Innovative Air Solutions

CORAL USA CORP.
19121 Marketplace Avenue, Bldg. 1 Suite 165 KYLE, TX 78640, United States of America
Cell: +1 480 796 5352 **E:** info@coral.us **www.coralnorthamerica.com**

WELDING | GRINDING | DEBURRING | POLISHING | SANDING | THERMAL CUTTING | DRY DUST | HAZARDOUS DUST | SANDBLASTING | POWDER COATING

AIRALT / AIRALT M

Dust & Fume collector with fully automatic reverse pulse cleaning

Overview

The Coral AIRALT is a high efficiency dust collection system that is used in many industrial, chemical, and pharmaceutical applications.

Working Principle

The contaminated air enters into the bottom of the dust collector hopper where a significant decrease in velocity occurs causing the larger solids to drop into the collection hooper.

The air then continues to flow up into the filter chamber where the finer or lighter solids are removed by either large surface area filter cartridges (AIRALT) or filtering sleeves (AIRALT/M). As the contaminated air flows through the filter cartridges (AIRALT) or the filter sleeves (AIRALT/M) from the outside to the inside, the dust is collected on the outside. The clean air is then discharged.

Reverse pulse cleaning

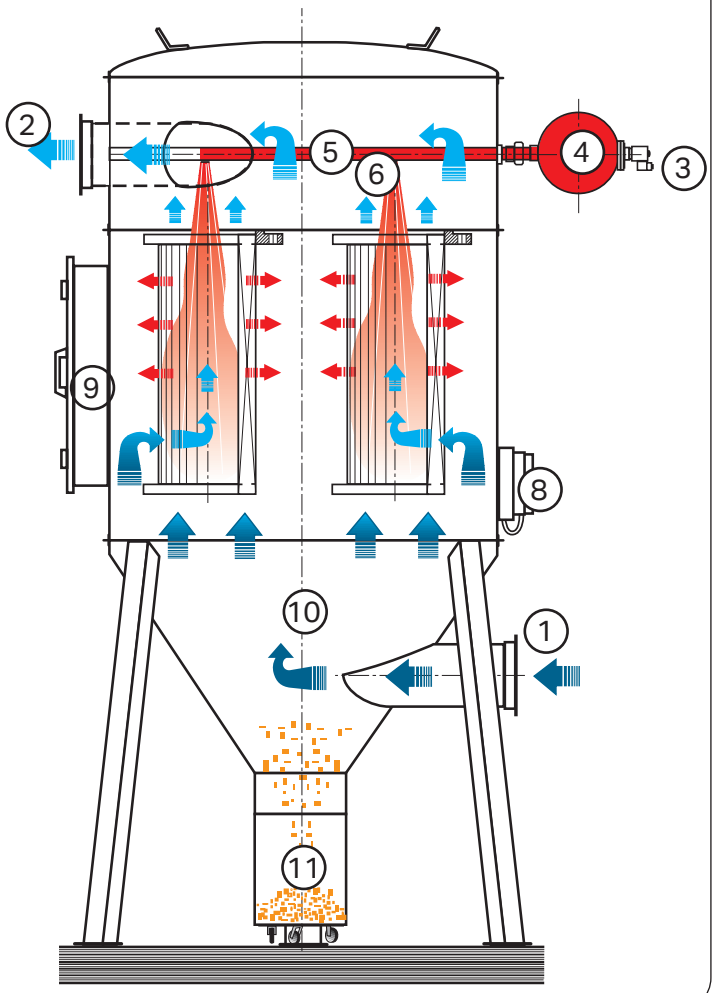
As dust is removed and gradually accumulates on the filter cartridges or sleeves, our Coral automated cleaning system senses that the filter cartridges are becoming clogged and initiates a jet cleaning system. The jet cleaning system uses a blast of compressed air which creates a shock wave and causes the collected solids to fall off the filter cartridges down into a lower collection bin.

Cleaning cycles can be controlled by a timer and solenoid valves or by a PLC with a differential pressure sensor which monitors the pressure loss through the filter cartridges or sleeves and back pulses on demand. The filter cartridges or filter sleeves are always kept at peak efficiency by the cleaning cycles. After an initial period of operation, the filter cartridges reach a constant pressure drops and will continue operating efficiently for long periods of time.

