



- Unitized tube bank design, FM Approved
- Maximum protection and efficiency with minimum pressure drop
- Weight loaded for both vacuum and pressure venting
- Attached with quick release bolts and hinge
- Wide range of standard construction materials available
- Three inlet types: screwed, flat face flange and raised face flange

## The Shand & Jurs 94560 Combination Conservation Valve and Flame Arrester

The Shand & Jurs Model 94560 Combination Valve and Flame Arrester design provides for maximum flow capacity, minimum leakage and a positive flame stop on low pressure tanks containing flammable liquids or solvents having low flash points. This single piece of equipment provides pressure/vacuum venting and a flame arrester. Only one installation is required for both the venting and flame arrester functions.

The conservation vent portion of the unit features diaphragms that are cushion seated and constructed of FEP Teflon for reliability and extended service life. This contributes to high resistance to adhesion of ice and gum formations of the pallet and its seating surfaces. The body of the valve is self-draining and drip rings keep condensation from the seating surfaces.

FM approved, the flame arrester contains a unitized tube bank. The tube bank is formed by spirally winding alternate flat and corrugated sheet stock around a solid core, maximizing flow capacity and minimizing pressure drop. This proven design insures uniformity of free area flow and allows for years of dependable service.

Quick access to the flame arrester element is attained through use of swing bolts and a hinged conservation

vent. Once the wing nuts are loosened, the bolts swing away and the vent lifts clear, the flame arrester element can be accessed for inspection and servicing.

The conservation valve is weight loaded for both vacuum and pressure venting. The conservation valve is located on top of the flame arrester body and is attached by using quick release bolts and hinge. This permits easy removal of the conservation valve for inspection and/or replacement of the flame arrester tube bank. The weather hood of the conservation valve is stainless steel.

Standard pressure and vacuum settings are 1/2 oz./sq. in. with maximum pressure settings of 24 oz./sq. in. and 5 oz./sq. in. for vacuum. Its flow capacity is certified in accordance with API standards.

Shand & Jurs Model 94560 Combination Conservation Valve and Flame Arrester is available in 2, 3 and 4 inch sizes with flat or raised face flanges to match drilling of ANSI 150# specifications. Standard construction includes lightweight cast aluminum, cast iron, cast steel and 316 stainless steel as standard. For highly corrosive and severe conditions, special materials are available. Steam jacketing is available as an option.

**SPECIFICATIONS**

Sizes: ..... 2", 3", 4"

**Pressure & Vacuum Settings:**

Standard Settings: ..... 0.5 oz./sq. in.\*  
 Pressure: ..... 24 oz./sq. in. (Maximum)  
 Vacuum: ..... 5 oz./sq. in. (Maximum)

\* Expanda-Seal Pressure Setting:  
 1.5 oz./sq. in. Minimum  
 (Consult Factory for lower settings)

**Flange Rating:**

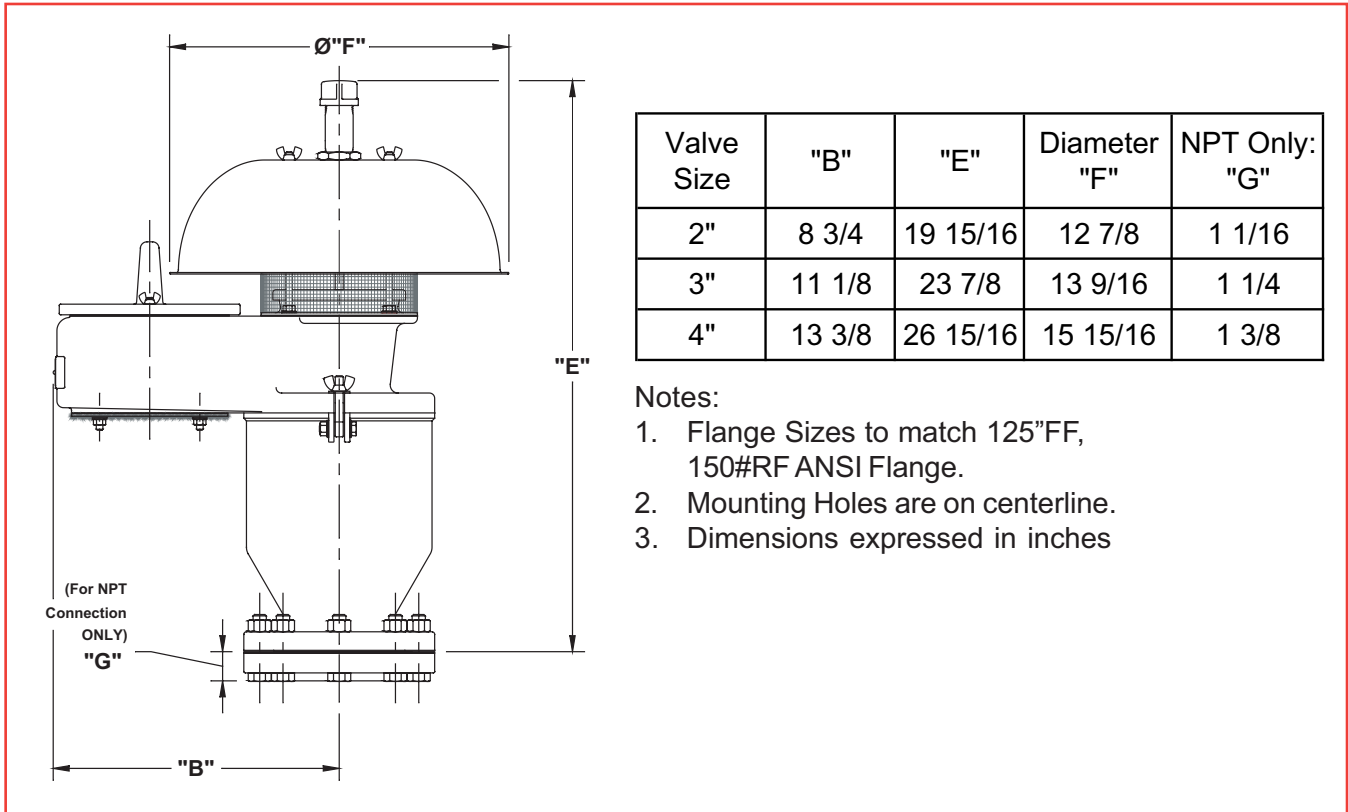
To match drilling of ANSI 150 lb. flat face or  
 150 lb. raised face (cast aluminum body option  
 available with flat face only) NPT inlet options  
 available.

