

APTECH GAS DELIVERY COMPONENTS



SINGLE STAGE REGULATORS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI/BAR	Outlet Max PSI/BAR	Absolute	Cv STD/OPT	Flow SLPM STD/OPT	Connection Size Inch	Connection Type
AP	1000	S VAR	•	•	3500 / 241	150 / 10 150 / 10 500 / 35		0.09 / 0.15	30 / 100	1/4, 3/8	W
AZ		S	•				W				
AK		S, B	•				N				
AP	1100	S VAR	•		300 / 21	100 mm Hg to 10 psig	•	0.05	1	1/4, 3/8	W
AZ		S	•	•			W				
AP	1500	S VAR	•	•	3500 / 241 4500 / 310 opt	150 / 10		0.09	30	1/4, 3/8	W
AZ		S	•	•			W				
AK		S, B	•	•			N				
AP	1400T	S VAR	•	•	2300 / 159 3000 / 207 opt	150 / 10	•	0.45	400	1/4, 3/8, 1/2	W
AZ		S	•	•			W				
AK		S, B	•	•			N				
AP	1200	S VAR	•	•	1700 / 117 3000 / 207 opt	150 / 10		0.9 / 1.1	800 / 1500	1/4, 3/8, 1/2, 3/4	W
AZ		S	•	•			W				
AK		S, B	•	•			N				
AP	1300	S VAR	•		300 / 21	150 / 10		1.1	1100	1/4, 3/8, 1/2, 3/4	W
AZ		S	•				W				
AK		S	•				N				
AZ	9200	S		•	300 / 21	150 / 10		1.6	2000	3/4, 1	W
AK		S		•			N				
AP	9000	S	•	•	1700 / 117 3000 / 207 opt	300 / 21		3	2000	1/2, 3/4, 1	W
AP	9100	S	•	•	800 / 55	150 / 10		4	5000	1/2, 3/4, 1	W

MINI REGULATORS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI/BAR	Outlet Max PSI/BAR	Absolute	Cv STD/OPT	Flow SLPM STD/OPT	Connection Size Inch	Connection Type
AP	500	S VAR	•		150 / 10	100 / 7	•	0.06 / 0.1	15 / 30	1/4, 3/8	W, IGS
AP	5200	S VAR	•	•	150 / 10	100 / 7	•	0.07 / 0.15	30 / 100	1/4, 3/8	W, IGS

TWO STAGE REGULATORS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI/BAR	Outlet Max PSI/BAR	Absolute	Cv STD/OPT	Flow SLPM STD/OPT	Connection Size Inch	Connection Type
AP	1700	S VAR	•	•	3500 / 241	100 / 7		0.05	15	1/4, 3/8	W
AK		S, B	•	•	4500 / 310 opt	200 / 14					N
AP	5200	S VAR	•	•	3500 / 241	120 / 8		0.1	250	1/4, 3/8	W

Please review applicable data sheets prior to making final product selection.
All specifications subject to change without notice.

• : Optional • : Standard W : Welded N : Threaded or Compression IGS : Surface mount (C & W seal)

PNEUMATICALLY ACTUATED REGULATORS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI/BAR	Outlet Max PSI/BAR	C _v STD/OPT	Flow SLPM STD/OPT	Connection Size Inch	Connection Type
AP	10PA	S VAR	•		3500 / 241	150 / 10	0.09 / 0.15	30 / 100	1/4, 3/8	W
AZ		S	•							W
AK		S, B	•							N
AP	15PA	S VAR	•	•	3500 / 241	150 / 10	0.09	30	1/4, 3/8	W
AZ		S	•	•						W
AK		S, B	•	•						
AP	14PA	S VAR	•	•	2300 / 159 3000 / 207 opt	150 / 10	0.45	400	1/4, 3/8, 1/2	W
AZ		S	•	•						W
AK		S, B	•	•						N
AP	12PA	S VAR	•	•	1700 / 117 3000 / 207 opt	150 / 10	0.9 / 1.1	1200	1/4, 3/8, 1/2	W
AZ		S	•	•						W
AK		S, B	•	•						N
AP	90 PA	S	•	•	1700 / 117	150 / 10	3	3000	1/2, 3/4, 1	
AP	91 PA	S	•	•	800 / 55	150 / 10	4	7000	1/2, 3/4, 1	

CROSSOVER MANIFOLDS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI/BAR	Outlet Max PSI/BAR	C _v STD/OPT	Gauge	Connection Size Inch	Connection Type
AP	M6	S VAR	•	•	3500 / 241	275 / 19	0.09	•	1/4, 3/8	W
AK	M6	S, B	•	•				•	1/4	N
AK	M8	S, B	•	•	3500 / 241	250 / 17	0.05	•	1/4	N

