Disc Cleaning Filters

DCF-3000

Mechanically Cleaned

Permanent Media

Two actuators isolate the actuation mechanism from the filtrate with a bridged system. The benefit is a long operating life for high pressure, high temperature conditions.

The dual cleaning disc and twin actuator design of the DCF-3000 mechanically cleaned filter can be fabricated in a variety of materials and options. It can be used in many different applications and operating temperatures up to 400 °F (200 °C). It is ideal for highly viscous or sticky liquids with flow rates of up to 500 GPM (110 m³/h). For water-like liquids, it can handle flow rates up to 1500 GPM (340 m³/h).

FEATURES

- No need for disposable filter media reduces operating, material and disposal costs
- Minimum product loss through highly concentrated discharge of contaminants
- Virtually maintenance- and interruption-free operation
- Safe operation through reduction or elimination of operator intervention
- Compact and cost-effective design to fit most installations
- Slotted wedge wire elements in stainless steel from 15 µm and perforated filter elements up to 1/4" (6.35 mm) handle a wide range of filtration requirements
- Available with POM (Delrin®) or PEEK cleaning discs
- Optional with Eaton easy control relays
- Available with DGRL inspection, ASME U stamp on request

TYPICAL APPLICATIONS

• Paper coatings • PCC/GCC slurries • Phenolic resins
• Detergents • Petroleum based greases • Ethanol processing
• Hot fry oils • CIP fluids (sodium hydroxide) • Starch
• Lime slurries • Adhesives • Curtain coaters • Nutricuticals
• Machining coolants • Paint • Ink • Chocolate • Edible oils
• Tallow

When filtering high viscosity liquids for demanding applications, the DCF-3000 filter's twin actuator, dual disc models deliver tremendous benefits. It is available in flow rates up to 1500 GPM (340 m³/h) with retentions of 15 to 1,100 µm.

Utilizing the proven features of the DCF-1600 twin actuator mechanically cleaned filter, yet designed with 2.5 times the capacity, Eaton's DCF-3000 filter is compatible with a wide range of fluid process conditions. A maximum operating pressure of 150 PSI (10 bar) along with a maximum temperature of up to 400 °F (200 °C) allows for multiple seals and cleaning disc material options.

Dual circular cleaning disc design ensures intimate contact with the screen to thoroughly and uniformly clean the media.

DCF-3000 Specifications	
Approx weight	350 lbs (159 kg)
Service height:	136 in (3,454 mm)
Flow rates at 100 µm:	Up to 1,100 GPM (250 m³/h)
Operating pressure:	30 - 150 PSI (2 - 10 bar)
Operating temperature, max.:	400 °F (200 °C)
Viscosity:	Water-like to 500,000+
Standard retention:	15 - 1,100 µm
Housing material:	316 Stainless steel
Elastomers:	EPDM, FPM, NBR, FEP/FPM, others on request
Cleaning discs:	POM (Delrin®), PEEK
Packing:	PTFE, FPM, HPU
Process connections:	DN 100 - DN 200 DIN flanged or 4 - 8" 150# ANSI flanged
Purge connection:	DN 50 DIN flanged or 2" 150# ANSI flanged
Air for actuator drive (clean, dry, non lubricated air):	80 PSI (5.5 bar) min. - 116 PSI (8 bar) max. 5.0 cfm (141.5 l/min)
Electrical for controllers:	115 VAC or 230 VAC 50/60Hz
Semi-auto voltage:	24 VDC
Flooded weight:	720 lbs (325 kg)

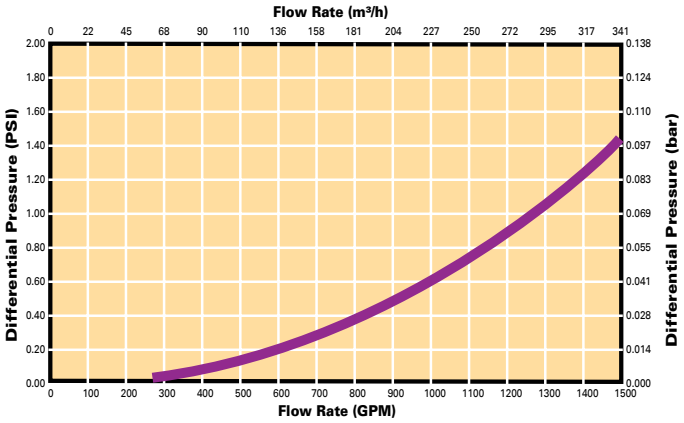
Slotted Wedge Wire Strainer Element Options

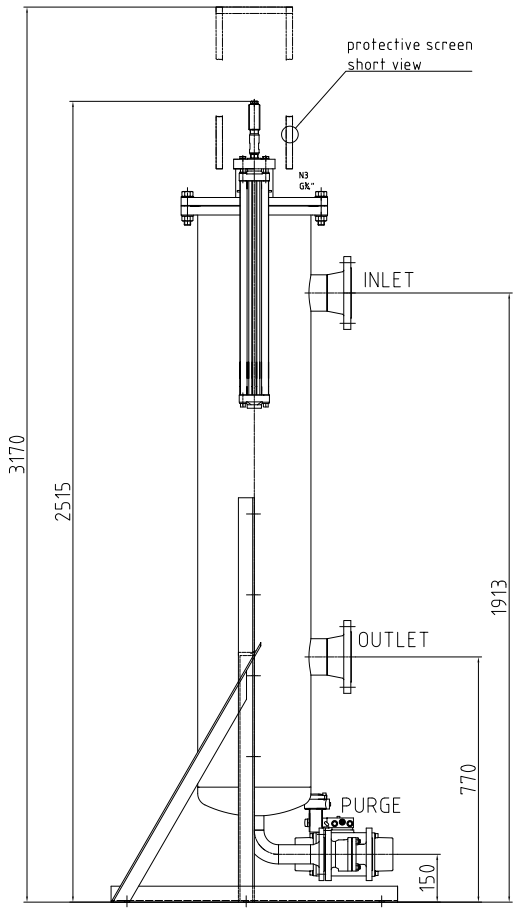
Inch	Micron	Mesh	% Open Area
.002	50	325	6
.003	75	200	9
.004	100	150	12
.006	150	100	17
.007	180	80	19
.008	200	70	21
.009	230	60	23
.015	380	40	33
.024	600	30	44
.030	700	20	50
.045	1140	15	60

Additional retentions available, consult Eaton.

Delrin® is a registered trademark of E. I. du Pont de Nemours and company.

DCF-3000 Flow Rates





For more information:
WEB: FLTR.com.au **PHONE**: (+61) 1300 62 4020 **EMAIL**: info@FLTR.com.au **SKYPE**: Purple.Engineering

FLTR Purple Engineering