

## PRESSURE REDUCING VALVES

# G1PR/H1PR

RUGGED DEPENDABILITY,  
SUPERIOR PERFORMANCE

G1PR/H1PR is a premium, self-acting pressure reducing valve, ideal for maintaining accurate downstream pressure while responding quickly and effectively.



# PRESSURE REDUCING VALVES

## G1PR/H1PR

The purpose of the G1PR/H1PR is to reduce a higher upstream pressure to a lower, constant downstream pressure regardless of fluctuations in upstream pressure or variations in flow.

FIG.1





# FEATURES

- Robust and compact design
- Easy to install and use
- Optimized for flow stability
- Self-acting
- Accurate and Stable
- Quick and Responsive

## DESIGN

The pressure reducing valve is a self-acting unit consisting of:

- Valve with pressure balanced cone
- Valve body materials  
Nodular cast iron (PN25) or Cast steel (PN40)
- 1, 2, or 3 springs
- Diaphragm housing
- One capillary tube
- Compensation chamber (for steam application)

## FUNCTION

The medium flows through the free area between the seat and cone. The position of the valve cone determines the flow rate and consequently the pressure ratio across the valve.

The downstream pressure is transmitted through the compensation chamber (for steam applications) and the capillary to the diaphragm, where it is converted into a positioning force. This positioning force is adjusting the cone with dependence on the force of the operating springs. The spring force can be adjusted by using the set point adjuster. **(FIG .1)**

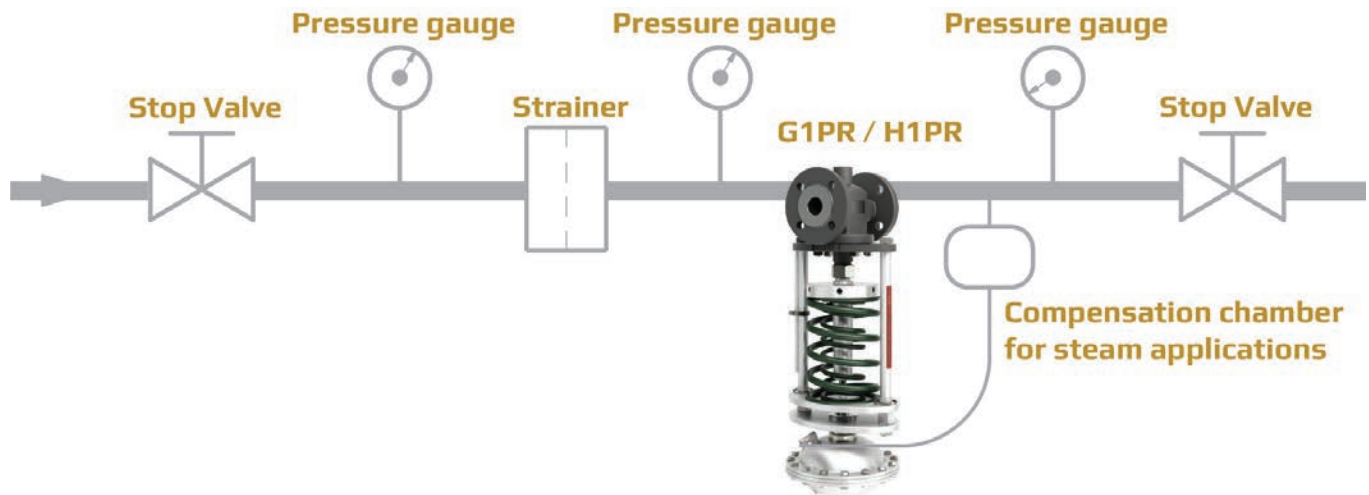
The valve cone is pressure balanced. The fluid pressure acts onto the bottom and top surfaces of the cone at the same time. In this way, the forces produced by the fluid pressure on the cone, are compensated.

## SPECIFICATIONS

TYPE	FLANGE CONNECTION DN in mm	k <sub>VS</sub> -value m <sup>3</sup> /h	LIFTING HEIGHT mm	WEIGHT kg
15 G/H1PR	15	4	7,5	21
20 G/H1PR	20	6,3	7,5	23
25 G/H1PR	25	10	9	24
32 G/H1PR	32	16	10	27
40 G/H1PR	40	25	11	29
50 G/H1PR	50	35	11,5	33
65 G/H1PR	65	58	14,5	38
80 G/H1PR	80	80	16	55

SET POINT RANGE bar	0,4 - 1,2	1 - 2,5	2-5	4-10	8-16
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## INSTALLATIONS EXAMPLE



**PIONEERING  
TECHNOLOGY.**

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