

Mechanically Cleaned Filters and Strainers

DCF, MCF, MCS

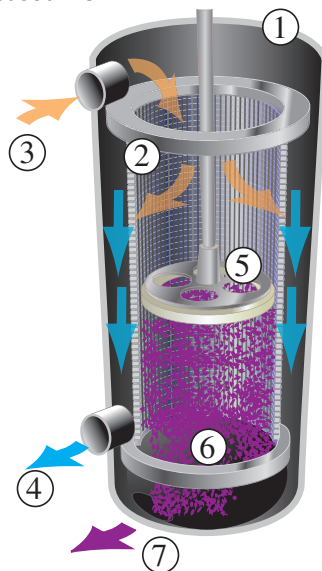
Unbeatable reliability
with measurable ROI

PERMANENT MEDIA WITH DISC CLEANING TECHNOLOGY

- Elimination or reduction in disposable filter bags or cartridges for reduced operator handling inventory costs and landfill waste
- Reduction in product loss, more thorough contaminant purge
- Reduction or elimination of operator intervention for safer operation
- Virtually maintenance free, near 100% uptime
- Compact design, lower capital cost to fit most installations
- Choice of pneumatic, motor drive or magnetic actuation
- Stainless steel screens from 15 micron slots to 1/4" perforations to handle a wide range of filtration needs
- Short payback period and increased ROI



Eaton's unique spring loaded cleaning disc (shown here in an MCS-500) ensures intimate contact with the filtration screen to thoroughly and uniformly clean the media.



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 • nutraceuticals • machining coolants • paint
- ink • chocolate • edible oils • tallow

Collect, concentrate, expel

Eaton's mechanically cleaned filters are based on a simple concept: A cylindrical stainless steel housing (1) contains a filter screen (2); unfiltered liquids enter the inlet (3); solids are deposited on the interior surface of the filtration screen; and filtered fluid exits at the outlet (4).

When the media requires cleaning (based on time, differential pressure, or manual selection), a spring loaded cleaning disc travels down and up, wiping the media clean of concentrated solids in both strokes. Once the debris is removed from the slotted screen, the cleaning disc directs the contaminant to the bottom of the housing (6) and out of the flow path (7). This cleaning process happens while the filter remains in service, thereby maintaining process efficiency and dramatically reducing loss of valuable product.

Choice of actuation method

Pneumatic -The cleaning disc can be actuated by air pressure alone (60 to 80 psi @ 5 cfm). DCF-800 and DCF-1600 models feature single or twin air cylinders. The smaller DCF-400 is equipped with a single cylinder.

Pneumatic with magnetic coupling - MCS and MCF-Series utilize rare earth magnets to eliminate the need for lid thru-holes and their associated seals. This cost-effective method reduces maintenance and lengthens operating life.

Motorized -The DCF-2000 Series uses a motor to drive the cleaning disc through higher viscosity fluids and other challenging conditions.

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DCF-Series

When processing water and water-like liquids where a low initial investment is demanded, this series delivers tremendous benefits.



DCF-1600



DCF-800



DCF-1600 with twin actuation



DCF-2000

DCF-2000 Series

Designed specifically for the needs of the pulp and paper industry, the DCF-2000 features a rugged motorized cleaning action, which can handle the continuous processing requirements of protecting critical wet-end coating operations.

High Flow MCS Strainer

Engineered to conserve valuable process water while protecting costly equipment from debris, the MCS features fast-cleaning magnetically coupled actuation. This high flow strainer uses a magnetically coupled cleaning disc, which eliminates the need for cover thru-holes and their associated seals.



MCS-500

MCF-824

MCF 824-Series

The MCF features a magnetically coupled cleaning disc, which eliminates the need for lid thru-holes and their associated seals. The MCF was designed specifically for the most challenging process liquids and conditions, and features the fastest cleaning action of the mechanically cleaned family.



	DCF-400	DCF-800	DCF-1600	DCF-2000	MCF-824	MCS-500	MCS-1500
Total Volumetric Capacity gal (liters)	0.94 (3.5)	3.9 (14.8)	11 (41.6)	11 (41.6)	11 (41.6)	18.7 (70.8)	49.2 (186.2)
Flow Rate Range at 100µ gpm (m³/hr)	2–20 (0.45–4.5)	20–60 (4.5–13.6)	60–200 (13.6–45.4)	30–200 (6.8–45.4)	30–200 (6.8–45.4)	to 500 (to 112.5)	to 1500 (to 337.5)

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Disc Cleaning Filters

DCF-400 DCF-800 DCF-1600

Mechanically
Cleaned

Permanent
Media

The Eaton DCF-Series is ideal for highly viscous, abrasive, or sticky liquids. The DCFs operate at a consistently low differential pressure and deliver simple, reliable operation in which a low initial investment is a key driving factor.



DCF-800 - One actuator delivers simple, reliable operation with water-like liquids. Ideal where a low initial investment is a key driving factor

FEATURES

- Elimination or reduction in disposable filter bags and cartridges for reduced operator handling inventory costs and landfill waste
- Reduction in product loss, more thorough contaminant purge in a highly concentrated waste stream
- Reduction or elimination of operator intervention for safer operation
- Virtually maintenance free, near 100% uptime
- Compact design, lower capital cost to fit most installations
- Stainless steel screens from 15 micron slots to 1/4" perforations to handle a wide range of filtration needs
- Available with UHMWPE, Urethane®, Teflon, or Kynar® Cleaning Discs

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 • nutraceuticals • machining coolants • paint
- ink • chocolate • edible oils • tallow

When processing water and water-like liquids where a low initial investment is demanded, DCF single actuator models deliver tremendous benefits. Available in 400, 800, and 1600 sizes, The DCF-Series enables operation at a vast range of flow rates and retentions.

