

The fully automatic 538 Series IntelliSwitch II electronic changeover manifold is CONCOA's revolutionary, web-enabled gas management system. The IntelliSwitch II features proprietary onboard I-Link web server technology, allowing remote monitoring, secure system configuration, and e-mail notification of real-time system status and events. It is ideally suited to interchangeable service/continuous supply in analytical laboratories, chemical processes, instrumentation, and critical gas supply applications. The IntelliSwitch II gas manifold offers continuous gas pressure and flow control from liquid cylinders, high-pressure cylinders, or a combination of the two sources, allowing the end-user to select the most economical gas supply mode with the simple push of a button. Proprietary software logic lowers yearly gas costs by eliminating liquid cylinder vent loss and excess residual return, which makes the IntelliSwitch II™ the perfect choice for laboratory, pilot plant, or process applications.

### **Typical Applications**

- · High Purity, Non-corrosive, Non-flammable Gas Supply
- Gas Chromatograph and Mass Spec Carrier and Support Gases
- · Microbulk Changeover Supply
- Incubator Carbon Dioxide and Nitrogen Gas Supply
- · Biotech, Pharmaceutical, and Forensic Gas Systems
- · Central Gas Supply System for Laboratory, Research, or Process Plants
- · Inductively Coupled Plasma (ICP) and ICP-Mass Spec Continuous Gas Supply



### **Features**

Microprocessor Control provides fully automatic priority assignment

Remote and Field-Adjustable Software permits process flexibility and remote monitoring

On-Site or Remote Source Selection ensures effective management of liquid cylinder or high-pressure supply source

On Board Web Server and Remote Software optimizes monitoring and control functions to streamline operations

Low Loss Technology reduces residual return to lower operational costs

Electronic Economizer eliminates liquid cylinder vent loss

**NEMA 4 Enclosure Standard** protects against environmental factors

### **Materials and Specifications**

Maximum Inlet Pressure: 3000 PSIG (210 BAR)

Cv: 1.0

Filter: 40-micron

**Temperature Range:** 0°F to 140°F (-18°C to 60°C)

Inlet/Outlet Connections: 1/2 in FNPT

Valve Bodies: Brass barstock
Valve Stems: 316L Stainless steel

Valve Seats: PCTFE

Seals: PTFE, PCTFE, and Chloroprene

Power Requirements: 100-240 VAC 50/60 Hz @.55A

Communication Connectivity: Two-channel NO/NC output relay alarm contacts



## **Materials and Specifications**

Enclosure: NEMA 4 powder-coated steel

Weight: 67 lbs. (30.4 kg)

Conformances: Cleanliness meets or exceeds CGA G-4.1; ANSI/ASME B40.1; PED 2014/68/EU; CE marked;

CRN OH17950.5

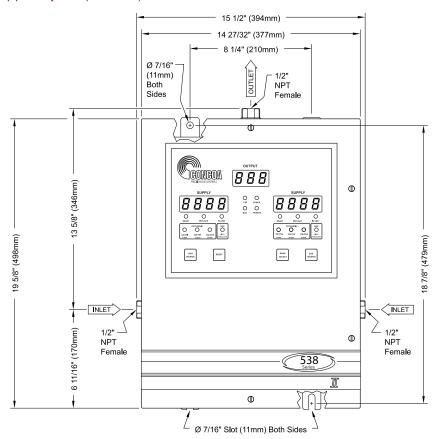
Ordering Information						
538	Α	В	С	D	-CON	
Series 538	Delivery Pressure	Right Side Connection	Left Side Connection	Assembly	Hose	
	C: 100 PSIG (7 BAR)	<b>0:</b> 1/2" FPT port	<b>0:</b> 1/2" FPT port	7: Single Stage Pressure Control	Please specify inlet	
	<b>D</b> : 150 PSIG (10 BAR)	1: Diaphragm valves with 36" (900mm) stainless flexible hose	1: Diaphragm valves with 36" (900mm) stainless flexible hose	<b>G:</b> Dual Stage Pressure Control	connection (if applicable)	
	E: 200 PSIG (14 BAR)	2: Diaphragm valves with 72" (1800mm) stainless flexible hose	2: Diaphragm valves with 72" (1800mm) stainless flexible hose	8: Single Stage Pressure Control with Pipe Away Relief Valve*	CGA DIN 477 BS 341	
		3: Manifold connector*	3: Manifold connector*	<b>H:</b> Dual Stage Pressure Control with Pipe Away Relief Valve*	and others available.	
		*See 52 Series Maniflex Manifold	*Protects device. Appropriately sized pipeline relief required.			

