

# 1-AVCW See-Thru Air Vent for Ozone Applications

For Pressures to 150 psig (10 barg) or Specific Gravity Down to 0.80

## What Is Ozone?

Ozone is a gas that forms naturally during thunderstorms when lightning converts normal oxygen molecules (O<sub>2</sub>) into ozone (O<sub>3</sub>). The fresh, sweet smell in the air after a storm is the smell of ozone. The unstable ozone molecule reacts rapidly with most substances and is an extremely strong natural oxidant.

## How Is Commercial Ozone Produced?

Ozone can be formed by exposing air to ultraviolet light; however, the most common method of generating ozone is by passing air through an electrical discharge. Because ozone has strong oxidizing properties, its production requires corrosion-resistant equipment.

## How Is Ozone Used in Water Filtration and Purification?

Because ozone is such an effective oxidant, it kills viruses, bacteria, mold, mildew, fungus and germs. Passing ozone through water achieves high purification rates without any chemical residue. Oxygen is the only by-product.

## Typical Customer Applications:

- Purifying standing ground water in Third World countries.
- Conditioning water for poultry and livestock.
- Purifying water in the bottled water industry.
- Filtering and purifying water for process applications.

## A See-Thru Body Shows You It's Working

Now, you can literally see what you've been missing. The Armstrong 1-AVCW See-Thru Air Vent lets you easily check its operating condition. You won't have to waste time and money scheduling maintenance that isn't needed, and you can quickly react to a condition before it becomes a problem.

## Efficient Operation

Simple ball-float mechanism doesn't need electricity to operate. The air vent automatically discharges only when air or gas is present. No liquid is lost, as with manual venting.

## Positive Seating

Free-floating valve mechanism ensures positive seating and prevents liquid loss. There are no fixed pivots to wear or create friction. Wear points are heavily reinforced for long life.

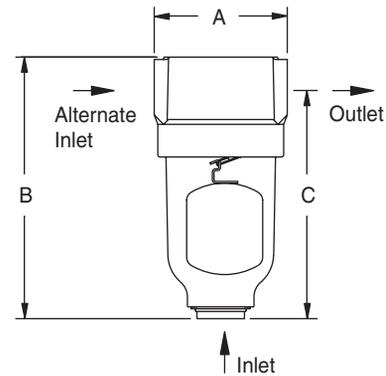
## Corrosion Resistance

Long-lasting polycarbonate cap and body provides trouble-free operation. T316 stainless steel internal parts resist corrosion and reduce maintenance.

## Compare—and Save the Difference

Seeing really is believing—especially when you compare the Armstrong 1-AVCW See-Thru Air Vent with manual venting. Measure the time and money you can save with a more efficient, easier-to-maintain system. For more information or technical assistance, contact your local Armstrong Representative.

**NOTE: The Armstrong 1-AVCW should not be used in an environment where there are high levels of ketones or chlorinated or aromatic hydrocarbons.**



1-AVCW

| List of Materials              |                      |
|--------------------------------|----------------------|
| Name of Part                   | Material             |
| Cap                            | Polycarbonate        |
| Body                           | Polycarbonate        |
| O-Rings (Body Cap and Fitting) | Aflas                |
| Float Lever and Screws         | T316 Stainless Steel |
| Valve & Seat                   | T316 Stainless Steel |
| Fitting                        | Polycarbonate        |
| Retainer Ring                  | Zinc Plated Steel    |

| Physical Data                              |                                      |     |
|--|--------------------------------------|-----|
|  | in                                   | mm  |
| Inlet Connection (In Body)                 | 3/4                                  | 20  |
| Inlet Connection (Alternate)               | 1/2                                  | 15  |
| Outlet Connection                          | 1/2                                  | 15  |
| "A" Face-to-Face                           | 3-1/2                                | 89  |
| "B" Height                                 | 6-13/16                              | 172 |
| "C" Bottom to $\varnothing$                | 6                                    | 152 |
| Maximum Allowable Pressure (Vessel Design) | 150 psig @ 150°F<br>(10 barg @ 66°C) |     |
| Maximum Operating Pressure                 | 150 psig (10 barg)                   |     |
| Specific Gravity Range                     | 1.00 to 0.80                         |     |
| Weight, lb (kg)                            | 1 (.5)                               |     |

| Model 1-AVCW Capacity |      |              |      |                    |
|-----------------------|------|--------------|------|--------------------|
| Differential Pressure |      | Orifice Size | scfm | m <sup>3</sup> /hr |
| psig                  | barg |              |      |                    |
| 15                    | 1.0  | 1/8"         | 4.3  | 7.3                |
| 30                    | 2.0  |              | 6.5  | 11.0               |
| 50                    | 3.5  |              | 9.5  | 16.1               |
| 75                    | 5.0  |              | 13.1 | 22.2               |
| 100                   | 7.0  |              | 16.9 | 28.7               |
| 125                   | 8.5  |              | 20.5 | 34.8               |
| 150                   | 10.5 |              | 24.2 | 41.3               |

**NOTE:** Discharge of air through an orifice in scfm (standard cubic feet of free air per minute) at a standard atmospheric pressure of 14.7 psig (1 barg) and 70°F (21°C).