

MIL-STD-1329B

30 June 1976

SUPERSEDING

MIL-STD-1329A

14 November 1974

MILITARY STANDARD

**SWITCHES, RF COAXIAL,
SELECTION OF**



FSC 5985

MIL-STD-1329B
30 June 1976

DEPARTMENT OF DEFENSE
Washington, D.C. 20301

Switches, RF Coaxial, Selection of

MIL-STD-1329B

1. This Military Standard is approved for use by all Departments and Agencies of the Department of Defense.
2. Recommended corrections, additions, or deletions should be addressed to Naval Electronic Systems Command, Washington, D.C. 20360.

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1. SCOPE

1.1 Scope. This standard provides a list of standard coaxial switches for use in military applications.

1.2 Purpose. The purpose of this standard is to:

- (a) Provide the equipment designer with a list of coaxial switches considered standard for military applications.
- (b) Restrict the number of coaxial switch types used in military equipment in order to provide effective logistic support of field equipment.
- (c) Establish criteria pertinent to choice, application, and use of coaxial switches in military equipment.

2. REFERENCED DOCUMENTS

2.1 The issues of the following documents in effect on the date of invitation for bids form a part of this standard to the extent specified herein.

SPECIFICATION

MILITARY

- MIL-S-3928 - Switches (Coaxial), Radio Frequency Transmission Line, General Specification for.
- MIL-S-24067 - Switches, Coaxial, Radio Frequency Transmission Line, (For Use With Electronic Countermeasures Equipment), General Specification.
- MIL-S-25879 - Switch, Radio Frequency Transmission Line SA-521A/A.

(Copies of specifications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. DEFINITIONS.

3.1 The terms used in this standard are commonly encountered in coaxial switch engineering practice.

4. GENERAL REQUIREMENTS

4.1 Selection of coaxial switches. Coaxial switches to be used in military applications shall be selected from those listed in tables I through IV. Cross-reference of type to part number is shown in table V.

4.2 Criteria for selection. The criteria for the selection of coaxial switches for inclusion in this standard are:

- (a) The coaxial switches shall be considered by representatives of the Military Departments the best available type for current application.
- (b) Availability of the coaxial switches shall be reasonably certain.
- (c) The coaxial switches shall have an approved military specification.

4.3 Application and use. Coaxial switches used in military applications shall be representative of manufactured lots possessing acceptable material and physical and electrical characteristics and shall in no manner degrade the operational characteristics of the equipment in which used.

4.4 Detailed requirements for coaxial switches. The detailed requirements for coaxial switches listed in this standard are covered by the applicable MIL-S-3928 or MIL-S-24067 specification sheets, or MIL-S-25879.

