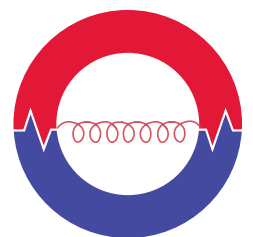


Precision Storage Vessels



AIR & DIRT SEPARATORS



PRECISION

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AIR AND DIRT SEPARATOR

Precision Air and Dirt Separator are designed to eliminate air and separate debris associated with any hydronic system. In removable type High Velocity air and dirt separator, a removable flanged type end cover is installed so that easy access for coalescing medium and dirt removal. Non removal type high velocity air and dirt separator are also manufactured. Air and dirt separator are designed and manufactured as per ASME section VIII Div I and registered with National Board of Boiler and Pressure Vessel inspectors. Material of construction will be carbon steel. Connections are flanged to Class 150, Class 300, PN16 or PN 25. External surface will be coated with red oxide primer and with one coat red enamel paint. Standard working pressure will be 10 bar. Designs up to 20 bar available on request.

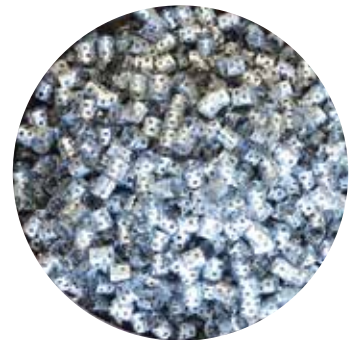
Each air and dirt separator to be fixed with air vent. A tap is fitted on top of the removable cover (in removable type) and in body for non removable type to facilitate system fast fill and removal of floating impurities and air trapped within the air separator.

Application

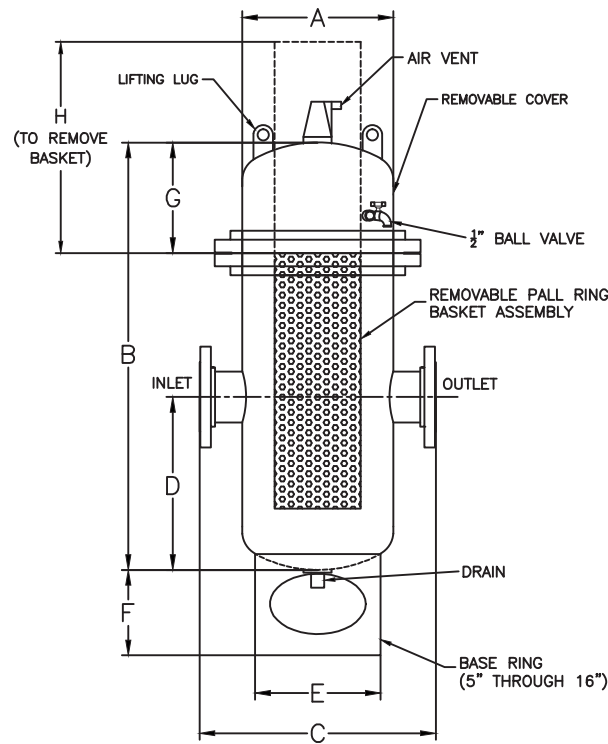
Precision Air and Dirt Separator removes entrained air bubbles and dirt particles in the system. Small Air bubble coalesce and form larger air bubbles which rise to the top of the vessel and vented through the air vent. Dirt particles that are collected at the bottom of the separator can be removed through the blow down valve .In case of coalescing medium to be cleaned then top removable cover to be removed for access. Precision air & dirt separators provide higher efficiency with reduced pressure drops so a smaller pump can be used to achieve maximum efficiency.

PALL Ring Technology

Precision air and dirt separator use proven PALL ring technology. By using Pall Ring technology micro bubbles as small as 18 microns, and dirt particles of 35 microns can be removed. It removes air from place where air vent cannot be installed and also it removes and separates solid particles. Pall Rings are kept in a stainless steel basket which can be removed from the top flange of removable type air and dirt separator. Pall rings are made of Stainless steel 304 material. Air bubbles are separated by the pall ring through coalescence process where dirt particles are caught and drifted to the bottom of the tank, further removed through blowdown valve.



