

97570

Combination Conservation Vent & Flame Arrester

SHAND & JUR'S

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The Shand and Jurs Model 97570 is a combination of our 94020 Conservation Vent and 94306 Flame Arrester in a single, easy to configure package providing for pressure and vacuum relief, as well as positive flame stop on low pressure tanks containing flammable liquids or solvents having a low flash point.

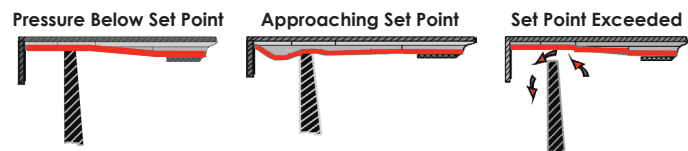
Continued design improvements provide the 94020 conservation vent with high efficiency, maximum flow capacity and minimum leakage. Standard materials of construction are low copper aluminum, cast iron, ductile iron, cast steel and 316 stainless steel for body materials. The conservation vent features cushion seated diaphragms constructed of FEP Teflon for reliability, and extended service life. For high reliability, the pressure and vacuum pallets are both peripherally and center stem guided. Conservation Vents are available in a full range of sizes and configurations, such as open or closed vent (pipe-away). Standard pressure and vacuum settings are 1/2 oz./sq. in.

The 94306 not only provides exceptional protection against fire from external ignition, but also offers maximum flow capacity. The unitized tube bank provides maximum flow while minimizing pressure drop. Standard construction includes light weight cast aluminum, cast iron, cast steel, 304 stainless steel and 316 stainless steel body materials suitable for most environments. Tube bank is available in aluminum, 304 stainless steel and 316 stainless steel as standard. For highly corrosive and severe conditions, special materials and coatings are available. A complete range of sizes from 2" through 12" are available with flat face or raised face flanges to match ANSI 150 lb. connections.

Expanda-Seal

Shand & Jurs "Expanda-Seal" option is available on all pressure pallet assemblies. This feature significantly reduces leakage. The ballooning effect of the Teflon diaphragm effectively seals the valve.

The "Expanda-Seal" feature ensures less than .5 SCFH of air at 95% of the set point.



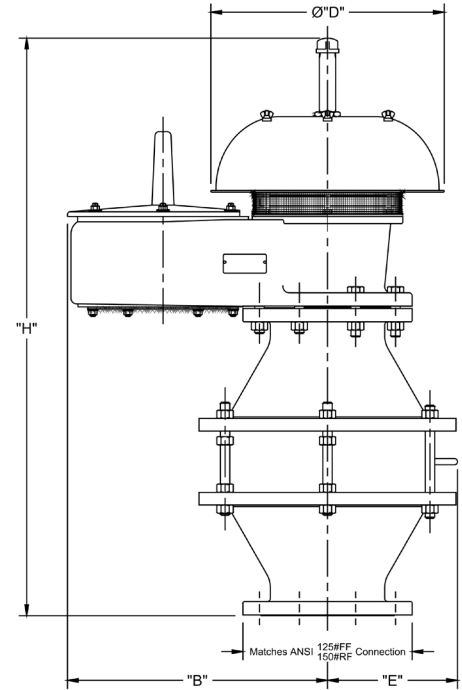
Features

- Sizes 2" thru 12" ANSI and DIN
- Cost effective, dual purpose
- Provides pressure & vacuum relief
- Serves as a barrier between external flame and internal vapors
- Provides protection against flame propagation
- Optional "all weather" coating and insulation jackets available
- Open or closed vent configurations

