

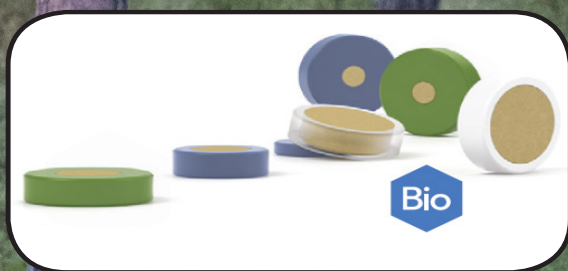


INACOM INSTRUMENTS

Issue 2

Magazine

Innovative products for fluidic systems



PEEK Frits



Stainless Steel Frits



Frit-in-a-Ferrule™



PORO-FRIT™

PACKING HPLC
COLUMNS IS YOUR
BUSINESS...
OURS IS PROVIDING
THE FRITS!

The editor of this magazine actually took this picture before he had to run for his life...



MARVEL XACT™

MARVELXACT™ fingertight with a “click-feedback”

TRUE BIOCOMPATIBILITY

PEEK-Lined Stainless Steel tubing technology, developed by IDEX Health & Science, delivers the benefit of a bioinert PEEK flow path with UHPLC pressures of 19,000 psi.

FINGER-TIGHT TO UHPLC

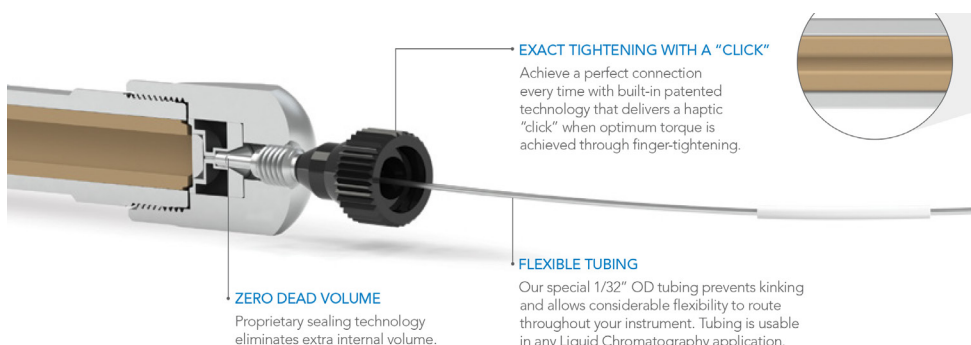
MarvelXACT is truly a finger-tight connection system that has a patented torque-limiting mechanism for exact tightening every time, and seals up to 19,000 psi (~1,310 bar) for routine use.

SMALL & ACCESSIBLE

Fittings are small enough to fit in tight spaces, yet allow for finger-tightening at UHPLC pressures.

ROBUST TIP

Enables robust structure, superior re-usability, and minimizes chances of tip damage from connecting and disconnecting.



FINGER-TIGHT TO
19000 PSI
(1,310 bar / 130 MPa)

100+
CONNECTS &
DISCONNECTS

NO
PEAK TAILING OR
BROADENING

CLICKS
FOR EXACT
TIGHTENING

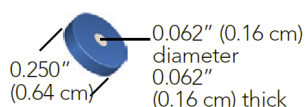
MINIMIZE
CARRYOVER
RISK

PEEK® FRITS

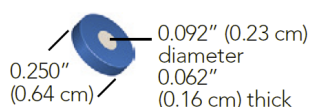
Patented IDEX Health & Science PEEK Frits offer exceptionally uniform porosity. This property ensures longer filtration life and consistent frit-to-frit swept volumes. The PEEK polymer frit discs are biocompatible and inert to most solvents, making them well-suited for bioanalytical applications. PEEK's robust properties make these products suitable for low and high pressure applications.

Disc rings, included on all PEEK frits, are made of PCTFE and are slightly thicker than the frit disc, providing enhanced sealing and excellent chemical resistance. PCTFE surrounded PEEK frits can be used up to 80 °C.

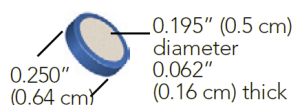
0.5 µm PEEK Frits



A-701

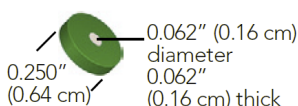


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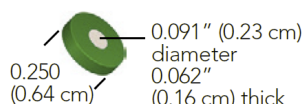


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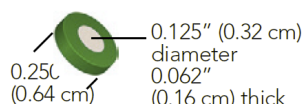
2 µm PEEK Frits