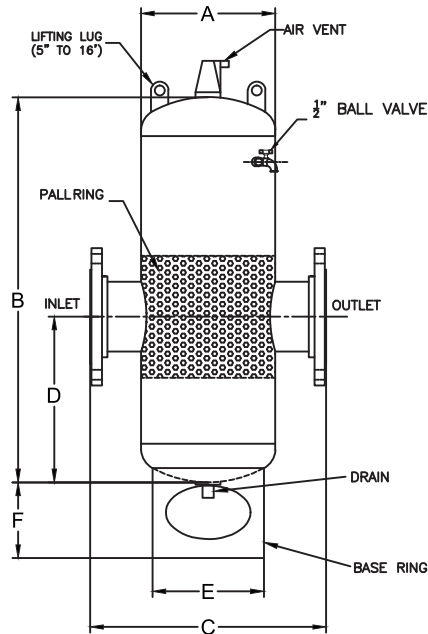
Removable Cover Type High Velocity High Flow Air And Dirt Separator



Model No.	Size (Inch)	Optimum Flow GPM	A (Inch)	B (Inch)	C (Inch)	D (Inch)	E (Inch)	F (Inch)	G (Inch)	H (Inch)	Pall Ring surface area (sq.ft)	Approx wt (lbs)	Blowdown Valve Size (Inch)	Air Vent (Inch)
ADS-RC-HV-2	2	116	12	32	22	17	-	-	9	18	26	150	1 ½"	1"
ADS-RC-HV-2.5	2.5	168	12	32	22	17	-	-	9	18	26	155	1 ½"	1"
ADS-RC-HV-3	3	253	14	41	24	21	-	-	10	25	55	300	1 ½"	1"
ADS-RC-HV-4	4	460	14	41	24	21	-	-	10	25	55	310	1 ½"	1"
ADS-RC-HV-5	5	695	20	58	30	29	18	13	12	36	120	585	1 ½"	1"
ADS-RC-HV-6	6	1025	20	58	30	29	18	13	15	36	120	600	1 ½"	1"
ADS-RC-HV-8	8	1740	24	70	34	35	20	13	15	45	200	960	1 ½"	1"
ADS-RC-HV-10	10	2710	30	87	42	43	24	14	18	57	240	1130	1 ½"	1"
ADS-RC-HV-12	12	4130	30	87	42	43	24	14	18	57	240	1180	1 ½"	1"
ADS-RC-HV-14	14	4728	36	103	48	52	30	14	20	69	420	1660	1 ½"	1"
ADS-RC-HV-16	16	6265	36	103	48	52	30	14	20	69	420	1690	1 ½"	1"

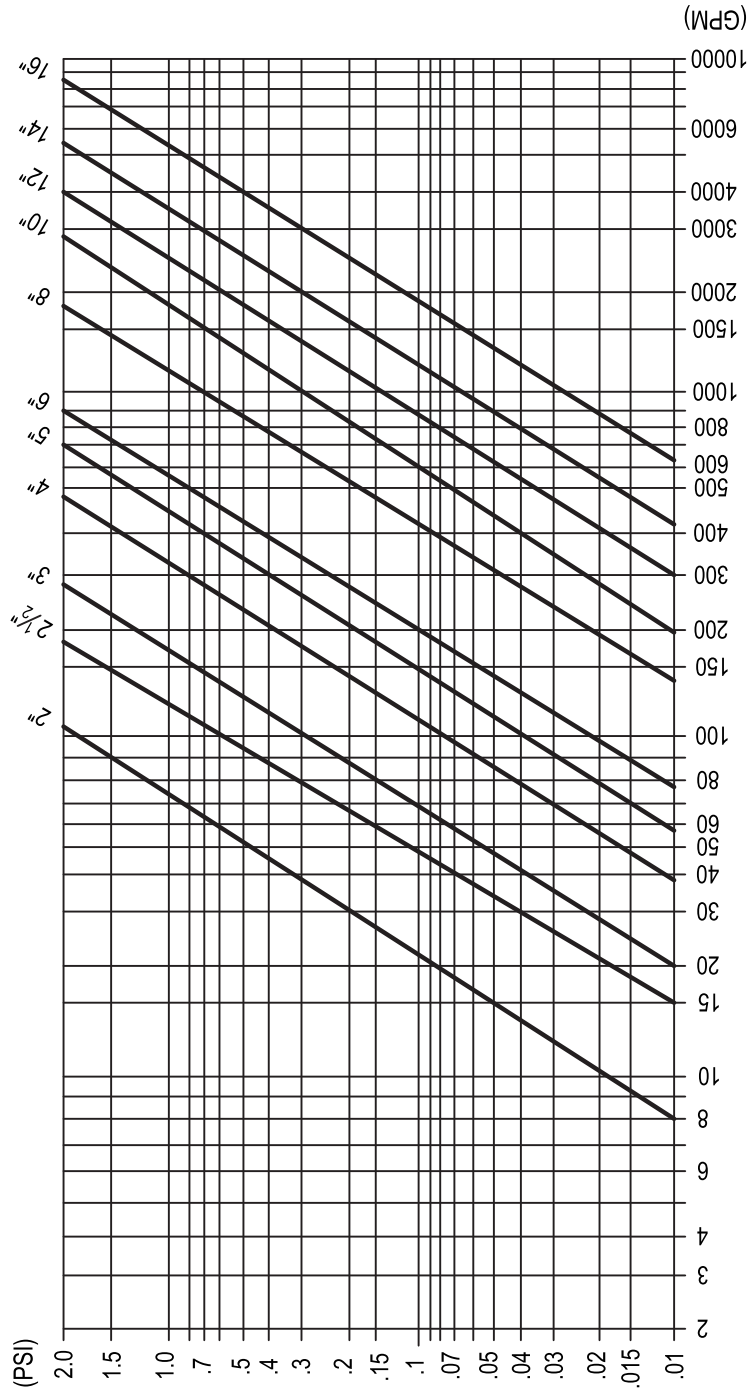
•Available upto 36 inch Size. For details please consult factory.

