

INCH-POUND

MS27737G

18 April 2011

SUPERSEDING

MS27737F

04 September 1991

DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, ONE 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.

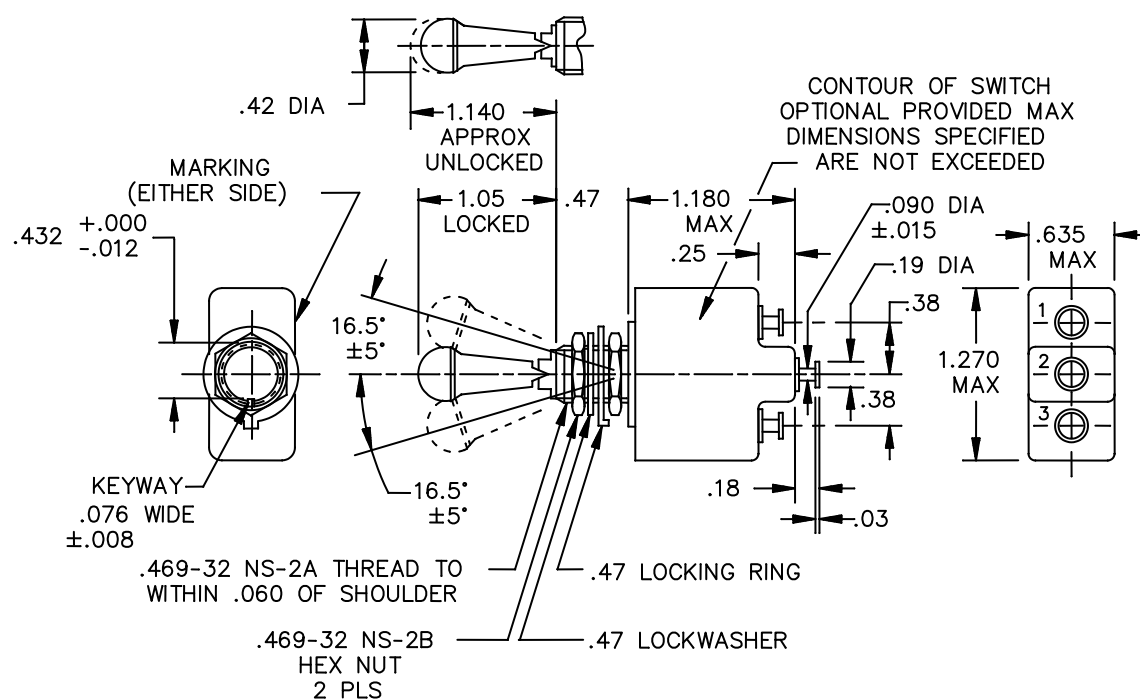
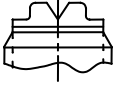
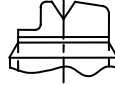
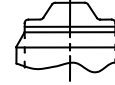
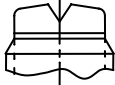
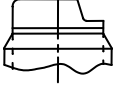
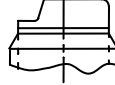
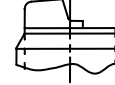
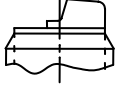
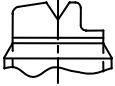
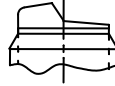

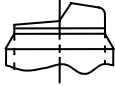



FIGURE1. Dimensions and configuration

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LOCKING COMBINATIONS

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

| Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|-------|--------|-------|
| .005 | 0.13 | .060 | 1.52 | .25 | 6.4 | .635 | 16.13 |
| .008 | 0.20 | .076 | 1.93 | .38 | 9.7 | 1.05 | 26.7 |
| .012 | 0.30 | .090 | 2.29 | .42 | 10.7 | 1.140 | 28.96 |
| .015 | 0.38 | .18 | 4.6 | .432 | 10.97 | 1.180 | 29.97 |
| .020 | 0.51 | .19 | 4.8 | .469 | 11.91 | 1.270 | 32.27 |
| .03 | 0.8 | | | .47 | 11.9 | | |

NOTES:

1. Dimensions are inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .020$ (0.51 mm) for two place decimals and $\pm .005$ (0.13 mm) for three place decimals.
4. For hardware and terminal screw detail specifications, see appendix of MIL-DTL-3950.
5. Part number example MS27737-21A (locking combinations' A').
6. In the event of a conflict between the text of this standard and the reference cited herein, the text of this standard shall take precedence.

FIGURE1. Dimensions and configuration Continued

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REQUIREMENTS

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-pounds applied in both directions immediately following the humidity test.

Maximum weight is 0.11 pound.

Electrical rating: See table I.

TABLE I Detail Requirements.

| MS Part Number | 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 |
| MS27737-21 | ALL | 1-2 ON | OFF | 2-3 ON | 5 | 20 | 15 | 3 | 15 | 10 |
| MS27737-22 | D,F,G | OFF | NONE | 2-3 ON | | | | | | |
| MS27737-23 | D,F,G | 1-2 ON | NONE | 2-3 ON | | | | | | |
| MS27737-24 | E,F,K,M | NONE | OFF | 2-3 ON | | | | | | |
| MS27737-25 | F | NONE | MOM. OFF | 2-3 ON | 4 | 15 | 10 | 2 | 15 | 7 |
| MS27737-26 | F | 1-2 MOM ON | NONE | 2-3 ON | | | | | | |
| MS27737-27 | E,L,N | 1-2 MOM ON | OFF | 2-3 MOM. ON | | | | | | |
| MS27737-28 | E | 1-2 MOM ON | OFF | NONE | | | | | | |
| MS27237-29 | F | MOM. OFF | NONE | 2-3 ON | | | | | | |
| MS27737-30 | F | 1-2 MOM ON | NONE | OFF | | | | | | |
| MS27737-31 | E,F,K,L,M,N | 1-2 MOM ON | OFF | 2-3 ON | | | | | | |
| MS27737-32 | E | NONE | ON 1-2 | 2-3 MOM. ON | 5 | 20 | 15 | 3 | 15 | 10 |
| MS27737-33 | E,F,K,M | NONE | ON 1-2 | 2-3 ON | | | | | | |

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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 5930-2011-059)

Review activities

Army – AV
Navy – EC
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/>.