

**GAS DELIVERY COMPONENTS
CONDENSED CATALOG**

APRIL 2014

SINGLE STAGE REGULATORS

Series	Model	Material	Hastelloy Internal	Tied Diaphragm	Inlet PSI / BAR	Outlet Max PSI / BAR	Absolute	C _v STD / OPT	Flow SLPM STD / OPT	Connection Size Inch	Connection Type
AP AZ AK	1000	S VAR S S, B	○ ○ ○			150 / 10 3500 / 241 500 / 35		0.09 / 0.15	30 / 100	1/4, 3/8	W W N
AP AZ	1100	S VAR S	○ ○		300 / 21	100mm Hg to 10 psig	● ●	0.05	1	1/4, 3/8	W W
AP AZ AK	1500	S VAR S S, B	○ ○ ○	● ● ●	3500 / 241 4500 / 310 opt	150 / 10		0.09	30	1/4, 3/8	W W N
AP AZ AK	1400T	S VAR S S, B	● ● ●	● ● ●	2300 / 159 3000 / 207 opt	150 / 10	○ ○ ○	0.45	400	1/4, 3/8, 1/2	W W N
AP AZ AK	1200	S VAR S S, B	○ ○ ○	● ● ●	1700 / 117 3000 / 207 opt	150 / 10		0.9 / 1.1	800 / 1500	1/4, 3/8, 1/2, 3/4	W W N
AP AZ AK	1300	S VAR S S	○ ○ ○		300 / 21	150 / 10		1.1	1100	1/4, 3/8, 1/2, 3/4	W W N
AZ AK	9200	S S		● ●	300 / 21	150 / 10		1.6	2000	3/4, 1	W 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	C _v 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
SL	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	C _v STD / OPT	Flow SLPM STD / OPT	Connection Size Inch	Connection Type
AP AK	1700	S VAR S, B	○ ○	● ●	3500 / 241 4500 / 310 opt	100 / 7 200 / 14		0.05	15	1/4, 3/8	W N
AP	2700	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 AZ AK	10PA	S VAR S S, B	○ ○ ○		3500 / 241	150 / 10	0.09 / 0.15	30 / 100	1/4, 3/8	W W N
AP AZ AK	15PA	S VAR S S, B	○ ○ ○	● ● ●	3500 / 241	150 / 10	0.09	30	1/4, 3/8	W W N
AP AZ AK	14PA	S VAR S S, B	○ ○ ○	● ● ●	2300 / 159 3000 / 207 opt	150 / 10	0.45	400	1/4, 3/8, 1/2	W W N
AP AZ AK	12PA	S VAR S S, B	○ ○ ○	● ● ●	1700 / 117 3000 / 207 opt	150 / 10	0.9 / 1.1	1200	1/4, 3/8, 1/2	W W 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 AK	M6	S VAR S, B	○ ○	○ ○	3500 / 241	275 / 19	0.09	○ ○	1/4, 3/8 1/4	W 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	Connection Size Inch	Connection Type
KT10	C - 300 SS	10,000 / 690	10,000 / 690		0.06 / 0.12	1/4	N
	S - 316L SS	4000 / 280	4000 / 280	○			W*
	B - Brass	6000 / 414	6000 / 414				N
KT12	C - 300 SS	6000 / 414	2500 / 172	○	0.8 / 2.0	1/2, 3/4	N
	B - Brass	5000 / 345					