Non Removable Cover Type High Velocity High Flow Air And Dirt Separator



Model No.	Size (Inch)	Optimum Flow GPM	A (Inch)	B (Inch)	C (Inch)	D (Inch)	E (Inch)	F (Inch)	Pall Ring surface area (sq.ft)	Approx wt (lbs)	Blowdown Valve Size (Inch)	Air Vent (Inch)
ADS-NR-HV-2	2	116	12	32	22	16	-	-	64	100	1"	1"
ADS-NR-HV-2.5	2.5	168	12	32	22	16	-	-	64	105	1"	1"
ADS-NR-HV-3	3	255	14	41	24	21	-	-	82	120	1"	1"
ADS-NR-HV-4	4	460	14	41	24	21	-	-	82	130	1"	1"
ADS-NR-HV-5	5	695	20	58	30	29	18	13	165	255	1"	1"
ADS-NR-HV-6	6	1025	20	58	30	29	18	13	165	270	1"	1"
ADS-NR-HV-8	8	1740	24	70	34	35	20	14	290	520	1"	1"
ADS-NR-HV-10	10	2720	30	86	42	43	24	14	456	735	1"	1"
ADS-NR-HV-12	12	4130	30	86	42	43	24	14	456	785	1 1/2"	1"
ADS-NR-HV-14	14	4728	36	103	48	52	30	14	800	1100	1 1/2"	1"
ADS-NR-HV-16	16	6265	36	103	48	52	30	14	800	1125	1 1/2"	1"
ADS-NR-HV- 18	18	8250	42	121	57	62	38	13	1110	2930	1 1/2"	1"
ADS-NR-HV- 20	20	10250	48	132	62	68	44	13	1585	3705	1 1/2"	1"
ADS-NR-HV- 22	22	11890	54	143	67	76	50	14	21146	5350	1 1/2"	1"
ADS-NR-HV- 24	24	14245	54	148	67	73	50	14	2431	5890	1 1/2"	1"
ADS-NR-HV- 26	26	17170	60	165	75	85	54	14	3276	8430	1 1/2"	1"
ADS-NR-HV- 30	30	23039	66	186	83	96	60	15	4227	10630	1 1/2"	1"
ADS-NR-HV- 36	36	33460	84	220	105	114	78	16	7926	21460	1 1/2"	1"

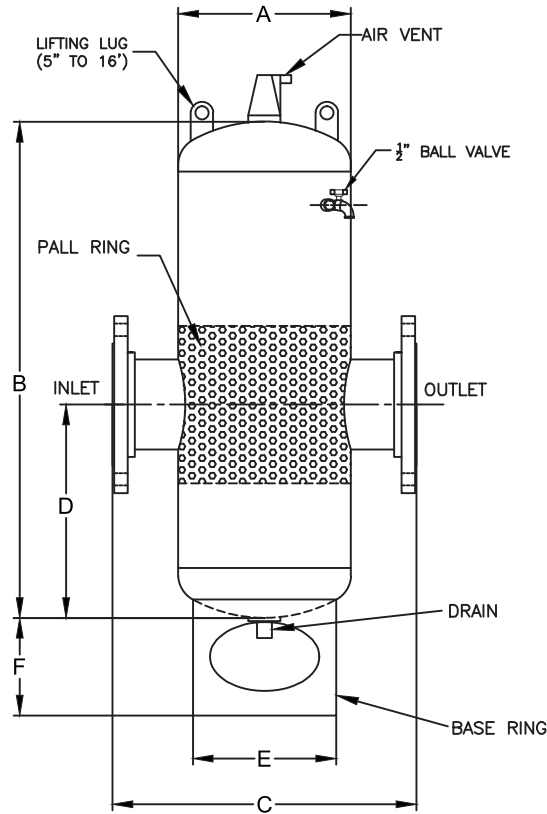
Air And Dirt Separator High Velocity Model Pressure Drop Curve



