Pressure Retaining Valve Type V86

Product description

The V86 pressure retaining valve serves to keep the working or system-related pressures constant, to balance out pressure pulsation and to reduce pressure peaks in chemical process systems.

Function

If the inlet pressure rises above the set value, the pressurized valve piston is lifted against the spring resistance. As a result, the valve opens and the pressure in the outlet pipe is reduced. The valve closes as soon as the inlet pressure sinks below the pre-set spring tension.

Applications

- Chemical process industry
- Measurement and control
- Water treatment
- Microelectronics

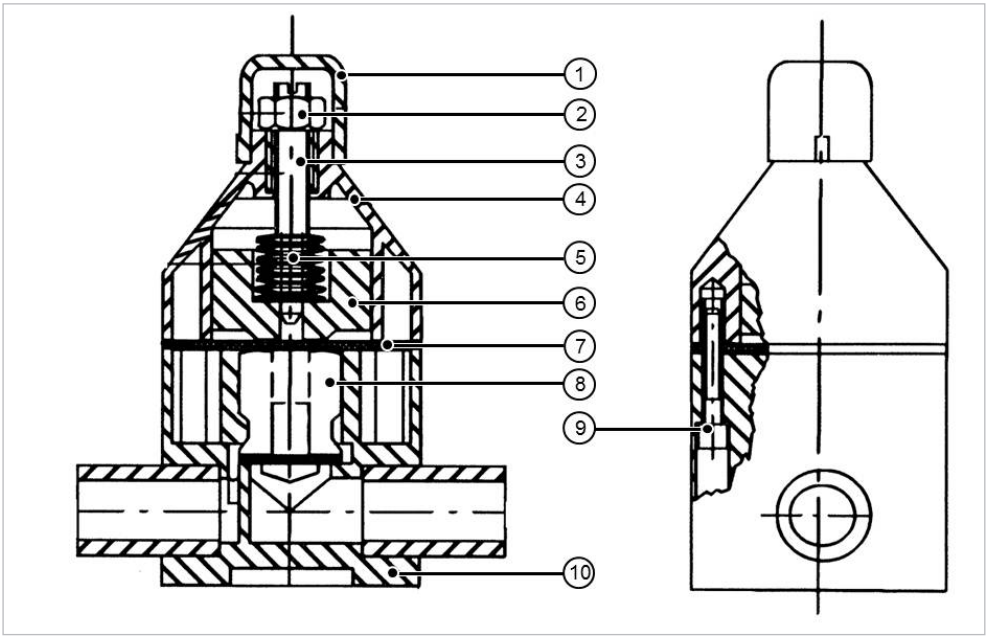
Benefits/features

- No auxiliary energy required
- The working pressure is set with an adjusting screw and locked with a locking nut.
- Valves can also be adjusted under working pressure
- Requires practically no maintenance and can be installed in any position
- All parts that come into contact with the medium are made of highly resistant plastics
- The large form of the housing allows good flow values

Flow media

Neutral and aggressive media with a small quantity of particles/solids. The chemical resistance depends on the selected valve material (see online tool ChemRes PLUS).

Technical data

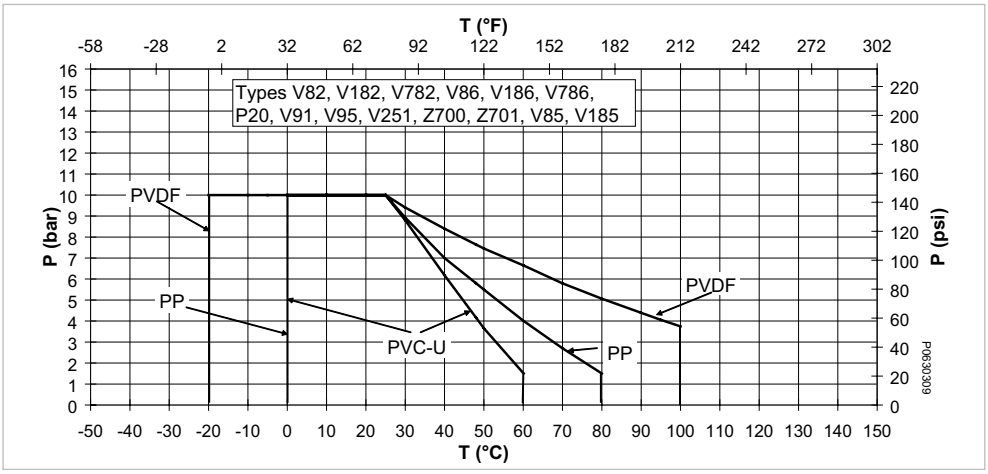


① Cap
② Locking nut
③ Adjusting screw
④ Upper valve body
⑤ Spring assembly)
⑥ Pressure piece
⑦ Diaphragms
⑧ Piston
⑨ Cylinder screw
⑩ Lower valve body

