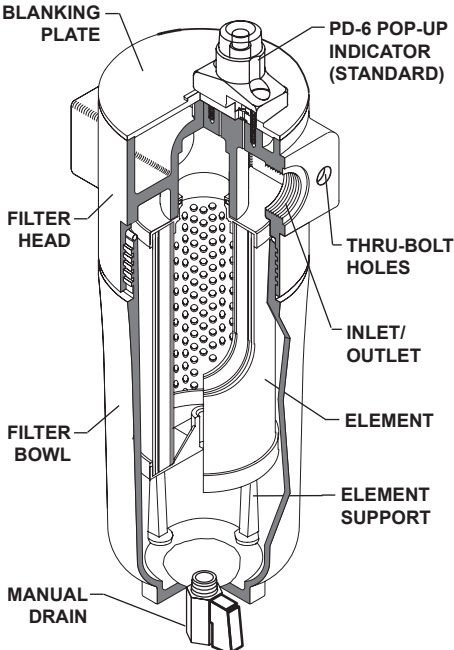
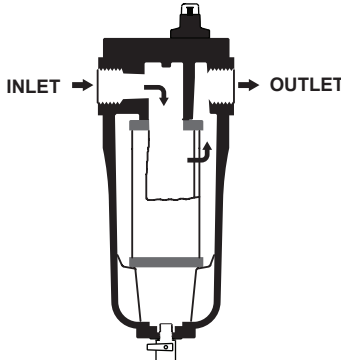
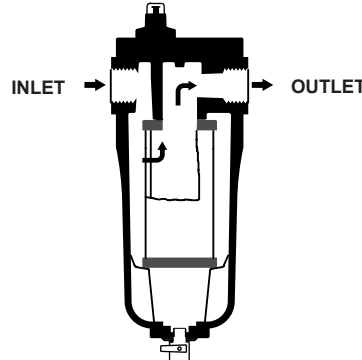


INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

GF200 SERIES COMPRESSED GAS FILTERS

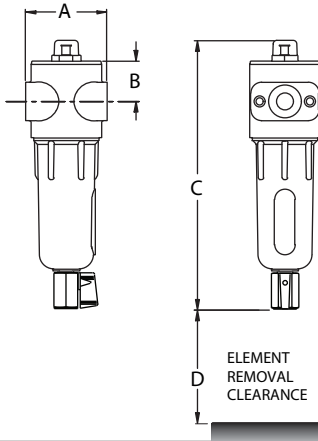
PRODUCT PURPOSE & FUNCTION:

Van Gas GF200 series filters are designed to remove contaminants from compressed gas systems. Available in 1/4" to 3" connection sizes and flow capacities from 27 to 2233 MSCFD (at 100 psig) in 15 housings and 9 filtration grades, the GF200 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, and connector kits.

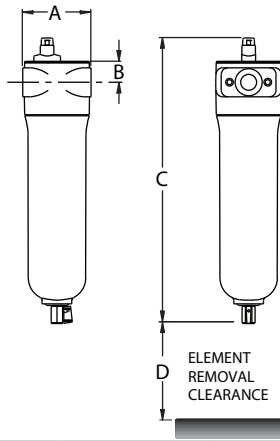
FILTER DETAILS		FLOW DIRECTION THROUGH ELEMENT					
		(COALESCING) IN/OUT			(PARTICULATE) OUT/IN		
							