The DCF-800 and DCF-1600 are also available in twin actuator models, which are designed for the rigors of processing highly viscous, abrasive, sticky, or otherwise hard-to-process liquids. DCF filters are suitable for a broad spectrum of challenging applications and accommodate a wide range of flow and retention requirements.



DCF-1600 - Two actuators isolate the actuation mechanism from the filtrate system. The benefit is a long operating life in challenging conditions.

DCF-800 twin actuator model



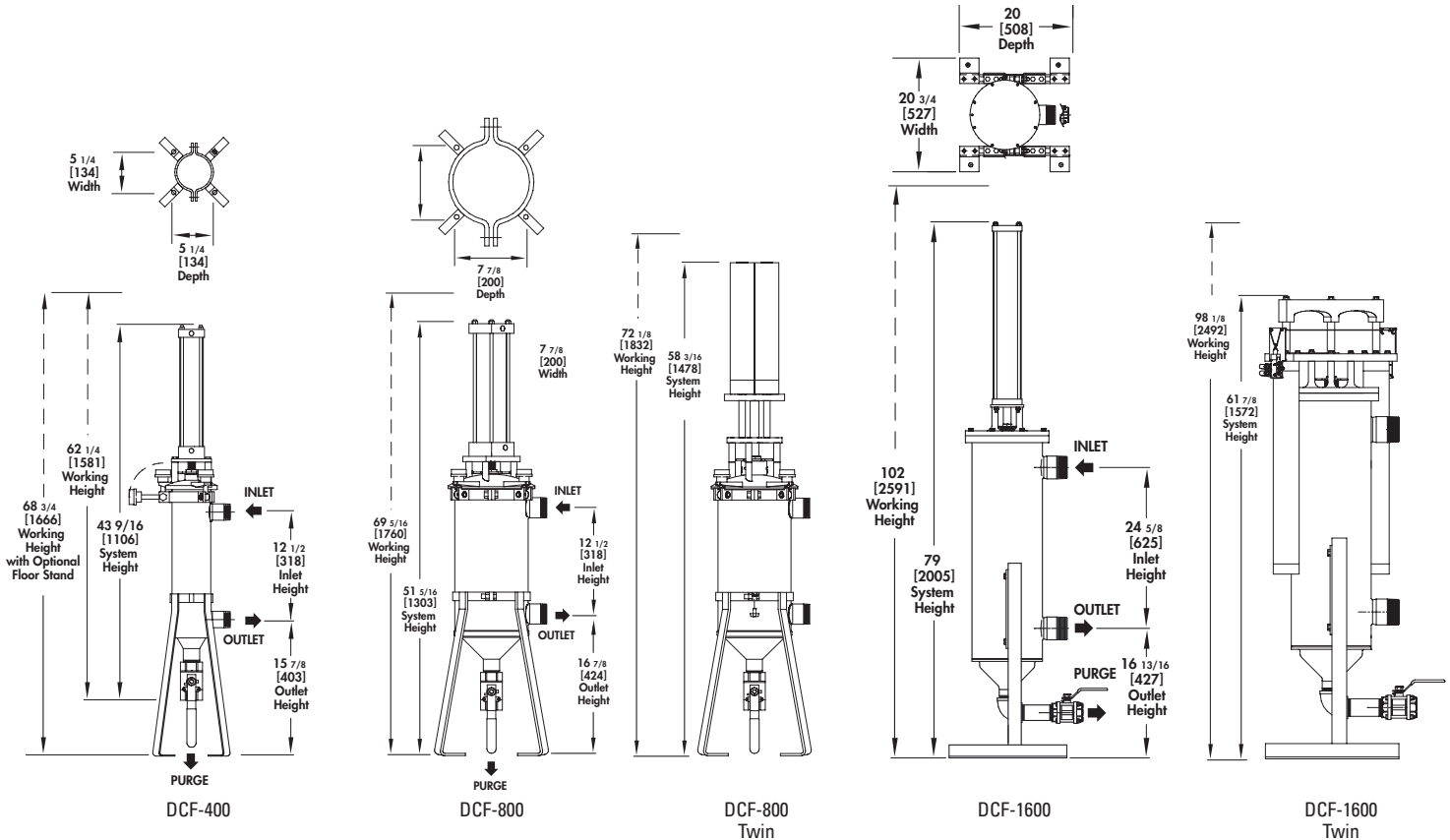
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Our unique circular cleaning disc design (MCF design shown) ensures intimate contact with the screen to thoroughly and uniformly clean the media.

DCF-400, DCF-800, DCF-1600 Disc Cleaning Filters



	DCF-400	DCF-800	DCF-1600
Single Unit Weight	35 lbs (16 kg)	75 lbs (34 kg)	215 lbs (97.5 kg)
Service Height	61.25 in (1556 mm)	69.25 in (1760 mm)	102 in (2591 mm)
Total Volumetric Capacity	0.94 gal (3.5 liters)	3.9 gal (14.8 liters)	11 gal (41.6 liters)
Purge Chamber Capacity	4 fl. oz (119 ml)	25 fl. oz (0.74 liters)	1.5 gal (6 liters)
Filtration Surface Area	112 in ² 722 cm ²	264 in ² 1703 cm ²	610 in ² 3935 cm ²
Flow Rate Range at 100µ	2–20 gpm 0.45–4.5 m ³ /hr	20–60 gpm 4.5–13.6 m ³ /hr	60–200 gpm 13.6–45.4 m ³ /hr
Temperature, maximum*	350° F (177° C)	350° F (177° C)	350° F (177° C)
Pressure, maximum	300 psi (21 bar)	150 psi (10.5 bar) standard	150 psi (10.5 bar) standard
Service Requirements			
Air for Actuator Drive, min	400/800 = 60 psi at 5 cfm (4 bar @ 8.5 m ³ /min) 1600 = 80 psi at 5 cfm (5 bar @ 8.5 m ³ /min)		
Electrical for Controllers	Control for all three models, automated only, 110/220V, 50/60 Hz, single phase		

* Dependent on elastomer seal selection.

