

## 94520 Emergency Pressure Vent & Manhole Cover

The Shand & Jurs 94520 Emergency Vent provides emergency venting and manhole requirements, where intermediate pressure relief beyond that provided by tank conservation vents is required. This vent is not intended to meet requirements of explosion relief, but is designed to relieve excessive internal pressure. It is a economical solution to costly and dangerous tank roof rupture problems.

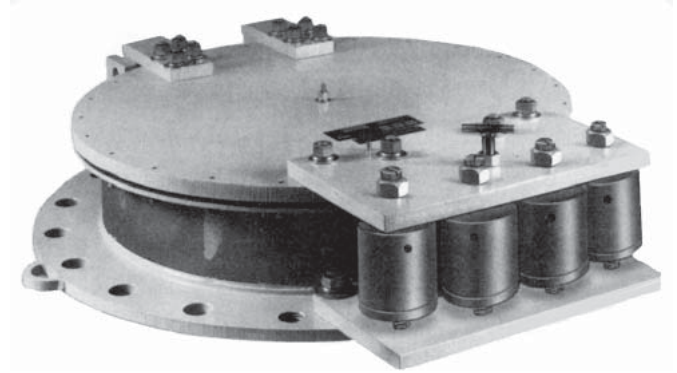
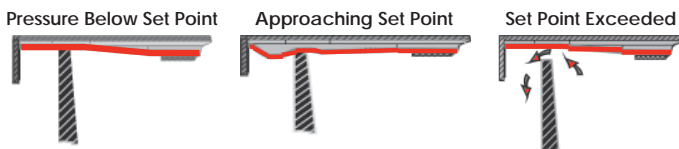
The 94520 is available in 10", 16" and 20" sizes and is designed to utilize a patented, magnetic latch system, which provides greater flow capacities than conventional weight loaded vents. It also provides for 100% opening at set pressure with no overpressure required. The magnetic latching principle eliminates hundred of pounds of loading weights required by conventionally loaded vents. The vent is tightly latched utilizing permanent magnets, which are mounted to the vent cover and act on a magnetic stainless steel plate on the vent base. As the pressure increases, the magnetic attraction between the base and cover remains constant, until the set pressure is reached. The setting is determined by the size and strength of the magnets.

Since the force required to overcome the magnets is much greater than the force (or pressure) required to support the lightweight cover, the vent immediately goes to full open at the set pressure. There is no "simmering" or leakage as the tank pressure approaches set pressure.

The vent cover is prevented from opening more than 90° via spring loaded cables. These cables are attached to the cover and the vent body. This will assure the cover to self close once fully opened.

### Expanda-Seal

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



## Features

- Magnetic latching eliminates expensive loading weights
- Instantaneous opening at set pressure, no overpressure required
- Unique diaphragm construction assures tight seal between pallet and seat
- Seat opening provides for clear passage when used as a manhole

## Specifications

**Pressure Setting Range:**  
2.5 oz. to 35.9 oz./in.<sup>2</sup>

**Connections:**  
10 & 16 inch: Flat face flange to fit 125lb. ANSI flat flange  
20 inch: Flat face flange to fit API roof manhole

