

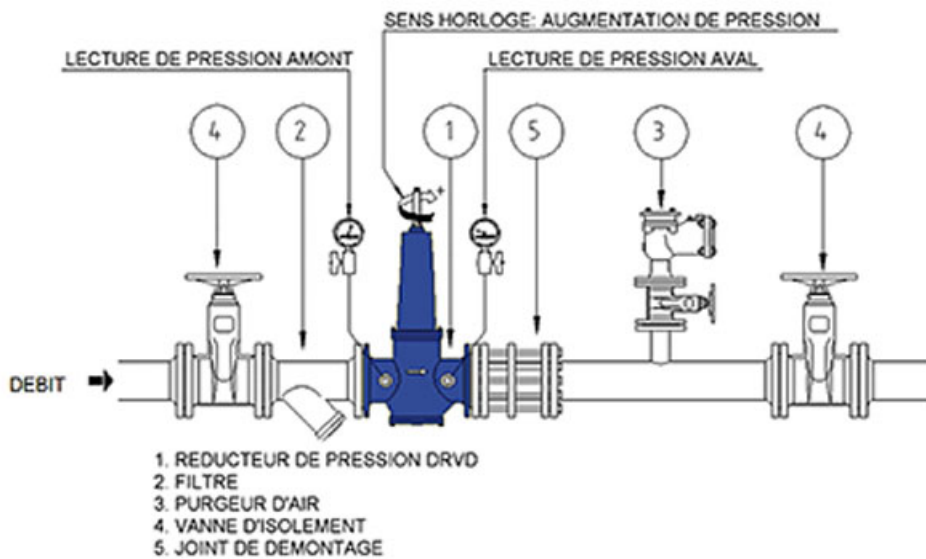
Operation and maintenance instructions for pressure reducing valve Type DRVD NG DN50-100



Preliminary inspection

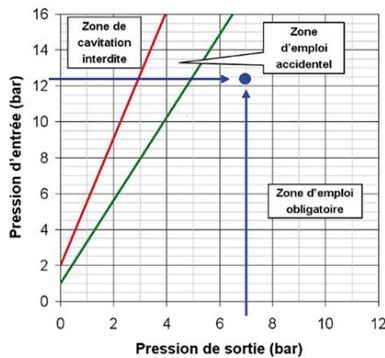
The pressure reducing valve DRVD type must be used on cold potable water networks. Before to use it, it's necessary to check that the installation and water quality fulfill the requirements of regulations in force in particular NF EN 806-2, NF P40-201 DTU 60.1, Décret n° 2001-1220. Check also that the valve is not damaged by transport or handling : in case of damage, please repair.

Necessary installation requirements



Pipe in horizontal position, calibrating screw of the valve installed upwards. It is essential that the valve is installed between 2 isolating valves and that it is protected by a strainer on upstream side and an air valve on downstream side. Please respect the diagram below. The direction of assembly is indicated by an arrow.

Conditions of use



Check that the conditions of use correspond to the supplied valve:

- Pressures: in standard conditions from 1,5 to 6 bars, in special conditions (different springs) from 2 to 8 bars and from 4 to 1 bars maximum
- Maximum pressure: 16 bars. Please consult us in case of higher pressure
- Cool water (maximum temperature : 40° C)
- Maximum capacity:

DN	Maximum capacity (l/s)
50	4,1
65	7,0
80	10,6
100	16,5

Start up and adjustment

The valve is a direct pressure reducing valve: it is operated by the downstream pressure which pushes the piston against the force of the spring.

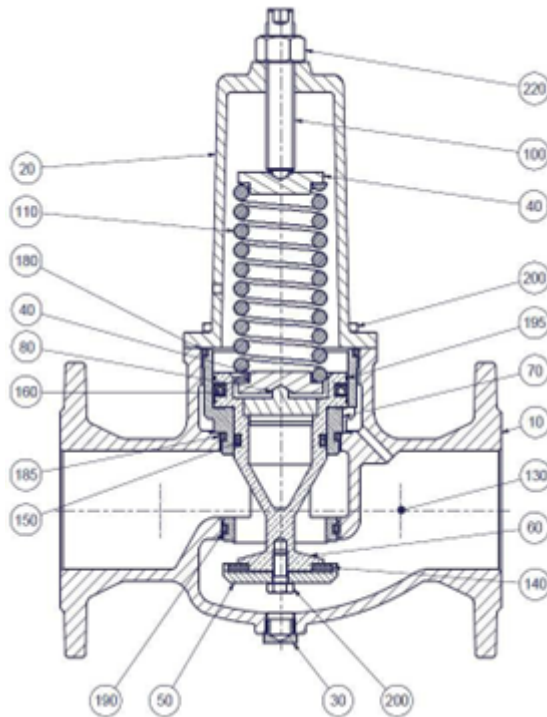
The adjustment of pressure is made with the calibrating screw (100):

