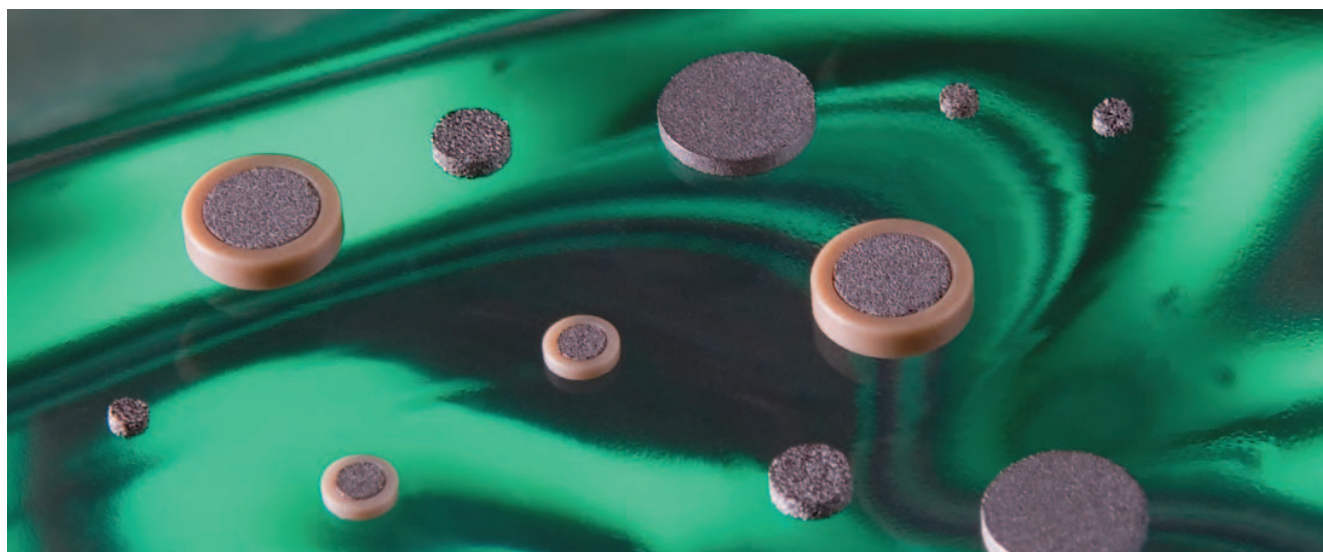


FRITS



REPRODUCIBILITY AND PRECISION

VICI Jour unidense frits, with uniform flow across the entire frit, offer unexcelled reproducibility and precision. Proprietary manufacturing processes ensure uniformity and precise, repeatable dimensional control.

PEEK-encased frits surround the frit with a ring of PEEK, reducing the actual porous surface to the ID of an HPLC column or filter.

FRITS INDEX

UNIDENSE FRITS

Stainless page 87
Titanium 87
Polyethylene 86

PEEK-ENCASED FRITS

Stainless 88
Titanium 89
Polyethylene 89

Polyethylene frits

UNIDENSE TYPE

- Biocompatible
- Metal free

Our completely metal-free polymer frits are made of UHMWPE (Ultra High Molecular Weight PolyEthylene), and offer a competitively priced alternative to titanium.

For single use only. Sold in packages of 5.



SPECIFICATIONS

MATERIAL
UHMWPE
TOLERANCES
±0.08 mm (.003")
PRESSURE RATING
<210 bar (3000 psi)

OD		Thickness		Porosity		Frit volume	Product No.
inches	mm	inches	mm	μm		μL	
.255	6.50	.079	2.00	10		26.5	JR-F-255-079-10PE-5

➔ OPTIONS AND MORE INFORMATION

See facing page.

➔ SEE ALSO

PEEK-encased polyethylene frits . . . 89



Stainless steel frits

UNIDENSE TYPE

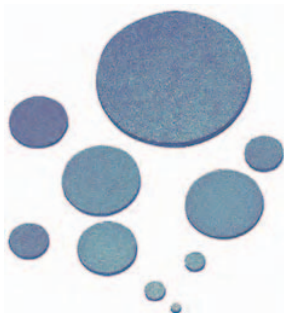
SPECIFICATIONS

MATERIAL

Stainless steel
Type 316L sintered

TOLERANCES

See chart below



For both standard frits and those produced to custom specifications, these frits offer unexcelled reproducibility and precision. Proprietary manufacturing processes ensure uniformity and precise, repeatable dimensional control.

Stainless steel frits are manufactured of SS316L, which has extra-low carbon content. The sintering process used results in a strong bonding of the sinter metal particles. Depending on the grade of powder used, the porosity of the frit can be precisely tuned.

