



GC Accessories

GC Ferrules | GC Septa | Injection Port Liners for Agilent GCs
Inlet Seals | Guard Columns | Fused Silica Connectors

Choosing the Right Ferrule

All ferrules are thermally conditioned and ready for immediate high temperature GC use.

Advantages of Graphite Ferrules

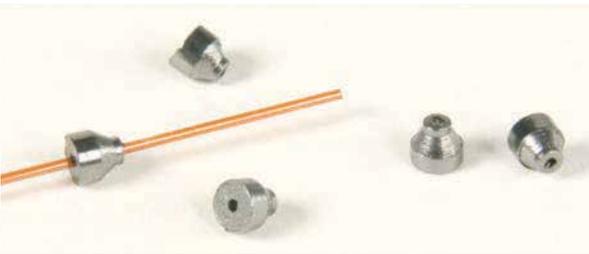
Our graphite ferrules fit Swagelok® or Parker® fittings. Graphite ferrules are soft and compliant. They will not stick to glass at higher temperatures. These ferrules are ideal for glass to metal connections. The graphite ferrule can be reused if not over tightened.

Advantages of Polyimide Ferrules

Improved mixing techniques for polyimide ferrules allow for better homogenous mixing of graphite and polyimide resin. One can observe this when looking at a polyimide ferrule. The surfaces are very smooth and exhibit a highly polished or highly shined surface. Polyimide ferrules exhibit a lower coefficient of expansion than other polyimide resins, therefore, reducing the tendency of the column nuts loosening in the heated GC ovens.

Advantages of PTFE Ferrules

The PTFE ferrules are a one piece design and require no back ferrule. These ferrules are completely inert.



Maximum Operating Temperatures

- 100% Graphite ferrules - 450°C
- 85% Polyimide / 15% Graphite - 400°C
- 60% Polyimide / 40% Graphite - 400°C
- 100% Polyimide ferrules - 350°C
- 100% PTFE ferrules - 250°C



Ferrule Type/Size

- 1/16" x 0.4mm Capillary tubing with ID of 0.10 to 0.25mm
- 1/16" x 0.5mm Capillary tubing with ID of 0.28 to 0.35mm
- 1/16" x 0.8mm Capillary tubing with ID of 0.45 to 0.53mm
- 1/16" x 1.0mm Capillary tubing with ID of 0.75mm

- No Hole to create custom fittings or for plugs
- 2-Hole Connects 2 pieces of capillary tubing to the same fitting

