

# 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.

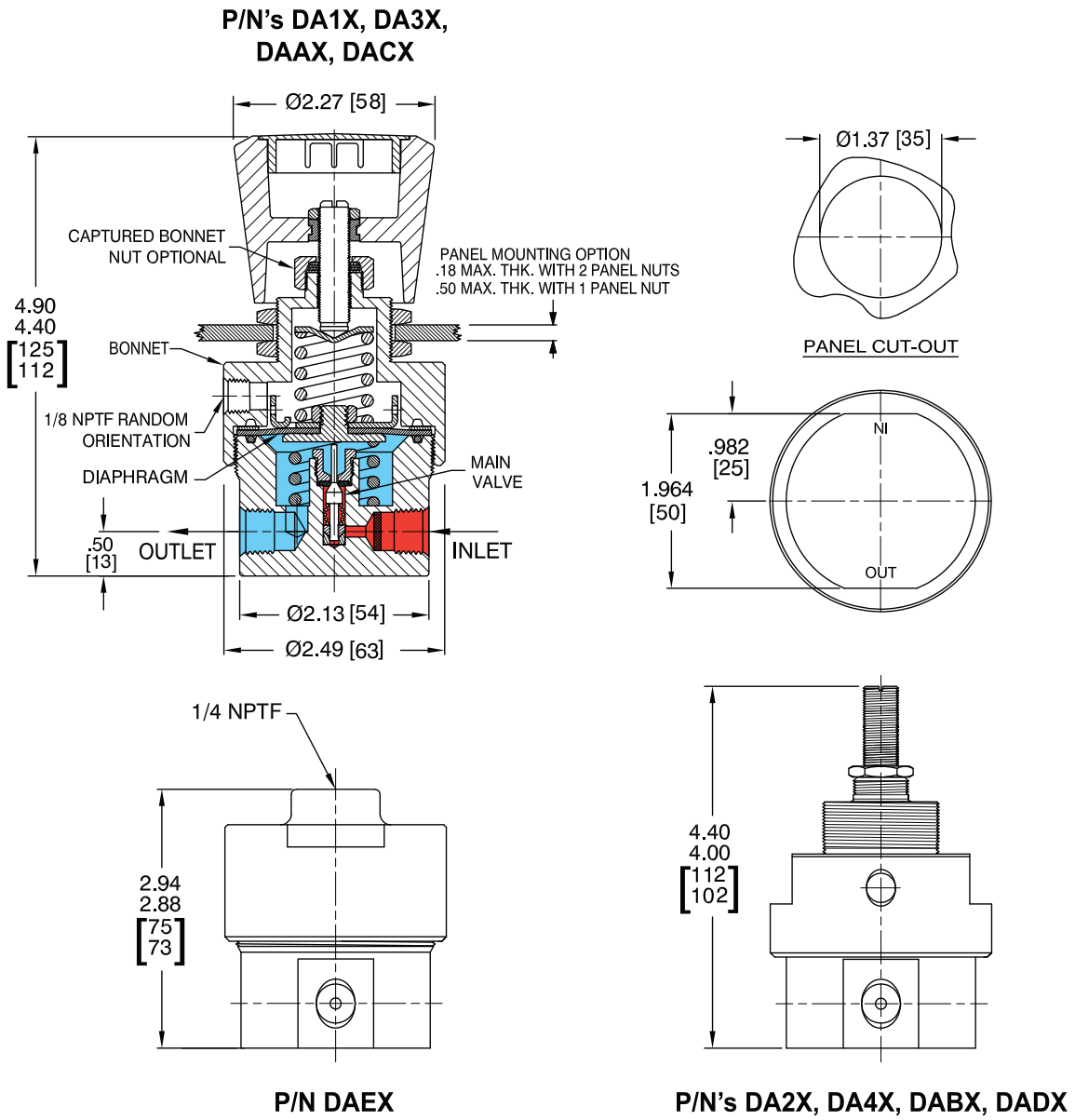
### Applications

- 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

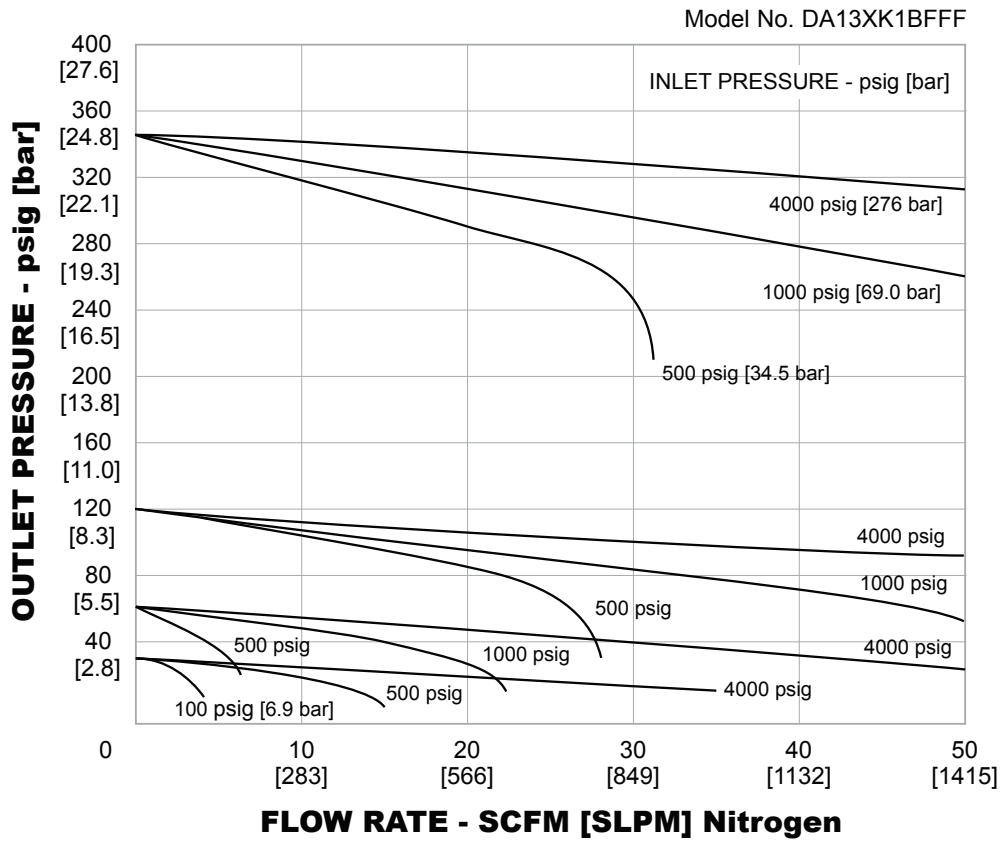
DA Series Regulator Drawing



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

## DA Series Regulator Flow Chart




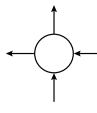
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on [www.tescom.com](http://www.tescom.com).



## 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><br>1 – Handknob adjust<br>2 – Screwdriver adjust<br>3 – Captured bonnet Hand adjust<br>4 – Captured bonnet Screw adjust<br><b>Absolute Pressure Reducing</b><br>A – Handknob adjust<br>B – Screwdriver adjust<br>C – Captured bonnet Hand adjust<br>D – Captured bonnet Screw adjust<br>E – Dome loaded (maximum dome pressure 125 psig / 8.6 bar) | 1 – Brass<br>3 – Aluminum | 0 – N/A<br><br>1 – 0-15 psig / 0-1.0 bar<br><br>2 – 0-50 psig / 0-3.4 bar<br><br>3 – 0-100 psig / 0-6.9 bar<br><br>4 – 0-350 psig / 0-24.1 bar | 50 mm Hg absolute - 100 psig / 6.9 bar (Dome loaded only)<br><br>50 mm Hg absolute - 15 psig / 1.0 bar<br><br>50 mm Hg absolute - 50 psig / 3.4 bar<br><br>50 mm Hg absolute - 100 psig / 6.9 bar<br><br>50 mm Hg absolute - 350 psig / 24.1 bar | K – CTFE Inlet 4500 psig / 310 bar maximum<br>V – Vespel® Inlet 4500 psig / 310 bar maximum<br>T – Teflon® Inlet 500 psig / 34.5 bar maximum | 1 – C <sub>v</sub> = 0.06 | B – Buna-N<br>E – Ethylene Propylene<br>V – Viton® | 9 – None<br>P – Panel Mounting | A – No gauge ports<br><br>D – Out gauge port at 90°<br><br>B – In and Out gauge port at 60°<br><br>L – In and out gauge port at 90°<br> | B – 1/4" SAE<br>F – 1/4" NPTF<br>J – 1/4" MS33649<br>9 – None |

1. 28" Hg = 50 mm Hg absolute