

MACHEREY-NAGEL

Chromatography

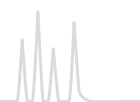


Columns and supplies





Ferrules for capillary columns



Ferrules

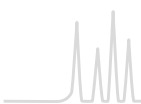
★ Key features

- Graphite ferrules provide the highest temperature stability (up to 450 °C). They are reusable, if handled with care. We also offer 1/16" graphite ferrules specially designed for Carlo Erba / Fisons or for Agilent gas chromatographs.
- Vespel ferrules with 40 % graphite. Temperature-stable up to 400 °C and reusable.

Ordering information

Ferrules

Bore (= column OD)	Graphite	Vespel +40 % Graphite
T _{max} →	450 °C	400 °C
1/16" ferrules		
0,4 mm		706246
0,5 mm	708308	
1/16" ferrules for Carlo Erba (Fisons) instruments		
0,8 mm	708340	
1/16" ferrules for Hewlett-Packard (Agilent) instruments		
0,4 mm	708353	
0,5 mm	708354	
0,8 mm	708355	
1/8" ferrules		
no bore	708341	
1/4" ferrules		
no bore	708344	
0,4 mm	708345	
0,5 mm	708346	



Septa for capillary column



Injection Port Septa blister pack for cleanliness and easily handling

★ Key features

- BTO septa for highest demands in GC and GC-MS – pierced, soft – CenterGuide™
- AG3 septa with higher durability than BTO – pierced, hard – CenterGuide™
- Marathon Septa with extreme durability for > 400 injections – pierced – CenterGuide™

Ordering information

Injection port septa

Septum grade	BTO septa	AG3 septa	Marathon septa	
				
OD	T _{max}			
9 mm	400 °C	702646	702656	702660
11 mm	400 °C	702647	702657	702661
11,5 mm	400 °C	702648	702658	702662
Shimadzu®	300 °C	702649	702659	702663
	Pack of	25	25	25





Standard Septa in classical plastic container

★ Key features

- Standard septa (ST) beige silicone, 60° shore A, 4 mm
- High temperature septa (HT) red non-bleeding silicone, 60° shore A, 3 mm (320 °C max.)
- Silicone septa soft, transparent
- Silicone / PTFE septa white silicone, one side coated with grey PTFE, 3 mm

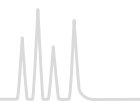
Ordering information

Classical septa

Septum grade	Standard septa (ST)	High temperature septa (HT)	Silicone septa	Silicone septa / PTFE
				
OD				
9 mm	702609	702619	702602	
10 mm	702610	702620		702625
11 mm	702611	702621	702604	702626
12 mm	702612	702622	702605	702627
13 mm	702613	702623	702606	702628
17 mm		702632		
	Pack of	50	50	50



Accessories for capillary columns



Connectors for capillary GC columns

★ Key features

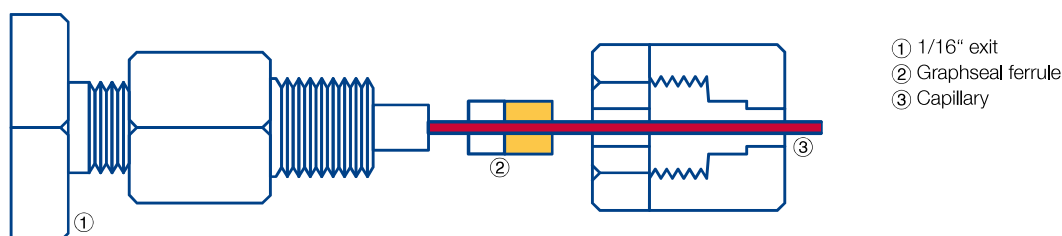
• Glass connectors for fused silica capillary columns from 0.2 to 0.53 mm ID: manufactured from deactivated glass with slightly tapered inner diameter; used to join two fused silica capillaries of equal or different diameters. Advantages compared to stainless steel fittings are easy connection without tools, optical control during connection, negligible heat capacity and no dead volume.

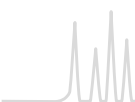
• Graphseal ferrules for capillary columns: a stainless steel ferrule filled with graphite – the ideal sealing material for capillaries. The capillary is mounted on a 1/16" exit (detector, injector etc.), with the appropriate ferrule, a nut (with slit) and an adapter (see table below).

Ordering information

Connectors for capillary GC columns

Description	Pack of	REF
Graphseal ferrules for capillary columns		
0.4 mm bore	10 ferrules	708337
0.5 mm bore	10 ferrules	708318
0.8 mm bore	10 ferrules	708319
Universal capillary glass connectors		
linear	5 connectors	707971
linear	10 connectors	707972
Y splitter	1 connector	707973





Tools and general accessories for GC

★ Key features

- Magnifying lens with scale: an essential tool for any laboratory. In capillary GC it is often important to inspect column integrity or check cut ends of capillaries. When closing a column by melting the magnifying lens can be used to check whether the column is really closed or whether an open channel has been formed in the sealed end. Our lens provides 8fold magnification and is supplied with a scale as pictured in the figure below. The space between lines is equivalent to 1/10 mm.
- Diamond file: a useful tool for cutting capillaries and smoothing ends of capillaries. Square capillary ends are especially important for butt connections (e.g., in Valco unions).
- Glass wool, quartz wool and glass fiber wadding are used for, e.g., GC liners, packed GC columns etc.

Ordering information

Tools and general accessories

Description	Pack of	REF
Tools for capillary GC		
Diamond file	for cutting capillaries and straightening capillary ends	1
Magnifying lens with scale	magnification 8x	1
PTFE tape for sealing, reels 12 m long, 12 mm wide, 0.1 mm thick	1 reel	1
Glass wool		
Glass wool, long fibers, DMCS treated, for packed GC columns	50 g	1
Glass fiber wadding silanized, very fine fibers	25 g	1
Quartz wool, very fine fibers	25 g	1