FILTRATION GRADES							
APPLICATION		ELEMENT GRADE	PURPOSE	NOMINAL PARTICULE REMOVAL	ELEMENT FLOW DIRECTION	COLOR CODE	
OIL REMOVAL (LIQUIDS)		AA	Extra Coarse Coalescing	25.00 μ	IN/OUT	WHITE	
		A	Coarse Coalescing	5.00 μ	IN/OUT	GREEN	
		B	General Purpose Coalescing	1.00 μ	IN/OUT	RED	
		C	High Efficiency Coalescing	0.01 μ	IN/OUT	BLUE	
PARTICULATE REMOVAL (SOLIDS)		RAA	Extra Coarse Particulate	25.00 μ	OUT/IN	WHITE	
		RA	Coarse Particulate	5.00 μ	OUT/IN	GREEN	
		RB	General Purpose Particulate	1.00 μ	OUT/IN	RED	
		RC	High Efficiency Particulate	0.01 μ	OUT/IN	BLUE	
OIL VAPOR REMOVAL		RD	Vapor Absorbing	0.01 μ	OUT/IN	WHITE	
OPERATING CONDITIONS							
MAXIMUM WORKING PRESSURE							
All Models		250 PSIG					
OPERATING TEMPERATURE							
Minimum		35°F					
Maximum		225°F					
MAXIMUM RECOMMENDED INLET TEMPERATURE							
AA, A, RAA, RA, RB, and RC Series		225°F					
B Series		175°F					
C Series		125°F					
RD Series		80°F					
WARNINGS							
• DO NOT REPLACE ANY ITEM ON FILTER WHILE IT IS PRESSURIZED. • DO NOT OPERATE A LEAKING FILTER. TAKE FILTER OUT OF SERVICE IMMEDIATELY. • DO NOT OPERATE ABOVE MAXIMUM WORKING PRESSURE (MWP) AT MAXIMUM OPERATING TEMPERATURE (°F). • USE THE PROPER RULES FOR THE GAS BEING PROCESSED.							

FILTER HOUSING DIMENSIONS & WEIGHTS

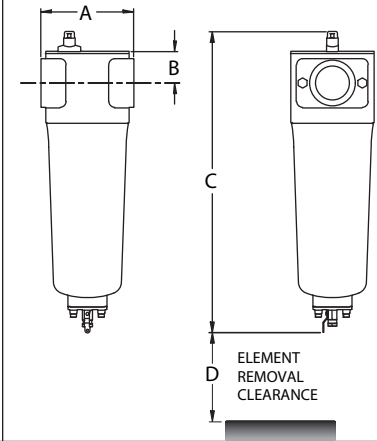
DIMENSIONS FOR:
GF200-15-1/4
GF200-25-3/8
GF200-25-1/2



DIMENSIONS FOR:
GF200-55-1/2 GF200-150-1 GF200-400-2
GF200-85-3/4 GF200-265-1-1/4 GF200-500-2
GF200-100-1 GF200-350-1-1/2



DIMENSIONS FOR:
GF200-600-3 GF200-1250-3
GF200-800-3
GF200-1000-3



FILTER MODEL	FLOW** (MSCFD)	IN/OUT CONN. (NPT)	A (INCHES)	B (INCHES)	C*** (INCHES)	D (INCHES)	HOUSING WEIGHT**** (LBS)	ELEMENT WEIGHT**** (LBS)
GF200-15-1/4-(*)	27	1/4"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
GF200-25-3/8-(*)	45	3/8"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
GF200-25-1/2-(*)	45	1/2"	2-13/16	1-5/8	9-1/4	3	1.3	0.1
GF200-55-1/2-(*)	98	1/2"	3-7/16	1-5/16	11-3/4	4	3.2	0.3
GF200-85-3/4-(*)	152	3/4"	4-15/16	1-5/8	14-9/16	4	5.7	0.5
GF200-100-1-(*)	179	1"	4-15/16	1-5/8	14-9/16	4	5.7	0.6
GF200-150-1-(*)	268	1"	4-15/16	1-5/8	20-7/16	6	6.7	0.9
GF200-265-1-1/4-(*)	473	1-1/4"	4-15/16	1-5/8	20-7/16	6	6.7	1
GF200-350-1-1/2-(*)	625	1-1/2"	5-5/16	2-1/16	21-3/8	6	8.7	1.1
GF200-400-2-(*)	714	2"	5-5/16	2-1/16	21-3/8	6	8.7	1.1
GF200-500-2-(*)	893	2"	5-5/16	2-1/16	29-3/8	6	9.9	2.3
GF200-600-3-(*)	1072	3"	7-7/8	2-3/4	24-1/2	8	19.8	2.7
GF200-800-3-(*)	1429	3"	7-7/8	2-3/4	30-1/16	8	21.9	3.6
GF200-1000-3-(*)	1786	3"	7-7/8	2-3/4	34-3/4	12	28.1	4.3
GF200-1250-3-(*)	2233	3"	7-7/8	2-3/4	34-3/4	12	28.1	4.3

*Insert appropriate filtration grades here; for example GF200-15-1/4-B.

