



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. Options include internal pressure switches with warning lights for cylinder depletion or internal pressure transducers without warning lights. Both may be used with an Altos alarm.



522 300A shown

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 and pharmaceutical gas systems
- Central gas supply system for laboratory, research or process plants

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
- Flexible Source Pressure Monitoring**
Pressure switches or transducers
- 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
- Transducers (optional)**
0-6000 PSIG (4-20 mA output)
Optionally intrinsically safe

Specifications

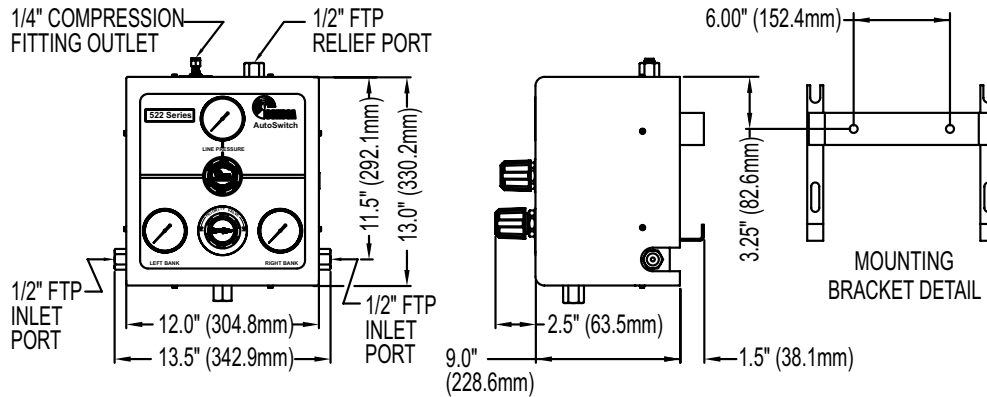
- Maximum Inlet Pressure**
3000 PSIG (210 BAR)
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Maximum Flow at 100 PSIG (7 BAR)**
600 SCFH (283 LPM)
- Cv**
0.1
- Inlet Connection**
1/2" FPT
- Outlet Connection**
1/4" stainless steel compression tube
- Relief Valve Outlet**
1/2" FPT
- Helium Leak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

CRN 0H17950.5

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Installation Information



DISTRIBUTION SYSTEMS

Ordering Information

522	A	B	C	D	-CON	Options
Series 522	Outlet Pressure	Inlet Connection	Cylinders/Side	Assembly	Hose	
	2: 0-50 PSIG (0-3.5 BAR)	0: 1/2" FPT	0: No inlet connection**	1: 0-4000 PSIG/0-275 BAR gauges no alarm capability	-001: 1/2" FPT Port	C: Compact manifold extensions
	3: 0-100 PSIG (0-7 BAR)	1: Brass manifolds with 36" (900mm) stainless steel flexible hoses at each station	1: One cylinder	4: 0-4000 PSIG/0-275 BAR gauges with alarm capability* and pressure switches - alarm not included	Please specify inlet connection (if applicable)	
	4: 0-200 PSIG (0-14 BAR)	3: Diaphragm valves with 36" (900mm) stainless steel flexible hoses*	2: Two cylinders	A: 0-4000 PSIG/0-275 BAR gauges with Altos 2 alarm and standard transducers	CGA DIN 477 BS 341 and others available	
	5: 0-350 PSIG (0-24 BAR)	4: Brass manifolds with 24" (600mm) stainless steel flexible hoses at each station	3: Three cylinders	B: 0-4000 PSIG/0-275 BAR gauges with standard transducers - alarm not included		
	7: 0-150 PSIG (0-10 BAR)	5: Chrome-plated brass manifolds with 36" (900mm) stainless steel flexible hoses at each station	4: Four cylinders	C: 0-4000 PSIG/0-275 BAR gauges with Altos 2 alarm and intrinsically safe transducers		
		6: 1/2" FPT with captured vent	5: Five cylinders	D: 0-4000 PSIG/0-275 BAR gauges with intrinsically safe transducers - alarm not included		
		7: Chrome-plated brass manifolds with 24" (600mm) stainless steel flexible hoses at each station	6: Six cylinders	<i>*Intrinsic safety barriers are required for flammable gas service or for use in hazardous environments.</i>		
		8: Diaphragm valves for toxic gases with 36" (900mm) flexible hoses**†	7: Seven cylinders			
		9: Diaphragm valves with 72" (1800mm) stainless steel hoses*	8: Eight cylinders			
		<i>*One cylinder/side only †Includes captured vent</i>	9: Nine cylinders			
			0: Ten cylinders**			
			A: Eleven cylinders			
			B: Twelve cylinders			
			C: Thirteen cylinders			
			D: Fourteen cylinders			
			E: Fifteen cylinders			
			<i>** If manifold option is selected in B, 0 = ten cylinders</i>			