



- Unique stem guide maximizes flow
- Spring loaded valve automatically closes in event of fire
- Pilot pallet reduces effort to open against tank pressure in blocked line.
- Fire proven ANSI flanges
- Standard 2" - 12" sizes, up to 30" available

The Shand & Jurs Model 96311 Internal Safety Valve

The Shand & Jurs Model 96311 Internal Safety Valve is applicable wherever liquids are stored or transferred. It is an essential safeguard against the hazards of exposure fire and a valuable aid in accident prevention.

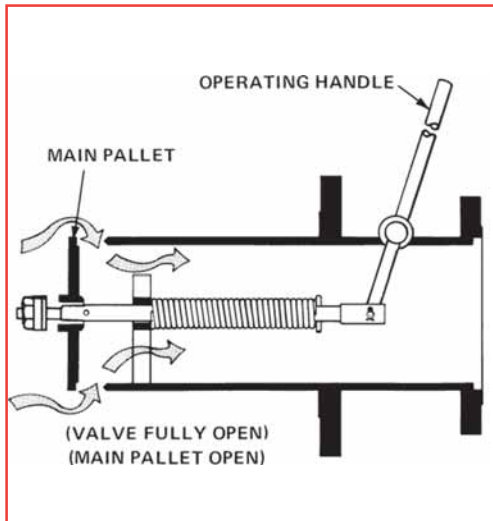
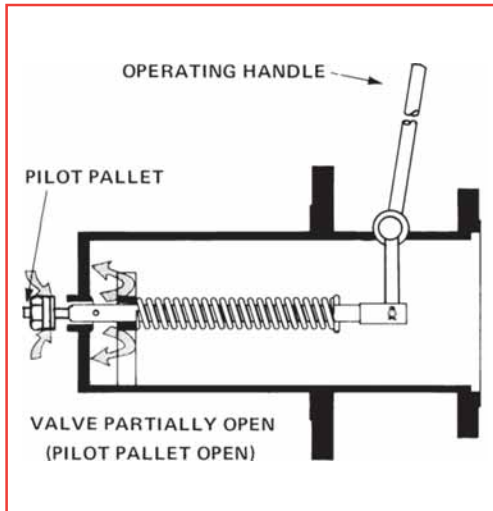
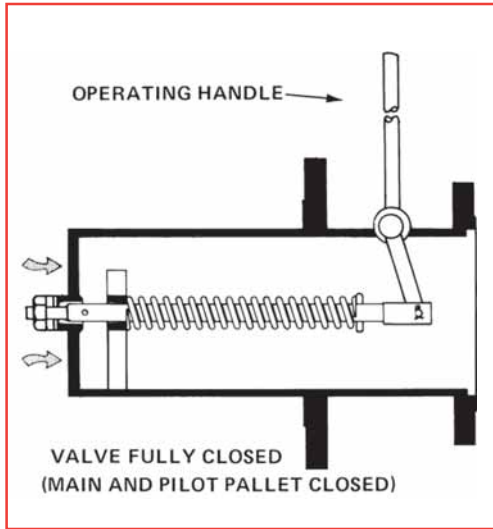
Model 96311 is available in standard sizes of 2", 3", 4", 6", 8", 10" and 12". Construction includes a steel body, stainless steel spring and stainless steel overlay on pallet and valve seat. The unique stem design has a center pivot and a nylon bearing to resist the effects of corrosion fouling. New linkage design provides maximum clearance for high flow capacity.

The valve is opened manually and is held open by a chain and fusible link. The link releases at 212°F

or at other temperatures as required and the spring loaded valve automatically closes. When opening the valve against a blocked line, the pilot pallet, opens first which equalizes the pressure across the main pallet allowing the valve to be opened the rest of the way with minimum effort.

The central mounting flange is one size larger than the nominal pipe size (see table of dimensions). All flanges are raised face to match ANSI 150 pound series permitting mounting on standard API single flange nozzles.

Extra large mounting flanges are available for use where internal piping is required for connection to suction heaters, blending spiders, etc. Any of the flanges can be specified blank for welding.



