| INCH-POUND |
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| MS27754F |
| 13 April 2011 |
| SUPERSEDING |
| MS27754E |
| 20 May 1988 |

## DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, MINIATURE, DOUBLE POLE TOGGLE SEAL, LEVER LOCK

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 sheet and MIL-DTL-83731.


| Inches | mm | Inches | mm | Inches | mm |
| :---: | :---: | :---: | :---: | :---: | :---: |
| .004 | 0.10 | .072 | 1.83 | .47 | 11.9 |
| .030 | 0.76 | .090 | 2.29 | .51 | 13.0 |
| .04 | 1.02 | .10 | 2.5 | .535 | 13.59 |
| .062 | 1.57 | .175 | 4.45 | .575 | 14.61 |
| .07 | 1.78 | .27 | 6.9 | .740 | 18.80 |
|  |  | .428 | 10.87 | 1.160 | 29.46 |

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .020(0.51 \mathrm{~mm})$ on two place decimals and $\pm .005(0.13 \mathrm{~mm})$ on three place decimals.
4. For hardware detail specifications, see supplement of MIL-DTL-83731.
5. Configuration of switch case is optional provided maximum dimensions specified are not exceeded.

FIGURE 1. Dimensions and configurations.

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FIGURE 2. Detail requirements.

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| Canceled MS part number 1/ | Substitute part number 1/ | Available locking combinations | Circuits made with toggle lever in |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Keying side } \\ 1-2 \quad 4-5 \end{gathered}$ | Center position | Opposite keying side 2-3 5-6 |
| MS27754-1 | MS27754-34 | All | On | 2-3 on 4-5 | On |
| -2 | -35 | E, F, K, L, M, N | Mom-on | 2-3 on 4-5 | On |
| -3 | -36 | E, L, N | Mom-on | 2-3 on 4-5 | Mom-on |
| -4 | -38 | All | On | 1-2 on 5-6 | On |
| -5 | -39 | E, F, K, L, M, N | Mom-on | 1-2 on 5-6 | On |
| -6 | -40 | E, L, N | Mom-on | 1-2 on 5-6 | Mom-on |

1/ The canceled part numbers are no longer acquirable; the substitute part numbers have a lower dielectric withstanding voltage at reduced barometric pressure (see test voltage requirement below).

## REQUIREMENTS:

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

Test voltage for dielectric withstanding voltage at reduced barometric pressure, shall be 400 V rms minimum.
Electrical endurance shall be performed for 30,000 cycles.
Mechanical endurance shall be performed 50,000 cycles at $-65^{\circ} \mathrm{C}$ and then 50,000 cycles at $85^{\circ} \mathrm{C}$.
Intermediate current shall be performed for 30,000 cycles.
Terminals shall be molded into the switch case and shall accommodate No. 18 AWG wire.
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 pound inches applied in both directions immediately following the humidity test.

Maximum weight shall be .045 pound.
Electrical ratings for 28 V dc and 115 V ac at 400 Hz . Lamp load $=1$ ampere, resistive load $=5$ amperes, inductive load = 2 amperes.

Part or Identifying Number (PIN) example: MS27754-36L (locking combination "L").

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

## Reference documents:

MIL-DTL-83731

| Custodian: | Preparing activity: |
| :--- | :---: |
| Army - CR | DLA - CC |
| Navy - AS |  |
| Air Force - 85 | (Project 5930-2011-019) |
| DLA - CC |  |

Review activity:
Army - AV, EA
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/.

