



# AIR SEPARATOR

ASME Commercial Tangential Air Separators



For Closed Hydronic Heating & Chilled Water Systems



# AIR SEPARATOR

Amtrol tangential air separators are designed to create a low velocity vortex that separates and removes entrained air from circulating water or anti-freeze in a closed, non-potable water system. Available in 1" to 24" sizes with an optional stainless steel strainer to collect unwanted system debris, all Amtrol tangential air separators are made in the USA at our ISO 9001:2015 certified facilities and meet all ASME Section VIII, Division 1 Standards.



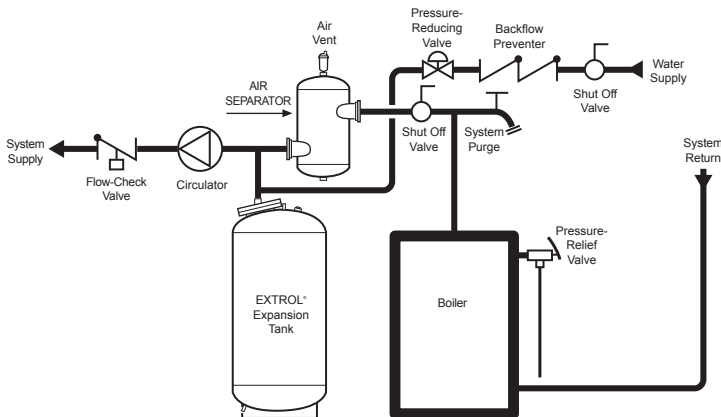
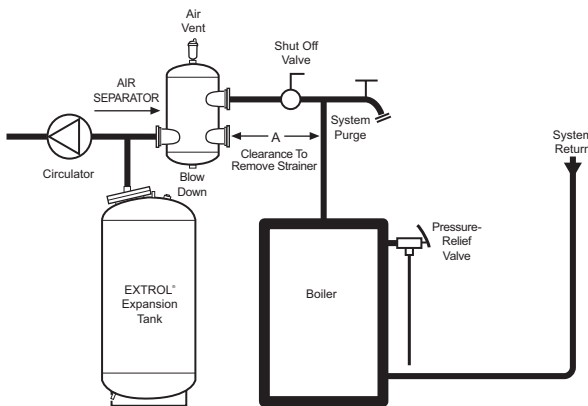
## TANGENTIAL AIR SEPARATORS AS Series

- Tangential design with low velocity vortex action.
- Prevents blocked terminal units, inefficient pump operation and costly equipment corrosion.
- Available in 1" to 24" sizes.
- Ring base standard on 5-AS(L) through 24-AS(L) models. Seismic Restraints(R) optional.
- Removable, 304 stainless steel strainer available.
- Maximum operating temperature: 350° F. 375° F available upon request.

## Typical Installation

### Clearance to Remove Strainer

Model Number	A (Inches)
2-AS	12
2½-AS	13
3-AS	15
4-AS	17
5-AS	22
6-AS	24
8-AS	30
10-AS	36
12-AS	45
14-AS	49
16-AS	59
18-AS	62
20-AS	70
24-AS	80



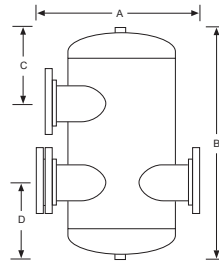
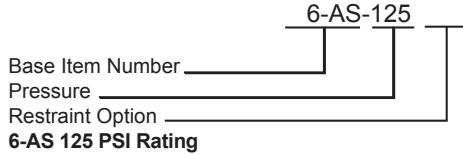
### Maximum Flow Rate Based on Design Velocity

Model Number	Velocity 4 ft./sec. (gpm)	Velocity 6 ft./sec. (gpm)	Velocity 8 ft./sec. (gpm)	Velocity 10 ft./sec. (gpm)
1-ASL	10	15	20	25
2-AS(L)	42	63	84	105
2½-AS(L)	60	90	120	150
3-AS(L)	93	140	185	230
4-AS(L)	160	240	320	400
5-AS(L)	250	375	500	630
6-AS(L)	360	540	720	900
8-AS(L)	630	940	1,250	1,580
10-AS(L)	990	1,500	1,980	2,470
12-AS(L)	1,400	2,100	2,800	3,500
14-AS(L)	1,680	2,500	3,350	4,200
16-AS(L)	2,200	2,800	3,500	5,000
18-AS(L)	3,300	4,200	5,200	7,500
20-AS(L)	4,500	5,600	7,000	10,000
22-AS(L)	5,000	6,300	7,900	11,300
24-AS(L)	5,500	7,000	8,800	12,500

