

94080



Shand & Jurs Co.

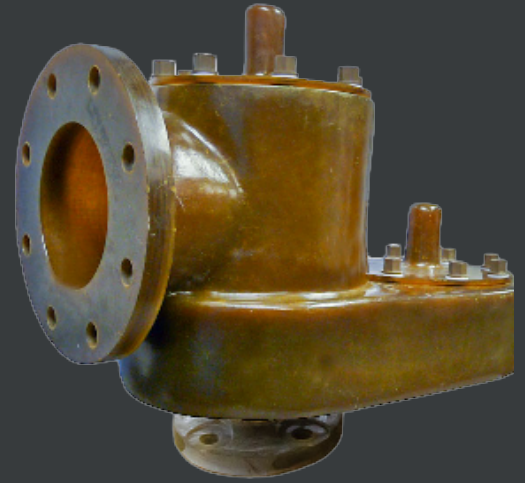
A COGNESSENSE BRAND

FRP Vacuum Vent

The Shand & Jurs® Model 94080 provides vacuum-relief protection for atmospheric storage tanks handling corrosive or oxidizing vapors, where metallic vents lose sealing accuracy due to material attack. The vent opens within defined vacuum limits to prevent shell distortion during pump-out, cooling, or condensation events while remaining closed during normal operation.

A weight-loaded pallet with diaphragm sealing opens from 0.5 oz/in² up to 8 oz/in² vacuum and reseats repeatably after each breathing cycle. The one-piece fiberglass-reinforced plastic housing eliminates pathways for corrosion that can change calibration over time, while the self-draining seat prevents condensate accumulation that could freeze or restrict pallet movement.

Available in 2–12 in. sizes with ANSI 125/150 or EN PN10/16 flanges, the 94080 maintains stable vacuum protection in chemical and wastewater storage where material compatibility governs long-term reliability.



