

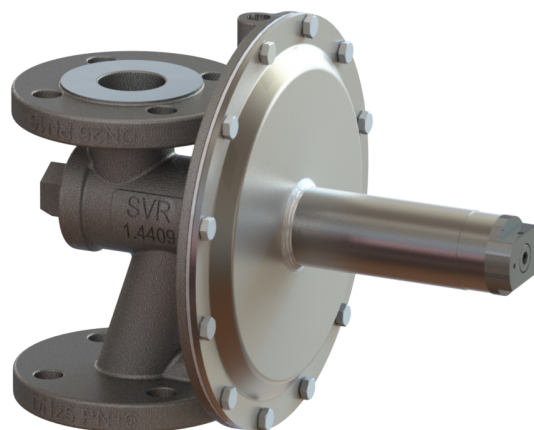
Pressure Reducing Valve

Type PRL

Description

These simple and robust designed pressure reducing valves (without auxiliary energy) are adapted to a large number of processes requiring downstream pressure control. The pressure reducing valve closed when the downstream pressure increases. The set point is adjustable with a hand wheel which compresses a spring more or less according to the desired set point value. These valves are particularly adapted for gases (air, nitrogen...)

Direct passage valve
PRL / Single reverse seat
PRLE / Single reverse seat
Balanced by piston



Characteristics

Flanges PN 16 : DN15 to DN100 according EN 1092-1
Flanges Class 150 : 1" - 2" - 3" - 4" selon according EN 1759-1 – B16-5
Material :
Steel 1.0619 – A216 WCB for DN 80 – DN 100 - 3" - 4"
Stainless steel 1.4409 – CF3M
Stainless steel 1.4408 – CF8M for DN 80 – DN 100 - 3" - 4"
Design ANSI B16-34, EN 12516-1 & EN 12516-2

Options

- Diaphragm in FPM
- Adjusted & sealed
- Rain cover
- Certificate Atex - material - FDA

Special features

Wide range of Kvs : 0.6 to 26
Pressure set point range : 5 to 1000 mbar

How to order

- Pressure reducing valve type PRL
- DN, PN Material, Bride Flanges according to EN.Kvs = ____ Ø seat = ____ mm
- Internal impulse (or external on pipe).
- Plug, stem and seat in stainless steel.

