
3000 SERIES MANUAL FLUSH FILTER

Model 3400 Wye Inline Configuration



Model 3600 Horizontal Configuration



3000 SERIES MANUAL FLUSH FILTER

INTRODUCTION

The Morrill Industries, Inc. 3000 Series Manual Flush Filters are a through flush filter with no mechanical components to assist in cleaning the screen. This provides a low cost, high quality filter for various filtration applications down to 200 mesh (75 microns). The cleaning or flush process is accomplished by using a flush valve. Filters are ideal for use in; water wells, canals, ponds, rivers, and process water. The 3000 Series Manual flush filters are used as; field filters when working with contaminated lines, as a backup filter, after a primary filter such as an Automatic Filter or Sand Media Filter, as a primary filter for Well Water.

OPERATION

The 3000 Series Flush Filter consists of; a filter housing, filter end cap, filter screen, and flush valve. Under normal filtering operation, dirty water flows into the filter body inlet, then is 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 is accomplished by opening the flush valve and if system design allows, restricting the discharge valve after the filter. This will provide a "power flush", by restricting water flowing through the screen it will help remove contaminants from inside the filter screen. Flush the filter for 10-15 seconds, then open the filter discharge valve and close the flush valve. The filter is now back to normal operation.

FILTER CONSTRUCTION







Option 1: Filter body and lid assemblies are 304/304L Stainless Steel construction with 316/316L Stainless Steel Wire Mesh Sintered (Bonded) Screen.

Option 2: Filter body and lid assemblies are constructed with Carbon Steel and Fusion Bodied Epoxy Lined and Coated w/Polyester Color topcoat for UV protection, with 316/316L Stainless Steel Wire Mesh Sintered (Bonded) Screen.

STANDARD FITTINGS

- Two - 1/4" N.P.T 2-1/2" Dia. Liquid Filled Gauges 0-100 PSI
o(Back Mount or Bottom Mount as required)
- One- 2" Air/Vacuum Release Valve (65AIRA2)
- One - 1-1/2" or 2" Ball Valve for Flush (Dependent on Filter Size)

* All Filters have a 150 PSI pressure rating. Higher pressure rating construction is available.

AVAILABLE SCREENS			
	MESH SIZE	MESH OPENING	MICRON
	24	0.0277"	705
	40	0.0150"	380
	60	0.0092"	233
	80	0.0070"	177
	120	0.0046"	118
	200	0.0030"	75

FLOW RATE (GPM)	SCREEN AREA INCHES ²
130	160
250	212
400	288
600	410
900	640
1200	834
1500	1085
2200	1598
2800	2138

Choosing a 3000 Series Through Flush Filter

STEP 1: Determine filtration requirements. The filters are for filtration after the pump, discharge side.

STEP 2: Determine your maximum available flow rate, and size the Filter accordingly. Review flow rates and screen sizes available.

STEP 3: Choose the materials of construction appropriate for your application from Stainless Steel to Carbon Steel.

STEP 4: Determine appropriate configuration and connection size.

FILTER BODY ORDERING
 Part Number Sequence (Positions); 1234-5-67
 Example: 3406-P-06
 3400 Series Wye Through Flush Filter, 600 GPM unit, Carbon Steel w/ Epoxy Lined and Coated w/ exterior of Blue Streak 2, 6" flanges.

