



EnviZion® & BioviZion®

Ordering Guide



ITT

Ordering Guide

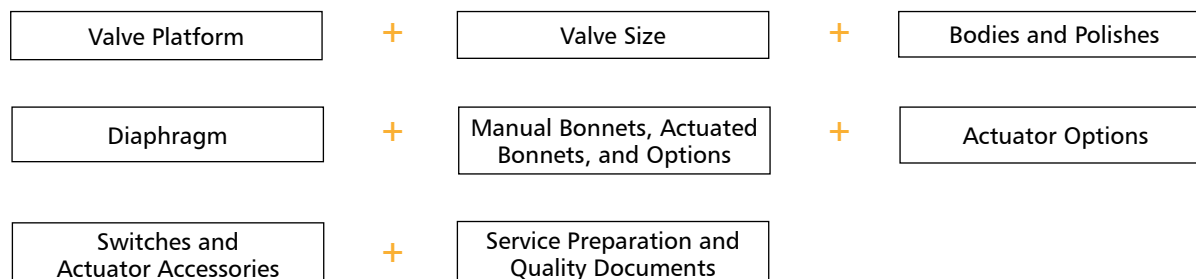
This brochure contains a comprehensive list of the figure number codes and description for each valve product option available for the standard EnviZion and BioviZion products. To assist in the ordering process, we have included instructions on how to construct a standard valve figure number in proper sequence. ITT's channel partners can also find our e-Prism tool available at www.engvalves.com/Members/e-Prism/. This tool is a simple means of identifying valve product configuration and nomenclature. This tool will assist in selecting compatible features and proper designation structure.

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EnviZion block body valve drawings are available. Go to our website (<https://www.engvalves.com/tools-and-resources/drawings/hygienic-diaphragm-drawings/envizion-drawings>) for more information. Others available upon request.

How to Construct an EnviZion Valve Figure Number



Constructing Figure Numbers

Below are examples for constructing a manual and actuated valve figure number. The actuated valve example will be used to build a figure number on the following pages.

Figure Number Example - Manual Valve

Figure Number: ENV-1-F-419-SF1-0-0-TMZ-ZH

Detailed description:

1: 1 inch size (DN25)

F: Forged 316L SS

419: Triclamp Tube

SF1: Interior Finish: Ra 20 Microinch Max

0: Exterior Finish: No Mechanical Polish

0: No Electropolish

TMZ: Modified PTFE Diaphragm (FDA)/ Grade B1 B.C.

ZH: EnviZion manual handwheel

Figure Number Example - Actuated Valve

Figure Number: ENV-1-F-428L-SF1-0-0-TMZ-ZA2-ISP-3W-HZ

Detailed description:

1: 1 inch size (DN25)

F: Forged 316L SS

428L: 16 Gauge Extended Tangent Butt weld

SF1: Interior Finish: Ra 20 Microinch Max

0: Exterior Finish: No Mechanical Polish

0: No Electropolish

TMZ: Modified PTFE Diaphragm (FDA)/ Grade B1 B.C.

ZA2: EnviZion SS actuator - fail closed

ISP: 3W - 3 Wire Output

ISP: NSV - No Solenoid

ISP: ST - Standard Cover

ISP: NBT - No Diagnostics

ISP: HZ - Hazardous Location Class I, II, III; DIV 2

Valve Platform, Size, Body & Polishes, Diaphragm

Valve Platform

Platform	
Code	Description
ENV	Envizion valve

Valve Size

Size	
Code	Description
.50	.50 Inch (DN15)
.75R	.75 Inch (DN20) with 0.5" topworks
.75	.75 Inch (DN20) with 1" topwork
1	1 Inch (DN25)
1.5	1.5 inch (DN40)
2	2.0 inch (DN50)

Bodies and Polishes

Body Type

Code	Description
BV	BioviZion Stainless Steel
F	Forged 316L Stainless Steel
N	Body Not Supplied
TBV	Tank Bottom Valve
W	Wrought 316L Stainless Steel
Spec	Special Material Body

Body Ends

Code	Description
Clamp	
409	Swagelok TS Fitting
410	Tri-Clamp Sch. 5 Pipe
418	ISO 1.6mm Wall Tri-Clamp End
419	Tri-Clamp Tube
419S	Tri-Clamp Tube 18 Gauge
419S1	Tri-Clamp Tube 20 Gauge
Buttweld	
422	Sch. 5 Pipe (ISO Body)
423	18 Gauge
423L	18 Gauge Ext. Tangen
424	20 Gauge
424L	20 Gauge Ext. Tangent
425	Sch. 5 Pipe (ANSI Body)
426	Sch. 10 Pipe
428	16 Gauge (for block bodies)
428L	16 Gauge Ext. Tangent BW (for forgings)
481	DIN Series 1
482	DIN Series 2
483	DIN Series 3
484	SMS
485	TBV, 45 Degree 14 GA BW
486	TBV, 45 Degree 16 GA BW
487	TBV, 45 Degree 18 GA BW
488	TBV, 45 Degree Tri-Clamp
493	ISO 2.9mm wall
494	ISO 1.2mm wall
495	ISO 1.0mm wall
496	ISO 1.6mm wall
497	ISO 2.0mm wall
498	ISO 2.3mm wall
499	ISO 2.6mm wall
Spec	Special End

Second End Code (Optional)

Code	Description
Clamp	
X07	By Male Thread w/ Gasket Seat
X09	Swagelok TS Fitting
X10	By Tri-Clamp Sch. 5 Pipe
X19	By Tri-Clamp Tube
X19S	By Tri-Clamp Tube 18 Gauge
X19S1	By Tri-Clamp Tube 20 Gauge
Buttweld	
X22	By Sch. 5 Pipe (ISO Body)
X23	By 18 Gauge
X23L	18 Gauge Ext. Tangent
X24	By 20 Gauge
X24L	20 Gauge Ext. Tangent
X25	By Sch. 5 Pipe (ANSI Body)
X26	By Sch. 10 Pipe
X27	By Sch. 40 Pipe
X28	By 16 Gauge
X28L	By 16 Gauge Ext. Tangent BW
X81	By DIN Series 1
X82	By DIN Series 2
X83	By DIN Series 3
X84	By SMS
X85	By ISO
X93	By ISO 2.9mm Wall
X94	By ISO 1.2mm Wall
X95	By ISO 1.0mm Wall
X96	By ISO 1.6mm Wall
X97	By ISO 2.0mm Wall
X98	By ISO 2.3mm Wall
X99	By ISO 2.6mm Wall
Spec	Special End

Mechanical Polish - Interior

Code	Description
6	25 μ in Ra (.6 μ m) max
7	15 μ in Ra (.38 μ m) max
8	20 μ in Ra (.5 μ m) max
10	10 μ in Ra (.25 μ m) max
SF1	BPE SF1 Ra 20 Max
SF2	BPE SF2 Ra 25 Max
SF4	BPE SF4 Ra 15 Max, EP
SF5	BPE SF5 Ra 20 Max, EP
SF6	BPE SF6 Ra 25 Max, EP

Mechanical Polish - Exterior

Code	Description
0	No Mechanical Polish
1	Scotch Brite
2	25 μ in Ra (.6 μ m) max, Welds Scotch Brite
3	35 μ in Ra (.8 μ m) max, Welds Scotch Brite
4	25 μ in Ra (.6 μ m) max, Welds Removed
6	35 μ in Ra (.8 μ m) max, Welds Removed
7	Special Polish Requirement
8	No Ext Body Polish, Weld Beads Removed

Electropolish

Code	Description
0	No Electropolish
2	Exterior Only
3	Interior and Exterior
4	Interior Only

Body Only

Code	Description
Y	Body Only Supplied

Diaphragms

Diaphragms

Code	Description
TMZ	PTFE (FDA) with EPDM Backing Cushion

Topwork Options and Switches

Manual Bonnets

Manual Bonnets

Code	Description
ZH	Envizion Manual
ZHS	Envizion Manual sealed

Actuated Bonnets and Options

Actuated Bonnets

Code	Description
ZA1	Envizion SS Actuator - FO
ZA2	Envizion SS Actuator - FC (90#)
ZA3	Envizion SS Actuator - DA
ZA1S	Envizion SS Actuator - FO sealed
ZA2S	Envizion SS Actuator - FC (90#) sealed
ZA3S	Envizion SS Actuator - DA sealed
ZB1	Envizion Advantage Actuator - FO
ZB2	Envizion Advantage Actuator - FC (90#)
ZB26	Envizion Advantage Actuator - FC (60#)
ZB3	Envizion Advantage Actuator - DA
ZB1S	Envizion Advantage Actuator - FO sealed
ZB2S	Envizion Advantage Actuator - FC (90#) sealed
ZB26S	Envizion Advantage Actuator - FC (60#) sealed
ZB3S	Envizion Advantage Actuator - DA sealed

Topwork Options

Code	Description
EBG	Envizion Bonnet Guard (Tamper Resistant/Submersible)

Electropolish Topworks

Code	Description
1	Topworks

Switches

Integrated Switch Package

Code	Description
ISP-3W-HZ	3 Wire Discrete, without solenoid, without diagnostics
ISP-3W-BL-HZ	3 Wire Discrete, without solenoid, with diagnostics
ISP-3W-LS-HZ	3 Wire Discrete, without solenoid, without diagnostics
ISP-3W-LS-BL-HZ	3 Wire Discrete, without solenoid, with diagnostics
ISP-3W-SV-HZ	3 Wire Discrete, with internal solenoid, without diagnostics
ISP-3W-SV-BL-HZ	3 Wire Discrete, with internal solenoid, with diagnostics
ISP-3W-SV-BT-HZ	3 Wire Discrete, with internal solenoid, with diagnostics and control
ISP-3W-SV-LS-HZ	3 Wire Discrete, with internal solenoid, without diagnostics
ISP-3W-SV-LS-BL-HZ	3 Wire Discrete, with internal solenoid, with diagnostics
ISP-3W-SV-LS-BT-HZ	3 Wire Discrete, with internal solenoid, with diagnostics and control
ISP-AI-HZ	ASi, without solenoid, without diagnostics
ISP-AI-BL-HZ	ASi, without solenoid, with diagnostics
ISP-AI-LS-HZ	ASi, without solenoid, without diagnostics
ISP-AI-LS-BL-HZ	ASi, without solenoid, with diagnostics
ISP-AI-SV-HZ	ASi, with internal solenoid, without diagnostics
ISP-AI-SV-BL-HZ	ASi, with internal solenoid, with diagnostics
ISP-AI-SV-BT-HZ	ASi, with internal solenoid, with diagnostics and control
ISP-AI-SV-LS-HZ	ASi, with internal solenoid, without diagnostics
ISP-AI-SV-LS-BL-HZ	ASi, with internal solenoid, with diagnostics
ISP-AI-SV-LS-BT-HZ	ASi, with internal solenoid, with diagnostics and control
ISP-2W	2 Wire, without solenoid, without diagnostics
ISP-2W-LS	2 Wire, without solenoid, without diagnostics
ISP-2W-SV	2 Wire, with internal solenoid, without diagnostics
ISP-2W-SV-LS	2 Wire, with internal solenoid, without diagnostics
ISP-DN-HZ	DeviceNet, without solenoid, without diagnostics
ISP-DN-BL-HZ	DeviceNet, without solenoid, with diagnostics
ISP-DN-LS-HZ	DeviceNet, without solenoid, without diagnostics
ISP-DN-LS-BL-HZ	DeviceNet, without solenoid, with diagnostics
ISP-DN-SV-HZ	DeviceNet, with internal solenoid, without diagnostics
ISP-DN-SV-BL-HZ	DeviceNet, with internal solenoid, with diagnostics
ISP-DN-SV-BT-HZ	DeviceNet, with internal solenoid, with diagnostics and control
ISP-DN-SV-LS-HZ	DeviceNet, with internal solenoid, without diagnostics
ISP-DN-SV-LS-BL-HZ	DeviceNet, with internal solenoid, with diagnostics
ISP-DN-SV-LS-BT-HZ	DeviceNet, with internal solenoid, with diagnostics and control

Limit Switches

Code	Description
LS16	Westlock 98810002BI
LS17	Westlock 98810002BI with Eliminator Fitting
LS41	Efector IN0117
LS42	Efector IN5331
LS128	Westlock 99P21A00000
LS129	Westlock 99P21AD550
LS140	Westlock 99P22G00000
LSSpec	Special

* Additional LS codes are available

Value Switch Package

Code	Description
VSPG30	Gold Contacts 30V
VSPN	NAMUR Proximity
VSPPP	3-Wire PNP Proximity
VSPS48	Silver Contacts 48V
VSPZ	2-Wire Proximity
VSP+G	Gold Contacts 24V
VSP+S	Silver Contacts 24V
VSP+N	NAMUR Proximity 24V
VSP+Z	2-Wire Proximity 24V

Actuator Accessories

Actuator Accessories

Transducer

Code	Description
TR1630	Conoflow GT6108ED
TRCA	Controlair 550X
TRIPH	Moore IPH2/4-20MA/3-15PSIG/20PSI/FR1/WDNS
TRSpec	Special

Positioners

Code	Description
PR1	Conoflow Model 31
PR2	Conoflow Model 33
PR15	Burkert 8694 Style
PR16	YTC TMP-3000
PR18	Sitomatic Positioner DIPR 9001
PR19	StoneL Prism PI80/81
PRSpec	Special

Mechanical Accessories

Code	Description
AO	Adjustable Opening Stop

Actuator Hardware Options

Code	Description
HW3	SS Tubing and Fittings
HW9	PTFE Tubing and Stainless Steel Fittings
HW10	Breather Vent Filter Stainless Steel
HW11	Breather Vent Filter BRS
HW15	1/4" 3-way valve & Schrader connection

Solenoid Valve

Code	Description
SV1	Asco 8320G184
SV2	Asco EF8320G184
SV3	Asco 8345G1
SV4	Asco EF8345G1
SV7	Asco 8302G202
SV8	Asco EF8320G202
SV14	Burkert Series 6012
SV15	Burkert Series 6014

Solenoid Voltage

Code	Description
V1	120V / 60HZ
V2	24VDC
V3	240V / 60HZ
VSpec	Special

Speed Controllers

Code	Description
SC	Schrader 337-1001
SC3	Whitey needle valve SS-1RM2
SCSpec	Special

Filter Regulators

Code	Description
FR1	Conoflow FR95ASKE1G
FR2	Fisher 67FR
FRSpec	Special

Service Preparation & Quality Documents

Service Preparation and Quality Documents

Special Service Preparation

Code	Description
BAG	Cleaned and Bagged
EU_SERVICE	European Union Service
OXY	Oxygen
SIFREE	Silicone Free Preparation
SPEC	Customer Special
VAC	Vacuum

Special Quality Documents

Code	Description
SQD2	C of C (seat & shell pressures)
SQD3	C of C Profilometer Tape for each body
SQD5	C of C Body/Stud/Nut CMTR and C of C to ASME Section VIII
SQD6	C of C Tube CMTR, Tank Bottom Valve
SQD7	C of C Weld Rod CMTR, Tank Bottom Valve

2-Way Valve

2-Way Valve with Manual Topwork

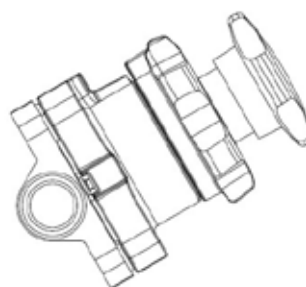
1" valve, forged body with buttweld ends, 20 Ra interior finish, TMZ PTFE diaphragm with B1 backing cushion, manual topwork with tamper resistant bonnet guard.

