

**Teflon® Ferrules**

- Upper temperature limit 250°C.
- 100% Teflon®; completely inert.
- One-piece design requires no back ferrule.

Fitting Size	Ferrule ID	qty.	cat.#
1/32"	1/16"	10-pk.	21122
1/16"	0.4mm	10-pk.	21123
1/8"	0.5mm	10-pk.	21124
1/4"	0.8mm	10-pk.	21125
3/8"	1/8"	10-pk.	21126
1/2"	3/16"	10-pk.	21127
3/4"	1/4"	10-pk.	21128



**Graphite Ferrules—For M4 Fittings for Thermo Scientific TRACE™ and Focus SSL**

Ferrule ID	Fits Column ID	Similar to TS part #	Graphite	
			2-pk.	10-pk.
0.3mm	0.10/0.15mm	—	22221	22222
0.4mm	0.18/0.28mm	290-13488	20280	20281
0.5mm	0.32mm	290-13487	20282	20283
0.8mm	0.45/0.53mm	290-13486	20284	20285



**5mm Ferrules for Shimadzu 17A GCs**

- For use with packed columns.
- Graphite composition.

Description	qty.	cat.#
5mm Ferrules for Shimadzu 17A GCs	10-pk.	21121



**tech tip**

**Choosing the Right Ferrule**

Although graphite and Vespel®/graphite ferrules each have advantages and disadvantages, the choice of ferrule composition is largely a personal preference.

Graphite ferrules are soft, easy to seal, stable to 450°C, and contain no binders that might off-gas.

Vespel®/graphite ferrules work better for vacuum and high-pressure applications (e.g., GC/MS) because they will not fragment or allow oxygen to permeate into the system, whereas graphite ferrules will. Because Vespel®/graphite ferrules are made from a harder material, they might require retightening after several temperature cycles.

Alumaseal™ ferrules are ideal for GC/MS. They will not crack or fragment and require no retightening after temperature cycles.



**Terri Sowerby**  
Shipping/Assembly  
Manager  
3+ years of service!

**Stainless Steel Jet Reamers**

A great tool for cleaning detector jets and other small orifices. Serrated design is optimal for removing silica deposits and other contaminants. Ideal for removing ferrules that have become stuck in fittings.



Dislodge ferrules or remove silica deposits with the Jet Reamer/ Ferrule Remover.



Description	qty.	cat.#
Stainless Steel Jet Reamers	6-piece set	20113