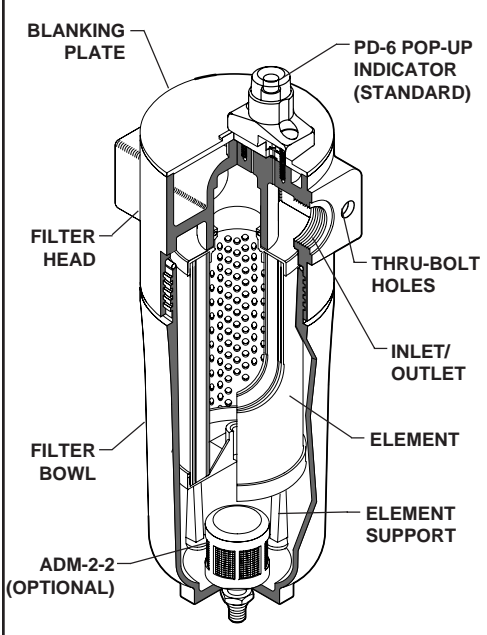
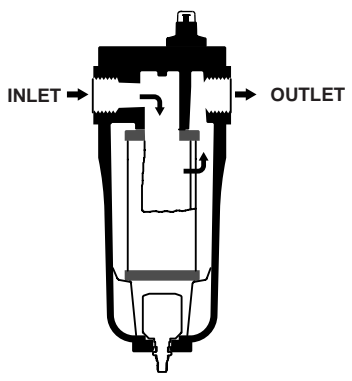
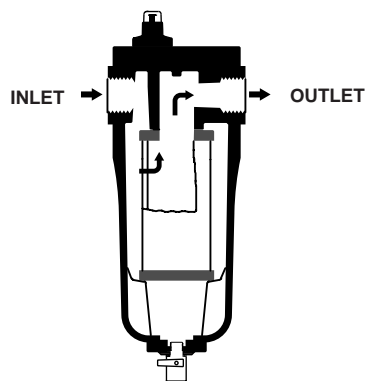


# INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

## F200 SERIES COMPRESSED AIR & GAS FILTERS

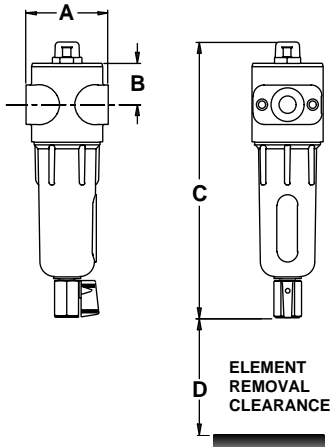
### PRODUCT PURPOSE & FUNCTION:

Van Air's F200 series filters are designed to remove contaminants from compressed air & gas systems. Available in 1/4" to 3" connection sizes and flow capacities from 15 to 1000 scfm (at 100 psig) in 14 housings and 9 filtration grades, the F200 series can remove oil aerosols, oil vapors, water and particulates. Housings are made of cast aluminum and coated with an epoxy powder coating for corrosion resistance. All units include push-on elements with durable polyester drain layer (except RD grade). Accessories include differential pressure indicators, wall mounting kits, connector kits, and automatic drain valves.

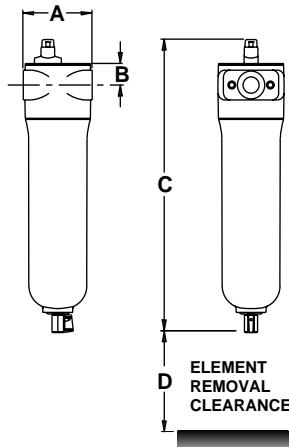
FILTER DETAILS		FLOW DIRECTION THROUGH ELEMENT			
		<p>(COALESCING) IN/OUT</p> 		<p>(PARTICULATE) OUT/IN</p> 	
FILTRATION GRADES					
APPLICATION	ELEMENT GRADE	PURPOSE	NOMINAL PARTICULATE REMOVAL	ELEMENT FLOW DIRECTION	COLOR CODE
Oil Removal (Liquids)	AA	Extra Coarse Coalescing	25.00µ	IN/OUT	BLACK
	A	Coarse Coalescing	5.00µ	IN/OUT	GREEN
	B	General Purpose Coalescing	1.00µ	IN/OUT	RED
	C	High Efficiency Coalescing	0.01µ	IN/OUT	BLUE
Particulate Removal (Solids)	RAA	Extra Coarse Particulate	25.00µ	OUT/IN	BLACK
	RA	Coarse Particulate	5.00µ	OUT/IN	GREEN
	RB	General Purpose Particulate	1.00µ	OUT/IN	RED
	RC	High Efficiency Particulate	0.01µ	OUT/IN	BLUE
Oil Vapor Removal	RD	Vapor Absorbing	0.01µ	OUT/IN	BLACK
OPERATING CONDITIONS					
<b>MAXIMUM WORKING PRESSURE</b>					
All Models	250 PSIG				
<b>OPERATING TEMPERATURE</b>					
Minimum	35°F				
Maximum	225°F				
<b>MAXIMUM RECOMMENDED INLET TEMPERATURE</b>					
AA, A, RAA, RA, RB, and RC Series	225°F				
B Series	175°F				
C Series	125°F				
RD Series	80°F				
WARNINGS					
<ul style="list-style-type: none"> <li>• DO NOT REPLACE ANY ITEM ON FILTER WHILE IT IS PRESSURIZED.</li> <li>• DO NOT OPERATE A LEAKING FILTER. TAKE FILTER OUT OF SERVICE IMMEDIATELY.</li> <li>• DO NOT OPERATE ABOVE MAXIMUM WORKING PRESSURE (MWP) AT MAXIMUM OPERATING TEMPERATURE (°F).</li> <li>• USE THE PROPER RULES FOR THE GAS BEING PROCESSED.</li> </ul>					

