The 529 Series Protocol Switchover Station combines all of the safety and convenience features of a standard Protocol Station with the added efficiency of having a reserve cylinder connected to the system. The Protocol Switchover Station valving allows manual switching and isolation of the depleted cylinder for safe change-out. The system comes complete with Protocol Station, two 3-foot all stainless steel pigtails with armor casing, and two valves (diaphragm, 3,000 PSIG or needle 4,500 or 6,000 PSIG).

### Features
- **Plugged port in gas block**
  - Facilitates purging
- **Integral check valve at inlet**
  - No internal contamination during cylinder change
- **Bracket mounts**
  - Attaches conveniently to any surface

### Specifications
- **Protocol Tee**
  - Brass or 316 stainless steel barstock
- **Flexible Pigtails**
  - 316 stainless steel barstock
  - Monel innercore for oxygen service
- **Inlet Connection**
  - 316 stainless steel or brass barstock
- **Check Valve “O” Ring**
  - Viton®
- **Bracket**
  - 304 Stainless Steel
- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
  - 4500 PSIG (310 BAR) optional
  - 6000 PSIG (380 BAR) optional
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Weight (Single Stage)**
  - 3.6 lbs. (1.4 kg)
- **Weight (Dual Stage)**
  - 4.0 lbs. (1.6 kg)

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>529-0154-CON</td>
<td>For example, to order a 422-1331-580 with a Protocol Switchover, the stock number would be 422-1331-580C</td>
</tr>
<tr>
<td>529-0155-CON</td>
<td>Protocol Switchover Station for brass regulators with max inlet 3,000 PSIG (4,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0156-CON</td>
<td>Protocol Switchover Station for chrome-plated brass regulators with max inlet 3,000 PSIG (4,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0157-CON</td>
<td>Protocol Switchover Station for 316L stainless steel regulators with max inlet 3,000 PSIG (4,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0158-CON</td>
<td>Protocol Switchover Station for brass regulators with max inlet 4,500 PSIG (6,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0159-CON</td>
<td>Protocol Switchover Station for chrome-plated brass regulators with max inlet 4,500 PSIG (6,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0160-CON</td>
<td>Protocol Switchover Station for 316L stainless steel regulators with max inlet 4,500 PSIG (6,000 PSIG Gauge)</td>
</tr>
<tr>
<td>529-0160-CON</td>
<td>Protocol Switchover Station for 316L stainless steel regulators with max inlet 6,000 PSIG (10,000 PSIG Gauge)</td>
</tr>
</tbody>
</table>
The 529 Series Protocol Switchover Alarm combines all of the features of the Protocol Switchover Station with the added security of a remote alarm system. The Protocol Switchover Alarm will provide an audio/visible warning when a cylinder is nearly depleted. The system comes complete with Protocol Switchover Station, two 3-foot all stainless steel pigtails with armor casing, two valves (diaphragm, 3,000 PSIG or needle 4,500 or 6,000 PSIG) and remote alarm.

### Features
- **Plugged port in gas block**
  - Facilitates purging
- **Integral check valve at inlet**
  - No internal contamination during cylinder change
- **Bracket mounts**
  - Attaches conveniently to any surface
- **Pressure Switch Gauge**
  - Provides visible warning of cylinder depletion
- **Remote Alarm**
  - Provides audible and visible warning of cylinder depletion

### Specifications
- **Protocol Tee**
  - Brass or 316 stainless steel barstock
- **Flexible Pigtails**
  - 316 stainless steel barstock
  - Monel innercore for oxygen service
- **Inlet Connection**
  - 316 stainless steel or brass barstock
- **Check Valve “O” Ring**
  - Viton®
- **Bracket**
  - 304 Stainless Steel

- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
  - 4500 PSIG (310 BAR) optional
  - 6000 PSIG (380 BAR) optional

- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)

- **Weight (Single Stage)**
  - 4.4 lbs. (2 kg)

- **Weight (Dual Stage)**
  - 4.8 lbs. (2.2 kg)

- **Intrinsic Safety Barriers**
  - Required for flammable gas service or for use in hazardous environments

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add letter “G” after any regulator stock number</td>
<td>For example, to order a 422-1331-580 with a 110V Protocol Switchover Alarm, the stock number would be 422-1331-580G</td>
</tr>
<tr>
<td>Add letter “H” after any regulator stock number</td>
<td>For example, to order a 422-1331-580 with a 220V Protocol Switchover Alarm, the stock number would be 422-1331-580H</td>
</tr>
<tr>
<td>529-0151-CONG</td>
<td>110V Protocol Switchover Alarm for brass regulators with max inlet 600 PSIG</td>
</tr>
<tr>
<td>529-0152-CONG</td>
<td>110V Protocol Switchover Alarm for chrome-plated brass regulators with max inlet 600 PSIG</td>
</tr>
<tr>
<td>529-0153-CONG</td>
<td>110V Protocol Switchover Alarm for 316L stainless steel regulators with max inlet 600 PSIG</td>
</tr>
<tr>
<td>529-0154-CONG</td>
<td>110V Protocol Switchover Alarm for brass regulators with max inlet 3,000 PSIG</td>
</tr>
<tr>
<td>529-0155-CONG</td>
<td>110V Protocol Switchover Alarm for chrome-plated brass regulators with max inlet 3,000 PSIG</td>
</tr>
<tr>
<td>529-0156-CONG</td>
<td>110V Protocol Switchover Alarm for 316L stainless steel regulators with max inlet 3,000 PSIG</td>
</tr>
<tr>
<td>529-0157-CONG</td>
<td>110V Protocol Switchover Alarm for brass regulators with max inlet 4,500 PSIG</td>
</tr>
<tr>
<td>529-0158-CONG</td>
<td>110V Protocol Switchover Alarm for chrome-plated brass regulators with max inlet 4,500 PSIG</td>
</tr>
<tr>
<td>529-0159-CONG</td>
<td>110V Protocol Switchover Alarm for 316L stainless steel regulators with max inlet 4,500 PSIG</td>
</tr>
<tr>
<td>529-0160-CONG</td>
<td>110V Protocol Switchover Alarm for 316L stainless steel regulators with max inlet 6,000 PSIG</td>
</tr>
</tbody>
</table>

For 220V Protocol Switchover Alarm replace “G” after Part Number with “H”
This advanced electronically operated 918 Series AUTO-LOGIC II changeover manifold is fully automatic and provides the user with simple, intuitive operation via a color touch screen. Users can switch from high pressure cylinders on both sides, low pressure cryogenic containers on one side and high pressure cylinders on the other side, or cryogenic containers on both sides with just a few screen touches. Once you have set the operating parameters, you need only to change cylinders as necessary. There is no need to make pressure adjustments or flip a knob after the system has switched from one side to the other. Just replace the empty cylinders and open the valves. The system is now set to change in the opposite direction. The AUTO-LOGIC II capabilities provide customers with a changeover system that suits their current operation and future expanded requirements without having to buy another system.

The 918TS is available with either brass or stainless steel high purity gas components. It has digital pressure readouts for inlet pressures and outlet delivery pressure, built-in alarms, and dry contacts to operate external equipment, such as remote alarms or an auto-dialer. Entire system is housed in a NEMA 4X box.

Features

- Fully automatic, simple, hassle free operation via a color touch screen
- Constant digital and graphic gas supplies on both sides
- Delivery pressure monitor displays any unusual variances
- High and low adjustable delivery pressure alarm settings
- Designed for high purity gas service
- May be used with any type gas source
- “Leak-Check” monitoring alerts the user to low reserve side pressure of either high pressure or cryogenic containers while in standby via audible and visual alarms
- “Gas-Check” feature ensures efficient use of gas supplies when cryogenic containers are in service
- Built-in audio and visual alarm
- External dry contacts provided to activate optional equipment or remote alarms
- System housed in NEMA 4X box
- Available in either brass or stainless steel construction

Specifications

- Max Inlet Pressure 3000 psig
- Power required 120 VAC/60Hz
- Inlet and Outlet Connections 1/4” NPT female
## Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Delivery Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>918TS-1-200</td>
<td>brass electronic high purity changeover manifold</td>
<td>25-200 psig</td>
</tr>
<tr>
<td>918TS-2-200</td>
<td>stainless steel electronic high purity changeover manifold</td>
<td>25-200 psig</td>
</tr>
</tbody>
</table>

