

Divert valves are instrumental in achieving efficient, cost effective piping design. Divert valves allow process fluids to be diverted, mixed and/or sampled. ITT Pure-Flo is the first in the industry to incorporate the multiple weir block design. Divert valves minimize contact surfaces, minimize hold up volume, reduce CIP cycle times, improve product purity, minimize piping dimensional envelope, reduce number of system weldments, and are more easily actuated and validated than transfer panels.

Typical Applications

- Distribution of process flows (ie. mixing flow paths)
- 2-Way diverts are often used to switch between main and backup pumps on WFI loops
- Used in place of transfer panels
- Also used for bypass, drain and isolation
- CIP distribution
- Switching between buffers for Chromatography

Specifications

Standard Sizes:

- 0.25" - 4" (DN 8 - 100)
- Other sizes available upon request

Materials:

- 316L ASTM - A479
- DN 177440, 1.4435
- 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 actuators.

The 2-Way Divert Valve is designed to optimize drainability in the horizontal or vertical orientation.

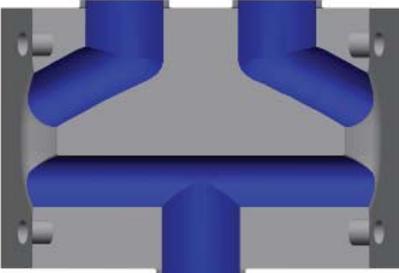


Patent for 2-Way
6,237,637



Flow Path

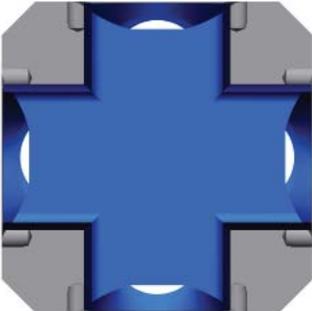
2-Way (DV2W)



3-Way (DV3W)



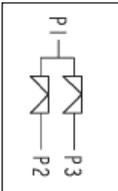
4-Way (DV4W)



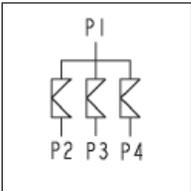
5-Way (DV5W)



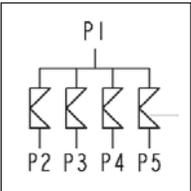
6-Way (DV6W)



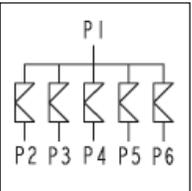
DV2W



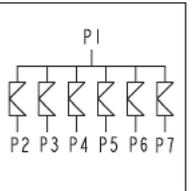
DV3W



DV4W



DV5W



DV6W

How to Order a Multiport Divert Valve

2-Way Divert Valve with a 1" wrought stainless steel body, inlet and outlets have Tri-Clamp ends, outlet is Option 4, 25 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: DV2W-1-4-419-PP1-419-W-SM-6-1-0

Configuration Example		DV2W	1	4	419	PP1	419	W	SM	6-1-0
Valve Body	Block Type	DV2W								
	Valve Size		1							
	Type (.5" only) ¹									
	Outlet Option ²			4						
	Common Port Size ³									
	End Connections ⁴				419					
	Common Port End Connection (P1) ⁵									
	Porting ⁶					PP1				
	Port Connection ⁷						419			
	Body Material							W		
	Mounting Holes ⁸								SM	
	Polish Selections									6-1-0

3-Way Through 6-Way Example

3-Way Divert Valve with a 1.5" wrought stainless steel body, inlet and outlets have Tri-Clamp ends, outlet is Option 4, 25 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: DV3W-1-4-1.5-DVFT-419-X28-W-SM-6-1-0

Configuration Example		DV3W	1	4	1.5	DVFT	419	X28	W	SM	6-1-0
Valve Body	Block Type ⁹	DV3W									
	Valve Size		1								
	Type (.5" only) ¹										
	Outlet Option ²			4							
	Common Port Size ³				1.5						
	Divert Valve Flow Through ¹⁰					DVFT					
	End Connections ⁴						419				
	Common Port End Connection (P1) ⁵							X28			
	Body Material								W		
	Mounting Holes ⁸									SM	
	Polish Selections										6-1-0

¹ For .5 inch valve, must specify Pure-Flo (PF) or Bio-Tek (BT).

² See page 4 for outlet options.

³ Common Port Size - provides the option of a larger common port (P1) size than the valve size (to increase flow when more than one valve is open).

⁴ Contact the factory for discrete end connection selections.

⁵ Common Port End Connection - provides the option of a different end connection for the Common Port (P1).

⁶ Porting (for the 2-way divert only) - out the bottom of the valve, typically for drain ports. Consult the factory for additional details.

