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IN REPLY
REFER TO

DSCC-VAT

1 July 2004

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of MIL-PRF-8805 /11J, /14F, /15G, /17G, /18G, /19F, /23G, /25F, /34E, /38G, /40H, /47G, /48H, /49H, /65D, /76H, /84E, /90F, /96E, /100F, /101K, /104C, /107C, /110D, and /114C.
Project numbers 5930-1838 through -1863.

The drafts of the above subject documents are being sent to you for review and comments. These drafts consist of the following changes:

Updating of referenced documents.
Incorporation of amendments.

If these documents are of interest to you, please provide your comments electronically. This can be in the form of a return e-mail, with or without an attached text file. A 45-day coordination cycle from the date of this letter has been allotted. Please provide your comments within that time period. If no comments are received in the allotted 45 day coordination cycle, concurrence is assumed and all comments received after will be held to the first amendment. If an electronic response is not possible we will still accept comments via letter, facsimile or phone call but only after you have contacted the project officer listed below. The draft documents can be found at the following DSCC-VA web page:

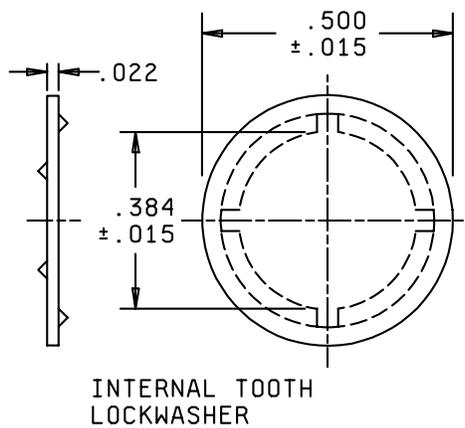
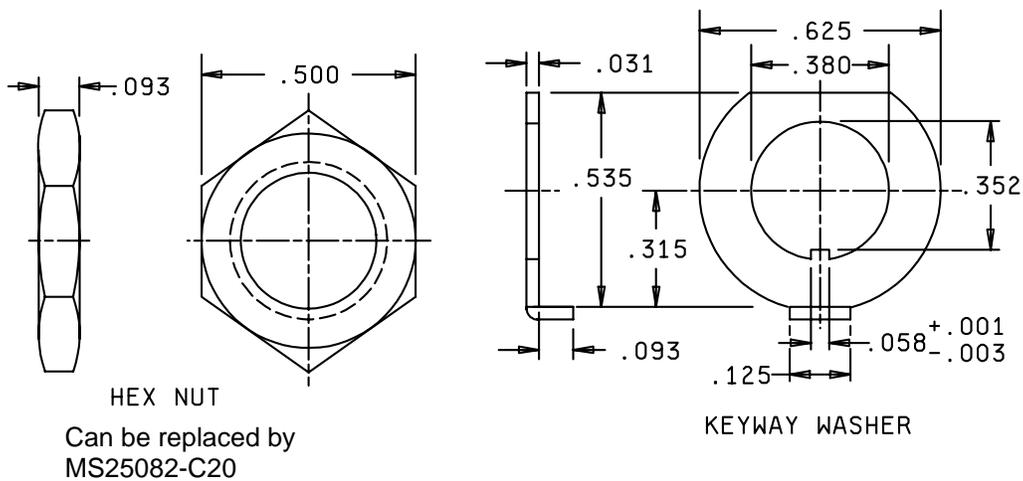
www.dsccl.dla.mil/Programs/MilSpec/initialdrafts.asp

This process still requires military departments to identify their comments as "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians or this office, as applicable, in sufficient time to allow for consolidating the department reply.

If there are any questions, please contact Mark Rush by the preferred method of E-Mail at Mark.Rush@dla.mil or by telephone at commercial 614-692-0550, DSN 850-0550; or by facsimile at 614-693-1644. Our mailing address as a last resort is Defense Supply Center, Columbus, DSCC-VAT, P.O. Box 3990, Columbus, OH 43216-5000. If you have further questions or concerns you may contact me at Kendall.Cottongim@dla.mil, by telephone at 614-692-0676 or by facsimile at 614-692-6939.

/ SIGNED /
KENDALL A. COTTONGIM
Chief
Electronics Components Team

MIL-PRF-8805/84E



Can be replaced by NASM 35333-134

M8805/84-003

FIGURE 1. Dimensions and configurations - Continued.