### Options
- 912-AVA audio/visual alarm module for remote alarm
- AVD-4SB auto dialer
- 914/918-HUB - this hub device allows for multiple dry contact connections to operate auxiliary devices
- Pigtails for 918TS Changeover Manifolds (2 per set)
  - **For Brass Manifolds**
    - 918-FPB601-Y-CGA*: two flexible Teflon lined stainless steel braided pigtails with brass fittings and no check valves
    - 918-FPB601-Y-CV-CGA*: two flexible Teflon lined stainless steel braided pigtails with brass fittings and check valves
    - 918-FPB604-Y-CGA*: two flexible all stainless steel braided pigtails with brass fittings and no check valves
    - 918-FPB604-Y-CV-CGA*: two flexible all stainless steel braided pigtails with brass fittings and check valves
  - **For Stainless Steel Manifolds**
    - 918-FP604-Y-CGA*: two flexible all stainless steel braided pigtails without check valves
    - 918-FP604-Y-CV-CGA*: two flexible all stainless steel braided pigtails with check valves

* Specify CGA connection when ordering

Y = pigtail length in feet
Description
The 919 Series Ultra-Logic changeover manifold is an advanced version of the AUTO-LOGIC II and provides the user with simple, intuitive operation via a color touch screen. Users can switch from high pressure cylinders on both sides, low pressure cryogenic containers on one side and high pressure cylinders on the other side, or cryogenic containers on both sides with just a few screen touches. Once you have set the operating parameters, you need only change cylinders as necessary. There is no need to make pressure adjustments or flip a knob after the system has switched from one side to the other. Just replace the empty cylinders and open the valves. The system is now set to change in the opposite direction.

The additional Ultra-Logic capabilities provide customers with a changeover system that suits their current operation and future expanded requirements without having to buy another system.

The 919 TS is available with either brass or stainless steel high purity gas components. It has digital pressure readouts for inlet pressures and outlet delivery pressure, built-in alarms, and dry contacts to operate external equipment, such as remote alarms or an auto-dialer. Entire system is housed in a NEMA 4X box.

Features
- Can be controlled via network
- Provides full data logging capability for all functions to aid in 21CFR11 compliance
- Operating parameters are password protected for multiple users
- 919TSP provides automatic purging to ensure gas purity on cylinder change outs

Plus these features, also available with the Auto-Logic® II
- Fully automatic, simple, hassle free operation via a large color touch screen
- Constant digital and graphic gas supplies on both sides
- Delivery pressure monitor displays any unusual variances
- High and low adjustable delivery pressure alarm settings
- Designed for high purity gas service
- May be used with any type gas source
- “Leak-Check” monitoring alerts the user to low reserve side pressure of either high pressure or cryogenic containers while in standby via audible and visual alarms
- “Gas-Check” feature ensures efficient use of gas supplies when cryogenic containers are in service
- Built-in audio and visual alarm
- External dry contacts provided to activate optional equipment or remote alarms
- System housed in NEMA 4X box
- Available in either brass or stainless steel construction

Specifications
Max Inlet Pressure
3000 psig
Power required
120 VAC/60Hz
Inlet and Outlet Connections
1/4” NPT female
### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Delivery Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>919TS-1-200</td>
<td>brass electronic high purity changeover manifold</td>
<td>25-200 psig</td>
</tr>
<tr>
<td>919TSP-1-200</td>
<td>brass electronic high purity changeover manifold with automatic purging</td>
<td>25-200 psig</td>
</tr>
<tr>
<td>919TS-2-200</td>
<td>stainless steel electronic high purity changeover manifold</td>
<td>25-200 psig</td>
</tr>
<tr>
<td>919TSP-2-200</td>
<td>stainless steel electronic high purity changeover manifold with automatic purging</td>
<td>25-200 psig</td>
</tr>
</tbody>
</table>

**Options**
- 912-AVA audio/visual alarm module for remote alarm
- AVD-45B auto dialer

**Pigtails for 919TS Changeover Manifolds (2 per set)**

- **For Brass Manifolds**
  - 919-FPB601-Y-CGA*: two flexible Teflon lined stainless steel braided pigtails with brass fittings and no check valves
  - 919-FPB601-Y-CV-CGA*: two flexible Teflon lined stainless steel braided pigtails with brass fittings and check valves
  - 919-FPB604-Y-CGA*: two flexible all stainless steel braided pigtails with brass fittings and no check valves
  - 919-FPB604-Y-CV-CGA*: two flexible all stainless steel braided pigtails with brass fittings and check valves

- **For Stainless Steel Manifolds**
  - 919-FP604-Y-CGA*: two flexible all stainless steel braided pigtails without check valves
  - 919-FP604-Y-CV-CGA*: two flexible all stainless steel braided pigtails with check valves

* Specify CGA connection when ordering

Y = pigtail length in feet
### 522 Series

The 522 Series AutoSwitch is a continuous gas delivery system for high purity gas service, typically in the laboratory or process plant, that automatically changes cylinder or bank priority from the primary source to a reserve supply without transmitting pressure fluctuations to the use line. Internal pressure switches, warning lights, and remote alarm indicate low bank pressure.

### Description

<table>
<thead>
<tr>
<th>Advanced Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 400 Series Brass System Components</td>
</tr>
<tr>
<td>• Metal to metal seals</td>
</tr>
<tr>
<td>• No possibility of gas contamination</td>
</tr>
<tr>
<td>• Integral Line Regulator</td>
</tr>
<tr>
<td>• Stable line pressure during change over</td>
</tr>
</tbody>
</table>

### Remote Alarm

- Providing audible and visible notification of cylinder depletion, one Advantium 8 remote alarm can monitor and power up to four switchover stations. See page 4.76.

#### Intrinsic Safety Barriers

- Safe use with flammable gases or in hazardous areas (class 1, division 1, group A, B, C or D)

#### Relay Output

- Easy integration with other alarm systems

#### Telephone Dialer

- Notify multiple off-site locations of the need to change depleted cylinders

#### Computer Interface

- Serial communication through RS-232 port

### Materials

- **Priority Valve**
  - Brass barstock
- **Line Regulator**
  - Brass barstock
- **Diaphragms**
  - 316L stainless steel
- **Enclosure**
  - Acrylic powder-coated steel
- **Tubing and Fittings**
  - 316 stainless steel
- **Internal Seats and Seals**
  - PTFE
- **Pressure Gauges and Switches**
  - Brass, Bronze and Stainless Steel
- **Check Valves**
  - Brass with Viton® seals

### Specifications

- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Maximum Flow (100 PSIG)**
  - 600 scfh (283 lpm)
- **Inlet Connection**
  - ½” FPT
- **Outlet Connection**
  - ¼” stainless steel compression tube
- **Helium Leak Integrity**
  - 1 x 10⁻⁸ scc/sec
- **Weight**
  - 40 lbs. (18 kg)
### Flow Performance

![Flow Performance Diagram](image)

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>522</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 522</td>
<td>Outlet Pressure</td>
<td>Inlet Connection</td>
<td>Cylinders/Side</td>
<td>Assembly</td>
<td>Pigtail</td>
</tr>
<tr>
<td>2</td>
<td>0-50 PSIG</td>
<td>0: ½” FPT</td>
<td>0: No Inlet Connection</td>
<td>1: Without Alarm Capability*</td>
<td>CGA DIN 477 BS 341 and others available</td>
</tr>
<tr>
<td>3</td>
<td>0-100 PSIG</td>
<td>1: Brass Manifolds (36” flexible pigtails at each station)</td>
<td>1: One Cylinder</td>
<td>4: With Alarm Capability* (Alarm Sold Separately)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0-200 PSIG</td>
<td>2: Brass Manifolds (36” flexible pigtails at each station)</td>
<td>2: Two Cylinders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0-350 PSIG</td>
<td>3: Diaphragm Valves* (Two 36” stainless flexible pigtails)</td>
<td>3: Three Cylinders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0-150 PSIG</td>
<td>4: Brass Manifolds (24” flexible pigtails at each station)</td>
<td>4: Four Cylinders</td>
<td></td>
<td></td>
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<tr>
<td>522</td>
<td>Outlet Pressure</td>
<td>Inlet Connection</td>
<td>Cylinders/Side</td>
<td>Assembly</td>
<td>Pigtail</td>
</tr>
<tr>
<td>2</td>
<td>0-50 PSIG</td>
<td>0: ½” FPT</td>
<td>0: No Inlet Connection</td>
<td>1: Without Alarm Capability</td>
<td>CGA DIN 477 BS 341 and others available</td>
</tr>
<tr>
<td>3</td>
<td>0-100 PSIG</td>
<td>1: Brass Manifolds (36” flexible pigtails at each station)</td>
<td>1: One Cylinder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0-200 PSIG</td>
<td>2: Brass Manifolds (36” flexible pigtails at each station)</td>
<td>2: Two Cylinders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0-350 PSIG</td>
<td>3: Diaphragm Valves* (Two 36” stainless flexible pigtails)</td>
<td>3: Three Cylinders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0-150 PSIG</td>
<td>4: Brass Manifolds (24” flexible pigtails at each station)</td>
<td>4: Four Cylinders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.