Sold in packages of 5.

OD		Thickness		Porosity	Frit volume	Product No.
inches	mm	inches	mm	μm	μL	
1/16"	1.59	.030	0.76	0.5	0.39	JR-.5FR1-5
				1	0.45	JR-1FR1-5
				2	0.53	JR-2FR1-5
				10	0.60	JR-10FR1-5
1/8"	3.18	.040	1.02	0.5	2.10	JR-.5FR2-5
				1	2.43	JR-1FR2-5
				2	2.83	JR-2FR2-5
				10	3.24	JR-10FR2-5
1/4"	6.35	.040	1.02	0.5	8.39	JR-.5FR4-5
				2	11.30	JR-2FR4-5
				10	12.91	JR-10FR4-5
3/8"	9.53	.040	1.02	0.5	18.91	JR-.5FR6-5
				2	25.45	JR-2FR6-5
				10	29.09	JR-10FR6-5
1/2"	12.70	.040	1.02	0.5	33.58	JR-.5FR8-5
				2	45.2	JR-2FR8-5
				10	51.66	JR-10FR8-5
1"	25.40	.060	1.52	2	269.43	JR-2FR1K-5
				10	307.92	JR-10FR1K-5

➔ OPTIONS

- Standard frits do not have chamfers. Chamfered frits are available on request.
- Other dimensions and porosities are available on request. Minimum order quantity: 100 pieces. Please contact your local distributor or VICI directly.

i TOLERANCES

OD (mm) Tolerance
<5 ±0.05 mm
(.002")

5-12 ±0.08 mm
(.003")

12.5-25.4 ±0.20 mm
(.008")

i NOTES

- Stated porosities are only nominal and do not reflect the maximum pore size of a frit.
- See frit volume chart for help choosing the right frit and porosity for your application... page 109
- Frit volumes are theoretical and are calculated by multiplying overall frit volume times the porosity proportion.

➔ SEE ALSO

PEEK-encased frits

Stainless 88
Titanium 89

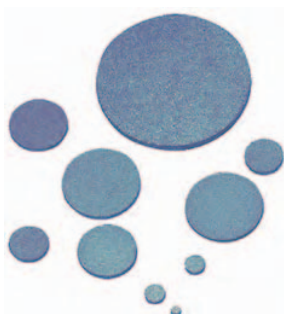
SPECIFICATIONS

MATERIAL

Titanium, sintered

TOLERANCES

See chart at left



Titanium frits

UNIDENSE TYPE

- Biocompatible
- Recommended for protein analysis
- High corrosion resistance
- Various pore sizes and diameters

Titanium is preferred over stainless steel for applications related to the analysis of sensitive substances in general and large biomolecules in particular. Evidently proteins have a tendency to adsorb on the stainless steel (iron) frit and consequently reduce recovery or may even decompose. Titanium also offers higher corrosion resistance and can be used with solvents containing halides.

Sold in packages of 5.

OD		Thickness		Porosity	Frit volume	Product No.
inches	mm	inches	mm	μm	μL	
1/16"	1.59	.062	1.57	0.5	0.82	JR-.5FR1TI-5
		.040	1.02	2	0.71	JR-2FR1TI-5
1/8"	3.18	.040	1.02	2	2.83	JR-2FR2TI-5
1/4"	6.35	.040	1.02	2	11.30	JR-2FR4TI-5
3/8"	9.53	.040	1.02	2	25.45	JR-2FR6TI-5
1/2"	12.70	.040	1.02	2	45.2	JR-2FR8TI-5
				10	51.66	JR-10FR8TI-5
1"	25.40	.040	1.02	2	180.80	JR-2FR1KTI-5

PEEK-encased frits



FRITS

PEEK-ENCASED FRITS

PEEK-encased frits surround the frit with a ring of PEEK, reducing the actual porous surface to the ID of an HPLC column or filter.

The compressed PEEK ring forms a seal between the bottom of the fitting and the column end, preventing the mobile phase and the sample from entering the previously accessible poorly swept areas.

Stainless steel frits

PEEK-ENCASED

- For HPLC columns or in-line filters
- Eliminate poorly swept volume and improves peak symmetry
- Various porosity and dimension options

Our PEEK-encased frits with 0.115" or 1/4" OD ring are intended for HPLC columns with IDs of 3.2, 3.9, and 4.6 mm. With the frit surrounded by a PEEK ring, the actual porous surface is reduced to the column ID.

The compressed PEEK ring forms a seal between the bottom of the fitting and the column end, preventing the mobile phase and the sample from entering the previously accessible poorly swept areas.

Sold in packages of 5.

