

The ISG combines the functionality of the two most common process fabrications (Sterile Access (SA) and GMP) into one assembly, greatly reducing the deadlegs of conventional SA and GMP fabrications when a purge valve is required.

This is achieved by providing the purge valve integral to the main body design. By simply rotating the assembly, one fabricated block body can provide three process fabrication orientations: Standard Sterile Access Port (SAP) and vertical GMP porting above and below the weir. The result is one integral valve assembly, which reduces contact surfaces and hold up volume, while minimizing dimensional envelope and increasing design flexibility.



Patent # 6,401,756

Typical Applications

- Process diversion, steam barrier/block sampling

Specifications

Standard Sizes:

- 0.5" - 2" (DN15 - 50)
- 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 actuator.

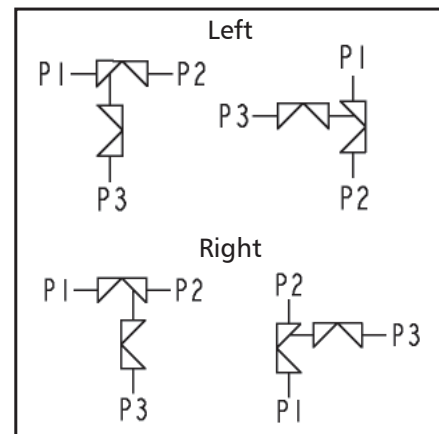


Sterile Access

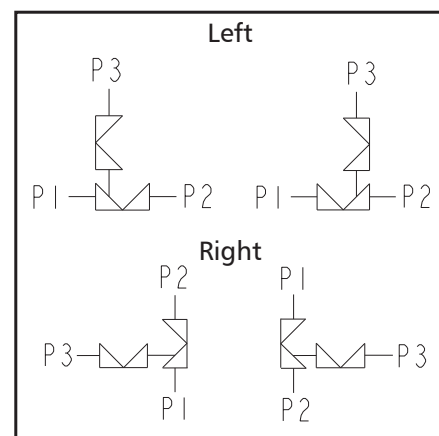
GMP

ISG

ISG

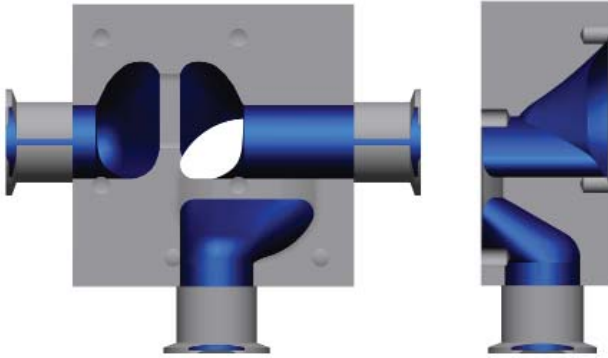


Inverted ISG



Flow Path

ISG



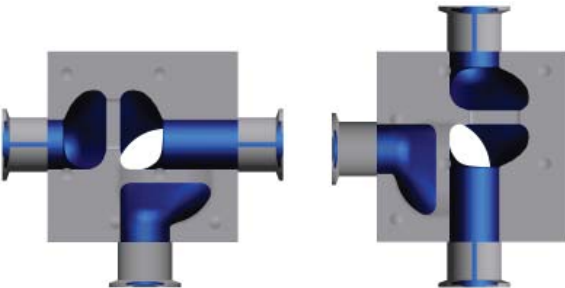
Inverted ISG



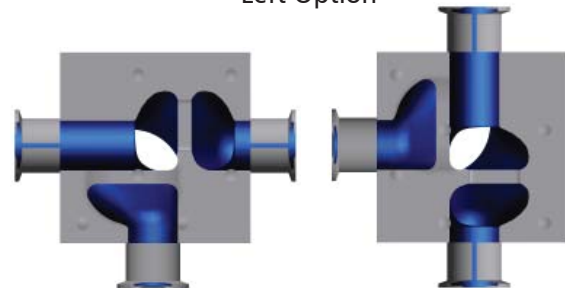
Valve Orientation

ISG

Right Option

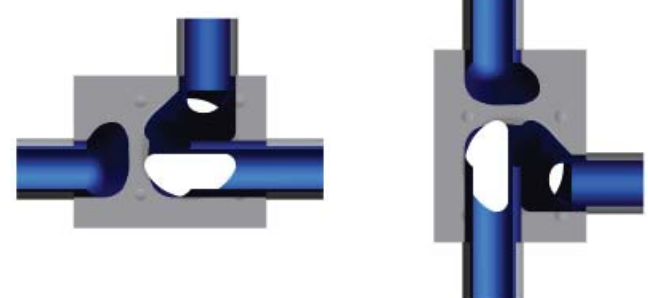


Left Option

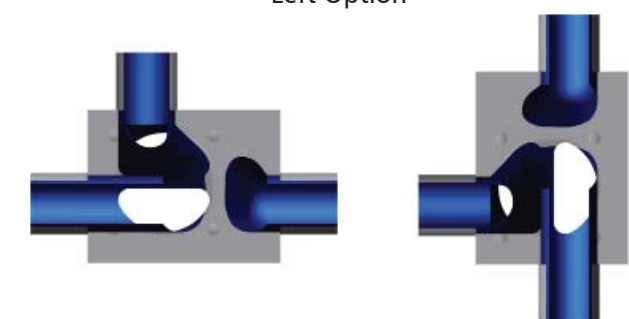


Inverted ISG

Right Option



Left Option

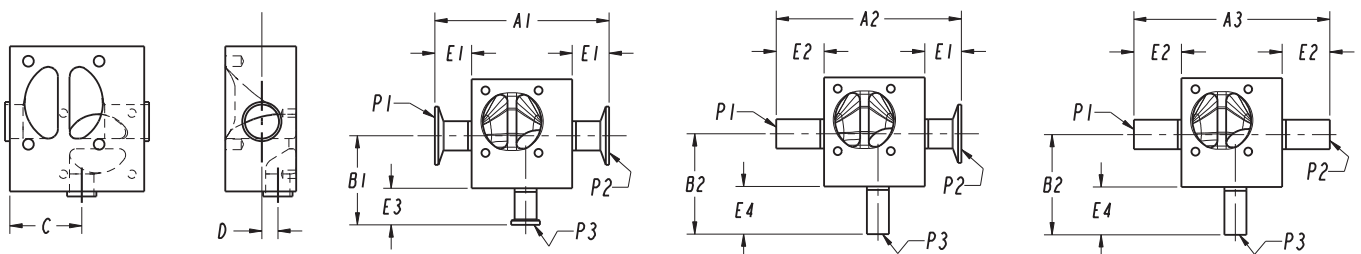


General Dimensions

Valve Size (Main x Purge)	Dimensions										
	A1	A2	A3	B1	B2	C	D	E1	E2	E3	E4
1/2" BT x 1/2" BT	3.25	4.25	5.25	1.67	2.67	1.05	0.09	0.625	1.63	0.625	1.63
	[82.6]	[108.0]	[133.4]	[42.4]	[67.8]	[26.7]	[2.29]	[15.9]	[41.3]	[15.9]	[41.3]
1/2" PF x 1/2" BT	3.53	4.53	5.53	1.67	2.67	1.32	0.12	0.625	1.63	0.625	1.63
	[89.7]	[115.1]	[140.5]	[42.4]	[67.8]	[33.5]	[3.1]	[15.9]	[41.3]	[15.9]	[41.3]
1/2" PF x 1/2" PF	3.85	4.85	5.85	1.94	2.94	1.32	0.19	0.625	1.63	0.625	1.63
