

## F101 & F102 Particulate & Coalescing Series Filters

### ASME code filters built to last.

Van Air Systems F101 & F102 series coalescing and particulate filters remove solids, liquids, and oil aerosols from compressed air and gas systems. The F101 series include six filter housings available with flows from 500 to 5000 SCFM at 100 PSIG (6.9 BARG). F101 series filters offer 10 filtration grades that remove oil or solid particles. F102 series filters include nine housings with flows ranging from 1,500 to 20,000 SCFM at 100 PSIG (6.9 BARG). F102 series filters include a primary sump chamber for the efficient separation of bulk liquids, eliminating the need for an upstream liquid separator. In both the F101 and F102 design, high quality Van Air Systems elements ship with the filter housing. All housings are built and stamped in accordance with ASME code, Section VIII, Div. I, latest edition designed for 250 PSIG (17.2 BARG) at 225°F (107°C).

### F101 & F102 series filters are ideal for:

- Pre-filtration compressed air dryers
- Particulate removal downstream of desiccant dryers
- Abrasive blasting, point of use
- Pulse air dust collectors

FEATURES

- Maximum working pressure – 250 PSIG (17.2 BARG), 225°F (107°C)**
- ASME code stamp, section VIII**
- Welded carbon steel construction**
- (10) available element grades to suite every need**
- Large reservoirs facilitate draining**



### BENEFITS OF THE F101 & F102 SERIES FILTERS

Long lasting // Reduce maintenance

[vanairsystems.com](http://vanairsystems.com)

## SPECIFICATIONS

- Carbon steel housing
- Maximum working pressure: 250 PSIG (17.2 BARG)
- Port locations for installation of pressure differential gauge
- Housing interior – alkyd enamel
- Housing exterior – primer & enamel
- Color filter element
- Stainless steel internal tie rod & hex fastener
- O-ring element seal
- Inline connections

## F101

- Inlet/outlet – NPT or ANSI RF Flange
- Filter element access – through flange at bottom of housing
- Manual drain valve included

## F102

- Inlet/outlet – ANSI RF Flanges
- Housing – leg mounted & free standing
- Filter element access – through top of housing via O-ring sealed swing closure
- (2) manual drain valves

## OPTIONAL EQUIPMENT

- Pressure differential gauge
- Automatic drain

## DIMENSIONS & SPECIFICATIONS

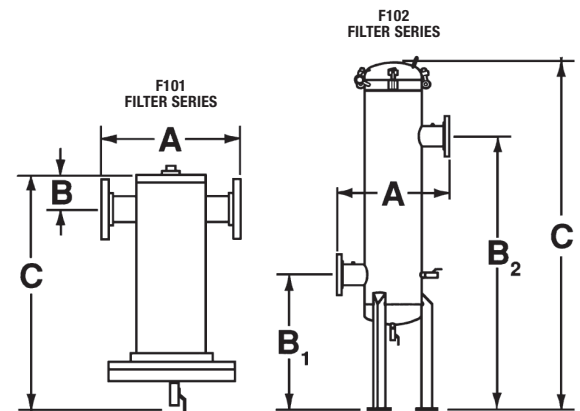
Model No.	A		B1		B2		C		In/Out Conn.	Drain Conn.	Replacement Element	Weight		No. of Elements
	in	cm	in	cm	in	cm	in	cm				lbs	kg	
F101-500-(* )	11 7/8	31	4 5/8	12	-	-	39	99	2" NPT	1/2" NPT	E101/102-500-(* )	100	45	1
F101-1000-(* )	15 1/2	40	5 1/4	14	-	-	41 1/8	105	3" NPT	1/2" NPT	E101/102-500-(* )	149	68	2
F101-1500-(* )	17 3/4	45	6 1/4	16	-	-	44 1/2	113	3" NPT	1/2" NPT	E101/102-500-(* )	240	109	3
F101-2000-(* )	18	46	6 3/8	17	-	-	50 7/8	130	4" FLG	1/2" NPT	E101/102-625-(* )	260	118	3
F101-3500-(* )	24 3/4	63	14	36	-	-	56 5/8	144	6" FLG	1/2" NPT	E101/102-625-(* )	390	177	5
F101-5000-(* )	28	72	15 1/2	40	-	-	61 5/8	157	6" FLG	1" NPT	E101/102-625-(* )	600	272	8
F102-1500-(* )	18 3/4	48	32	81	70 3/4	180	82	209	3" FLG	(2) 1" NPT	E101/102-500-(* )	250	114	3
F102-2000-(* )	18 3/4	48	32	81	77 1/2	197	89 1/2	228	4" FLG	(2) 1" NPT	E101/102-625-(* )	325	148	3
F102-3500-(* )	24 3/4	63	33 1/2	85	78 1/2	200	92	234	6" FLG	(2) 1" NPT	E101/102-625-(* )	385	175	5
F102-5000-1(* )	28	72	33 1/2	85	78 1/2	200	93	237	6" FLG	(2) 1" NPT	E101/102-625-(* )	550	250	8
F102-7500-(* )	32	82	34 1/2	88	80 1/2	205	98 1/4	250	8" FLG	(2) 1" NPT	E101/102-625-(* )	735	333	12
F102-10,000-(* )	36	92	35 1/2	91	83 3/4	213	104 3/8	266	10" FLG	(2) 1" NPT	E101/102-625-(* )	1150	521	16
F102-12,500-(* )	36	92	35 1/2	91	83 3/4	213	104 3/8	266	10" FLG	(2) 1" NPT	E101/102-625-(* )	1150	521	20
F102-15,000-(* )	42	107	44 1/2	113	94 3/4	241	117 3/4	299	12" FLG	(2) 1" NPT	E101/102-625-(* )	1675	759	24
F102-20,000-(* )	52	132	46	117	99 1/4	252	126	320	16" FLG	(2) 1" NPT	E101/102-625-(* )	2300	1042	32

