



- Designed for high efficiency & economy
- Provides maximum flow capacity
- Reduces maintenance and replacement costs
- Suitable for corrosive and toxic applications
- Standard flange base for 2", 3", 4", 6", 8", 10", 12", 16", 20" and 24" to fit 150 lb. ANSI flanges

The Shand & Jurs Model 94160 Pressure Relief Vent

The Shand & Jurs Model 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.

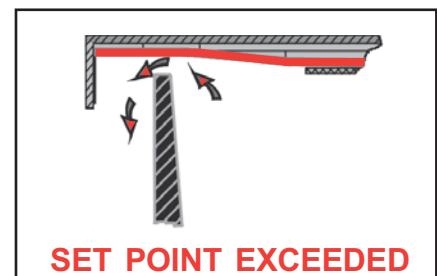
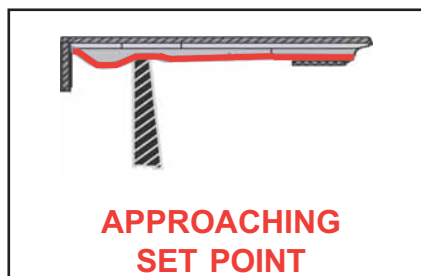
Standard materials of construction include aluminum, iron, steel and 316 stainless steel. This selection of materials is suitable for applications in corrosive and toxic product environments.

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 Teflon, 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 flanges. Flanged base materials are aluminum and cast iron for 150 lb. flat face flange, and cast steel, ductile iron and stainless steel for 150 lb. raised face flange.



Shand & Jurs "Expanda-Seal" option is available on all pressure pallet assemblies. This feature, shown in blue, significantly reduces leakage. The ballooning effect of the teflon diaphragm effectively seals the valve. The "Expanda-Seal" feature ensures less than .5 SCFH of leakage at 95% of the set point.

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, DIN or JIS
 10K.

Standard
 Setting (min.): 0.5 oz./in² (0.865" W.C.)

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

Temperature Range: Body and Seal
 Options for Process Temperature Ranges of
 -300°F to 500°F