	[97.8]	[123.2]	[148.6]	[49.3]	[74.7]	[33.5]	[4.8]	[15.9]	[41.3]	[15.9]	[41.3]
3/4" x 1/2" BT	3.70	4.70	5.70	1.85	2.85	1.54	0.31	0.625	1.63	0.625	1.63
	[94.0]	[119.4]	[144.8]	[47.0]	[72.4]	[39.1]	[7.9]	[15.9]	[41.3]	[15.9]	[41.3]
3/4" x 1/2" PF	4.07	5.07	6.07	2.07	3.07	1.54	0.40	0.625	1.63	0.625	1.63
	[103.4]	[128.8]	[154.2]	[52.6]	[78.0]	[39.1]	[10.2]	[15.9]	[41.3]	[15.9]	[41.3]
3/4" x 3/4"	4.57	5.57	6.57	2.28	3.28	1.66	0.22	0.625	1.63	0.625	1.63
	[116.1]	[141.5]	[166.9]	[57.9]	[83.3]	[42.2]	[5.6]	[15.9]	[41.3]	[15.9]	[41.3]
1" x 1/2" BT	5.25	5.63	6.00	1.96	2.96	1.70	0.47	1.25	1.63	0.625	1.63
	[133.4]	[143.0]	[152.4]	[49.8]	[75.2]	[43.2]	[11.9]	[31.8]	[41.3]	[15.9]	[41.3]
1" x 1/2" PF	5.50	5.87	6.25	2.19	3.19	1.71	0.56	1.25	1.63	0.625	1.63
	[139.7]	[149.1]	[158.8]	[55.6]	[81.0]	[43.4]	[14.2]	[31.8]	[41.3]	[15.9]	[41.3]
1" x 3/4"	5.93	6.30	6.68	2.41	3.41	1.84	0.41	1.25	1.63	0.625	1.63
	[150.6]	[160.0]	[169.7]	[61.2]	[86.6]	[46.7]	[10.4]	[31.8]	[41.3]	[15.9]	[41.3]
1" x 1"	6.41	6.79	7.16	3.24	3.61	1.96	0.02	1.25	1.63	1.25	1.63
	[162.8]	[172.5]	[181.9]	[82.3]	[91.7]	[49.8]	[0.5]	[31.8]	[41.3]	[31.8]	[41.3]
1 1/2" x 1/2" BT	6.13	6.50	6.88	2.19	3.19	2.19	0.66	1.25	1.63	0.625	1.63
	[155.7]	[165.1]	[174.8]	[55.6]	[81.0]	[55.6]	[16.8]	[31.8]	[41.3]	[15.9]	[41.3]
1 1/2" x 1/2" PF	6.13	6.50	6.88	2.44	3.44	2.19	0.81	1.25	1.63	0.625	1.63
	[155.7]	[165.1]	[174.8]	[62.0]	[87.4]	[55.6]	[20.6]	[31.8]	[41.3]	[15.9]	[41.3]
1 1/2" x 3/4"	6.47	6.84	7.22	2.69	3.69	2.31	0.72	1.25	1.63	0.625	1.63
	[164.3]	[173.7]	[183.4]	[68.3]	[93.7]	[58.7]	[18.3]	[31.8]	[41.3]	[15.9]	[41.3]
1 1/2" x 1"	6.86	7.23	7.61	3.46	3.84	2.44	0.32	1.25	1.63	1.25	1.63
	[174.2]	[183.6]	[193.3]	[87.9]	[97.5]	[62.0]	[8.1]	[31.8]	[41.3]	[31.8]	[41.3]
1 1/2" x 1 1/2"	7.75	8.13	8.50	3.94	4.31	2.69	0.10	1.25	1.63	1.25	1.63
	[196.9]	[206.5]	[215.9]	[100.1]	[109.5]	[68.3]	[2.5]	[31.8]	[41.3]	[31.8]	[41.3]
