

# Enardo ES-805-SO

## In-Line Vent Valve

### Introduction

Enardo™ ES-805-SO In-Line Vent Valves represent the latest development in high-performance, tight-sealing tank venting products and complement the industry-leading Enardo ES-665 Series Thief Hatch product line. With a leakage rate of no more than 0.1 SCFH at 90% of set point, the Enardo ES-805-SO offers unparalleled vent valve performance.

Enardo ES-805-SO In-Line Vent Valves are designed to prevent the escape of light ends of crude by maintaining pressure in the storage tank. The in-line vent valve is installed directly into the vent line exhaust. The Enardo ES-805-SO has both pressure and vacuum relief capability whereas the Enardo ES-805-PSO has only pressure relief capacity.

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 set pressure.

### Available Sizes

2 through 4 in. / 50 through 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



Figure 1. Enardo ES-805-SO In-Line Vent Valve

### 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. / 51.7 mbar) 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](http://www.enardo.com)

### Features

- Multiple setting options by adding additional pressure weights
- Fluorocarbon (FKM) gaskets for “Sour Gas” and corrosive service applications
- Leakage rate of no greater than 0.1 SCFH at 90% of setpoint
- Non-corrosive coating option for extremely harsh environments
- Certified flow capacities in accordance with API

# Enardo ES-805-SO

## In-Line Vent Valve

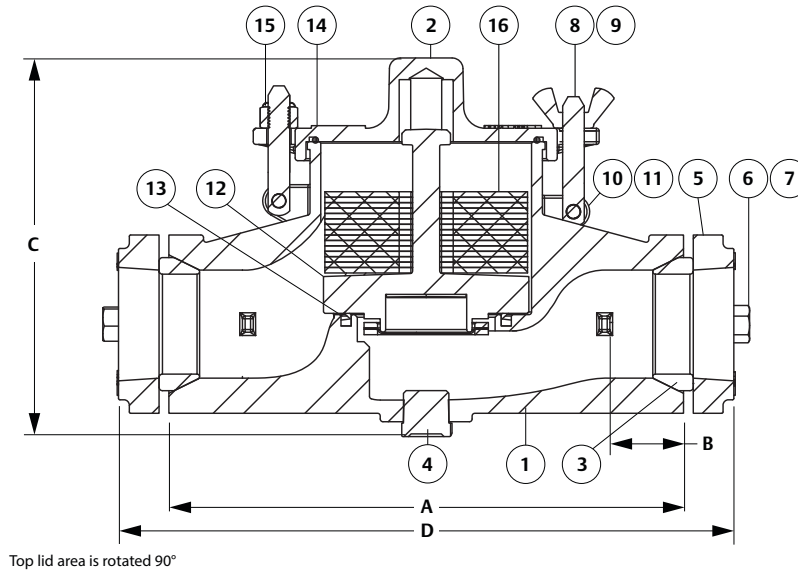


Figure 2. Enardo™ ES-805-SO Dimensions

Table 1. Enardo ES-805-SO Dimensions

MODEL	SIZE		A		B		C (HEIGHT)		D (LENGTH)		APPROXIMATE WEIGHT	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	Lb	kg
Enardo ES-825-SO	2	50	11-7/8	302	1-3/4	44.5	8-3/4	222	14-1/4	362	12	5
Enardo ES-835-SO	3	80	12	305	1-3/4	44.5	10-1/4	260	15-1/4	387	17	8
Enardo ES-845-SO	4	100	14-1/2	368	1-3/4	44.5	11-5/8	295	17-1/4	438	23	10

Table 2. Enardo ES-805-SO In-line Vent Valve

KEY	PART NAME	PART NUMBER		
		2 In. / 50 mm	3 In. / 80 mm	4 In. / 100 mm
1	Valve Body	3514261	3514297	3514321
2	Lid	3514264	3514300	3514335
3	Flange Gasket	3505501	3505502	3505503
4	Pipe Plug	2023802	2023802	2023802
5	Slip-on Flange	3508901	3508902	3508903
6	Hex Bolt	2021203	2021200	2021200
7	Square Nut	2021901	2021901	2021901
8	Eyebolt	3505601	3505601	3505601
9	Wing Nut	2001002	2001002	2001002
10	Latch Pin	4505103	4505103	4505103
11	Latch Clip (HPC-148)	2027100	2027100	2027100
12	Pallet Assembly, Nitrile (NBR)	ERAA43150A0	ERAA43150A2	ERAA43150A4
12	Pallet Assembly, Fluorocarbon (FKM)	ERAA43150A1	ERAA43150A3	ERAA43150A5
13	V-ring Seal, Nitrile (NBR)	3514286	3514316	3514323
13	V-ring Seal, Fluorocarbon (FKM)	3514313	3514317	3514324
14	Lid O-ring, Nitrile (NBR)	3514285	3514318	3514365
14	Lid O-ring, Fluorocarbon (FKM)	3514314	3514319	3514372
15	Nylock Nut	1/2 - 13	1/2 - 13	1/2 - 13
16	Pressure Weight(s)	As required	As required	As required