94040 Spring Loaded Conservation Open Vent

The Shand & Jurs Model 94040 Spring Loaded Conservation Vent is designed utilizing over 100 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.

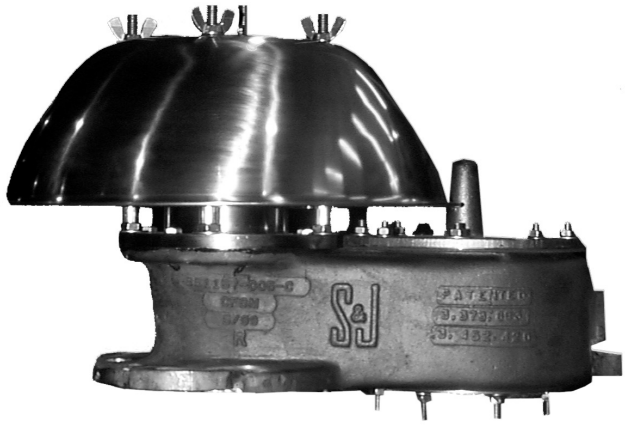
Higher pressure settings are accommodated using a unique method of spring loading which ensures highly reliable operation and reduces excessive venting of product at a relatively low cost. Pressure settings range from 1 psig through 15 psig for all sizes except 12" which has a maximum of 12 psig. Vacuum protection is provided utilizing a weight loaded vertical lift pallet assembly that assures opitmum air flow into tank.

The pallet to seat diaphragm is air-cushion seated FEP 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.

An Expanda-Seal is available on the pressure pallet to assure minimal leakage up to 95% of set 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, steel and 316 stainless steel. Standard seats are aluminum or 316 stainless steel.



Features

- Suitable materials available for corrosive/extreme temperature service
- 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

94040
Spring Loaded Conservation Open Vent

SHAND&JURS

Specifications:

Sizes:
2", 3", 4", 6", 8", 10" & 12"

Pressure:
Minimum 1 psig

Vacuum:
2 oz/in^2 (3.46 in. w.c.)

Maximum Pressure Setting*:
2"-10" - 15 psig; 12" - 12 psig

*Max. Standard Vacuum Setting (oz/in^2):

Size	Lead Weights	Stainless Steel Weights
2"	7.5 oz.	6 oz.
3"	9 oz.	7.5 oz.
4"	10.5 oz.	7.5 oz.
6"	12 oz.	7.5 oz.
8"	13.5 oz.	9 oz.
10"	16.5 oz.	12 oz.
12"	21 oz.	15 oz.

Higher settings may be available. Consult Factory.

Temperature Range:
Process Temperature ranges for body material:
-50°F to 250°F (Aluminum)
-50°F to 220°F (316 Stainless Steel)
-20°F to 220°F (Carbon Steel)

Type of Flange Connection:
Flanged for all sizes
Raised Face flange available, except for aluminum body material. Flange connection matches vent size 150 lb. ANSI compatible.

Diaphragm:
FEP (Fluorinated Ethylene Propylene),
Temp Range: -65°F to 400°F

Optional:
FKM (Fluoroelastomer), Temp Range: -15°F to 400°F
NBR (Nitrile-Butadiene), Temp Range: -15°F to 250°F
PFA (Fluoroplastic Film), Temp Range: -15°F to 500°F

Material of Construction:

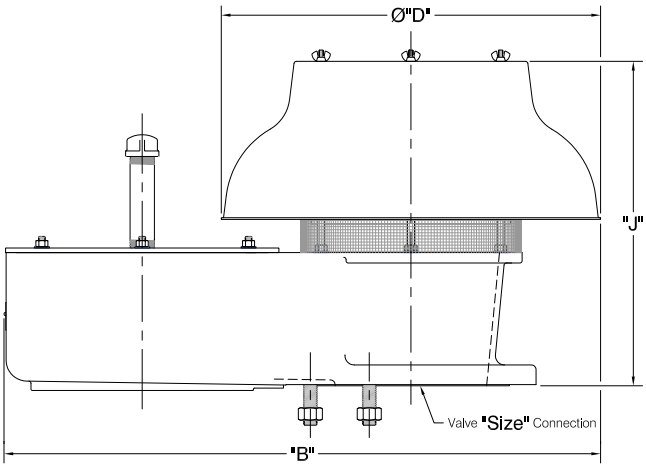
Body:
Low Copper Cast Aluminum, Carbon Steel, 316 Stainless Steel