***Dimensions include filter housing, PD-6 and manual drain.

**Flow is based on MSCFD @ 100 PSIG @ 100°F with
.65 SG Natural Gas.

****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
GF200-15-1/4	9	15	21	27	33	39	44	50	56	62
GF200-25-3/8	16	25	35	45	54	64	74	84	93	103
GF200-25-1/2	16	25	35	45	54	64	74	84	93	103
GF200-55-1/2	34	55	77	98	120	141	162	184	205	227
GF200-85-3/4	53	85	118	152	185	219	251	284	317	351
GF200-100-1	63	100	139	179	218	257	295	334	373	413
GF200-150-1	94	150	209	268	327	386	442	501	560	619
GF200-265-1-1/4	166	265	369	476	577	682	781	885	989	1093
GF200-350-1-1/2	219	350	488	625	763	900	1031	1169	1307	1444
GF200-400-2	250	400	557	714	872	1029	1179	1336	1493	1650
GF200-500-2	313	500	697	893	1090	1286	1474	1670	1866	2063
GF200-600-3	375	600	836	1072	1307	1543	1768	2004	2240	2476
GF200-800-3	500	800	1115	1429	1743	2058	2358	2672	2986	3301
GF200-1000-3	625	1000	1393	1786	2179	2572	2947	3340	3733	4126
GF200-1250-3	782	1251	1742	2233	2724	3216	3684	4176	4667	5158

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 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 GF200-15 through 55) or with strap wrench (models GF200-85 through 1250). 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.
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.

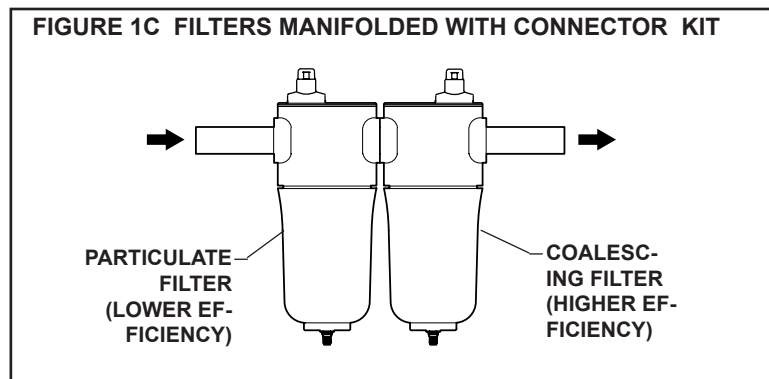
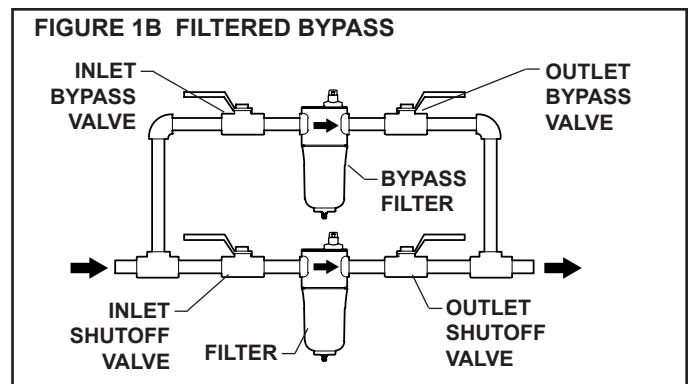
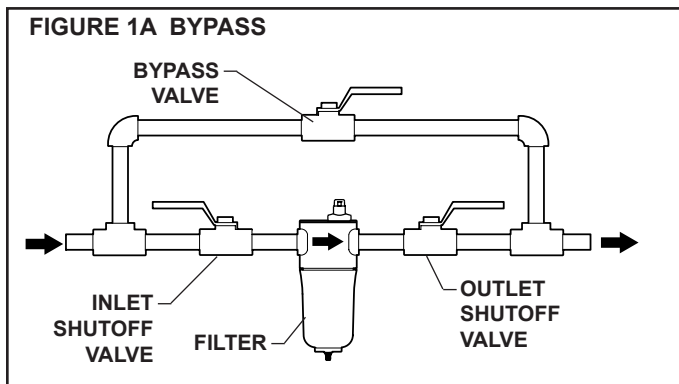


