

INCH-POUND

MIL-PRF-8805/92D
19 October 2006
SUPERSEDING
MIL-PRF-8805/92C
31 October 2001

PERFORMANCE SPECIFICATION SHEET

SWITCH ASSEMBLIES, SENSITIVE, LEVER LOCK, 5 AMPERES, UNSEALED

This specification 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.

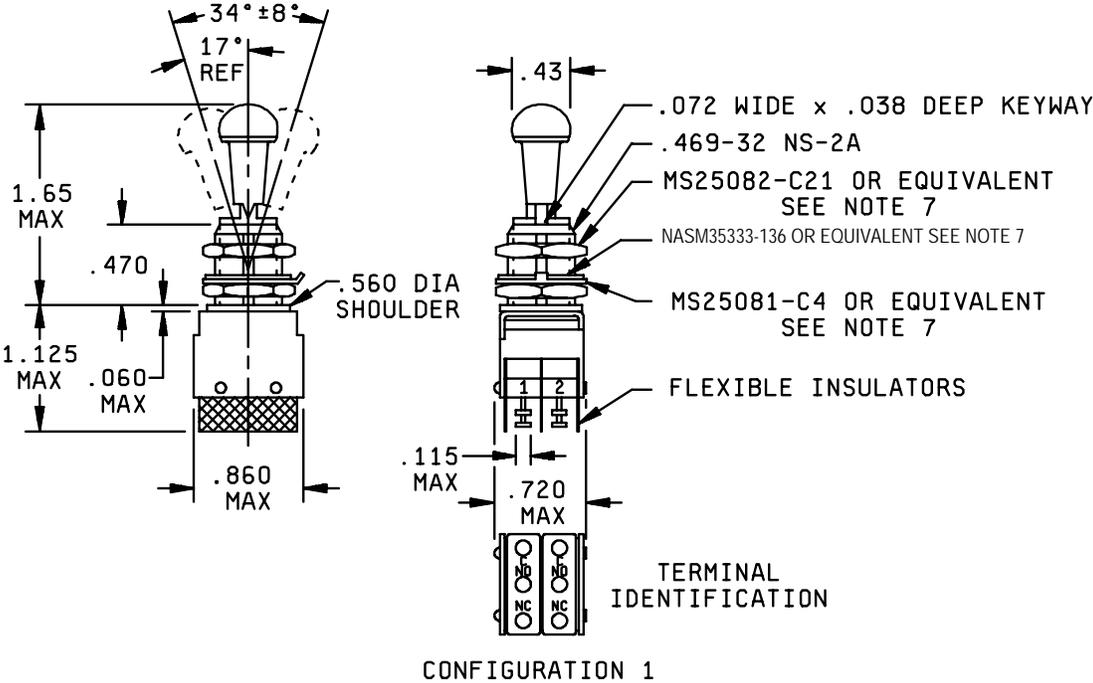
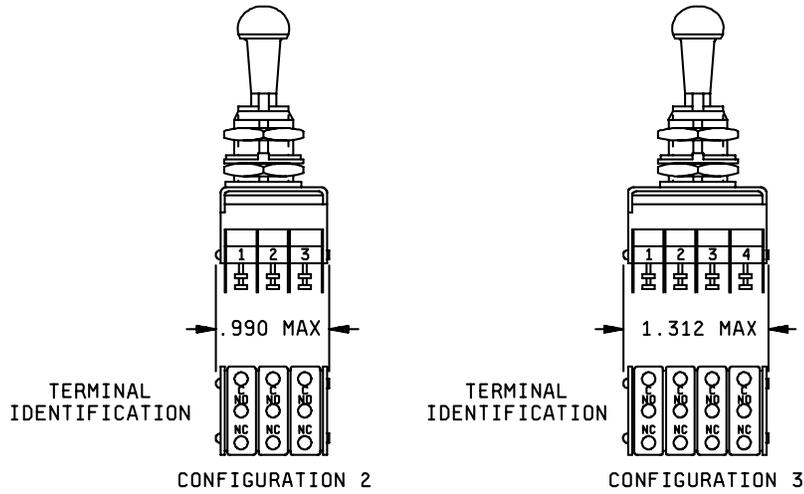


FIGURE 1. Configurations and dimensions.



KEYING SIDE →

"A" LOCKED IN THREE POSITIONS	"B" LOCKED IN CENTER AND EXTREME POSITION (KEYWAY SIDE)	"D" LOCKED OUT OF CENTER POSITION	"E" LOCKED IN CENTER POSITION
"F" LOCKED IN EXTREME POSITION (OPPOSITE KEYWAY)	"G" LOCKED IN EXTREME POSITION (KEYWAY SIDE)	"J" LOCKED OUT OF CENTER AND EXTREME POSITION (OPPOSITE KEYWAY)	"K" LOCKED IN CENTER AND EXTREME POSITION (OPPOSITE KEYWAY)
"L" LOCKED OUT OF EXTREME POSITION (KEYWAY SIDE)	"M" LOCKED OUT OF AND INTO EXTREME POSITION (OPPOSITE KEYWAY)	"N" LOCKED OUT OF EXTREME POSITION (OPPOSITE KEYWAY)	"P" LOCKED OUT OF AND INTO EXTREME POSITION (KEYWAY SIDE)

