

# VU3000 Series

# Pressure Reducing Facility Regulator



The VU3000 is a high purity, pressure reducing facility regulator. It is designed to regulate a large volume of gaseous media at low pressure. This regulator has an extremely high flow capacity of Cv = 5 / 10 / 15 / 20.



## Features

- ▶ Flow capacity Cv = 5
- ▶ Maximum inlet pressure of 300psig.
- ▶ Outlet pressure ranges of 0-30psig and 0-150psig.
- ▶ Design maximum inboard leak rate of  $1 \times 10^{-9}$  scc/sec He.
- ▶ SUS316L stainless steel welded body construction.
- ▶ 15µin (0.375µm) internal surface finish for standard units.
- ▶ Bulk handling of high purity gases N<sub>2</sub> blanketing.

### Material of Construction

#### Wetted

Body.....SUS 316L  
 Poppet.....SUS 316L  
 Seat.....PTFE / Vespel® / Peek  
                   Buna-N90 / EP 80  
 Diaphragm.....SUS 316L / Hastelloy C-22

#### Non-Wetted

Cap.....Stainless Steel  
 Knob.....Alum. Powder Coated

### Operating Conditions

Max. Inlet.....300psig (21barg)  
 Outlet.....0~30psig (2barg)  
                   0~150psig (10barg)  
 Temp.....-20°F to 165°F (-28°C to 73°C)

### Functional Performance

Flow Capacity.....Cv = 5  
                   (ANSI/ISA S75.02 1988 using water)  
 Design Leak Rate:  
 Outboard..... $1 \times 10^{-9}$  scc/sec He  
 Inboard..... $1 \times 10^{-9}$  scc/sec He  
 Across Seat..... $4 \times 10^{-9}$  scc/sec He  
 Supply Pressure Effect...0.5psig (0.03barg)  
                   per 100psig (6.8barg)

### Surface Finishes

Standard Ra.....15µin  
                   (0.375µm)  
 Standard Connections  
 End to End.....Welded female / male VCR®  
                   tube stubs, flange  
 Gauges.....VCR®/ NPT  
 (internal style of VCR®, compatible with male swivel VCR®)

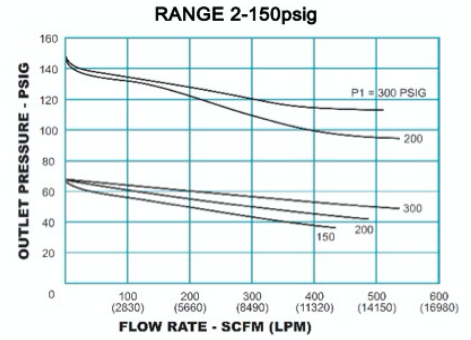
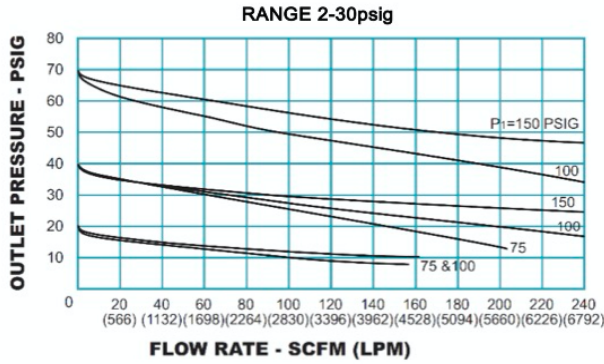
### Approximate Weight

15lbs (6.8kg)

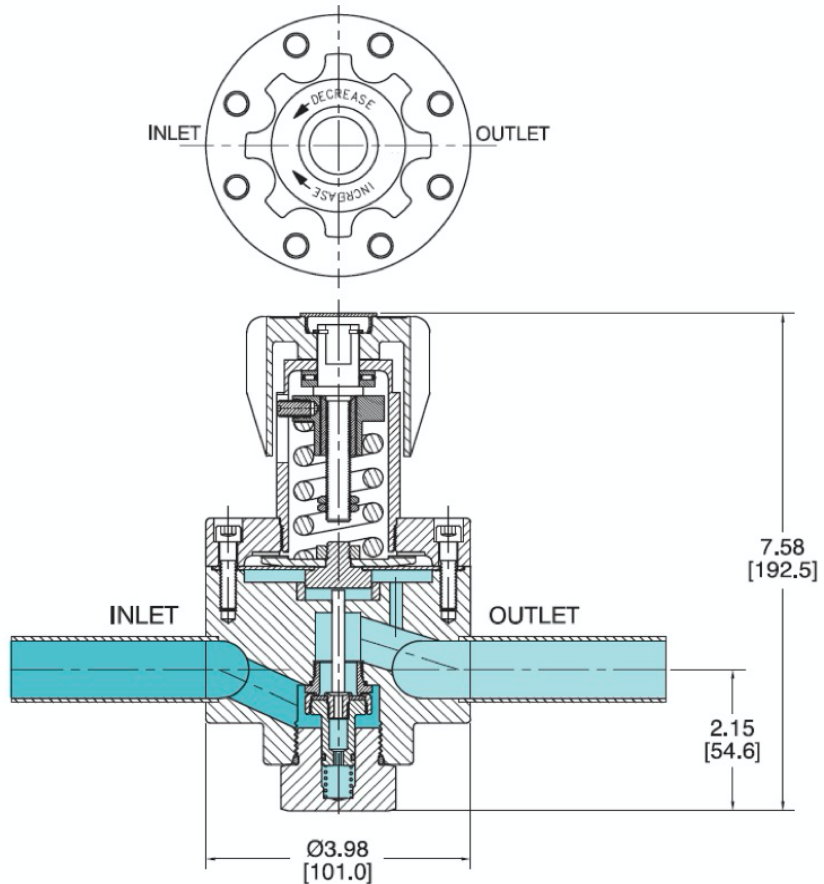
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## Flow Curve