Figure Number: ENV-1-F-428L-SF1-0-0-TMZ-ZH-EBG

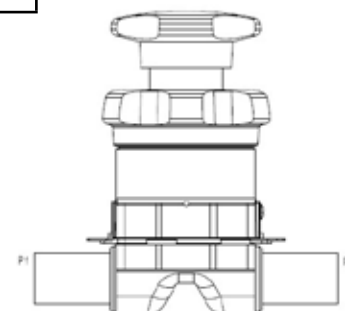
Valve Assembly	Configuration Example	ENV	1	F	428L	SF1-0-0	TMZ	ZH	EBG	
	Valve Platform	ENV								
	Valve Size		1							
	Body Type			F						
	Valve End Connection (P1, P2 or P1)				428L					
	Valve Second End Connection (P2) ¹									
	Polish Selections					SF1-0-0				
	Diaphragm Selection						TMZ			
	Topwork							ZH		
	Topwork Options								EBG	
	Switches & Actuator Accessories									
	Service Preparation & Quality Doc.									



¹ Second end connection can be provided if end connections are different.



VALVE IN DRAIN POSITION
INSTALLATION ORIENTATION



2-Way Valve with Actuated Topwork

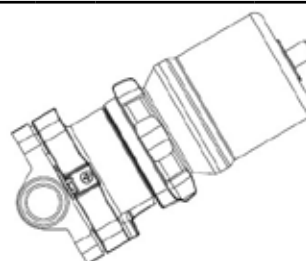
1" valve, forged body with buttweld ends, 20 Ra interior finish, TMZ PTFE diaphragm with B1 backing cushion, stainless steel fail-closed actuator with ISP limit switch.

Figure Number: ENV-1-F-428L-SF1-0-0-TMZ-ZA2-ISP-3W-HZ

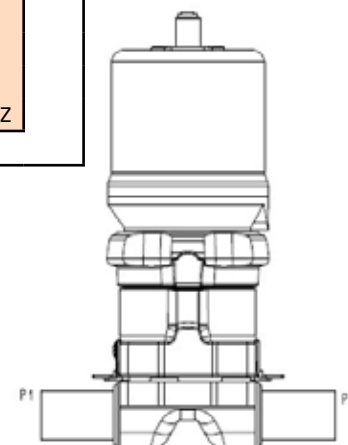
Valve Assembly	Configuration Example	ENV	1	F	428L	SF1-0-0	TMZ	ZA2	EBG	ISP-3W-HZ
	Valve Platform	ENV								
	Valve Size		1							
	Body Type			F						
	Valve End Connection (P1, P2 or P1)				428L					
	Valve Second End Connection (P2) ¹									
	Polish Selections					SF1-0-0				
	Diaphragm Selection						TMZ			
	Topwork							ZA2		
	Topwork Options								EBG	
	Switches & Actuator Accessories									ISP-3W-HZ
	Service Preparation & Quality Doc.									



¹ Second end connection can be provided if end connections are different.



VALVE IN DRAIN POSITION
INSTALLATION ORIENTATION



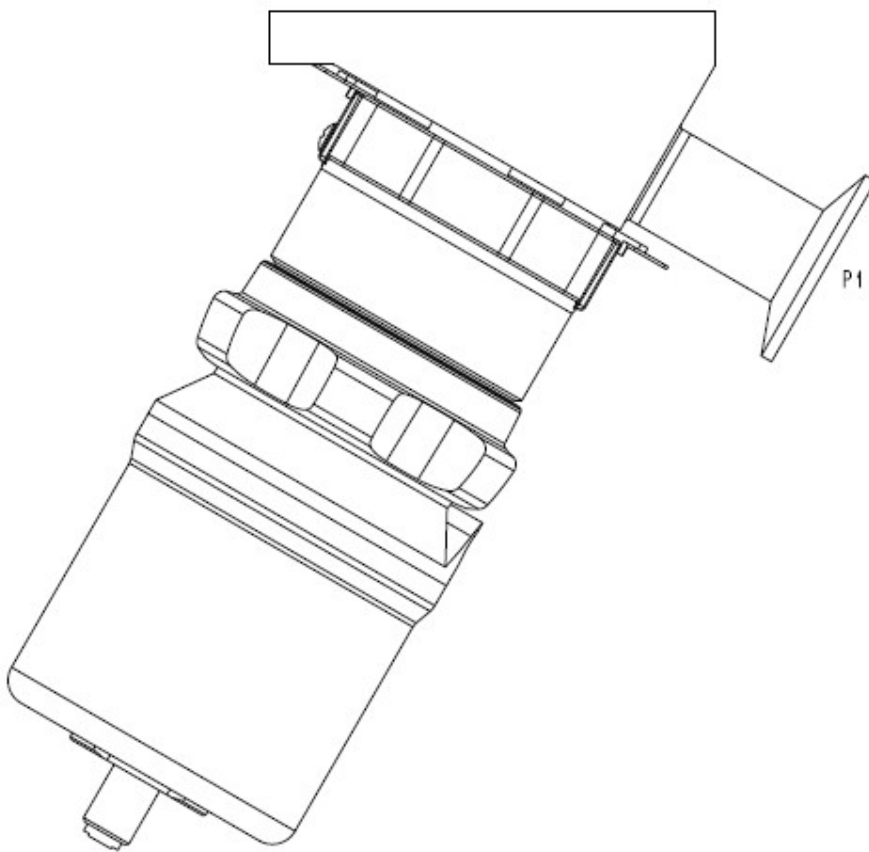
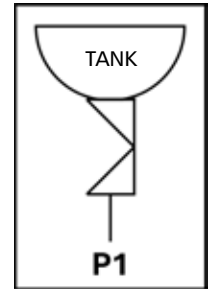
Tank Bottom Valve

Tank Bottom Valve

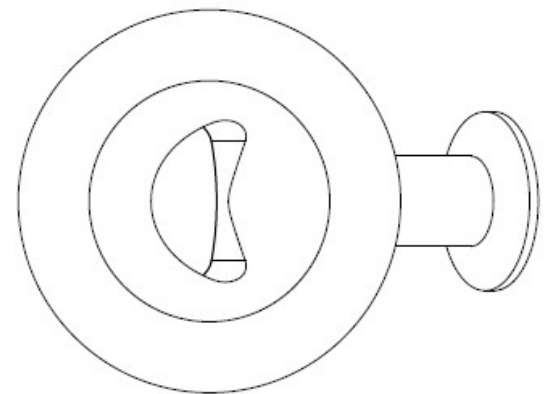
1" Tank Bottom Valve, Tri-clamp end, 20 Ra interior finish, PTFE diaphragm, stainless steel fail-closed actuator with ISP limit switch.

Figure Number: ENV-1-TBV-419-SF1-1-0-TMZ-ZA2-ISP-3W-HZ

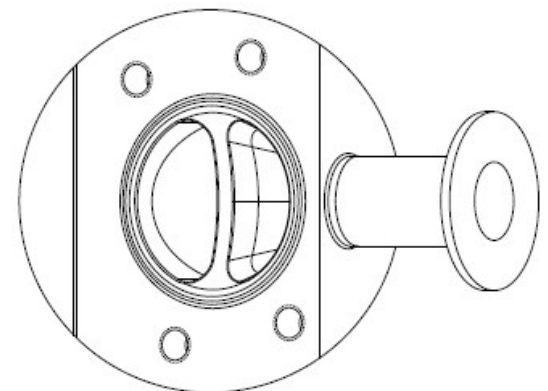
Valve Assembly	Configuration Example	ENV	1	TBV	419	SF1-0-0	TMZ	ZA2		ISP-3W-HZ
	Valve Platform	ENV								
	Valve Size		1							
	Body Type			TBV						
	Valve End Connection				419					
	Polish Selections					SF1-0-0				
	Diaphragm Selection						TMZ			
	Topwork							ZA2		
	Topwork Options									
	Switches & Actuator Accessories									ISP-3W-HZ
	Service Preparation & Quality Doc.									



SIDE VIEW
INSTALLATION ORIENTATION



TOP VIEW



BOTTOM VIEW

Sterile Access & GMP Fabrications

Fabrication Type

Code	Description
GMP	GMP
HSA	Horizontal Sterile Access
SA	Sterile Access
SPEC	Special

Purge Location

Code	Description
P1	Purge located closest to main valve end 1
P2	Purge located closest to main valve end 2
PB	Purge located at both valve ends (P1 and P2)

Purge Valve Orientation

Code	Description
B	Back
F	Front
L	Left
LL	Left Special
LR	Left/Right Special
R	Right
RL	Right/Left Special
RR	Right Special

Valve Number for Fabrication

Code	Description
M	Main Valve
2	Second Valve
3	Third Valve
4	Fourth Valve
5	Fifth Valve
6	Sixth Valve
7	Seventh Valve
8	Eighth Valve
9	Ninth Valve
10	Tenth Valve

Envizion SA Two valve fabrication with a 1" wrought body main valve and a 1/2" forged body secondary valve closest to the second end P2 and facing to the front. The main valve has butt-weld end connection, 20 Ra max polished interior, a fail-closed Envizion stainless steel actuator with ISP limit switch pack, and PTFE diaphragm. The secondary valve has Tri-clamp end, 20 Ra max polished interior, a manually operated bonnet, and PTFE diaphragm.

Complete Figure Number:

ENV-SA-2-1-.5

ENV-SA-M-1-W-428L-P2-F-SF1-1-0-TMZ-ZA2-ISP-3W-HZ

ENV-SA-2-.5-F-419-F-SF1-0-0-TMZ-ZH

Fabrication Figure Number: ENV-SA-2-1-.5

Fabrication	Configuration Example	ENV	SA	2	1	.5
	Valve Platform	ENV				
	Fabrication Type		SA			
	Two Valve Fabrication			2		
	Main Valve Size				1	
	Second Valve Size					.5

Main Valve Figure Number: ENV-SA-M-1-W-428L-P2-F-SF1-1-0-TMZ-ZA2-ISP-3W-HZ

Main Valve	Configuration Example	ENV	SA	M	1	W	428L		P2	F	SF1-1-0	TMZ	ZA2		ISP-3W-HZ
	Valve Platform	ENV													
	Fabrication Type		SA												
	Valve Number			M											
	Main Valve Size				1										
	Main Valve Body Type ¹					W									
	Main Valve Body End Code (P1, P2 or P1) ²						428L								
	Main Valve Second End Code (P2) ²								P2						
	Purge Location									F					
	Purge Valve Orientation										SF1-1-0				
	Polish Selections											TMZ			
	Diaphragm Selection												ZA2		
	Topwork														ISP-3W-HZ
	Topwork Options														
	Switches & Actuator Accessories														
	Service Preparation & Quality Doc.														

Second Valve Figure Number: ENV-SA-2-.5-F-419-F-SF1-0-0-TMZ-ZH

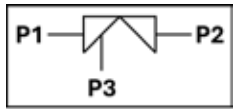
Second Valve	Configuration Example	ENV	SA	2	.5	F	419	F	SF1-1-0	TMZ	ZH				
	Valve Platform	ENV													
	Fabrication Type		SA												
	Valve Number			2											
	Valve Size				.5										
	Body Type					F									
	Body End Code (P3)						419								
	Purge Valve Orientation							F							
	Polish Selections								SF1-1-0						
	Diaphragm Selection									TMZ					
	Topwork										ZH				
	Topwork Options														
	Switches & Actuator Accessories														
	Service Preparation & Quality Doc.														

¹ Main valve is always a wrought body

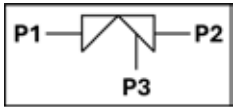
² Second end connection can be provided if end connections are different.

SA,HSA (Drawings)

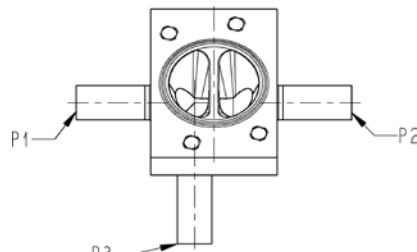
Single Valve Fabrication



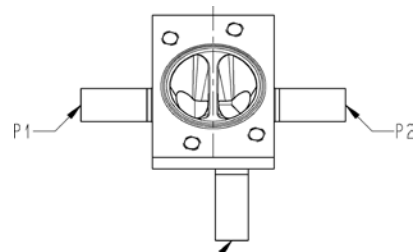
Purge Location P1



Purge Location P2

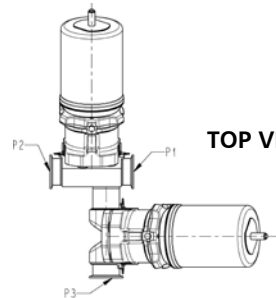


Purge Location P1

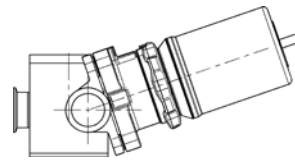


Purge Location P2

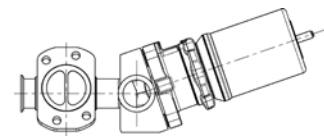
Two Valve Fabrication



TOP VIEW

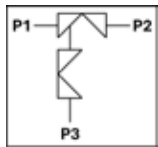


BACK VIEW

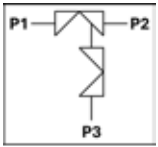


SIDE VIEW

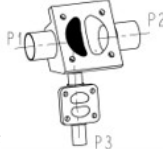
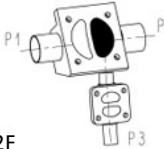
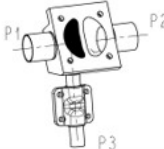
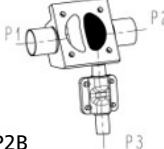
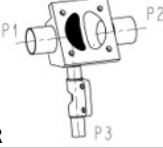
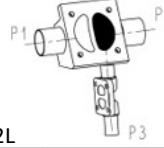
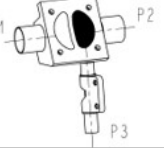
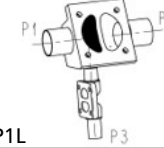
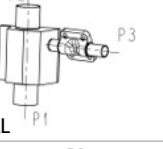
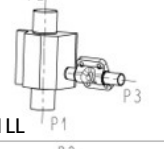
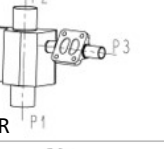
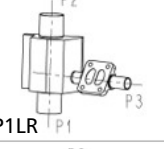
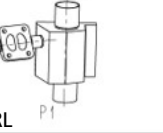
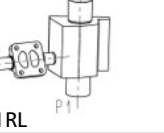
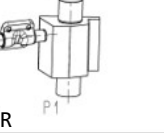
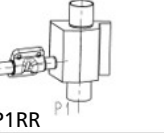
STERILE ACCESS (SA) Purge Valve Orientations



Purge Location P1



Purge Location P2

 SA-P1F	 SA-P2F	 SA-P1B	 SA-P2B
 SA-P1R	 SA-P2L	 SA-P2R	 SA-P1L
 SA-P2LL	 SA-P1LL	 SA-P2LR	 SA-P1LR
 SA-P2RL	 SA-P1RL	 SA-P2RR	 SA-P1RR

HORIZONTAL STERILE ACCESS (HSA) Purge Valve Orientations

 HSA-P1L	 HSA-P2L	 HSA-P1R	 HSA-P2R
--	--	---	--

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

EnviZion GMP 2—valve fabrication with a 1" wrought body main valve and a ½" forged body secondary valve closest to the second end P2 and facing to the right. The main valve has Tri-Clamp ends, 20 Ra max polished interior, a reverse acting EnviZion stainless steel actuator with ISP limit switch pack, and PTFE diaphragm. The secondary valve has Tri-clamp end, 20 Ra max polished interior, a manually operated bonnet, and PTFE diaphragm.