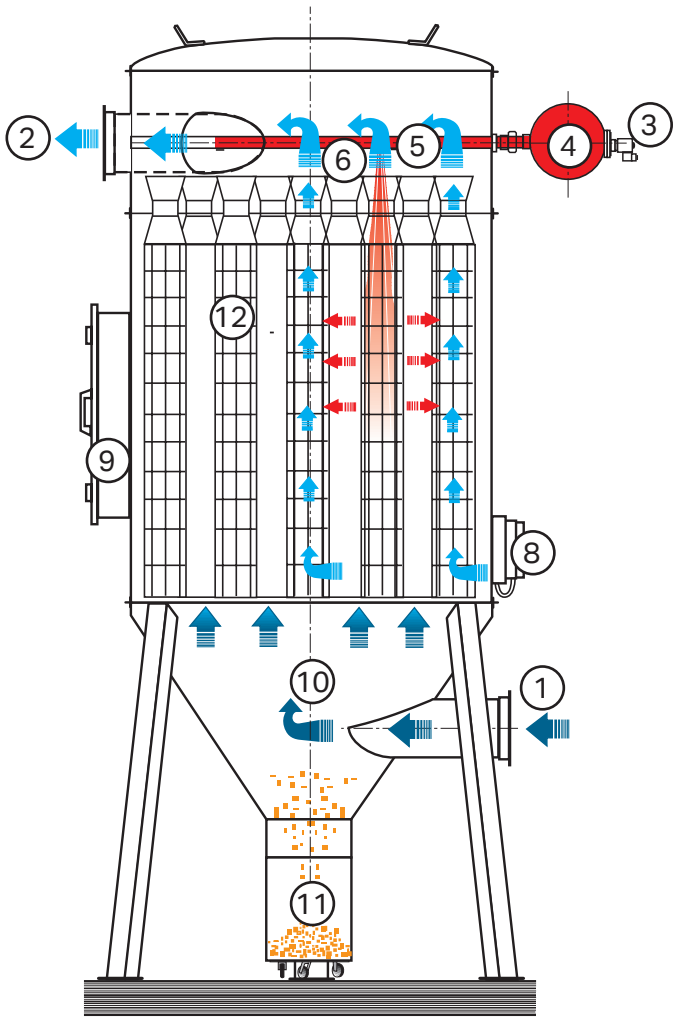
AIRALT

OPERATING PRINCIPLE

AIRALT



AIRALT/M



LEGEND

- Inlet for air to be treated
- Pollutant
- Clean air outlet
- Reverse pulse compressed air

1 Polluted air inlet
2 Filtered air outlet
3 Electrovalve
4 Compressed air tank
5 Distribution pipe
6 Nozzles
7 Filtering cartridge
8 Cyclic programmer
9 Maintenance door
10 Hopper
11 Collection bin (up to Ø2000mm)
12 Filtering sleeves

CORAL
Innovative Air Solutions

AIRALT

2 FILTERING CARTRIDGE

STANDARD

M PES

polyester

OPTIONALS

M PES/TF

polyester/PTFE coating

M PES+ PTFE/membrane

polyester/teflon membrane

M-PES/AX/EXAM ACCREDITED

polyester/aluminum coated/antistatic

M-PES+PTFE/Membrane-H

Fabric with H13 filtration efficiency

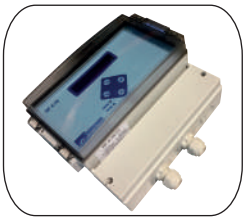
⚠ • Cartridge model choice could affect various parameters.

4

***MEMBRANE ELECTRO VALVE**: two way valve normally closed; it is activated by an electric solenoid. It holds air pressure of max.7 bar.*
The compressed air tank operates at 4 to 7 bar.

