

# 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

<b>Controlled Pressure Range</b>	760 - 50 mm Hg absolute
<b>Design Proof Pressure</b>	150% of maximum operating
<b>Leakage</b>	Bubble-tight
<b>Operating Temperatures<sup>1</sup></b>	
<b>Buna-N:</b>	-40°F to 165°F / -40°C to 74°C
<b>Ethylene Propylene:</b>	-40°F to 250°F / -40°C to 121°C
<b>Viton®:</b>	-15°F to 165°F / -26°C to 74°C
<b>Flow Capacity</b>	C <sub>v</sub> = 0.25
<b>Maximum Operating Torque</b>	15 in-lbs / 1.7 N•m

### MEDIA CONTACT MATERIALS

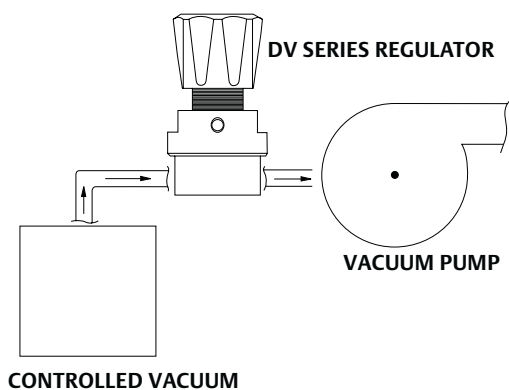
<b>Body</b>	Brass or Nickel-plated Aluminum
<b>Diaphragm</b>	Buna-N, Ethylene Propylene, Viton®
<b>O-Ring</b>	Buna-N, Ethylene Propylene, Viton®
<b>Remaining Parts</b>	300 Series Stainless Steel and Brass

### OTHER

<b>Cleaning</b>	CGA 4.1 and ASTM G93
<b>Weight (without gauges)</b>	
<b>Brass:</b>	2.4 lbs / 1.1 kg
<b>Aluminum:</b>	1 lb / 0.5 kg

1. For extended temperatures from -40°F to 400°F / -40°C to 204°C, consult Tescom.  
Viton® 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.

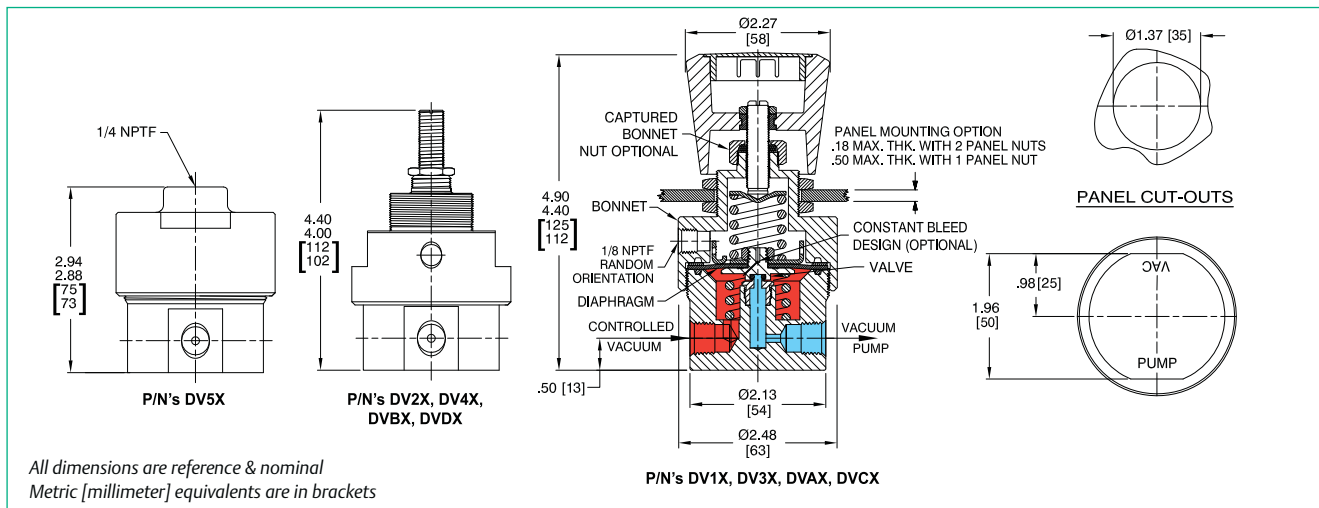
## Applications

- Instrumentation testing
- Calibration equipment

## Features and Benefits

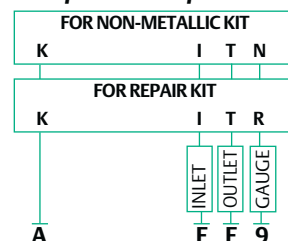
- Controls sub-atmospheric pressure
- Excellent repeatability
- Accurate diaphragm-type regulation ± 0.1% full scale accuracy
- High sensitivity of 10 mm Hg absolute achieved with constant bleed option
- Easy maintenance
- Low operating handknob torque
- Captured bonnet and panel mounting options are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

## 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.



Example for selecting a part number:

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 -	1	3	5	B	B	9	A	F F 9
<b>DV</b>	<b>Standard Vacuum NO BLEED</b> 1 – Handknob adjust 2 – Screwdriver adjust 3 – Captured bonnet Hand adjust 4 – Captured bonnet Screw adjust 5 – Dome loaded <b>Standard Vacuum CONSTANT BLEED</b> A – Handknob adjust B – Screwdriver adjust C – Captured bonnet Hand adjust D – Captured bonnet Screw adjust	1 – Brass 3 – Aluminum	<b>NO BLEED</b> 5 – 760 - 50 mm Hg absolute <b>CONSTANT BLEED</b> 5 – 760 - 100 mm Hg absolute	B – Brass	B – Buna-N E – Ethylene Propylene V – Viton®	9 – None P – Panel Mounting	A – No gauge ports B – Gauge ports at 60° F – In gauge at 90° G – In gauge at 90° L – Gauge ports at 90°	B – 1/4" SAE E – 1/8" NPTF F – 1/4" NPTF J – 1/4" MS33649 9 – None
			1. 28" Hg = 50 mm Hg absolute					