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EF-MC-02
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Disc Cleaning Filters

DCF-2000

Mechanically
Cleaned

Permanent
Media

Eaton's DCF-2000 is designed specifically to address the challenges associated with filtering coatings and slurries in the paper making industry. Eliminate paperbreaks or streaks, reduce the environmental impact, and maximize uptime and productivity—for high production volumes and consistent product quality.



DCF-2000
Single
Configuration

DCF-2000

With a rugged motorized cleaning action, the DCF-2000 can handle the continuous processing requirements of protecting critical wet-end coating operations.

FEATURES

- Filters 48-72% solids coatings at 75 micron retention—the tightest in the industry
- Continuously removes contaminants from the coating and efficiently evacuates collected contaminants while operating at a low, constant differential pressure
- Designed for continuous unattended operation—without the need for operator intervention
- Mechanically cleaned media eliminates replacement media cost and the expense and hazard of waste disposal
- Increased profitability—improves system efficiency, reduces paperbreaks and associated downtime
- Multiplex configurations available and valved to a common tapered header for high-flow applications

TYPICAL APPLICATIONS

- paper coatings



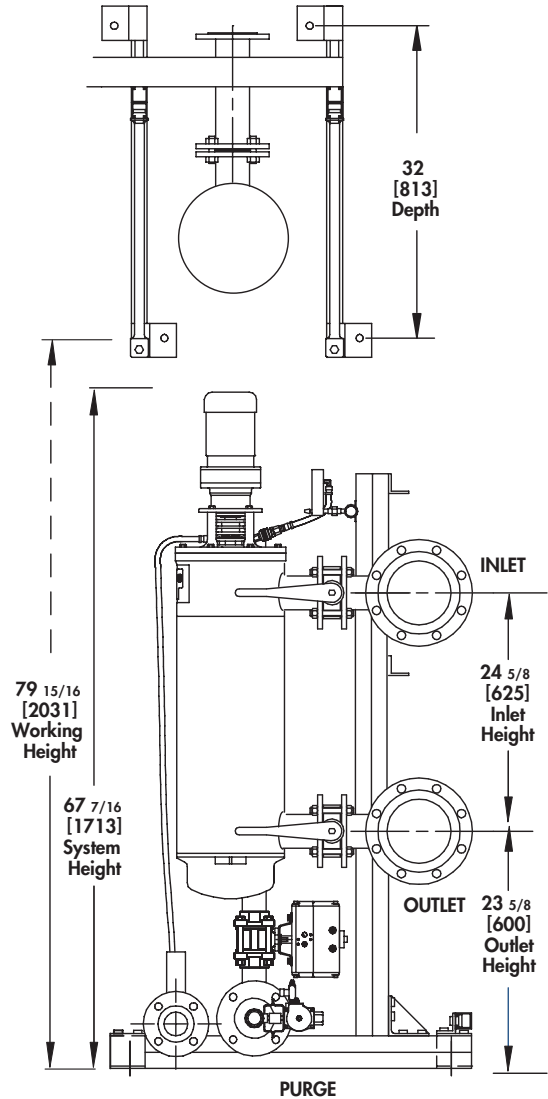
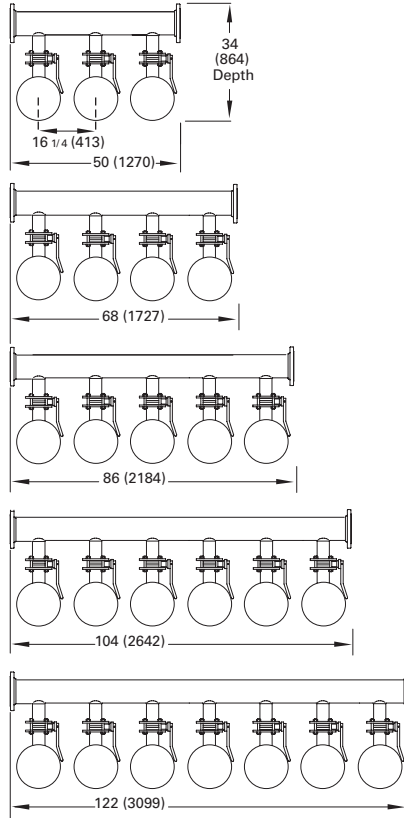
DCF-2000
Multiplex
Configuration

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DCF-2000 Disc Cleaning Filters

Driven at a constant rate and pressure, the cleaning disc continuously wipes collected debris from the screen. Collected contaminants are agitated in the collection chamber, keeping them in a semi-liquid state, ready to be purged from the system.



DCF-2000 Specifications

Single Unit Weight	564 lbs (256 kg)
Service Height	72 in (1829 mm)
Total Volumetric Capacity	11 gal (41.6 liters)
Purge Chamber Capacity	1.5 gal (6 liters)
Filtration Surface Area	610 in ² (3935 cm ²)
Flow Rate Range at 100 μ	30–200 gpm 6.8–45.4 m ³ /hr
Temperature, maximum*	160° F (71° C)
Pressure, maximum	150 psi (10.5 bar) standard
Electrical for Motor Drive	single phase 110/220V, 50/60 Hz for control and three phase, 220/380/440/575V (please specify), 50/60 Hz for motor.
Electrical for Controllers	single phase 110/220V, 50/60 Hz

* Dependent on elastomer seal selection

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Magnetically Coupled Filter

MCF

824-Series



Mechanically
Cleaned

Permanent
Media

Simplified design uses only 25 total parts

Up to 200 GPM throughput with virtually no downtime with the MCF 824-Series magnetically coupled self-cleaning filter. This technology allows for quick and easy access for maintenance, reduces potential leaks, and requires few moving parts while providing a long service life.

