

INCH-POUND

MIL-PRF-10304/16C
w/AMENDMENT 2
28 August 2013
SUPERSEDING
MIL-PRF-10304/16C
w/AMENDMENT 1
18 January 2008

PERFORMANCE SPECIFICATION SHEET

METERS, ELECTRICAL INDICATING, PANEL TYPE, RUGGEDIZED:
SPECIAL (FLUSH MOUNTING, ROUND FLANGE, 3.5 INCH), STYLE 36

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

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

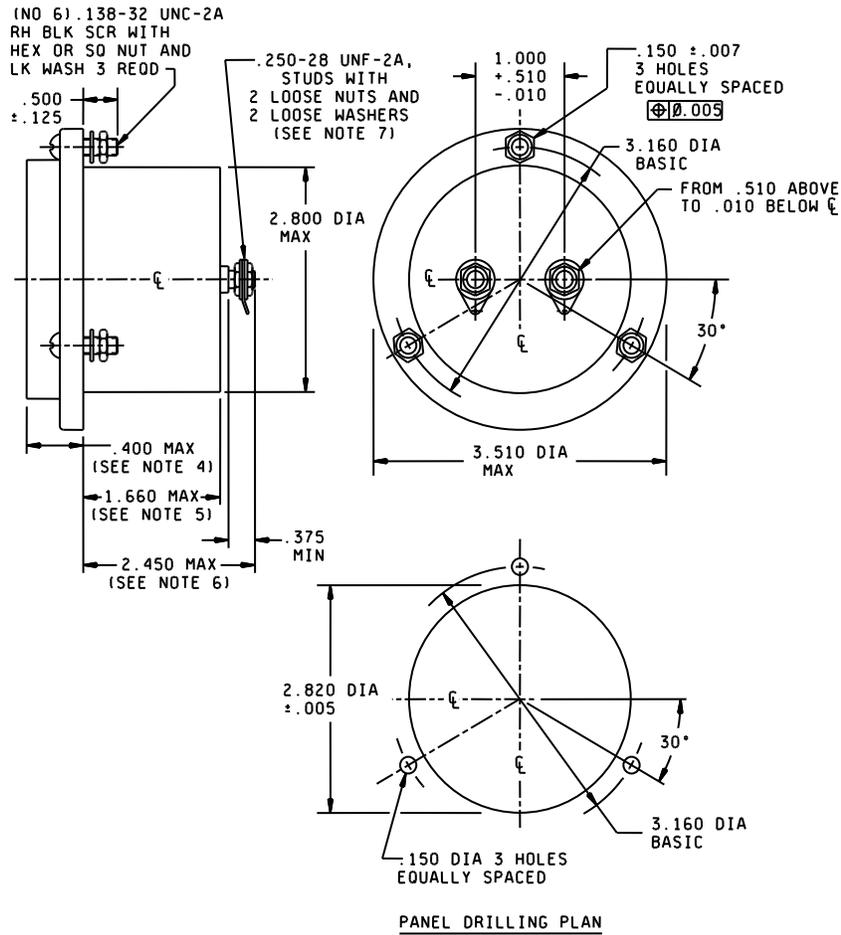


FIGURE 1. Meter, panel type.

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Inches	mm	Inches	mm	Inches	mm
.005	.13	.250	6.35	1.660	42.16
.007	.18	.375	9.53	2.450	62.23
.010	.25	.400	10.16	2.800	71.12
.125	3.18	.500	12.70	2.820	71.63
.138	3.51	.510	12.95	3.160	80.26
.150	3.81	1.000	25.40	3.510	89.15

NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerances are $\pm .015$ inch for two place (.XX), and $\pm .005$ inch for three place (.XXX) dimensions.
2. Tolerance is ± 0.5 ($\frac{1}{2}$) degree on angles.
3. Metric equivalents are given for general information only.
4. Maximum projection from front panel including mounting gaskets (if used).
5. For self-contained meters of 30 amperes (amp) and above, this dimension is 2.0 inches (50.80 mm) maximum.
6. For self-contained meters of 30 amperes (amp) and above, this dimension is 2.625 inches (66.68 mm) maximum.
7. Other forms of terminals, as specified in MIL-PRF-10304, are permitted. The specified minimum length applies to stud-type terminals only. Terminals shall be equally spaced, from each side of vertical centerline.

FIGURE 1. Meter, panel type - Continued.

REQUIREMENTS:

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

Dimensions and configuration: See figure 1.

Full-scale ranges: See table I.

Scale:

Length: 2 inches minimum.

Pointer deflection: 90 degrees minimum.

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

Accuracy: ± 2 percent.

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TABLE I. Full-scale ranges and special features.

