

# D300 SERIES BLANKETING PRESSURE REGULATOR



**regport** 

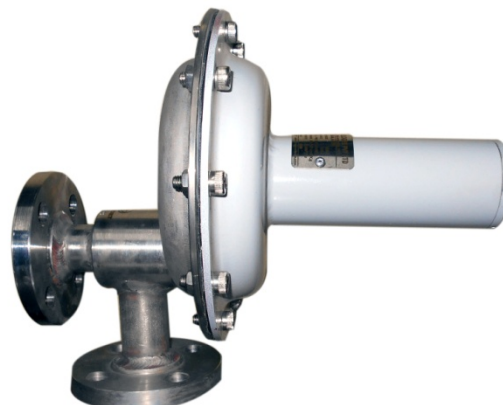
# D300 SERIES

## BLANKETING PRESSURE REGULATOR

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### LOW PRESSURE REGULATOR – D300

D300 self-actuated lever operated direct acting regulators are the best solution for low pressure applications. These are designed to control the set outlet pressure precisely irrespective of variations in inlet pressure and flow rate for the process. D300 provides an economical solution for precise pressure control with high accuracies at low pressure requirements for process.



### TYPICAL APPLICATIONS

- Tank Blanketing
- Centrifuge Blanketing
- Gas Burners
- Furnaces
- Gas Train
- Industrial gases
- Speciality gases

### FEATURES

#### ■ Blanketing Application :

Specially designed for use in corrosive as well as non corrosive atmospheres like chemical and pharmaceuticals for inertization of storage tanks, centrifuges, reactors and vessels. Being compact and inlet from bottom makes the installation easy and economical.

#### ■ Accurate low pressure regulation :

Lever type construction transmits diaphragm movement into precise orifice opening even at very low pressure giving constant fuel gas supply to burners, gas trains, furnace etc.

#### ■ Easy Maintenance :

Unique design facilitates easy and fast maintenance & inspection of regulator internals.

#### ■ Appropriate material range :

Variety of material is available to suit corrosive solvents stored in vessels and for various utility gases. Also, available with NACE compatible material for sour gas applications.

#### ■ Tamper - Resistant Adjustment :

Cap and adjusting screw discourage on-field tampering of the pressure setting.

#### ■ Load absorbing Diaphragm assembly :

Special load absorbing diaphragm assembly prevents diaphragm failure during malfunctioning thus providing safety against leakage of fluid to atmosphere.

#### ■ Wide set range for various applications :

Design is compatible for various set pressures between 50 mmWC till 750 mBar for various applications and process requirements.

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### SPECIFICATIONS

Mechanical Design Pressure ⇒ 10.5 Bar (150 psi)

Maximum Inlet pressure ⇒ 10.5 Bar

Outlet pressure ⇒ 50 mmWC to 750 mBar

Diaphragm & Spring Housing Design Pressure ⇒ 10.5 Bar

Design Temperature ⇒ (-)10 to 80°C NBR polymer and (-)20 to 150°C with FKM

End Connection ⇒ Screwed to NPT-F or BSP-F, Flanged B16.5 ANSI 150#, ANSI 300#

Orifice Sizes ⇒ 4.5 mm and 7.5 mm

Flow Capacities ⇒ Refer Table Below

### MATERIAL OF CONSTRUCTION

Body ⇒ AISI 304SS (Standard), AISI 316SS, CS-A105 or any other material on request

Diaphragm ⇒ Reinforced NBR (standard), FKM – Fluoroelastomer, PTFE, Neoprene and EPDM

Internals\* ⇒ AISI 316SS (Standard), 304SS, 316L-SS or any other material on request

Diaphragm Housing ⇒ Same as body material

Spring Housing ⇒ CS (Standard) or any other material on request

Soft Seat and Polymer – PTFE (standard), NBR (Nitrile), FKM (Viton), Neoprene and EPDM

### SPRING RANGE AND INSTALLATION

Spring Number	Spring Range	Preferred Installation
102-S	5.0 to 15.0 mBar (2.0 to 6.0 InchWC)	OUTLET NOZZLE ON TANK NOZZLE *
103-S	12.0 to 30.0 mBar (4.8 to 12.0 InchWC)	OUTLET NOZZLE ON TANK NOZZLE *
104-S	28.0 to 75.0 mBar (11.0 to 30.0 InchWC)	ANY DIRECTION
105-S	65.0 to 170.0 mBar (26.0 to 68.0 InchWC)	ANY DIRECTION
106-S	150.0 to 320.0 mBar (60.0 to 128.0 InchWC)	ANY DIRECTION
107-S	300.0 to 500.0 mBar (120.0 to 200.0 InchWC)	ANY DIRECTION
108-S	470.0 to 750 mBar (188.0 to 300.0 InchWC)	ANY DIRECTION

