INCH-POUND
MIL-PRF-8805/114D
6 December 2012
SUPERSEDING
MIL-PRF-8805/114C
4 October 2004

PERFORMANCE SPECIFICATION SHEET

SWITCH ASSEMBLY, SENSITIVE, ROLLER PLUNGER, SPDT, 7 AMPERES, WATERTIGHT SEAL

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.

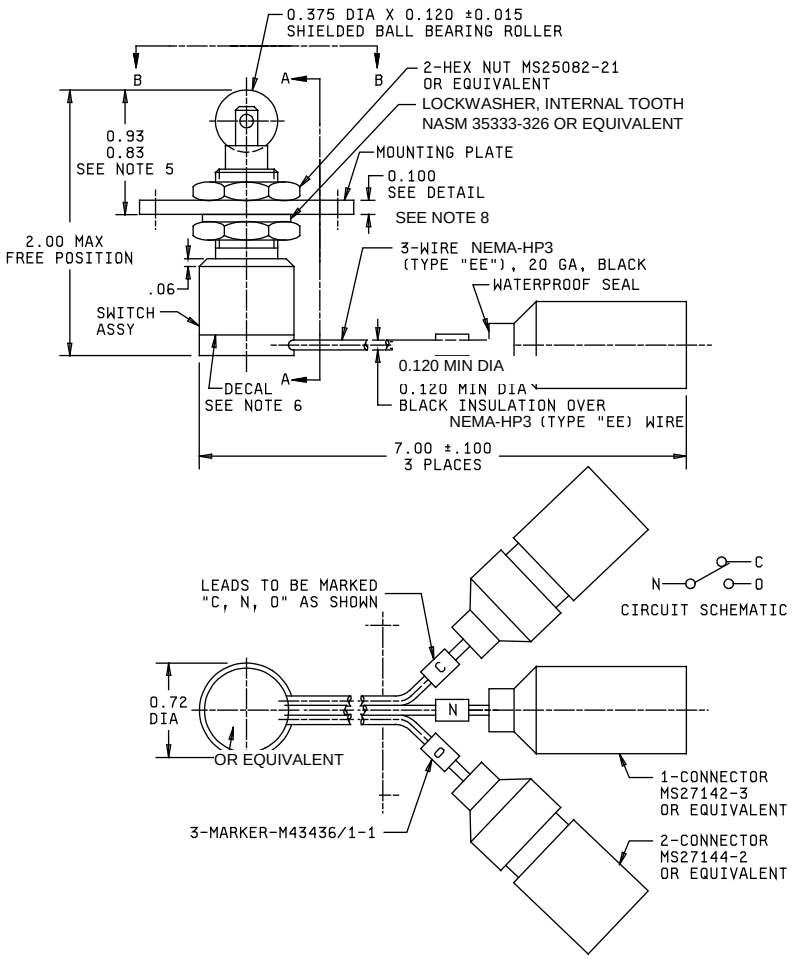
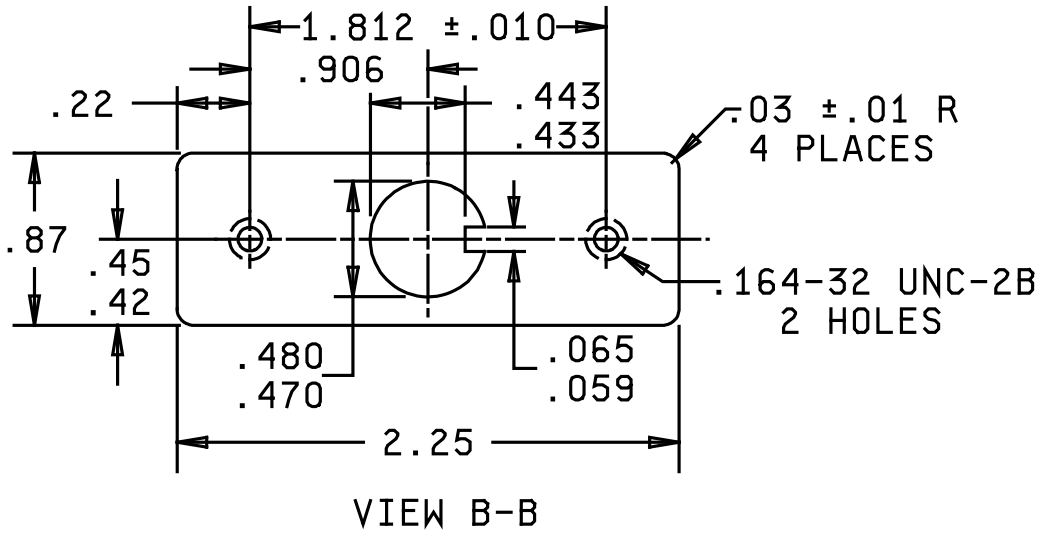
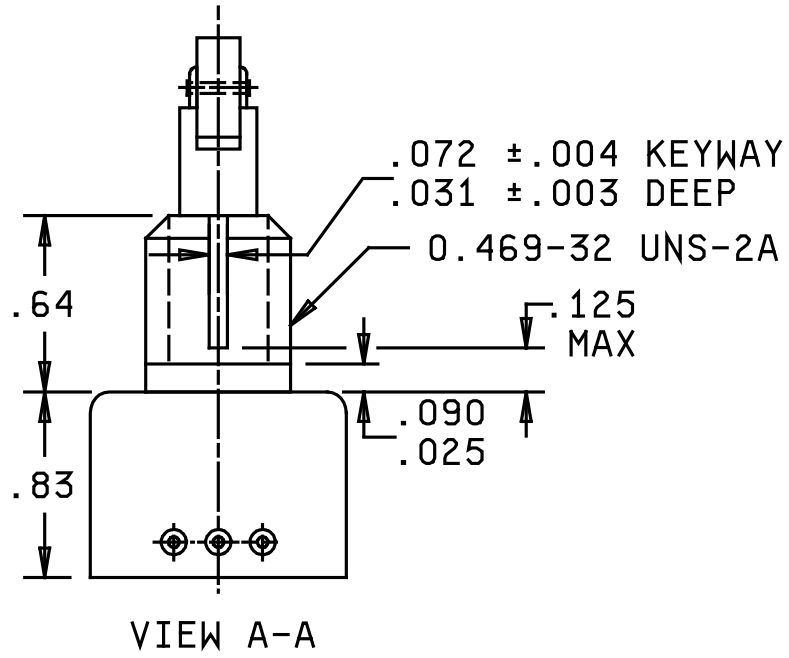


