.3 mm
925 198 010
JPG 925 2090 10

30.4 PRESSURE REGULATORS TYPE «C»

Aerial model Battery version

2 pieces connection cal.50 to braze on Cu Ø 54 mm
925 1860 10
JPG 925 2090 10

2 pieces connection cal.50 toweld on Ac Ø 60.3 mm
925 1850 10
JPG 925 2090 10

Output manifold cal 50 to braze on Cu Ø 54 mm
04 0000 922
JPG 925 2090 10

Output manifold cal 50 to weld on Ac Ø 60.3 mm
925 198 010
JPG 925 2090 10

Nipple at JSC cal 25
to braze on Cu Ø 28 mm
925 2140 10

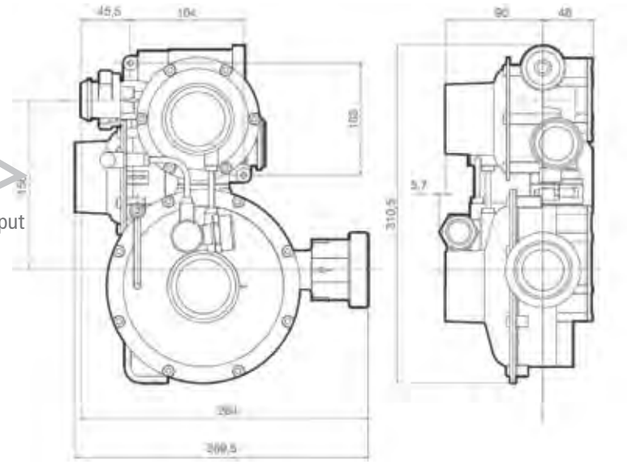
Cross-head for square version
long cross-head for input PE 954 5001 77
short cross-head for
input Cu or Ac 925 2740 10

Nipple at JSC cal 25
to weld on Ac Ø 33.7 mm
925 1890 10

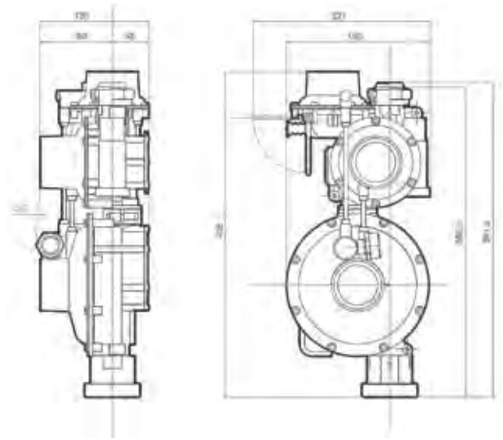
Cross-head for
battery version
954 6201 77

Output

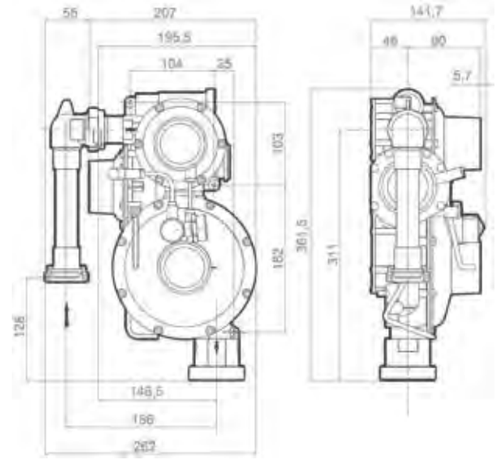
Input



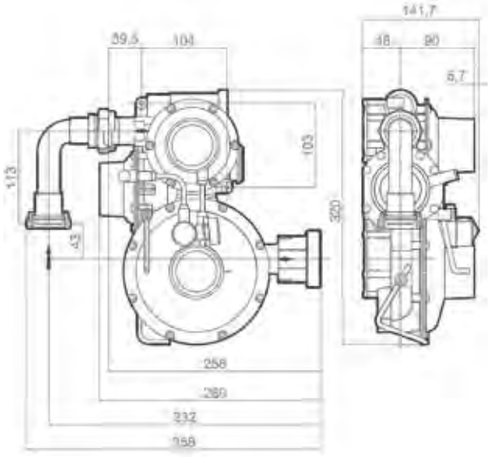
Other possible model: model in line



GDF Version Versions type C GDF are equipped with inlet cross-head and with mounting kit:



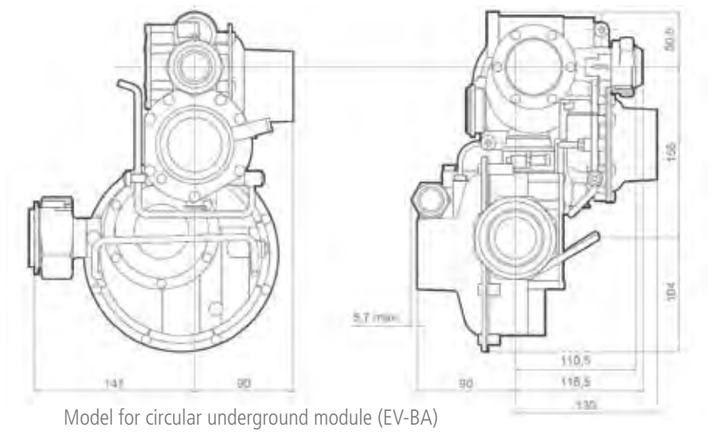
« U » Version (GDF designation)



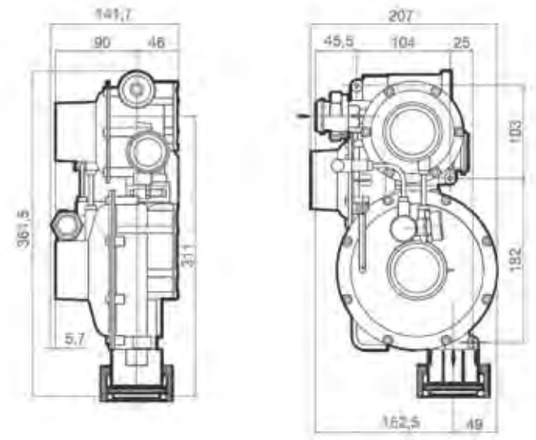
« Square » Version (GDF designation)

30.4 PRESSURE REGULATORS TYPE «C»

Square » Version (GDF designation)



Model for circular underground module (EV-BA)



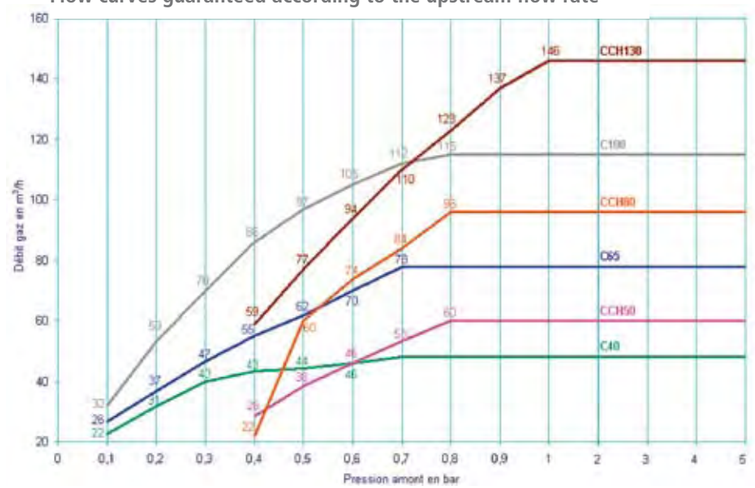
Model for rectangular underground module (EH-EQ)

