# TECO/ABB ROTAMETER APPLICATION NOTE

NUMBER: AB-V-018

## Gas Analyzers

## **Description of Application**

There are many types of gas analyzers, all of which require the measurement and/or controlling of low rates of gas for sampling and introduction of modifying gases.

#### Where Used

O.E.M.'s Manufacturing:

Carbon Monoxide Analyzers

Oxygen Analyzers

Chlorine Analyzers

Hydrocarbon Analyzers

Toxic Gas Detectors

Pollen Count Detectors

Combustible Gas Detectors

Hydrogen Sulfide Analyzers

Air Pollution Analyzers NO/NO<sub>x</sub> Analyzers

And many more

## **Rotameter Solution**

Since sample flow rates (and flow rates of introduced gases) are usually very small, purge type rotameters are ideal for this application. They are small, inexpensive, dependable, easy to read and require no power.

### **How Installed**

O.E.M.'s generally make the purge type rotameter an integral part of their analyzer, using either flush or surface mounting available with this type of meter.

#### **Method of Operation**

In most applications, the rotameter is used to set flows to fixed rates using the hand control valve which is built into the meter. The accuracy of the analyzer reading is dependent, to a degree, on the accuracy of the sample (and other) gas flow settings.

#### **Model Selection**

Most applications have low flow rates requiring 10A6130 Series meters. The accuracy and scale resolution will determine which scale length to use 10A6131, 10A6132, or 10A6133. Higher flow rates would be handled by 1/2" 10A4555. Brass fittings and Buna-N o-rings are suitable for most application.