*If manifold option is selected in B, 0 = Ten Cylinders

See Pages 4.94 and 4.95 for Alarm Options
Remote Alarm

Providing audible and visible notification of cylinder depletion, one Advantium 8 remote alarm can monitor and power up to four switchover stations. See page 4.76.

Intrinsic Safety Barriers
- Safe use with flammable gases or in hazardous areas (class 1, division 1, group A, B, C or D)

Relay Output
- Easy integration with other alarm systems

Telephone Dialer
- Notify multiple off-site locations of the need to change depleted cylinders

Computer Interface
- Serial communication through RS-232 port

Materials

<table>
<thead>
<tr>
<th>Description</th>
<th>Advanced Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority Valve</td>
<td>400 Series 316L Stainless Components Capsule® seat</td>
</tr>
<tr>
<td>Line Regulator</td>
<td>Metal to metal seals</td>
</tr>
<tr>
<td>Diaphragms</td>
<td>No possibility of gas contamination</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Integral Line Regulator</td>
</tr>
<tr>
<td>Tubing and Fittings</td>
<td>Stable line pressure during change over</td>
</tr>
<tr>
<td>Internal Seats and Seals</td>
<td>Variable Line Pressure</td>
</tr>
<tr>
<td>PTFE</td>
<td>Line pressure changeable on site</td>
</tr>
<tr>
<td>Pressure Gauges and Switches</td>
<td>User-Friendly Priority Valve</td>
</tr>
<tr>
<td>Check Valves</td>
<td>One knob switches cylinder priority</td>
</tr>
<tr>
<td></td>
<td>Integral Manifold System</td>
</tr>
<tr>
<td></td>
<td>Easy installation</td>
</tr>
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</table>

Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Advanced Features</th>
</tr>
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<tbody>
<tr>
<td>Maximum Inlet Pressure</td>
<td>3000 PSIG (210 BAR)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-40°F to 140°F (-40°C to 60°C)</td>
</tr>
<tr>
<td>Maximum Flow (100 PSIG)</td>
<td>600 scfh (283 lpm)</td>
</tr>
<tr>
<td>Inlet Connection</td>
<td>¼” FPT</td>
</tr>
<tr>
<td>Outlet Connection</td>
<td>¼” stainless steel compression tube</td>
</tr>
<tr>
<td>Helium Leak Integrity</td>
<td>1 x 10^-8 scc/sec</td>
</tr>
<tr>
<td>Weight</td>
<td>40 lbs. (18 kg)</td>
</tr>
</tbody>
</table>
Flow Performance

523 Series AutoSwitch

Outlet Pressure - PSI (BAR)
- 50 (3.4)
- 100 (6.9)
- 150 (10.3)
- 200 (13.8)
- 250 (17.2)
- 300 (20.7)
- 350 (20.7)
- 400 (27.6)
- 450 (31.4)
- 500 (34.5)
- 550 (37.6)
- 600 (40.7)
- 650 (43.8)
- 700 (46.9)
- 750 (49.2)
- 800 (52.3)
- 850 (55.3)
- 900 (58.4)
- 950 (61.5)
- 1000 (64.6)

FLOW RATE - SCFH (LPM) N₂

Outlet Pressure

- 100 (47.2)
- 200 (94.4)
- 300 (141.6)
- 400 (188.8)
- 500 (236)
- 600 (283)
- 700 (330)
- 800 (378)
- 900 (425)
- 1000 (472)

Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>523</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
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<tbody>
<tr>
<td>Series</td>
<td>Outlet Pressure</td>
<td>Inlet Connection</td>
<td>Cylinders/Side</td>
<td>Assembly</td>
</tr>
<tr>
<td>523</td>
<td>0: 0-50 PSIG</td>
<td>½&quot; FPT for Non-Toxic Gases</td>
<td>0: No Inlet Connection*</td>
<td>1: Without Alarm Capability</td>
</tr>
<tr>
<td>2:</td>
<td>0-100 PSIG</td>
<td>Stainless Steel Manifolds for Non-Toxic Gases (36&quot; flexible pigtails at each station)</td>
<td>1: One Cylinder</td>
<td>4: With Alarm Capability* (Alarm Sold Separately)</td>
</tr>
<tr>
<td>3:</td>
<td>0-200 PSIG</td>
<td>Diaphragm Valves for Non-Toxic Gases* (Two 36&quot; flexible pigtails)</td>
<td>2: Two Cylinders</td>
<td></td>
</tr>
<tr>
<td>4:</td>
<td>0-350 PSIG</td>
<td>Stainless Steel Manifolds for Non-Toxic Gases (24&quot; flexible pigtails at each station)</td>
<td>3: Three Cylinders</td>
<td>*Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.</td>
</tr>
<tr>
<td>5:</td>
<td>0-150 PSIG</td>
<td>Stainless Steel Manifolds for Toxic Gases† (36&quot; flexible pigtails at each station)</td>
<td>4: Four Cylinders</td>
<td></td>
</tr>
<tr>
<td>7:</td>
<td></td>
<td>Stainless Steel Manifolds for Toxic Gases† (24&quot; flexible pigtails at each station)</td>
<td>5: Five Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stainless Steel Manifolds for Toxic Gases† (Two 36&quot; flexible pigtails)</td>
<td>6: Six Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diaphragm Valves for Toxic Gases*† (Two 72&quot; stainless steel pigtails)</td>
<td>7: Seven Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diaphragm Valves* (Two 72&quot; stainless steel pigtails)</td>
<td>8: Eight Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*One cylinder/side only</td>
<td>9: Nine Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>†Includes captured vent</td>
<td>A: Eleven Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: Twelve Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C: Thirteen Cylinders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D: Fourteen Cylinders</td>
<td></td>
</tr>
</tbody>
</table>

Related Options

See Pages 4.94 and 4.95 for Alarm Options
## 536 Series

**automatic switchover system from LP cryogenic source to HP cylinders**

![Image](image.png)

### Description
The 536 Series AutoSwitch GL is a continuous gas delivery system for high purity gas service that automatically changes cylinder or bank priority from a cryogenic source to a reserve bank of high pressure cylinders without transmitting pressure fluctuations to the use line.

### Advanced Features
- **Integral Line Regulator**
  - Stable line pressure during change over
- **400 Series Brass System Components**
  - Capsule® seat
  - Metal to metal seals
  - No possibility of gas contamination
- **Variable Line Pressure**
  - Line pressure changeable on site
- **Preset Switching Pressure**
  - Prevents tampering or adjustment
- **Integral Manifold System**
  - Easy installation

<table>
<thead>
<tr>
<th>Remote Alarm</th>
<th>Materials</th>
<th>Specifications</th>
</tr>
</thead>
</table>
| Provides audible and visible notification of cylinder depletion, one Advantium 8 remote alarm can monitor and power up to four switchover stations. See page 4.94. | **Priority Valve**
  - Brass barstock | **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR) |
| **Intrinsic Safety Barriers**
  - Safe use with flammable gases or in hazardous areas (class 1, division 1, group A, B, C or D) | **Line Regulator**
  - Brass barstock | **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C) |
| **Relay Output**
  - Easy integration with other alarm systems | **Diaphragms**
  - 316L stainless steel | **Maximum Flow** (100 PSIG)
  - 600 scfh (283 lpm) |
| **Telephone Dialer**
  - Notify multiple off-site locations of the need to change depleted cylinders | **Enclosure**
  - Acrylic powder-coated steel | **Inlet Connection**
  - ½” FPT |
| **Computer Interface**
  - Serial communication through RS-232 port | **Tubing and Fittings**
  - 316 stainless steel | **Outlet Connection**
  - ½” stainless steel compression tube |
  | **Internal Seats and Seals**
  - PTFE | **Helium Leak Integrity**
  - 1 x 10⁻⁸ scc/sec |
  | **Pressure Gauges and Switches**
  - Brass, bronze and stainless steel | **Weight**
  - 40 lbs. (18 kg) |
  | **Check Valves**
  - Brass with Viton® seals |
### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>536 Series</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlet Pressure</td>
<td>Liquid Cylinders (Primary)</td>
<td>High Pressure (Reserve)</td>
<td>Assembly</td>
<td>Pigtail</td>
<td></td>
</tr>
<tr>
<td>2: 0-50 PSIG</td>
<td>0: No Inlet Connection</td>
<td>0: No Inlet Connection</td>
<td>1: Without Alarm Capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3: 0-100 PSIG</td>
<td>1: One Cylinder*</td>
<td>1: One Cylinder*</td>
<td>4: With Alarm Capability*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2: Two Cylinders†</td>
<td>2: Two Cylinders†</td>
<td>(Alarm Sold Separately)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3: Three Cylinders†</td>
<td>3: Three Cylinders†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4: Four Cylinders†</td>
<td>4: Four Cylinders†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Includes 36&quot; flexible pigtail and diaphragm valve</td>
<td>* Includes 36&quot; flexible pigtail and diaphragm valve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>† Each manifold header includes 36&quot; flexible pigtail, manifold extensions and mounting hardware</td>
<td>† Each manifold header includes 36&quot; flexible pigtail, manifold extensions and mounting hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.