**Note:** Due to our policy of continuous improvement, dimensions and specifications may change without notice. Before pre-piping, request a certified drawing. Flanges are ANSI Class 150 R. F. All F101 and F102 filter bodies are built and stamped per ASME code. F101-3500 and 5000 models have elliptical top heads. (\* ) Filter Element Grade

## FLOW CAPACITIES AT VARIOUS PRESSURES PSIG (BARG)

Model No.	50 (3.4)		100 (6.9)		150 (10.3)		200 (13.8)		250 (17.2)	
	SCFM	NM3/HR	SCFM	NM3/HR	SCFM	NM3/HR	SCFM	NM3/HR	SCFM	NM3/HR
F101-500-(* )	280	450	500	804	720	1158	935	1503	1155	1857
F101-1000-(* )	565	909	1000	1608	1435	2307	1870	3007	2310	3714
F101-1500-(* )	845	1359	1500	2412	2155	3465	2810	4518	3460	5564
F101-2000-(* )	1130	1817	2000	3216	2870	4615	3745	6022	4615	7421
F101-3500-(* )	1975	3176	3500	5628	5025	8080	6550	10532	8080	12993
F101-5000-(* )	2820	4535	5000	8040	7180	11545	9360	15051	11540	18556
F102-1500-(* )	845	1359	1500	2412	2155	3465	2810	4518	3460	5564
F102-2000-(* )	1130	1817	2000	3216	2870	4615	3745	6022	4615	7421
F102-3500-(* )	1975	3176	3500	5628	5025	8080	6550	10532	8080	12993
F102-5000-(* )	2820	4535	5000	8040	7180	11545	9360	15051	11540	18556
F102-7500-(* )	4230	6802	7500	12060	10770	17318	14040	22576	17310	27834
F102-10,000-(* )	5640	9069	10000	16080	14360	23091	18720	30102	23080	37113
F102-12,500-(* )	7050	11336	12500	20100	17950	28864	23400	37627	28850	46391
F102-15,000-(* )	8460	13604	15000	24120	21540	34636	28080	45153	34620	55669
F102-20,000-(* )	11280	18138	20000	32160	28720	46182	37440	60204	46160	74225

(\* ) Filter Element Grade



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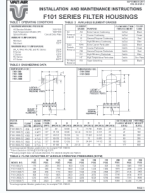
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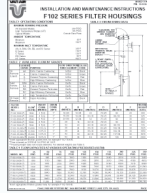
# F101 & F102 Series Filters - PDF Downloads

## Installation, Operation and Maintenance Manuals

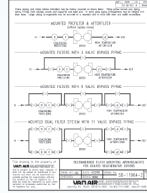
F101



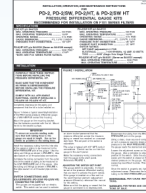
F102



Mounting Filters for  
Regenerative Desiccant Dryers

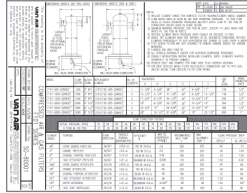


PD-2 Pressure  
Differential Gauge Kits

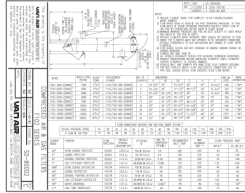


## Sales Drawings

F101



F102



## Filtration Grades

GRADE	MICRON RATING	OIL CARRYOVER PPM (W/W)	DESCRIPTION
AA	25	7.8	Extra coarse coalescing
A	5	3.9	Coarse coalescing
B	1	0.78	General purpose coalescing
C	0.01	0.008	High efficiency coalescing
RAA	25	N/A	Extra coarse particulate
RA	5	N/A	Coarse particulate
RB	1	N/A	General purpose particulate
RC	0.01	N/A	High efficiency particulate
RD	0.01	0.004	Oil vapor adsorbing
HT	1	-	High temperature particulate

Grade RD Elements must not operate in oil saturated conditions.  
Replace periodically to suit application but change at least every 6 months.