



ITT



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

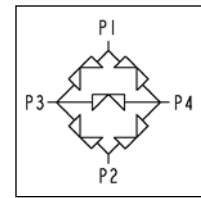
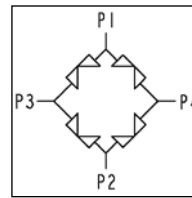
Standard End Connections:

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

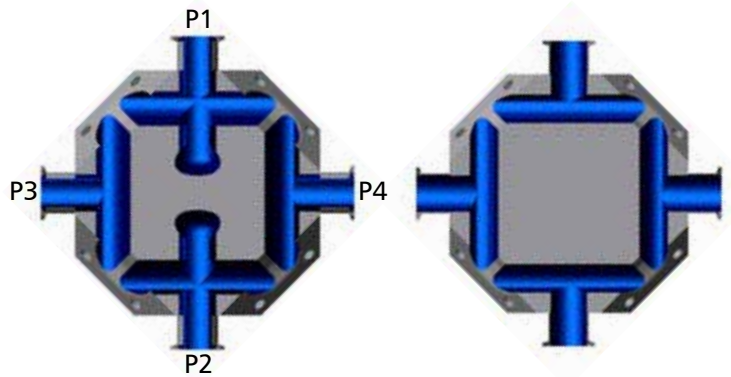
Compatible with standard Pure-Flo topworks: See PFTOP for details on available manual bonnets or actuator.



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



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 |
| Valve Body | Block Type ¹ | CHRO | | | | | | |
| | Valve Size | | 2 | | | | | |
| | Type (.5" only) ² | | | | | | | |
| | End Connections | | | | 419 | | | |
| | Body Material | | | | | W | | |
| | Standard Mounting ³ | | | | | | SM | |
| Polish Selections | | | | | | | | 6-1-0 |

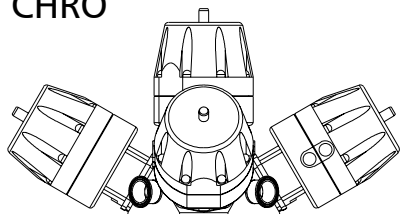
¹ Chromatography block includes bypass valve as a standard (CHRO). Use Block Type CHN for Chromatography block with no bypass valve.

² For .5 inch valve, must specify Pure-Flo (PF) or Bio-Tek (BT).

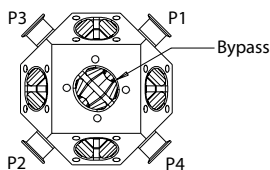
³ Standard mounting for Chromatography blocks consists of drilled and tapped holes on the bottom of the block. Contact factory for specific sizes and locations. Body can be mounted horizontally (as shown below) or vertically with port P1 at the top.

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

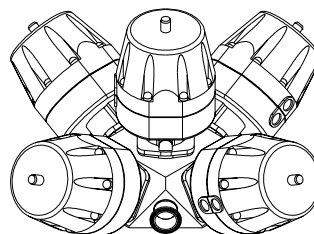
CHRO



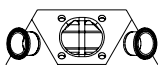
SIDE VIEW



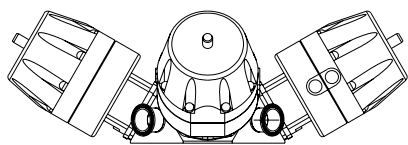
TOP VIEW



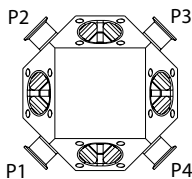
ISOMETRIC VIEW



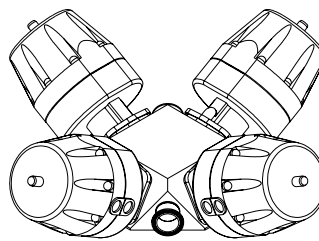
CHN



FRONT VIEW



TOP VIEW



ISOMETRIC VIEWS



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Cam-Line, Cam-Tite, Dia-Flo,
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EnviZion, Pure-Flo

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