

# Enardo ES-905-SO

## End-of-Line Stack Vent Valve

### Introduction

Enardo™ ES-905-SO End-of-Line Stack 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-905-SO offers unparalleled vent valve performance.

Enardo ES-905-SO End-of-Line Stack 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-905-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



Figure 1. Enardo™ ES-905-SO End-of-Line Stack 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.) Lead

#### Body Gasketing

Nitrile (NBR) or Fluorocarbon (FKM)

### Additional Technical Data

#### Additional Technical Data

Scan or Click the QR code for more information on this product.

[www.Enardo.com](http://www.Enardo.com)



09/23

### 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 0.1 SCFH at 90% of setpoint
- Certified flow capacities in accordance with API
- Tight sealing
- Superior flow

# Enardo ES-905-SO

## End-of-Line Stack Vent Valve

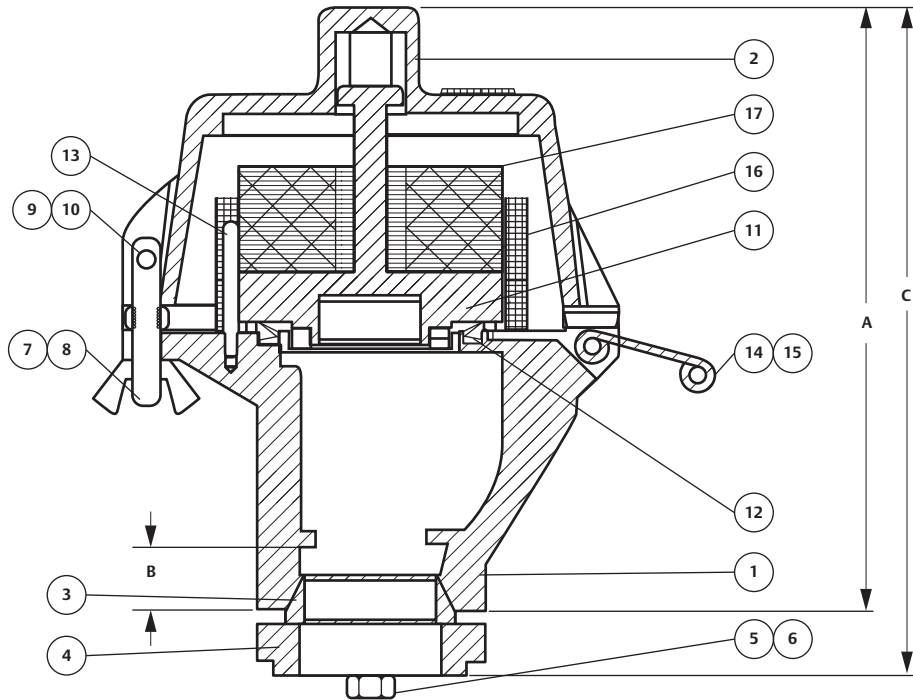


Figure 2. Enardo™ ES-905-SO End-of-Line Stack Vent Valve Dimensions

Table 1. Enardo ES-905-SO End-of-Line Stack Vent Valve Dimensions

| MODEL            | SIZE |     | A      |     | B     |      | C, HEIGHT |     | APPROXIMATE WEIGHT <sup>(1)</sup> |    |
|------------------|------|-----|--------|-----|-------|------|-----------|-----|-----------------------------------|----|
|                  | In.  | mm  | In.    | mm  | In.   | mm   | In.       | mm  | lb                                | kg |
| Enardo ES-925-SO | 2    | 50  | 10-7/8 | 276 | 1-1/4 | 31.8 | 12-1/8    | 308 | 11                                | 5  |
| Enardo ES-935-SO | 3    | 80  | 13     | 330 | 1-1/4 | 31.8 | 14-5/8    | 371 | 15                                | 7  |
| Enardo ES-945-SO | 4    | 100 | 14-1/4 | 362 | 1-1/4 | 31.8 | 15-1/2    | 394 | 19                                | 9  |

1. 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-905-SO End-of-Line Stack Vent Valve

| KEY | PART NAME                           | PART NUMBER |             |             |
|-----|-------------------------------------|-------------|-------------|-------------|
|     |                                     | 2 In.       | 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)      | ERAA43150A0 | ERAA43150A2 | ERAA43150A4 |
| 11  | Pallet Assembly, Fluorocarbon (FKM) | ERAA43150A1 | ERAA43150A3 | ERAA43150A5 |
| 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 |