

INCH-POUND

MIL-S-8805/50C
31 October 2001
SUPERSEDING
MIL-S-8805/50B
16 June 1993

MILITARY SPECIFICATION SHEET

SWITCHES, SENSITIVE, ROLLER-LEVER, WATERTIGHT

INACTIVE FOR NEW DESIGN AFTER 10 FEBRUARY 1971

This specification forms a part of MIL-PRF-8805, dated 23 January 1998, and is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-8805.

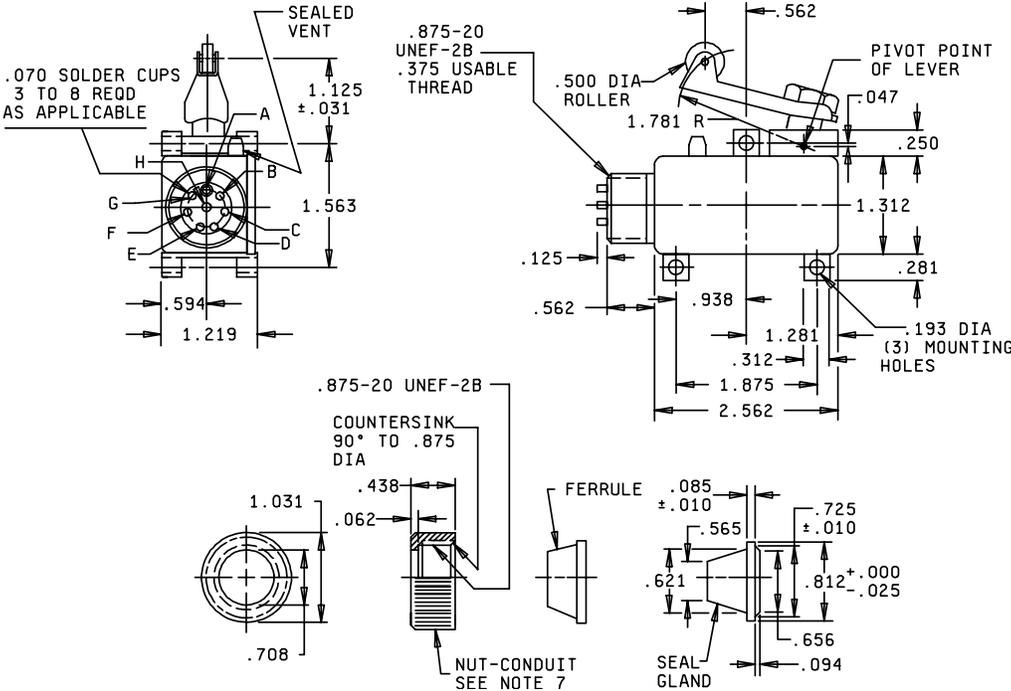
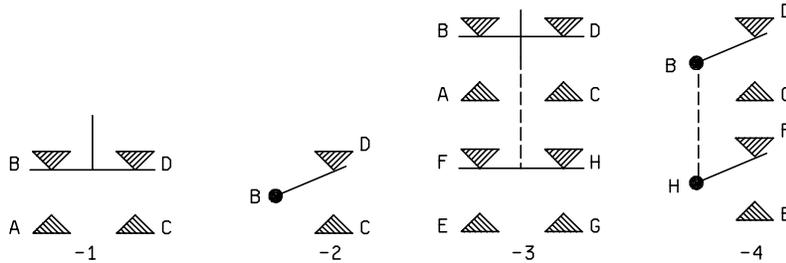
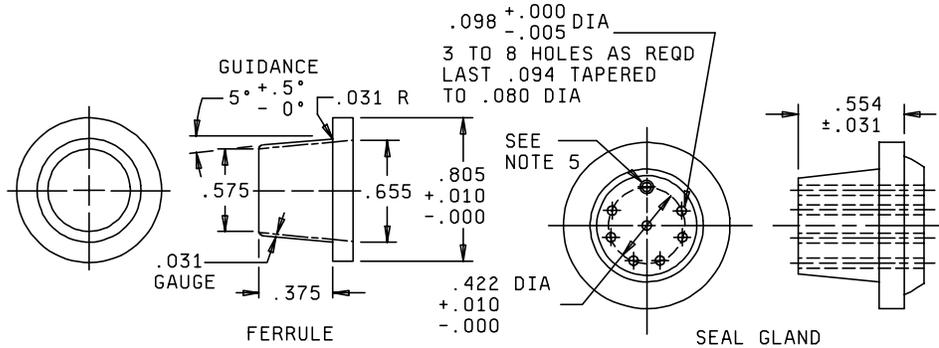


FIGURE 1. Dimensions and configuration.

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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.

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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: Silicone 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	115 V ac, 400 Hz
	amperes	amperes
Resistive	15	10
Inductive	10	10
Lamp	5	6

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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.

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).

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

Custodians:

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

Preparing activity:
DLA - CC

(Project 5930-1126-13)

Review activities:

Army - AR, GL, MI
Navy - AS, MC, OS, SH
Air Force - 19, 99