LOCKING COMBINATION

Inches	mm	Inches	mm	Inches	mm
.038	.97	.43	10.92	.860	21.84
.060	1.52	.469	11.91	.990	25.15
.062	1.57	.470	11.94	1.125	28.58
.072	1.83	.560	14.22	1.312	33.32
.115	2.92	.720	18.29	1.65	41.91

FIGURE 1. Configurations and dimensions - continued.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest .01 mm) are given for general information only and are based on 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± 0.015 (.38 mm) for three place decimals and ± 0.02 (51 mm) for two place decimals.
4. Design configuration optional provided specified dimensions are not exceeded.
5. Base switch number shall be permanently marked as shown.
6. Double turret type terminals shall accept two AN-20 or equivalent wires.
7. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for hexagon nut, lock washer and key washer material. Dimensions shall be in accordance with the referenced hardware specifications.

FIGURE 1. Configurations and dimensions - continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 1 (Unsealed).

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

Shock type: M (100 g, test condition I, method 213 of MIL-STD-202).

Vibration grade: 1 (10 to 500 Hz).

Weight: See table III.

Operating characteristics:

Coincidence of operating and releasing points: All poles shall transfer within 10° of lever travel.

Locking arrangement: Positive locking shall be accomplished and shall prevent motion of the toggle lever until the locking mechanism is manually released.

Locking mechanism release: The force required to release the locking mechanism shall be 3 to 5 pounds.

Material:

Bracket and lever: Corrosion resistant steel.

Switch assembly: Basic switch shall be MS25085-2 (MIL-PRF-8805/2) switch listed on QPL-8805.

Contact resistance: Not applicable.

Dielectric withstanding voltage:

Sea level: 1,000 Vrms.

Altitude: 50,000 feet, 400 Vrms

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In qualification inspection table after electrical endurance the dielectric withstanding voltage points of application between all unconnected terminals of the same pole are not applicable.

Mechanical endurance: 100,000 cycles.

Lever lock switches shall be tested for 100,000 cycles (at room ambient conditions) with the lever being pulled to its fully extended position and then permitted to return to its fully retracted position by spring action without operation of the switches. The cycling rate for this test shall be 60 cycles per minute maximum. In addition to this test, the lever lock switches shall receive a normal mechanical endurance test of 100,000 cycles of operation with the lever lock mechanism held in its fully extended position continuously throughout the test.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

Qualification inspection (group submission): See table II.

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

Circuit configuration: See table IV.

TABLE I. Electrical ratings.

Load	Sea level		50,000 feet
	28 V dc	115 V ac, 60 Hz	28 V dc
	amperes	amperes	amperes
Resistive	5	5	5
Inductive	3	5	2.5
Lamp	2.4	1.5	2.4

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TABLE II. Qualification inspection group submission.

Examination or test	Basic switch assembly	Additional sample units for combined submission	Extent of approval
<u>Group I.</u> Visual and mechanical examination Operating characteristics	M8805/92-002 (12 sample units)	(2 sample units each) M8805/92-005 M8805/92-016 M8805/92-019 (tested to group I only)	All
<u>Group II.</u> Strength of actuating means (2 sample units only) Strength of mounting bushing (2 sample units only) Thermal shock Vibration Shock Operating characteristics Dielectric withstanding voltage Visual and mechanical examination	(4 sample units from group I)	-----	
<u>Group III.</u> Salt spray (corrosion) Visual and mechanical examination	(2 sample units from group I)	----	
<u>Group IV.</u> Low temperature operation (2 sample units) Mechanical endurance at room ambient conditions (2 units) Operating characteristics Dielectric withstanding voltage Visual and mechanical examination	(4 sample units from group I)	----	
<u>Group V.</u> Electrical endurance Inductive load, dc	(2 sample units from group I)	----	

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TABLE III. PIN's and characteristics.

PIN M8805/92-	Switch configuration number (See figure I)	Locking combination	Table IV circuit configuration	Switch action			Weight			
				Opposite keyway	Center	Keyway				
001	1	D	1	Main	None	Main	lb. max			
002	3	D	4				.075			
003		F						.100		
004		G								
005	1	E	2	Mom	Main	Mom	.075			
006		A D E F G J K L M N		Main	Main	Main	Main	Main	.075	
007									.075	
008									.075	
009									.075	
010									.075	
011									.075	
012									.075	
013									.075	
014									.075	
015									.075	
016	2	B	3	Main	Main	Main	.075			
017		E					Mom	Main	Main	.075
018		P								.075
019	2	A	3	Main	Main	Main	.090			

TABLE IV. Circuit configuration.

Circuit configuration	Switch pole number	Circuit closed with the toggle lever in		
		Opposite keyway side	Center	Keyway side
1	1	C-NC	None	C-NO
	2	C-NC		C-NO
2	1	C-NO	C-NC	C-NC
	2	C-NC		C-NO
3	1	C-NO	C-NC	C-NC
	2	C-NC		C-NO
	3	C-NO		C-NC
4	1	C-NC	None	C-NO
	2	C-NC		C-NO
	3	C-NC		C-NO
	4	C-NC		C-NO

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

- MIL-PRF-8805/2
- MIL-STD-202

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

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Custodians:

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

Preparing activity:

DLA - CC

(Project 5930-2006-038)

Review activities:

Army – AR, AV, MI
Navy – AS, MC, OS
Air Force – 19

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/>