## FILTER HOUSING DIMENSIONS & WEIGHTS

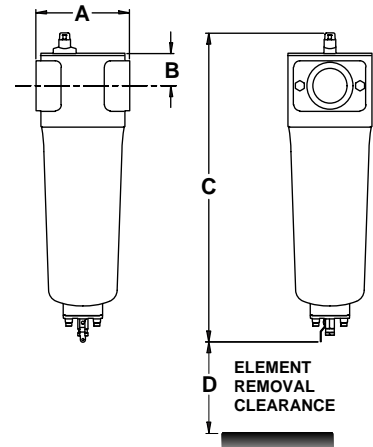
**DIMENSIONS FOR:**  
 F200-15-1/4  
 F200-25-3/8  
 F200-25-1/2



**DIMENSIONS FOR:**  
 F200-55-1/2    F200-150-1    F200-400-2  
 F200-85-3/4    F200-265-1-1/4    F200-500-2  
 F200-100-1    F200-350-1-1/2



**DIMENSIONS FOR:**  
 F200-600-3  
 F200-800-3  
 F200-1000-3



FILTER MODEL	FLOW** (SCFM)	IN/OUT CONN. (NPT)	A (INCHES)	B (INCHES)	C*** (INCHES)	D (INCHES)	HOUSING WEIGHT**** (LBS)	ELEMENT WEIGHT**** (LBS)
F200-15-1/4-(* )	15	1/4"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
F200-25-3/8-(* )	25	3/8"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
F200-25-1/2-(* )	25	1/2"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
F200-55-1/2-(* )	55	1/2"	3-7/16	1-5/16	11-3/4	4	3.2	0.3
F200-85-3/4-(* )	85	3/4"	4-15/16	1-5/8	14-9/16	4	5.7	0.5
F200-100-1-(* )	100	1"	4-15/16	1-5/8	14-9/16	4	5.7	0.6
F200-150-1-(* )	150	1"	4-15/16	1-5/8	20-7/16	6	6.7	0.9
F200-265-1-1/4-(* )	265	1-1/4"	4-15/16	1-5/8	20-7/16	6	6.7	1
F200-350-1-1/2-(* )	350	1-1/2"	5-5/16	2-1/16	21-3/8	6	8.7	1.1
F200-400-2-(* )	400	2"	5-5/16	2-1/16	21-3/8	6	8.7	1.1
F200-500-2-(* )	500	2"	5-5/16	2-1/16	29-3/8	6	9.9	2.3
F200-600-3-(* )	600	3"	7-7/8	2-3/4	24-1/2	8	19.8	2.7
F200-800-3-(* )	800	3"	7-7/8	2-3/4	30-1/16	8	21.9	3.6
F200-1000-3-(* )	1000	3"	7-7/8	2-3/4	34-3/4	12	28.1	4.3

\*Insert appropriate filtration grades here; for example F200-15-1/4-B.  
 \*\*\*Dimensions include filter housing, PD-6 and manual drain.

\*\*Flow is based on SCFM @ 100 PSIG @ 100°F.  
 \*\*\*\*For total filter weight, add element weight to housing weight.

## FLOW CAPACITIES AT VARIOUS OPERATING PRESSURES (SCFM)

FILTER MODEL	25 PSIG	50 PSIG	75 PSIG	100 PSIG	125 PSIG	150 PSIG	175 PSIG	200 PSIG	225 PSIG	250 PSIG
F200-15-1/4	8	11	13	15	17	18	20	21	23	24
F200-25-3/8	13	18	22	25	28	31	33	35	38	40
F200-25-1/2	13	18	22	25	28	31	33	35	38	40
F200-55-1/2	28	39	48	55	62	67	73	78	83	87
F200-85-3/4	43	60	74	85	95	104	112	120	128	134
F200-100-1	50	71	87	100	112	122	132	141	150	158
F200-150-1	75	107	131	150	168	183	198	212	225	237
F200-265-1-1/4	133	188	231	265	297	323	350	374	398	419
F200-350-1-1/2	175	249	305	350	392	427	462	494	525	553
F200-400-2	200	284	348	400	448	488	528	564	600	632
F200-500-2	250	355	435	500	560	610	660	705	750	790
F200-600-3	300	426	522	600	672	732	792	846	900	948
F200-800-3	400	568	696	800	896	976	1056	1128	1200	1264
F200-1000-3	500	710	870	1000	1120	1220	1320	1410	1500	1508

