

## Choose for Your Instrument



### GC Supplies - Thermo Scientific Instrument Quick Pick Guide

- Syringes
- Septa
- Inlet Liners
- O-rings and Sealing Rings
- SilTite® FingerTite Ferrules
- Ferrules

Your chromatography analysis does not end with the selection of the GC column. The combination of components selected for your instrument also make an important contribution to successful separations. SGE brings technology and chromatography expertise to improve your chromatography.

## SGE Supplies for Sample Preparation, Sample Introduction, and Separation

### SAMPLE INTRODUCTION - Syringes

Our involvement in all areas of chromatography provides us with a unique understanding of your requirements enabling us to optimize syringe design for sample introduction.

All our syringes, both manual and autosampler, incorporate SGE's Diamond Syringe Technology offering significantly improved levels of durability, clarity and accuracy. SGE has a comprehensive range of syringe options including plunger protection, removable or fixed needles, a range of needle gauge and length options as well as needle-tip style alternatives.

### SAMPLE INTRODUCTION – GC Inlet Liners

The GC Inlet liner is where the sample is introduced and vaporized into the gaseous phase. The design of the liner is crucial, as is liner deactivation, to ensure reproducible and accurate chromatography.

### SEPARATION - GC Connections (ferrules and fittings)

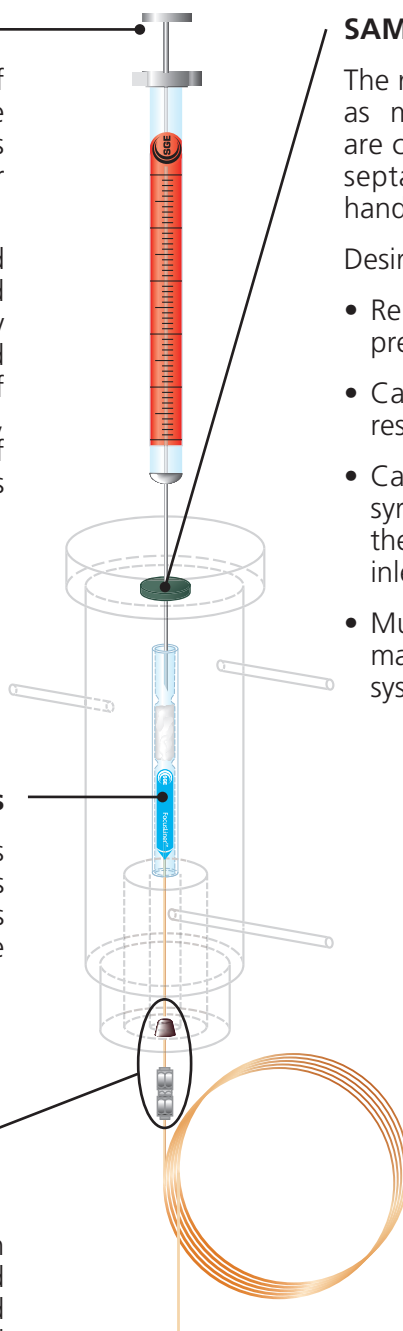
SGE manufactures an array of connection types for GC use. Poorly defined or selected connections can lead to an increase in dead volume, leaks from cycled temperatures and mismatched tubing sizes.

### SAMPLE INTRODUCTION - Septa

The role of septa for GC analysis is key as many chromatographic problems are caused as a result of inappropriate septa material or inappropriate handling of the septa.

Desired septa attributes:

- Reliably seal against the carrier gas pressure in the inlet.
- Capable of being pierced and resealed time after time.
- Capable of being pierced by the syringe needle without pieces of the septa being deposited in the GC inlet system.
- Must not contaminate or bleed material into the chromatographic system.

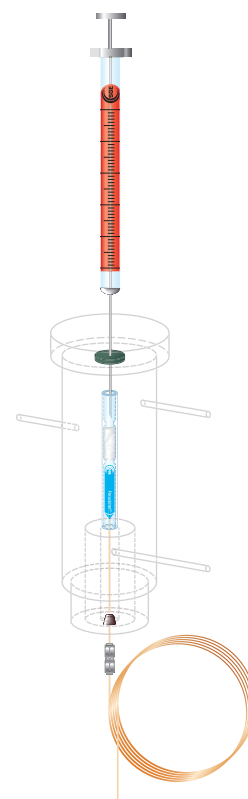


# Instrument Quick Pick for Thermo Scientific

## Autosampler Syringes for Thermo Scientific / CE Instruments / Fisons

All needles have a cone point style.