	AIRALT 19-24	AIRALT 33-149	AIRALT 206-675	AIRALT/M
SOLENOID VALVE MODEL	VPN 508 24/50	VPN 514 24/50	VPN 516 24/50	VPN 508 24/50
GAS FITTINGS (IN)	1	1 ½	2	1
PRESSURE (P.S.I.)	Min. 0,5	5 Recommended	Max 7	
MAX FLUID TEMPERATURE (°F)	80	80	80	80
VOLTAGE (V)	24 AC	24 AC	24 AC	24 AC
FREQUENCY (HZ)	60	60	60	60
POWER ABSORBED (V)	19 AC 15 DC	19 AC 15 DC	19 AC 15 DC	19 AC 15 DC
PROTECTION RATING	IP 65	IP 65	IP 65	IP 65

6



ENERGY SAVING

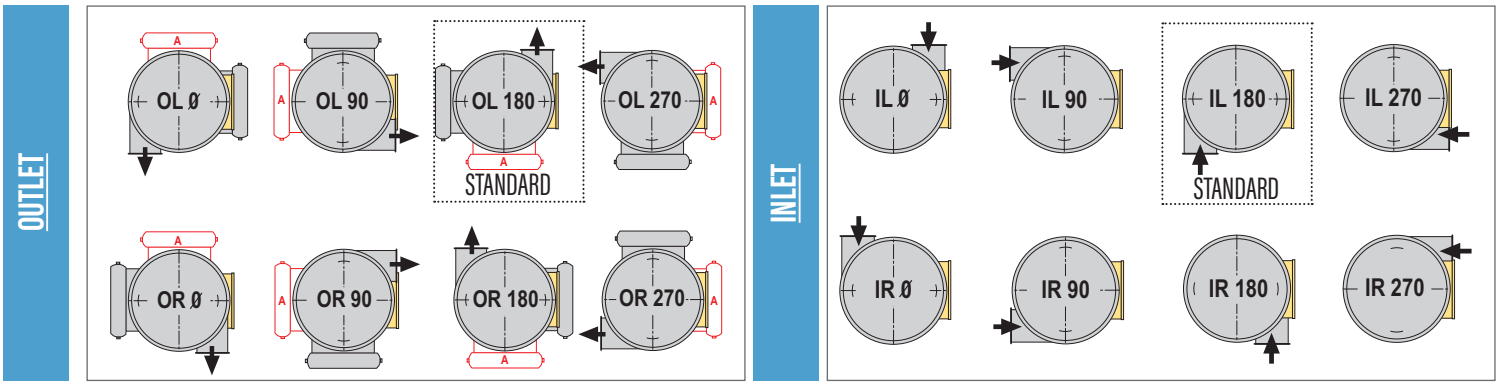
***CYCLIC PROGRAMMER (PLC):** a sealed container is used with a transparent lid, duration of injection and pause phases are preset but easily changeable.*

IN/OUT VOLTAGE	230 V / 24VAC
MAXIMUM CHARGING POWER	20VA pulse
TEMPERATURE RANGE	-15°C ÷ +50°C
DISPLAY	5 LEDs h 13mm
PROTECTION RATING	IP65
DP CONTROL	Internal transducer 0÷10 kPa
DIMENSIONS	235 x 190 x 120 mm
TERMINAL BOARD	2.5 mm^2 250VAC