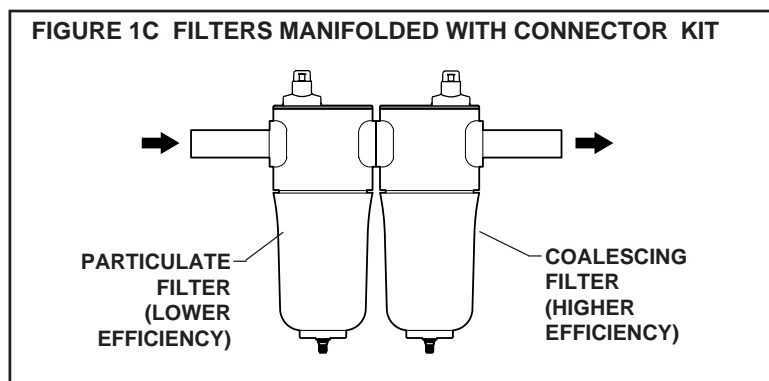
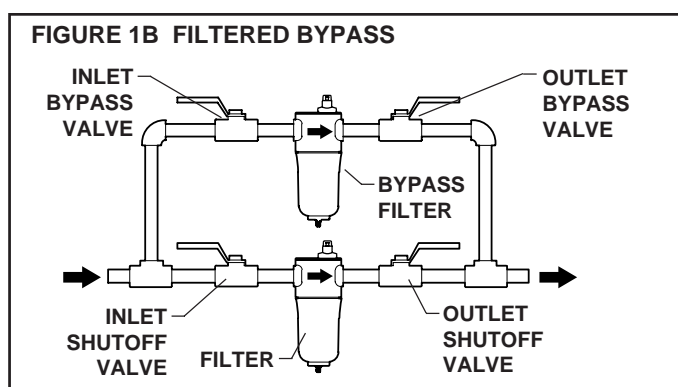
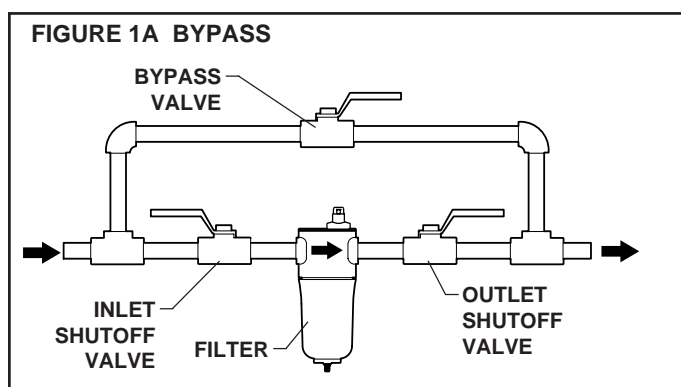
## INSTALLATION

1. Before installing filter, check operating temperature and pressure conditions to verify that they are within the specified ranges. **(See Operating Conditions on page 1).** Also verify that system flow rate corresponds to the rated capacity of the filter. Operating at flows above rated capacity will result in increased pressure drop.
2. Locate Filter at the point of lowest operating temperature to ensure that water and oil vapor do not condense downstream of the filter. Filter should be installed close to the point of use to minimize the risk of pipe scale, dirt, etc. recontaminating the compressed air or gas. This is particularly important when installing a new filter on an existing system that has not had proper filtration.
3. Install filter vertically. Provide required minimum clearance below filter to allow for replacement of element. **(See Element Removal Clearance on page 2).**
4. Protect filter from reverse flow conditions. Do not install filter downstream of quick opening valves.
5. Remove filter head from the bowl by turning bowl counter-clockwise. Pull element from locator. Set bowl and element aside for use later.
6. Install inlet and outlet shutoff valves to facilitate replacement of element. Bypass piping is recommended **(See Figure 1A and 1B).** **MAKE SURE VALVES ARE CLOSED BEFORE PROCEEDING.**
7. Connect filter head into piping. Avoid reducers or bushings to match inlet size. The resulting restriction will increase pressure drop. Make sure head is installed with flow arrows pointing in proper direction. Use pipe thread compound as required.