AUTOSAMPLER				SYRINGE SPECIFICATIONS							
TriPlus	AS3000	AS2000	AS200/800	Volume	Length (mm)	Gauge (OD mm)	Syringe Code	Plunger Stop	Syringe Part No.	Needle Part No.	Pack Size
<b>Fixed Needle</b>											
•				10 µL	50	23 (0.63)	10F-C/T-GT-5/0.63C	✓	002987	–	–
•		•		10 µL	50	23 (0.63)	10F-BT-GT-5/0.63C		0029871	–	–
•				10 µL	80	23 (0.63)	10F-C/T-8/0.63C	✓	002989	–	–
•		•		10 µL	80	23 (0.63)	10F-BT-8/0.63C		0029891	–	–
•				10 µL	80	26 (0.47)	10F-C/T-8/0.47C	✓	002992	–	–
•		•		10 µL	80	26 (0.47)	10F-BT-8/0.47C		0029921	–	–
•				10 µL	50	23 (0.63)	10F-C/T-5/0.63C	✓	002981	–	–
•	•	•	•	10 µL	50	23 (0.63)	10F-VA8400/BT-5/0.63C		002951	–	–
•				10 µL	50	26 (0.47)	10F-C/T-5/0.47C	✓	002980	–	–
•	•	•	•	10 µL	50	26 (0.47)	10F-BT-5/0.47C		0029801	–	–
<b>Removable Needle</b>											
•				10 µL	50	26 (0.47)	10R-C/T-5/0.47C	✓	002982	037010	2
•	•	•		10 µL	50	26 (0.47)	10R-BT-GT-0.47C		0029851	037010	2
•				10 µL	50	23 (0.63)	10R-C/T-5/0.63C	✓	002984	037787	2
•	•	•	•	10 µL	50	23 (0.63)	10R-BT-0.63C		0029841	037787	2
•				10 µL	80	26 (0.47)	10R-C/T-8/0.47C	✓	002993	031535	3
•		•	•	10 µL	80	26 (0.47)	10R-BT-8/0.47C		0029931	031535	3



## Septa

SGE has a number of different septa materials:

- GP = For non-demanding routine applications.
- EC = Combines significantly longer injection life, low bleed and low injection port adhesion.
- MN = Premium septa for autosamplers, up to 400 injection per septum.
- HT = Bleed and temperature optimized, combined with outstanding mechanical properties.



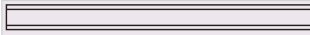


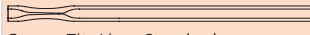
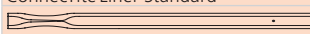
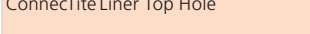
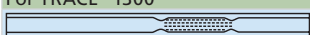
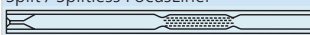
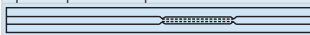

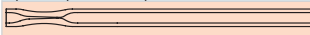
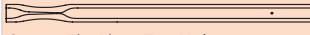
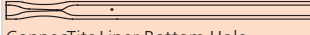
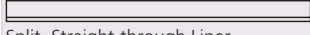
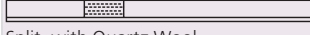
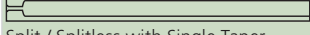
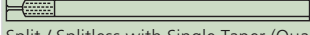
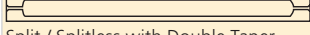
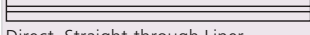
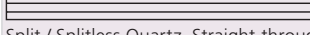
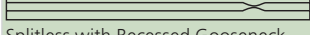
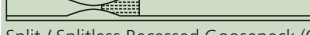
Type	Material	Durability	Resealing	Solvent Resistance	Tear Resistance	Maximum Temperature
GP	Silicone	Good	Good	Excellent	Good	200 °C
EC	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
MN	High Temperature Silicone	Excellent	Excellent	Excellent	Excellent	400 °C
HT	BTO Silicone	Excellent	Excellent	Excellent	Excellent	400 °C

Diameter (mm)	Septum Type	Pack Size	Part No.
<b>For TRACE™ 1300</b>			
11	GP	48	041826
11	EC	24	041902
11	MN	48	041856
11	HT	24	041898
17	EC	24	041903
17	MN	24	0418505
17	HT	24	0418990

## Inlet Liners

Description and Geometry Sketch	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part no.
<b>For TRACE™ and Focus™</b>					
Splitless FocusLiner™ (for use with 70 mm Needle)	8	5	105	5	092045
Splitless FocusLiner™ with Top-end Restriction (for use with 70 mm Needle)	8	5	105	5	092046
				25	09204625
Split FocusLiner™ (for use with 50 mm Needle)	8	5	105	5	092048
Splitless FocusLiner™ (for use with 50 mm Needle)	8	5	105	5	092049
Splitless with Single Taper	8	3	105	5	092141
Splitless with Single Taper	8	5	105	5	092144

