

Ferrules

Capillary Column Ferrules



ChromConcept provides ferrules for capillary columns made from Graphite, Vespel[®], Vespel[®]/Graphite and PTFE.

Graphite For high temperature use. This is also the softest ferrule material, so it seals gas tight with finger-tight pressures, without the risk of breaking the column. May be reused several times if not over-tightened. The one-piece design fits standard fittings, and does not need a back ferrule. Upper temperature limit is 450°C.

Vespel/Graphite Ferrules made from a polyimide/graphite blend are recommended for GC/MS interface applications. Our one-piece design requires no back ferrule, and can be reused if not over-tightened. Upper temperature limit is 400°C.

Ferrules/Capillary Columns

- 0.25 mm ID columns use 0.4 mm ID ferrules
- 0.32 mm ID columns use 0.5 mm ID ferrules
- 0.53 mm ID columns use 0.8 mm ID ferrules

Note: Most capillary GCs use $\frac{1}{16}$ " ferrules; for PerkinElmer Sigma Series use $\frac{1}{8}$ " ferrules.

Agilent style are reducing ferrules designed to fit all inlets and detectors on the Agilent 5890, 6890 and 7890 except the MSD. The MSD should be used with standard $\frac{1}{16}$ " ferrules, preferably made from Vespel/Graphite.

Ferrule Sizes

A $\frac{1}{16}$ " ferrule actually measures $\frac{1}{8}$ " in diameter, while $\frac{1}{8}$ " ferrules measure $\frac{1}{4}$ " in diameter. Ferrule terminology arose because a $\frac{1}{16}$ " ferrule was normally used with $\frac{1}{16}$ " OD tubing, and so required a ferrule about twice a width. Capillary chromatographers use the same $\frac{1}{16}$ " fittings, even though capillary columns are much narrower than $\frac{1}{16}$ " tubing. $\frac{1}{16}$ " ferrules are standard for most GCs except the Agilent Split/Splitless injector, which uses $\frac{1}{16}$ " ferrules of a special shape. Other exceptions include PerkinElmer, Shimadzu and Thermo Instrument GCs.

SHIMADZU - Graphite Ferrules - Sold in packages of 10



Description		Item No.	Price ₹
Capillary Column Ferrules	For Capillary Sizes - ID		
Shimadzu 17A, 2010, & 2014 GCs, 0.4 mm	0.25 mm	CB9211174AG	
Shimadzu 17A, 2010, & 2014 GCs, 0.5 mm	0.32 mm	CB9211175AG	
Shimadzu 17A, 2010, & 2014 GCs, 0.8 mm	0.53 mm	CB9211178AG	

AGILENT - Graphite Ferrules



Short Ferrules for Agilent Inlets*		Item No.	Price ₹
1/16" to 0.4 mm	0.18 mm	CB9211164AG	
1/16" to 0.5 mm	0.25 - 0.32 mm	CB9211165AG	
1/16" to 0.8 mm	0.53 mm	CB9211168AG	
1/16" to 1.0 mm	0.53 - 0.65 mm	CB9211160AG	

PERKIN ELMER / VARIAN - Graphite Ferrules



Description		Item No.	Price ₹
Reducing Ferrules	For Capillary Sizes - ID		
1/8" to 0.4 mm	0.25 mm	CB9211204AG	
1/8" to 0.5 mm	0.32 mm	CB9211205AG	
1/8" to 0.8 mm	0.53 mm	CB9211208AG	
1/8" two-hole, 0.5 mm each	0.32 mm	CB9211222AG	

THERMO - Graphite Ferrules



Cup Ferrules - M4 Nut	Item No.	Price ₹
0.28 mm ID	CB921198210AG	
0.38 mm ID	CB921198310AG	
0.48 mm ID	CB921198410AG	
0.80 mm ID	CB921198810AG	