2" x 1/2" BT	6.75	7.38	8.00	2.56	3.56	2.50	0.85	1.25	1.88	0.625	1.63
	[171.5]	[187.5]	[203.2]	[65.0]	[90.4]	[63.5]	[21.6]	[31.8]	[47.6]	[15.9]	[41.3]
2" x 1/2" PF	6.75	7.38	8.00	2.69	3.69	2.50	0.97	1.25	1.88	0.625	1.63
	[171.5]	[187.5]	[203.2]	[68.3]	[93.7]	[63.5]	[24.6]	[31.8]	[47.6]	[15.9]	[41.3]
2" x 3/4"	6.78	7.41	8.03	2.87	3.87	2.63	0.91	1.25	1.88	0.625	1.63
	[172.2]	[188.2]	[204.2]	[72.9]	[98.3]	[66.8]	[23.1]	[31.8]	[47.6]	[15.9]	[41.3]
2" x 1"	7.19	7.81	8.44	3.71	4.09	2.75	0.57	1.25	1.88	1.25	1.63
	[182.6]	[198.4]	[214.4]	[94.2]	[103.9]	[69.9]	[14.5]	[31.8]	[47.6]	[31.8]	[41.3]
2" x 1 1/2"	8.07	8.69	9.32	4.19	4.56	3.00	0.44	1.25	1.88	1.25	1.63
	[205.0]	[220.7]	[236.7]	[106.4]	[115.8]	[76.2]	[11.2]	[31.8]	[47.6]	[31.8]	[41.3]
2" x 2"	8.81	9.44	10.06	4.50	5.12	3.25	0.13	1.25	1.88	1.25	1.88
	[223.8]	[239.8]	[255.5]	[114.3]	[130.0]	[82.6]	[3.3]	[31.8]	[47.6]	[31.8]	[47.6]

BT = Bio-Tek, PF = Pure-Flu

Note: All dimensions in brackets [] are millimeters



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

How to Order an ISG

Integral Sterile Access and GMP valve with a 1.5" wrought stainless steel body, inlets and outlets on the main valve (P1 and P2) are sanitary clamp with a butt weld end, second valve is an end connection option 2, second valve is a .5" Pure-Flo, 25 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ISG-1.5-2-.5-SVPPF-R-W-6-1-0

Configuration Example		ISG	1.5		2	.5	SVPPF	R	W	6-1-0
Valve Body	Block Type	ISG								
	Valve Size (Main)		1.5							
	Type (.5" only) ¹									
	Outlet Option				2					
	Second Valve Size					.5				
	Second Valve Type						SVPPF			
	Valve Orientation ²							R		
	Body Material								W	
Polish Selections										6-1-0

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

² Second valve ported on the left or right side of main valve weir.

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

