

HPLC connections

A bad connection between the column and LC system may influence peak separation, which appears as additional peak tailing. It is especially problematic in cases where a small peak of interest is eluted in the tail of a much larger neighboring peak.

Figure 1 shows a typical connection in an LC system.

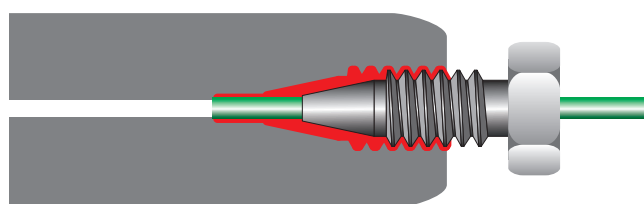


Figure 1a. Too long capillary in the fitting nut – wrong

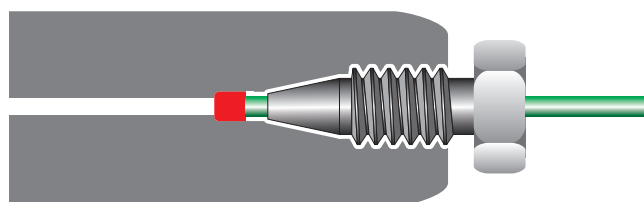


Figure 1b. Too short capillary in the fitting nut – wrong

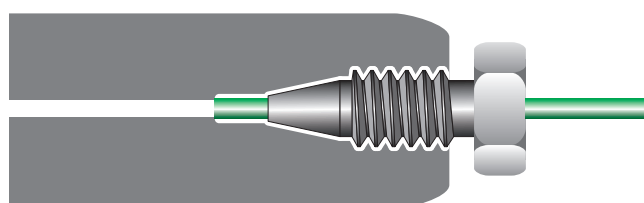


Figure 1c. Shows the right connection

The dead volume (fig.1a,1b, in red) causes broadening of peaks observed at the detector. It results in an increase in peak width or change in peak shape and depends on the size of the void.

Figure 1c shows the right connection between column and LC system.

