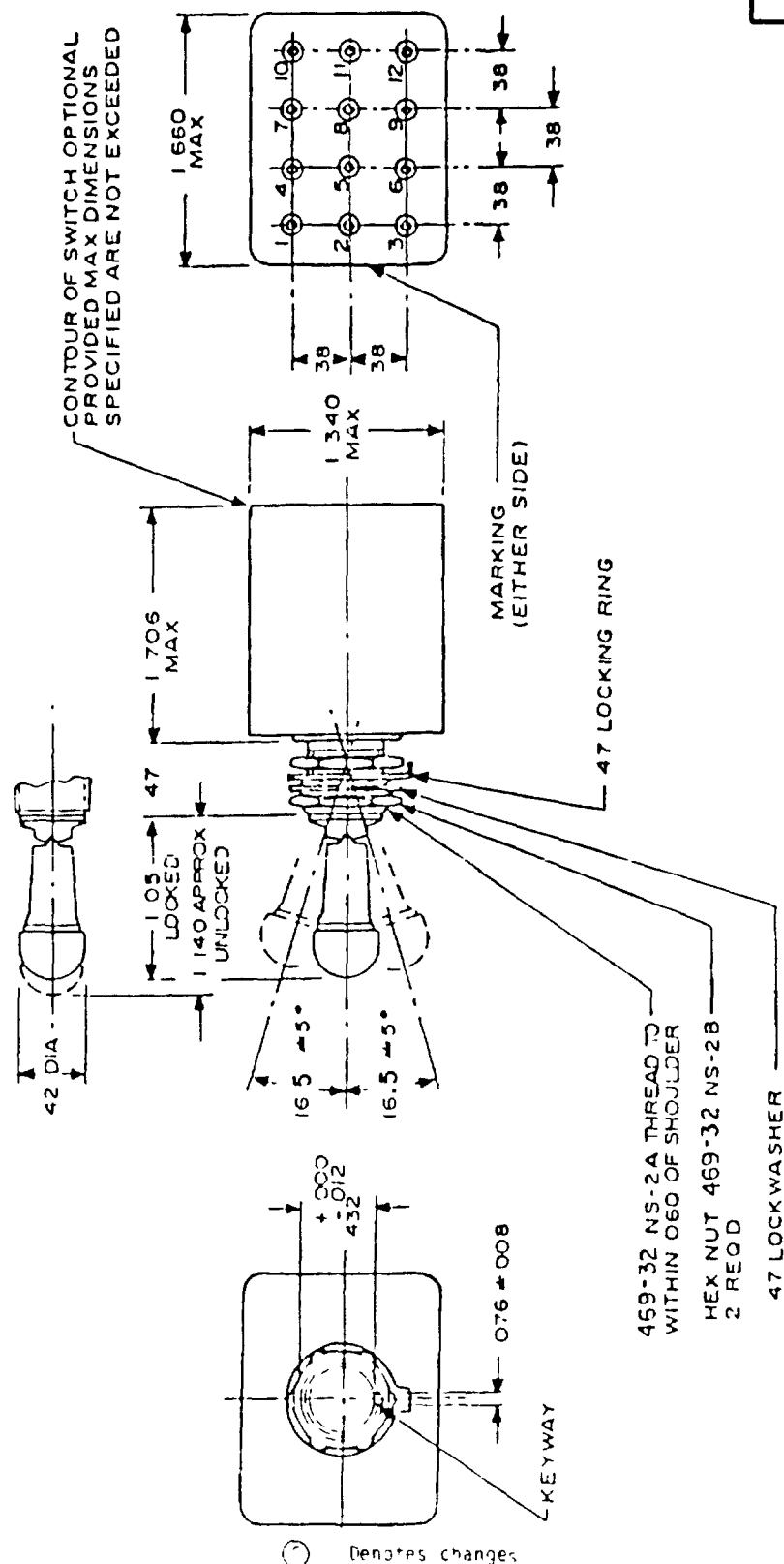


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① Denotes changes

| | | | |
|--|---------------------------|--|-------------------|
| DL Air Force - 85 Other Cust Army - EP Navy - AS | International Interest | TITLE SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS | MILITARY STANDARD |
| | | | MS27783 |
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| Inches | mm | Inches | mm |
|--------|------|--------|-------|
| .005 | 0.13 | .432 | 10.97 |
| .008 | 0.20 | .469 | 11.91 |
| .012 | 0.30 | .47 | 11.9 |
| .020 | 0.51 | 1.05 | 26.7 |
| .060 | 1.52 | 1.140 | 28.96 |
| .076 | 1.93 | 1.340 | 34.04 |
| .38 | 9.7 | 1.660 | 42.16 |
| .42 | 10.7 | 1.706 | 43.33 |

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 detail specifications, see appendix of MIL-S-3950
- 5 Contact installing/removal tool in accordance with M81969/14-03
- 6 Grommet sealing plug in accordance with MS27488A16
- 7 Sealing grommet shall seal on a smooth wire insulation of .068 (1.73 mm) to .103 (2.62 mm) diameters
- 8 Terminal shall adequately accept a wire contact within dimensional limits of M39029/1-102.
- 9 The terminal end of switch shall be color coded blue to indicate contact size
- 10 Direction of internal mechanism movement is opposite to the direction of the toggle movement.
- 11 Sealing plugs may be used in nonfunctional grommet holes
- 12 Maximum weight is .227 pound
- 13 Locking arrangement Positive locking shall be accomplished and shall prevent motion of the toggle lever until the locking mechanism is manually released
- 14 The force required to release the locking mechanism shall be 3 to 5 pounds
- 15 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.
- 16 Part number example MS27783-21A (locking combination 'A')
- 17 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
- 18 Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein

