

# Serie F.800



## PRESSURE RELIEF VALVE

F.820



The flanged pressure relief control valves, globe type, are hydraulically operated control valves and designed to maintain valve upstream pressure value constant and stable, regardless of flow rate variations. When line pressure is higher than the adjusted pre-set valve pressure level, inlet pressure is kept stable by opening fully the valve. In case of sudden pressure increase, it releases the higher pressure wave in a pressure sensitive manner and in this way, the water system works regularly. When there is no flow in the main valve, it closes by itself as fully tightness. The valves hydrodynamic body is designed for unobstructed flow path and provides excellent and highly effective modulation capacity for high differential pressure applications.

They are made of ductile iron, with an epoxy coating. The valves are suitable for water supply, fire fighting, industrial systems.

**NO:** for steam and gas.

### Application fields



WATER



INDUSTRY



DRINKING WATER

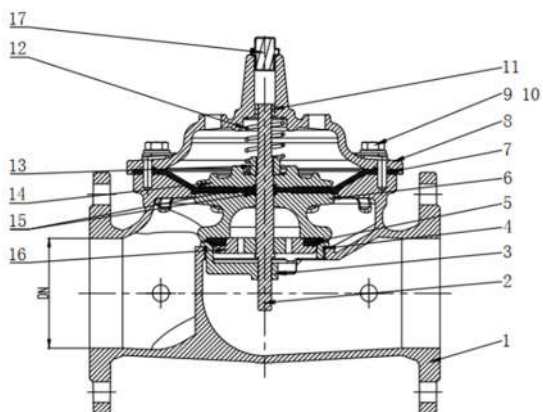


FIRE FIGHTING

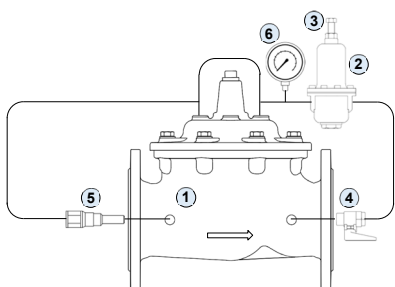


[www.flowsureglobal.com.tr](http://www.flowsureglobal.com.tr)

## Materials

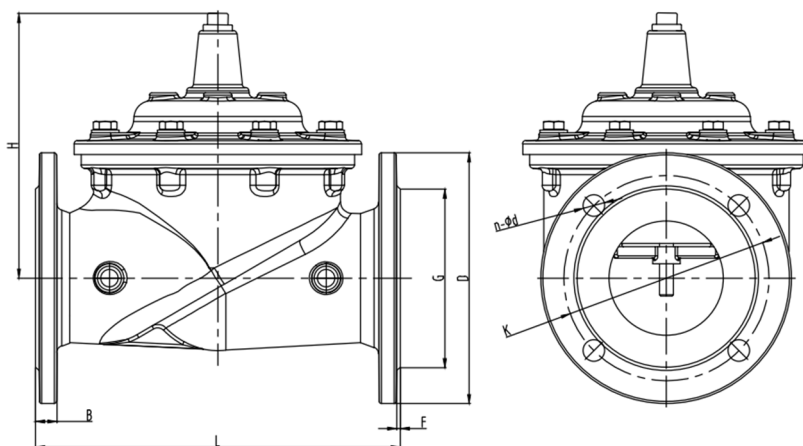


	Component	Material
1	Body	Ductile Iron
2	Stem	AISI304 – Stainless Steel
3	Seat	AISI304 – Stainless Steel
4	O Ring	NBR
5	Sealing Gasket	NBR
6	Mounting Plate	Ductile Iron
7	Diaphragm	NBR
8	Bonnet	Ductile Iron
9	Bolt	AISI304 – Stainless Steel
10	Plain Washer	AISI304 – Stainless Steel
11	Guide Bush	CuZn39Pb1 Brass
12	Spring	AISI304 – Stainless Steel
13	Check Nut	AISI304 – Stainless Steel
14	Top Board	Ductile Iron
15	O Ring	NBR
16	Lower Platen	AISI304 – Stainless Steel
17	Plug	AISI304 – Stainless Steel



## Materials

	Component	Material
1	Body	Ductile Iron
2	Pilot valve	Stainless Steel
3	Adjust Screw	Steel
4	Ball Valve	Brass
5	Strainer	Brass
6	Pressure Gauge	Stainless steel case



## Dimensions (mm)

DN	50	65	80	100	125	150	200	250	300	350	400	500	600
L	230	290	310	350	350	480	600	730	850	980	1100	1250	1450
D	165	185	200	220	250	285	340	405	460	520	580	715	840
K	125	145	160	180	210	240	295	355	410	470	525	650	770
G	99	118	132	156	184	211	266	319	370	429	480	609	720
n-d	4-Ø19	4-Ø19	8-Ø19	8-Ø19	8-Ø19	8-Ø23	12-Ø23	12-Ø28	12-Ø28	16-Ø28	16-Ø31	20-Ø34	20-Ø37
B	19	19	19	19	19	19	20	22	24.5	27	28	32	36
F	3	3	3	3	3	3	3	3	4	4	4	4	4
H	150	175	215	220	220	335	415	500	550	550	650	743	870

## Certificates



## Standards

Flange Dimensions : TS EN1092-2 (PN 16)