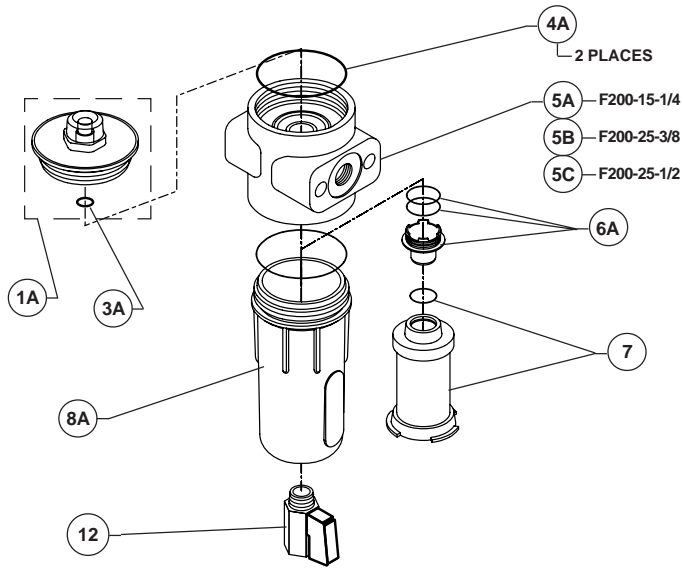
### IMPORTANT

**INSTALL FILTER HEAD INTO THE PIPING WITH ARROWS POINTING IN THE PROPER DIRECTION TO ENSURE PROPER OPERATION. (SEE FLOW DIRECTION DIAGRAM BELOW).**

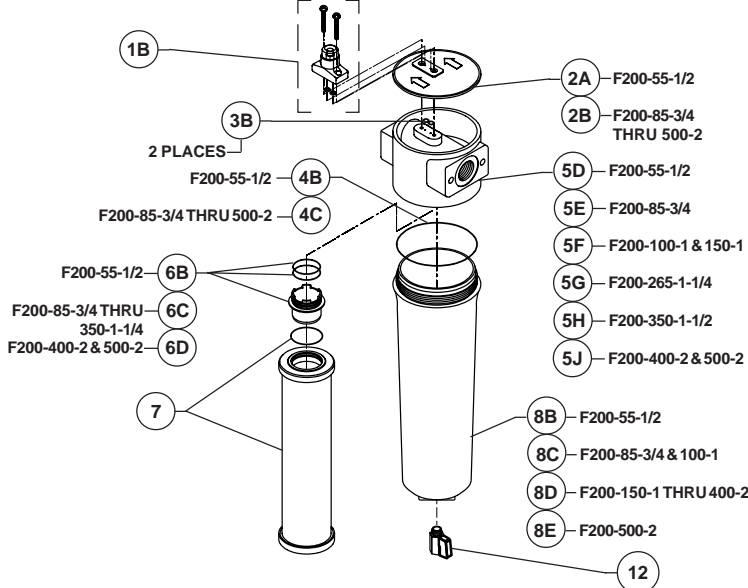
8. Install element by pushing onto element locator on filter head.
9. Check to make sure that the o-ring in the head is in the proper position. Thread filter bowl into filter head and tighten either by hand (models F200-15 through 55) or with strap wrench (models F200-85 through 1000). Do not over tighten. Over-tightening could damage filter bowl or make it difficult to remove.
10. Make sure drain valve on bottom of filter is closed. On filters equipped with ADM2-2 auto drain, provide a drain line to remove accumulated water and oil.
11. Pressurize system and slowly open inlet and outlet shutoff valves.
12. Check piping for leaks. Depressurize system and repair leaks as needed.
13. Re-pressurize system and slowly open inlet and outlet shutoff valves. Close bypass valve if provided.
14. Filter is now in service.



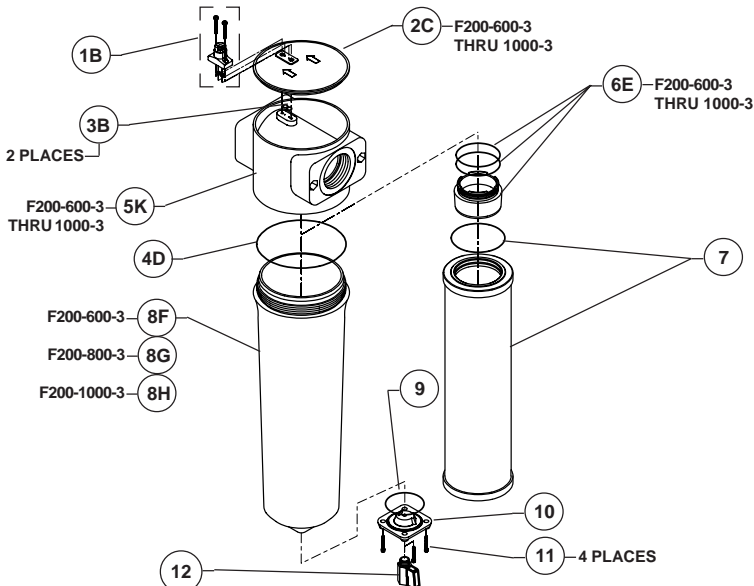
**FIGURE 2A F200-15-1/4 THRU 25-1/2 REPLACEMENT PARTS**



**FIGURE 2B F200-55-1/2 THRU 500-2 REPLACEMENT PARTS**



**FIGURE 2C F200-600-3 THRU 1000-3 REPLACEMENT PARTS**



**Finding a part number**

1. Find the figure that references your filter.
2. Find the replacement part you need and the item number of that part.
3. Find the item number in the first column of the **Replacement Parts** table.
4. Find the part description that best describes the part.
5. See the last column for the part number.