Capillary Ferrule	Capillary or Tubing I.D.	100% Graphite	Agilent™ X-Reference	85% Polyimide 15% Graphite	Agilent™ X-Reference	60% Polyimide 40% Graphite	100% Polyimide	100% Teflon	Pack Size
Capillary Ferrules									
1/16"	0.4mm	OV-GF-04	500-2004	OV-MS-04	5062-3508	OV-GV-04	OV-HF-04	OV-TF-04	10
	0.4mm (HP/Agilent Short Style)	OV-GF-04HP	500-2114	OV-MS-04-HP	5181-3323	OV-GV-04HP	OV-HF-04HP	-	10
	0.5mm	OV-GF-05	-	OV-MS-05	5062-3506	OV-GV-05	OV-HF-05	OV-TF-05	10
	0.5mm (HP/Agilent Short Style)	OV-GF-05HP	5080-8853	OV-MS-05HP	5062-3514	OV-GV-05HP	OV-HF-05HP	-	10
	0.8mm	OV-GF-08	500-2008	OV-MS-08	5062-3538	OV-GV-08	OV-HF-08	OV-TF-08	10
	0.8mm (HP/Agilent Short Style)	OV-GF-08HP	500-2118	OV-MS-08HP	5062-3512	OV-GV-08HP	OV-HF-08HP	-	10
	1.0mm	OV-GF-10	500-2010	OV-MS-10	-	OV-GV-10	OV-HF-10	OV-TF-10	10
	1.0mm (HP/Agilent Short Style)	OV-GF-10HP	5080-8773	OV-MS-10HP	-	-	-	-	10
	1.2mm	OV-GF-12	500-2012	OV-MS-12	-	OV-GV-12	OV-HF-12	OV-TF-12	10
Straight Ferrules									
1/16"	1/16"	OV-GF-01	0100-1326	OV-MS-01	-	OV-GV-01	OV-HF-01	OV-TF-01	10
1/8"	1/8"	OV-GF-02	0100-1325	OV-MS-02	-	OV-GV-02	OV-HF-02	OV-TF-02	10
3/16"	3/16"	OV-GF-316	-	-	-	-	-	OV-TF-316	10
1/4"	1/4"	OV-GF-03	0100-1324	OV-MS-03	-	OV-GV-03	OV-HF-03	OV-TF-03	10
3/8"	3/8"	OV-GF-138	-	-	-	-	-	OV-TF-138	10
1/2"	1/2"	OV-GF-13	-	-	-	-	-	OV-TF-13	10
Reducing Ferrules									
1/8"	0.4mm	OV-GF-48	-	OV-MS-48	-	OV-GV-48	OV-HF-48	OV-TF-48	10
	0.5mm	OV-GF-58	-	OV-MS-58	-	OV-GV-58	OV-HF-58	OV-TF-58	10
	0.8mm	OV-GF-88	-	OV-MS-88	-	OV-GV-88	OV-HF-88	OV-TF-88	10
	1.0mm	OV-GF-18	-	OV-MS-18	-	OV-GV-18	OV-HF-18	-	10
	1.2mm	OV-GF-38	-	OV-MS-38	-	OV-GV-38	OV-HF-38	-	10
	1/16"	OV-GF-68	0100-1336	OV-MS-68	-	OV-GV-68	OV-HF-68	OV-TF-68	10
1/4"	4.0mm	OV-GF-40	-	OV-MS-40	-	OV-GV-40	OV-HF-40	OV-TF-40	10
	0.4mm	OV-GF-44	-	OV-MS-44	-	OV-GV-44	OV-HF-44	OV-TF-44	10
	0.5mm	OV-GF-45	-	OV-MS-45	-	OV-GV-45	OV-HF-45	OV-TF-45	10
	0.8mm	OV-GF-84	-	OV-MS-84	-	OV-GV-84	OV-HF-84	OV-TF-84	10
	1/16"	OV-GF-64	0100-1335	OV-MS-64	-	OV-GV-64	OV-HF-64	OV-TF-64	10
	1/8"	OV-GF-81	0100-1334	OV-MS-81	-	OV-GV-81	OV-HF-81	OV-TF-81	10
Two-Hole Ferrules									
1/16"	0.4mm	OV-GF-14	-	OV-MS-14	5062-3580	OV-GV-14	OV-HF-14	OV-TF-14	10
	0.5mm	OV-GF-25	-	OV-MS-15	5062-3581	OV-GV-15	OV-HF-15	OV-TF-15	10
1/8"	0.5mm	OV-GF-28	-	OV-MS-28	-	OV-GV-28	OV-HF-28	OV-TF-28	10
	0.8mm	OV-GF-29	-	OV-MS-29	-	OV-GV-29	OV-HF-29	OV-TF-29	10
No-Hole Ferrules									
1/16"	-	OV-GF-01-NH	-	OV-MS-01-NH	5181-3308	OV-GH-01-NH	OV-HF-01-NH	OV-TF-01-NH	10
1/8"	-	OV-GF-02-NH	-	OV-MS-02-NH	-	OV-GH-02-NH	OV-HF-02-NH	OV-TF-02-NH	10
1/4"	-	OV-GF-03-NH	-	OV-MS-03-NH	-	OV-GH-03-NH	OV-HF-03-NH	OV-TF-03-NH	10
3/8"	-	OV-GF-138-NH	-	-	-	-	-	OV-TF-138-NH	10

Septum Selection by Instrument	
Most Common Sizes	Instrument Brand/Model
3/8" (9.5 mm)	Bruker/Varian non-capillary injectors Thermo (Finnigan GC)
7/16" (11 mm)	Agilent 5880A/5890/6850/6890/7890, PTV GCs Bruker/Varian 1075/1077 Injectors Perkin-Elmer, Thermo
Shimadzu Plug - CHR-HD-S1544	



CHR-GCSP-HT11/50



CHR-GCSPCH-GP11/50

ChromGC GC & GC-MS Septa					
Diameter	Thickness	Maximum Temp.	Application	Item No.	Pack Size
3/8" (9.5 mm)	3 mm	325°C	General Purpose	CHR-GCSP-GP9.5/50	50
	3 mm	325°C	General Purpose, with Guide Hole	CHR-GCSPCH-GP9.5/50	50
	3 mm	400°C	High Temperature	CHR-GCSP-HT9.5/50	50
	3 mm	400°C	High Temperature, with Guide Hole	CHR-GCSPCH-HT9.5/50	50
7/16" (11 mm)	3 mm	325°C	General Purpose	CHR-GCSP-GP11/50	50
	3 mm	325°C	General Purpose, with Guide Hole	CHR-GCSPCH-GP11/50	50
	3 mm	400°C	High Temperature	CHR-GCSP-HT11/50	50
	3 mm	400°C	High Temperature, with Guide Hole	CHR-GCSPCH-HT11/50	50

* Bulk pack of 100 also available. The item No. ends with /100 instead of /50

Inlet Liners

- Deactivated for maximum inertness
- Meets or exceeds original manufacturers' specifications