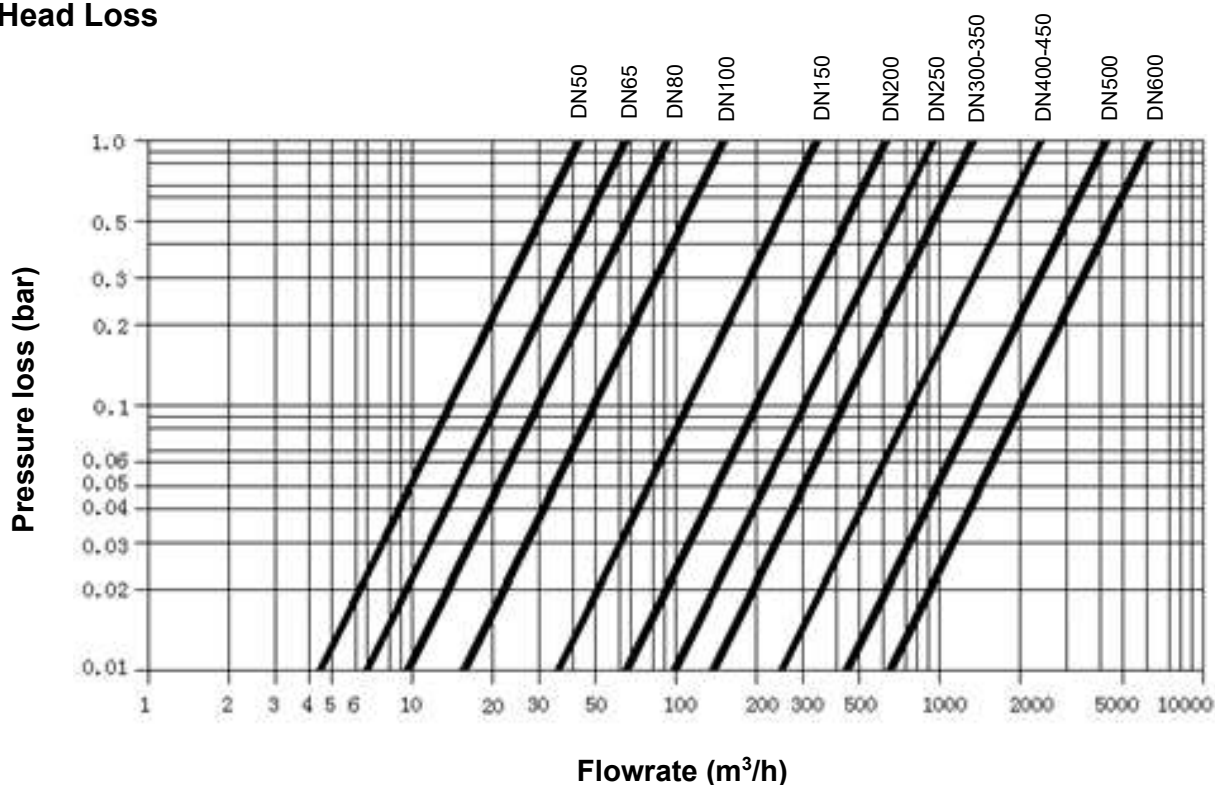
Face to Face Dimensions : TS EN 558-1

Tests : TS EN 12266-1

Nominal Pressure: PN16 (Option: PN25)

Temperature: 0 ~ 70°C

## Head Loss



## Instruction and Recommendations

### STORING

- Keep in dry and closed place.

### RECOMMENDATIONS

Before carrying out maintenance or dismantling the valve:

- Ensure that the pipes, valves and fluids have cooled down
- That the pressure has decreased, and that the lines and pipes have been drained in case of toxic, corrosive, inflammable or caustic liquids.

Temperatures above 50°C and below 0°C might cause damage to people.

### INSTALLATION

- Handle with care
- Install the pressure reducing valves in a horizontal position, for the best working situation, in order to reduce wear of the internal part; if necessary, it is possible to install the pressure reducing valve in a vertical position.
- Before installing the valve, ensure that the piping is cleaned thoroughly in order to avoid damage to the internal parts of the valve caused by residues and stones.
- Place the valve between the flanges of the pipe and install the seal between the pipe and valve flanges. Check that the seals are positioned correctly.
- The distance between the counterflanges must be equal to the valve's face to face distance.
- Do not use the bolts of the counterflanges to bring the piping close to them. The bolts must be cross tightened.
- Do not weld the flanges to the piping after installing the valve.
- Water hammers might cause damage and ruptures. Inclination, twisting and misalignments of the piping may subject the installed valve to excessive stresses. It is recommended that elastic joints be used, in order to reduce such effects as much as possible.
- These valves are unidirectional: install in accordance with the flow direction arrow indicated on the body.
- Valve can be assembled horizontally or vertically.

### INDICATIONS TO BE MADE WHEN ORDERING:

- Maximum flowrate
- Maximum pressure value
- Desired upstream pressure

**ADJUSTMENT**

- Step 1: Loose the adjusting bolt located on the pilot valve completely.
- Step 2: Turn on the pump in water system, leave the water flow into the system.
- Step 3: Inlet pressure is increased when adjusting bolt is tightened, and is reduced when loosened.
- Step 4: By using the adjusting bolt located on the pilot valve adjust the inlet pressure to the desired nominated value. ( Tighten the bolt until valve is closed fully ).