Enardo 2100 Series

Emergency Relief Vent

Introduction

Enardo™ 2100 Series emergency relief vents are designed to provide an emergency pressure relief opening for storage tanks when exposed to overpressure that are not handled by standard tank vents. These vents provide the capacity to meet API standard 2000 for emergency venting due to fire exposure when properly sized. Quick and easy access for tank inspection and maintenance is also provided.

Emergency pressure relief vent provides pressure relief only. Vacuum relief must be supplied by normal venting devices or an Enardo 2500 Series emergency relief vent with vacuum.

When excessive pressure builds within the storage tank the Enardo 2100 Series emergency pressure relief vent lid begins to open at the predetermined set pressure, relieving excess pressure. When the overpressure has dissipated, the cover reseats onto the base. Guides prevent misalignment and provide an accurate reseat.

Available Sizes (Flat Face Connection Standard)

16, 20 and 24 in. / 400, 500 and 600 mm API 20 and 24 in. / 500 and 600 mm

Vent Setting Range

Pressure

Up to 8.0 oz/sq. in.
(0.5 oz./sq. in. increments)
Up to 14.0 in. w.c.
(1.0 in. w.c. increments)
Up to 352 mm w.c.
(22.4 mm w.c. increments)
Up to 34.5 mbar
(2.2 mbar increments)

See Table 1 for minimum settings See Table 2 for maximum settings



Figure 1. Enardo 2100 Series Emergency Relief Vent

Vent Setting Range (continued)

Vacuum

N/A

Construction Materials

Base

Carbon Steel 304 SST 316 SST

Cover

Aluminum 304 SST 316 SST

Seal

Nitrile (NBR) Fluorinated Ethylene Propylene (FEP) Fluorocarbon (FKM)

Seal Support

Aluminum 304 SST 316 SST

Additional Technical Data

For more technical information, contact your local Sales Office or log on to:

www.enardo.com

Features

- Advanced seal technology exceeds the most stringent of industrial standards for allowable leakage (1 SCFH at 90% set point) and provides excellent set point accuracy.
- All components are field replaceable, including pallet seal without the need for special tools or complex procedures.
- Every Enardo 2100 Series vent is factory inspected and leak checked and certified.
- Corrosion-resistant coatings are available for even the most corrosive of applications.
- Certified flow capacity curves are available for the full product size range.
- Available in API, ANSI, DIN and JIS flanges. Flat face connection is standard.

Table 1. Minimum Settings Enardo 2100 Series														
		COVER MATERIAL												
SIZE		Aluminum	Carbon Steel/ Stainless Steel	Aluminum	Carbon Steel/ Stainless Steel	Aluminum	Carbon Steel/ Stainless Steel	Aluminum	Carbon Steel/ Stainless Steel					
ln.	mm	oz./sq. in.		mbar		In. w.c.		mm w.c.						
16	400	0.7	1.3	3	5.6	1.2	2.2	30	56					
20	500	0.7	1.3	3	5.6	1.2	2.2	30	56					
24	600	0.8		3.4	5.6	1.4	2.2	36	56					

Table 2. Maximum Settings Enardo 2100 Series										
SI	IZE	COVER MATERIAL	MAXIMUM PRESSURE SETTING							
ln.	mm	COVER MATERIAL	oz./sq. in.	oz./sq. in. mbar In. w.c.		mm w.c.				
16	400		8	34.5	14	352				
20	500	All	6	26.0	10.5	264				
24	600		4	17.2	7	176				



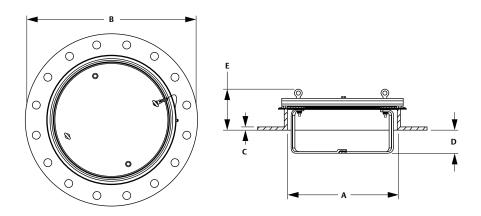
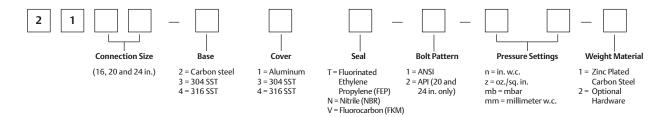


Figure 2. Enardo™ 2100 Series Dimensions

Table 3. Enardo 2100 Series Dimensions																
MODEL	A (SIZE)		B1 ⁽²⁾ (ANSI FLANGE O.D.)		B2 ⁽²⁾ (API FLANGE O.D.)		C (FLANGE THICKNESS)		D (HEIGHT)		E (HEIGHT)		WEIGHT (ALUMINUM/ CARBON STEEL) ⁽¹⁾		WEIGHT (STAINLESS STEEL) ⁽¹⁾	
	ln.	mm	ln.	mm	ln.	mm	ln.	mm	ln.	mm	ln.	mm	Lbs	kg	Lbs	kg
Enardo 2116	15.3	387	23.5	597	20.9	530	0.50	13	3.1	79	6.3	160	56	25	62	28
Enardo 2120	19.3	489	27.5	699	26.0	660	0.75	19	4.1	104	6.3	160	84	38	98	44
Enardo 2124	23.3	591	32.0	813	30.0	762	1.00	25	5.2	132	6.3	160	134	61	149	67

^{1.} Unit weights indicate Net Weight of valve at minimum set pressure and do not include shipping crate or box. Add 20% for gross shipping weight (Domestic Only). Pressure settings above the standard will increase total unit weight - consult factory for more information. Lids of less than 100 lbs / 45 kg in weight will be tethered to the base with one lanyard. Lids weighing 100 lbs / 45 kg or more will be restrained with two lanyards.

Selection Guide to Enardo 2100 Series



Example:



Indicates a 20 in. Emergency Pressure Relief Vent with a Carbon steel base, an aluminum cover with a Nitrile (NBR) seal, an ANSI 150 lb. Flat Face bolting pattern with a relief pressure of 2 oz./sq. in. and zinc plated carbon steel weights.



^{2.} Flat face connecting flange is standard.