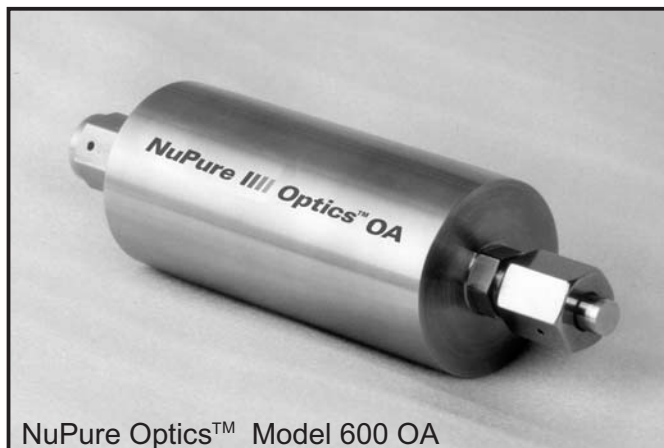


### Optics™ OA Room Temperature Purifier for Optics Purge Gases

#### FEATURES



NuPure Optics™ Model 600 OA

- ◆ Removal of impurities to <0.5 ppb<sup>1</sup>
- ◆ 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
- ◆ Lowest cost (initial and operating)

#### APPLICATIONS

- ◆ Photolithography
- ◆ Lens Purging
- ◆ Removal of hydrocarbons
- ◆ Removal of sulfur compounds
- ◆ Manufacturing of flat panel displays
- ◆ Metrology

NuPure's Optics™ OA Gas Purifier is designed to purify CDA, Inerts (e.g. Nitrogen or Helium), O<sub>2</sub>, and O<sub>2</sub>/Inert gas mixtures. It reduces hydrocarbons and other gaseous impurities commonly found in N<sub>2</sub> and CDA to PPT levels using *room temperature operation*. The Optics™ OA is ideally suited to purifying gases for lens purging.

The NuPure™ Optics™ OA contains a new proprietary combination of non-reactive inorganic absorber media containing no hydrocarbons or sulfur compounds. Because the Optics™ OA does not react with oxygen, complicated temperature sensing equipment is not required and because no heat generated during our purification process, the Optics™ OA purifier can be located at the point-of-use with no effect on temperature sensitive processes.

The NuPure™ Optics™ OA gas purifiers come in standard size ranges from 0 to 2500 slpm. The use of optional factory-installed inlet isolation valve is recommended for elimination of possible operator error during installation.

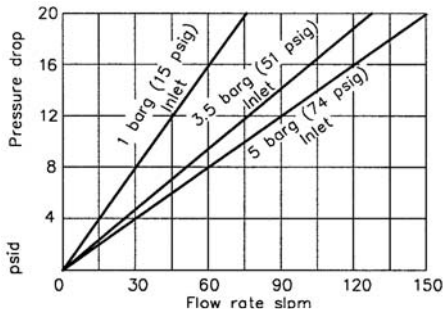
#### IMPURITIES REMOVED<sup>1</sup>

Version	SO <sub>2</sub> /SO <sub>x</sub>	H <sub>2</sub> S	Toluene	CO <sub>2</sub> /CO	NH <sub>3</sub>	H <sub>2</sub> O	NMHCs	Particles
PF or XL	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	<0.5 ppb	0.003 µm or 1 µm

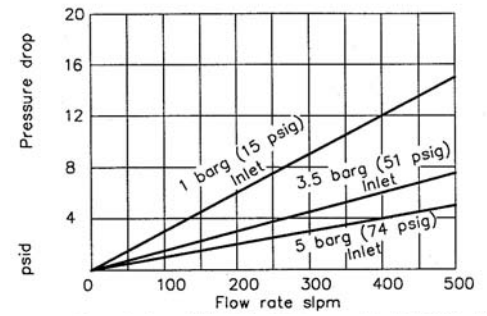
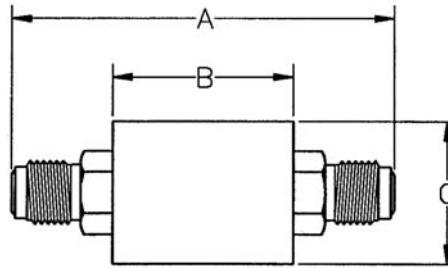
1 - Removes: acid gases, alcohols, amines, ammonia, CO/CO<sub>2</sub>, all hydrocarbons, H<sub>2</sub>O, H<sub>2</sub>S, NO<sub>x</sub>, SO<sub>2</sub>, SO<sub>x</sub>, siloxanes and toluene.

