35350 POCKET CALCULATOR
FOR ORIFICE METERS

- CALCULATES—
GAS FLOW DIRECTLY FROM STATIC PRESSURE, DIFFERENTIAL PRESSURE AND ORIFICE COEFFICIENT SETTINGS.

- STRONG—
MAGNESIUM BODY
PLASTIC SCALES
LUCITE INDICATOR

- LIGHT—
WEIGHT LESS THAN 3 OUNCES

- PRECISE—
MADE TO .001" TOLERANCE

- SMOOTH—
TONGUE AND GROOVE JOINTS FOR SLIDE AND INDICATOR

R.S. SPECIALTIES
FOR THE
PETROLEUM
INDUSTRY
INSTRUCTIONS FOR USE OF THE R.S. Pocket Calculator

TO OBTAIN HOURLY GAS FLOW

1. DETERMINE THE AVERAGE STATIC PRESSURE READING ON THE CHART FOR A ONE HOUR PERIOD. PRESSURE BASE OF STATIC SCALE IS 14.4 PSI, IF BAROMETRIC PRESSURE IS OTHER THAN 14.4, CORRECT AVERAGE BY DIFFERENCE FROM 14.4. (DO NOT CONVERT TO ABSOLUTE PRESSURE AS THIS HAS BEEN TAKEN CARE OF BY RULE GRADUATIONS).

2. SET CORRECTED AVERAGE STATIC PRESSURE ON “D” SCALE (MARKED PRESS. VAC.) OF RULE USING HAIRLINE OF INDICATOR.

3. DETERMINE AVERAGE DIFFERENTIAL PRESSURE DURING SAME HOUR OF CHART.

4. MOVE SLIDE OF RULE UNTIL THIS FIGURE ON “C” SCALE (MARKED DIFF.) IS UNDER HAIRLINE OF INDICATOR.

5. DETERMINE HOURLY COEFFICIENT OF ORIFICE FROM METER TAG OR FROM HANDBOOK.

6. WITHOUT MOVING SLIDE, MOVE INDICATOR TO SET COEFFICIENT UNDER HAIRLINE ON “A” SCALE (MARKED COEFFICIENT). IF COEFFICIENT HAS THREE FIGURES BEFORE THE DECIMAL POINT, USE LEFT HALF OF SCALE; OR IF IT HAS FOUR NUMBERS, USE RIGHT HALF OF SCALE.

7. READ GAS FLOW IN CUBIC FEET PER HOUR ON “B” SCALE UNDER HAIRLINE OF INDICATOR. ANSWER WILL BE IN “M” (1000) CUBIC FEET PER HOUR.

8. IF, WHEN COEFFICIENT IS SET AS ABOVE, THE “B” SCALE DOES NOT FALL UNDER THE HAIRLINE, THE SLIDE MAY BE RELOCATED BY SETTING THE HAIRLINE ON 1, 10 OR 100 OF THE “B” SCALE AND THEN MOVING THE SLIDE RIGHT OR LEFT AS REQUIRED UNTIL THE NEXT 1, 10 OR 100 APPEARS UNDER THE HAIRLINE. THEN RESET THE INDICATOR TO THE COEFFICIENT AND READ CUBIC FEET ON THE “B” SCALE, MULTIPLYING THE ANSWER BY 10 FOR EACH TIME THE SLIDE WAS MOVED RIGHT THE DISTANCE BETWEEN 1 AND 10 OR 10 AND 100; OR, IF SLIDE WAS MOVED LEFT, DIVIDE BY 10 FOR EACH SIMILAR MOVEMENT.

TO OBTAIN HOURLY EXTENSIONS

1. DETERMINE AVERAGE STATIC PRESSURE AND SET ON “D” SCALE AS IN 1 AND 2 ABOVE.

2. DETERMINE AVERAGE DIFFERENTIAL AND SET ON “C” SCALE AS IN 3 AND 4 ABOVE.

3. MOVE SLIDE SO HAIRLINE IS OVER CENTER ‘11’ OF “A” SCALE.

4. READ EXTENSION UNDER HAIRLINE ON “B” SCALE.

5. IF NECESSARY, MOVE SLIDE AS IN NO. 8 ABOVE.

TO APPROXIMATE COEFFICIENT FOR CHOOSING ORIFICE PLATE

KNOWING ANTICIPATED STATIC PRESSURE, ANTICIPATED FLOW AND DESIRED DIFFERENTIAL, SET ANTICIPATED STATIC ON “D” SCALE OPPOSITE DESIRED DIFFERENTIAL ON “C” SCALE. OVER ANTICIPATED FLOW ON “B” SCALE FIND COEFFICIENT ON “A” SCALE. FROM METER HANDBOOK, CHOOSE PLATE SIZE WITH CLOSEST COEFFICIENT.

NOTE: Leather carrying cases (Cat. No. 35352) for the 35350 Rules are available.