



## Flooded Cell Catalyst Vent

PowerSafe® flooded batteries by EnerSys® deliver unmatched reserve power reliability in harsh environments. But like all flooded battery designs, they continuously vent hydrogen and oxygen – up to 50 times more hydrogen than Valve Regulated Lead Acid (VRLA) batteries.

Also known as outgassing, hydrogen evolution or water decomposition, the effect robs the batteries of moisture, driving watering requirements and maintenance costs. Batteries utilizing the catalyst vent offer reduced watering intervals, decreasing TCO of overall string.

The Flooded Cell Catalyst Vent greatly reduces the effects of risks and costs associated with outgassing. Featuring an external, plastic plug assembly, the unit captures most of the hydrogen and oxygen gas that escapes under normal operating and recharging conditions, then recombines the gasses and returns water to the battery.

Installed externally, the Flooded Cell Catalyst Vent reduces water consumption and provides protection against ignition sources entering the battery. The unit's external location also keeps heat generated by the gas recombination away from internal battery processes, protecting battery performance and service life.

The Flooded Cell Catalyst Vent helps PowerSafe flooded batteries deliver similar low-maintenance performance as characterized by VRLA batteries, cutting operating costs and further supporting an already superior service life profile.

### Features and Benefits

- Supports PowerSafe® C, D, E, OPzS, and OGi batteries
- Recombines hydrogen and oxygen to return water to the battery
- Reduces ventilation requirements during normal operation
- Extends battery watering intervals
- Significantly reduces maintenance and service requirements
- Mitigates the risks associated with battery outgassing
- Lasts for the life of the battery
- Reduces Total Cost of Ownership (TCO)

## Construction

- Designed to replace EnerSys® standard quarter turn, bayonet type vent
- Self-limiting design for safe operation under abnormal, high-gassing conditions
- Palladium catalyst encapsulated in ceramic tube surrounded by absorber

## Installation and Operation

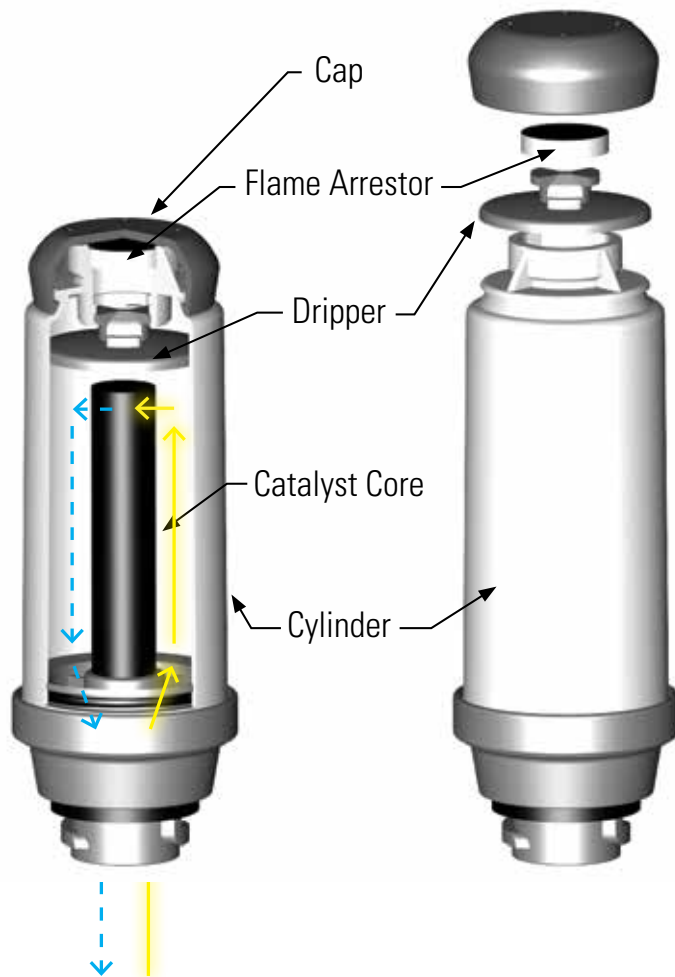
- To be installed ONLY after commissioning charge is complete
- Not suitable for use with charge voltages greater than 2.40 VPC. Use standard Flame Arrestor vents when charging greater than 2.40 VPC.

## Standards

- Recombination efficiency maximized to mimic the level of sealed Valve Regulated Lead Acid (VRLA) batteries
- Integrated spark/flame arrestor for increased safety

Batteries Supported	Battery AH Capacities	Flooded Cell Catalyst Vent Unit Number
Powersafe® OPzS and OGi*	European Vent ≤ 500 AH	800476
	European Vent 501 - 1000 AH	800477
Powersafe® C, D and E	North American Vent ≤ 500 AH	800478
	North American Vent 501 - 1000 AH	800479

\*OGi 3 and single cell jar only



## External Recombinant Catalyst Technology

The Flooded Cell Catalyst Vent captures and recombines escaping hydrogen and oxygen, returning it to the battery. A palladium catalyst recombines the rising gases (indicated by the yellow arrows) into water (blue arrows), which then flows back into the battery.



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