

## DA Series

## Regulators - Pressure Reducing

DDAXX1798X012

## Specifications

For other materials or modifications, please consult TESCOM.

## OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Inlet Pressure**

4500 psig / 310 bar

**Outlet Pressure Ranges**

50 mm Hg absolute - 15 psig / 1.0 bar

50 mm Hg absolute - 50 psig / 3.4 bar

50 mm Hg absolute - 100 psig / 6.9 bar

50 mm Hg absolute - 350 psig / 24.1 bar

**Design Proof Pressure**

150% maximum rated

**Leakage**

Internal, Bubble-tight

**Operating Temperature<sup>1</sup>**

-15°F to 140°F / -25°C to 60°C

**Flow Capacity**

$C_v = 0.06$

**Maximum Operating Torque**

30 in-lbs / 3.4 N•m



TESCOM DA Series absolute pressure reducing regulator is designed with an elastomeric diaphragm and provides accuracy to +/- 0.1 psig / 0.007 bar. This regulator may be used to reduce pressure from a supply source up to 4500 psig / 310 bar into a vacuum environment.

## MEDIA CONTACT MATERIALS

**Body**

Brass or Nickel Plated Aluminum

**Diaphragm**

Buna-N, Ethylene Propylene, or Viton®

**Seat**

Teflon® ( Inlet 500 psig / 34.5 bar maximum), CTFE, or Vespel®

**Friction Sleeve (inner)**

Teflon®

**Friction Sleeve (outer)**

316 Stainless Steel

**Filter (40 micron)**

316 Stainless Steel

**Remaining Parts**

300 Series Stainless Steel

## 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®, Teflon®, and Vespel® are registered trademarks of E.I. du Pont de Nemours and Company.

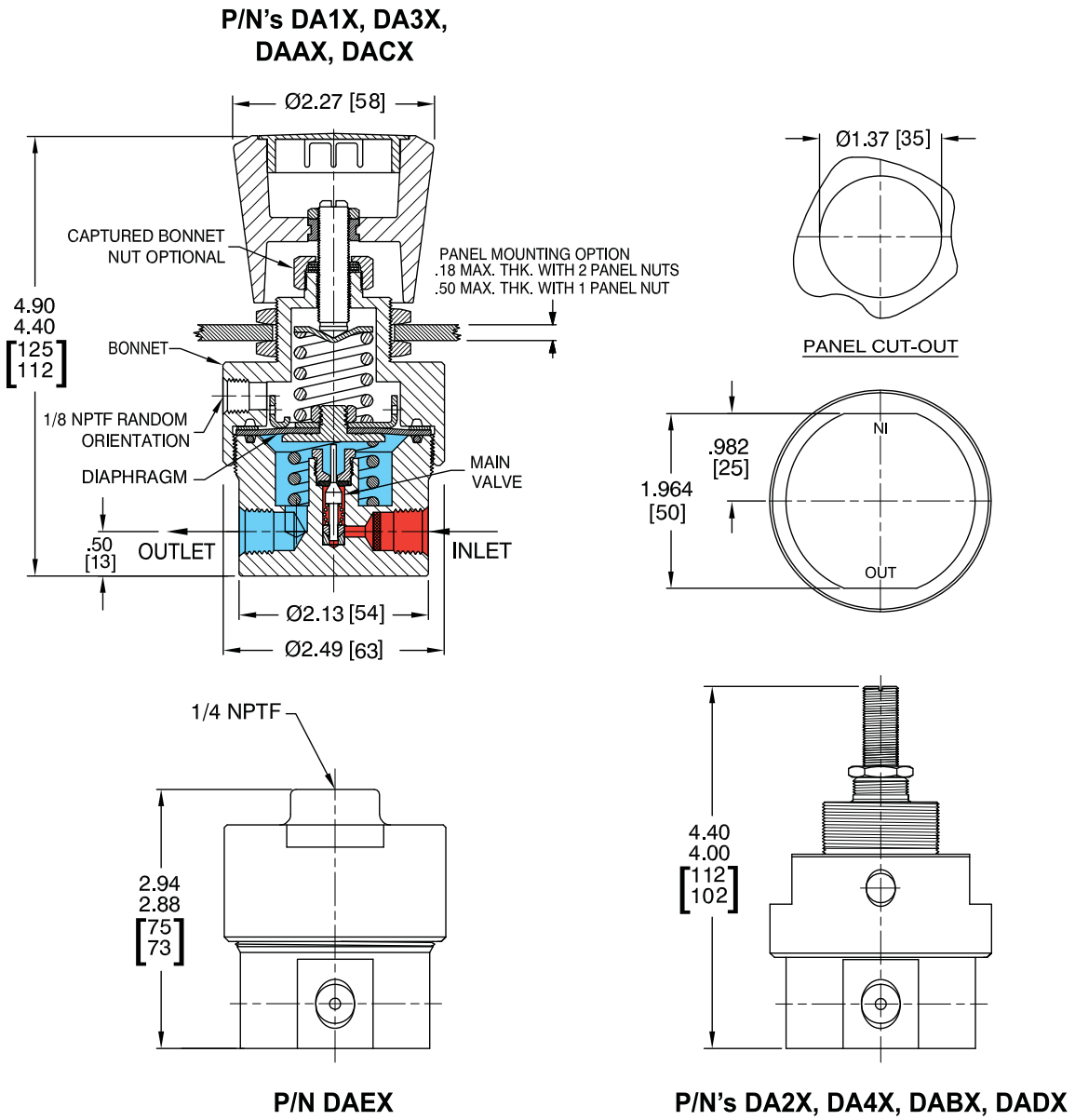
## Applications

- Instrumentation testing
- Calibration equipment

## Features and Benefits

- Compact in size and highly sensitive
- Economical
- Quick response and accurate diaphragm-type regulation
- Excellent repeatability
- Non-venting
- Low operating handknob torque
- Captured bonnet is available
- Panel mounting option is available
- Variety of porting options, body materials and soft goods

