

3M Purification



CUNO™ GP Series Self-Cleaning Metal Filter System

The CUNO™ GP series self-cleaning metal filter is an all-metal cleanable edge type filter designed for high-pressure applications. The threaded aluminum sump is O-ring sealed to the head for quick reduction without disturbing pipe connections. Mounting holes and sump drain are provided to allow ease of installation and operation.

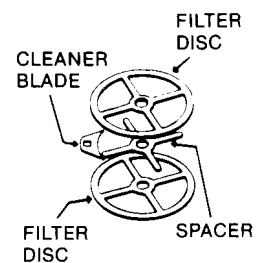
Theory of Operation

The CUNO GP 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. The CUNO GP series filter is available in spacings from 0.003" to 0.008" (75µm to 200 µm).

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 as often as experience indicates is necessary.

Flow Capacity

The flow rates listed in Table 1 are based on clean fluid with a pressure drop of 20 kPa. 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.



Applications

Coatings	Adhesives
Food & Beverage	Syrups
Oil & Gas	Lubricating oils, Bunker "C", Quenching oils, Cooling oils, Cutting oils, Diesel oils, Fuel oils, Tar, Wax, Grease

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
- Can be used on suction side of pumps

Table 1. – Model GP Flow Rates

Micron (µm)	Spacing (in.)	Screen Mesh Equiv.	Free Area (cm ²)	Viscosity in SSU			
				100	300	700	2000
Flow in lpm							
75	0.003	200	19	18.9	11.7	6.8	3.8
125	0.005	120	25	22.7	14.7	9.1	5.3
200	0.008	70	35	25.0	17.4	10.2	6.4

Catalog Numbers

Model	Micron (µm)	Spacing (in.)	Filter Catalog Number	Cartridge Catalog Number
GP	Steel Cartridge			
	75	0.003	70020105865	70020081819
	125	0.005	70020105873	70020081827
	200	0.008	70020105881	70020081835

For replacement parts, contact your 3M Purification Representative.



Specifications

Table 2 lists the Model GP general specifications

Table 2. – Model GP Specifications

General Filter Data	
Inlet/Outlet Connection	1" NPTF
Drain	3/4" - 16AN814-8DL
Max. Operating Pressure	20,600 kPa @ 148 °C
Sludge Capacity	90 cm ³
Shipping Weight	4 kg
Housing Data	
Head	Anodized Aluminum
Sump	Anodized Aluminum
Head Gasket	Buna N O-ring
Gland Seal	Buna N O-ring
Cartridge Data	
Diameter	32 mm
Length	115 mm
Material*	Steel
Spacing	0.003", 0.005", or 0.008"
Micron (µm)	75, 125 and 200

Dimensions

Rough plumbing dimensions for the Model GP are given in Figure 1. Allow enough space for sump reduction.

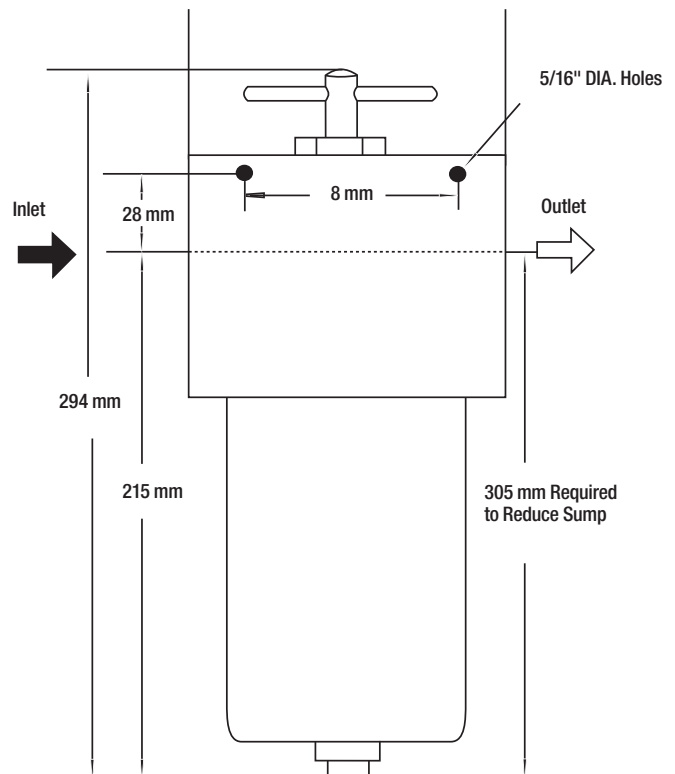


Figure 1. – Model GP Dimensions

Important Notice

The information described in this literature is accurate to the best of our knowledge. A variety of factors, however, can affect the performance of the Product(s) in a particular application, some of which are uniquely within your knowledge and control. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING THE SAME WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR USE. IN NO EVENT WILL 3M PURIFICATION BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION.

It is your responsibility to determine if additional testing or information is required and if this product is fit for a particular purpose and suitable in your specific application.

Limitation of Liability

3M Purification Pty Limited will not be liable, to the extent permitted by law, for any loss or damage from the use of the Product(s), whether direct, indirect, special, or consequential, regardless of the legal theory asserted, included warranty, contract, negligence or strict liability.

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