FEATURES

- Permanent media retains valuable product otherwise lost by media changeout
- Simple design with very few wear parts—for reduced spare parts stocking needs
- No external shaft or drive seals—eliminates all associated leakage
- Cleanable permanent media eliminates downtime and disposal requirements
- Easy no-tools access for routine maintenance and service
- Continuous operation—even during cleaning cycles

TYPICAL APPLICATIONS

- paper coatings • pcc/gcc slurries • phenolic resins • petroleum based greases • ethanol processing
- cip fluids (sodium hydroxide) • hot fry oils • starch • lime slurries • curtain coaters • nutraceuticals
- machining coolants • adhesives • paint • ink • chocolate • edible oils • detergents • tallow

OPTIONS

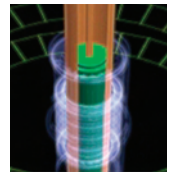
- EPT/EPDM (Nordel™) or Viton® seal material
- Advanced programmable microprocessors
- ASME code and CRN design units
- Automatic pressure transmitters
- Purge welding, internal and external polishing
- Multi-station configurations
- Air bleed capability

The MCF, from Eaton, draws upon our rich history of self-cleaning filtration. The innovative, magnetically coupled drive technology that moves the cleaning disc—without the need for shaft or drive external seals—makes the MCF unique. The MCF, a cost effective solution, is designed for a wide range of industrial liquid filtration applications. It also addresses the challenges of environmental concerns, loss of valuable product, and demand for greater operator safety.

How the MCF works

Filtrate flows from the top down and from the inside of the media toward the outside to increase retention of contaminants. The unique design uses a spring loaded cleaning disc that travels top to bottom inside the filter media – removing collected contaminants. The cleaning disc and flow continually drive undesirable solids downward, where they are concentrated in the purging chamber for easy expulsion. A hollow shaft at the center of the system contains a piston with powerful rare earth magnets. These internal magnets are coupled to external magnets housed in a carrier connected to the cleaning disc.

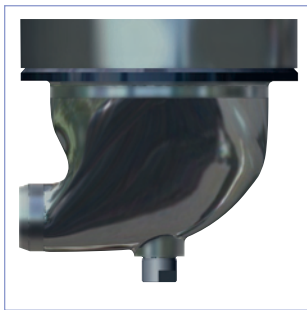
Pneumatic actuation moves the inner magnet up and down the shaft, with the outer magnet on the cleaning disc following. The result is powerful actuation, without the need for a physical linkage passing through the vessel.



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MCF 824-Series Magnetically Coupled Filter



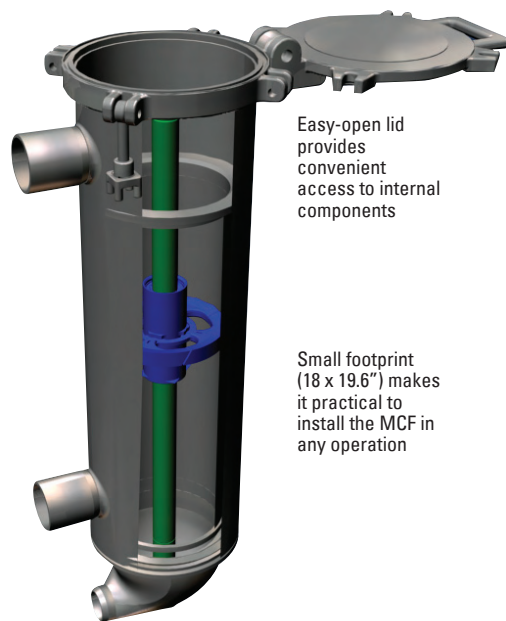
The MCF purge chamber was engineered without horizontal surfaces to facilitate flow dynamics for an extremely thorough purging process



Choice of stainless steel filters include wedge wire, rated from 15 – 1125 microns or perforated screens for complete removal of large solids



Quartered spring loaded cleaning disc combines maximum wear characteristics with optimized cleaning ability



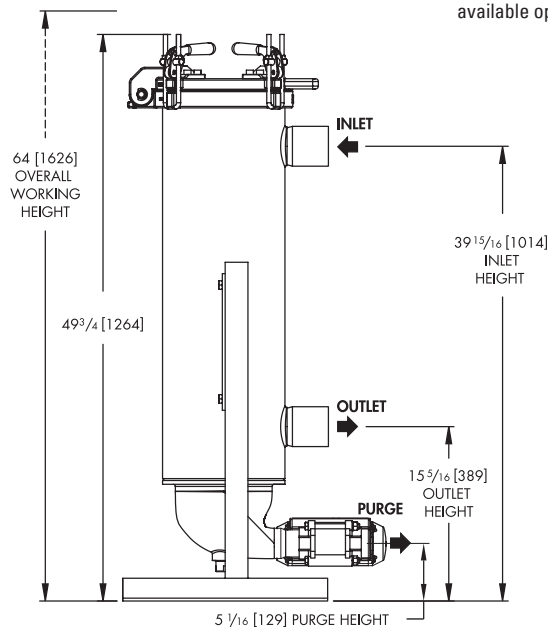
Easy-open lid provides convenient access to internal components

Small footprint (18 x 19.6") makes it practical to install the MCF in any operation