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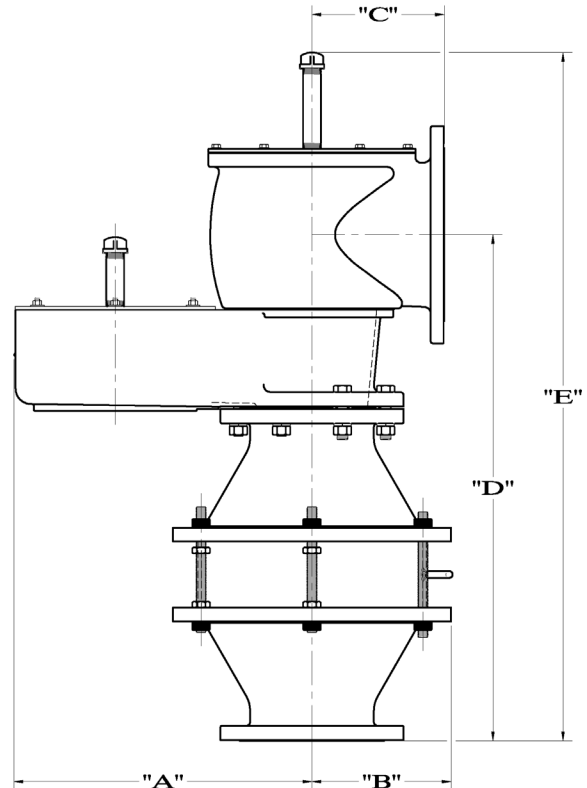
Open Vent Outline Dimensions

Dimensions (Inches [mm])				
Valve Size	"B"	Diameter "D"	"E"	"H"
2 [50]	8 13/16 [224]	12 7/8 [327]	7 5/8 [194]	26 9/16 [675]
3 [75]	11 3/16 [284]	13 9/16 [345]	8 5/16 [211]	29 7/16 [748]
4 [100]	13 9/16 [345]	15 19/16 [405]	6 13/16 [173]	33 11/16 [856]
6 [150]	16 11/16 [424]	18 5/8 [473]	8 1/4 [210]	38 11/16 [983]
8 [200]	20 1/2 [521]	18 5/8 [473]	10 1/4 [260]	45 13/16 [1164]
10 [250]	24 11/16 [627]	25 9/16 [649]	12 1/4 [311]	57 1/16 [1449]
12 [300]	29 1/16 [738]	29 7/8 [759]	14 3/8 [365]	65 3/16 [1656]



Closed Vent Outline Dimensions

Dimensions (Inches [mm])					
Valve Size Inlet x Outlet	"A"	"B"	"C"	"D"	"E"
2" x 2"	8 29/32 [226]	4 1/4 [108]	4 1/4 [108]	18 19/32 [468]	24 9/16 [624]
2" x 3"			4 1/4 [108]	18 7/16 [468]	24 9/16 [624]
3" x 3"	11 1/8 [283]	5 1/4 [133]	5 1/4 [133]	21 9/32 [540]	29 7/16 [748]
3" x 4"			5 1/4 [133]	21 5/8 [549]	29 7/16 [748]
4" x 4"	12 15/16 [328]	6 3/16 [157]	6 1/2 [165]	24 3/32 [633]	38 5/16 [973]
4" x 6"			5 15/16 [151]	24 15/16 [633]	34 1/4 [870]
6" x 6"	17 13/16 [452]	8 3/16 [208]	8 3/8 [213]	29 9/32 [743]	41 3/16 [1046]
6" x 8"			8 1/4 [210]	30 7/32 [767]	41 1/4 [1048]
8" x 8"	21 31/32 [558]	10 1/4 [260]	9 3/4 [248]	36 9/32 [920]	50 3/4 [1289]
8" x 10"			9 3/4 [248]	37 1/4 [946]	50 3/4 [1289]
10" x 10"	26 3/8 [670]	12 1/4 [311]	11 19/32 [294]	42 27/32 [1087]	59 3/16 [1503]
10" x 12"			11 19/32 [294]	43 23/32 [1110]	59 3/16 [1503]
12" x 12"	30 11/16 [780]	14 3/8 [365]	12 13/16 [325]	49 7/32 [1249]	67 [1702]
12" x 14"			12 13/16 [325]	49 3/4 [1264]	66 3/4 [1696]



All designs subject to change. Certified dimensions and specifications available upon request.

