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INCH-POUND
MIL-DTL-83731D
SUPPLEMENT 1
2 July 2010

DETAIL SPECIFICATION

SWITCHES, TOGGLE, UNSEALED AND SEALED TOGGLE GENERAL SPECIFICATION FOR

This supplement forms a part of MIL-DTL-83731D, dated 2 July 2010.

SPECIFICATION SHEETS

	MIL-DTL-83731/9	-	Switches, Toggle, Miniature, Lever Seal, Panel Seal, Single Pole.
	MIL-DTL-83731/10	-	Switches, Toggle, Miniature, Lever Seal, Panel Seal, Double Pole.
	MIL-DTL-83731/11	-	Switches, Toggle, Miniature, Lever Lock, Single Pole, Unsealed.
	MIL-DTL-83731/12	-	Switches, Toggle, Miniature, Lever Lock, Double Pole, Unsealed.
	MIL-DTL-83731/13	-	Switches, Toggle, Miniature, Right angle (Vertical) PCB Mount, Single Pole, Lever Seal, Flux Seal.
	MIL-DTL-83731/14	-	Switches, Toggle, Miniature, Right Angle (Vertical) PCB Mount, Double Pole, Lever Seal, Flux Seal.
	MIL-DTL-83731/15	-	Switches, Toggle, Miniature, Right Angle (Horizontal) PCB Mount, Single Pole, Lever Seal, Flux Seal.
	MIL-DTL-83731/16	-	Switches, Toggle, Miniature, Right Angle (Horizontal) PCB Mount, Double Pole, Lever Seal, Flux Seal.
*	MIL-DTL-83731/21	-	Switches, Toggle, Miniature, Lever Seal, Panel Seal, Four Pole Logic Load to 5 Amperes.
*	MIL-DTL-83731/22	-	Switches, Toggle, Miniature, Lever Lock, Four Pole, Unsealed, Logic Load to 5 Amperes.
	MIL-DTL-83731/23	-	Switches, Toggle, Double Pole, 4 Amperes, Low Level, Environmentally Sealed
	MIL-DTL-83731/24	-	Switches, Toggle, Three Pole, 4 Amperes, Low Level, Environmentally Sealed
	MIL-DTL-83731/25	-	Switches, Toggle, Four Pole, 4 Amperes, Low Level, Environmentally Sealed

MS MILITARY STANDARDS

	MS18150	-	Switch, Toggle, 2 Circuit, Sealed Toggle.
	MS18151	-	Switch, Toggle, One 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.
	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.
*	MS75075	-	Switch, Toggle, Two Pole, Unsealed.

*Inactive for new design.

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TABLE I. Application information.

MIL-DTL-83731/	Contact form and enclosure design 1/	Size of mounting bushing	Type of termination 2/	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
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
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
23	LS and LL Double Pole	.468	SL and PC	Low Level 4A at 28 V dc	20,000	10,000	Yes 20,000
24	LS and LL Three Pole	.468	SL and PC	Low Level 4A at 28 V dc	20,000	10,000	Yes 20,000
25	LS and LL Four Pole	.468	SL and PC	Low Level 4A at 28 V dc	20,000	10,000	Yes 20,000

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.

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

Preparing Activity
DLA - CC

(Project 5930-2010-033)

Review activities:
Army - AR, AV, MI
Navy - EC, MC

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