

INCH-POUND  
MIL-PRF-8805/90G  
w/Amendment 1  
26 January 2016  


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SUPERSEDING  
MIL-PRF-8805/90G  
27 March 2007

PERFORMANCE SPECIFICATION SHEET

SWITCH, SENSITIVE, LOW FORCE, SPDT, 10 AMPERES, UNSEALED

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

The complete requirements for acquiring the switches described herein shall consist of this specification and the latest issue of MIL-PRF-8805.

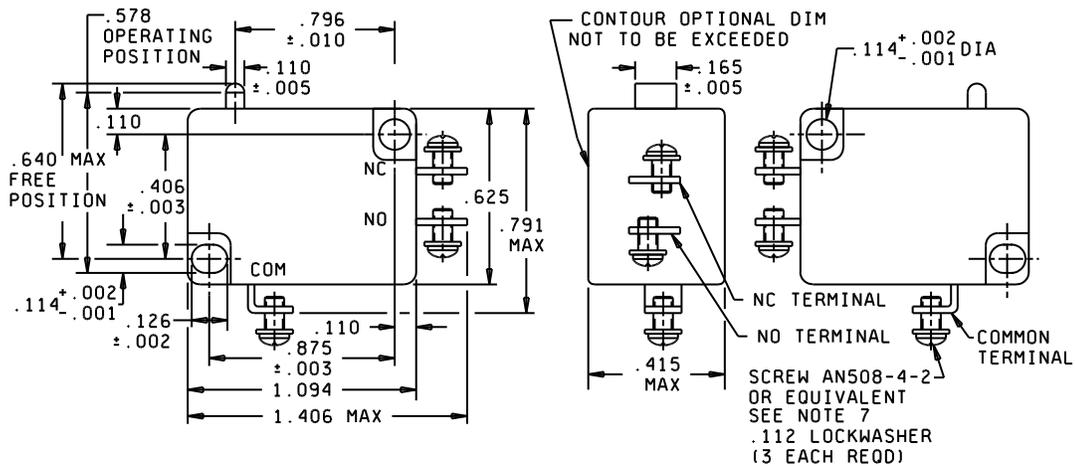


FIGURE 1. Configuration and dimensions.



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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.110	2.79	.415	10.54	.796	20.22
.002	0.05	.114	2.90	.578	14.68	.875	22.23
.003	0.08	.126	3.20	.625	15.88	1.094	27.79
.005	0.13	.165	4.19	.640	16.26	1.406	35.71
.010	0.25	.406	10.31	.791	20.09		

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is  $\pm 0.015$  inch (0.38 mm).
3. Exact shape of switch optional provided dimensions specified are not exceeded.
4. Mark, stamp, or mold NO, NC, and COM. terminal designation on either side of switch.
5. Metric equivalents are given for general information only.
6. Mounting holes shall accept .112 (2.82 mm) maximum diameter pins or screws.
7. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for terminal screws and lock washer material. Dimensions shall be in accordance with the referenced hardware specifications.

FIGURE 1. Configuration and dimensions. Cont

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Enclosure design: 1 (unsealed).

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

Shock: 50 g's, MIL-STD-202, method 213, test condition A.

Vibration grade: 1 (10 Hz to 500 Hz).

Weight: 0.35 ounce maximum.

Terminal strength: 15 pounds.

Operating characteristics:

Actuating force: 2.65 ounces maximum.

Pre travel: .050 inch (1.27 mm) maximum.

Movement differential: .010 inch (0.25 mm) maximum.

Overtravel: .050 inch (1.27 mm) minimum.

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Strength of actuating means: 25 pounds.

Contact resistance: Not applicable.

Dielectric withstanding voltage:

Sea level: 1,000 V rms.

Altitude: 400 V rms at 50,000 feet.

Mechanical endurance: 25,000 cycles.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

Qualification:

Group submission – See table II.

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

TABLE I. Electrical ratings.

Load	Sea level		50,000 feet	
	28 V dc (amperes)	115 V ac, 60 Hz (amperes)	28 V dc (amperes)	115 V ac, 60 Hz (amperes)
Resistive	10	10	10	10
Inductive	6	10	6	10
Motor	6	3	---	---

TABLE II. Group submission.

Examination or test	Basic switch	Other switch samples	Extent of approval
Qualification inspection table of MIL-PRF-8805, groups I through VIII, inclusive	M8805/90-001 (all sample units)	M8805/90-002 and M8805/90-003 (2 sample units each) visual and mechanical examination	All

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TABLE III. PIN's and characteristics.

PIN's M8805/90	Terminals	Switching characteristics
-001	NC, NO and Common	SPDT
-002	NO and Common	SPNO
-003	NC and Common	SPNC

The margins of this specification are marked with vertical lines to indicate where modifications from this amendment were made. 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-8805, this document references the following :  
MIL-STD-202-213

Custodian:  
Navy - EC  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5930-2016- 008)

Review activities:  
Navy - AS

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 <http://assist.dla.mil/>