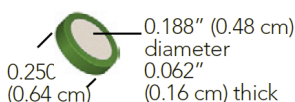
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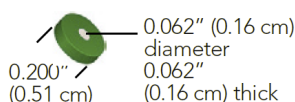
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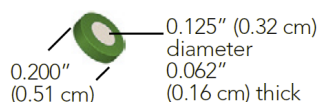
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A-706

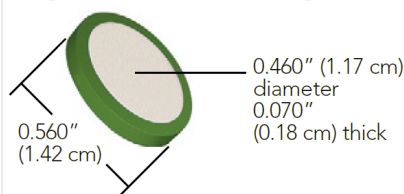


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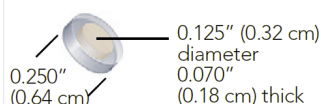


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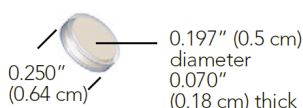
2 µm Semi-Prep PEEK Frits



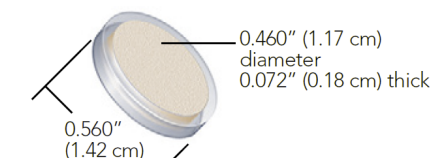
5 µm and 10 µm PEEK Frits



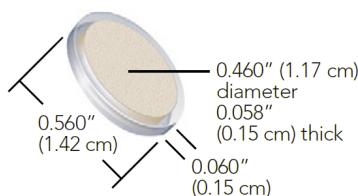
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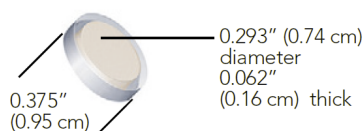
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OC-803



OC-805



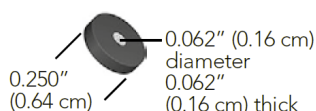
OC-815

Stainless Steel FRITS

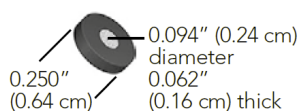
Our Analytical-scale 316 Stainless Steel Frits are available in 0.5 μm or 2 μm porosity—the most common HPLC filtration ratings. Each frit includes a PCTFE or PEEK polymer sealing ring.

Many of the frits shown have the common 0.250" (0.64 cm) and 0.254" (0.64 cm) ODs, which allow them to be used in many of the Precolumn and Inline Filters. Choose the larger diameter faces and/or larger porosity frits for faster flow rates. Choose frits with a smaller diameter face and/or smaller porosity for applications sensitive to extra flow path volume.

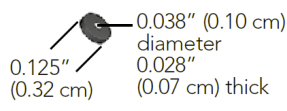
0.5 μm Stainless Steel Frits



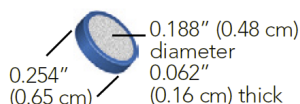
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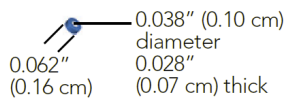
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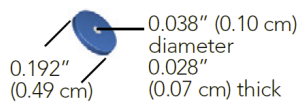
C-128-31



C-140-30

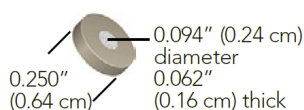


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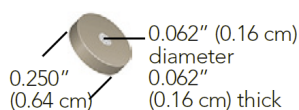


C-425

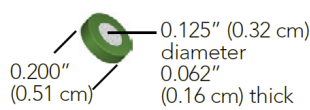
2 μm Stainless Steel Frits



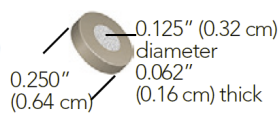
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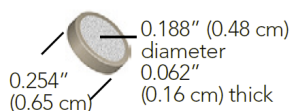
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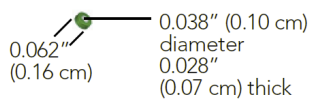
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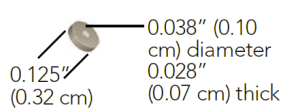
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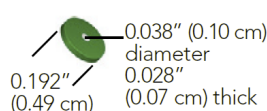
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C-407



C-408



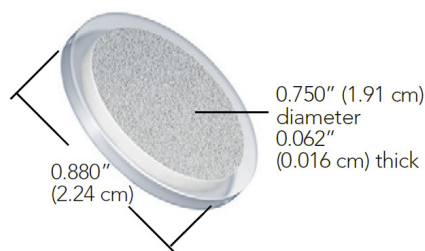
C-420

Semi-Prep Stainless Steel Frits

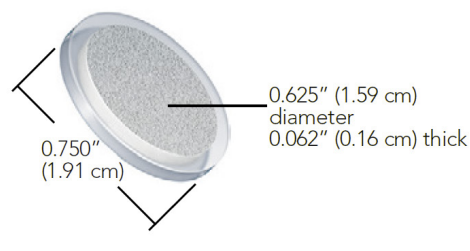
Many of these frits come complete with a PCTFE, ETFE, or PTFE sealing ring.

