

# **BACHARACH®**

**INSTRUCTION 16-9008**

# **floret®**

**Operation/Maintenance  
Rev. 2 - October 1995**

**Bacharach, Inc**

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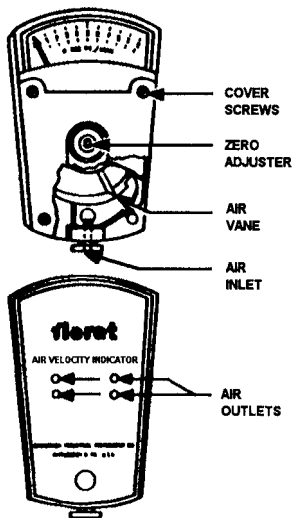
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## GENERAL OPERATING INSTRUCTIONS

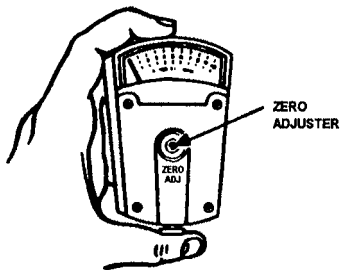
The Floret is a small, restrained-vane anemometer intended for general purpose air velocity measurements. Air entering through the AIR INLET at the bottom deflects a balanced AIR VANE and pointer to indicate air velocity on the scale, and leaves through four small holes (AIR OUTLETS) in the back cover.



## ZERO ADJUSTMENT

Before using, adjust pointer zero position:

1. Hold the unit so your thumb covers the hole in AIR INLET to keep out stray air currents.
2. Turn the ZERO ADJUSTER to set the pointer so it covers the scale's zero line.
3. Repeat steps 1 & 2, as required, during use.

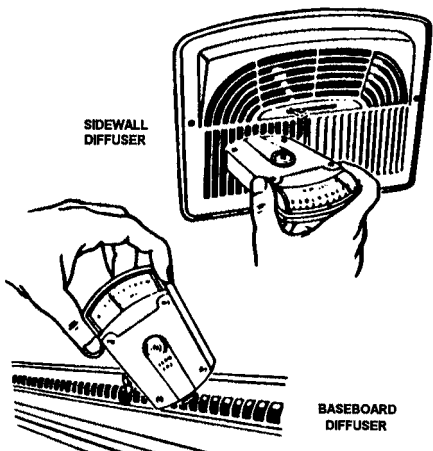


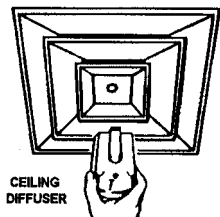
## USING FLORET

The Floret can be used to measure air velocity through any opening  $\frac{1}{4}$ " in diameter or larger. For best results, hold the Floret with the AIR INLET squarely across air stream against the grill face (or in throat of duct). The pointer on the scale indicates the air velocity.

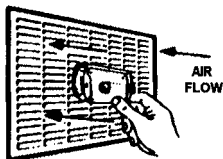
The Floret can be rotated to any position for best viewing as long as air flow is directly into the AIR INLET. Where pointer swings or oscillates due to fluctuating air velocities, average maximum and minimum readings for approximate average velocity.

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





CEILING  
DIFFUSER



RETURN OR EXHAUST

## AIR VELOCITY MEASUREMENT

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

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

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

## AIR VOLUME FLOW MEASUREMENTS

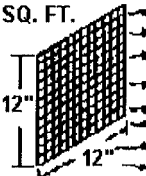
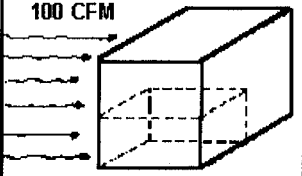


Floret indicates air velocity in feet per minute. Most air delivery specifications are in cubic feet per minute (CFM). Air velocity times size of opening in square feet is cubic feet per minute (CFM). If the opening is in inches, find the area in square inches and divide by 144 to convert to square feet.

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

### EFFECT OF SIZE OF OPENING ON AIR VELOCITY

Opening	Velocity	Cubic Ft. / Minute
<p>SQ. FT.</p>  <p>12"</p> <p>12"</p>	<p>100 FT. PER MIN.</p>	<p>100 CFM</p> 
<p>1/4 SQ. FT.</p>  <p>6"</p> <p>6"</p>	<p>400 FT. PER MIN.</p>	<p>100 CFM</p> 

One hundred cubic feet of air per minute will flow through an opening one foot square at an air velocity of 100 feet per minute.

One hundred cubic feet of air per minute will flow through an opening six inches square at an air velocity of 400 feet per minute.

**Volume =**  
**Opening X Velocity**  
**Velocity =**  
**Volume / Opening**

## WARRANTY

Bacharach, Inc. warrants to Buyer that at the time of delivery this Product will be free from defects in material and manufacture and will conform substantially to Bacharach Inc.'s applicable specifications. Bacharach's liability and Buyer's remedy under this warranty are limited to the repair or replacement, at Bacharach's option, of this Product or parts thereof returned to Seller at the factory of manufacture and shown to Bacharach Inc.'s reasonable satisfaction to have been defective; provided that written notice of the defect shall have been given by Buyer to Bacharach Inc. within one (1) year after the date of delivery of this Product by Bacharach, Inc. For full details concerning this warranty, contact Bacharach Inc.