



SERIES AP 1300

SINGLE STAGE REGULATOR

High Flow Line Regulator

- SS 316L VAR construction
- High flow free poppet design
- 10 µin. surface finish standard
- Flow rates to 1,000 slpm (35 scfm)
- Line regulator for specialty and bulk gases
- Vacuum to 300 psig (21 bar) inlet
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Operating Parameters

Source pressure	AP 1300	vacuum to 300 psig (21 bar)
Delivery pressure	AP 1302	1 to 30 psig (0.07 to 2 bar)
	AP 1306	2 to 60 psig (0.14 to 4 bar)
	AP 1310	2 to 100 psig (0.14 to 7 bar)
	AP 1315	5 to 150 psig (0.34 to 10 bar)
Proof pressure		450 psig (31 bar)
Burst pressure		1,200 psig (83 bar)

Other Parameters

Inlet/outlet connectors	1/4, 3/8, 1/2 inch face seal or tube weld
Flow coefficient (Cv)	1.1
Internal volume	1.19 in ³ (19.6 cm ³)
Operating temperature	-40° to +160°F (-40° to +71°C)
Surface finish	15 µin Ra max / 10 µin. Ra avg. (0.4/0.25 µm) standard; 10 µin (0.25 µm); 7 µin (0.18 µm); and 5 µin (0.13 µm) Ra max optional
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	1 x 10 ⁻⁹ sccs He
Leakage across seat	4 x 10 ⁻⁸ sccs He
Installation	surface or panel (optional)
Supply pressure effect	4.6 psig per 100 psig source pressure change

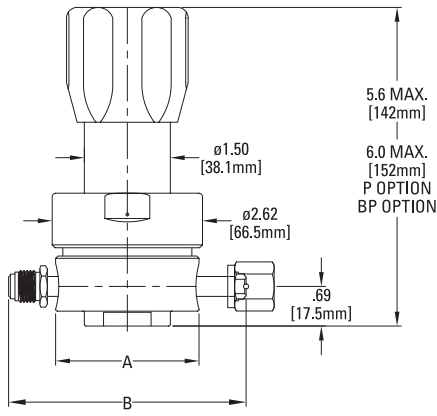
Materials

Type of Service	Series AP 1300 S Noncorrosive	Series AP 1300 SHP Corrosive
Wetted Parts		
Body	stainless steel 316L secondary remelt	stainless steel 316L secondary remelt
Nozzle	stainless steel 316L	stainless steel 316L
Poppet	stainless steel 316L	Ni-Cr-Mo alloy / UNS N06022
Diaphragm	Ni-Cr-Mo alloy / UNS N06022	Ni-Cr-Mo alloy / UNS N06022
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE (PTFE optional)	PCTFE (PTFE optional)

All specifications subject to change without notice.

SERVICE AND SUPPORT BEYOND COMPARE

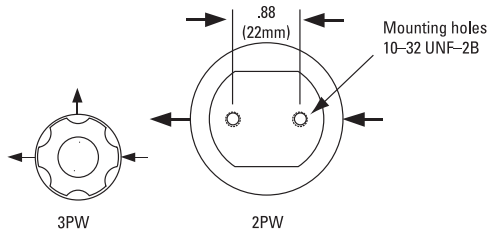
DIMENSIONAL INFORMATION



Face Seal	A	B
1/4" Male	2.00" (51 mm)	4.00" ±.02 (102 mm)
1/4" Female	2.00" (51 mm)	3.70" ±.02 (94 mm)
3/8"	2.50" (64 mm)	5.22" ±.03 (133 mm)
1/2"	2.50" (64 mm)	5.22" ±.03 (133 mm)
3/4"	2.50" (64 mm)	6.26" ±.04 (159 mm)

All dimensions in inches (mm). Metric dimensions are for reference only.

PORTING CONFIGURATIONS



CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.

ORDERING INFORMATION

Sample Order Number

AP 1310SM 3PW FV8 FV8 1

AP 1310 | Series

AP 1302 = 1-30 psig (.07 to 2 bar)
 AP 1306 = 2-60 psig (.14 to 4 bar)
 AP 1310 = 2-100 psig (.14 to 7 bar)
 AP 1315 = 5-150 psig (.34 to 10 bar)

S | Material

S = Stainless steel (SS)
 SHP = SS/Ni-Cr-Mo alloy poppet and diaphragm

M | Surface Finish Options

M = 10 µin. Ra max
 V = 7 µin. Ra max
 X = 5 µin. Ra max

3PW | Ports

2PW = 2 ports butt weld
 3PW = 3 ports butt weld

FV8 FV8 | Connections Inlet / Outlet

FV4 = 1/4 inch face seal female
 MV4 = 1/4 inch face seal male
 FV6 = 3/8 inch face seal female
 MV6 = 3/8 inch face seal male
 FV8 = 1/2 inch face seal female
 MV8 = 1/2 inch face seal male
 FV12 = 3/4 inch face seal female
 MV12 = 3/4 inch face seal male

Tube weld stub available

1 | Gauges/Delivery

Standard gauge port is 1/4 inch face seal male (1/4 inch female available).

0 = No gauge
 V3 = 30-0-30 psig/bar
 L = 30-0-60 psig/bar
 1 = 30-0-100 psig/bar
 H = 30-0-160 psig/bar

P | Options

P = Panel installation ring
 TF = PTFE seat
 BP = Bonnet port 1/8 inch NPT
 Panel hole 1.56" diameter.

