

V501

PRESSURE REDUCING CONTROL VALVE



Product Description

TVN V501 Pressure Reducing Control Valves are hydraulically operated control valves that reduce higher upstream pressure in the water network into a preset desired lower constant downstream pressure, and maintain it constant, regardless of fluctuating demand or varying upstream pressure. They are simple and reliable globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. When there is no flow in the system, it closes by itself automatically, and whenever the valve upstream pressure value decreases below adjusted downstream pressure value, it opens fully by itself. In cases, the valve downstream pressure value increases above adjusted downstream pressure value, it closes fully by itself.



Technical Data	
Size range	DN40 - DN300
Pressure range	0,7 - 16 bar (10 - 240 psi)
Temperature	-10°C to +80 °C
Flange drilling	Flanged EN 1092-2 / ISO 7005-2 Threaded ISO (BSP) - ANSI (NPT)
Coating	Polyester Epoxy
Testing	EN 12266-1
Marking	EN 19

Application Range

- Agricultural irrigation
- Household implementation
- Supply of water fire extinguishing
- Various applications of industrial systems.
- Food and chemical enterprises

Adjustment

Small globe valve on outlet side is closed on main valve. When pilot valve tappet on the valve is rotated clockwise, adjusting pressure rises and when rotated counterclockwise, adjusting pressure decreases. Small globe valve on outlet side is opened by screwing the lock nut under

Working Principle



IRRIGATION



POTABLE WATER

V501

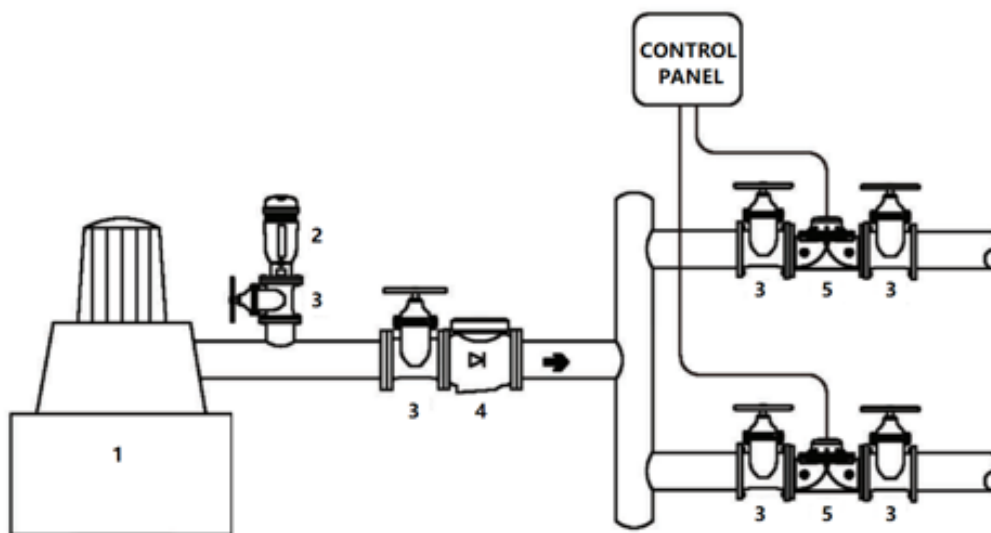
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Product Features

- No need for extra energy by running on pressure network
- Easy and zero adjustment to demanded pressure
- Pressure reduction without being affected by pressure and flow changes in network
- Manual switch on/off. Has a wide range of application with use of different pilot valves.
- Easy maintenance provides minimum pressure loss and free flow in open valve at demanded flow amounts.
- Easy use and maintenance due to simple design.
- Does not require maintenance in operation for a long time due to its corrosion resistant components.
- Has a long working life in operation since coating has been made with phosphorization and over-dried epoxy powder paint.
- Performs perfect modulation in variable flows and even too low flow rates close to zero.

Application System



- 1- Pump
- 2- Air Release Valve
- 3- Isolation Valve
- 4- Check Valve
- 5- Pressure Reduce Control Valve

V501

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Material List



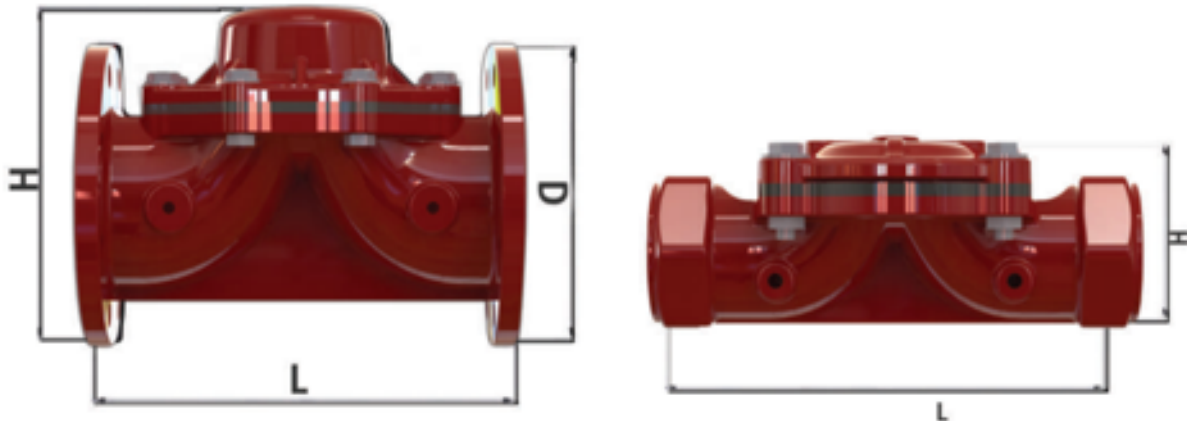
No	Part	Material
1	BODY	GGG40 Ductile Iron / GG25 Cast Iron
2	DIAPHRAM	Court Fabric / Reinforced Natural Rubber
3	COVER	GGG40 Ductile Iron / GG25 Cast Iron
4	WASHER	Plated Steel
5	BOLT	Plated Steel
6	NUT	Plated Steel / MS 58 Brass
7	SPRING THRUST RING	Polyamic
8	SPRING	AISI 304

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Dimensions Table



FLANGED CONTROL VALVES									
DN		L		D		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
2"	50	8	204	6.4	165	6.4	165	33	15
2½"	65	8.1	206	7.2	185	7.2	185	36	16.5
3"	80	11.4	290	7.8	200	7.8	200	57	26
4"	100	11.6	296	8.6	220	8.6	220	61	28
5"	125	12.3	314	9.8	250	9.8	250	72	33
6"	150	16.2	413	11.2	285	12.6	321	125	57
8"	200	18.5	470	13.3	340	18.8	403	187	85
10"	250	18.5	470	16	407	17	433	226	103
12"	300	20.8	530	18.3	466	19.5	497	316	145
THREADED CONTROL VALVES									
DN		L		H		Weight			
inch	mm	inch	mm	inch	mm	lbs	kg		
2"	50	8.1	206	4.2	107	28.6	13		
2½"	65	9	230	4.3	110	30.8	14		
3"	80	13.7	350	5.7	145	44	20		