

SELF-OPERATED PRESSURE REGULATORS

EXCESS PRESSURE VALVE MODEL **S2**

MAIN FEATURES

Self-actuating excess pressure valve, fully balancing by diaphragm. It's used to maintain the pressure upstream of the valve to an adjusted set point.

When upstream pressure rises above a set point, the valve opens proportionally pressure rising.

This series of regulators is suitable for steam, compressed air, non-hazardous gases and liquids.

Actuator mounts diaphragm with intermediate reinforced lining.

Set pressure regulating range between **0,02** and **8 barg** with different actuators (up 16 barg under request).

Condensation tank (pot) is available and necessary for steam or fluid upper to 125°C, to protect the diaphragm against overheating.

The excess pressure valve is not a safety valve, and then if necessary, an overpressure protection must be installed.

Max. permissible upstream pressure	16 barg
Max. permissible temperature	-10 to 80°C (gases and liquids) Up 180°C (steam)
Sizes	DN15 to DN65 DN80-DN100 Consult
Body material	Nodular Iron (GGG40.3) Bronze RG10 (consult) Carbon steel (GSC25N) Stainless steel (1.4408)
Connections	Flanged DIN PN16-PN40 Flanged ANSI 150 / 300 Threaded BSP / NPT, consult
Trim material	Stainless steel Aisi 304L (optionally AISI 316L)
Diaphragm Material	EPDM until 125°C EPDM + PTFE 125°C to 180°C
Seal material	NBR, EPDM, PEEK,... Graphited PTFE

S2 valves are perfectly suitable for controlling gases in the temperature range between -10 and +80°C (or 0 to 180°C when soft seal is PTFE+GR and diaphragm EPDM+PTFE).

