

VUMicro Series

Miniature Pressure Regulator



This regulator design is based on the process-proven Micro Series and incorporates a new poppet and seat allowing increased flow capacity of 100slpm.



Features

- ▶ Flow capacity to 100slpm.
- ▶ Standard Hastelloy C-22[®] poppet and diaphragm.
- ▶ Minimized footprint, internal volume, and surface area.
- ▶ Delivers most of the outstanding performance of the **VUMicro**, despite the size reduction.
- ▶ Dimensions are interchangeable with Veriflo Quantum valves.
- ▶ No wetted spring.
- ▶ No threads exposed to the wetted area.
- ▶ Standard full internal electropolish.

Material of Construction

Wetted

Body.....S/S 316L
 Poppet.....S/S 316L
 Seat.....PCTFE (formerly Kel-F81[®])
 Diaphragm.....S/S 316L

Non-Wetted

Cap.....Nickel Plated Brass
 Adjusting Screw.....S/S 316L
 Knob.....Alum. Powder Coated

Operating Conditions

Max. Inlet.....250psig (17barg)
 Outlet.....-10in Hg~60psig
 (250torr~4barg)
 Temp.....-40°F to 150°F (-40°C to 65°C)

Functional Performance

Flow Capacity..... $C_v = 0.06$
 (SEMI Flow Coefficient Test # F-32-0998)
 Design Leak Rate:
 Outboard..... 2×10^{-9} scc/sec He
 Inboard..... 2×10^{-10} scc/sec He
 Across Seat..... 5×10^{-8} scc/sec He
 Design Proof Pressure.....375psig (26barg)
 Design Burst Pressure.....750psig (52barg)

Surface Finish

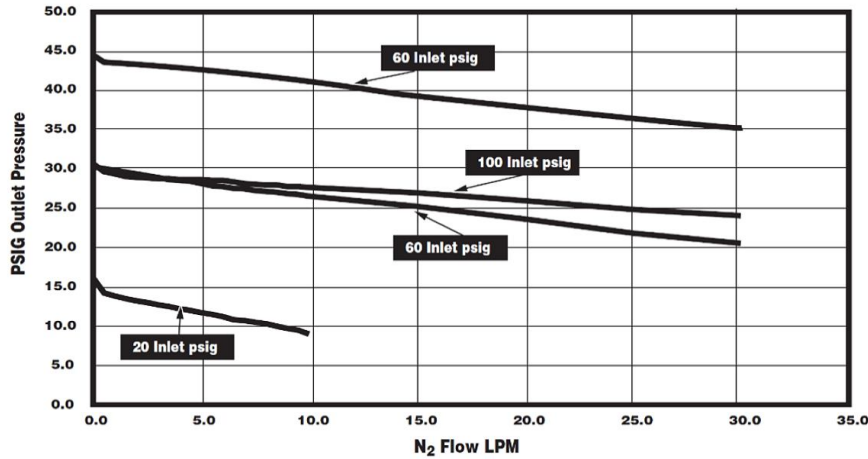
Standard Ra..... $5\mu\text{in}$ (0.125 μm)

Approximate Weight

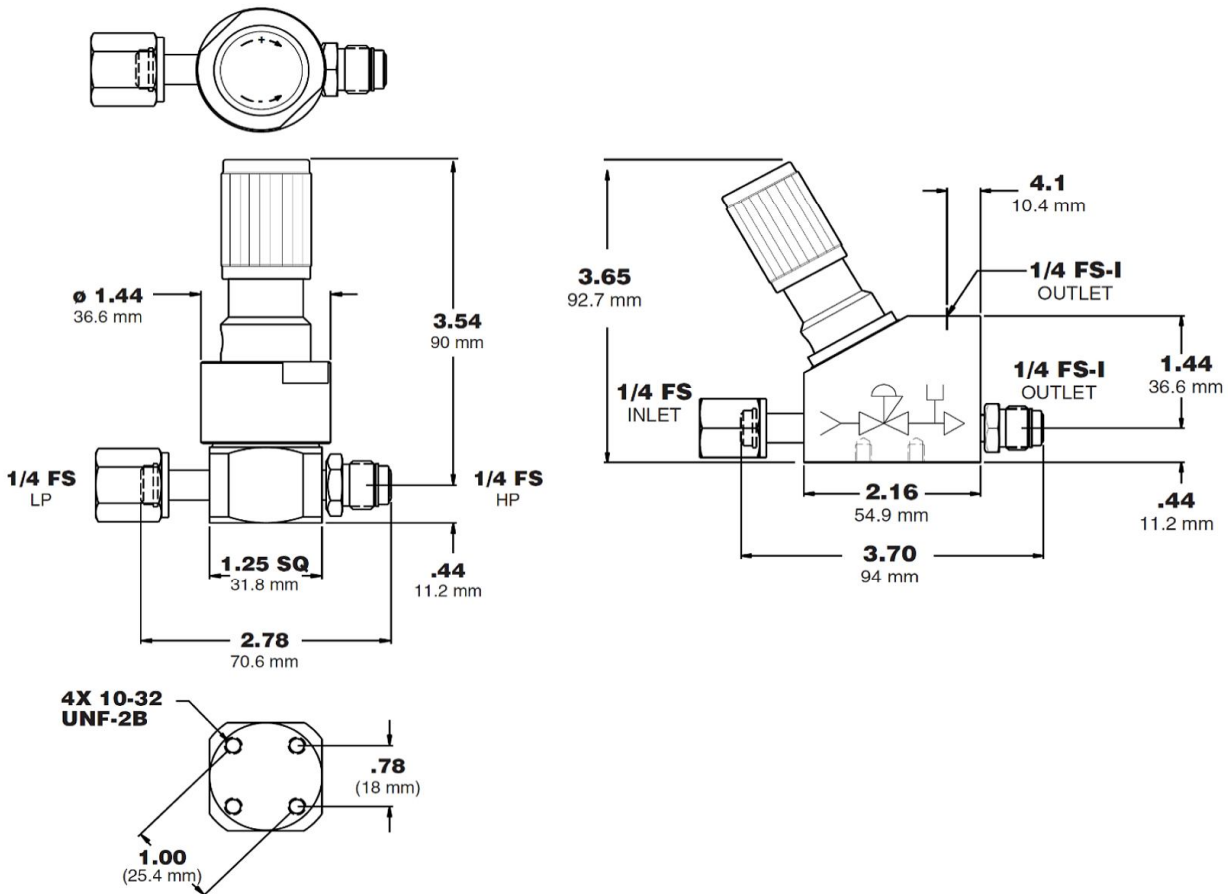
0.75lbs (0.34kg)

