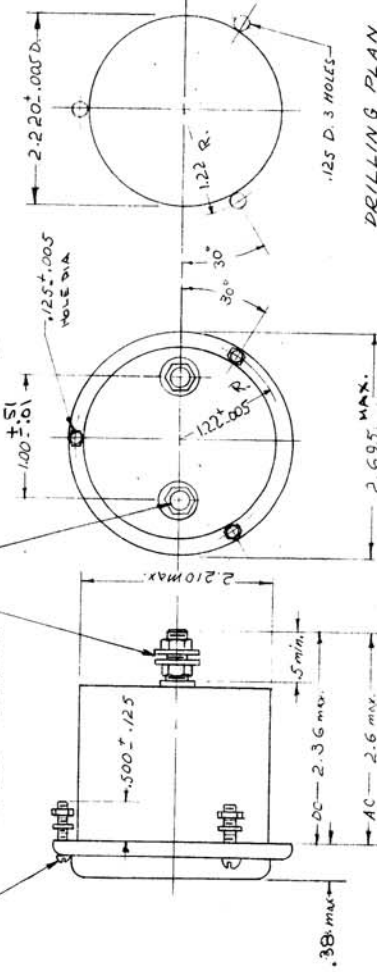


**STANDARD DRAWING**

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

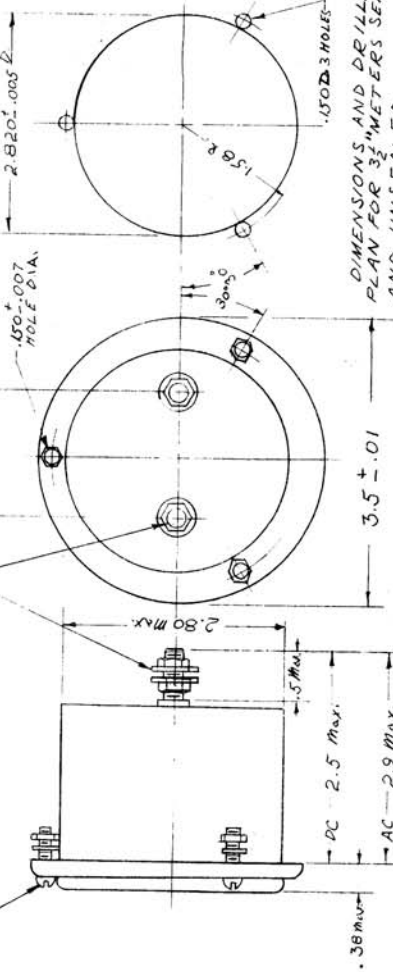
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL NOT BE MADE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

4-40 NC-2 ROUND HEAD BLACK SCREWS WITH NUT AND LOCKWASHER FROM .51 ABOVE TO .26 BELOW  $\phi$  & 2 LOOSE WASHERS



DIMENSIONS AND DRILLING PLAN FOR 2 1/2 METERS, SEALED AND UNSEALED

6-32 NC-2 ROUND HEAD BLACK SCREWS WITH NUTS AND LOCKWASHER 1/4-28 NF-2 STUDS WITH 2 LOOSE NUTS AND 2 LOOSE LOCKWASHERS FROM .51 ABOVE TO .01 BELOW  $\phi$



NOTE: TMC IN SIGNIA TO BE PRINTED ON FACE OF METERS (REF. NP-117)

|   |            |          |          |         |        |         |           |
|---|------------|----------|----------|---------|--------|---------|-----------|
| ISSUE ITEM  | NO. CHANGE | DATE     | BY       | CN. NO. | DRAFTS | CHECKER | ENG. APP. |
|   |            | 10-22-54 | J.L. SUE |         |        |         |           |
| TOLERANCES  |            |          |          |         |        |         |           |
| DEC. DIM. ±   |            |          |          |         |        |         |           |
| FRAC. DIM. ±  |            |          |          |         |        |         |           |
| OTHER AN ULAR DIM. ±  |            |          |          |         |        |         |           |
| DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED. |            |          |          |         |        |         |           |

|  |       |       |        |            |         |       |
|--|-------|-------|--------|------------|---------|-------|
| COMPONENT                              | STYLE | COLOR | SCHEME | FULL-SCALE | CURRENT | UNITS |
| MR                                     | 35    | W     |        | 300        | DC      | VV    |
| TYPE DESIGNATION                       |       |       |        |            |         |       |
| KIND OF CURRENT                        |       |       |        |            |         |       |
| AC-25 TO 125 CPS., 60 CPS NOM/MI       |       |       |        |            |         |       |
| AF-800 CPS. NOMINAL                    |       |       |        |            |         |       |
| AF-400 CPS. NOMINAL                    |       |       |        |            |         |       |
| DC-DIRECT CURRENT                      |       |       |        |            |         |       |
| RF-R.F., CONVENTIONAL SCALE.           |       |       |        |            |         |       |
| RL-R.F., LINEAR EXPANDED "             |       |       |        |            |         |       |
| SEALED.                                |       |       |        |            |         |       |
| ELECTRICAL UNIT                        |       |       |        |            |         |       |
| UA-MICROAMPERES                        |       |       |        |            |         |       |
| MA-MILLIAMPERES                        |       |       |        |            |         |       |
| AA-AMPERES                             |       |       |        |            |         |       |
| KA-KILOAMPERES                         |       |       |        |            |         |       |
| VV-VOLTS                               |       |       |        |            |         |       |
| KV-KILOVOLTS                           |       |       |        |            |         |       |
| MV-MILLIVOLTS                          |       |       |        |            |         |       |
| DC AMMETERS 2 1/2 & 3 1/2              |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |
|  | 100   | 150   |        |            |         |       |
|  | 200   | 300   |        |            |         |       |
|  | 500   | 800   |        |            |         |       |
|  | 500   | 500   |        |            |         |       |
|  | 800   | 800   |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| 2 1/2 METER ONLY. *                    |       |       |        |            |         |       |
| 3 1/2 METER ONLY. **                   |       |       |        |            |         |       |
| * REQUIRES EXTERNAL SHUNT OR RESISTOR. |       |       |        |            |         |       |
| * ALSO WITH ZERO CENTER.               |       |       |        |            |         |       |
| * REQUIRES EXTERNAL RESISTOR.          |       |       |        |            |         |       |
| FULL SCALE                             |       |       |        |            |         |       |
| UG.                                    | MA.   | A.    | KA.    |            |         |       |
| 20                                     | 1     | 1     | 1      |            |         |       |
| 50                                     | 5     | 2     | 1.2    |            |         |       |
| 100                                    | 10    | 5     |        |            |         |       |
| 200                                    | 20    | 10    |        |            |         |       |
| 500                                    | 30    | 30    |        |            |         |       |
| 800                                    | 50    | 80    |        |            |         |       |