



## TVSEC-Series Stainless Steel Air and Vacuum Relief Tank Vent Valve



When filling or emptying a tank this valve relieves pressure or vacuum and seals under equal pressure. In addition, it includes an external stainless screen that protects against larger particulates from entering the tank. It includes a 1/4" FNPT port that allows inert gas to be pumped into the tank.

### Application

- They are most prominent in the winery and brewery markets.

### Sizes

- 2", 3", and 4"

### Features

- Triple action functionality
  - Valve relieves pressure as the fluid level rises while filling a tank
  - Valve relieves vacuum as the fluid level drops while emptying a tank
  - Seals under equal pressure
- Stainless steel screen surrounds the entire vacuum and pressure flow area
- 1/4" FNPT connection for gas inlet; plug also supplied

### Specifications

- Standard clamp connection
- Tank vent data
  - Vacuum break: **2" water column (0.1 PSI)**
  - Pressure relief: **22" water column (0.8 PSI)**
  - Maximum tank fill and evacuation rate: **250 GPM**
  - Maximum operating temperature: **120°F (49°C)**
  - Minimum operating temperature: **40°F (4.4°C)**
- Materials of construction
  - Product contact metal components: **304 stainless steel**
  - Non-product contact metal components: **304 stainless steel**
  - Product contact seals: **EPDM**
  - Gas inlet purge plug: **Nylon**
- Surface finish
  - Product contact metal components: **Ra ≤ 32**
- Screen technical data:
  - Surface area of the open holes: **3.2in<sup>2</sup> +/- 0.2in<sup>2</sup>**
  - Surface area of the open holes and screen: **20in<sup>2</sup>**
  - Hole diameter: **0.03"**

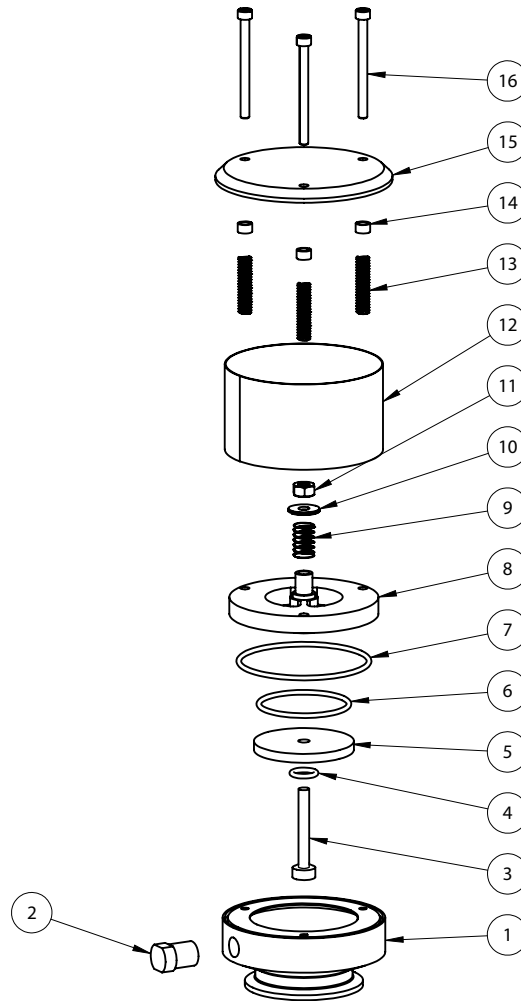
NOTE: This valve has been designed as a secondary pressure and vacuum relief vent. Always open the upper manhole whenever a product is being transferred in excess of **250 GPM**. Dixon Sanitary assumes no liability for tank damage or product loss. Designed for indoor use.