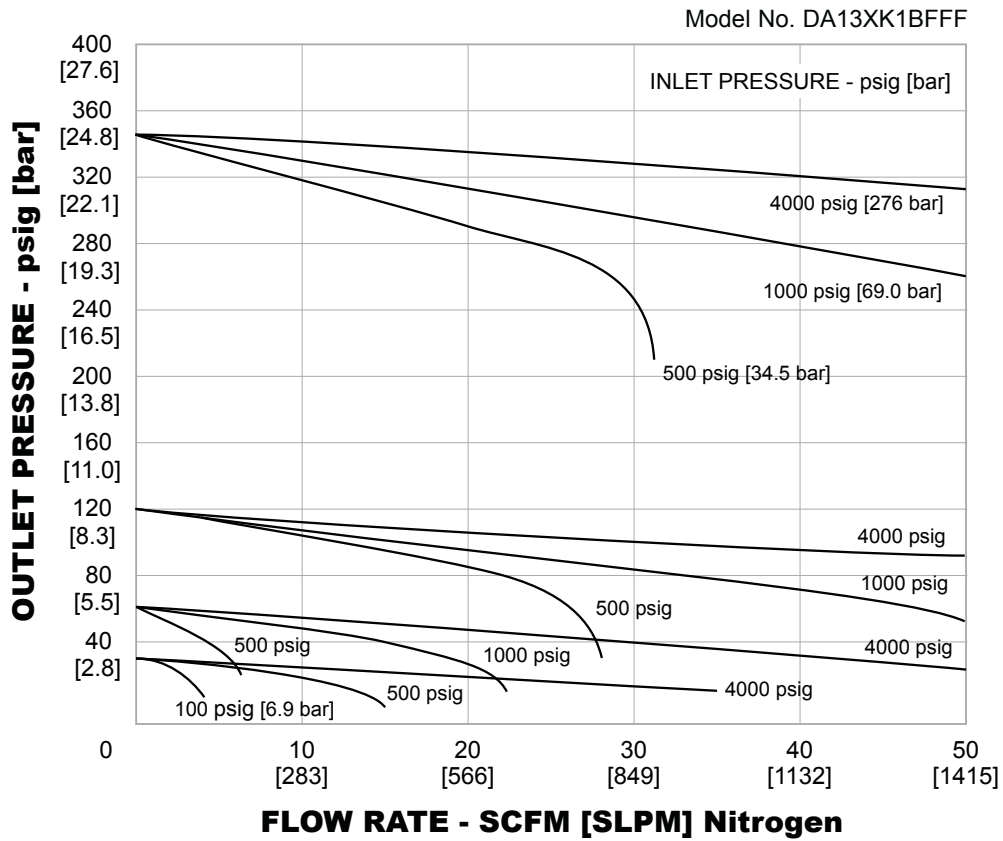
DA Series Regulator Drawing



All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

## DA Series Regulator Flow Chart




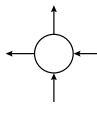
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on [www.tescom.com](http://www.tescom.com).



## DA 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	LOAD TYPE	BODY MATERIAL	OUTLET PRESSURE RANGES		SEAT MATERIAL	FLOW C <sub>v</sub>	DIAPHRAGM MATERIAL	MOUNTING	STANDARD PORTING CONFIGURATION	INLET, OUTLET AND GAUGE PORT TYPE AND SIZE
			STANDARD	ABSOLUTE <sup>1</sup>						
DA	<b>Standard Pressure Reducing</b> 1 – Handknob adjust 2 – Screwdriver adjust 3 – Captured bonnet Hand adjust 4 – Captured bonnet Screw adjust <b>Absolute Pressure Reducing</b> A – Handknob adjust B – Screwdriver adjust C – Captured bonnet Hand adjust D – Captured bonnet Screw adjust E – Dome loaded (maximum dome pressure 125 psig / 8.6 bar)	1 – Brass 3 – Aluminum	0 – N/A  1 – 0-15 psig / 0-1.0 bar  2 – 0-50 psig / 0-3.4 bar  3 – 0-100 psig / 0-6.9 bar  4 – 0-350 psig / 0-24.1 bar	50 mm Hg absolute - 100 psig / 6.9 bar (Dome loaded only)  50 mm Hg absolute - 15 psig / 1.0 bar  50 mm Hg absolute - 50 psig / 3.4 bar  50 mm Hg absolute - 100 psig / 6.9 bar  50 mm Hg absolute - 350 psig / 24.1 bar	K – CTFE Inlet 4500 psig / 310 bar maximum V – Vespel® Inlet 4500 psig / 310 bar maximum T – Teflon® Inlet 500 psig / 34.5 bar maximum	1 – C <sub>v</sub> = 0.06	B – Buna-N E – Ethylene Propylene V – Viton®	9 – None P – Panel Mounting	A – No gauge ports  D – Out gauge port at 90°  B – In and Out gauge port at 60°  L – In and out gauge port at 90° 	B – 1/4" SAE F – 1/4" NPTF J – 1/4" MS33649 9 – None
				1. 28" Hg = 50 mm Hg absolute						