

CUNO™ EF G Series

CUNO™ EF G Series Self Cleaning Metal Filter System



Model G

Model MG

The CUNO™ EF G series self cleaning metal filter is an all metal cleanable edge filter. The cast iron head is gasket sealed to the sump by a reinforcing ring and screws to allow sump reduction without disturbing pipe connections. A vent screw and sump drain are provided to allow ease of maintenance and operation. An angle type mounting bracket attached to the filter head is also included. CUNO™ EF GU series self cleaning metal filter is the same as the model G, but is listed by under writers' Laboratory (UL File MP 485) as suitable for service on oil burner fuel supply lines with operating parameters up to 90 psi and 77 gallons per hour. A motorized version Model MG is available. Consult your 3M Purification Inc.'s Representative for more information.

Theory of Operation

The CUNO EF series self cleaning metal filter cartridge is an assembled unit composed of a stack of alternating metal discs and spacers of uniform thickness on a rotatable metal shaft. The thickness of the spacer determines the degree of filtration. CUNO EF G series self cleaning metal filter is available in spacings from 0.003" to 0.015".

Cleaning blades are mounted on a stationary rod adjacent to the cartridge stack and extend into the openings between the discs. Turning the cartridge handle rotates the disc and spacer assembly past the fixed cleaner blades. By rotating the cartridge, in either direction, the particles lodged between the discs are positively reduced or "combed" from the surface without interruption of flow. Drain the sump as often as experience indicates is necessary.

Features & Benefits

Cleanable design

- Reduces used filter cartridge disposal

Positive cleaning action with no interruption of flow or service

- Maximizes process up-time

Rugged all metal construction for trouble-free operation

- Can handle highly viscous fluids
- Economical solution to long term filtration needs

Table 1 lists the Model G general specifications.

Specifications

Table 1. – Model G General Specifications

| | |
|-------------------------|--|
| Inlet/Outlet Connection | ¾" NPT |
| Drain | ½" NPT |
| Vent | 1/8" NPT |
| Max. Operating Pressure | 125 psi @ 200 °F |
| Sludge Capacity | 2.4 in³ |
| Shipping Weight | 5 lbs |
| Housing Data | |
| Head | Cast Iron |
| Sump | Drawn Steel |
| Head Gasket | Buna N/Cork |
| Gland Packing | PTFE-Aramid Fiber |
| Cartridge Data | |
| Diameter | 1 ¼" |
| Length | 4 ½" |
| Material* | Steel, Brass, or 304 SS |
| Spacing | 0.003", 0.005", 0.008", 0.012" or 0.015" |

*Check catalog numbers for available combinations of material and spacing



Flow Capacity

The flow rates listed in Table 2 are based on clean fluid with a pressure drop of 3 psi. Flow rates for other viscosity fluids are approximately proportional. Select a filter model according to the nature and concentration of the contaminant to be reduced.

Table 2. – Model G Flow Rates

| Spacing (in.) | Screen Mesh Equiv. | Free Area (in ²) | Viscosity in SSU | | | |
|------------------|--------------------------|---------------------------------|------------------|-----|-----|------|
| | | | 100 | 300 | 700 | 2000 |
| | | | Flow in gpm | | | |
| 0.003 | 200 | 3.0 | 5.0 | 3.1 | 1.8 | 1.0 |
| 0.005 | 120 | 4.0 | 6.0 | 3.9 | 2.4 | 1.4 |
| 0.008 | 70 | 5.4 | 6.6 | 4.6 | 2.7 | 1.7 |
| 0.012 | 50 | 6.9 | 7.3 | 5.2 | 3.2 | 1.9 |
| 0.015 | 40 | 7.7 | 7.5 | 5.5 | 3.3 | 2.0 |

