

# Wafergard® III Bulk In-line Metal Gas Filters

*The solution for high-flow, high-purity  
gas filtration*

Entegris' complete line of all-metal, high-flow filtration products satisfies the concerns and needs to supply particle-free process gas at the point of delivery.

Wafergard® bulk in-line gas filters are available with nickel filtration membranes for all process gases. These filters come in a variety of fitting types to meet your installation requirements. They have 0.0015 µm filtration technology to meet the most demanding needs of ultraclean bulk gas delivery.

## APPLICATIONS

- Bulk gas farm and Bulk Special Gas System (BSGS)
- Ultra-high purity gas lines
- High temperature applications
- New fab construction and/or upgrade existing filters

## FEATURES & BENEFITS

<b>Nickel filtration membranes</b>	Provides excellent compatibility and high-efficiency filtration
<b>Available with 0.0015 µm filtration technology</b>	Meets the most demanding needs of ultra-clean bulk gas delivery
<b>Available in a variety of fitting types</b>	Provides flexibility to meet installation requirements



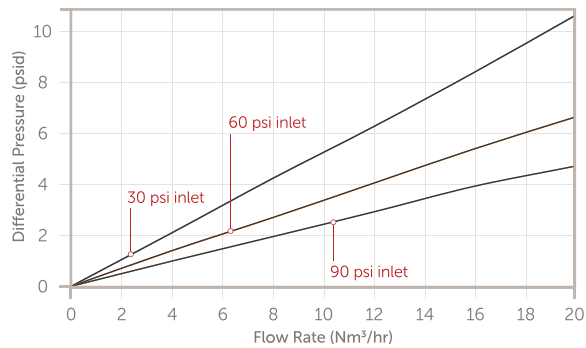
*Meets the most demanding needs of ultraclean bulk gas delivery.*

## SPECIFICATIONS

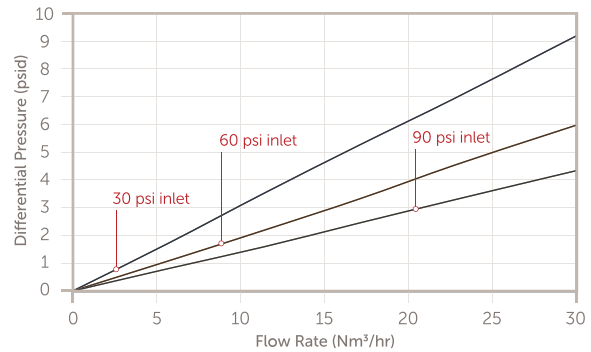
<b>Materials</b>	Filter element	Sintered nickel membrane filter
	Housing	Electropolished VAR 316L stainless steel
<b>Removal rating</b>	0.0015 $\mu\text{m}$	
<b>Surface finish interior</b>	<10 $\mu\text{in Ra}$	
<b>Downstream cleanliness</b>	<0.03 particles/liter (<1 particle/ft <sup>3</sup> ) >0.01 $\mu\text{m}$	
<b>Helium leak rating</b>	1 x 10 <sup>-9</sup> atm cc/sec	
<b>Maximum operating conditions</b>	Maximum operating pressure:	50 bar (725 psig) SI2N0010R, SI2N0025R
		31 bar (450 psig) SI2N0050R, SIN0100B, SI2N0200B, SI2N0200R
		17 bar (250 psig) SI2N0400B
	Maximum forward/reverse differential pressure:	5.2 bar (75 psid)
	Maximum operating temperature in inert gases:	200°C (392°F)
<b>Particle retention</b>	Greater than 99.9999999% (9 LRV) removal of all particles at maximum rated flow (referenced at the most penetrating particle size)	