See Pages 4.94 and 4.95 for Alarm Options
### Description

The 537 AutoSwitch GL is a continuous gas delivery system for high purity gas service that automatically changes cylinder or bank priority from a cryogenic source to a reserve bank of high pressure cylinders without transmitting pressure fluctuations to the use line.

### Advanced Features

- **400 Series 316L Stainless Components**
  - Capsule® seat
- **Metal to metal seals**
  - No possibility of gas contamination
- **Integral Line Regulator**
  - Stable line pressure during change over
- **Variable Line Pressure**
  - Line pressure changeable on site
- **Preset Switching Pressure**
  - Prevents tampering or adjustment
- **Integral Manifold System**
  - Easy installation

### Remote Alarm

Providing audible and visible notification of cylinder depletion, one Advantium 8 remote alarm can monitor and power up to four switchover stations. See page 4.94.

- **Intrinsic Safety Barriers**
  - Safe use with flammable gases or in hazardous areas (class 1, division 1, group A, B, C or D)
- **Relay Output**
  - Easy integration with other alarm systems
- **Telephone Dialer**
  - Notify multiple off-site locations of the need to change depleted cylinders
- **Computer Interface**
  - Serial communication through RS-232 port

### Materials

- **Priority Valve**
  - 316L stainless steel barstock
- **Line Regulator**
  - 316L stainless steel barstock
- **Diaphragms**
  - 316L stainless steel
- **Enclosure**
  - Acrylic powder-coated steel
- **Tubing and Fittings**
  - 316 stainless steel
- **Internal Seats and Seals**
  - PTFE
- **Pressure Gauges and Switches**
  - 316 stainless steel
- **Check Valves**
  - 316 stainless steel with Viton® seal

### Specifications

- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Maximum Flow (100 PSIG)**
  - 400 scfh (190 lpm)
- **Inlet Connection**
  - ½” FPT
- **Outlet Connection**
  - ¼” stainless steel compression tube
- **Helium Leak Integrity**
  - 1 x 10^-8 scc/sec
- **Weight**
  - 40 lbs. (18 kg)
## Equipment

### Flow Performance

![Graph](image)

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>537</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 537</td>
<td>Outlet Pressure</td>
<td>Liquid Cylinders (Primary)</td>
<td>High Pressure (Reserve)</td>
<td>Assembly</td>
<td>Pigtail</td>
</tr>
<tr>
<td>2: 0-50 PSIG</td>
<td>0: No Inlet Connection</td>
<td>0: No Inlet Connection</td>
<td>1: Without Alarm Capability</td>
<td>CGA DIN 477 BS 341 and others available</td>
<td></td>
</tr>
<tr>
<td>3: 0-100 PSIG</td>
<td>1: One Cylinder*</td>
<td>1: One Cylinder*</td>
<td>4: With Alarm Capability*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2: Two Cylinders†</td>
<td>2: Two Cylinders†</td>
<td>(Alarm Sold Separately)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3: Three Cylinders‡</td>
<td>3: Three Cylinders‡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4: Four Cylinders‡</td>
<td>4: Four Cylinders‡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Includes 36&quot; flexible pigtail and diaphragm valve</td>
<td>* Includes 36&quot; flexible pigtail and diaphragm valve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>† Each manifold header includes 36&quot; flexible pigtail, manifold extensions and mounting hardware</td>
<td>† Each manifold header includes 24&quot; flexible pigtail, manifold extensions and mounting hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related Options</td>
<td>See Pages 4.94 and 4.95 for Alarm Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The fully-automatic 538 Series IntelliSwitch II™ gas switchover is CONCOA’s revolutionary new generation of gas management systems. The IntelliSwitch II features an proprietary onboard I-Link web server technology allowing remote monitoring, secure system configuration, and e-mail notification of real-time system status and events. It is ideally suited to interchangeable service/continuous supply in analytical laboratory, chemical process, instrumentation, and critical gas supply applications. The IntelliSwitch II offers continuous pressure and flow control from liquid or high pressure cylinder sources. The end-user selects the ideal mode of supply by the simple push of a button. Proprietary software logic lowers yearly gas costs by eliminating liquid cylinder vent loss and excess residual return. It is these features which make the 538 Series IntelliSwitch II the perfect gas management system.

<table>
<thead>
<tr>
<th>Features</th>
<th>Materials</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-Processor Control</td>
<td>Regulator and Valve Bodies</td>
<td>Power Requirements</td>
</tr>
<tr>
<td>Fully automatic priority assignment</td>
<td>Brass barstock</td>
<td>110 or 220 VAC (terminal block</td>
</tr>
<tr>
<td>Remote and Field-Adjustable Software</td>
<td>Valve Stems</td>
<td>provided with 1/2&quot; conduit hole)</td>
</tr>
<tr>
<td>Enables process flexibility and remote</td>
<td>316L stainless steel</td>
<td>Maximum Inlet Pressure</td>
</tr>
<tr>
<td>monitoring</td>
<td>Valve Seats</td>
<td>3,000 PSIG (210 BAR)</td>
</tr>
<tr>
<td>On-Site or Remote Source Selection</td>
<td>PCTFE</td>
<td>Temperature Range</td>
</tr>
<tr>
<td>Liquid cylinder or high-pressure service</td>
<td>Seals</td>
<td>0°F to 140°F (-18°C to 60°C)</td>
</tr>
<tr>
<td>On Board Web Server and Remote</td>
<td>PTFE, PCTFE and Viton®</td>
<td>Flow Capacity</td>
</tr>
<tr>
<td>Software</td>
<td>Enclosure</td>
<td>Cv = 1.0</td>
</tr>
<tr>
<td>Enables monitoring and control functions</td>
<td>NEMA 4 Powder-coated steel</td>
<td>Filter</td>
</tr>
<tr>
<td>Low Loss Technology</td>
<td></td>
<td>40-micron</td>
</tr>
<tr>
<td>Reduces residual return</td>
<td></td>
<td>Inlet Connection</td>
</tr>
<tr>
<td>Electronic Economizer</td>
<td></td>
<td>1/4&quot; FPT</td>
</tr>
<tr>
<td>Eliminates liquid cylinder vent loss</td>
<td></td>
<td>Outlet Connection</td>
</tr>
<tr>
<td>Process Gas Pilot Valve</td>
<td></td>
<td>1/2&quot; FPT</td>
</tr>
<tr>
<td>Simple installation</td>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td>RS 232 Communication</td>
<td></td>
<td>67 lbs. (30.4 kg)</td>
</tr>
<tr>
<td>Provides remote monitoring of supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEMA 4 Enclosure Standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install anywhere</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- High purity non-corrosive non-flammable gas supply
- GC and mass spec carrier and support gases
- ICP and ICP mass spec continuous gas supply
- Incubator CO2 and Nitrogen gas supply
- Biotech, pharmaceutical and forensic gas systems
- Micro bulk changeover supply
- Central gas supply system for laboratory, research or process plants
### Installation Dimensions

![Diagram of installation dimensions]

