INCH-POUND
MS90310H
1 April 2005
SUPERSEDING
MS90310G
18 October 1985

DETAIL SPECIFICATION SHEET

SWITCH, TOGGLE, POSITIVE BREAK, MINIATURE, TOGGLE SEALED, SOLDER LUG, SINGLE POLE, .469 MOUNTING BUSHING

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-8834.

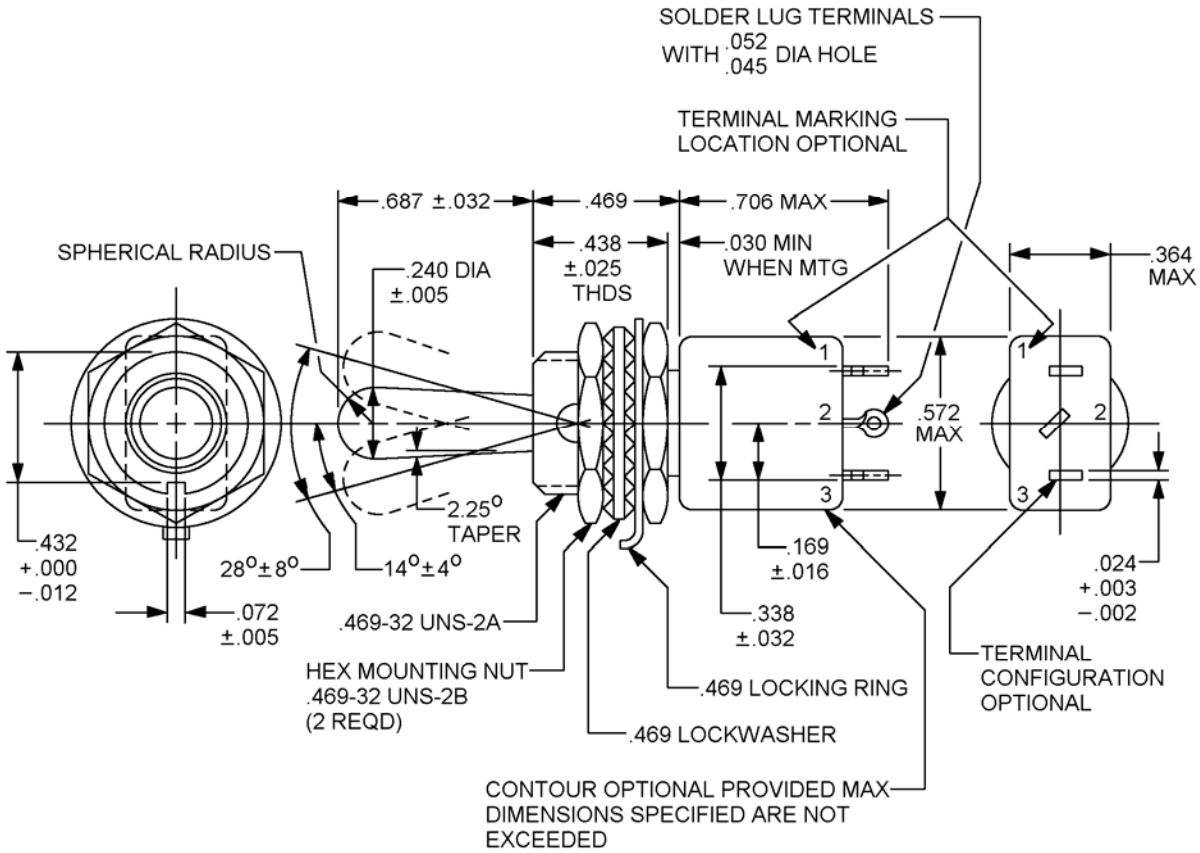

FIGURE 1. Dimensions and configuration.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	.05	.024	.61	.072	1.83	.438	11.13
.003	.08	.025	.64	.169	4.29	.469	11.91
.005	.13	.030	.76	.240	6.10	.572	14.53
.010	.25	.032	.81	.338	8.59	.687	17.45
.012	.30	.045	1.14	.364	9.25	.706	17.93
.016	.41	.052	1.32	.432	10.97		

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.010 (0.25 mm) on decimals and ±.5º on angles.
4. For hardware detail specifications see appendix of MIL-DTL-8834

FIGURE 1. Dimensions and configurations - Continued.

REQUIREMENTS:

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

Maximum weight: .0429 pound (19.4 grams).

Dielectric withstanding voltage: 50,000 feet.

Toggle seal test: Method II.

Shock: Method I and Method II (high impact). The switch shall be electrically and mechanically operative at the conclusion of the shock test except there can be mechanical transfer of the contact mechanism at all levels when tested in accordance with Method II (high impact).

Terminal strength: 5 pounds normal to the mounting plane and 2 pounds in other planes.

Altitude: 50,000 feet.

Electrical ratings: See table I.

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

TABLE I. Electrical ratings.

Load	28 V dc	115 V ac 60 Hz	115 V ac 400 Hz	5 millivolts
	(amperes)	(amperes)	(amperes)	(microamperes)
Resistive	5	2	3	
Inductive	1 1/	1	2	
Low level	- - -	- - -	- - -	25 2/

1/ With time constant of .020 ±.002 seconds.
2/ Contact resistance not to exceed 50 ohms during life, low level switching.

Table II. Switching characteristics.

PIN MS90310-	Circuit with toggle lever in these positions 1/		
	Opposite keyway side 2/	Center position	Keyway side 2/
-211	ON 2-3	OFF	ON 1-2
-221		NONE	OFF
-231			ON 1-2
-241		OFF	NONE
-271	MOM-ON 2-3		MOM-ON 1-2
-281	NONE		
-311	ON 2-3		

1/ Direction of movement of internal mechanism is opposite to the direction of the toggle movement.
2/ Non functional terminals shall not be supplied.

Referenced documents:
MIL-DTL-8834

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.

Custodians:
Army - CR
Navy - AS
Air Force - 11
DLA - CC

Review activities:
Army - AR, AV, MI
Navy - EC
Air Force – 99

Preparing activity:
DLA - CC

(Project 5930-1911)

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 http://assist.daps.dla.mil/ .