

INCH-POUND

MS27722F

14 February 2024

SUPERSEDING

MS27722E

7 August 2019

DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, ONE POLE, ENVIRONMENTALLY SEALED, INTEGRATED WIRE TERMINALS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the switches described herein shall consist of this specification and the latest issue of [MIL-DTL-3950](#).

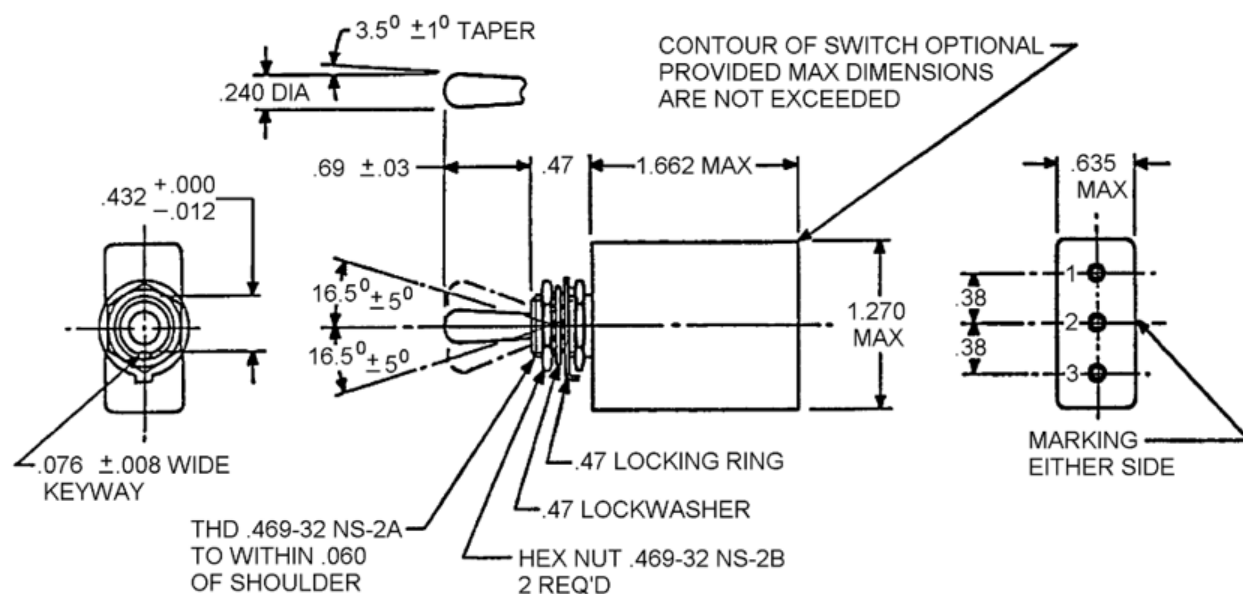
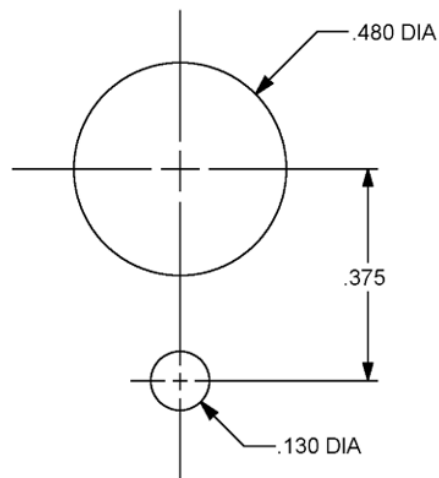


FIGURE 1. Dimensions and configuration.



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RECOMMENDED PANEL CUTOUT

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is ± 0.020 for two place decimals and ± 0.005 for three place decimals.
3. Contact installing and removal tool, M81969/14-03, in accordance with [SAE-AS81969/14](#).
4. For hardware detail specifications, see appendix of [MIL-DTL-3950](#).
5. Grommet holes or access to grommet holes, on nonfunctional terminals, optional.
6. The terminal end of the switch shall be color coded blue to indicate contact size.
7. Sealing plugs may be used in nonfunctional grommet holes when applicable.

FIGURE 1. Dimensions and configuration – Continued.

REQUIREMENTS:

Switching characteristics: See table I. Direction of movement of internal mechanism is opposite to the direction of the toggle movement.

Maximum weight: .105 pound.

Grommet sealing plug: MS27488-16-2 per [MS27488](#).

Sealing grommet: Sealing grommet shall seal on a smooth wire insulation of .068 to .103 diameters.

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

Electrical ratings: See table I.

Hardware: For detailed specifications, see appendix of [MIL-DTL-3950](#).

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Tests shall be performed in accordance with [MIL-DTL-3950](#) except:

- a. During all tests, switches shall be fully wired with the appropriate wire and terminal contacts.
- b. 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 contact to the other wire contacts.

TABLE I. Switching characteristics and electrical ratings.

PIN's	Circuit with toggle lever in			Current capacity (amperes) 28 V dc			Current capacity (amperes) 115 V ac, 60 and 400 Hz		
	Keying side	Center	Opposite keying side	Lamp load	Resistive load	Inductive load	Lamp load	Resistive load	Inductive load
MS27722-21	1-2 On	Off	2-3 On	5	20	15	3	15	10
MS27722-22	Off	None	2-3 On						
MS27722-23	1-2 On	None	2-3 On						
MS27722-24	None	Off	2-3 On						
MS27722-25	None	Mom off	2-3 On	4	15	10	2	15	7
MS27722-26	1-2 Mom on	None	2-3 On						
MS27722-27	1-2 Mom on	Off	2-3 Mom on						
MS27722-28	1-2 Mom on	Off	None						
MS27722-29	Mom off	None	2-3 On						
MS27722-30	1-2 Mom on	None	Off						
MS27722-31	1-2 Mom on	Off	2-3 On						
MS27722-32	None	On 1-2	2-3 Mom on	5	20	15	3	15	10
MS27722-33	None	On 1-2	2-3 On						

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Referenced documents:

[MIL-DTL-3950](#)
[MS27488](#)
[SAE-AS81969/14](#)

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:

DLA - CC

(Project 5930-2024-010)

Review activities:

Army - AR, AV, EA, MI
Navy - MC

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.dla.mil/>.