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>538</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 539</td>
<td>Delivery Pressure</td>
<td>C: 100 PSIG with web server</td>
<td>Right Side Connection 0: ½” FPT 1: Diaphragm valves with 36” stainless flexible hose 2: Diaphragm valves with 72” stainless flexible hose 3: Manifold connector*</td>
<td>Left Side Connection 0: ½” FPT 1: Diaphragm valves with 36” stainless flexible hose 2: Diaphragm valves with 72” stainless flexible hose 3: Manifold connector</td>
<td>Assembly 6: 3000 PSIG inlet/120 VAC 7: 3000 PSIG inlet/240 VAC</td>
</tr>
<tr>
<td>C: 150 PSIG with web server</td>
<td>D: 200 PSIG with web server</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E: 200 PSIG with web server</td>
<td>Ø 3/8&quot; (9mm) Both Sides</td>
<td>Ø 7/16&quot; (11mm) Both Sides</td>
<td>Ø 7/16&quot; (11mm) Both Sides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ø 7/16&quot; (11mm) Both Sides</td>
<td>15 1/2&quot; (394mm)</td>
<td>14 21/32&quot; (377mm)</td>
<td>8 1/16&quot; (216mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ø 7/16&quot; (11mm) Both Sides</td>
<td></td>
<td>8 1/16&quot; (216mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Remote Alarm
- **Order Number**: Advantium Series
- **Description**: Provides audible and visible notification of a depleted supply bank to a remote location

### Vent Manifold Kit
- **Order Number**: 629 Series
- **Description**: Wall-mounted manifold designed to equalize liquid cylinder head pressure

### Switchover Station
- **Order Number**: 518 1625
- **Description**: Safely mount and secure any switchover and 2 cylinders

### AutoSwitch Floor Stand
- **Order Number**: 830 7439
- **Description**: Support AutoSwitch enclosure

### Manifold Floor Stand
- **Order Number**: 830 7437
- **Description**: Supports 2 standard length (12") manifold extensions installed consecutively

### Hose Options
- **Options**: CGA, DIN 477, BS 341 and others available

---

*Note: The diagram shows the dimensions and connections for the equipment, but the text provides the detailed ordering information and configuration options.*
## 539 Series

Microprocessor control electronic switchover system

### Description

The IntelliSwitch electronic switchover provides continuous gas supply from liquid cylinders, high pressure cylinders, or a combination of the two allowing the end-user to select the most economical mode of gas supply. Microprocessor control lowers yearly gas cost by eliminating liquid cylinder vent loss and excess residual return, making the IntelliSwitch the perfect choice for laboratory, pilot plant or process applications.

<table>
<thead>
<tr>
<th>Description</th>
<th>Advanced Features</th>
</tr>
</thead>
</table>
| The IntelliSwitch electronic switchover provides continuous gas supply from liquid cylinders, high pressure cylinders, or a combination of the two allowing the end-user to select the most economical mode of gas supply. Microprocessor control lowers yearly gas cost by eliminating liquid cylinder vent loss and excess residual return, making the IntelliSwitch the perfect choice for laboratory, pilot plant or process applications. | - Microprocessor Control
- Fully automatic priority assignment
- Field Adjustable Parameters
- Enables process flexibility
- On-Site Source Selection
- Liquid cylinder or high-pressure service
- Low Loss Technology
- Reduces residual return
- Electronic Economizer
- Eliminates vent loss from 230, 350 or 500 PSIG liquid cylinders
- Process Gas or Air Actuated Pilot Valves
- Simple installation
- RS 232 or 485 Communications
- Provides remote monitoring of supply |

### Low Loss Principle

The Low Loss Principle consists of two features, the Look-Back and the Economizer. When the IntelliSwitch electronics sense that the primary bank pressure is low, it automatically switches to the reserve bank. After a period of time, the system looks back at the depleted source to sense if it has rebuilt pressure. If it has, the system switches back and continues to draw product from this source, eliminating false switchovers and reducing residual return.

The Electronic Economizer has selectable settings for 230, 350 & 500 PSIG liquid cylinders. The IntelliSwitch continuously monitors the pressure in the reserve bank. When the pressure goes above the Economizer setting, the IntelliSwitch will draw gas from the headspace of the reserve bank, preventing vent losses.

### Specifications

- **Power Requirements**: 110 or 220 VAC
- **Maximum Inlet Pressure**: 3,000 PSIG (210 BAR)
- **Temperature Range**: 0°F to 140°F (-18°C to 60°C)
- **Flow Capacity**: Cv = 1.0
- **Filter**: 40-micron
- **Inlet Connection**: ½” FPT
- **Outlet Connection**: ½” FPT
- **Weight**: 67 lbs. (30.4 kg)

### Materials

- **Regulator and Valve Bodies**: Brass barstock
- **Valve Stems**: 316L stainless steel
- **Valve Seats**: PCTFE
- **Seals**: PTFE, PCTFE and Viton®
- **Enclosure**: Powder-coated steel
## Installation Dimensions

![Diagram of Installation Dimensions]

## Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>539</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>Outlet Pressure</td>
<td>Right Side Connection</td>
<td>Left Side Connection</td>
<td>Assembly</td>
<td>Pigtail</td>
</tr>
<tr>
<td>539</td>
<td>2: 0-50 PSIG</td>
<td>0: ½&quot; FPT</td>
<td>0: ½&quot; FPT</td>
<td>0: 110 VAC External Pilot</td>
<td>Please specify inlet connection (if applicable)</td>
</tr>
<tr>
<td></td>
<td>3: 0-100 PSIG</td>
<td>1: Diaphragm Valve with 36&quot; stainless flexible pigtail</td>
<td>1: Diaphragm Valve with 36&quot; stainless flexible pigtail</td>
<td>1: 220 VAC External Pilot</td>
<td>CGA DIN 477</td>
</tr>
<tr>
<td></td>
<td>4: 0-150 PSIG</td>
<td>2: Diaphragm Valve with 72&quot; stainless flexible pigtail</td>
<td>2: Diaphragm Valve with 72&quot; stainless flexible pigtail</td>
<td>2: 110 VAC Internal Pilot</td>
<td>BS 341</td>
</tr>
<tr>
<td></td>
<td>5: 0-200 PSIG</td>
<td>3: Manifold Connector</td>
<td>3: Manifold Connector</td>
<td>3: 220 VAC Internal Pilot</td>
<td>and others available</td>
</tr>
</tbody>
</table>

**Right Side Connection**
- 0: ½" FPT
- 1: Diaphragm Valve with 36" stainless flexible pigtail
- 2: Diaphragm Valve with 72" stainless flexible pigtail
- 3: Manifold Connector

**Left Side Connection**
- 0: ½" FPT
- 1: Diaphragm Valve with 36" stainless flexible pigtail
- 2: Diaphragm Valve with 72" stainless flexible pigtail
- 3: Manifold Connector

**Assembly**
- 0: 110 VAC External Pilot
- 1: 220 VAC External Pilot
- 2: 110 VAC Internal Pilot
- 3: 220 VAC Internal Pilot

**Pigtail**
- Please specify inlet connection (if applicable)
- CGA DIN 477
- BS 341
- and others available

See Pages 4.94 and 4.95 for Alarm Options

**Related Options**
- See Pages 4.94 and 4.95 for Alarm Options
The 540 Series Generator Back-Up Panel is designed to provide a reserve supply to a gas generator. If there is a loss of power, or if the gas generator cannot provide sufficient gas to the system, the reserve supply will automatically activate and supply gas without interruption. When the generator is capable of supplying the system, the reserve shuts down. Generator back-up panels are available for nitrogen, air or hydrogen generators in brass or 316 stainless steel construction. With the available remote alarm package, the system can signal when the reserve supply is active or running low.

