

## V6938\_V04 UHPLC Precolumn Filter - Instruction (Order No. B2, B2002)

UHPLC precolumn filters are designed to be an affordable alternative with a total volume of less than 1  $\mu\text{L}$ . Therewith, these filters have minimal effect on efficiency with all UHPLC columns and systems and, when properly used, should not have any impact on the separation. To assure that chromatographic performance is not affected, it is strongly recommended that the filter is not removed from the UHPLC column until it will be replaced. Repeated installation of the same precolumn filter in multiple columns and instruments is not recommended and will lead to diminished performance.

**Order No. B2: Pore size 0.5  $\mu\text{m}$**   
**Order No. B2002: Pore size 0.2  $\mu\text{m}$**



### Installation and Replacement of the UHPLC precolumn Filter

#### Tools Required:

Open end wrenches  
(5/16" for the filter and the appropriate size for the column end-fitting, typically 1/4")

When installing the UHPLC precolumn filter, it is important that all connections are properly seated in order to eliminate dead volume and to ensure a proper seal.

#### To install your filter correctly:

1. Place the PEEK ferrule over the tube end of the UHPLC precolumn filter and install it in the inlet of the column. Connect the filter in the same manner you would install the solvent line from your liquid chromatograph.
2. Finger-tighten the precolumn filter in the column inlet.
3. Using two open-ended wrenches (5/16" for the filter and typically 1/4" for the column end-fitting) tighten the precolumn filter an additional 3/4 turn.
4. Install the solvent line into the precolumn filter in a similar fashion. We recommend using a new nut and ferrule on the instrument solvent line to insure a zero volume connection.
5. After pressurizing the system, inspect all connections for leakage and tighten appropriate fittings as necessary.

**Do not to over-tighten the precolumn filters!** UHPLC precolumn filters should be tightened only to the point of ensuring a leak-free connection; no more than 1 full turn past fingertight. Over-tightening can cause deformation of both the PEEK ferrule and the connecting tubing, which may result in damage to the column and/or filter.

If you have any further questions do not hesitate to contact us.