Type designation of meter <u>1/</u>		Range of special meter	Special features <u>7/</u>			
Special	Similar		Resistance (nominal)	Power consumption (loss)		
		<u>direct current</u>	<u>ohms</u>	<u>millivolts ± 2%</u>		
MR36**105SPECR	<u>2/</u> MR36*020DCUAR	50 μA	5,000	250		
MR36**106SPECR	<u>2/</u> MR36*020DCUAR	100 μA	2,500	250		
MR36**107SPECR	<u>2/</u> MR36*020DCUAR	200 μA	1,250	250		
MR36**108SPECR	<u>2/</u> MR36*001DCMAR	500 μA	500	250		
MR36**109SPECR	<u>2/</u> MR36*001DCMAR	1 mA	100	100		
MR36**110SPECR	<u>2/</u> MR36*001DCMAR	1.5 mA	66.67	100		
MR36**111SPECR	<u>2/</u> MR36*001DCMAR	3 mA	33.33	100		
MR36**112SPECR	<u>2/</u> MR36*001DCMAR	5 mA	20	100		
MR36**113SPECR	<u>2/</u> MR36*001DCMAR	8 mA	12.5	100		
		<u>amperes, dc</u>	Scale marked "Charge" (to right of zero) and "Discharge" (to left of zero).			
MR36**114SPECR	<u>2/</u> MR36*010DCAAR	1-0-9				
MR36**115SPECR	<u>2/</u> MR36*010DCAAR	<u>3/</u> 10-0-30				
MR36**116SPECR	<u>2/</u> MR36*010DCAAR	<u>3/</u> 15-0-15				
MR36**117SPECR	<u>2/</u> MR36*010DCAAR	<u>4/</u> 25-0-75				
MR36**118SPECR	<u>2/</u> MR36*010DCAAR	<u>3/</u> 30-0-30				
MR36**119SPECR	<u>2/</u> MR36*010DCAAR	<u>3/</u> 50-0-50				
		<u>amperes, dc</u>	Self-contained.			
MR36**120SPECR	<u>5/</u> MR36*005DCAAR	0-80				
MR36**121SPECR	<u>5/</u> MR36*005DCAAR	0-100				
MR36**131SPECR	<u>6/</u> MR36**2H2DCVVR	<u>volts, dc</u> 150-0-150	The range cannot be designated by the regular type designation.			
		<u>direct current</u>	Resistance (nominal)	Power consumption (loss)	Uniform scale marking	Number of scale divisions
			<u>ohms</u>	<u>millivolts ±2%</u>		
MR36*152SPECR	<u>2/</u> MR36*020DCUAR	50 μA	5,000	250	0-100	50
MR36*153SPECR	<u>2/</u> MR36*020DCUAR	100 μA	2,500	250	0-100	50
MR36*154SPECR	<u>2/</u> MR36*020DCUAR	200 μA	1,250	250	0-100	50
MR36*155SPECR	<u>2/</u> MR36*001DCMAR	500 μA	500	250	0-100	50
MR36*156SPECR	<u>2/</u> MR36*001DCMAR	1 mA	100	100	0-100	50
MR36*157SPECR	<u>2/</u> MR36*001DCMAR	1.5 mA	66-2/3	100	0-100	50
MR36*158SPECR	<u>2/</u> MR36*001DCMAR	3 mA	33-1/3	100	0-100	50
MR36*159SPECR	<u>2/</u> MR36*001DCMAR	5 mA	20	100	0-100	50
MR36*160SPECR	<u>2/</u> MR36*001DCMAR	8 mA	12-1/2	100	0-100	50
MR36*161SPECR	<u>2/</u> MR36*020DCUAR	50 μA	5,000	250	0-150	75
MR36*162SPECR	<u>2/</u> MR36*020DCUAR	100 μA	2,500	250	0-150	75
MR36*163SPECR	<u>2/</u> MR36*020DCUAR	200 μA	1,250	250	0-150	75
MR36*164SPECR	<u>2/</u> MR36*001DCMAR	500 μA	500	250	0-150	75
MR36*165SPECR	<u>2/</u> MR36*001DCMAR	1 mA	100	100	0-150	75
MR36*166SPECR	<u>2/</u> MR36*001DCMAR	1.5 mA	66-2/3	100	0-150	75
MR36*167SPECR	<u>2/</u> MR36*001DCMAR	3 mA	33-1/3	100	0-150	75
MR36*168SPECR	<u>2/</u> MR36*001DCMAR	5 mA	20	100	0-150	75
MR36*169SPECR	<u>2/</u> MR36*001DCMAR	8 mA	12-1/2	100	0-150	75

1/ The asterisk is to be replaced by a letter designating the color scheme.

2/ See MIL-PRF-10304/12 for requirements.

3/ Used with external shunt.

4/ Used with 75-ampere external shunt.

5/ See MIL-PRF-10304/14 for requirements.

6/ See MIL-PRF-10304/11 for requirements.

7/ Special meters covered by this specification shall meet the requirements specified for similar meters, except for the special features described within this table.

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Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-PRF-10304, this document references the following:

MIL-PRF-10304/11
MIL-PRF-10304/12
MIL-PRF-10304/14

CONCLUDING MATERIAL

Custodians:
Army – CR
Navy – SH
Air Force – 99
DLA – CC

Preparing activity:
DLA – CC
(Project 6625-2013-012)

Review activities:
Army –AT, AV, CR4, MI
Navy – MC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.