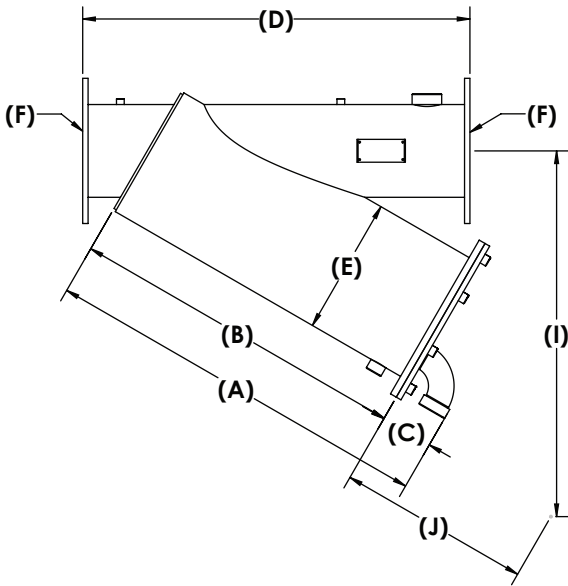
STEP 5 - CHOOSE FILTER BODY

PART NUMBER CHART															
POST.	DESC.			#	POST.	DESC.			#	POST.	DESC.			#	
12	FILTER SERIES			34	FILTER SIZE (GPM)			5	MATERIAL			67	CONNECT. SIZE		
	3400	=	34		130	=	01		304	=	4		2"	=	02
	3600	=	36		250	=	02		316	=	6		3"	=	03
					400	=	04		C/S E/B	=	P		4"	=	04
					600	=	06						6"	=	06
					900	=	09						8"	=	08
					1200	=	12						10"	=	10
					1500	=	15						12"	=	12
					2200	=	22								
					2800	=	28								

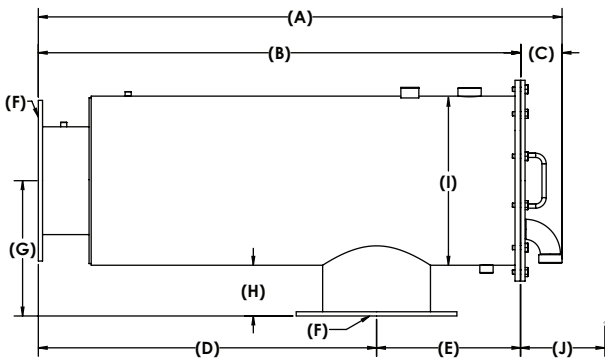
STEP 6 - CHOOSE FILTER SCREEN

GPM	SCREEN SIZE					
	24	40	60	80	120	200
130	3001-024	3001-040	3001-060	3001-080	3001-120	3001-200
250	3002-024	3002-040	3002-060	3002-080	3002-120	3002-200
400	3004-024	3004-040	3004-060	3004-080	3004-120	3004-200
600	3006-024	3006-040	3006-060	3006-080	3006-120	3006-200
900	3009-024	3009-040	3009-060	3009-080	3009-120	3009-200
1200	3012-024	3012-040	3012-060	3012-080	3012-120	3012-200
1500	3015-024	3015-040	3015-060	3015-080	3015-120	3015-200
2200	3022-024	3022-040	3022-060	3022-080	3022-120	3022-200
2800	3028-024	3028-040	3028-060	3028-080	3028-120	3028-200

DIMENSIONS



3400 SERIES MANUAL WYE CONFIGURATION								
GPM	A	B	C	D	E	(F)LG	I	J
130	20.875	15.875	5.00	20.00	6.62	2.00	20.00	16.00
250	24.375	19.375	5.00	20.00	6.62	3.00	22.00	18.00
400	26.375	21.375	5.00	22.00	8.62	4.00	24.00	22.00
600	32.875	27.875	5.00	22.00	8.62	6.00	28.00	28.00
900	31.375	26.375	4.00	28.00	12.75	6.00	30.00	27.00
1200	37.375	32.375	4.00	28.00	12.75	8.00	38.00	33.00
1500	43.375	38.375	4.00	28.00	12.75	8.00	42.00	41.00
2200	43.375	38.375	4.00	38.00	18.00	10.00	42.00	41.00
2800	54.875	49.875	4.00	42.00	18.00	10.00	48.00	53.00



3600 SERIES MANUAL FLUSH FILTER HORIZONTAL CONFIGURATION FILTERS										
GPM	A	B	C	D	E	(F)LG	G	H	I	J
130	26.875	21.875	5.00	12.00	9.875	2.00	9.31	6.00	6.63	16.00
250	30.375	25.375	5.00	16.00	9.375	3.00	9.31	6.00	6.625	18.00
400	32.375	27.375	5.00	18.00	9.375	4.00	10.31	6.00	8.625	22.00
600	38.875	33.875	5.00	22.00	11.875	6.00	10.31	6.00	8.625	28.00
900	37.375	32.375	4.00	20.00	12.375	6.00	13.00	6.00	14.00	27.00
1200	43.375	38.375	4.00	26.00	12.375	8.00	13.00	6.00	14.00	33.00
1500	49.00	44.375	4.00	32.00	12.375	8.00	13.00	6.00	14.00	41.00
2200	49.00	44.375	4.00	32.00	12.375	10.00	16.00	6.00	20.00	41.00
2800	60.875	55.875	4.00	40.00	15.875	12.00	16.00	6.00	20.00	53.00