

NEW OUTSIDE DIAMETER FUSED SILICA FOR AGILENT J&W CP AND VF GC COLUMNS

The Measure of Confidence



How to check if you received a GC column with the new outside diameter:

1. The outside of the box.

On the outside of the box the following label is visible:

IMPORTANT!
NEW
Outside
Diameter

This label is near the column information label on the spine of the box.

2. In the box

- In the box, an insert is included with information about the change of the outside diameter and the ferrules which have to be used for the new columns (see appendix). Note: if this column is used with a non-Agilent GC, please check the Agilent CrossLab Supplies Selection Guide for non-Agilent GC systems (publication number 5990-9065EN), where cross-referenced part numbers can be found for the correct ferrule for your GC system.
- The certificate of analysis includes the new outside diameter dimensions of the fused silica used for the column. In the appendix, an example of a certificate of analysis can be found with an indication where to find the outside diameter.

Now all Agilent J&W 0.25 mm id fused silica GC columns can be installed in your GC using one size ferrule.

The outside diameter (od) of Agilent's 0.25 mm internal diameter (id) fused silica tubing is now standardized. Nominal od was 0.39 mm and has been changed to 0.36 mm.

With this change, all 0.25 mm id CP- and VF-brand columns have the same od as the DB- and HP-brand columns. This means that only one size ferrule is required for all Agilent 0.25 mm id fused silica columns.

The ferrules are available in graphite, Vespel, Vespel/graphite and stainless steel composition.

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3. Mark on EZ-Grip

The EZ-Grip is marked with a triangular symbol to indicate the column has the new outer diameter (see red arrow in image below).



4. Serial number on column cage

If the original column packaging, test summary and E-Z Grip have been separated from the column, another option is to locate the column serial number (indicated by red arrow in image below) and contact Agilent Technical Support. See photo: On the column cage, there is a unique serial number. Contact Technical Support and provide them with the serial number; they can determine if the column has the old (0.39 mm) or new (0.36 mm) outside diameter fused silica.



For CP and VF columns with the 0.36 mm od, refer to the table below for the correct ferrules needed for proper installation.

Ferrule material	Part number (10 ferrules per package)	
	Short ferrule	Long ferrule
Graphite	500-2114	
Vespel	5181-3322	
85% Vespel / 15% Graphite	5181-3323	5062-3508 (preconditioned)

Agilent recently introduced UltiMetal Plus Flexible Metal ferrules. With the novel design of our proprietary UltiMetal Plus Flexible Metal ferrule, you can confidently make leak-free column unions to capillary flow technology (CFT) devices. These new ferrules diminish the problems of column breakage during installation, poor fit and damage to the fitting experienced with other metal ferrules, while providing new benefits – ease of use and inertness! For more information, please visit www.agilent.com/chem/flexiferrule

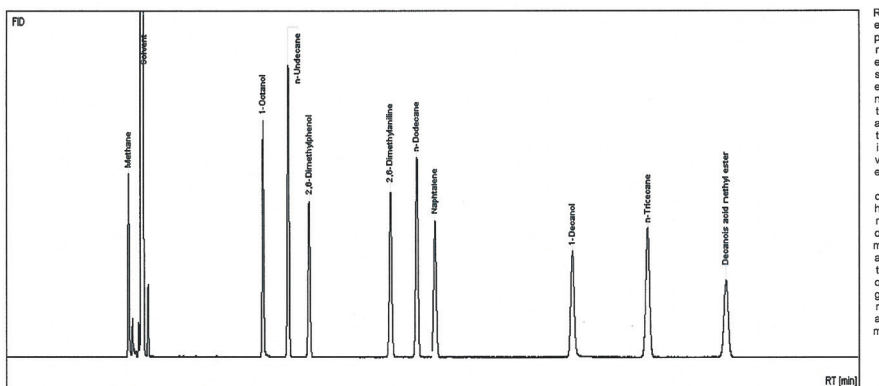
Ferrule material	Part number (10 ferrules per package)
UltiMetal Plus Flexible Metal	G3188-27501

Appendix

Certificate of analysis

Column Part No.:	CP8944	L (m) x ID (mm) x OD (mm):	30 x 0.25 x 0.36
Column Serial No.:	9297280	Approved By:	
Stationary Phase:	VF-5ms		
Film Thickness (µm):	0.25		

PERFORMANCE SUMMARY



Maximum Allowable Operating Temperature Isothermal	: 325 °C
Maximum Allowable Operating Temperature Programmed	: 350 °C
Test mix	: CP0060
Sample volume	: 0.10 µl
Injector temperature	: 270 °C
Detector temperature	: 300 °C
Column temperature	: 120.0 °C
Detector	: FID
Carrier gas	: Hydrogen
Pressure *	: 58.6 kPa

