

Ferrules

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Wide range of choices for a wide range of instruments and applications

Thermo Scientific™ Ferrules are available in three different materials and various dimensions to match the instrument and capillary column ID. The choice of material is dependent upon the use; guidelines are given in the table.

All varieties of ferrules are supplied in contaminant-free, individual blister packs, allowing removal of an individual item without risk of contamination to the other supplied items.

Learn more at

thermofisher.com/gcparts

Material type	Suitable for GC-MS	Temp limit (°C)	Re-usable
Graphite	No	450	Yes
Graphite/vespel	Yes	350	No
Stainless steel (SiTite)	Yes	500	No

To select the most appropriate ferrule for your GC system, refer to the table below:

Suitable for	100% graphite	Graphite/vespel	SiTite
Thermo Scientific™ TRACE™ Ultra SSL injector	•	•	
Thermo Scientific TRACE 1300/1600 series and Agilent SSL injectors	•	•	•
Thermo Scientific TRACE Ultra non-MS detectors	•	•	
Thermo Scientific TRACE 1300/1600 series and Agilent non-MS detectors	•	•	
All Thermo Scientific and Agilent MS detectors		•	•
Thermo Scientific PTV injector	•	•	

100% graphite ferrules

Thermo Scientific 100% graphite ferrules are a soft material that is porous to oxygen, making them suitable for most applications except GC-MS interface connections. These easy-to-use ferrules form a soft grip with the column and provide a stable seal.



Graphite/vespel ferrules

The mechanically robust graphite/vespel ferrules have a long lifetime and are compatible with GC-MS. These ferrules form a strong grip with the column and cannot be reused as they form a permanent seal with the column. They have a temperature limit of 350 °C, but must be re-tightened after initial temperature cycles.



SiTite metal ferrules

The Thermo Scientific™ SiTite™ Ferrule forms a strong, permanent, airtight seal around the capillary column, eliminating leaks. The base of the ferrule is flat and forms a perfect seal with the MS interface. The ferrule's temperature tolerance is well above the limit of the injector, MS interface or GC oven. Unlike other ferrules, SiTite ferrules do not need re-tightening after installation.



