

Ultrapure™ R-EG/R-TF

The increasing density of surface features on semiconductor circuits requires ever higher levels of purity in gases and other materials used throughout the manufacturing process. Donaldson's Ultrapure R-EG/R-TF filter system meets those demands.

The Donaldson® Ultrapure™ R-EG filter housings use the R-TF depth filter cartridge to purify oxygen, argon, helium, nitrogen and other gases down to a particle size of 0.01 µm.

The R-EG/R-TF filter system is an ideal point-of-use filter for the electronics industry to help assure trouble-free production with consistent quality.

Constructed of 316L stainless steel, this unit has an inner and outer surface finish of Ra 20. The R-TF filter element utilizes Donaldson's Ultradepth borosilicate filter media for high dirt-holding capacity and low pressure drop.

Applications Requiring High Purity Gases

- Photoresist Manufacture
- Ion Doping
- Oxidation/Diffusion Ovens
- Wafer Drying
- Gas Supply for Automatic Control Systems



The Ultrapure gas filter R-EG housing with R-TF depth filter

Features

Benefits

Absolute retention	The Ultrapure R-EG/R-TF gas filter systems was developed especially for the semiconductor industry, and retains particles down to a size of 0.01 μm .
Long service life / low operating costs	The high dirt holding capacity of the R-TF filter element allows for long service life and low differential pressure, leading to low operating costs.
Safety from leakage	The upper and lower housing sections are secured with a v-clamp and Viton®* gasket, assuring a positive seal against leakage.
No particle emission	No fibers or other particles migrate from the proprietary Donaldson depth filter media used in the R-TF element.

Materials

Filter Housing:	316L SS
Housing Seal:	Viton® (Bam-passed)
Inner Core:	316L SS
Outer Core:	316L SS
Endcaps:	316L SS
Filter Media:	Ultradept® (Borosilicate fiber)
Element O-Rings:	EPDM or Viton®

* Viton is a registered trademark of DuPont Performance Elastomers LLC

Maximum Operating Pressure

300 psig

Absolute Retention Rates

0.01 μm

Maximum Operating Temperature

250°F

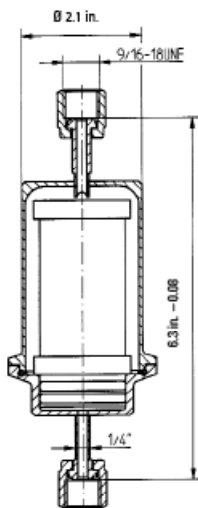
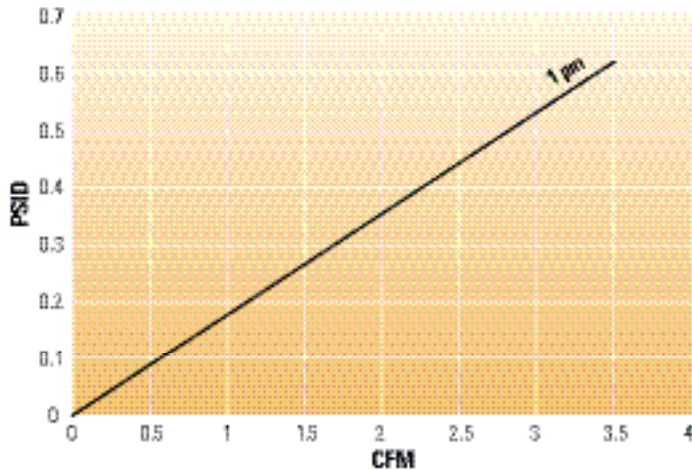
Surface

Electropolished to Ra 20

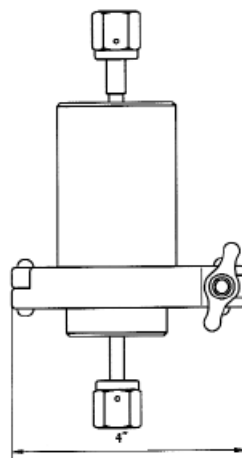
Types of Connections

VCR 1/4" female/female (std);
Welding ends and VCR 1/4" male/male on request

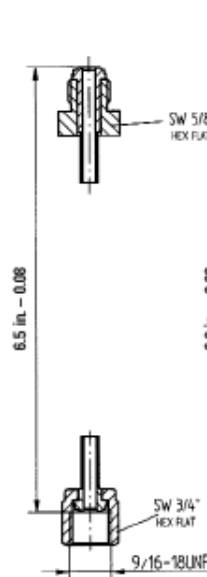
R-TF Pressure Drop at 44 psig — Air



VCR 1/4" FEMALE



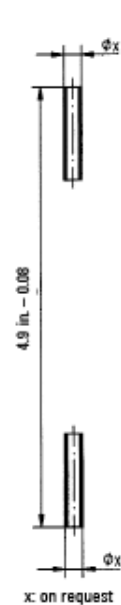
VCR 1/4" MALE / FEMALE



VCR 1/4" MALE



WELDING ENDS



Donaldson Company, Inc. Tel 800.543.3634 (USA)
Process Filtration Tel 800.343.3639 (within Mexico)
P.O. Box 1299 processfilters@donaldson.com
Minneapolis, MN www.donaldson.com
55440-1299 U.S.A.

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Printed in U.S.A. on recycled paper

Bulletin No. PRO-218 Ultrapure R-EG/R-TF 12-08