Choose from 2 μm , 5 μm , 10 μm , and 20 μm filtration porosities and a range of diameters to match your intended flow rate and filtration requirements.

2 μm Semi-Prep Stainless Steel Frits



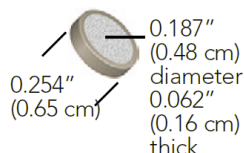
A-332



A-343

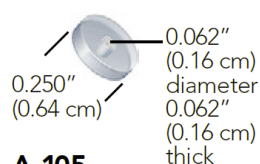
Stainless Steel FRITS (Cont.)

5 µm Semi-Prep Stainless Steel Frits

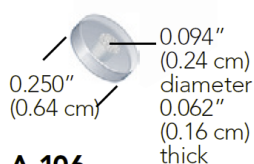


C-417

10 µm Semi-Prep Stainless Steel Frits



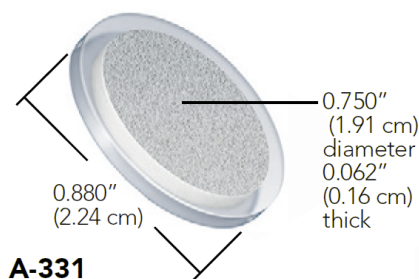
A-105



A-106

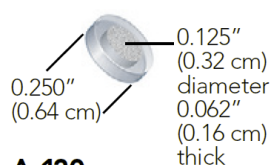


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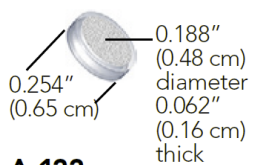


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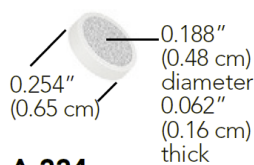
20 µm Semi-Prep Stainless Steel Frits



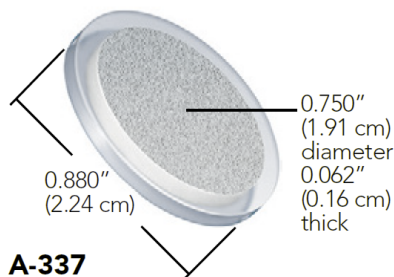
A-120



A-122



A-224



A-337

Dimensions

The thickness dimension in the part drawings and the pricing tables represents the thickness of the frit disc not the frit ring. Frit rings are often slightly thicker to ensure a proper seal. When tightened into a filter holder the ring compresses to nearly match the thickness of the frit disc.

Frit volume is calculated by determining what the mass of the frit would be if it were a solid block of material of equal size. Then the solid mass of the frit is multiplied by the percentage assigned to the porosity to determine the theoretical frit volume:

20% for 0.5 µm frits

24% for 2 µm frits

26% for 5 µm frits

28% for 10 µm frits

30% for 20 µm frits.

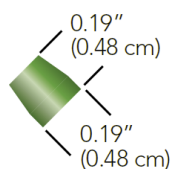
To Clean Or Not To Clean?

It is rarely worth the time and effort to clean frits, given the relatively low cost of replacements. Furthermore, cleaning may leave some debris embedded in the frit pores. If the washed frit is accidentally returned to your instrument in a reverse orientation, any remaining debris could be flushed out and deposited further down the fluid path. If this frit is being used as a column head frit, the debris may be washed directly onto the column bed.

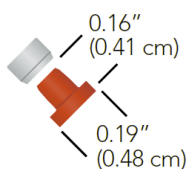
Frit-in-a-Ferrule™

Now you can filter at any point in your system where 1/16" or 1/8" OD tubing is used in a flat-bottom 1/4-28, M6 or 5/16-24 connection.

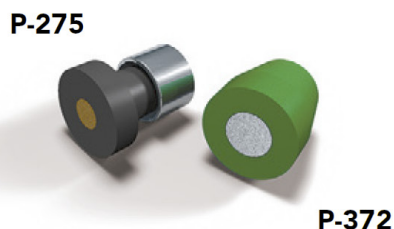
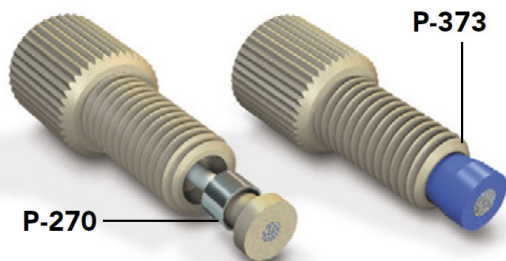
Our Frit-In-A-Ferrule product line is designed to seal and filter simultaneously by incorporating a frit into the body of a flat-bottom ferrule. This simple design allows you to eliminate traditional inline filters and reduce the number of additional connections in your system.



