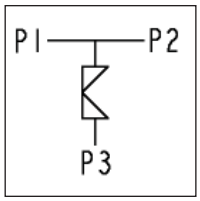
ITT | Engineered Valves

Pure-Flo® Zero Static Block Body Tee (ZSBBT & ZSBT)

Zero Static use points are some of the most critical valves utilized in the Biopharmaceutical industry. Use point valves allow process fluids to be transferred, sampled, drained or diverted with minimal impact on critical systems such as WFI and purified water.



Typical Applications

- Point-of-use valves
- Piping Branch valves

Specifications

Standard Sizes:
- 0.25" - 2" (DN 8 - 50) Valve size
- 0.5" - 4" (DN 15 - 100) Run 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.

Flow Path

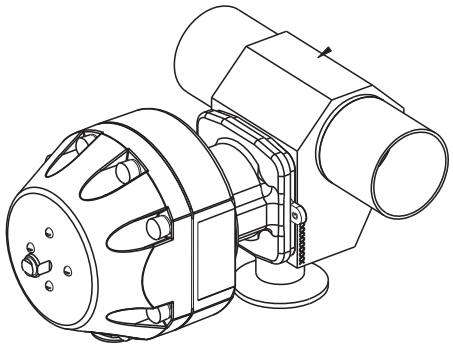
How to Order a Zero Static Block Body Tee

ZSBBT with a 1" wrought stainless steel main valve with Tri-Clamp end connection and a 2" tube with buttweld ends, 25 Ra interior finish, standard exterior finish (Scotch Brite).

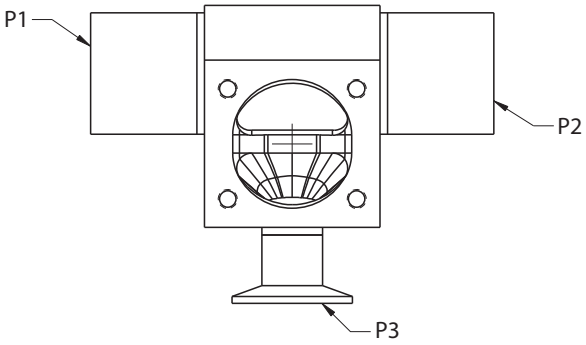
Figure Number: ZSBBT-1-W-419-2-X28-6-1-0

	Configuration Example	ZSBBT	1	W	419	2	X28		6-1-0
Valve Body	Block Type	ZSBBT							
	Valve Size		1						
	Body Type			W					
	Body End Connection				419				
	Zerostatic Tube Size					2			
	Zerostatic Tube End Connection						X28		
	Zerostatic Tube Second End Connection								
	Polish Selections								6-1-0

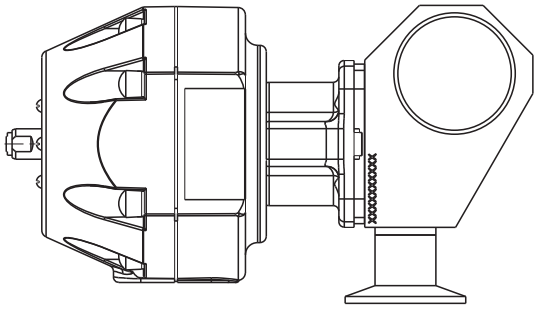
To add topworks, see BBTOP. For additional figure numbers, see PFORD.



ISOMETRIC VIEW



FRONT VIEW



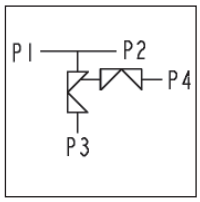
SIDE VIEW

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

Pure-Flo® Zero Static Back to Back Sample (ZSBBS)

The ZSBBS process fabrication is a modification of a standard Zero Static Tee. An integral valve located on the back of the valve assembly provides access to a sample port upstream of the Zero Static Tee weir. This sample port is utilized to take samples of the main process flow. The sample valve typically utilizes a .5" Bio-Tek or Pure-Flo valve.

