

INCH-POUND  
MIL-DTL-3971/1E  
24 January 2001  
SUPERSEDING  
MIL-M-3971/1D  
14 September 1992

# DETAIL SPECIFICATION SHEET

METERS, TIME TOTALIZING, NON-HERMETICALLY SEALED,  
ELECTRICAL: TYPE 1, 10-40V OR 40-130V OR 10-130V:  
GRADES A AND B, 2 HOLE AND 3 HOLE FLANGE

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

The complete requirement for procuring meters described herein shall consist of this  
document and the issue in effect of MIL-DTL-3971.

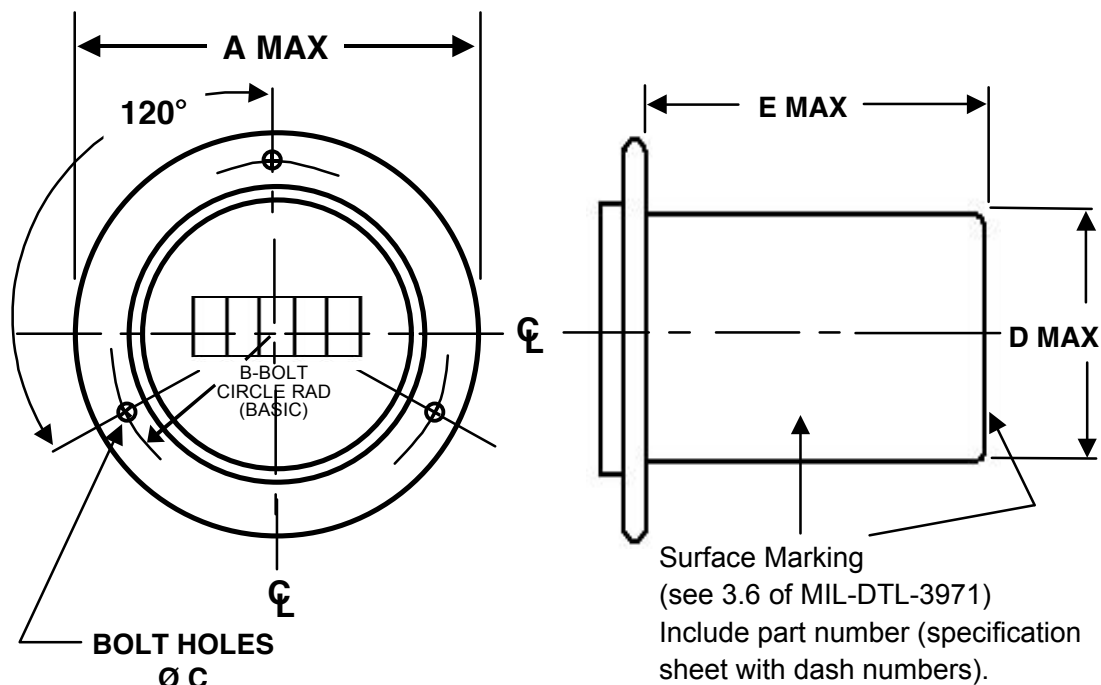


FIGURE 1. Meter with 3 hole flange.

AMSC N/A

FSC 6645

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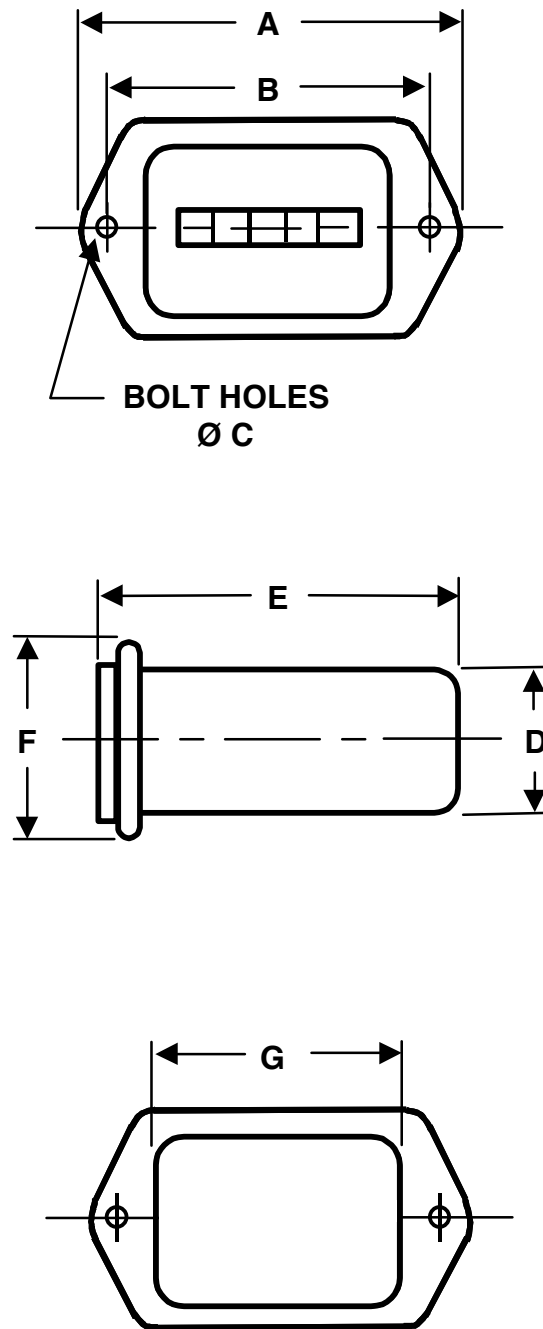