FIGURE 2A GF200-15-1/4 THRU 25-1/2 REPLACEMENT PARTS

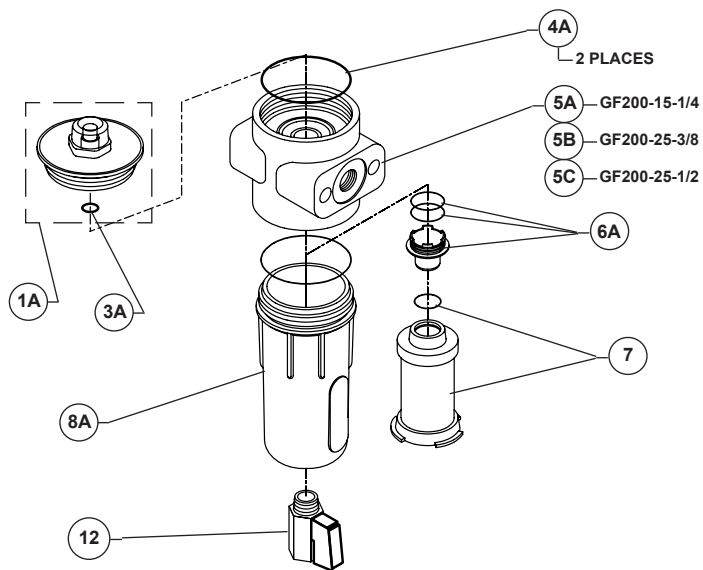


FIGURE 2B GF200-55-1/2 THRU 500-2 REPLACEMENT PARTS

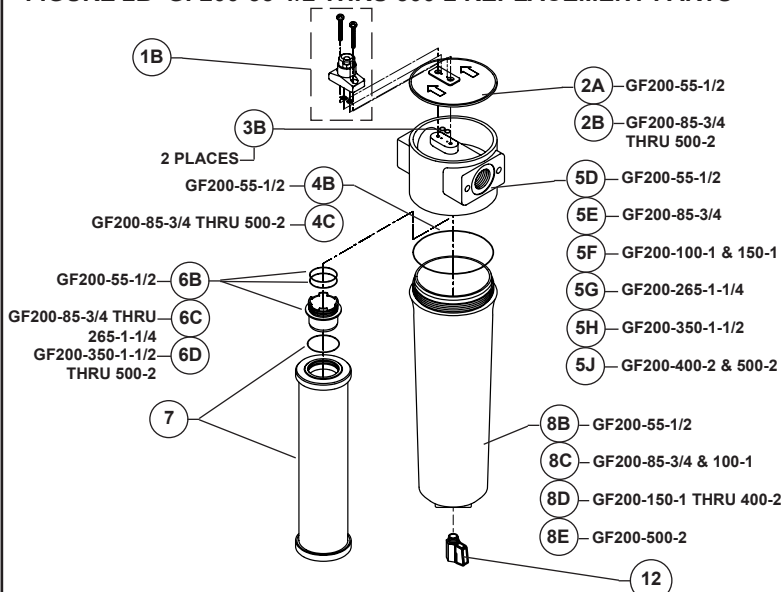
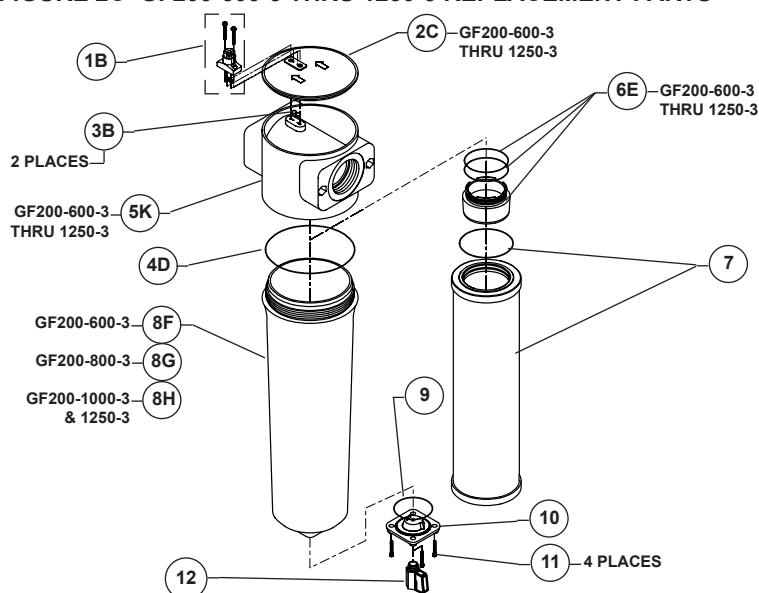


FIGURE 2C GF200-600-3 THRU 1250-3 REPLACEMENT PARTS



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

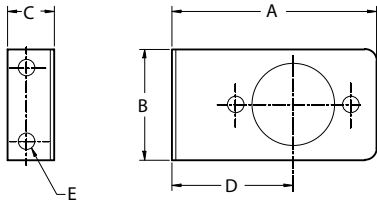
ITEM	PART DESCRIPTION	FIG 2-	QTY	PART NO.
1A	PD-6A-C DIFFERENTIAL PRESSURE INDICATOR KIT FOR COALESCING FILTERS	A	1	84-10126
	PD-6A-P DIFFERENTIAL PRESSURE INDICATOR KIT FOR PARTICULATE FILTERS	A	1	84-1012
1B	PD-6 DIFFERENTIAL PRESSURE INDICATOR KIT	B,C	1	84-10125
2A	BLANKING PLATE FOR GF200-55-1/2	B	1	326-00110
2B	BLANKING PLATE FOR GF200-85-3/4 THRU 500-2	B	1	326-00120
2C	BLANKING PLATE FOR GF200-600-3 THRU 1250-3	B	1	326-00130
3A	BLANKING PLATE O-RING FOR GF200-15-1/4 THRU 25-1/2	A	1	475-00110
3B	BLANKING PLATE O-RING FOR GF200-55-1/2 THRU 1250-3	B,C	2	475-00006
4A	BODY O-RING FOR GF200-15-1/4 THRU 25-1/2	A	2	475-01000
4B	BODY O-RING FOR GF200-55-1/2	B	1	475-00146
4C	BODY O-RING FOR GF200-85-3/4 THRU 500-2	B	1	475-00242
4D	BODY O-RING FOR GF200-600-3 THRU 1250-3	C	1	475-00362
5A	1/4" NPT FILTER HEAD FOR GF200-15-1/4	A	1	201-00100
5B	3/8" NPT FILTER HEAD FOR GF200-25-3/8	A	1	201-00110