The integral sample valve greatly reduces contact surfaces, hold up volume and possible deadlegs as compared to sample valves that are welded to the exterior of a standard Zero Static valve. The ZSBBS is an essential element of piping systems required to meet demanding L/D ratios suggested by the ASME BPE standard.



Typical Applications

- Use point where sampling of loop water is required prior to opening main valve.

Specifications

Standard Sizes:
- 0.5" - 2" (DN 15 - 50) Main valve size
- 0.5" - 4" (DN 15 - 100) Run size
- 0.5" Sample valve
- 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.

Sample outlet features a reducing ferrule (.75" connection to a .5" port) to maximize drainability of the small diameter port.

Flow Path

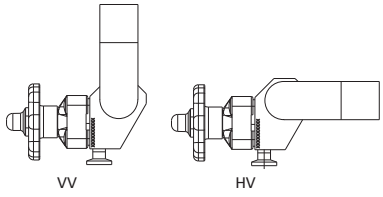
How to Order a Zero Static Back to Back Sample

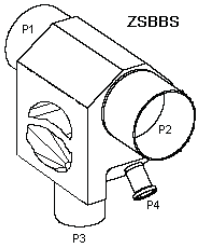
Zero Static Block Body with a 2" wrought stainless steel main valve and a 4" tube, all three outlets are buttweld, Bio-Tek sample valve with .75" Tri-Clamp connection, 25 Ra interior finish, standard exterior finish (Scotch Brite).

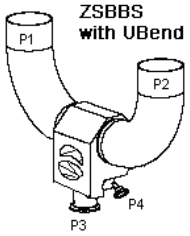
Figure Number: ZSBBS-2-428-4-428-.5-SVBT-419R-R-W-6-1-0

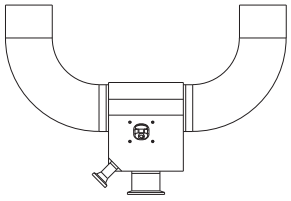
	Configuration Example	ZID	1		419	2	419	.5	SVBT	419	R	W	6-1-0
Valve Body	Block Type	ZID											
	Valve Size		1										
	Body End Connection (P3)				419								
	Zerostatic Tube Size					2							
	U-Bend Tube Orientation[1]						419						
	Zerostatic Tube End Connections (P1, P2)							.5					
	Second Valve Size								SVBT				
	Second Valve Type (.5" only)[2]									419			
	Second Valve End Connection (P4)[3]										R		
	Sample Outlet Side											W	
	Body Material												6-1-0
	Polish Selections												

[1] For a U-Bend Vertical Tube, enter VV. For Horizontal Tube, enter HV. See drawings below for vertical tube and horizontal tube examples.
[2] For .5 inch valve, must specify Pure-Flo (PF) or Bio-Tek (BT). PF is recommended for steam applications.
[3] 419R refers to .75 x .5 reducing Tri-Clamp port connection required for drainability. .5" sample port is available upon request.
To add topworks, see BBTOP. For additional figure numbers, see PFORD.

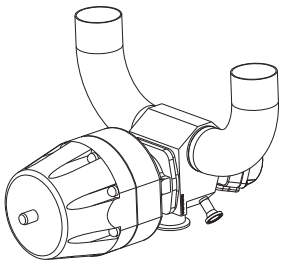




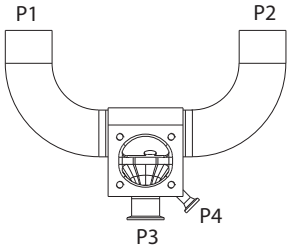




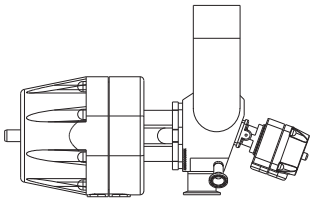
BACK VIEW



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

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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Lancaster, PA 17603
(717) 509-2200

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Kirkham, Lancashire
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Pure-Flo® Integral Sterile Access and GMP (ISG)