## Inlet Liners Continued

Description and Geometry Sketch	OD (mm)	ID (mm)	Length (mm)	Pack Size	Part no.
 Splitless, Straight-through Liner	8	3	105	5	092147
 SPME Liner	8	0.8	105	5	092148
 Split, Straight-through Liner	8	5	105	5	092150
 TRACE™ 2000 PTV Liner	2.75	1.75	120	5	092142
 Sintered Glass, Large Volume Injection (LVI) Liner	2.75	0.78/1.8	120	5	092155
 ConnectTite Liner Standard	8	5	105	5	092334
 ConnectTite Liner Top Hole	8	5	105	5	092335
 ConnectTite Liner Bottom Hole	8	5	105	5	092336
<b>For TRACE™ 1300</b>					
 Split / Splitless FocusLiner™	6.3	4	78.5	5 25	092002 092219
 Split / Splitless Tapered FocusLiner™	6.3	4	78.5	5 25	092003 092011
 Split / Splitless FAST FocusLiner™	6.3	2.3	78.5	5 25	092005 092008
 Split / Splitless Tapered FAST FocusLiner™	6.3	2.3	78.5	5 25	092111 092115
 ConnectTite Liner Standard	6.3	4	78.5	5	092324
 ConnectTite Liner Top Hole	6.3	4	78.5	5	092325
 ConnectTite Liner Bottom Hole	6.3	4	78.5	5	092326
 Split, Straight-through Liner	6.3	4	78.5	5 25	092007 092222
 Split, with Quartz Wool	6.3	4	78.5	5 25	092001 092220
 Split / Splitless with Single Taper	6.3	4	78.5	5 25	092017 092229
 Split / Splitless with Single Taper (Quartz Wool)	6.3	4	78.5	5 25	092019 092218
 Split / Splitless with Double Taper	6.3	4	78.5	5 25	092018 092230
 Direct, Straight-through Liner	6.3	1.2	78.5	5 25	092016 092224
 Split / Splitless Quartz, Straight-through Liner	6.1	2	78.5	5	092004
 Splitless with Recessed Gooseneck	6.3	2	78.5	5	092013
 Split / Splitless Recessed Gooseneck (Quartz Wool)	6.3	4	78.5	5 25	092010 092223

- Taper / Gooseneck
- FocusLiner™
- Taper Focus
- ConnectTite
- Straight
- Double Taper
- PTV/LVI

## O-rings and Sealing Rings

Description	Usage	Pack Size	Part No.
<b>For 8000 &amp; TRACE™ GCs</b>			
Graphite Sealing Ring	8 mm ID. Can be used at temperatures up to 450 °C. Suitable for use with liners 092004 and 09200401.	10	0726004
<b>For TRACE™ 1300</b>			
Viton O-Ring	Can be used at temperatures up to 300 °C. Suitable for liners with OD of 6.3 mm.	10	0726532
Graphite Sealing Ring	Can be used at temperatures up to 450 °C. Suitable for all inlet liners above except 092004 and 09200401.	10	0726005
Graphite Sealing Ring	Can be used at temperatures up to 450 °C. Suitable for use with liners 092004 and 09200401.	10	0726006

## SilTite® FingerTite Ferrules



Description	Column ID	Ferrule ID (mm)	Pack Size	Part No.
SilTite FingerTite Thermo Injector/FID Starter Kit	0.1-0.25 mm	0.4	*	073614
SilTite FingerTite Thermo Injector/GC-MS ISQ Starter Kit	0.1-0.25 mm	0.4	*	073615
SilTite FingerTite Thermo Injector/GC-MS Starter Kit	0.1-0.25 mm	0.4	*	073616
SilTite FingerTite Ferrule 0.4 mm	0.1-0.25 mm	0.4	10	073630
SilTite FingerTite Ferrule 0.5 mm	0.32 mm	0.5	10	073631
SilTite FingerTite Ferrule Blanking	-	-	2	073633
SilTite FingerTite Female Nut	-	-	5	073636
<b>For TRACE™ 1300</b>				
SilTite Fingertite INJ / FID Starter Kit			*	073610
SilTite Fingertite Capillary / FID Starter Kit			*	073611
SilTite Fingertite INJ / MS Starter Kit			*	073612
SilTite Fingertite Blanking Ferrule		Replacement Items	2	073633
SilTite Fingertite INJ Base Seal		Replacement Items	2	073640
SilTite Fingertite MS Adaptor			1	0736102
SilTite Fingertite Injector			1	0736104
SilTite Fingertite Starter Kit 0.5			#	0736105

\* Each starter kit includes all the parts necessary to convert one GC system (one injector and one detector) to the SilTite FingerTite system suitable for installing 0.1 – 0.25 mm ID capillary columns. In addition there are five SilTite FingerTite nuts, one packet (ten ferrules) of 0.4 mm ID SilTite FingerTite ferrules and a ferrule install tool which allows you to seat the ferrule in the correct position on the capillary column.