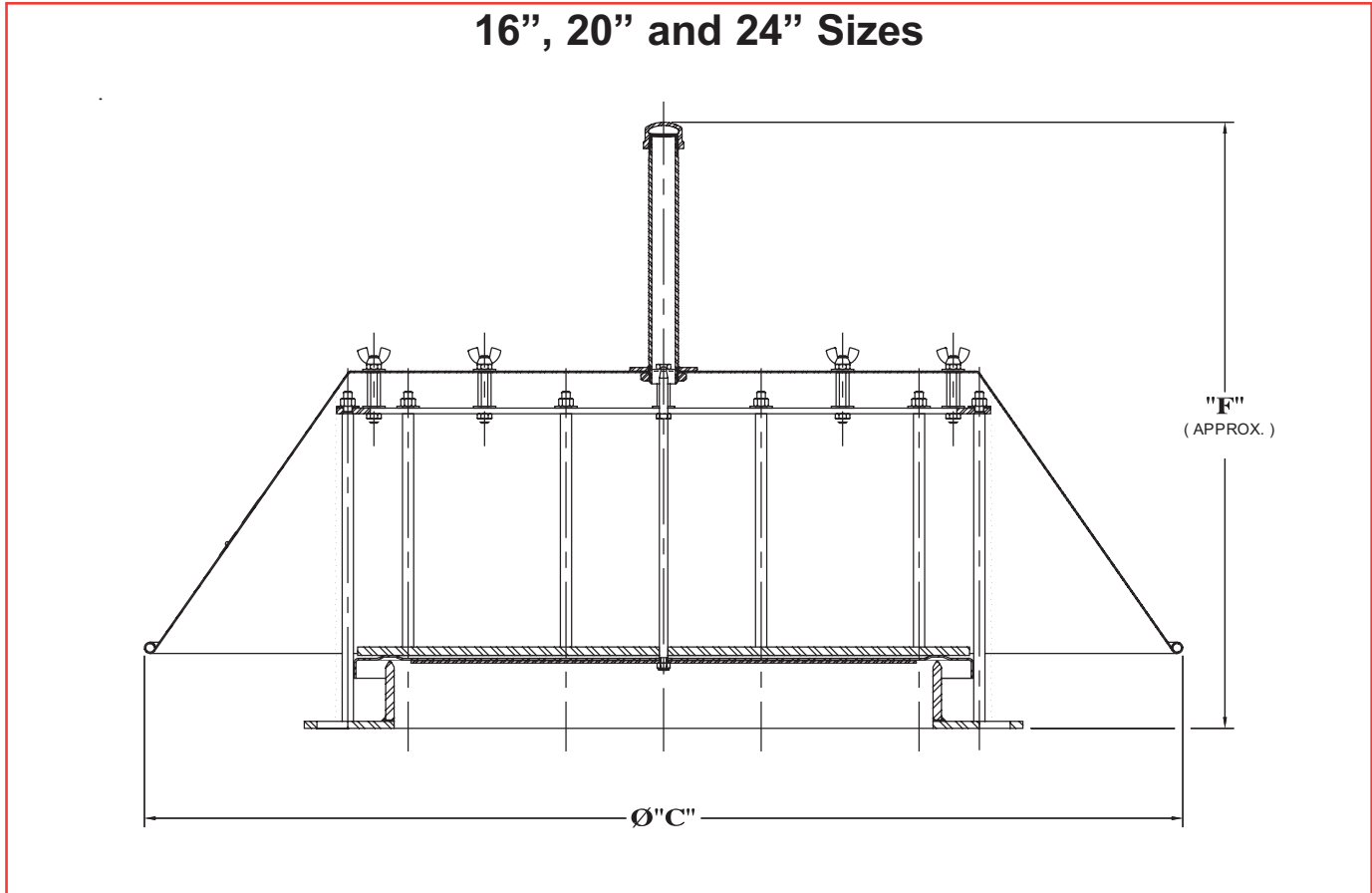
Service and Body Material*:

Normal: Aluminum
 Severe: Cast Iron, Ductile Iron, 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.

(**) Teflon seats available for 3", 4" and 6" sizes

Note: 16"-24" sizes not available in Cast or Ductile Iron



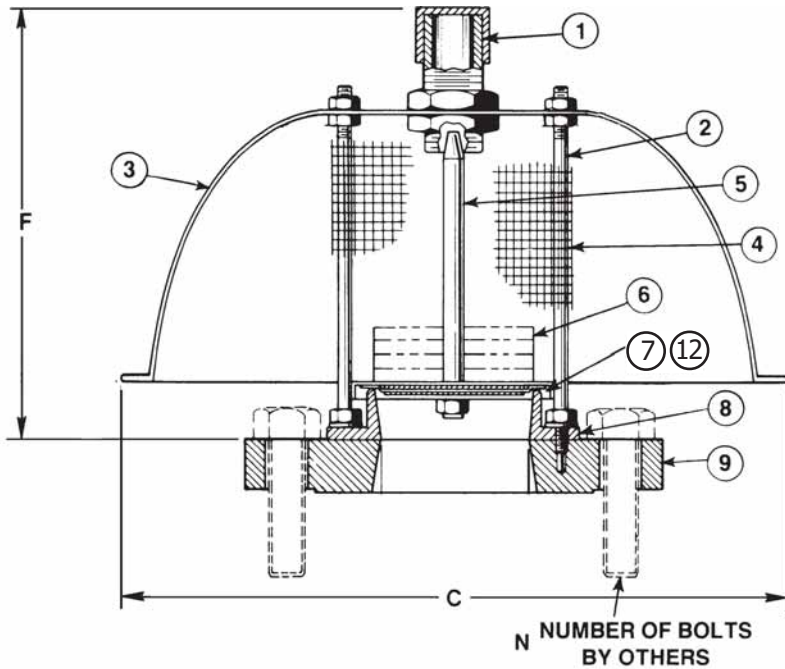
Item No.	Description	Standard Material & Services	
		Normal	Severe
1	Stem Guide	Galv Steel, *316 S.S.	
2	Pallet Guides	316 S.S.	
3	Hood	18-8 S.S. (Spun Al. for Sizes 12"-24") 316 S.S. and Steel Options	
4	Screen	Galv. Steel	304 S.S., *316 S.S.
5	Stem	AL, 316 S.S.	316 S.S.
6	Loading Weight	Lead	
7	Pallet	Aluminum	316 S.S.
8	Seat	Aluminum	316 S.S.
9	Body Flange	Aluminum	C. Iron, D.I., C. Steel, 316 S.S.
10	Retaining Plate	Aluminum	316 S.S.
12	Diaphragm	FEP Teflon**	

