

# 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®

**O-Ring**

Buna-N, Ethylene Propylene, Viton®

**Remaining Parts**

300 Series Stainless Steel and Brass

#### OTHER

**Cleaning**

CGA 4.1 and ASTM G93

**Weight (without gauges)**

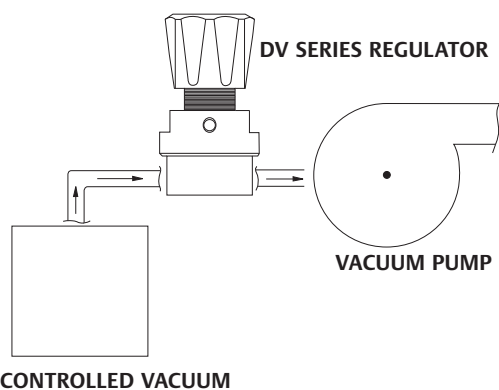
**Brass:** 2.4 lbs / 1.1 kg

**Aluminum:** 1 lb / 0.5 kg

1. For extended temperatures from -40°F to 400°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.

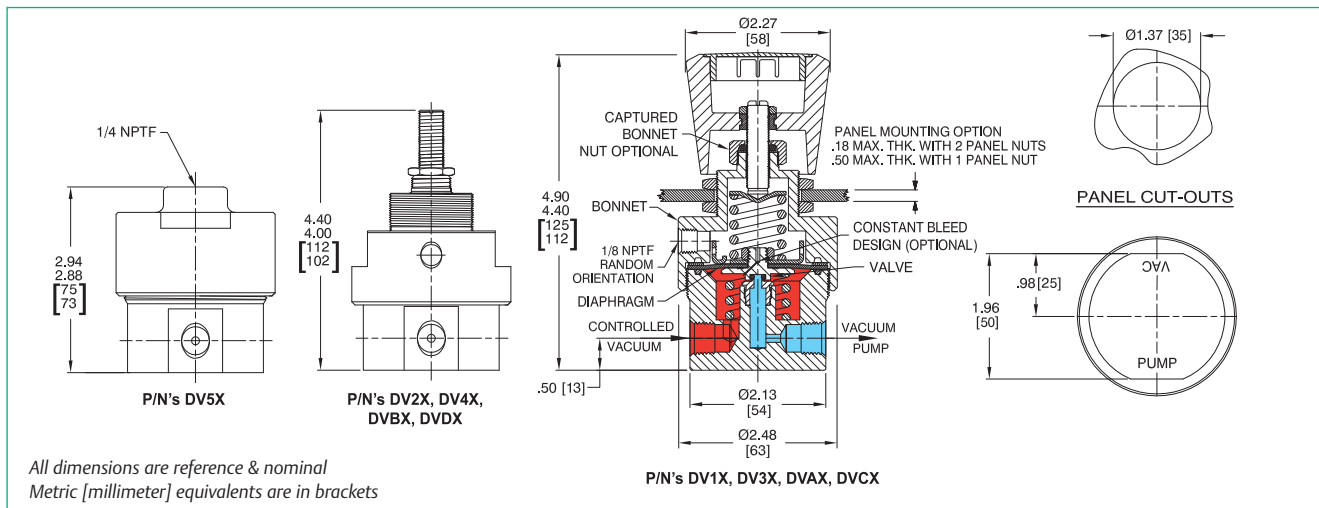
### Applications

- Instrumentation testing
- Calibration equipment

### Features and Benefits

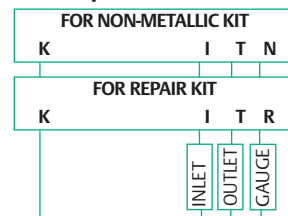
- Controls sub-atmospheric pressure
- Excellent repeatability
- Accurate diaphragm-type regulation  $\pm 0.1\%$  full scale accuracy
- High sensitivity of 10 mm Hg absolute achieved with constant bleed option
- Easy maintenance
- Low operating handknob torque
- Captured bonnet and panel mounting options 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	<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 - 0 - 710 mm Hg absolute <b>CONSTANT BLEED</b> 5 - 0-635 mm Hg absolute 9 - 0-255 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



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.