5. DETAILED REQUIREMENTS. Not applicable.

6. NOTES. Not applicable.

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TABLE I. Standard coaxial switches with series N connectors.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connector
M3928/6-01	1P2T	Solenoid	28 dc	None	Solder terminals
6-02	1P2T	Solenoid	110 dc	None	Solder terminals
6-03	1P2T	Solenoid	115 ac	None	Solder terminals
6-04	1P2T	Manual	---	None	---
7-01	1P2T	Solenoid	115 ac	None	MS3456-10SL-3S <u>1/</u>
7-02	1P2T	Manual	---	None	---
7-03	1P2T	Solenoid	26 dc	None	MS3456-10SL-3S <u>1/</u>
7-04	1P3T	Solenoid	115 ac	None	MS3456-14S-2S <u>1/</u>
7-05	1P3T	Solenoid	26 dc	None	MS3456-14S-2S <u>1/</u>
7-06	1P6T	Manual	---	None	---
7-07	1P6T	Solenoid	26 dc	None	MS3456-16S-1S <u>1/</u>
7-08	1P6T	Solenoid	115 ac	None	MS3456-16S-1S <u>1/</u>
7-09	1P2T	Solenoid	110 dc	None	6-32NC-2A
7-11	1P3T	Solenoid	110 dc	None	MS3456-14S-2S <u>1/</u>
7-12	1P3T	Manual	---	None	---
7-14	1P2T	Manual	---	None	---
7-15	1P6T	Manual	---	None	---
7-16	1P4T	Manual	---	None	---
7-17	1P2T	Solenoid	26 dc	None	6-32NC-2A
7-18	1P2T	Solenoid	26 dc	None	6-32NC-2A
7-19	1P2T	Solenoid	110 dc	None	6-32NC-2A
7-20	1P2T	Solenoid	28 dc	None	6-32NC-2A
7-21	1P2T	Solenoid	115 ac	None	6-32NC-2A
7-22	1P4T	Manual	---	None	---
7-24	1P4T	Solenoid	28 dc	None	6-32NC-2A
7-25	TR	Solenoid	28 dc	None	MS83723-13R1006N
7-26	TR	Solenoid	28 dc	Yes	MS83723-13R1006N
9-01	1P2T	Motor	28 dc	None	MS3456W-14S-5S <u>1/</u>
9-02	TR	Motor	28 dc	None	MS3456W-14S-5S <u>1/</u>
9-03	1P3T	Motor	28 dc	None	MS3456W-14S-2S <u>1/</u>
9-04	2P2T	Manual	---	None	---
9-05	1P2T	Manual	---	None	---
9-06	1P2T	Motor	115 ac	None	MS3456W-10SL-3S <u>1/</u>
9-07	1P3T	Motor	115 ac	None	MS3456W-14S-2S <u>1/</u>
9-08	1P6T	Motor	115 ac	None	MS3456W-16S-1S <u>1/</u>
9-09	TR	Motor	115 ac	None	MS3456W-10SL-3S <u>1/</u>
9-10	2P2T	Motor	115 ac	None	MS3456W-10SL-3S <u>1/</u>
9-11	2P2T	Motor	28 dc	None	MS3456W-14S-5S <u>1/</u>

1/ Mates with.

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TABLE I. Standard coaxial switches with series N connectors - Continued.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connector
M3928/9-12	1P6T	Motor	28 dc	None	MS3456W-165-1S 1/
9-13	TR	Manual	---	None	---
9-14	1P3T	Manual	---	None	---
9-15	1P6T	Manual	---	None	---
9-17	TR	Motor	28 dc	Yes	MS3452W-12-10S 1/
10-01	1P2T	Solenoid	110 dc	None	Solder terminals
10-02	1P2T	Solenoid	28 dc	None	Solder terminals
10-03	1P2T	Solenoid	115 ac	None	Solder terminals
10-04	1P2T	Solenoid	28 dc	None	Solder terminals
10-05	1P2T	Solenoid	28 dc	Yes	Solder terminals
10-06	1P2T	Solenoid	28 dc	None	MS27484T8-F98S 1/
10-07	TR	Solenoid	28 dc	None	MS27484T8-F98S 1/
10-08	TR	Solenoid	28 dc	Yes	MS3113H10-6P
M24067/1-001	1P2T	Solenoid	28 dc	Yes	MS3102R-14S-6P
2-001	2P2T	Solenoid	28 dc	Yes	MS3102R-14S-5P
(MIL-S-25879) SA-521A/A	1P2T	Solenoid	28 Vdc	None	MS3106-10SL-3S 1/

1/ Mates with.

TABLE II. Standard coaxial switches with series BNC connectors.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connector
M3928/7-10	1P2T	Solenoid	26 dc	None	6-32NC-2A
7-13	1P6T	Manual	---	None	---
7-23	1P2T	Solenoid	115 ac	None	6-32NC-2A
8-01	TR	Solenoid	28 dc	None	Solder terminals
8-03	1P2T	Solenoid	28 dc	None	Solder terminals
8-05	1P2T	Solenoid	115 ac	None	Solder terminals
8-07	1P2T	Solenoid	110 dc	None	Solder terminals
8-17	1P2T	Solenoid	28 dc	None	Solder terminals
8-18	1P2T	Solenoid	28 dc	None	Solder terminals
8-19	1P2T	Solenoid	28 dc	None	Solder terminals
8-20	1P2T	Solenoid	28 dc	None	Solder terminals
8-21	1P6T	Manual	---	None	---

