



HALE HAMILTON

Data Sheet

I.S.O. 9001 – quality throughout

SERIES 24 ULTRA HIGH PURITY UHP1100 SEMICONDUCTOR PRESSURE REGULATOR

HIGH FLOW, LINE REGULATOR FOR CORROSIVE AND NON-CORROSIVE GASES

FEATURES:

- The Series UHP 1100 Pressure Regulator is designed for in line applications which require high flow rates at inlet pressures up to 4350 psi.
- Standard materials of construction are bar stock 316 stainless steel with Kel-F® seat.
- Abrasive flow machined and electropolished.
- Low particle generation.
- Corrosion resistant.
- High surface finishes.

SPECIFICATIONS:

- Maximum inlet pressure: 4350 psi (300 bar).
- Higher pressure ranges available upon request.
- Adjustable outlet pressure ranges: 0-10, 0-25, 0-50, 0-100, 0-200 and 0-290 psi.
- Maximum flow: 500L/min.
- Operating temperature: -40°F to +212°F: (-40°C to + 100 °C).
- Porting: Welded 1/2" VCR® type 7 port options, 1/4" VCR® type gauge ports.
- Fluid media: Corrosive and non-corrosive gases.
- Outlet pressure rise per 100 psi inlet decay 0.6 psi max.
- Ra 10-15 Micro-inch wetted surface finish.
- Mass spec. Leak Tested to:-
Inboard 1×10^{-9} mbar L/sec He.
Outboard 1×10^{-9} mbar L/sec He.
Across seat 1×10^{-9} mbar L/sec He.
- Flow coefficient $C_v = 0.2$.

APPLICATIONS:

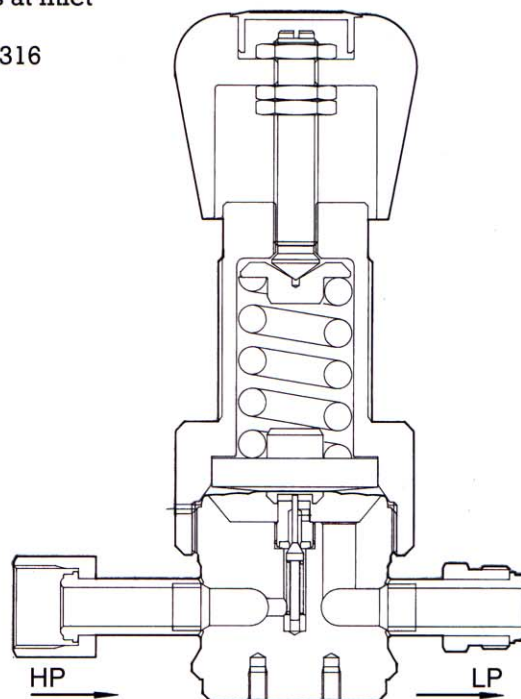
- High purity gas handling.
- Regulation of corrosive & speciality gases.
- Wafer process control.
- R & D Laboratories.
- High flow purging systems.

OPTIONAL FEATURES

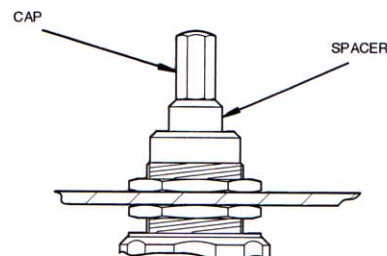
- Panel mounting.
- Locked outlet.
- Pressure gauges.
- Tied diaphragm.
- RHP Connections.

MATERIALS OF CONSTRUCTION

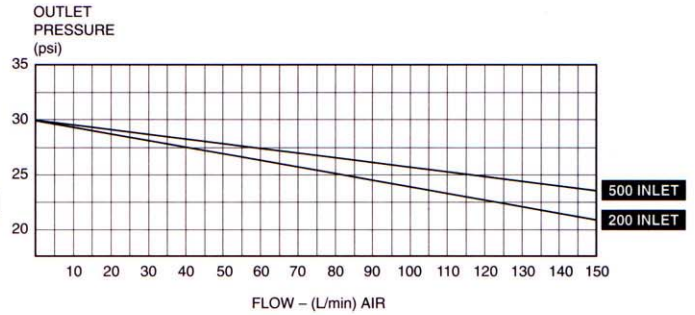
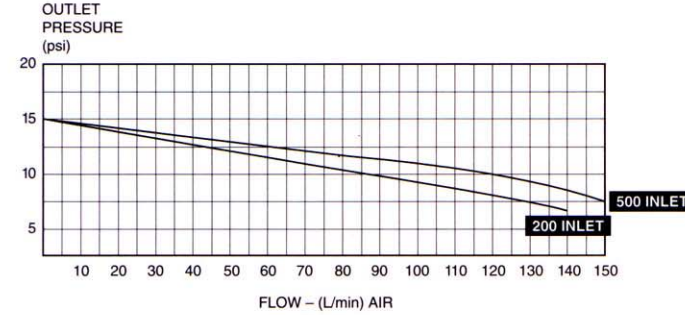
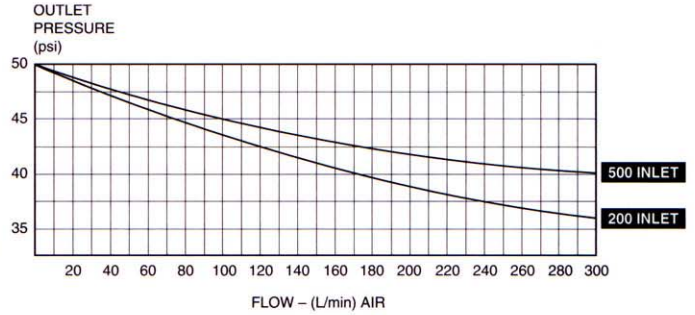
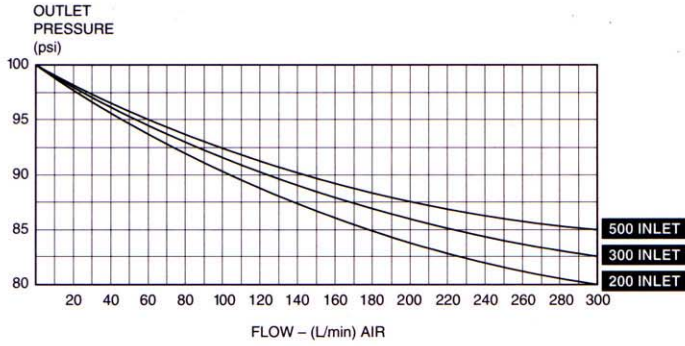
- BODY - Bar stock 316 stainless steel.
- SEAT AND SEAL - 316 Stainless steel & Kel-F®.
- BONNET - Electroless nickel plated aluminium bar stock.



