INCH-POUND
MS27739F
18 April 2011
SUPERSEDING
MS27739E
28 September 1987

DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, LEVER LOCK, SOLDER TERMINAL

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-DTL-3950.

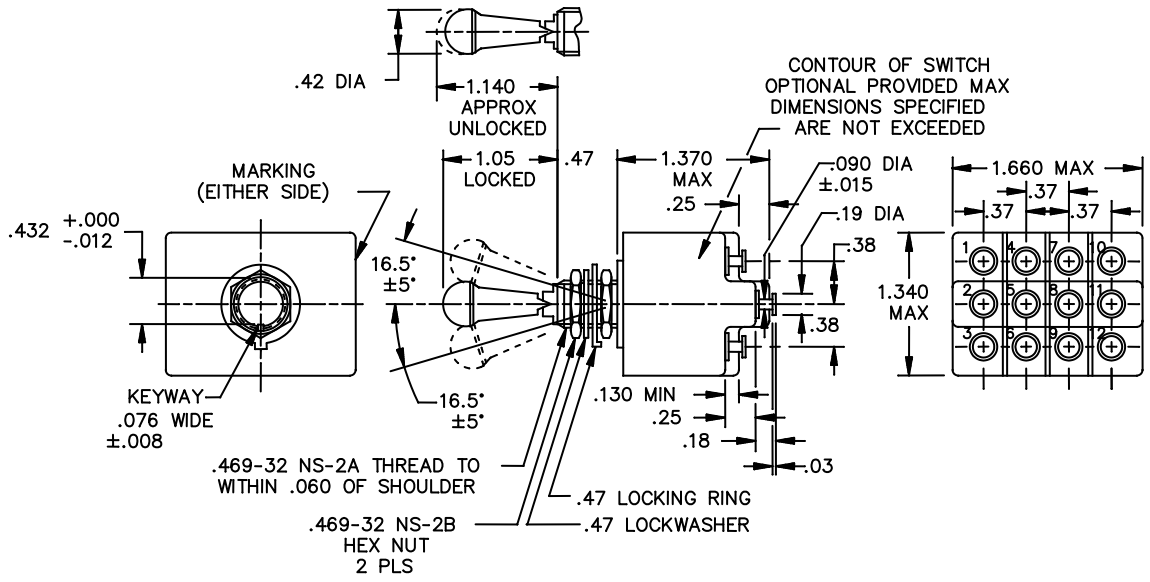
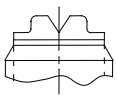
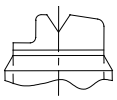
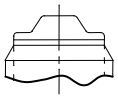
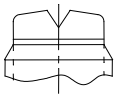
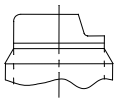
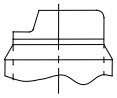
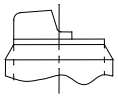
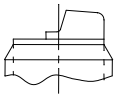
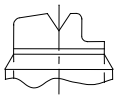
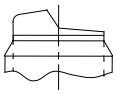
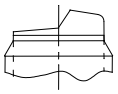
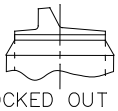


FIGURE1. Dimensions and configuration

LOCKING COMBINATIONS

A  LOCKED IN THREE POSITIONS	B  LOCKED IN CENTER AND DOWN POSITIONS (KEYING SIDE)	D  LOCKED OUT OF CENTER POSITION	E  LOCKED IN CENTER POSITION
F  LOCKED IN UP POSITION (OPPOSITE KEYING)	G  LOCKED IN DOWN POSITION (KEYING SIDE)	H  LOCKED OUT OF CENTER AND DOWN POSITION (KEYING SIDE)	J  LOCKED OUT OF CENTER AND UP POSITION (OPPOSITE KEYING)
K  LOCKED IN CENTER AND UP POSITION (OPPOSITE KEYING)	L  LOCKED OUT OF DOWN POSITION (KEYING SIDE)	M  LOCKED OUT OF AND INTO UP POSITION (OPPOSITE KEYING)	N  LOCKED OUT OF UP POSITION (OPPOSITE KEYING)
P  LOCKED OUT OF AND INTO DOWN POSITION (KEYING SIDE)	FIGURES A THRU P DO NOT REPRESENT DETAILS OF CONSTRUCTION. THEY SCHEMATICALLY ILLUSTRATE LOCKING CONFIGURATIONS AND MOMENTARY POSITIONS		

