

Emergency Vent and Manhole Cover (Pressure & Vacuum) Model 94221

Model 94221 Emergency Vent and Manhole Cover provides emergency relief of excessive internal pressure and vacuum beyond that provided by tank breather requirements.

This weight loaded vent utilizes Unique-Seal diaphragms which provide tight seals between pallets and seats. Special diaphragm materials are available for vents subjected to severe low temperatures or used on tanks storing heated stock. Corrosion resistant pressure/vacuum seat is standard.

Model 94221 is available in 20" and 24" size to fit a standard API or ANSI flange. Special Flanges are available including DIN.

The pallet starts to lift when set pressure is approached. Flow efficiency rises rapidly to approximately 60% of a perfect orifice at 40% excess of the set pressure.

At a higher overpressure, the pallet completely clears the manhole and the efficiency approximates 75%. For a standard setting the capacity at 6 mbar (40% overpressure) is approximately 14.000 m³/h for the 20" size.



Pallet construction permits settings from 4.3 mbar for aluminum pallet & 5.6 mbar for S.S. pallet standard to 34.5 mbar maximum pressure. Vacuum settings are from 4.7 mbar standard to 17.2 mbar maximum. If specifying other than standard vacuum setting, it must be recognized that increased vacuum setting automatically increases the set point of pressure relief.

Features and Benefits

- Design incorporates pressure and vacuum relief.
- 20" and 24" roof manhole
- "Self-energizing" Unique-Seal diaphragm assures a tight seal
- Reduced maintenance costs
- No unbolting of vent for gasket replacement or tank examination

Emergency Vent and Manhole Cover Setting Range

Model Numbers	Sizes Available	Connections	Pressure	Vacuum
Model 94221	20" and 24"	API, ANSI and DIN	4.3 to 34.5 mbar	4.7 to 17.2 mbar

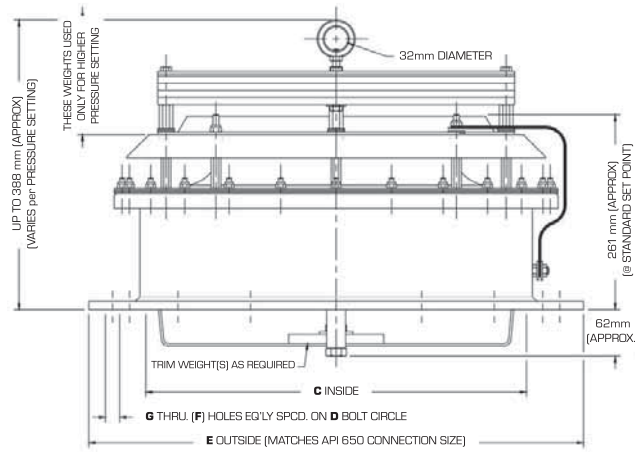
Pressure/Vacuum settings depend on material of construction

Materials of Construction

Base	Pressure Seat	Pallet (Guide)	Diaphragm (Clamp Ring)	Back-up Disc Gasket & Spacer	(Pressure) Diaphragm
Steel Aluminum and SS	Stainless Steel Aluminum	Aluminum	Aluminum Steel	N8090	FEP Teflon

*Optional: All Steel, Stainless Steel and Other Materials Available.

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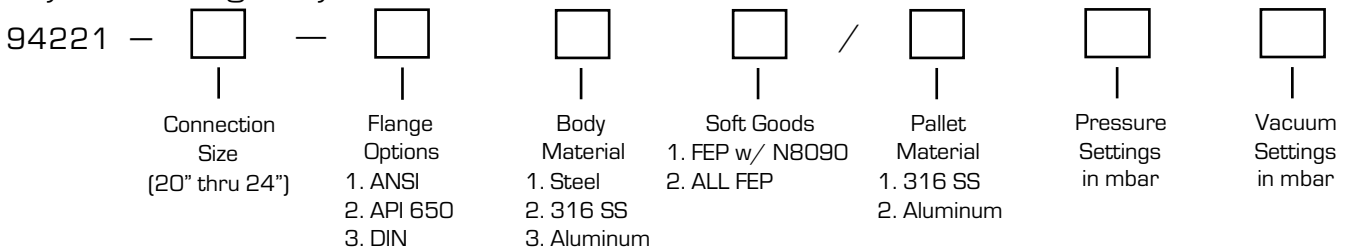


OUTLINE DIMENSIONS

Vent Size	Connection Matching Size	C	D Bolt Circle	E	F # Holes	G
20"	20" 125#/150# ANSI	508 mm	635 mm	699 mm	20	32 mm
20"	24" 125#/150# ANSI	508 mm	749 mm	813 mm	20	35 mm
24"	24" 125#/150# ANSI	610 mm	749 mm	813 mm	20	35 mm
20"	20" API Roof Manhole	508 mm	597 mm	660 mm	16	19 mm
20"	24" API Roof Manhole	508 mm	699 mm	762 mm	20	19 mm
24"	24" API Roof Manhole	610 mm	699 mm	762 mm	20	19 mm

Consult our sales department for 30" and 36" dimensions

Key to Emergency Vent and Manhole Cover Model Number



Example:



Indicates an Emergency Vent and Manhole Cover with 20" connection, ANSI Flange. Steel Body material and Aluminum Pallet with ALL FEP Soft-Goods. The Pressure Setting is 4.3 mbar and Vacuum Setting of 2.0 mbar.