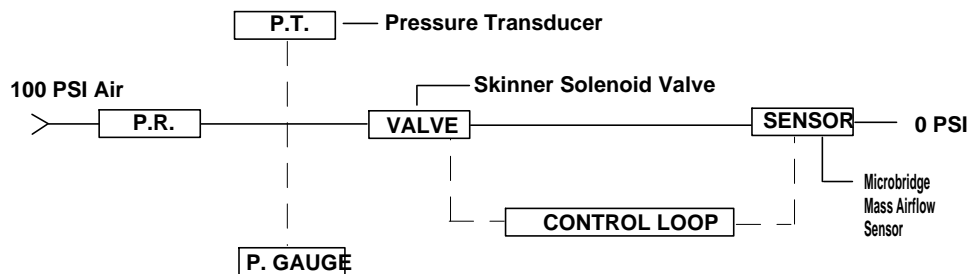


Gas Chromatograph

MASS AIRFLOW

AP 00077



PRODUCT

AWM3100V
AWM3300V

APPLICATION DESCRIPTION

In chromatography, components in a sample are separated by affinity to certain materials. A mobile phase (liquid or gas) passes over a stationary phase (usually a column or plate) and compounds are separated according to their relative attraction for the mobile and stationary phases. The solubility and miscibility of compounds are primary factors affecting the process.

Separation systems are used in a wide variety of industrial and scientific applications which involve the isolation and analysis of products from mixtures that form during chemical synthesis. End uses include quality control of pharmaceuticals, food chemical measurement, investigation of the chemistry and metabolism of biological systems, forensic science, and environmental monitoring.

One of the fastest-growing areas is that of biotechnology, which combines biology, chemistry, and engineering. In biotechnology, micro organisms are used for the production of drugs, foods and chemicals; which in turn are used in the health, agriculture, food processing, energy, metals extraction, forest products, and environmental protection industries.

In this application the microbridge controls a solenoid valve, open or close, to control the amount of flow of a particular gas in a channel of the chromatograph/electronic pressure and flow control system.