INCH-POUND

MIL-PRF-10304/30A
w/AMENDMENT 2
28 August 2013
SUPERSEDING
MIL-PRF-10304/30A
w/AMENDMENT 1
18 January 2008

PERFORMANCE SPECIFICATION SHEET

METERS, ELECTRICAL INDICATING, PANEL TYPE, RUGGEDIZED:
MILLIAMMETER, DC (FLUSH MOUNTING, ROUND FLANGE, 1 INCH),
STYLES 05, 06, AND 07

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.

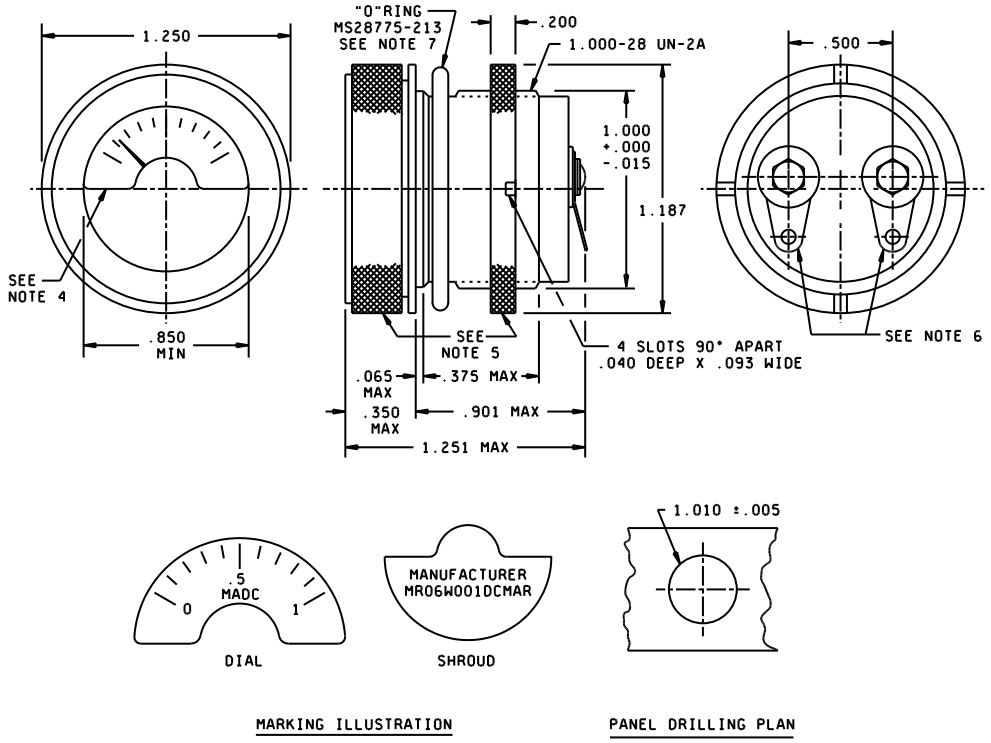

FIGURE 1. Meter, panel type.

Inches	mm	Inches	mm	Inches	mm
.005	.13	.350	8.89	1.010	25.65
.015	.38	.375	9.53	1.187	30.15
.040	1.02	.500	12.70	1.250	31.75
.065	1.65	.850	21.59	1.251	31.78
.093	2.36	.901	22.89		
.200	5.08	1.000	25.40		

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ± .015 (.38 mm).
4. Shroud design is optional.
5. Knurled edge required for mounting; optional for front flange.
6. The solder lug terminals shall accommodate wire of a diameter of .065 (1.65 mm) and may accommodate up to a maximum diameter of .105 (2.67 mm).
7. The O-ring shall be in accordance with SAE AS28775 (table I, Dynamic or Static use), Part or Identifying Number (PIN) MS28775-213.

FIGURE 1. Meter, panel type - Continued.

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

Dimensions and configuration: See figure 1.

Weight: 4 ounces maximum.

Case material: Metal or molded thermosetting plastic.

Full-scale ranges: See table I.

Scale:
Pointer deflection: 90 degrees minimum.
Length: 0.75 inch minimum.

Power consumption: 100 milliamperes maximum.

Position influence: ± 3 percent.

Accuracy: ± 3 percent.

Overshoot: 50 percent maximum or damping factor of 2 minimum.

Response time: 2.0 seconds.

High temperature cycling:
± 4 percent.
± 4 percent permanent change.

Temperature influence: ± 1 percent.

Exposure to extreme temperatures:
± 8 percent.
± 3 percent permanent change.

Overload capacity:
Momentary overload: ± 2 percent.
Sustained overload:
± 2 percent temporary zero shift.
± 1 percent permanent zero shift.
± 2 percent permanent change.

Dielectric withstanding voltage: 1, 000 volts rms.

Supersession data: See table II.

TABLE I. Full-scale ranges.

Ammeters	
Milliamperes	
Zero left	Zero Center
50	25-0-25
100	50-0-50
500	250-0-250

TABLE II. Supersession data.

Superseded type designation	New type designation
Style 04	Style 07
MR04W001DCMA	MR07W001DCMAR
MR04B001DCMA	MR07B001DCMAR
MR04F001DCMA	MR07F001DCMAR
MR04S001DCMA 1/	MR07P001DCMAR
Style 05	Style 05
MR05W001DCMA	MR05W001DCMAR
MR05B001DCMA	MR05B001DCMAR
MR05F001DCMA	MR05F001DCMAR
MR05S001DCMA 1/	MR05P001DCMAR
Style 06	Style 06
MR06W001DCMA	MR06W001DCMAR
MR06B001DCMA	MR06B001DCMAR
MR06F001DCMA	MR06F001DCMAR
MR06S001DCMA 1/	MR06P001DCMAR

1/ The color scheme code letter "S" has been superseded by the code letter "P". The type designations of all new units will carry the code letter "P" (when applicable) to indicate that non-radioactive material has been used for phosphorescent markings and pointer.

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:

SAE AS28775

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

(Project 6625-2013-018)

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.