

INCH-POUND

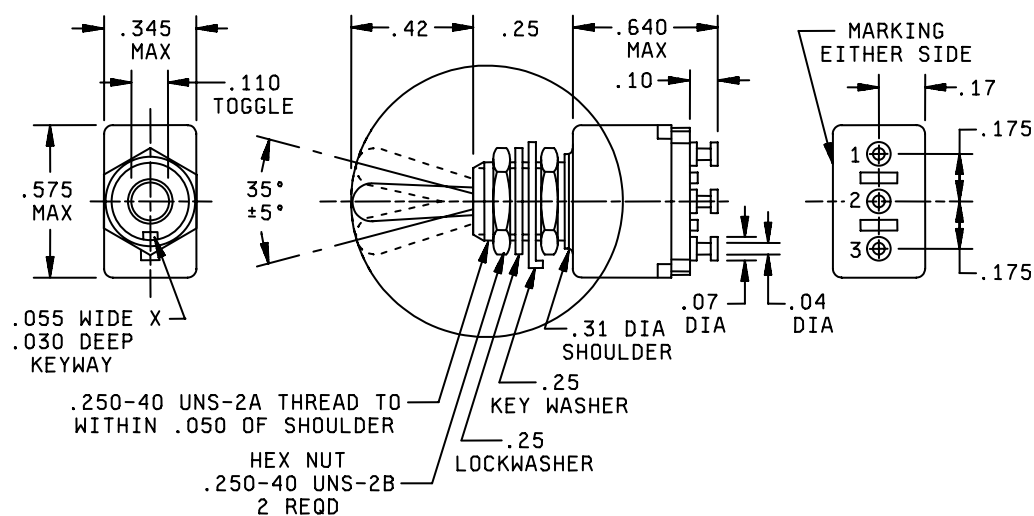
MS27716E  
 16 November 2005  
 SUPERSEDING  
 MS27716D  
 20 May 1988

## DETAIL SPECIFICATION SHEET

## SWITCH, TOGGLE, MINIATURE, SINGLE POLE, UNSEALED

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-83731.

FIGURE 1. Dimensions and configurations

## MS27716E

Inches	mm	Inches	mm
.030	0.76	.175	4.45
.04	1.02	.250	6.35
.050	1.27	.25	6.4
.055	1.40	.31	7.9
.07	1.78	.345	8.76
.10	2.5	.42	10.7
.110	2.79	.575	14.61
.17	4.3	.640	16.26

## 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 mm) on two place decimals and  $\pm .005$  (0.13 mm) on three place decimals.
4. For hardware detail specification, 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 Continued

## MS27716E

## REQUIREMENTS:

In the event of a conflict between the text of this standard and the reference cited herein, the text of this standard and the reference cited herein, the text of this standard shall take precedence.

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°C and then 50,000 cycles at 85°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.

Strength of actuating lever pivot and lever stop: 8 pounds.

Sand and dust: Toggle boots in accordance with MIL-DTL-5423 shall be used.

Maximum weight shall be .015 pound.

Electric rating for 28 volts direct current and 115 volts ac at 400Hz.

Lamp Load is 1 Ampere.

Resistive load is 5 Amperes.

Inductive Load is 2 Amperes.

Table I Detail Requirements

Canceled MS Part NO. <u>1/</u>	Substitute MS Part NO <u>1/</u>	Circuit made with toggle lever in		
		Keying Side 1-2	Center Position	Opposite keying side 2-3
MS27716-21	MS27716-21-1	On	Off	On
MS27716-22	MS27716-22-1	Off	None	On
MS27716-23	MS27716-23-1	On	None	On
MS27716-26	MS27716-26-1	Mom-On	None	On
MS27716-27	MS27716-27-1	Mom-On	Off	Mom-On
MS27716-31	MS27716-31-1	Mom-On	Off	On

1/ The canceled part numbers are no longer procurable; the substitute part numbers have a lower dielectric withstanding voltage at reduced barometric pressure.

MS27716E

Referenced documents

MIL-DTL-83731

MIL-DTL-5423

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 – EC

Air Force – 11

DLA – CC

Preparing activity:

DLA – CC

Project (5930-2005-014)

Review activities:

Army – AV

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