Fabrication Figure Number: ENV–GMP–2–1–.5

Fabrication	Configuration Example					
	Valve Platform	ENV	GMP	2	1	.5
	Fabrication Type	GMP				
	Two Valve Fabrication			2		
	Main Valve Size				1	
	Second Valve Size					.5

Main Valve Figure Number: ENV–GMP–M–1–W–419–P2–R–SF1–1–0–TMZ–ZA2–ISP-3W-HZ

Main Valve	Configuration Example															
	Valve Platform	ENV	GMP	M	1	W	419		P2	R	SF1-1-0	TMZ	ZA2		ISP-3W-HZ	
	Fabrication Type	GMP														
	Valve Number			M												
	Main Valve Size				1											
	Main Valve Body Type ¹					W										
	Main Valve Body End Code (P1, P2 or P1)						419									
	Main Valve Second End Code (P2) ²								P2							
	Purge Location									R						
	Purge Valve Orientation										SF1-1-0					
	Polish Selections											TMZ				
	Diaphragm Selection												ZA2			
	Topwork															
	Topwork Options															
	Switches & Actuator Accessories														ISP-3W-HZ	
	Service Preparation & Quality Doc.															

Second Valve Figure Number: ENV-GMP-2-.5-F-419-R-SF1-0-0-TMZ-ZH

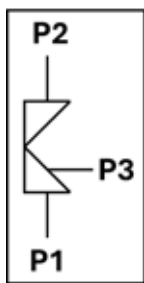
Second Valve	Configuration Example													
	Valve Platform	ENV	GMP	2	.5	F	419	R	SF1-1-0	TMZ	ZH			
	Fabrication Type	GMP												
	Valve Number			2										
	Valve Size				.5									
	Body Type					F								
	Body End Code (P3)						419							
	Purge Valve Orientation							R						
	Polish Selections								SF1-1-0					
	Diaphragm Selection									TMZ				
	Topwork										ZH			
	Topwork Options													
	Switches & Actuator Accessories													
	Service Preparation & Quality Doc.													

¹ Main valve is always a wrought body

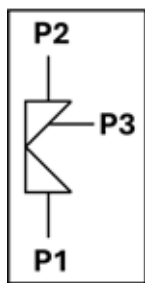
² Second end connection can be provided if end connections are different.

GMP (Drawings)

Single Valve Fabrication

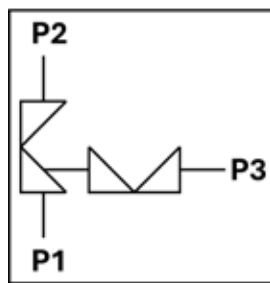


Purge Location P1

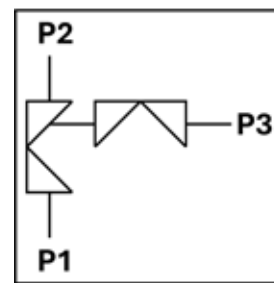


Purge Location P2

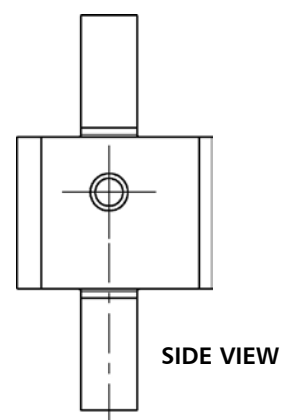
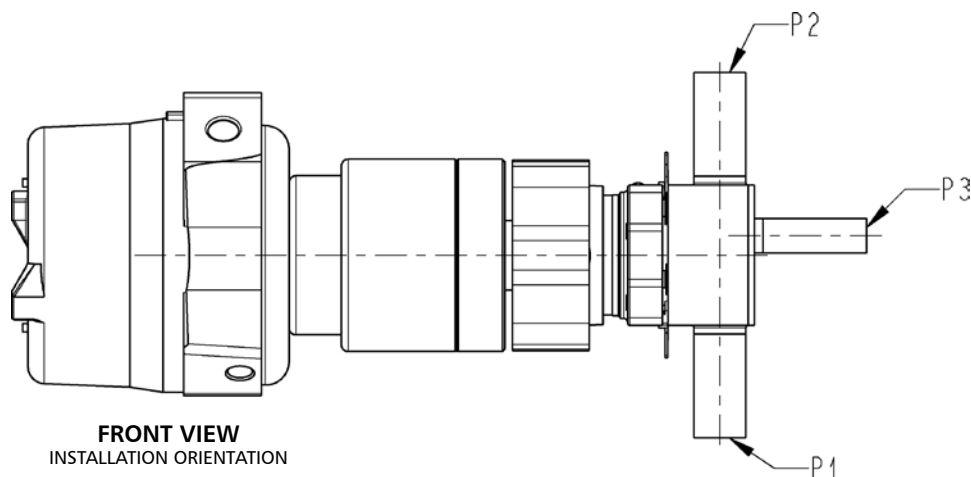
Two Valve Fabrication



Purge Location P1



Purge Location P2



GMP Purge Valve Orientations

<p>GMP-P1F</p>	<p>GMP-P2F</p>	<p>GMP-P1B</p>	<p>GMP-P2B</p>
<p>GMP-P1RR</p>	<p>GMP-P2LL</p>	<p>GMP-P2RR</p>	<p>GMP-P1LL</p>
<p>GMP-P2L</p>	<p>GMP-P1L</p>	<p>GMP-P2R</p>	<p>GMP-P1R</p>

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

Zero Static Configurations

Single Valve Fabrication Types

Code	Description
ZSBT	Zero Static Block Body
ZSBT-BO	Zero Static Block Body with Back Outlet Option
ZSBV	Zero Static Block Body with Vertical Run
EZSBHV	Zero Static E-Series U-Bend - Horizontal Tube - Vertical Valve
EZSBVV	Zero Static E-Series U-Bend - Vertical Tube - Vertical Valve

Multi Valve Fabrication Types

Code	Description
ZSBBS	Zero Static Back to Back Sample
ZDPT	Zero Static Downstream Purge - Top
ZDPB	Zero Static Downstream Purge - Bottom
ZDI	Zero Static Dual Inline
ZID	Zero Static Inverted with Drain
ZUD	Zero Static with Upstream Sample and Downstream Purge

¹ Centered by default (no selection reqd) in ZSBBS

² 419R: standard for .5 sample valve to improve drainability in ZSBBS

Body Type

Code	Description
EZ	Main Valve EnviZion
SVBV	Second Valve BioviZion
SVEZ	Second Valve EnviZion
TVBV	Third Valve BioviZion
TVEZ	Third Valve EnviZion

Second Valve Orientation

Code	Description
R ¹	Ported on Right Side of Valve (Standard)
L ¹	Ported on Left Side of Valve

U Bend Tube Orientation (Optional)

Code	Description
EHV	E-Series Horizontal U-Bend, Vertical Valve
EVV	E-Series Vertical U-Bend, Vertical Valve
USPEC	Special U-Bend Orientation

Second Valve Connection

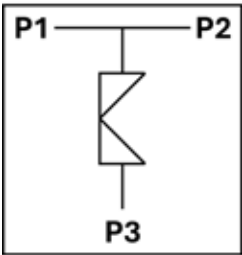
Code	Description
419R ²	.75" Tri-Clamp
428	16 Gauge
419	Tri-Clamp Tube

Zero Static Block Body (ZSBT)

Zero Static Block Body, wrought or forged stainless steel, 1" main valve with Tri-Clamp end connection, 2" tube with buttweld ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

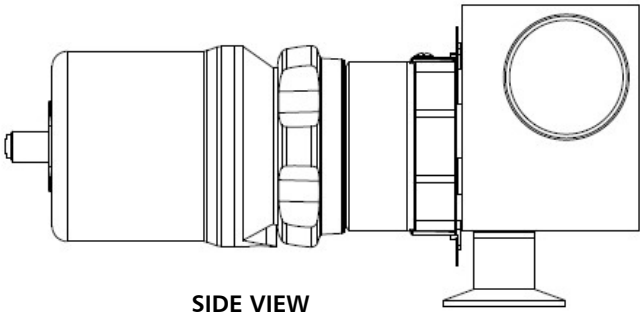
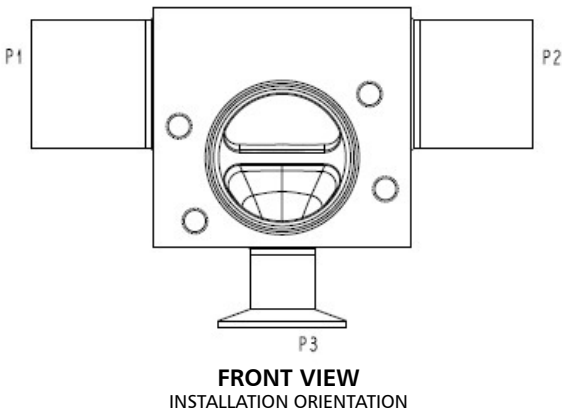
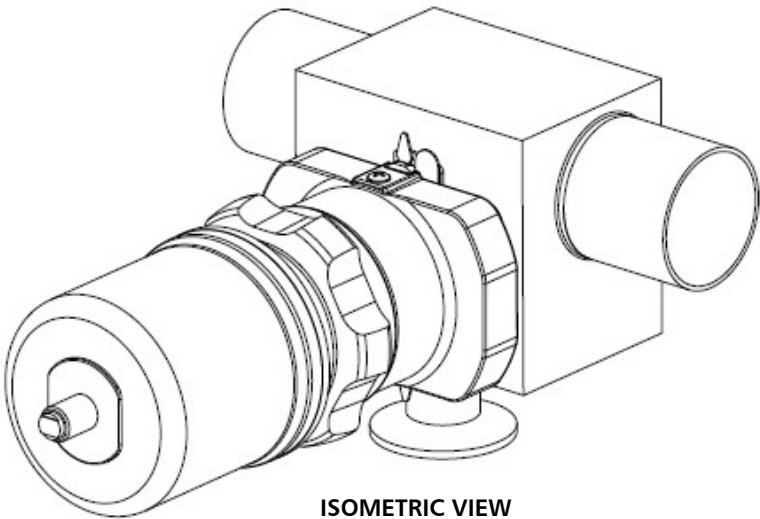
Figure Number: ENV-ZSBT-1-W-419-2-X28-SF1-1-0

Valve Body	Configuration Example	ENV	ZSBT	1	W	419	2	X28	SF1-1-0
	Valve Platform	ENV							
	Block Type		ZSBT						
	Valve Size			1					
	Body Type				W				
	Body End Connection (P3)					419			
	Zerostatic Tube Size						2		
	Zerostatic Tube End Connections (P1, P2 or P1)							X28	
	Zerostatic Tube Second End Connection (P2) ¹								
	Polish Selections								SF1-1-0



¹Second end connection can be provided if end connections are different.

To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



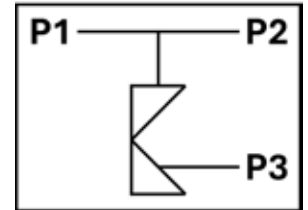
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Zero Static Block Body with Back Outlet Option (ZSBT-BO)

Zero Static Block Body with Back Outlet, wrought stainless steel, 1" main valve with Tri-Clamp end connection, 2" cross tube (run) with butt weld ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

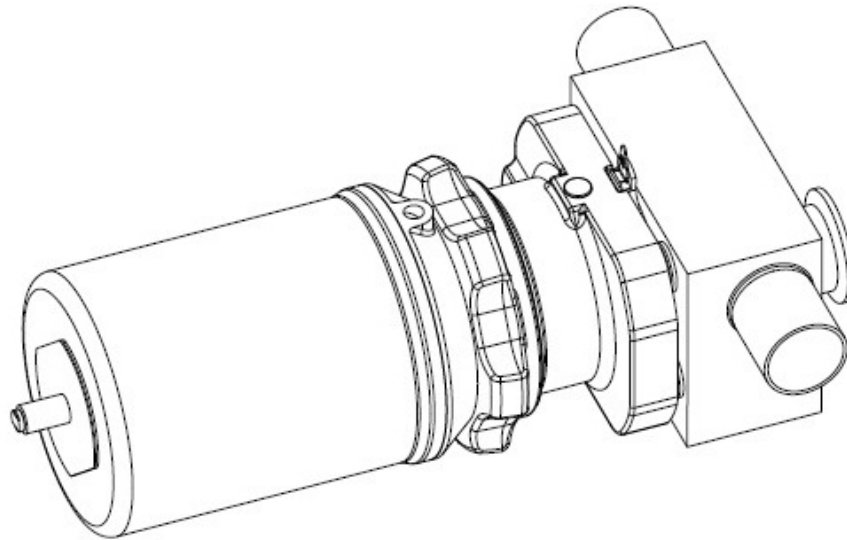
Figure Number: ENV-ZSBT-BO-1-W-419-2-X28-SF1-1-0

Valve Body	Configuration Example	ENV	ZSBT-BO	1	W	419	2	X28	SF1-1-0
	Valve Platform	ENV							
	Block Type		ZSBT-BO						
	Valve Size			1					
	Body Type				W				
	Body End Connection (P3)					419			
	Zerostatic Tube Size						2		
	Zerostatic Tube End Connections (P1, P2 or P1)							X28	
	Zerostatic Tube Second End Connection (P2) ¹								
	Polish Selections								SF1-1-0

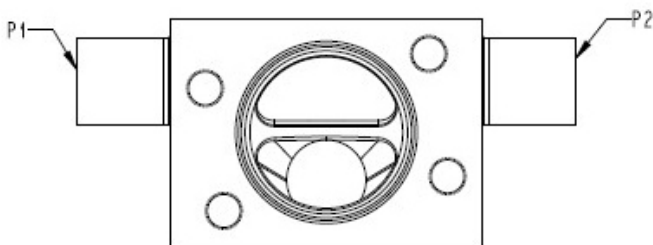


¹Second end connection can be provided if end connections are different.