Description	ID (mm)	OD (mm)	Length (mm)	Glass Type	Deactivated	Agilent™ X-Reference	Part Number
Deactivated Injection Port Liners							
Splitless, single tapered Liner 	4.0	6.45	78.5	Borosilicate	Yes	5181-3316	IS-4209
Splitless, single tapered Liner w/wool* 	4.0	6.45	78.5	Borosilicate	Yes	5062-3587	IS-4210
Splitless, double tapered Liner 	4.0	6.45	78.5	Borosilicate	Yes	5181-3315	IS-4211
Split, straight Liner, w/wool* 	4.0	6.3	78.5	Borosilicate	Yes	19251-60540	IS-4212
Split, straight Liner, with cup for manual injections + 	4.0	6.3	78.5	Borosilicate	No	18740-80190	IS-4202
Direct Liner 	1.5	6.45	78.5	Borosilicate	Yes	18740-80200	IS-4215
Direct Connect double tapered Liner, w/bottom hole 	4.0	6.3	78.5	Borosilicate	Yes	G1544-80700	IS-4217
Split, single tapered Liner, low pressure drop, w/wool* 	4.0	6.3	78.5	Borosilicate	Yes	5183-4647	IS-4220
Split, single tapered Liner, w/wool* 	4.0	6.3	78.5	Borosilicate	Yes	5183-4711	IS-4221

+ The Cup Split Liner (IS-4202) contain small amounts of packing (10% CH-1 on 80/100 Chromosorb-WHP) retained by silanized glasswool.

* Containing deactivated quartz wool packing to ensure vaporization of your sample before reaching the column entrance. The liner is made of borosilicate glass.

** O-Ring not included. Viton O-Ring are sold in pack of 10 (Item No. LS-HPVOR)

Inlet Gold Seals

Instrument	Description	Pack Size	Part Number
For Agilent™ 7890/6890/6850			
	0.8mm Inlet Seal, Gold-plated Splitless, Gold-plated Washers	2	OV-4300
	0.8mm Inlet Seal, Gold-plated, Splitless, Gold-plated Washers	10	OV-4300-10
	0.8mm Inlet Seal, Gold-plated, Split Double Groove (Cross), Gold-plated Washers	2	OV-4400
	0.8mm Inlet Seal, Gold-plated, Split Double Groove (Cross), Gold-plated Washers	10	OV-4400-10
	Replacement Gold-plated Washers for Inlet Seal	12	OV-4800



Fused Silica Connectors

- Universal Glass Unions
- One size fits all - Fits 0.18mm to 0.53mm ID tubing
- Tapered interior bore assures a press-tight friction fit.
- Easy to use & quick install
- Excellent for repairing broken columns or for connecting guard columns.



Item No.	Description	Pack Size
OV-ML100	Universal Glass Union	5
OV-ML100-25	Universal Glass Union	25
OV-ML100-100	Universal Glass Union	100
OV-ML100D	Universal Glass Union (Deactivated)	5
OV-ML-100D-25	Universal Glass Union (Deactivated)	25
OV-ML-100D-100	Universal Glass Union (Deactivated)	100
OV-ML200	Universal Y-Splitter Glass Union	5
OV-ML200D	Universal Y-Splitter Glass Union (Deactivated)	5

GC Guard Columns

- Inert
- Pretested
- Increased analytical column lifetime

Guard columns consist of 5 meters of deactivated fused silica supplied with high temperature string. All guard columns are extremely inert and each is pretested.

Guard columns are useful in protecting your analytical column from harmful non-volatile contaminants that are commonly found in many environmental and industrial samples.

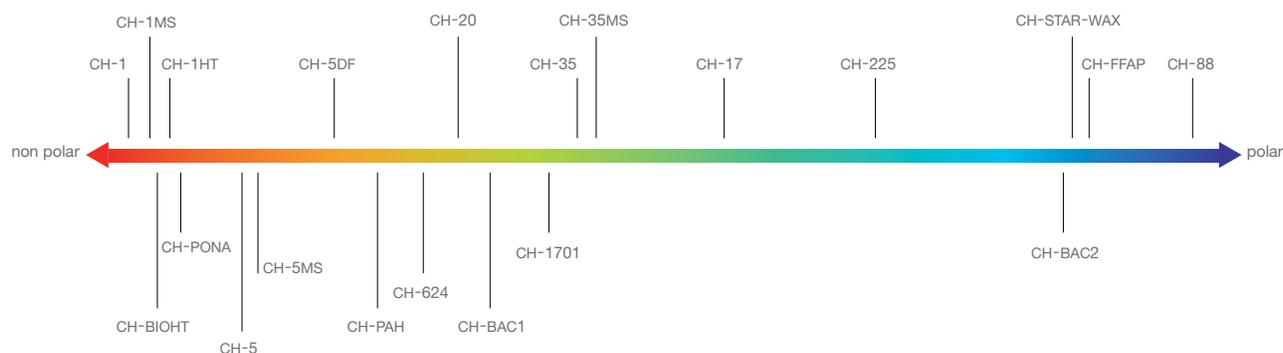
Attaching the guard column to the front of the analytical column using fused silica connectors, or zero dead volume union, will extend your column's lifetime. The non-volatile contaminants are deposited onto the guard column.

Item No.	Length	I.D. mm
OV6180-5	5 Meters	0.18
OV6250-5	5 Meters	0.25
OV6320-5	5 Meters	0.32
OV6530-5	5 Meters	0.53

*1M, 10M, 15M, 30M, 60M, 105M length or custom length also available

ChromGC columns available in any phase you require

Common Phases Polarity Quick View



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