TABLE III. Standard coaxial switches with series SMA connectors.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connector
M3928/15-01	1P2T	Solenoid	28 dc	None	Solder terminals
15-02	1P2T	Solenoid	28 dc	None	Solder terminals
15-03	1P2T	Solenoid	28 dc	None	Solder terminals
15-04	1P2T	Solenoid	28 dc	Yes	Solder terminals
15-05	1P2T	Solenoid	28 dc	Yes	Solder terminals
15-06	1P2T	Solenoid	28 dc	None	Solder terminals
15-07	1P2T	Solenoid	28 dc	None	Solder terminals
15-08	1P2T	Solenoid	28 dc	Yes	Solder terminals
16-01	1P3T	Solenoid	28 dc	Yes	MS3114E-12-10P
17-01	1P4T	Solenoid	28 dc	Yes	M8372311-H1210N
17-02	1P4T	Solenoid	28 dc	None	RTK07-8-7P (Deutsch) or equivalent

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TABLE III. Standard coaxial switches with series SMA connectors - Continued.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connectors
M3928/18-01	1P6T	Solenoid	28 dc	None	RTK07-8-7P (Deutch) or equivalent
18-02	1P6T	Solenoid	28 dc	None	Solder terminals
19-01	TR	Solenoid	28 dc	Yes	Solder terminals
19-02	TR	Solenoid	28 dc	None	Solder terminals
19-03	TR	Solenoid	28 dc	Yes	Solder terminals
19-04	TR	Solenoid	28 dc	None	Solder terminals
19-05	TR	Solenoid	28 dc	Yes	Solder terminals
19-06	TR	Solenoid	115 ac	Yes	MS3113H10-6P

TABLE IV. Standard coaxial switches with series TNC connectors.

Part number	Configuration	Type actuator	Operating voltage (nom)	Position indicating circuit	Type actuator connectors
M3928/12-01	1P2T	Solenoid	28 dc	Yes	MS27478-Y8D6P
13-01 ^{2/}	1P2T	Solenoid	28 dc	Yes	Solder terminals
14-01	TR	Solenoid	28 dc	Yes	MS27466-T9B6P
20-01	1P2T	Solenoid	28 dc	Yes	MS3113H-10C-6P
20-02	1P2T	Solenoid	28 dc	None	Solder terminals
20-03	1P2T	Solenoid	28 dc	None	MS3113-8-2P
20-04	1P2T	Solenoid	28 dc	Yes	Solder terminals
20-05	1P2T	Solenoid	28 dc	Yes	Solder terminals
20-06	1P2T	Solenoid	28 dc	None	MS3116E-8-XS ^{1/}
20-07	1P2T	Solenoid	28 dc	None	Solder terminals
20-08	1P2T	Solenoid	28 dc	Yes	Solder terminals
21-01	TR	Solenoid	28 dc	Yes	Solder terminals
21-02	TR	Solenoid	28 dc	Yes	Solder terminals
21-03	TR	Solenoid	28 dc	Yes	Solder terminals

^{1/} Mates with.

^{2/} Center connector (common) is series SC.

TABLE V. Cross-reference of type to part number.

Part number	Type SA-()/U	Part number	Type SA-()/U
M3928/6-01	1363	M3928/8-03	1350
6-02	1364	8-05	1352
6-03	1365	8-07	1354
6-04	1366	9-01	303
7-01	1320	9-02	1334
7-02	1321	9-03	1335
7-03	185	9-04	1336
7-04	1323	9-05	1337
7-05	1324	9-06	1338
7-06	1325	9-07	1339
7-07	1326	9-08	1340
7-08	1327	9-09	1341
7-09	1328	9-10	1342
7-10	1329	9-11	1343
7-11	1330	9-12	1344
7-12	1331	9-13	1345
7-13	1332	9-14	1346
7-14	273	9-15	1347
7-15	275	10-01	1360
7-16	274	10-02	1361
8-01	1348	10-03	1362

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Custodians:

Navy - EC
Army - EL
Air Force - 11

Review activities:

Army - MJ, MI
Navy - SH
Air Force - 17, 80, 85
DSA - ES

User activities:

Army - AV
Navy - OS, MC, CG, AS
Air Force - 19

Preparing activity:
Navy - EC

Agent:
DSA - ES

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