GENERAL REFERENCE

G

GC

Gas Chromatography.

An analytical method incorporating an injection system, analytical column, controlled temperature zone, and detector. An inert carrier gas moves the sample through the column, which separates the sample components into discrete bands which are measured as they pass through the detector.

Guard column

A column used in series between the injector and analytical column to prevent certain types of components from entering the analytical column.

Н

HPLC

High Performance Liquid Chromatography. An analytical system consisting of an injector, pump, analytical column, and detector. Using a liquid mobile phase, the sample is pumped through the column, where it is separated into discrete sample component bands which are detected and measured as the bands elute from the column.

Inert

ID

Internal diameter.

Technically, unreactive with other substances; however, in the instrumentation field, "inert" is a relative term. Often polymers are termed inert but are soluble in some fluids and can react with some compounds.

Internal fitting

A type of compression fitting in which the fitting body has female threads; an internal nut has male threads.

LC

Liquid Chromatography.

Any of a variety of low to medium pressure techniques which use a liquid mobile phase as the carrier to move sample. Similar to HPLC.

Large bore

A bore that is larger than the standard for a given fitting; a fitting ordered with a large bore will have a larger flow orifice than the standard or capillary bore fitting of the same design. Denoted by suffix "L" in the product number.

Luer adapter

An adapter that connects a tapered luer fitting (square nib) of a syringe to a tube or tube fitting.

M

Male nut

A nut with male threads.

Make up

The point at which a ferrule, nut, and tube are assembled in the fashion which will effect a leak-free seal. In most compression fittings, that is accomplished by compressing the tube with the small end of the ferrule. With Valco metal ferrules, the ferrule usually makes up on the tube by cutting a shallow ring in it.

Manifold

A type of distribution fitting in which a single source is directed to multiple outlets, or vice versa. Caution! Using a common distribution fitting in reverse to merge multiple streams may create dead volume. Special manifolds are available for this application.

Microbore column

A liquid chromatography column of narrow bore (typically 2 mm or less) for improved resolution.

Ν

NPT

National Pipe Thread; a standardized tapered pipe fitting. See pipe thread.

Nanobore

Nanobore generally refers to components with bore sizes less than 250 µm (0.010").

Nanovolume®

The trademark registered to Valco Instruments Co. Inc. and VICI AG International, applied to our nanobore components with bore sizes less than 250 µm (0.010").