



ADVANCED PRESSURE TECHNOLOGY

# SERIES AK 1300 SINGLE STAGE PRESSURE REGULATOR HIGH FLOW LINE REGULATOR



- ◆ Vacuum to 300 psig (21 bar) inlet, 150 psig (10 bar) outlet
- ◆ Flow capacity\*  
1 to 1,000 slpm (0.03 to 35.3 scfm)
- ◆ Stainless Steel or Brass construction
- ◆ High leak integrity
- ◆ Machined from bar stock
- ◆ Optional accessories
- ◆ Fine adjustment control  
(six turns of the knob from off to wide open)
- ◆ Cleaned for O2 service
- ◆ Field repairable
- ◆ Diffusion resistant Ni-Cr-Mo alloy diaphragm
- ◆ Installation and operating instructions available at [www.aptech-online.com](http://www.aptech-online.com) in the Tech Briefs section

## ENGINEERING DATA

### Operating Parameters

Source pressure	vacuum to 300 psig (21 bar)
Delivery pressure	1 to 30 psig (0.07 to 2 bar) AK 1302 2 to 100 psig (0.14 to 7 bar) AK 1310 5 to 150 psig (0.3 to 10 bar) AK 1315
Proof pressure	450 psig (31 bar)
Burst pressure	1,200 psig (83 bar)

### Other Parameters

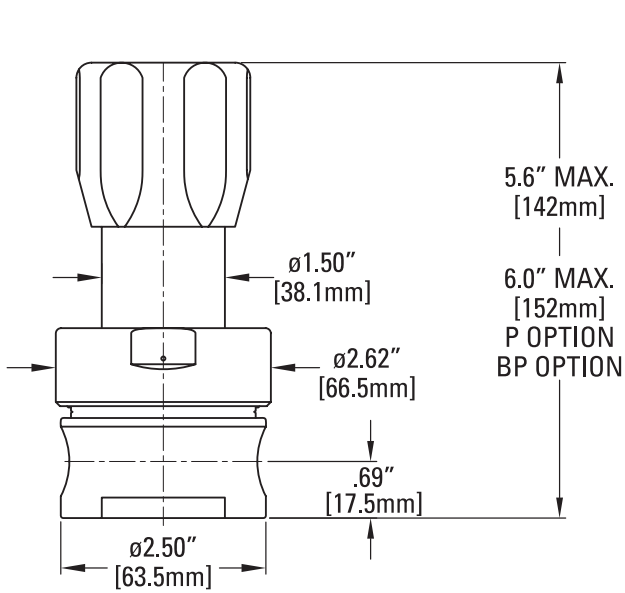
Inlet/outlet ports	1/4", 3/8" and 1/2" NPT and compression (optional porting available)
Flow coefficient (Cv)	1.1
Internal volume	0.65 in <sup>3</sup> (10.6 cm <sup>3</sup> )
Operating temperature	-40 to +160F (-40 to +71C)
Leak rate	1 x 10 <sup>-9</sup> sccs
Supply pressure effect	4.6 psig per 100 psig source pressure change

## MATERIALS OF CONSTRUCTION

	AK 1300B	AK 1300S
Body	brass	SS 316
Poppet	SS 316	SS 316
Diaphragm	Ni-Cr-Mo alloy / UNS N06022	Ni-Cr-Mo alloy / UNS N06022
Seat	PCTFE	PCTFE

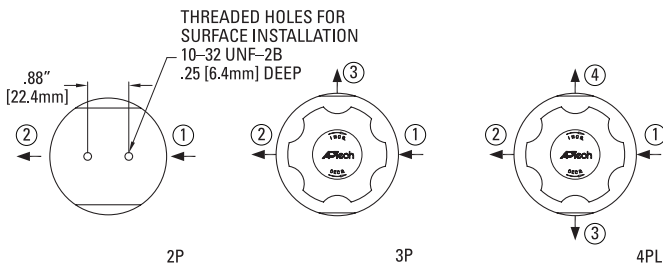
\*Flow rating based upon N2 @ 100 psig inlet, varying gas type and, or inlet/outlet pressures will effect rating.  
All specifications subject to change without notice.