HIGH PRESSURE REGULATORS

Series	Material	Inlet PSI/BAR	Outlet Max PSI/BAR	Pneumatically Actuated	C _v STD/OPT	Flow SLPM STD/OPT	Connection Type
KT10	S VAR	10,000 / 690	10,000 / 690	•	0.06 / 0.12	1/4	N
		4000 / 280	4000 / 280				W*
		6000 / 414	6000 / 414				N
KT12		6000 / 414	2500 / 172	•	0.8 / 2.0	1/2, 3/4	N
	S VAR	5000 / 345					

BACK PRESSURE REGULATORS

Series	Model	Material	Operating Pressure Max PSI/BAR	C _v STD/OPT	Flow SLPM STD/OPT	Connection Type
BP	1000	S VAR	300 / 21	0.3	1/4, 3/8	W*
		S, B			1/4	N

Material description

S VAR : 316L SS VAR S : 316L SS B : Brass *KT10 Welded *BP1000 Welded N

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• : Optional • : Standard W : Welded N : Threaded or Compression IGS : Surface mount (C & W seal)

PNEUMATIC VALVES

Series	Model	Material	Pressure Rating PSI / BAR	Type* Actuation	C _v STD/OPT	Connection Size Inch	Connection Type	Two Step Metered and Full Flow	LOTO
AP	3540	S VAR	145 / 10	NC	0.29	1/4, 3/8	W, IGS		•
AZ		S					W		
AK		S					N		
AP	3542	S VAR	125 / 9	NC	0.29	1/4, 3/8	W		
AZ		S					W		
AK		S					N		
AP	3550	S VAR	300 / 21	NC	0.29	1/4, 3/8	W		
AZ		S					W		
AK		S					N		
AP	3571	S VAR	125 / 9	NC	0.29	1/4, 3/8	W, IGS	•	•
AZ		S					W		
AK		S					N		
AP	3580	S VAR	250 / 17	NO	0.29	1/4, 3/8	W, IGS		•
AZ		S					W		
AK		S					N		
AP	3000	S VAR	3000 / 207	NC	0.23 / 0.28	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	3080	S VAR	3000 / 207	NO	0.23	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	3004	S VAR	3700 / 255	NC	0.23	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	3007	S VAR	300 / 21	NC	0.23	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	4540	S VAR	125 / 9	NC	0.5	1/4, 3/8	W, IGS		•
AZ		S					W		
AK		S					N		
AP	4542	S VAR	250 / 17	NO	0.5	1/4, 3/8	W, IGS		
AZ		S					W		
AK		S					N		
AP	4550	S VAR	3000 / 207	NC	0.5	1/4, 3/8	W		
AZ		S					W		
AK		S					N		
AP	4571	S VAR	3000 / 207	NO	0.5	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	4580	S VAR	3700 / 255	NC	0.5	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	4000	S VAR	3700 / 255	NC	0.35	1/4, 3/8	W		•
AZ		S					W		
AK		S					N		
AP	3113	S VAR	1300 / 90	NC	1.0	1/4, 3/8	W		•
AP	3130	S VAR	3000 / 207	NC	0.7	1/4, 3/8	W		•
AP	3700	S VAR	250 / 17	NC	2.8	1/4, 3/8	W		
AP	3708	S VAR	250 / 17	NO	2.8	1/4, 3/8	W		

*NC = Normally closed, NO = Normally open

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• : Optional • : Standard W : Welded N : Threaded or Compression IGS : Surface mount (C & W seal) LOTO : Lockout / tagout

