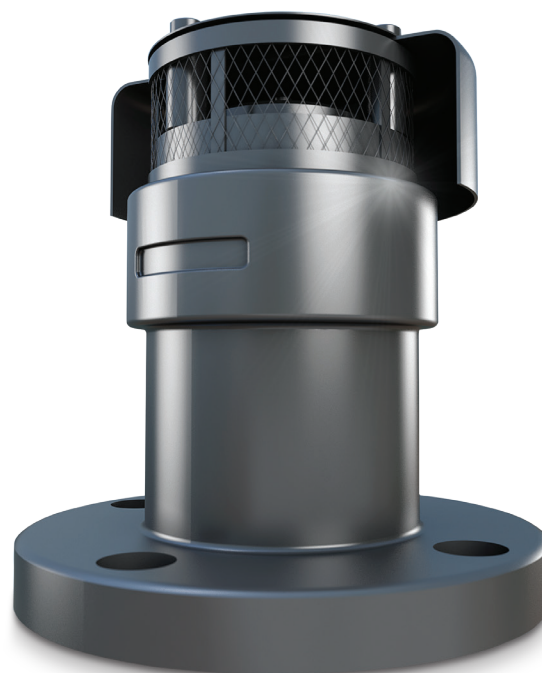


A-210/A-212 Series Vacuum Relief Valves

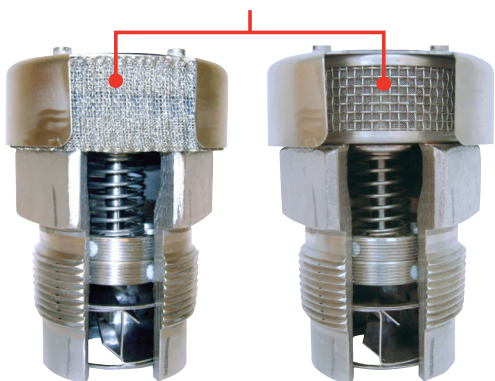
Designed to allow atmospheric air to enter and protect the tank car from collapse when there is a vacuum.

Enhanced Valve Design

Midland Vacuum Relief Valves are designed with a philosophy to keep the debris out of the tank, relieve vacuum pressure in the tank, and avoid the Non-Accident Release (NAR) of commodity by keeping the critical valve sealing area isolated and free from contaminants that can cause leaks.



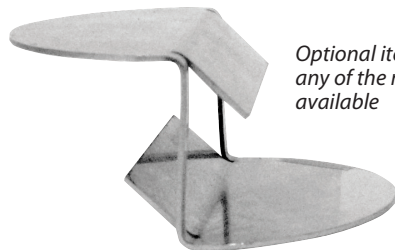
Stainless-Steel Mesh Screen Filter



Basic or Optional Premium Filter

Inlet filter prevents debris from entering the seating area, which can occur when cars are improperly vented during unloading.

Stainless-Steel Baffle



Optional item for any of the models available

Features

- Enhanced VRVs eliminate NARs during transport and transfer process
- Optimized for transportation of harsh commodities – including ethanol and crude
- Stainless-steel construction for better corrosion resistance
- No-step design eliminates improper cycling of the valve
- Built-in debris screen keeps contamination from entering the valve-seating area
- Valve poppet reversed, moving the sealing surface away from the lading
- Optional baffle keeps the lading from the sealing surface during product surges
- Pressure settings from 0.75 psig to 5 psig of vacuum



A-210/A-212 Series Vacuum Relief Valves

Vacuum Relief Valve Part System

Style		Configuration		Pressure Setting (psig)	Seal Material**	
A-21X		-FRXX		-XX	-XX	
2.5" NPT Threaded*	0	Basic Screen w/ baffle	1	(null = 0.75)	Buna N	BN
2.5" Flanged	2	Basic Screen, No Baffle	10	2	Buna N, Food Grade	BNFG
		Premium Screen w/ Baffle	2	3	Ethylene Propylene	EP
		Premium Screen, No Baffle	20	4	Ethylene Propylene Food Grade	EPFG
				5	Viton A	VA
					Viton B	VB
					Viton GL	VL
					Chemraz 505	CZ-505

REMEMBER!
 To assure intended operation of Midland Vacuum Relief Valves, AAR recommended methods for safe loading and unloading should be followed.
 (AAR Pamphlet 34, CPC-1245)

*NOTE: Per AAR regulations, effective July 1, 2013, "threaded connection" VRV's are no longer allowed for OEM use on new tank cars.

**NOTE: Contact Midland for other seal material options.

Cross Reference - Existing Midland VRV's to Enhanced VRV

CONNECTION	Product Family	
	EXISTING	SPECIFY ENHANCED
2-1/2" NPT	A-205	A-210
	A-207	
	A-208	
	A-209	
Flanged - 4x 5/8" dia. Holes on 3-7/8" dia. Bolt circle	A-220	A-212
	A-222	