AIRALT

TECHNICAL FEATURES

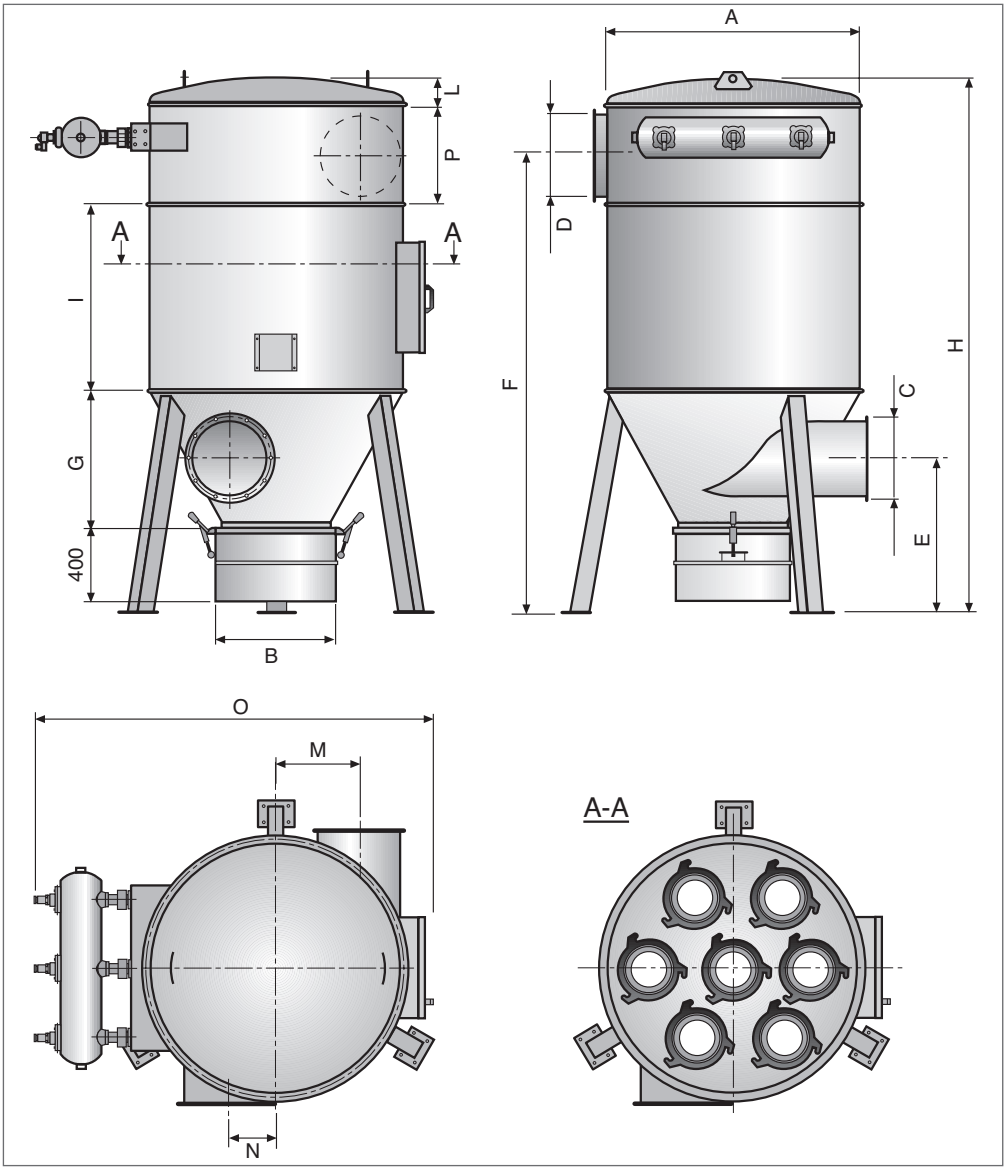
OUTLET (OUTLET) AND IONLET (INLET) SIDE refering to maintenance door position

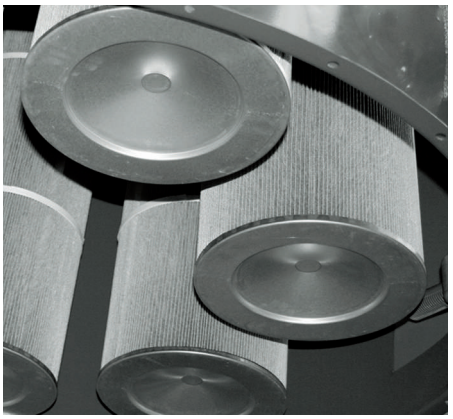


A = OPTIONAL tank position (on request)

