

PERFORMANCE SPECIFICATION SHEET

SWITCH, PUSH, MICROPHONE, DPST, NORMALLY OPEN, FOOT OPERATED,
MOMENTARY, UNSEALED AND WATERTIGHT

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

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

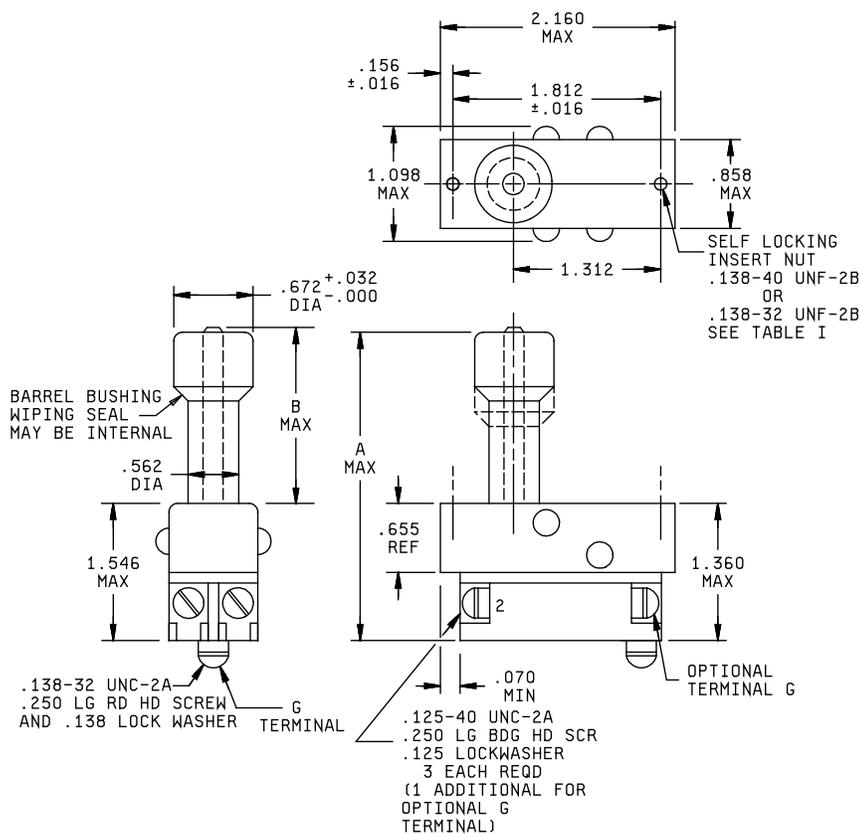
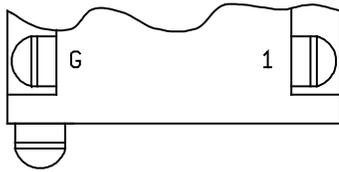
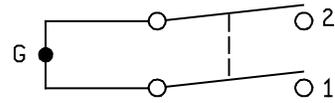


FIGURE 1. Dimensions and configuration.

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TERMINAL MARKINGS



SCHEMATIC DIAGRAM

Inches	mm	Inches	mm
.010	0.25	.858	21.79
.016	0.41	.910	23.11
.032	0.81	1.098	27.89
.070	1.78	1.312	33.32
.125	3.18	1.360	34.54
.138	3.51	1.546	39.27
.156	3.96	1.660	42.16
.250	6.35	1.812	46.02
.562	14.27	2.160	54.86
.655	16.64	2.218	56.34
.672	17.07	2.968	75.39

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± 0.010 .
4. Mounting hardware not furnished.
5. Lockwashers are not captive to terminal screws.
6. Dimension A is 2.218 or 2.968, see table I.
7. Dimension B is 0.910 or 1.660, see table I.
8. Design optional within envelope dimensions shown.

FIGURE 1. Dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Enclosure design: 1 (unsealed) or 3 (watertight), see table I.

Temperature characteristic: -40°C to +85°C.

Thermal shock: In accordance with test condition A, method 107 of MIL-STD-202, except low temperature extreme shall be -40°C (-40°C to +85°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:

Mounting bracket: Steel, corrosion resistant or equivalent.

Weight:

With short actuator bushing (M8805/55-001, -003, -005, -007 and -009): 0.25 pound maximum.
With long actuator bushing (M8805/55-002, -004, -006, and -008): 0.32 pound maximum.

Operating characteristics:

±10% variation from specified values acceptable after test.

Actuating force: 7.0 (+4 -0) pounds for -001 thru -008
13 ± 2 pounds for -009

Pretravel: .090 inch minimum.

Total travel: .165 inch minimum.

Overtravel: .050 inch minimum.

Differential travel: .050 inch minimum.

Full overtravel force: 20 pounds maximum for -001 thru -008
25 pounds maximum for -009

Release force: 0.5 pounds minimum.

Rated load at 28 V dc: 0.75 ampere inductive at sea level only.

Overload at 28 V dc:

Inductive: 1.75 amperes

Minimum operating cycles:

Rated load: 50,000 cycles

Overload: 1,000 cycles.

Dielectric withstanding voltage:

Altitude: 50,000 feet.

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Terminal strength:

Pull: 20 pounds.

Torque: 5 inch pounds.

Strength of actuating means: 20 pounds.

Moisture resistance: (Applicable to M8805/55-005 through -009 only) Insulation resistance shall be not less than 2.5 megohms in the wet condition, and not less than 50 megohms in the dry condition.

Salt spray (corrosion):

Unsealed switches (M8805/55-001 through -004): Group III of the MIL-PRF-8805 qualification inspection table is applicable, except no electrical test applicable following salt spray.

Sand and dust: Method I.

Solderability: Not applicable.

Mechanical endurance: 50,000 cycles.

Qualification inspection: See table II.

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

TABLE I. PIN's, configurations and dimensions.

Part or Identifying Number PIN ^{1/}	Seal	Actuator bushing	Dimensions		Insert nut thread
			A	B	
M8805/55-001 M8805/55-002	Unsealed	Short	2.218	0.910	.138-40 UNF-2B
		Long	2.968	1.660	
M8805/55-003 M8805/55-004	Unsealed	Short	2.218	0.910	.138-32 UNF-2B
		Long	2.968	1.660	
M8805/55-005 M8805/55-006	Watertight	Short	2.218	0.910	.138-40 UNF-2B
		Long	2.968	1.660	
M8805/55-007 M8805/55-008	Watertight	Short	2.218	0.910	.138-32 UNF-2B
		Long	2.968	1.660	
M8805/55-009	Watertight	Short	2.218	0.910	.138-40 UNF-2B

^{1/} M8805/55-001 replaces and is interchangeable with canceled PIN MS25039-1.

TABLE II. Qualification inspection group submission.

Examination or test <u>1/</u> <u>2/</u>	Basic switch	Other switch samples <u>1/</u>	Extent of approval
Groups I, II, III, VI, VII, and VIII	M8805/55-005	M8805/55-008 Group I	ALL
Groups I, II, III, and V	M8805/55-001		

- 1/ Group numbers refer to those inspection groups specified in the MIL-PRF-8805 qualification inspection table.
- 2/ If only the sealed versions, or only the unsealed versions are being qualified, the entire qualification inspection table of MIL-PRF-8805 is applicable.

Reference documents:
MIL-PRF-8805
MIL-STD-202

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.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC
(Project 5930-2010-022)

Review activities:
Army - AR, 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 <https://assist.daps.dla.mil/> .