FIGURE 2. Meter with 2 hole flange.

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TABLE I. Specification data for type I meters.

DASH NO.	FIG.	A	B	C	D	E	F	G	Grade	Voltage	Range	Readout
1	1	2.875	1.265	.150	2.210	3.00	—	—	A	10-40	10,000	9999.9
2	1	2.875	1.265	.150	2.210	3.00	—	—	A	40-130	10,000	9999.9
3	1	3.500	1.580	.150	2.625	3.00	—	—	A	10-40	10,000	9999.9
4	1	3.500	1.580	.150	2.625	3.00	—	—	A	40-130	10,000	9999.9
5	1	2.875	1.265	.150	2.210	3.00	—	—	B	10-40	10,000	9999.9
6	1	2.875	1.265	.150	2.210	3.00	—	—	B	40-130	10,000	9999.9
7	1	3.500	1.580	.150	2.625	3.00	—	—	B	10-40	10,000	9999.9
8	1	3.500	1.580	.150	2.625	3.00	—	—	B	40-130	10,000	9999.9
9	1	2.810	1.580	.150	2.135	1.75	—	—	B	10-130	10,000	9999.9
10	1	3.500	1.580	.150	2.135	1.75	—	—	B	10-130	10,000	9999.9
11	2	2.120	1.750	.150	.900	1.950	.125	1.414	A	10-40	10,000	9999.9
12	2	2.120	1.750	.150	.900	1.950	.125	1.414	B	10-40	10,000	9999.9

## Notes:

1. Dimensions are in inches (in.).
2. Tolerances: Dimensional  $\pm 0.015$  in., bolt holes  $\pm .005$  in. unless otherwise indicated.  
Angular  $\pm 0.5^\circ$ .
3. Range and readout are in hours and tenths of hours.

## 1. REQUIREMENTS

1.1 Dimensions of case. See figures 1 and 2 and table I as applicable.

1.2 Colors, elapsed time indicator:

Hours: White on black background

Tenths: Black on white background

1.3 Power consumption. Not applicable

1.4 Dielectric strength:

Voltage	— 200 volts rms
Frequency	— 60 Hz
Potential	— ac
Points of application	— Terminals and case

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1.5 Weight. 0.60 lbs. maximum

1.6 Starting. 10-40V: 1. Energize with 28V for 60 seconds at +22°C ( $\pm 2^\circ\text{C}$ ),  
de-energize for 180 seconds, repeat 3 times.

2. As above at 12V, repeat 2 times.

40-130V: 1. As above at 120V, repeat 3 times.

2. As above at 85V, repeat 2 times.

10-130V: 1. As above at 120V, repeat 3 times.

2. As above at 85V, repeat 2 times.

3. As above at 28V, repeat 3 times

4. As above at 12V, repeat 2 times.

1.7 Stopping. The meter shall stop within 120 seconds after being de-energized.

1.8 Power supply tolerance. 10-40 volt-meters One-half hour at 10 volts

One-half hour at 40 volts

40-130 volt-meters One-half hour at 40 volts

One-half hour at 130 volts

10-130 volt-meters One-half hour at 10 volts

One-half hour at 130 volts

1.9 Part number. The part number consists of the basic number of this specification sheet and a dash number taken from table I.

Example:

		<u>M3971/1-1-S</u>
Basic number	_____	
Specification sheet number	_____	
Dash number from Table I	_____	
B (blade) or S (stud) terminal configuration	_____	

Note: Specify terminal configuration; wire lead (blade) or terminal block (stud).

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Custodians:

Army – AR

Navy – SH

Air Force – 99

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