

PRESSURE REDUCING VALVE

MODEL: SD-PRV-G150

SD-PRV-A150

- Globe or Angle Pattern
- Available in rated inlet pressure of 300psi with model numbers : SD-PRV-G300 and SD-PRV-A300
- Available in Iron Body, Ductile Iron and Bronze body material
- Accurate Pressure Control
- In Line Service
- Grooved Ends and Flanged ends

DESCRIPTION

SD-PRV-G (globe) and SD-PRV-A (angle) Pressure Reducing Valves are indispensable in any fire protection system. Our diaphragm actuated design is proven highly reliable and easy to maintain. We offer both a globe or angle pattern with a full range of adjustments. These valves are also available in a variety of material options. Epoxy coating is strongly recommended for all fire system valves (excluding bronze valves). The SD-PRV-G and SD-PRV-A can be supplied with optional internal and external epoxy coating of the main valve wetted surfaces.

FUNCTION

SD-PRV-G (globe) and SD-PRV-A (angle) Pressure Reducing Valves automatically reduce a higher inlet pressure to a steady lower outlet pressure regardless of changing flow rate and/or varying inlet pressure. The valves pilot control system is very sensitive to slight downstream pressure fluctuations, and will automatically open or close to maintain the desired pressure setting. The downstream pressure can be set over a wide range by turning the adjustment screw on the CRD pilot control. The adjustment screw is protected by a screw-on cover, which can be sealed to discourage tampering.

TECHNICAL SPECIFICATION

Size	175 lb. Class	1 1/2" - 8" (Globe)
		2" - 6" (Angle)
End Details:	300-lb. Class	1 1/2" - 8" (Globe)
		2" - 6" (Angle)
End Details:	50 ANSI B16.42 (Ductile Iron) (Bronze) 300# (Ductile Iron) 300# (Cast Steel) 300# (Ductile Grooved End)	
Pressure Differential	10 PSI Min.	
Pressure Adjustment Range:	175lb. Class	30 – 165 psi
	300lb.Class	30 – 165 psi
Temperature Range	Water to 180°F Max	



MATERIAL

Main Valve Body & Cover	Ductile Iron - ASTM A536
Main valve Internal Trim	Bronze ASTM B61
Pilot Control System	Bronze
Pilot Control Valve	ASTM B62 with Stainless Steel 303 internal trim. Copper tubing with brass fittings.
Main valve and pilot valve diaphragm and disc	Buna-N synthetic rubber

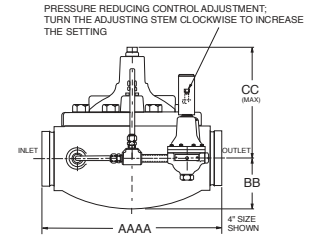
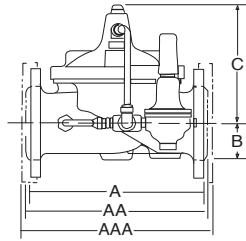
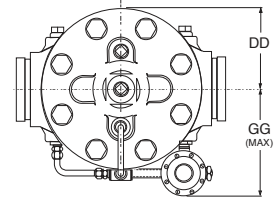
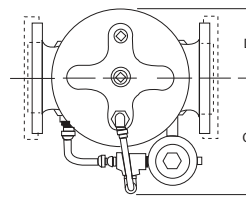
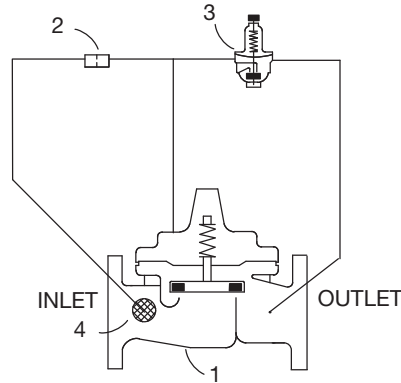
TYPICAL APPLICATION

Underwriters Laboratories requires the installation of pressure gauges upstream and downstream of the Pressure Reducing Valve. Also, a relief valve of not less than 1/2 inch in size must be installed on the downstream side of the pressure control valve. Adequate drainage for the relief valve discharge must be provided.

