

SINTERED POLYETHYLENE (PEL) ELEMENTS

Features:

- Excellent Pre-Filters In Compressed Air
- High Strength
- For Use As Diffusers, Mufflers
- Ideal For Wicking Samples
- Protect Final High Efficiency Filters
- 10, 25, 75, And 100 Micron Available

Applications:

- Economical Coalescing Pre-Filter
- Point-Of-Use Liquid Filter
- Use As Diffusers And Mufflers



Our high efficiency PEL filter elements are constructed from virgin polyethylene (H.D.P.E.). The material is in powdered/granular form and then compressed into a sintered tube. This process allows the filter element to be free from foreign binders. Thus, the only compatibility issue is with polyethylene. No end caps or gaskets are necessary to seal the element into place. Axial compression is used to create a seal on the flat surface of the element. The PEL elements are naturally hydrophobic.

In **compressed air/gas applications**, the PEL elements may be utilized as pre-coalescers or initial coarse filters in heavily contaminated systems. The 75-micron grade is recommended for this task since it exhibits the best flow curves.

In **liquid applications**, slight pressure will force liquid through the element while at the same time repelling any dirt "particulate" which is encapsulated in the water. The element uses two filtration techniques, surface area and depth. Typical flow direction is out to in, since dirt is visible on the outside surface area and the outer diameter is larger for increased surface filtration. The elements may be back flushed in place, or cleaned ultrasonically, however their low cost makes it economical to dispose of.

The PEL elements are ideally used with our aluminum 300 series and plastic 700 series housings in liquid sampling applications where heavy dirt loading is a problem.

The PEL elements can also be used as end-of line filters, and ultrasonically welded into our disposable in-line filters (DIF).

They are also ideal as **particulate filters and/or bulk liquid knockouts in high-pressure gas systems where dramatic pressure swings occur**. The surface tension along with the depth porosity traps contaminants.

Please consult United Filtration Systems for proper sizing and other applications.

PRINCIPLE SPECIFICATIONS

Stainless Steel Model Number	Dimensions I.D. x Length
PEL-12-32-	0.5" X 1.25"
PEL-12-57-	0.5" X 2.25"
PEL-12-127-	0.5" X 5.0"
PEL-25-64-	1.0" X 2.5"
PEL-25-178-	1.0" X 7.0"
PEL-38-152-	1.5" X 6.0"
PEL-51-230-	2.0" X 9.0"
PEL-51-254-	2.0" X 10.0"
PEL-51-476-	2.0" X 18.75"
PEL-63-762-	2.5" X 30.0"



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