



SLING PSYCHROMETER TM0081 - BACHARACH TYPE

MANUAL

# 1. CAUTION

Damage to thermometers or plastic case will result if instrument is exposed to direct sun light or excessive heat for prolonged periods.

1	Remove cap; immerse end of body to saturate wick.	
2	Fill psychrometer reservoir with water. Replace cap.	
3	Be sure wick covers "wet" bulb (the other bulb is dry).	WET
4	Pull body from tube until body hangs free.	
5	Use tube as handle; whirl body about 1-½ minutes.	
6	Read wet & dry bulb thermometers; replace body in tube.	WEI SULS  40 50 60 70 10 90  DRY BULB
7	Set thermometer reading on upper two calculator scales	PP
8	Read % relative humidity as indicated by arrow.	00 WET BULD 70  UKT BULD 80 90  20 30 40 % R.M. 50





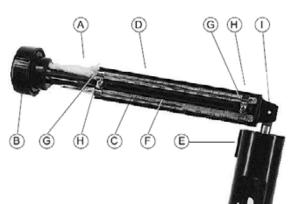


#### 2. BEFORE USE

WICK (A) should be thoroughly saturated with water. Remove END CAP (B) and immerse PSYCHROMETER BODY (C) up to mercury (or red spirit) reservoir on the thermometers until WICK is thoroughly wetted. Fill END CAP with water and replace; tighten just enough to prevent leakage.

### 3. USE

- Be sure WICK (A) is wet and covers mercury (or red spirit) reservoir on WET BULB THERMOMETER (D). Be sure reservoir on other THERMOMETER (F) is dry
- 2. Pull TUBE (E) clear of BODY so BODY can swivel.
- 3. Holding TUBE, whirl body two to three revolutions per second (120 to 180 RPM).
- 4. Continue whirling until temperatures stabilize (1½ minutes is usually ample).
- 5. Immediately read WET BULB THERMOMETER (D) and then DRY BULB THERMOMETER (F). (See application instructions.)
- 6. Set wet and dry bulb temperatures opposite each other on side rule type calculator scales, sliding BODY into TUBE as required.
- 7. Read % R.H. (percent relative humidity) indicated by arrowhead on lower scale.



# 4. APPLICATION

Wet-bulb temperatures should be read first and as quickly as possible for highest accuracy. Delay in reading may cause error. In addition, the wick must be kept clean, saturated with water, and whirled long enough to stabilize temperatures.

The range of the psychrometer is from 10% to 100% R.H., for dry-bulb temperatures of 30° to 100°F (-5° to 50°C).

In addition to the above instructions, barometric pressure and other factors will influence exact relative humidity determinations to a very minor degree. For precise work, use a psychrometric chart or set of tables such as W.B. No. 235 "Psychrometric Tables for Obtaining the Vapor Pressure, Relative Humidity, and Temperature of Dew Point," which can be purchased from the Superintendent of Documents, United States Government Printing Office, Washington,

D.C. The accuracy of the Psychrometer, however, is satisfactory for all except the most exacting work

# **5. MAINTENANCE**

WICK (A) should be kept clean; when dirty, cut off WICK below WET BULB THERMOMETER (D) and pull clean section out of END CAP (B) and slide over bulb on WET BULB THERMOMETER.

THERMOMETERS (D) and (F) are replace able by backing off SCREWS (G) and loos en ing THERMOMETER CLIPS (H). To separate BODY (C) and TUBE (E), drive ROLL PIN (I) out of eye in PLUG AND SWIVEL ASSEMBLY, which then may be slid out back end of TUBE.





### 6. DISCLAIMER

The right of technical modifications is reserved.

The information given in this manual is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this manual without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this manual or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this manual is liable to modification from time to time in the light of experience and our policy of continuous product development.

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