Dielectric Barrier Discharge Helium Ionization Detector:

Unique Patented detector design ⁽¹⁾:

- Windowless detector is sensitive, easy to maintain and does not require cleaning
- Rugged, stable, non-radioactive ionization source
- Simple power source ensures rapid start and long life
- Reverse flow scheme reduces possibility of electrode contamination
- Field serviceable
- Able to use Grade 5 Helium without extensive purification and standard GC flow controllers

Operating conditions:

Gas consumption: 80 mL/min of Grade 5 Helium

Temperature: Capable of 280 °C operation

Electrical: Consumes less than 20 watts

Able to operate with packed, micropacked, megabore, and PLOT columns



Chromatogram of 25 uL loop injection of a 10 p.p.m. fixed gases standard

The DBDHID is designed for fixed gas

and difficult to ionize species. It's unique design and powerful plasma yield a detector that is capable of detecting sub-nanogram quantities of analytes such as hydrogen and nitrogen.

Due to the rugged nature of the plasma, the detector system can be fitted onto current GC systems without major gas purification systems and without major modifications to the existing plumbing.

⁽¹⁾ U.S. Patent #: 5,892,364

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