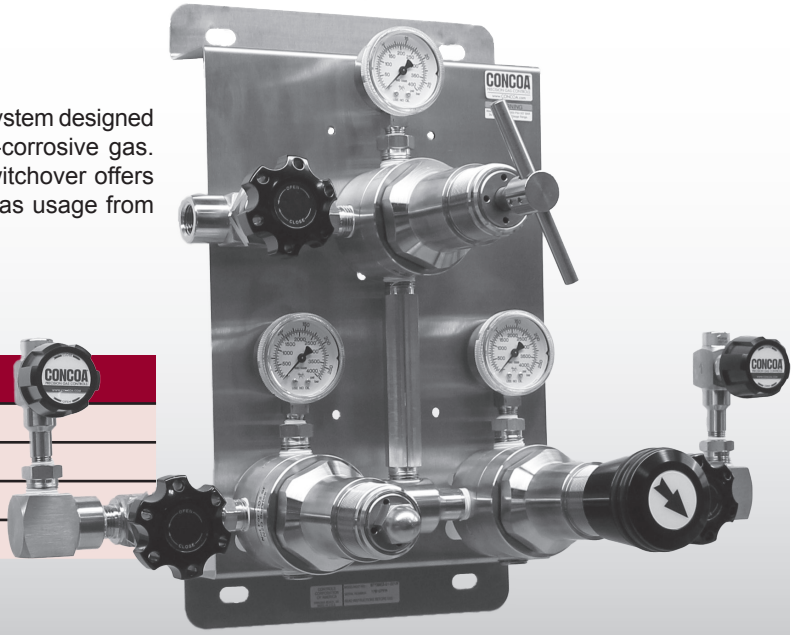
Pressure Differential Switchovers

677 SERIES

High Flow Switchover

The 677 Series Switchover is an automatic switchover system designed to supply a continuous, high flow of high purity, non-corrosive gas. Based on the technology of the 67S regulator, the switchover offers high flow with relatively low static, ensuring optimal gas usage from the source.



677 39E2-001R shown

Typical Applications

- Tube trailer supply systems
- Cylinder cradle supply systems
- High pressure backup to a bulk cryogenic source
- High flow skid applications

Features

67S Series Regulators
Low static design

Stainless Steel Bodies and Bonnets
Rugged, high purity design

User-Friendly
One knob switches cylinder priority

Optional Line Regulator
Stable line pressure during change over

Optional Remote Alarm
Easy integration with Altos system
CE marked universal voltage alarm

Optional Purge Valves
Allows purging after cylinder change over

Optional Outlet Valve
Allows isolation of pipeline

Materials

Bodies
316L stainless steel barstock

Bonnets
316L stainless steel barstock

Seats
Viton® or EPDM

Dynamic Cartridges
316L stainless steel barstock

Internal Seals
PTFE and Viton®

Filters
40 micron 316L stainless steel

Specifications

Maximum Inlet Pressure
3000 PSIG (210 BAR)

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

Gauges
2" (53mm) diameter stainless steel

Outlet Connection
1/2" MPT (without line regulator)
1/2" FPT (with line regulator or outlet valve)

Transducers
0-6000 PSIG (4-20 mA output)
Optional intrinsically safe models

Cv
2.3

Weight (677 39E2-001R)
37 lbs. (16.8 kgs)