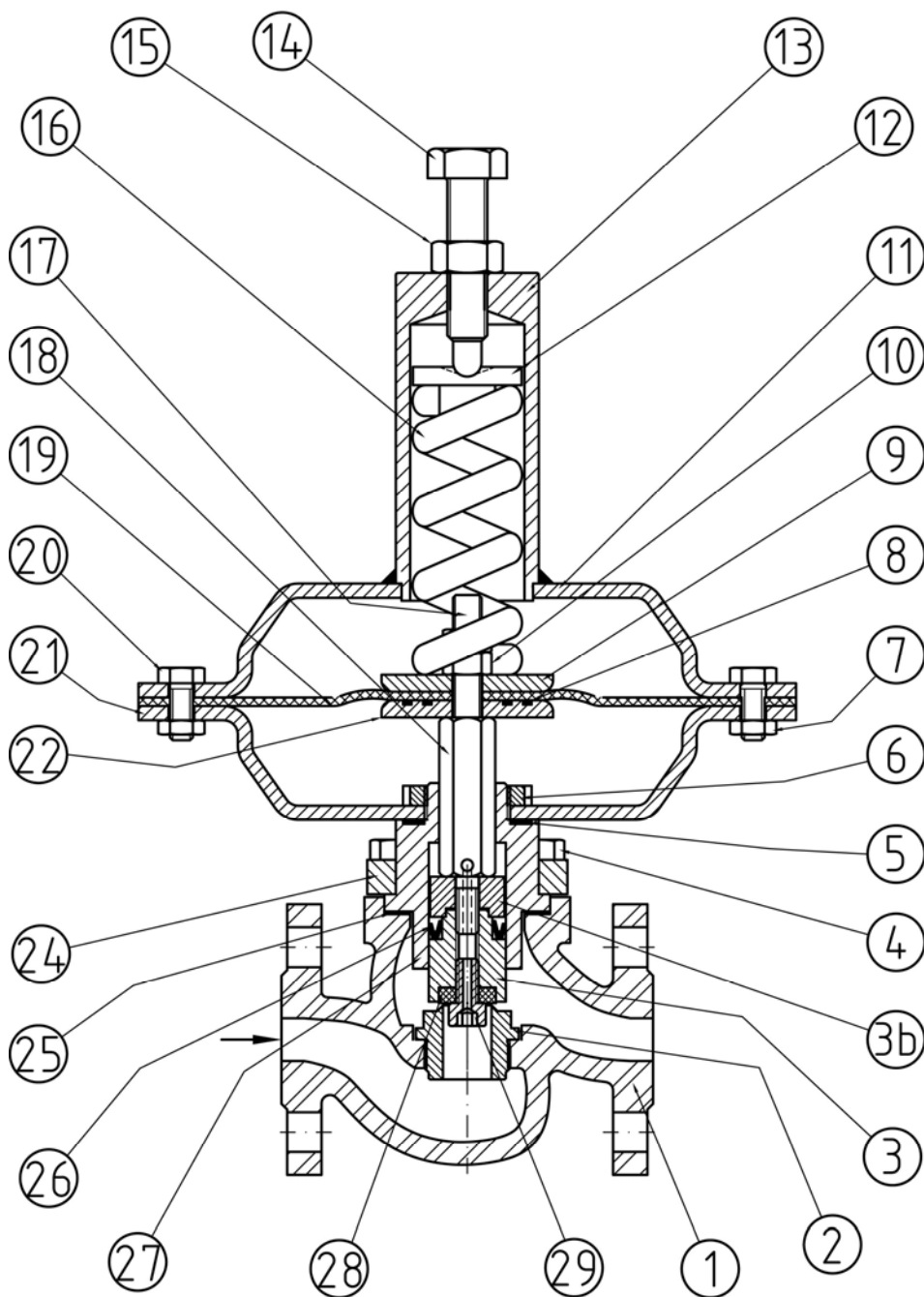


Common uses

Chemical laboratory installations, waters distribution systems, installation of waste water, industrial, compressed air, sprinkler systems, fuel-oil, fire protection, inert gas protection,...

Special features

Steam installation up 180°C for steam, actuator, Stainless steel AISI316 actuator, Stainless steel AISI 316 trims, special soft-seals, external control line could be replaced by internal set (not for steam)...



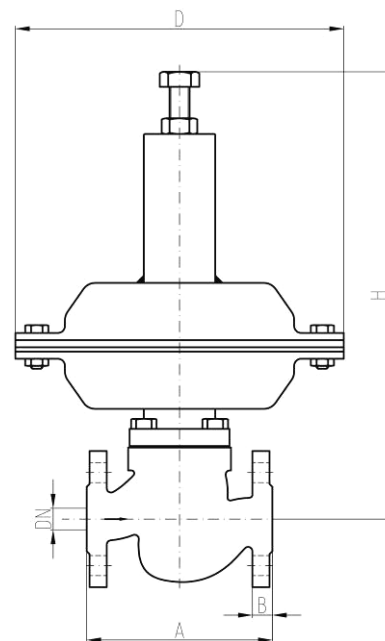
OPERATING

The excess pressure valves S2 model works with direct action principle.

The forces at the plug caused by the upstream and downstream pressures are eliminated by the balancing gasket. The plug is fully balanced.

When the force resulting from the upstream pressure p_1 (via external control line or internal) exceeds the spring force adjusted at the set point springs, the valve opens proportionally to the change in pressure.

The spring force is adjustable at the set point bolt (item 14).



