Plasma & Reactive Gas Solutions

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Catalytic converter for safe transformation of excess ozone process gas to oxygen

Ozone Gas Destruct

ACCESSORY PRODUCT FOR SAFE DESTRUCTION OF EXCESS OZONE GAS

While highly effective as a cleaning agent, ozone is a highly toxic gas. Wherever ozone is used, safety measures have to be taken in order to protect personnel and equipment from unintended ozone exposure. One such important safety measure is the destruction of excess ozone gas that is not used in a process. The OVS Ozone Gas Destruct unit is designed to safely convert high levels of ozone into oxygen, reducing the ozone level down to detection limit - well below safety thresholds.

The OVS ozone gas destruct unit converts ozone into oxygen by use of a catalyst. The catalyst material is contained within a robust stainless steel cylinder. Due to the exothermal reaction, the stainless steel cylinder can get hot. In order to protect personnel and the environment from the hot cylinder surface, the cylinder is contained within a secondary exterior shell.

For moist ozone gas applications, such as after contacting ozone gas with water, the OVS can be supplied with optional heating. The heating ensures that the temperature is maintained above dew point at all times and thus avoids condensation of water vapor in the catalyst material.

Two models are available, the OVS 1 which destroys up to 102 grams per hour of ozone and the OVS 4 for destruction of up to 324 grams per hour. The OVS 1 is available in a heated version and can be used unheated as well, the OVS 4 can be ordered in a heated or in an unheated version.

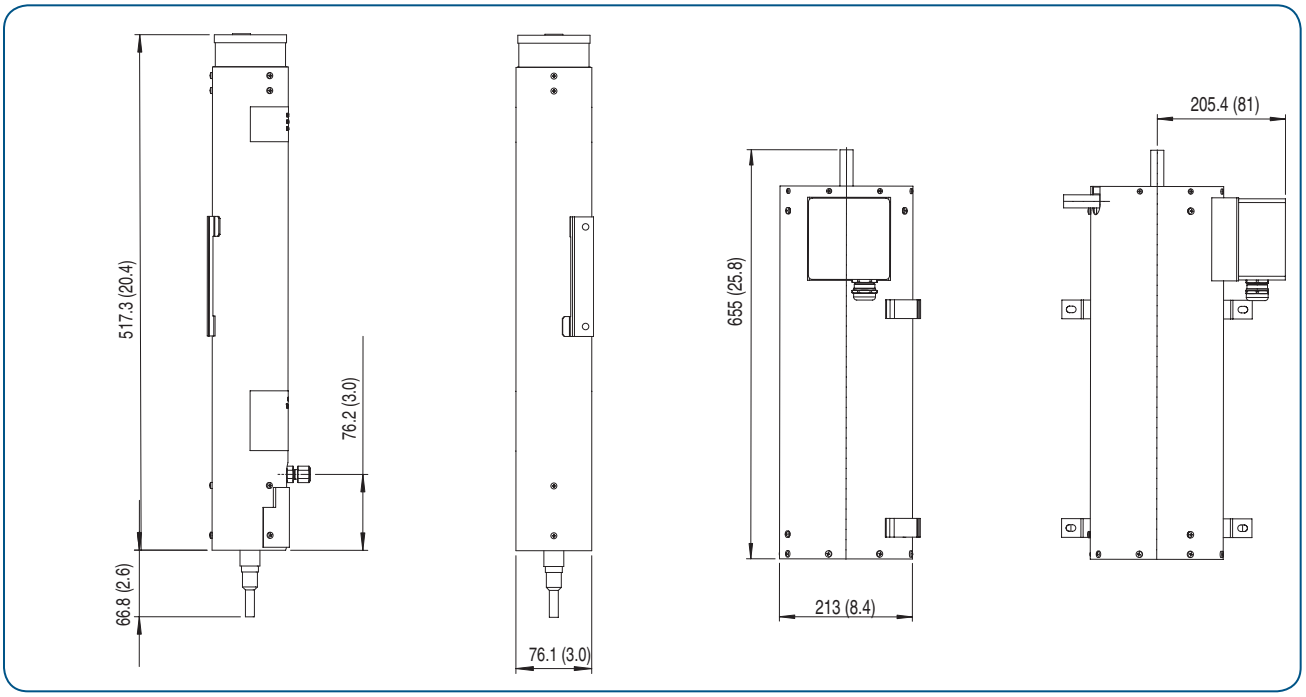
Features & Benefits

- Fast, reliable ozone destruction
- Eliminates high concentrations of ozone
- Models for dry or moist ozone environments
- Double-shell design for personnel protection
- High-quality, ozone resistant materials
- Compact design
- Easy installation

Specifications and Ordering Information

	OVS 1	OVS 4
Operating Range		
Max. ozone gas destruction capacity	102 g/h @ 0.6 m³/h	324 g/h @ 5,4 m³/h
Max. gas flow	1 m³/h @ 70 g/m³ (4.8 wt%)	5.4 m³/h @ 60 g/m³ (4.1 wt%)
Max. ozone input concentration	280 g/m³ (18.6 wt%) @ 0.25 m³/h	300 g/m³ (19.6 wt%) @ 0.3 m³/h
Residual ozone in output gas	below 0.1 ppm	below 0.1 ppm
Connections		
Gas in / out	1/4" Swagelok male	R 1/2" (DIN2999 - ISO 7/1 PT)
Power (heated version only)	24 VDC , 25 W (external power supply for 100-240 VAC included)	180 - 253 VAC, 50 W
Physical Data		
Dimensions	76 mm x 518 mm (3" x 20.4")	213 mm x 655 mm (8.4" x 25.8")
Weight	approx. 3 kg (6.6 lbs)	approx. 18 kg (39.7 lbs)

Contact your local sales account representative for pricing and availability.



Dimensional Drawing

Note: Unless otherwise specified, dimensions are nominal values in millimeters (inches referenced).

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