

Inlet Seals for Agilent Instruments

by Donna Lidgett, GC Accessories Product Marketing Manager



Vespel® ring seal on top and bottom surfaces!

Dual Vespel® Ring Inlet Seals

- Vespel® ring embedded in bottom surface eliminates need for washer.
- Vespel® ring embedded in top surface reduces operator variability by requiring minimal torque to seal.
- Prevents oxygen from entering the carrier gas, increasing column lifetime.

In Agilent split/splitless injection ports, our Dual Vespel® Ring Inlet Seal greatly improves performance, relative to conventional metal-to-metal seals—it stays sealed, even after repeated temperature cycles, without retightening the reducing nut! Two soft Vespel® rings, outside the sample flow path, eliminate the need for a washer and ensure very little torque is needed to make a leak-tight seal. Tests show Dual Vespel® Ring Inlet Seals seal equally effectively at torques from 5 in. lb. to 60 in. lb.

best choice!

Washerless, leak-tight seals for Agilent GCs

Use a stainless steel seal for analyses of unreactive compounds. To reduce breakdown and adsorption of active compounds, use a Siltek®-treated or gold-plated seal. •

0.8mm ID Dual Vespel® Ring Inlet Seal	2-pk.	10-pk.
Siltek®	21242	21243
Gold-Plated	21240	21241
Stainless Steel	21238	21239
1.2mm ID Dual Vespel® Ring Inlet Seal	2-pk.	10-pk.
Siltek®	21248	21249
Gold-Plated	21246	21247
Stainless Steel	21244	21245



Replacement Inlet Seals or Agilent 5890/6890/6850 Split/Splitless Injection Ports

- Special grade of stainless steel that is softer and deforms more easily, creating a better seal.
- Increases column lifetime because oxygen cannot permeate into the carrier gas.
- Reduced noise benefits high-sensitivity detectors (e.g., ECDs, MSDs).
- Siltek® treatment provides inertness similar to fused silica.
- All seals include washers.

The inlet seal at the base of the Agilent 5890/6890 GC injection port contacts the sample and, because septum fragments and sample residue accumulate on the seal surface, the seal must be changed frequently to prevent adsorption of active compounds. •

• Use a 1.2mm inlet seal with Vespel®/graphite ferrules or when installing two columns using a two-hole ferrule. Use a 0.8mm inlet seal with graphite ferrules or single capillary column installations.

Single-Column Installation, 0.8mm Opening*	0.25/0.32mm ID Dual-Column Installation, 1.2mm Opening		0.53mm ID Dual-Column Installation (1/4-inch opening)		
	2-pk.	10-pk.	2-pk.	10-pk.	
Stainless Steel Inlet Seal					
21315	21316	20390	20391	20392	20393
Gold-Plated Inlet Seal					
21317	21318	21305	21306	—	—
Siltek® Inlet Seal					
21319	21320	21307	21308	—	—

*0.8mm ID stainless steel inlet seal is similar to Agilent part #18740-20880, 0.8mm ID gold-plated inlet seal is similar to Agilent part #18740-20885.

Replacement Inlet Seal Washers



Description	Similar to Agilent part #	qty.	cat.#
Replacement Inlet Seal Washers	5061-5869	15-pk.	21710