## TVSEC-Series Air and Vacuum Relief Tank Vent Valve - Part Number Table

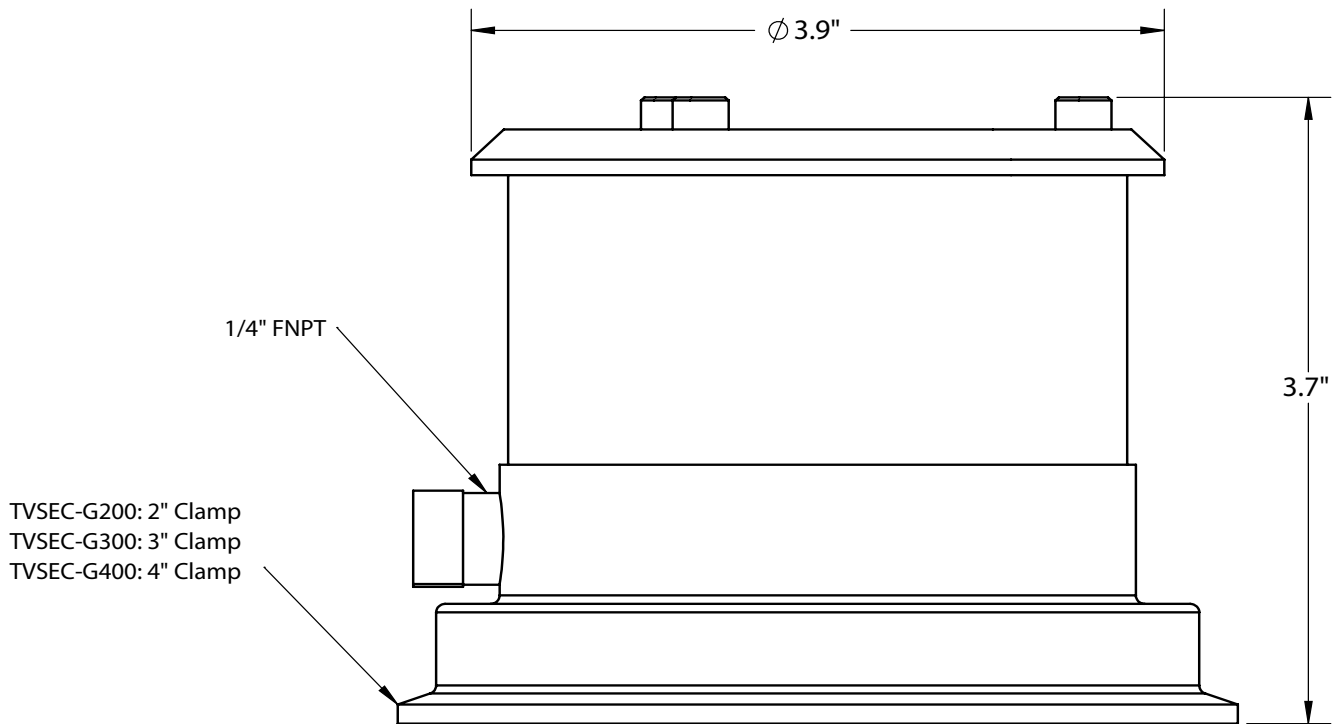
Tube O.D.	Dimension A (in)	304 Stainless Steel Part #
2"	2.52	TVSEC-G200
3"	3.58	TVSEC-G300
4"	4.68	TVSEC-G400

### TVSEC-Series Stainless Steel Air and Vacuum Relief Tank Vent Valve - Bill of Materials



Item	Valve Size	Part #	Description	Material	Qty
1	2"	TVSEC-1-200	2" body	304 stainless steel	1
	3"	TVSEC-1-300	3" body		
	4"	TVSEC-1-400	4" body		
2	all	TVSEC-2	plug	PVC	1
3	all	TVSEC-3	vacuum bolt	304 stainless steel	1
4	all	TVSEC-4E	vacuum bolt O-ring	EPDM	1
5	all	TVSEC-5	vacuum disc	304 stainless steel	1
6	all	TVSEC-6E	vacuum disc O-ring	EPDM	1
7	all	TVSEC-7E	pressure plate O-ring	EPDM	1
8	all	TVSEC-8	pressure plate	304 stainless steel	1
9	all	TVSEC-9	vacuum spring	304 stainless steel	1
10	all	TVSEC-10	flat washer	304 stainless steel	1
11	all	TVSEC-11	nut	304 stainless steel	1
12	all	TVSEC-12	screen	304 stainless steel	1
13	all	TVSEC-13	pressure plate springs	304 stainless steel	3
14	all	TVSEC-14	spacers	304 stainless steel	3
15	all	TVSEC-15	cover	304 stainless steel	1
16	all	TVSEC-16	cover screws	304 stainless steel	3

## TVSEC-Series Stainless Steel Air and Vacuum Relief Tank Vent Valve - Dimensions



## TVSEC-Series Stainless Steel Air and Vacuum Relief Tank Vent Valve - Repair Kits

### Tank Vent Repair Kit

Part #	Description	Qty
TVSEC-RK	304 stainless steel vacuum bolt	1
	EPDM vacuum bolt O-ring	1
	EPDM vacuum disc O-ring	1
	EPDM pressure plate O-ring	1
	vacuum spring	1
	304 stainless steel flat washer	1
	304 stainless steel nut	1
	304 stainless steel pressure plate springs	3
	304 stainless steel spacers	3
	304 stainless steel cover screws	3



### Tank Vent O-Ring Kit

Part #	Description	Qty
TVSEC-OKIT-E	EPDM vacuum bolt O-ring	1
	EPDM vacuum disc O-ring	1
	EPDM pressure plate O-ring	1



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NOTE: Because of the health hazards associated with contamination and lead content in drinking water systems, Dixon couplings, unless otherwise specifically approved, are not recommended for potable water service and should not be used in applications where drinking water will contact the wetted surfaces of the coupling.

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