P-372
Flangeless Frit-In-A-Ferrule
for 1/8" OD tubing



P-276
Super Flangeless Frit-In-A-Ferrule
for 1/16" OD tubing



- Seals and filters simultaneously
- Less expensive and more convenient than traditional inline filter systems
- Available in both Flangeless and Super Flangeless™ versions

PORO-FRIT™ for Prep Chromatography

TECHNICAL DATA

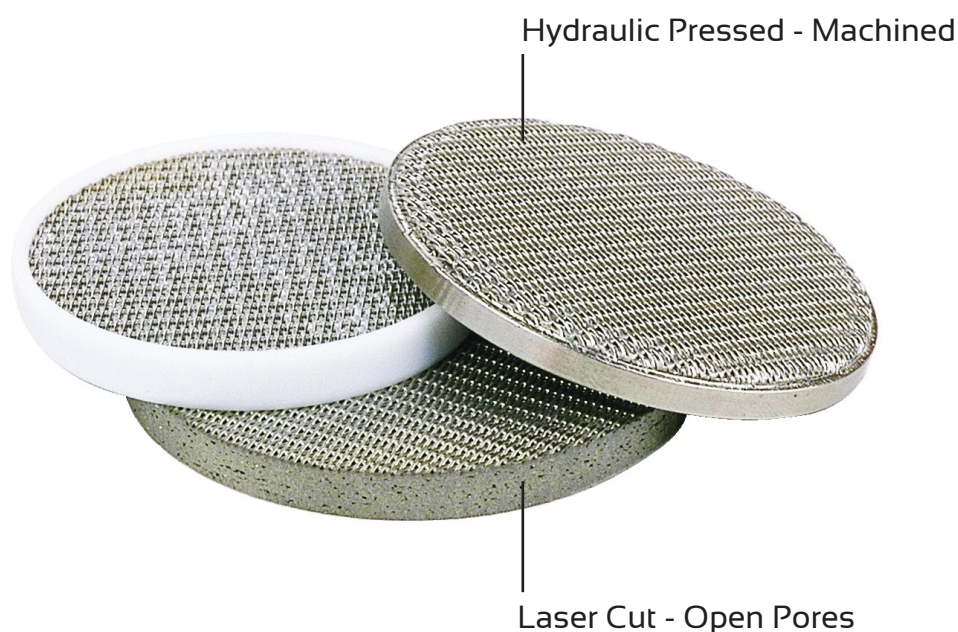
PORO-FRIT™ is a woven wire cloth laminate with the different wire cloth layers closely bounded together by a unique sintering process, resulting in a predetermined precise characteristics with regard to pore size, number or layers, strength, pore distribution and permeability.

PORO-FRIT™ has a defined pore size range of 2 microns and upwards and the geometry of the pores is uniform and there are no "blind holes", which may happen in ordinary sintered frits. The physical characteristics are very well suited for

prep chromatography since the build-up of back-pressure is very low and flow characteristics are excellent.

Presently we do have a capacity to manufacture prep frits in the range from 20 mm up to 300 mm, without welding.

Depending upon the application most of our frits have 5-10 layers, including a strong support screen, and a thickness of either 1.7 - 3.0 - 5.0 mm.




DID YOU MISS THE 160 PAGES CATALOG OF FLUID CONNECTIONS ?

We offer you free of charge our new 160 pages catalog of a variety of fluid connections, such as tubing, connectors, fittings, and flow control devices that meet the increasingly demanding requirements of today's high performance Analytical fluidic systems.

Just drop an e-mail to your local dealer and they will rush you a copy.

12



Fluidic Connections

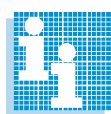
IDEX Health & Science has developed a comprehensive line of standard and custom tubing, connectors, fittings, and flow control devices that meet the increasingly demanding requirements of today's high performance analytical fluidic systems. We feature specialty, high-performance polymers and distinct materials designed to work with your system needs. We offer unique products such as biocompatible PEEK-lined stainless steel tubing as well as an assortment of high pressure and fluoropolymer tubing. All of our fittings, filters and frits and connectors come in a variety of materials and styles. We can provide micro and nano-scale dimensions and well as custom forming, assembly and kitting. We also offer our RI detector that provide high resolution and low dispersion detection for HPLC applications.

13	TUBING
30	FITTINGS
62	CONNECTORS
94	FILTERS & FRITS

FLUIDICS

FLUIDICS 3 FLUIDIC CONNECTIONS

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industrial and analytical components

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Dwarsweg 71 A
3959 AE Overberg

Tel. 0318-52 11 51
E-mail: info@inacom.nl