

U23 SERIES

Ultra High Purity Regulator

Solutions for Life

U23 Series single-stage regulators are ideal purge regulators for low pressure and high purity systems, especially for heavy duty gas flow applications. Our metal-to-metal diaphragm to body seal is designed to minimize leakage and to provide excellent accuracy and longevity.



» U23SLGK-DIP-91-91

Surface Finish

- Standard Ra: 20 μ m
- Optional Ra (EP): 10 μ m

Internal Volume

- 59.9 cc

*: Standard Material

Features

- 316L stainless steel body
- Metal to metal diaphragm to body seal
- Easy front panel and rear bracket mounting
- Gauge ports are standard with 1/4" face seal male. Internal 1/4" face seal female is also available
- Fully internal electropolished
- Cleaned, assembled and packaged for high purity semiconductor applications
- High-cycle life
- 100% Helium-leak tested

Materials

- Body: 316L stainless steel
- Seat: PCTFE*, Vespel®
- Diaphragm: 316L stainless steel
- Poppet: 316 stainless steel
- Remaining part: 316 stainless steel

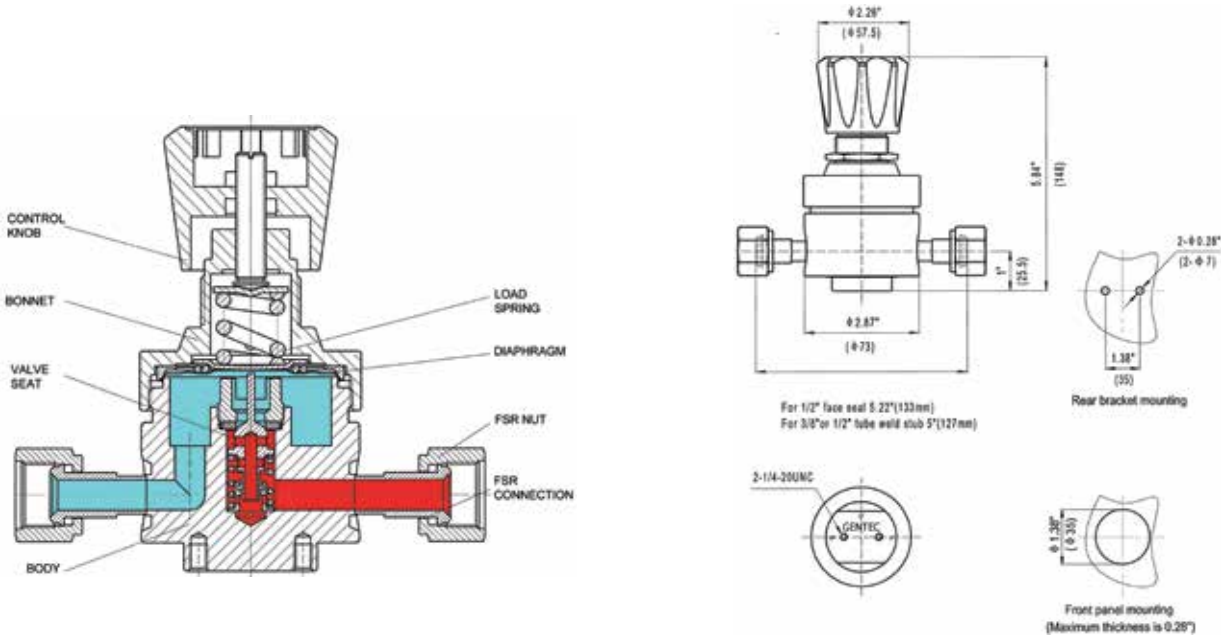
Functional Performance

- Flow capacity: Cv=1.8
- Maximum leak Rate:
 - Inboard leakage: 2×10^{-9} atm cc/sec He
 - Across seat leakage: 4×10^{-8} atm cc/sec He
- Proof pressure: 150% of maximum rated pressure
- Burst pressure: 400% of maximum rated pressure

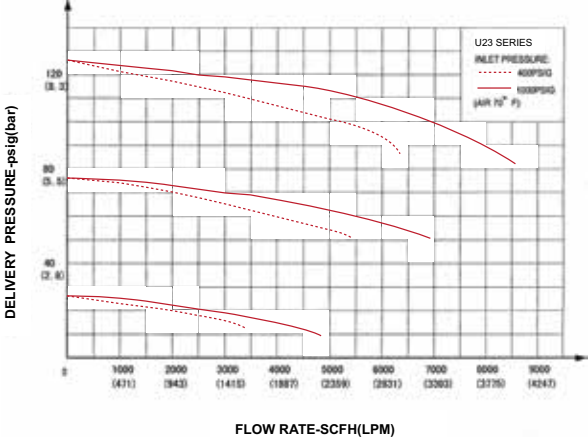
Operating Conditions

- Maximum inlet pressure: 500 psi (35 bar), 3000 psi (206 bar)
- Outlet pressure: 0 ~ 25 psi (1.7 bar), 0 ~ 50 psi (3 bar), 0 ~ 100 psi (7 bar), 0 ~ 150 psi (10 bar)
- Temperature: -40°F ~ 165°F (-40°C ~ 74°C)

Dimensions



Flow Data



Ordering Information

| EX: U23 | SL | B | K | - D | H | P - | 95 - 95 | - P |
|---------|---------------|-----------------------|------------------------|---------------------------|--|--|------------------------------------|--|
| Series | Body Material | Body Ports | Seat | Inlet Pressure | Outlet Pressure | Pressure Gauge* | Inlet/Outlet Connection | Options |
| U23 | SL: 316L | A B G J M | K: PCTFE V: Vespel® | D: 3000 psi F: 500 psi | H: 0-150 psi I: 0~100 psi K: 0~50 psi L: 0~25 psi | W: Without Gauge P: psi / bar Gauge | 95: 1/2" FSR(F) 96: 1/2" FSR(M) | E: Ra 10 µin P: Panel Mounting H: Hastelloy® Diaphragm |

*: Gauges' connection: 1/4"FSR , other connection type please conect GENTEC.