

LOFMET™ titanium and stainless steel filter cartridges

Eaton's LOFMET filter cartridges are designed for a variety of applications including corrosive liquids and gases, cryogenic fluids, high viscosity solutions, process steam, high temperature liquids and gases and catalyst recovery.

Porous titanium or stainless steel 316 filter cartridges are designed for applications involving extreme operating conditions and aggressive fluids and gases. The rugged, fixed pore structure is constructed from sintered titanium powder. The result is a filter element that can withstand heat, high pressures and repeated cleaning/backwash cycles. Mechanical strength and corrosion resistance are the results of a seamless design.

Features and benefits

- High corrosion resistance
- All sintered titanium or stainless steel 316 construction
- Backwashable for reuse and maximum economy
- Multiple end configurations and gasket/o-rings to fit most filter housings

Design

Filter materials

Titanium or stainless steel 316

End caps

Titanium or stainless steel 316

Gaskets/O-rings

EPDM, Buna-N, silicone, FPM, FEP encapsulated (O-Rings only), PTFE (gasket only)

Retention ratings

0.5, 1, 5, 10, 15, 35, 50, 100 µm
@ 99.5% efficiency

Technical data

Nominal lengths

5", 9.75", 10", 20", 30", 40"
(127, 248, 254, 508, 762, 1016 mm)

Outside diameter

2.36" (60 mm); 2.48" (63 mm)

Max. operating temperature

700 °F (371 °C)*

Max. differential pressures

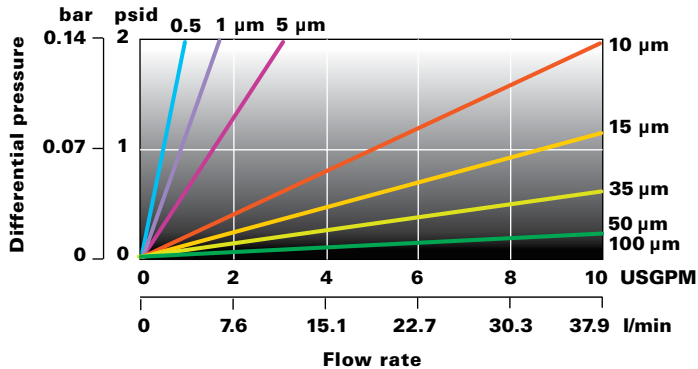
250 psid (17.4 bar) forward
50 psid (3.5 bar) reverse

* Max. temperature applicable to NPT style filters only (no O-rings or gaskets). Consult Eaton for guidance on specific chemical/temperature compatibility.

LOFMET filter cartridges

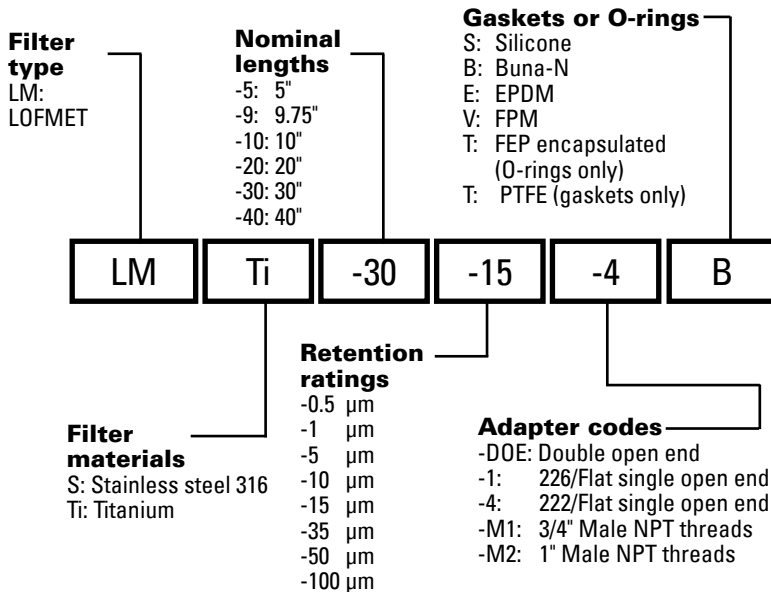
Flow rate*

(70°F/21°C per 10" filter cartridge for water)



* For liquids other than water, multiply pressure drop by fluid viscosity in centipoise.

Ordering code



Efficiency of retention

| Beta ratio retention of efficiency | Beta 200 99.5% | Beta 20 95% | Beta 10 90% |
|------------------------------------|----------------|-------------|-------------|
| 0.5 μm | 0.5 | 0.3 | 0.1 |
| 1 μm | 1 | 0.8 | 0.4 |
| 5 μm | 5 | 3 | 1 |
| 10 μm | 10 | 8 | 5 |
| 15 μm | 15 | 12 | 10 |
| 35 μm | 35 | 32 | 28 |

$$\text{Beta ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters. Testing was conducted using the single-pass test method, water at 3 gpm/10" cartridge (9.45 l/min). Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.



LOFMET filter cartridges are available with a variety of gasket and end cap configurations.