**REPLACEMENT PARTS**

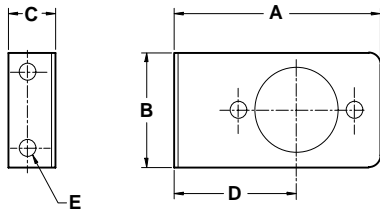
ITEM	PART DESCRIPTION	FIG 2-	QTY	PART NO.
1A	PD-6A-C DIFFERENTIAL PRESSURE INDICATOR KIT FOR COALESCING FILTERS	A	1	84-10126
	PD-6A-P DIFFERENTIAL PRESSURE INDICATOR KIT FOR PARTICULATE FILTERS	A	1	84-10127
1B	PD-6 DIFFERENTIAL PRESSURE INDICATOR KIT	B,C	1	84-10125
2A	BLANKING PLATE FOR F200-55-1/2	B	1	326-00110
2B	BLANKING PLATE FOR F200-85-3/4 THRU 500-2	B	1	326-00120
2C	BLANKING PLATE FOR F200-600-3 THRU 1000-3	B	1	326-00130
3A	BLANKING PLATE O-RING FOR F200-15-1/4 THRU 25-1/2	A	1	475-00110
3B	BLANKING PLATE O-RING FOR F200-55-1/2 THRU 1000-3	B,C	2	475-00006
4A	BODY O-RING FOR F200-15-1/4 THRU 25-1/2	A	2	475-01000
4B	BODY O-RING FOR F200-55-1/2	B	1	475-00146
4C	BODY O-RING FOR F200-85-3/4 THRU 500-2	B	1	475-00242
4D	BODY O-RING FOR F200-600-3 THRU 1000-3	C	1	475-00362
5A	1/4" NPT FILTER HEAD FOR F200-15-1/4	A	1	201-00100
5B	3/8" NPT FILTER HEAD FOR F200-25-3/8	A	1	201-00110
5C	1/2" NPT FILTER HEAD FOR F200-25-1/2	A	1	201-00120
5D	1/2" NPT FILTER HEAD FOR F200-55-1/2	B	1	201-00130
5E	3/4" NPT FILTER HEAD FOR F200-85-3/4	B	1	201-00140
5F	1" NPT FILTER HEAD FOR F200-100-1 & 150-1	B	1	201-00150
5G	1-1/4" NPT FILTER HEAD FOR F200-265-1-1/4	B	1	201-00160
5H	1-1/2" NPT FILTER HEAD FOR F200-350-1-1/2	B	1	201-00170
5J	2" NPT FILTER HEAD FOR F200-400-2 & F200-500-2	B	1	201-00180
5K	3" NPT FILTER HEAD FOR F200-600-3 THRU 1000-3	C	1	201-00200
6A	EPL1 ELEMENT ADAPTOR FOR F200-15-1/4 THRU 25-1/2	A	1	326-00005
6B	EPL2 ELEMENT ADAPTOR FOR F200-55-1/2	B	1	326-00010
6C	EPL3 ELEMENT ADAPTOR F200-85-3/4 THRU 265-1-1/4	B	1	326-00015
6D	EPL4 ELEMENT ADAPTOR FOR F200-350-1-1/2 THRU 500-2	B	1	326-00020
6E	EPL5 ELEMENT ADAPTOR FOR F200-600-3 THRU 1000-3	C	1	326-00025
7	REPLACEMENT ELEMENTS (REFER TO PAGE 5)			
8A	FILTER BOWL FOR F200-15-1/4 THRU 25-1/2	A	1	201-01000
8B	FILTER BOWL FOR F200-55-1/2	B	1	201-01010
8C	FILTER BOWL FOR F200-85-3/4 & 100-1	B	1	201-01020
8D	FILTER BOWL FOR F200-150-1 THRU 400-2	B	1	201-01030
8E	FILTER BOWL FOR F200-500-2	B	1	201-01040
8F	FILTER BOWL FOR F200-600-3	C	1	201-01050
8G	FILTER BOWL FOR F200-800-3	C	1	201-01060
8H	FILTER BOWL FOR F200-1000-3	C	1	201-01070
9	DRAIN ADAPTOR O-RING	C	1	475-00142
10	DRAIN ADAPTOR PLATE	C	1	261-00006
11	DRAIN ADAPTOR SCREW	C	4	460-00100
12	MANUAL DRAIN 1/4" KIT	A,B, C	1	84-10852