DIMENSIONS and Kv

DN	15	20	25	32	40	50	65	80	100	
Kv value	3,5	5	9	13,5	22	32	57	82	115	m ³ /h
A (EN PN40)	130	150	160	180	200	230	290	350	350	mm
A (ANSI 150 LB)	o	o	7,25	-	8,75	10	10,86	13,88	352,5	In.
A (ANSI 300 LB)	o	o	7,76	-	9,25	10,5	11,5	14,49	368	In.
H	315	315	325	325	360	360	390	390	410	mm
Aprox. Weight	8	9	12	13	15	20	30	42	55	kg

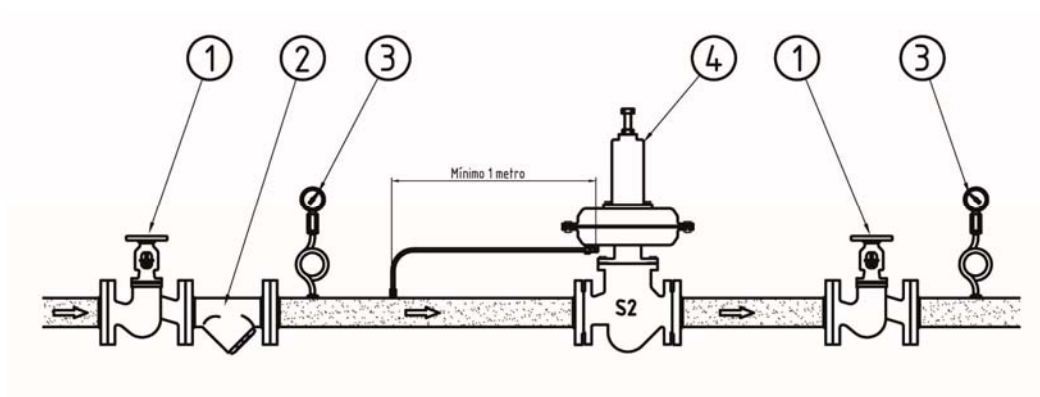
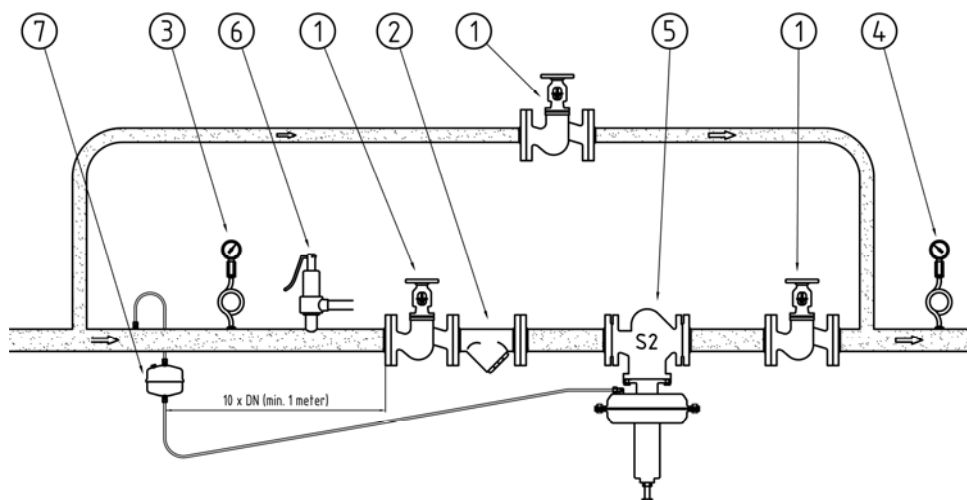
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THIS SHOULD NEVER BE USED AS SAFETY VALVE, ONLY LIKE ACCESSORY OF PRESSURE.

INSTALLATION

Typical installations



- 1.-Isolation Valve
- 2.-Filter
- 3.-Inlet pressure gauge
- 4.-Outlet pressure gauge
- 5.-Excess pressure Valve S2
- 6.-Safety Valve
- 7.-Condensing tank

It is advisable to mount in horizontal pipes, with the actuator at the top, as shown in figure.

It is essential to install a filter (item 2) at the entrance of the valve to avoid excessive maintenance venting line.

The distance between valve and pressure tapping point should be about 1 meter.

External control line it's necessary for liquids with temperatures above 125°C and steam, and recommended for liquids below 125°C.

For gases isn't necessary because valve mounts the internal control line.