BACK PRESSURE REGULATORS

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

S VAR : 316L SS VAR S : 316L SS B : Brass

*KT10 Welded *BP1000 Welded

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 AZ AK	3540	S VAR S S	145 / 10	NC	0.29	1/4, 3/8	W, IGS W N		○
AP AZ AK	3542	S VAR S S	125 / 9	NC	0.29	1/4, 3/8	W W N		
AP AZ AK	3550	S VAR S S	300 / 21	NC	0.29	1/4, 3/8	W W N		
AP AZ AK	3571	S VAR S S	125 / 9	NC	0.29	1/4, 3/8	W, IGS W N	●	○
AP AZ AK	3580	S VAR S S	250 / 17	NO	0.29	1/4, 3/8	W, IGS W N		○
AP AZ AK	3000	S VAR S S	3000 / 207	NC	0.23 / 0.28	1/4, 3/8	W W N		○
AP AZ AK	3080	S VAR S S	3000 / 207	NO	0.23	1/4, 3/8	W W N		○
AP AZ AK	3004	S VAR S S	3700 / 255	NC	0.23	1/4, 3/8	W W N		○
AP AZ AK	3007	S VAR S S	4500 / 310	NC	0.23	1/4	W W N		○
AP AZ AK	4540	S VAR S S	125 / 9	NC	0.5	1/4, 3/8, 1/2	W W N		○
AP AZ AK	4542	S VAR S S	125 / 9	NC	0.5	1/4, 3/8	W W N		
AP AZ AK	4550	S VAR S S	300 / 21	NC	0.5	1/4, 3/8, 1/2	W W N		
AP AZ AK	4571	S VAR S S	125 / 9	NC	0.5	1/4, 3/8, 1/2	W W N	●	○
AP AZ AK	4580	S VAR S S	250 / 17	NO	0.5	1/4, 3/8, 1/2	W W N		○
AP AZ AK	4000	S VAR S S	3000 / 207	NC	0.35	1/4, 3/8, 1/2	W W N		○
AP	3113	S VAR	1300 / 90	NC	1.0	1/2	W		○
AP	3130	S VAR	3000 / 207	NC	0.7	1/2	W		○
AP	3700	S VAR	250 / 17	NC	2.8	3/8, 1/2, 3/4	W		
AP	3708	S VAR	250 / 17	NO	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 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 AZ AK	3600	S VAR S S	3000 / 207	Knob, multi turn		0.29	1/4, 3/8	W W N	
AP AZ AK	3604	S VAR S S	3700 / 255	Knob, multi turn		0.29	1/4, 3/8	W W N	
AP AZ AK	3625	S VAR S S	3000 / 207	Lever, 1/4 turn	●	0.29	1/4, 3/8	W, IGS W N	○
AP AZ AK	3624	S VAR S S	3700 / 255	Lever, 1/4 turn	●	0.29	1/4, 3/8	W W N	
AP AZ AK	3627	S VAR S S	4500 / 310	T Handle, 1/4 turn	●	0.29	1/4	W W N	
AP AZ AK	3650	S VAR S S	3000 / 207	Knob, 1/4 turn	●	0.29	1/4, 3/8	W W N	
AP AZ AK	3652	S VAR S S	250 / 17	Knob, 1/4 turn	●	0.29	1/4, 3/8	W W N	
AP AZ AK	3657	S VAR S S	3000 / 207	Knob, pull turn	●	0.29	1/4, 3/8	W W N	●
AP AZ AK	4600	S VAR S S	300 / 21 3000 / 207 opt	Knob, multi turn		0.5	1/4, 3/8, 1/2	W W N	
AP AZ AK	4625	S VAR S S	300 / 21 3000 / 207 opt	Lever, 1/4 turn	●	0.5	1/4, 3/8, 1/2	W W N	○
AP AZ AK	4650	S VAR S S	300 / 21 3000 / 207 opt	Knob, 1/4 turn	●	0.5	1/4, 3/8, 1/2	W W N	
AP AZ AK	4652	S VAR S S	250 / 17	Knob, 1/4 turn	●	0.5	1/4, 3/8	W W N	
AP AZ AK	4657	S VAR S S	300 / 21 3000 / 207 opt	Knob, pull turn	●	0.5	1/4, 3/8, 1/2	W W 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	●

○ : Optional ● : Standard W : Welded N : Threaded or Compression IGS : Surface mount (C 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 Max 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		1/4, 3/8	W
AP 71	S VAR	26 / 100	●	1/4, 3/8	W
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

Series	Cleanroom Assembly	N ₂ Testing	Helium Testing	Connection Type				Material	EP	Surface Finish STD / OPT in μ inches
				W		N				
				Face Seal	Tube Stub	NPT	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

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 **AP**Tech

- 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



*Applies to AP, AZ and SL series only



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