

# U1891SFR STEAM FILTER

- 304 Stainless Steel Filter Housing With Easily Replaceable Disposable Element
- Recleanable Stainless Steel Elements Available
- Specially Constructed Baffle To Remove Bulk Condensate At Filter Inlet
- Top Mounted Element For Even Steam Flow
- Large Sump To Eliminate Condensate Carry-Over



Our U1891SFR steam filter is especially designed for steam service. The U1891SFR comes complete with gauge and one 51-460-70ZZ disposable depth filter, rated at 98% efficiency for 0.01 micron.

Recleanable stainless steel sintered filter elements are available, designated 1, 3, 10, 25, 50, 100 and 200, at 98% removal ratings in microns. Grade 25 is recommended for removal of fine pipe scale and bulk condensate from steam. The 25 micron element will provide high performance while allowing generous flow through the system.

The U1891SFR can remove large amounts of contamination due to a uniquely designed cavity baffle that abruptly changes steam flow direction and velocity thus knocking out much of the problem causing condensate and large pipe scale. From the baffle cavity, steam moves upward to the filter element chamber where the 70ZZ microfiber filter element removes essentially all suspended solid particles and remaining water droplets. The base of the element chamber is protected by an inverted stack. The stack (secondary baffle) removes bulk liquids and deflects incoming we steam up and through the element for improved performance.

## PRINCIPAL SPECIFICATIONS

Housing Specifications	
Material Of Construction:	
Housing	304 Stainless Steel
Seals	EPDM
Gauge	316 Stainless Steel
Bleed Valve	316 Stainless Steel
Disposable Filter Element	Borosilicate microfiber with PVDF Binder
Recleanable Filter Element	316 Stainless Steel with PTFE Seals
Steam Connection	1" NPT Female
Drain Connection	1/2" NPT Female
Valve Connection	1/4" NPT Male
Maximum Steam Pressure	200 PSIG
Weight	Approximately 15 pounds

## ELEMENT SPECIFICATION

Disposable Filter Element Code:	51-460-70ZZ
Maximum Capacity (Using 51-460-70ZZ):	Approximately 275 lbs/hr at 45 PSIG
Recleanable Filter Element Code (Optional extra):	SS-189-_____T*

\*Note: Enter micron grade required e.g. 1, 3, 10, 25, 50, 100, 200.



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## STEAM FLOW RATES FOR DISPOSABLE 51-460-70ZZ

Pressure (PSIG)	Flow, lbs/hr. At Indicated Pressure Drop		
	2 PSIG	5 PSIG	10 PSIG
5	32	64	--
10	40	80	160
15	48	96	192
20	54	108	216
25	61	122	244
30	70	140	280
35	76	152	304
40	83	166	332
45	91	182	364
50	99	198	396
55	104	208	416
60	114	228	456
65	120	240	480
70	127	254	508
75	134	268	536
80	141	282	564

**A. Technical Details:**

- Process connection is 1" NPT
- Condensate connection is 1/2" NPT
- Relief valve connection is 1/4" NPT

**B. Mounting Instructions:**

- Housing must be mounted vertically
- Use of a Thermostatic Controlled condensate drain is advised
- This drain must be mounted approximately 3 feet from the Steam Filter to get a temperature drop of 20°F
- It is advised to change the filter element at least every 4-6 weeks
- When changing element, the seal must be greased or replaced

**C. Procedure For Disassembly of Housing:**

1. Relieve pressure from housing with needle valve
2. Unscrew collar of housing with wrench
3. Remove upper bowl of housing
4. Slide old element from core
5. Slide new element on core
6. Check and grease seal ring
7. Replace upper bowl
8. Check if needle valve is closed

**D. Replacement Part Numbers:**

- Filter Element: 51-460-70ZZ
- Seal Ring: EPDM Seal #GEU1891

-CANADIAN REGISTRATION NUMBER ON FILE



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