Ultra High Purity and Ultra High Performance The SQ Series was created in response to the need for high performance point-of-use pressure reducing regulators for semiconductor processing.

EXACT Series

High Purity High Performance Pressure Transducer

- Thermo-Fused Technology to Hastelloy C-22® which dramatically reduces drift and improves repeatability.
- Enhanced Thermal Performance.
- Case Stress cancellation which minimizes shift during installation.
- Improved corrosion resistance with Hastelloy C-22[®] material.
- Extremely high overpressure ratio tolerances (3x Full Scale).
- NEMA 4 package.
- Replaceable Electronics Module.

OPERATING CONDITIONS:

Operating Temperature: -20°C to +105°C (-4°F to 221°F), Pressure Ranges Available: 0 to 30 through 0 to 3,000 psig, Response Time: Less than 1 mSec

STANDARD ELECTRICAL OUTPUT:

4-20mA, 0-5 VDC, .5-10.5 VDC Linearity 0 10* F.S.O. Long Term Stability - 250° F.S.O 1 year



EXACT Series Pressure Transducer

SQ Series

High Performance Pointof-Use Regulators

- SQ's have no wetted internal springs or threads that could release particles and moisture.
- Single low pressure seal to atmosphere.
- 5 Ra and internal electropolishing are standard on SQ Micro products.

 SQ Series: 140E, SQ HP, 420E, Micro High Flow, Micro "A" Style, 60, Micro products.



- Design maximum inboard leak 2x10⁻¹⁰ scc/s He.
- Hastelloy C-22® poppet and diaphragm standard.
- Hurricane Cleaning is standard.

OPERATING CONDITIONS:

Max Inlet: 250 psig (17.2 barg), Outlet: 20 in. Hg to 100 psig (7 barg) not on SQ Micro - limited to 60 psig (4 barg) out, Optional Inlet: 750 psig (52 barg) SQ 140E only

FLOW COEFFICIENTS:

SQ 60, HP and Micro C $_{\rm V}$ =.05, SQ 140E C $_{\rm V}$ =.25, SQ 420E C $_{\rm V}$ = 1.5



SQ 60SA

SQ 60SA

Pressure Regulator

OPERATING CONDITIONS:

Max Inlet: 250 psig (70 barg) Outlet: 28" Hg to 30 psig (67 mbar Abs .2 barg)

FLOW CAPACITY:

 $C_{v} = .20$

INTERNAL VOLUME:

5.2 c.c.

SQ Micro 130

Pressure Regulator

OPERATING CONDITIONS

Max Inlet: 250 psig max (17 barg) Outlet: 0-30, 0-60 psig (2, 7 bar)

FLOW CAPACITY

 $C_{V} = .20$

INTERNAL VOLUME

5 c.c.



SQ Micro 130

SQ 130E

Pressure Regulator

OPERATING CONDITIONS

Max Inlet: 1000 psig (70 barg) Outlet: 0-30, 0-100 psig (2, 7 barg)

FLOW CAPACITY

 $C_{V} = .22$

INTERNAL VOLUME

5.2 c.c.



SQ 130E

SQ HP

High Pressure Regulator

OPERATING CONDITIONS

Max Inlet: 3500 psig max (241 barg)
Outlet: 0-30, 0-100 psig (2, 7 barg)

FLOW CAPACITY $C_V = .05$

INTERNAL VOLUME

5 c.c.



SQ HP