Certifications

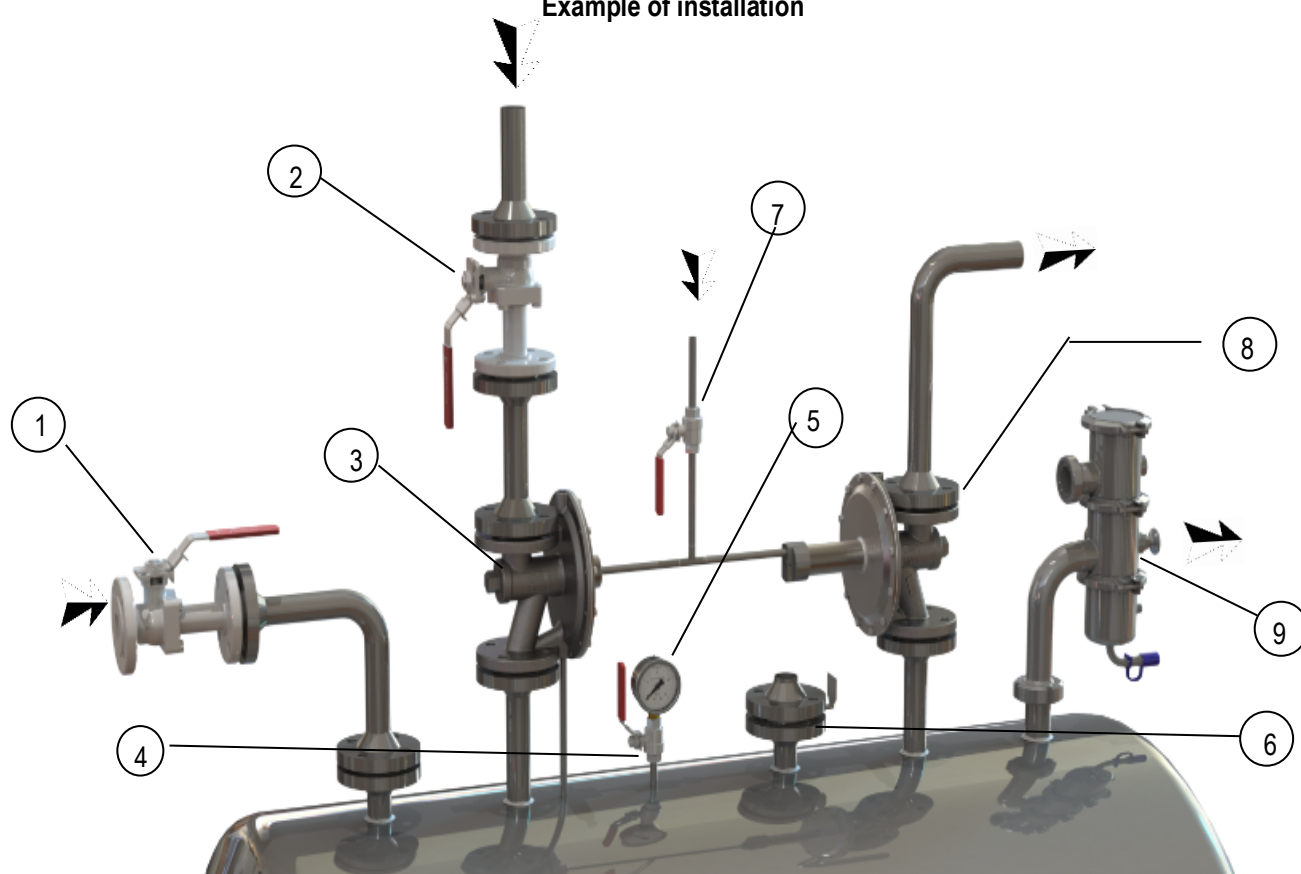
DESP; ATEX II 2 G/D; ISO9001 / PED; ATEX II 2 G/D; ISO9001

Operation

The pressure reducing valves type PRL are self-actuated (without auxiliary energy) controlling the pressure downstream compared to a set point. The pressure reducing valve closed by increase in the pressure downstream in a proportional way.

The choice of the adjustment range will be carried out according to the pressure downstream to control and of adjustment range table.

Example of installation



Rep./Item	Description
1	Valve inlet product
2	Inlet isolating valve
3	Pressure reducing valve
4	Isolating valve
5	Gauge
6	Rupture disc
7	Upper casing
8	Inlet pilot valve
9	Safety valve

Mounting

It is imperative to assemble the pressure reducing valve, on vertical piping. It is imperative to assemble the excess pressure valve, on vertical piping, the diaphragm vertical, to reduce potential areas of retention (condensation).

However, after checking with our services, depending on the operating pressure, the device can be mounted in a horizontal position.

Operational limits

Pressure reducing valve	Nominal diameter	Leakage rate	Max. Temperature in actuator
PRL	DN 15 to DN100	Sealing/ Class VI ANSI B 16 104	160 °C with PTFE diaphragm
PRLE	DN 15 to DN100		

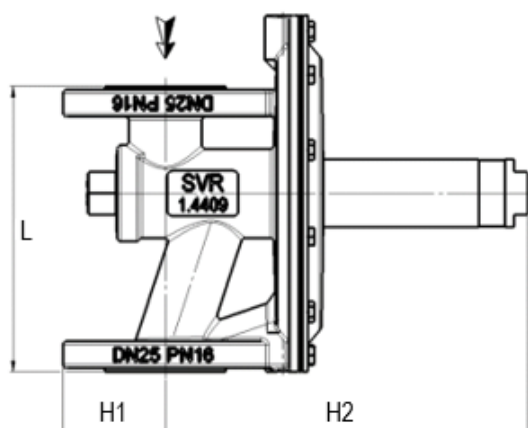
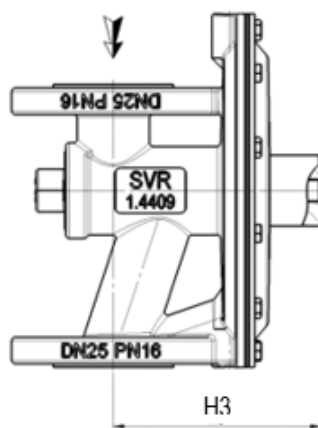
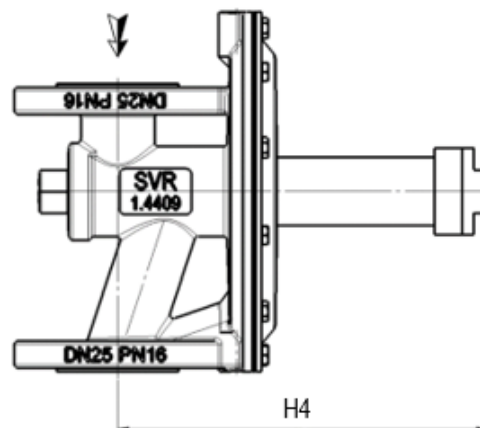
Kvs values (m³/h)