SCHEMATIC DIAGRAM

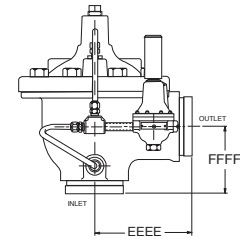
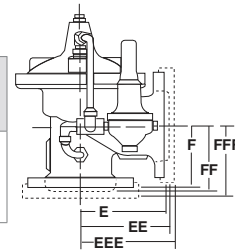
Item Description

1. Hytrol (Globe or Angle)
2. Restriction Tube Fitting
3. Pressure Reducing Control
4. Flow Clean Strainer



FLOW CAPACITY TABLE

Valve Size	1½	2	2½	3	4	6	8
Maximum Flow Rate (GPM of Water)	160	262	373	576	992	2251	3900



Valve size	1½"	2"	2½"	3"	4"	6"	8"
A Threaded	184	238	279	318	---	---	---
AA 150 ANSI	216	238	279	305	381	508	645
AAA 300 ANSI	229	254	295	337	397	533	670
AAAA Grooved End	216	228	279	318	381	508	645
B	28	38	43	65	81	109	135
BB Grooved End	52	54	64	79	105	152	184
C Max.	140	161	192	208	270	340	496
CC Max. Grooved End	104	127	175	165	223	281	369
D	71	84	102	116	146	200	254
DD Grooved End	71	84	102	116	146	200	254
E Threaded	83	121	140	159	---	---	---
EE 150 ANSI	102	121	140	152	191	254	324
EEE 300 ANSI	108	127	149	162	200	267	349
EEEE Grooved End	---	121	---	152	191	---	---
F Threaded	48	83	102	114	---	---	---
FF 150 ANSI	102	83	102	102	127	152	203
FFF 300 ANSI	108	89	109	111	135	165	216
FFFF Grooved End	---	121	---	114	127	---	---
G Max.	191	197	197	203	228	241	267
GG Max.	206	203	---	207	236	267	292

Unit : mm

PRESSURE REDUCING VALVE

MODEL: SD-91430K

HYDRAULIC FEATURES

The PISTON-type pressure reducing valve PN 25 is an automatic valve that reduces and stabilizes the pressure of a fluid in a water distribution conduit according to a preset value. The use of this hydraulic device is necessary if the maximum possible pressure at any point in the water distribution system can reach or exceed the relative maximum allowable working pressure, or if the installation is equipped with devices that can be operated exclusively at pressure levels lower than the one available in the system.

The piston-type pressure reducing valve is designed for use in either internal or external water distribution systems, where the water main pressure values do not surpass 25 bar. The thermoplastic material of the internal piston structure guarantees rigidity, strength and an enhanced regulation precision thanks to the compensated seat. The O-rings, in antistick-slip Perox EPDM elastomer with a low coefficient of friction, are durable and require only limited maintenance interventions. The internal finish of the body and the broader dimensions of the passage allow high performances even with a minimal water draw.

The piston-type pressure reducing valve (PN 25) is used in air conditioning plants, sanitary installations for water supply, irrigation systems, compressed air (not oil mist) distribution systems, fire suppression piping (it should be borne in mind that local government standards for fire protection must always be observed), and sanitary installations for water supply in buildings (according to EN 806-2 and EN 805).

This product adheres to the standards set forth by the European health authorities for the transport of alimentary fluids and potable water.

ATTENTION: *The pressure gauge connectable to the pressure reducing valve indicates the already-reduced pressure (ps) of the outlet liquid flow.*

TECHNICAL FEATURES

Connections	Female-Female
Pressure	
Maximum allowable working pressure (PN)	25 Bar
Outlet settings (Ps)	1 - 5.5 Bar
Ps value set during testing	3 bar
Outlet Ps set tolerance on varying inlet pressure	± 10 %
Temperature	
Working Temperature (TS)	0°C (excluding ice) 130°C



