

# PRESSURE REDUCING VALVES V182 – V82



## INSTRUCTIONS MANUAL

**BAMO MESURES**

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PRESSURE REDUCING  
VALVES

**V182 – V82**

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906 M1 03 A

**PLAS**

**906-03/1**

# 1. MANUFACTURER'S DECLARATION

That the pressure reducing valves in case of the disqualification by using them with dangerous, inflammable, gaseous media, and as a result of their nominal width and pressure classification, are not part of the EC Directive 97/23 EC. Modifications on the pressure reducing valve which have an effect on the given technical specifications and the intended use render this manufacturer's declaration null and avoid.

# 2. DESCRIPTION

The pressure reducing valves V82 / V182 reduce pressure to a given value. They adjust themselves to the set working pressure and maintain it on the downstream side irrespective of fluctuations of inlet pressure or changes in flow demand. There is no direct relation between the working pressure and the inlet pressure. The valve works by balancing an adjustable spring force that pushes downward onto a diaphragm, against the force of the fluid pushing upwards. The secured pressure can be seen on the attached manometer.

# 3. TECHNICAL FEATURES

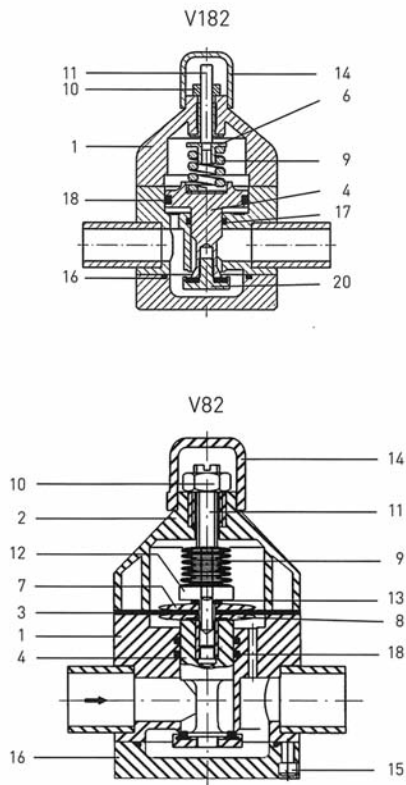
Body parts: PVC, PP or PVDF  
 Temperature limits PVC: 0...+60 °C  
 PP: -10...+80 °C  
 PVDF: -20...+100 °C  
 Seals: FPM (valve and pressure gauge guard)  
 Diaphragm: EPDM, PTFE coated

### Model V182

Nominal diameter: ND 10 to ND 50  
 Nominal pressure: PN 10  
 Adjustable range: 0.5...9 bar

### Model V82

Nominal diameter: ND 65 to ND 100  
 Nominal pressure ND 65 & ND 80: PN 6  
 ND 100: PN 4  
 Adjustable range ND 65 & ND 80: 0.5...5 bar  
 ND 100: 1...3 bar



Rep.	Designation
1	Valve body
2	Valve housing
3	Diaphragm
4	Piston
7	Compresseur (top)
8	Compresseur (bottom)
9	Spring assembly
10	Counter nut
11	Set screw
12	Cylinder screw
13	Washer (V82)
14	Cap
15	Hexagonal screw
16	Valve bottom with O-Ring
18	O-ring (V82)
19	Hexagonal screw
20	Piston lower part (V182)

## 4. INSTALLATION

1. The pressure reducing valves should be installed on pipeline systems free of tensions, if possible with a detachable connection [flange or union).
2. It can be installed in any position.
3. In case of dirty fluids or fluids with particles, we recommend you to install a line strainer in front of the unit.
4. Before activating you must check the tension of the body and piston bolts. If necessary fix bolts cross-over (*behold chart below*).

### Torque

ND	Screw / Body	Nm
10, 15, 20	M6 x 70	9
20, 25	M8 x 90	12
32, 40	M10 x 120	15
50	M12 x 180	29
65	M12 x 220	29
80	M12 x 250	29
	M12 x 40	29
	M12 x 70	29
100	M12 x 345	29
	M12 x 80	29
	M12 x 60	29

ND	Screw / Piston	Nm
10, 15, 20	M8 x 25	6
20, 25	M10 x 25	10
32, 40	M14 x 30	15
50	M14 x 30	15
65	M20 x 80	25
80	M20 x 80	25
100	M20 x 80	25

## 5. AJUSTEMENT DE LA PRESSION DE SERVICE

1. Unscrew the plastic cap [14] from the top [2] of the valve.
2. Remove the counter nut [10].
3. Turn the set screw with a screwdriver/hexagonal key as follows:
  - a] clockwise —> The operating pressure is increasing
  - b] counterclockwise —> The operating pressure is decreasing
4. Once set up the operating pressure, secure it with the counter nut [10].

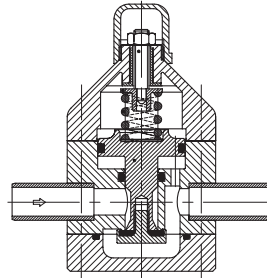
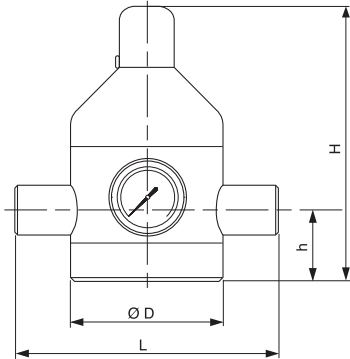
## 6. MAINTENANCE

1. The pressure relief valves types V82 / V182 require very little maintenance.
2. In case the fluids are full of dirt and/or particles, the pressure retaining valves need to be cleaned depending on the degree of pollution.
3. When dismantling the retaining valve [e.g. for cleaning], you should unlock the set screw [11] until the spring assembly [9] is discharged. Only after this, you can unlock the cylinder screws [11] from the reducing valve.

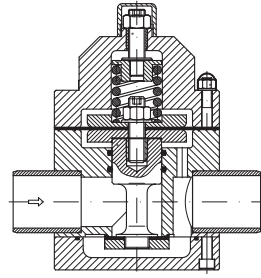
## 7. DIMENSIONS

ND	d	L	D	h	H
10	16	134	70	112	134
15	20	134	70	112	134
20	25	134	100	130	174
25	32	174	100	130	174
32	40	174	130	175	224

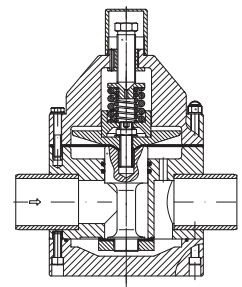
	d	L	D	h	H
40	50	224	130	178	224
50	63	244	150	210	244
65	75	300	200	250	300
80	90	360	250	305	360
100	110	420	300	345	420



V182 DN 10 - 50



V82 DN 65



V82 DN 80 - 100

## 8. CHARACTERISTICS

All following diagrams are established for Water at 20°C.

For each couple of curves, the upper one represents the opening pressure and lower one represents the closing pressure.