Ferrules and nuts for Thermo Scientific instruments

For use with	Material type	Ferrule size for column ID (mm)	Quantity	Cat. no.
Thermo Scientific™ TRACE™ 1300/1600 series SSL injectors and detectors	100% graphite	0.1-0.32	10 pack	290GA139
		0.45-0.53	10 pack	290GA140
	15% graphite/85% vespel	0.1-0.25	10 pack	290VA191
		0.32	10 pack	290VA192
		0.53	10 pack	290VA193
Thermo Scientific capillary column nut for TRACE 1300/1600 series SSL injectors and non-MS detectors	Stainless steel	–	5 pack	35050458
Thermo Scientific TRACE 1300/1600 series PTV injectors	100% graphite	0.1-0.25	10 pack	29053488
		0.32	10 pack	29053487
		0.53	10 pack	29053486
Thermo Scientific capillary column nut for TRACE 1300/1600 series PTV injectors	Stainless steel	–	5 pack	35053221
Thermo Scientific™ TRACE™ Ultra injectors and non-MS detectors	100% graphite	0.1-0.25	10 pack	29053488
		0.32	10 pack	29053487
		0.53	10 pack	29053486
Thermo Scientific™ capillary column nut for TRACE Ultra	Brass	–	5 pack	35032423
Thermo Scientific™ MS detectors	15% graphite/85% vespel	0.1-0.25	10 pack	29033496
		0.32	10 pack	29033497
Thermo Scientific™ capillary column nut for MS detector	Brass	–	5 pack	290BT240
	Stainless steel	–	5 pack	290BT241
Thermo Scientific MS detectors	VESPEL SCP-5000	0.1-0.25	5 pack	290VT221
Thermo Scientific™ capillary column spring loaded nut for MS detectors	Stainless steel for ISQ/TSQ/ Orbitrap Exploris	–	1 pack	1R120434-0010
	Stainless steel for QE GC/Exactive GC	–	1 pack	1R120434-0020
Thermo Scientific™ SilTite™ kit for Thermo Scientific TRACE 1300/1600 series GC SSL injectors	SilTite metal	0.1-0.25	1 each*	290MA215
		0.32	1 each*	290MA216
		0.53	1 each*	290MA217
Thermo Scientific™ SilTite™ kit for Thermo Scientific ISQ GC-MS interface	SilTite metal	0.1-0.25	1 each*	290MA194
		0.32	1 each*	290MA195
		0.53	1 each*	290MA196
Thermo Scientific™ replacement SilTite™ ferrules for TRACE 1300/1600 series and ISQ GC-MS interface kits	SilTite metal	0.1-0.25	10 pack	290MA201
		0.32	10 pack	290MA202
		0.53	10 pack	290MA203
Thermo Scientific™ SilTite™ nuts for MS interface	–	–	5 pack	290MA205
Thermo Scientific™ SilTite™ nuts for SSL injectors	–	–	5 pack	290MA207
Thermo Scientific™ SilTite™ kits for Thermo Scientific™ DSQ GC-MS interface	SilTite metal	0.1-0.25	1 each*	290MT229
		0.32	1 each*	290MT230
		0.53	1 each*	290MT231
	Replacement SilTite nuts	5 pack	290MT211	
Thermo Scientific™ SilTite™ replacement ferrules for DSQ GC-MS interface kits	SilTite metal	0.1-0.25	10 pack	290MT221
		0.32	10 pack	290MT222
		0.53	10 pack	290MT223
Thermo Scientific TRACE 1600 series iConnect SSL injectors with HeSaver-H ₂ Safer	SilTite metal	< or = 0.25	10 pack	29063465
	SilTite metal	0.25	10 pack	29063466
	SilTite metal	0.32	10 pack	29063467
Thermo Scientific column nut for TRACE 1600 series iConnect SSL injectors with HeSaver-H ₂ Safer	–	–	10 pack	290SF302

* SilTite kits contain 2 SilTite nuts and 10 ferrules

Ferrules for Agilent instruments

For use with	Material type	Ferrule size column ID (mm)	Quantity	Cat. no.
Agilent injectors and non-MS detectors	100% graphite	0.1-0.32	10 pack	290GA139
		0.45-0.53	10 pack	290GA140
		Packed column 1/8" OD	10 pack	290GA108
		Packed column 1/4" OD	10 pack	290GA107
	15% graphite/85% vespel	0.1-0.25	10 pack	290VA191
		0.32	10 pack	290VA192
		0.53	10 pack	290VA193
		Packed column 1/8" OD	10 pack	290VT168
		Packed column 1/4" OD	10 pack	290VT165
		Capillary column nut for injectors and non-MS detectors	Stainless steel	—
Agilent MS detectors	15% graphite/85% vespel	0.1-0.25	10 pack	29033496
		0.32	10 pack	29033497
		0.53	10 pack	290VP144
Thermo Scientific™ SiTite™ kits for Agilent SSL injectors	SiTite metal	0.1-0.25	1 each*	290MA215
		0.32	1 each*	290MA216
		0.53	1 each*	290MA217
SiTite nuts for MS interface	—	—	5 pack	290MA205
Thermo Scientific™ SiTite™ kit for Agilent MS detectors	SiTite metal	0.1-0.25	1 each**	290MA194
		0.32	1 each**	290MA195
		0.53	1 each**	290MA196
Thermo Scientific™ SiTite™ replacement ferrules for all SiTite kits	SiTite metal	0.1-0.25	10 pack	290MA201
		0.32	10 pack	290MA202
		0.53	10 pack	290MA203
Thermo Scientific™ nuts for SSL injectors	—	—	5 pack	290MA207

Thermo Scientific GC consumables are suitable for use with Agilent GC systems

* Kit contains 2 nuts, 10 ferrules, and 2 base seals

** Kit contains 2 nuts and 10 ferrules