**REPLACEMENT ELEMENTS**

<b>FILTER MODEL</b>	<b>ELEMENT MODEL</b>	<b>PART NUMBER</b>	<b>FILTER MODEL</b>	<b>ELEMENT MODEL</b>	<b>PART NUMBER</b>
F200-15-1/4, F200-25-3/8 & F200-25-1/2	E200-15/25-AA	26-10400	F200-265-1-1/4	E200-265-RB	26-2108
	E200-15/25-RAA	26-10401		E200-265-C	26-2086
	E200-15/25-A	26-10402		E200-265-RC	26-2119
	E200-15/25-RA	26-10403		E200-265-RD	26-2156
	E200-15/25-B	26-10404		F200-350-1-1/2 & 400-2	E200-350/400-AA
	E200-15/25-RB	26-10405	E200-350/400-RAA		26-10410
	E200-15/25-C	26-10406	E200-350/400-A		26-10411
	E200-15/25-RC	26-10407	E200-350/400-RA		26-10412
	E200-15/25-RD	26-10408	E200-350/400-B		26-10413
	F200-55-1/2	E200-55-AA	26-10032		E200-350/400-RB
E200-55-RAA		26-10107	E200-350/400-C	26-10415	
E200-55-A		26-2059	E200-350/400-RC	26-10416	
E200-55-RA		26-2092	E200-350/400-RD	26-10417	
E200-55-B		26-2070	F200-500-2	E200-500-AA	26-10418
E200-55-RB		26-2103		E200-500-RAA	26-10419
E200-55-C		26-2081		E200-500-A	26-10420
E200-55-RC		26-2114		E200-500-RA	26-10421
E200-55-RD		26-2151		E200-500-B	26-10422
F200-85-3/4		E200-85-AA		26-10034	E200-500-RB
	E200-85-RAA	26-10109		E200-500-C	26-10424
	E200-85-A	26-2061		E200-500-RC	26-10425
	E200-85-RA	26-2094		E200-500-RD	26-10426
	E200-85-B	26-2072		F200-600-3	E200-600-AA
	E200-85-RB	26-2105	E200-600-RAA		26-10428
	E200-85-C	26-2083	E200-600-A		26-10429
	E200-85-RC	26-2116	E200-600-RA		26-10430
	E200-85-RD	26-2153	E200-600-B		26-10431
	F200-100-1	E200-100-AA	26-10035		E200-600-RB
E200-100-RAA		26-10110	E200-600-C		26-10433
E200-100-A		26-2062	E200-600-RC		26-10434
E200-100-RA		26-2095	E200-600-RD		26-10435
E200-100-B		26-2073	F200-800-3		E200-800-AA
E200-100-RB		26-2106		E200-800-RAA	26-10437
E200-100-C		26-2084		E200-800-A	26-10438
E200-100-RC		26-2117		E200-800-RA	26-10439
E200-100-RD		26-2154		E200-800-B	26-10440
F200-150-1		E200-150-AA		26-10036	E200-800-RB
	E200-150-RAA	26-10111		E200-800-C	26-10442
	E200-150-A	26-2063		E200-800-RC	26-10443
	E200-150-RA	26-2096		E200-800-RD	26-10444
	E200-150-B	26-2074		F200-1000-3	E200-1000-AA
	E200-150-RB	26-2107	E200-1000-RAA		26-10115
	E200-150-C	26-2085	E200-1000-A		26-2067
	E200-150-RC	26-2118	E200-1000-RA		26-2100
	E200-150-RD	26-2155	E200-1000-B		26-2078
	F200-265-1-1/4	E200-265-AA	26-10037		E200-1000-RB
E200-265-RAA		26-10112	E200-1000-C		26-2089
E200-265-A		26-2064	E200-1000-RC		26-2122
E200-265-RA		26-2097	E200-1000-RD		26-2159
E200-265-B		26-2075			

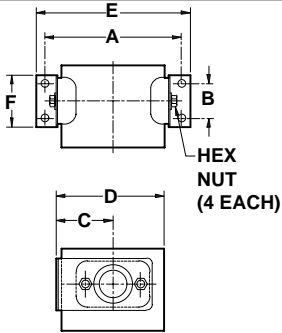
# ACCESSORIES

MOUNTING BRACKET KITS



**MOUNTING BRACKET DIMENSIONS**

TYPE	A	B	C	D	E
MB-1	2-15/16"	1-9/16"	13/16"	1-3/4"	1/4"
MB-1-2	2-15/16"	1-9/16"	13/16"	1-3/4"	1/4"
MB-2	4-5/16"	2-3/8"	1"	2-9/16"	5/16"
MB-2-2	4-3/4"	2-3/4"	1"	2-3/4"	5/16"
MB-3-2	7-1/8"	4-15/16"	1-3/16"	3-15/16"	3/8"



