

Synthetic Element Products



PERRY EQUIPMENT CORPORATION

ISO 9001

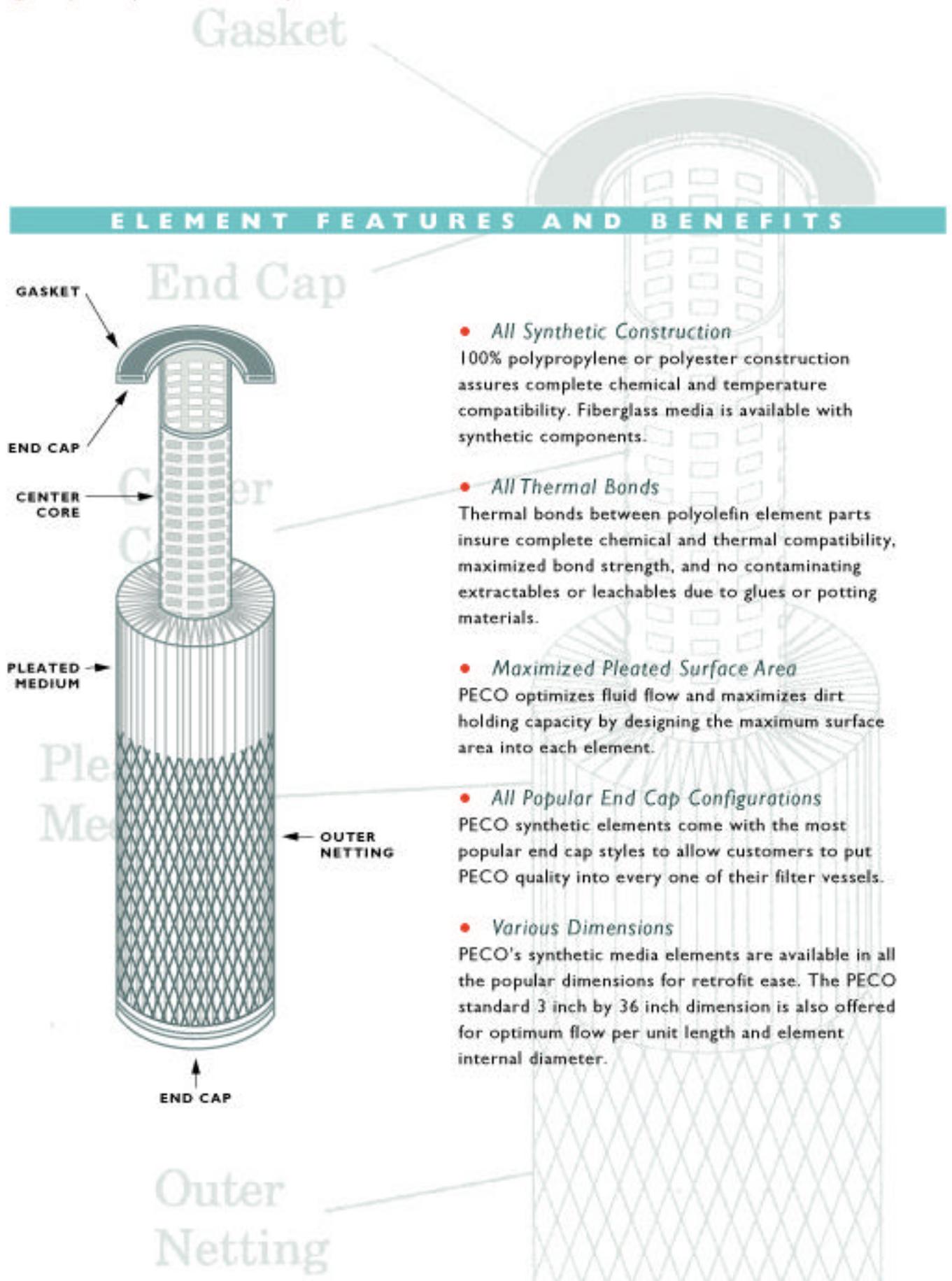
**Pleated  
Element  
Filtration  
Products**



ENGINEERED FILTRATION TECHNOLOGIES

# PECO PLEATED SYNTHETIC FILTERS

High quality filtration products.....



PECO has been providing products and services worldwide since 1936. The PECO traditions of "solving customer problems" and "getting the job done" continue to drive the company into the future.

