



INDEX

Last Drop Mobile Phase Filter	75
Last Drop Filter/Spargers	76
Last Drop Mobile Phase Glass Filter, biocompatible, high flowrate	77
Economy Last Drop Mobile Phase Filters	78
No-Met Biocompatible Mobile Phase Filter	79
SS Mobile Phase Filters & Helium Spargers	80
In-Line Low Pressure Filter Cartridges	81
PEEK In-Line Filter Kit – High Pressure	82
PEEK Pre-Column Filter Kit – High Pressure	83
Sure-Guard	84
SS Ultra-High-Pressure In-Line Filter	85

Disclaimer

The maximum holding pressure for any type of connection involving tubing and a ferrule, varies considerably with the tubing material, the ferrule material, the clearance between tubing OD and ferrule ID and the shape of the fitting detail.

Last Drop Mobile Phase Filter

SPECS

Materials

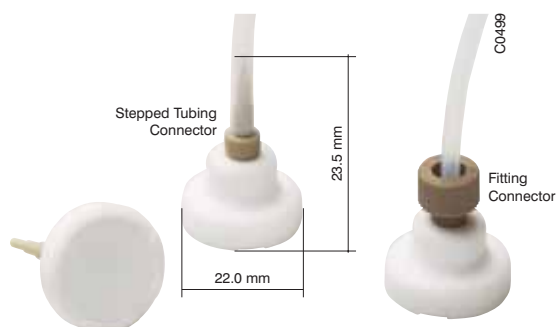
Body: PTFE
 Frits: PTFE, SS316
 (see chart)
 Stepped: PEEK
 Fitting: PEEK
 Ferrule: ETFE

Dimensions

Fitting: 1/4"-28 for 1/8" OD tubing
 Stepped: for 1.5, 2.2 and 3.5 mm ID tubing.
 Others: see illustration

Spares & Tools

For spare parts see page 76



Last Drop Mobile Phase Filter

- No loss of mobile phase
- Biocompatible PTFE frits or SS frits
- Three different porosities
- Two connector types

The Last Drop Mobile Phase Filter utilizes a flat filter element which sits parallel to the bottom of the reservoir. This design allows the filter to draw all but the last 2 % of the mobile phase from the reservoir without drawing air into the system. Conventional cylindrical mobile phase filters

begin to draw air into the system when less than 10 % of the solvent remains in the reservoir. We recommend the metal free PTFE version for sensitive biochromatography applications where metal surfaces may corrode or interact with samples.

Last Drop Mobile Phase Filters

Part No.	Description	max. flow rate*
JR-9000-0520	Filter, PTFE, Last Drop 2.5 μm, stepped tubing connector	1.2 ml/min
JR-9000-0520F	Filter, PTFE, Last Drop 2.5 μm, fitting connector	1.2 ml/min
JR-9000-0521	Filter, PTFE, Last Drop 5 μm, stepped tubing connector	2.6 ml/min
JR-9000-0521F	Filter, PTFE, Last Drop 5 μm, fitting connector	2.6 ml/min
JR-9000-0522	Filter, PTFE, Last Drop 10 μm, stepped tubing connector	3.5 ml/min
JR-9000-0522F	Filter, PTFE, Last Drop 10 μm, fitting connector	3.5 ml/min
JR-9000-0522H	Filter, PTFE, hydrophobic, Last Drop 10 μm, stepped tubing connector	11 ml/min
JR-9000-0522HF	Filter, PTFE, hydrophobic, Last Drop 10 μm, fitting tubing connector	11 ml/min
JR-9000-0530	Filter, SS, Last Drop 2 μm, stepped tubing connector	28 ml/min
JR-9000-0530F	Filter, SS, Last Drop 2 μm, fitting connector	28 ml/min
JR-9000-0531	Filter, SS, Last Drop 5 μm, stepped tubing connector	30 ml/min
JR-9000-0531F	Filter, SS, Last Drop 5 μm, fitting tubing connector	30 ml/min
JR-9000-0532	Filter, SS, Last Drop 10 μm, stepped tubing connector	30 ml/min
JR-9000-0532F	Filter, SS, Last Drop 10 μm, fitting connector	30 ml/min

NEW

* flowrate measured with methanol/water (1:1), ultrasonic degassing, helium sparging to prevent regassing

