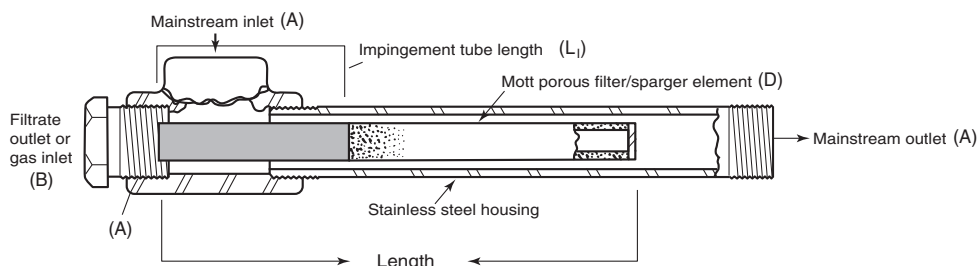


► Mott Sampling Filter



Series 8501 – Threaded Assembly



Operating Principle as Sampling Filter

The gas or liquid to be sampled is introduced at the mainstream inlet and accelerates as it passes the filter, due to the reduced flow passage. This increased velocity puts the filter into an inertial mode. Plugging is minimized, since particulate matter in the mainstream is directed parallel to the filter tube rather than incident to the porous media.

Filter Applications

- Particulate-free sampling.
- Liquid analysis.

Advantages

- High differential pressure capability.
- Wide range of porosities.
- Self-cleaning for long on-stream life.
- Simple, all stainless-steel assembly.
- Uniform permeability.

Standard Filter Availability

Series No. – 8501 Filter
Fitting Size

(A) - Mainstream NPT	(B) - Filtrate Outlet Gas Inlet NPT	(D) - Porous Diameter	(LI) - Impingement Tube Length
- 1/2"	- 1/8"	- 3/8"	- 2"
- 3/4"	- 1/4"	- 1/2"	- 2 1/4"
- 1"	- 1/2"	- 3/4"	- 2 1/2"
- 1 1/2"	- 3/4"	- 1"	- 3 1/2"

Lengths 6", 12", 18", 24", 36"
Media Grades 0.5, 2, 5, 10, 20, 40

Operating Principle as Sparger or Gas/Liquid Contactor

Liquid is introduced at the mainstream inlet and accelerates around the porous element. Gas is injected at left, through the porous tube, creating extremely fine bubbles. As these bubbles emerge from the porous tube, they are continuously sheared by the liquid – further reducing their size and increasing the gas/liquid interface. Bubble size can be varied by adjusting velocity. Higher velocities result in higher shear rates and finer bubble size.

Sparger Applications

- Carbonation, aeration, hydrogenation.
- Injection of air, oxygen, hydrogen or other gases for gas/liquid reactions.

Advantages

- Uniform permeability for consistent bubble size.
- Dynamic reduction of bubble size for maximum efficiency.
- High efficiency from bubble shear reduces sparger size required.

Spare Parts Options: Replacement Elements

Elements Series No. 850
Fitting Size

(A) - Male NPT	(B) - Female NPT	(D) - Porous Diameter	(LI) - Impingement Tube Length
- 1/2"	- 1/8"	- 3/8"	- 2"
- 3/4"	- 1/4"	- 1/2"	- 2 1/4"
- 1"	- 1/2"	- 3/4"	- 2 1/2"
- 1 1/2"	- 3/4"	- 1"	- 3 1/2"

Lengths 6", 12", 18", 24", 36"
Media Grades 0.5, 2, 5, 10, 20, 40

► porous metal products

