

400 SERIES SAFETY FILTERS

INTRODUCTION

The Morrill Industries, Inc. 400 Series Safety Filters are used as a safety back-up to media or other types of drip quality filtration systems. In the event of a media underdrain or cake failure, the 400 Series Safety Filter will catch and contain media and contaminants to protect the field system from contamination. The Safety Filter is not intended for use as a primary filter.

OPERATION

The 400 Series Safety Filter consists of a stainless steel filter housing, and stainless steel sintered wire mesh screen. Filtered Water from a media tank system enters the safety filter at the lower inlet of the filter housing. Water flows from inside the wire mesh screen to the outside of the screen, and discharges through an upper flanged port on the filter housing. The 400 Series Safety Filter has pressure gauges on the inlet and discharge sides of the filter for indicating pressure losses. The pressure differential will build between the inlet and discharge if contaminants start to build on the screen. During normal operation, the Safety Filter should have minimal to no pressure loss. Small particulates or "fines" may collect in the screen over time. In the case of a media tank failure, the 400 Series Safety Filter will contain the media within the housing and an immediate pressure loss should be indicated. The Safety Filter will contain contaminants of 233 Micron or coarser.



FILTER CONSTRUCTION

- Filter Body is 10 gauge 304/304L Stainless Steel Pipe Conforming to ASTM A 778
- Flanges are 304/304L Stainless Steel meeting ASTM A182 and ASME/ANSI Drilling for Class 150
- Lid Flange is 304/304L Stainless Steel to ATSM A240 Material
- Threaded Outlets are 304/304L Stainless Steel with threads to ANSI B 1.20.1, Material ASTM A1 82
- Lid Gaskets are 1/4" Thick EPDM Material
- Screen Gaskets are EPDM Material
- Wire Mesh Screen is 316/316L Stainless Steel Material
- Ball Valves - 600 WOG 2 PC Full Port Brass w/Graphite Packing
- All Filter Housings and Screens will have individual Serial Numbers
- All Filters to have Direction of Flow indicators

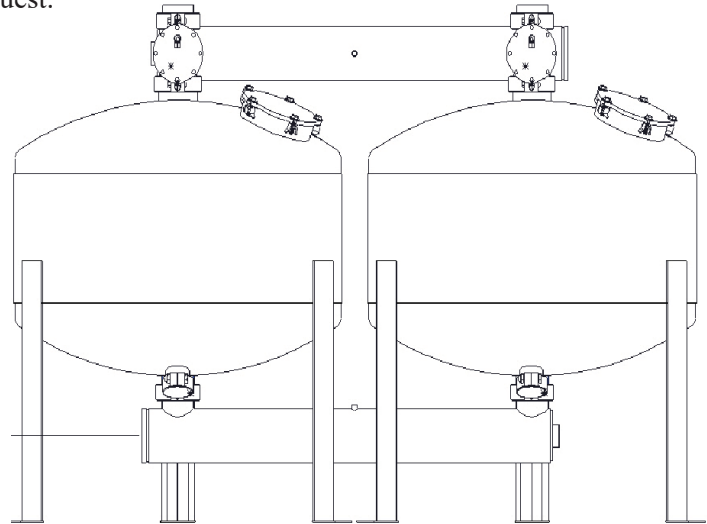
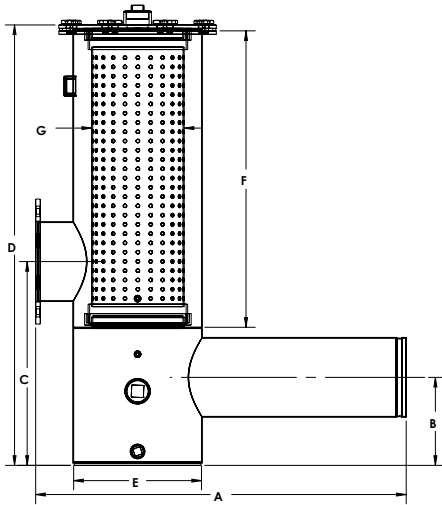
STANDARD FITTINGS

- Two - 1/4" N.P.T. 0-100 PSI Glycerin Filled Pressure Gauges (Back Mount)
- One - 1" Brass Ball Valve (Flush Valve)
- One - 2" Air/Vacuum Release Valve.
- One- 2" Brass Plugged Port for injection or Tap Off

SPECIFICATIONS / DIMENSIONS

SPECIFICATIONS & DIMENSIONS												
PART NO.	GPM	SCREEN MESH	SCREEN AREA SQ. IN.	GRV/FLG	A	B*	C	D	E	F	G	SCREEN
406	650	60	410	6"	35"	*	22"	47.00"	8.63"	31.50"	6.38"	BS04-060
410	975	60	640	6"	40"	*	22"	39.75"	14.00"	23.00"	10.50"	BS05-060
414	1400	60	834	8"	40"	*	24"	49.75"	14.00"	32.00"	10.50"	BS06-060
418	1950	60	1085	10"	40"	*	24"	56.75"	14.00"	39.00"	10.50"	BS07-060
428	2800	60	1598	12"	44"	*	28"	58.00"	18.00"	39.00"	15.25"	BS08-060
436	3600	60	2138	14"	46"	*	32"	74.00"	18.00"	50.50"	15.25"	BS09-060

*Dimensions must be determined by brand of media tank and by configuration. 100 PSI maximum pressure rating. Higher pressure ratings units available upon request.



REPLACEMENT PARTS

MODEL #	SCREEN GASKET	FILTER LID GASKET	HARDWARE	QTY
406	M06UG	M06TOR-12	9ECB	N/A
410	M10UG	MISF-11	5/8"-11 x 1-1/2"	8
414	M10UG	MISF-11	5/8"-11 x 1-1/2"	8
418	M10UG	MISF-11	5/8"-11 x 1-1/2"	8
428	M15UG	M12TOR-20	5/8"-11 x 1-1/2"	12
436	M15UG	M1TOR-20	5/8"-11 x 1-1/2"	12

