ORIFICE FLOW METERS

DESCRIPTION

Model 5720 Calibrated Orifice Flow Meters are designed for measuring flows of air or gases at pressures up to 100 psig and temperatures to 700 °F. Orifice ports are accurately machined for precision measurements. Each orifice plate has model number and orifice diameter stamped on tab for easy identification and selection.

Flange tap pressure drop readings determine flow on chart on page 3. Thin, square edge, bored orifice plates are installed between Pyronics "ADAPTO" flanges. Gaskets are provided to seal both sides of the plate. Meters should have at least 10 pipe diameters of smooth, clean, straight pipe upstream and downstream for accurate readings.

Orifice flow meters are ideal for measuring air and gas flows in combustion systems. Air-fuel ratio adjustment of burners is simplified when true air and gas rates are known.

Available accessories to be used with the orifice flow meters are the Model 5721 – 12” W.C. Manometer or the Model 5714 – Low Pressure Gauges for measuring pressure differential at the orifice plate.

In applications where corrosive gases are used or high humidity conditions are common, it is suggested that stainless steel plates be used. Petcocks and hose barbs are sold separately.

FLOW FACTORS

Flow versus Pressure Drop Curves on page 3 are based on air flows (specific gravity = 1.0) at zero line pressure and 60 °F temperature. For accurate measurement of flows at higher pressures, temperatures or other specific gravities, use correction tables on page 3.

FEATURES

- Inexpensive flow metering device
- Simple four bolt construction
- Plates available in mild steel or stainless
- 5% maximum flow error
- Two bolt quick-change plate removal

CAUTION: Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.

NOTICE: PYRONICS practices a policy of continuous improvement in the design of its products. It reserves the right to change the specifications at any time without prior notice.
ORDERING INFORMATION

1. Select orifice plate number based on flow required and desired pressure drop.
2. Use specific gravity, pressure and temperature correction tables when required.
3. Specify complete model number and quantity.
4. Shipping instructions.
Note: Flow versus Pressure Drop Curves are based on air flows (sp. gr. = 1.0) at zero line pressure and 60° F temperature.
Note: Flow versus Pressure Drop Curves are based on gas flows (sp. gr. = 0.6) at zero line pressure and 60° F temperature.