

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.

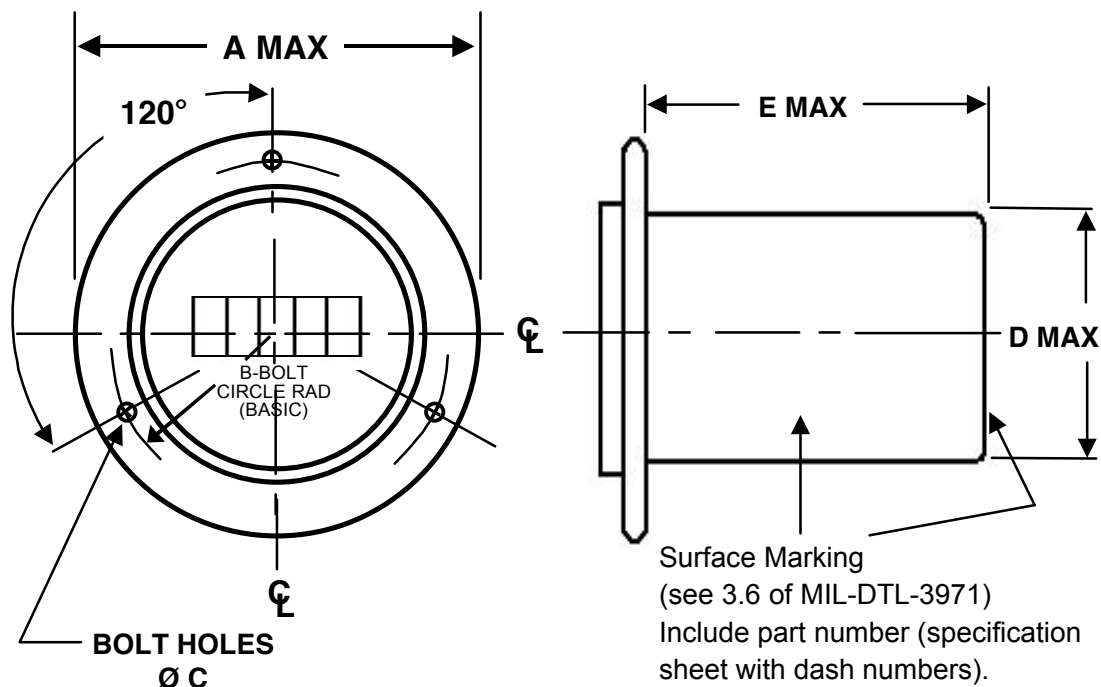


FIGURE 1. Meter with 3 hole flange.

AMSC N/A

FSC 6645

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-DTL-3971/1E

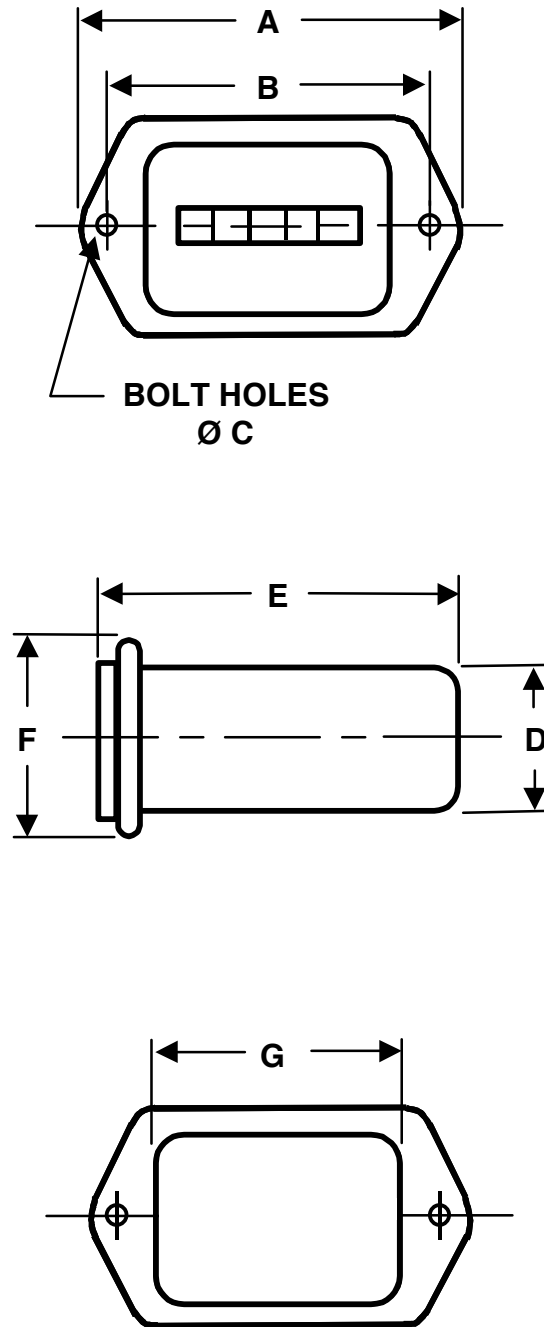


FIGURE 2. Meter with 2 hole flange.

MIL-DTL-3971/1E

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 ± 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

MIL-DTL-3971/1E

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).

MIL-DTL-3971/1E

Custodians:

Army – AR

Navy – SH

Air Force – 99

Preparing activity:

DLA-GS

(Project 6645-0503)

Reviewers:

Army – AT, CR

Navy – AS, SA, MC, EC

Air Force – 11

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1,2,3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4,5,6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of this form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE
1.DOCUMENT NUMBER
2.DOCUMENT DATE (YYMMDD)

MIL-DTL-3971/1E

000418

3.DOCUMENT TITLE 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
4.NATURE OF CHANGE*(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*
5.REASON FOR RECOMMENDATION
6.SUBMITTER
a.NAME *(Last, First, Middle Initial)*
b.ORGANIZATION
c.ADDRESS *(Include Zip Code)*
d.TELEPHONE *(Include Area Code)*
**7.DATE
SUBMITTED
(YYMMDD)**

(1)Commercial

(2)DSNif applicable)

8.PREPARING ACTIVITY
a.NAME

L. Craig Hammond

b.TELEPHONE *(Include Area Code)*

(1) Commercial (2) DSN
(804) 279-5019 695-5019

c.ADDRESS *(Include Zip Code)*

ATTN: DSCR-VBD
Defense Supply Center Richmond
Richmond, VA 23297-5610

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:

Defense Standardization Program Office
8725 John J. Kingman Road, Suite 2533
Fort Belvoir, Virginia 22060-6221
Telephone (703) 767-6888 DSN 427-6888