5C	1/2" NPT FILTER HEAD FOR GF200-25-1/2	A	1	201-00120
5D	1/2" NPT FILTER HEAD FOR GF200-55-1/2	B	1	201-00130
5E	3/4" NPT FILTER HEAD FOR GF200-85-3/4	B	1	201-00140
5F	1" NPT FILTER HEAD FOR GF200-100-1 & 150-1	B	1	201-00150
5G	1-1/4" NPT FILTER HEAD FOR GF200-265-1-1/4	B	1	201-00160
5H	1-1/2" NPT FILTER HEAD FOR GF200-350-1-1/2	B	1	201-00170
5J	2" NPT FILTER HEAD FOR GF200-400-2 & GF200-500-2	B	1	201-00180
5K	3" NPT FILTER HEAD FOR GF200-600-3 THRU 1250-3	C	1	201-00200
6A	EPL1 ELEMENT ADAPTOR FOR GF200-15-1/4 THRU 25-1/2	A	1	326-00005
6B	EPL2 ELEMENT ADAPTOR FOR GF200-55-1/2	B	1	326-00010
6C	EPL3 ELEMENT ADAPTOR GF200-85-3/4 THRU 265-1-1/4	B	1	326-00015
6D	EPL4 ELEMENT ADAPTOR FOR GF200-350-1-1/2 THRU 500-2	B	1	326-00020
6E	EPL5 ELEMENT ADAPTOR FOR GF200-600-3 THRU 1250-3	C	1	326-00025
7	REPLACEMENT ELEMENTS (REFER TO PAGE 5)			
8A	FILTER BOWL FOR GF200-15-1/4 THRU 25-1/2	A	1	201-01000
8B	FILTER BOWL FOR GF200-55-1/2	B	1	201-01010
8C	FILTER BOWL FOR GF200-85-3/4 & 100-1	B	1	201-01020
8D	FILTER BOWL FOR GF200-150-1 THRU 400-2	B	1	201-01030
8E	FILTER BOWL FOR GF200-500-2	B	1	201-01040
8F	FILTER BOWL FOR GF200-600-3	C	1	201-01050
8G	FILTER BOWL FOR GF200-800-3	C	1	201-01060
8H	FILTER BOWL FOR GF200-1000-3 & 1250-3	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

