

- Low copper aluminum alloy minimizes special materials needs
- Guided pressure pallet assures smooth lift and closure
- Unique diaphragm construction assures positive seal and minimal blowdown
- Easy inspection of internal components
- Withstands variety of materials including highly corrosive and toxic products
- Pallet lip design contributes to high flow characteristics

The Shand and Jurs Model 94040 Spring Loaded Conservation Vent (Pressure/Vacuum)

The Shand & Jurs Model 94040 Spring Loaded Conservation Vent is designed utilizing over 80 years of experience in producing high quality and dependable conservation vents and safety fittings. This vent meets the need of higher pressure settings required on storage tanks (ideally suited when blanketed with nitrogen or other inert gas), process vessels and piping common to the petroleum, chemical and petro-chemical industries.

Higher pressure settings are accommodated using a unique method of spring loading which ensures highly reliable operation and reduces excessive venting of product at a relatively low cost. Pressure settings range from 1 psi through 15 psi for sizes 2" to 10" and up to 10 psi for the 12" size. Screw and flange type connections are offered for the 2" and 3" size and flange only for sizes 4" to 12". Vacuum protection is provided utilizing a weight loaded vertical lift pallet assembly that assures optimum air flow into tank.

The pallet to seat diaphragm is cushion seated Teflon for long service life and optimum reliability. This diaphragm helps to ensure a high resistance to any ice and gum formations, prevents the pallet from sticking to the seat. The carefully engineered body, seat and pallet offers a superior combination of tight sealing and high capacity at lower over-pressure.

One of the most important features which should be noted in the Model 94040 design is the variety of construction materials available. A wide range of highly corrosive and toxic products common to the petroleum, petro-chemical and chemical industries, require that a conservation vent be able to withstand this environment and still function reliably. For few instances where our standard materials may not be suitable, optional materials are readily available.

Standard materials offered are aluminum, cast iron, cast steel and 316 stainless steel. Standard seats are aluminum and 316 stainless steel.

SPECIFICATIONS:

Sizes:..... 2", 3", 4", 6", 8", 10" & 12"
 Pressure:..... Minimum 1 psi
 Vacuum:..... 2 oz./sq. in. (3.46 in. w.c.)

Maximum
 Pressure Setting:*..... 2" to 10" - 15 psi
 and 12" - 10 psi

***MAX STD VACUUM SETTING (oz / sq. in.)**

SIZE	LEAD WEIGHTS	S.S. WEIGHTS
2"	7.5oz	6.0oz
3"	9oz	7.5oz
4"	10.5oz	7.5oz
6"	12oz	7.5oz
8"	13.5oz	9oz
10"	16.5oz	12oz
12"	21oz	15oz

*Higher settings may be available. Consult Factory

Temperature Range: Body and Seal
 Options for Process Temperature Ranges of
 -70°F to 500°F

Service and Body Material:

Normal:..... Cast Low Copper
 Aluminum

Severe:..... Steel, 316 Stainless Steel
 Normal:..... Cast Iron

Seats:..... Aluminum or
 316 Stainless Steel.

Type of Flange Connection:

Screwed or flanged for 2" & 3" sizes
 Flanged for 4", 6", 8", 10" & 12" sizes
 Raised Face flange available, except for
 aluminum body material. Flange connection
 matches vent size 150 lb. ANSI compatible.
 DIN and JIS 10K available

Valve Size	Outlet Size	"F"	"C"	"G"	"H"	"E"
2"	3"	13	10 3/8	5 1/32	4 1/4	7/8
3"	4"	16 3/16	12 1/8	5 31/32	5 1/4	13/16
4"	6"	19 1/4	14 1/8	7 1/32	5 15/16	13/16
6"	8"	24 15/16	17 1/4	10 11/32	8 1/4	3/4
8"	10"	30 1/2	20 7/8	12 23/32	9 3/4	1
10"	12"	36 1/2	24 5/8	14 29/32	11 19/32	1
12"	14"	41 7/8	27 5/8	16 29/32	12 13/16	1

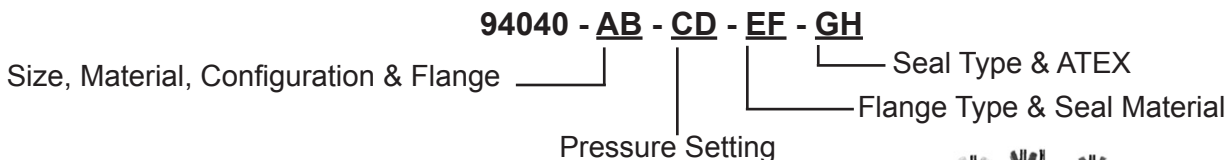
Valve Size	"B"	"J"	Diameter "D"	"E"
2"	15 1/4	10 3/4	12 7/8	7/8
3"	17 15/16	11 9/16	13 9/16	13/16
4"	21 1/2	13 5/8	15 15/16	13/16
6"	26	14 7/8	18 5/8	3/4
8"	29 25/32	16 3/4	18 5/8	1
10"	37 7/16	18 1/2	25 9/16	1
12"	43 15/16	21 1/8	29 7/8	1

Inlet size = Outlet size available.
 Consult factory.

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

MODEL NUMBER SELECTION:

The model number will consist of a base number 94040 followed by four 2 digit numbers which represent the options listed in the following pages.