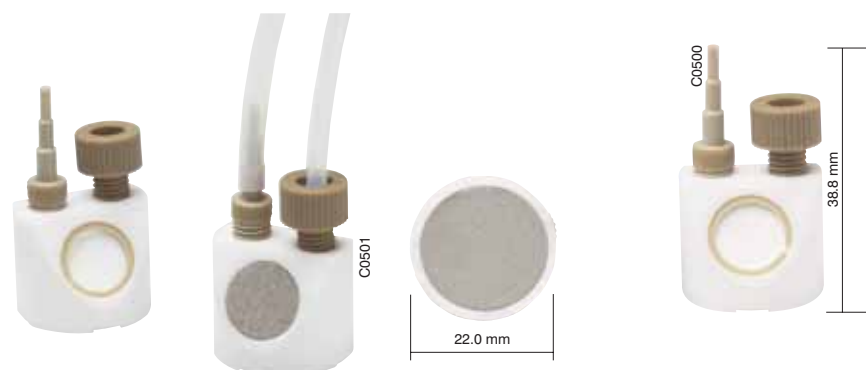
Last Drop Filter/Spargers

Last Drop Filter/Spargers

- Parallel filtering and sparging
- Biocompatible PTFE frits or SS frits
- Three different porosities

This Filter/Sparger filter combines filtration and sparging in one single unit. The PTFE housing contains, a mobile phase filter, either a stainless steel or a PTFE fil-

ter element. The PEEK stepped connector is for connecting the solvent line, nut and ferrule for the sparging line.



SPECS

Materials

Body: PTFE
 Frits: PTFE, SS316
 (see chart)
 Stepped: PEEK
 Fitting: PEEK
 Ferrule: ETFE

Dimensions

Fitting: 1/4"-28 for 1/8" OD tubing
 Stepped: for 1.5, 2.2 and 3.5 mm ID tubing.
 Others: see illustration

Tech Tip

We recommend our Impermeable tubing to prevent "regassing" of helium degassed solvents (see page 27)

Last Drop Filter/Spargers

Part No.	Description	max. flow rate*
JR-9000-0602	Filter/Sparger, PTFE, Last Drop 2.5 µm filter, 10 µm sparger	1.2 ml/min
JR-9000-0603	Filter/Sparger, PTFE, Last Drop 5 µm filter, 10 µm sparger	2.6 ml/min
JR-9000-0604	Filter/Sparger, PTFE, Last Drop 10 µm filter, 10 µm sparger	3.5 ml/min
JR-9000-0604H	Filter/Sparger, PTFE, hydrophobic, Last Drop 10 µm filter, 10 µm sparger NEW	11 ml/min
JR-9000-0640	Filter/Sparger, SS, Last Drop 2 µm filter, 10 µm sparger	30 ml/min
JR-9000-0641	Filter/Sparger, SS, Last Drop 5 µm filter, 10 µm sparger	30 ml/min
JR-9000-0642	Filter/Sparger, SS, Last Drop 10 µm filter, 10 µm sparger	30 ml/min

* flowrate measured with methanol/water (1:1), ultrasonic degassing, helium sparking to prevent regassing

Spare Parts

Part No.	Description	Qty/pkg
JR-20116-10	Nut, PEEK, flangeless, 1/8", natural	10
JR-051-10	Ferrule, ETFE, 1/8"	10
JR-8000-0485	Stepped Adapter, PEEK, universal	1

Last Drop Mobile Phase Glass Filter, biocompatible, high flowrate

Specs

Materials

Body: glass
Frit: ceramic
Connector: PTFE

Dimensions

Connector for 1/8" tubing
Others: see illustration

Last Drop Mobile Phase Glass Filter, biocompatible, high flowrate

NEW

- The solution for biocompatibility and high flowrates
- Easy pushing tubing connection

Due to the ceramic frit, the flowrate can be much higher than the PTFE biocompatible mobile phase filters.

The feet of glass allow withdraw nearly all of the mobile phase. Less than 2 % is left in the bottle.



