

VFF FilterPro





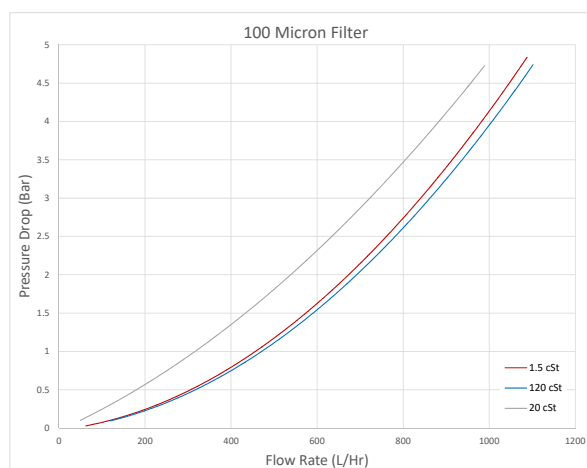
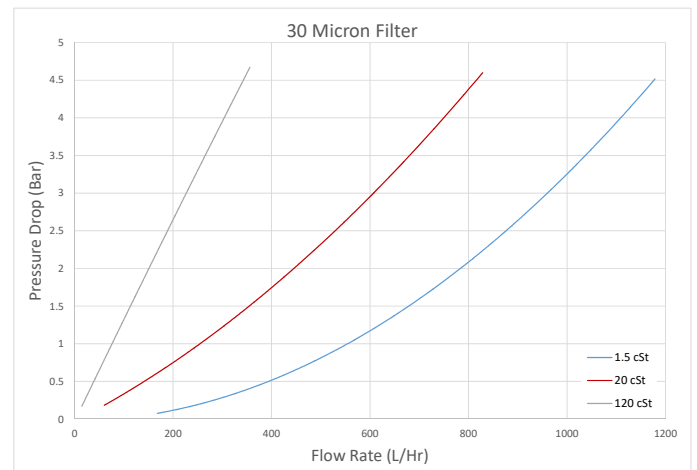
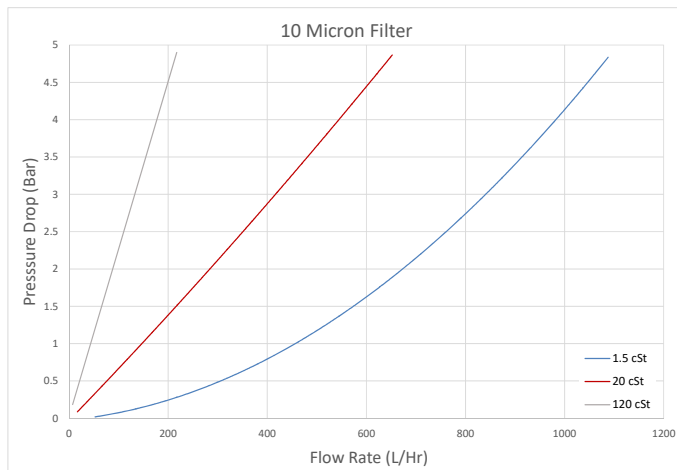
VFF FilterPro

Litre Meter has developed a flow assurance filter to the same high standards as their successful VFF flow meter range. By using the same material, inspection and standards requirements it is ready for your chemical injection project. The filter has been designed to match and protect our flow meters in their designed environment to achieve their optimum level of performance.

Litre Meter VFF meters have a strict filtration requirement of 40 microns for the smallest range (LF03 & LF05) and 100 microns for the larger. 96% of Litre Meter failures are due to contamination and almost all issues occur during factory testing, or within the first 6 months of service. Litre Meter therefore offers three key filter sizes to maximise the efficiency of any chosen meter. The range of 10, 30 and 100 Microns filtration is achieved by a 4 layer wire woven mesh engineered in a compact design. The woven mesh is a proven surface filtration principle which removes particulate by trapping it between the 4 layers. The filter can withstand a pressure drop of 60 bar with a burst pressure drop of 150 bar. The pressure drops for each mesh size can be seen in the tables below. A range of material is offered from 316 to exotic materials such as Super Duplex, titanium or Hastelloy.

Key Features

- Suitable for low and high viscosity liquids at pressures up to 1380 bar
- Filter elements from 10 microns
- High filter burst pressure of 150 bar
- Reusable filter element
- Compact design
- Multiple material options
- Highly durable
- Perfectly suited to work alongside your flowmeter
- Connections: NPT, Autoclave, ANSI Flanges, Grayloc Hubs, Galperti Hubs, Techlok Hubs. More upon request.



