

ELIMINATOR™ CG

Room Temperature Purifier for Inert Gases

FEATURES



- ◆ Removal of impurities to <0.5 ppb¹
- ◆ Removes *all* hydrocarbons, including CH₄
- ◆ No heaters or power required
- ◆ Room-temperature operation
- ◆ 316L SS (<10 Ra EP) vessel
- ◆ Factory regenerable for up to 10 year life
- ◆ Field regenerable for up to 10 year life
- ◆ Improved process equipment performance
- ◆ Optional built-in 0.003 µm filter (PF type)
- ◆ High Flow - up to 2500 slpm
- ◆ Low cost (initial and operating)

APPLICATIONS

- ◆ Zero-Hydrocarbon UHP Gas Purge
- ◆ APIMS Zero and Calibration
- ◆ Semiconductor Process Equipment
- ◆ Gas Cylinder Cabinets
- ◆ Gas Analyzer Carts
- ◆ Analytical Industry
- ◆ Research and Development

NuPure's Eliminator™ CG Gas Purifier is designed to purify Inert Gases (Nitrogen or Noble Gases) to state-of-the-art purity, using a **patented** design and process. It removes **all** hydrocarbons (including methane), and all other gaseous impurities found in Inert gases, to PPT levels using *room temperature operation*. The Eliminator™ CG is ideal for **critical process and purging** applications.

The NuPure™ Eliminator™ CG contains a new patented combination of catalyst and metal getter. It contains no hydrocarbon or sulfur compounds. The Eliminator™ CG Purifier incorporates a new unique internal filter design combined with a short purifier geometry, allowing a **very high flow** combined with a **very low pressure drop**.

The Eliminator™ CG gas purifiers come in standard size ranges from 0 to 2500 slpm. The use of optional factory-installed inlet isolation valve (shown in photo) is recommended for elimination of possible operator error during installation. Optional high Cv valves are available to ensure a low system pressure drop.

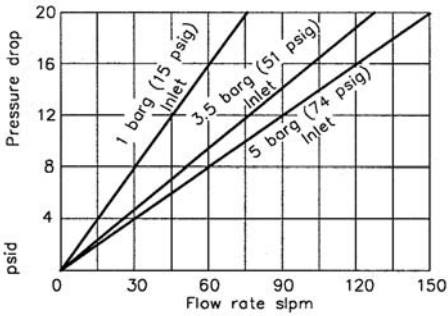
IMPURITIES REMOVED¹

| Gas | Version | H ₂ O | O ₂ | CO ₂ | CO | H ₂ | NMHCs | CH ₄ | Particles |
|----------------|----------|------------------|----------------|-----------------|----------|----------------|----------|-----------------|------------------|
| N ₂ | PF or XL | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <1.0 ppb | 0.003 µm or 1 µm |
| Noble | PF or XL | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <0.5 ppb | <1.0 ppb | 0.003 µm or 1 µm |

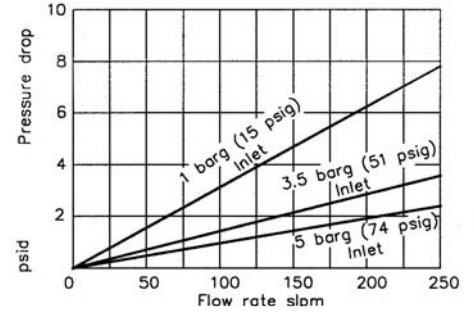
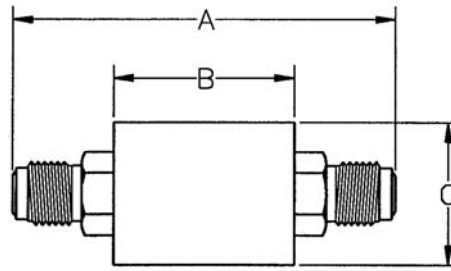
¹ - Based on a VLSI Grade Liquid Gas source. Nitrogen not removed from noble gases. Removal of nitrogen can be accomplished using **heated getter** purifiers. See brochures for NuPure™ PF Series® and Omni™ Series Gas Purifiers.

ELIMINATOR™ CG

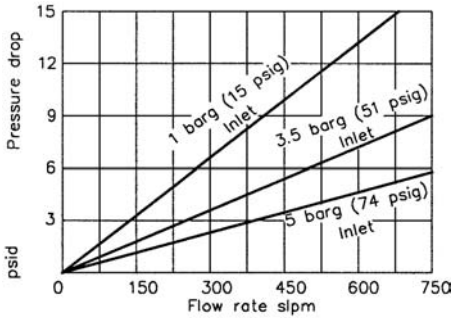
Dimensional and Performance Specifications