APPLICATIONS

<b>Petroleum/Chemicals</b> . . . . .	gas processing liquids, injection water, completion fluids, solvents, acids, intermediates, wet/dry gas, lube oils.
<b>Electronics</b> . . . . .	RO/DI, resin traps, process gases, solvents, acids.
<b>Pharmaceuticals</b> . . . . .	make-up water, fermentation media, blanket gases, wash water.
<b>Food &amp; Beverage</b> . . . . .	water, syrups, oils, flavorings, wine, beer, vinegar, gases.
<b>Coatings</b> . . . . .	paints, masks, inks, mag coatings, solvents, gases.
<b>Cosmetics</b> . . . . .	alcohols, process gases, water, lotions, perfumes.
<b>Utility</b> . . . . .	boiler feed water, cooling water, de-ionized water, lube oils.

OPERATING DATA

<b>Max. Operating Temperature</b>	<b>pH Range</b>	<b>Core Collapse Differential Pressure</b>	<b>Recommended Element Change Out Differential Pressure</b>
polyester (240°F, 115°C) polypropylene (180°F, 82°C) fiberglass (240°F, 115°C)*	polyester (0-9) polypropylene (0-14) fiberglass (0-9)	110 psid @ 77°F, 25°C 75 psid @ 125°F, 52°C 50 psid @ 180°F, 82°C	16-20 psid**

\* Based on using polyester core and end caps.  
\*\* Recommended as a guide. These can be exceeded but differentials above these points could rise rapidly and approach crush strength of core.

SPECIFICATIONS

- **MEDIA** polyester, polypropylene or fiberglass\*
- **CORE\*\*** polyester, polypropylene
- **OUTER COVER** polyester, polypropylene netting
- **END CAPS** polyester, polypropylene, (for metal consult factory)
- **END CAP STYLES** see page 6 for available end caps
- **END CAP ACCESSORIES** spring, core extender (metal or polypropylene)
- **GASKETS** Buna-N, Viton, EPR, Silicone, Neoprene
- **COMPRESSION SPRING** carbon steel, stainless steel, polypropylene

\* fiberglass media elements come with polyester cores and end caps  
\*\* carbon steel core for 336 polyester elements

# PHYSICAL CHARACTERISTICS

## Dimensional Characteristics

	[in / mm]	[in / mm]
<b>Standard O.D.</b>	2.5 / 64	3 / 76
<b>Standard I.D.</b>	1.08 / 27	1.5625 / 40
<b>Length**</b>	10 / 254, 20 / 508, 30 / 762, 40 / 1016	36 / 914

\*\* Other lengths available: 9.75", 19.50", 29.25"

## Surface Area Characteristics

Length [in / mm]	Surface Area (ft <sup>2</sup> / m <sup>2</sup> )
10 / 254	4.5 / 0.42
20 / 508	9.5 / 0.88
30 / 762	13.94 / 1.30
36 / 914	*14.38 / 1.34
40 / 1016	19.17 / 1.79

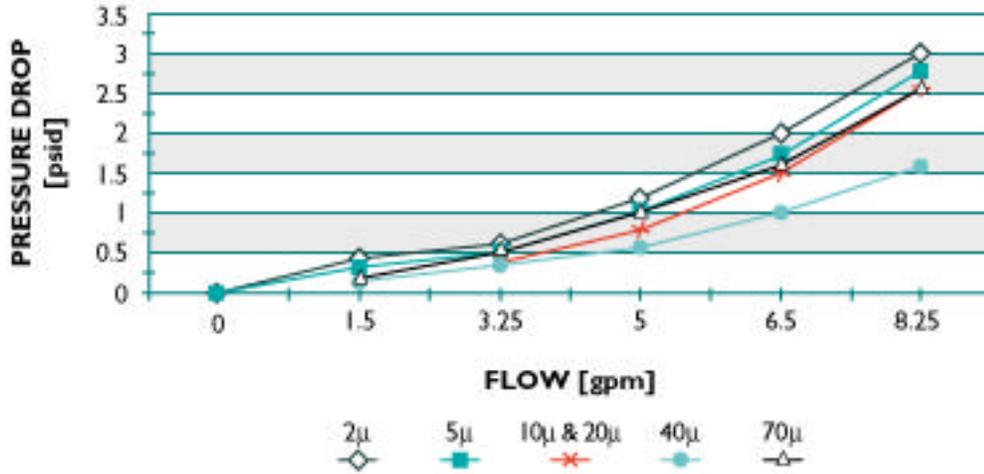
\* Polyester 336 size only contains 18.55 / 1.73 (ft<sup>2</sup>/m<sup>2</sup>) of Surface Area due to use of Carbon Steel Core.