⁷ Port Connection - is required if Porting is selected. Designates the port end connection(s).

⁸ Contact factory for standard or custom mounting options.

⁹ Figure numbers for Block Type: 3-Way - DV3W, 4-Way - DV4W, 5-Way - DW5W, 6-Way - DV6W. Note: Combinations with more than six diverted ports are possible but are typically not recommended due to the internal deadleg.

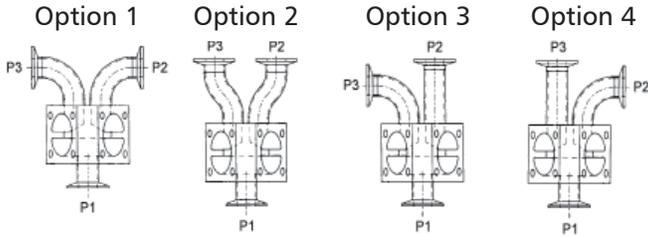
¹⁰ Divert Valve Flow Through (3 through 6-Way only) - provides an additional common port from the opposite side of the block.

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

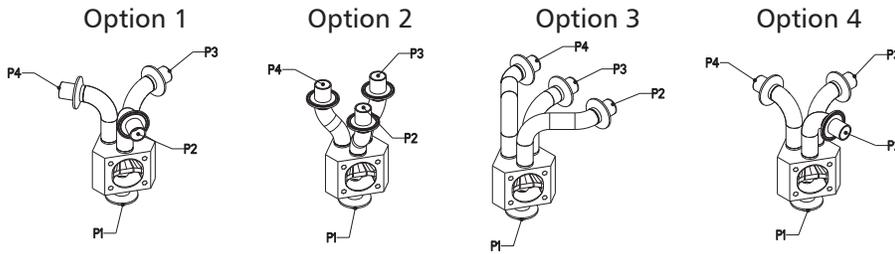
Contact the factory for additional options.

Outlet Options

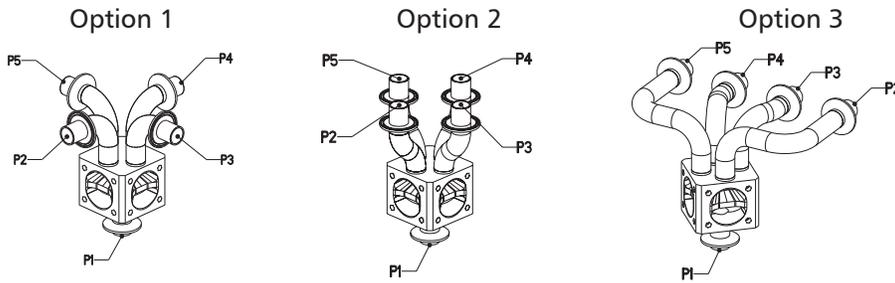
2-Way



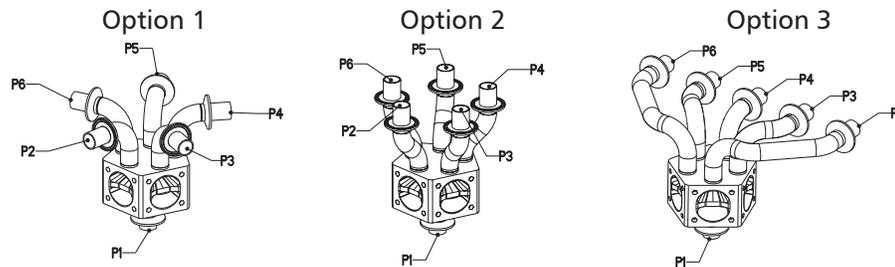
3-Way



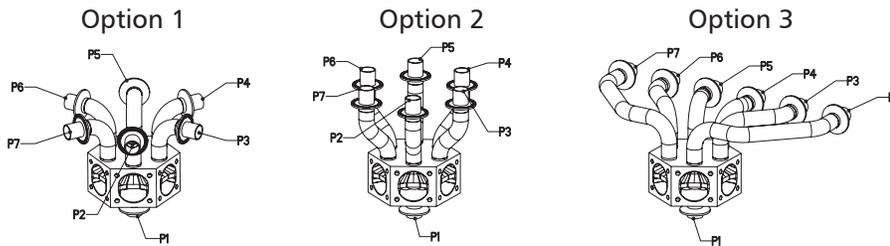
4-Way



5-Way



6-Way



Engineered Valves, LLC
33 Centerville Road
Lancaster, PA 17603
(717) 509-2200

ITT Pure-Flo (UK) Ltd
Richards Street
Kirkham, Lancashire
PR4 2HU, England