= Inspection port

AIRALT 19-24-33-40-51-64-81-101-122-149-206-248

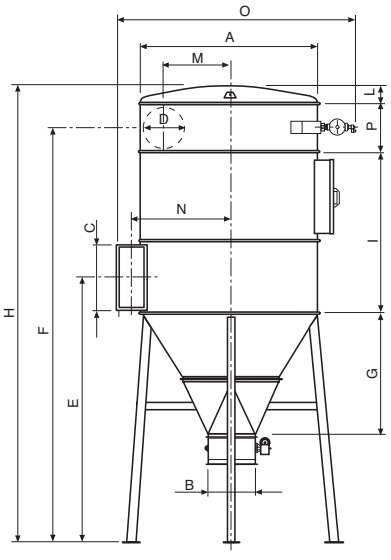




IFA/BGIA L-PES standard polyester cartridge

AIRALT 360-555-675

Models over 78" diameter



	DIMENSIONS (inches)													
	Ø A	Ø B	Ø C	Ø D	E	F	G	H	I	L	M	N	O	P
AIRALT 19	23	9	5	5	24	68	16	81	28	5	8	3	48	15
AIRALT 24	23	9	5	5	24	79	16	93	40	5	8	3	48	15
AIRALT 33	39	16	11	11	29	90	23	106	40	4	13	6	68	20
AIRALT 40	39	16	11	11	29	90	23	106	40	4	13	6	68	20
AIRALT 51	39	16	11	11	29	90	23	106	40	4	13	6	68	20
AIRALT 64	39	16	11	11	29	90	23	106	40	4	13	6	68	20
AIRALT 81	49	24	13	13	36	99	32	114	40	6	17	11	79	20
AIRALT 101	49	24	13	13	36	99	32	114	40	6	17	11	79	20
AIRALT 122	55	24	17	17	33	97	30	114	40	6	18	9	87	20
AIRALT 149	62	24	17	17	37	99	32	115	40	6	22	13	96	20
AIRALT 206	78	24	21	21	50	124	53	146	40	8	28	16	114	27
AIRALT 248	78	24	21	21	50	124	53	146	40	8	28	16	114	27
AIRALT 360	118	11 x 31	41 x 18	26	175	273	82	316	106	26	43	64	150	31
AIRALT 555	137	11 x 31	41 x 18	29	188	288	95	337	106	30	51	73	169	35
AIRALT 675	157	11 x 31	51 x 26	35	204	316	112	372	118	32	61	86	202	47

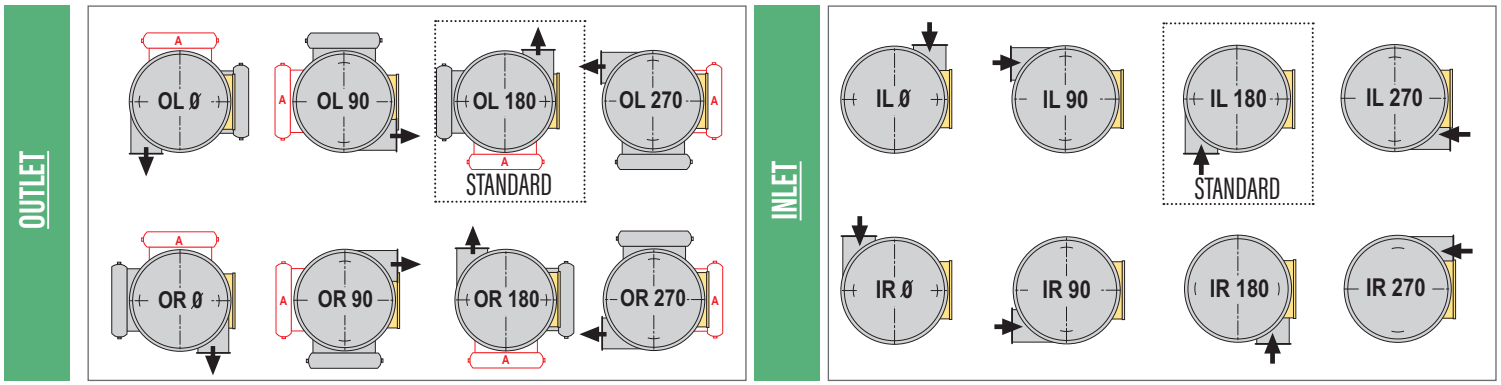
	Dust holding capacity	Filtering surface	Max flow rate (indicative)	Max operating pressure	Valve N°	Air tank volume	* Air volume per valve	Cartridges (N°-Ø-H-pleats)
	ft³	sq.ft	cfm	psi		in³	in³	cfm
AIRALT 19	0.6	204	800	100	3x1"	790	5300	7-Ø5-27-2
AIRALT 24	0.6	258	1175	100	3x1"	790	5300	7-Ø5-39-2
AIRALT 33	1.94	355	1470	100	2x1"1/2	1342	13240	4-Ø12-27-5
AIRALT 40	1.94	430	1880	100	2x1"1/2	1342	13240	4-Ø12-27-6
AIRALT 51	1.94	549	2350	100	2x1"1/2	1342	13240	4-Ø12-39-5
AIRALT 64	1.94	688	2940	100	2x1"1/2	1342	13240	4-Ø12-39-6
AIRALT 81	4.41	870	3820	100	3x1"1/2	2074	13240	6-Ø12-39-5
AIRALT 101	4.41	1086	4700	100	3x1"1/2	2074	13240	6-Ø12-39-6
AIRALT 122	4.41	1313	2288	100	3x1"1/2	2074	13240	7-Ø12-39-6
AIRALT 149	4.41	1604	6765	100	3x1"1/2	2074	13240	9-Ø12-39-6
AIRALT 206	4.41	2218	9705	100	5x2"	5614	21175	16-Ø12-39-5
AIRALT 248	4.41	2670	11765	100	5x2"	5614	21175	16-Ø12-39-6
AIRALT 360	-	3865	16470	100	6x2"	7078	21175	24-Ø12-39-6
AIRALT 555	-	5970	16470	100	6x2"	7078	21175	37-Ø12-39-6
AIRALT 675	-	7265	16470	100	6x2"	7078	21175	45-Ø12-39-6