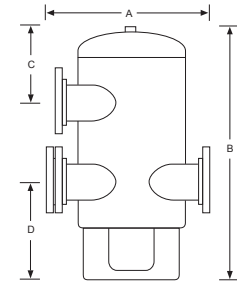
For optimum air elimination, maximum flow rate should be as close to 6 ft./sec. as possible.

# ASME Tangential Air Separators

## How to Order: Specify Model & Options

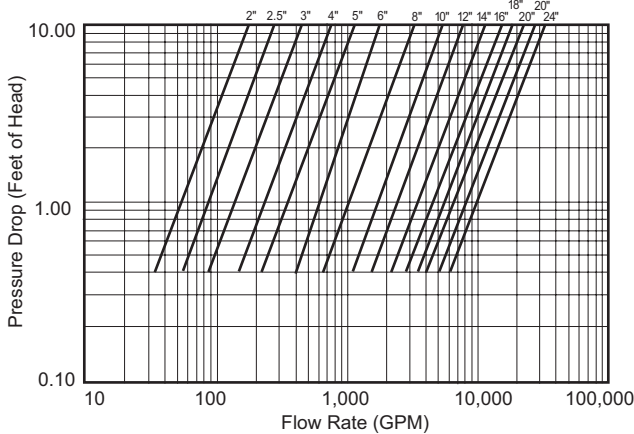


2-AS through 4-AS



5-AS through 24-AS

## Pressure Drop Flow Chart



Data confirmed by independent third party testing.

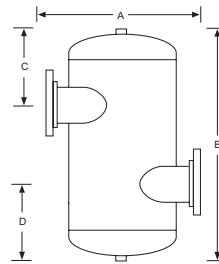
## ASME Air Separators with Strainer Specifications

Model Number	A Width (Inches)	B Height (Inches)	C Length (Inches)	D Length (Inches)	System Conn. (Inches)	Shipping Weight (lbs.) Max. Working Pressure	
						125 PSI	150 PSI
2-AS	18	24	8	8	2	45	47
2½-AS	18	24	8	8	2½	54	58
3-AS	18	24	8	8	3	60	64
4-AS	23	24	8	8	4	70	83
5-AS	26	40	11	17	5	200	220
6-AS	28	45	14	17	6	249	261
8-AS	34	57	17	22	8	375	445
10-AS	42	63	19	22	10	750	800
12-AS	48	82	22	34	12	950	1,060
14-AS	58	102	28	44	14	2,200	2,500
16-AS	66	104	29	43	16	3,000	3,900
18-AS	66	114	33	45	18	3,500	4,700
20-AS	72	110	36	44	20	5,000	6,100
22-AS	72	126	35	43	22	5,500	6,600
24-AS	84	147	46	58	24	7,000	8,400

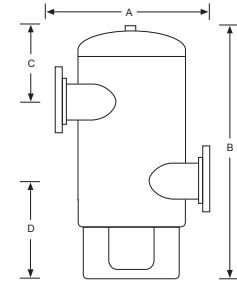
Models 2-AS through 4-AS available with threaded pipe connections.

Models 2-AS through 14-AS available with grooved pipe connections.

175, 250 and 300 PSI models available. Consult Amtrol for detailed information.

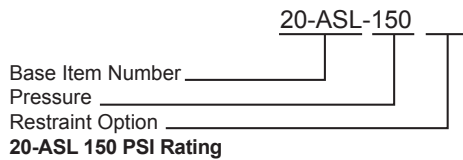


1-ASL through 4-ASL

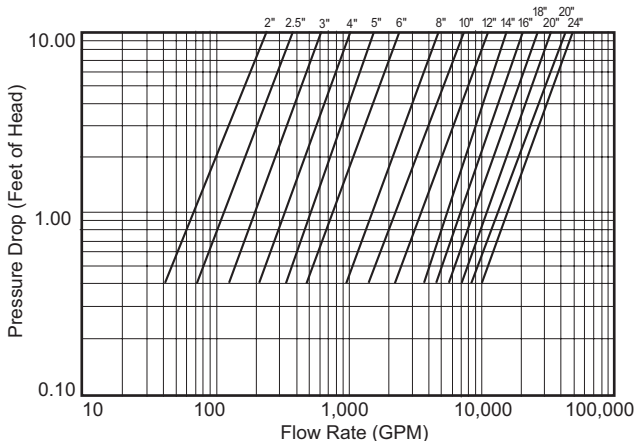


5-ASL through 24-ASL

## How to Order: Specify Model & Options



## Pressure Drop Flow Chart



Data confirmed by independent third party testing.

