

# Thief Hatch Brochure



A CENTURY'S WORTH OF INNOVATION

**CLAY & BAILEY MANUFACTURING COMPANY**

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**50**

Part No.	Size	Press	Vac	Wt.lbs
0050-01-0800	8"	2oz	0.5oz	18.0

**Features**

Combination pressure and vacuum relief valve designed for tanks requiring large SCFH venting. Standard gasket material is neoprene with other gasket materials available. Durable cast iron cover and base with machined brass vacuum valve. Base conforms to API requirements.

Bolt Pattern:

(16) - 1/2" dia holes on a 10 3/8" B.C.

**50D**

Part No.	Size	Press	Vac	Wt.lbs
0050-01-0810	8"	2oz	0.5oz	20.0

**Features**

Same as #50 above, only with deep base, overall height is 14".

Bolt Pattern:

(16) - 1/2" dia holes on a 10 3/8" B.C.

**50 & 50D Repair Parts Listing**

Part Number	Description	Material
0050-01-0800	2oz Press / 0.5oz Vac. Cover Assembly	Cast Iron, Brass
0050-01-0811	Base	Mild Steel
0050-01-0801	Base	Cast Iron
0050-03-0801	Base	Aluminum
0054-01-0805	2oz Press / 0.4oz Vac Cover Assembly	Aluminum
0054-01-0835	4oz Press / 0.4oz Vac Cover Assembly	Cast Iron
0054-05-1200	Cover Gasket	Neoprene
0054-05-1201	Cover Gasket	EPDM
0054-05-1202	Cover Gasket	Viton
0054-05-1203	Cover Gasket	ECH
0054-05-0822	Base Gasket	CIR
0054-09-1814	Hinge Pin	Cold Rolled Steel

See #52 repair parts for other listings.

**Maintenance Note:**

Check gaskets periodically for cracking or UV damage, replace if necessary. Inspect internal valve for blockage or debris.

**Airflow Rating:**

**50 & 50D Pressure:**  
498,289 SCFH @ 2.5psig

**50 & 50D Vacuum:**  
13,192 SCFH @ 2"H<sub>2</sub>O (-1oz)





**54**

Part No.	Size	Press	Vac	Wt.lbs
0054-01-0800	8"	2oz	0.4oz	17.0
0054-01-0830	8"	4oz	0.4oz	19.0
0054-01-0840*	8"	2oz	0.4oz	12.0
0054-01-0850*	8"	4oz	0.4oz	13.0

\*Provided with weld on collar

## Features

Durable relief valve designed for storage vessels requiring pressure and vacuum venting. An 8" dead weight cover opens completely, to allow for high venting capacity. Standard settings are 2 oz pressure and 0.4 oz vacuum, with other settings available. The #54 can be ordered with bolting or welding base. Flange hole pattern complies with API bolt circle dimensions. Standard gasket is neoprene, other gasket materials available.

Bolt Pattern: (16) - 1/2" dia holes on a 10 3/8" B.C.



**55**

Part No.	Size	Press	Vac	Wt.lbs
0055-01-0800	8"	2oz	0.5oz	18.0
0055-01-0810*	8"	2oz	0.5oz	18.0

\*Provided with weld on collar

## Features

Dead weight, pressure relief valve suitable for storage tanks requiring pressure relief only. Standard gasket material is neoprene with other materials available. Uses the same base as the #54.

Hole Pattern: (16) - 1/2" dia holes on a 10 3/8" B.C.

## Repair Parts Listing

54

Part Number	Description	Material
0050-01-0801	Base	Cast Iron
0050-03-0801	Base	Aluminum
0054-01-0805	2oz Press / 0.4oz Vac Cover Assembly	Aluminum
0054-01-0835	4oz Press / 0.4oz Vac Cover Assembly	Cast Iron
0054-05-1200	Cover Gasket	Neoprene
0054-05-1201	Cover Gasket	EPDM
0054-05-1202	Cover Gasket	Viton
0054-05-1203	Cover Gasket	ECH
0054-05-0822	Base Gasket	CIR
0054-09-1814	Hinge Pin	Cold Rolled Steel

See #52 repair parts for other listings.