Hand levers shown in the illustration are an available option

MCF-824 STANDARD SPECIFICATIONS

Single Unit Weight	200 lbs (91 kg)
Service Height	64 in. (1,626 mm)
Footprint	19.6 in. (498 mm) x 18 in. (457 mm)
Volumetric Capacity	11 gal (41.6 l) total
Purge Chamber	1.3 gal (5 l) capacity
Connections: Standard	3 in (75 mm) I/O NPT thread, 2 in (50 mm) NPTI purge
Connections: Optional	150# RFSO flanged, Sanitary, DIN (PM16) flanged, or BSPT—and purge valve options and more
Filtration Surface Area	601 in ² (3935 cm ²)
Media	Wedge wire: 15µ–1125µ, or defined pore: 25µ–100µ
Screen	Diameter: 8 in (203 mm), Length: 24 in. (610 mm), Area: 610in ² (3935 cm ²)
Flow Rate Range	30–200 gpm (6.8–45.4 m ³ /hr)
Temperature, maximum	180°F (82°C)
Operating pressure	30–150 psi (2–10.5 bar)
Elastomer Seal	Optional: EPT/EPDM (Nordel™) or Viton®
Cleaning Disc	Standard: Delrin - optional: High-Density Polyethylene
Housing/Wetted Parts Materials	Standard: 316 stainless steel
Controllers	Standard: continuous cleaning valve (CCV)
Controller Options	Push button, semi-automatic electric, electric timer, PLC
Air for Actuator Drive (Clean, dry, non lubricated air)	80 psi (5.5 bar) at 5 cfm (140 m ³ /m)
Electrical for Controllers	(if equipped with optional electric automatic control timer): 110 or 220 Volt, 50 or 60 Hz, single-phase



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EF-MC-04
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Magnetically Coupled Strainer

High Flow MCS-500

Mechanically
Cleaned
Permanent
Media

The MCS-500's magnetically coupled actuation eliminates the need for dynamic seals. This technology provides quick and easy access for maintenance, reduces potential leaks, and requires few moving parts while providing a long service life.



Environmentally Sustainable Design

FEATURES

- No dynamic seals
- Minimal purge for low waste operation
- Easy in-line installation
- Continuous 24/7 operation
- Maintenance-friendly design means lower labor costs
- Eco-friendly. No bags to purchase, change, or landfill
- 316 stainless steel vessel

OPTIONS

- Multi-station configuration
- EPT/EPDM (Nordel™) or Viton® seal material
- Advanced programmable microprocessors
- ASME Code units
- Automatic pressure transmitters
- Purge welding
- Air bleed capability
- 304 stainless steel controller enclosure
- Gauge ports: 1/4"

The MCS-Series is engineered to conserve valuable process water while protecting costly equipment from debris. It offers minimal purge volumes in fresh water applications—allowing you to save on the cost of make up liquids, chemical treatment, and heating energy.

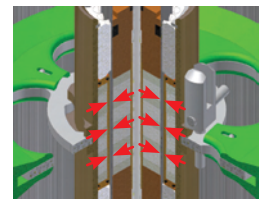
Featuring fast cleaning magnetically coupled actuation, this design offers an optimized configuration to help improve and reduce costly maintenance and downtime. In addition, this actuation method eliminates the need for cover thru-holes and their associated seals.

TYPICAL APPLICATIONS

- paper coatings • pcc/gcc slurries • phenolic resins • petroleum based greases • ethanol processing
- cip fluids (sodium hydroxide) • hot fry oils • starch • lime slurries • curtain coaters • nutraceuticals
- machining coolants • adhesives • paint • ink • chocolate • edible oils • detergents • tallow

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The actuation piston and cleaning disc are coupled by powerful rare earth magnets—a simple design that delivers tremendous benefits by eliminating the need for shaft or external drive seals.

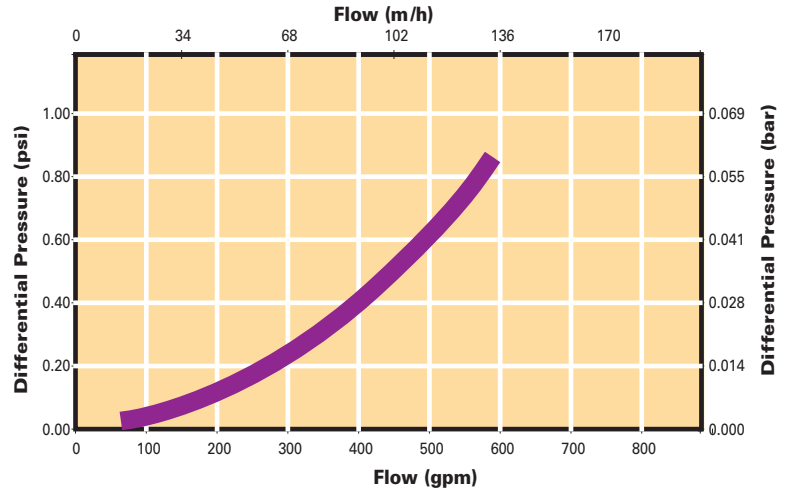
MCS-500 Magnetically Coupled Strainer

HIGH FLOW MCS-500 SPECIFICATIONS

Approx Weight	350 lbs (159 kg)
Service Height	66 in (1676 mm)
Flow Rates at 100µ	Up to 500 gpm / 114 m ³ /hr
Operating Pressure	30-150 psi (2-10.5 bar)
Operating Temperature, max.	180° F (82° C)
Viscosity	Water/water-like fluids
Standard Retention*	150–1,100 microns
Vessel Material	316 Stainless Steel
Elastomers	EPT/EPDM (Nordel™) or Viton®
Process Connections	6 in 150# Flanged / DN 200 Flanged
Purge Connection	1 1/2 in NPT / 1 1/2 in BSPT
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 50/60 Hz
Semi-Auto Voltage	24 VAC, 115 VAC, 230 VAC 24 VDC 115/230 VAC

*Tighter retentions available. Please call for more information.