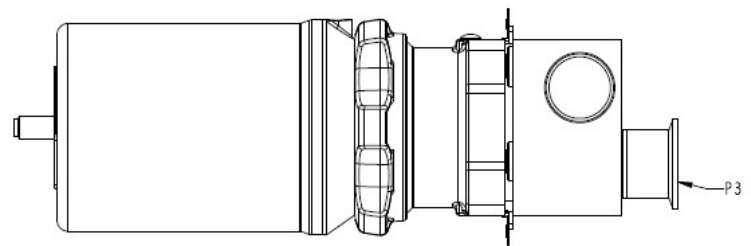
To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



ISOMETRIC VIEW



FRONT VIEW
INSTALLATION ORIENTATION



SIDE VIEW

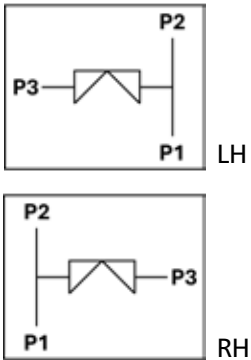
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Zero Static Block Body with Vertical Run (ZSBV)

Zero Static Block Body with Vertical Run, wrought stainless steel, 1" main valve with Tri-Clamp end connection, 2" tube with buttweld ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

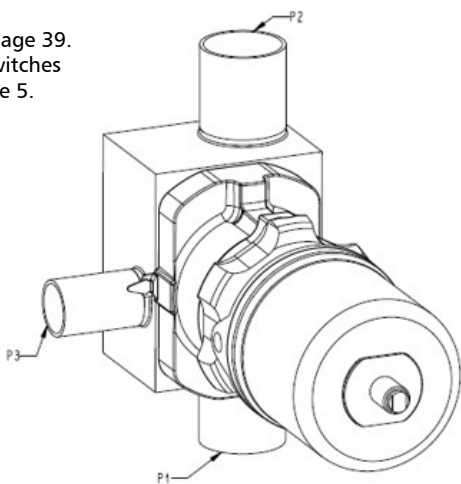
Figure Number: ENV-ZSBV-R-1-W-419-2-X28-SF1-1-0

Valve Body	Configuration Example	ENV	ZSBV	R	1	419	2	X28	SF1-1-0
	Valve Platform	ENV							
	Block Type		ZSBV						
	Left or Right Orientation			R					
	Valve Size				1				
	Body End Connection (P3)					419			
	Zerostatic Tube Size						2		
	Zerostatic Tube End Connections (P1, P2 or P1)							X28	
	Zerostatic Tube Second End Connection (P2) ¹								
	Polish Selections								SF1-1-0

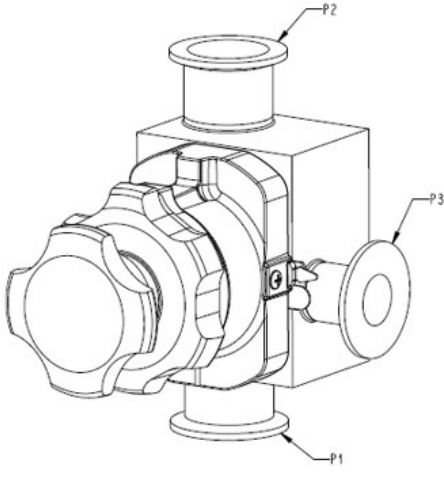


¹Second end connection can be provided if end connections are different.

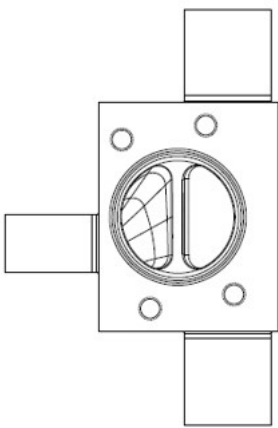
To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.



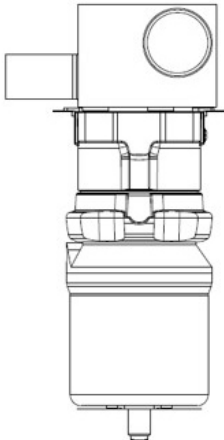
ISOMETRIC VIEW LH



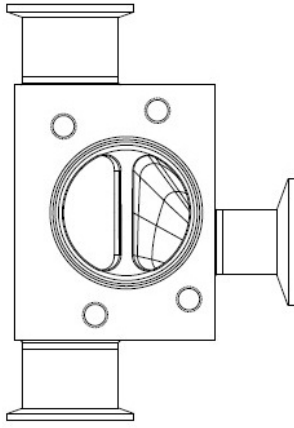
ISOMETRIC VIEW RH



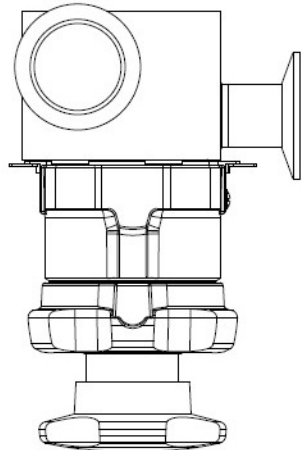
FRONT VIEW LH
INSTALLATION ORIENTATION



TOP VIEW LH



FRONT VIEW RH
INSTALLATION ORIENTATION



TOP VIEW RH

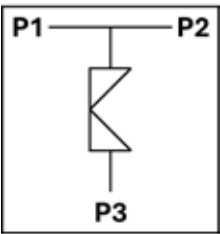
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Zero Static Block Body U-bend (EZSBVV, EZSBHV)

Zero Static Block Body, 1" wrought or forged stainless steel main valve with Tri-Clamp outlet, 2" U-bend vertical tube with buttweld ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-EZSBVV-1-W-419-2-X28-SF1-1-0-TMZ-ZA2-ISP-3W-HZ

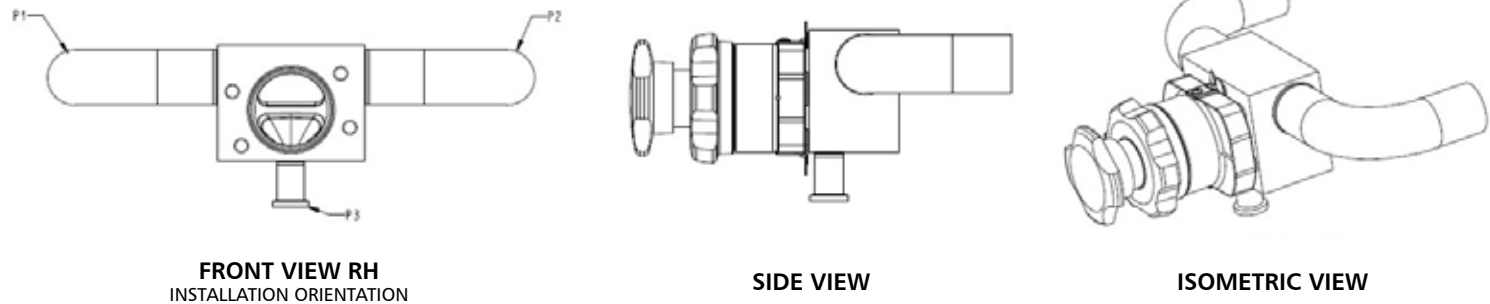
Valve Body	Configuration Example	ENV	EZSBVV	1	W	419	2	X28	SF1-1-0
	Valve Platform	ENV							
	Block Type ¹		EZSBVV						
	Valve Size			1					
	Body Type				W				
	Valve End Connection (P3)					419			
	Zerostatic Tube Size						2		
	Zerostatic Tube End Connection (P1, P2 or P1)							X28	
	Zerostatic Tube Second End Connection (P2) ²								
	Polish Selections								SF1-1-0



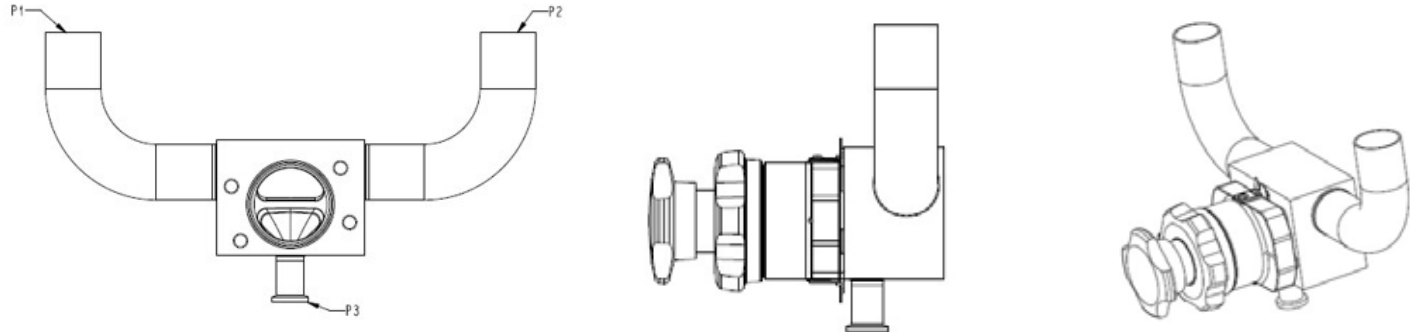
¹ EZSBVV for vertical tube, vertical valve. EZSBHV for horizontal tube, vertical valve. See drawings below for vertical tube and horizontal tube examples.
² Second end connection can be provided if end connections are different.

To add topwork(s) see page 39.
 For topwork options, switches
 and accessories see page 5.

EZSBHV



EZSBVV



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

Zero Static Back to Back Sample (ZSBBS)

Zero Static Block Body, 1.5" wrought stainless steel main valve with Tri-Clamp outlet, 2" tube with buttweld ends, .5" BioviZion sample with Tri-Clamp outlet, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-ZSBBS-1.5-EZ-419-2-428-.5-SVBV-419R-W-SF1-1-0

Valve Body	Configuration Example	ENV	ZSBBS	1.5	EZ	419	2		428	.5	SVBV	419R		W	SF1-1-0
	Valve Platform	ENV													
	Block Type		ZSBBS												
	Main Valve Size			1.5											
	Main Valve Type				EZ										
	Main Valve End Connection (P3)					419									
	Zerostatic Tube Size						2								
	U-Bend Tube Orientation ¹														
	Zerostatic Tube End Connection (P1, P2)							428							
	Second Valve Size								.5						
	Second Valve Type									SVBV					
	Second Valve End Connection (P4) ²										419R				
	Second Valve Orientation ³														
	Body Material												W		
	Polish Selections														SF1-1-0

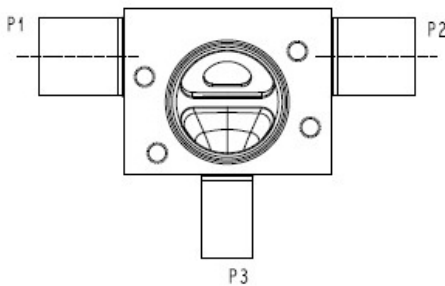
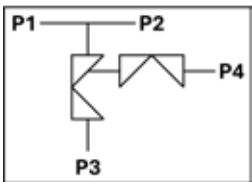
¹ Second end connection can be provided if end connections are different.

² 419R is standard for .5 sample valve to improve drainability.

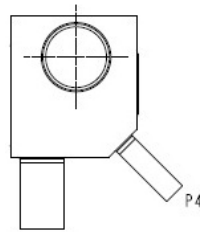
³ Second valve is centered as standard and does not appear in the figure number. Right (R) and Left (L) options are available.

To add topwork(s) see page 39.

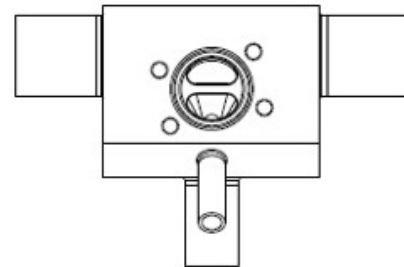
For topwork options, switches and accessories see page 5.



FRONT VIEW
INSTALLATION ORIENTATION

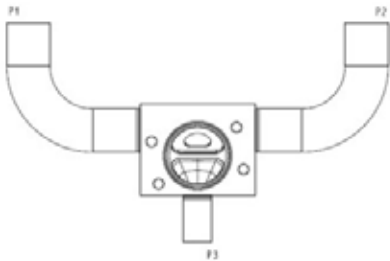


SIDE VIEW

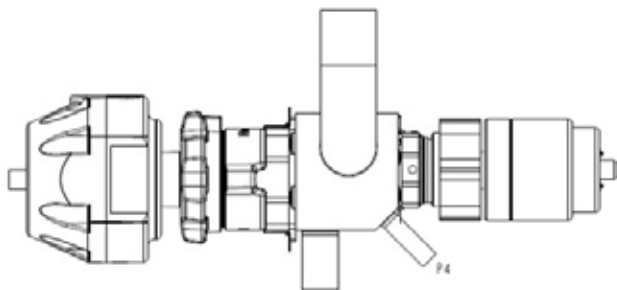


BACK VIEW

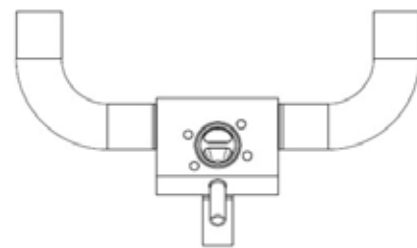
U-Bend Tube Orientation: EVV



FRONT VIEW
INSTALLATION ORIENTATION



SIDE VIEW



BACK VIEW

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

Zero Static Downstream Purge - Top (ZDPT)

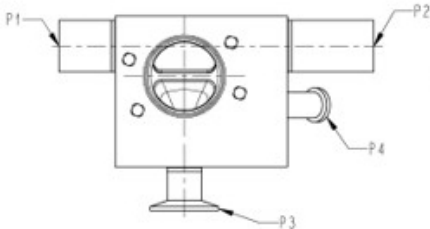
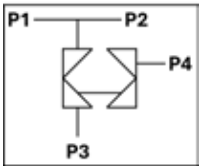
Zero Static Block Body, wrought stainless steel, 1" main valve with Tri-Clamp outlet, 2" tube with butt weld ends, .5" BioviZion purge with Tri-Clamp outlet on the right side of the valve, 20 Ra interior finish, standard exterior finish (Scotch Brite). Please note the ZDPT secondary valve outlet position is above the secondary valve weir.

Figure Number: ENV-ZDPT-1-EZ-419-2-428-.5-SVBV-419-R-W-SF1-1-0

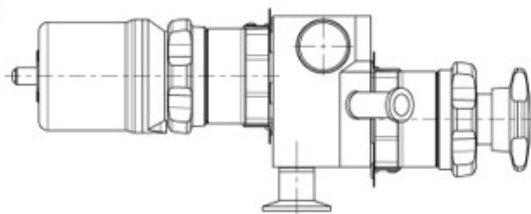
Valve Body	Configuration Example	ENV	ZDPT	1	EZ	419	2		428	.5	SVBV	419	R	W	SF1-1-0
	Valve Platform	ENV													
	Block Type		ZDPT												
	Main Valve Size			1											
	Main Valve Type				EZ										
	Main Valve End Connection (P3)					419									
	Zerostatic Tube Size						2								
	U-Bend Tube Orientation ¹														
	Zerostatic Tube End Connection (P1, P2)							428							
	Second Valve Size								.5						
	Second Valve Type									SVBV					
	Second Valve End Connection (P4)										419				
	Second Valve Outlet Orientation											R			
	Body Material												W		
	Polish Selections														SF1-1-0

¹ For a U-Bend vertical tube and vertical valve, enter EVV. For horizontal tube and vertical valve, enter EHV. See drawings below for vertical tube and horizontal tube examples.

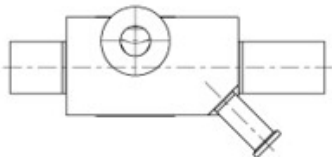
To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.



