

94570 Combination Conservation Vent and Flame Arrester

The Shand and Jurs 94570 Combination Conservation Vent and Flame Arrester is 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.

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.

The Shand & Jurs Model 94020 Conservation Vent is designed utilizing over 90 years of experience in producing high quality and dependable conservation fittings. Continued design improvements provide these vents with high efficiency, maximum flow capacity and minimum leakage. The easily serviceable configuration and lightweight construction reduces maintenance and installation costs.

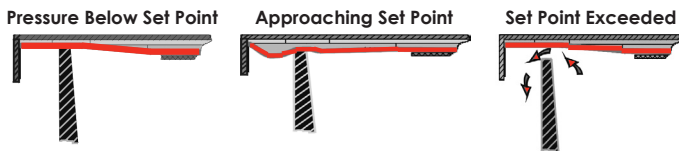
Diaphragms are air cushion seated and are constructed of FEP Teflon for reliability and extended service life. Teflon diaphragms contribute to high resistance to adhesion of ice and gum formations, thus assuring protection against pallet sticking to the seating surface. The body is self-draining and drip rings keep condensates from the seating surfaces. The carefully engineered body, seat, and pallet assembly results in a superior combination of tight sealing and high capacity at low over-pressure with minimal blow down.

The unitized tube bank provides maximum flow while minimizing pressure drop. Both body and tube banks are available in numerous materials to meet the requirements of your site.

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.

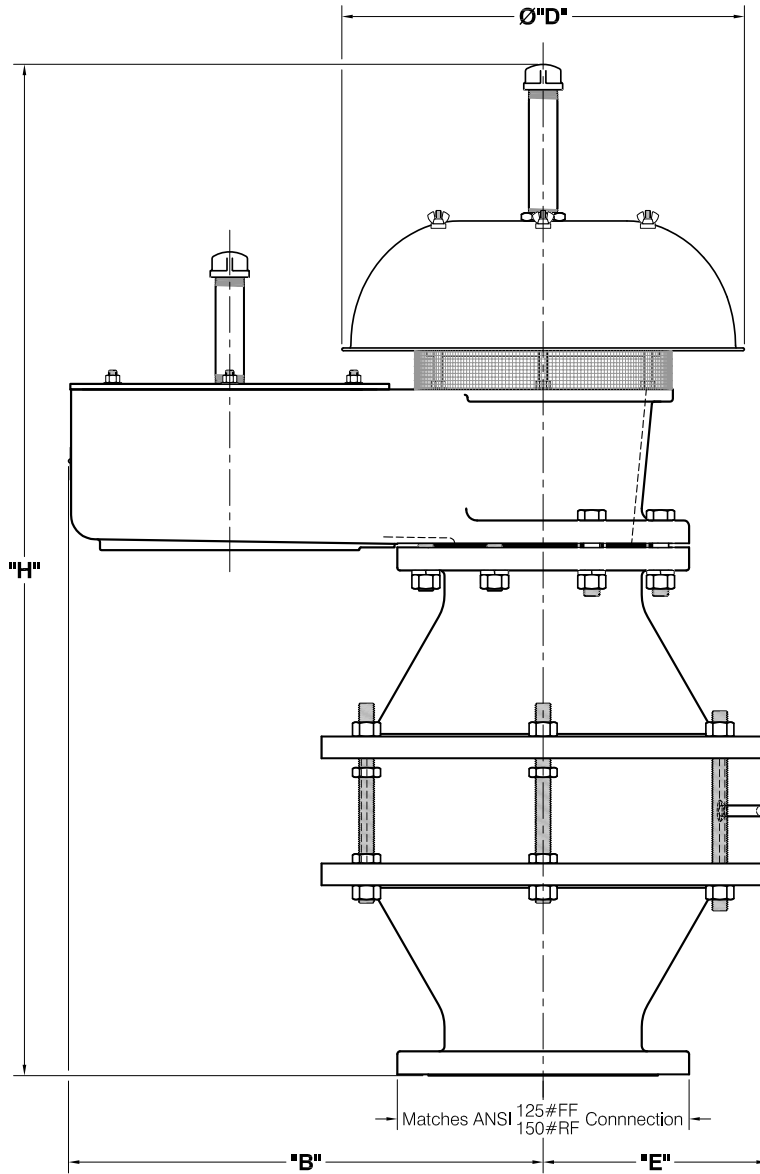
The "Expanda-Seal" feature ensures less than .5 SCFH of air at 95% of the set point.



Features

- 2"-12" Sizes ANSI and EN1092 available
- 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, insulation jackets and steam jacketing available
- Open or closed vent configurations

Outline Dimensions



Vent Size	"B"	Diameter "D"	"E"	"H"
2"	8 13/16	12 7/8	7 5/8	26 5/16
3"	11 3/16	13 5/16	8 5/16	29 7/16
4"	13 5/16	15 15/16	6 13/16	33 11/16
6"	16 11/16	18 5/8	8 1/4	38 11/16
8"	20 1/2	18 5/8	10 1/4	45 13/16
10"	24 11/16	25 5/16	12 1/4	57 1/16
12"	29 1/16	29 7/8	14 3/8	65 3/16

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

94570 Ordering Guide

Model Number Selection

The model number will consist of a base number **94570** followed by 9 digit numbers. These digits will represent 8 option tables.

