



## WAFERGARD® II F-40 IN-LINE GAS FILTERS

*Superior particulate filtration for ultrapure gas system filtration*

### Overview

Wafergard® II F-40 in-line gas filters are the filters of choice for ultrapure gas system filtration. These filters have excellent compatibility with all classes of semiconductor gases and offer high-efficiency filtration with optimal flow differential performance.

### Features and Benefits

- Greater than 99.9999999% removal of all particles larger than 0.003 µm diameter
- 316L stainless steel shell with 0.25 µm Ra (10 µin Ra) electropolished interior finish
- Cleanroom manufactured, welded and tested
- Low pressure drop reduces risk of low vapor pressure gas condensation
- Cleanroom packaged by vacuum bagging and double-bagging for superior out-of-box cleanliness
- Teflon® PTFE membranes provide high-efficiency filtration



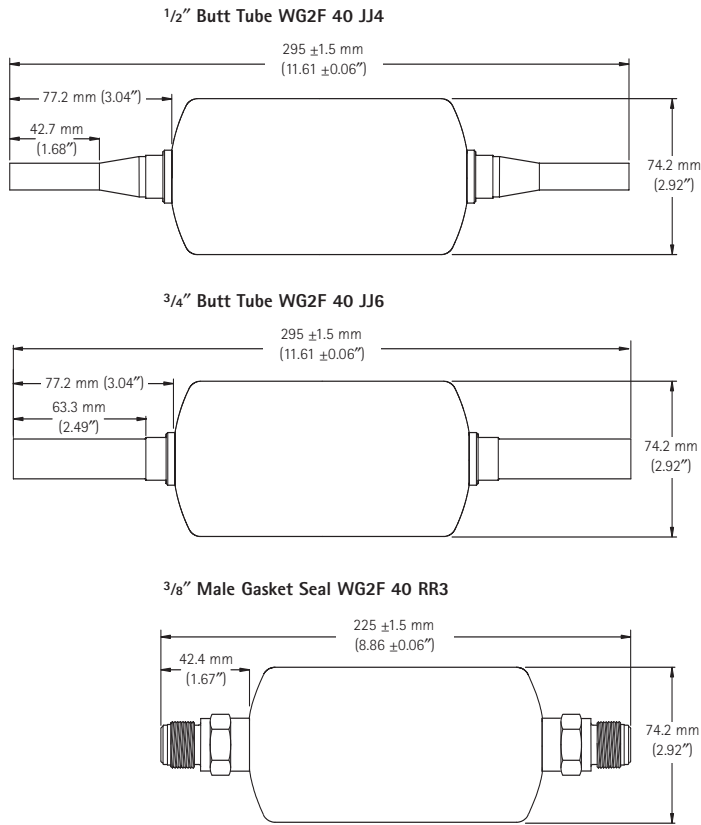
### Applications

- Facility entrances
- Bulkheads
- Facility chases

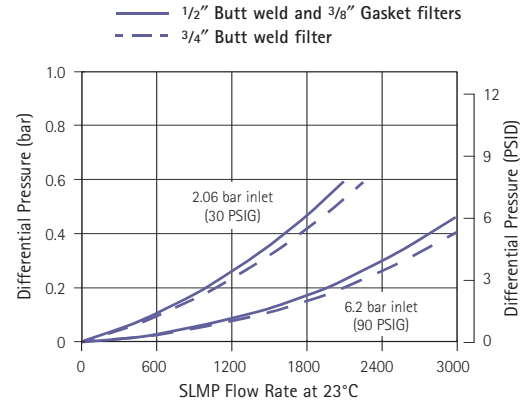
### Specifications

Materials:	Filter element	Hydrophobic Teflon® PTFE membrane supported by molded Halar® ECTFE stacked disc supports with a direct housing seal
	Housing	Electropolished 316L stainless steel housing
Downstream cleanliness:	Volatiles	<10 ppb moisture @ ≥5% of rated flow
Removal rating:	≥0.003 µm	
Surface finish interior:	≤10 µin Ra	
Helium leak rating:	Qualified	2×10 <sup>-10</sup> cc/min.
	Tested	1×10 <sup>-9</sup> cc/min.
Operating conditions:	Maximum inlet pressure	18 bar (250 PSIG) at 23°C
	Maximum forward differential pressure	4 bar (60 PSID) at 23°C
	Maximum reverse differential pressure	0.7 bar (10 PSID) at 23°C
	Maximum operating temperature	120°C (248°F)
Particle retention:	Greater than 99.9999999% (9 LRV) removal of all particles @ 1500 SLPM (referenced at the most penetrating particle size)	
Flow rating:	See performance data	

## Dimensions



## Performance Data



## Ordering Information

Part Number	Fitting Options	Overall Length
WG2F 40 JJ4	Wafergard® II F-40 in-line filter, 1/2" butt weld tube	295.0 mm (11.6")
WG2F 40 JJ6	Wafergard® II F-40 in-line filter, 3/4" butt weld tube	295.0 mm (11.6")
WG2F 40 RR3	Wafergard® II F-40 in-line filter, 3/8" gasket seal (compatible with VCR® fitting), male inlet/outlet	225.0 mm (8.86")

## For More Information

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [www.entegris.com](http://www.entegris.com) and select "Regional Customer Service Centers" for the center nearest you.

## Terms and Conditions of Sale

All purchases are subject to Entegris' "Terms and Conditions of Sale." To view and print this information, visit Entegris' Web site at [www.entegris.com](http://www.entegris.com) and select the Legal Notices link from the footer found on the home page.

Entegris® and Wafergard® are registered trademarks of Entegris, Inc.  
 Teflon® is a registered trademark of E.I. du Pont de Nemours and Company.  
 Halar® is a registered trademark of Ausimont USA, Inc.

### ENTEGRIS, INC.

Corporate Headquarters / 3500 Lyman Boulevard / Chaska, Minnesota 55318 USA  
 Customer Service Tel. 952-556-4181 / Customer Service Fax 952-556-8022  
[www.entegris.com](http://www.entegris.com)