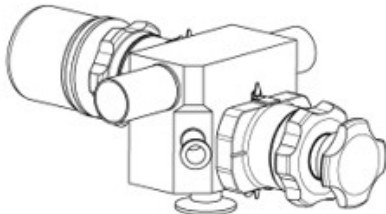
FRONT VIEW



SIDE VIEW

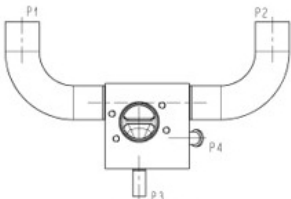


BOTTOM VIEW

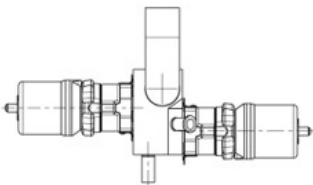


ISOMETRIC VIEW

U-Bend Tube Orientation: EVV

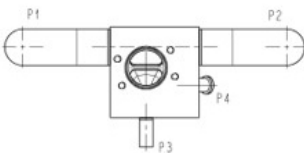


FRONT VIEW

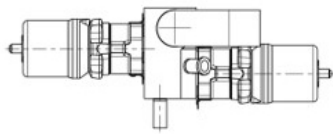


SIDE VIEW

U-Bend Tube Orientation: EHV



FRONT VIEW



SIDE VIEW

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

Zero Static Downstream Purge - Bottom (ZDPB)

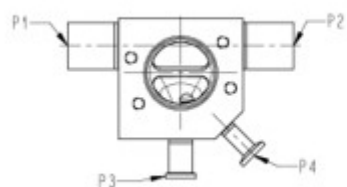
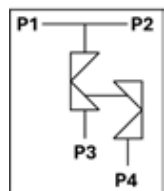
Zero Static Block Body, wrought stainless steel, 1" main valve with Tri-Clamp outlet, 2" tube with buttweld ends, .5" BioviZion purge with Tri-Clamp outlet on the right side of the valve, 20 Ra interior finish, standard exterior finish (Scotch Brite). Please note the ZDPB secondary valve outlet position is below the secondary valve weir.

Figure Number: ENV-ZDPB-1-EZ-419-2-428-.5-SVBV-419-R-W-SF1-1-0

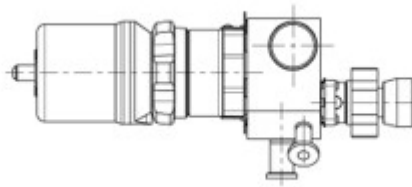
Configuration Example		ENV	ZDPB	1	EZ	419	2		428	.5	SVBV	419	R	W	SF1-1-0
Valve Body	Valve Platform	ENV													
	Block Type		ZDPB												
	Main Valve Size			1											
	Main Valve Type				EZ										
	Main Valve End Connection (P3)					419									
	Zerostatic Tube Size						2								
	U-Bend Tube Orientation ¹														
	Zerostatic Tube End Connection (P1, P2)							428							
	Second Valve Size								.5						
	Second Valve Type									SVBV					
	Second Valve End Connection (P4)										419				
	Second Valve Orientation											R			
	Body Material												W		
	Polish Selections														SF1-1-0

¹ For a U-Bend vertical tube and vertical valve, enter EVV. For horizontal tube and vertical valve, enter EHV. See drawings below for vertical tube and horizontal tube examples.

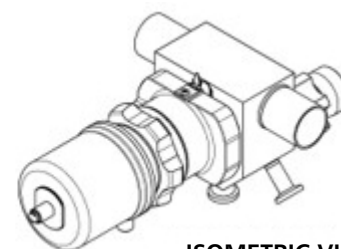
To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.



FRONT VIEW

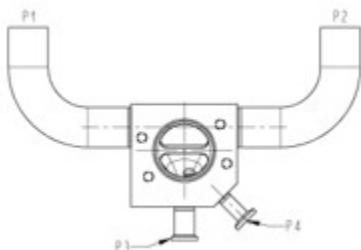


SIDE VIEW

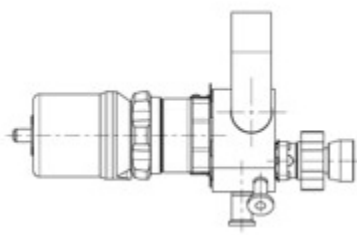


ISOMETRIC VIEW

U-Bend Tube Orientation: EVV

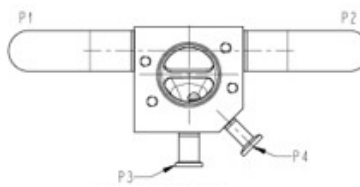


FRONT VIEW

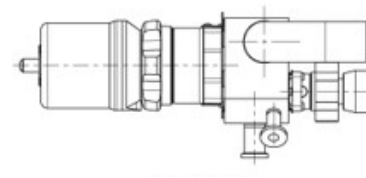


SIDE VIEW

U-Bend Tube Orientation: EHV



FRONT VIEW



SIDE VIEW

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

Zero Static Dual Inline (ZDI)

Zero Static Dual Inline, 1" wrought stainless steel main valve with Tri-Clamp outlet, 2" tube with butt weld ends, 1" EnviZion second valve, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-ZDI-1-EZ-419-2-428-1-SVEZ-W-SF1-1-0

Valve Body	Configuration Example	ENV	ZDI	1	EZ	419	2		428	1	SVEZ	W	SF1-1-0
	Valve Platform	ENV											
	Block Type		ZDI										
	Main Valve Size			1									
	Main Valve Type				EZ								
	Main Valve End Connection (P3)					419							
	Zerostatic Tube Size						2						
	U-Bend Tube Orientation ¹												
	Zerostatic Tube End Connection (P1, P2)							428					
	Second Valve Size								1				
	Second Valve Type									SVEZ			
	Body Material										W		
	Polish Selections												SF1-1-0

¹ For a U-Bend vertical tube and vertical valve, enter EVV. For horizontal tube and vertical valve, enter EHV.

To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.

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

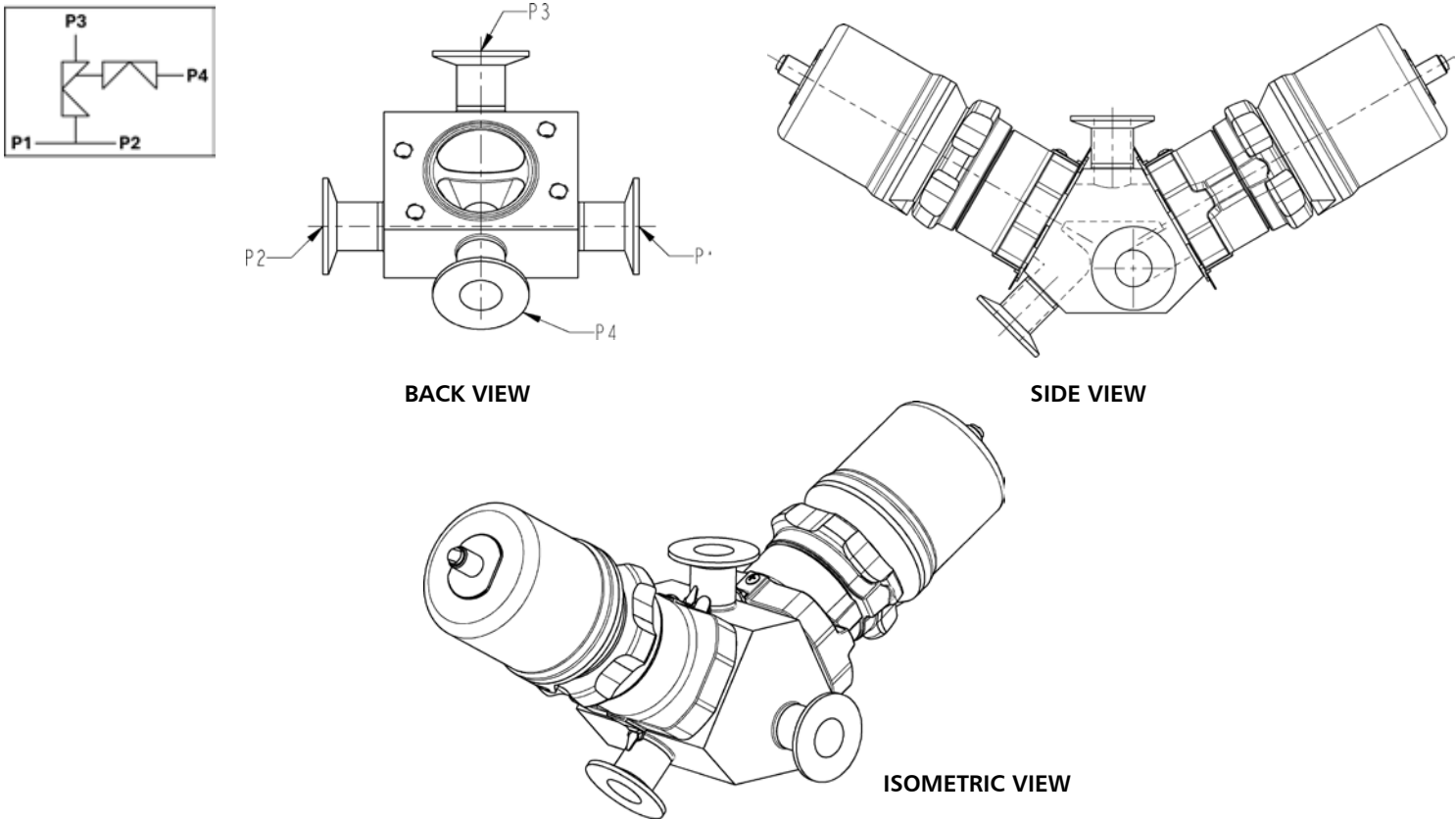
Zero Static Inverted with Drain (ZID)

Inverted Zero Static with Drain, wrought stainless steel, 1" main valve with Tri-Clamp outlet, 2" tube with buttweld ends, .5" BioviZion second valve Tri-Clamp outlet, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-ZID-1-EZ-419-2-428-.5-SVBV-419-W-SF1-1-0

Configuration Example		ENV	ZID	1	EZ	419	2	428	.5	SVBV	419		W	SF1-1-0
Valve Body	Valve Platform	ENV												
	Block Type		ZID											
	Main Valve Size			1										
	Main Valve Type				EZ									
	Main Valve End Connection (P3)					419								
	Zerostatic Tube Size						2							
	Zerostatic Tube End Connection (P1, P2)													
	Second Valve Size								.5					
	Second Valve Type									SVBV				
	Second Valve End Connection (P4)										419			
	Second Valve Outlet Orientation (optional)													
	Body Material												W	
Polish Selections														SF1-1-0

To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



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

Zero Static with Upstream Sample and Downstream Purge (ZUD)

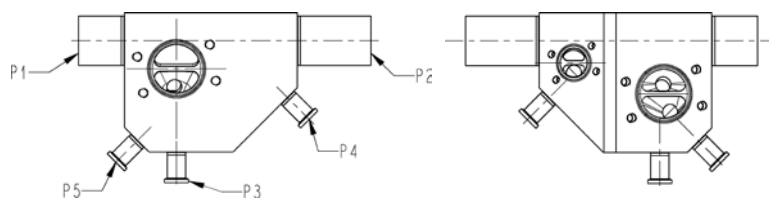
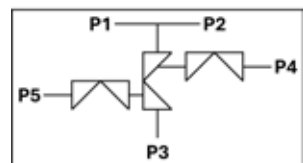
ZUD, wrought stainless steel body, 1" main valve with Tri-Clamp outlet, 0.5" BioviZion Upstream Sample (right side) and 0.5" BioviZion Downstream Purge. 2" Zero Static tube size with butt weld ends. (Sample valve with 0.75" reducing ferrule and purge valve with 0.5" Tri-Clamp end connection.) 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-ZUD-1-EZ-419-2-428-.5-SVBV-419R-R-0.5-TVBV-419-W-SF1-1-0

Configuration Example		ENV	ZUD	1	EZ	419	2		428	.5	SVBV	419R	R	0.5	TVBV	419	W	SF1-1-0
Valve Platform		ENV																
Block Type			ZUD															
Main Valve Size				1														
Main Valve Type					EZ													
Main Valve End Connection (P3)						419												
Zerostatic Tube Size							2											
U-Bend Tube Orientation ¹																		
Zerostatic Tube End Connection (P1, P2)								428										
Second/Sample Valve Size									.5									
Second Valve Type										SVBV								
Second Valve End Connection (P4)											419R							
Second Valve Outlet Orientation												R						
Third/Purge Valve Size													0.5					
Third Valve Type														TVBV				
Third Valve End Connection (P5)															419			
Body Material																W		
Polish Selections																		SF1-1-0

¹ For a U-Bend vertical tube and vertical valve, enter EVV. For horizontal tube and vertical valve, enter EHV. See drawings below for vertical tube and horizontal tube examples.

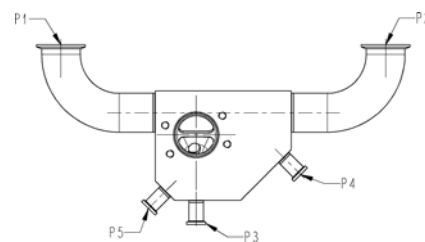
To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.



FRONT VIEW

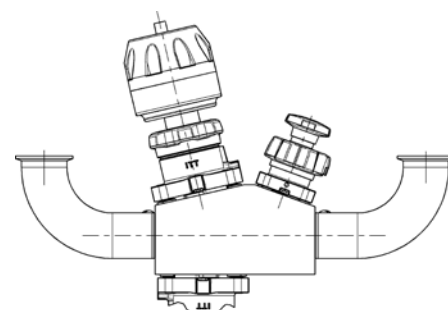
BACK VIEW

U-Bend Tube Orientation: EVV

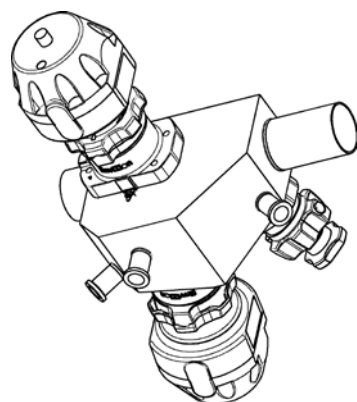


FRONT VIEW

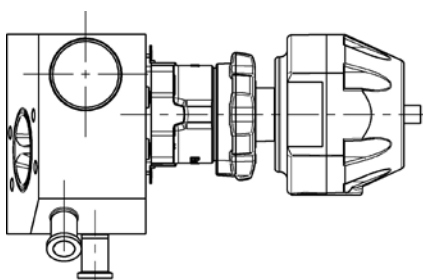
U-Bend Tube Orientation: EHV



TOP VIEW



ISOMETRIC VIEW



SIDE VIEW

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

Multiport Valves

Type of Valve

Code	Description
BBD	Block and Bleed Drain
BBV	Block and Bleed Vent
BYP	EnviZion Valve with Bypass Option
CHRO	Chromatography
CHN	Chromatography without Bypass
CRO	Cross over
CROD	Cross over with Drain Angle
DF	Dual Flow
DV2E	E-Series Divert Valve 2-way
DV2WS	Sterile Tank Vent Filter Shunt
DV3W	Divert Valve 3-way
DV4W	Divert Valve 4-way
DV5W	Divert Valve 5-way
DV6W	Divert Valve 6-way
HDV3W	Horizontal Divert Valve 3-way
IDSA	Integral Dual Sterile Access
IHSA	Integral Horizontal Sterile Access
INV_ISG	Inverted ISG
ISG	Integral Sterile Access GMP
SB1	Integral Sterile Barrier
VSPEC	Special Valve Type