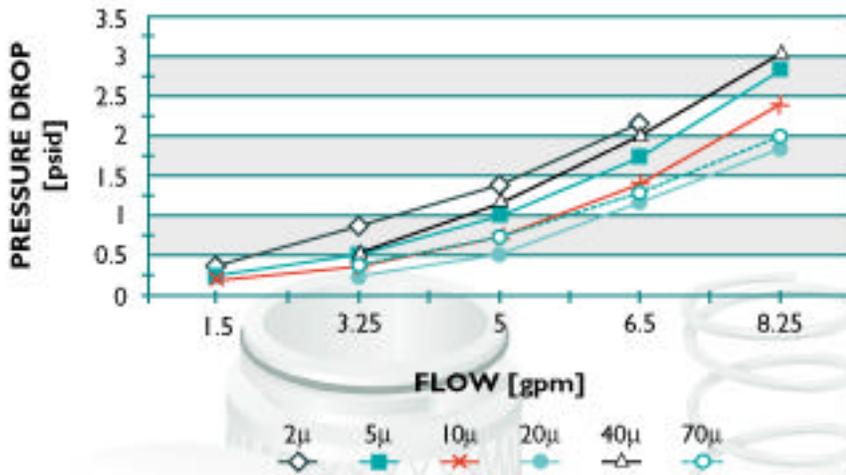
# FLOW CHARACTERISTICS

Flow Rates in clean condition applicable to Polypropylene & Polyester Media

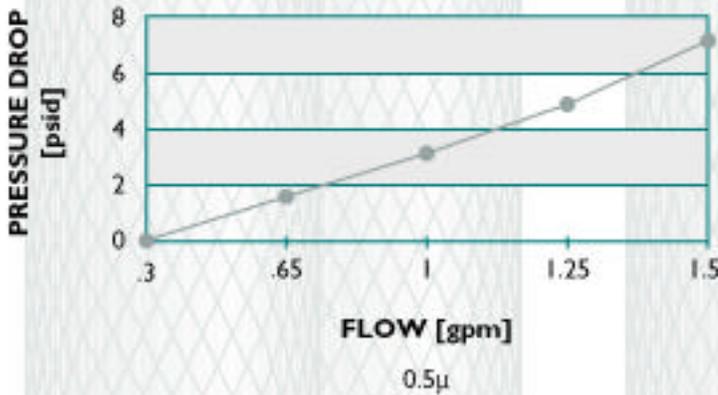
Flow vs Differential Pressure—Polypropylene / 10" Element



Flow vs Differential Pressure—Polyester / 10" Element

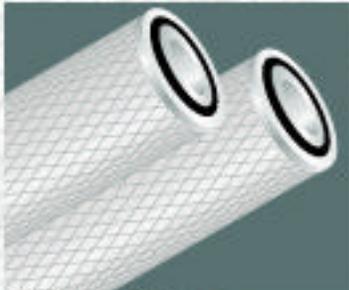


Flow vs Differential Pressure—Polypropylene / 10" Element



## END CAP OPTIONS

All PECO Pleated Synthetic Filters contain a sturdy outer netting for pleat support and protection.



PECO Code A  
**DOE**



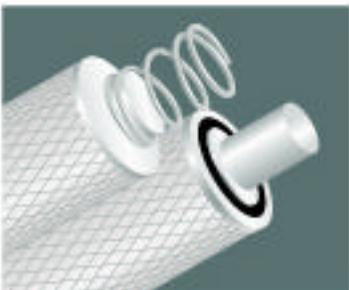
PECO Code O  
**222 O-Ring**



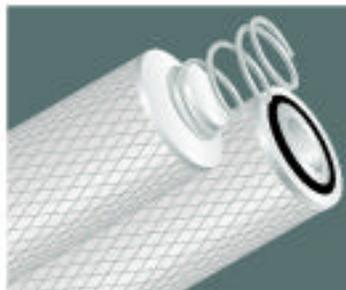
PECO Code F  
**222 O-Ring/Finned**



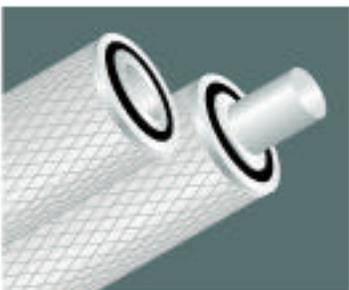
PECO Code J  
**226 O-Ring**



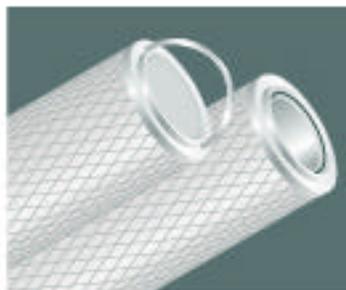
PECO Code E  
**Spring & Core Extender**