Column Test Conditions

* 100 kPa = 14.5 psi = 1 Bar

Column Performance:

Rt [Min]	Component
1.48	methane
1.64	Solvent
3.14	1-octanol
3.46	n-undecane
3.70	2,6-dimethylphenol
4.71	2,6-dimethylaniline
5.06	n-dodecane
5.27	naphthalene
6.97	1-decanol
7.93	n-tridecane
8.87	decanoic acid methyl ester
Total	

Specifications of the column:

Retention factor (k) n-tridecane	4.4
Number of theoretical plates n-tridecane	131922 > 117000
Number of theoretical plates per meter n-tridecane	4397
Film thickness [µm]	0.25
Phase ratio	249.4
Retention Index 1-decanol	1272.7
Retention Index decanoic acid methyl ester	1323.1
AS10 Tailing factor decanoic acid methyl ester	0.97 < 1.24
Bleed, spc controlled at 325 °C [pA]	0.75 < 1.00
Linear gas velocity [cm/s]	33.8

The Measure of Confidence



Appendix


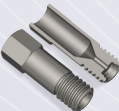

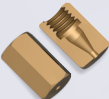
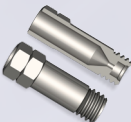
Short and Long Ferrule Information

Now one size of ferrule fits all Agilent J&W 0.25 mm id fused silica GC columns

The outside diameter (od) of Agilent J&W 0.25 mm internal diameter (id) fused silica tubing is standardized. Now, our CP- and VF-brand columns have the same od as the DB- and HP-brand columns. This means that only one size of ferrule is required for all Agilent 0.25 mm id fused silica columns. The ferrules are available in graphite, Vespel, and Vespel/graphite composition.

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Short and Long Ferrules

Short ferrules (height 3 mm)	Long ferrules (height 3.6 mm)	
 <p>Vespel/graphite ferrules, p/n 5181-3323</p>  <p>Universal column nut, p/n 5181-8830</p> <p>Standard fitting for Agilent GC inlet and detectors (FID, NPD, ECD) column connections use short ferrules and the Universal nut</p>	 <p>Preconditioned long ferrule for MSD connection, p/n 5062-3508</p>  <p>MS Interface column nut, p/n 05988-20066</p> <p>Preconditioned Vespel/graphite ferrules are recommended with MSD Interface nut</p>	 <p>Column nut for long or two-hole ferrules, p/n 05921-21170</p> <p>Alternative nut for Agilent standard inlet or detector fittings used with long Vespel/graphite ferrules</p>

Ordering information

Ferrule material	Short ferrule part number (10/pk)	Long ferrule part number (10/pk)
Graphite	500-2114	
Vespel	5181-3322	
85% Vespel/15% graphite	5181-3323	5062-3508 (preconditioned)

We also offer Agilent CrossLab ferrules for installation in non-Agilent GC systems. Please refer to the CrossLab Supplies Selection Guide for non-Agilent GC systems (publication number 5990-9065EN) where cross-referenced part numbers can be found for the correct ferrule for your GC system.

Thank you for choosing Agilent J&W as your GC column supplier.

To learn more about Agilent J&W GC columns visit agilent.com/chem/mygccolumns



Appendix

Agilent CrossLab Supplies

CrossLab Agilent

Supplies for Non-Agilent GC Systems

Agilent CrossLab is a growing portfolio of supplies critical to instrument performance and productivity. Agilent CrossLab GC supplies are designed and manufactured to perform seamlessly with a variety of non-Agilent GCs in your lab. Look inside this catalog to find a comprehensive range of GC supplies to use across your lab.

We currently support:

- Bruker, Varian*
- CTC
- PerkinElmer
- Shimadzu
- Thermo Scientific

*Formerly Varian GC systems, now Bruker products

Our growing GC Supplies portfolio includes the following products, featuring easy-to-use packaging for improved productivity:

- Premium non-stick inlet septa
 - Ultra Inert inlet liners
 - Liner O-rings
 - Column ferrules and nuts
 - Autosampler syringes
 - Vials and closures
- (See the complete CrossLab Vials and Closures section of our General Chromatography catalog, publication number 5991-1056EN)



Agilent CrossLab is more than supplies:

- Offering a comprehensive portfolio of GC supplies
- Over 40 years of chromatography expertise and ongoing innovation
- Optimal performance for both routine and challenging applications
- Dependable worldwide product availability and delivery
- Convenience of consolidated purchasing

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