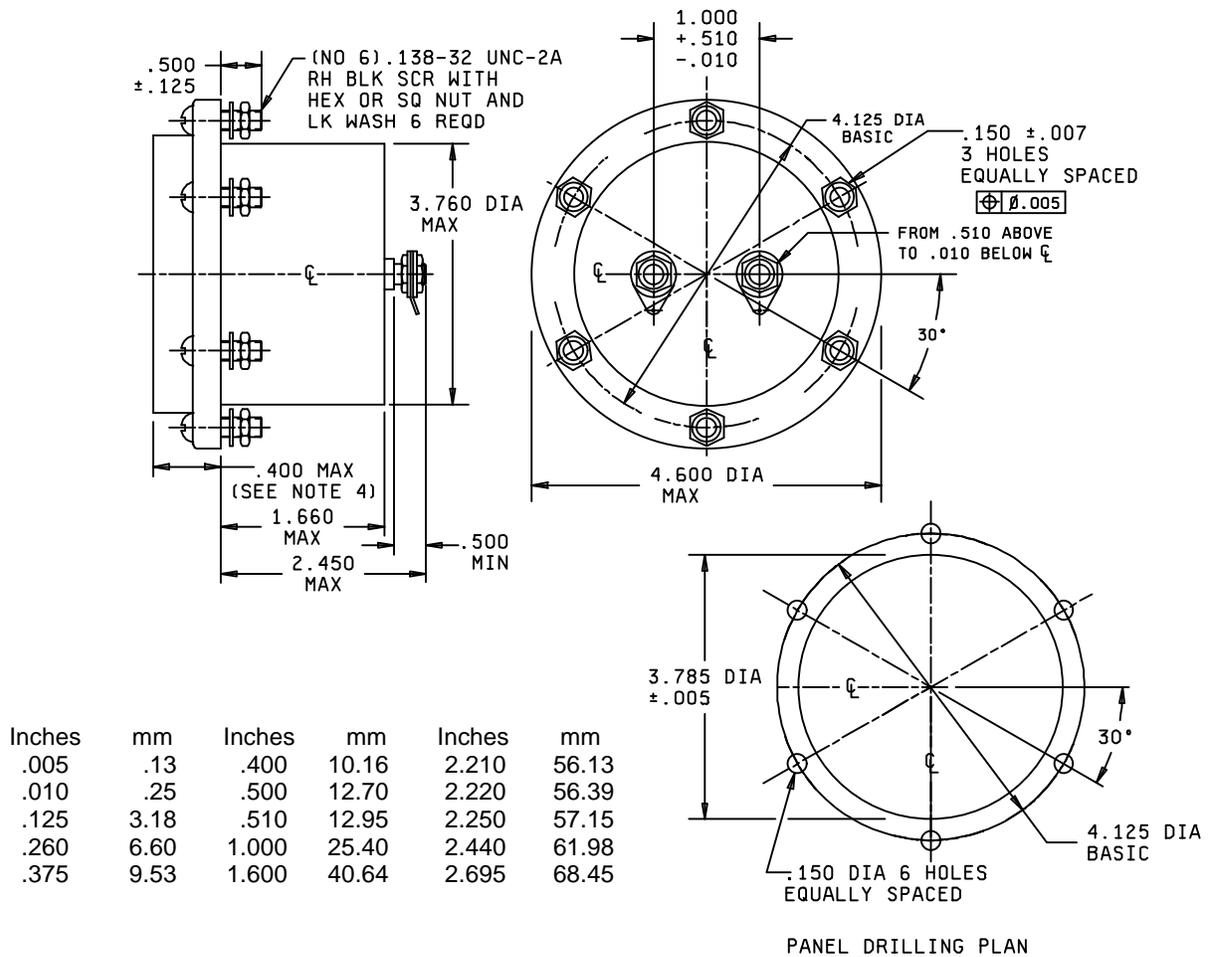


PERFORMANCE SPECIFICATION SHEET

METERS, ELECTRICAL INDICATING, PANEL TYPE, RUGGEDIZED:  
 AMMETER, DC (FLUSH MOUNTING, ROUND FLANGE, 4½ INCH), STYLE 46

This specification is approved for use by all Departments  
 and Agencies of the Department of Defense.

The requirements for acquiring the meters described herein  
 shall consist of this specification and MIL-PRF-10304.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Tolerance is  $\pm 1/2^\circ$  on angles.
4. Maximum projection from front panel including gaskets (if used).

FIGURE 1. Meter, panel type.

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REQUIREMENTS:

(Readings expressed as a percent of full-scale value.)

Dimensions and configuration: See figure 1.

Full-scale ranges: See table I.

Scale:

Length: 3.25 inches minimum.

Pointer deflection: 90° minimum.

Position influence: ±2 percent change of 60° rotation from normal operating position.

Accuracy: ±2 percent.

Overshoot: See table I.

Response time: See table I.

Power consumption (loss) (at end scale deflection): See table.

High temperature cycling:

±4 percent.

±2 percent permanent change.

Temperature influence: ±1 percent change.

(Type MR46W001DCMAR meters shall be tested as millivoltmeters in this test.)

Exposure to extreme temperatures: ±3 percent permanent change.

(Type MR46W001DCMAR meters shall be tested as millivoltmeters in this test.)

Overload capacity: Momentary overload: ±2 percent permanent change.

Sustained overload:

±1 percent temporary zero shift.

±1 percent permanent zero shift.

±2 percent permanent change.

Dielectric withstanding voltage: 3,000 volts rms.

Vibration, random drop, and shock: Repeatability is not acceptable for those microammeters below 100-microampere ranges.

TABLE I. Type designation and characteristics.

Type designation	Full-scale ranges		Overshoot (max)	Resistance	Power consumption (loss)	Response time
	Zero	Range				
MR46W001DCMAR	Left	1 mA 100 mV	% 40	ohms 100 nom	millivolts 100±2	seconds max 2
MR46W050DCMAR	Left	50 µA	50	2,500±2%	125 nom	3

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Custodians:

Army - CR  
Navy - SH  
Air Force - 99  
DLA - CC

Preparing activity:

DLA - CC

(Project 6625-0872)

Review activities:

Air Force - 11  
Army - AR, AT, AV, CR4  
Navy - MC