

INCH-POUND

MIL-S-8805/50D
20 June 2006

SUPERSEDING
MIL-S-8805/50C
31 October 2001

MILITARY SPECIFICATION SHEET

SWITCHES, SENSITIVE, ROLLER-LEVER, WATERTIGHT

INACTIVE FOR NEW DESIGN AFTER 10 FEBRUARY 1971

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

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

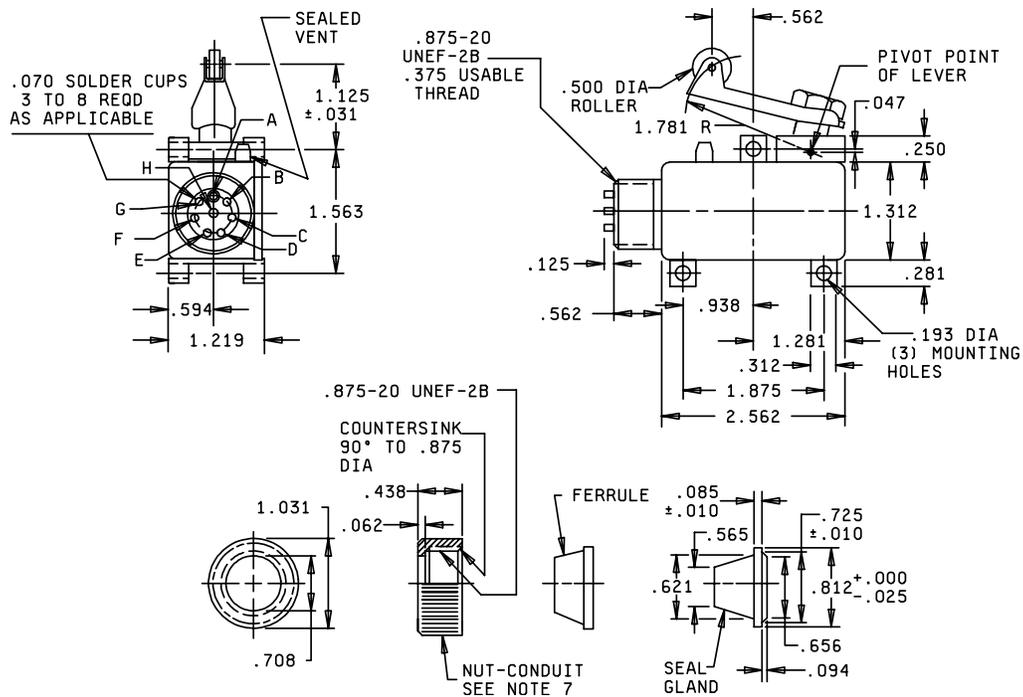
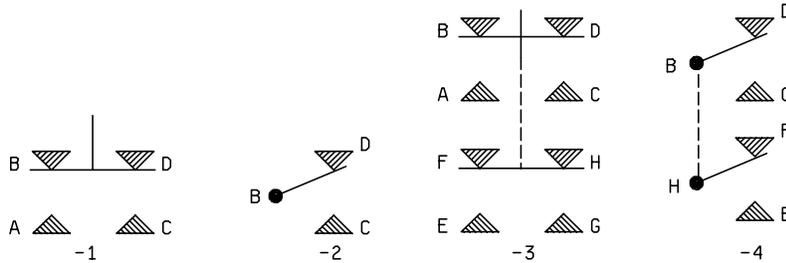
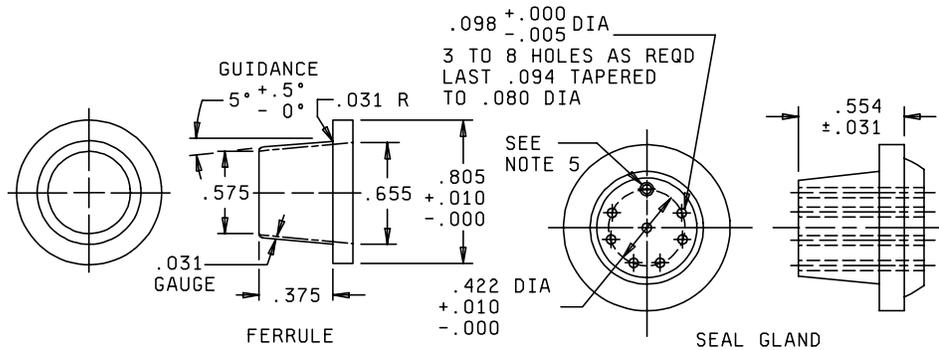


FIGURE 1. Dimensions and configuration.