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	0.13	.060	1.52	.25	6.4	.47	11.9
.008	0.20	.076	1.93	.37	9.4	1.05	26.7
.012	0.30	.090	2.29	.38	9.7	1.140	28.96
.015	0.38	.130	3.30	.42	10.7	1.370	34.80
.020	0.51	.18	4.6	.432	10.97	1.660	42.16
.03	0.8	.19	4.8	.469	11.91		

NOTES:

1. Dimensions are inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± .020 (0.51 mm) for two place decimals and ± .005 (0.13 mm) for three place decimals.
4. For hardware detail specifications see appendix of MIL-DTL-3950.
5. Part number example, MS27739-21A (locking combination ‘A’).
6. In the event of a conflict between the text of this standard and the reference cited herein shall take precedence.

FIGURE1. Dimensions and configuration Continued

REQUIREMENTS

Maximum weight is 0.23 pound.

All switches on this standard are designed so that the movement of the switch mechanism is opposite to that of the toggle lever.

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

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

The locking means at the top of the toggle bushing shall be capable of withstanding a torque of 20 inch-pound applied in both directions immediately following the humidity test.

Electrical rating: See table I.

TABLE I: Detail Requirements

MS Part No.	Available locking combinations	Circuit with Toggle Lever In			Current capacity (amperes) 28 volts DC			Current capacity(amperes) 115 volts, 60 and 400 Hertz AC		
		Keying side	Center	Opposite keying side	Lamp-Load circuit	Resistive circuit	Inductive circuit	Lamp-Load circuit	Resistive circuit	Inductive circuit
MS27739-1	ALL	1-2 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 5-6 8-9 ON 11-12	5	20	12	4	15	15
MS27739-2	E, F, K, L, M, N	1-2 MOM. 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 5-6 8-9 ON 11-12	4	18	10	2	11	8
MS27739-3	E, L, N	1-2 MOM. 4-5 7-8 ON 10-11	2-3 4-5 7-8 ON 11-12	2-3 MOM. 5-6 8-9 ON 11-12						
MS27739-21	ALL	1-2 7-8 4-5 ON 10-11	OFF	2-3 8-9 8-9 ON 11-12	5	20	12	4	15	15
MS27739-22	D, F, G	OFF	NONE	2-3 8-9 5-6 ON 11-12						
MS27739-23	D, F, G	1-2 7-8 4-5 ON 10-11	NONE	2-3 8-9 5-6 ON 11-12						
MS27739-24	E, F, K, M	NONE	OFF	2-3 8-9 5-6 ON 11-12						
MS27739-25	F	NONE	MOM. OFF	2-3 8-9 5-6 ON 11-12	4	18	10	2	11	8
MS27739-26	F	1-2 MOM. 7-8 4-5 ON 10-11	NONE	2-3 8-9 5-6 ON 11-12						
MS27739-27	E, L, N	1-2 MOM. 7-8 4-5 ON 10-11	OFF	2-3 8-9 5-6 ON 11-12						
MS27739-28	E	1-2 MOM. 7-8 4-5 ON 10-11	OFF	NONE						
MS27739-29	F	MOM. OFF	NONE	2-3 8-9 5-6 ON 11-12						
MS27739-30	F	1-2 MOM. 7-8 4-5 ON 10-11	NONE	OFF						
MS27739-31	E, F, K, L, M, N	1-2 MOM. 7-8 4-5 ON 10-11	OFF	2-3 8-9 5-6 ON 11-12						
MS27739-32	E	NONE	1-2 7-8 4-5 ON 10-11	2-3 MOM. 8-9 5-6 ON 11-12						
MS27739-33	E, F, K, M	NONE	1-2 7-8 4-5 ON 10-11	2-3 8-9 5-6 ON 11-12	5	20	12	4	15	15

Referenced documents
MIL-DTL-3950

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 – AS
Air Force – 85
DLA – CC

Preparing activity
DLA – CC

(Project 5930-2011-061)

Review activities
Army – AR, AV, MI
Navy – EC, MC
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.daps.dla.mil/ .