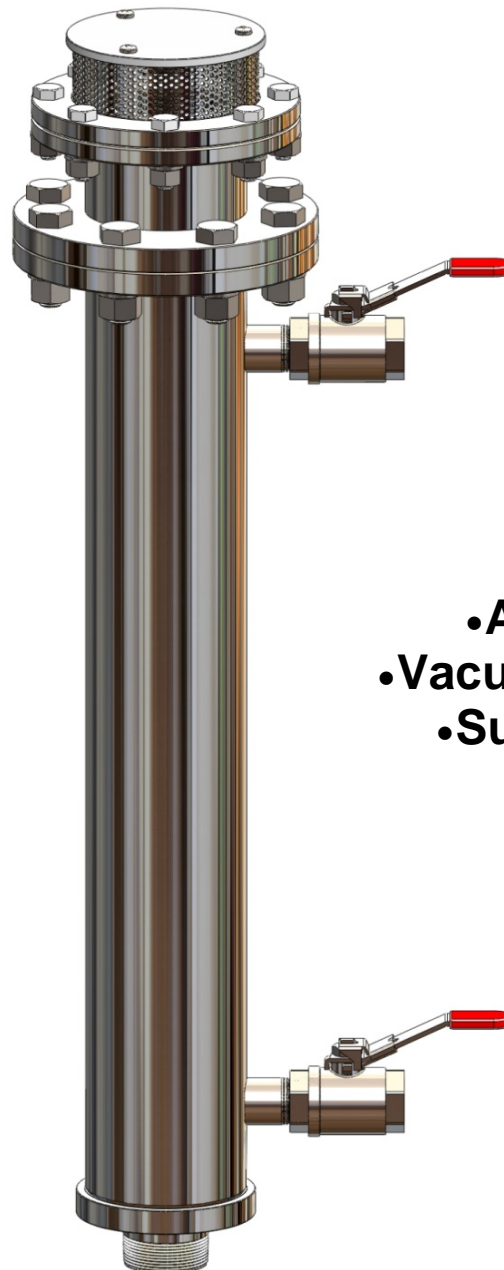


Summer 2010



Vent-Tech
Combination Sewage Air Relief Valve

SWG-V Series



- Air Release
- Vacuum Protection
- Surge Control

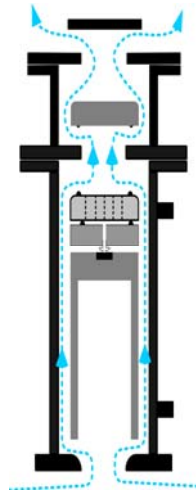
**High Air Flow Discharge with Surge Control
(No Air Intake)**

www.internationalvalve.com

Vent-Tech
 SWG-V Series – High Air Flow Discharge with Surge Control
Operating Description

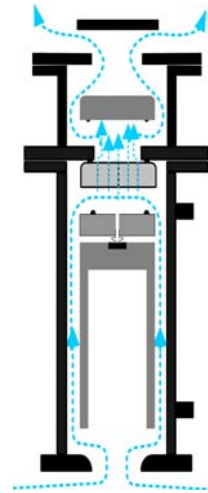
SWG-V Series is used where air inflow has an adverse effect on pipeline infrastructure and standard operating procedures, such as water hammer, head loss and line blockage. The SWG-V Series works using the same principles as the SWG-C Series, adding a Closet Float to maintain siphoning effects when needed.