## PERFORMANCE DATA

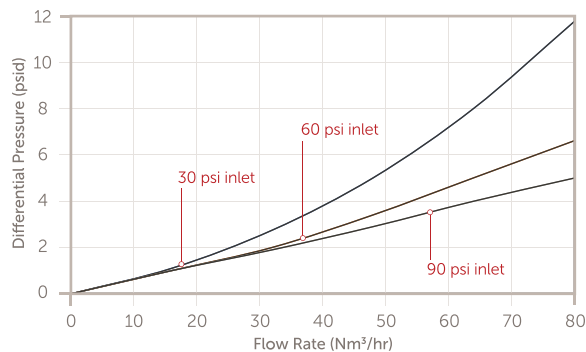
Wafergard SI2N0010R Bulk Gas Filters



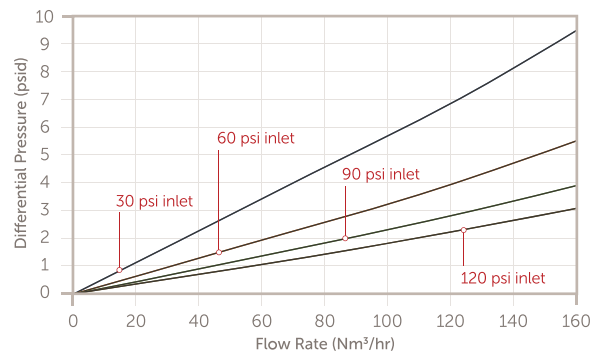
Wafergard SI2N0025R Bulk Gas Filters



Wafergard SI2N0050R Bulk Gas Filters

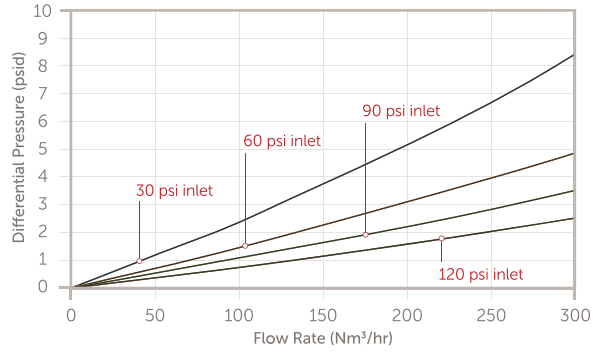


Wafergard SI2N0100B Bulk Gas Filters

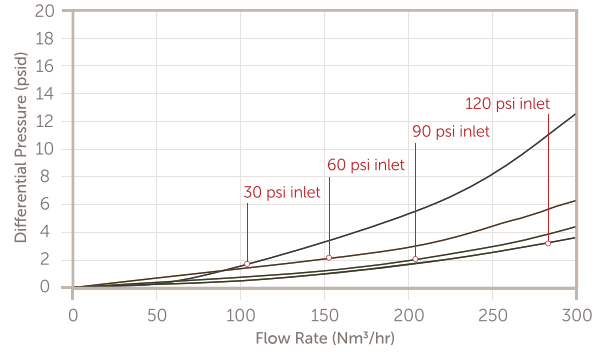


## PERFORMANCE DATA

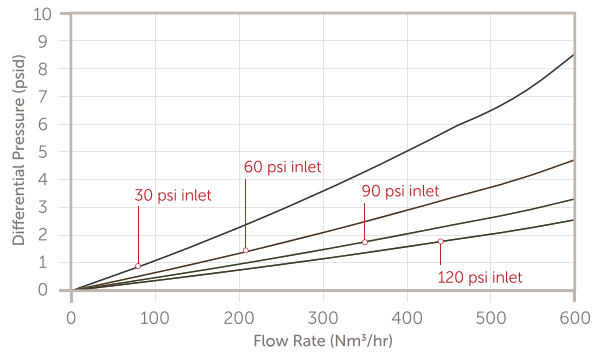
Wafergard SI2N0200B Bulk Gas Filters



Wafergard SI2N0200R Bulk Gas Filters

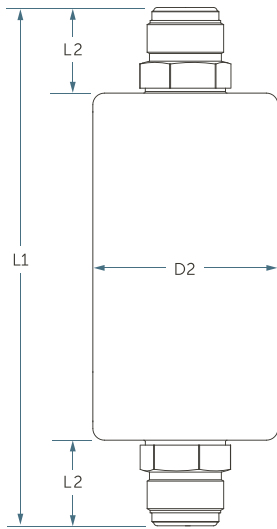


Wafergard SI2N0400B Bulk Gas Filters

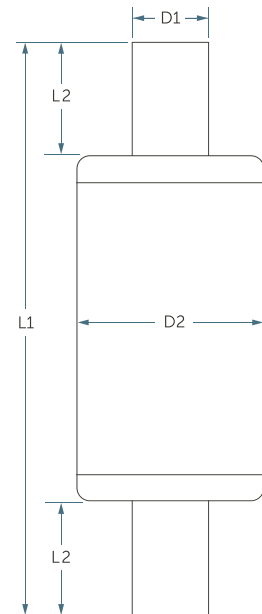


## DIMENSIONS

VCR® Male



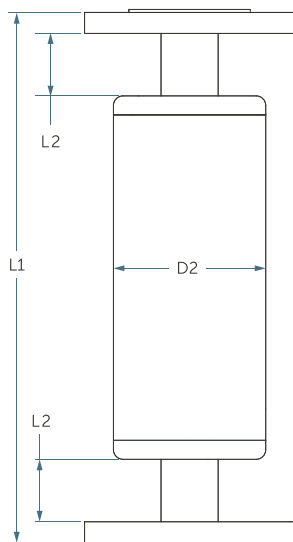
Butt Weld



## DIMENSIONS

Part number	Fitting configuration	D1	D2	L1	L2
SI2N0010R	VCR male	–	38.1 mm (1.5")	213 mm (8.4")	35.9 mm (1.4")
SI2N0010RV	VCR male	–	38.1 mm (1.5")	213 mm (8.4")	35.9 mm (1.4")
SI2N0025R	VCR male	–	38.1 mm (1.5")	305 mm (12.0")	35.9 mm (1.4")
SI2N0025RV	VCR male	–	38.1 mm (1.5")	305 mm (12.0")	35.9 mm (1.4")
SI2N0050R	VCR male	–	76.2 mm (3.0")	213 mm (8.4")	35.2 mm (1.4")
SI2N0050R4	VCR male	–	76.2 mm (3.0")	225 mm (8.9")	30.2 mm (1.2")
SI2N0100B	Butt weld	25.4 mm (1.0")	101.6 mm (4.0")	267 mm (10.5")	57.2 mm (2.3")
SI2N0100BRR6	VCR male	–	101.6 mm (4.0")	384 mm (15.1")	115.9 mm (4.6")
SI2N0100BRR8	VCR male	–	101.6 mm (4.0")	384 mm (15.1")	115.9 mm (4.6")
SI2N0200B	Butt weld	38.1 mm (1.5")	101.6 mm (4.0")	356 mm (14.0")	57.2 mm (2.3")
SI2N0200B16	Butt weld	50.8 mm (2.0")	101.6 mm (4.0")	356 mm (14.0")	52.1 mm (2.1")
SI2N0200R	VCR male	–	101.6 mm (4.0")	354 mm (13.9")	56.4 mm (2.2")
SI2N0400B	Butt weld	50.8 mm (2.0")	152.4 mm (6.0")	358 mm (14.1")	51.9 mm (2.1")
SI2N0400B24	Butt weld	76.2 mm (3.0")	152.4 mm (6.0")	358 mm (14.1")	52.1 mm (2.05")