**OPTICS™ OA**

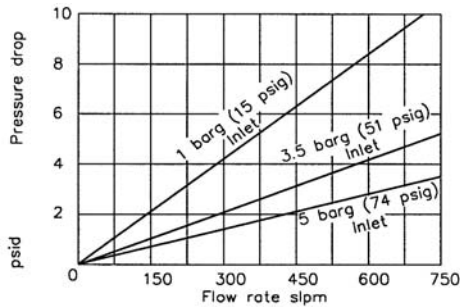
**Dimensional and Performance Specifications**



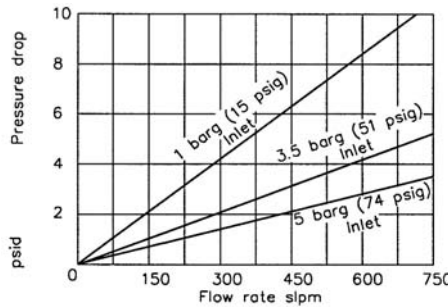
Models 1200 OA and 3000 OA (VR4)



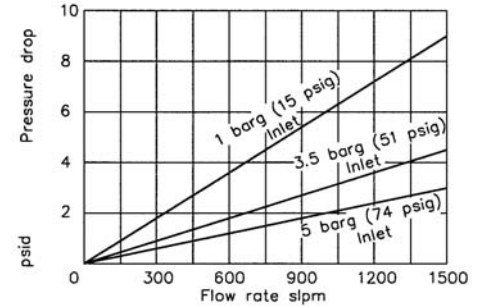
Model 3000 OA (VR2)



Models 10000 OA



Models 15000 OA



Models 25000 OA

Purifier Model	A in (mm)	B in (mm)	C in (mm)	Particle Filtration Level	Max Flow @90 psig	Part Number
Mini OA	3.3 (84)	1.5 (38)	1.0 (25)	0.003 μm <sup>1</sup> or 1 μm	4 slpm	00040-OA-VR4-PF <sup>1</sup> or XL
100 OA	3.3 (84)	1.5 (38)	1.5 (38)	0.003 μm <sup>1</sup> or 1 μm	12 slpm	00100-OA-VR4-PF <sup>1</sup> or XL
200 OA	4.8 (122)	3.0 (76)	1.5 (38)	0.003 μm <sup>1</sup> or 1 μm	25 slpm	00200-OA-VR4-PF <sup>1</sup> or XL
600 OA	6.3 (160)	4.5 (114)	2.0 (51)	0.003 μm <sup>1</sup> or 1 μm	75 slpm	00600-OA-VR4-PF <sup>1</sup> or XL
1000 OA	8.8 (224)	7.0 (178)	2.0 (51)	0.003 μm <sup>1</sup> or 1 μm	125 slpm	01000-OA-VR4-PF <sup>1</sup> or XL
1200 OA	7.9 (202)	6.1 (156)	3.0 (76)	0.003 μm <sup>1</sup> or 1 μm	150 slpm	01200-OA-VR4-PF <sup>1</sup> or XL
2000 OA	12.5 (317)	10.7 (272)	2.5 (63)	0.003 μm <sup>1</sup> or 1 μm	250 slpm	02000-OA-VR4-PF <sup>1</sup> or XL
3000 OA	17.3 (439)	15.5 (394)	3.0 (76)	0.003 μm <sup>1</sup> or 1 μm	350 slpm	03000-OA-VR4-PF <sup>1</sup> or XL
3000 OA	17.7 (449)	15.6 (396)	3.0 (76)	0.003 μm <sup>1</sup> or 1 μm	500 slpm	03000-OA-VR2-PF <sup>1</sup> or XL
10000 OA <sup>2</sup>	24.9 (632)	22.8 (579)	4.0 (101)	0.003 μm <sup>1</sup> or 1 μm	1200 slpm	10000-OA-VR2-PF <sup>1</sup> or XL
15000 OA <sup>2</sup>	24.9 (632)	22.8 (579)	5.0 (127)	0.003 μm <sup>1</sup> or 1 μm	1800 slpm	15000-OA-VR2-PF <sup>1</sup> or XL
25000 OA <sup>2</sup>	24.9 (632)	22.8 (579)	6.0 (152)	0.003 μm <sup>1</sup> or 1 μm	2500 slpm	25000-OA-VR2-PF <sup>1</sup> or XL

<b>Maximum Pressure</b>	250 psig (USA) / 9.9 kg/cm <sup>2</sup> G (Japan)	<b>Materials</b>	316L SS (<10 Ra EP)
<b>Operating Temperature</b>	Room Temperature	<b>Fittings</b>	1/4" MVCR <sup>3</sup> available on sizes Mini-3000
<b>Leak Rate</b>	<2 x 10 <sup>-9</sup> atm cc/sec He		1/2" MVCR <sup>3</sup> available on sizes 600-25000

1 - Sub-micron filtration only with PF version.

2 - For models 10000 and larger - the printed dimensions are subject to future change. Please check with factory prior to ordering.

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

**NuPure III**

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