Valve Size	Dimensions in Inches		"N" No. of Bolts*	Net Weight - lbs.	
	"C"	"F"		Alum.	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

*For Severe 316 S.S. Service

*ANSI Sizes Shown

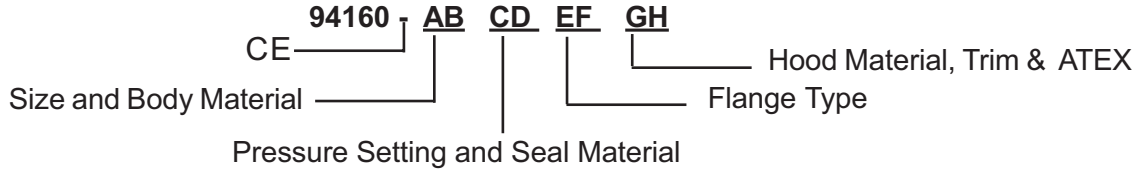
**N8090 Backup / Spacer for Higher Pressure Settings



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

MODEL NUMBER SELECTION:

The model number will consist of a base number 94160 followed by eight values which represent the options listed in the following tables.



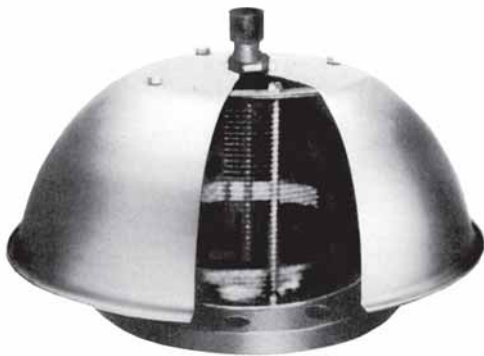
ORDERING INFORMATION

Specify:

1. Model 94160 Pressure Relief Vent
2. Size and Body Material
3. Pressure Set Point
4. Flange Type
5. Hood Material
6. To specify CE for Ordinary EU Locations use 94160C AB-CD-EF-GH
7. ATEX Certification for Group IIB, IIA EU Locations use H5, H6, or H8

TABLE AB - SIZE AND BODY MATERIAL

OPTION AB	SIZE	BODY MATERIAL
10	2"	ALUM
40	2"	CS
50	2"	SS 316
12	3"	ALUM
32, 62	3"	CI
42	3"	CS
52	3"	SS 316
13	4"	ALUM
33, 63	4"	CI
43	4"	CS
53	4"	SS 316
14	6"	ALUM
34, 64	6"	CI
44	6"	CS
54	6"	SS 316
15	8"	ALUM
35, 65	8"	CI
45	8"	CS
55	8"	SS 316
16	10"	ALUM
36, 66	10"	CI
46	10"	CS
56	10"	SS 316
17	12"	ALUM
37, 67	12"	CI
47	12"	CS
57	12"	SS 316
18	16"	ALUM
48	16"	CS
58	16"	316 SS
19	20"	ALUM
49	20"	CS
59	20"	316 SS
11	24"	ALUM
41	24"	CS
51	24"	316 SS