CHARACTERISTICS	C40	C65	C100	CCH50	CCH80	CCH130
Incoming pressure	0.8 to 5 bars					
Outgoing pressure Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	21 ± 1 mbar 27 ± 1.5 mbar 37 ± 2 mbar			300 mbar ± 15 mbar		
Operating temperature	20°C to 60°C					
At upstream pressure of: Flow rates are Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	**300 Nom. mbars** 40 m3/h 39 m3/h 25 m3/h or 50 kg/h	**700 mbars and+ Guaran.** 48 m3/h 47 m3/h 30 m3/h or 60 kg/h	**550 Nom. mbars** 65 m3/h 63 m3/h 40 m3/h or 81 kg/h	**700 mbars and+ Guaran.** 78 m3/h 76 m3/h 48 m3/h or 97 kg/h	**550 Nom. mbars** 100m3/h 97m3/h 62m3/h or 125kg/h	**800 mbars and+ Guaran.** 115m3/h 112m3/h 72m3/h or 144kg/h
	650 Nom. mbars 50 m3/h 31 m3/h or 63 kg/h	**800 mbars and+ Guaran.** 60 m3/h 37 m3/h or 75 kg/h	**650 Nom. mbars** 80 m3/h 50 m3/h or 100 kg/h	**800 mbars and+ Guaran.** 96 m3/h 60 m3/h or 120 kg/h	**850 Nom. mbars** 130 m3/h 81 m3/h or 162 kg/h	**1000 mbars and+ Guaran.** 146 m3/h 91 m3/h or 182 kg/h
Safe keeping flow	between 110 and 150% of the nominal flow rate					
Minimal outgoing pressure of safe keeping Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	10 mbar 14 mbar 19 mbar			180 mbar		
Safety valve calibration Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	between 40 and 50 mbar between 45 and 55 mbar between 50 and 60 mbar			between 350 mbar and 370 mbar		
Maximal pressure of safe keeping Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	65 mbar			390 mbar		
Connection	input: nut JSC cal.25 – output: male JPG cal.50 (aerial model) input: nut JSC cal.25 – output: male JPG cal.50 (underground model)					
Weight	about 9 kg					
Briffault's Coding						
Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	**aerial square** 005450090 84.51.320 005463090 84.51.321 005466090 84.51.322	**aerial square** 005470090 84.52.160 005473090 84.52.161 005476090 84.52.162	**aerial square** 005487090 005487190 005487290	**aerial square** 005480090 84.52.190	**aerial square** 005483090 84.52.195	**aerial square** 005487390
Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type) Propane	**aerial battery** 005462090 84.51.330 005465090 84.51.331 005468090 84.51.332	**aerial battery** 005472090 84.52.170 005475090 84.52.171 005478090 84.52.169	**aerial battery** 005487590 005487690 005487790	**aerial battery** 005482090 84.52.191	**aerial battery** 005485090 84.52.196	**aerial battery** 005487890
Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type)	**underground EV-BA** 005469090 84.51.345 005469190 84.51.346	**underground EV-BA** 005479090 84.51.371 005479190 84.51.372	-	**underground EV-BA** 005489090 84.52.189		
Natural gas « H »-(Lacq type) Natural gas « L »-(Groningue type)	**underground EH-EQ** 005450990 005463990	**underground EH-EQ** 005470990 005473990	**underground EH-EQ** 005487990 005488590	**underground EH-EQ** 005480990 84.52.194	**underground EH-EQ** 005483990 84.52.199	**underground EH-EQ** 005488690

For any other setting: please contact us

Possible installation in S2300, S300 cubicle, industrial station, in underground circular and rectangular cubicle.

Flow curves guaranteed according to the upstream flow rate



Briffault®

Head office:
B.P. 10 - 12, rue du Moulin des Ponts
27610 Romilly-sur-Andelle

Tel. : +33 2 32 49 77 11
Fax : +33 2 32 49 48 06

E-mail: briffault@briffault.eu
www.briffault.eu

Commercial office:
Tel. : +33 2 32 49 97 56
+33 2 32 68 34 03
+33 2 32 68 34 05

Fax : +33 2 32 49 48 06