**INSTALLED MOUNTING BRACKET KIT DIMENSIONS**

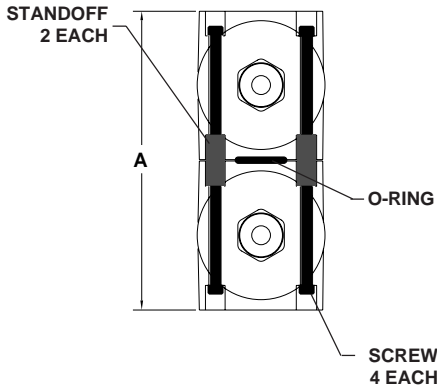
TYPE	USED ON	PART NO	A	B	C	D	E
MB-1	55	84-0720	4-1/2"	1-1/4"	1-3/4"	3-5/16"	5-1/4"
MB-1-2	15 THRU 25	84-10130	3-3/4"	1-1/4"	1-3/4"	3"	4-7/16"
MB-2	85 THRU 265	84-0721	5-15/16"	1-9/16"	2-9/16"	4-7/8"	6-11/16"
MB-2-2	350 THRU 500	84-10131	6-1/2"	2"	2-3/4"	5-1/4"	7-5/16"
MB-3-2	600 THRU 1000	84-10132	9-5/16"	3-3/4"	3-15/16"	7-7/16"	10-1/4"

KITS FOR MB-1 THRU MB-2-2 INCLUDES (2) MOUNTING BRACKETS, (2) TIE RODS, (2) WASHERS, & (2) NUTS.

KIT FOR MB-3-2 INCLUDES (2) MOUNTING BRACKETS, (4) SCREWS, (4) WASHERS, & (4) NUTS.

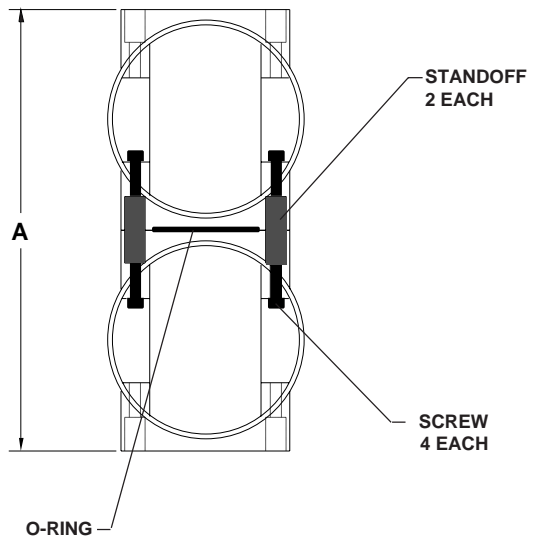
CONNECTOR KITS

**CK-1 & CK-1-2**



**CK-2, CK-2-2 & CK-3-2**

NOTE: BLANKING PLATES REMOVED FOR CLARITY.

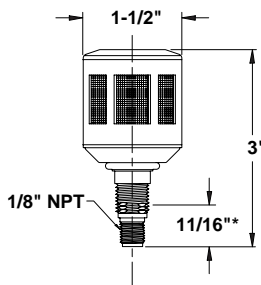


**CONNECTOR KIT DETAILS**

MODEL	A	USED FOR (GF200-)	PART NO
CK-1	7"	55	84-0723
CK-1-2	5-3/4"	15 THRU 25	84-10133
CK-2	9-7/8"	85 THRU 265	84-0724
CK-2-2	10-11/16"	350 THRU 500	84-10134
CK-3-2	15-3/4"	600 THRU 1000	84-10135

DRAIN KITS

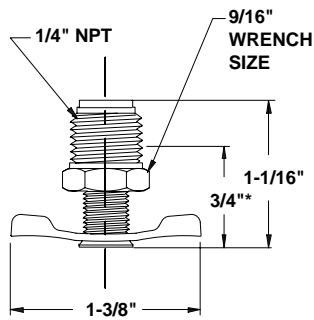
**ADM-2-2 AUTO DRAIN (P/N: 84-10120)**



KIT INCLUDES (1) AUTO DRAIN, (1) NUT, (1) O-RING & INSTRUCTION SHEET.

