

V510 series



Pilot Type Tank Blanket Valve

V510 Series

The blanket gas regulator is one of the principal components typically installed on a storage tank to protect the tank and its contents. It is a precision regulator that is capable of maintaining a very low gas pressure (min. 0.005 BarG) in the tank by controlling the flow of a high pressure (Max. 13 BarG) blanketing gas. It maintains a positive pressure in the tank when fluid is pumped out or as fluid temperature decreases.

Typically nitrogen or another compatible gas is used to suppress the tank product vapors. This reduces losses due to product evaporation and prevents atmospheric contaminants, including moisture, from entering the tank, preventing tank corrosion and product contamination.

V510 Valve is self-contained, fully balanced pilot-operated, and are used for accurate pressure control on tank blanketing systems.

Standard Specification

Straight way (2Way Globe) / Angle – Option



Size	3/4" to 2" (DN20...DN50)
Rating	ANSI 150Lb to 300Lb
End Connections	Screwed (NPT) FF/RF Flange – ANSI B16.5 Option : JIS Flange, DIN Flange
Set Pressure Sensing Connection	External – 1/2" NPT (Standard)
Construction Materials	Body : Stainless Steel (CF8, CF8M, CF3M) Trim : Stainless Steel (316 SS) Actuator : Stainless Steel (304 SS, 316 SS) Spring : Spring Steel Diaphragm : PTFE Tubing : 316L SS (904L – Option)
Cv Range	0.5 to 55
Main valve Flow Characteristic	Linear or EQ %
Maximum Operating Pressure	Inlet : 200 PsiG (13.8 BarG) Outlet : 1.5 PsiG (0.1 BarG)
Outlet Set Pressure Range	5 mbar to 1.5 PsiG (0.005 to 0.1 BarG)
Differential Operating Range	Minimum : 30 PsiG (2BarG) Maximum : 200 PsiG (13.8 BarG)
Operating Temperature Range	-20°F to 212°F (29°C to 100°C)

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Application

- Refineries.
- Chemical & Petrochemical Plants.
- Liquid Bulk Storage Terminals.
- Pulp & Paper Plants.
- Food & Beverage Storage.

Features

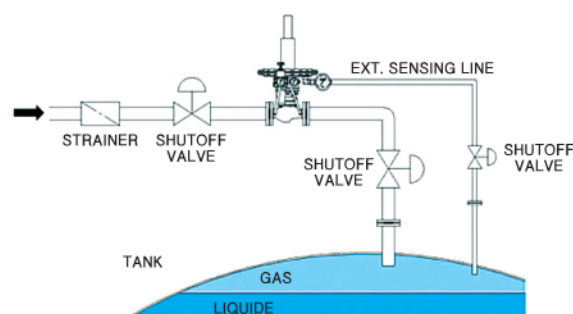
- Fully Balanced Pilot operated design.
- Pilot Controlled.
- Selt - Controlled.
- Highly Sensitive.
- Fully field serviceable.

Performance

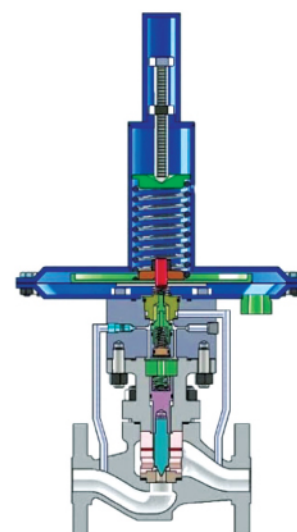
- Very tight operating band.
- Bubble Tight Shutoff.
- Quick Changed Trim for Easy Maintenance.
- Set pressure is field adjustable.

Design Flexibility

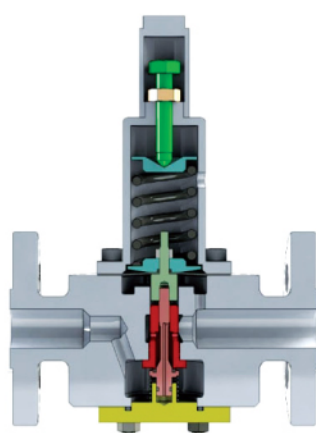
- Angled or In-Line Body Option.
- Optional flow plugs to meet specific flow requirements.
- System purge and field test capability available.



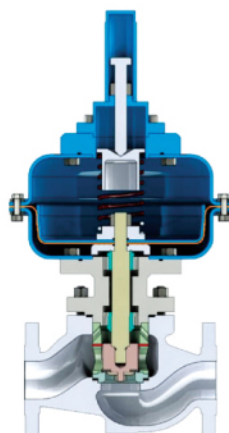
Tank Blanketing Valve Installation



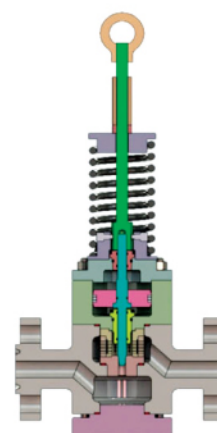
V510 Series - Pilot Operated Tank Blanketing Valve



V5150 Series
Direct Acting - Pressure Reducing Valve



V520 Series
Direct Acting - Pressure Relief Valve



V530 Series
Differential Pressure Regulating Valve