

U211 SERIES ULTRA HIGH PURITY REGULATOR

U211 series single stage ultra high purity regulator is developed for the semiconductor industry, it is manufactured in accordance with SEMI requirement and assembled, tested and packaged in a class 100 clean room.



U211SLBK-DHP-VSM4-S1



U211SLAK-DHW-VSF4-S1

Features

- 316L or 316L VAR stainless steel body
- Metal to metal diaphragm to body seal
- Easy front panel and rear bracket mounting
- Gauge ports are standard with 1/4" face seal male
- Fully internal electropolished
- Cleaned, assembled, and packaged for high-purity semi-conductor applications
- High-cycle life
- 100% Helium-leak tested

Materials

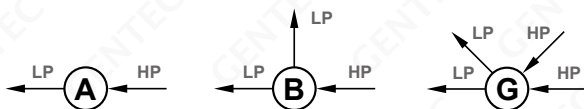
- Body: 316L, 316L VAR
- Seat: PCTFE*, Vespel® (Options)
- Diaphragm: C-22

*: Standard material

Specifications

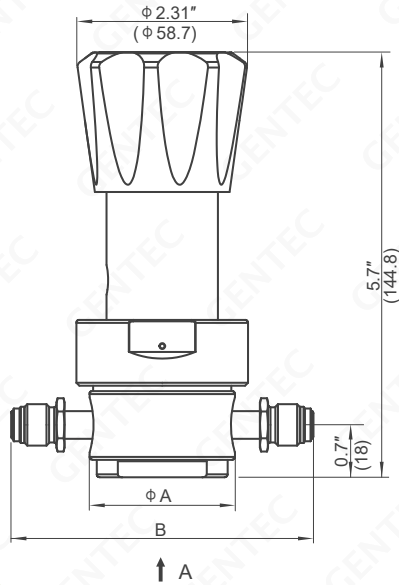
- Max. Inlet Pressure: 500, 3000, 4500 psi
- Max. Outlet Pressure: 25, 50, 100, 150, 250, 500 psi
- Supply Pressure Effect:
SPE = 0.35 psi / 100 psi (U211), SPE = 0.65 psi / 100 psi (U211A)
- Temperature: -40°F ~ 165°F (-40°C ~ 74°C)
- U211 Series Cv: 0.09
U211A Series Cv: 0.15
- Inboard leakage: 1×10^{-9} atm/sec He
- Across seat leakage: 4×10^{-8} atm/sec He
- Proof pressure: 150% of maximum rated pressure
- Burst pressure: 400% of maximum rated pressure
- Wetted Surface: Ra 10 μ m
- Internal Volume: 8.4 cc

Regulator Port Configurations



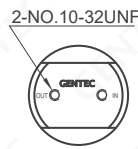
Material Configuration	Noncorrosive		Corrosive
	U211*SL	U211*SLV	U211*SLV***-H
Body	316L	316L VAR	316L VAR
Diaphragm	C-22	C-22	C-22
Stem	316L	316L	C-22
Nozzle	316L	316L	C-22
Seat	PCTFE, Vespel® (Options)	PCTFE, Vespel® (Options)	PCTFE, Vespel® (Options)
Wetted Surface	10 μ m	10 μ m	10 μ m

Dimensions

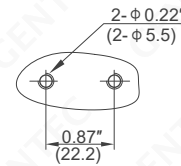


Dimension: in.(mm)

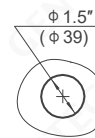
Connection Type		Dimension in.(mm)	
		A	B
VSF4	1/4" swivel female FSR	1.97" (50)	3.7" (94)
VSM4	1/4" swivel male FSR		3.7" (94)
VSF8	1/2" swivel female FSR		4.7" (119.4)
VSM8	1/2" swivel male FSR		4.7" (119.4)
TW4	1/4" weld stub		2.96" (75.2)
TW6	3/8" weld stub		2.96" (75.2)



A

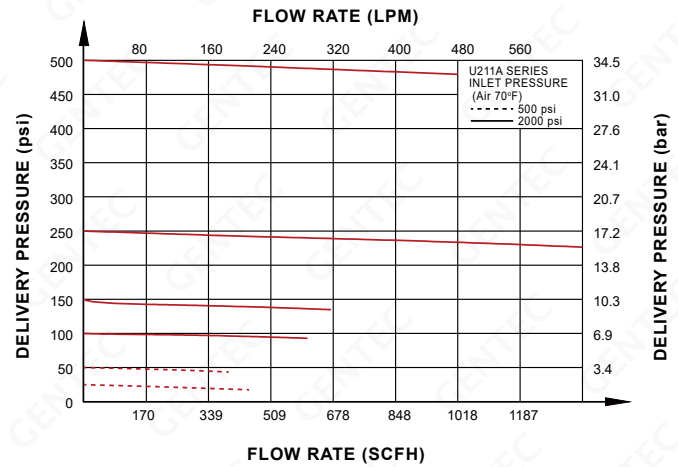
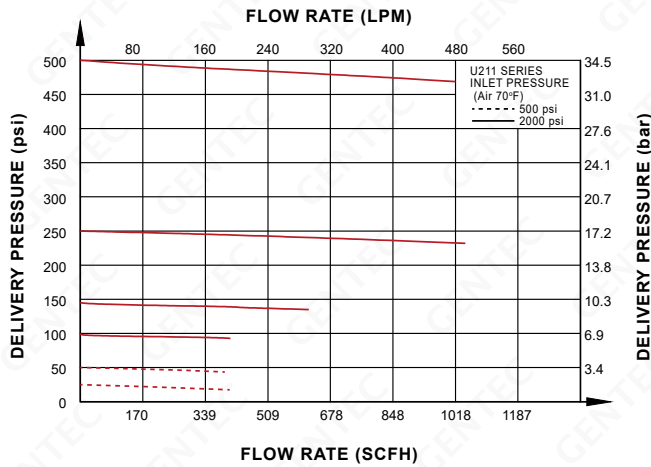


Rear Bracket Mounting



Front Panel Mounting
Maximum thickness is 0.28"(7.1mm)

Flow Data



Ordering Information

EX:	U211	SL	B	K	- D	H	P	- VSF4	- H	- P	- S1
	Series	Body	Ports	Seat	Inlet Pressure	Outlet Pressure	Pressure Gauge*	Inlet / Outlet Connection	Corrosion Resistance	Options	Process Standard
	U211	SL: 316L	A	K: PCTFE	C: 4500 psi	F: 0 ~ 500 psi	W: Without Gauge	VSF4, VSM4	None: Standard	None: Rear Bracket	S1: UHP
	U211A	SLV: 316L VAR	B G	V: Vespe ^l	D: 3000 psi	G: 0 ~ 250 psi H: 0 ~ 150 psi I: 0 ~ 100 psi	P: psi / bar Gauge K: psi / kPa Gauge	VSF8, VSM8 TW4, TW6 When Inlet and Outlet Connections are the same, please write a connection code.	H: C-22 stem and nozzle See Material Configuration table.	P: Panel Mounting	Process Standard S2: Photovoltaic Process Standard
					F: 500 psi	G: 0 ~ 250 psi H: 0 ~ 150 psi I: 0 ~ 100 psi K: 0 ~ 50 psi L: 0 ~ 25 psi					

*: Gauges' connection: 1/4"swivel male FSR , other connection type please contact GENTEC.