■ Please refer Installation and Orientation Diagram

### WEIGHT

1" Screwed End 08 Kgs – Max

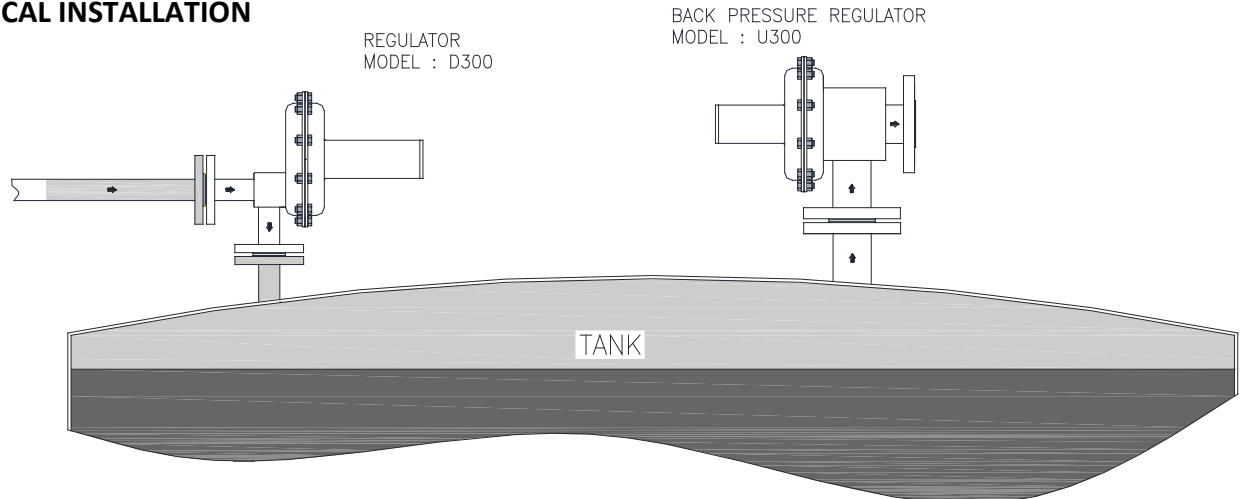
1" Flanged End 10 Kgs – Max

2" Screwed End 15 Kgs – Max

2" Flanged End 18 Kgs – Max

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## TYPICAL INSTALLATION

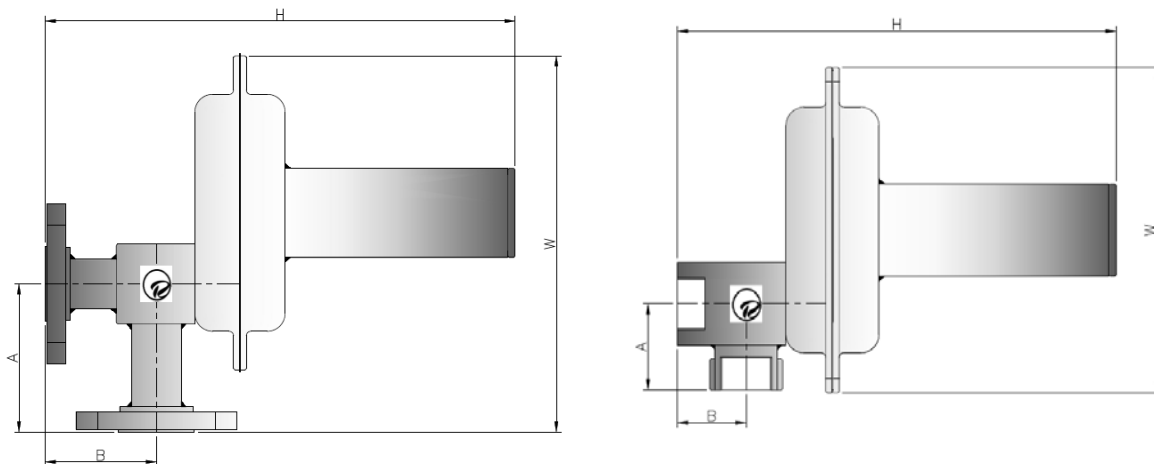


**Typical Installation :** Typical Installation indicating the mounting of the Low Pressure – Blanketing Pressure Regulating Valve and Low Pressure Back Pressure Regulating Valve installed on a small storage tank / process vessel.

