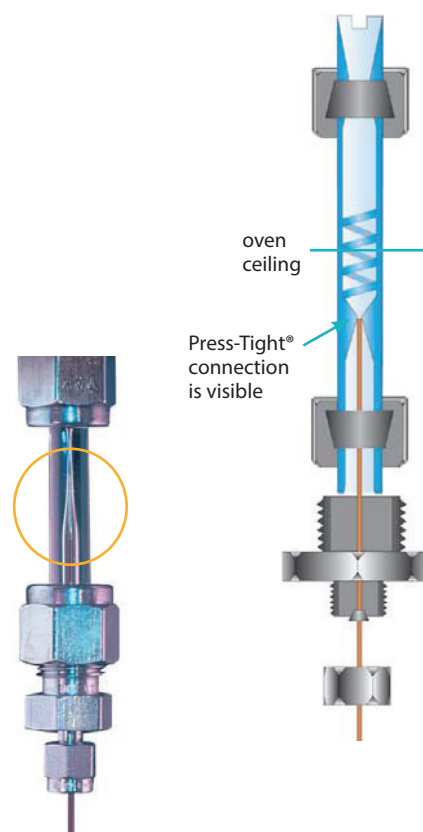


**it's a fact**

The 1/4-inch Vu-Tight liner fits directly into a 1/4-inch injection port. The connection between the liner and the column is in the GC oven, allowing visual confirmation of the seal. Problems, such as a crushed column end in the Press-Tight® taper, can be detected easily, making proper installation worry-free. The Cyclo Vu-Tight liner prevents nonvolatile residue from contaminating the column.

**Converting Packed Inlets to Capillary Column Use**

Two types of inlet conversion kits are available for a 1/4-inch packed column injection port to fit either 0.32 or 0.53 mm ID capillary columns: the Vu-Tight liner and the Uniliner® liner with adaptor (next page). The Vu-Tight liner fits directly into the 1/4-inch injection port and allows visual confirmation of the connection between the column and the liner. The Uniliner® liner and adaptor work together to allow either direct or on-column injection when using 0.53 mm ID columns. Both systems incorporate a Press-Tight® connection between the liner and column inlet, minimize dead volume, and reduce solvent peak tailing.

**Features of Both Conversion Kits:**

- Fit Agilent, Bruker/Varian, and other common GCs with 1/4-inch packed column injection ports (with maximum insertion depth of 4 inches).
- Install easily within 15 minutes.
- Accommodate either 0.32 or 0.53 mm ID fused silica columns (tubing OD ≥ 0.5 mm).
- Liners are deactivated and extremely inert.
- Liners designed to accept dirty samples are available for either system.
- Press-Tight® connections between the liner and column inlet minimize dead volume, reduce solvent peak tailing, and sharpen early-eluting components.

**Vu-Tight DI Liners for 1/4-Inch Packed Injection Port Conversion**

- Visually observe the Press-Tight® connection between the column end and liner.
- Fit 0.32 and 0.53 mm ID capillary columns (column ODs from 0.5 mm to 0.8 mm).
- Slotted top prevents obstruction of carrier gas flow.
- Two designs available.
- Operate in the direct injection mode.

**Vu-Tight DI Liners for 1/4-Inch Packed Injection Port Conversion**

Can easily be packed with wool for dirty samples.

Description	qty.	cat.#
Vu-Tight DI Liner	ea.	20342
Vu-Tight DI Liner	5-pk.	20343
Vu-Tight DI Liner	25-pk.	20344

**Cyclo Vu-Tight DI Liners (1/4-inch OD)**

Ideal for dirty samples. Spiral bore prevents nonvolatile residue from contaminating the column.

Description	qty.	cat.#
Cyclo Vu-Tight DI Liner	ea.	20787
Cyclo Vu-Tight DI Liner	5-pk.	20788

**Vu-Tight Installation Fittings Kit**

Includes a 1/4-inch stainless steel nut and graphite ferrule for attaching the liner to the GC inlet and a 1/4 to 1/16-inch stainless steel reducer, plus a 1/4-inch and 0.5 mm ID graphite ferrule for attaching the column to the liner.