ORDERING INFORMATION

Specify:

1. Model 94040 Spring Loaded Conservation Vent
2. Size
3. Pressure and Vacuum Setting
4. Type of Seat
5. Temperature Range
6. Type of Service and Body Material
7. Type of Flange Connection
8. Seal Type
9. To Specify CE for Ordinary EU Locations use Table G2
10. ATEX Certification for Group IIB, IIA EU Locations use Table G1

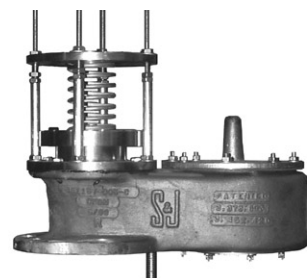
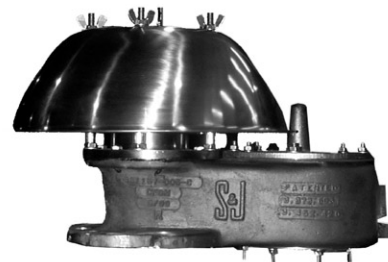


TABLE II - (CD) PRESSURE SETTING RANGES (PSI)

OPTION #	RANGE FROM	RANGE TO
01	1.0	2.0
02	2.1	3.0
03	3.1	4.0
04	4.1	5.0
05	5.1	6.0
06	6.1	7.0
07	7.1	8.0
08	8.1	9.0
09	9.1	10.0
10	10.1	11.0
11	11.1	12.0
12	12.1	13.0
13	13.1	14.0
14	14.1	15.0

ATEX and CE Models are Limited to Options 01-06

TABLE III - (EF) FLANGE TYPE & SEAL MATERIAL

OPTION #	DESCRIPTION
0X	FF ANSI
1X	RF ANSI
2X	FF DIN PN 16
3X	RF DIN PN 16
4X	FF JIS 10K
5X	RF JIS 10K
X0	FEP
X1	PTFE
X2	BUNA
X3	VITON

TABLE IV - (GH) SEAL TYPE

OPTION #	DESCRIPTION
00	STD.
01	Expanda-Seal
*10	ATEX Certified
*11	ATEX Certified Expanda-Seal
20	CE /STD. Seal
21	CE / Expanda-Seal

* Pallet, Side Guides, Nuts, Bolts, Screen and Spring are 316 SS

TABLE I - (AB) SIZE, MATERIAL, CONFIGURATION & FLANGE

FLAT FACED OPTION #	RAISED FACED OPTION #	SIZE	DESCRIPTION		VENT TYPE
			BODY	TRIM	
12	N/A	2"	ALUM	ALUM	OPEN
22	N/A	2"	ALUM	ALUM	CLOSED
32	A2	2"	CI	SS	OPEN
42	52	2"	CI	SS	CLOSED
62	72	2"	CS	SS	CLOSED
B2	C2	2"	CS	SS	OPEN
82	92	2"	SS	SS	CLOSED
D2	E2	2"	SS	SS	OPEN
14	N/A	3"	ALUM	ALUM	OPEN
24	N/A	3"	ALUM	ALUM	CLOSED
34	A4	3"	CI	SS	OPEN
44	54	3"	CI	SS	CLOSED
64	74	3"	CS	SS	CLOSED
B4	C4	3"	CS	SS	OPEN
84	94	3"	SS	SS	CLOSED
D4	E4	3"	SS	SS	OPEN
15	N/A	4"	ALUM	ALUM	OPEN
25	N/A	4"	ALUM	ALUM	CLOSED
35	A5	4"	CI	SS	OPEN
45	55	4"	CI	SS	CLOSED
65	75	4"	CS	SS	CLOSED
B5	C5	4"	CS	SS	OPEN
85	95	4"	SS	SS	CLOSED
D5	E5	4"	SS	SS	OPEN
16	N/A	6"	ALUM	ALUM	OPEN
26	N/A	6"	ALUM	ALUM	CLOSED
36	A6	6"	CI	SS	OPEN
46	56	6"	CI	SS	CLOSED
66	76	6"	CS	SS	CLOSED
B6	C6	6"	CS	SS	OPEN
86	96	6"	SS	SS	CLOSED
D6	E6	6"	SS	SS	OPEN
17	N/A	8"	ALUM	ALUM	OPEN
27	N/A	8"	ALUM	ALUM	CLOSED
37	A7	8"	CI	SS	OPEN
47	57	8"	CI	SS	CLOSED
67	77	8"	CS	SS	CLOSED
B7	C7	8"	CS	SS	OPEN
87	97	8"	SS	SS	CLOSED
D7	E7	8"	SS	SS	OPEN
18	N/A	10"	ALUM	ALUM	OPEN
28	N/A	10"	ALUM	ALUM	CLOSED
38	A8	10"	CI	SS	OPEN
48	58	10"	CI	SS	CLOSED
68	78	10"	CS	SS	CLOSED
B8	C8	10"	CS	SS	OPEN
88	98	10"	SS	SS	CLOSED
D8	E8	10"	SS	SS	OPEN
19	N/A	12"	ALUM	ALUM	OPEN
29	N/A	12"	ALUM	ALUM	CLOSED
39	A9	12"	CI	SS	OPEN
49	59	12"	CI	SS	CLOSED
69	79	12"	CS	SS	CLOSED
B9	C9	12"	CS	SS	OPEN
89	99	12"	SS	SS	CLOSED
D9	E9	12"	SS	SS	OPEN