

94160 Pressure Relief Vent

The Shand & Jurs 94160 Pressure Relief Vent provides pressure relief for storage tanks and low pressure vessels. Utilizing a flange mounted design, this economical vent provides maximum flow capacity and high efficiency.

The improved vent uses a reduced number of standard components thus minimizing maintenance and replacement costs.

Standard materials of construction include aluminum, cast iron, steel and 316 stainless steel. This selection of materials is suitable for applications in corrosive and toxic product environments.

To ensure alignment and seating, the pressure pallet used is both peripheral and center stem guided. For added reliability and extended service, the diaphragm is "cushion seated" and constructed of FEP, contributing to high resistance to adhesion of ice and gum formation. Seat rings are field replaceable.

For additional protection, a weatherhood and a coarse mesh screen surrounding the entire valve prevent foreign matter from entering the valve.

A standard flanged base for sizes 2" thru 24" will fit 150 lb. ANSI FF/RF Flanges. Flanged base materials are aluminum, cast steel, and stainless steel. RF Flange is not available in aluminum.

Expanda-Seal

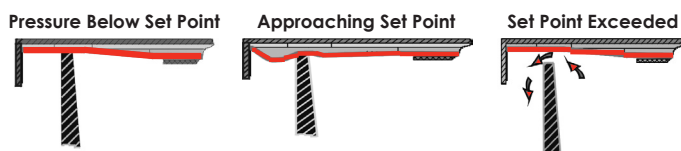
Shand & Jurs "Expanda-Seal" option is available on all pressure pallet assemblies. This feature significantly reduces leakage. The ballooning effect of the FEP diaphragm effectively seals the valve.

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



Features

- Designed for high efficiency & economy
- Provides maximum flow capacity
- Reduces maintenance and replacement costs
- Suitable for corrosive and toxic applications
- "All Weather" Teflon coating available



Specifications

Sizes:

2", 3", 4", 6", 8", 10", 12", 16", 20" and 24"
(other sizes available upon request)

Flange Connection:

Matches valve size 150 lb. ANSI, API, EN1092-1.

Standard Setting (Min.):

0.5 oz/in² (0.865" W.C.) (See Standard Setting Table)

Maximum Setting:

16 oz/in² (Without modification)
(higher settings available with modification)

Temperature Range:

Process Temperature ranges for body material:

-65°F to 250°F (Aluminum)

-65°F to 350°F (316 Stainless Steel)

-20°F to 350°F (Carbon Steel)

Diaphragm:

FEP (Fluorinated Ethylene Propylene), FKM (Fluoroelastomer),
NBR (Nitrile-Butadiene), PFA (Fluoroplastic Film)

Service and Body Material*:

Normal: Aluminum

Severe: Steel, 316 Stainless Steel

Seats: Normal Service, Aluminum for all sizes, Severe

Service 316 Stainless Steel for all sizes

* Optional materials of construction available on request.