Key Features

One-piece FRP housing

Eliminates corrosion leakage paths present in fabricated metal bodies

Derakane or Furan resin construction

Maintains structural integrity in aggressive oxidizing vapors

Self-draining seating surface

Prevents condensate freeze-binding on the pallet

Weight-loaded pallet assembly

Repeatably opening at low vacuum settings

Encapsulated lead weights

Prevents material attack and contamination

Diaphragm sealing interface

Limits continuous air ingress during normal operation



Benefits



CORROSION-RESISTANT CONSTRUCTION

Extends service life in aggressive environments



CONTROLLED VACUUM OPENING

Prevents tank shell distortion during pump-out



NON-BINDING PALLET MOVEMENT

Maintains operation in freezing or condensate-forming service



STABLE RESEALING

Preserves normal breathing performance



REDUCED MAINTENANCE INTERVENTION

Eliminates recurring corrosion repair cycles



TIGHT SEALING BEHAVIOR

Prevents product degradation from excess air ingress

Available Options



Derakane 470 body

Standard corrosion-resistant construction



Derakane 411 body

Enhanced chemical resistance



Furan resin body

Maximum resistance for highly aggressive service



Hastelloy C external hardware

Severe corrosion environments



EN PN16 flange drilling

Metric piping compatibility



Polypropylene vacuum screen

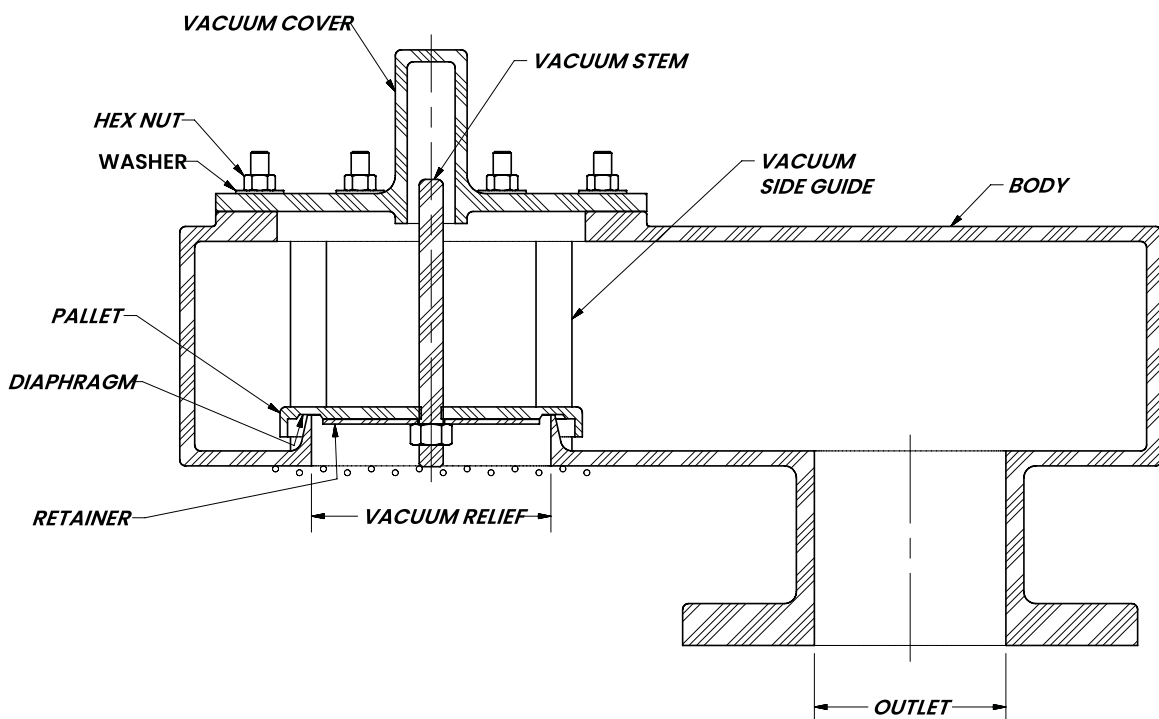
Prevents debris entry into vent opening



Key Performance Data

Parameter	Value
Device Type	Vacuum relief vent
Standard Setting	0.5 oz/in ²
Adjustable Range	Up to 8 oz/in ²
Nominal Sizes	2" – 12"
Connections	ANSI 125/150 FF or EN1092-1 PN10/16
Sealing Method	Diaphragm-sealed pallet
Loading Method	Weight-loaded
Body	FRP (Derakane 470 / 411 or Furan)
Diaphragm	FEP Teflon
Weights	Encapsulated lead
Hardware	316 SS standard, Hastelloy C optional

Dimensions





Model Number Selection

The model number will consist of a base number 94080 followed by 5 digit numbers. These digits will represent 5 sets of option tables.

94080 - AB - CD - E

Ordering Information

Specify:

1. Model 94080 Fiberglass Reinforced Plastic Vacuum Vent
2. Type of Size
3. Type of Pressure and Vacuum Setting
4. Temperature Range
5. Flange Type

Table A - Size (Inlet x Outlet)

Option A	Description
2	2"
3	3"
4	4"
6	6"
8	8"
0	10"
1	12"

Table B - Body Material & Flange Type

Option B	Body Material	Description
A	Derakane 470 (316SS Studs)	ANSI-FF 150#
B	Derakane 470 (Hastelloy "C" Studs)	ANSI-FF 150#
C	Derakane 411 (Hastelloy "C" Studs)	ANSI-FF 150#
D	Furan (Hastelloy "C" Studs)	ANSI-FF 150#
E	Derakane 470 (316SS Studs)	EN1092-1 PN16 FF
F	Derakane 470 (Hastelloy "C" Studs)	EN1092-1 PN16 FF
G	Derakane 411 (Hast "C" Studs)	EN1092-1 PN16 FF
H	Furan (Hastelloy "C" Studs)	EN1092-1 PN16 FF

**Table C* - Size of Pallet Assembly**

Option C	Description
2	2"
3	3"
4	4"
6	6"
8	8"
0	10"
1	12"

*Option "C" must match option "A"

Table D - Setting & Weight Type

Option D	Description
A	LOW: 0.5 oz/in ² to 3.0 oz/in ²
B	MED: 3.01 oz/in ² to 8.0 oz/in ²
C	HIGH: 8.01 oz/in ² to 16 oz/in ²

Table E - Options

Option E	Description
0	None
A	Polypropylene Vac. Screen 2"-4"
B	Polypropylene Vac. Screen 6"-8"
C	Polypropylene Vac. Screen 10"-12"

Summary

The Model 94080 maintains predictable vacuum protection in corrosive storage where metal vents lose calibration and require replacement. The FRP construction and self-draining pallet provide repeatable opening at low vacuum settings while minimizing maintenance intervention. It protects tank integrity and stored product quality by preventing distortion and uncontrolled air ingress during normal breathing cycles.

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