1. AIR RELEASE – START UP



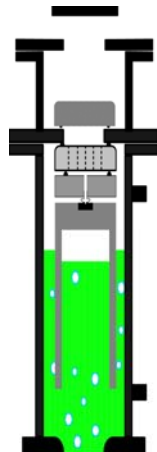
- Air/gas exhaust enters valve when pump starts up and moves liquid
- Air/gas exits large orifice through annulus between Valve and Floats
- Vents to atmosphere

2. AIR RELEASE – HIGH VELOCITY



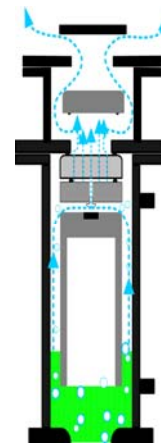
- High velocity air/gas enters Valve
- Multi-orifice Surge Float seats against Flange, forcing venting through the Surge Float
- Backpressure created, and the resistance controls water hammer and shock

3. FULLY CHARGED PIPELINE - VALVE CLOSED



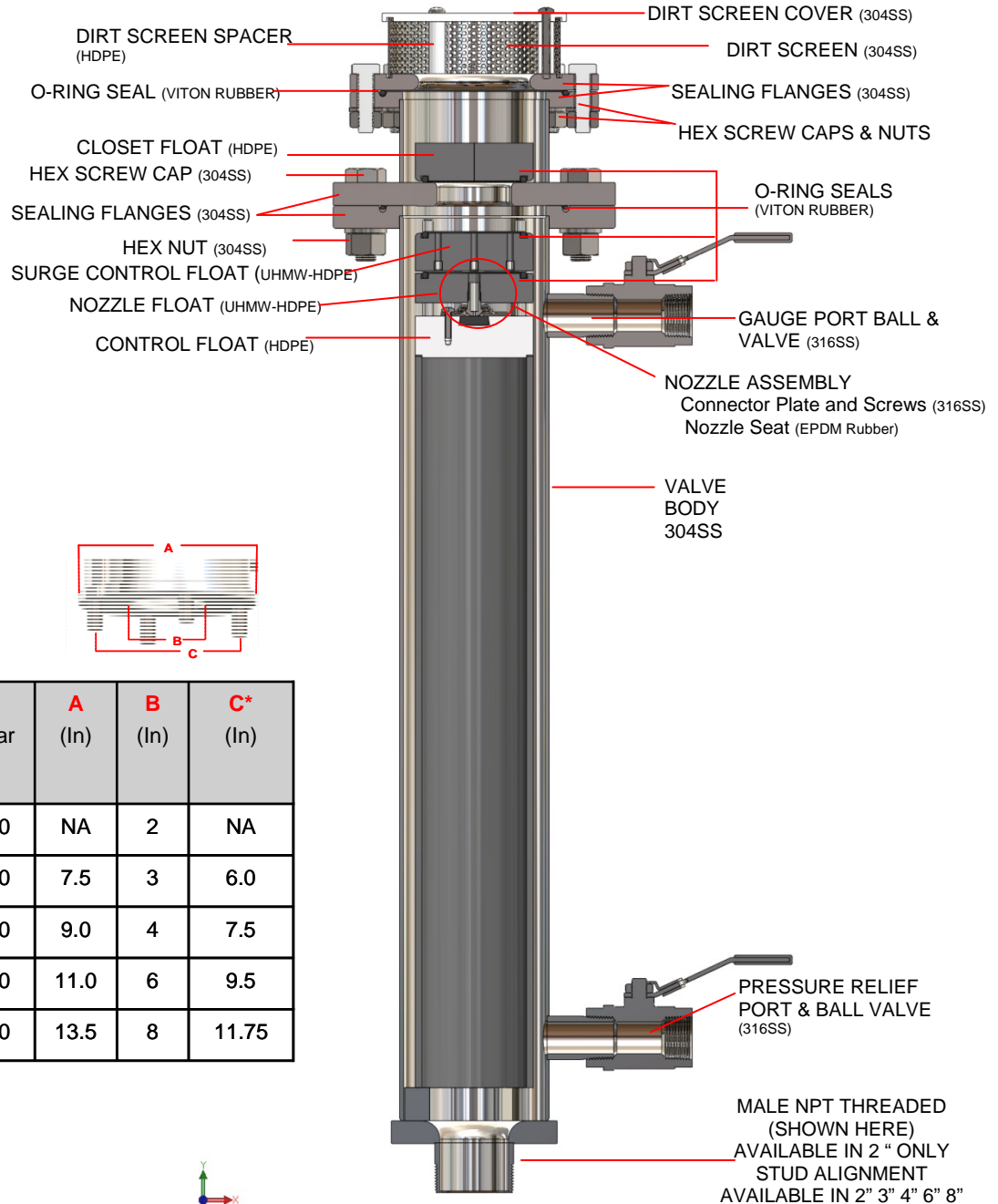
- Fluid in Valve raises the Control Float, seating it against the Nozzle Float
- Nozzle Float seats against the Surge Float, closing the large orifice
- Closet Float rests on top of lower flange