* With valve open 0,2 seconds, tank pressure 5 bar

AIRALT/M

TECHNICAL FEATURES

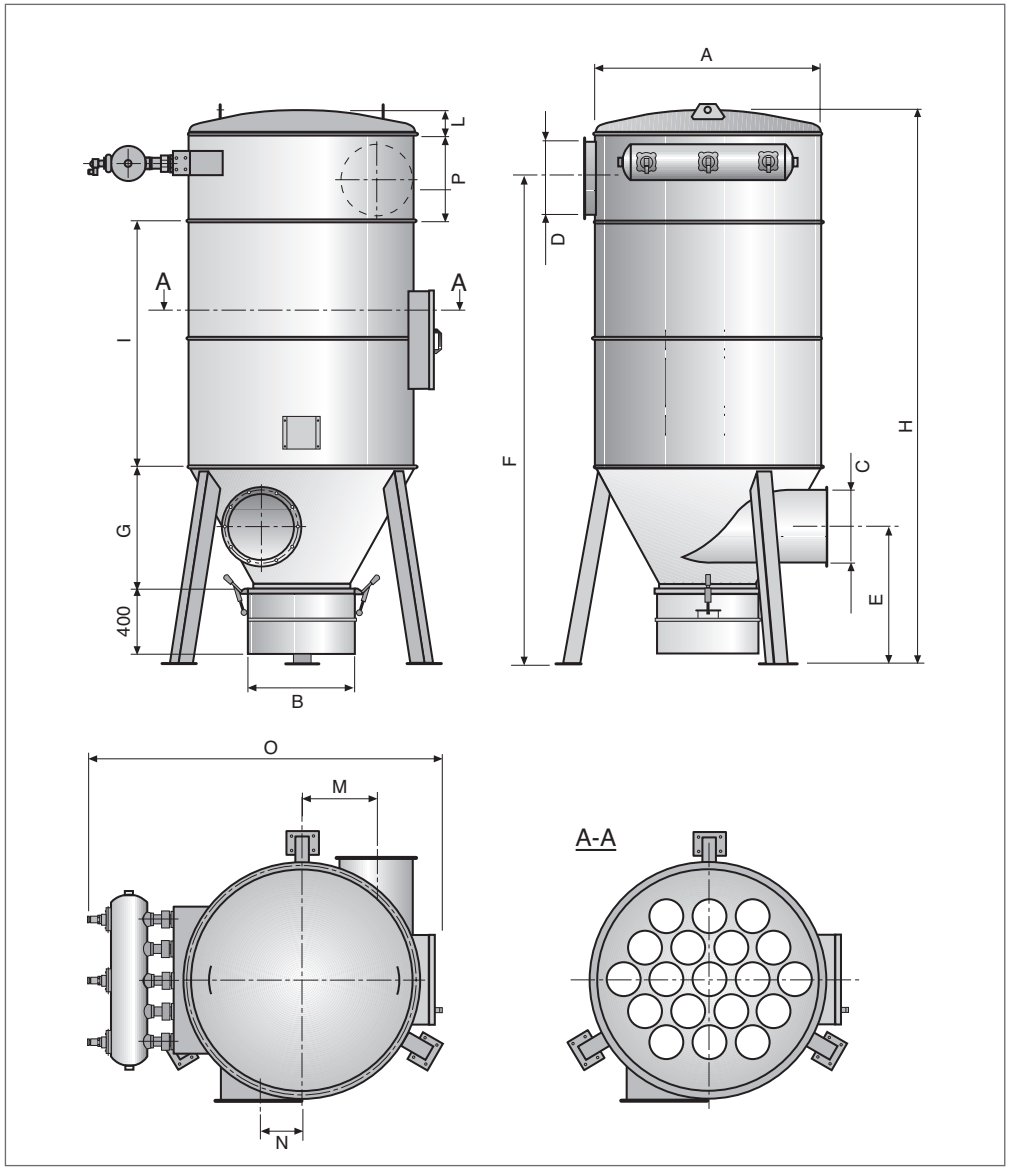
OUTLET (OUTLET) AND IONLET (INLET) SIDE refering to maintenance door position



