



# Pressure Differential Switchovers

# 522 SERIES

## AutoSwitch

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. Optional internal pressure switches, warning lights, and separate remote alarm indicate low bank pressure and the need to change depleted cylinders.

### Typical Applications

- High purity non-corrosive gas supply
- Gas chromatograph carrier and support gases
- Hydrogen and other flammable gases
- Pure or mix process gas supply
- Biotech, pharmaceutical gas systems
- Central gas supply system for laboratory, research or process plants



522 3004 shown

### Features

- 400 Series Brass 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
- User-Friendly Priority Valve**  
One knob switches cylinder priority
- Integral Manifold System**  
Easy installation
- Optional Alarms**  
Advantium 16 monitors up to 8 systems  
Advantium 2 PLUS monitors 1 system
- Intrinsic Safety Barriers**  
For use with flammable gases or in hazardous areas (Class 1, Div. 1, Group A, B, C, or D)

### Materials

- Priority Valve**  
Brass barstock
- Line Regulator**  
Brass barstock
- Diaphragms**  
316L stainless steel
- Enclosure**  
Acrylic powder-coated steel
- Tubing and Fittings**  
316L stainless steel
- Internal Seals**  
PTFE
- Seats**  
PTFE (line regulator)  
PCTFE (inlet regulators)
- Pressure Gauges**  
Brass, bronze and stainless steel
- Pressure Switches (optional)**  
Field-settable on inlet gauge, dry contact (opens below set point)
- Check Valves**  
Brass with Viton® seals

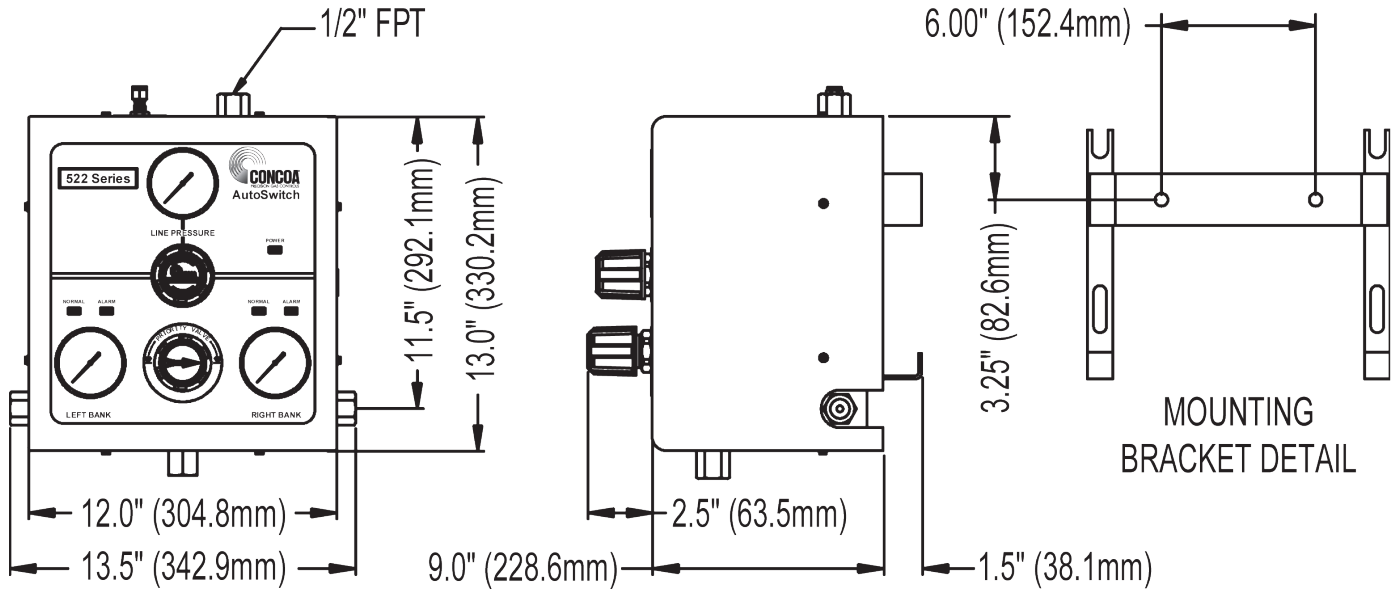
### Specifications

- Maximum Inlet Pressure**  
3000 PSIG (210 BAR)
  - Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
  - Maximum Flow at 100 PSIG (7 BAR)**  
600 SCFH (283 LPM)
  - Cv**  
0.1
  - Inlet Connection**  
1/2" FPT
  - Outlet Connection**  
1/4" stainless steel compression tube
  - Relief Valve Outlet**  
1/2" FPT
  - Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
  - Weight**  
40 lbs. (18 kg)
- See pages 70-71 for manifold specifications*

# Pressure Differential Switchovers



## Installation Information



DISTRIBUTION SYSTEMS

## Ordering Information

522	A	B	C	D	-CON	Options
Series 522	Outlet Pressure	Inlet Connection	Cylinders/Side	Assembly	Hose	
	<b>2:</b> 0-50 PSIG (0-3.5 BAR)	<b>0:</b> 1/2" FPT	<b>0:</b> No inlet connection**	<b>1:</b> Without alarm capability	Please specify inlet connection (if applicable)	<b>C:</b> Compact manifold extensions
	<b>3:</b> 0-100 PSIG (0-7 BAR)	<b>1:</b> Brass manifolds with 36" (900mm) stainless steel flexible hoses at each station	<b>1:</b> One cylinder	<b>4:</b> With alarm capability* (alarm sold separately)	CGA DIN 477 BS 341 and others available	
	<b>4:</b> 0-200 PSIG (0-14 BAR)	<b>3:</b> Diaphragm valves with 36" (900mm) stainless steel flexible hoses*	<b>2:</b> Two cylinders	<i>*Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.</i>		
	<b>5:</b> 0-350 PSIG (0-24 BAR)	<b>4:</b> Brass manifolds with 24" (600mm) stainless steel flexible hoses at each station	<b>3:</b> Three cylinders			
	<b>7:</b> 0-150 PSIG (0-10 BAR)	<b>5:</b> Chrome-plated brass manifolds with 36" (900mm) stainless steel flexible hoses at each station	<b>4:</b> Four cylinders			
		<b>6:</b> 1/2" FPT with captured vent	<b>5:</b> Five cylinders			
		<b>7:</b> Chrome-plated brass manifolds with 24" (600mm) stainless steel flexible hoses at each station	<b>6:</b> Six cylinders			
		<b>9:</b> Diaphragm valves with 72" (1800mm) stainless steel hoses*	<b>7:</b> Seven cylinders			
		<i>*One or two cylinders/side only</i>	<b>8:</b> Eight cylinders			
			<b>9:</b> Nine cylinders			
			<b>0:</b> Ten cylinders**			
			<b>A:</b> Eleven cylinders			
			<b>B:</b> Twelve cylinders			
			<b>C:</b> Thirteen cylinders			
			<b>D:</b> Fourteen cylinders			
			<b>E:</b> Fifteen cylinders			
			<i>** If manifold option is selected in B, 0 = ten cylinders</i>			