## Maintenance Note:

54 - Check gaskets periodically for cracking or UV damage, replace if necessary. Inspect internal valve for blockage or debris.

55 - Check gasket periodically for cracking or UV damage, replace if necessary.

## Airflow Rating:

54 Pressure:

506,723 SCFH @ 2.5psig

55 Pressure:

575,396 SCFH @ 2.5psig

54 Vacuum:

12,721 SCFH @ 2"H<sub>2</sub>O (-1oz)

**56**

Part No.	Size	Press	Vac	Wt.lbs
0056-01-0800	8"	4oz	0.4oz	38
0056-01-0810	8"	8oz	0.4oz	38
0056-01-0820	8"	12oz	0.4oz	38
0056-01-0830	8"	16oz	0.4oz	38

### **Features**

Long Pan, dual combination thief hatch. Ideal for oilfield tanks as base contains spills after sampling. Unit is lockable, with a spring loaded aluminum cover and cast iron base. Standard gasket material is Buna-N with other gasket material available. Settings of 4oz pressure and 0.4oz vacuum are standard. Flange bolt pattern conforms to API pattern.  
Bolt Pattern:  
(16) - 1/2" dia holes on a 10 3/8" B.C.

### ***Repair Parts Listing***

Part Number	Description	Material
0056-01-0803	4 oz Press / 0.4oz Vac Internal Valve Assy	Aluminum
0056-01-0805	4 oz Press / 0.4oz Vac Cover Assembly	Aluminum
0056-03-0806	Handle & Latch Assembly	Aluminum
0056-05-3000	Pressure Gasket	EPDM
0056-05-3001	Vacuum Gasket	EPDM
0056-05-3002	Pressure Gasket	VITON*
0056-05-3003	Vacuum Gasket	VITON*
0056-05-3004	Pressure Gasket	ECH
0056-05-3005	Vacuum Gasket	ECH
0056-05-3006	Pressure Gasket	Buna-N
0056-05-3007	Vacuum Gasket	Buna-N
0056-05-3050	Envelope Pressure Gasket	Buna-N
0056-09-1808	Hinge Pin	Mild Steel

### ***Maintenance Note:***

Check gaskets periodically for cracking or UV damage, replace if necessary. Inspect internal valve for blockage or debris.

### ***Airflow Rating:***

#### **56 Pressure:**

549,117 SCFH @ 2.5psig

#### **56 Vacuum:**

13,192 SCFH @ 3"H<sub>2</sub>O (-1oz)





**256**

Part No.	Size	Press	Vac	Wt.lbs
0256-01-0800	8"	4oz	0.4oz	38
0256-01-0810	8"	8oz	0.4oz	38
0256-01-0820	8"	12oz	0.4oz	38
0256-01-0830	8"	16oz.	0.4oz	38

## Features

“Ducks Nest” design of thief hatch with the same internal pressure and vacuum ports as the #56 above.

Bolt Pattern:

(16) - 1/2" dia holes on a 10 3/8" B.C.

## Repair Parts Listing

Part Number	Description	Material
0056-05-3000	Pressure Gasket	EPDM
0056-05-3001	Vacuum Gasket	EPDM
0056-05-3002	Pressure Gasket	VITON*
0056-05-3003	Vacuum Gasket	VITON*
0056-05-3004	Pressure Gasket	ECH
0056-05-3005	Vacuum Gasket	ECH
0056-05-3006	Pressure Gasket	Buna-N
0056-05-3007	Vacuum Gasket	Buna-N
0056-05-3050	Envelope Pressure Gasket	Buna-N
0056-09-1808	Hinge Pin	Mild Steel

## Maintenance Note:

Check gaskets periodically for cracking or UV damage, replace if necessary. Inspect internal valve for blockage or debris.