Last Drop Mobile Phase Glass Filter, biocompatible, high flowrate

Part No.	Description	max. flow rate*
JR-9000-0520G	Glassfilter, ceramic, Last Drop, 2 μm , incl. 1/8" tubing connector JR-9000-0520GC	30 ml/min
JR-9000-0526G	Glassfilter, glass-frit, Last Drop, 10-16 μm , incl. 1/8" tubing connector JR-9000-0525GC	n.a.**
JR-9000-0528G	Glassfilter, glass-frit, Last Drop, 40-100 μm , incl. 1/8" tubing connector JR-9000-0525GC	n.a.**

* flowrate measured with methanol/water (1:1), ultrasonic degassing, helium sparging to prevent regassing

** flowrate test running, when catalog was printed

Spare Parts

Part No.	Description	Qty/pkg
JR-9000-0520GC	Connector, PTFE, 6.35 mm, for 1/8" tubing	1
JR-9000-0525GC	Connector, PTFE, 6.8 mm, for 1/8" tubing	1

Economy Last Drop Mobile Phase Filters

Economy Last Drop Mobile Phase Filters

- Very competitively priced
- Biocompatible PTFE frits or SS frits
- Three different porosities
- Two diameters

We can offer Economy Mobile Phase Filters in 2 sizes, depending upon the dimension of the bottleneck. The filter body

is made of PTFE which has been specially selected to be resistant against virtually all common mobile phases.



Economy Last Drop Mobile Phase Filter

Part No.	Description	max. flow rate*
JR-4676-2.5TF	Filter, PTFE, Economy mobile phase 2,5 μm , OD 19 mm	1.2 ml/min
JR-4676-5TF	Filter, PTFE, Economy mobile phase 5 μm , OD 19 mm	2.6 ml/min
JR-4676-10TF	Filter, PTFE, Economy mobile phase 10 μm , OD 19 mm	3.5 ml/min
JR-4677-2.5TF	Filter, PTFE, Economy mobile phase 2,5 μm , OD 22 mm	1.2 ml/min
JR-4677-5TF	Filter, PTFE, Economy mobile phase 5 μm , OD 22 mm	2.6 ml/min
JR-4677-10TF	Filter, PTFE, Economy mobile phase 10 μm , OD 22 mm	3.5 ml/min
JR-4676-2	Filter, SS, Economy mobile phase 2 μm , OD 19 mm	30 ml/min
JR-4676-10	Filter, SS, Economy mobile phase 10 μm , OD 19 mm	30 ml/min
JR-4677-2	Filter, SS, Economy mobile phase 2 μm , OD 22 mm	30 ml/min
JR-4677-10	Filter, SS, Economy mobile phase 10 μm , OD 22 mm	30 ml/min

* flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

SPECS

Material
 Body: PTFE
 Frits: PTFE/SS316
 (see chart)

Dimension
 For 1/8" OD tubing
 Others: see illustration

Tech Tip
 Easy to replace – easy to clean – use ultrasound or replace with new

We recommend our tubing JR-T-4003-M3 (1/8" OD x 1.59 mm ID) or JR-T-6800-M3 (1/8" OD x 1.59 mm ID) for connecting the filter (see page 24–25)

No-Met Biocompatible Mobile Phase Filter

SPECS

Material

Body: Polyethylene/PTFE (see chart)
 Adapter: PEEK
 Fitting: PEEK
 Ferrule: ETFE

Dimension

See illustration

Tech Tip

The Polyethylene filter is hydrophobic, therefore it may initially require some priming with methanol or acetonitrile

We recommend our tubing JR-T-4003-M3 (1/8" OD x 1.59 mm ID) or JR-T-6800-M3 (1/8" OD x 1.59 mm ID) for connecting the filter (see page 24–25)

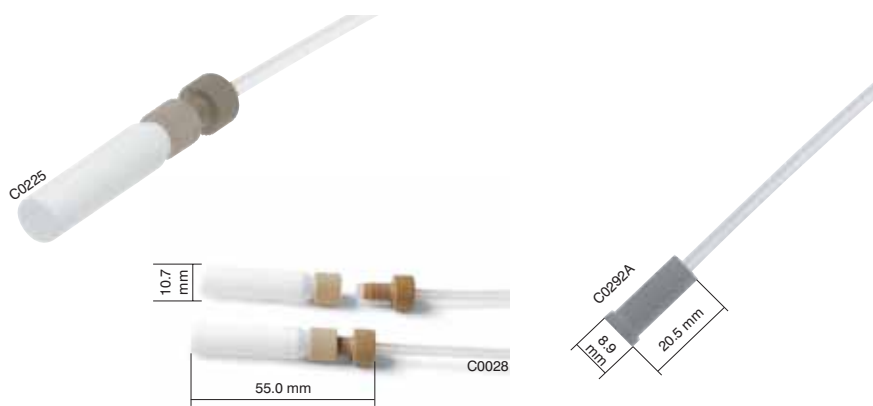
No-Met Biocompatible Mobile Phase Filter

