

1000 SERIES HORIZONTAL IRRIGATION FILTERS



INTRODUCTION

The Morrill Industries, Inc. 1000 Series Horizontal Filter is a low maintenance filter that has been proven in the Agricultural Irrigation industry for over half a century. The Filters simple, yet robust design allows for the proper degree of filtration for many irrigation applications. They are ideal for; Solid Set Sprinkler Systems, Pivot Irrigation Systems, as well as a variety of other uses. The Grooved End Cap connection eliminates the leaks that Circle Lock (Ring Lock) connections typically have after only a short time in operation. The two bolt grooved coupler helps to reduce the likelihood of accidental Filter element removal, while offering additional protection against theft.

OPERATION

The 1000 Series Horizontal Filter consists of; a filter housing, filter screen, and flush valve. The Horizontal Filter is designed to be installed on the discharge side of the pumping station. Under normal filtering operation, dirty water flows into the filter body inlet, then it's processed through the filter screen, and clean water flows out the filter body outlet to the system. As contaminants build on the filter screen, it will start to build a pressure loss across the screen, from the inlet to the outlet. When the pressure loss across the screen builds to 5 - 6 PSI loss, it is time to manually flush the filter. The manual flush valve on the screen end-cap is opened, and the debris is flushed out of the Filter. If the filter element still shows a pressure loss across the screen after flushing, removal of the screen element and manually cleaning the screen may be necessary.

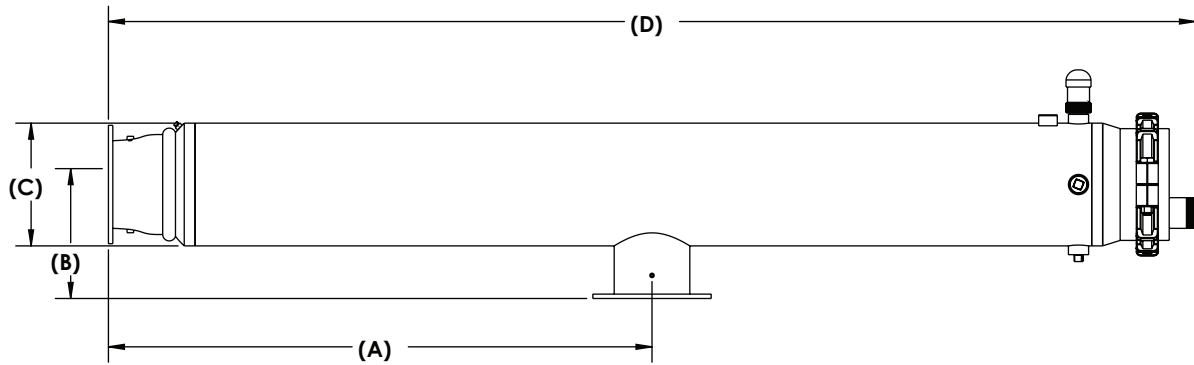
FILTER CONSTRUCTION

- Filter Body is 10 ga. Carbon Steel Pipe meeting or exceeding ASTM A252 Grade 1
- Flanges are Carbon Steel to AWWA C207-13, ASME/ANSI Drilling for Class 150
- Tank Flanges are Carbon Steel to ASTM A105, threads to ANSI B1.20.1
- Circle Lock Gaskets are SBR-1005 60 Duro
- Screen Cap is 304/304L Stainless Steel to ASTM A240 Material
- Perforated Screens are 304/304L to ASTM A240 Material
- Gate Valve - 200 WOG NRS Brass w/ Graphite Packing
- Filter Body Hot Dipped Galvanized to ASTM A123/A123M
- All Filter Housings and Screens will have individual Serial Numbers
- All Filters to have Direction of Flow indicators

STANDARD FITTINGS

- One - 1/4" N.P.T 2-1/2" Dia. Liquid Filled Gauges 0-100 PSI (Back Mount)
- One - 1/4" N.P.T 2-1/2" Dia. Liquid Filled Gauges 0-100 PSI (Bottom Mount)
- One - 2" Air/Vacuum Release Valve (65AIRA2)
- One - 3" Gate Valve (Series 1010 will have 2" Gate Valve)
- One - 1-1/2" Galvanized Close Nipple
- One - 2" x 1-1/2" Galvanized Hex Bushing
- Three - 1-1/2" Galvanized Plugged Ports
- Three - 1/4" Galvanized Plugged Ports

