

AIR VOLUME FLOW MEASUREMENTS

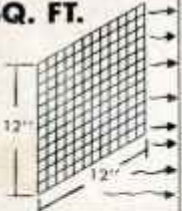
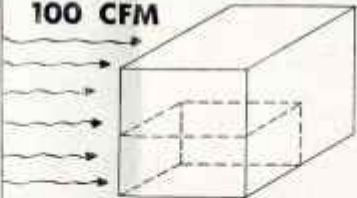


floret indicates air velocity in feet per minute. Most air delivery specifications are cubic feet per minute (CFM). Air velocity times size of opening in square feet is cubic feet per minute (CFM). If opening is in inches, find area in square inches and divide by 144 to convert to square feet.

Most grill and diffuser manufacturers specify "K" and performance factors or net effective area. Multiply these factors times air velocity for volume delivery in cubic feet per minute (CFM). Refer to manufacturer's literature for additional information.

MAINTENANCE

1. Keep *floret* in case when not in use.
2. Do not drop or abuse *floret*.
3. If POINTER sticks or binds, remove front cover and clean interior with soft camel's hair brush. Then reinstalling front cover, tighten COVER SCREWS evenly.
4. Any cracks in cover or leaks in body will affect accuracy.
5. Check zero and adjust as required before use. Normal adjustment is less than one-half scale division.
6. Return to factory for all repairs or maintenance not covered in these instructions.

EFFECT OF SIZE OF OPENING ON AIR VELOCITY

Opening	Velocity	Cubic Ft./Minute	
<p>1 SQ. FT.</p> 	<p>100 FT. PER MIN.</p>	<p>100 CFM</p> 	<p>One hundred cubic feet of air per minute will flow through an opening one foot square at air velocity of 100 feet per minute.</p> <p>— ● —</p> <p>One hundred cubic feet of air per minute will flow through an opening six inches square at air velocity of 400 feet per minute.</p>
<p>1/4 SQ. FT.</p> 	<p>400 FT. PER MIN.</p>	<p>100 CFM</p> 	

Warranty

We guarantee every *floret* to be free from defects in material or workmanship for a period of one year. If the instrument develops such defects within one year from date of shipment from our plant, it will be repaired or replaced if it is returned to our factory, transportation charges prepaid, with statement as to what is claimed faulty. This warranty, however, does not apply to damage due to misuse or careless handling. Furthermore, we do not assume liability for indirect or consequential damage or loss of any nature in connection with the equipment sold by us.

INSTRUCTIONS 4-M-58



floret

Model MIE

OPERATING and MAINTENANCE INSTRUCTIONS



Copyright 1958

BACHARACH INDUSTRIAL INSTRUMENT COMPANY

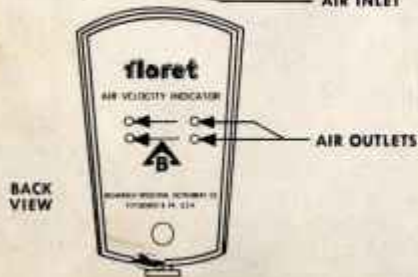
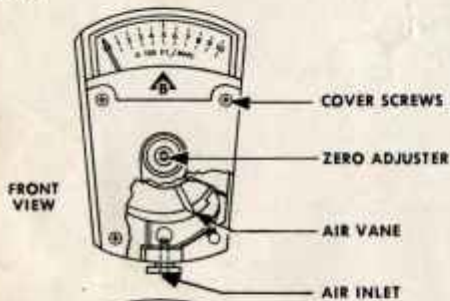
Since 1909 Makers of Testing Instruments and Other Precision Devices

200 N. Braddock Avenue • Pittsburgh 8, Pa.

Telephone: Churchill 2-5400

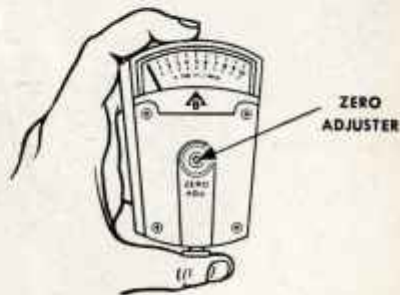
GENERAL OPERATING INSTRUCTIONS

The *floret* is a small, restrained-vane anemometer intended for general purpose air velocity measurements. Air entering through INLET at bottom deflects a balanced VANE and POINTER to indicate air velocity on SCALE, and leaves through four small holes in back cover.



ZERO ADJUSTMENT

1. Before using, adjust POINTER zero position.
2. Hold so thumb covers hole in INLET to keep out stray air currents.
3. Turn ZERO ADJUSTER to set POINTER so it covers zero line on SCALE.
4. Repeat, as required, during use.



USING FLORET

floret can be used to measure air velocity through any opening $\frac{1}{4}$ " in diameter or larger. For best results, hold *floret* with INLET squarely across air stream against face of grill (or in throat of duct). Position of POINTER on SCALE indicates air velocity.

floret can be rotated to any position for best viewing as long as air flow is directly into

INLET. Where *POINTER* swings or oscillates due to fluctuating air velocities, average maximum and minimum readings for approximate average velocity.

Hand position is important when holding *floret* (as with any other small anemometer). Air stream through instrument should have unrestricted entry and exit. Recommended hand positions for typical applications are shown.



AIR VELOCITY MEASUREMENTS

Keep **INLET** of *floret* squarely across air stream and at point where air velocity measurement is needed. Air diffuses rapidly from a grill or orifice and readings mean little unless made at correct location.

Obtain average velocity by taking several readings over face of grill or opening and averaging. A second, less accurate method is to move *floret* continuously over face and mentally average readings. For approximate or relative readings, one reading at center of face or opening is usually satisfactory.

Air patterns from diffusers, cold storage cabinet grills, etc., can be determined by moving *floret* across air stream and tilting *floret* to obtain maximum readings. Comparing readings taken at different points shows patterns of air flow and effects of adjustments to get improved pattern.