# **TESC**ØM

# DV Series Regulators - Relief / Backpressure

#### DDVXX1800X012

### **Specifications**

For other materials or modifications, please consult TESCOM.

#### **OPERATING PARAMETERS** *Pressure rating per criteria of ANSI/ASME B31.3*

**Controlled Pressure Range** 760 - 50 mm Hg absolute

**Design Proof Pressure** 150% of maximum operating

Leakage Bubble-tight

#### Operating Temperatures<sup>1</sup>

**Buna-N:** -40°F to 165°F / -40°C to 74°C **Ethylene Propylene:** -40°F to 250°F / -40°C to 121°C **Viton®:** -15°F to 165°F / -26°C to 74°C

Flow Capacity  $C_V = 0.25$ 

Maximum Operating Torque 15 in-lbs / 1.7 N•m

#### MEDIA CONTACT MATERIALS

Body

Brass or Nickel-plated Aluminum

Diaphragm Buna-N, Ethylene Propylene, Viton<sup>®</sup> O-Ring

Buna-N, Ethylene Propylene, Viton<sup>®</sup>

Remaining Parts 300 Series Stainless Steel and Brass

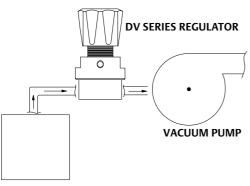
#### OTHER

Cleaning CGA 4.1 and ASTM G93

Weight (without gauges) Brass: 2.4 lbs / 1.1 kg Aluminum: 1 lb / 0.5 kg

1. For extended temperatures from -40°F to  $400^{\circ}$ F / -40°C to  $204^{\circ}$ C, consult Tescom. Viton<sup>®</sup> is a registered trademark of E.I. du Pont de Nemours and Company.

## **DV Series Typical Application**





TESCOM DV Series is a compact, lightweight, diaphragm regulator that offers vacuum control up to 0.1% accuracy. Optional constant bleed feature allows for pressure adjustment in both directions.

## Applications

- Instrumentation testing
- Calibration equipment

## **Features and Benefits**

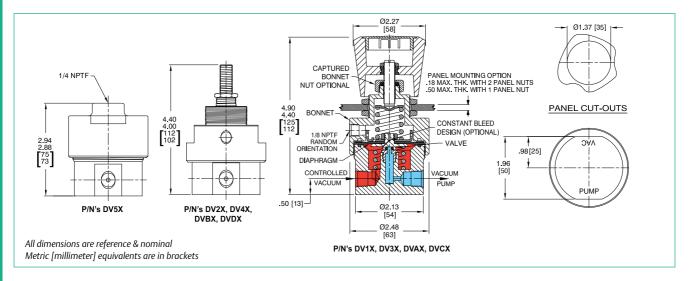
- Controls sub-atmospheric pressure
- Excellent repeatability
- Accurate diaphragm-type regulation ± 0.1% full scale accuracy
- High sensitivity of 10 mm Hg absolute achieved with constant bleed option
- Easy maintenance
- Low operating handknob torque
- Captured bonnet and panel mounting options are available





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## **DV Series Regulator Drawing**



## **DV Series Regulator Part Number Selector**

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

							FOR NON-	FOR NON-METALLIC KIT		
							к	ITN		
							FOR R	FOR REPAIR KIT		
							к	ITR		
Examp	le for selecting a pa	rt number:						INLET OUTLET GAUGE		
DV -	1	3	5	В	В	9	Ā	F F 9		
BASIC SERIES	FUNCTION / LOAD TYPE	BODY MATERIAL	CONTROLLED VACUUM PRESSURE <sup>1</sup>	VALVE PARTS	DIAPHRAGM AND O-RING MATERIAL	MOUNTING	PORTING CONFIGURATION (1/4" NPTF GAUGE PORTS)	INLET AND OUTLET GAUGE PORTS TYPE AND SIZE		
DV	Standard Vacuum	1 – Brass	NO BLEED	<b>B</b> – Brass	<b>B</b> – Buna-N	<b>9</b> – None	A – No gauge ports	<b>B</b> – 1/4" SAE		
	NO BLEED	<b>3</b> – Aluminum	<b>5</b> – 760 -		<b>E –</b> Ethylene	<b>P</b> – Panel	$\frown$	<b>E –</b> 1/8" NPTF		
	1 – Handknob adjust		50 mm Hg		Propylene	Mounting	←( )←	<b>F –</b> 1/4" NPTF		
	2 – Screwdriver adjust		absolute		V – Viton®			<b>J –</b> 1/4" MS33649		
	3 – Captured bonnet		CONSTANT BLEED				<b>B</b> – Gauge ports at 60°	<b>9</b> – None		
	Hand adjust		<b>5 –</b> 760 -				$\mathbf{X}$			
	4 – Captured bonnet		100 mm Hg							
	Screw adjust		absolute							
	5 – Dome loaded						F – In gauge at 90°			
	Standard Vacuum									
	CONSTANT BLEED						*			
	A – Handknob adjust						←( )←			
	<b>B</b> – Screwdriver adjust									
	<b>C</b> – Captured bonnet						<b>G</b> – In gauge at 90°			
	Hand adjust						$\leftarrow$			
	<ul> <li>D – Captured bonnet</li> <li>Screw adjust</li> </ul>									
	Screw adjust									
							L – Gauge ports at 90°			
							l			
							←( )←			
			1. 28" Ha =	50 mm Hq ab	solute					