Related Options					
Part Number	Option	Description			
5750025-01-24V	Altos 2™ Remote Alarm	Provides audible and visible notification of a depleted supply bank to a remote location			
52L Series Vent MicroManifold	Vent Manifold Kit	Wall-mounted manifold designed to equalize liquid cylinder head pressure			
52 Series Maniflex™ Manifold	Modular Manifold System	52B (Brass), 52C (Chrome-plated brass), and 52S (Stainless steel) Series Maniflex System allows unlimited number of manifold stations to be connected to a single header			
518 1625	Switchover Floor Stand	Safely mount and secure any switchover and two cylinders			
830 7437	Manifold Floor Stand	Supports two standard length 12" (304.8mm) manifold extensions installed consecutively			
830 7439	AutoSwitch Floor Stand	Support AutoSwitch/IntelliSwitch enclosure			

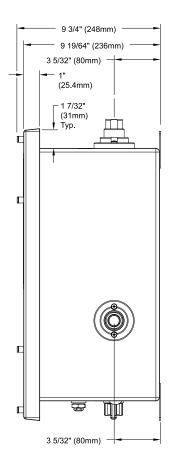


### **Installation Dimensions**

shown without optional pipe-away relief (D = 7 or G)

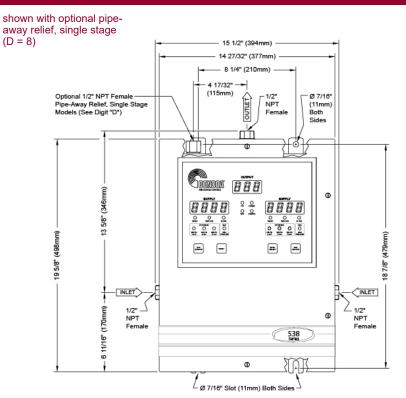


#### side view shown

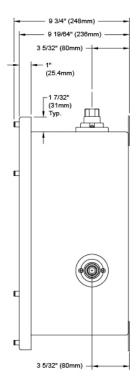




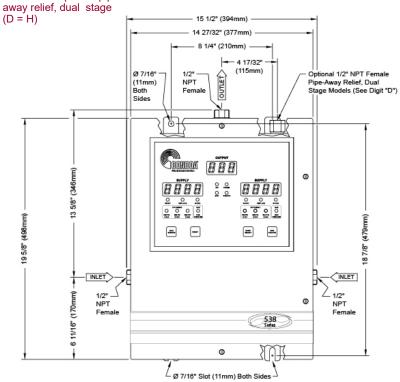
### **Installation Dimensions**



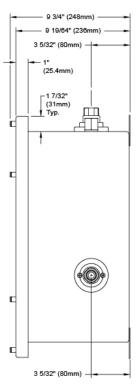
#### side view shown



#### shown with optional pipeaway relief, dual stage



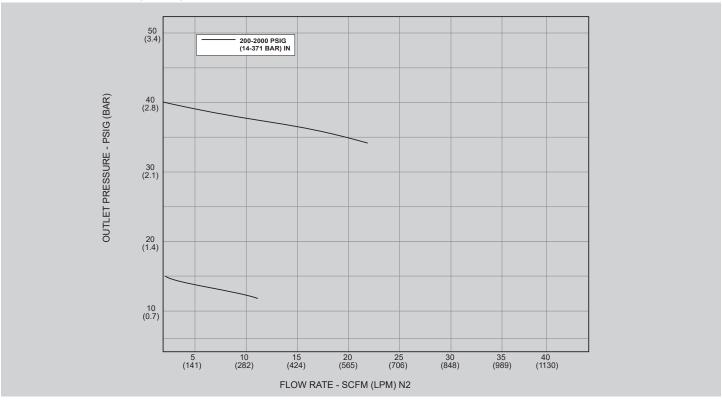
#### side view shown

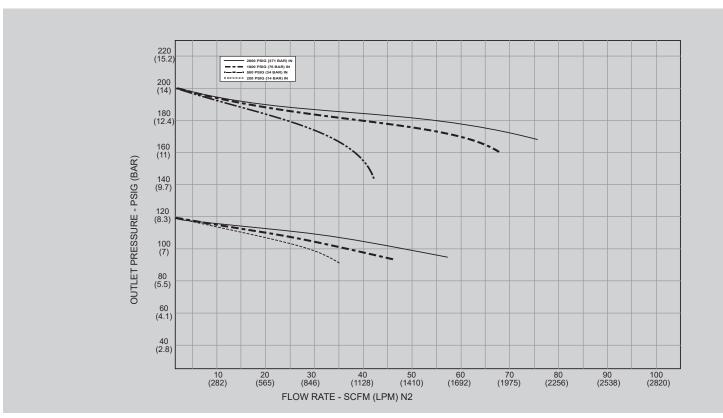




## **Flow Curves**

#### 538 Series Single Stage Curves







## **Flow Curves**

#### 538 Series Dual Stage Curves