Type

Code	Description
EZ	Main Valve EnviZion
SVBV	Second Valve BioviZion
SVEZ	Second Valve EnviZion
TVBV	Third Valve BioviZion
TVEZ	Third Valve EnviZion

Outlet Option

Code	Description
1	Outlet Configuration 1
2	Outlet Configuration 2
3	Outlet Configuration 3
4	Outlet Configuration 4
5	Outlet Configuration 5
6	Outlet Configuration 6
7	Outlet Configuration 7
8	Outlet Configuration 8
OSPEC	Special Outlet Configuration

Note: Refer to the drawing that corresponds to the type chosen

Material

Code	Description
W	Wrought 316L
WA	Wrought AL6XN
WC2	Wrought C-22
WC6	Wrought C-276
WT	Wrought Titanium
BSPEC	Special Material

Flow Through (Optional)

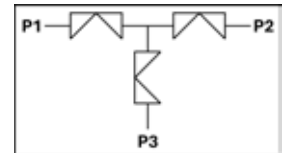
Code	Description
DVFT	Divert Flow-Through

Block and Bleed Valve (BBD, BBV)

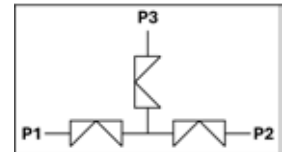
Block and Bleed, wrought stainless steel, 1.5" main valve with buttweld end, 1.5" second valve with buttweld end, 1" third valve with Tri-Clamp ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-BBD-1.5-EZ-428-1.5-SVEZ-428-1-TVEZ-419-W-SF1-1-0

Configuration Example		ENV	BBD	1.5	EZ	428	1.5	SVEZ	428	1	TVEZ	419	W	SF1-1-0
Valve Platform		ENV												
Block Type			BBD											
Main Valve Size				1.5										
Main Valve Type				EZ										
Main Valve End Connection (P3)					428									
Second Valve Size						1.5								
Second Valve Type						SVEZ								
Second Valve End Connection							428							
Third Valve Size								1						
Third Valve Type								TVEZ						
Third Valve End Connection									419					
Zerostatic Tube Size												W		
U-Bend Tube Orientation ¹														SF1-1-0



BBD

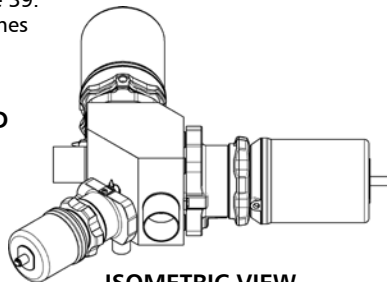


BBV

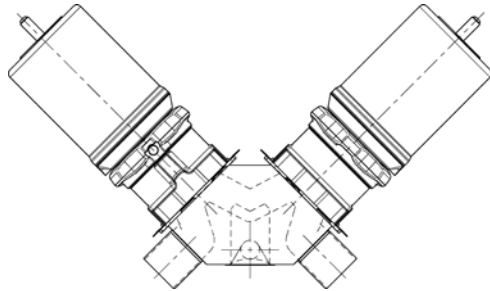
¹ Contact the factory for additional options for discrete end connection selections.

To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.

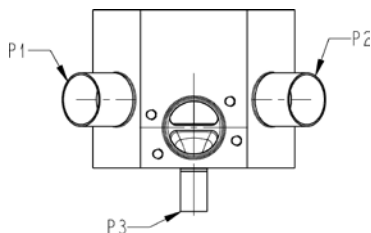
BBD



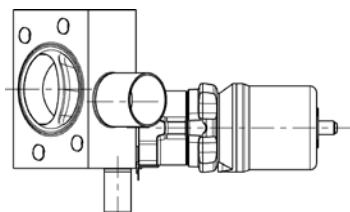
ISOMETRIC VIEW



TOP VIEW

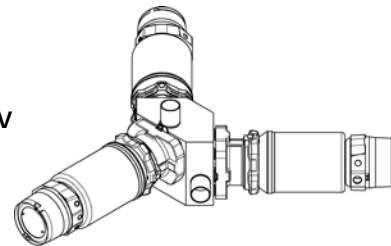


FRONT VIEW

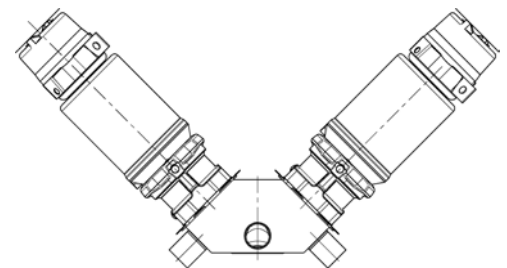


SIDE VIEW

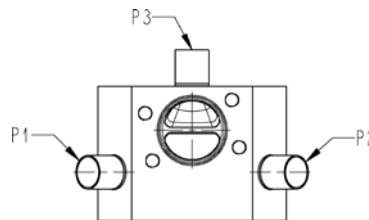
BBV



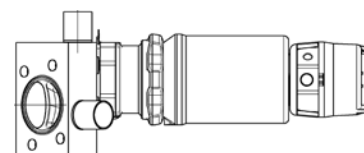
ISOMETRIC VIEW



TOP VIEW



FRONT VIEW



SIDE VIEW

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

Bypass Valve (BP)

1" wrought stainless steel valve with BioviZion bypass, Tri-Clamp ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-BP-1-EZ-419-.25-SVBV-W-SF1-1-0

Valve Body	Configuration Example	ENV	BP	1	EZ	419	.25	SVBV	W	SF1-1-0
	Valve Platform	ENV								
	Block Type		BP							
	Valve Size			1						
	Valve Type				EZ					
	Body End Connections (P1, P2)					419				
	Second Valve Size ¹						.25			
	Second Valve Type							SVBV		
	Body Material								W	
	Polish Selections									SF1-1-0

¹ 1/4" standard bypass valve size (internal passage diameter .18"). Consult the factory for additional bypass valve sizes.

To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.

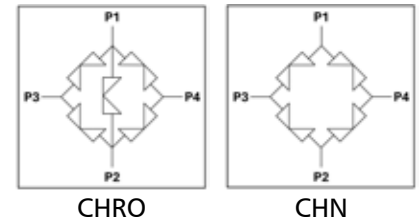
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Chromatography Valve (CHRO, CHN)

1" Chromatography Valve with Bypass, wrought stainless steel body, Tri-Clamp ends, standard mounting holes, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-CHRO-1-EZ-419-W-SF1-1-0

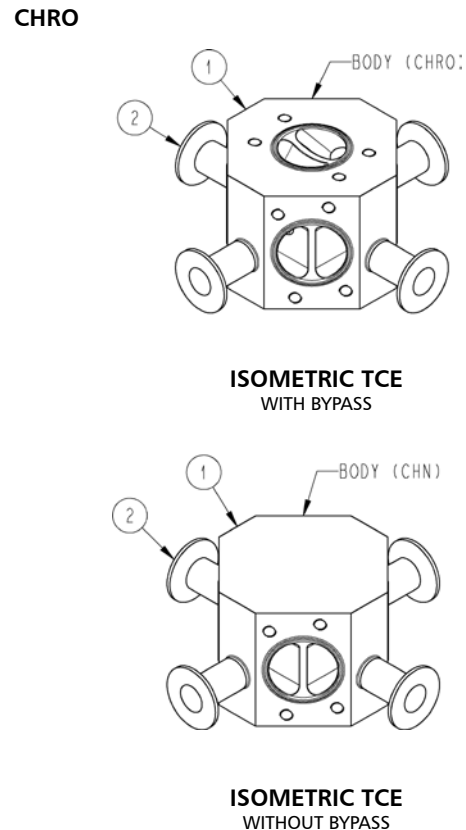
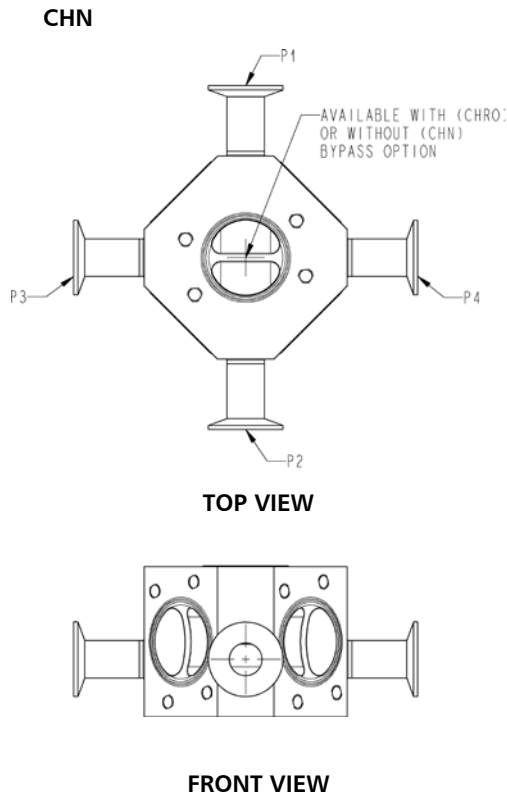
Valve Body	Configuration Example	ENV	CHRO	1	EZ	419	W	SF1-1-0
	Valve Platform	ENV						
	Block Type ¹		CHRO					
	Valve Size			1				
	Valve Type				EZ			
	End Connections (P1, P2, P3, P4)					419		
	Body Material						W	
	Standard Mounting ²							
	Polish Selections							SF1-1-0



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

² 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 topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



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

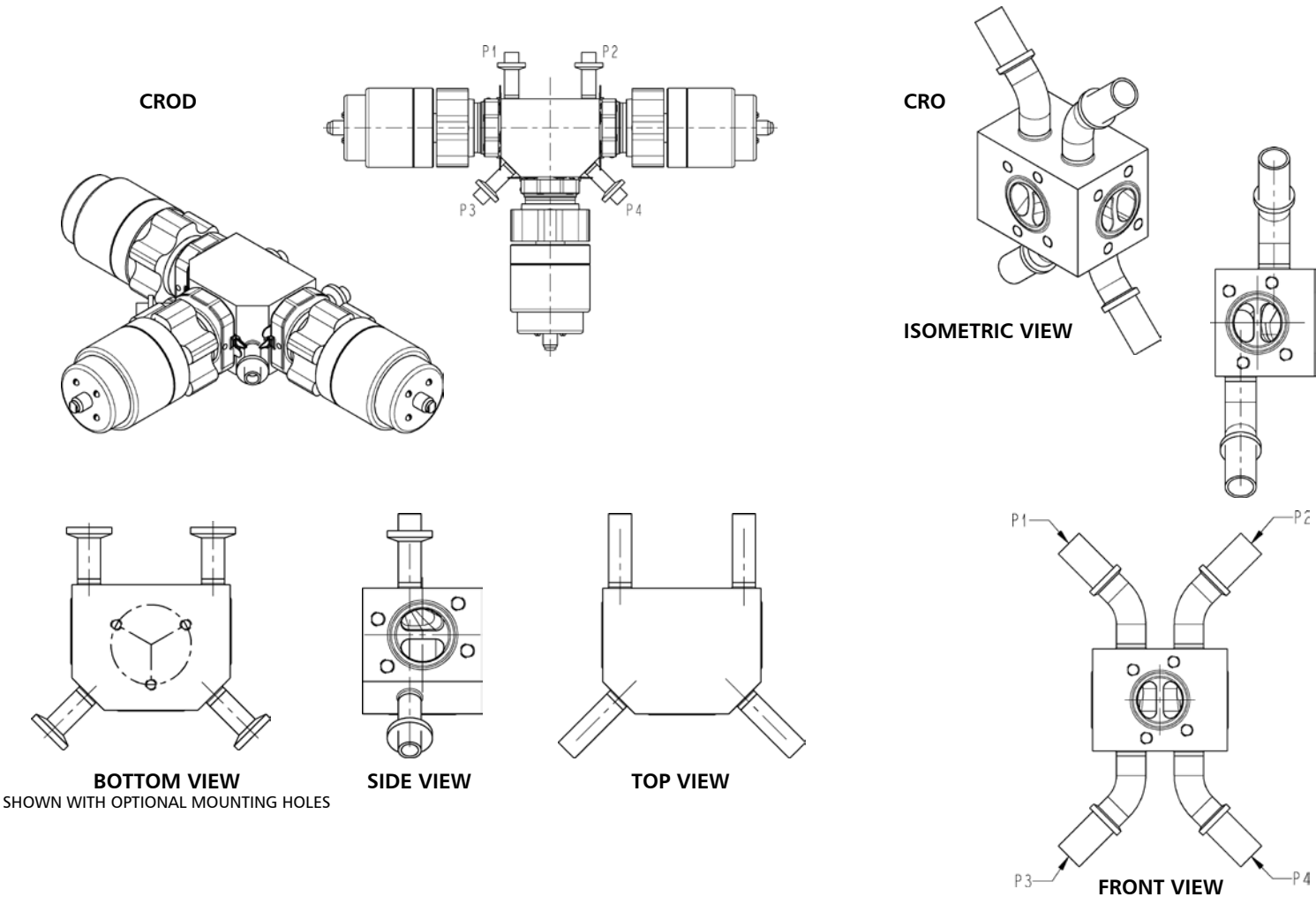
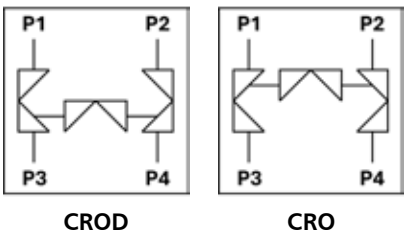
Crossover Valve (CROD, CRO)

1" Crossover with Drain Angle, wrought stainless steel body, Tri-Clamp ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-CROD-1-EZ-419-W-SF1-1-0

Valve Body	Configuration Example	ENV	CROD	1	EZ	419	W	SF1-1-0
	Valve Platform	ENV						
	Block Type		CROD					
	Valve Size			1				
	Valve Type				EZ			
	End Connections (P1, P2, P3, P4)					419		
	Body Material						W	
	Polish Selections							SF1-1-0

To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



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

Multiport Divert Valves (DV2E, DV3W, DV4W, DV5W, DV6W)

2-Way

2-Way Divert Valve with a 1" wrought stainless steel body, inlet and outlets have Tri-Clamp ends, outlet is Option 4, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-DV2E-1-EZ-4-419-W-SF1-1-0

Valve Body	Configuration Example	ENV	DV2E	1	EZ	4		419				W		SF1-1-0
	Valve Platform	ENV												
	Block Type		DV2E											
	Valve Size			1										
	Valve Type				EZ									
	Outlet Option					4								
	Common Port Size ¹							419						
	End Connections (P1, P2, P3, P4 or P2, P3, P4) ²								419					
	Common Port End Connections (P1) ³													
	Body Material											W		
	Mounting Holes ⁴													
	Polish Selections													SF1-1-0

3-Way Through 6-Way

3-Way Divert Valve with a 1.5" wrought stainless steel body, inlet and outlets have Tri-Clamp ends, outlet is Option 4, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-DV3W-1.5-EZ-4-419-W-SF1-1-0

Valve Body	Configuration Example	ENV	DV3W	1.5	EZ	4		419				W		SF1-1-0
	Valve Platform	ENV												
	Block Type ⁵		DV3W											
	Valve Size			1.5										
	Valve Type				EZ									
	Outlet Option					4								
	Common Port Size ¹							419						
	Divert Valve Flow Through ⁶								419					
	End Connections ²													
	Common Port End Connections (P1) ³													
	Body Material											W		
	Mounting Holes ⁴													
	Polish Selections													SF1-1-0

¹ 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.