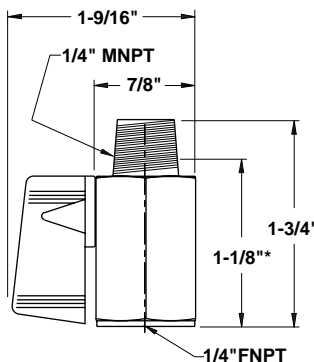
\* DIMENSION EXTENDING OUT OF FILTER HOUSING

**1/4" PETCOCK MANUAL DRAIN (P/N: 84-10850)**



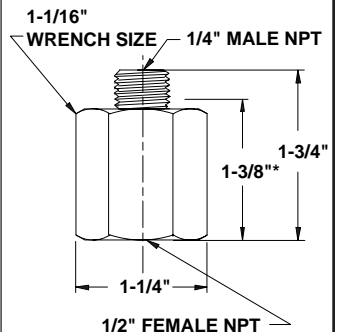
\* DIMENSION EXTENDING OUT OF FILTER HOUSING

**1/4" BALL VALVE MANUAL DRAIN (P/N: 84-10852)**



\* DIMENSION EXTENDING OUT OF FILTER HOUSING

**1/4" TO 1/2" DRAIN ADAPTER (P/N: 84-10851)**



\* DIMENSION EXTENDING OUT OF FILTER HOUSING

## ACCESSORIES CONT'D

### DIFFERENTIAL PRESSURE INDICATOR KITS

PD-4 (P/N: 84-0764)	PD-5 (P/N: 84-10001)	PD-6 (P/N: 84-10125)
<p style="text-align: center;">FITS ALL MODELS EXCEPT F200-15-1/4 THRU 25-1/2.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">KIT INCLUDES (1) PD-4, (2) SCREWS, (4) O-RINGS &amp; INSTRUCTION SHEET. *DIMENSIONS EXTENDING ABOVE FILTER HOUSING.</p>	<p style="text-align: center;">FITS ALL MODELS EXCEPT F200-15-1/4 THRU 25-1/2.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">KIT INCLUDES (1) PD-5, (2) SCREWS, (4) O-RINGS &amp; INSTRUCTION SHEET. *DIMENSIONS EXTENDING ABOVE FILTER HOUSING.</p>	<p style="text-align: center;">FITS ALL MODELS EXCEPT F200-15-1/4 THRU 25-1/2.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">KIT INCLUDES (1) PD-6, (2) SCREWS, (4) O-RINGS &amp; INSTRUCTION SHEET.</p> <div style="text-align: center;"> <p><b>PD-6A-C (P/N: 84-10126)</b> <b>PD-6A-P (P/N: 84-10127)</b></p> <p style="text-align: center;">FITS MODELS F200-15-1/4 THRU 25-1/2 ONLY.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>PD-6A-C FOR COALESCING FILTERS</p> <p>PD-6A-P FOR PARTICULATE FILTERS</p> </div> <div style="width: 45%; text-align: center;"> </div> </div> <p style="text-align: center;">KIT INCLUDES (1) PD-6A, (2) O-RINGS &amp; INSTRUCTION SHEET. *DIMENSIONS EXTENDING ABOVE FILTER HOUSING.</p> </div>

## MAINTENANCE

- Drain coalescing filters every shift.
- Check differential pressures weekly on coalescing and particulate filters (AA, A, B, C, RA, RB, and RC grades). When differential pressure reaches 10 psid, install clean elements. On adsorbing filters (grade RD), install clean elements when hydrocarbon vapors are first detected downstream or every six months, whichever comes first.
- For correct replacement element model numbers, see label on filter housing, the bottom endcap of the element, or page 5 of this instruction manual.
- When changing out element, inspect housing o-ring for nicks and/or cracks. If nicks and/or cracks are present, replace o-ring.

### TROUBLE SHOOTING

CONDITION	POTENTIAL CAUSE	RECOMMENDATION
Initial pressure drop too high	Filter undersized for flow rate.	Install larger filter.
	Filter grade too fine.	Install coarser grade element.
	Filter inlet smaller than pipe size.	Install larger filter.
Oil carryover	Oil present in system before installing filter.	Clean piping.
	Excessive inlet oil >50ppm.	Check compressor and/or gas/oil separator if compressor is rotary vane or screw type. Check lube rate if reciprocating compressor. Install coarse coalescer for prefiltration.
	Filter installed backwards.	Check flow direction (See page 1).
	Filter bowl not being drained.	Drain more frequently.
	High differential pressure.	Check element if excessive (7-10 psid or above), replace element if necessary.
	Defective seal.	Check o-ring in element.
	Incorrect element grade.	Use finer grade.
	By-pass valve leaking or open.	Close valve. Check seals on valve.
Short element life	Unfiltered gas entering from source down stream of filter.	Relocate filter or install additional filter.
	High operating temperatures.	Install, clean, replace or relocate aftercooler, or relocate filter.
	Cooling by refrigerated dryer.	Install grade C filter downstream of dryer.
	Excessive contamination.	Install coarse particulate filter immediately upstream of existing filter.
High compression temperatures causing varnish/carbon formation.	High compression temperatures causing varnish/carbon formation.	Use compression lubricant with good temperature stability. Lower lube rates where possible. Use coarser grade filter element.
	Oil/water emulsion overloading element.	Inspect moisture separator. Remove water with better separation.
	High viscosity oil or freeze-up due to low ambient temperature.	Raise ambient temperatures. Heat trace inlet piping and housing.

**SAFETY PRECAUTIONS**

Safety is everybody's business and is based on your use of good common sense. All situations or circumstances cannot always be predicted and covered by established rules. Therefore, use your past experience, watch out for safety hazards and be cautious.



**Filters****source.com**<sup>Inc</sup>

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