PECO Code S  
**Spring & Single Open End**



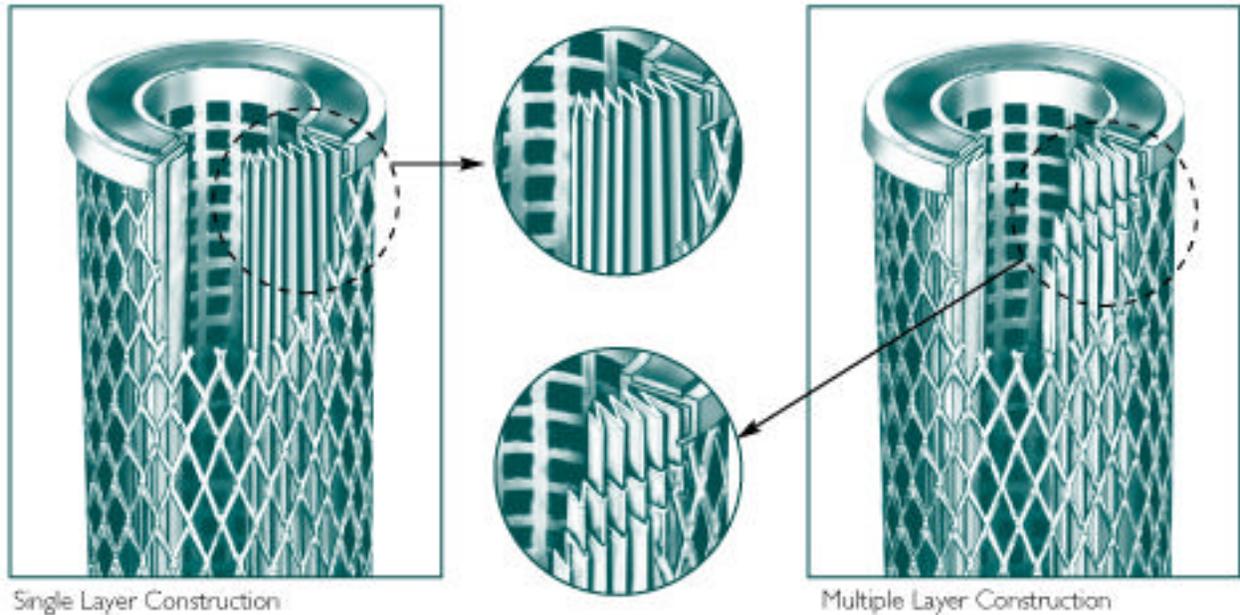
PECO Code X  
**Double Open End  
w/ Core Extender**



PECO Code I  
**Single Open End  
1401 STYLE**

The support cores and end caps are manufactured of high density synthetic material for element strength and positive seals. With the exception of the gasket, PECO Pleated Synthetics are available with 100% construction of either polypropylene or polyester material. This includes cores, end caps and outer cover. *Polypropylene elements are manufactured from FDA listed materials.*





The PECO Pleated Synthetic Filter Elements are designed with single layer or multi-layer pleated construction. For lower micron ratings, the multi-layer construction provides added strength and stability to the media while providing more surface area for contaminant loading. This allows maximum filter life without sacrificing efficiency. Single layer media provides maximum contaminant loading through cake formation in applications where larger contaminant particulates are removed.

**BETA RATING DEFINED**

**Beta Rating:**  $\beta = \frac{\text{Influent particle count greater than size } x}{\text{Effluent particle count greater than size } x}$       % Removal Efficiency =  $\frac{\beta - 1}{\beta} \times 100$

**PECO LABORATORY TESTING**

Peco uses a recirculating system to test efficiencies of filters. A modified version of ASTM-795, F-796 and F-797 is used. The test is concluded at 20 psid. Total contaminant loading is determined at the conclusion of the test.

**ISO 9001 CERTIFICATION**

PECO Filtration Elements are manufactured under a quality management system certified to ISO 9001. This assures that each PECO Filter is engineered and manufactured to the highest level of quality standards. Therefore assuring you consistent tolerances and quality...filter after filter!



## ELEMENT NOMENCLATURE

