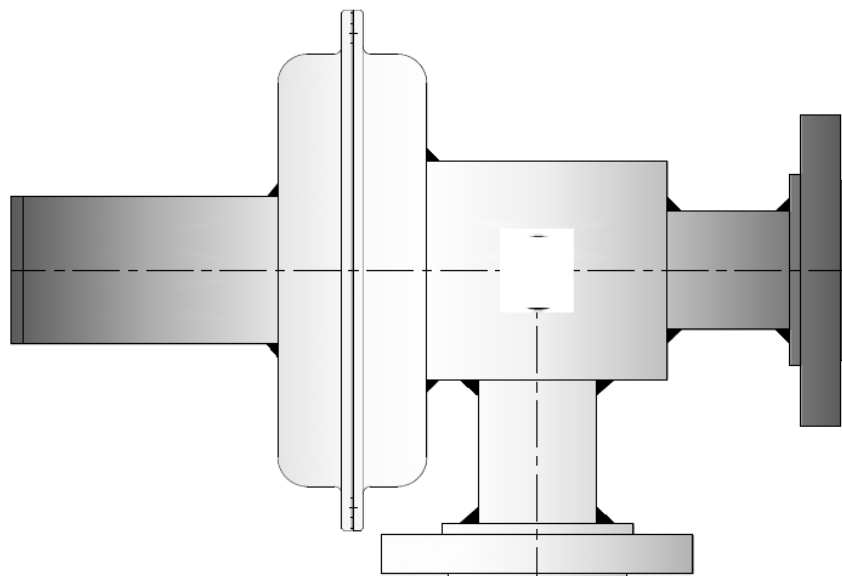


U300 SERIES

BACK PRESSURE REGULATING VALVE



U300 SERIES

BACK PRESSURE REGULATING VALVE

Low Pressure Control

Typically called as Upstream Pressure Control Valves are meant for controlling the pressure at inlet and maintain or hold the pressure in the equipment at preset value. The U300 Series are Direct Acting Self Actuated Angle Type Low Pressure Back Pressure Regulating Valves meant to regulate the inlet pressure at the pre-determined set value required for the processes / equipment protection.

Being self actuated it does not require any external controller for its functionality. These are widely used in almost each business segment wherein the various utilities are needed at controlled pressure for various processes.

Typical Applications

- *Blanketing Systems*
- *Temperature Relief*
- *Back Pressure Holding*
- *Industrial gases*
- *Non-Corrosive gases*
- *Speciality gases*

FEATURES

- **Back Pressure Regulation / Control** : These are designed to respond to the smallest rise in pressure at inlet and allow the excess pressure at outlet affecting protection of equipments like storage tanks and process vessels. These are also used as Pressure Holding Valves as they hold the pressure at upstream.
- **Self Actuated Design** : This series of back pressure regulating valves are self actuated or self contained and hence, do not require any external energy like pneumatic air or electricity to operate.
- **Internal impulse Sensing** : The impulse sensing is internal ie through the valve body itself avoiding the impulse tubing for sensing.
- **Accurate Pressure Control** : The inlet pressure directly acts on the diaphragm to counter balance the spring force affecting efficient response capability and accuracy.
- **Easy Maintenance** : The maintenance and inspection of the back pressure regulating valve internals is possible without removing body from pipe line.
- **Material selection** : As a standard we provide trim material as AISI 316. Wide range of material is available to suit various services for different process fluids including corrosive fluids. NACE compliance can be provided for sour services.
- **Tamper - Resistant Adjustment** : Cap and adjusting screw discourage on-field tampering of the pressure setting.
- **Leakage Proof** : Combination of metallic and soft seat enables the leakage class VI as per ANSI FCI 70.2.
- **Minimum Maintenance Cost** : The general replacement parts are polymer parts like Diaphragm, Soft Seat & O Rings only and thus the maintenance cost is very low.

U300 SERIES

BACK PRESSURE REGULATING VALVE

SPECIFICATIONS

Design Specifications

Design Pressure – As per ANSI 150# & ANSI 300#

Set pressure range – 10 mBarg to 1,000 mBarg with different model configurations

Design Temperature – (-)10 to 80°C with BunaN polymer and (-)20 to 150°C with Fluroelastomer

MOC Specifications

Body – Carbon steel, Stainless Steel 304, 316 and other on request

Internals – AISI304 (Standard), AISI316, 316L,

Monel, Hastalloy B/C and other on request

Soft Seat & Polymer – Buna N (Nitrile), Neoprene, Fluroelastomer, PTFE and other on request

Diaphragm – Reinforced Polymers like Buna N (Nitrile), Neoprene, Fluroelastomer and PTFE

Spring Housing – Fabricated Steel (Standard) and other on request

- Other special material available on request. Please consult with our Sales team.

