



# Pressure Differential Switchovers

# 523 SERIES

## AutoSwitch

The 523 Series AutoSwitch is a continuous gas delivery system for ultra-high purity or corrosive gas service, typically in the laboratory or process plant, that automatically changes cylinder or bank priority from 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

- Research purity or 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



523 3004 shown

### Features

- 400 Series Stainless Steel 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 8 monitors up to 4 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**  
316L stainless steel
- Line Regulator**  
316L stainless steel
- Diaphragms**  
316L stainless steel
- Enclosure**  
Acrylic powder-coated steel
- Tubing and Fittings**  
316L stainless steel
- Internal Seats and Seals**  
PTFE
- Pressure Gauges**  
316L stainless steel
- Pressure Switches (optional)**  
Field-settable on inlet gauge, dry contact (opens below set point)
- Check Valves**  
Brass with Viton® seals

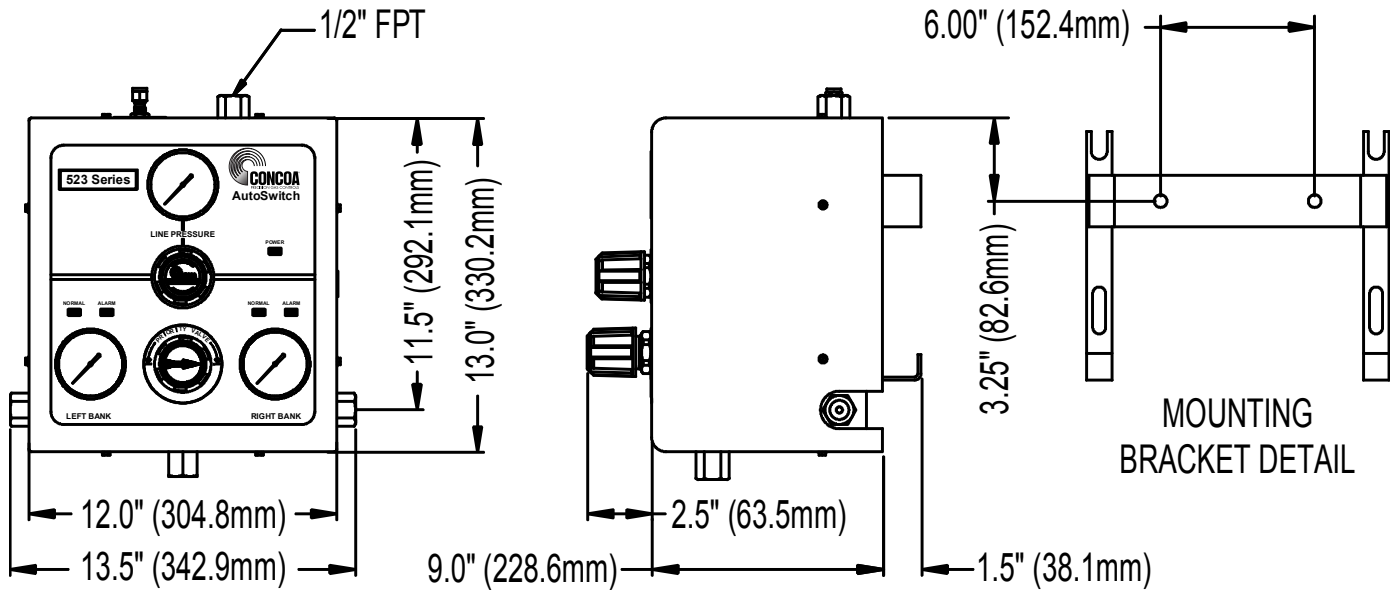
### Specifications

- 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 54-55 for manifold specifications*

# Pressure Differential Switchovers



## Installation Information



## Ordering Information

523	A	B	C	D	-CON	Options
Series 523	Outlet Pressure	Inlet Connection	Cylinders/Side	Assembly	Hose	
	<b>2:</b> 0-50 PSIG (0-3.5 BAR)	<b>0:</b> 1/2" FPT for non-toxic gases	<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> Stainless steel manifolds for non-toxic gases with 36" (900mm) 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 for non-toxic gases with Two 36" (900mm) 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> Stainless steel manifolds for non-toxic gases with 24" (600mm) flexible hoses at each station	<b>3:</b> Three cylinders			
	<b>7:</b> 0-150 PSIG (0-10 BAR)	<b>5:</b> Stainless steel manifolds for toxic gases 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> Stainless steel manifolds for toxic gases with 24" (600mm) flexible hoses at each station†	<b>6:</b> Six cylinders			
		<b>8:</b> Diaphragm valves for toxic gases with 36" (900mm) flexible hoses**†	<b>7:</b> Seven cylinders			
		<b>9:</b> Diaphragm valves with 72" (1800mm) stainless steel hoses*	<b>8:</b> Eight cylinders			
		<i>*One cylinder/side only †Includes captured vent</i>	<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>			