A = OPTIONAL tank position (on request)

= Inspection port

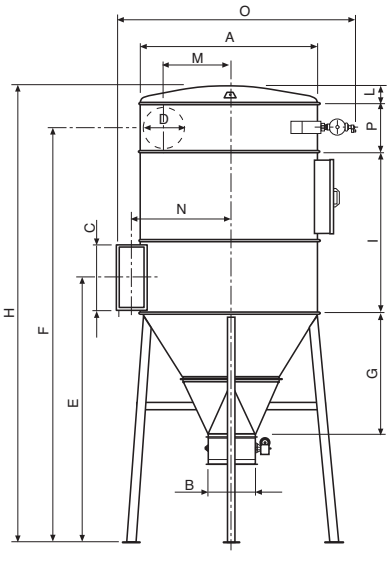
AIRALT/M 11-14-18-26-33-40-41-51-61-69-87-104



IFA/BGIA L-PES standard polyester sleeves

AIRALT/M 121-151-181-206-247-292-350

Models over 78" diameter



	DIMENSIONS (inches)													
	ØA	ØB	ØC	ØD	E	F	G	H	I	L	M	N	O	P
AIRALT/M 11/1.5	39	16	11	11	29	109	23	125	59	4	13	6	63	20
AIRALT/M 14/2.0	39	16	11	11	29	129	23	144	78	4	13	6	63	20
AIRALT/M 18/2.5	39	16	11	11	29	149	23	164	98	4	13	6	63	20
AIRALT/M 26/2.0	49	24	13	13	36	139	32	154	78	5	17	11	74	20
AIRALT/M 33/2.5	49	24	13	13	36	159	32	174	98	5	17	11	74	20
AIRALT/M 32/2.0	55	24	17	17	33	136	30	152	78	6	18	9	80	20
AIRALT/M 40/2,5	55	24	17	17	33	155	30	172	98	6	18	9	80	20
AIRALT/M 41/2.0	62	24	17	17	37	137	32	153	78	6	22	13	89	20
AIRALT/M 51/2.5	62	24	17	17	37	157	32	173	98	6	22	13	89	20
AIRALT/M 61/3.0	62	24	17	17	37	177	32	193	118	6	22	13	89	20
AIRALT/M 69/2.0	78	24	21	21	50	163	53	184	78	7	28	16	106	27
AIRALT/M 87/2.5	78	24	21	21	50	183	53	204	98	7	28	16	106	27
AIRALT/M 104/3.0	78	24	21	21	50	202	53	224	118	7	28	16	106	27
AIRALT/M 121/2.0	118	11 x 31	41 x 18	26	175	332	82	375	165	26	43	64	150	31
AIRALT/M 151/2.5	118	11 x 31	41 x 18	26	175	332	82	375	165	26	43	64	150	31
AIRALT/M 181/3.0	118	11 x 31	41 x 18	26	175	332	82	375	165	26	43	64	150	31
AIRALT/M 206/2.5	137	11 x 31	41 x 18	29	188	348	95	396	165	30	51	73	169	35
AIRALT/M 247/3.0	137	11 x 31	41 x 18	29	188	348	95	396	165	30	51	73	169	35
AIRALT/M 292/2.5	157	11 x 31	51 x 26	35	204	375	113	431	177	32	61	86	202	47
AIRALT/M 350/3.0	157	11 x 31	51 x 26	35	204	375	113	431	177	32	61	86	202	47