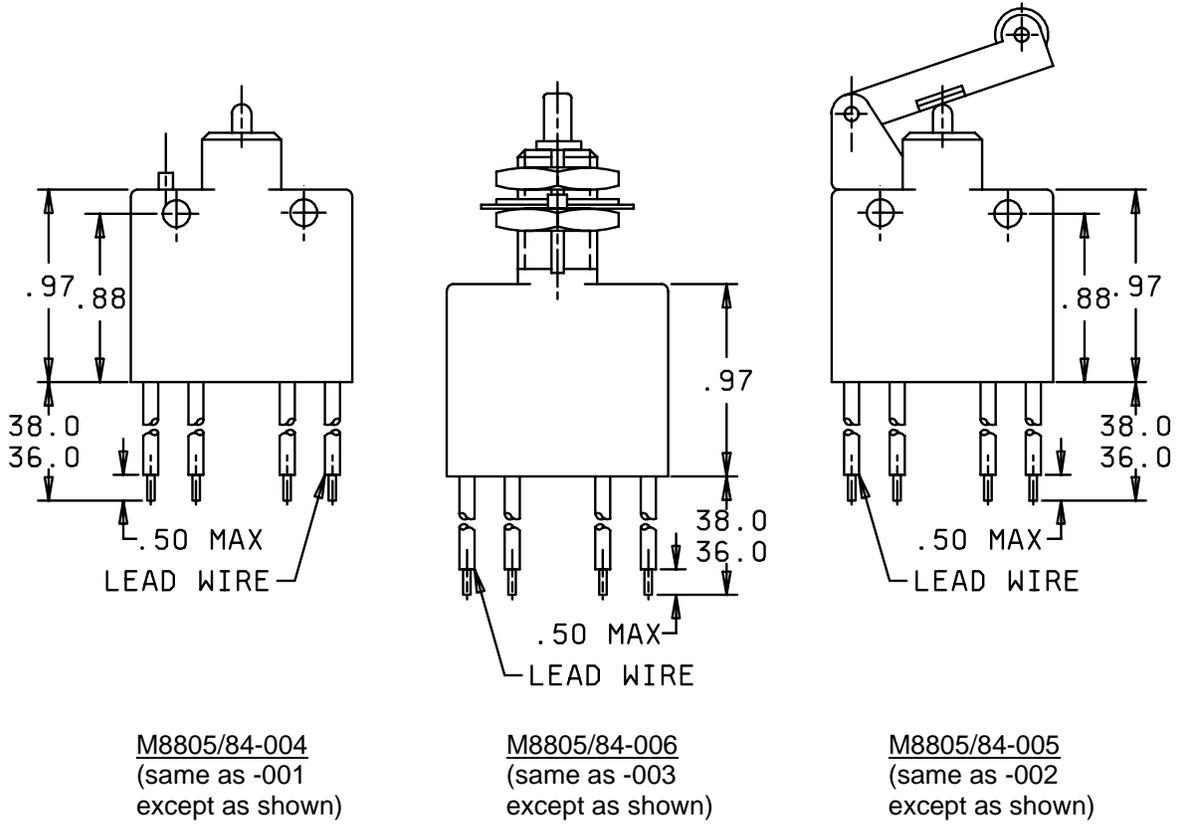
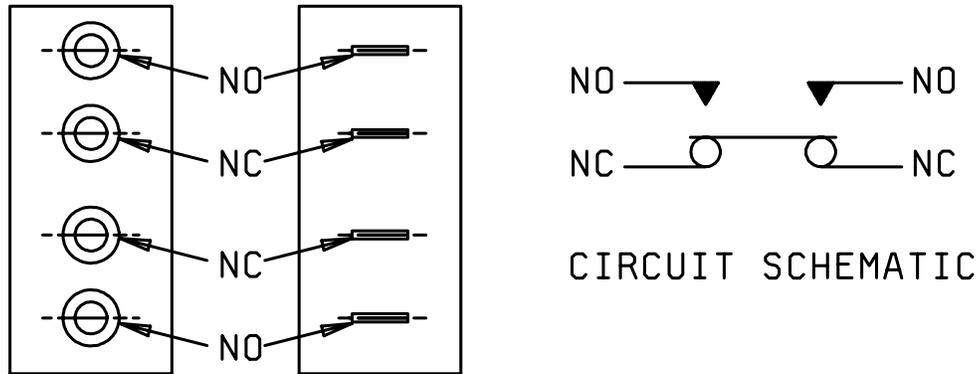


FIGURE 1. Dimensions and configurations - Continued.



