

# 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 use with 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
- Cell Culture Incubators
- Single Inductively Coupled Plasma Mass Spectrometer (ICP-mass spec) Argon Installation



526C01A-01-001 shown with Altos 2 alarm

## Features

**400 Series Regulators with Capsule Seat Design** provide 360° filtration

**Metal-to-Metal Diaphragm Seal** prevents gas contamination

**Check Valve in Optional Regulator Hose Inlet Gland** prevents contamination and backflow

**Optional Line Regulator** maintains stable line pressure during a changeover

**Optional Purge Valve** enables purging after cylinder changeover

**Optional Remote Alarm** signals audible and visible warnings of cylinder depletion

## Materials and Specifications

**Maximum Inlet Pressure (right side liquid cylinder):** 500 PSIG (35 BAR)

**Maximum Inlet Pressure (left side high pressure cylinder):** 3000 PSIG (210 BAR)

**Regulator Bodies:** Brass barstock

**Gauges:** 2 in (50 mm) diameter brass

**Outlet Connections:** 1/4 in compression tube fitting

**Helium Leak Integrity:**  $1 \times 10^{-8}$  scc/sec

**Cv:** 0.1

**Max Flow (single cryogenic liquid nitrogen cylinder):** 250 SCFH (118 SLPM) @ 120 PSIG (8 BAR) inlet; 300 SCFH (141 SLPM) @ 200 PSIG (14 BAR) inlet; 300 SCFH (141 SLPM) @ 300 PSIG (21 BAR) inlet (Flow can be significantly less depending on liquid cylinder condition and duty cycle)

**Diaphragms:** 316L Stainless steel

**Seats:** PTFE (line regulators); PCTFE (inlet regulators)

**Filters:** 10-micron sintered bronze

**Internal Seals:** PTFE

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

**Standard Transducers (optional):** 0-6000 PSIG (4-20 mA output)

**Intrinsically Safe Transducers (optional):** 0-5000 PSIG (4-20 mA output)

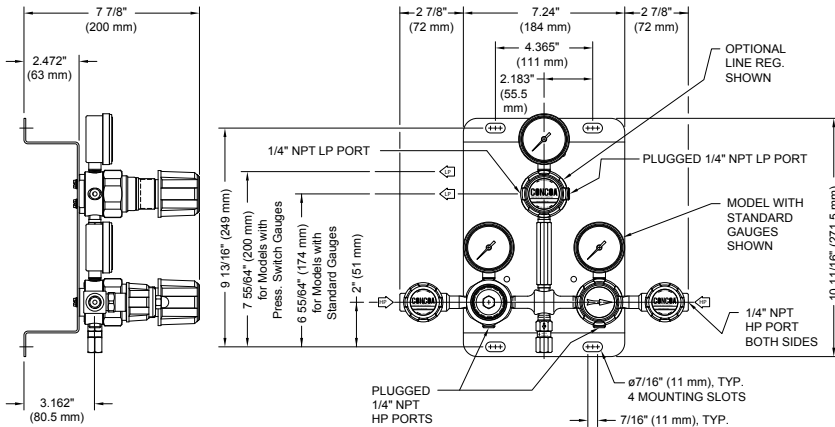
**Conformances:** Cleanliness meets or exceeds CGA G-4.1; ANSI/ASME B40.1; CRN OH5216

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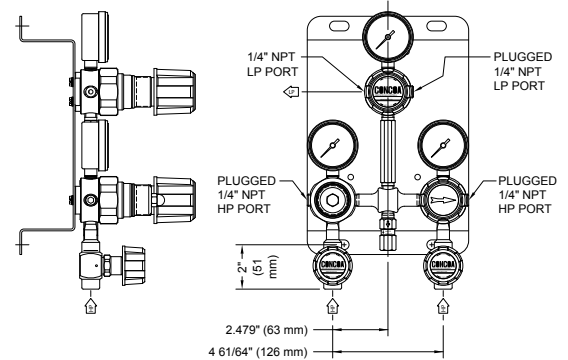


## Installation Dimensions

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	
	<b>A:</b> 120 PSIG (8 BAR)	<b>0:</b> 1/4" FNPT 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 with no alarm capability	<i>Please specify inlet connection (if applicable)</i>	<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 with Altos 2 alarm	<b>CGA DIN 477 BS 341 and others available</b>	<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 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 without alarm		<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 standard pressure transducers (not intrinsically safe) and Altos 2 alarm		
		<b>4:</b> Diaphragm valves with 1/4" FNPT 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) and without alarm		
		<b>5:</b> Diaphragm valves with 36" (900mm) hoses	<b>7:</b> 0-150 PSIG (0-10 BAR)	<b>L:</b> 0-42 BAR/0-600 PSIG right side gauge 0-275 BAR/0-4000 PSIG left side gauge with intrinsically safe pressure transducers and Altos2 alarm		
		<b>6:</b> Diaphragm valves with manifold connectors*		<b>N:</b> 0-42 BAR/0-600 PSIG right side gauge 0-275 BAR/0-4000 PSIG left side gauge with intrinsically safe pressure transducers and without alarm		
		<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 52 Series Maniflex for manifold ordering information</i>					