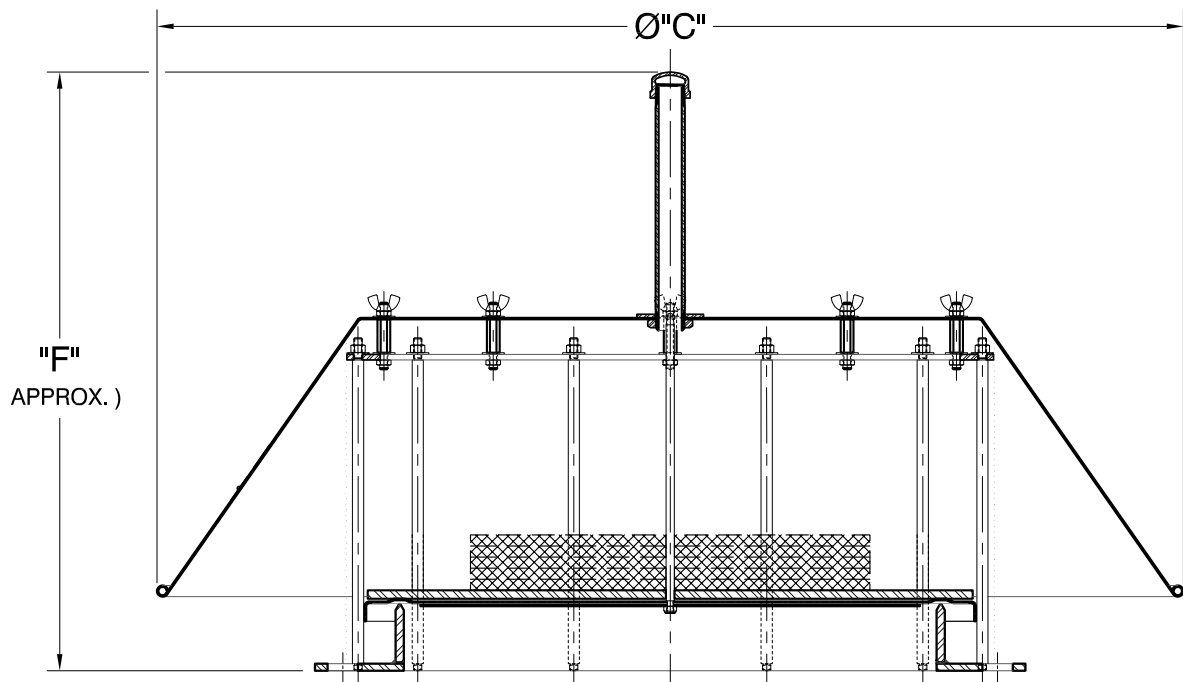
Standard Materials of Construction

Service	Body	Pallet & Retainer	Seat	Pallet Stem	Pallet Side Guides	Stem Guides	Diaphragm	Screen	Hardware
Norm. Alum.	Alum.	316	316	316	316 SS	316	FEP	GS	316 SS
Severe Steel	CS	316 SS	316 SS	316 SS	316 SS	316 SS	FEP	304 SS	316 SS
Severe 316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	FEP	316 SS	316 SS

* 316 SS pallet stem used in place of aluminum for elevated settings
HOODS: 2" -10" Sizes - 18-8 Stainless Steel or 316 Stainless Steel
12" -24" Sizes - Aluminum, Steel, or 316 Stainless Steel