HORIZONTAL FILTER SPECIFICATION



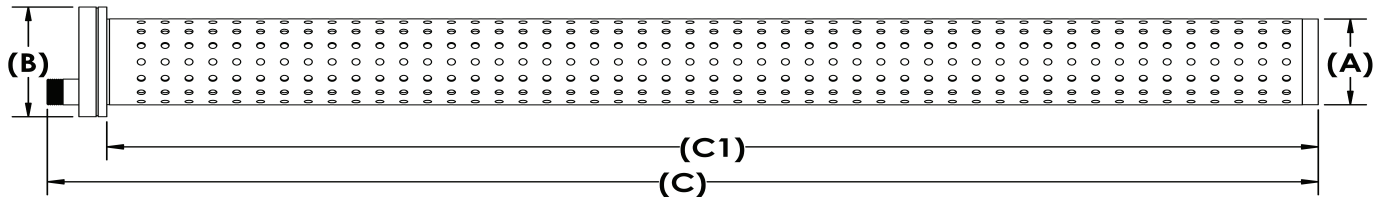
STEP 1 - CHOOSE FILTER BODY

PART NO.		FLANGE SIZE	GPM RATING	SUGGESTED GPM	SCREEN AREA SQ. FT.	DIMENSIONS IN.				WEIGHT IN LBS.	
*FILTER BODY	REPL. BODY					A	B	C	D	FILTER BODY	REPL. BODY
1000-08	FB12-08	8" Inlet/Outlet	1750	1350	23.5	62	13	14	126	298	256
1000-10	FB12-10	10" Inlet/Outlet	1750	1350	23.5	62	13	14	126	305	266
1005-06	FB07-06	6" Inlet/Outlet	900	750	11.75	42	13	14	74	194	165
1005-08	FB07-08	8" Inlet/Outlet	900	750	11.75	42	13	14	70.5	205	171
1010-04	FB04-04	4" Inlet/Outlet	550	450	7.5	34	9	14	62	135	87
1010-06	FB04-06	6" Inlet/Outlet	550	450	7.5	34	9	10	62	142	94

For 304/304L Stainless Steel filters, place (S) at the end of part number. Example: 1000-08s

For Galvanized, place (G) at the end of part number. Example: 1000-08G

*Includes all standard fittings

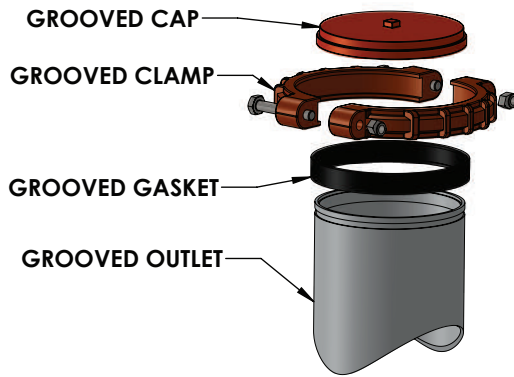


STEP 2 - CHOOSE FILTER SCREEN

GPM RATING	SCREEN PERF. SIZE	SCREEN AREA SQ. FT.	DIMENSIONS IN.				PART NUMBERS					
			A	B	C	C1	(A)	(B)	(C)	SHIPPING TUBE	(D)	(E)
1750 GPM	.125"	23.5	10	12.8	121	115	FS12-125	FS12-125A	FS12-125X	ST-1	1000-CAP	1000-CAPI
	.062"						FS12-062	FS12-062A	FS12-062X			
	.050"						FS12-050	FS12-050A	FS12-050X			
	.033"						FS12-033	FS12-033A	FS12-033X			
900 GPM	.125"	11.75	10	12.8	65	59.5	FS07-125	FS07-125A	FS07-125X	ST-2	1000-CAP	1000-CAPI
	.062"						FS07-062	FS07-062A	FS07-062X			
	.050"						FS07-050	FS07-050A	FS07-050X			
	.033"						FS07-033	FS07-033A	FS07-033X			
550 GPM	.062"	7.5	8	10.8	53.5	48	FS04-062	FS04-062A	FS04-062X	ST-3	0400-CAP	0400-CAPI
	.050"						FS04-050	FS04-050A	FS04-050X			
	.033"						FS04-033	FS04-033A	FS04-033X			

1000 SERIES HORIZONTAL FILTER SPECIFICATIONS CONTINUED

- A - Full Screen replacement is the Screen and End Cap as a whole.
- B - Screen only is the Screen without End Cap, the customer to repair themselves.
- C - Screen only install is the purchase of a screen and having Morrill Industries, Inc. weld the screen onto an existing End Cap. This includes the removal of an End Cap from an existing damaged screen and disposal of the old screen.
 *When ordering item (A), (B), or (C) and they need to be shipped, a shipping tube must be purchased for safe transport.
- D - Cap replacement is the purchase of an End Cap only for customer replacement.
- E - Cap install is the purchase of an End Cap and having Morrill Industries, Inc. weld the Cap onto an existing screen. This includes the removal of the old End Cap and disposal.



REPLACEMENT FILTER GASKETS	
PART #	DESCRIPTION
565-08	8" CL Gasket (550 GPM)
565-10	10" CL Gasket (400, 750, 1200, GPM)

OPTIONAL GROOVE OUTLET*	
PART #	DESCRIPTION
F06	6" Groove gasket replacement port

*AVAILABLE ON ALL MODELS