MANUAL VALVES

Series	Model	Material	Pressure Rating PSI / BAR	Type Actuation	Open / Closed Indication	C _v STD/OPT	Connection Size Inch	Connection Type	LOTO
AP	3600	S VAR	3000 / 207	Knob, multi turn		0.29	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	3604	S VAR	3700 / 255	Knob, multi turn		0.29	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	3625	S VAR	3000 / 207	Lever, 1/4 turn	•	0.29	1/4, 3/8	W, IGS	•
AZ		S						W	
AK		S						N	
AP	3624	S VAR	3700 / 255	Lever, 1/4 turn	•	0.29	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	3627	S VAR	4500 / 310	T Handle, 1/4 turn	•	0.29	1/4	W	
AZ		S						W	
AK		S						N	
AP	3650	S VAR	3000 / 207	Knob, 1/4 turn	•	0.23 / 0.28	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	3652	S VAR	3000 / 207	Knob, 1/4 turn	•	0.23	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	3657	S VAR	3000 / 207	Knob, pull turn	•	0.23	1/4, 3/8	W	•
AZ		S						W	
AK		S						N	
AP	4600	S VAR	300 / 21	Knob, multi turn		0.23	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	4625	S VAR	250 / 17	Lever, 1/4 turn	•	0.5	1/4, 3/8, 1/2	W	•
AZ		S						W	
AK		S						N	
AP	4650	S VAR	3000 / 207	Knob, 1/4 turn	•	0.5	1/4, 3/8, 1/2	W	
AZ		S						W	
AK		S						N	
AP	4652	S VAR	3000 / 207	Knob, 1/4 turn	•	0.5	1/4, 3/8	W	
AZ		S						W	
AK		S						N	
AP	4657	S VAR	3700 / 255	Knob, pull turn	•	0.5	1/4, 3/8, 1/2	W	•
AZ		S						W	
AK		S						N	
AP	3100	S VAR	3000 / 207	Knob, multi turn		0.7 / 1.3	1/2	W	
AP	3125	S VAR	3000 / 207	Lever, 1/4 turn		1.0	1/2	W	•
AP	3150	S VAR	1300 / 90	Knob, 1/4 turn		1.0	1/2	W	
AP	3157	S VAR	1300 / 90	Knob, pull turn		1.0	1/2	W	
AP	3800	S VAR	250 / 17	Knob		2.8	3/8, 1/2, 3/4	W	
AP	3900	S VAR	250 / 17	Knob, pull turn		2.8	3/8, 1/2, 3/4	W	

*NC = Normally closed, NO = Normally open

• : Optional • : Standard W : Welded N : Threaded or Compression IGS : Surface mount (C & W seal) LOTO : Lockout / tagout

METAL SEATED VALVES

Model	Material	Pressure Rating PSI / BAR	Type Actuation	C _v STD/OPT	Connection Size Inch	Connection Type
AP 3200	S VAR	125 / 9	Pneumatic, NC	0.27	1/4, 3/8	W
AP 3260	S VAR	125 / 9	Knob, multi turn	0.27	1/4, 3/8	W

CHECK VALVE

Model	Material	Pressure Rating PSI / BAR	C _v	Cracking Pressure PSI / BAR	Connection Size Inch	Connection Type
AP 64	S VAR	3500 / 241	0.4 max	3 / 0.23	1/4	W

VACUUM GENERATORS

Model	Material	Vacuum Efficiency In Hg / Torr	Modules*	Connection Size Inch	Connection Type
AP 7	S VAR	26 / 100		1/4, 3/8	W
AP 70	S VAR	26 / 100			
AP 71	S VAR	26 / 100	•		
AP 72	S VAR	26 / 100	•	1/4, 3/8	W

*Monoblock vacuum generator, N2 supply valve and check valve

FLOW SWITCHES

Model	Material	Pressure Max PSI / BAR	Trip Points SLPM @ 100 psi N ₂	Connection Size Inch	Connection Type
AP 74	S VAR	3500 / 267	2, 5, 10, 25, 50, 100	1/4	W
AP 74B	S VAR	3500 / 241	225, 350, 500, 950	1/2	W
		2400 / 163	1100, 1650, 2600	3/4	W
		2200 / 152	3000, 4000	1	W
		1300 / 90	5000, 6000	1-1/2	W

SERIES FEATURES

Model	Cleanroom Assembly	N ₂ Testing	Helium Testing	Connection Type				Material	EP	Surface Finish STD / OPT in μ inches
				W Face Seal	W Tube Stub	N NPT	N Compression			
AP	•	•	•	•				SVAR	•	15 / 10, 7, 5 Ra max
AZ	•	•	•	•				S	•	10 Ra avg
AK		•				•		S, B		63 Ra avg
KT		•				•		S, B		63 Ra avg

• : Optional • : Standard W : Welded N : Threaded or Compression

ULTRA CLEAN PRODUCTS

BY DESIGN*

- > No particle generating sliding or abrading parts in the flow path
- > Minimal surface area and internal volume
- > Proper surface chemistry and low Ra values
- > Only metal seals to atmosphere
- > All internal threads isolated from media



BY MANUFACTURING*

- > Certified Class 100 Clean Room for welding, cleaning, assembly, test and packaging operations
- > Hot DI cleaning and bake out
- > Rigorous 100% inspection, verification and testing at each manufacturing step

BY **APTech**

- > Uncompromising quality, performance and reliability
- > Renown delivery, service and support
- > Custom monoblock integrated component configurations
- > Special fitting, porting, testing and dimension options
- > Utmost flexibility to customer's needs