FILTER MODEL	ELEMENT MODEL	PART NO.		FILTER MODEL	ELEMENT MODEL	PART NO.
GF200-15-1/4, GF200-25-3/8, & GF200-25-1/2	E200-15/25-AA	26-10400		GF200-350-1-1/2, & GF200-400-2	E200-350/400-AA	26-10409
	E200-15/25-RAA	26-10401			E200-350/400-RAA	26-10410
	E200-15/25-A	26-10402			E200-350/400-A	26-10411
	E200-15/25-RA	26-10403			E200-350/400-RA	26-10412
	E200-15/25-B	26-10404			E200-350/400-B	26-10413
	E200-15/25-RB	26-10405			E200-350/400-RB	26-10414
	E200-15/25-C	26-10406			E200-350/400-C	26-10415
	E200-15/25-RC	26-10407			E200-350/400-RC	26-10416
	E200-15/25-RD	26-10408			E200-350/400-RD	26-10417
GF200-55-1/2	E200-55-AA	26-10032		GF200-500-2	E200-500-AA	26-10418
	E200-55-RAA	26-10107			E200-500-RAA	26-10419
	E200-55-A	26-2059			E200-500-A	26-10420
	E200-55-RA	26-2092			E200-500-RA	26-10421
	E200-55-B	26-2070			E200-500-B	26-10422
	E200-55-RB	26-2103			E200-500-RB	26-10423
	E200-55-C	26-2081			E200-500-C	26-10424
	E200-55-RC	26-2114			E200-500-RC	26-10425
	E200-55-RD	26-2151			E200-500-RD	26-10426
GF200-85-3/4	E200-85-AA	26-10034		GF200-600-3	E200-600-AA	26-10427
	E200-85-RAA	26-10109			E200-600-RAA	26-10428
	E200-85-A	26-2061			E200-600-A	26-10429
	E200-85-RA	26-2094			E200-600-RA	26-10430
	E200-85-B	26-2072			E200-600-B	26-10431
	E200-85-RB	26-2105			E200-600-RB	26-10432
	E200-85-C	26-2083			E200-600-C	26-10433
	E200-85-RC	26-2116			E200-600-RC	26-10434
	E200-85-RD	26-2153			E200-600-RD	26-10435
GF200-100-1	E200-100-AA	26-10035		GF200-800-3	E200-800-AA	26-10436
	E200-100-RAA	26-10110			E200-800-RAA	26-10437
	E200-100-A	26-2062			E200-800-A	26-10438
	E200-100-RA	26-2095			E200-800-RA	26-10439
	E200-100-B	26-2073			E200-800-B	26-10440
	E200-100-RB	26-2106			E200-800-RB	26-10441
	E200-100-C	26-2084			E200-800-C	26-10442
	E200-100-RC	26-2117			E200-800-RC	26-10443
	E200-100-RD	26-2154			E200-800-RD	26-10444
GF200-150-1	E200-150-AA	26-10036		GF200-1000-3	E200-1000-AA	26-10040
	E200-150-RAA	26-10111			E200-1000-RAA	26-10115
	E200-150-A	26-2063			E200-1000-A	26-2067
	E200-150-RA	26-2096			E200-1000-RA	26-2100
	E200-150-B	26-2074			E200-1000-B	26-2078
	E200-150-RB	26-2107			E200-1000-RB	26-2111
	E200-150-C	26-2085			E200-1000-C	26-2089
	E200-150-RC	26-2118			E200-1000-RC	26-2122
	E200-150-RD	26-2155			E200-1000-RD	26-2159
GF200-265-1-1/4	E200-265-AA	26-10037		GF200-1250-3	E200-1250-AA	26-7510
	E200-265-RAA	26-10112			E200-1250-RAA	26-7514
	E200-265-A	26-2064			E200-1250-A	26-7509
	E200-265-RA	26-2097			E200-1250-RA	26-7513
	E200-265-B	26-2075			E200-1250-B	26-7511
	E200-265-RB	26-2108			E200-1250-RB	26-7515
	E200-265-C	26-2086			E200-1250-C	26-7512
	E200-265-RC	26-2119			E200-1250-RC	26-7516
	E200-265-RD	26-2156			E200-1250-RD	26-7517