- Increase of pressure: calibration in clockwise direction
- Decrease of pressure: calibration in anti-clockwise direction

Procedure of adjustment:

- Isolate the valve closing the 2 isolating valves (4),
- Open the isolating valve on the air valve (3); the strainer (2) must be clean, the pressure-gauges have to be installed,
- Decompress the spring of the valve completely while turning the calibrating screw (100) in anti-clockwise direction,
- The adjustment of pressure is made with a low flow in the network: open a water intake on downstream side,
- Open the upstream isolating valve (3-4 turns only), check the upstream pressure which must be lower than the allowable operating pressure of the valve,
- Calibrate with the indicated pressure, control on the downstream pressure-gauge,
- Close the water intake,
- Open completely the isolating valves (upstream and downstream) (4).

Instructions of use and maintenance



It is imperative to follow the following recommendations:

- Every 3 months: control the upstream pressure and check the recommended pressure, adjust it if necessary.
- The maintenance operations have to be made after water cut and without dismantling the valve. It is necessary to isolate it in order not to have pressure.
 - Every 12 months: replace the joint (160) – see references on the following page.
 - Every 3 years: replace all the dynamic joints.

Any other operation on the valve, other than concerning maintenance, must be subjected to the prior agreement of the After Sale Department.

All the joints are also available in one kit.

Item	Quantity	Description
220	1	Nut
200	5	Fixing screw
195	2	Segment
190	1	O'ring
185	1	O'ring
180	1	O'ring
170	1	O'ring
160	1	Lip joint
150	1	Lip joint
140	1	Joint
130	2	Pressure intake
110	1	Spring
100	1	Calibrating screw
80	1	Gasket
70	1	Ring
60	1	Piston
50	1	Joint holder
40	2	Gasket
30	1	Cover
20	1	Cap
10	1	Body

A- Maintenance 12 months: repère joint 160 item joint 160 (1 kit of 5 pieces)

DN	Reference
50	212458
65	212459

DN	Reference
80	212460
100	212461

Assembly instructions:

1. Isolate the valve after decreasing of the internal pressure (if necessary dismantle from the network),
2. Untighten completely the spring (110) (turn the calibrating screw (100) in anti-clockwise direction),
3. Remove the fixing screws from the cap (200), then the cap (20),
4. Remove the spring and gaskets (110-40),
5. Open the cover (30) and dismantle the piston,
6. Remove the screw (200), the joint holder (50) and the joint (140),
7. Take the piston out (60),
8. Remove the lip joint (160), clean and lubricate the joints, and put in place the new joint,
9. Put the piston back in its place without damaging the joints,
10. Proceed in opposite direction for the reassembly,
11. Open the isolating valves and regulate according to instructions above.

B- Maintenance 3 years: item joints 140, 150, 160, 195 (1 kit with 1 piece of each item)

DN	Reference
50	212465
65	212466
80	212467
100	212468

Assembly instructions:

1. Isolate the valve after decreasing of the internal pressure (if necessary dismantle from the network),
2. Untighten completely the spring (110) (turn the calibrating screw (100) in anti-clockwise direction),
3. Remove the fixing screws from the cap (200), then the cap (20),
4. Remove the spring and gaskets (110-40),
5. Open the cover (30) and dismantle the piston,
6. Remove the screw (200), the joint holder (50) and the joint (140),
7. Take the piston out (60),
8. Remove the joints (150, 160, 195), clean and lubricate the joints, and put in place the new joint,
9. Put the piston back in its place without damaging the joints,
10. Put the new joint back in place (140)
11. Proceed in opposite direction for the reassembly,
12. Open the isolating valves and regulate according to instructions above.

C- Replacement of all the joints : 1 kit of 1 piece of each item

This kit, containing all the joints, will permit an unusual repair.

DN	Reference
50	166922
65	202174
80	162935
100	167069

D- Modification of adjustment by changing the spring kit

DN	Reference from 2 to 8 bar	Reference from 4 to 12 bar
50	166921	167028
65	166923	166924
80	162928	166926
100	162931	166927

Assembly instructions:

1. Isolate the valve after decreasing of the internal pressure (if necessary dismantle from the network),
2. Untighten completely the spring (110) (turn the calibrating screw (100) in anti-clockwise direction),
3. Remove the fixing screws from the cap (200), then the cap (20),
4. Remove the spring and gaskets (110-40),
5. Put in place the new spring, with new gaskets if necessary,
6. Proceed in opposite direction for the reassembly,
7. Open the isolating valves and regulate according to instructions above.

The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.