Table D - Vent Type

Option D	Description
1	Open Vent
2	Open Vent w/ Flame Snuffer
3	Closed, Standard Outlet > Inlet*
4	Pipe Away, P&V
6	Pipe Away, Same Size Inlet, Outlet, Seat
7	Open Vent with "All Weather" Coating
8	Open Vent with Flame Snuffer with "All Weather" Coating
9	Closed, Standard Outlet > Inlet with "All Weather" Coating
A	Pipe Away, Same Size Inlet, Outlet, Seat with "All Weather Coating
B	Open Vent with "All Weather" Coating with Insulation Jacket
C	Open Vent with Flame Snuffer with "All Weather" Coating & Insulation Jacket
D	Closed, Standard Outlet > Inlet with "All Weather" Coating & Insulation Jacket
E	Pipe Away, Same Size Inlet, Outlet, Seat with "All Weather Coating & Insulation Jacket

* Standard closed vent (outlet is one size larger than the inlet).
Ex. 2" Inlet X 3" Outlet, 6" Inlet X 8" Outlet.

NOTE: Option 6 replaced Option 5. Dimensions are not identical. Consult Factory if replacement valve is required.

Table E - Seal Type and Softgoods

Option E	Description
0	Normal FEP / N8090
1	Expand-Seal FEP / N8090
2	Normal FEP (All)
3	Expand-Seal FEP (All)
4	Normal Viton
5	Expand-Seal Viton
6	Normal PTFE
8	Normal Buna
9	Expand-Seal Buna

Table F - Pressure Range & Load Weight Material

Option F	Description	Material
1	**Standard Pressure and Vacuum Setting = 0.5 oz/in ²	Lead
2	Over 2.9 oz/sq. in. to Maximum Setting	Lead
3	> Standard to 2.9 oz/in ²	Lead
4	**Standard Setting	316 SS
5	Over 2.9 oz/in. ² to Maximum Setting	316 SS
6	> Standard to 2.9 oz/in. ²	316 SS
7	Incremental Weights Pressure Only 2.9 Oz. - 14 Oz. (5 in. W.C. - 24 in. W.C.)	Lead
8	Standard Incremental Weight Set Pressure Only 6" -16" W.C. in 1" Increments Including (1)-1/2 In. and (2)-1/4 In. W.C. Weights	Lead

**Expand-Seal min. pressure setting: 1.5 oz/in.²

Table G - Seat & Pallet Material

Option G	Seat	Pallet
A	Standard*	Standard*
B	Teflon	Standard*
C	Aluminum	Standard*
D	Phenolic	Standard*
E	Stainless Steel	Standard*
F	Teflon Coated SS	Standard*
G	Standard*	316 Stainless Steel
H	Teflon	316 Stainless Steel
I	Aluminum	316 Stainless Steel
J	Phenolic	316 Stainless Steel
K	Stainless Steel	316 Stainless Steel
L	Teflon Coated SS	316 Stainless Steel

*See Materials of Construction
Options G-L are applicable for Aluminum bodies only. 316 SS Pallet is standard on all other body options.

Table H - Cleaning & Trim

Option H	Cleaning	Trim
A	Normal	Standard
B	LOX	Standard
C	LIN	Standard
D	Normal	316 Stainless Steel
E	LOX	316 Stainless Steel
F	LIN	316 Stainless Steel

LOX = Liquid Oxygen
LIN = Liquid Nitrogen
Trim Includes Stem, Stem Guides, Side Guides, Nuts, Bolts and Screen.

NOTE: LOX/LIN cleaning for Cryogenic Breathers of aluminum construction includes degreasing before assembly only!

Table I - Flame Arrester Housing, Bank Assembly Frame & Sheet Metal*

Option I	Tube Bank Material	Shell Material
1	Aluminum	Aluminum
6	304 Stainless Steel	Cast Steel
2	316 Stainless Steel	316 Stainless Steel
4	304 Stainless Steel	304 Stainless Steel

* Tie Rods and Nuts available in 18-8 SS Standard. If 316 SS required, please refer to Option H.