Specification

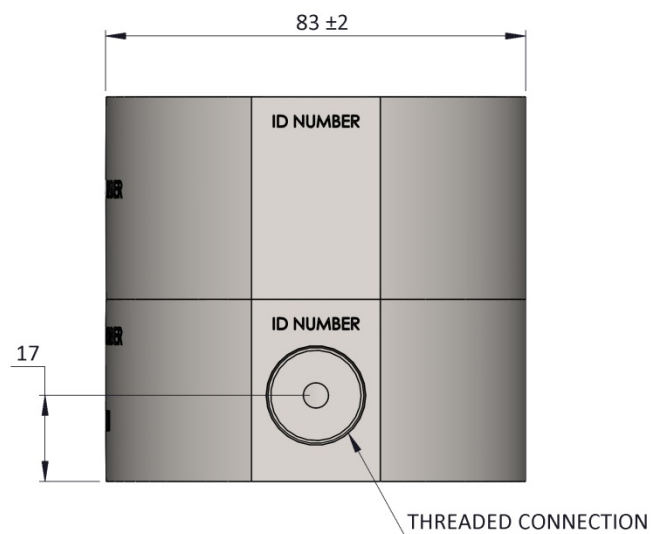
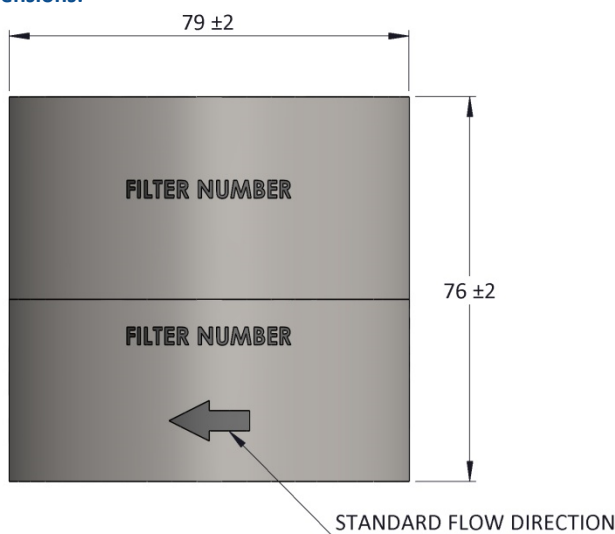
The compact design of the VFF FilterPro offers a range of standard material and sizes to best suit a customer specification. However, we can also provide a bespoke design option to match any specification, if required. This might include specialist materials or processing, specialist connections or seals.

To achieve optimal performance of your meter Litre Meter recommends that the filter is installed directly before each flow meter using the appropriate connection union.

The standard material we offer can be seen in the table to the side however we offer a free consultation if you have a alternative material you wish to use.

Typical Material and Ratings		
Material	Standard	Maximum Pressure (bar)
316 Stainless Steel	BAR STOCK	690
	FORGED	690
F44 6Mo SS (UNS S31254)	BAR STOCK	690
	FORGED	1035
F51 Duplex (UNS S31803)	BAR STOCK	1035
	FORGED	1035
F53 Super Duplex (UNS S32750)	BAR STOCK	1380
	FORGED	1380
F55 Super Duplex (UNS S32760)	BAR STOCK	1380
	FORGED	1380
Hastelloy (UNS N10276)	BAR STOCK	1035
Titanium	BAR STOCK	1380
PRESSURE RATING IS DEPENDANT ON MATERIAL AND CONNECTION		

Dimensions:



Typical Connections and Ratings		
Threaded Connection Size	Standard	Maximum Pressure Rating (bar)
1/4"	NPT	550
3/8"	NPT	530
1/2"	NPT	530
3/8"	AUTOCLAVE	1380
9/16"	AUTOCLAVE	1380
OTHER CONNECTION TYPES ARE AVAILABLE UPON REQUEST PRESSURE RATING IS DEPENDANT ON MATERIAL AND CONNECTION		

Connections: NPT threaded connections are standard for lower pressure versions; Autoclave medium pressure fittings (cone & thread) are standard for higher ratings. ANSI & API flanges in raised face and ring type joint are available upon request. Hubs such as Grayloc, Galperti, Techlok are also available upon request.

Ambient Temperature rating: $-40^{\circ}\text{C} - 120^{\circ}\text{C}$

Seal: There are pressure seals between the meter body and cap normally in FPM. The seals are available in: FFKM, FEP covered silicon and in higher pressure versions PTFE and Inconel. The seals are selected based on pressure and fluid to fully optimise the meter.

