

PRV-25 DIRECT ACTING PRESSURE REDUCING VALVE INSTALLATION AND MAINTENANCE INSTRUCTIONS

GENERAL SAFETY INFORMATION

Safe operation of this product can only be guaranteed if it is properly installed, commissioned, used and maintained by qualified personnel in compliance with the operating instructions. General installation and safety instructions for pipeline and plant construction, as well as the proper use of tools and safety equipment must also be complied with.

PRESSURE

Before starting the maintenance, Mind that pressure may exist in the system. Ensure that any pressure is isolated and safely vented to atmospheric pressure.

TEMPERATURE

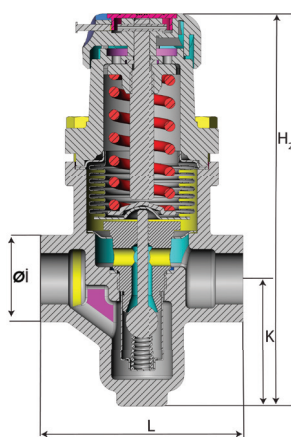
Allow time for temperature to normalise after isolation to avoid danger of burns.

GENERAL PRODUCT INFORMATION

PRV 25 is a direct acting type pressure reducing valve which is used for such cases that sensitive pressure adjustment is not necessary. It works with setting the system pressure occurs at the bellow caused by the spring pressure. Outlet pressure is adjusted with turning the hand wheel through +/- directions on the top of the product. PRV 25 which has three pressure settings which are represented by three spring colors and is designed for applications using steam or gases such as compressed air.

SIZES AND PIPE CONNECTIONS

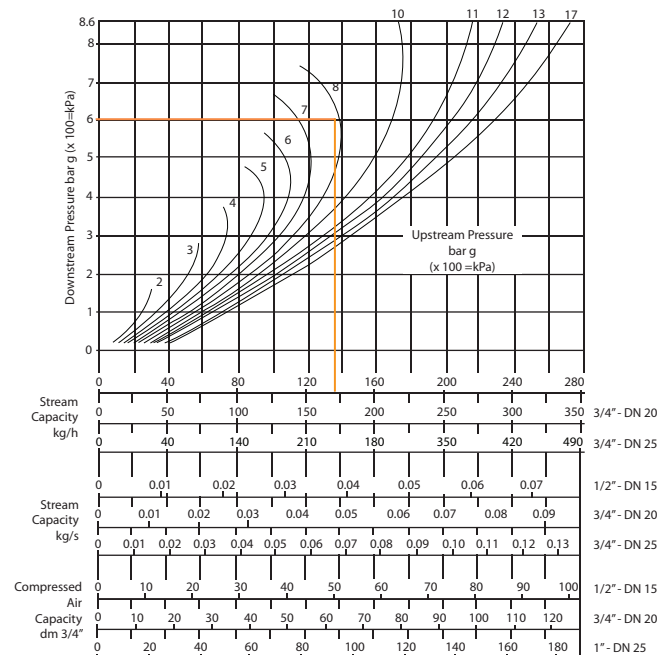
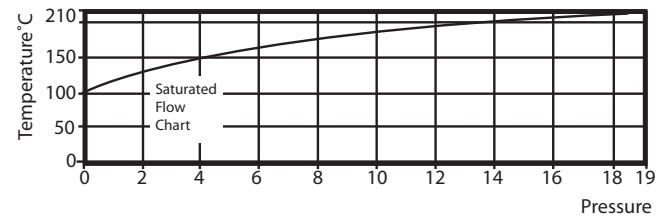
1/2"-3/4"-1" Screwed BSP or NPT



Dimensions	Screwed (mm)			
	H	L	K	Øi
1/2"	186,5	83	65	36
3/4"	186,5	96	65	41
1"	186,5	108	65	45

3. OPERATION CONDITIONS

Max. Body Pressure	PN 25
Maks. Design Temperature	210° C
Max. Upstream Pressure	19 barg
Max. Downstream Pressure	8.6 barg
Max. Recommended Turndown Ratio at Max. Flow	10:1
Max. Cold Hydrolic Test Pressure	38 barg



How to use the chart?

The curves numbered 2,3,4,5,etc. Represent upstream pressures. Downstream pressures are read along the vertical line on the left hand side of the chart.

Example: required reducing valve to pass 120 kg/h reducing from 8 to 6bar. From the downstream pressure of 6bar on the left hand side of the chart to be extended out horizontally until the line meets the curve of 8 bar upstream line. Orthographic projection of this point is read as the capacity of the product.

4. INSTALLATION

Check material suitability, pressure and temperature and their maximum and minimum values. If the maximum operating limits of the product are lower than those of the system in which it is being fitted, or if malfunction of the product could result in a dangerous overpressure or over temperature occurrence, ensure a safety device is included in the system to prevent such over-limit situations. PRV 25 must be installed on a horizontal pipeline with the flow direction as indicated by the arrow on the product body. Remove protection covers from all connections. Install the pressure reducer to the pipeline carefully.

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5. MAINTENANCE

Steps to be followed for the maintenance of pressure reducer;

- Pressure reducer can be reviewed under 2 groups as lower and upper groups.
- Remove the spring housing by undoing the 4 spring housing bolts.
- Lift out the bellows assembly (6) and the spring (7) and control the functionality of the bellow.
- The part numbered 7 can be changed according to the pressure level.

Grey : 0,14 - 1,70 barg

Green : 1,40 - 4,00 barg

Orange : 3,50 - 8,60 barg

e. In case, to change the pressure setting, change the adjustment cover numbered 9.

f. Remove the seat part numbered 5 with a special spanner

g. Clean the seating group (2,3,4,5,14) by air. Seating group is un-effective if there is any dirt.

h. Reassemble in the reverse order, using new gaskets, ensuring that the components and seating faces are clean. Do not forget to place 2 of gaskets numbered 13 between the lower and upper groups

i. Install the product to the pipeline after maintenance and cleaning are done.

Part List		
No	Part Name	Material
1	Body Ductile	Iron GGG 40.3
2	Valve Spring	Stainless Steel AISI 316
3	Strainer	Stainless Steel AISI 316
4	Valve	Stainless Steel AISI 420
5	Seat	Stainless Steel AISI 431
6	Bellow	Stainless Steel AISI 316
7	Pressure Adjustment Spring	Stainless Steel
8	Lock Pin	Tool steel
9	Spring Adjustment Cover	Poly-propylene
10	Pressure Adjustment Cover	Poly-propylene
11	Pressure Adjustment Stem	Stainless Steel AISI 316
12	Upper Cover	Aluminium
13	Cover Gasket	Graphite </td
14	Valve Pressure Stem	Stainless Steel AISI 316L