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Flow Curve



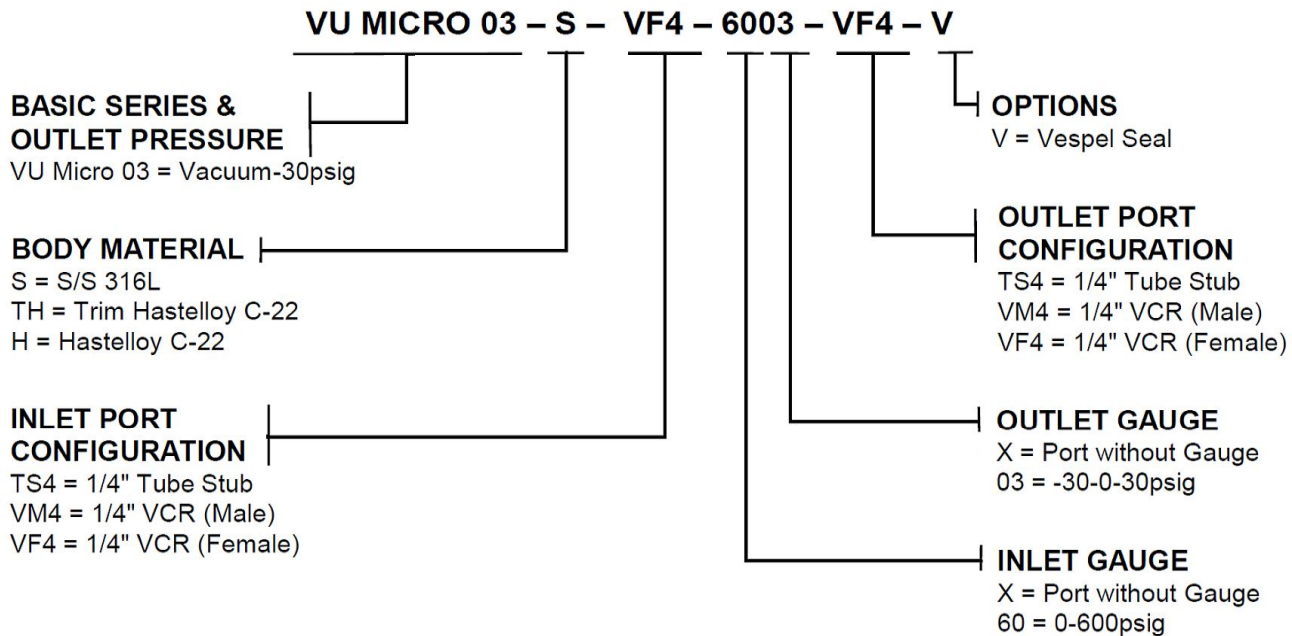
Dimensional Drawing



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Ordering Information



EXAMPLE:

1. VU Micro 03-S-VF4-6003-VF4-V
1/4" VCR (Female) VU Micro 03 with inlet gauge 600psig and outlet gauge 30psig, vespel seal.
2. VU Micro 03-H-VM4-VM4
1/4" VCR (Male) VU Micro 03 (0-30psig) In full Hastelloy C-22.
3. VU Micro 03-S-TS4-TS4
1/4" Tube stub VU Micro 03 (0-30psig).