94570 - AB - CD - EF - GH - I

Ordering Information

Specify:

1. Size and body material
2. Type of flange
3. Tube bank and shell material
4. Closed or open vent
5. Pressure and vacuum settings if not standard
6. Optional materials of construction or coatings, if required



Table AB - Size, Material & Inlet Flange Type

Option AB	Size	Type of Connection	Material
11	2"	NPT	Aluminum
12	2"	Flanged	Aluminum
21	2"	NPT	Aluminum Cryo Hood
22	2"	Flanged	Aluminum Cryo Hood
31/41	2"	NPT	Cast Iron / Ductile Iron
32/42	2"	Flanged	Cast Iron / Ductile Iron
51	2"	NPT	Cast Steel
52	2"	Flanged	Cast Steel
71	2"	NPT	316 Stainless Steel
72	2"	Flanged	316 Stainless Steel
13	3"	NPT	Aluminum
14	3"	Flanged	Aluminum
23	3"	NPT	Aluminum Cryo Hood
24	3"	Flanged	Aluminum Cryo Hood
33/43	3"	NPT	Cast Iron / Ductile Iron
34/44	3"	Flanged	Cast Iron / Ductile Iron
53	3"	NPT	Cast Steel
54	3"	Flanged	Cast Steel
73	3"	NPT	316 Stainless Steel
74	3"	Flanged	316 Stainless Steel
15	4"	Flanged	Aluminum
25	4"	Flanged	Aluminum Cryo Hood
35/45	4"	Flanged	Cast Iron / Ductile Iron

Option AB	Size	Type of Connection	Material
55	4"	Flanged	Cast Steel
75	4"	Flanged	316 Stainless Steel
16	6"	Flanged	Aluminum
26	6"	Flanged	Aluminum Cryo Hood
36/46	6"	Flanged	Cast Iron / Ductile Iron
56	6"	Flanged	Cast Steel
76	6"	Flanged	316 Stainless Steel
17	8"	Flanged	Aluminum
27	8"	Flanged	Aluminum Cryo Hood
37/47	8"	Flanged	Cast Iron / Ductile Iron
57	8"	Flanged	Cast Steel
77	8"	Flanged	316 Stainless Steel
18	10"	Flanged	Aluminum
28	10"	Flanged	Aluminum Cryo Hood
38/48	10"	Flanged	Cast Iron / Ductile Iron
58	10"	Flanged	Cast Steel
78	10"	Flanged	316 Stainless Steel
19	12"	Flanged	Aluminum
29	12"	Flanged	Aluminum Cryo Hood
39/49	12"	Flanged	Cast Iron / Ductile Iron
59	12"	Flanged	Cast Steel
79	12"	Flanged	316 Stainless Steel

Table C - Flange Type

Option C	Description
0	ANSI 125/150lb. FF
1	ANSI 125/150 lb. RF*
2	EN1092-1 PN16 FF
3	EN1092-1 PN16 RF*
4	JIS 10K FF
5	JIS 10K RF*

*Raised face flanges not available with aluminum bodies

Table E - Seal Type & Softgoods

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

Table G - Seat & Pallet Material

Option G	Seat	Pallet
A	Standard*	Standard*
B	Teflon	Standard*
C	Aluminum	Standard*
E	Stainless Steel	Standard*
F	Teflon Coated S.S.	Standard*
G	Standard*	316 Stainless Steel
H	Teflon	316 Stainless Steel
I	Aluminum	316 Stainless Steel
K	Stainless Steel	316 Stainless Steel
L	Teflon Coated S.S.	316 Stainless Steel

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

Table I - Flame Arrester, Tube Bank & Shell

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

Table D - Vent Type

Option D	Description
1	Open Vent
2	Open Vent with Flame Snuffer
3	Closed, Standard Outlet > Inlet
4	Pipe Away, P&V
6	Pipe Away, Same Size in, out, 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 In, Out, Seat with "All Weather" Coating

*Raised face flanges not available with aluminum bodies

Table F - Pressure Range

Option F	Description	Material
1	**Standard Pressure and Vacuum Setting = 05 oz/in ²	Lead
2	Over 2.9 oz/in ² to Maximum Setting	Lead
3	>Standard to 2.9 oz/in ²	Lead
4	**Standard Setting	316 Stainless Steel
5	Over 2.9 oz/in ² to Maximum Setting	316 Stainless Steel
6	>Standard to 2.9 oz/in ²	316 Stainless Steel
7	Incremental Weights Pressure Only 2.9 oz. - 14 oz. (5 in. W.C. - 24 in. W.C.)	Lead

**Expanda- Seal Pressure Setting - 1.5 oz/in² Minimum.

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!