Size	Valve Flange	2" x 2"	3" x 3"	4" x 4"	6" x 6"	8" x 8"	10" x 10"	12" x 12"
Type Flange	Raised Face to Match ANSI 150 lb.							
Temperature Flange	Ambient to 500°F							
Pressure	50 PSIG Maximum							
Body, Main Pallet & Handle	Steel - Painted							
Seat and Main Pallet	Steel with Stainless Steel Overlay							
Pilot Pallet & Hardware	Steel - Plated							
Shaft, Stem Lever & Packing Unit	Stainless Steel or Steel - Nickel Plated							
Spring	Stainless Steel							
Pilot Seat Disc & Packing	Teflon							

Fusible Link Releases at 212° F.
(Or lower when specified)

Valve Leakage Rate Approx. 1/2 GPM (water)

Special steels available for refrigerated service

MATERIALS OF CONSTRUCTION:

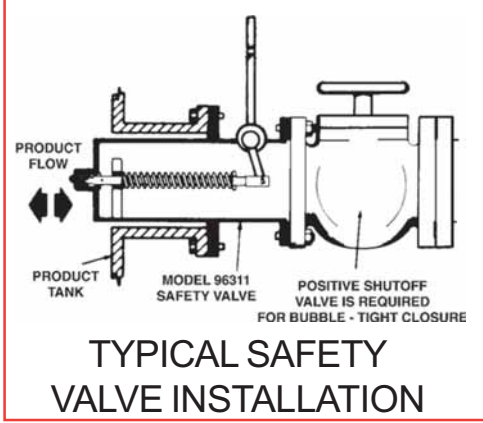
Materials of construction in this equipment have been selected as representing the most suitable commercially available material for use in the service intended. However, they do not constitute a guarantee against corrosion since processes vary from plant to plant and concentration of harmful fluids, gasses or solids vary from time to time in a given process. Empirical experience by users should be the final guide and alternate materials based on this are generally available.

Dimensions of Connection & Mounting Flanges				
Flange Size	Flange Dia.	No. of Holes	Hole Dia.	Bolt Circle Dia. (Staddle Centerline)
2	6	4	3/4	4 3/4
3	7 1/2	4	3/4	6
4	9	8	3/4	7 1/2
6	11	8	7/8	9 1/2
8	13 1/2	8	7/8	11 3/4
10	16	12	1	14 1/4
12	19	12	1	17
14	21	12	1 1/8	18 3/4
16	23 1/2	16	1 1/8	21 1/4
18	25	16	1 1/4	22 3/4

Dimensions specified in Inches.

ITEM	DESCRIPTION
1	Hex Nut
2	Retainer
3	Seat Disc
4	Retainer
5	Pallet
6	Sleeve
7	Washer
8	Hex Nut
9	Spring
10	Spring Retainer
11	Body Assembly Std. Mtg. Flange
	Oversize Mtg. Flange
12	Shaft Assembly

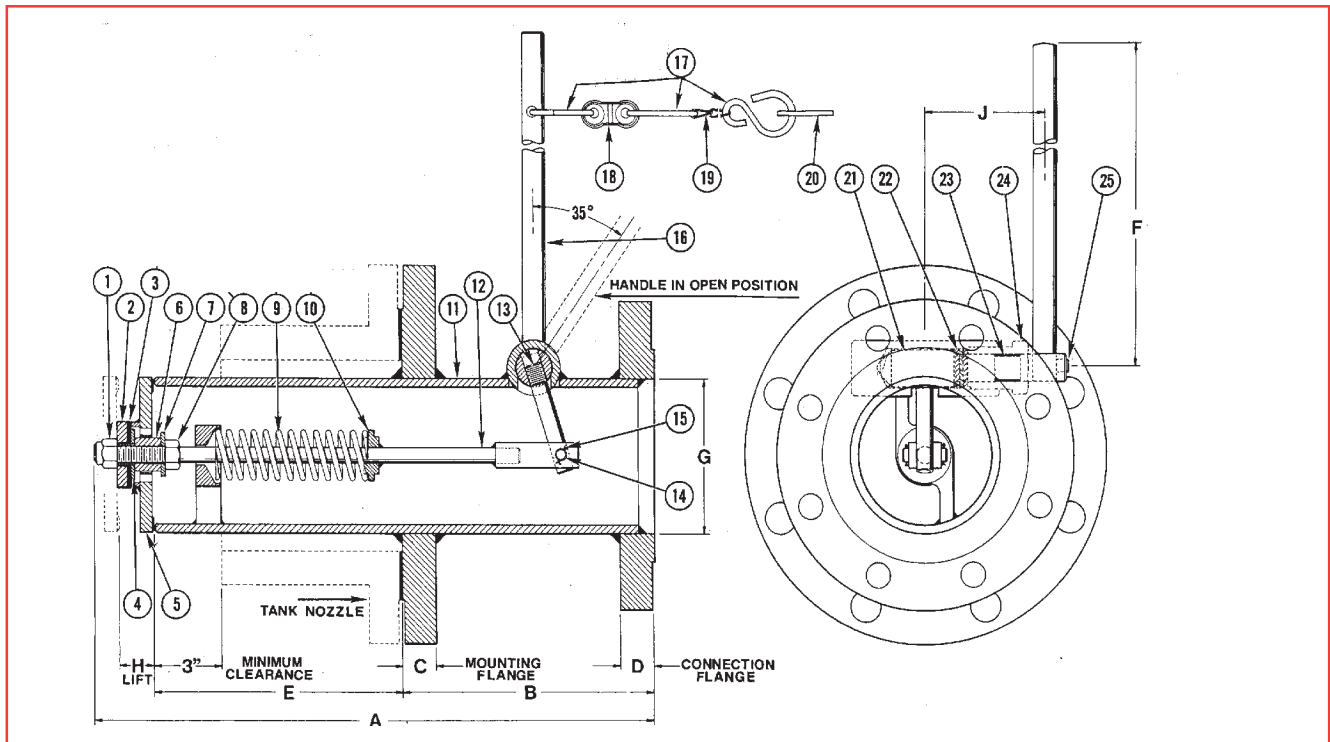
ITEM	DESCRIPTION
13	Drive Lever
14	Hinge Pin
15	Cotter Pin
16	Handle
17	S-hook
18	Fusible Link (212 deg. F)
19	Sash Chain (30")
20	Hold-Down Plate
21	Stem
22	Packing
23	Bearing
24	Packing Nut
25	Set Screw



