

NOT MEASUREMENT SENSITIVE

MIL-S-83731A
 SUPPLEMENT 1B
 2 March 1990
 SUPERSEDING
 SUPPLEMENT 1A
 12 July 1984

MILITARY SPECIFICATION

SWITCHES, TOGGLE, UNSEALED AND SEALED TOGGLE,
GENERAL SPECIFICATION FOR

This supplement forms a part of MIL-S-83731A, dated 26 January 1976.

SPECIFICATION SHEETS

- MIL-S-83731/9 - Switches, Toggle, Miniature, Lever Seal, Panel Seal, Single Pole.
- MIL-S-83731/10 - Switches, Toggle, Miniature, Lever Seal, Panel Seal, Double Pole
- MIL-S-83731/11 - Switches, Toggle, Miniature, Lever Lock, Single Pole, Unsealed
- MIL-S-83731/12 - Switches, Toggle, Miniature, Lever Lock, Double Pole, Unsealed
- MIL-S-83731/13 - Switches, Toggle, Miniature, Right Angle (Vertical) PCB Mount, Single Pole, Lever Seal, Flux Seal.
- MIL-S-83731/14 - Switches, Toggle, Miniature, Right Angle (Vertical) PCB Mount, Double Pole, Lever Seal, Flux Seal.
- MIL-S-83731/15 - Switches, Toggle, Miniature, Right Angle (Horizontal) PCB Mount, Single Pole, Lever Seal, Flux Seal
- MIL-S-83731/16 - Switches, Toggle, Miniature, Right Angle (Horizontal) PCB Mount, Double Pole, Lever Seal, Flux Seal.
- MIL-S-83731/17(USAF) - Switches, Toggle, Subminiature, Sealed Lever, Flux Sealed, One, Two, and Four Pole, High and Low Level Contacts
- MIL-S-83731/18(USAF) - Switches, Toggle, Subminiature, Sealed Lever, Flux Sealed, One, Two, and Four Pole, Right Angle (Horizontal and Vertical) PCB Mount, Low-Level Contacts.
- MIL-S-83731/19(USAF) - Switches, Toggle, Subminiature, Lever Lock, Sealed Lever, Flux Sealed - One, Two, and Four Pole, High and Low Level Contacts
- MIL-S-83731/20(USAF) - Switches, Toggle, Subminiature, Lever Lock, Sealed Lever, Flux Sealed, Right Angle PC Board Mount - One, Two, and Four Pole, Low Level Contacts.
- MIL-S-83731/21(USAF) - Switches, Toggle, Miniature, Lever Seal, Panel Seal, Four Pole Logic Load to 5 Amperes
- MIL-S-83731/22(USAF) - Switches, Toggle, Miniature, Lever Lock, Four Pole, Unsealed, Logic Load to 5 Amperes.

MS MILITARY STANDARDS

- MS18150 - Switch, Toggle, 2 Circuit, Sealed Toggle.
- MS18151 - Switch, Toggle, One Pole, Sealed Toggle.
- MS18152 - Switch, Toggle, Two Pole, Sealed Toggle.
- * MS25068 - Switch, Toggle, Four Pole, Sealed Toggle.
- * MS25098 - Switch, Toggle, One Pole, Sealed Toggle.
- * MS25100 - Switch, Toggle, Two Pole, Sealed Toggle.
- * MS25125 - Switch, Toggle, One Pole, Sealed Toggle, Lever Lock
- * MS25126 - Switch, Toggle, Two Pole, Sealed Toggle, Lever Lock
- * MS25127 - Switch, Toggle, Four Pole, Sealed Toggle, Lever Lock.
- MS25201 - Switch, Toggle, Two Pole, Sealed Toggle.
- MS27716 - Switch, Toggle, Miniature, Single Pole, Unsealed.
- MS27717 - Switch, Toggle, Miniature, Double Pole, Unsealed
- MS27718 - Switch, Toggle, Miniature, Single Pole, Toggle Seal
- MS27719 - Switch, Toggle, Miniature, Double Pole, Toggle Seal

