

# AGILENT J&W PORAPLOT COLUMNS NOW HAVE INTEGRATED PARTICLE TRAPS

The Measure of Confidence

## Installation and User Guide

Thank you for purchasing this Agilent J&W PoraPLOT column. The particle trapping technology of the PoraPLOT column is improved with a built-in particle trap. This technology represents the latest innovation from Agilent Technologies, designed to provide you with the same high performance you have come to expect from the leader in capillary PLOT column manufacturing without the worry of particles fouling your detectors or valves that may be installed in your GC system.

Before proceeding, please take a moment to read and understand the information in this Installation and User Guide.

### What is different about Agilent J&W PLOT PT columns?

Through our innovative coating technology, your PoraPLOT column has a coating of stationary phase and an integrated particle trap at the end of a single length of capillary column. With the inclusion of this built-in particle trap, under normal use\*, you can confidentially connect this PLOT column to any of your GC detectors without concern of stationary phase particles causing valve failures or chromatographic anomalies that you can experience with a standard PLOT column. This column is even suitable for use in GC/MS applications and because it is one continuous length of capillary tubing; there is no union attaching the particle traps any longer, which makes it leak-free.

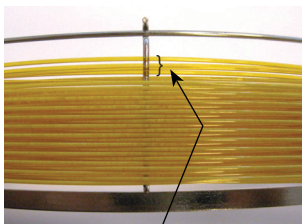
There are some other functional differences that you need to be aware of as you get ready to install your new column and set up your GC system. There is a section that will have a different appearance (see photo on back); this is the particle trap section of your PoraPLOT column, also indicated with a detector side label. There are approximately five coils (ca. 2.5 meters). You may also notice that there appear to be voids or particles inside the column at the interface where the particle trap and the stationary phase coating meet. This is normal for this type of column. The column you received has been individually inspected to a visual cosmetic standard and has been individually tested to verify the highest chromatographic performance available.

\* Please note that under extreme conditions of excessive carrier gas pressure, damage to the stationary phase can occur. Under such conditions, it is possible that stationary phase particles may break through the particle traps. The following table provides guidelines for the upper maximum flow based on inside diameter.

0.25 mm	3 mL/minute
0.32 mm	5 mL/minute
0.53 mm	10 mL/minute



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*2.5 m particle trapping portion identified by different colored tubing and detector side label*

## Installing an Agilent J&W PLOT PT column

PLOT columns are highly retentive. Trace amounts of water, oxygen and light hydrocarbon contaminants in your carrier gas stream can adversely affect chromatography. The use of a moisture trap, an oxygen trap, and a hydrocarbon trap on your carrier gas line is highly recommended. Install the particle trap at the detector side and further the column according to the instructions at the back of the Quality Control Certificate.

## PLOT PT columns with dual ended particle trapping technology

Agilent also offers PLOT columns with dual ended integrated particle traps. These PLOT columns can be connected to backflush valves, heart-cut valves, capillary flow technology (CFT) devices, and any of your GC detectors, even GC/MS.

Agilent J&W PLOT PT columns with dual ended particle traps are available in porous polymer, aluminum oxide, and Molsieve stationary phases.

## For more information

[www.agilent.com/chem/plotpt](http://www.agilent.com/chem/plotpt)



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