TERMINAL IDENTIFICATION

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	0.05	.06	1.5	.125	3.18	.352	8.94	.68	17.5
.003	0.08	.062	1.57	.187	4.75	.375	9.53	.69	17.3
.005	0.13	.068	1.73	.19	4.8	.380	9.65	.765	19.43
.010	0.25	.078	1.98	.250	6.35	.384	9.75	.85	21.6
.015	0.38	.080	2.03	.292	7.42	.500	12.70	.88	22.4
.02	0.5	.09	2.3	.300	7.62	.535	13.59	.882	22.40
.022	0.56	.093	2.36	.315	8.00	.562	14.27	.97	24.6
.025	0.64	.109	2.77	.32	8.1	.625	15.88	36.00	914.4
.030	0.76	.112	2.84	.320	8.13	.640	16.26	38.00	965.2
.031	0.79	.120	3.05						

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± 0.02 (0.5 mm) on two place decimals and ± 0.010 (0.25 mm) on three place decimals.
4. Terminal designation:
M8805/84-001, M8805/84-002, M8805/84-003: NO and NC stamped on bottom or either side of switch. M8805/84-004, M8805/84-005, M8805/84-006: NO-20 and NC-20 stamped on leads. The marking shall be legible, permanent, shall not impair the wire characteristics, shall appear every 15 inches (381. mm) maximum, and shall appear within three inches (76.2 mm) of the end.
5. Switch design optional within envelope dimensions shown.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Enclosure design: 3 (watertight).

Temperature characteristic: 1 (-55°C to +85°C).

Shock type: M (100 g's, test condition I, method 213 of MIL-STD-202).

Vibration grade: 1 (10 Hz to 500 Hz swept sinusoidal, 10 g's peak).

Finish: Switch housing shall be processed to resist corrosion.

Weight:

- M8805/84-001 - .50 ounce maximum.
- M8805/84-002 - .60 ounce maximum.
- M8805/84-003 – 1.10 ounce maximum.
- M8805/84-004 – 2.30 ounce maximum.
- M8805/84-005 – 2.40 ounce maximum.
- M8805/84-006 – 2.90 ounce maximum.

Operating characteristics: See table I.

Contact resistance (maximum):	M8805/84-001, -002, -003	M8805/84-004, -005, -006
Initial	50 milliohms.	150 milliohms.
After mechanical endurance -	100 milliohms.	200 milliohms.

Terminal strength:

Force (Static) -	5 lbs.	5 lbs.
Duration of force -	5-10 seconds.	5-10 seconds.

Mechanical endurance: 50,000 cycles.

Electrical endurance: 50,000 cycles.

Electrical ratings: See table II.

Intermediate current: 50,000 cycles.

Part or Identifying Number (PIN): See table I.

Qualification:

Group submission – See table III.

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TABLE I. PIN and characteristics. 1/

PIN M8805/84	Type of actuator	Actuating force (maximum)	Releasing force (minimum)	Pretravel (maximum)	Movement differential	Overtravel (minimum)	Strength of actuator
-001 -004	Pin plunger	2.5 lbs	.5 lb	(inch) .050 (1.27 mm)	(inch) .020 ±.010 (.51 ±.25 mm)	(inch) .060 max (1.52 mm)	(lbs) 25
-002 -005	Roller- lever	20 oz	4 oz	.125 (3.18 mm)	.060 max (1.52 mm)	.025 (.64 mm)	10
-003 -006	Overtravel plunger	2.5 lbs	.5 lb	.070 (1.78 mm)	.020 (.51 ±.25 mm)	.187 (4.75 mm)	25

1/ ±20 percent variation in values acceptable after test.

TABLE II. Electrical ratings.

Load	Sea level - 28 V dc		50,000 feet - 28 V dc	
	Single circuit NO or NC (amperes)	2 circuit <u>1/</u> (amperes)	Single circuit NO or NC (amperes)	2 circuit <u>1/</u> (amperes)
Resistive	10	10	10	10
Inductive	7.5	5	3.5	2
Motor	4	2	---	---
Intermediate current	.04	.04	.04	.04

1/ Both NO and NC circuits under load during electrical endurance test.

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TABLE III. Qualification inspection.

Examination or test	Basic switch	Other switch samples	Extent of approval
Qualification inspection table of MIL-PRF-8805	M8805/84-004 (all sample units)	M8805/84-001, M8805/84-002, M8805/84-003, M8805/84-005 M8805/84-006 (2 sample units). Visual and mechanical examination and operating characteristics. M8805/84-002 and -003 strength of actuating means. M8805/84-005 vibration and shock. M8805/84-001 strength of terminals.	All

Marginal notations are not used in this revision to identify changes with respect to the previous issue.

Referenced Documents:

MIL-PRF-8805
MIL-STD-202
MS25082
NASM35333

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:

DLA - CC

(Project 5930-1855)

Review activities:

Army - AT, AM, AV, MI
Navy - AS, MC, OS, SH
Air Force - 19, 99

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 www.dodssp.daps.mil.