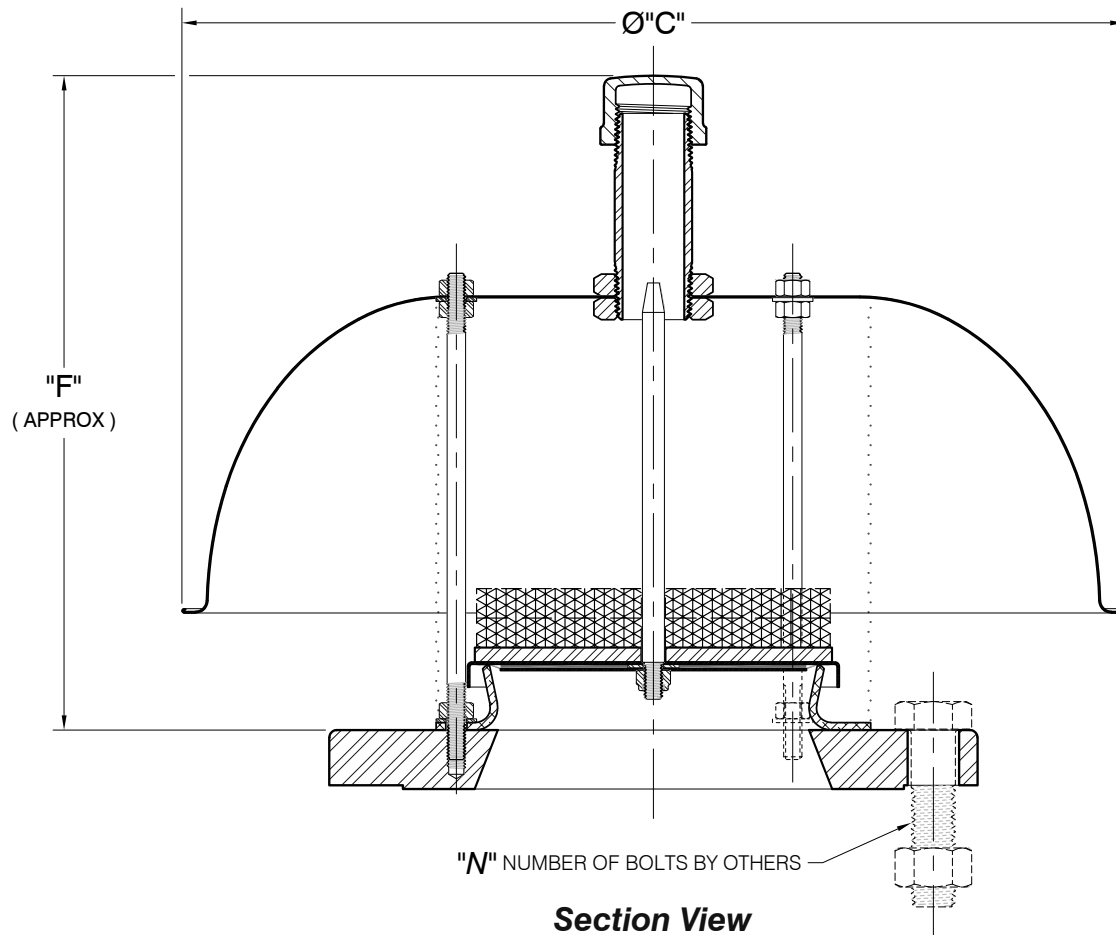
CS = Cast Steel

16", 20" and 24" Sizes



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

Dimensions



Vent Size (In.)	Dimensions in Inches		"N" No. of Bolts*	Net Weight - Lbs.	
	"C"	"F"		Aluminum	Steel
2"	12 ⁷ / ₈	8 ¹ / ₂	4	4	10
3"	12 ⁷ / ₈	7 ³ / ₄	4	5	12
4"	13 ⁵ / ₈	7 ³ / ₄	8	7	16
6"	16	10 ¹ / ₄	8	10	22
8"	18 ⁵ / ₈	14	8	13	34
10"	18 ⁵ / ₈	16	12	19	48
12"	25 ¹ / ₂	16	12	27	72
16"	46 ¹ / ₄	28	16	48	128
20"	46 ¹ / ₄	28	20	75	180
24"	46 ¹ / ₄	28	20	108	245

*ANSI Sizes Shown

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

94160 Ordering Guide

Model Number Selection

The model number will consist of a base number **94160** followed by 9 digit numbers. These digits will represent 8 option tables.

94160 - AB - C - D - EF - G - H - I

Ordering Information

Specify:

1. Model 94160 Pressure Relief Vent
2. Size and Body Material
3. Pressure Set Point
4. Temperature Range
5. Flange Type
6. Hood Material
7. ATEX Certification for II 1 G Ex h II B T1...T6 Ga EU Locations if specified.



Table AB - Vent Size (Mounting Flange)

Option AB	Size
02	2"
03	2"
04	2"
06	3"
08	3"
10	3"
12	4"
16	4"
20	4"
24	6"

Temperature Limits

Diaphragm Material	Temperature Range
FEP	-65 F to 400 F
FKM	-15 F to 400 F
NBR	-40 F to 250 F
PFA	-65 F to 500 F

Table C - Base Material & Hood Material

Option C	Base Material	Seal Material	Pallet Type
A	Aluminum	FEP	Standard
B	Steel		
C	316SS		
D	Aluminum	FKM	
E	Steel		
F	316SS		
G	Aluminum	PFA	
H	Steel		
I	316SS		
J	Aluminum	FEP	Expanda-Seal
K	Steel		
L	316SS		
M	Aluminum	FKM	
N	Steel		
O	316SS		
P	Aluminum	PFA	
Q	Steel		
R	316SS		

Table D - Flange Type

Option D	Pallet Type
1	ANSI 125/150 F.F.
2	ANSI 125/150 R.F.
3	EN1092-1 PN16 F.F.
4	EN1092-1 PN16 R.F.
5	API-650

Table EF* - Vent Size

Option EF	Weight & Hood Size
02	2"
03	3"
04	4"
06	6"
08	8"
10	10"
12	12"
16	16"
20	20"
24	24"

* Option "EF" must be same as option "AB"

Table G - Setting, Weight & Hood Material

Option G	Set Point	Weight Material	Hood Material
A	Standard	Lead	Standard (18-8SS), Alum. for 12-24" Sizes
B	Low		
C	Medium		
D	High		
E	Standard	316SS	
F	Low		
G	Medium		
H	High		
I	Standard	Lead	316SS
J	Low		
K	Medium		
L	High		
M	Standard	316SS	
N	Low		
O	Medium		
P	High		

Standard = 0.5 oz/in²

Standard (Expanda) = 1.5 oz/in²

LOW = STD to 5 oz/in²
 MEDIUM = 5.01 oz/in² to 8 oz/in²
 HIGH = 8.01 oz/in² to 16 oz/in²

Table H - Certification

Option H	Description
1	Standard
2	ATEX

Table I - Options

Option I	Description
0	None
1	Limit Switch - Pressure