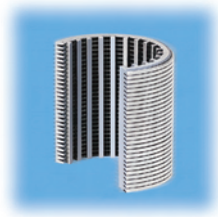
MCS-500 Flow Rates



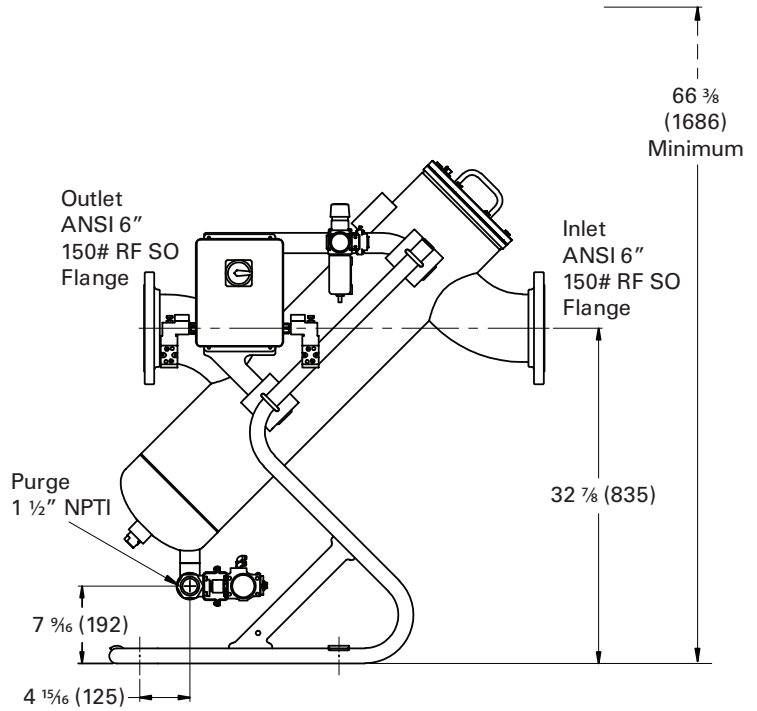
Up to eight MCS units can be configured into a multiplex system for high volume requirements

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.



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EF-MC-05
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Magnetically Coupled Strainer

High Flow MCS-1500

Mechanically
Cleaned
Permanent
Media

Environmentally Sustainable Design

Eaton's MCS-1500 is perfect for high-capacity straining needs. Its magnetically coupled actuation eliminates the need for dynamic seals. This technology provides quick and easy access for maintenance, reduces potential leaks, and requires few moving parts while providing a long service life.



FEATURES

- No dynamic seals
- Minimal purge for low waste operation
- Easy in-line installation
- Continuous 24/7 operation
- Maintenance-friendly design means lower labor costs
- Eco-friendly. No bags to purchase, change, or landfill
- 316 stainless steel vessel

OPTIONS

- Multi-station configuration
- EPT/EPDM (Nordel™) or Viton® seal material
- Advanced programmable microprocessors
- ASME Code units
- Automatic pressure transmitters
- Purge welding
- High pressure units
- Air bleed capability
- 304 stainless steel controller enclosure
- Gauge port: 1/4"

The MCS-Series is engineered to conserve valuable process water while protecting costly equipment from debris. It offers minimal purge volumes in fresh water applications, allowing you to save on the cost of make up liquids, chemical treatment and heating energy.

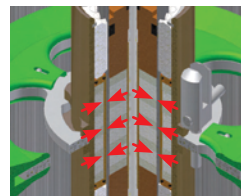
Featuring fast cleaning magnetically coupled actuation, this design offers an optimized configuration to help improve and reduce costly maintenance and downtime. In addition, this actuation method eliminates the need for cover thru-holes and their associated seals.

TYPICAL APPLICATIONS

- paper coatings • pcc/gcc slurries • phenolic resins • petroleum based greases • ethanol processing
- cip fluids (sodium hydroxide) • hot fry oils • starch • lime slurries • curtain coaters • nutricosmetics
- machining coolants • adhesives • paint • ink • chocolate • edible oils • detergents • tallow

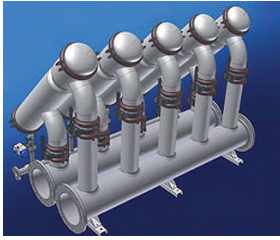
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The actuation piston and cleaning disc are coupled by powerful rare earth magnets—a simple design that delivers tremendous benefits by eliminating the need for shaft or external drive seals.

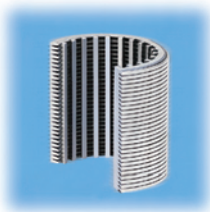
MCS-1500 High Flow Magnetically Coupled Strainer



Up to eight MCS units can be configured into a multiplex system for high volume requirements.

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



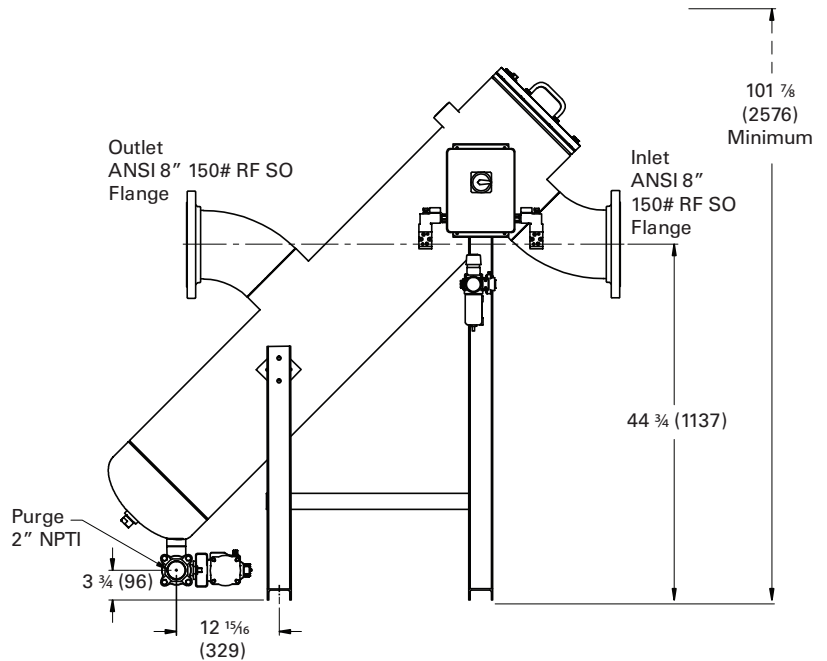
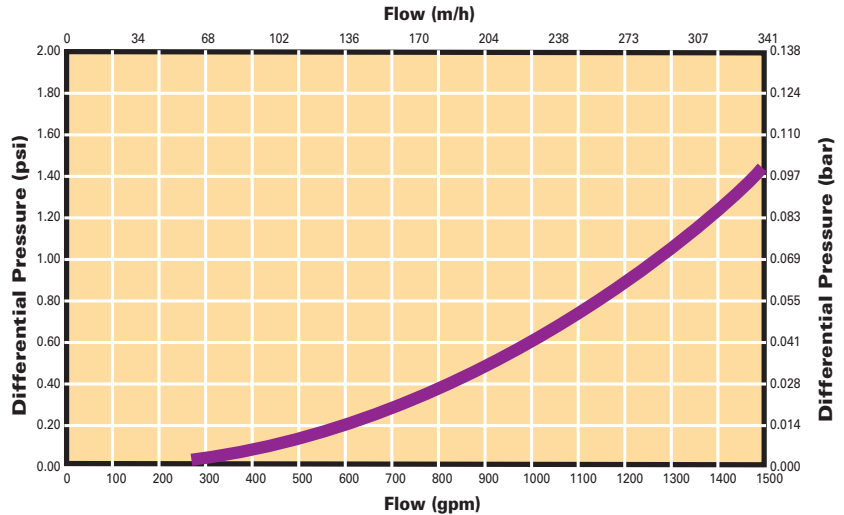
Additional retentions available, consult Eaton.