For changes see page 2

REVISED

15 May 1970

APPROVED

| | | | |
|---|---------------------------|--|---|
| P A Air Force - 85 Other Cust Army - EP Navy - AS | International Interest | TITLE SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS | MILITARY STANDARD MS27783 |
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User activity Air Force - 11

Army - AV
Navy - FC
Air Force - 90
DLA - ES

Review activities

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User activity Air Force - 11

 Review activity
 Air Force - 90
 UL - 15

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|---|--|---------------------------|--|--|-------------------------------------|--|
| P A Air Force - 85 Other Cust Army - ER Navy - AS | | International interest | TITLE SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS | | MILITARY STANDARD MS27783 | |
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| | | | | | | | |
|--|--|---|--|---|--|--|--|
| Locking combinations | | | | | | | |
| A | B | C | D | E | F | G | H |
| LOCKED IN THREE POSITIONS | LOCKED IN CENTER AND DOWN POSITIONS (KEYING SIDE) | LOCKED OUT OF CENTER POSITION | LOCKED OUT OF CENTER POSITION | LOCKED IN CENTER POSITION | LOCKED IN UP POSITION (OPPOSITE KEYING) | LOCKED IN DOWN POSITION (KEYING SIDE) | LOCKED OUT OF CENTER AND DOWN POSITION (KEYING SIDE) |
| J | K | L | M | N | P | FIGURES A THROUGH P DO NOT REPRESENT DETAILS OF CON- STRUCTION. THEY SCHEMATICALLY ILLUSTRATE LOCKING CONFIGURATIONS AND MOMENTARY POSITIONS | |
| LOCKED OUT OF CENTER AND UP POSITION (OPPOSITE KEYING) | LOCKED IN CENTER AND UP POSITION (OPPOSITE KEYING) | LOCKED OUT OF DOWN POSITION (KEYING SIDE) | LOCKED OUT OF AND INTO UP POSITION (OPPOSITE KEYING) | LOCKED OUT OF UP POSITION (OPPOSITE KEYING) | LOCKED OUT OF AND INTO DOWN POSITION (KEYING SIDE) | | |

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Army - AV
 Navy - EC
 Air Force - 99
 DLA - ES

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Review activities
 User activity
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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 | Lamp-load circuit | Resistive circuit |
| | | Center | Inductive circuit | Inductive circuit |
| MS27783-1 | All | 1-2 4-5 12-3 7-8 On 10-11 7-8 On 11-12 8-9 On 11-12 | 5 | 12 |
| MS27783-2 | E, F, K, L, M, N | 1-2 Mom. 4-5 12-3 7-8 On 10-11 7-8 On 11-12 8-9 On 11-12 | 4 | 11 |
| MS27783-3 | E, L, N | 1-2 Mom. 4-5 12-3 7-8 On 10-11 7-8 On 11-12 8-9 On 11-12 | 4 | 11 |
| MS27783-21 | All | 1-2 7-8 4-5 On 10-11 Off | 5 | 12 |
| MS27783-22 | D, F, G | Off | 5 | 12 |
| MS27783-23 | D, F, G | 1-2 7-8 4-5 On 10-11 None | 5 | 12 |
| MS27783-24 | E, F, K, M | None | 5 | 12 |
| MS27783-25 | F | None | 5 | 12 |
| MS27783-26 | F | 1-2 Mom. 7-8 4-5 On 10-11 None | 5 | 12 |
| MS27783-27 | E, L, N | 1-2 Mom. 7-8 4-5 On 10-11 Off | 5 | 12 |
| MS27783-28 | E | 1-2 Mom. 7-8 4-5 On 10-11 Off | 5 | 12 |
| MS27783-29 | F | Mom. off | 5 | 12 |
| MS27783-30 | F | 1-2 Mom. 7-8 4-5 On 10-11 None | 5 | 12 |
| MS27783-31 | E, F, K, L, M, N | 1-2 Mom. 7-8 4-5 On 10-11 Off | 5 | 12 |
| MS27783-32 | E | 1-2 7-8 4-5 On 10-11 7-8 On 11-12 8-9 On 11-12 | 5 | 12 |
| MS27783-33 | E, F, K, M | 1-2 7-8 4-5 On 10-11 7-8 On 11-12 8-9 On 11-12 | 5 | 12 |

Test requirements

Test shall be performed in accordance with MIL-S-3950 except

- During all tests, switches shall be fully wired with appropriate wire and terminal contacts
- Contact voltage drop - the contact voltage drop with two terminals and the switch contact in series shall not exceed 8 millivolts measured from one wire contact through the contacts to the other wire contacts

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P A
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 Army - ER
 Navy - AS

International interest

TITLE

SWITCH, TOGGLE, FOUR POLE, ENVIRONMENTALLY SEALED, LEVER-LOCK, INTEGRATED WIRE TERMINALS

MILITARY STANDARD

MS27783

Procurement Specification
 MIL-S-3950

SUPERSEDES

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