² Contact the factory for discrete end connection selections.

³ Common Port End Connection - provides the option of a different end connection for the Common Port (P1).

⁴ Contact factory for mounting options.

⁵ Figure numbers for Block Type: 3-Way - DV3W, 4-Way - DV4W, 5-Way - DV5W, 6-Way - DV6W.

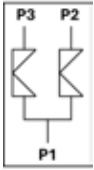
Note: Combinations with more than six diverted ports are possible but are typically not recommended due to the internal deadleg.

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

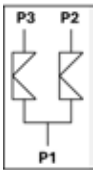
To add topwork(s) see page 39.

For topwork options, switches
and accessories see page 5.

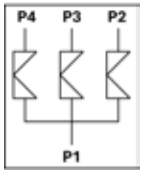
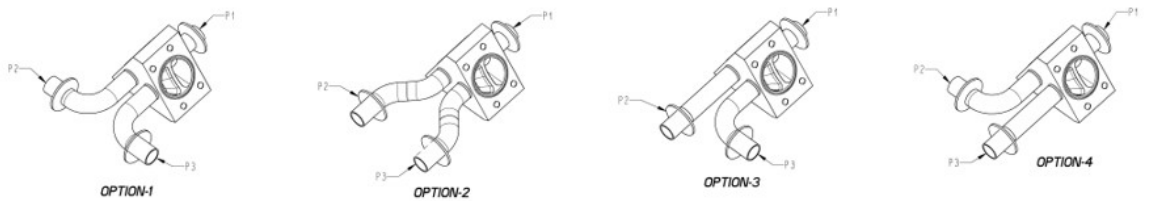
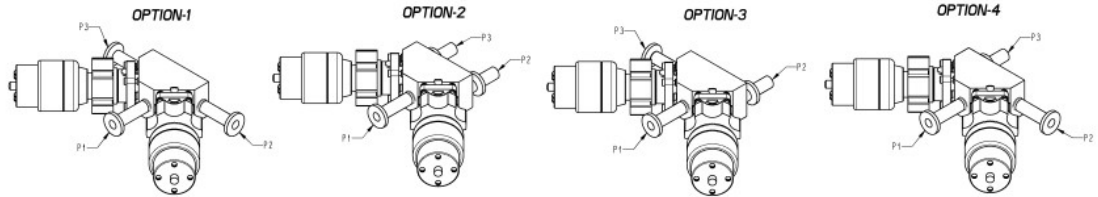
Multiport Divert Valves (DV2E, DV3W, DV4W, DV5W, DV6W) Drawings



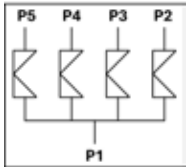
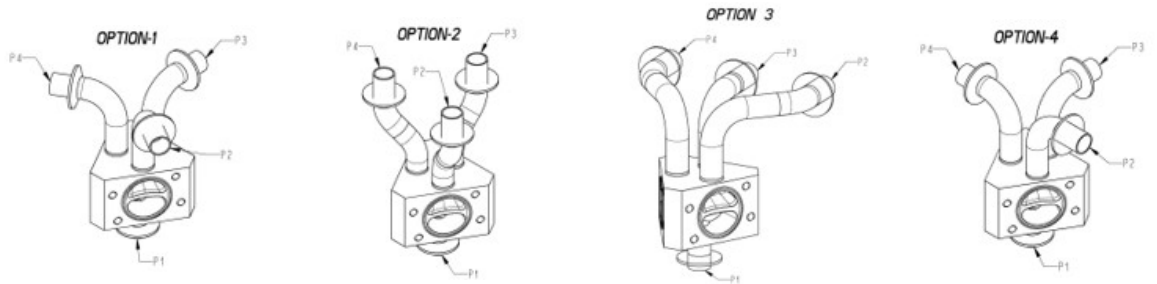
2DV BIOVIZION



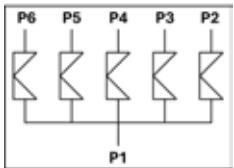
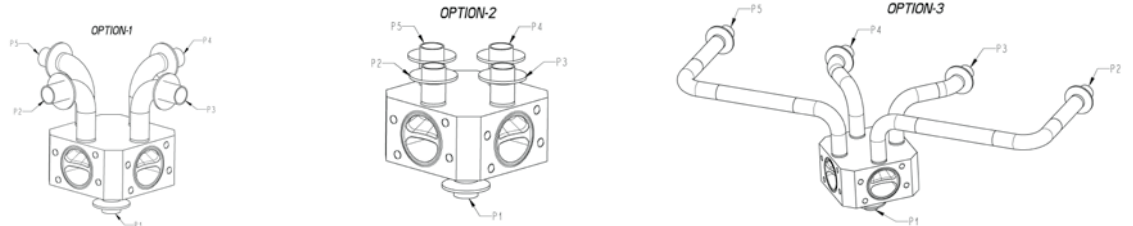
2DV ENVIZION



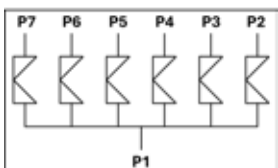
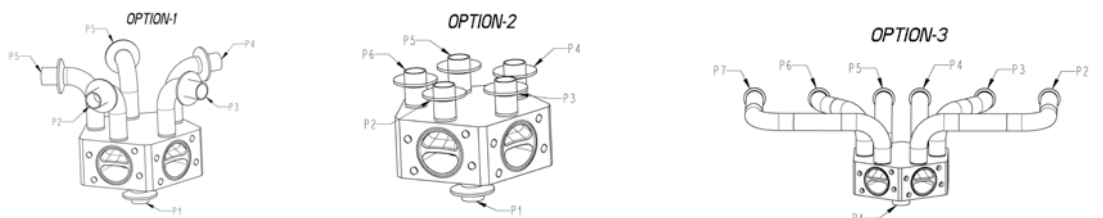
3DV ENVIZION



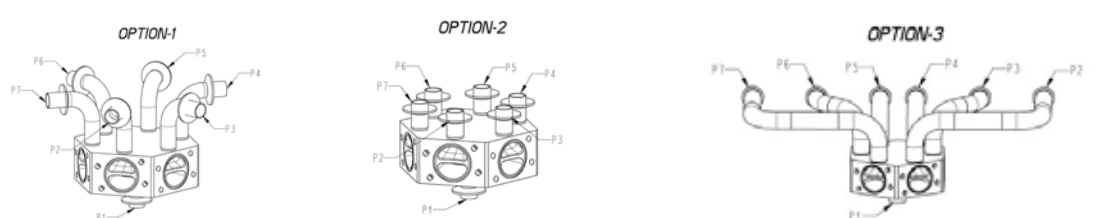
4DV



5DV



6DV



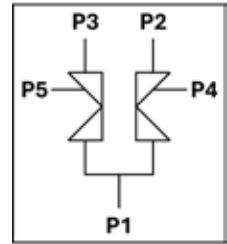
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Sterile Tank Vent Filter Shunt (DV2WS)

Sterile Tank Vent Filter Shunt with a 1.5" wrought stainless steel body, inlet and outlets have Tri-Clamp ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-DV2WS-1.5-EZ-419-W-SF1-1-0

Valve Body	Configuration Example	ENV	DV2WS	1.5	EZ		419	W	SF1-1-0
	Valve Platform	ENV							
	Block Type		DV2WS						
	Valve Size ¹			1.5					
	Valve Type				EZ				
	Common Port Size (P1) ²								
	End Connections (P1, P2, P3, P4)						419		
	Body Material							W	
	Polish Selections								SF1-1-0



¹ Standard sizes: 1.5" and 2"

² Common Port Size option provides increased clamp size to connect directly to an available tank port.

Valve Size: 1.5" and 2"

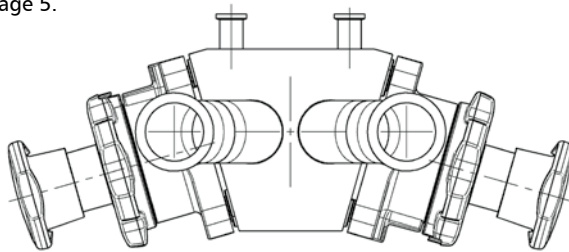
Optional Common Port Size for 1.5: 2", 2.5", 3", 4"

Optional Common Port Size for 2: 2.5", 3", 4"

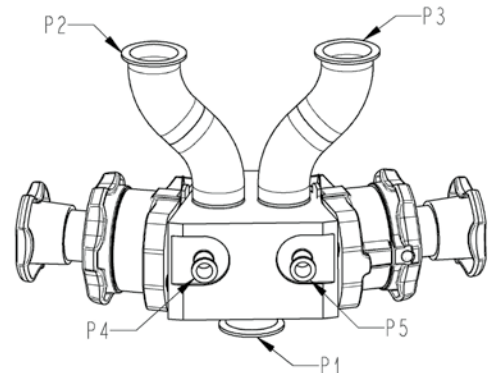
Consult the factory for non-jacketed versions available for use with steam.

To add topwork(s) see page 39.

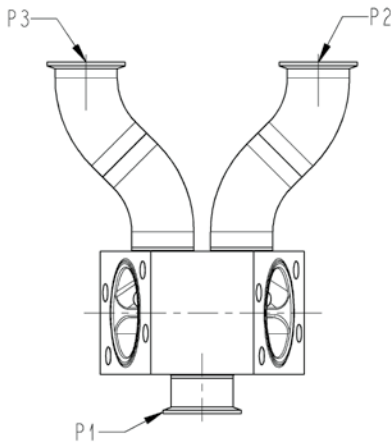
For topwork options, switches and accessories see page 5.



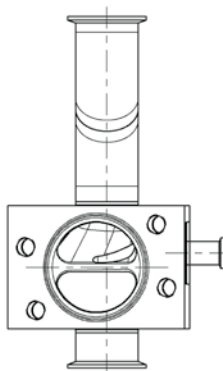
TOP VIEW



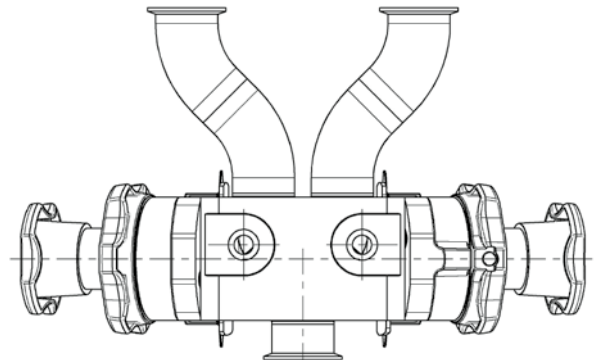
ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW



BACK VIEW

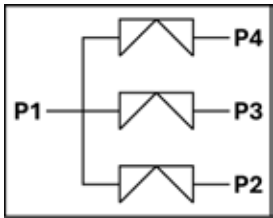
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Horizontal Divert Valve 3-Way (HDV3W)

2" Horizontal Divert Valve 3-Way, wrought stainless steel body, butt weld ends, common port (P1) on the right (when facing the weir of the third valve), 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-HDV3W-2-EZ-428-R-W-SF1-1-0

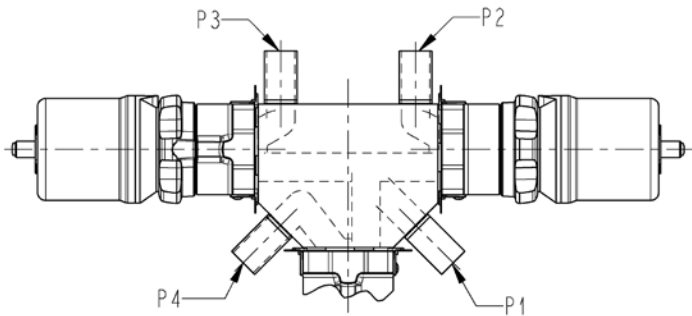
Valve Body	Configuration Example								
	Valve Platform	ENV	HDV3W	2	EZ	428	R	W	SF1-1-0
	Block Type	HDV3W							
	Valve Size		2						
	Valve Type			EZ					
	Valve Connections (P1, P2, P3, P4) ¹				428				
	Valve Orientation ²					R			
	Body Material						W		
	Polish Selections								SF1-1-0



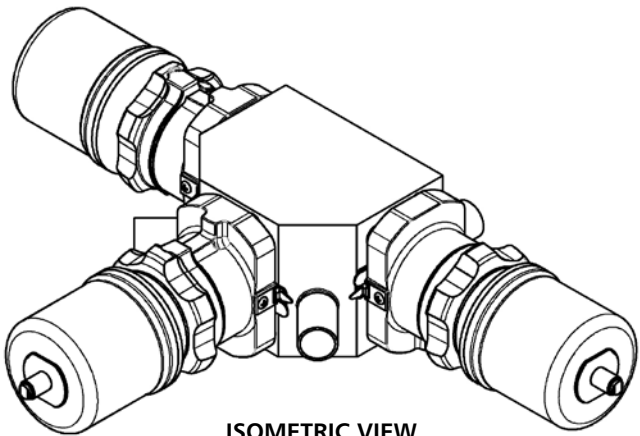
¹ Contact the factory for discrete end connection options.

² This determines which side (right or left) the Common Port (P1) is on when viewing from the top (See Top View below, Right orientation shown).

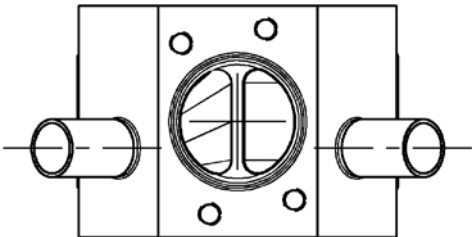
To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



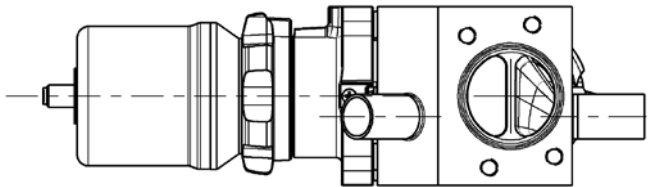
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

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

Integral Dual Sterile Access (IDSA)

2" Integral Dual Sterile Access, wrought stainless steel, Tri-Clamp ends, 1" Second valve (P1 side) is oriented down, 1" Third valve (P2 side) is oriented down, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-IDSA-2-EZ-419-1-SVEZ-D-1-TVEZ-D-W-SF1-1-0

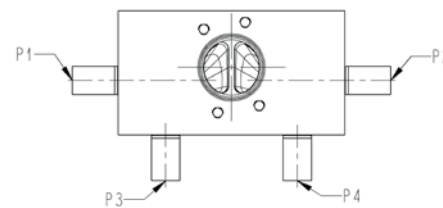
Configuration Example	ENV	IDSA	2	EZ	419	1	SVEZ		D	1	TVEZ		D	W	SF1-1-0
Valve Platform	ENV														
Block Type		IDSA													
Main Valve Size			2												
Main Valve Type				EZ											
Main Valve End Connections (P1, P2)					419										
Second Valve Size						1									
Second Valve Type							SVEZ								
Second Valve End Connection (P3) ¹									D						
Second Valve Outlet Orientation ²										1					
Third Valve Size											TVEZ				
Third Valve Type															
Third Valve End Connection (P4) ¹												D			
Third Valve Outlet Orientation ²															
Body Material														W	
Polish Selections															SF1-1-0

¹ Specify second (P3) and third (P4) end connections if they differ from those for the main valve (P1, P2).