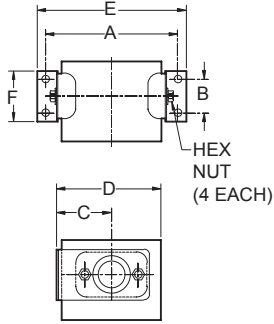
ACCESSORIES

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	4-15/16"	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

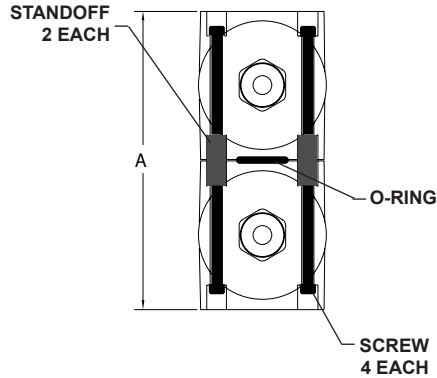
TYPE	USED ON	PART NO	A	B	C	D	E
MB-1	55	84-0720	4-1/2"	1-1/4"	1-3/4"	3-5/16"	5-1/4"
MB-1-2	15 THRU 25	84-10130	3-3/4"	1-1/4"	1-3/4"	3"	4-7/16"
MB-2	85 THRU 265	84-0721	5-15/16"	1-9/16"	2-9/16"	4-7/8"	6-11/16"
MB-2-2	350 THRU 500	84-10131	6-1/2"	2"	2-3/4"	5-1/4"	7-5/16"
MB-3-2	600 THRU 1250	84-10132	9-5/16"	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

