

## 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.

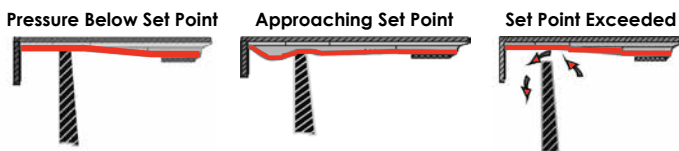
The 94520 is available in 16" and 20" sizes and is designed to utilize a magnetic latch system, which provides greater flow capacities than conventional weight loaded vents. It also provides for 100% opening at set pressure with no overpressure required. The magnetic latching principle eliminates hundred of pounds of loading weights required by conventionally loaded vents. The "snap action" operation of the vent is achieved by opposing magnets in the cover and base. It is this force that ensures a tight seal when closed. 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 80° by a hydraulic damper attached to the cover and 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:

10 oz. to 36 oz./in.<sup>2</sup>

### Connections:

16" & 20" ANSI 125 lb. flat face or raised face  
20" API 650 roof manhole

## Materials of Construction

### Base with Seat:

Carbon steel with 316SS overlay or 316 Stainless Steel

### Permanent Magnet:

Rare-Earth (Neodymium)

### Pallet, Hinge Assembly, Hinge Bracket

Carbon Steel or 316 Stainless Steel

### Diaphragm:

FEP Film

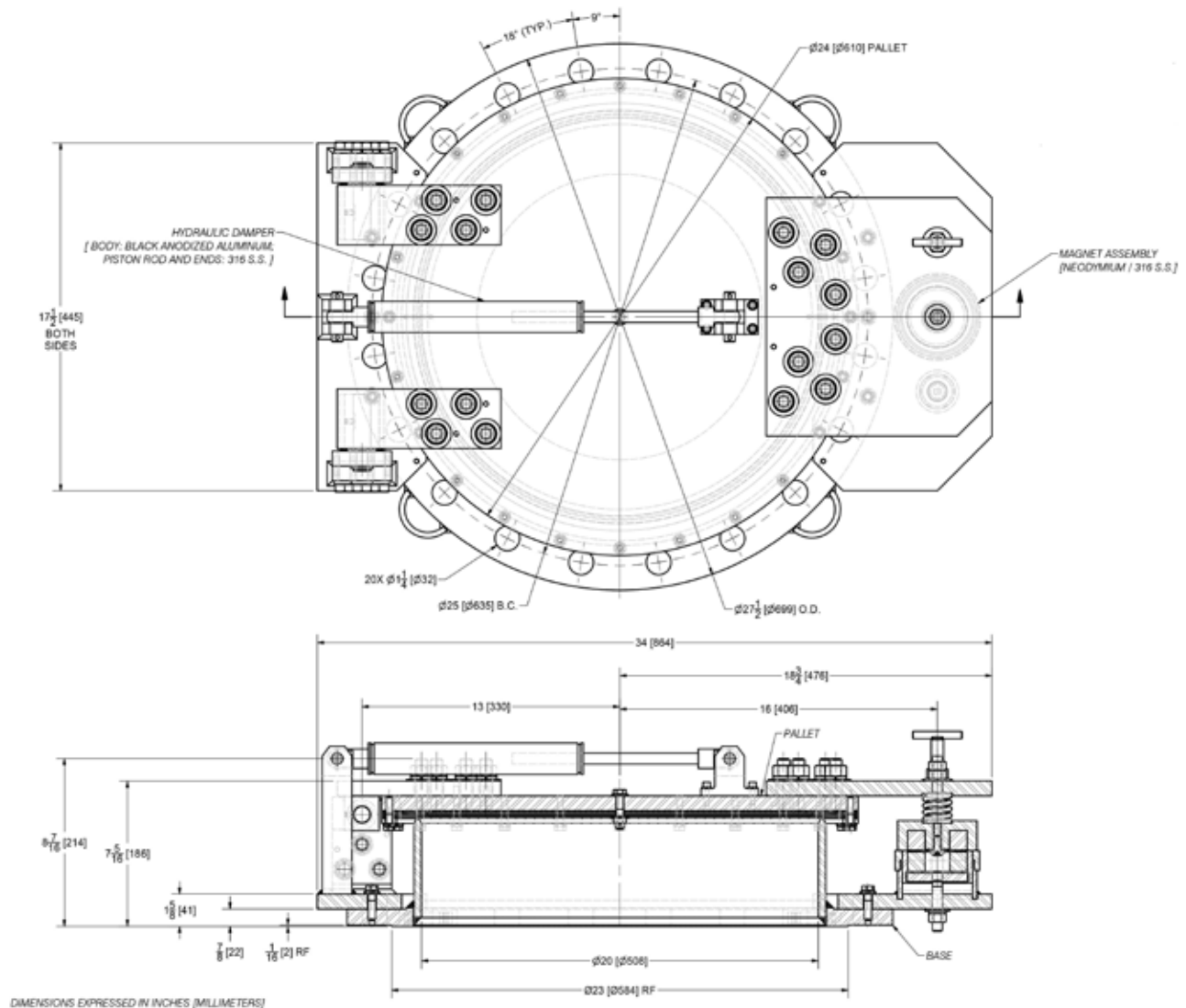
### Hydraulic Damper:

Body: Aluminum with 316SS Piston Rod and Ends

### Back-Up Gasket, Gasket, Slot Gasket:

Fiber Composite

## Outline Dimensions (20" RF ANSI 125# Shown)

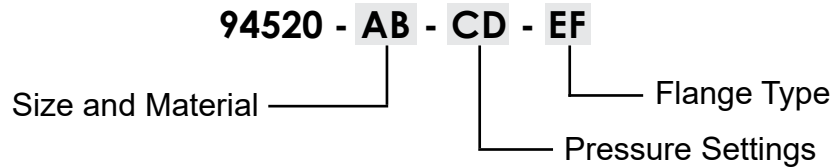


All designs subject to change. Certified dimensions and specifications available upon request.

## 94520 Ordering Guide

### Model Number Selection

The model number will consist of a base number **94520** followed by three 2 digit numbers. These digits will represent 3 option tables.



### Ordering Information

Specify:

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



#### Table AB - Size and Material

Option AB	Size	Material
02	16"	Steel
03	20"	Steel 20" Flange
23	20"	Steel 24" Flange
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
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>

#### Table EF - Flange Type

OPTION EF	Flang Type
01*	API - 650 Flat Face Only
02	ANSI 125# Flat Face
03	ANSI 125# Raised Face

\* Only for 20" size

Note: For full flange thickness per ANSI B16.5 additional cost is required