## Airflow Rating:

**256 Pressure:**  
549,117 SCFH @ 2.5psig

**256 Vacuum:**  
13,192 SCFH @ 3"H<sub>2</sub>O (-1oz)



**256B**

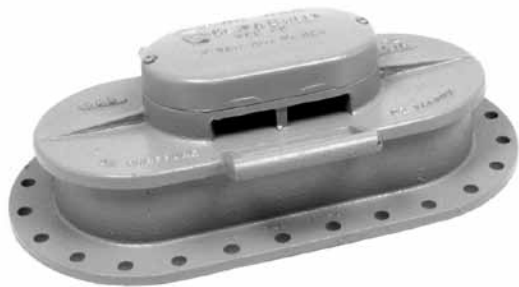
Part No.	Size	Wt.lbs
0256-01-8000	8"	18

## Features

Durable breather vent for use on ASTs or tanks requiring large freeflowing ventilation. Aluminum lid is non-sparking and lockable. Base is standard cast iron with a hole pattern conforming to API specifications. Base available in aluminum. Screen is perforated 16ga.

Bolt Pattern:

(16) - 1/2" dia holes on a 10 3/8" B.C.

**52****Repair Parts Listing**

Part Number	Description	Material
0052-01-1801	8x18 Base	Cast Iron
0052-01-1812	8x18 Cover Only	Cast Iron
0052-01-1815	8x18 2oz Press / 0.4oz Vac Cover Assembly	Cast Iron
0052-01-2201	8x22 Base	Cast Iron
0052-01-2212	8x22 Cover Only	Cast Iron
0052-01-2215	8x22 2oz Press / 0.4 oz Vac Cover Assembly	Cast Iron
0052-03-1803	Cap	Aluminum
0052-03-1807	Shelve	Aluminum
0052-05-1000	Cap Gasket	EPDM
0052-05-1812	8x18 Cover Gasket	Neoprene
0052-05-1813	8x18 Cover Gasket	EPDM
0052-05-1814	8x18 Cover Gasket	Viton
0052-05-1815	8x18 Cover Gasket	ECH
0052-05-2222	8x22 Cover Gasket	Neoprene
0052-05-2223	8x22 Cover Gasket	EPDM
0052-05-2224	8x22 Cover Gasket	Viton
0052-05-2225	8x22 Cover Gasket	ECH
0052-05-4000	Vacuum Gasket	Buna-N
0052-05-4001	Vacuum Valve	Buna-N
0052-05-4002	Vacuum Valve	Viton
0052-05-4003	Vacuum Valve	EPDM
0052-05-8018	8x18 Base Gasket	CIR
0052-05-8022	8x22 Base Gasket	CIR
0052-09-1814	Hinge Pin	Cold Rolled Steel

**Maintenance Note:**

52 - Check gaskets periodically for cracking or UV damage, replace if necessary. Inspect internal valve for blockage or debris.

256B - Check gaskets periodically for cracking or UV damage, replace if necessary.

**Airflow Rating:**

52, (8" x 18") Pressure:  
1,194,396 SCFH @ 2.5psig

52, (8" x 18") & (8" x 22") Vacuum:  
12,231 SCFH @ 3"H<sub>2</sub>O (-1oz)

52, (8" x 22") Pressure:  
1,476,002 SCFH @ 2.5psig







**54-20**

Part No.	Size	Press	Vac	Wt.lbs
0054-03-2000	20"	2oz	0.4oz	68.0
0054-03-2010	20"	4oz	0.4oz	68.0

## Features

20" Dual Purpose Thief Hatch is access hatch and pressure vacuum relief. Aluminum base and cover provide safe, non-sparking opening. Standard neoprene gaskets with other gasket material available upon request. Flange bolt pattern conforms to API specifications.

Bolt Pattern:

(28) - 5/8" dia holes on a 22" B.C.

