MultiFine MS

Pleated filter elements to fit bag filter housings

MultiFine MS, is designed to offer long life whenever the filter area of conventional filter bags is not sufficient to cover the entire batch.
MultiFine MS, will fit practically all bag filter housings taking advantage of the existing structure with no other change than the filter element itself.
It offers about 10 times the area of a conventional Size 2 bag to guarantee very low differential pressure, high dirt capacity and quick maintenance operations.
The large internal diameter allows to handle the flow-rate with no restriction of the section.

Main features
- Multi-layer pleated filter media with drainage netting for a full distribution of the flow trough out the element

- Outer cage to prevent damage during the handling, the physical support for the differential pressure is provided by the standard restrainer basket

- Cartridge structure and the majority of the filter media are made from polypropylene, all materials are approved to handle edible fluids

Standard sizes:
- **1** = to fit single bag housings MRS1SW1
- **2** = to fit single bag housings MRS1SW2 and multi-bag HVS

Filter media
- Polypropylene, wide chemical compatibility
- Borosilicate, naturally charged ("Z" potential) to remove organic matter
- Polyester, hydrophilic and very good with solvents

CARTRIDGE CODE SELECTION

Cartridge series	Filter media material and micron rating	Standard sizes	End-cap 1	End-cap 2	Gasket material
MultiFine = **MU**	To be selected from Table1	To fit MRS1SW1 = **MS1** To fit MRS1SW2 and HVS = **MS2**	Open = **A**	Open = **A** Blind = **C**	Silicone = **S** Buna = **N** EPDM = **E** Viton = **V**
MU	**M10**	**MS2**	**A**	**C**	**E**

MultiFine

| Table 1 - Standard filter media		Nominal filter area		Particle retention in liquids		
Filter media code	Filter media material	MS1	MS2	Nominal ß = 10	Nominal ß = 100	Absolute ß = 1000
Y80	polyester	2.00 m²	4.10 m²	55*	80*	-
Y50	polyester	2.00 m²	4.10 m²	25	50*	-
Y5	polyester	2.00 m²	4.10 m²	3	5	-
M80	polypropylene	2.00 m²	4.10 m²	50*	80*	-
M50	polypropylene	2.00 m²	4.10 m²	30	50*	-
M20	polypropylene	2.00 m²	4.10 m²	10	15	20
M10	polypropylene	2.00 m²	4.10 m²	3	5	10
M5	polypropylene	2.00 m²	4.10 m²	1	3	5
M3	polypropylene	2.00 m²	4.10 m²	0.6*	1.5*	3
M1	polypropylene	2.00 m²	4.10 m²	0.45*	0.8*	1*
M06	polypropylene	2.00 m²	4.10 m²	0.2*	0.4*	0.6*
G1	borosilicate	2.00 m²	4.10 m²	0.45*	0.8*	1*
G06	borosilicate	2.00 m²	4.10 m²	0.2*	0.4*	0.6*

* - extrapolated value

Definition of "Beta ratio"

The value of "ß" for a given particle size (x) is the result of the following ratio:
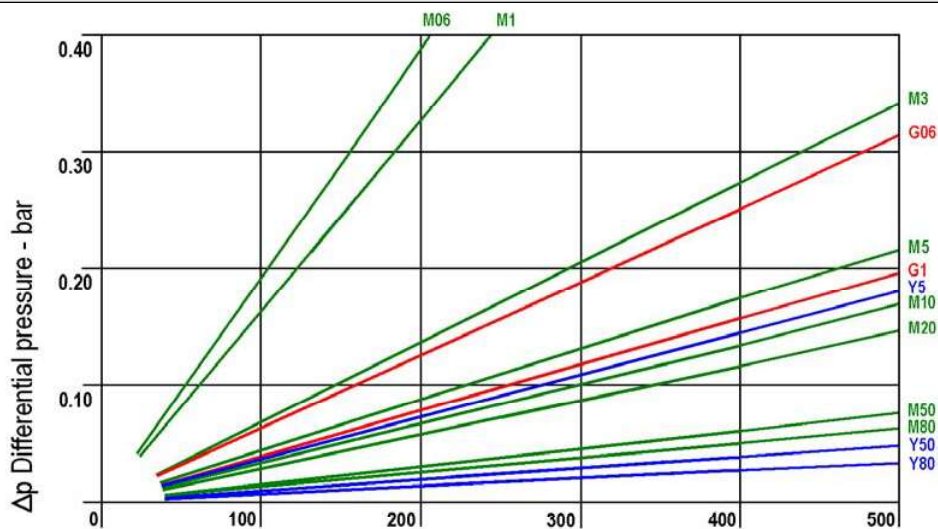
$$ß(x) = \frac{n° \text{ of particles with size} > x \text{ up-stream}}{n° \text{ of particles with size} > x \text{ down-stream}}$$

The relation between Beta ratio and efficiency, is as follows:

$$Eff.\% = \left(1 - \frac{1}{ß} \right) 100$$
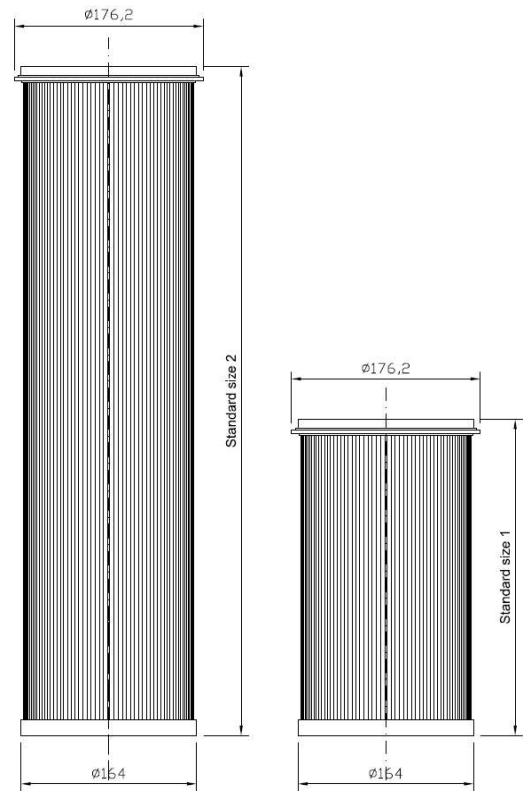
Water flow-rate versus differential pressure of a MS1 filter element, MS2 filter elements will offer twice as much the flow-rate at same differential pressure