

VENTING | GAUGE HATCHES

MODEL 200 & 300 TVTH



Features

- Economical gauge and thief hatch with integral pressure and vacuum relief.
- Flush top-mounted design does not extend into tank.
- Available in 4, 6, 8, 12, 16 and 32 ozsi pressure relief settings, with fixed 0.4 ozsi vacuum relief.
- Standard sweet trim (Model 200 TVTH).
- Sour Service Trim (Model 300 TVTH) with stainless or inconel springs.
- Fusion-bond Epoxy (FBE) coating available for severe sour service.



FEATURES

Economical Thief Hatch

- The Tank Vent Thief Hatch (TVTH) Model 200 and 300 are a budget-conscious choice for integrated thief access and pressure + vacuum relief.

Flush Top-Mount design

- The pressure and vacuum relief mechanism operates above the tank roof to maintain functionality if the thief hatch opening is irregular or undersize.

Variety of Pressure Settings

- The Model 200 & 300 TVTH are available with wide variety of factory-set pressure relief settings
- Vacuum relief is fixed at 0.4 ozsi.

Two Trim Levels for Sweet or Sour Service

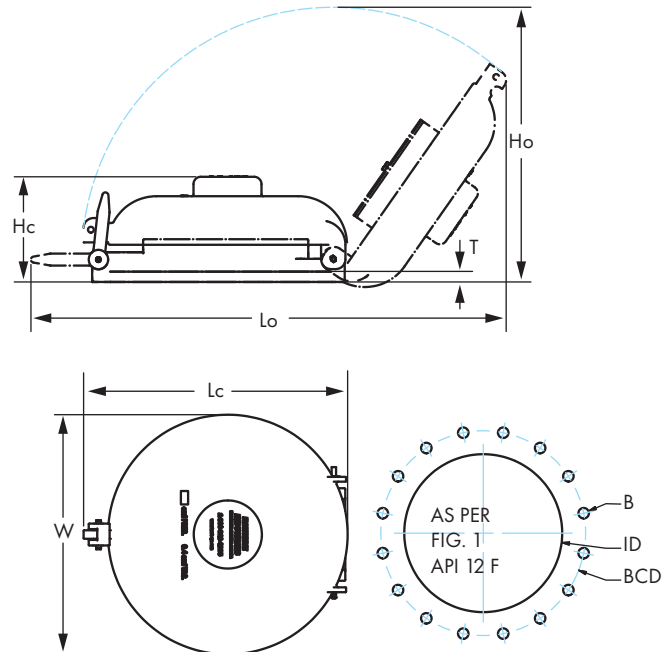
- The Model 200 TVTH is designed for sweet service with polyisoprene pressure and vacuum gaskets and stainless steel springs.
- The Model 300 TVTH is suitable for sour service, with expanded FKM (Sponge Viton) gaskets and stainless steel, or optionally inconel, springs.

FBE Coating

- For especially sour environments, a Fusion-bond Epoxy coating is available.
- For acid service, refer to the Model 400 Acid Service TVTH.

DIMENSIONS

Dimension		Value	
		[in.]	[mm.]
Hc	Height (Closed)	5 ½	140
Ho	Height (Minimum to Open)	14 ¼	362
Lc	Length (Hatch Closed)	13 ½	343
Lo	Length (Hatch Open)	24 ½	622
W	Width	12 ¼	311
T	Flange Thickness	½	13
Weight		11 ¼ lb	5.1 kg
B	Bolt Hole	17/32	13.5
ID	Cutout Diameter	8	203
BCD	Bolt Circle Diameter	10-3/8	264
Bolt Size & Number		½-13UNC-2A x 16 plcs	



RELIEF SETTINGS

The following relief pressures are available and in stock.