## 54 - 20 Repair Parts Listing

Part Number	Description	Material
0054-01-2002	Cap	Cast Iron
0054-01-2009	Weight (Each Wt. Adds 1oz to Press Setting)	Cast Iron
0054-03-2004	Vacuum Valve	Aluminum
0054-03-2005	2oz Press / 0.4oz Vac Cover Assembly	Aluminum
0054-03-2012	2oz Press Cover Only	Aluminum
0054-03-2041	Base	Aluminum
0054-05-2004	Vacuum Valve Gasket	ECH
0054-05-2012	Cover Pressure Gasket	ECH
0054-05-2014	Cover Pressure Gasket	White FDA Approved
0054-05-2015	Vacuum Valve Gasket	White FDA Approved
0054-05-2022	Base Gasket	CIR
0054-05-2063	Cover Pressure Gasket	Neoprene
0054-07-2009	Hinge Pin	304 Stainless Steel
0887-05-1016	Vacuum Valve Gasket	Neoprene

## **Maintenance Note:**

Periodic examination of unit is recommended. Replace damaged or worn gaskets and hardware as required.

## **Airflow Rating:**

**54-20 Pressure:**  
3,146,216 SCFH @ 2.5psig

**54-20 Vacuum:**  
90,086 SCFH @ 3"H<sub>2</sub>O (-1oz)

**255**

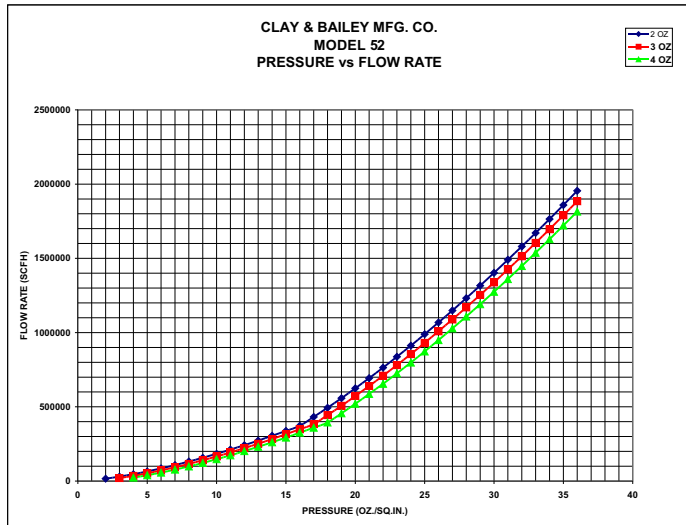
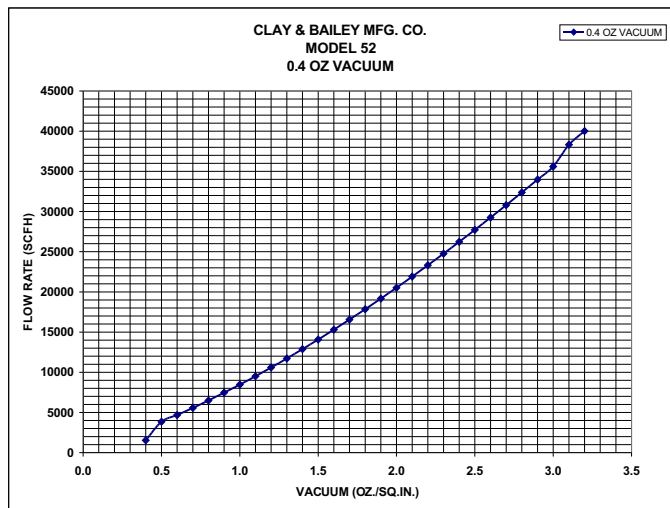
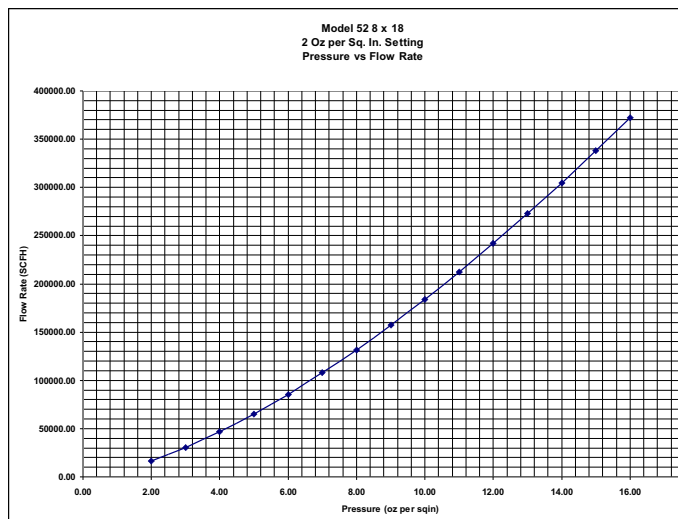
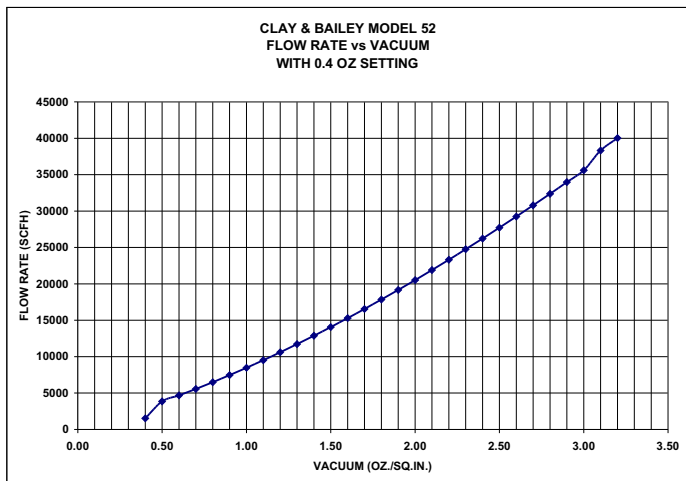
Part No.	Size	Press	Vac	Wt.lbs
0255-03-0800	8"	4 oz	0.4 oz	
0255-03-0810	8"	8 oz	0.4 oz	
0255-03-0811	8"	10 oz	0.4 oz	
0255-03-0812	8"	12 oz	0.4 oz	
0255-03-0816	8"	16 oz	0.4 oz	