	Dust holding capacity	Filtering surface	Max flow rate (indicative)	Max operating pressure	Valve N°	Air tank volume	* Air volume per valve	Cartridges (N°-Ø- H)
	ft³	sq.ft	cfm	psi		in³	in³	cfm
AIRALT/M 11/1.5	1.94	118	880	100	5x1"	1013	5300	19-Ø4-59
AIRALT/M 14/2.0	1.94	150	1100	100	5x1"	1013	5300	19-Ø4-78
AIRALT/M 18/2.5	1.94	194	1500	100	5x1"	1013	5300	19-Ø4-98
AIRALT/M 26/2.0	4.41	280	2000	100	7x1"	1350	5300	35-Ø4-78
AIRALT/M 33/2.5	4.41	355	2600	100	7x1"	1350	5300	35-Ø4-98
AIRALT/M 32/2.0	4.41	344	2500	100	7x1"	1350	5300	42-Ø4-78
AIRALT/M 40/2,5	4.41	430	3200	100	7x1"	1350	5300	42-Ø4-98
AIRALT/M 41/2.0	4.41	441	3200	100	9x1"	1685	5300	54-Ø4-78
AIRALT/M 51/2.5	4.41	549	3900	100	9x1"	1685	5300	54-Ø4-98
AIRALT/M 61/3.0	4.41	657	4700	100	9x1"	1685	5300	54-Ø4-118
AIRALT/M 69/2.0	4.41	743	5300	100	13x1"	2355	5300	92-Ø4-78
AIRALT/M 87/2.5	4.41	936	6650	100	13x1"	2355	5300	92-Ø4-98
AIRALT/M 104/3.0	4.41	1120	8000	100	13x1"	2355	5300	92-Ø4-118
AIRALT/M 121/2.0	-	1300	9200	100	19x1"	3393	5300	156-Ø4-78
AIRALT/M 151/2.5	-	1625	11500	100	19x1"	3393	5300	156-Ø4-98
AIRALT/M 181/3.0	-	1948	13800	100	19x1"	3393	5300	156-Ø4-118
AIRALT/M 206/2.5	-	2217	15700	100	21x1"	3660	5300	213-Ø4-98
AIRALT/M 247/3.0	-	2648	18800	100	21x1"	3660	5300	213-Ø4-118
AIRALT/M 292/2.5	-	3132	22200	100	27x1"	4700	5300	252-Ø4-98
AIRALT/M 350/3.0	-	3767	26800	100	27x1"	4700	5300	252-Ø4-118

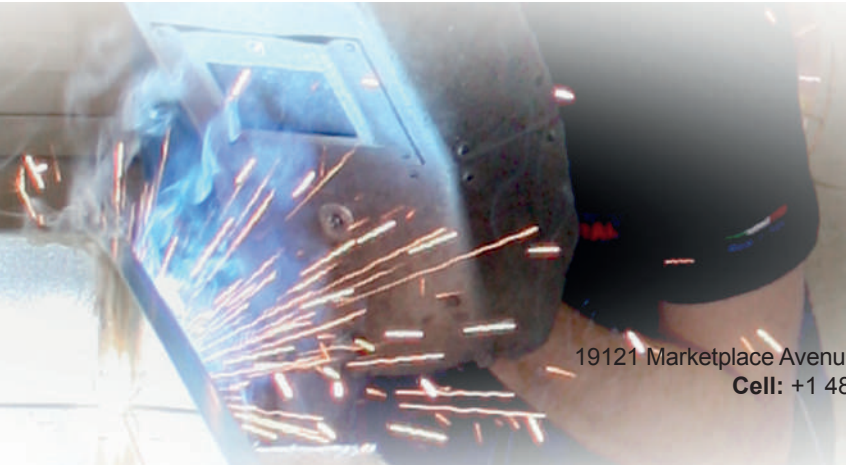
* With valve open 0,2 seconds, tank pressure 5 bar

AIRALT/M

coralnorthamerica.com

ONE Company

ONE Solution



CORAL
Innovative Air Solutions

CORAL USA CORP.
19121 Marketplace Avenue, Bldg. 1 Suite 165 KYLE, TX 78640, United States of America
Cell: +1 480 796 5352 **E:** info@coral.us **www.coralnorthamerica.com**