**MATERIALS OF CONSTRUCTION:**

1. Aluminum body, Aluminum tube bank and valve internals\*
2. Cast Iron body, 316 Stainless Steel tube bank and valve internals\*
3. Cast Steel body, 316 Stainless Steel tube bank and valve internals\*
4. 316 Stainless Steel Body, 316 Stainless Steel tube bank and valve internals\*
5. Ductile Iron body, 316 Stainless Steel tube bank and valve internals\*

\* Valve Internals: Seats and Pallets  
 Vertical Lift Vacuum Pallet (Cage Guided).

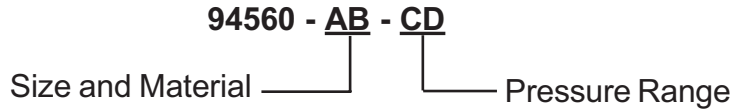
Approval: ..... FM (Factory Mutual),  
 NEC Group D



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

### MODEL NUMBER SELECTION:

The model number will consist of a base number 94560 followed by two 2 digit numbers which represent the options listed in the following tables.



### ORDERING INFORMATION

Specify:

1. Model 94560 Combination Conservation Valve & Flame Arrester
2. Size
3. Material
4. Flange Type
5. Pressure Range



**TABLE (AB) - SIZE, MATERIAL & INLET FLANGE TYPE**

OPTION #	SIZE	TYPE OF CONNECTION	MATERIAL
14	2"	Flat Face Flange	ALUM
24	2"	Flat Face Flange	CI
34	2"	Flat Face Flange	CS
44	2"	Flat Face Flange	316 SS
54	2"	Flat Face Flange	DI
27	2"	Raised Face Flange	CI
37	2"	Raised Face Flange	CS
47	2"	Raised Face Flange	316 SS
57	2"	Raised Face Flange	DI
11	2"	Threaded	ALUM
21	2"	Threaded	CI
31	2"	Threaded	CS
41	2"	Threaded	316 SS
51	2"	Threaded	DI
15	3"	Flat Face Flange	ALUM
25	3"	Flat Face Flange	CI
35	3"	Flat Face Flange	CS
45	3"	Flat Face Flange	316 SS
55	3"	Flat Face Flange	DI
28	3"	Raised Face Flange	CI
38	3"	Raised Face Flange	CS
48	3"	Raised Face Flange	316 SS
58	3"	Raised Face Flange	DI
12	3"	Threaded	ALUM
22	3"	Threaded	CI
32	3"	Threaded	CS
42	3"	Threaded	316 SS
52	3"	Threaded	DI
16	4"	Flat Face Flange	ALUM
26	4"	Flat Face Flange	CI
36	4"	Flat Face Flange	CS
46	4"	Flat Face Flange	316 SS
56	4"	Flat Face Flange	DI
29	4"	Raised Face Flange	CI
39	4"	Raised Face Flange	CS
49	4"	Raised Face Flange	316 SS
59	4"	Raised Face Flange	DI
13	4"	Threaded	ALUM
23	4"	Threaded	CI
33	4"	Threaded	CS
43	4"	Threaded	316 SS
53	4"	Threaded	DI

**TABLE (C) - SEAL TYPE**

OPTION #	SEAL TYPE & SOFT GOODS
0	Normal FEP Teflon/N8090
1	Expanda seal FEP Teflon/N8090
2	Normal FEP Teflon (all)
3	Expanda FEP Teflon (all)
4	Normal Viton (all)
5	Expanda Viton (all)
6	Normal PTFE & N8090
7	RESERVED

**TABLE (D) - PRESSURE RANGE**

OPTION #	DESCRIPTION	MATERIAL
1	Standard Setting	Lead
2	Over 2.9 oz/sq. in.	Lead
3	Standard to 2.9 oz/sq.in.	Lead
4	Standard Setting	316 SS
5	Over 2.9 oz/sq. in. + Table A	316 SS
6	Standard to 2.9 oz/sq.in. + Tbl A	316 SS

Expanda-Seal Pressure Setting:  
1.5 oz./sq. in. Minimum  
(Consult Factory for lower settings)