Bridges Class 150 Bridges / Flanges	¾"	1"	1 ½"	2"	3"	4"
Seat	15	25	40	50	80	100
4	0.6	0.7				
6	1	1.2				
10	2	3	3	3		
14		5	5.5	5.5		
21			12	12		
32			26	26		
42						
65						
75						
80						

Adjustment range (bar eff)

DN 15	DN 25	1"	DN 40	DN 50	2"
10 - 30 mbarg	10 - 20 mbarg	10 - 20 mbarg	10 - 20 mbarg	10 - 20 mbarg	10 - 20 mbarg
20 - 100 mbarg	10 - 50 mbarg	10 - 50 mbarg	10 - 50 mbarg	10 - 50 mbarg	10 - 50 mbarg
100 - 300 mbarg	30 - 150 mbarg	30 - 110 mbarg	30 - 150 mbarg	30 - 150 mbarg	30 - 150 mbarg
200 - 600 mbarg	50 - 300 mbarg	50 - 270 mbarg	50 - 300 mbarg	70 - 300 mbarg	70 - 300 mbarg
300 - 1000 mbarg	160 - 850 mbarg	200 - 900 mbarg	170 - 600 mbarg	170 - 600 mbarg	170 - 600 mbarg

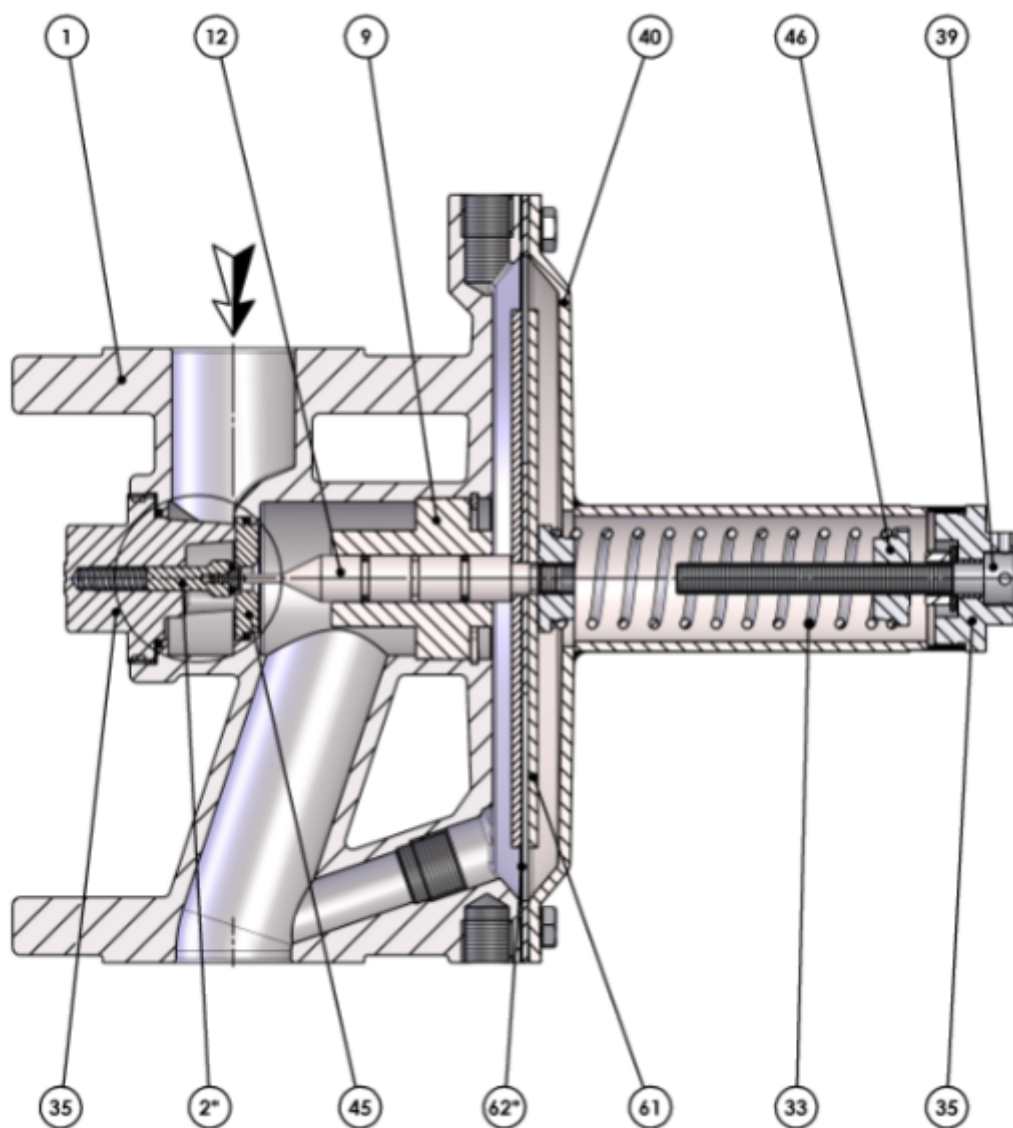
Dimensions

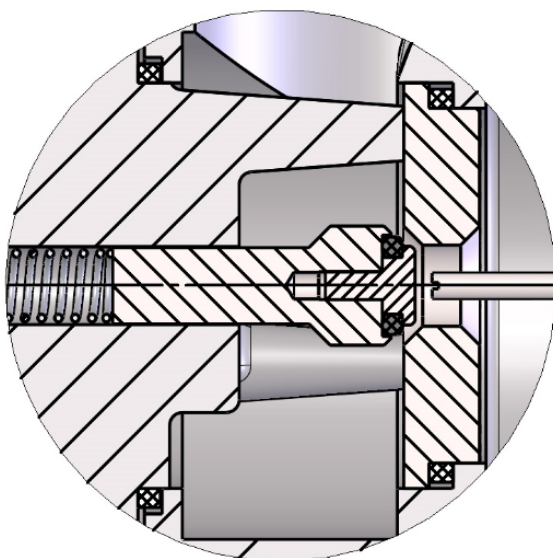
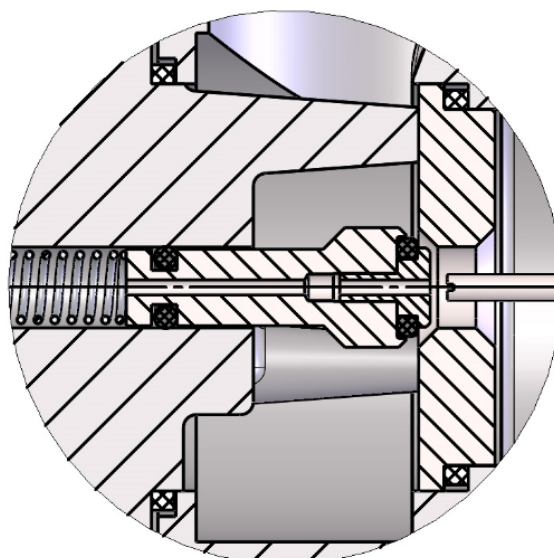
Standard

Dom loaded

Pilot


DN	15	25	40	50	80	100
L (ISO PN16)	130	160	200	230	310	350
L (Class 150 RF)		127		178	222	254
H1	47.5	57.5	75	82.5		
H2	190.5	203	254	254		
H3	107	118	164	164		
H4	193	206	257	257		
Mass (kg)	4.5	6.8	16.2	19		