Pressure Setting [ozsi]	TVTH 200	TVTH 300	
	AISI 302 SS	INCONEL	
4	●	●	●
6	●	●	●
8	●	●	●
12	●	●	●
16	●	●	●
32	●	●	●

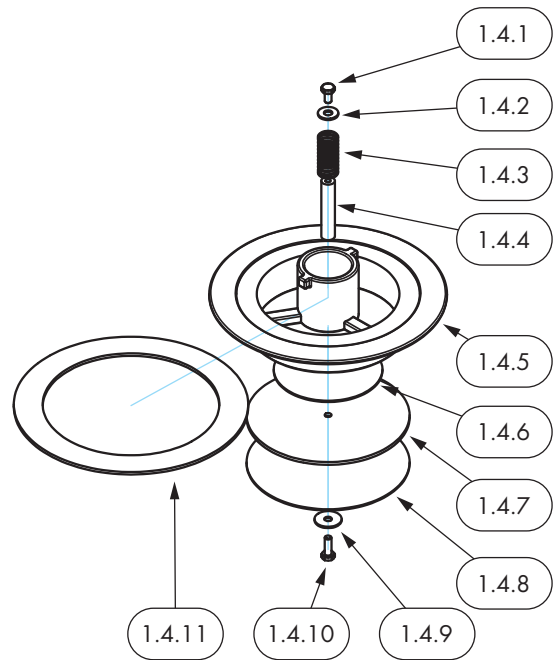
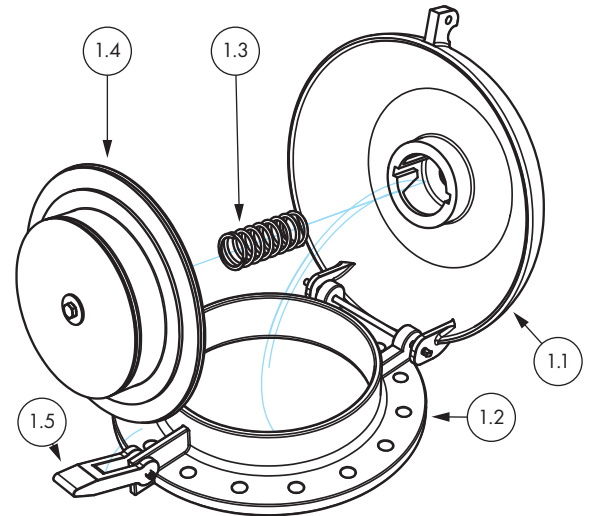
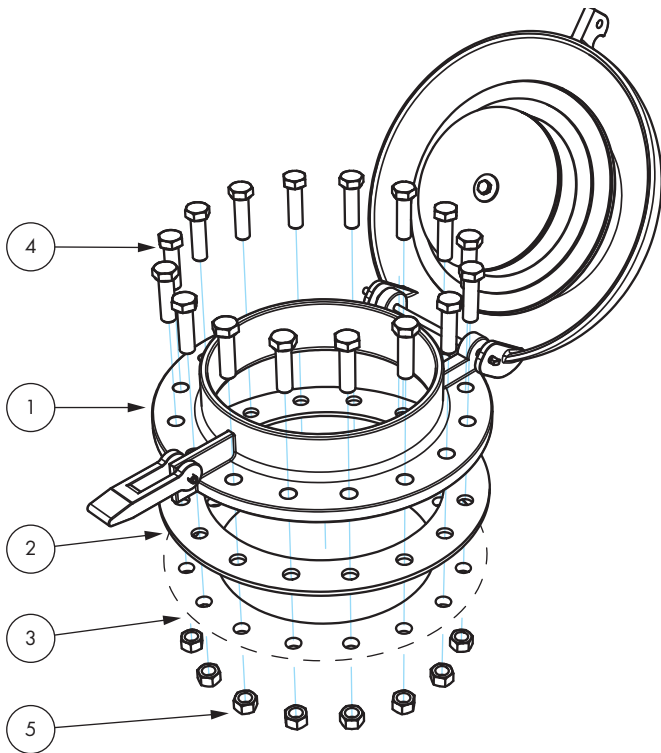
Vacuum Setting [ozsi]	TVTH 200	TVTH 300	
	AISI 302 SS	INCONEL	
0.4	●	●	●

Pressures not listed can be achieved, but with additional lead time and a 25 pc minimum order.