- Very competitively priced
- Inert and biocompatible
- Replacement filters
- Also recommended for IC

Stainless steel is not an acceptable material for a growing number of applications involving the separation of labile macro biomolecules. It is of great importance that all of the biological activity of the samples is retained and that the biological specificity remains unchanged. High salt buffer concentrations can corrode stainless steel and the metal ions released from these filters may react with

the biomolecules of interest or even contaminate the eluents in Ion chromatography.

The No-met filters are designed from inert polymeric components, which effectively eliminate metal contamination of the fluid path. The economy version can be easily slipped over 1/8" OD tubing, no fitting required.



No-Met Mobile Phase Filter

Part No.	Description	max. flow rate*
JR-32171	Filter, PTFE, mobile phase No-Met 5 µm, 1/8"	2.2 ml/min
JR-32172	Filter, PTFE, mobile phase replacement No-Met 5 µm	2.2 ml/min
JR-32178	Filter, PE, mobile phase No-Met < 20 µm, 1/8"	500 ml/min
JR-32179	Filter, PE, mobile phase replacement No-Met < 20 µm	500 ml/min
JR-32174	Filter, PE, Economy No-Met 5 µm, 1/8"	300 ml/min

* flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

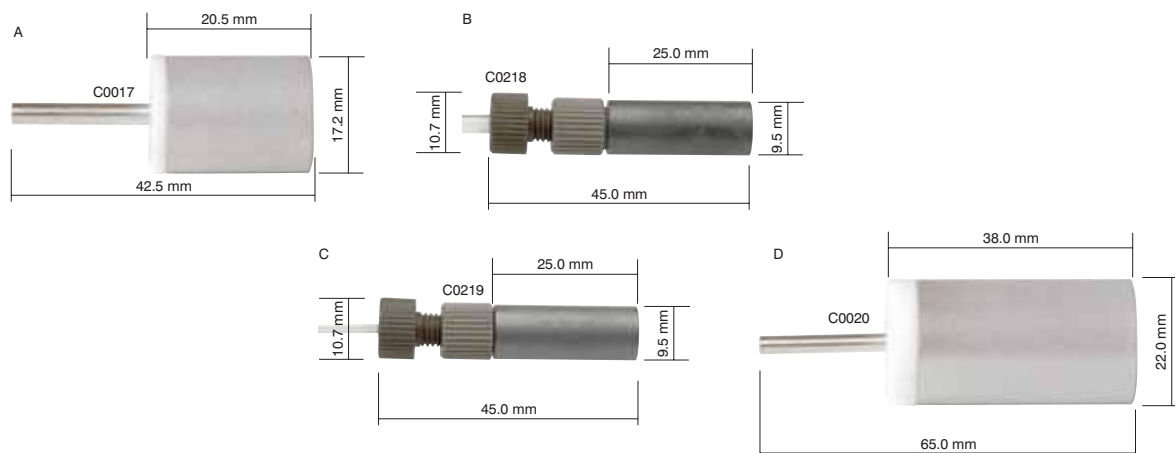
SS Mobile Phase Filters & Helium Spargers

SS Mobile Phase Filters & Helium Spargers

- Ideal for helium sparging
- Three different porosities
- Fitting and pipe connectors

VICI Jour Mobile Phase Filters protect HPLC systems from small particles in the mobile phase. These filters are made from SS316 with PEEK or PTFE connectors and are suitable for most solvents. The complete line has versions for both analytical and preparative applications.

VICI Jour Helium Spargers (2 μm versions) offer an inexpensive way to prepare and maintain mobile phases free of dissolved gases. Connected to a regulated supply of Helium gas (0–400 mL/min.) they effectively remove dissolved oxygen, nitrogen and other atmospheric gases from the mobile phase.



