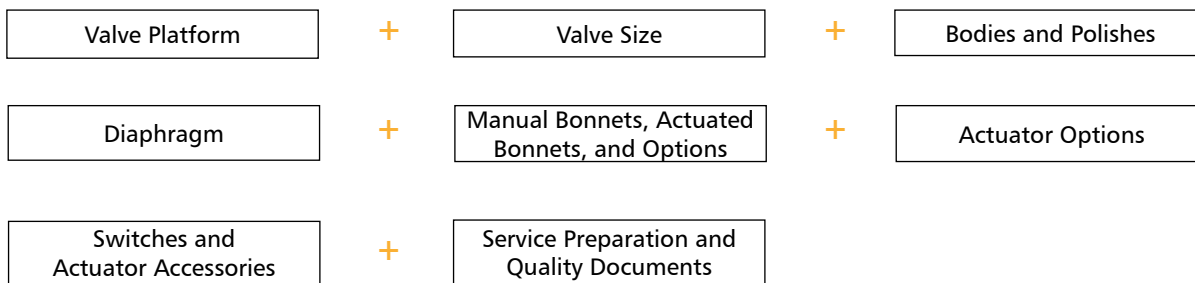


## EnviZion Valve Ordering Guide

### 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-419-6-0-0-TMZ-ZH

Detailed description:

1: 1 inch size (DN25)  
F: Forged 316L SS  
419: Triclamp Tube  
6: Interior Finish: Ra 25 Microinch Max  
0: Exterior Finish: No Mechanical Polish  
0: No Electropolish  
TMZ: Modified PTFE Diaphragm (FDA)/ Grade B1 B.C.  
ZH: EnviZion zero torque handwheel

#### Figure Number Example - Actuated Valve

**Figure Number:** ENV-1-F-428L-6-0-0-TMZ-ZA1-VSPS48

Detailed description:

1: 1 inch size (DN25)  
F: Forged 316L SS  
428L: 16 Gauge Extended Tangent Butt weld  
6: Interior Finish: Ra 25 Microinch Max  
0: Exterior Finish: No Mechanical Polish  
0: No Electropolish  
TMZ: Modified PTFE Diaphragm (FDA)/ Grade B1 B.C.  
ZA1: EnviZion zero torque actuator - fail open  
VSPS48: Value Switch Package, Silver Contacts 48V

#### Valve Platform

Platform	
Code	Description
ENV	EnviZion valve

#### Valve Size

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

**Figure Number:** ENV-1

Configuration Example	ENV	1
Valve Platform	ENV	
Valve Size		1

# EnviZion Valve Ordering Guide

## Bodies and Polishes

### Body Type

Code	Description
F	Forged 316L Stainless Steel
N	Body Not Supplied
TBV	Tank Bottom Valve
TBVCR	Tank Bottom Valve 316L BN2
W	Wrought 316L Stainless Steel
Spec	Special Material Body

### Body Ends

Code	Description
<b>Clamp</b>	
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
<b>Buttweld</b>	
422	Sch. 5 Pipe (ISO Body)
423	18 Gauge
424	20 Gauge
425	Sch. 5 Pipe (ANSI Body)
426	Sch. 10 Pipe
428	16 Gauge
428L	16 Gauge Ext. Tangent BW
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

Code	Description
<b>Clamp</b>	
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
<b>Buttweld</b>	
X22	By Sch. 5 Pipe (ISO Body)
X23	By 18 Gauge
X24	By 20 Gauge
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

### Tube Extension

Code	Description
TE1	Valve End 1
TE2	Valve End 2
TEA	Both Valve Ends & Purge End
TEB	Both Valve Ends
TEP	Purge End
TE1P	Valve End (P1) & Purge (P3)
TE2P	Valve End (P2) & Purge (P3)

### Mechanical Polish - Interior

Code	Description
6	25 $\mu$ m Ra (.6 $\mu$ m) max
7	15 $\mu$ m Ra (.38 $\mu$ m) max
8	20 $\mu$ m Ra (.5 $\mu$ m) max
10	10 $\mu$ m Ra (.25 $\mu$ m) max
SF1	BPE SF1 Ra 20 Max
SF2	BPE SF2 Ra 25 Max
SF3	BPE SF3 Ra 30 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	As Cast
1	Scotch Brite
2	25 $\mu$ m Ra (.6 $\mu$ m) max, Welds Scotch Brite
3	35 $\mu$ m Ra (.8 $\mu$ m) max, Welds Scotch Brite
4	25 $\mu$ m Ra (.6 $\mu$ m) max, Welds Removed
6	35 $\mu$ m Ra (.8 $\mu$ 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

Figure Number: ENV-1-F-428L-6-0-0-

Configuration Example		F	428L			6	0	0	
Bodies and Polishes	Block Type	F							
	Body Ends		428L						
	Second End Code								
	Tube Extension								
	Mechanical Polish - Interior					6			
	Mechanical Polish - Exterior							0	
	Electropolish								0
	Body Only								

# EnviZion Valve Valve Ordering Guide

## Diaphragms

### Diaphragms

Code	Description
TMZ	PTFE (FDA) Grade B1 B.C.