FIGURE 1. Dimensions and configuration.



DETAIL OF MOUNTING PLATE, 0.100 THICK



LESS MOUNTING HARDWARE AND DECAL

FIGURE 1. Dimensions and configuration - Continued.

Inches	mm	Inches	mm
0.003	0.08	0.375	9.53
0.004	0.10	0.42	10.67
0.005	0.13	0.433	11.00
0.010	0.25	0.443	11.25
0.015	0.38	0.45	11.43
0.025	0.64	0.469	11.91
0.03	0.76	0.470	11.94
0.031	0.79	0.480	12.19
0.059	1.50	0.56	14.22
0.06	1.52	0.64	16.26
0.065	1.65	0.72	18.29
0.072	1.83	0.83	21.08
0.090	2.29	0.87	22.10
0.100	2.54	0.93	23.62
0.120	3.05	0.906	23.01
0.125	3.18	1.00	25.40
0.164	4.17	1.56	39.62
0.22	5.59	1.812	46.02
0.26	6.60	2.00	50.80
0.36	9.14	2.25	57.15
		7.00	177.80

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance (in inches) is 0.03 for 2 place decimals and 0.005 for 3 place decimals.
4. Exact shape of switch optional within envelope dimensions shown.
5. Mounting plate shall be positioned between indicated dimensions.
6. Decal: Pressure sensitive, aggressive tack type, using permanent adhesive.
7. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for hardware material.
8. Lead wire shall be 20 gauge, flame and abrasion, insulated black and shall be capable meeting the environmental and system requirements of the intended application.

FIGURE 2. Dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configuration: See figures 1.

Enclosure design: 3.

Temperature characteristic: 1.

Shock type: M.

Sinusoidal vibration grade: 2.

Military part number: M8805/114-01.

Finish: All exposed parts shall be corrosion resistant or shall be treated for corrosion resistance.

Mounting hardware: Mounting plate shall be positioned as shown on figure 1.

Weight (with leads): 0.20 pound maximum.

Operating characteristics:

Actuating force: 9 ± 3 pounds.

Releasing force: 4 pounds minimum.

Pretravel: 0.040 inch maximum.

Overtravel: 0.125 inch minimum.

Overtravel force: 30 pounds maximum.

Movement differential: 0.020 inch minimum.

Strength of actuating means: 30 pounds.

Salt spray: Connectors shall be coupled during the test and examined for corrosion following the test.

Sand and dust: Connectors shall be coupled during the test. Following the test, there shall be no evidence of dust inside the connectors.

Mechanical endurance: 25,000 cycles.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

TABLE I. Electrical ratings.

Load	Sea level 28 V dc (amperes)
Resistive	7
Inductive	4
Motor	4

Marking: Black printing 0.06 inch high on white background (decal).

Terminal identification: Include circuit schematic diagram.

Qualification inspection: Table II applies only if qualified MIL-PRF-8805/4 basic sensitive switches are utilized, and similar products have been qualified to MIL-PRF-8805/43 or MIL-PRF-8805/104.

TABLE II. Qualification inspection.

Number of sample units	Tests of MIL-PRF-8805 qualification inspection table
6	Group I
2	Group III
4 1/	Group VII

1/ Electrical endurance: Only resistive and inductive loads need to be tested

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where modifications from this revision 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:

MIL-PRF-8805
MS27144
MIL-PRF-8805/104
MS25082
MIL-PRF8805/43
NEMA-HP3
MIL-PRF-8805/4
NASM 35333

Custodian:
Army - AT
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-2011-115)

Review activities:
Air Force - 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 https://assist.dla.mil/ .