INSTALLATION AND MAINTENANCE INSTRUCTIONS
PRV - PRESSURE REDUCING VALVES
PRV25/2S – PRV25/2SG – PRW25/2S

GENERAL

- These instructions must be carefully read before any work involving products supplied by VALSTEAM ADCA ENGINEERING S.A. is undertaken.

- The installation procedure is a critical stage in a life of a valve and care should be taken to avoid damage to the valve or equipment.

- Reducing valves are designed to give accurate control of down-stream pressures. They give their maximum performance only when the equipment associated with them is correctly sized and installed in accordance with our recommendations.

Warning!
- If malfunction of any other equipment or system operation failure may result in a dangerous overpressure, over temperature or even vacuum condition, a safety device must be included in the system to prevent such situations.
- At start up, the presence of small particles in the fluid (dirt, scale, weld splatters, etc) may cause an imperfect closure of the seat. If this occurs, proceed to an accurate cleaning.
- Do not touch the equipment without appropriate protection during working operation because it may conduct heat if the used fluid is at high temperature.
- Before starting maintenance be sure that the equipment is not pressurized or hot.
- The equipments must be used within the working temperature and pressure limits laid down for them, otherwise they may fail (refer to nameplate and/or IS- Information Sheet).
- Do not remove the nameplate attached to the equipment. Serial number and other useful information is stamped on it.
- The valve is not suitable for oxygen service.

INSTALLATION

- Prior to install check that the product is suitable for the intended application: materials and pressure/temperature ratings.
- Before to install remove plastic covers placed on flanges or connection ends. The equipment has an arrow or Inlet/Outlet designations. Be sure that it will be installed on the appropriate direction.
- Take care with jointing material to ensure that none may be permitted to block or enter the valve.
- Reducing valves are recommended to be fitted with the centre line of the valve in a vertical position to ensure that the best results are obtained.
- An ADCA pipeline strainer should be installed upstream of the valve to protect from dirt which could damage the valve or cause mal-functioning.
- The reducing valve pipework should be properly supported and free from strain and it should not be subjected to undue surges of pressure.

For steam installations we strongly recommend that the reducing valve is positioned where condensation is unable to collect or that, alternatively, separators and steam traps are fitted so that the pipework drains correctly. The start up condition should be considered.

Installation area requirements:

- The installation area should have easy access and provide enough space for maintenance and removing operations.
- The installation area should have the necessary firing system to prevent damage of the equipment due to over temperature/pressure cause by fire.

MAINTENANCE

- We recommend that the pressure reducing valves to be serviced as necessary. Pressure reducing valves should be checked periodically (at least yearly), to verify that they are operating correctly and to clean the internal parts and screen (if any).
- When reassembling make sure that all gasket faces are clean and always use a new gasket. Tighten cover bolts uniformly in a diagonal sequence.
- Valves in store for long periods should have their adjusting spring relaxed.
- For further information refer to the relevant PRV brochure or consult our Sales Office.

LIMITING CONDITIONS	PRV25/2S	PRV25/2SG	PRW25/2S
Body design conditions	PN25	PN25	PN25
Max. upstream pressure	17bar	17bar	14bar
Max. downstream pressure	8,6bar	8,6bar	8,6bar
Min. downstream pressure	0,14bar	0,14bar	0,35bar
Max. design temperature	210ºC	180ºC	75ºC
Max. Cold hydraulic test	38bar	38bar	38bar
Max.reducing ratio	10:1	10:01	10:01

Pressure ranges				
Spring colour	**Blue***	**Yellow****	**Green**	**Red**
Red. Press. bar	0,35-1,7	0,14-1,7	1,4-4	3,5-8,6

*Applicable only on the PRW ; ** Appl.only on the PRV
Where control spring ranges overlap, always use the lower range to give better control and precision

It is preferable to select a range spring where the desired reduced pressure is at upper end of range.

USEFUL NOTES ON VALVE AND PIPE SIZING

If the flow is unknown it's possible to estimate it based on pipe size or equipment heat requirements - please consult.