MIL-S-8805/50D



Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	0.13	.098	2.49	.562	14.28	.875	22.23
.010	0.25	.125	3.18	.565	14.35	.938	23.83
.015	0.38	.193	4.90	.575	14.61	1.031	26.19
.025	0.64	.250	6.35	.594	15.09	1.125	28.58
.031	0.79	.281	7.14	.621	15.77	1.219	30.96
.047	1.19	.312	7.92	.655	16.64	1.281	32.54
.062	1.57	.375	9.53	.656	16.66	1.312	33.32
.070	1.78	.422	10.72	.708	17.98	1.563	39.70
.080	2.03	.438	11.13	.725	18.42	1.781	45.24
.085	2.16	.500	12.70	.805	20.45	1.875	47.63
.094	2.39	.554	14.07	.812	20.62	2.562	65.07

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .015$ (0.38 mm), except $\pm .005$ (.127 mm) for ferrule and seal gland.
4. The "A" pin shall be permanently indicated with a circle.
5. One hole on small end of gland shall be permanently marked with a circle, to be mounted on "A" pin.
6. The circuit and the terminal arrangement shall be marked on the switch case.
7. The dimensions of the electrical conduit coupling nut shall be in accordance with AN3054-8 or equivalent. Alternative base metals and protective finishes, as approved by the qualifying activity, may be used.

FIGURE 1. Dimensions and configuration - Continued

MIL-S-8805/50D

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 3 (watertight).

Temperature characteristic: 2 (-65° to +125°C).

Shock type: 50 g's, sawtooth, in accordance with method 213, test condition G, MIL-STD-202.

Sinusoidal vibration grade: 1 (10 to 500 Hz).

Material:

Ferrule: Deep drawn steel gauge number 22 (.031 inch), plated to resist corrosion.
Seal gland: Silicon rubber or equivalent.

Weight: 7.0 ounce maximum.

Operating characteristics:

Actuating force: 4.0 +2, -0 pounds.

Pretravel: .100 ±.031 inch.

Overtravel: .250 inch minimum.

Movement differential: .062 +.025, -.010 inch.

Full overtravel force: 11 +4, -3 pounds.

Coincidence of operating and releasing points: In switches having more than one moving contact, the moving contacts shall open and close together within .015 inch of actuator travel as measured at the roller axis.

Contact resistance: Not applicable.

Mechanical endurance: 200,000 cycles.

Electrical endurance: 100,000 cycles.

Electrical ratings: See table I.

TABLE I. Electrical ratings.

Load	Sea level	
	28 V dc amperes	115 V ac, 400 Hz amperes
Resistive	15	10
Inductive	10	10
Lamp	5	6

MIL-S-8805/50D

Qualification:

Group submission: See table II.

Conformance:

Group B inspection: Not applicable.

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

TABLE II. Qualification inspection – group submission. 1/

Examination or test	Basic switch	Other switch samples	Extent of approval
Qualification inspection table of MIL-PRF-8805, groups I, II, III, V, VI, VII, and VIII	MS25040-1	MS25040-2, and -4: Two sample units each, visual and mechanical examination	ALL

TABLE III. Part or Identifying Number (PIN). 1/

PIN	Contact arrangement
MS25040-1	2 circuit
MS25040-2	SPDT
MS25040-3	4 circuit
MS25040-4	DPDT

1/ Military Standard Drawing MS25040 is canceled and superseded by MIL-S-8805/50.

Referenced documents. In addition to MIL-PRF-8805, this document references the following:

MIL-STD-202
AN3054

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

Custodians:

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

Preparing activity:
DLA - CC

(Project 5930-2006-020)

Review activities:

Army – AR, GL, 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 <http://assist.daps.dla.mil/>