Figure Number: ENV-1 -F-428L-6-0-0-TMZ-

Configuration Example	TMZ
Diaphragm	TMZ

## Manual Bonnets

### Manual Bonnets

Code	Description
ZH	EnviZion Zero torque Manual
ZHS	EnviZion Zero torque Manual sealed

## Actuated Bonnets and Options

### Actuated Bonnets

Code	Description
ZA1	EnviZion Zero torque Actuator - FO
ZA2	EnviZion Zero torque Actuator - FC (90#)
ZA3	EnviZion Zero torque Actuator - DA
ZA1S	EnviZion Zero torque Actuator - FO sealed
ZA2S	EnviZion Zero torque Actuator- FC (90#) sealed
ZA3S	EnviZion Zero torque Actuator - DA sealed

### Weep Holes

Code	Description
W2	Two Weep Holes in Bonnet
W4	Four Weep Holes in Bonnet (3A Internals Only)

### Electropolish Topworks

Code	Description
1	Topworks
1S	Advantage Spool

Figure Number: ENV-1-F-428L-6-0-0-TMZ-ZA1

Bonnets	Configuration Example	ZA1			
	Manual Bonnets	ZA1			
	Actuated Bonnets				
	Weep Holes				
	Electropolish Topworks				

## Switches and Actuator Accessories

### Switch Package SP-2

Code	Description
SP2S	Silver Contacts - Mechanical
SP2SEU	Silver De-Rate to 70VD-C/48VAC Max for EU Service - Mechanical
SP2G	Gold Contacts - Mechanical
SP2GEU	Gold De-Rated to 70VD-C/48VAC Max for EU Service - Mechanical
SP2Z	2-Wire Proximity
SP2N	NAMUR Proximity
SP2P	3-Wire PNP Proximity
SP2NP	3 Wire NPN Proximity
SP2B	Effector IS-2002-AROA Proximity

### Limit Switches (cont.)

Code	Description
LS13	Westlock 9880
LS14	Westlock E9880
LS15	Westlock 99920-AB
LS16	Westlock 98810002BI
LS17	Westlock 98810002EI
LS41	Efactor IN0117
LS42	Efactor IN5331
LS78	StoneL PM3311SO2RS
LS79	StoneL PM3311SO2RL
LS128	Westlock 99P21A00000
LS129	Westlock 99P21AD550
LS140	Westlock 99P22G00000
LSSpec	Special

### Mechanical Accessories

Code	Description
AO	Adjustable Opening Stop

### Actuator Hardware Options

Code	Description
HW3	SS Tubing and Fittings
HW4	Plastic Tubing /Brass Fittings
HW5	PVC Coated Tubing /Brass Fittings
HW6	PVC Coated Tubing /SS 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
SC2	Whitey needle valve SS-1RMA
SCSpec	Special

### Filter Regulators

Code	Description
FR1	Conoflow GFH60XTKEG3G
FR1X2	Two Conoflow GFH60XT-KEG3G
FR2	Fisher 67FR
FR2X2	Two Fisher 67FR
FRSpec	Special

# Envizion Valve Ordering Guide

## Switches and Actuator Accessories (cont.)

Transducer		Positioners		Signal Ranges	
Code	Description	Code	Description	Code	Description
TR1	Conoflow GT2108ED	PR1	Conoflow Model 31	SR1	3-15 PSI
TR1630	Conoflow GT6108ED	PR2	Conoflow Model 33	SR2	6-30 PSI
TRIPH	Moore IP- H/4-20MA/3-15PSIG/20PSI/ FR1/WDNS	PR3	Moore 73NF	SR3	3-9 PSI
TRWS	Watson Smith S3-4904-3XR	PR4	Moore 73 NB	SR4	9-15 PSI
TRSpec	Special	PR5	Moore 73 NR		
		PR6	Conoflow P50		
		PR7	Conoflow P51		
		PR8	Conoflow P52		
		PRSpec	Special		

Junction Box	
Code	Description
JB	Junction Box: Standard
JBSpec	Special

Figure Number: ENV-1-F-428L-6-0-0-TMZ-ZA1-VSPS48-

Switches and Actuator Accessories	Configuration Example	VSPS48										
Switch Packages (select 1):		VSPS48										
SP2		VSPS48										
VSP												
Limit Switches - Special												
Mechanical Accessories												
Actuator Hardware Options												
Solenoid Valve												
Solenoid Voltage												
Speed Controllers												
Filter Regulators												
Transducer												
Positioners												
Signal Range												
Junction Box												

## Service Preparation and Quality Documents

Special Service Preparation		Special Quality Documents	
Code	Description	Code	Description
BAG	Cleaned and Bagged	SQD2	C of C (seat & shell pressures)
DS	Dual Scale (PSI/BAR) Gauges	SQD3	C of C Profilometer Tape for each body
EU_SERVICE	European Union Service	SQD5	C of C Body/Stud/Nut CMTR and C of C to ASME Section VIII
NPC	No Polishing Compound	SQD6	C of C Tube CMTR, Tank Bottom Valve
OXY	Oxygen	SQD7	C of C Weld Rod CMTR, Tank Bottom Valve
SIFREE	Silicone Free Preparation		
SPEC	Customer Special		
TOB	Tobacco		
VAC	Vacuum		

Figure Number: ENV-1-F-428L-6-0-0-TME-36-M7-A209-VSPS48-SQD3

Configuration Example	SQD3
Special Service Preparation	
Special Quality Documents	SQD3



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