Valve Size	Connection Flange Size	Mounting Flange Size		Dimensions								Net Wt. Lbs.
		Std.	C	A	B	D	E	F	G	H	J	
2"	2"	3"	15/16	16 5/8	5 3/4	3/4	9 1/2	9 3/8	2 3/8	3/4	4	38
3"	3"	4"	15/16	16 7/8	5 3/4	15/16	9 5/8	9 3/8	3 1/2	1 1/8	4	52
4"	4"	6"	1	19 1/2	7 5/8	15/16	10	9 3/8	4 1/2	1 3/8	4	78
6"	6"	8"	1 1/8	21 1/4	8	1	11	16 3/8	6 5/8	2 1/4	6	130
8"	8"	10"	1 3/16	23 1/4	9	1 1/8	12	20 3/8	8 5/8	2 5/8	6	173
10"	10"	12"	1 1/4	24 3/8	10	1 3/16	12	26 3/8	10 3/4	3 1/4	6	255
12"	12"	14"	1 3/8	23 3/4	9 3/8	1 1/4	12	26 3/8	12	3 7/8	6	350

Flange Connections are ANSI 150 lb Class.

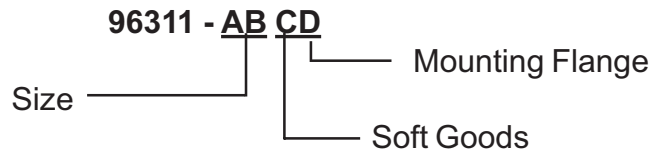
WEIGHTS AND BOX SIZES LISTED FOR DOMESTIC PACKAGING ONLY



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

MODEL NUMBER SELECTION:

The model number will consist of a base number 96311 followed by 4 digits which represent the options listed in the following tables.



ORDERING INFORMATION

Specify:

1. Model 96311 Internal Safety Valve
2. Valve Size
3. Mounting Flange
4. Special Materials of Construction and Drilling
(Available upon Request)

TABLE I - VALVE SIZE & MOUNTING FLANGE

OPTION # (AB) - (CD)	VALVE SIZE	MOUNTING FLANGE
03-X2	2" x 3"	standard
03-X3	2" x 4"	oversized
04-X2	3" x 4"	standard
04-X3	3" x 6"	oversized
05-X2	4" x 6"	standard
05-X3	4" x 8"	oversized
06-X2	6" x 8"	standard
06-X3	6" x 10"	oversized
07-X2	8" x 10"	standard
07-X3	8" x 12"	oversized
08-X2	10" x 12"	standard
08-X3	10" x 16"	oversized
09-X2	12" x 14"	standard
09-X3	12" x 18"	oversized
09-X4	12" x 16"	oversized
10-X2	14" x 16"	standard
10-X3	14" x 20"	oversized

TABLE II - SEAL MATERIAL

OPTION C	DESCRIPTION
0	Fluorogold Std.
1	Viton
2	Buna-N