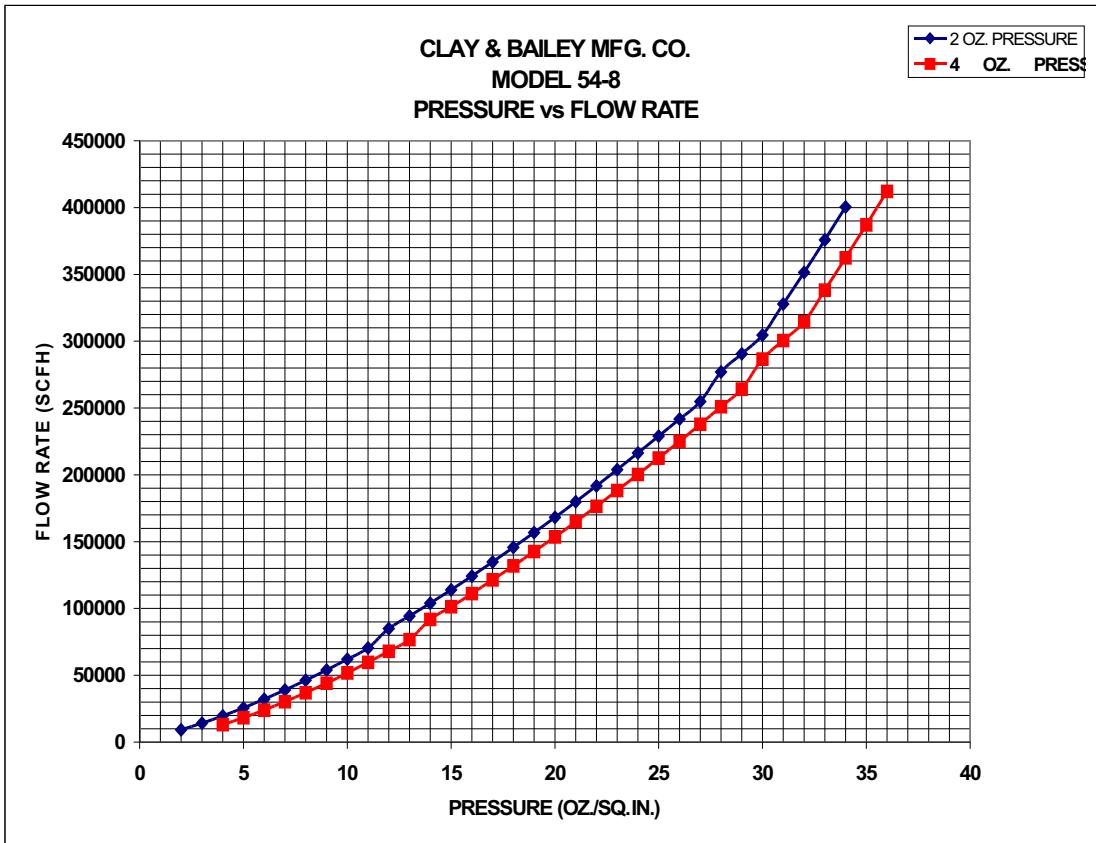
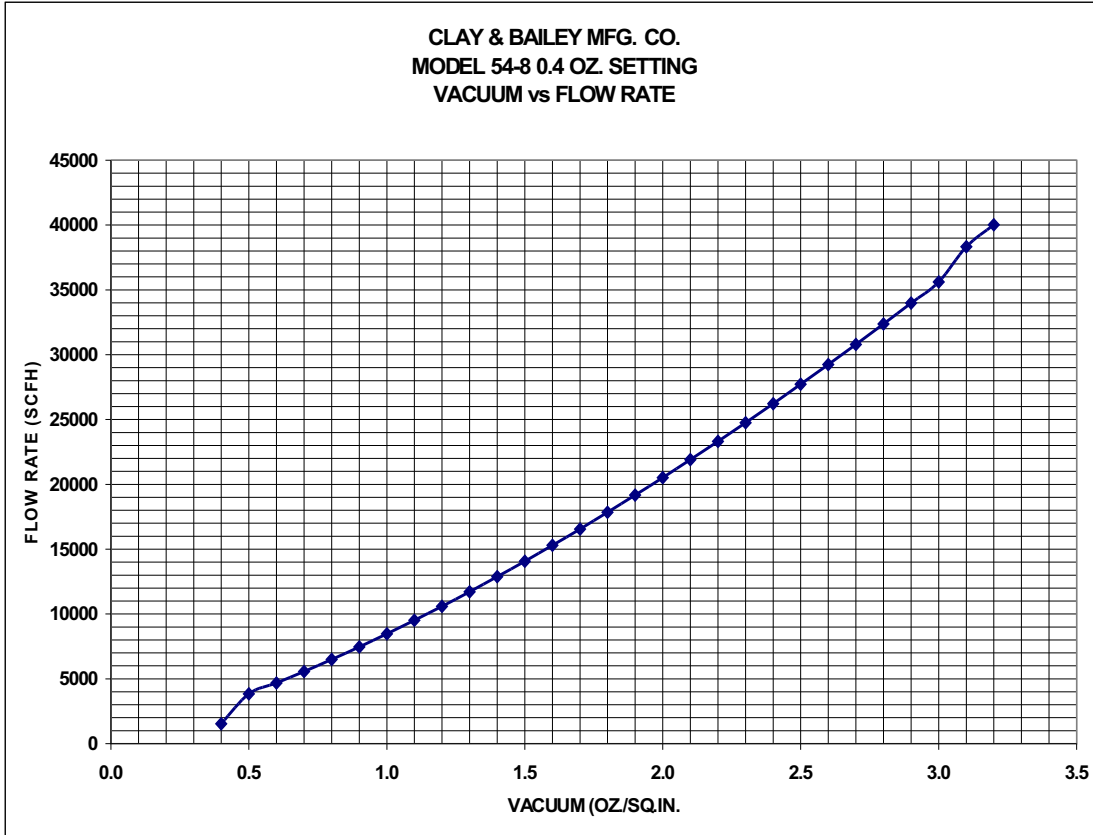
### **Features**