All dimensions in mm

Part list - PRL DN15 – DN50 / ½" - 2"

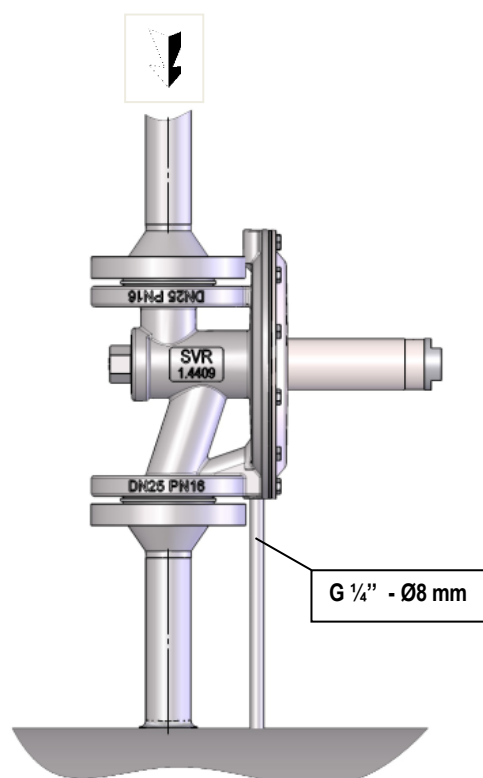
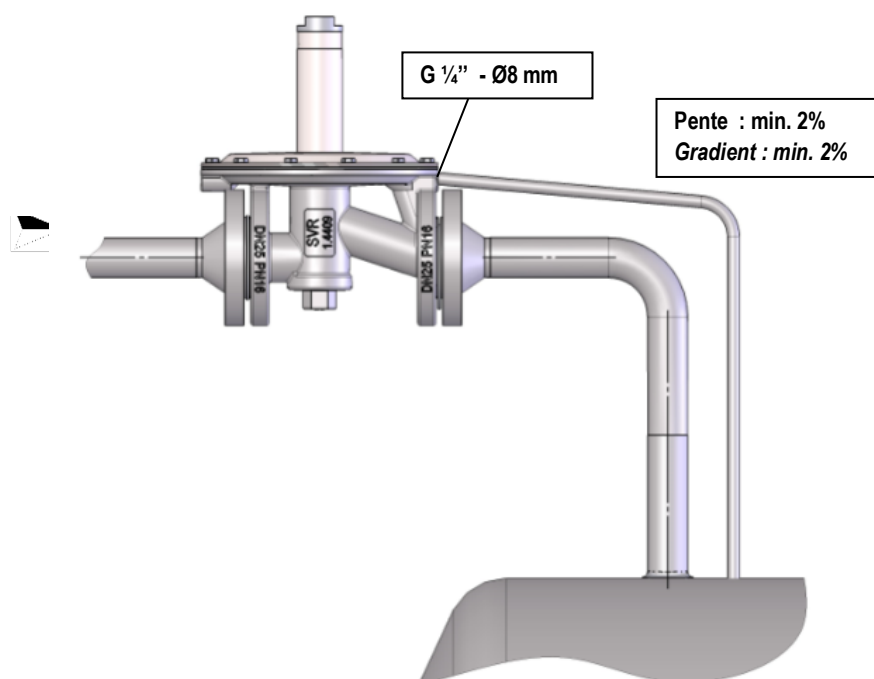


Standard version

with balanced seat


Rep./Item	Description	Material
1	Body	1.4409 / 1.4408 / 1.0619
2*	Piston	Stainless steel
9	Guide	Stainless steel
12	Pin	Stainless steel
33	Spring	Stainless steel
39	Adjusting screw	Stainless steel
40	Upper casing	1.4404 / 1.0619
45	Seat	Stainless steel
46	Spring guide	Stainless steel
61	Diaphragm plate	Stainless steel
62*	Diaphragm	PTFE FDA / FPM

* Spare parts

Mounting of Reducer With External Feedback Line



Pressure Reducing Valve Characteristic

