# Enardo ES-900-SO

End-of-Line Stack Vent Valve

#### Introduction

Enardo™ ES-900-SO end-of-line vent valves represent the latest development in high-performance, tight-sealing tank venting products, and complement the industry-leading Enardo ES-660 Series thief hatch product line. With a leakage rate of no more than 1.0 SCFH at 90% of set point, the Enardo ES-900-SO offers unparalleled vent valve performance.

Enardo ES-900-SO End-of-Line Vent Valve is designed to prevent the escape of light ends of crude by maintaining pressure in the storage tank. The end-of-line vent valve is installed directly on the end of the vent line exhaust. The Enardo ES-900-SO has both pressure and vacuum relief capability.

The pressure vacuum vent valve opens when the system pressure or vacuum exceeds the set pressure of the valve. When over pressure occurs, the pallet lifts, breaking the seal between the seat and pallet, allowing vapors to pass through the valve orifice and relieving the pressure or vacuum buildup. The valve closes once the tank pressure goes below the setting point.

## **Available Sizes**

2 to 4 in. / 50 to 100 mm

## **Vent Setting Range**

## **Pressure**

1.0 to 16.0 oz./sq. in. / 4.3 to 6.90 mbar (0.5 oz./sq. in. / 2 mbar increments)

#### Vacuum

0.4 oz./sq. in / 1.7 mbar



#### **Construction Materials**

## Housing

Cast Aluminum

#### **Pallet**

Aluminum

#### **Pressure Seal**

Nitrile (NBR) or Fluorocarbon (FKM)

#### Hardware

Zinc-plated carbon steel

## Weight

Zinc-plated carbon steel (to 12 oz./sq. in.) Lead

## **Body Gasketing**

Nitrile (NBR) or Fluorocarbon (FKM)

# **Additional Technical Data**

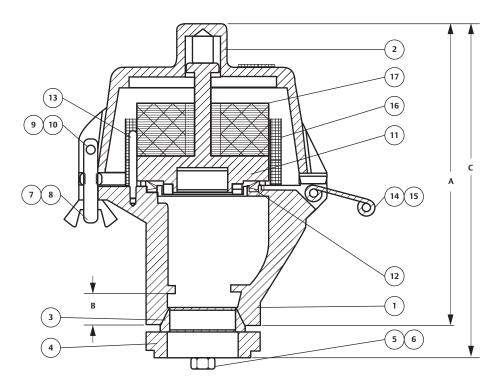
For more technical information, contact your local Sales Office or log on to:

www.enardo.com

## **Features**

- Multiple setting options by adding additional pressure weights
- Fluorocarbon (FKM) gaskets for "Sour Gas" and corrosive service applications
- Non-Corrosive coating option for extremely harsh environments
- Leakage rate of no greater than 1.0 SCFH at 90% of setpoint
- Certified flow capacities in accordance with API
- Tight sealing
- Superior flow





**Figure 2.** Enardo™ ES-900-SO Dimensions

Table 1. Enardo ES-900-SO Dimensions										
MODEL	SIZE		А		В		C (HEIGHT)		APPROXIMATE WEIGHT <sup>(1)</sup>	
	ln.	mm	ln.	mm	ln.	mm	ln.	mm	Lb	kg
Enardo ES-920-SO	2	50	10-7/8	276	1-1/4	31.8	12-1/8	308	11	5
Enardo ES-930-SO	3	80	13	330	1-1/4	31.8	14-5/8	371	15	7
Enardo ES-940-SO	4	100	14-1/4	362	1-1/4	31.8	15-1/2	394	19	9

<sup>1.</sup> Unit weights indicate Net Weight of valve in pounds at standard set pressure (1.0 oz./sq. in. pressure - 0.4 oz./sq. in. vacuum), does not include shipping crate or box. Add 20% for gross shipping weight (Domestic Only).

Table 2. Enardo ES-900-SO In-line Vent Valve									
	2027.0045	PART NUMBER							
KEY	PART NAME	2 ln.	3 In.	4 In.					
1	Valve Body	3514326	3514337	3514341					
2	Hood	3514329	3514339	3514343					
3	Flange Gasket	3505501	3505502	3505503					
4	Slip-on Flange	3508901	3508902	3508903					
5	Hex Bolt	2021203	2021200	2021200					
6	Square Nut	2021901	2021901	2021901					
7	Eyebolt	3505601	3505601	3505601					
8	Wing Nut	2001002	2001002	2001002					
9	Latch Pin	4505103	4505103	4505103					
10	Latch Clip (HPC-148)	2027100	2027100	2027100					
11	Pallet Assembly, Nitrile (NBR)	3514269	3514271	3514273					
11	Pallet Assembly, Fluorocarbon (FKM)	3514270	3514272	3514274					
12	V-ring Seal, Nitrile (NBR)	3514286	3514316	3514323					
12	V-ring Seal, Fluorocarbon (FKM)	3514313	3514317	3514324					
13	Guide Rod	3514344	3514345	3514346					
14	Lever	3514350	3514350	3514350					
15	Lever Spring	3514351	3514351	3514351					
16	Screen	3514330	3514347	3514348					
17	Pressure Weight(s)	As required	As required	As required					

