

# MAHLE

Industrial Filtration

## Cartridge Filter Housings Nowata 1U Series Cartridge Housings

316 Stainless Steel Filters for Liquid and Gas Applications  
Waterflood Operations, Pollution Control, Glycol and Amine Filtration

### 1. Features

The Nowata "1U" Series Cartridge Filter Housings are available in 1, 2, 3 or 4 cartridge length models. All models have a 2000 PSI working pressure. These filters are ideal for many high pressure, low volume applications. The "1U" Series is best suited for filter applications requiring low cost, durable, easily operated, corrosion resistant filters. These filters are specifically used by the petroleum production industry in secondary recovery water flood applications requiring the corrosion resistance of 316 stainless steel. A filter is normally placed at each individual input well just ahead of the flow meter. The cast 316 stainless steel head mounts directly in the flow line. The filter may be mounted in any position. The fluid or gas enters one side of the head and is channeled to the area around the cartridge. The fluid or gas passes through the depth type cartridge into the center tube and out the side of the head. The direction of flow, from dirty inlet to clean outlet, is indicated by an arrow cast in the filter head. The body is connected to the head by a two bolt, grooved coupling and sealed with a double lip gasket.

Standard "1U" Series models are made of corrosion resistant 316 stainless steel bodies. For less corrosive applications, the "1UP" Series models have epoxy lined, carbon steel bodies. Each model is equipped with a 1/4" internal pipe thread drain in the bottom of the body.



#### Standard Features

- Available in 1, 2, 3 or 4 Cartridge Length Models
- 2000 PSI Working Pressure
- Cast 316 Stainless Steel Head
- 316 Stainless Steel or Epoxy Lined Carbon Steel Body
- 316 Stainless Steel Internals
- Grooved Closure
- Buna Gasket
- Gas or Fluid Filtration
- Water Flow Rates to 24 GPM
- 1" Internal Pipe Thread Inlet/Outlet Connections
- 1/4" Internal Pipe Thread Drain is Standard
- Optional 1/4" Internal Pipe Thread Differential Pressure Ports



## 2. Standard Construction for 1U and 1UP Housing

### Nowata "1U" Series

The 316 stainless steel cast head has 1 inch, in-line, internal pipe thread inlet and outlet connections. The tubular body is made of 316 stainless steel. The head and body are connected by a two bolt, grooved coupling and a Buna gasket. The internal fittings, center tube and retainer are made of 316 stainless steel so that all surfaces in contact with the fluid or gas are stainless steel. All models have a 2000 PSI working pressure at a maximum temperature of 250°F.

### Nowata "1UP" Series

The "1UP" Series has all of the same construction features as the "1U" Series except that the tubular body is epoxy lined, carbon steel. The less expensive "1UP" Series filter with an epoxy lined, carbon steel body should be used only when the corrosion rate of the carbon steel will not greatly shorten the life of the housing. "1UP" models are normally used for salt water and mildly corrosive fluids.

## 3. Optional Construction Features

### Differential Pressure Connections

Two 1/4" internal pipe thread connections in the head are available on special order. They can be used for two gauges or a DP indicator to monitor cartridge performance.

### Gasket Material

Buna gasket is provided as standard. Viton and EPDM gaskets are also available by special order.

### Internal Materials

Standard internals are made of 316 stainless steel. Optional brass or plated carbon steel internals are available on special order.

### Non-Code Construction

The "1U" Series is not available with ASME Code Stamp due to the use of the grooved coupling closure system. See the "1UY" Series Datasheet for ASME Code construction.

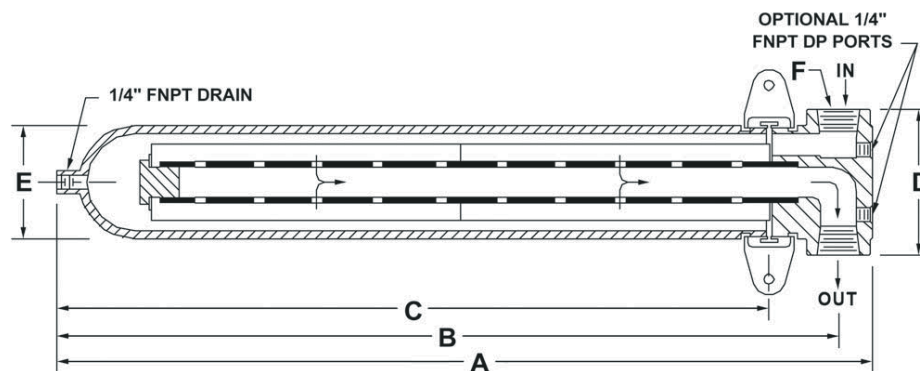
## 4. Dimensional Information

Model	Number of Cartridges	Shipping Weight (lbs)	A	B	C (1)	D	E (2)	F (3)
1U1N 1UP1N	1	19	16	15	11-1/2	4-1/2	3-1/2	1" FNPT
1U2N 1UP2N	2	27	26	25	21-1/2	4-1/2	3-1/2	1" FNPT
1U3N 1UP3N	3	35	36	35	31-1/2	4-1/2	3-1/2	1" FNPT
1U4N 1UP4N	4	43	46	45	41-1/2	4-1/2	3-1/2	1" FNPT

Dimensions shown in inches unless otherwise stated. Specifications are for reference only and subject to change without notice.

### NOTES:

- (1) Additional clearance required to remove housing body.
- (2) Body Diameter.
- (3) Internal pipe thread inlet and outlet connection size.



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