VFF FilterPro - Expanded View

The simple design of the filter offers easy assembly and maintenance as shown below:

8x M10x45 SCH BOLTS
A4-80/A4-100

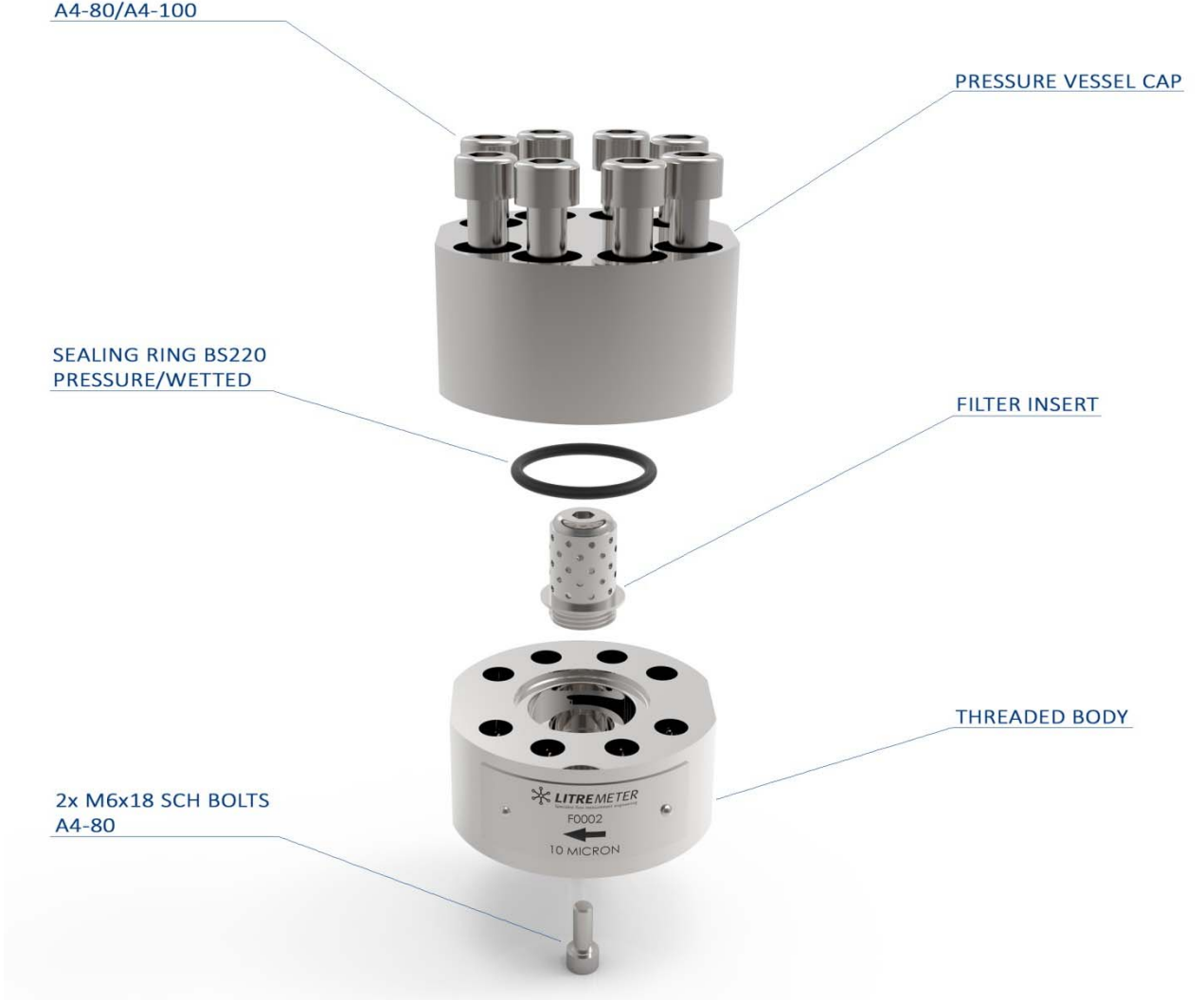
PRESSURE VESSEL CAP

SEALING RING BS220
PRESSURE/WETTED

FILTER INSERT

2x M6x18 SCH BOLTS
A4-80

THREADED BODY



Litre Meter Ltd
Hart Hill Barn
Granborough Road
North Marston Buckingham
MK18 3RZ
Email: sales@litremeter.com



MJ Systems, LLC
Authorized LitreMeter Distributors
502 N 8th St • La Porte, TX 77571
Off (281) 842-7600 • Fax (281) 842-7601
www.mjsusa.com • sales@mjsusa.com