4. AIR/GAS RELEASE FROM PRESSURIZED PIPELINE

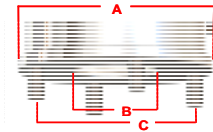


- Pressure builds in Valve Chamber and Control Float loses buoyancy and drops
- Unseats the Nozzle Float from Control Float, forcing exhaust to vent through the Nozzle and multi-orifice Surge Floats
- Air/gas continues venting until fluid re-enters the chamber, raising the Control Float which closes the Valve

Vent-Tech
 SWG-V Valve – STANDARD BODY
Material Specifications



STUD ALIGNMENT



Valve size (In)	DN (mm)	Bar	A (In)	B (In)	C* (In)
2	050	10	NA	2	NA
3	080	10	7.5	3	6.0
4	100	10	9.0	4	7.5
6	150	10	11.0	6	9.5
8	200	10	13.5	8	11.75

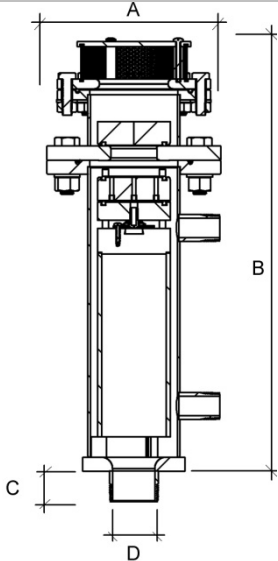
*ANSI B16.5 Class 150



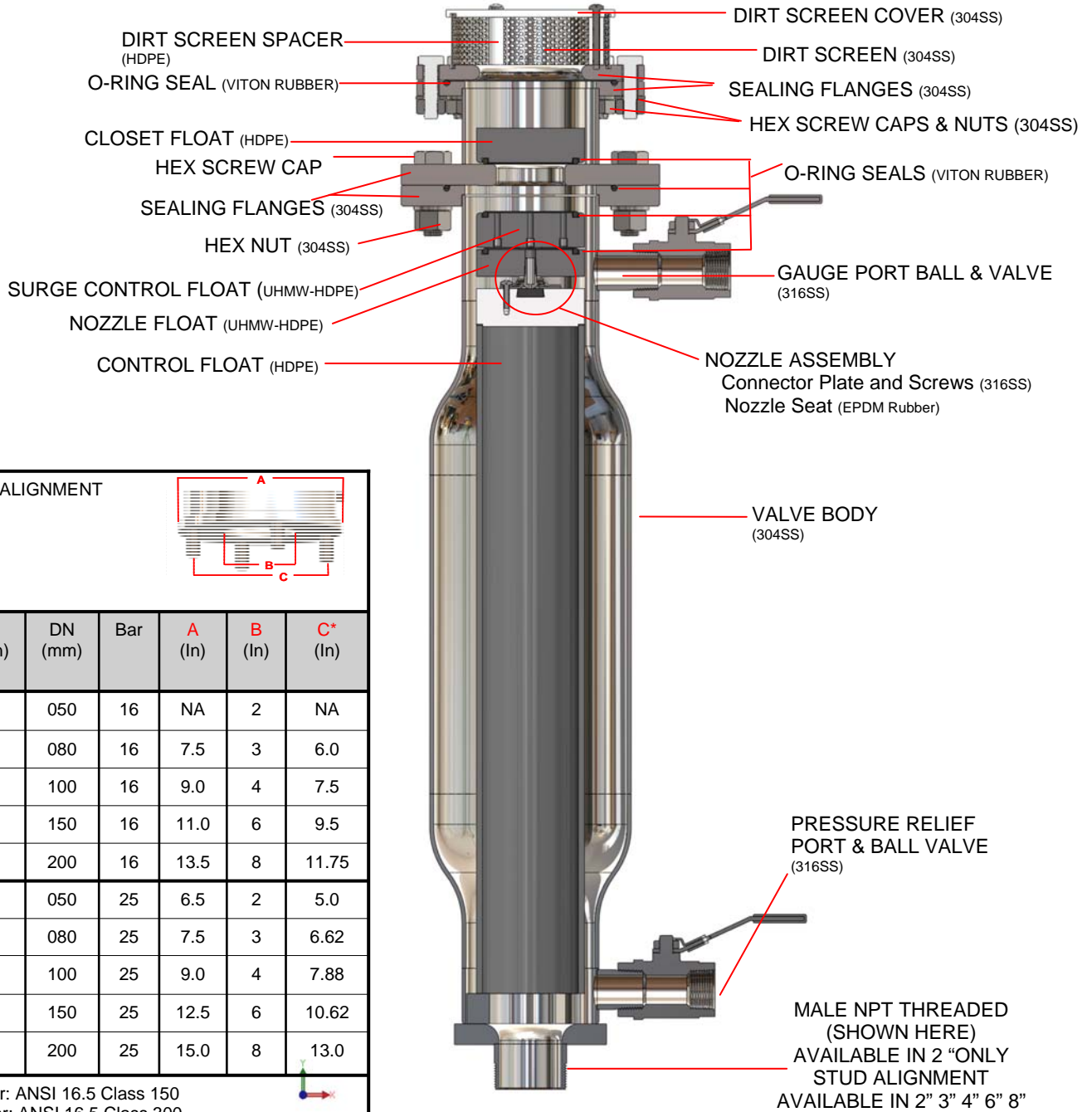
INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE

VENT-TECH SEWAGE AIR RELIEF VALVE	
Series:	Size:
SWG-V	2" 3" 4" 6" 8"
	Date: 6-2010
MATERIAL SPECIFICATIONS	

Vent-Tech
 SWG-V Valve – STANDARD BODY
General Specifications

VALVE TYPE	<u>HIGH AIR FLOW DISCHARGE WITH SURGE CONTROL (NO AIR INTAKE)</u> <u>STANDARD SWG-V Series</u>						
	VALVE OPERATIONS: <ol style="list-style-type: none"> 1. Controlled air/gas discharge at pump start up 2. Air/gas discharges from pressurized line using dynamic surge protection 3. Maintains siphoning effect 4. Surge abatement for high velocity start up conditions, column separation and fluid oscillation 						
VALVE SIZES	2-3-4-6-8 (inches) 10-12 inch available with special order						
STANDARD OPERATING PRESSURES	10 Bar: 3 to 147 (psi)						
VALVE CONNECTIONS	INLET:	<ul style="list-style-type: none"> • Male NPT threaded 2" only • 3" to 8" studded for ANSI B16.5 Class 150 • Number of Flange Screw Studs (4 to 8) 					
	OUTLET	<ul style="list-style-type: none"> • Swivel flanges available • Female connection 					
MATERIAL SPECIFICATIONS	ANSI B16.5 CLASS 150, EXCEEDS AWWA C 512 304SS, 316SS, HDPE, UHMW-HDPE, Viton, EPDM						
VALVE TESTS	<ul style="list-style-type: none"> • Leak test up to 1.5 valve rated pressure • Pressurized air release • Low pressure leak test 						
DIMENSIONS (INCHES) WEIGHTS (LBS)	SIZE	MODEL	A	B	C	D	WT.
	2	02SWG10TVS	8.66	33.5	1.66	2	50
	3	03SWG10SVS	11.25	35.7	2.125	3	95
	4	04SWG10SVS	11.25	35.7	2.125	4	93
	6	06SWG10SVS	15.5	50.4	2.125	6	213
	8	08SWG10SVS	17.5	50.4	2.125	8	262