SPECS

Material

Body: SS316
 Pipe: SS316
 Pipe Adapter: PTFE
 Fitting Adapter: PEEK
 Fittings: PEEK
 Ferrules: ETFE

Dimension

See illustration

Tech Tip

We recommend our Impermeable tubing to prevent “regassing” of helium degassed solvents (see page 27)

Mobile Phase Filters & Helium Spargers

Part No.	Drawing	Porosity	Fitting/Pipe OD	max. flow rate*
JR-3675-2	A	2 μm	1/8" Pipe OD	95 mL/min
JR-367008-2	B	2 μm	1/8" Fitting ID	35 mL/min
JR-367008-10	B	10 μm	1/8" Fitting ID	100 mL/min
JR-367008-20	B	20 μm	1/8" Fitting ID	120 mL/min
JR-367016-2	C	2 μm	1/16" Fitting ID	35 mL/min
JR-367016-10	C	10 μm	1/16" Fitting ID	35 mL/min
JR-367016-20	C	20 μm	1/16" Fitting ID	35 mL/min
JR-3678-2	D	2 μm	1/8" Pipe OD	50 mL/min
JR-3678-25	D	25 μm	1/8" Pipe OD	100 mL/min

* flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

In-Line Low Pressure Filter Cartridges

SPECS

Material

Cartridge: PTFE/CTFE
Filter Screen: SS316

Dimensions

For all 1/4"-28 fitting details
OD: 5,20 mm
Thickness: 2.03 mm
Bore: 0.8 mm
Filter Surface Diameter
2 mm

Tolerances

+/- 0.05 mm (.002")

Tech Tip

We recommend using these Filter Cartridges in combination with the VICI Unions on page 65

They fit as well in any other LP solvent line connector like our Tees, Crosses & Manifolds on page 68-70 or our VICI Micro Valves on page 71

In-Line Low Pressure Filter Cartridges

- Easy to replace
- Compact design
- Fits All 1/4"-28 fitting details
- Three different porosities

These filters are convenient since they can be simply dropped into any 1/4"-28 fitting detail. Therefore, all LP solvent line connectors like unions, tees, crosses etc. can be used as cartridge holder. The filter

is made of a stainless steel screen pressed in an inert cartridge. The inner design of the cartridge ensures the equal distribution of the solvent to the screen. (Nut and union shown not included)



In-Line Low/Medium Pressure Filter for LC

Part No.	Description	Qty/pkg	max. flow rate*
JR-CFE-S2-5	In-Line Filter Cartridge, 2 µm	5	30 ml/min
JR-CFE-S10-5	In-Line Filter Cartridge, 10 µm	5	30 ml/min
JR-CFE-S75-5	In-Line Filter Cartridge, 75 µm	5	30 ml/min

* flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

PEEK In-Line Filter Kit – High Pressure

PEEK In-Line Filter Kit – High Pressure

- 100 % biocompatible
- Minimal hold-up volume
- Metal free PE-frits and biocompatible Ti-frits
- Different porosities

The VICI Jour In-Line Filter traps fines and other particles from samples and mobile phases before they damage valuable instruments and columns.

This design is made entirely of PEEK for biocompatibility and chemical resist-

ance. Titanium or polyethylene filter elements are used for complete biocompatibility. The design has virtually no hold-up volume and can be used in analytical applications with virtually no band broadening or loss of efficiency.



In-Line Filter Kit – High Pressure

Part No.	Description	Internal Volume μL^*	max. flow rate**
JR-68257PE	Filter, PEEK, In-Line, PE frit PEEK-encased 10 μm	13.9	30 ml/min
JR-68253	Filter, PEEK, In-Line, Ti frit PEEK-encased 2 μm	11.85	30 ml/min
JR-68247	Filter, PEEK, In-Line, Ti frit PEEK-encased 0.5 μm	9.50	25 ml/min
JR-68257	Filter, PEEK, In-Line, Ti frit PEEK-encased 10 μm	13.2	30 ml/min

* The internal volume is the total flushed volume between the ends of the connecting tubes, including the frit volume

** flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

Replacement Frits

Part No.	Description	Internal Volume μL^*	Qty/pkg
JR-1151-10P-5	Frit, PE, PEEK-encased 10 μm	11.31	5
JR-1125-05P-5	Frit, Ti, PEEK-encased 0.5 μm	6.87	5
JR-1125-2P-5	Frit, Ti, PEEK-encased 2 μm	9.24	5
JR-1125-10P-5	Frit, Ti, PEEK-encased 10 μm	10.56	5