Model No	Optimum Flow GPM
ADS-XX-HV-2	116
ADS-XX-HV-2.5	168
ADS-XX-HV-3	255
ADS-XX-HV-4	460
ADS-XX-HV-5	695
ADS-XX-HV-6	1025
ADS-XX-HV-8	1740
ADS-XX-HV-10	2720
ADS-XX-HV-12	4130
ADS-XX-HV-14	4728
ADS-XX-HV-16	6265

*Above 16" Please Consult Factory.

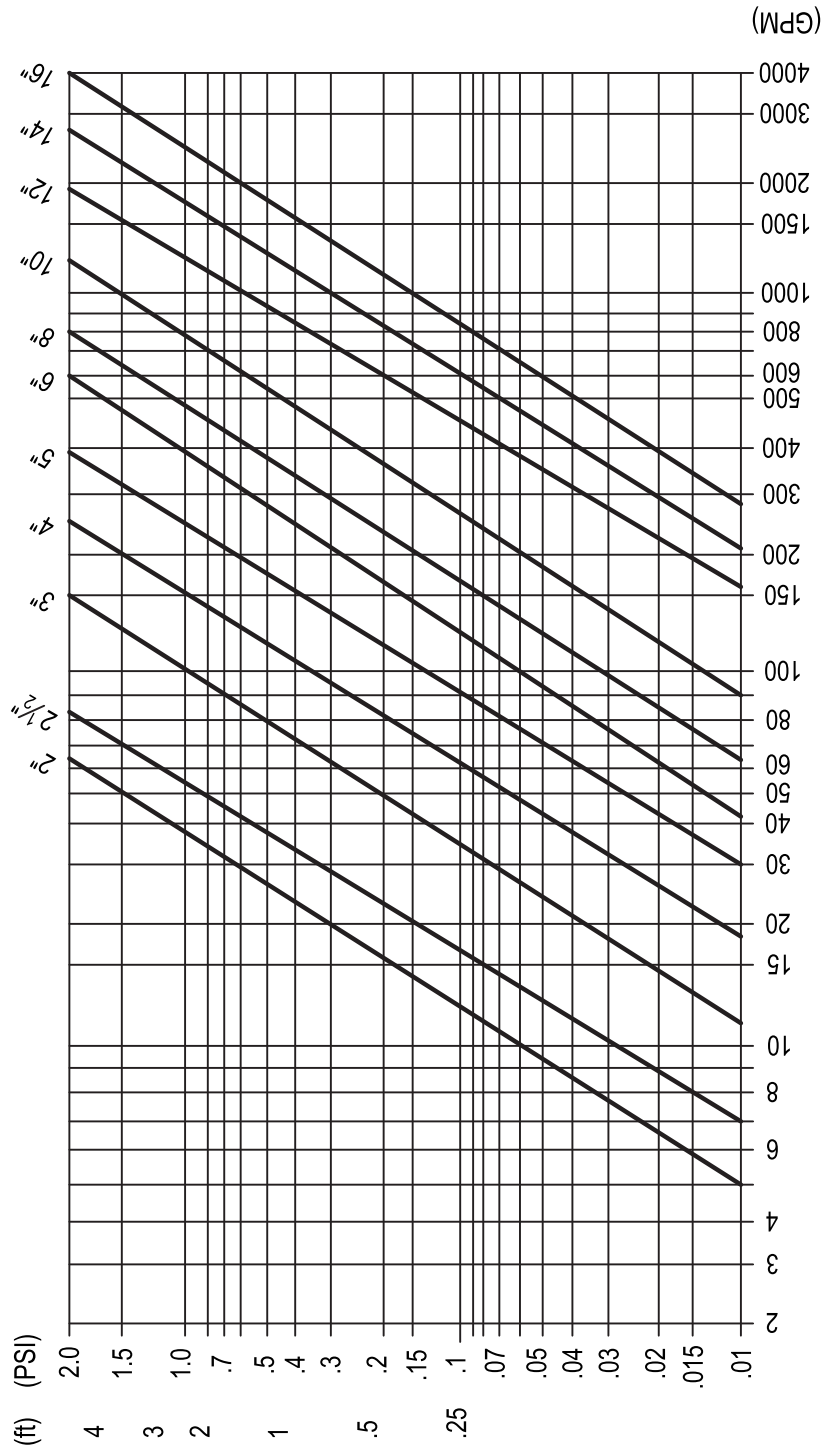
Non Removable Cover Type Standard Velocity High Flow Air And Dirt Separator