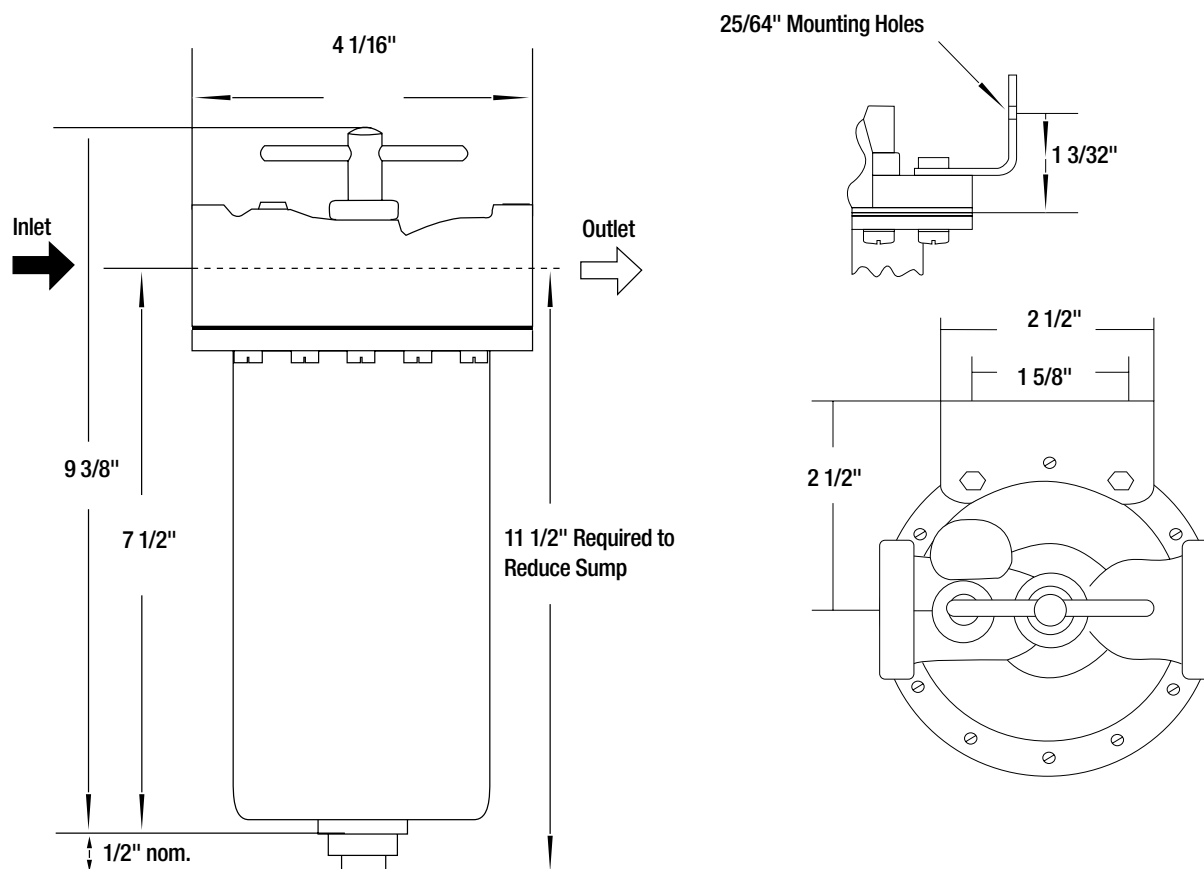
Catalog Numbers

| Model | Spacing (in.) | Filter Catalog Number | Cartridge Catalog Number |
|-------|---------------------------|-----------------------|--------------------------|
| G | Steel Cartridge | | |
| | 0.003 | 13018-26-50-0030 | 13131-07-50-0030 |
| | 0.005 | 13018-26-50-0050 | 13131-07-50-0050 |
| | 0.008 | 13018-26-50-0080 | 13131-07-50-0080 |
| | 0.012 | 13018-26-50-0120 | 13131-07-50-0120 |
| | 0.015 | 13018-26-50-0150 | 13131-07-50-0150 |
| | Brass Cartridge | | |
| | 0.003 | 13018-26-20-0030 | 13131-07-20-0030 |
| | 0.005 | 13018-26-20-0050 | 13131-07-20-0050 |
| | 0.012 | 13018-26-20-0120 | 13131-07-20-0120 |
| | Stainless Steel Cartridge | | |
| | 0.003 | 13018-26-40-0030 | 13131-07-40-0030 |
| | 0.005 | 13018-26-40-0050 | 13131-07-40-0050 |
| | 0.008 | 13018-26-40-0080 | 13131-07-40-0080 |
| | 0.012 | 13018-26-40-0120 | 13131-07-40-0120 |
| | 0.015 | 13018-26-40-0150 | 13131-07-40-0150 |

For replacement parts, contact your 3M Purification Representative.

Catalog Numbers Dimensions

Rough plumbing dimensions for the Model G are given in Figure 1.



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