



# Pressure Differential Switchovers

# 526 LC SERIES

## Switchover

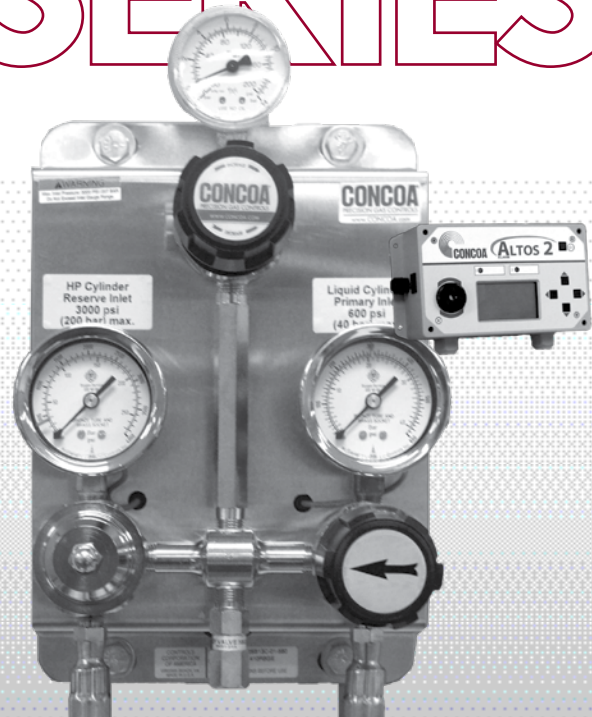
The 526 LC Series is an automatic switchover system designed to continuously supply high purity gas from a primary cryogenic source and backup high pressure cylinders. The system comes with options for flexible hoses or manifold connectors for the high pressure side for multiple cylinders. Due to flow 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<sup>-8</sup> 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

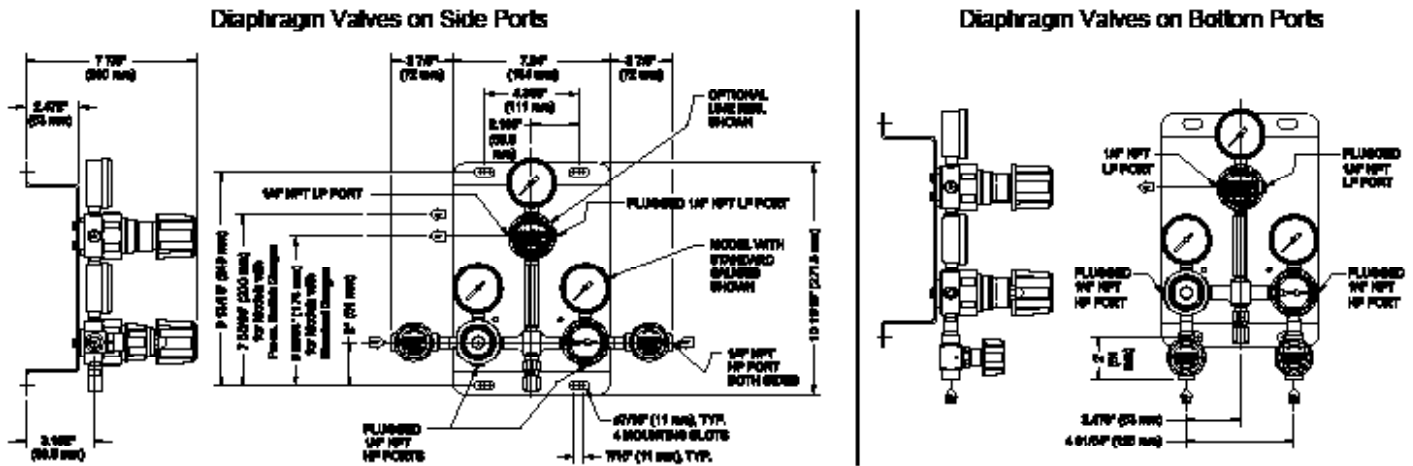
*Flow can be significantly less depending on liquid cylinder condition and duty cycle.*

# Pressure Differential Switchovers



## Installation Information

DISTRIBUTION SYSTEMS



## Ordering Information

526	A	B	C	D	-CON	Options
Series 526	Switching Pressure	Inlet Connection	Line Regulator	Assembly	Hose	
	<b>A:</b> 120 PSIG (8 BAR)	<b>0:</b> 1/4" FPT ports	<b>0:</b> None	<b>A:</b> 0-42 BAR/0-600 PSIG right side gauge 0-275 BAR/0-4000 PSIG left side gauge	Please specify inlet connection (if applicable)	<b>A:</b> Outlet valve
	<b>B:</b> 200 PSIG (14 BAR)	<b>1:</b> 36" (900mm) stainless steel flexible hoses	<b>1:</b> 0-15 PSIG (0-1 BAR)	<b>B:</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)		<b>B:</b> Outlet valve and purge valve
	<b>C:</b> 300 PSIG (21 BAR)	<b>2:</b> Manifold connectors*	<b>2:</b> 0-50 PSIG (0-3.5 BAR)	<b>C:</b> 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	CGA DIN 477 BS 341 and others available	<b>V:</b> Purge valves
	<i>Note: switching pressure must be higher than line regulator pressure selected in column C.</i>	<b>3:</b> 24" (600mm) stainless steel flexible hoses	<b>3:</b> 0-100 PSIG (0-7 BAR)	<b>G:</b> 0-42 BAR/0-600 PSIG right side gauge 0-275 BAR/0-4000 PSIG left side gauge With Altos 2 alarm and standard pressure transducers (not intrinsically safe)		
<b>4:</b> Diaphragm valves with 1/4" FPT port		<b>4:</b> 0-250 PSIG (0-17 BAR)	<b>J:</b> 0-42 BAR/0-600 PSIG right side gauge 0-275 BAR/0-4000 PSIG left side gauge With standard pressure transducers (not intrinsically safe) - alarm not included			
<b>5:</b> Diaphragm valves with 36" (900mm) hoses		<b>7:</b> 0-150 PSIG (0-10 BAR)				
<b>6:</b> Diaphragm valves with manifold connectors*						
<b>7:</b> Diaphragm valves with 24" (600mm) hoses						
	<b>C:</b> Compact manifold connectors*					
	<b>D:</b> Diaphragm valves with compact manifold connectors*					
	<i>*See pages 70-71 for manifold ordering information</i>					