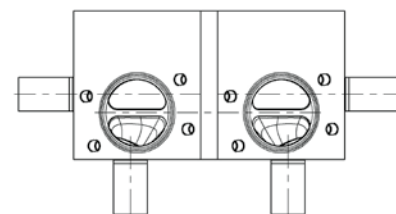
² See P&ID below for second and third valve orientation options

To add topwork(s) see page 39.

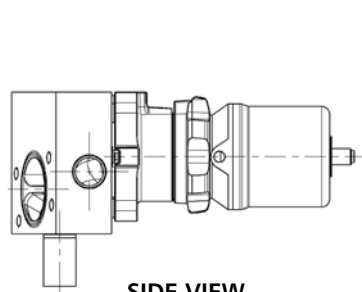
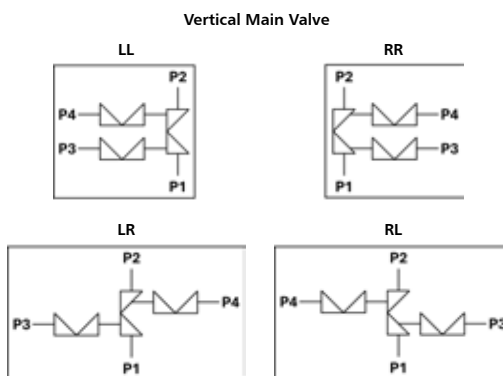
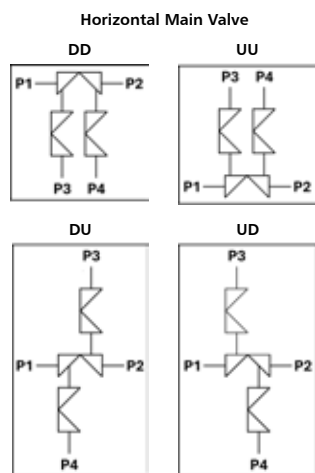
For topwork options, switches and accessories see page 5.



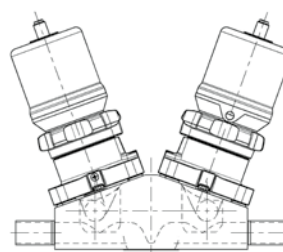
FRONT VIEW



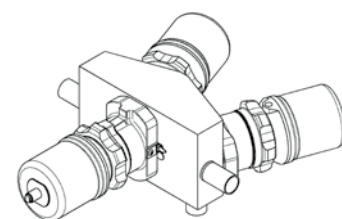
BACK VIEW



SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

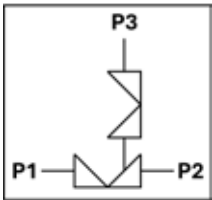
Please contact the factory for the latest drawing and dimensional information. The above drawing should only be used as a general reference.

Integral Horizontal Sterile Access (IHSA)

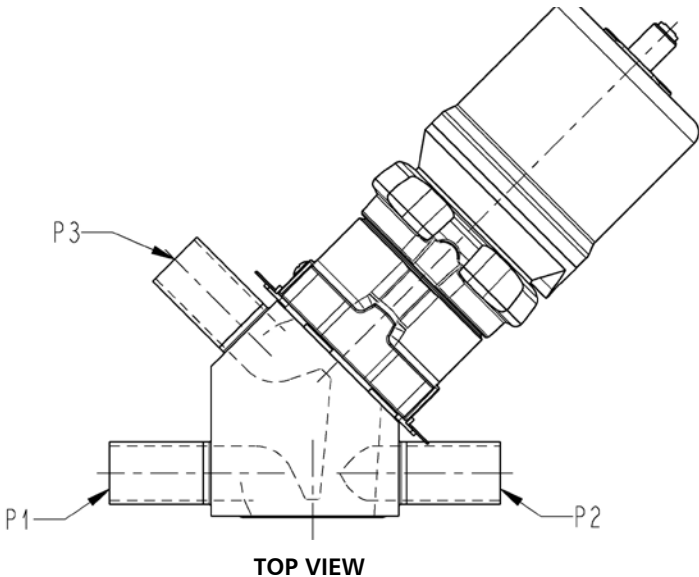
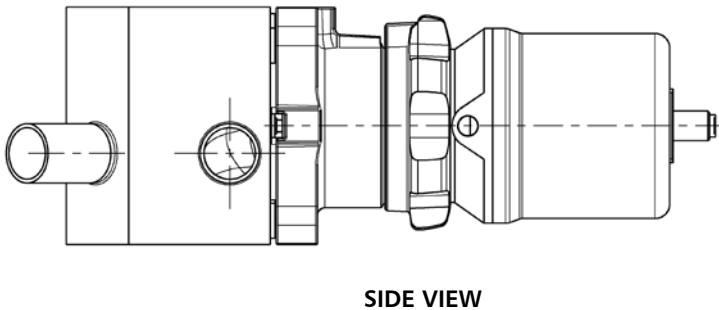
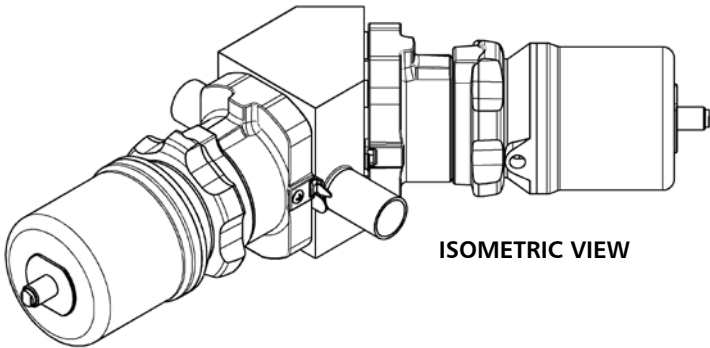
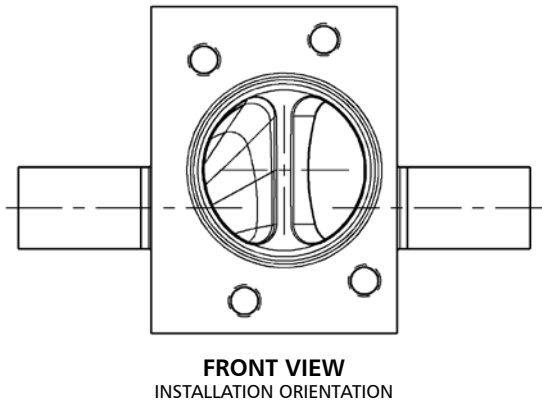
Integral Horizontal Sterile Access valve with a 1" wrought stainless steel body, 1" secondary valve ported on right hand side, all outlets have buttweld ends, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-IHSA-1-EZ-428-1-SVEZ-428-R-W-SF1-1-0

Configuration Example		ENV	IHSA	1	EZ	428	1	SVEZ	428	R	W	SF1-1-0
Valve Body	Valve Platform	ENV										
	Block Type		IHSA									
	Main Valve Size			1								
	Main Valve Type				EZ							
	Main Valve End Connections (P1, P2)					428						
	Second Valve Size						1					
	Second Valve Type							SVEZ				
	Second Valve End Connection (P3)								428			
	Second Valve Orientation									R		
	Body Material										W	
	Polish Selections											SF1-1-0



To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



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

Integral Sterile Access and GMP (ISG, INV_ISG)

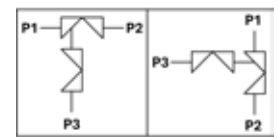
Integral Sterile Access and GMP valve, wrought stainless steel body, option 2, 1.5" main valve with Tri-clamp ends, .5" BioviZion second valve with buttweld end, 20 Ra interior finish, standard exterior finish (Scotch Brite).

Figure Number: ENV-ISG-1.5-EZ-2-.5-SVBV-R-W-SF1-1-0

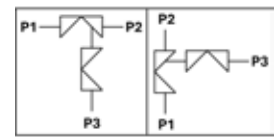
Configuration Example		ENV	ISG	1.5	EZ	2	.5	SVBV	R	W	SF1-1-0
Valve Body	Valve Platform	ENV									
	Block Type		ISG								
	Main Valve Size			1.5							
	Main Valve Type				EZ						
	Outlet Option					2					
	Second Valve Size						.5				
	Second Valve Type							SVBV			
	Valve Orientation ¹								R		
	Body Material									W	
	Polish Selections										SF1-1-0

¹ Second valve ported on the left or right side of main valve weir.

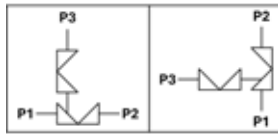
To add topwork(s) see page 39.
For topwork options, switches
and accessories see page 5.



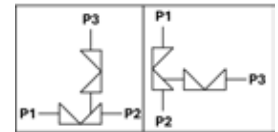
ISG-Left



ISG-Right

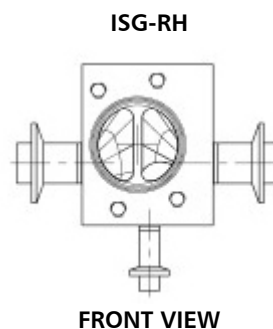
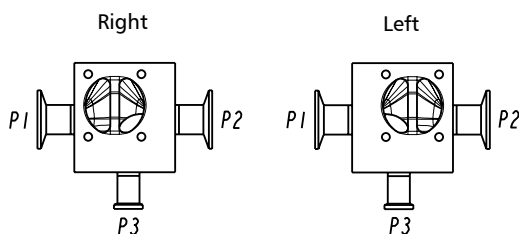
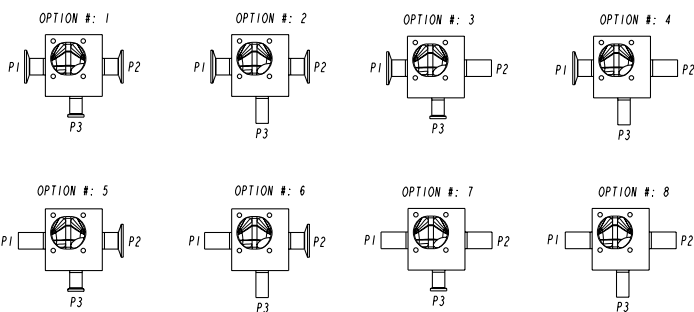


INV_ISG-Left

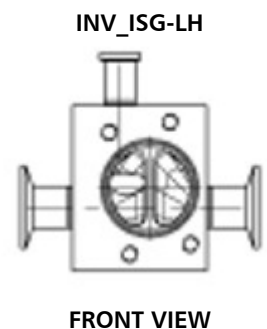


INV_ISG-Right

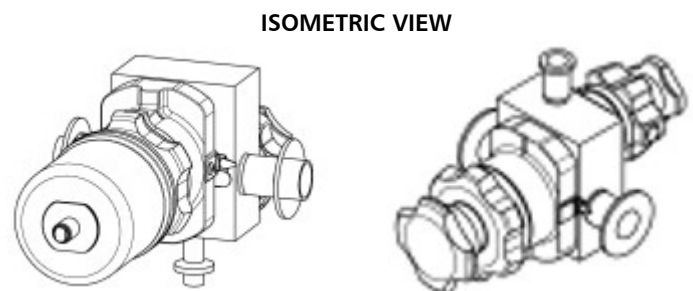
End Connection Options



FRONT VIEW



FRONT VIEW



ISOMETRIC VIEW

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

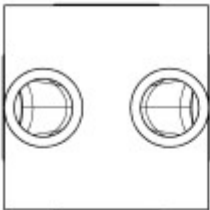
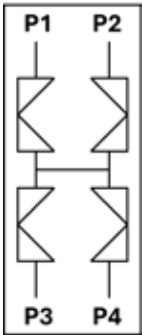
Integral Sterile Barrier (SB1)

1" Integral Sterile Barrier, wrought stainless steel, Tri-Clamp end connections, 20 Ra interior finish, standard exterior finish (Scotch Brite).

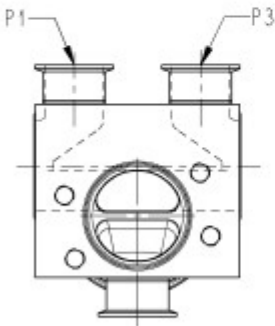
Figure Number: ENV-SB1-1-EZ-419-W-SF1-1-0

Configuration Example		ENV	SB1	1	EZ	419	W	SF1-1-0
Valve Body	Valve Platform	ENV						
	Block Type		SB1					
	Process Valve Size			1				
	Main Valve Type				EZ			
	Body End Connections (P1, P2, P3, P4)					419		
	Body Material						W	
	Polish Selections							SF1-1-0

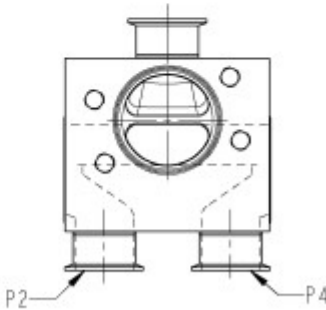
To add topwork(s) see page 39.
For topwork options, switches and accessories see page 5.



TOP VIEW



FRONT VIEW



SIDE VIEW

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

How to Order Topworks for Block Body Valves

1" manual topwork with bonnet gaurd, TMZ PTFE diaphragm, no valve body.

Figure Number: ENV-1-N-TMZ-ZH-EBG

Manual Topwork and Accessories	Configuration Example	ENV	1	N	TMZ	ZH	EBG	
	Valve Platform	ENV						
	Valve Size		1					
	Body (Not supplied)			N				
	Diaphragm				TMZ			
	Manual Topwork					ZH		
	Topwork Options						EBG	
	Electropolish Topworks							

¹ Multiple selections allowed

1.5" stainless steel fail-closed actuator with TMZ PTFE diaphragm, ISP limit switch, no valve body.

Figure Number: ENV-1.5-N-TMZ-ZA2-ISP-3W-HZ

Actuated Topwork and Accessories	Configuration Example	ENV	1.5	N	TMZ	ZA2					ISP-3W-HZ
	Valve Platform	ENV									
	Valve Size		1.5								
	Body (Not supplied)			N							
	Diaphragm				TMZ						
	Actuated Bonnet					ZA2					
	Electropolish Topworks										
	Actuated Topwork										
	Topwork Options										
	Switch Options										ISP-3W-HZ

¹ Multiple selections allowed.

Example of a complete figure number for block body valve and topworks:

ENV-ISG-1.5-EZ-1-.5-SVBV-R-W-SF1-1-0

1.5-N-TMZ-ZA2-ISP-3W-HZ

ENV-1-N-TMZ-ZH

EnviZion block body valve drawings are available.

Go to our website (<https://www.engvalves.com/tools-and-resources/drawings/hygienic-diaphragm-drawings/envizion-drawings>) for more information.

Others available upon request.



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

ITT Engineered Valves
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Tel: +1 (662) 256-7185

Fabri-Valve

ITT Bornemann GmbH
31683 Obernkirchen
Germany
Tel: +49 5724 390-0

EnviZion, Pure-Flo

