

Get Connected!

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What is the difference between angled and regular Press-Tight® connectors?

The only difference between these connectors is their shape. A Press-Tight® connector is a straight tube; an angled Press-Tight® connector has a slight angle in the middle which reduces the strain on the fused silica tubing. This is of particular use in making a connection in a broken column, when you must make the connection within the column coils.

How can I obtain a leak-tight seal using a Press-Tight® connector?

Press-Tight® connectors are easy to use, but if they are not properly sealed, they can loosen due to thermal expansion during temperature-programmed runs. The keys to successful sealing are: 1) making a clean, square cut on the column and 2) moistening the end of the column with methanol before seating it into the connector. A small amount of polyimide resin also helps prevent the seal from separating during temperature cycling.



A brown ring indicates a proper seal.

Can Press-Tight® connectors be used with MXT® columns?

No. To achieve a leak-tight metal-to-metal connection, we recommend the **MXT™ Low Dead Volume connector** for metal columns. These low dead volume connectors are Siltek® treated to make them inert to active compounds, and they can be used up to 400°C without degrading the deactivation layer. MXT™ tubing can even be connected to fused silica tubing using an MXT™ connector with a Valcon Polyimide ferrule instead of a stainless steel ferrule.

Have you ever had to connect a GC analytical column to a guard column or transfer line? Or repair a broken column? How about connecting two columns in series or performing confirmation analysis with a single injection? All of these connections are possible with Restek's extensive selection of GC connectors. In most situations, connector choice is a personal preference and Restek offers several options. Here we review differences among our connectors and answer some frequently asked questions about our popular Press-Tight® connectors.

The **Press-Tight® connector**, a glass connector with a tapered internal diameter at each end, is the quickest and least expensive option. Straight or angled Press-Tight® connectors are effective for fused silica-to-fused silica connections for standard applications at temperatures below 325°C. The resulting connections are inert and have low dead volume.

The **MXT™-Union connectors** are unbreakable metal connectors that are reusable and ensure a low dead volume. They are designed for metal-to-metal connections, but also can make metal-to-fused silica unions using a Valcon polyimide adaptor. This unique graphite-reinforced composite allows a capillary column to slide into the adaptor and be locked in place simply by loosening and tightening the nuts.

If you require a fused silica-to-fused silica connector for high temperature applications, try Restek's **Vu2 Union™ connector** or **SeCure™ "Y" connector**. They combine the simplicity of a glass connector with the strength of a metal connector. Both connectors feature an open design that allows visual confirmation of the seal, and also have secondary seals to help maintain a leak-tight connection. These ultra-strong connections will not disconnect unexpectedly under temperature changes, vibrations, or other stresses normally encountered in GC analysis.

Restek also offers a **Vacuum Vu-Union® connector** for connecting a fused silica column to a mass spec transfer line. The Vacuum Vu-Union® connector utilizes Vespel® ferrules for nonpermeable vacuum connections. A specifically designed Vu-Union® glass insert permits more torque to be applied to the ferrules without fear of cracking the insert. As with the Vu2 Union™, you can confirm the seal through the window of the connector.

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see page 20-21 for a sampling of our connectors, or visit us online at www.restek.com

