

## Magnetically Coupled Strainer

# MCS 1500™

## High flow strainer

Mechanically Cleaned  
Permanent Media

### Environmentally sustainable design

*Eaton's MCS 1500 magnetically coupled strainer 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
- 316 stainless steel housing

#### Options

- Multi-station configuration
- EPT/EPDM (Nordel™) or Viton® seal material
- Advanced programmable microprocessors
- Construction according to "AD 2000-Merkblätter", DIN EN 13445 or ASME Code
- 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.

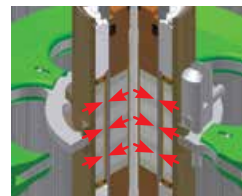
Featuring fast cleaning magnetically coupled actuation, this design offers an optimized configuration to help improve and reduce costly maintenance and downtime. In addition, this actuation method eliminates the need for cover thru-holes and their associated seals.

#### 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 • nutraceuticals
- machining coolants • adhesives • paints • inks • chocolate • edible oils • detergents • tallow



Powering Business Worldwide



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.

Nordel™ is a registered trademark of The Dow Chemical Company ("Dow") or an affiliated company. Viton® is a registered trademark of E. I. du Pont de Nemours and company.

# 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



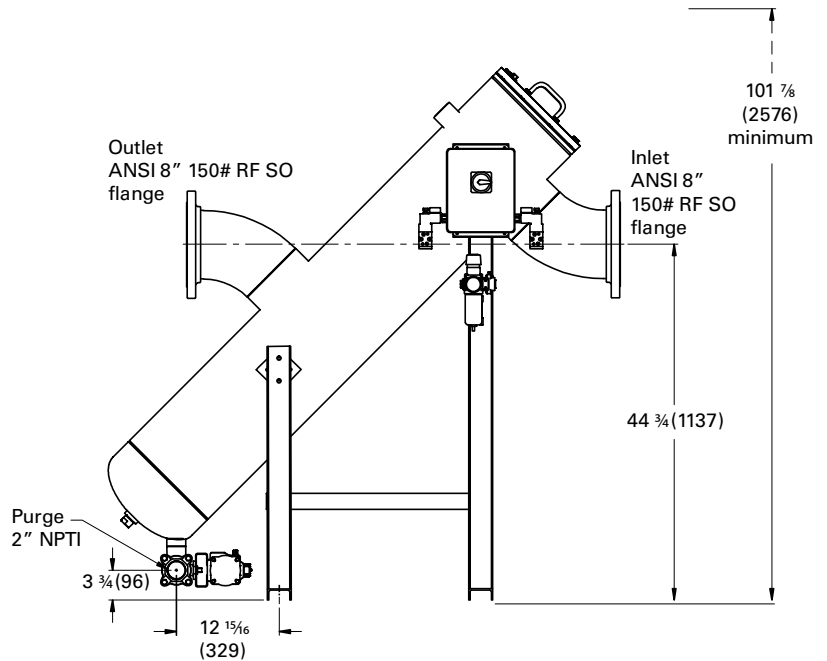
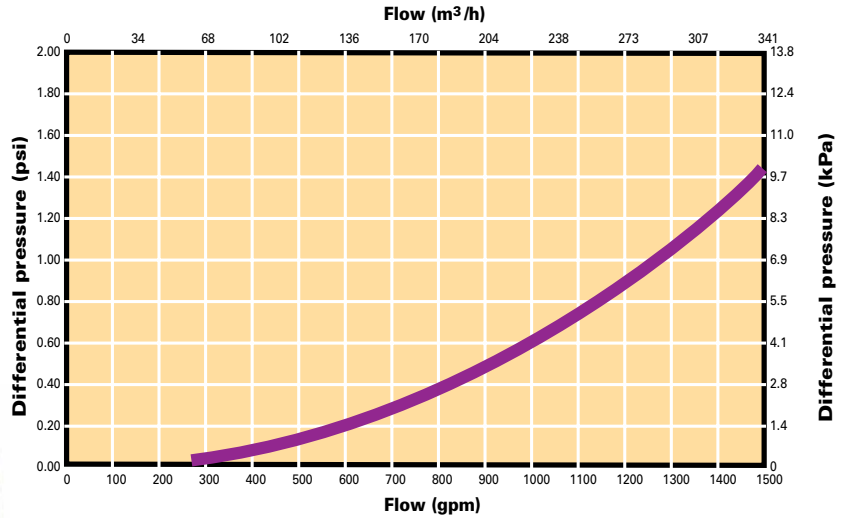
Additional retentions available, consult Eaton.

## MCS 1500 high flow strainer specifications

Approx. weight	775 lb (352 kg)
Service height	102 in (2,591 mm)
Flow rate range at 100 µm	Up to 1,500 gpm (340 m³/h)
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
Housing material	316 stainless steel
Elastomers	EPT/EPDM (Nordel) or Viton
Process connections	8 in 150# flanged/DN 200 flanged
Purge connection	2 in NPT/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 contact Eaton for more information.

## MCS 1500 flow rates



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