Ring OD		Frit OD		Thickness		Porosity	Frit volume	Product No.
inches	mm	inches	mm	inches	mm	μm	μL	
.115"	2.92	.038	0.97	.028	0.70	0.5	0.13	JR-1110-05P-5
						2	0.18	JR-1110-2P-5
						5	0.20	JR-1110-5P-5
		.077	1.96	.028	0.70	0.5	.055	JR-1111-05P-5
						2	0.74	JR-1111-2P-5
						5	0.80	JR-1111-5P-5
.25"	6.35	.078	2.00	.062	1.59	0.5	1.30	JR-1104-05P-5
						2	1.74	JR-1104-2P-5
						5	3.32	JR-1102-05P-5
		.125	3.20	.062	1.59	2	4.47	JR-1102-2P-5
						5	4.94	JR-1101-05P-5
		.153	3.90	.062	1.59	2	4.47	JR-1101-2P-5
						5	6.87	JR-1100-05P-5
		.181	4.60	.062	1.59	2	9.24	JR-1100-2P-5
						5	1.75	JR-1103-05P-5
		.125	3.20	.032	0.80	2	2.25	JR-1103-2P-5



SPECIFICATIONS

MATERIAL

Frit Stainless S316L

Ring PEEK

TOLERANCES

±0.05 mm (.002")

SEE OPTIONS

Other dimensions and porosities are available on request. Minimum order quantity: 100 pieces. Please contact your local distributor or VICI directly.

NOTES

- Stated porosities are only nominal and do not reflect the maximum pore size of a frit.
- See frit volume chart for help choosing the right frit and porosity for your application. 109

- Frit volumes are theoretical and are calculated by multiplying overall frit volume times the porosity proportion.

SEE ALSO

Unidense type frits

Polyethylene 86

Stainless 87

Titanium 87

**SPECIFICATIONS****MATERIAL**

Frit Titanium

Ring PEEK

TOLERANCES

±0.05 mm (.002")

**Titanium frits****PEEK-ENCASED**

- For HPLC columns or in-line filters
- Biocompatible – recommended for protein analysis
- Eliminate poorly swept volume and improves peak symmetry
- Higher corrosion resistance
- Various porosity and dimension options

In terms of biocompatibility, the frit is the critical spot for contributing metal ions to the mobile phase and for interaction with protein samples.

VICI Jour PEEK-encased frits with 1/5" or 1/4" OD ring are intended for HPLC columns with IDs of 3.2 and 4.6 mm. With the frit surrounded by a PEEK ring, the actual porous surface is reduced to the column ID.

The compressed PEEK ring forms a seal between the bottom of the fitting and the column end, preventing the mobile phase and the sample from entering the previously accessible poorly swept areas.

Sold in packages of 5.

Ring OD		Frit OD		Thickness		Porosity	Frit volume	Product No.
inches	mm	inches	mm	inches	mm	μm	μL	
1/5	5.08	.102	2.60	.062	1.59	5	3.20	JR-1128-5P-5
.25	6.35	.125	3.20	.062	1.59	0.5	3.32	JR-1127-05P-5
						2	4.47	JR-1127-2P-5
		.181	4.60	.062	1.59	0.5	6.87	JR-1125-05P-5
						2	2.94	JR-1125-2P-5
						5	10.04	JR-1125-5P-5
						10	10.56	JR-1125-10P-5

SPECIFICATIONS**MATERIAL**

Frit UHMWPE

Ring PEEK

TOLERANCES

±0.05 mm (.002")

Polyethylene frits**PEEK-ENCASED**

- Biocompatible
- Metal free

Our polymer frits are made of UHMWPE (Ultra High Molecular Weight PolyEthylene). They are a competitively priced alternative to titanium and are completely metal free.

With the frit surrounded by a PEEK ring, the actual porous surface is reduced to the column ID. The compressed PEEK ring forms a seal between the bottom of the fitting and the column end, preventing the mobile phase and the sample from entering the previously accessible poorly swept areas.

Sold in packages of 5.



Ring OD		Frit OD		Thickness		Porosity	Frit volume	Product No.
inches	mm	inches	mm	inches	mm	μm	μL	
1/5	5.08	.098	2.50	.059"	1.50	10	2.94	JR-1150-10P-5
.25	6.35	.181	4.60	.059"	1.50	10	11.31	JR-1151-10P-5

➔ OPTIONS AND MORE INFORMATION

See facing page.

t TECH TIPS

- PEEK-encased titanium frits can also be used as spare parts frits for the PEEK in-line filter kit . . .62
- PEEK-encased polyethylene frits can be used as spare parts for: PEEK in-line filter kit62 PEEK columns91