Pressure Seat:
Aluminum or 316 Stainless Steel

Vacuum Integral Seat:
Aluminum, 316, Stainless Steel or Carbon Steel with 316 SS overlay

Hood (Open Vent):
Stainless Steel, Aluminum, 316 Stainless Steel

Dimensions:



Vent Size	"B"	"J"	Diameter "D"
2"	15 ¼	10 ¾	12 ⅞
3"	17 15⁄16	11 9⁄16	13 9⁄16
4"	21 ½	13 ⅝	15 15⁄16
6"	26	14 ⅞	18 ⅝
8"	29 25⁄32	16 ¾	18 ⅝
10"	37 7⁄16	18 ½	25 9⁄16
12"	43 15⁄16	21 ⅛	29 ⅞

Tolerances: ± ⅛

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

94040 Ordering Guide

Model Number Selection

The model number will consist of a base number **94040** followed by 8 digit numbers. These digits will represent 4 sets of option tables.

94040 - AB - CD - EF - GH

Ordering Information

Specify:

1. Model 94040 Spring Loaded Conservation Vent
2. Size
3. Pressure and Vacuum Setting
4. Temperature Range
5. Type of Service and Body Material
6. Type of Flange Connection
7. ATEX Certification for II 1 G Ex h II B T1...T6 Ga EU Locations

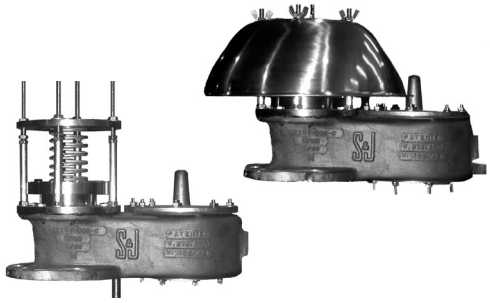


Table A - Size (Body & Flange)

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

Table B - Body (Casting) Material & Flange Type

Option B	Body Material	FLange Type
A	Aluminum I-ST	ANSI-FF 150#
B	Cast Steel I-ST	ANSI-FF 150#
C	Cast Steel I-ST	ANSI-RF 150#
D	316SS I-ST	ANSI-FF 150#
E	316SS I-ST	ANSI-RF 150#
F	Aluminum I-ST	EN1092-1 PN16 FF
G	Cast Steel I-ST	EN1092-1 PN16 FF
H	Cast Steel I-ST	EN1092-1 PN16 RF
I	316SS I-ST	EN1092-1 PN16 FF
J	316SS I-ST	EN1092-1 PN16 RF

Table E - Options

Option A	Description
1	None
2	ATEX*

*Max. pressure for ATEX is 0.5 Borg [7.25 PSIG]

Table C - Size of Pallet

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

Table D - Spring Ranges

Option D	Description
A	1.0 PSIG - 3.0 PSIG
B	3.01 PSIG - 5.0 PSIG
C	5.01 PSIG - 7.0 PSIG
D	7.01 PSIG - 9.0 PSIG
E	9.01 PSIG - 11.0 PSIG
F	11.01 PSIG - 13.0 PSIG
G	13.01 PSIG - 15.0 PSIG
H	1.0 PSIG - 3.0 PSIG; Expanda-Seal
I	3.01 PSIG - 5.0 PSIG; Expanda-Seal
J	5.01 PSIG - 7.0 PSIG; Expanda-Seal
K	7.01 PSIG - 9.0 PSIG; Expanda-Seal
L	9.01 PSIG - 11.0 PSIG; Expanda-Seal
M	11.01 PSIG - 13.0 PSIG; Expanda-Seal
N	13.01 PSIG - 15.0 PSIG; Expanda-Seal