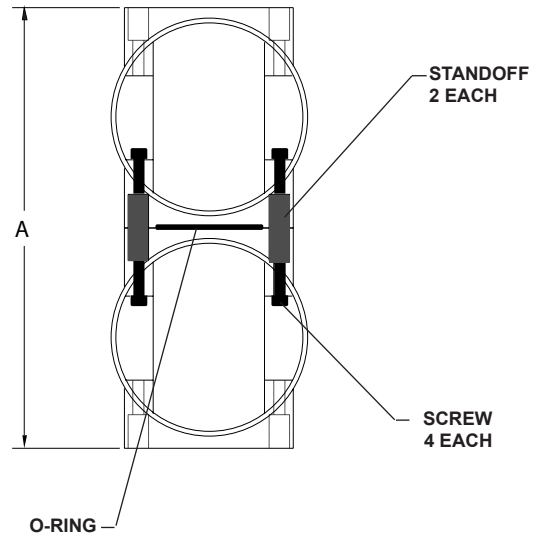


CONNECTOR KIT DETAIL

TYPE	USED ON	PART NO	A
CK-1	55	84-0723	7"
CK-1-2	15 THRU 25	84-10133	5-3/4"
CK-2	85 THRU 265	84-0724	9-7/8"
CK-2-2	350 THRU 500	84-10134	10-11/16"
CK-3-2	600 THRU 1250	84-10135	15-3/4"

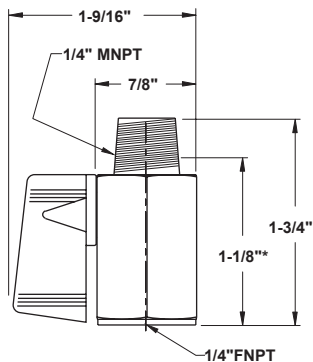
CK-2, CK-2-2 & CK-3-2

NOTE: BLANKING PLATES REMOVED FOR CLARITY.



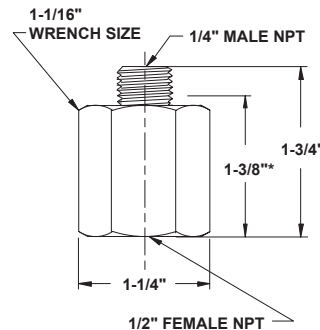
DRAIN KITS

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)



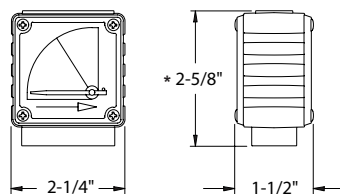
* DIMENSION EXTENDING OUT OF FILTER
HOUSING

ACCESSORIES CONT'D

DIFFERENTIAL PRESSURE INDICATOR KITS

PD-5 (P/N: 84-10001)

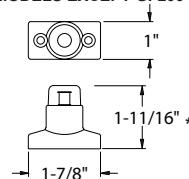
FITS ALL MODELS EXCEPT GF200-15-1/4 THRU 25-1/2.



KIT INCLUDES (1) PD-5, (2) SCREWS, (4) O-RINGS & INSTRUCTION SHEET.
*DIMENSIONS EXTENDING ABOVE FILTER HOUSING.

PD-6 (P/N: 84-10125)

FITS ALL MODELS EXCEPT GF200-15-1/4 THRU 25-1/2.



KIT INCLUDES (1) PD-6, (2) SCREWS, (4) O-RINGS & INSTRUCTION SHEET.

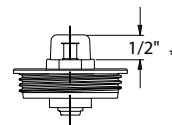
PD-6A-C (P/N: 84-10126)

PD-6A-P (P/N: 84-10127)

FITS MODELS GF200-15-1/4 THRU 25-1/2 ONLY.

PD-6A-C
FOR COALESCING
FILTERS

PD-6A-P
FOR PARTICULATE
FILTERS



KIT INCLUDES (1) PD-6A, (2) O-RINGS & INSTRUCTION SHEET.
*DIMENSIONS EXTENDING ABOVE FILTER HOUSING.

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