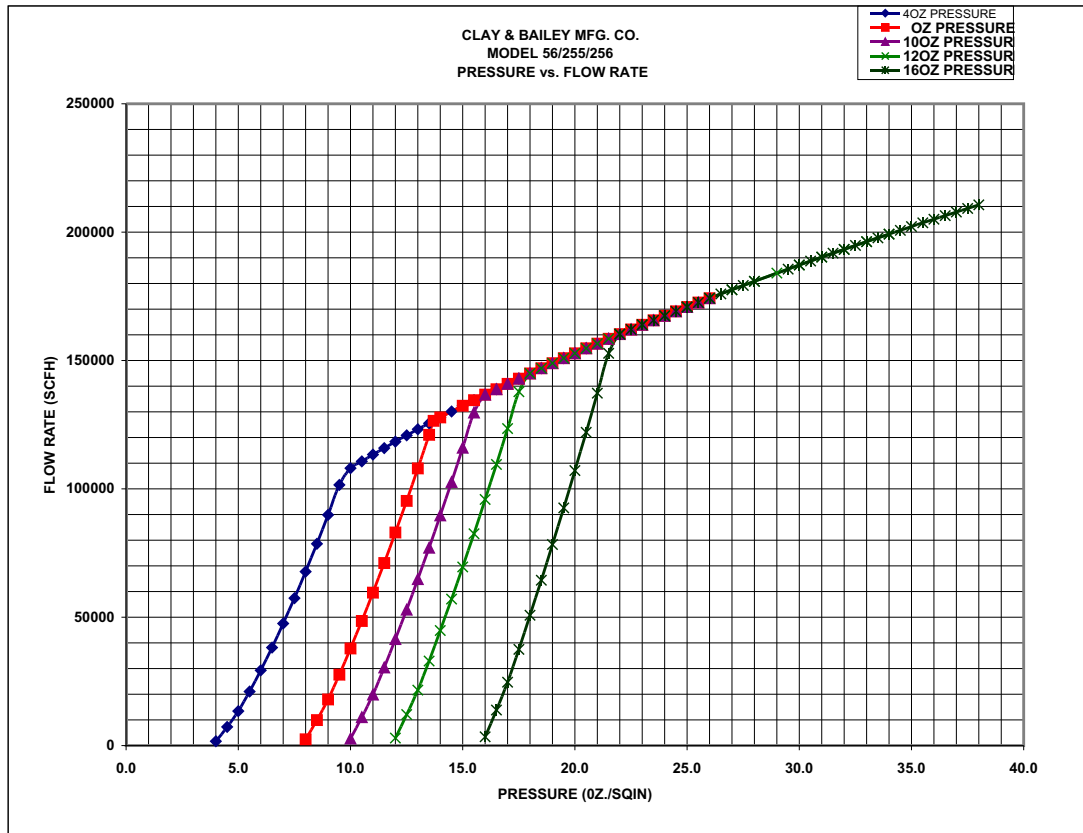
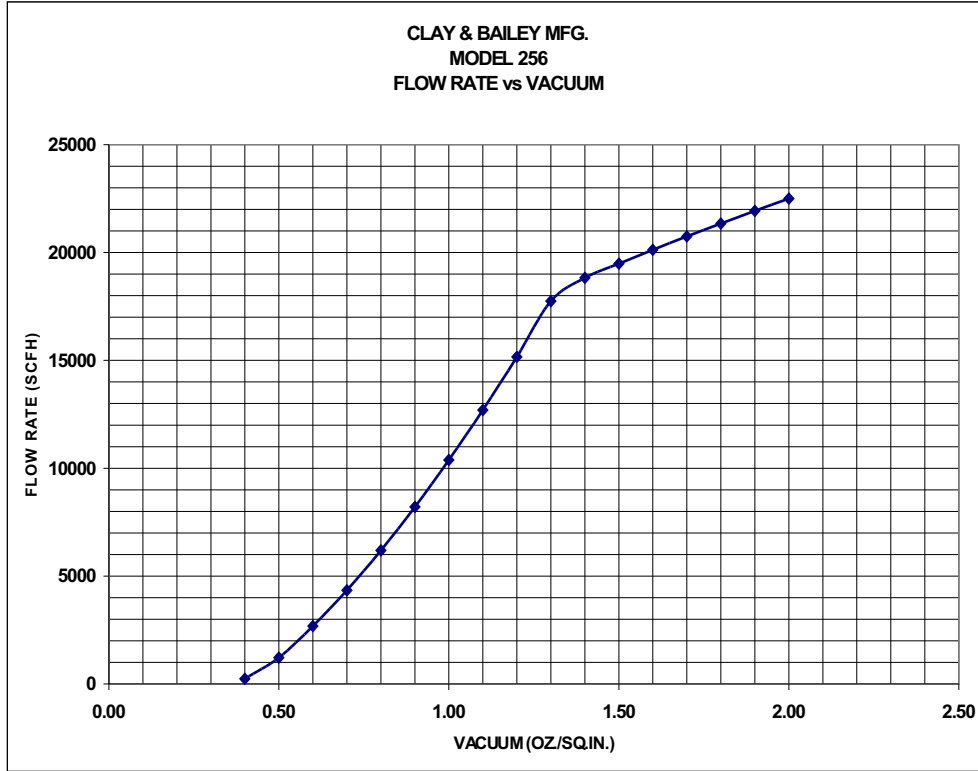
Economical, spring loaded thief hatch offering pressure and vacuum relief. Low profile design with standard APZ bolt pattern. Options include gasket material and pressure settings.











