

1290 Infinity In-line Filter(5067-4638)

0.3 μm SS Frit, 1.3 μL Delay Volume

Intended use

In most cases, the lifetime limiting factor for UHPLC columns is high backpressure. Particular matter in the sample is collecting on the inlet frit of the column and causes an increase in backpressure until the pressure limit of the system is reached.

Using the Agilent Technologies 5067-4638 1290 Infinity In-line Filter protects the UHPLC column effectively from clogging by particular matter from samples or the UHPLC system.

Kit Contents

Table 1 Kit Contents

Description	Part No.	Qty.
Filter housing	not orderable	1
Filter cap	not orderable	1
Filter insert	not orderable	1

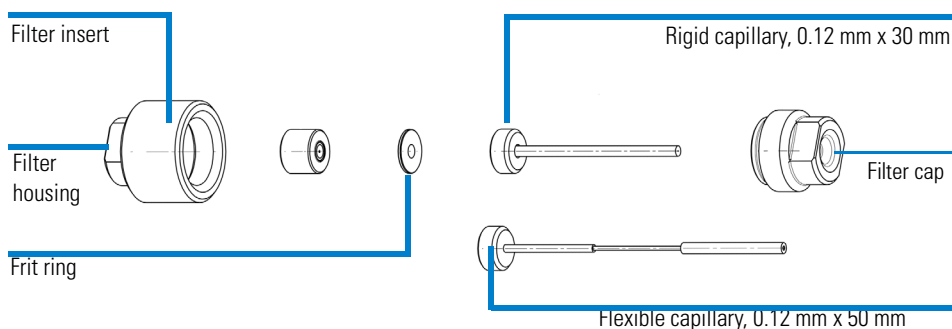


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Table 1 Kit Contents

Description	Part No.	Qty.
Frit ring, 2 mm frit, 0.3 µm pore width pack of 5	5023-0271	1
SSL capillary, rigid, 0.12 mm ID, 30 mm length	5067-4637	1
SSL capillary, flexible, 0.12 mm ID, 50 mm length	5067-4636	1
Installation note	not orderable	1

Schematic

**Figure 1** Exploded view of the 1290 Infinity In-line Filter

Technical Data

Table 2 Technical Data

Max. operating pressure	1200 bar
Delay volume with rigid capillary	1.3 µL
Delay volume with flexible capillary	1.6 µL

Installing the 1290 In-line Filter

Prerequisites	Turn the loading pump off
Tools required	2 ea. 1/4 - 5/16 inch wrench, part no. 8710-0510
Parts required	In-line filter, part no. 5067-4368

Depending of the type of columns in use and the user preferences, the in-line filter can be installed in different ways.

CAUTION

Be careful when tightening Swagelok fittings. Overtightening causes permanent damage to the fitting ferrules and will result in leaks. Fingertight plus 1/4 turn is sufficient to provide a pressure tight seal.

Installation to the Injection Valve of the Autosampler (preferred way)

- 1 Push the rigid capillary through the filter cap.
- 2 Place a frit ring into the filter cap.

NOTE

The frit ring doesn't have a dedicated front or rear face. It can be installed in either orientation

- 3 Place the filter insert onto the frit ring with the cutting edge facing the frit ring.
- 4 Screw the filter housing on and tighten with two 5/16 inch wrenches.
- 5 Attach the short rigid tubing of the filter to port 6 of the Autosampler valve.
- 6 Use flexible stainless tubing to connect the outlet of the in-line filter to the Thermostatted Column Compartment heat exchanger or to the inlet of your column.

Installation in Front of the Column

- 1 Push the flexible capillary through the filter cap.
- 2 Place a frit ring into the filter cap.

- 3 Place the filter insert onto the frit ring with the cutting edge facing the frit ring.
- 4 Screw the filter housing on and tighten with two 5/16 inch wrenches.
- 5 Install the flexible tubing of the in-line filter to the column inlet.
- 6 Use flexible stainless tubing to connect the other end of the in-line filter to port 6 of the Autosampler valve.

NOTE

For use with columns of 250 mm length, the flexible capillary can be bent to place the in-line filter onto another tab of the thermostatted column compartment.

With short columns the rigid tubing can be used as well.

Maintenance

It is recommended to monitor the backpressure of routine applications.

Replace the frit ring if the backpressure is 10% above the regular value. A clogged frit contributes to carryover.

CAUTION

Detach the removable capillary from the 1290 Infinity In-line filter before opening the filter housing. Leaving the capillary connected may result in leaks or damage to filter parts.

Consumables and Spare Parts

Table 3 Consumables and Spare Parts

Description	Part No.
Frit ring, 0.3 µm pore width, pack of 5	5023-0271
SS capillary, 0.12 mm x 30 mm, rigid, incl. fitting	5067-4637
SS capillary, 0.12 mm x 50 mm, flexible, incl. fitting	5067-4636

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