

U11 SERIES TIED-DIAPHRAGM ULTRA HIGH PURITY REGULATOR

U11 series single stage Tied-Diaphragm 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.



» U11SLBK-DHP-VSM4-E



» U11SLAK-DHW-VSF4-E

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

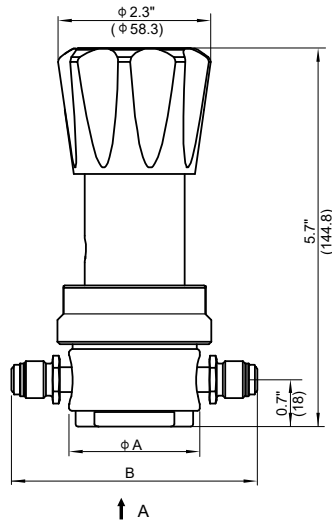
- Body: 316L, 316L VAR
- Seat: PCTFE*, Vespel®
- Diaphragm: HC22

Specifications

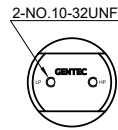
- Max. Inlet Pressure: 500psi (35 bar), 3000psi (206 bar), 4500psi (310 bar)
- Max. Outlet Pressure: 0~25psi (1.7 bar), 0~50psi (3 bar), 0~75psi (5.2 bar), 0~100psi (7bar), 0~150psi (10bar), 0~250psi (17 bar), 0~500psi (34 bar)
- 30" Hg Vac~30psi, 30" Hg Vac~60psi, 30" Hg Vac~100psi
- Temperature: -40°F ~ 165°F(-40°C ~ 74°C)
- U11 Series Cv: 0.09
U11A 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
- Surface Finish: 10 uin
- Internal Volume: 8.4 cc

*: Standard material

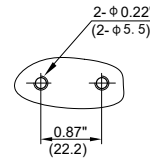
Dimensions



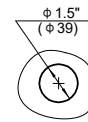
Connection Type	Dimension in.(mm)	
	A	B
VSF4	1/4" swivel female FSR	3.7" (94)
VSM4	1/4" swivel male FSR	3.7" (94)
VSF8	1/2" swivel female FSR	4.7" (119.4)
VSM8	1/2" swivel male FSR	4.7" (119.4)
TW4	1/4" weld stub	2.96" (75.2)
TW6	3/8" weld stub	2.96" (75.2)



A



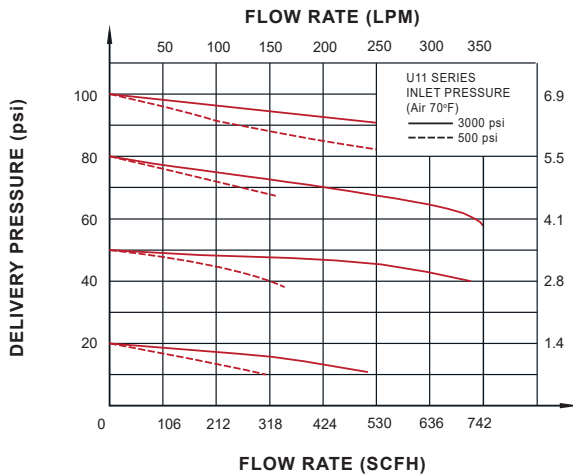
Rear bracket mounting



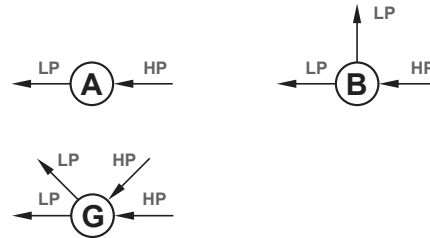
Front panel mounting
(Maximum thickness is 0.28")

Dimension: in.(mm)

Flow Data



Regulator Port Configurations



	Material Configuration			
	U11SL	U11SLV	U11SLV***-SH	U11SLV***-H
Body	316L	316L VAR	316L VAR	316L VAR
Diaphragm	HC-22	HC-22	HC-22	HC-22
Stem	316L	316L	HC-22	HC-22
Nozzle	316L	316L	316L	HC-22
Seat	PCTFE	PCTFE	PCTFE	PCTFE
Surface Finish	10µin	10µin	10µin	10µin

Ordering Information

EX:	U11	SL	B	K	- D	H	P	- VSF4	- E	- H	- P
	Series	Body	Ports	Seat	Inlet Pressure	Outlet Pressure	Pressure Gauge	Inlet / Outlet Connection	Surface Finish	Corrosion Resistance	Options
	U11	SL: 316L	A	K: PCTFE	D: 3000 psi	F: 0 ~ 500 psi	W: Without Gauge	VSF4, VSM4	E: Ra 10 µin	None: 316L	None: Rear
	U11A	SLV: 316L VAR	B G	V: Vespel®	C: 4500 psi F: 500 psi	G: 0 ~ 250 psi H: 0 ~ 150 psi I: 0 ~ 100 psi J: 0 ~ 75 psi K: 0 ~ 50 psi L: 0 ~ 25 psi	P: psi / bar Gauge K: psi / kPa Gauge	VSF8, VSM8 TW4, TW6		SH: HC22 stem and 316L nozzle H: HC22 stem and nozzle	Bracket Mounting P: Panel Mounting