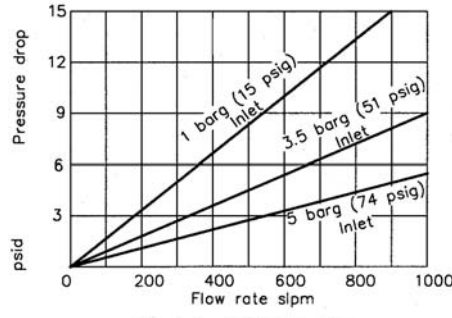
Models 1200 CG and 3000 CG (VR4)



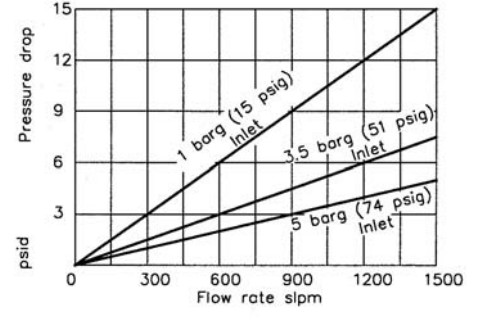
Models 3000 CG (VR2) and 5000 CG



Model 10000 CG



Model 15000 CG



Model 25000 CG

| Purifier Model | A in (mm) | B in (mm) | C in (mm) | Particle Filtration Level | Max Flow | Part Number |
|-----------------------|--------------|--------------|--------------|--|-----------|------------------------------------|
| Mini CG | 4.5 (114) | 2.7 (69) | 1.0 (25) | 0.003 μm^1 or 1 μm | 4 slpm | 00040-CG-VR4-PF ¹ or XL |
| 100 CG | 4.5 (114) | 2.7 (69) | 1.5 (38) | 0.003 μm^1 or 1 μm | 12 slpm | 00100-CG-VR4-PF ¹ or XL |
| 200 CG | 6.0 (152) | 4.2 (107) | 1.5 (38) | 0.003 μm^1 or 1 μm | 25 slpm | 00200-CG-VR4-PF ¹ or XL |
| 500 CG | 7.9 (202) | 6.1 (156) | 2.0 (51) | 0.003 μm^1 or 1 μm | 50 slpm | 00500-CG-VR4-PF ¹ or XL |
| 600 CG | 8.2 (208) | 6.5 (167) | 2.0 (51) | 0.003 μm^1 or 1 μm | 75 slpm | 00600-CG-VR4-PF ¹ or XL |
| 1000 CG ² | 12.9 (328) | 11.1 (282) | 2.0 (51) | 0.003 μm^1 or 1 μm | 85 slpm | 01000-CG-VR4-PF ¹ or XL |
| 1200 CG | 7.9 (202) | 6.1 (156) | 3.0 (76) | 0.003 μm^1 or 1 μm | 150 slpm | 01200-CG-VR4-PF ¹ or XL |
| 2000 CG | 17.7 (449) | 15.9 (402) | 2.5 (63) | 0.003 μm^1 or 1 μm | 250 slpm | 02000-CG-VR4-PF ¹ or XL |
| 3000 CG | 17.3 (439) | 15.5 (394) | 3.0 (76) | 0.003 μm^1 or 1 μm | 300 slpm | 03000-CG-VR4-PF ¹ or XL |
| 3000 CG | 17.7 (449) | 15.6 (396) | 3.0 (76) | 0.003 μm^1 or 1 μm | 500 slpm | 03000-CG-VR2-PF ¹ or XL |
| 5000 CG ³ | 25.3 (643) | 23.2 (590) | 3.0 (76) | 0.003 μm^1 or 1 μm | 850 slpm | 05000-CG-VR2-PF ¹ or XL |
| 10000 CG ³ | 35.9 (913) | 33.8 (860) | 4.0 (101) | 0.003 μm^1 or 1 μm | 1200 slpm | 10000-CG-VR2-PF ¹ or XL |
| 15000 CG ³ | 35.9 (913) | 33.8 (860) | 5.0 (127) | 0.003 μm^1 or 1 μm | 1800 slpm | 15000-CG-VR2-PF ¹ or XL |
| 25000 CG ³ | 35.9 (913) | 33.8 (860) | 6.0 (152) | 0.003 μm^1 or 1 μm | 2500 slpm | 25000-CG-VR2-PF ¹ or XL |

| | | | |
|------------------------------|---|------------------|---|
| Maximum Pressure | 250 psig (USA) / 9.9 kg/cm ² G (Japan) | Materials | 316L SS (<10 Ra EP) |
| Operating Temperature | Room Temperature | Fittings | 1/4" MVCR ⁴ available on sizes Mini-3000 |
| Leak Rate | <2 x 10 ⁻⁹ atm cc/sec He | | 1/2" MVCR ⁴ available on sizes 600-25000 |

1 - Sub-micron filtration only with PF version.

2 - For model 1000 dimension "A" has changed from 12.1 in to 12.9 in, dimension "B" has changed from 10.3 in to 11.1 in.

3 - For models 5000 and larger - printed dimensions are subject to future change. Please check with factory prior to ordering.

4 - VCR-compatible standard. VCR is Registered Trademark of Cajon Corporation. Special fittings on request.

NuPure III

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