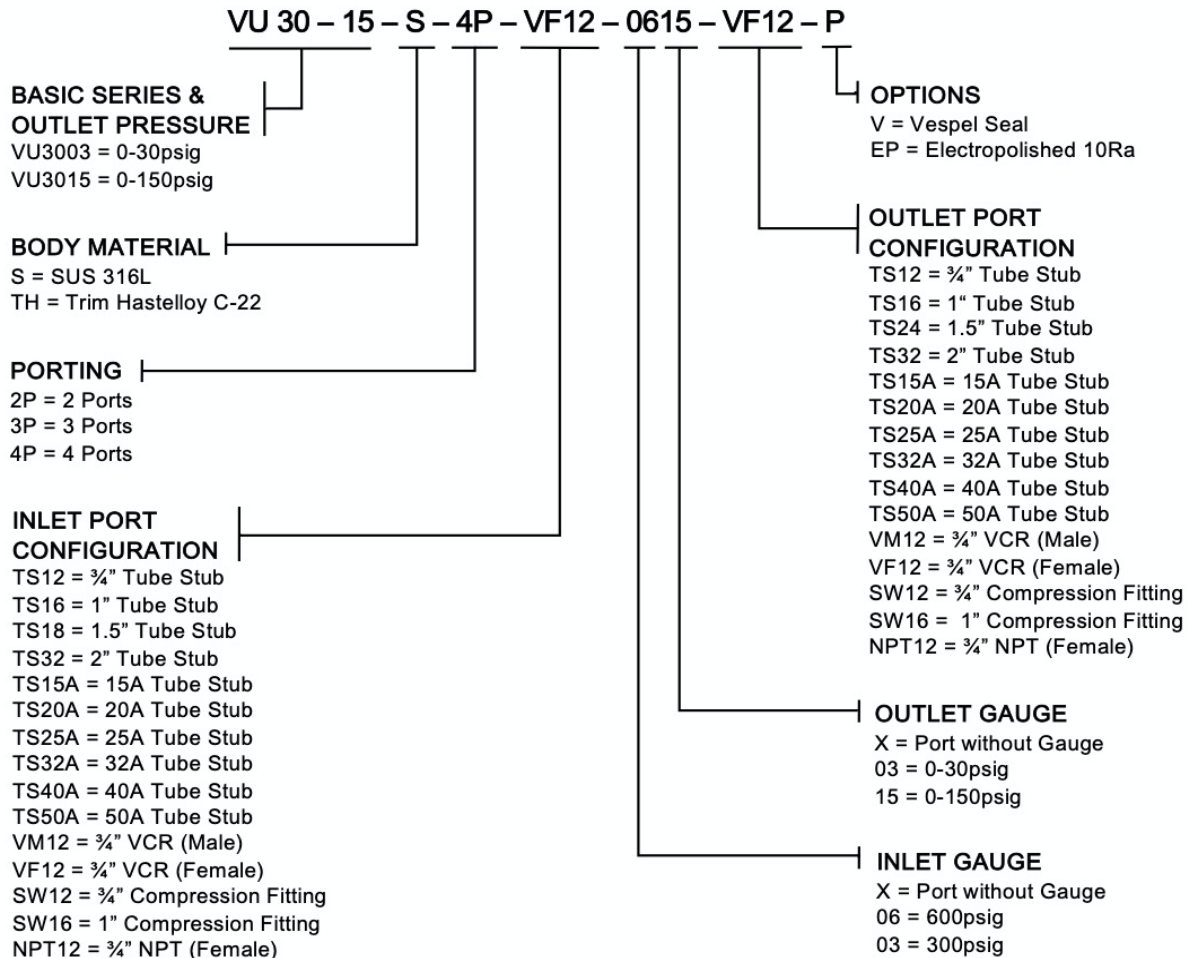
## Cross Sectional Drawing



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## Ordering Information



### EXAMPLE:

- VU3015-S-3P-TS32A-15-TS32A  
3 port 32A Tube Stub VU3015 with outlet gauge 150psig.
- VU3003-S-4P-NPT16-0603-NPT16  
4 port 1" NPT VU3015 (0-30psig) with CGA inlet fitting and inlet gauge 600 psig and outlet gauge 30psig.
- VU3015-S-2P-SW12  
2 port ¾" compression fitting VU3015 (1-150psig) without gauge port.