



Pressure Differential Switchovers

526 LC SERIES

Switchover

The 526 LC Series is an automatic switchover system designed to continuously supply high purity gas from a primary cryogenic source and backup high pressure cylinders. The system comes with options for flexible hoses or manifold connectors for the high pressure side for multiple cylinders. Due to flow and pressure limitations from a cryogenic sources the system has only three switching options that are matched to the three relief valve settings for cryogenic liquid cylinders.

Typical Applications

- Low flow purging
- Single inductively coupled plasma mass spectrometer (ICP-mass spec) argon installation
- Cell culture incubators



526 C14B shown with attached flexible hoses.

Features

- Three Matched Switching Pressures**
 - 120 PSIG (8 BAR) for 230, 350, or 500 PSIG (15, 24, or 34 BAR) relief liquid cylinders
 - 200 PSIG (14 BAR) for 350 or 500 PSIG (24 or 34 BAR) relief liquid cylinders
 - 300 PSIG (21 BAR) for 500 PSIG (34 BAR) relief liquid cylinders
- 400 Series Brass Barstock Regulators**
CAPSULE® seat
- Metal-to-Metal Diaphragm Seal**
No possibility of gas contamination
- Check Valves in Hose Inlet Glands**
Prevents contamination and back flow
- Optional Line Regulator**
Stable line pressure during change over
- Optional Remote Alarm**
Easy integration with Advantium system
- Optional Purge Valves**
Allows purging after cylinder change over

Materials

- Bodies**
Brass barstock
- Diaphragms**
316L stainless steel
- Seats**
PTFE (line regulators)
PCTFE (inlet regulators)
- Filters**
10 micron sintered bronze
- Internal Seals**
PTFE

Specifications

- Right Side Liquid Cylinder**
500 PSIG (34.5 BAR) maximum inlet pressure
- Left Side High Pressure Cylinder**
3000 PSIG (210 BAR) maximum inlet pressure
- Temperature Range**
-40°F to 140°F (-40°C to 60°C)
- Gauges**
2" (53mm) diameter brass
- Outlet Connection**
1/4" MPT (without line regulator)
1/4" FPT (with line regulator)
- Helium Leak Integrity**
1 x 10⁻⁸ scc/sec
- Cv**
0.1
- Weight**
8.25 lbs. (3.71 kg)
- Maximum Flow (Single Cryogenic Liquid Nitrogen Cylinder)**
250 SCFH (118 SLPM) at 120 PSIG (8 BAR) inlet
300 SCFH (141 SLPM) at 200 PSIG (14 BAR) inlet
300 SCFH (141 SLPM) at 300 PSIG (21 BAR) inlet
Flow can be significantly less depending on liquid cylinder condition and duty cycle.

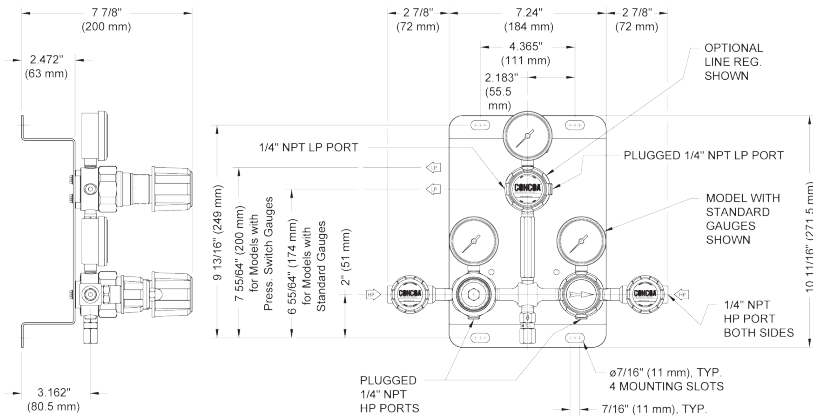
Pressure Differential Switchovers



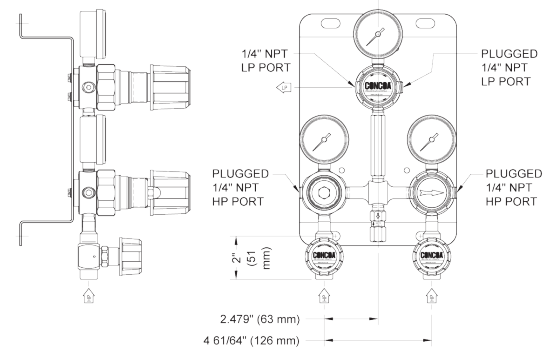
Installation Information

DISTRIBUTION SYSTEMS

Diaphragm Valves on Side Ports



Diaphragm Valves on Bottom Ports



Ordering Information

526	A	B	C	D	-CON	Options
Series 526	Switching Pressure	Inlet Connection	Line Regulator	Assembly	Hose	
	A: 120 PSIG (8 BAR)	0: 1/4" FPT ports	0: None	A: 0-600 PSIG/0-4200 kPa right side gauge 0-4000 PSI/0-28,000 kPa left side gauge No alarm capability	Please specify inlet connection (if applicable)	A: Outlet valve
	B: 200 PSIG (14 BAR)	1: 36" (900mm) stainless steel flexible hoses	1: 0-15 PSIG (0-1 BAR)	B: 0-42 BAR/0-600 PSIG right side pressure switch gauge 0-275 BAR/0-4000 PSIG left side pressure switch gauge and remote alarm (110/220 VAC)	CGA DIN 477 BS 341 and others available	B: Outlet valve and purge valve
	C: 300 PSIG (21 BAR)	2: Manifold connectors*	2: 0-50 PSIG (0-3.5 BAR)	C: 0-42 BAR/0-600 PSIG right side pressure switch gauge 0-275 BAR/0-4000 PSIG left side pressure switch gauge and no alarm		V: Purge valves
	<i>Note: switching pressure must be higher than line regulator pressure selected in column C.</i>	3: 24" (600mm) stainless steel flexible hoses	3: 0-100 PSIG (0-7 BAR)			
		4: Diaphragm valves with 1/4" FPT port	4: 0-250 PSIG (0-17 BAR)			
		5: Diaphragm valves with 36" (900mm) hoses	7: 0-150 PSIG (0-10 BAR)			
		6: Diaphragm valves with manifold connectors*				
		7: Diaphragm valves with 24" (600mm) hoses				
		C: Compact manifold connectors*				
		D: Diaphragm valves with compact manifold connectors*				
		<i>*See pages 70-71 for manifold ordering information</i>				