## ASME Air Separators Less Strainer Specifications

Model Number	A Width (Inches)	B Height (Inches)	C Length (Inches)	D Length (Inches)	System Conn. (Inches)	Shipping Weight (lbs.) Max. Working Pressure	
						125 PSI	150 PSI
1-ASL	7	12	4	4	1	14	15
2-ASL	18	24	8	8	2	41	43
2½-ASL	18	24	8	8	2½	50	54
3-ASL	18	24	8	8	3	56	60
4-ASL	23	24	8	8	4	66	79
5-ASL	26	40	11	17	5	175	195
6-ASL	28	45	14	17	6	190	210
8-ASL	34	57	17	22	8	350	400
10-ASL	42	63	19	22	10	700	750
12-ASL	48	82	22	34	12	912	990
14-ASL	58	102	28	44	14	1,853	2,150
16-ASL	66	104	29	43	16	2,610	3,600
18-ASL	66	114	33	45	18	2,900	4,000
20-ASL	72	110	36	44	20	4,560	5,800
22-ASL	72	126	35	43	22	5,320	6,000
24-ASL	84	138	44	51	24	6,175	7,000

Models 1-ASL through 4-ASL available with threaded pipe connections.

Models 1-ASL through 14-ASL available with grooved pipe connections.

175, 250 and 300 PSI models available. Consult Amtrol for detailed information.





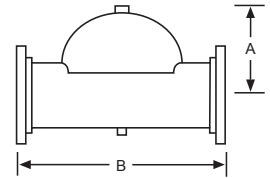
# In-Line Air Purgers

Amtrol in-line purgers are designed to separate air in low velocity, closed hydronic and chilled water systems where space is limited. It features a unique baffle design that moves air into a domed cavity above which an air vent can be mounted. Available in 4" to 18" sizes, all Amtrol air purgers are made in the USA at our ISO 9001:2015 certified facilities.

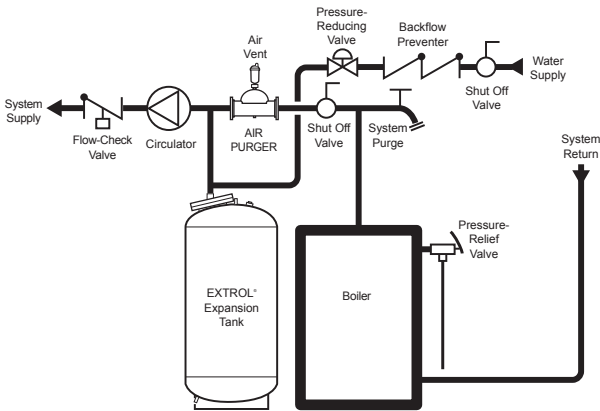


## IN-LINE AIR PURGERS

- Baffle design eliminates air in closed hydronic and chilled water systems.
- Available in 4" to 18" sizes.
- Model 449 is made of cast iron; all other models are steel.



## Typical Installation



## Non-ASME In-Line Air Purger Specifications

Model Number	A Conn. to Top (Inches)	B Length (Inches)	Connection (Inches)	Shipping Weight (lbs.) Max. Working Pressure	
				125 PSI	150 PSI
449*	5	12	4	56	—
461*	8	20	5	—	60
462*	9	24	6	—	65
463*	11	32	8	—	113
464*	14	40	10	—	174
465*	17	48	12	—	330
466*	19	48	14	—	500
467	20	48	16	—	331
468	24	72	18	—	573

Vent Tapping Connection: 449: 3/4" NPT; 461 through 468: 1 1/4" NPTF.  
 Drain Tapping Connection: 449: 1/2" NPT; 461 through 468: 1 1/2" NPTF.  
 \*Provided with 150 lb. ANSI Flanges.



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