Magnetically Coupled Strainer

Mechanically Cleaned

Permanent Media

High-Flow MCS-500

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 or FPM (Viton®)
- Advanced programmable microprocessors
- CE label (ASME code/CRN, others upon request)
- Automatic pressure transmitters
- Purge welding
- Air bleed capability
- 304 stainless steel controller enclosure
- Gauge ports: 1/4"

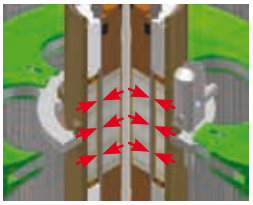
The MCS series is engineered to conserve valuable process water while protecting costly equipment from debris. It offers minimal purge volumes in fresh water applications, allowing you to save on the cost of refill of liquids, chemical treatment and heating energy.

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

EATON
Powering Business Worldwide



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

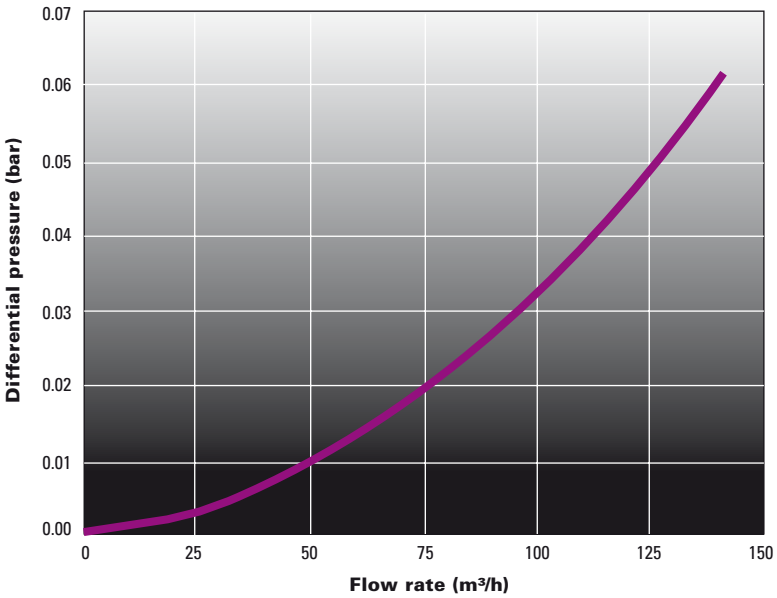
High-Flow MCS-500: Magnetically Coupled Strainer

HIGH-FLOW MCS-500: SPECIFICATIONS

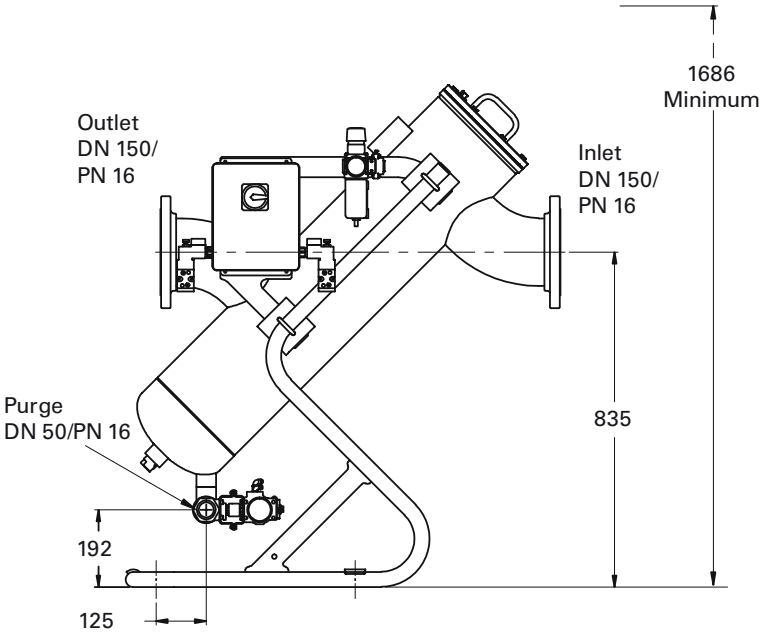
Approx weight	159 kg
Service height	1,686 mm
Flow rate at 100 µm	40 m³/h
Flow rate, max.	114 m³/h
Operating pressure	2 – 10 bar
Operating temperature, max.	82 °C
Viscosity	Water/water-like fluids
Standard retention*	150 – 1,100 microns
Housing/wetted parts material	316 Stainless Steel
Elastomers	EPT/EPDM or FPM (Viton®)
Process connection	DN 150 Flanged PN 16
Purge connection	DN 50 Flanged PN 16
Air for actuator drive (clean, dry, non-lubricated air)	5.5 bar min. – 8 bar max. 142 l/min
Electrical for controllers	230 VAC 50 Hz
Semi-auto voltage	24 VDC

* Tighter retentions available. Please contact Eaton.

HIGH-FLOW 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	1,140	15	60

Additional retentions available. Please contact Eaton.

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

Powering Business Worldwide

North America
44 Apple Street
Tinton Falls, NJ 07724
Toll Free: 800 656-3344
(North America only)
Tel: +1 732 212-4700

Europe/Africa/Middle East
Auf der Heide 2
53947 Nettersheim, Germany
Tel: +49 2486 809-0

Friedensstraße 41
68804 Altlußheim, Germany
Tel: +49 6205 2094-0

An den Nahewiesen 24
55450 Langenlonsheim, Germany
Tel: +49 6704 204-0

China
No. 3, Lane 280,
Linhong Road
Changning District, 200335
Shanghai, P.R. China
Tel: +86 21 5200-0099

Singapore
100G Pasir Panjang Road #07-08
Singapore 118523
Tel: +65 6825-1668

Brazil
Av. Ermano Marchetti, 1435 -
Água Branca, São Paulo - SP,
05038-001, Brazil
Tel: +55 11 3616-8461

For more information, please email us at *filtration@eaton.com* **or visit** *www.eaton.com/filtration*

EN
12-2020