Flange (ANSI, JIS, DIN)



Part number	Fitting configuration	D1	D2	L1	L2
SI2N0200A1007	ANSI 150 RF flange	–	101.6 mm (4.0")	356 mm (14.0")	44.5 mm (1.8")
SI2N0200A1015	ANSI 150 RF flange	–	101.6 mm (4.0")	356 mm (14.0")	39.7 mm (1.6")
SI2N0200A1020	ANSI 150 RF flange	–	101.6 mm (4.0")	356 mm (14.0")	38.5 mm (1.5")
SI2N0200J1015	JIS 10K RF flange	–	101.6 mm (4.0")	356 mm (14.0")	41.7 mm (1.6")
SI2N0400A1030	ANSI 150 RF flange	–	152.4 mm (6.0")	358 mm (14.1")	28.2 mm (1.1")

## ORDERING INFORMATION

PART NUMBER	FITTING SIZE AND TYPE	LENGTH
SI2N0010R	10 CFM, 1/2" VCR male	213 mm (8.40")
SI2N0010RV	10 CFM, 1/2" VCR male. V=specially treated version	213 mm (8.40")
SI2N0025R	25 CFM, 1/2" VCR male	305 mm (12.00")
SI2N0025RV	25 CFM, 1/2" VCR male. V=specially treated version	305 mm (12.00")
SI2N0050R	50 CFM, 3/4" VCR male	213 mm (8.40")
SI2N0050R4	50 CFM, 1/2" VCR male	225 mm (8.9")
SI2N0100B	100 CFM, 1" Butt weld tube	267 mm (10.50")
SI2N0100BRR6	100 CFM, 3/4" VCR male	384 mm (15.1")
SI2N0100BRR8	100 CFM, 1" VCR male	384 mm (15.1")
SI2N0200A1007	200 CFM, 3/4" ANSI 150 RF flange	356 mm (14.0")
SI2N0200A1015	200 CFM, 1 1/2" ANSI 150 RF flange	356 mm (14.0")
SI2N0200A1020	200 CFM, 2" ANSI 150 RF flange	356 mm (14.0")
SI2N0200B	200 CFM, 1 1/2" Butt weld tube	356 mm (14.0")
SI2N0200B16	200 CFM, 2" butt weld tube	356 mm (14.0")
SI2N0200J1015	200 CFM, 40A JIS 10K RF flange	356 mm (14.0")
SI2N0200R	200 CFM, 1" VCR male	354 mm (13.9")
SI2N0400A1030	400 CFM, 3" ANSI 150 RF flange	358 mm (14.1")
SI2N0400B	400 CFM, 2" butt weld tube	358 mm (14.1")
SI2N0400B24	400 CFM, 2" butt weld tube	358 mm (14.1")

#### FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](https://www.entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

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