TOZEN
A joint reliance

MODEL D200

Direct Acting Pressure Reducing Valve

Design and test standard:
ASSE 3001 Water Pressure Reducing Valves for Domestic Water Distribution Systems
EN1567 Water pressure reducing valves and combination water reducing valves-Requirements and tests

Features:
- Balanced Design
- Bigger diaphragm and react more sensitive
- Special design “yoke” stem, avoiding block
- Install and operation in any position
- Easy installation and maintenance

Specification:
Size: 3/8”--2”
Type: Direct Acting
Connection: PT/NPT
Material: SUS 304/316/ Bronze
Media: Pure water
Working temperature: 0-80 ºC
Pressure range: PN16

Function

The Model K200S Pressure Reducing Valve automatically reduces a higher inlet pressure to a steady lower downstream pressure, regardless of changing flow rate and/or varying inlet pressure.

This valve is an accurate regulator capable of holding downstream pressure to a re-determined limit. When downstream pressure exceeds the pressure setting , the valve close drip-tight.

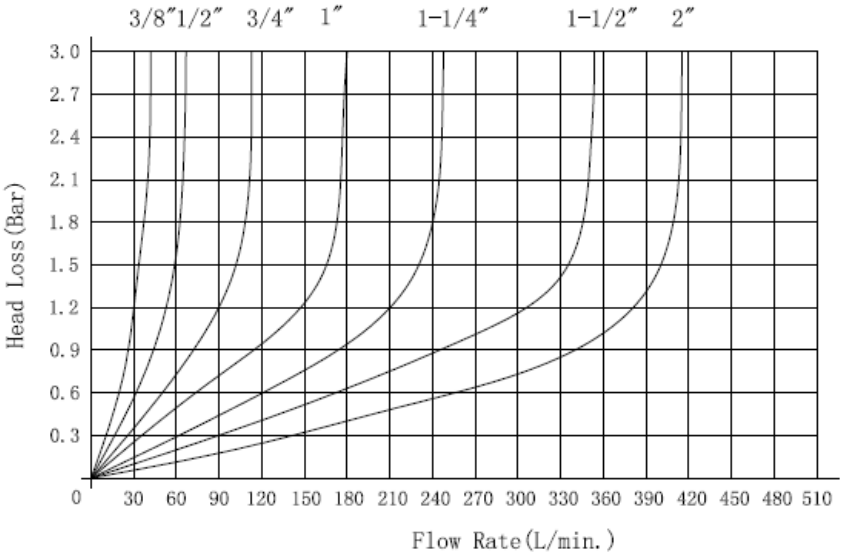
Why use a Direct Acting Pressure Reducing Valve D200

Because of growth, we are faced, more and more, with the challenge to protect our environment. Conserving our energy and water supply is one of the most important aspects of this global challenge. Since we can not increase our supply, we must re duce our consumption. After years of carelessness, we have finally recognized the need for a more responsible pattern of water use. Fortunately there is a simple solution to reducing consumption without changing our lifestyles.

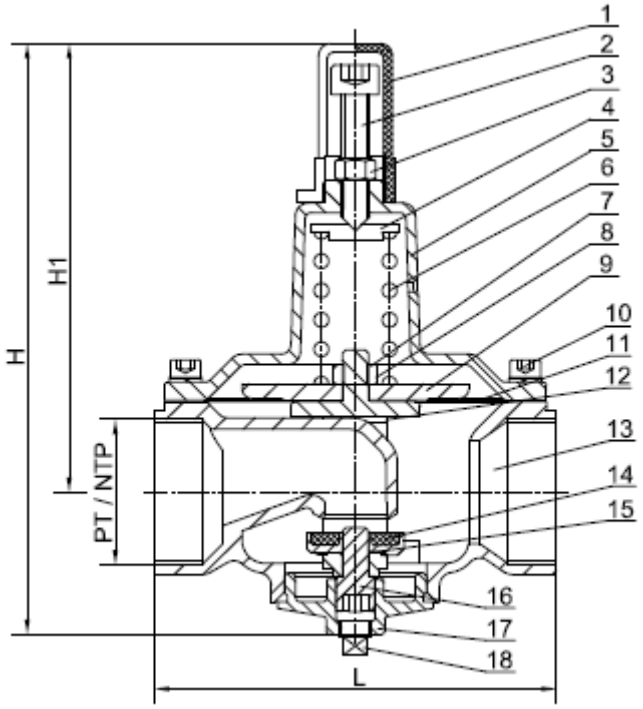
D200 is an automatic control which is in stalled at the water meter in homes to reduce the city main pressure to a lower, more functional pres sure. When the water pressure is reduced, less water is used . If these saving were applied to a million homes, consider the impact this would have on our consumption goals. D200 is equally effective for use in commercial buildings and irrigation systems.