COMPATIBLE FLUIDS

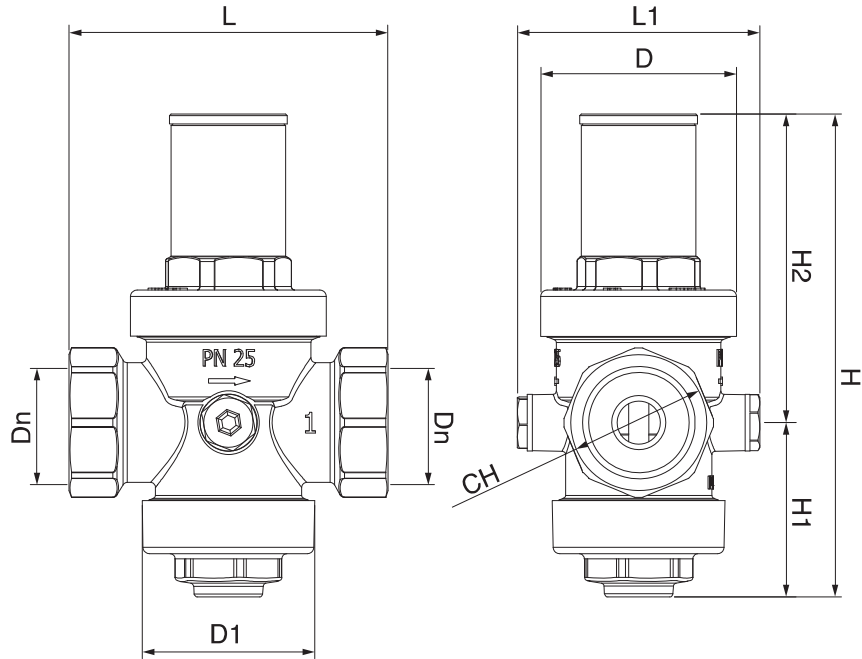
Water	
Glycolate Solutions	glycol 50%
Compressed Air	no oil mist

THREADING

Pipeline connection	ISO 228/1
Gauge connection	EN 10226- Rp1/4" (ex ISO 7/1)

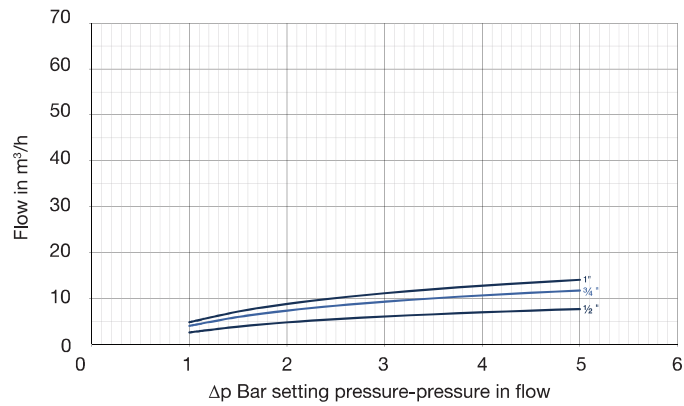
DESIGN

- Kitemark approved in compliance with the limits defined by EN 15671
- Brass body EN 12165 - CW617N in 1/2" to 2" sizes
- Die cast brass body EN1982-CT753S in 2 1/2" to 4" sizes
- Brass bonnets EN 12165 - CW617N
- Piston in PA66-GF30 POLYAMIDE reinforced with glass fiber in 1/2" to 2 1/2" light model
- Brass Piston EN 12165 - CW617N in 3" to 4" sizes
- Other forged components in brass EN 12165 - CW617N
- Other components in turned brass EN 12164 - CW614N
- Static O-ring washers and seat gaskets in EPDM RUBBER (peroxide-cured)
- Dynamic O-ring washers in EPDM RUBBER (peroxide-cured)
- O-rings and static sealing gaskets in EPDM perox, NBR, fiber free of asbestos
- SM GALVANIZED STEEL calibration spring - EN 10270-1
- Nickel plating ELECTRODEPOSITED COATING EN 12540 (Cu/Ni5s)
- STAINLESS STEEL insert seat EN 10088-1.4305 (AISI 303)



Dn	D	D1	L	L1	H	H1	H2	Key
1/2"	Ø48	Ø44	69	63	114	42	72	Hex. 26
3/4"	Ø48	Ø44	82	63	114	42	72	Hex. 31
1"	Ø59	Ø52	96	73	145.5	52.5	93	Oct. 42.5

Unit : mm



PRODUCT CODE

SD-91430K.115	f/f nickel plated	1/2"
SD-91430K.120	f/f nickel plated	3/4"
SD-91430K.125	f/f nickel plated	1"