**D300 – Low Pressure Angle Type Self Actuated Blanketing Pressure Regulator**

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

## EXTERNAL DIMENSIONS



Size	A	B	H	W
½" X 1" Flanged	100	75	320 ± 10	255
1" X 1" Screwed	55	45	290 ± 10	220
1" X 1" Flanged	100	75	320 ± 10	255
1" X 2" Flanged	125	100	370 ± 10	340
2" X 2" Flanged	125	100	370 ± 10	340

All dimensions are in mm

## ORDERING SPECIFICATIONS

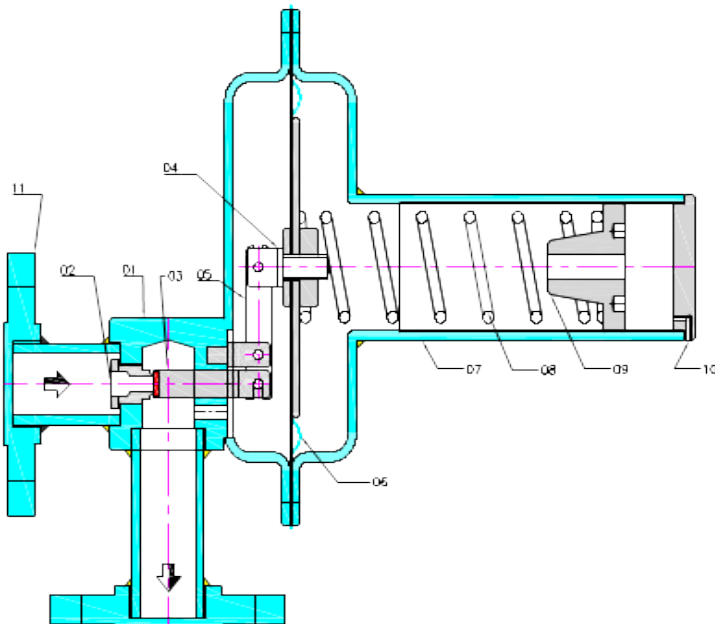
- Service Fluid Or Container Fluid To Be Blanketed
- Outlet Pressure
- Temp. Min./Max
- Body MOC
- Inlet Pressure
- Flow Min./ Max.
- Specific Gravity
- Internals MOC

***We also have developed globe type version ie inlet outlet flanges at 180° alongwith this angle type design.***

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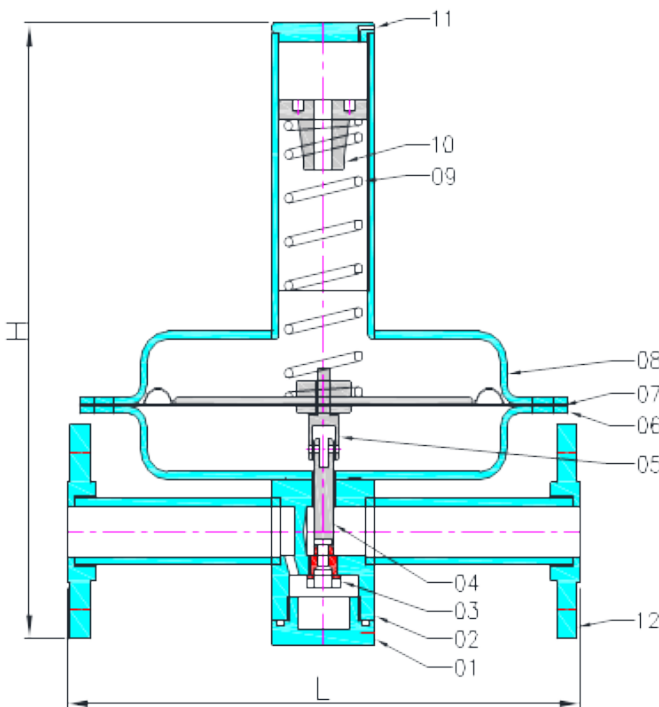
## G A DRAWING WITH MATERIAL OF CONSTRUCTION DETAILS

### Model D300



PART	ITEM	MOC
01	BODY	AISI 304
02	SEAT	AISI 316
03	STEM	AISI 316
04	CLAMP BOLT	AISI 316
05	LEVER	AISI 316
06	DIAPHRAGM	Reinforced VITON
07	SPRING HOUSING	CS - Fabricated
08	SPRING	SPRING STEEL
09	SETTING KNOB	AISI 304
10	CAP	ALUMINIUM
11	FLANGES	AISI 304
	FASTNERS	A193 Gr B8 / A194 Gr 8

### Model D300-G



PART	ITEM	MOC
01	BOTTOM	AISI 304
02	BODY	AISI 304
03	SEAT	AISI 316
04	STEM	AISI 316
05	CLAMP BOLT	AISI 316
06	DIAPH. HOUSING	AISI 304
07	DIAPHRAGM	Reinforced VITON
08	SPRING HOUSING	CS - Fabricated
09	SPRING	SPRING STEEL
10	SETTING KNOB	AISI 304
11	CAP	ALUMINIUM
12	FLANGES	AISI 304
	FASTNERS	A193 Gr B8 / A194 Gr 8