Not only is installing a D200 valve good for the environment, it saves money as well. Excessive water pressure can be harmful to a home plumbing system, causing damage to pipes, faucets, and appliances. Regulators increase the life span of dish washers and water heaters and reduce the noise of banging pipes caused by the “water hammer” effect.

Flow cure and size selection



Structure parameters



Dimension				
Inch	**DN**	L	H	H1
3//8	10	80	175	133
1//2	15	97	168	128
3//4	20	100	178	135
1	25	106	183	139
1 1//4	32	112	188	143
1 1//2	40	124	190	144
2	50	170	216	164

Notice:
If want flange connection, then the flanges will be weld to both inlet and outlet of body

		Material		
NO.	Part Name	□Standard	□Option 1	□Option 2
1	Cap	ABS		
2	Adjusting Screw	SUS304	SUS316	SUS316L
3	Jam Nut	A2	A4	
4	Spring guide	SUS304	SUS316	SUS316L
5	Bonnet	SUS304	SUS316	SUS316L
6	Spring	Cr-VA		
7	Nut	A2	A4	
8	Washer	A2	A4	
9	Fixing Holder	SUS304	SUS316	SUS316L
10	Screw	A2	A4	
11	Diaphragm	NBR+Nylon		
12	Yoke	SUS304	SUS316	SUS316L
13	Body	SUS304	SUS316	SUS316L
14	Disc	SUS304+EPDM	SUS316+EPDM	SUS316L+EPDM
15	O-Ring	NBR		
16	Spindle	SUS304	SUS316	SUS316L
17	Cover	SUS304	SUS316	SUS316L
18	Plug	SUS304	SUS316	SUS316L

Notice:
If want other material, please consult factory

Install, Operation and Maintenance

INSTALLATION

D200 may be installed in any position.

OPERATION

D200 is normally held open by the force of the compression spring above the diaphragm; and delivery pressure acts on the underside of the diaphragm. Flow through the valve responds to changes in downstream demand to maintain a pressure.

ADJUSTMENT PROCEDURE

D200 can be adjusted to provide a delivery pressure range as customer needed, Pressure adjustment is made by turning the adjustment screw to vary the spring pressure on the diaphragm. The greater the compression on the spring the higher the pressure setting.

1. Turn the adjustment screw in (clockwise) to increase delivery pressure.
2. Turn the adjustment screw out (counter-clockwise) to decrease the delivery pressure.
3. When pressure adjustment is completed, tighten jam nut on adjusting screw and replace protective cap.

MAINTENANCE

Disassembly

Unscrew 1#cap, 2#adjusting screw;
Unscrew 10# bolts and remove 5#bonnet;
Remove 4#Spring guide and 6#spring;
Turn out 17# plug;
Turn out 16# spindle and 14#disc with inner hexagon spanner; and check the rubber seal in disc, if it fails, replace with a new one.
Unscrew 7#nut , and check the 11# diaphragm, if it fails, replace with a new one.
Take the 12#yoke off body;

Reassembly

Reassembly is the reverse of disassembly. Caution: must be taken to avoid having the yoke drag on the inlet nozzle of the Body

Trouble shooting

See table left

SYMPTOM	PROBABLE CAUSE	REMEDY
Fails to open when deliver pressure lowers	No spring compression	Tighten adjusting screw
	Damaged spring	Disassemble and replace
	Spring guide is not in position	Assemble properly
	Yoke dragging on inlet nozzle	Disassemble and reassemble properly
Fails to close when delivery pressure rises	Spring compressed solid	Back off adjusting screw
	Mechanical obstruction	Disassemble and reassemble properly
	Worn disc	Disassemble remove and replace disc retainer assembly
	Yoke dragging on inlet nozzle	Disassemble and reassemble properly
Leakage from cover vent hole	Damaged diaphragm	Disassemble and replace
	Loose diaphragm nut	Remove cover and tighten nut