

# DV Series

## Regulators - Relief / Backpressure

DDVXX1800X012

### Specifications

For other materials or modifications, please consult TESCO M.

#### 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)**

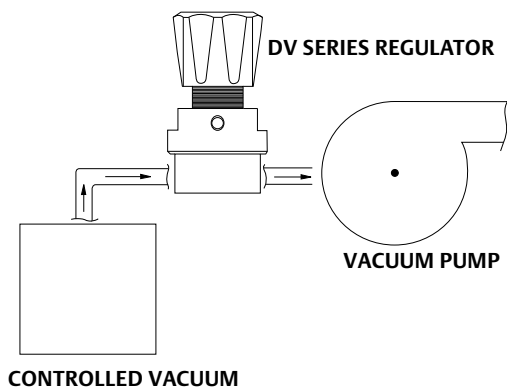
**Brass:** 2.4 lbs / 1.1 kg

**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.

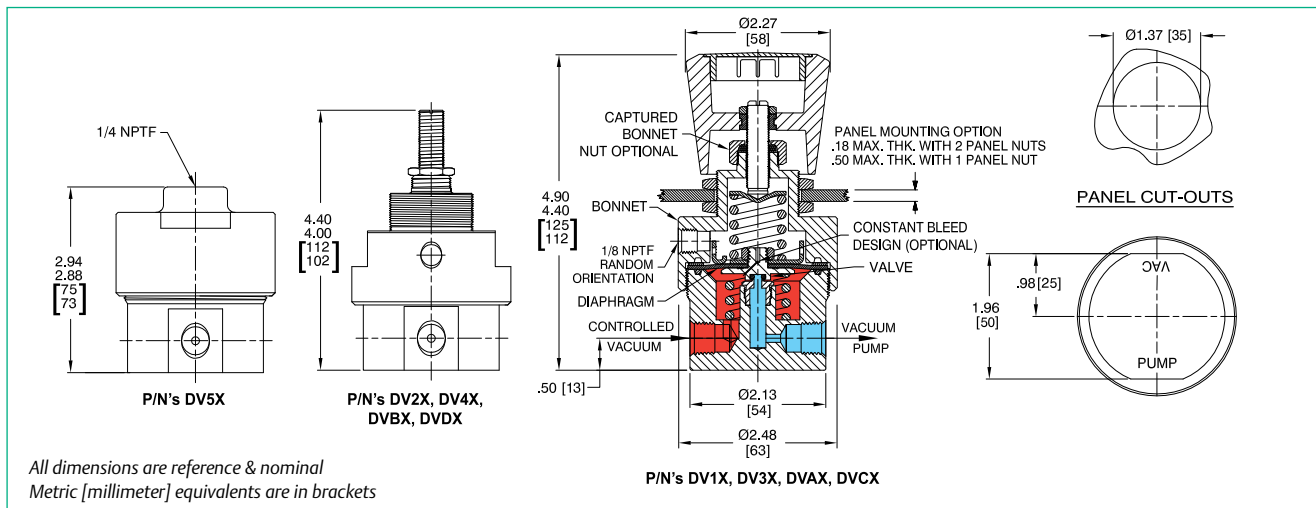
### Applications

- Instrumentation testing
- Calibration equipment

### Features and Benefits

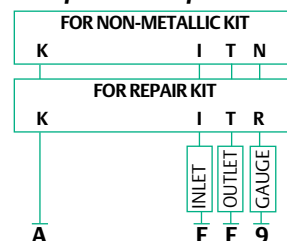
- Controls sub-atmospheric pressure
- Excellent repeatability
- Accurate diaphragm-type regulation  $\pm 0.1\%$  full scale accuracy
- High sensitivity of 10 mm Hg absolute achieved with constant bleed option
- Easy maintenance
- Low operating handknob torque
- Captured bonnet and panel mounting options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



**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.