HIGH FLOW MCS-1500 SPECIFICATIONS

Approx Weight	775 lbs (352 kg)
Service Height	102 in (2591 mm)
Flow Rate Range at 100µ	Up to 1500 gpm / 340 m³/hr
Operating Temperature, max.	180° F (82° C)
Operating Pressure	30-150 psi (2-10.5 bar)
Viscosity	Water/water-like fluids
Standard Retention*	150-1,100 microns
Vessel Material	316 Stainless Steel
Elastomers	EPT/EPDM (Norden™) or Viton®
Process Connections	8 in 150# Flanged / DN 200 Flanged
Purge Connection	2 in NPT / 2 in BSPT
Air for Actuator Drive	80 psi (5.5 bar) min - 116 psi (8 bar) max (Clean dry non lubricated air)
Electrical for Controllers	115 VAC or 230 VAC 50/60 Hz
Semi-Auto Voltage	24 VAC, 115 VAC, 230 VAC 24 VDC 115/230 VAC

*Tighter retentions available. Please call for more information.

MCS-1500 Flow Rates



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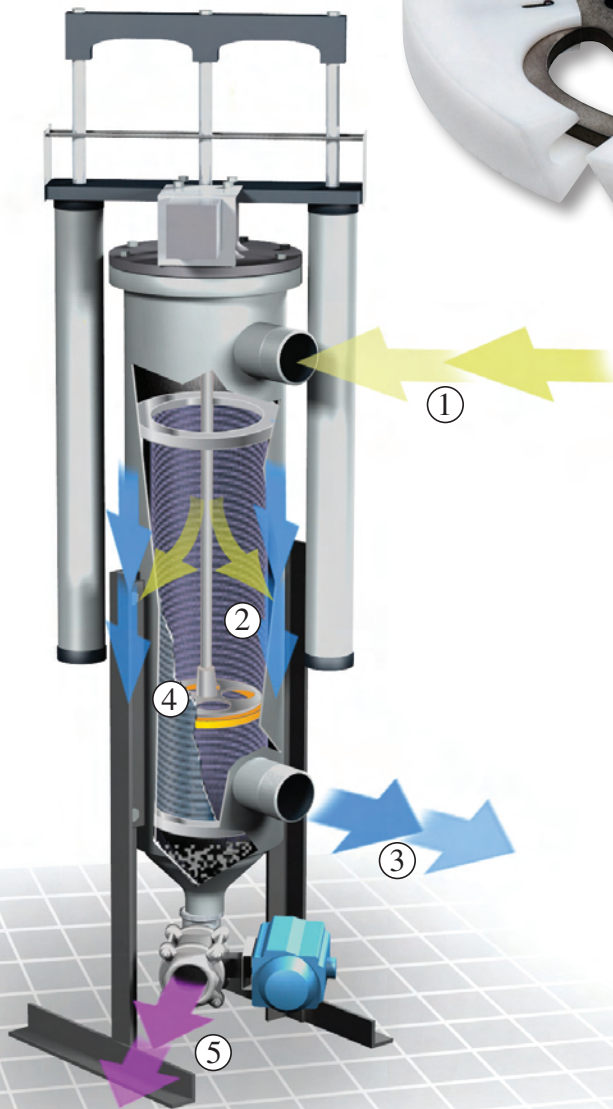


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Disc Power



Our unique circular cleaning disc design (MCF 824-Series design shown) ensures intimate contact with the screen to thoroughly and uniformly clean the media.



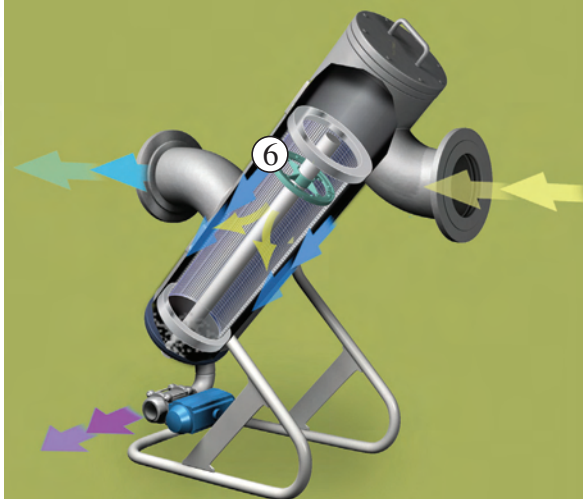
In Eaton's DCF mechanically cleaned filter unit, incoming fluids (1) are channeled from the interior cylinder through a wire screen (2) to the outer cylinder and out the discharge port (3). A cleaning disc (4) travels down and up inside the cylinder to periodically clear the filter screen. Particles are collected at the bottom of the housing where they can be discharged (5).