SPECS

Material

Body: PEEK
Frit: Titanium, polyethylene

Dimensions

Bore 0.25mm / 0.4mm
See illustration

Threads

10-32 female

Pressure rating

< 350 bar (< 5000 psi)

Tech Tip

We recommend 2 μm frits for columns with 5 μm or larger particles and 0.5 μm frits for smaller particles

Calculation of frit volume: see Tech Info on page 121

Note

PE frits for single use only

PEEK Pre-Column Filter Kit – High Pressure

SPECS

Material

Body: PEEK
Frit: Titanium, polyethylene

Dimensions

Bore 0.25 mm / 0.4 mm
See illustration

Threads

10-32 female to 10-32 male

Pressure rating

< 350 bar (< 5000 psi)

Tech Tip

We recommend 2 µm frits for columns with 5 µm or larger particles and 0.5 µm frits for smaller particles

Calculation of frit volume: see Tech Info on page 121

Note

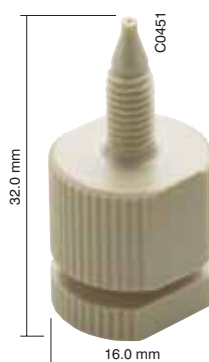
PE frits for single use only

PEEK Pre-Column Filter Kit – High Pressure

- 100% biocompatible
- Minimal hold-up volume
- Metal free PE-frits and biocompatible Ti-frits
- Different porosities

The VICI Jour Pre-Column Filter Kit has a standard 10-32 fitting and fits direct to most column types without introducing an additional dead volume.

The Filter Kit protects expensive columns against fine particles, which may otherwise accumulate on the column frit, leading to split peaks and high backpressure.



PEEK Pre-Column Filter Kit – High Pressure

Part No.	Description	Internal volume µL*	max. flow rate**
JR-68264PE	Filter, PEEK, pre-column, PE frit PEEK-encased 10 µm	15.9	30 ml/min
JR-68258	Filter, PEEK, pre-column, Ti frit PEEK-encased 0.5 µm	11.5	30 ml/min
JR-68262	Filter, PEEK, pre-column, Ti frit PEEK-encased 2 µm	13.85	30 ml/min
JR-68264	Filter, PEEK, pre-column, Ti frit PEEK-encased 10 µm	15.2	30 ml/min

* The internal volume is the hold-up volume between the end of the connecting tube and the filter 10-32 connector outlet, including the frit volume

** flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

Replacement Frits

Part No.	Description	Internal volume µL*	Qty/pkg
JR-1151-10P-5	Frit, PE, PEEK-encased 10 µm	11.31	5
JR-1125-05P-5	Frit, Ti, PEEK-encased 0.5 µm	6.87	5
JR-1125-2P-5	Frit, Ti, PEEK-encased 2 µm	9.24	5
JR-1125-10P-5	Frit, Ti, PEEK-encased 10 µm	10.56	5

Sure-Guard

Sure-Guard

- Minimized hold-up volume
- Disposable filter guard
- Ti-(biocompatible) and SS-frits
- Two different porosities

The VICI Jour Sure-Guard disposable In-Line filter offers an easy and inexpensive way of protecting valuable columns against fines and particles. It is easily

connected directly to any column with an inlet for 1/16" OD tubes and 10-32 threads. The VICI Jour Sure-Guard can be changed in seconds without tools.



Sure-Guard

Part No.	Description	Frit vol. μL*	Qty/pkg	max. flow rate**
JR-0611-SS05-3	Sure-Guard, disposable In-Line filter, SS frit 0.5 μm	0.45	3	30 ml/min
JR-0611-SS2-3	Sure-Guard, disposable In-Line filter, SS frit 2 μm	0.61	3	30 ml/min
JR-0611-TI05-3	Sure-Guard, disposable In-Line filter, Ti frit 0.5 μm	0.45	3	30 ml/min
JR-0611-TI2-3	Sure-Guard, disposable In-Line filter, Ti frit 2 μm	0.61	3	30 ml/min

* The internal volume is the total flushed volume between the ends of the connecting tubes, including the frit volume

** flowrate measured with methanol/water (1:1), ultrasonic degassed, helium sparging to prevent regassing

SPECS

Material

Body: PEEK
Filter: SS316, Titanium
(see chart)

