

#### **ELIMINATOR™ CAG**

## **Room Temperature Purifiers for Inert Gases**



# **APPLICATIONS**

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

## **FEATURES**

- Removal of impurities to <0.5 ppb<sup>1</sup>
- No heaters or power required
- Room-temperature operation
- ♦ 316L SS (<10 Ra EP) vessel
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- ♦ Factory/Field regenerable for up to 10 year life - no need for H₂ in regeneration gas
- Improved process equipment performance
- Optional built-in 0.003 μm filter (PF type)
- High Flow up to 300 slpm
- Low cost (initial and operating)

The NuPure™ Eliminator™ CAG uses a new, patented Catalyst/Absorber/Getter (CAG) purifier technology, which represents a major improvement over all other inert gas chemistries. This results in the best outlet purity guarantees of <0.5 ppb¹ per impurity². The CAG purifiers achieve this outstanding performance at *room temperature*. They are ideally suited to purifying inert gases from liquid sources.

The NuPure™ Eliminator™ CAG gas purifiers come in standard size ranges from 0 to 300 slpm, with the XL version especially suitable for high flow applications. The use of factory-installed inlet isolation valve is recommended for ease of installation, and elimination of possible operator error.

With the purchase of the newly-introduced Field Regeneration Kit, the purifier's operating cost can be reduced to almost zero. Field regeneration is particularly simple and convenient because the CAG can be regenerated without need for hydrogen!

#### IMPURITIES REMOVED1

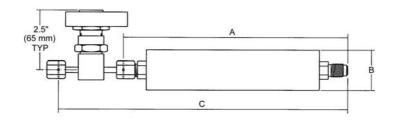
Gas	Version	H <sub>2</sub> O	02	CO <sub>2</sub>	СО	H <sub>2</sub>	NMHCs	CH <sub>4</sub>	Particles <sup>2</sup>
N <sub>2</sub>	PF or XL	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	< 1 pcf down to 0.01 µm
Noble	PF or XL	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	< 1 pcf down to 0.01 µm

<sup>1 -</sup> Based on 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<sup>TM</sup> PF Series<sup>®</sup> and Omni<sup>TM</sup> Series Gas Purifiers.

<sup>2 -</sup> Particle removal is guaranteed with PF version only

### NuPure™ ELIMINATOR™ CAG

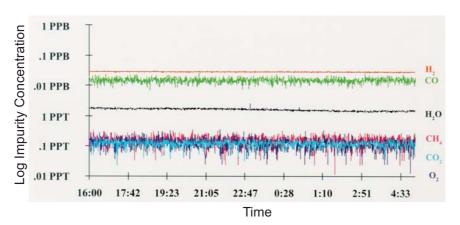
## **Dimensional and Perfomance Specifications**



Model	A in (mm)	B in (mm)	C in (mm)	Average Flow @1 yr regeneration	Max Flow <sup>1</sup> @130 psig	
E 40 CAG	5.7 (145)	1.0 (25)	8.5 (216)	0.3 slpm	3 slpm	
E 100 CAG	5.7 (145)	1.5 (38)	8.5 (216)	0.8 slpm	8 slpm	
E 200 CAG	10 (254)	1.5 (38)	12.8 (325)	2 slpm	20 splm	
E 600 CAG	14.6 (371)	2.0 (51)	17.4 (442)	6 slpm	60 slpm	
E 1000 CAG	22.1 (561)	2.0 (51)	24.9 (632)	10 slpm	100 slpm	
E 2000 CAG	33.1 (841)	2.5 (63)	35.9 (912)	20 slpm	200 slpm	
Maximum Press	ure 250 psig (	USA) / 9.9 kg/cm <sup>2</sup> G	(Japan) <b>Materials</b>	316L SS (<10 Ra EP)		
Operating Tempo	erature Room Tem	perature	Fittings	1/4" VCR <sup>2</sup>		
Leak Rate	< 2 x 10 <sup>-9</sup> a	atm cc/sec He	Gas Inlet	VLSI grade (99.9995% minimum)		

1 - Operation at high flow may result in a high pressure drop. Contact factory for technical assistance. 2 - VCR compatible fitting standard. VCR is a Registered Trademark of Cajon Corporation.

## NuPure<sup>™</sup> ELIMINATOR<sup>™</sup> Nitrogen Purifier Model 200 CAG @ 5 slpm, 130 psig Outlet Purity data as measured by APIMS\*



\*Tested by a VG Gas Analysis Systems APIMS.

## NuPure III

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