# **INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR THE CLAY & BAILEY MFG. CO. THIEF HATCHES**

## **OPERATION OF THIEF HATCH**

Clay & Bailey thief hatches are designed to provide trouble-free operation with a minimum of care and attention. The primary function is to prevent the loss of vapors in a closed storage system and provide pressure and vacuum relief.

## **INSTALLATION OF THIEF HATCH**

The Spring Loaded Thief Hatch can be installed on a matching API flange bolting circle of 16 bolt holes on a 10-3/8" circle for a nominal 8" opening. Place the base gasket on the bottom of the base and insert the 16 bolts from the bottom up by reaching inside through the opening in the deck and then attach each nut to the bolt from the outside. Tighten all nuts in a crosswise configuration making sure the hatch is fastened securely.

## **MAINTENANCE OF GASKETS AND SPRINGS**

Scheduled maintenance should be performed on a timely basis and more frequently in corrosive or dusty atmospheres. Normal maintenance requires the working gaskets and springs to be inspected and cleaned. Under normal operating conditions the pressure and vacuum gaskets and springs should be replaced once a year. The base gasket need only be replaced when a leak is noticed at the bolting area or if the hatch is removed.

## **GENERAL MAINTENANCE**

To ensure efficient operation of the thief hatch, the pressure and vacuum seats and gaskets should be wiped off carefully every time the hatch is opened. This prevents accumulation of residue that can deteriorate the performance of the valves.



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