STANDARD MATERIALS OF CONSTRUCTION

Service	Body	Pallet	Seat	Pallet Stem	Pallet Side Guides	Stem Guides	Diaphragm	Screen	Hardware
Norm. Alum.	ALUM.	ALUM.	ALUM.	ALUM.*	316 SS	GI	TEFLON	GS	St. Zinc Plated
Severe Iron	CI / DI	316 SS	316 SS	316 SS	316 SS	GI	TEFLON	304 SS	316 SS
Severe Steel	CS	316 SS	316 SS	316 SS	316 SS	GI	TEFLON	304 SS	St. Zinc Plated
Severe 316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	316 SS	TEFLON	304 SS	316 SS

CS = Cast Steel
 CI = Cast Iron
 DI = Ductile Iron
 GI = Galvanized Iron
 GS = Galvanized Steel

* 316 SS pallet stem used in place of aluminum for elevated settings

HOODS: 2" -10" Sizes - 18-8 Stainless Steel
 12" -24" Sizes - Aluminum

TABLE C - SEAL MATERIAL

OPTION C	DESCRIPTION
0	Normal FEP / N8090
1	Expanda Seal FEP / N8090
2	Normal FEP (all)
3	Expanda FEP (all)
4	Normal Viton
5	Expanda Viton
6	Normal PTFE
8	Normal Buna
9	Expanda Buna

TABLE D - PRESSURE RANGE

OPTION D	DESCRIPTION	MATERIAL
1	Standard Setting	Lead
2	Over 0.5 oz./sq. in.	Lead
4	Standard Setting	316 SS
5	Over 0.5 oz./sq. in. + Table B	316 SS

* 2"-12" sizes, Minimum Pressure Setting for Expanda-Seal is of 1.5 oz./sq. in.

* 16", 20" size Expanda Seal AL: 1.0 oz./sq. in. (min.); 24" 1.3 oz./sq. in. (min.)

* 16", 20" size Expanda Seal SS: 1.3 oz./sq. in. (min.); 24" 1.5 oz./sq. in. (min.)

TABLE EF - FLANGE TYPE

Option (EF)	Material
00	FF ANSI
10	RF ANSI
01	FF DIN 2633
11	RF DIN 2633
02	FF JIS 10K
12	RF JIS 10K
03	API 650 (20&24" ONLY)

TABLE G - SEAT & PALLET MATERIAL

Option G	Seat	Pallet
0	STD*	STD*
+ 1	Teflon	STD*
2	AL	STD*
+ 3	Phenolic	STD*
4	SS	STD*
5	Teflon Coated SS	STD*
A	STD*	316SS
+ B	Teflon	316SS
C	AL	316SS
+ D	Phenolic	316SS
E	SS	316SS
F	Teflon Coated SS	316SS

Note:
16" -24" Sizes have Integral Seats.
CS bases are constructed with SS
seat overlay as standard

- * Please see Standard Materials of construction
- ** Seat Material Not available for 16", 20" & 24" Sizes
- + These Options Not Available with ATEX Models

For ATEX Certified Valve specify H5, H6, or H8

TABLE H - HOOD MATERIAL & TRIM

Option H	Hood Material	Trim
1	AL HOOD	STD
2	316 S.S. HOOD	STD
3	STEEL HOOD	STD
4	18-8 SS. HOOD	STD
Option H	Hood Material	Trim
5	AL HOOD	316 SS
6	316 S.S. HOOD	316 SS
7	STEEL HOOD	316 SS
8	18-8 SS. HOOD	316 SS

Trim Includes: Stem, Stem Guides, Side Guides, Nuts, Bolts, Screen and Distribution Plate



UK Distributor
t: +44 (0)1388 813433
f: +44 (0)1388 813307
sales@orangecounty.co.uk
www.orangecounty.co.uk