Description	qty.	cat.#
Vu-Tight Installation Fittings Kit	kit	20504

### Uniliner® Liner for 1/4-Inch Packed Injection Port Conversion

- Reduces solvent tailing.
- Versatile—0.53 mm ID version can be used in the direct (DI) or on-column (OC) injection mode.
- Incorporates a gentle taper that seals the column and reduces dead volume in direct injection mode.
- Available in various designs.

On-column injections can be performed only with 0.53 mm ID columns because 26-gauge needles do not fit into the bore of 0.32 mm ID columns, or into the Uniliner® liner taper.

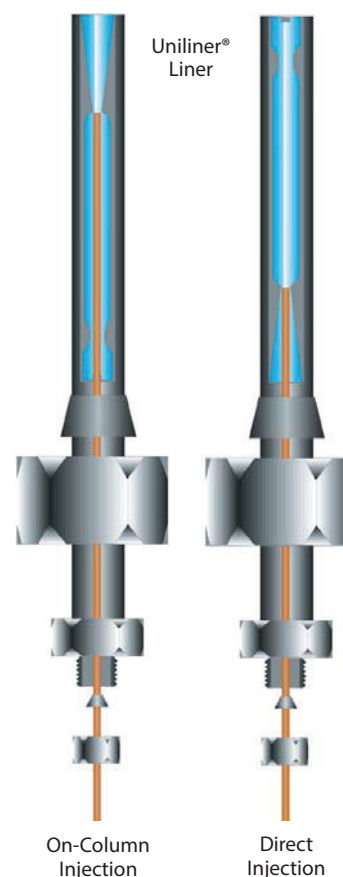
### it's a fact

5 mm Uniliner® liners fit into the 1/4-inch Uniliner® liner adaptor, which fits into a 1/4-inch injection port. The Uniliner® liner can be inserted in one direction for direct injections or inverted for on-column injections. Because the 1/4-inch injection port ferrule seals against the metal liner adaptor surface, it is virtually impossible to crack the glass Uniliner® liner during installation.

Description	Column ID Injection Mode*	ea. cat.#	5-pk. cat.#	
Uniliner Liner (small buffer volume chamber 60 mm long, for injections ≤2 µL)	0.53 mm DI or OC	20902	20903	
Uniliner Liner (large buffer volume chamber 85 mm long, for injections ≤4 µL)	0.32 & 0.53 mm DI only	20308	20309	
	0.53 mm DI or OC	20301	20305	
Cyclo-Uniliner Liner (for active, dirty samples)	0.32 & 0.53 mm DI only	20319	20320	
Open-Top Uniliner Liner (packed with wool)	0.32 & 0.53 mm DI only	20315	20316	
Low Volume/Purge & Trap Uniliner Liner (1 mm ID x 5 mm OD: use in 1/4" injection ports to troubleshoot purge & trap units)	0.32 & 0.53 mm DI only		20314	
Uniliner Liner Adaptor (required for installing Uniliner liners in 1/4" injection ports)	Includes 1/4-inch nut & graphite ferrule, 1/16-inch nut, and 0.8 mm ID graphite ferrule.			
		<b>Stainless Steel cat.#</b>	<b>Siltek-Treated cat.#</b>	
		For injection ports <8 cm	20310	22282
		For injection ports 8-15 cm	20311	
		<b>qty.</b>	<b>cat.#</b>	
1/4" Ferrules for Uniliner Liner Adaptor	5-pk.	20234		

\*DI = direct injection, OC = on-column injection

Note: a Uniliner liner must be used with a Uniliner liner adaptor (cat.# 20310 or 20311) for 1/4-inch injection ports. Remember to include a liner adaptor when ordering a Uniliner liner, unless you are purchasing replacement Uniliner liners.