CE MARKING (PED - European Directive)	
PN 25	**Category**
DN15 to DN32	SEP

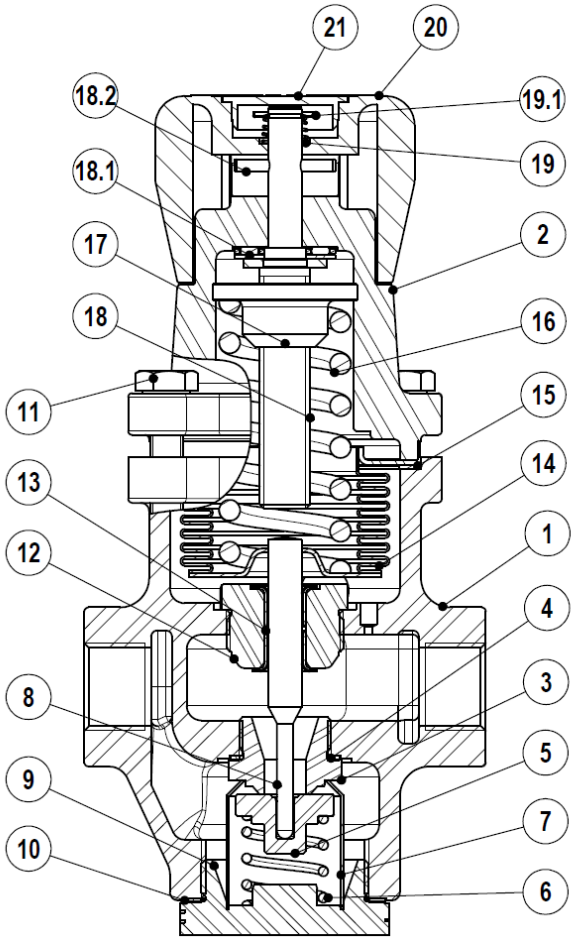
PARTS LIST FOR PRV25/2S PRESSURE REDUCING VALVES:

CODE	DESIGNATION	VALVE SIZE DN	POS.NR.	QTY.
VR.9610.015	Bellows and body gasket	15 - 25	14,15	1 set
VR.9610.115	Spring and body gasket 0,35-1,7 bar	15 - 25	15,16,21	1 set
VR.9610.215	Spring and body gasket 0,14-1,7 bar	15 - 25	15,16,21	1 set
VR.9610.315	Spring and body gasket 1,4-4 bar	15 - 25	15,16,21	1 set
VR.9610.415	Spring and body gasket 3,5-8,6 bar	15 - 25	15,16,21	1 set
VR.9614.015	Metal plug	15 - 25	5,6,7,10	1 set
VR.9614.020	Metal plug	15 - 25	5,6,7,10	1 set
VR.9614.025	Metal plug	15 - 25	5,6,7,10	1 set
VR.9615.015	PTFE/GR plug	15 - 25	5,6,7,10	1 set
VR.9615.020	PTFE/GR plug	15 - 25	5,6,7,10	1 set
VR.9615.025	PTFE/GR plug	15 - 25	5,6,7,10	1 set
VR.9616.015	NBR plug	15 - 25	5,6,7,10	1 set
VR.9616.020	NBR plug	15 - 25	5,6,7,10	1 set
VR.9616.020	NBR plug	15 - 25	5,6,7,10	1 set

Recommended tightening torques:

Pos.Nr.	Valve Size	Nm
3	**DN 15 - 25**	100-110
9	DN 15 - 25	65-75
11	**DN 15 - 25**	20-25

Remarks: tighten cover bolts uniformly



PRODUCTS RETURNING

ATTENTION

- Information regarding any hazards and precautions to be considered because of contaminating fluids and residues or mechanical damage that may represent a health, safety or environmental risk, must be provided in writing by the distributors and costumers when returning products to Valsteam ADCA engineering.
- Health and safety data sheets regarding substances identified as hazardous or potentially hazardous must be provided with the information mention above.

ATTENTION

- **LOSS OF WARRANTY: Total or partial disregard of above instructions involves loss of any right to warranty.**