Constructional Specifications

Body size – ½", ¾", 1", 1½", 2" & 3"

End Connection –

Screwed – ½", ¾" & 1" (Std); Available 1½" & 2"

Flanged ANSI B16.5 as per 150# & 300# – ½", ¾", 1", 1½", 2" & 3"

(Higher size and Rating available on demand)

Flow capacities – Refer Capacity Table

Weight – Refer Table for Flanged end

Screwed end

½", ¾", 1" : 12 Kg (max.)

1½" : 15 Kg (max.)

2" : 20 Kg (max.)

SET PRESSURE RANGES

SPRING NUMBER	SPRING RANGE
110S	7.0 to 15.0 mBar (3.0 to 6.0 InchWC)
120S	12.0 to 30.0 mBar (4.8 to 12.0 InchWC)
130S	28.0 to 75.0 mBar (11.0 to 30.0 InchWC)
140S	65.0 to 170.0 mBar (26.0 to 68.0 InchWC)
150S	150.0 to 320.0 mBar (60.0 to 128.0 InchWC)
160S	300.0 to 500.0 mBar (120.0 to 200.0 InchWC)
170S	470.0 to 750 mBar (188.0 to 300.0 InchWC)

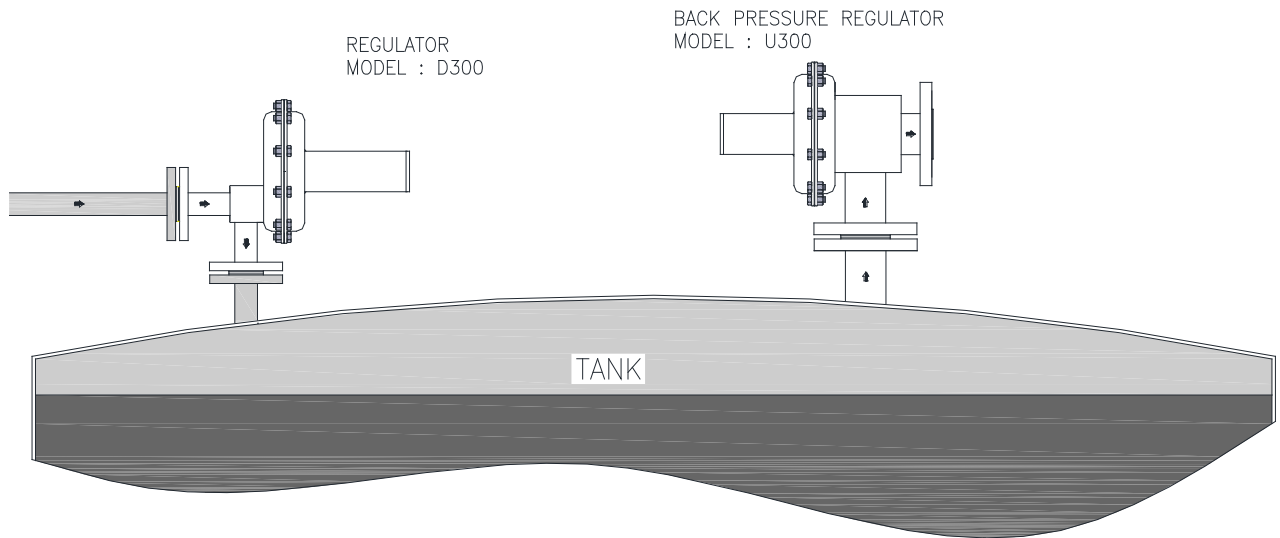
VALVE CO-EFFICIENTS Cv VALUES

Valve Size	½"	¾"	1"	1½"	2"
Cv Value	0.6	1.1	2.0	5.2	7.4

U300 SERIES

BACK PRESSURE REGULATING VALVE

TYPICAL INSTALLATION



Typical Installation : Typical Installation indicating the mounting of the Low Pressure – Blanketing Pressure Regulating Valve and Low Pressure Back Pressure Regulating Valve installed on a small storage tank / process vessel.

D300 – Low Pressure Angle Type Self Actuated Blanketing Pressure Regulator

U300 – Low Pressure Angle Type Self Actuated Back Pressure Regulating Valve

ORDERING SPECIFICATIONS

SERVICE FLUID / MEDIA

INLET PRESSURE

FLOW MIN./ MAX.

SPECIFIC GRAVITY

BODY MOC

BACK PRESSURE

TEMP. MIN./MAX.

SET PRESSURE

INTERNALS MOC



PLANET VALVES

Golden Park - Phase II

MEGH - A/815

Kalyan West - 421 301

Maharashtra, India.

Email : sales@planetvalves.com

Website : www.planetvalves.com

RT.U300.0816