Model No.	Size (Inch)	Optimum Flow GPM	A (Inch)	B (Inch)	C (Inch)	D (Inch)	E (Inch)	F (Inch)	Pall Ring Surface area (sq.ft)	Approx wt (lbs)	Blowdown valve size (Inch)	Air vent (Inch)
ADS-NR-S-2	2	51	10	17	20	8	-	-	12.7	30	1"	1"
ADS-NR-S-2.5	2.5	73	10	17	20	8	-	-	12.7	40	1"	1"
ADS-NR-S-3	3	113	12	23	22	12	-	-	12.7	75	1"	1"
ADS-NR-S-4	4	204	12	23	22	12	-	-	22	90	1"	1"
ADS-NR-S-5	5	306	14	29	24	16	-	13	22	230	1"	1"
ADS-NR-S-6	6	469	14	29	24	16	14	13	37	245	1"	1"
ADS-NR-S-8	8	816	18	37	28	19	14	13	78	525	1"	1"
ADS-NR-S-10	10	1291	24	47	36	26	18	13	133	615	1"	1"
ADS-NR-S-12	12	1837	24	55	36	27	20	13	148	695	1 1/2"	1"
ADS-NR-S-14	14	2106	30	62	42	33	24	14	294	1000	1 1/2"	1"
ADS-NR-S-16	16	2790	30	68	42	34	24	14	331	1055	1 1/2"	1"
ADS-NR-S-18	18	3673	36	91	48	43	30	14	572	1650	1 1/2"	1"
ADS-NR-S-20	20	4561	42	100	54	46	38	13	840	2410	1 1/2"	1"
ADS-NR-S-22	22	5300	48	109	60	52	44	13	1216	3190	1 1/2"	1"
ADS-NR-S-24	24	6346	48	118	60	54	44	13	1296	3360	1 1/2"	1"
ADS-NR-S-26	26	7647	54	127	67	58	50	14	1687	4620	1 1/2"	1"
ADS-NR-S-30	30	10262	60	145	74	63	54	14	2337	7050	1 1/2"	1"
ADS-NR-S-36	36	14905	72	172	90	77	66	16	3994	12030	1 1/2"	1"

Air And Dirt Separator Standard Velocity Model Pressure Drop Curve

Model No	Optimum Flow GPM
ADS-XX-S-2	51
ADS-XX-S-2.5	73
ADS-XX-S-3	113
ADS-XX-S-4	204
ADS-XX-S-5	306
ADS-XX-S-6	469
ADS-XX-S-8	816
ADS-XX-S-10	1291
ADS-XX-S-12	1837
ADS-XX-S-14	2106
ADS-XX-S-16	2790
ADS-XX-S-18	3673
ADS-XX-S-20	4561
ADS-XX-S-22	5300
ADS-XX-S-24	6346
ADS-XX-S-26	7647
ADS-XX-S-30	10262
ADS-XX-S-36	14905



Typical Specifications

Furnish and install, as shown on plans, a removable / non removable type Air and Dirt separator. The unit shall have flanged inlet and outlet connections to the vessel. A vent connection shall be fitted to the top of the vessel to enable installation of Airvent.

Air and Dirt separators shall have all steel body construction designed fabricated and stamped as per ASME Section VIII Div I with a working pressure of 10 bar.

Each Air & Dirt Separator to be fitted with a blow off tap to remove the air trapped within the separator. Air and Dirt Separator shall use high surface area pall rings made of stainless steel 304 to separate air and dirt with minimal pressure drop. Removable type Air and Dirt separator shall have removable upper head for removal, inspection and cleaning of the pall ring basket.

RANGE OF PRODUCTS

HEAT EXCHANGER PACKAGE

AIR RECEIVER

OIL AND GAS FIRED WATER HEATERS

INDIRECT HEATED STORAGE CALORIFIERS

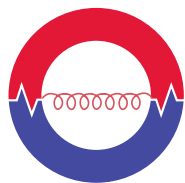
AIR SEPARATORS

FEED TANKS & CONDENSATE RECEIVERS

BLOWDOWN VESSEL

ELECTRIC WATER HEATERS

CHILLED WATER BUFFER TANKS



PRECISION

Precision Storage Vessels Pvt. Ltd.

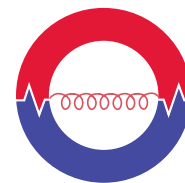
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