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

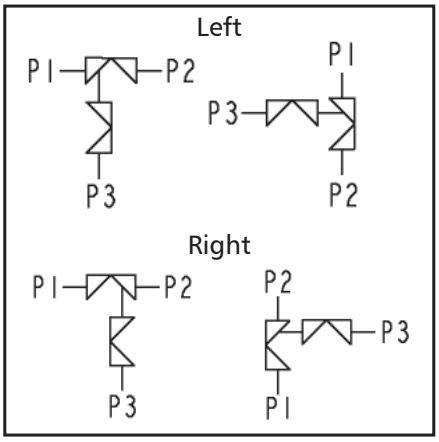
Materials:
- 316L ASTM - A479
- DN 177440, 1.4435
- Other materials available upon request

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

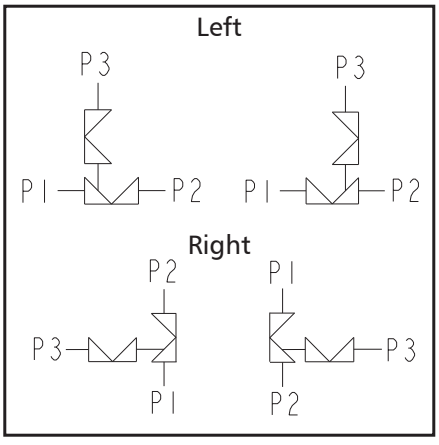
Compatible with standard Pure-Flo topworks: See PFTOP for details on available manual bonnets or actuator.

Sterile Access + GMP = ISG

ISG

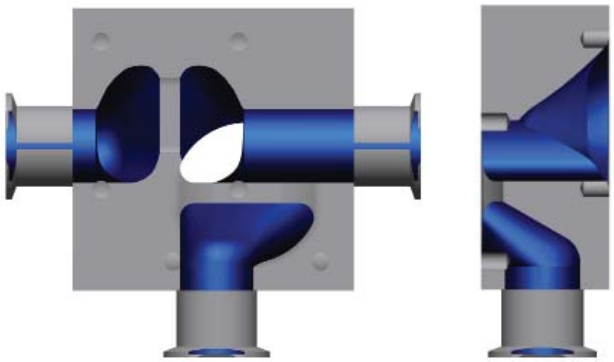


Inverted ISG



Flow Path

ISG

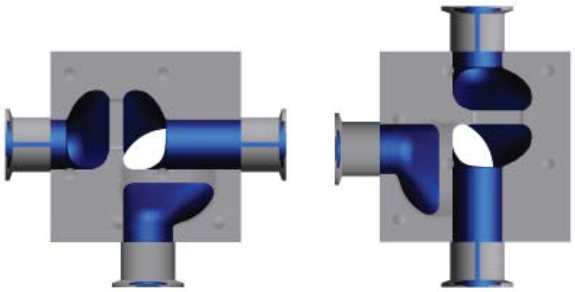


Inverted ISG

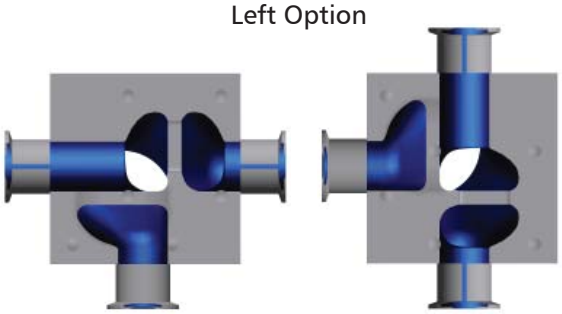
Valve Orientation

ISG

Right Option

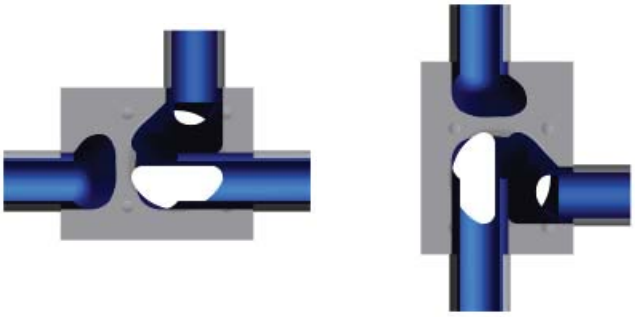


Left Option



Inverted ISG

Right Option



Left Option