

# CUNO™ EF DDS Series

Self Cleaning Metal Filter System

## CUNO™ EF DDS Self Cleaning Metal Filter System

CUNO™ EF DDS series self cleaning metal filter is designed for maximum economy where the required flow capacity is low. The DDS filter is cleanable with out interruption of flow by one turn of the cleaning handle. The sump and head are sealed by induction brazing. A drain is provided for reduction of sludge. Specifications for the DDS filter are listed in Table 1.



**Table 1. – DDS Specifications**

Filter Data	
Inlet/Outlet Connection	3/8" NPTF
Drain	1/4" NPTF
Max. Operating Pressure	250 psi @ 200 °F
Sludge Capacity	4 in <sup>3</sup>
Shipping Weight	2.5 lbs
Cartridge Diameter	1 1/4"
Cartridge Length	1 5/8"
Spacings	0.003", 0.005", or 0.008"
Construction Materials	
Head and Sump	Brass
Gland Packing	Aramid Fiber
Cartridge	Brass

## Applications

### Oil & Gas

Fuel service, Lubricating oils, Cooling oils, Cutting oils

### Filter Capacity

The CUNO EF DDS series self cleaning metal filter flow rates listed in Table 2 are based on clean fluid at 3 psi pressure drop. Flows at other viscosities are approximately proportional. Select a spacing (degree of filtration) according to the nature and concentration of the contaminant to be reduced.

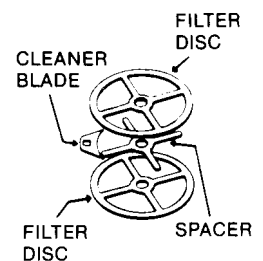
### Theory of Operation

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 DDS series self cleaning metal filter is available in spacings from 0.003" to 0.008".

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 with out interruption of flow. Drain the sump as often as experience indicates is necessary.

**Table 2. – Flow Rates**

Spacing (in.)	Screen Mesh Equiv.	Free Area (in <sup>2</sup> )	Viscosity in SSU			
			100	300	700	2000
Flow in gpm						
0.003	200	1.0	2.6	1.7	0.9	0.53
0.005	120	1.6	3.5	2.4	1.4	0.80
0.008	70	2.2	4.5	3.1	1.9	1.10



## Features & Benefits

### All brass materials

- Durable Construction for long service life
- Economical solution to long term filtration needs

### Positive cleaning action with no interruption of flow or service

- Maximizes process up-time

### Cleanable Filter Element

- Reduces used filter disposal

## Filter Dimensions

CUNO™ EF DDS series self cleaning metal filter dimensions are shown in Figure 1. These dimensions should be used for rough plumbing only. Note that enough space to accommodate sludge draining should be considered during installation.

### Catalog Numbers

Model	Spacing (in.)	Catalog Number
DDS	0.003	13136-01-20-0030
	0.005	13136-01-20-0050
	0.008	13136-01-20-0080

For replacement parts, contact your 3M Purification Representative.

Figure 1. – CUNO™ EF DDS Series Self Cleaning Metal Filter