SPECIFICATIONS

Function	Venting Gauge Hatch Tank Access + Pressure & Vacuum Relief
Temperature Range	-40°C to 75°C (Model 200, polyisoprene) -25°C to 205°C (Model 300, eFKM).
Pressure Relief Type	Spring-loaded pallet
Pressure Relief Range	4 to 32 ozsi (see Relief Settings)
Vacuum Relief Range	0.4 ozsi fixed
Tank Connection	8" API (Fig 1 API 12F)

PARTS LIST & MATERIALS OF CONSTRUCTION



Item	Part Name	Std. Material	Opt. Material
1	TVTH Assembly		
1.1	TVTH Lid	AL ZLD108	
1.2	TVTH Base	AL ZLD108	
1.3	Pressure Spring	302 SS	X750 Inconel ¹
1.4	Pressure & Vacuum Pallet		
1.4.1	Vacuum Spring Screw	AISI 304 SS	
1.4.2	Vacuum Spring Washer	AISI 304 SS	
1.4.3	Vacuum Spring	302 SS	X750 Inconel ¹
1.4.4	Vacuum stem	AL6061 OR EQ	
1.4.5	P & V Pallet	AL ZLD108	
1.4.6	Vacuum Disc	AL 5052 OR EQ	
1.4.7	Vacuum Gasket	Polyisoprene	eFKM ²
1.4.8	Vacuum Plate	AL 5052 OR EQ	
1.4.9	V. Gasket Washer	AISI 304 SS	
1.4.10	V. Gasket Screw	AISI 304 SS	
1.4.11	P. Gasket	Polyisoprene	eFKM ²
1.5	Latch	AL ZLD108	
2	Base Gasket	Chloroprene	FKM
3*	Tank connection		
4†	Installation Bolt		
5†	Installation Nut		

* parts supplied by others
 † parts sold separately

¹ Available on Model 300 only
² Standard on Model 300

CERTIFICATION

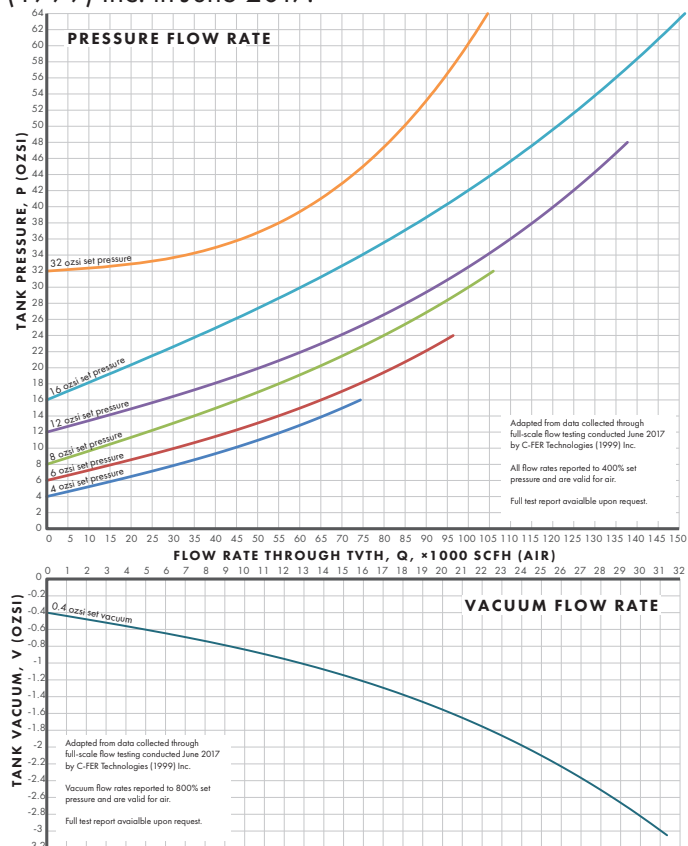
The Model 200 and 300 TVTH pressure and vacuum relief settings can be factory certified at an additional expense. Prior to packaging, the Model 200 and 300 are tested on the low-flow test bench for pressure-tightness and confirmation of relief setting. Certified hatches are accompanied by a certificate stating the relief pressure of the hatches.

