

REPLACEMENT PARTS:
 ELEMENT: P/N 010-13-180508
 GASKET: P/N 030-10-002866

TYPICAL ELEVATION

MAWP: 1480 PSIG @ 150 °F

WEIGHT: 200 LBS

APOLLO ENGINEERING COMPANY
 BROKEN ARROW, OKLAHOMA

OUTLINE DRAWING
 MODEL GFR-02-1440 GAS FILTER

DWG No. OL-02-1440

DRAWN BY: JAC
 DATE: 12-27-94

APP'D BY: JAC
 DATE: 12-27-94

REVISION No.
 DATE:

FILE: GFR02-HP.DWG

JOB No.

Prepared For
Apollo Customers
 Attn: All Users
 U.S.A.

Capacity Table For
GFR-02 Series Gas Filter
 (***)

Date Prepared: March 8, 2004

Flow Rate in MSCFH STP = 60F/14.65 PSI.

Not Corrected for Compressibility

Flowing Media	Natural Gas
Pipeline I.D.	2.067 inches
Flowing Temperature	60 °F
Specific Gravity	0.60 air = 1.00
k-Factor ($h=kV^2/2g$)	2.50

Line PSIG	Flow Rates (MSCFH) at Various Differential Pressures							
	5" wc	10" wc	20" wc	1 PSID	2 PSID	3 PSID	4 PSID	5 PSID
10	13	19	27	31	44	54	62	70
20	16	22	31	37	52	64	74	83
30	18	25	36	42	59	73	84	94
40	20	28	39	46	66	81	93	104
50	21	30	43	51	72	88	101	113
60	23	33	46	54	77	94	109	122
75	25	36	51	60	84	103	119	133
100	29	40	57	67	95	117	135	151
150	34	48	69	81	114	140	161	180
200	39	55	78	92	130	160	184	206
300	47	67	95	112	158	193	223	249
400	54	77	109	128	181	222	256	286
500	61	86	121	143	202	247	285	319
600	66	94	132	156	221	270	312	349
700	71	101	143	168	238	291	336	376
800	76	108	152	180	254	311	359	401
900	81	114	162	190	269	329	380	425
1000	85	120	170	200	283	347	401	448
1100	89	126	178	210	297	364	420	470
1200	93	132	186	219	310	380	438	490
1300	97	137	194	228	323	395	456	510
1400	100	142	201	237	335	410	473	529
1500	104	147	208	245	346	424	490	547

Represented By

Apollo Engineering Company
 P.O. Box 2050
 Broken Arrow, OK 74013

Telephone: (918)251-6780

Apollo

Engineering Company

P.O. Box 2050 Broken Arrow, OK 74013

Tel: (918)251-6780 FAX: (918)251-5986

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**Fabricated in Accordance with the Latest Edition of the ASME
Boiler and Pressure Vessel Code, Section VIII, Division 1**

Diameter	6.625"	O.D.	
Shell Length	28.500"	Seam to Seam	
Code Stamp	Optional	Other Specs	N.S.
Design Press.	1480	PSIG @	150 °F
Hydro. Press.	2220	PSIG @	40-100 °F
MDMT	-20	°F	1480 PSIG
Limited By	Flange	Radiograph	Spot
Joint Eff.	1.00	Heat Treat	No
Corr.Allow.	None	Wind Load	Std
Nozzle Proj.	Std	Dim'l Toler.	Std
Hinged Cover	No	Davit	No
Ladders	No	Platforms	No
Saddles	No	Insulation	No
Surface Prep.	SPPC SP2	Paint	Red Oxide Primer
Weight.	200 lbs	Volume	0.50 c.f.

Notes

Materials

Shell	SA106-B/C	Size	6"	Sch	XH
Nozzles	SA106-B/C	Size	2"	Sch	XH
QOC Hub	N/A	Size	N/A	Sch	N/A
QOC Cap	N/A	Heads	SA234-WPB		
Plate	SA516-70	Studs	SA193-B7, Plt'd		
Forgings	SA105	Nuts	SA194-2H, Plt'd		
BW Fittings	SA234-WPB	Gaskets	NonAsb		
Pipe	SA106-B/C	O-Rings	Nitrile		
Element Part No.	010-13-180508	Qty	1		
Gasket Part No.	030-10-002866	Qty	1		
Filter Cap Part No.	040-10-450300	Qty	1		
Wing Nut Part No.	040-10-450300	Qty	1		

Other

Notes

Process Design Conditions

Fluid	---	Notes	
Flow Rate	---	MSCFH	
Pressure	---	PSIG	
Temperature	---	°F	
Specific Gr.	---		
Pressure Drop	---	PSID	

Schedule of Openings

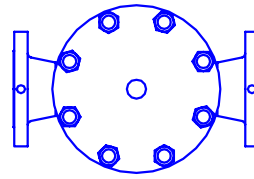
Mark	Qty	Size	Series	Facing	Type	Sch	Service
N1	1	2"	600#	RF	WN	XH	Inlet
N2	1	2"	600#	RF	WN	XH	Outlet
N3	1	6"	AECo	O-Ring	App Y	XH	Service Entry
T1	1	1/2"	N/A	Thr'd	D&T	---	Vent
T2	1	1"	3000#	Thr'd	Cplg	---	Drain
T3	2	1/4"	N/A	Thr'd	D&T	---	D.P. Taps

Sketch depicts general arrangement - actual details may vary. For example, nozzle necks may be either weld-o-lets or pipe, nozzles may have repads, baseplates may not have gussets, etc.

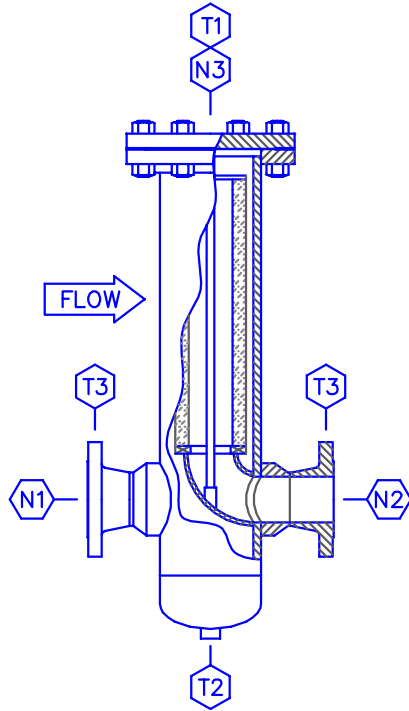
Notes

Specification	AECo Std	ITEM	Model GFR-02-1440 Gas Filter
Prepared By	JAC		
Date	9/26/2004		
Shop Order/Quote No.	Std	TAG	GFR-02-1440
Customer	AECo Users		

Apollo Engineering Company
Broken Arrow, Oklahoma



PLAN



ELEVATION

Style C