Vent-Tech
 SWG-V Valve – HIGH PRESSURE BODY
Material Specifications



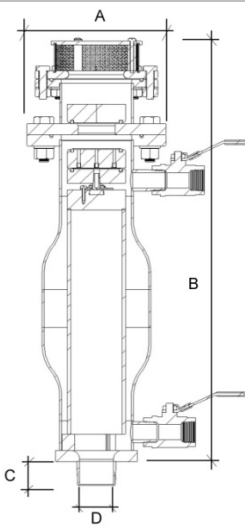
STUD ALIGNMENT					
Valve size (In)	DN (mm)	Bar	A (In)	B (In)	C* (In)
2	050	16	NA	2	NA
3	080	16	7.5	3	6.0
4	100	16	9.0	4	7.5
6	150	16	11.0	6	9.5
8	200	16	13.5	8	11.75
2	050	25	6.5	2	5.0
3	080	25	7.5	3	6.62
4	100	25	9.0	4	7.88
6	150	25	12.5	6	10.62
8	200	25	15.0	8	13.0

*16 Bar: ANSI 16.5 Class 150
 25 Bar: ANSI 16.5 Class 300

INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE

VENT-TECH SEWAGE AIR RELIEF VALVE	
Series:	Size:
SWG-V	2" 3" 4" 6" 8"
HP	Date: 6-2010
MATERIAL SPECIFICATIONS	

Vent-Tech
 SWG-V Valve – HIGH PRESSURE BODY
General Specifications

VALVE TYPE	HIGH AIR FLOW DISCHARGE WITH SURGE CONTROL (NO AIR INTAKE) HIGH PRESSURE SWG-V Series						
	VALVE OPERATIONS: <ol style="list-style-type: none"> 1. High volume air intake while pipeline fills 2. Controlled air/gas discharge at pump start up 3. Discharge of air/gas from pressurized pipeline 4. Surge abatement for high velocity start up conditions, column separation and fluid oscillation 						
VALVE SIZES	2-3-4-6-8 (inches) 10-12 inch available with special order						
STANDARD OPERATING PRESSURES	16 BAR: 7 to 232 psi 25 BAR: 7 to 363 psi						
VALVE CONNECTIONS	INLET: BAR 16:	<ul style="list-style-type: none"> • Male NPT threaded 2" available • 3" to 8" studded ANSI B16.5 Class 150 • Number of Flange Screw Studs (4 to 8) 					
	INLET: BAR 25	<ul style="list-style-type: none"> • 2" to 8" Studded ANSI B16.5 Class 300 • Number of Flange Screw Studs (8 to 12) 					
	OUTLET	<ul style="list-style-type: none"> • Swivel flanges available • Female connection 					
MATERIAL SPECIFICATIONS	ANSI B16.5 CLASS 150 and 300 EXCEEDS AWWA C 512 304SS, 316SS, HDPE, UHMW-HDPE, Viton, EPDM						
VALVE TESTS	<ul style="list-style-type: none"> • Leak test up to 1.5 valve rated pressure • Pressurized air release • Low pressure leak test 						
DIMENSIONS (INCHES) WEIGHTS (LBS)	SIZE	MODEL	A	B	C	D	WT.
	2	02SWG16TVS	8.66	33.5	1.66	2	57
	3	03SWG16SVS	11.25	33.7	2.125	3	98
	4	04SWG16SVS	11.25	33.7	2.125	4	92
	6	06SWG16SVS	15.5	48.4	2.125	6	219
	8	08SWG16SVS	17.5	48.4	2.125	8	266
	2	02SWG25SVS	8.66	33.5	2.125	2	57
	3	03SWG25SVS	11.25	33.7	2.125	3	98
	4	04SWG25SVS	11.25	33.7	2.125	4	92
	6	06SWG25SVS	15.5	48.7	2.125	6	219
	8	08SWG25SVS	17.5	48.7	2.125	8	266