# 0.4 and 0.5 Starter Kits include ten ferrules for either 0.1 - 0.25 mm ID capillary columns (0.4) or 0.32 mm ID capillary columns (0.5) plus five SilTite FingerTite nuts and the ferrule install tool.

## Ferrules

Description	Column ID	Ferrule ID	Pack Size	Part No.
<b>15% Graphite / 85% Vespel® Ferrules</b>				
For All Injectors & Detectors (Not for 8000 Series, Focus, TRACE™/Ultra GC)	0.1-0.25 mm	0.4 mm	10	0726549
	0.32 mm	0.5 mm	10	0726557
	0.53 mm	0.8 mm	10	0726548
	1/8" OD Packed Columns	1/8"	10	072669
	1/4" OD Packed Columns	1/4"	10	072667
For All Focus, Trace/Ultra Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.25 mm	0.4 mm	10#	072696
	0.32 mm	0.5 mm	10#	072697
	0.53 mm	0.8 mm	10#	072698
Brass Nut for Focus, Trace/Ultra GC Injectors & Non-MS Detectors			2	1034085
For TRACE™ 1300 Injectors & Detectors at atmospheric pressure e.g. FID	0.1-0.25 mm	0.4 mm	10	073109
	0.32 mm	0.5 mm	10	073111
	0.53 mm	0.8 mm	10	073113
	for 1/8" OD Packed Columns	1/8"	10	072669
	for 1/4" OD Packed Columns	1/4"	10	072667
For TRACE™ 1300 GC-MS Interface Connection	0.1-0.25 mm	0.4 mm	10	072663
	0.32 mm	0.5 mm	10	072654
	0.53 mm	0.8 mm	10	072655
<b>100% Graphite Ferrules</b>				
For Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	0.5 mm	10	072619
	0.45-0.53 mm	0.8 mm	10	072614
	1/8" OD Packed Columns	1/8"	10	072622
	1/4" OD Packed Columns	1/4"	10	072621
For TRACE™ 1300 Injectors & Detectors at atmospheric pressure e.g. FID (Not for GC-MS)	0.1-0.32 mm	0.5 mm	10	072635
	0.45-0.53 mm	0.8 mm	10	072636
	for 1/8" OD Packed Columns	1/8"	10	072602
	for 1/4" OD Packed Columns	1/4"	10	072601
<b>SilTite Metal Ferrules</b>				
For GC-MS Interface Connections (Starter Kit)	0.1-0.25 mm	0.4 mm	10*	073450
	0.32 mm	0.5 mm	10*	073451
	0.53 mm	0.8 mm	10*	073452
	1/32"	0.81 mm	10*	073453
For TRACE™ 1300 Split / Splitless Injectors (Starter Kit)	0.1-0.25 mm	0.4 mm	10#	073270
	0.32 mm	0.5 mm	10#	073271
	0.45-0.53 mm	0.8 mm	10#	073272
	1/32"	0.81 mm	10#	073273
<b>Replacement SilTite Metal Ferrules</b>				
For All GC-MS Interface Connections	0.1-0.25 mm	0.4 mm	10	073330
	0.32 mm	0.5 mm	10	073331
	0.53 mm	0.8 mm	10	073332
	1/32"	0.81 mm	10	073333
For All TRACE™ 1300 Connections	0.1-0.25 mm	0.4 mm	10	073220
	0.32 mm	0.5 mm	10	073221
	0.53 mm	0.8 mm	10	073222
	1/32"	0.81 mm	10	073219
<b>Replacement SilTite Nuts</b>				
SilTite Metal Nuts	-	-	5	073230
For TRACE™ 1300 GC-MS Interface Connection	-	-	5	073224
For TRACE™ 1300 Split / Splitless Injector	-	-	5	073226
<b>Replacement SilTite Base Seals</b>				
For TRACE™ 1300 Split / Splitless Injector	-	-	2	073400
	-	-	10	073401

\* Includes 10 ferrules, 2 SilTite nuts.

# To be used in combination with brass nut (Part No. 1034085)

SGE's involvement in gas chromatography includes the support we give to our customers.

### Technical Support

Contact us at [techsupport@sge.com](mailto:techsupport@sge.com) for technical support information.

### Our Website

[www.sge.com](http://www.sge.com) is a detailed source for information on chromatography, applications and SGE products. It also profiles the latest posters and materials developed by our technical experts based around the world.

### SGE Product Selection Guide

Our product selection guide can be accessed at [www.sge.com/selectionguide](http://www.sge.com/selectionguide)

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