### Features
- **Adjustable pressure**
  User determines the pressure at which the reserve supplies system
- **Check valves on both generator and reserve**
  Prevents back flow to the generator or reserve cylinder
- **Shut-off valves on both generator and reserve**
  Allows isolation and disconnection of either line

### Materials
- **Regulator body**
  Brass or 316L stainless steel barstock
- **Bonnet**
  Brass or chrome-plated brass barstock
- **Seat**
  PTFE (3000 PSIG)
- **Filter**
  10 micron multi-layer sintered wire mesh
- **Diaphragm and Pigtail**
  316L stainless steel
- **CGA Connections**
  Brass or 316L stainless steel with check valve
- **Check Valve Seat**
  Viton®
- **Panel**
  304 stainless steel

### Specifications
- **Maximum Inlet Pressure**
  3000 PSIG (210 BAR)
- **Temperature Range**
  -40°F to 140°F (-40°C to 60°C)
- **Gauges**
  2” diameter brass or 316L stainless steel
- **Helium Leak Integrity**
  $1 \times 10^{-9}$ scc/sec
- **Adjustable Pressure Range**
  0 to 150 PSIG (0 to 10 BAR)
- **Cv**
  0.1
- **Weight**
  lbs. (kg)
### Installation Dimensions

![Diagram of equipment installation dimensions]

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>540</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-CON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series</strong></td>
<td><strong>Material</strong></td>
<td><strong>Number of Reserve Cylinders</strong></td>
<td><strong>Pigtail Style</strong></td>
<td><strong>Assembly/Gauges</strong></td>
<td><strong>Inlet Connection</strong></td>
</tr>
<tr>
<td>540</td>
<td>1: Brass</td>
<td>1: 1 Cylinder with Diaphragm Valve</td>
<td>2: 24” Flexible 316 stainless steel with check valve</td>
<td>1: 0-4000 PSIG/kPa Gauge No alarm capability</td>
<td>CGA DIN 477 BS 341 and others available</td>
</tr>
<tr>
<td></td>
<td>2: 316L stainless steel</td>
<td>2: 2 Cylinder Manifold</td>
<td>3: 36” Flexible 316 stainless steel with check valve</td>
<td>2: 0-4000 BAR/PSIG Gauge No alarm capability</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3: 3 Cylinder Manifold</td>
<td>4: 72” Flexible 316 stainless steel with check valve</td>
<td>3: 0-4000 BAR/PSIG Gauge with Pressure Switch and 120V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4: 4 Cylinder Manifold</td>
<td>5: 5 Cylinder Manifold</td>
<td>4: 0-4000 BAR/PSIG Gauge with Pressure Switch and 220V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5: 5 Cylinder Manifold</td>
<td></td>
<td>5: 0-4000 BAR/PSIG Gauge with Pressure Switch and without Remote Alarm</td>
<td></td>
</tr>
</tbody>
</table>
The 526 Series Switchover is an automatic switchover system designed to supply a continuous supply of high purity, non-corrosive gas. The system comes with either flexible pigtails for use with two cylinders or manifold connectors for use with the Maniflex Modular Manifold System. Due to pressure differential considerations, an integral line regulator is available to maintain constant downstream pressure.

### Features

<table>
<thead>
<tr>
<th>Bodies</th>
<th>Diaphragms</th>
<th>Seats</th>
<th>Filters</th>
<th>Internal Seals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass barstock</td>
<td>316L stainless steel</td>
<td>PTFE</td>
<td>PCTFE with 4500 PSIG inlet</td>
<td>PTFE</td>
</tr>
</tbody>
</table>

### Materials

- **Capsule® seat**
- **Metal-to-metal diaphragm seal**
- **No possibility of gas contamination**
- **User-Friendly**
  - One knob switches cylinder priority
- **Check valves in pigtail inlet glands**
  - Prevents contamination and back flow
- **Compatible with Maniflex Manifolds**
  - Multiple cylinders per side
- **Optional Line Regulator**
  - Stable line pressure during change over

### Specifications

- **Maximum Inlet Pressure**
  - 3000 PSIG (210 BAR)
  - 4500 PSIG (310 BAR) optional
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Gauges**
  - 2" diameter brass
- **Outlet Connection**
  - ¼" MPT (without line regulator)
  - ¼" FPT (with line regulator)
- **Helium Leak Integrity**
  - 1 x 10⁻⁸ scc/sec
- **Cv**
  - 0.1
- **Weight**
  - 8.25 lbs. (3.71 kg)
# Equipment

## Flow Performance

### 526 Series Automatic Switchover

![Flow Performance Graph](chart)

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>526</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 526</td>
<td>Switching Pressure (Priority Right/Left)</td>
<td>Inlet Connections</td>
<td>Line Regulator</td>
<td>Assembly/Gauges</td>
<td>Pigtail</td>
</tr>
<tr>
<td>0: ¼” FPT Ports</td>
<td>0: None</td>
<td>1: 0-4000 PSI/kPa Gauges*</td>
<td></td>
<td></td>
<td>*Not available with 4500 PSIG inlet</td>
</tr>
<tr>
<td>1: 125 PSIG/105 PSIG*</td>
<td>1: Flexible Stainless Steel Pigtails (36&quot;)</td>
<td>1: 0-15 PSIG</td>
<td>1: 0-4000 BAR/PSI Gauges*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: 70 PSIG/50 PSIG*</td>
<td>2: Manifold Connectors*</td>
<td>2: 0-50 PSIG</td>
<td></td>
<td>No alarm capability</td>
<td></td>
</tr>
<tr>
<td>3: 100 PSIG/75 PSIG</td>
<td>3: Flexible Stainless Steel Pigtails (24&quot;)</td>
<td>3: 0-100 PSIG</td>
<td>2: 0-4000 BAR/PSI*</td>
<td>No alarm capability</td>
<td></td>
</tr>
<tr>
<td>4: 200 PSIG/170 PSIG</td>
<td>4: Diaphragm Valves with ¼” FPT Port</td>
<td>4: 0-250 PSIG</td>
<td>3: 0-4000 BAR/PSI*</td>
<td>with Pressure Switches and 110V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td>5: 500 PSIG/470 PSIG</td>
<td>5: Diaphragm Valves with Pigtails (36&quot;)</td>
<td>5: 0-400 PSIG</td>
<td>4: 0-4000 BAR/PSI*</td>
<td>No alarm capability</td>
<td></td>
</tr>
<tr>
<td>7: 150 PSIG/130 PSIG</td>
<td>6: Diaphragm Valves with Manifold Connectors*</td>
<td>7: 0-150 PSIG</td>
<td>5: 0-600 BAR/PSI Gauges</td>
<td>with Pressure Switches and 220V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td>8: 300 PSIG/270 PSIG</td>
<td>7: Diaphragm Valves with Pigtails (24&quot;)</td>
<td>A: 0-15 PSIG Redline for Acetylene</td>
<td>6: 0-600 BAR/PSI</td>
<td>No alarm capability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8: Flexible PTFE-lined Pigtails (36&quot;) (4500 PSIG maximum inlet pressure)</td>
<td>with Flashback Arrestor for Acetylene</td>
<td>7: 0-600 BAR/PSI</td>
<td>with Pressure Switches and 110V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A: Flexible Stainless Steel Pigtails (36&quot;) with Flashback Arrestor for Acetylene</td>
<td></td>
<td>8: 0-4000 BAR/PSI* with Pressure Switches and without Remote Alarm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*0-6000 PSI gauges with 4500 PSIG maximum inlet option</td>
<td></td>
</tr>
</tbody>
</table>

*CGA, DIN 477, BS 341 and others available*
The 527 Series Switchover is an automatic switchover system designed to supply a continuous supply of high purity, corrosive gas. The system comes with either flexible pigtails for use with two cylinders or manifold connectors for use with the Maniflex Modular Manifold System. Due to pressure differential considerations, an integral line regulator is available to maintain constant downstream pressure.

### Description

- **400 Series stainless steel regulators**
  - Capsule® seat
- **Metal-to-metal diaphragm seal**
  - No possibility of gas contamination
- **User-Friendly Priority Valve**
  - One knob switches cylinder priority
- **Check valves in inlet gland**
  - Prevents contamination and back flow.
- **Compatible with Maniflex Manifolds**
  - Multiple cylinders per side
- **Optional Line Regulator**
  - Stable line pressure during change over

### Features
- 316L stainless steel barstock
- 316L stainless steel
- PTFE
- PCTFE with 4500 PSIG inlet
- 10 micron sintered stainless steel
- PTFE

### Materials

- **Bodies**
- **Diaphragms**
- **Seats**
- **Filters**
- **Internal Seals**
- **Specifications**
  - **Maximum Inlet Pressure**
    - 3000 PSIG (210 BAR)
    - 4500 PSIG (310 BAR) optional
  - **Temperature Range**
    - -40°F to 140°F (-40°C to 60°C)
  - **Gauges**
    - 2" diameter stainless steel
  - **Outlet Connection**
    - ¼" MPT (without line regulator)
    - ¼" FPT (with line regulator)
  - **Helium Leak Integrity**
    - 1 x 10⁻⁸ scc/sec
  - **Cv**
    - 0.1
  - **Weight**
    - 8.25 lbs. (3.71 kg)
Flow Performance

527 Series Automatic Switchover

Outlet Pressure - PSI (BAR)
- 100 (47.2)
- 200 (94.4)
- 300 (141.6)
- 400 (188.8)
- 500 (236)
- 600 (283)
- 700 (330)
- 800 (378)
- 900 (425)

Flow Rate - SCFH (LPM) N₂
- 100 (478)
- 200 (956)
- 300 (1434)
- 400 (1912)
- 500 (2390)
- 600 (2868)
- 700 (3346)
- 800 (3824)
- 900 (4302)

Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>527</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 527</td>
<td>Switching Pressure (Priority Right/Left)</td>
<td>Inlet Connections</td>
<td>Line Regulator</td>
<td>Assembly/Gauges</td>
<td>Pigtail</td>
</tr>
<tr>
<td>1:</td>
<td>125 PSIG/105 PSIG*</td>
<td>0: ¼” FPT Ports</td>
<td>0: None</td>
<td>1: 0-4000 PSI/kPa Gauges</td>
<td>Please specify inlet connection (if applicable)</td>
</tr>
<tr>
<td>2:</td>
<td>70 PSIG/50 PSIG*</td>
<td>1: Flexible Stainless Steel Pigtails (36”)</td>
<td>1: 0-15 PSIG</td>
<td>2: 0-4000 BAR/PSI Gauges No alarm capability</td>
<td></td>
</tr>
<tr>
<td>3:</td>
<td>100 PSIG/75 PSIG</td>
<td>2: Manifold Connectors*</td>
<td>2: 0-50 PSIG</td>
<td>3: 0-100 PSIG</td>
<td></td>
</tr>
<tr>
<td>5:</td>
<td>500 PSIG/470 PSIG</td>
<td>4: Diaphragm Valves with ¼” FPT Port</td>
<td>4: 0-250 PSIG</td>
<td>5: 0-400 PSI</td>
<td></td>
</tr>
<tr>
<td>6:</td>
<td>300 PSIG/270 PSIG</td>
<td>5: Diaphragm Valves with Pigtails (36”)</td>
<td>5: 0-400 PSIG</td>
<td>6: 0-400 BAR/PSI with Pressure Switches and 220V Remote Alarm</td>
<td></td>
</tr>
<tr>
<td>7:</td>
<td>150 PSIG/130 PSIG</td>
<td>6: Diaphragm Valves with Manifold Connectors*</td>
<td>6: 0-600 BAR/PSI Gauges No alarm capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:</td>
<td>300 PSIG/270 PSIG</td>
<td>7: Diaphragm Valves with Pigtails (24”)</td>
<td>7: 0-600 BAR/PSI with Pressure Switches and 110V Remote Alarm</td>
<td>4: 0-4000 BAR/PSI with Pressure Switches and 220V Remote Alarm</td>
<td></td>
</tr>
</tbody>
</table>

*Not available with 4500 PSIG inlet

CGA DIN 477 BS 341 and others available
The 530 Series Switchover is an automatic switchover system designed to deliver a continuous supply of high pressure non-corrosive, non-oxidizing gas at flows up to 4000 SCFH. The system comes either with flexible pigtails for use with one or two cylinders per side, or with 1/4” Female NPT connection. A shut-off valve is standard to isolate the depleted bank during cylinder change. A line regulator is also standard to control downstream pressure regardless of bank priority. An alarm system is available to notify the user when a bank is depleted.

### Features
- **492 Series brass barstock regulators**
  - Safely controls pressures to 6000 PSIG
- **User-Friendly**
  - One know switches cylinder priority
- **Check valves in pigtails inlet glands**
  - Prevents contamination and back flow
- **Line Regulator**
  - Stable line pressure during change over
- **Capsule® Seat**
  - Increased serviceability and life

### Materials
- **Bodies**
  - Chrome-plated brass barstock
- **Cartridges**
  - Brass Barstock
- **Seats**
  - Arlon® (PEEK)
- **Filters**
  - 10 micron sintered bronze
- **Internal Seals**
  - Viton®
- **Weight**
  - 22.5lbs. (10.2 kg)

### Specifications
- **Inlet Pressure Available**
  - 3000 PSIG (207 BAR)
  - 4500 PSIG (310 BAR)
  - 6000 PSIG (414 BAR)
- **Temperature Range**
  - -40°F to 140°F (-40°C to 60°C)
- **Gauges**
  - 2 1/2” diameter chrome-plated brass (non-pressure switch models)
  - 2 1/2” diameter stainless steel (pressure switch models)
- **Outlet Connection**
  - 1/4” tube fitting
- **Cv**
  - 0.1
- **Not for O₂, N₂O, or CO₂**
Flow Performance

Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Series</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>-CON</th>
</tr>
</thead>
<tbody>
<tr>
<td>530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>530 A</td>
<td>Delivery Pressure</td>
<td>Inlet Pressure (Inlet Gauges)</td>
<td>Inlet Connection</td>
<td>Assembly Gauges</td>
<td>Pigtail</td>
</tr>
<tr>
<td>1: 1000 PSIG</td>
<td>1: 3000 PSIG (4000 PSIG/280 BAR)</td>
<td>0: 1/4” FPT Port</td>
<td>2: PSIG/BAR Gauges</td>
<td>CGA</td>
<td></td>
</tr>
<tr>
<td>2: 1500 PSIG</td>
<td>2: 4500 PSIG (6000 PSIG/414 BAR)</td>
<td>1: Two Diaphragm Valves with Two 36” Flexible Pigtails (One Station per Side)</td>
<td>No alarm capability</td>
<td>DIN 477</td>
<td></td>
</tr>
<tr>
<td>3: 2500 PSIG</td>
<td>3: 6000 PSIG (10,000 PSIG/700 BAR)</td>
<td>2: Two Diaphragm Valves with Four 36” Flexible Pigtails (Two Stations per Side)</td>
<td>3: PSIG/BAR Gauges with Pressure Switches† and 110V Remote Alarm</td>
<td>BS 341</td>
<td></td>
</tr>
<tr>
<td>4: 3500 PSIG</td>
<td></td>
<td></td>
<td>4: PSIG/BAR Gauges with Pressure Switches† and 220V Remote Alarm</td>
<td>and others available</td>
<td></td>
</tr>
</tbody>
</table>

†Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.
**Advantium 8 Alarm**

### Description

Designed for use with all CONCOA automatic switchover systems, the new Advantium Series offers superior integration, protection, and convenience by allowing end-users to monitor normally open or closed contact devices with a single flip of a switch. Systems can be configured for inert or flammable gases utilizing CONCOA’s innovative intrinsic safety barriers, allowing end-users to safely monitor flammable gas cylinder contents via a remote alarm on a CONCOA switchover or Protocol station.

### Features

<table>
<thead>
<tr>
<th>Sound</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 db audible alarm</td>
<td>Dimensions 9.59&quot; x 5.48&quot; x 2.95&quot;</td>
</tr>
<tr>
<td>Power 120 VAC or 220 VAC</td>
<td></td>
</tr>
<tr>
<td>Relay Contact Single pole, double throw (SPDT)</td>
<td>Power Fuses .5A normal blow, type 3AG, 120 VAC .25A normal blow, type 3AG, 220 VAC</td>
</tr>
<tr>
<td>Relay Contact Rating 1A@24 VDC or .5A@120 VAC</td>
<td>System Fuses Internal reseatable poly-fuse</td>
</tr>
<tr>
<td>RS232 Serial Port No parity 9600 baud rate</td>
<td>Connections Input connector (D25) Relay output connector (D15) RS232 serial output connector (D9)</td>
</tr>
</tbody>
</table>

- High profile visible and audible notification
- Audible alarm silence function
- Thirteen input and output channels Eight input and five output
- Dry contact relay output Four discrete or one general
- RS232 data interface capability
- NO or NC switch compatibility
- Auto-reset when cylinders are replenished
- Custom configure one to four systems

### Ordering Information and Configuration Options

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>529-5310</td>
<td>Multi-Station Remote Alarm (120V)</td>
</tr>
<tr>
<td>529-5311</td>
<td>Multi-Station Remote Alarm (220V)</td>
</tr>
<tr>
<td>529-5312</td>
<td>Intrinsic Safety Barriers for 526 or 527 Series Switchover Systems (required for flammable gas or hazardous environments)</td>
</tr>
<tr>
<td>529-5296</td>
<td>Intrinsic Safety Barriers for 522, 523, 536 or 537 Series AutoSwitch Systems (required for flammable gas or hazardous environments)</td>
</tr>
<tr>
<td>529-5306</td>
<td>AD2000 Telemetry Auto-dialer for 529-5310 and 529-5311 Alarms</td>
</tr>
<tr>
<td>529-5390</td>
<td>RS232 Advantium Monitoring Software</td>
</tr>
</tbody>
</table>