## Materials of Construction

**Seat:**  
Stainless Steel

**Diaphragm:**  
Teflon Coated Fiberglass

**Flange, Pallet, Hinge Assembly,  
Hinge Bracket Assembly, Retaining Ring:**  
Steel

**Back-Up Gasket, Gasket, Slot Gasket:**  
N8090

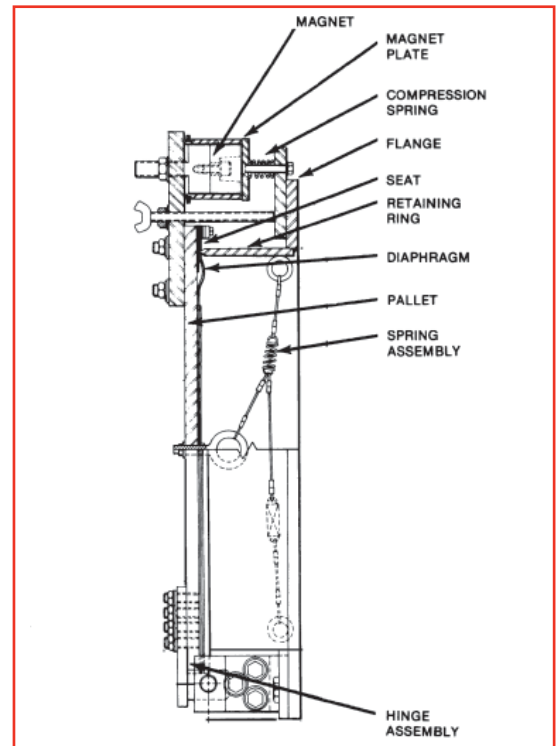
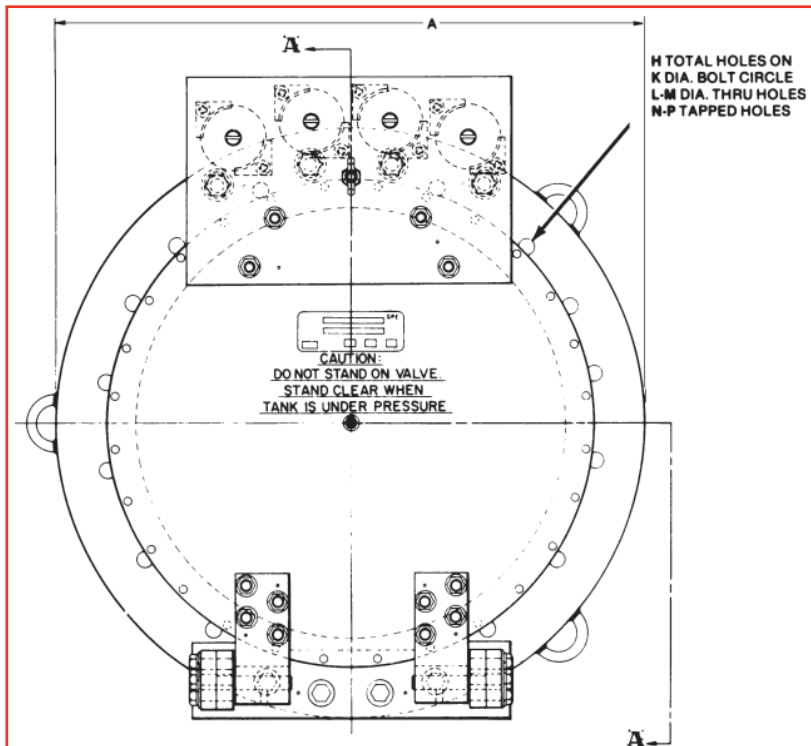
**Spring Assembly:**  
Stainless Steel - Type 316

**Magnet Plate:**  
Stainless Steel - Type 416

**Magnet:**  
Cast Alnico 5

**Compression Spring:**  
Stainless Steel - Type 302

## Outline Dimensions



Size	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"K"	"L"	"M"	"N"	"P"
10"	16	19 ¼	7 ¼	10 ¾	10	6 ¼	4 7/16	12	14 ¼	6	1	6	7/8
16"	23 ½	27	11 ¼	12	15 ¼	6 7/16	4 7/16	16	21 ¼	10	1 ⅛	6	1
20"	27 ¾	31 15/16	12 7/8	14 ¾	20	6 5/8	4 7/16	16	23 ½	12	¾	4	5/8

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

## 94520 Ordering Guide

### Model Number Selection

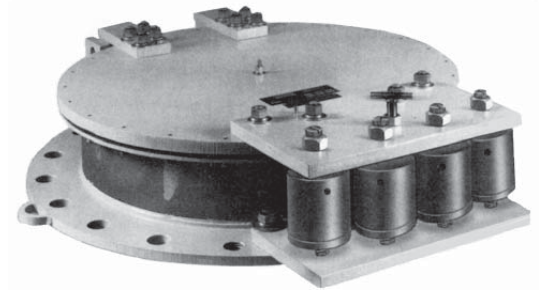
The model number will consist of a base number **94520** followed by 4 digit numbers. These digits will represent 2 option tables.

**94520 - AB - CD**

### Ordering Information

Specify:

1. Model 94520 Emergency Pressure Vent
2. Size Vent Required
3. Body Material
4. Pressure Setting
5. Type of Product Stored



**Table AB - Size and Material**

Option AB	Size	Material
01	10"	Steel
02	16"	Steel
03	20"	Steel 20" Flange
23	20"	Steel 24" Flange
11	10"	316 Stainless Steel
12	16"	316 Stainless Steel
13	20"	316 Stainless Steel 20" Flange
33	20"	316 Stainless Steel 24" Flange

**Table CD - Pressure Settings**

Option CD	Pressure Setting
01	2.5 to 9.9 oz./in. <sup>2</sup>
02	10.0 to 12.9 oz./in. <sup>2</sup>
03	13.0 to 15.9 oz./in. <sup>2</sup>
04	16.0 to 35.9 oz./in. <sup>2</sup>