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MS27720 - Switch, Toggle, Miniature, Single Pole, Toggle Seal, Lever Lock
 MS27721 - Switch, Toggle, Miniature, Double Pole, Toggle Seal, Lever Lock
 MS27753 - Switch, Toggle, Miniature, Double Pole, Toggle Seal.
 MS27754 - Switch, Toggle, Miniature, Double Pole, Toggle Seal, Lever Lock
 MS27790 - Switch, Toggle, Miniature, Double Pole, Unsealed.
 * MS35058 - Switch, Toggle, One Pole, Sealed Toggle.
 * MS35059 - Switch, Toggle, Two Pole, Sealed Toggle.
 MS75028 - Switch, Toggle, One Pole, Unsealed
 MS75029 - Switch, Toggle, Two Pole, Unsealed.
 MS75075 - Switch, Toggle, Two Pole, Unsealed.

* Inactive for new design

TABLE I. Application information for active specification sheets

MIL-S-83731/ <u>1/</u>	Contact form and enclosure design	Size of mounting bushing	Type of termination <u>2/</u>	Highest electrical resistive rating (amperes)	Life (cycles)		Low level contact testing (cycles)
					Logic level	Resistive level	
9	LS, PS, and TFS Single pole	.250	SL and PC	5 A at 28 V dc	10,000	10,000	N/A
10	LS, PS, and TFS Double pole	.250	SL and PC	5 A at 28 V dc	10,000	10,000	N/A
11	LL and TFS Single pole	.250	SL and PC	5 A at 28 V dc	10,000	10,000	N/A
12	LL and TFS Double pole	.250	SL and PC	5 A at 28 V dc	10,000	10,000	N/A
13	LS and TFS Single pole	.240 PCB mount	RAV and PC	5 A at 28 V dc	10,000	10,000	N/A
14	LS and TFS Double pole	.240 PCB mount	RAV and PC	5 A at 28 V dc	10,000	10,000	N/A
15	LS and TFS Single pole	.240 PCB mount	RAH and PC	5 A at 28 V dc	10,000	10,000	N/A
16	LS and TFS Double pole	.240 PCB mount	RAH and PC	5 A at 28 V dc	10,000	10,000	N/A
17	LS and TFS 1, 2, and 4 poles	.250	SL and PC	3 A at 28 V dc	10,000	10,000	Yes 20,000
18	LS and TFS 1, 2, and 4 poles	.187 PCB mount	RAH/V and PC	Low level 4 A at 20 V dc	N/A	N/A	Yes 20,000
19	LL, LS, and TFS 1, 2, and 4 poles	.250	SL and PC	3 A at 28 V dc	N/A	10,000	Yes 20,000

See footnotes at end of table.

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MIL-S-83731/	Contact form and enclosure design <u>1/</u>	Size of mounting bushing	Type of termination <u>2/</u>	Highest electrical resistive rating (amperes)	Life (cycles)		Low level contact testing (cycles)
					Logic level	Resistive level	
20	LL, LS, and TFS 1, 2, and 4 poles	.250	RA and PC	Low level .4 A at 20 V dc	N/A	N/A	Yes 20,000
21	LS, PS, and TFS Four pole	.250	SL and PC	Logic load 5 A at 28 V dc	10,000	10,000	N/A
22	LL and TFS Four pole	.250	SL and PC	Logic load 5 A at 28 V dc	10,000	10,000	N/A

1/ Enclosure design types have been abbreviated as follows: Lever seal = LS, panel seal = PS, terminal flux seal = TFS, and lever lock = LL.

2/ Termination types have been abbreviated as follows: Solder lug = SL, printed circuit = PC, right angle = RA, right angle vertical = RAV, right angle horizontal = RAH, and right angle horizontal and vertical = RAH/V.

CONCLUDING MATERIAL

Preparing activity
Air Force - 85

Agent
DLA - ES

(Project 5930-1418)