Contact CONCOA for pre-made patch cables
## Advantium 2 Remote Alarm

### Features
- High profile visible and audible notification
- Audible alarm silence function
- Two input channels and one output channel
- One general dry contact relay output
- NO or NC switch compatibility
- Auto-reset when cylinders are replenished

### Specifications
- **Audio**
  - 93 db audible alarm
- **Power**
  - 120 VAC or 220 VAC
- **Relay Contact**
  - Single pole, double throw (SPDT)
- **Relay Contact Rating**
  - 1A@24 VDC or .5A@120 VAC
- **Dimensions**
  - 3 ¼" x 6" x 2"
- **System Fuses**
  - Internal resettable poly-fuse
- **Connections**
  - Input connector (6-pin circular)
  - Relay output connector (4-pin circular)
- **Intrinsic Safety Barriers**
  - Required for flammable gas service or for use in hazardous environments

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>529-5106-120</td>
<td>Single-System Remote Alarm (120V)</td>
</tr>
<tr>
<td>529-5106-220</td>
<td>Single-System Remote Alarm (220V)</td>
</tr>
<tr>
<td>529-5312</td>
<td>Intrinsic Safety Barriers for 526 or 527 Series Switchover Systems</td>
</tr>
<tr>
<td>529-5296</td>
<td>Intrinsic Safety Barriers for 522, 523, 536 or 537 AutoSwitch Systems</td>
</tr>
</tbody>
</table>

## Advantium 1 Remote Alarm

### Features
- High profile visible and audible notification
- Audible alarm silence function
- One input channel and one output channel
- One general dry contact relay output
- NO or NC switch compatibility
- Auto-reset when cylinders are replenished

### Specifications
- **Audio**
  - 93 db audible alarm
- **Power**
  - 120 VAC or 220 VAC
- **Relay Contact**
  - Single pole, double throw (SPDT)
- **Relay Contact Rating**
  - 1A@24 VDC or .5A@120 VAC
- **Dimensions**
  - 3 ¼" x 6" x 2"
- **System Fuses**
  - Internal resettable poly-fuse
- **Connections**
  - Input connector (6-pin circular)
  - Relay output connector (4-pin circular)
- **Intrinsic Safety Barriers**
  - Required for flammable gas service or for use in hazardous environments

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>529-5135-120</td>
<td>Protocol Station Remote Alarm (120V)</td>
</tr>
<tr>
<td>529-5135-220</td>
<td>Protocol Station Remote Alarm (220V)</td>
</tr>
<tr>
<td>529-5313</td>
<td>Intrinsic Safety Barriers for Protocol Alarm Stations</td>
</tr>
</tbody>
</table>

Contact CONCOA for pre-made patch cables
Model 22660
mass spec distribution panel

Description
This panel provides mass spec users with all the necessary
gas handling equipment to properly install and operate their
new mass spectrometer. The gas distribution panel provides
all of the necessary controls to feed both air and nitrogen
to the mass spec at the proper pressures for optimum
operation. The valve arrangement provides the user with the
option of using nitrogen for all the functions instead of air
for the exhaust gas, Gas 1 and Gas 2 functions in the event
that compressed air is not available. The panel is compact
and easy to install. Simply mount the panel at a convenient
location and connect your gas lines using the compression
fittings provided.

Features
• Total high purity gas construction.
• Brass high purity line regulators.
• HL3300-125-580 regulator included for LN2 container.
• Diaphragm valves.
• Valved for use with air and nitrogen or nitrogen only.
• 1/4" OD compression fitting outlet connections.
• 50 feet of 1/4" polyethylene tubing.
• System is mounted on a 23" high x 12" wide x 1/2" thick
 HDPE panel.

Model 22687
generator backup panel

Description
This panel is designed to automatically provide a reserve
supply to a gas generator in the event of a power loss, or
the generator cannot provide sufficient gas to the system.
The system may be used with air, hydrogen, or nitrogen
generators and are available constructed of brass or
stainless steel. An alarm option is available.

Features
• High purity two stage regulator to ensure constant delivery
  pressure as required.
• Stainless steel inner core flexible 3’ pigtails with cylinder
  connections having integral check valves.
• Protocol station mounting assembly.
### Description

The 52B, 52C and 52S series Maniflex are modular gas distribution systems that may be connected to regulators, dual regulator switchovers, and AutoSwitch systems. A modular gas distribution system allows the user to size the inlet capacity of a system so that cylinder changes will not be as frequent. The Maniflex system provides the user with the capability of purchasing an unlimited number of manifold stations connected to a single header. The Maniflex headers themselves may be purchased as a complete system (unassembled) or as individual components.

### Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Advanced Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Inlet Pressure</strong></td>
<td>• Modular Design</td>
</tr>
<tr>
<td>3000 PSIG (210 BAR)</td>
<td>Flexible field installation</td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>• Integral Diaphragm Valves</td>
</tr>
<tr>
<td>-40°F to 140°F</td>
<td>Leak-tight integrity</td>
</tr>
<tr>
<td><strong>Header</strong></td>
<td>• Independent shut-off capability</td>
</tr>
<tr>
<td>0.625 OD x 0.188 wall (Brass)</td>
<td>• Expandable System</td>
</tr>
<tr>
<td>0.625 OD x 0.095 wall (Stainless)</td>
<td>Future growth capability</td>
</tr>
<tr>
<td><strong>Diaphragm Valve</strong></td>
<td>• Brass, Chrome-Plated Brass or Stainless Steel</td>
</tr>
<tr>
<td>Brass or stainless steel barstock (Body)</td>
<td>No possibility of gas contamination</td>
</tr>
<tr>
<td>PCTFE (Seat)</td>
<td>• Metal to Metal Field-Assembled Joints</td>
</tr>
<tr>
<td>303/304 stainless steel (Stems)</td>
<td>Easy leak-tight field assembly</td>
</tr>
<tr>
<td>Elgiloy® (Diaphragms)</td>
<td>• Silver-Brazed or TIG Welded Connectors</td>
</tr>
<tr>
<td></td>
<td>Contamination-free installation</td>
</tr>
</tbody>
</table>
Series 9900

low gas pressure alarm

The Series 9900 complies with the requirements of NFPA 99 2002 paragraph 5.1.10.5.5 that mandates the continuous monitoring of purge gas while welding or brazing gas lines.

These alarms are ideal for any gas application where a decrease in gas pressure could be detrimental to the operation.

Rated for 3000 psig the Series 9900 can be installed between the cylinder valve and the user’s pressure regulator or system. At low pressure, the Series 9900 provides both an audible and visual alert to the user when the container pressure reaches the pre-set level. Units are available in brass or stainless steel with the appropriate CGA connections for easy installation between an existing cylinder and regulator, or with pipe threads or compression fittings for permanent installation into a gas supply system.

Standard models require 110 VAC power. For remote locations or where power is not readily available there are battery-powered models that operate on a standard 9V battery.

Ordering Information

Replace the PSI in P/N with the desired activation pressure

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9910-PSI-CGA</td>
<td>110 VAC brass unit with audio/visual alarm and silence button</td>
</tr>
<tr>
<td>9911-PSI-CGA</td>
<td>9 volt brass unit with audio/visual alarm and on/off switch (no silence button)</td>
</tr>
<tr>
<td>9910-PSI-P4FF</td>
<td>110 VAC brass unit with audio/visual alarm and silence button - 1/4&quot; NPTF</td>
</tr>
<tr>
<td>9911-PSI-P4FF</td>
<td>9 volt brass unit with audio/visual alarm and on/off switch (no silence button)</td>
</tr>
<tr>
<td>9920-PSI-CGA</td>
<td>110 VAC SS unit with audio/visual alarm and silence button</td>
</tr>
<tr>
<td>9921-PSI-CGA</td>
<td>9 volt SS unit with audio/visual alarm and on/off switch (no silence button)</td>
</tr>
<tr>
<td>9920-PSI-P4FF</td>
<td>110 VAC SS unit with audio/visual alarm and silence button - 1/4&quot; NPTF</td>
</tr>
<tr>
<td>9921-PSI-P4FF</td>
<td>9 volt SS unit with audio/visual alarm and on/off switch (no silence button)</td>
</tr>
</tbody>
</table>

Features:

- Wide range of alarm pressure selection
- Available in brass or stainless steel
- Available with CGA connections or 1/4" NPT female inlet and outlet
- Complies with the requirements of NFPA 99 2002 paragraph 5.1.10.5.5
- Choice of power source - 110 VAC, 9V battery
- Provides both an audio (~90 dB @ 10 feet) and a visual alarm
- Mating inlet and outlet connections

Regulator sold separately