



# Pure-Flo® Chromatography

(CHRO & CHN)

In a typical chromatography process, there is an assembly of five diaphragm valves that connect the chromatography column to the process piping. Manipulating those valves allows the process to flow through the chromatography column in the forward and reverse direction, as well as bypass the column completely. The Pure-Flo Integral Chromatography Valve Assembly accomplishes this task by integrating the required valves while retaining flexibility, minimizing dead legs in the process piping, and reducing the overall space needed for the assembly. The Integral Chromatography Valve provides the process needs of three (3) P&IDs, utilizing four or five valves in one integrally machined assembly, dramatically reducing contact surfaces and hold up volume.

## Typical Applications

Chromatography

### **Specifications**

#### Standard Sizes:

- 0.25" 2" (DN 8 50) Valve size
- Other sizes available upon request Materials:
- 316L ASTM A479
- DN 177440, 1.4435
- AL6XN
- Hastelloy C-22 & C-276
- Other materials available upon request

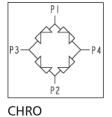
#### Standard End Connections:

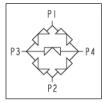
- 14, 16, 18, 20 Gauge OD tubing
- DIN/ISO
- Tri-Clover Tri-Clamp®
- Others available upon request

Compatible with standard Pure-Flo topworks: See PFTOP for details on available manual bonnets or actuator.



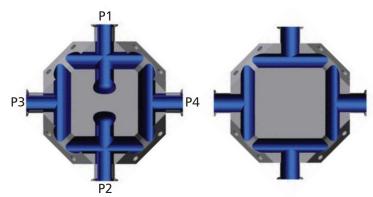
Patent # 6,112,767 and 5,906,223





CHN

### Flow Path



### How to Order a Chromatography Valve

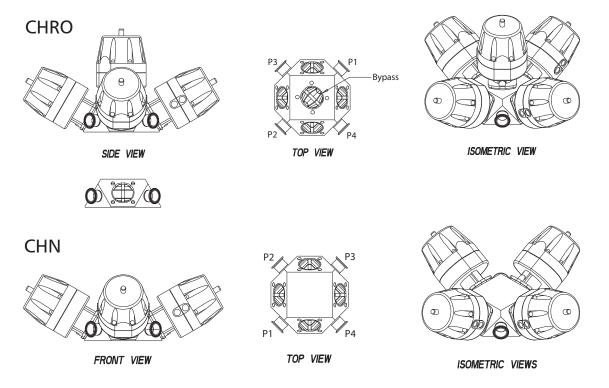
2" Chromatography Valve with Bypass, wrought stainless steel body, Tri-Clamp ends, standard mounting holes, 25 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: CHRO-2-419-W-SM-6-1-0

Configuration Example		CHRO	2	419	W	SM	6-1-0
	Block Type <sup>1</sup>	CHRO					
ve Bod	Valve Size		2				
	Type (.5" only) <sup>2</sup>						
	End Conections			419			
	Body Material				W		
>	Standard Mounting <sup>3</sup>					SM	
	Polish Selections						6-1-0

<sup>&</sup>lt;sup>1</sup> Chromatography block includes bypass valve as a standard (CHRO). Use Block Type CHN for Chromatography block with no bypass valve.

To add topworks, see BBTOP. For additional figure numbers, see PFORD.



Please contact ITT Engineered Valves for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

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<sup>&</sup>lt;sup>2</sup> For .5 inch valve, must specify Pure-Flo (PF) or Bio-Tek (BT).

<sup>&</sup>lt;sup>3</sup> Standard mounting for Chromatography blocks consists of drilled and tapped holes on the bottom of the block. Contact factory for specific sizes and locations. Body can be mounted horizontally (as shown below) or vertically with port P1 at the top.