Dimensions

Bore 0.4 mm
See illustration

Threads

10-32 female to 10-32 male

Pressure rating

< 350 bar (< 5000 psi)

Tech Tip

We recommend 2 μm frits for columns with 5 μm or larger particles and 0.5 μm frits for smaller particles

Spares & Tools

We recommend our Dual Layer or striped PEEK tubing for easy identification. (see page 6-10)

Calculation of frit volume: see Tech Info on page 121

SS Ultra-High-Pressure In-Line Filter

SPECS

Material

Body: SS316,
Frit: PEEK encased SS316

Dimensions

Bores: see chart
Others: see illustrations

Filter Dimensions

See page 98

Threads

10-32 female to 10-32 female

Tolerances

+/- 0.05 mm (.002")

Pressure rating

≤ 1000 bar (≤ 14500 psi)

Tech Tip

We recommend 2 μm frits for columns with 5 μm or larger particles and 0.5 μm frits for smaller particles

Calculation of frit volume: see Tech Info on page 121

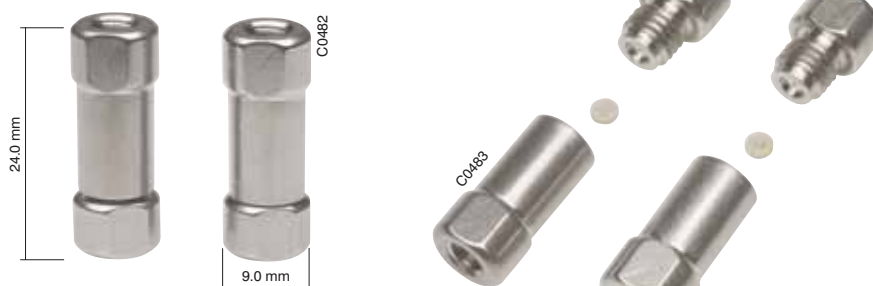
SS Ultra-High-Pressure In-Line Filter

UHPLC

- Qualified for UHPLC
- Minimized hold-up volume
- Ultra-High-pressure applications up to 1000 bar (14500 psi)
- Two different bores for analytical up to semi prep-flow rates
- Three different porosities

The VICI Jour SS In-Line Filter has virtually no hold-up volume and can be used in various applications without significant band broadening or loss of efficiency. The 0.25 mm bore versions are intended for analytical use between autosampler / injection valve and column. The 0.75 mm

bore versions are suitable for higher flow rates in semi prep systems or for solvent supply from pump to autosampler. With minimal dead volume and available frit porosities of 0.5, 2 or 5 μm these in-line filters are the ideal column protectors.



SS High-Pressure In-Line Filter

Part No.	Description	Internal Volume μL*
JR-68230-05	Filter, SS, In-Line, 0.25 mm bore, SS 0.5 μm	0.2
JR-68230-2	Filter, SS, In-Line, 0.25 mm bore, SS 2 μm	0.3
JR-68230-5	Filter, SS, In-Line, 0.25 mm bore, SS 5 μm	0.3
JR-68231-05	Filter, SS, In-Line, 0.75 mm bore, SS 0.5 μm	1.7
JR-68231-2	Filter, SS, In-Line, 0.75 mm bore, SS 2 μm	1.9
JR-68231-5	Filter, SS, In-Line, 0.75 mm bore, SS 5 μm	1.9

* The internal volume is the flushed volume between the ends of the connecting tubes, including the frit volume

Replacement Frits

Part No.	Description	Frit volume μL	Qty/pkg
JR-1110-05P-5	Frit, SS, PEEK-encased 0.5 μm, for P/N 68230 series	0.13	5
JR-1110-2P-5	Frit, SS, PEEK-encased 2 μm, for P/N 68230 series	0.18	5
JR-1110-5P-5	Frit, SS, PEEK-encased 5 μm, for P/N 68230 series	0.20	5
JR-1111-05P-5	Frit, SS, PEEK-encased 0.5 μm, for P/N 68231 series	0.55	5
JR-1111-2P-5	Frit, SS, PEEK-encased 2 μm, for P/N 68231 series	0.74	5
JR-1111-5P-5	Frit, SS, PEEK-encased 5 μm, for P/N 68231 series	0.80	5