# SERIES AK 1300 — QUALITY, RELIABILITY & PERFORMANCE!



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

## Porting Configurations

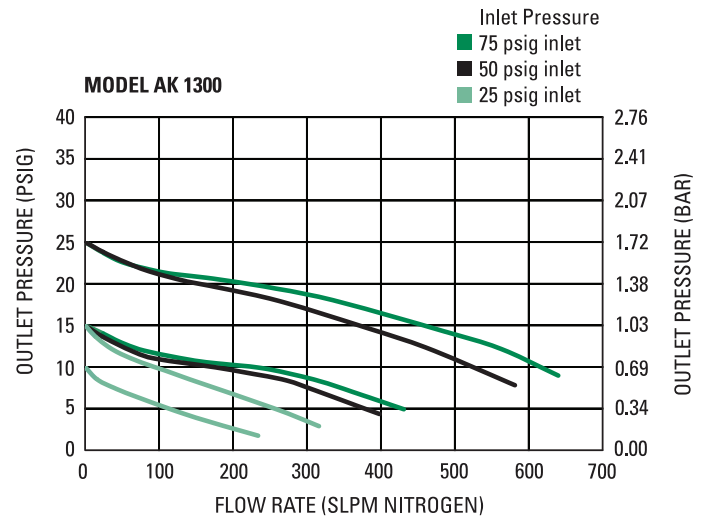
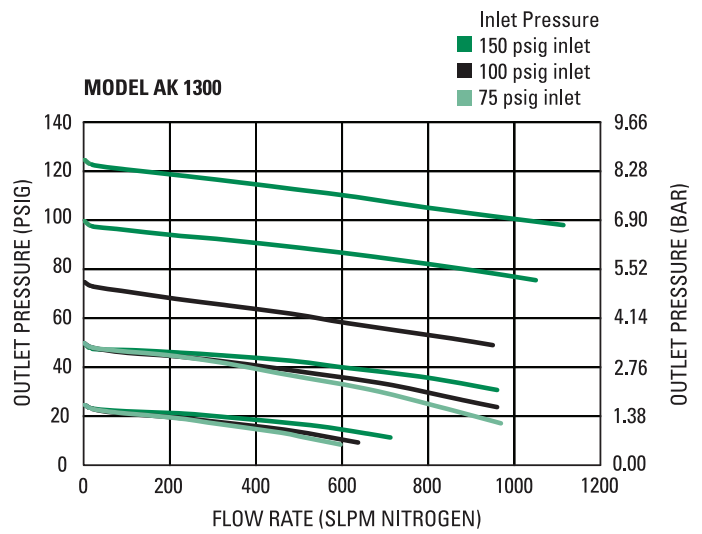


**NOTE:** Brass only available with 4PL porting.  
Ports, other than 1 & 2, are only available 1/4 inch NPT.

**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.

AK 1302 Series	ORDERING INFORMATION					
	S Material	4PL Ports	6 ①	6 ②	0 V3 ③ ④	P Options
AK 1302 = 1-30 psig (.07 to 2 bar) AK 1310 = 2-100 psig (.14 to 7 bar) AK 1315 = 5-150 psig (.3 to 10 bar)		2P = 2 Ports 3P = 3 Ports 4PL = 4 Ports	4 = 1/4 inch NPT 6 = 3/8 inch NPT 8 = 1/2 inch NPT 4T = 1/4 inch comp 6T = 3/8 inch comp 8T = 1/2 inch comp		0 = No gauge or device installed V3 = 30-0-30 psig/bar 1 = 30-0-100 psig/bar 2 = 0-200 psig/bar	P = Panel installation* BP = Threaded Bonnet Port
S = Stainless steel (SS) B = Brass						

**NOTE:** Designators required for all ports, but "0" not required if there isn't a port. A 2P has designators only for ① & ② ports, as example AK 1310 S 2P 44 not AK 1310 S 2P 44 000.  
\*On panel mount option, bonnet port is not threaded. Panel hole 1.56 inch diameter.



AP Tech has product options and variations which are not documented in data sheets. If you have a model number that is not defined by the ordering information, please consult the factory or your local representative.