PACKAGING

Model 200 and 300 TVTH are shipped ready-to-install in individual boxes. Package dimensions are 13 in. wide, 12 3/4 in. deep and 6 in. high and weigh 12 1/2 lb each. Bulk orders of Model 200 or 300 TVTH can be palletized in multiples of 21 units (eg 21 pc, 42 pc, 63 pc, etc).

FLOW CHARACTERISTIC

Empirical flow rate information for the Model 200 and 300 TVTH below is adapted from data collected from full-scale flow testing conducted by C-FER Technologies (1999) Inc. in June 2017.



RELATED PRODUCTS

The Model 200 and 300 TVTH are just one part of tankage product lines from Hawkeye Industries, which also include:

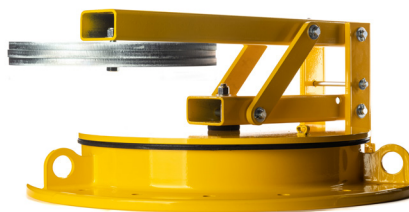
Vapor Control

- Tank Gaskets & Bolt Kits
- Series 5000 EPRV
- Series 6000 PVRV

Mechanical Level Indication

- Model 375LS Low Profile Liquid Seal Level Indication System
- Model 750 Open Level Indication System and Model 750LS Liquid Seal Level Indication System

Series 5000 EPRV



Model 375LS Level Gauging System



ORDERING INFORMATION

Most Model 200 and Model 300 TVTH configurations are stocked in Edmonton, ready to ship 1-day or less.

Model 200 TVTH (Sweet)

T200 – **Sp Sp G S** – **000**

[Sp] Set Pressure		[G] Seal Mat'l	
Selection	Flag	Selection	Flag
4 ozsi	04	Isoprene	R
6 ozsi	06	[S] Spring Mat'l	
8 ozsi	08		
12 ozsi	12	Stainless Steel	S
16 ozsi	16	Standard selections are in bold.	
32 ozsi	32	NOTES Model 200 TVTH are only available with isoprene seals and stainless springs. For other material options, refer to the Model 300 TVTH.	

Model 300 TVTH (Sour)

T300 – **Sp Sp G S** – **X Y Z**

[Sp] Set Pressure		[G] Seal Mat'l		[XYZ] Coating	
Selection	Flag	Selection	Flag	Selection	Flag
4 ozsi	04	Expanded FKM	S	Bare	000
6 ozsi ¹	06	FKM (VITON)	V	Severe Sour Svc	010
8 ozsi	08	FEPM (AFILAS)	A		
12 ozsi ¹	12	FFKM (KALREZ)	K		
16 ozsi	16	[S] Spring Mat'l			
32 ozsi	32				
		Stainless Steel	S		
		Inconel	I		

Standard selections are in bold.
NOTES
¹ Inconel springs not available for these pressure settings.

Examples	
Model 200 TVTH, 4 ozsi s.p., isoprene seals, stainless springs	T200-04RS-000
Model 200 TVTH, 16 ozsi s.p., isoprene seals, stainless springs	T200-16RS-000
Model 200 TVTH, 32 ozsi s.p., isoprene seals, stainless springs	T200-32RS-000

Examples	
Model 300 TVTH, 4 ozsi s.p., expanded FKM seals, stainless springs	T300-04SS-000
Model 300 TVTH, 16 ozsi s.p., FFKM seals, inconel springs, svr. sour ctg.	T300-16KI-010
Model 300 TVTH, 8 ozsi s.p., FEPM seals, stainless springs	T300-08AS-000