## Injection Port Conversion Chart

Instrument	Uniliner Liner Set-Up		Vu-Tight Fitting	
	Uniliner Liner: cat.# 20301, 20305, 20308, 20309, 20315, 20316, 20319, 20320, 20902, & 20903	Liner Adaptor: cat.# 20310	Vu-Tight Fitting Kit: cat.# 20504 Liner: cat.# 20342, 20343, 20344, 20787, & 20788	Vu-Tight Fitting Kit: cat.# 20504
Agilent GCs (1/4-inch injection ports) Models: 5700, 5710, 5711, 5712, 5830, 5840, 5880, 5890, 6850, 6890	✓	✓	✓	✓
Varian GCs (1/4-inch injection ports) Models: 1200, 1400, 2100, 2400, 3300-3700, 4400, 4600, 6000	✓	✓	✓	✓
Tracor GCs (1/4-inch injection ports) Models: 540, 550, 560, 565, 570	✓	✓	✓	✓
Packard Becker GCs (1/4-inch injection ports) Models: 427, 428, 429, 430, 433, 436, 437, 438	✓	✓	✓	✓
Gow-Mac GCs (1/4-inch injection ports) Models: 69-750, 69-550	✓	✓	✓	✓
HNU GCs (1/4-inch injection ports) Models: 301, 401, 421	✓	✓	✓	✓
PerkinElmer GCs (1/4-inch injection ports) Models: Sigma, 1B-4B, 300, 2001, 2100	✓	✓	✓	✓
PerkinElmer Auto SYS*	✓			

\*Does not require Uniliner liner adaptor.

Inlet Adaptor Kit for  
Dual Column Installationfor Agilent Capillary Injectors  
(Split/Splitless Fitting for  
Capillary Columns)

- 1/16-inch split/splitless fitting that accepts standard, two-hole capillary ferrules.
- Easier to install capillary columns due to the nut protruding farther from the insulated injection port chamber.
- Same column insertion depth as the original manufacturer's equipment.
- Kit includes adaptor fitting, 1/16" capillary nut, gold-plated 1.2 mm ID dual VespeI® ring inlet seal, one 0.4 mm ID two-hole ferrule, and one 0.5 mm ID two-hole ferrule.



Description	qty.	cat.#
Inlet Adaptor Kit for Dual Column Installation for Agilent Capillary Injectors	kit	27185
1.2 mm ID Dual VespeI Ring Inlet Seal, Gold-Plated	2-pk.	21246
	10-pk.	21247

## Graphite Replacement Ferrules

ID	fitting size	qty.	cat.#
0.5 mm	1/16"	10-pk.	20201
	1/16"	50-pk.	20228
0.8 mm	1/16"	10-pk.	20202
	1/16"	50-pk.	20224
1/4-inch	1/4"	10-pk.	20210



## 1/8-Inch Capillary Inlet Adaptor Fitting Kit

(Split/Splitless Fitting for 0.53 mm ID Capillary Columns)

- 1/8-inch split/splitless fitting accepts standard two-hole capillary ferrules and a standard 1/8-inch nut.
- Makes column installation easy due to the nut protruding farther from the insulated injection port chamber.
- The column insertion depth is the same as the original equipment.
- Kit includes adaptor fitting, capillary nut, stainless steel inlet seal, washer, and one 0.8 mm ID two-hole ferrule.
- Use recessed taper liners with this adaptor.

Description	qty.	cat.#
1/8-Inch Capillary Inlet Adaptor Fitting Kit	kit	20645
0.53 mm ID Dual-Column	2-pk.	20392
1/16-inch ID (Opening) Replacement Inlet Seal	10-pk.	20393

Two-Hole Ferrules for 1/8-Inch and 1/16-Inch  
Compression-Type Fittings

- Use 1/16-inch, two-hole ferrules with the 1/16-inch capillary inlet adaptor fitting kit (cat.# 27185).
- Use 1/8-inch, two-hole ferrules with the 1/8-inch capillary inlet adaptor fitting kit (cat.# 20645).



Fitting Size	Ferrule ID	Fits Column ID	qty.	VespeI/Graphite
1/16"	0.4 mm	0.25/0.28 mm	5-pk.	24848
1/16"	0.5 mm	0.32 mm	5-pk.	24849
1/8"	0.8 mm	0.45/0.53 mm	5-pk.	20246