Specification		
Dimensions	d75/DN65 – d110/DN100, 2 ½" – 4"	
Materials	PVC-U, PP, PVDF	
Gasket materials	EPDM	
Diaphragm	EPDM-PTFE-coated	
Pressure level	DN65–DN80	1 – 6 bar
	DN100	1 – 4 bar
Connections	Solvent cement spigot	DIN/ISO
	Fusion spigot	DIN/ISO
Standards	Pressure test according to ISO 9393	
	Leak-tightness test according to EN 12260	

Pressure-temperature diagrams

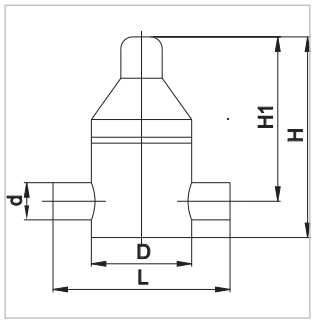
PVC-U, PVC-C, PP-H, PVDF



T Temperature (°C, °F)
P Permissible pressure in bar, psi

The pressure-temperature diagram is based on a lifetime of 25 years and water or similar media.

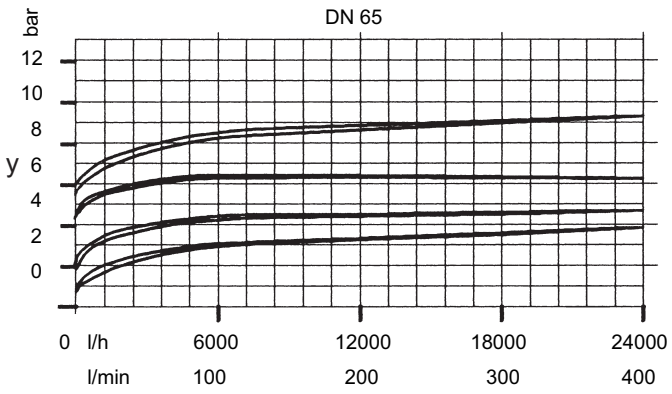
Dimensions

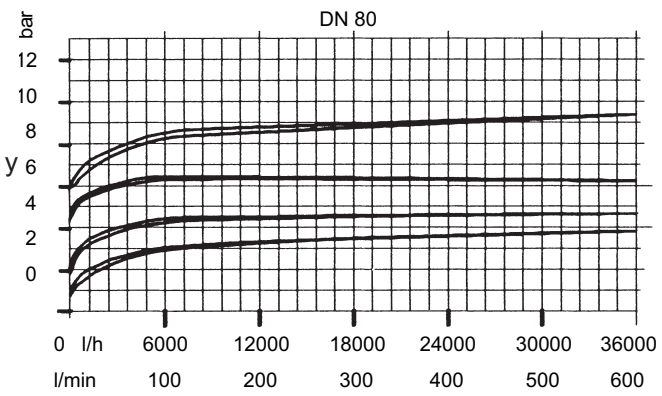


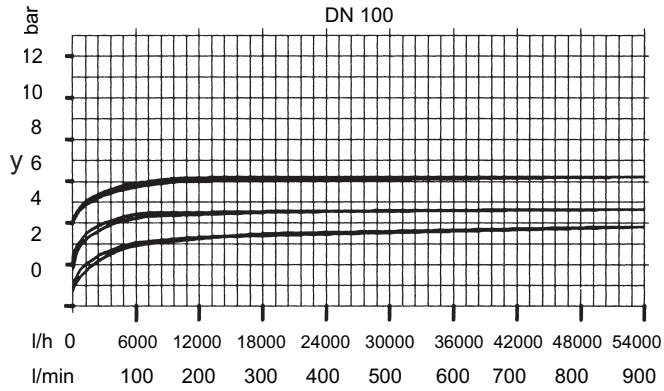
DN (mm)	L (mm)	L (mm)	L1 (mm)	l2 (mm)	øD (mm)	H (mm)	h (mm)
	PVC-U Solvent cement spigot PVDF fusion spigots	PVDF-HP/PP Butt fusion spigots BCF/IR					
10	134	-	140	154	83	137	20
15/20	134	158	140	154	83	137	20
25	174	198	180	185	112	199	27
32	174	202	230	248	165	199	43
40	224	256	230	248	165	290	43
50	244	256	250	252	165	290	43
65	284	284	290	280	180	275	230
80	360	360	310	-	250	410	320
100	380	380	390	-	250	485	415

L1 With flange
L2 Union bush

Characteristics Type V86







Mobile apps and online tools to support configuration and calculation at www.gfps.com/tools

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Tel. +41 52 631 11 11 • www.gfps.com • E-Mail: info.ps@georgfischer.com