How it works

Eaton's mechanically cleaned filters are based on a simple concept: A cylindrical stainless steel housing contains a filter screen; unfiltered liquids enter the inlet; solids are deposited on the interior surface of the filtration screen; and filtered fluid exits at the outlet.

When the media requires cleaning (based on time, differential pressure, or manual selection), a spring loaded cleaning disc travels down and up, wiping the media clean of concentrated solids in both strokes. Once the debris is removed from the slotted screen, the cleaning disc directs the contaminant to the bottom of the housing and out of the flow path. This cleaning process happens while the filter remains in service, thereby maintaining process efficiency and dramatically reducing loss of valuable product.



Eaton MCF and MCS operate in much the same manner as DCF units, but add the advantage of a magnetically coupled disc mechanism (6). This unique design eliminates the need for internal seals and reduces maintenance costs.



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TECHNICAL INFORMATION

Mechanically Cleaned Filters & Strainers



	DCF-400	DCF-800	DCF-1600	DCF-2000	MCF-824	MCS-500	MCS-1500
Approx Weight - lbs (kg)	35 (16)	75 (34)	215 (97.5)	564 (256)	200 (91)	350 (159)	775 (352)
Service Height - in (mm)	62 (1575)	69 (1753)	102 (2591)	80 (2032)	64 (1626)	66 (1676)	102 (2591)
Volumetric Capacity-gal (L)	0.94 (3.5)	3.9 (14.8)	11 (41.6)	11 (41.6)	11 (41.6)	18.7 (70.8)	49.2 (186.2)
Purge Chamber Capacity-gal (L)	0.0313 (0.119)	0.2 (0.74)	1.5 (6)	1.5 (6)	1.3 (5)	0.56 (2.1)	1.1 (4.1)
Filtration Surface Area - in ² (cm ²)	112 (722)	264 (1703)	610 (3935)	610 (3935)	610 (3935)	610 (3935)	1508 (9729)
Flow Rate Range at 100μ - gpm (m ³ /hr)	2–20 (0.45–4.5)	20–60 (4.5–13.6)	60–200 (13.6–45.4)	30–200 (6.8–45.4)	30–200 (6.8–45.4)	up to 500 (up to 114)	up to 1500 (up to 342)
Temp. max F (C)	350° (177°)	350° (177°)	350° (177°)	160° (71°)	180° (82°)	180° (82°)	180° (82°)
Pressure, max- psi (bar)	300 (21)	150 (10.5)	150 (10.5)	150 (10.5)	150 (10.5)	150 (10.5)	150 (10.5)

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Visit us online at filtration.eaton.com for a complete list of Eaton's filtration products.

Cleanable Media and System Options

Selection of media retentions and degree of automation is easy with Eaton mechanically cleaned filtration systems. Choose from 15 micron filter elements to 1/4" strainers. Manual to semi-automatic to full microprocessor controlled systems can be configured to suit specific operations, and the range of internal and external components help make Eaton systems a logical choice for long-term efficiency and cost control.

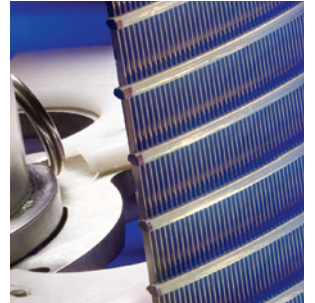
A range of control systems can be employed to actuate and monitor mechanically cleaned systems. Microcomputer controls can also be integrated with system-wide operations.



MEDIA ELEMENTS



Slotted Wedge Wire
DCF/MCF/MCS filter screens feature special wedge wire that is honed perfectly circular to guarantee contact with the cleaning disc so the slot openings are smallest at the screen's surface. This design helps prevent particle plugging of the slot openings while assuring total rated solids removal.



Perforated
Perforated screens feature precise and uniform perforation patterns for complete removal of larger solids. These elements are ideal for straining large volumes of viscous fluids. 1/16", 1/8", and 1/4" perforations are available.



Powering Business Worldwide

Mechanically Cleaned Filter Media and Options

MEDIA RETENTIONS

Slotted Wedge Wire

Inch	Micron	Mesh	% Open Area
.0006	15	—	2
.001	25	—	3
.0015	38	400	5
.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

Perforated

Inch	Micron	Mesh	% Open Area
1/16	1575	12	40
1/8	3175	6	40
1/4	6360	3	57

Additional retentions available. Consult Eaton.

CONTROL SYSTEM CHOICES

The control options for mechanically cleaned filters are as broad as the applications they serve. Available controllers include:



PLC microcomputer controls deliver programmable stand-alone performance, or can integrate with control networks. Allen-Bradley and Siemens controls are standard PLC options.



Continuous Cleaning Valve (CCV) is the standard configuration where the cleaning disc continuously cycles, driven by shop airflow. Purge is controlled by a manual valve or push-button.



Electric timer for timed stroke (single) or stroke and purge (dual) in a NEMA 4-, 7-, or 12- rated enclosure. Dual pneumatic timers are available for explosion proof environments.

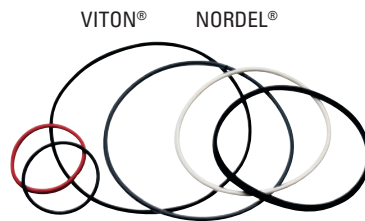


Semi-automatic electric control units for use with customer supplied controls for stroke and purge.

DISC AND SEAL CHOICES

To meet the widest range of operating conditions and process liquid characteristics, Eaton mechanically cleaned systems are available with a number of lid and element seal elastomers and cleaning discs.

Lid and element seals



Cleaning discs



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