**Preset and locked
discharge pressure**
Control knob replaced by
locking cap and spacer

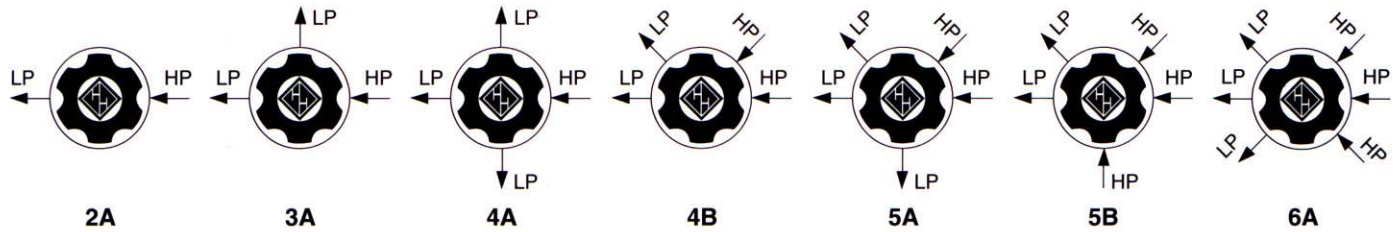


DISCHARGE CHARACTERISTICS:

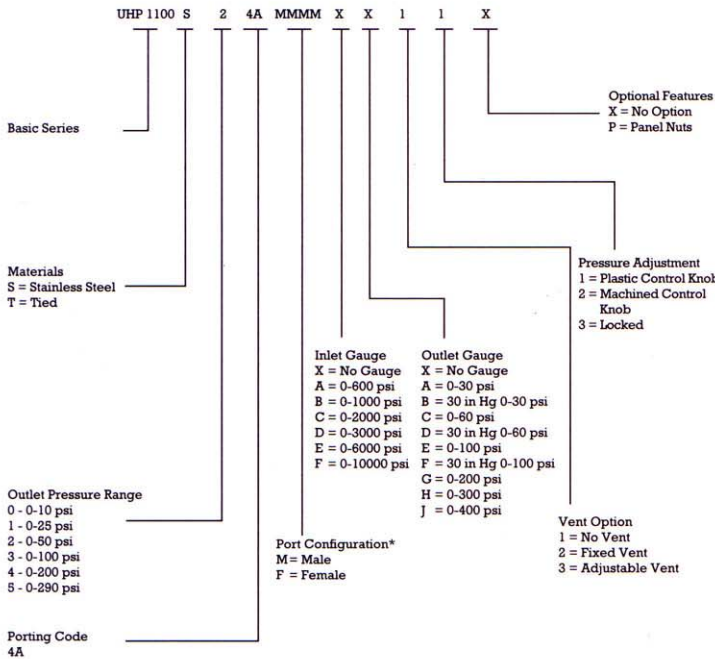


PORTING CODES:

(Alternative Port configurations are available)



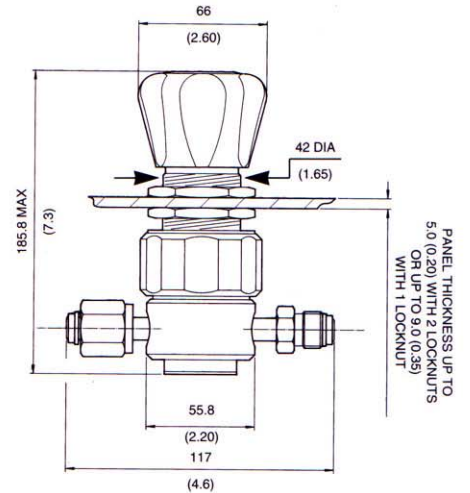
ORDERING INFORMATION:



VCR Trademark of Cajon
 TEFLO^N Trademark of Du-Pont
 KEL-F Trademark of 3M

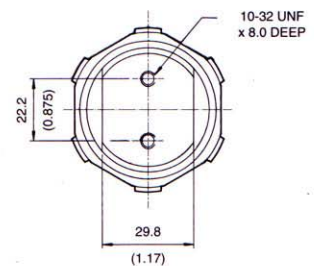
* Notes type of each connection counter clockwise from 3:00 port or regulator inlet

INSTALLATION:



PANEL THICKNESS UP TO 5.0 (0.20) WITH 2 LOCKNUTS OR UP TO 9.0 (0.39) WITH 1 LOCKNUT

BASEMOUNT:



Imperial equivalent in parenthesis (inches)
 Note: All dimensions are reference and nominal