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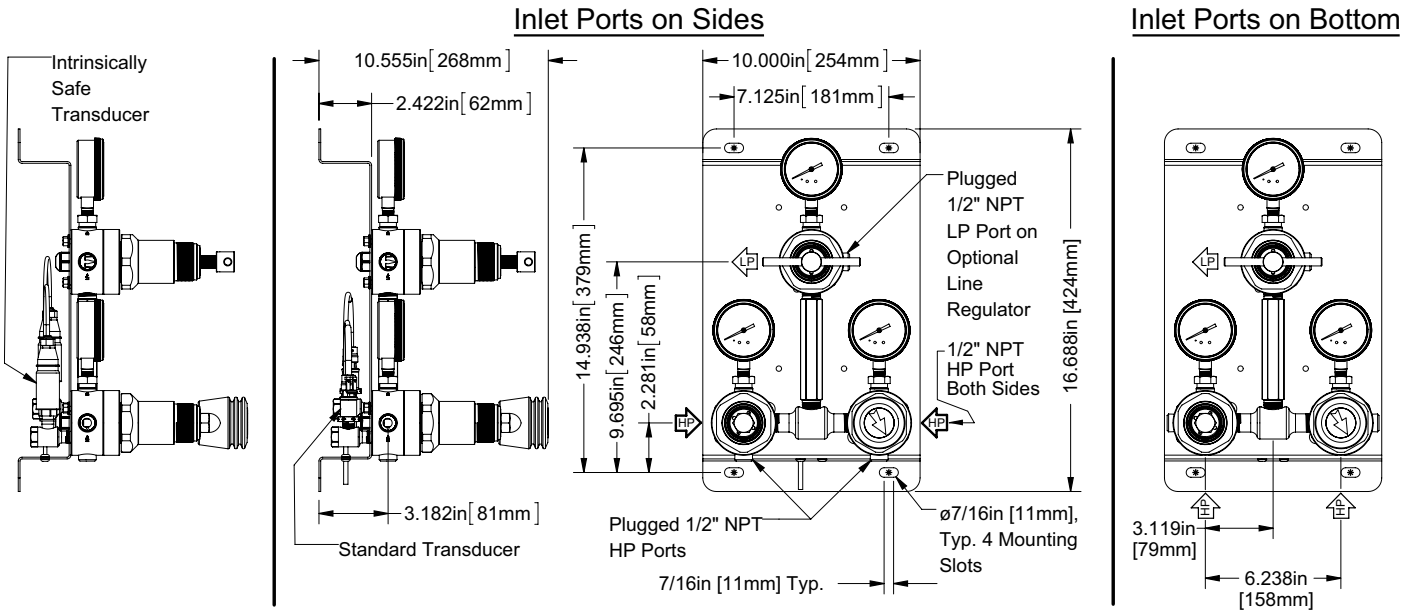

Ordering Information

677	A	B	C	D	CON	Options
Series 677	Nominal Switchover Pressure	Inlet Assembly and Orientation	Line Regulator and Outlet Assembly	Assembly	Inlet Connections	Seat
	3: 305 PSIG (21 BAR)	**0:** Bottom inlets	**0:** No line regulator or outlet valve	**1:** 0-4000 PSIG/0-28,000 kPa gauges no alarm capability	**-001:** 1/2" FPT	**R:** Viton*
	4: 430 PSIG (30 BAR)	**1:** Side inlets	**1:** 0-125 PSIG (0-9 BAR)	**2:** 0-4000 PSIG/0-280 BAR gauges no alarm capability		**C:** EPDM†
	7: 680 PSIG (47 BAR)	**6:** Bottom inlets with inlet valves	**2:** 0-250 PSIG (0-17 BAR)	**G:** 0-4000 PSIG/0-280 BAR gauges with Altos 2 alarm and standard transducers (not intrinsically safe)		**Not for Carbon Dioxide or Nitrous Oxide*
		7: Side inlets with inlet valves	**3:** 0-500 PSIG (0-34 BAR)	**J:** 0-4000 PSIG/0-280 BAR gauges with standard transducers (not intrinsically safe) - alarm not included		*†Not for oxidizers and certain hydrocarbons*
		8: Bottom inlets with inlet valves and purge valves	**C:** Outlet valve only	**L:** 0-4000 PSIG/0-280 BAR gauges with Altos 2 alarm and intrinsically safe transducers and barriers		
		9: Side inlets with inlet valves and purge valves	**D:** 0-125 PSIG (0-9 BAR) with outlet valve	**N:** 0-4000 PSIG/0-280 BAR gauges with intrinsically safe transducers and barriers - alarm not included		
			E: 0-250 PSIG (0-17 BAR) with outlet valve	*Note: Intrinsically safe transducers and barriers are required for flammable gas service or for use in hazardous environments.*		
			F: 0-500 PSIG (0-34 BAR) with outlet valve			

Maximum Suggested Flow Rate (Nitrogen)

Nominal Switchover Pressure	Outlet Pressure			
	60 PSIG (4.5 BAR)	100 PSIG (7 BAR)	200 PSIG (14 BAR)	400 PSIG (28 BAR)
305 PSIG (21 BAR) A = 3	3600 SCFH (1700 LPM)	5500 SCFH (2600 LPM)	Not Available	Not Available
430 PSIG (30 BAR) A = 4	4300 SCFH (2000 LPM)	7100 SCFH (3350 LPM)	8300 SCFH (3900 LPM)	Not Available
680 PSIG (47 BAR) A = 7	4600 SCFH (2150 LPM)	7900 SCFH (3700 LPM)	15,000 SCFH (7050 LPM)	16,000 SCFH (7500 LPM)

Note: The maximum flow rate assumes a 20% drop in line pressure from a static condition and standard laboratory conditions. For example, to achieve the flow rate for 60 PSIG (4.5 BAR) listed above, the outlet regulator would be set at 75 PSIG (5.4 BAR).