

INCH-POUND

MIL-DTL-3928/16B
w/AMENDMENT 1
20 November 2018
SUPERSEDING
MIL-DTL-3928/16B
15 August 2001

DETAIL SPECIFICATION SHEET

SWITCHES, RADIO-FREQUENCY
TRANSMISSION LINE (COAXIAL) (ELECTRICALLY OPERATED)
CLASS 5, 1P3T

Inactive for new design
after 20 September 2011

This specification is approved for use by all Departments and
Agencies of the Department of Defense.

The requirements for acquiring the switch described herein
shall consist of this specification and MIL-DTL-3928.

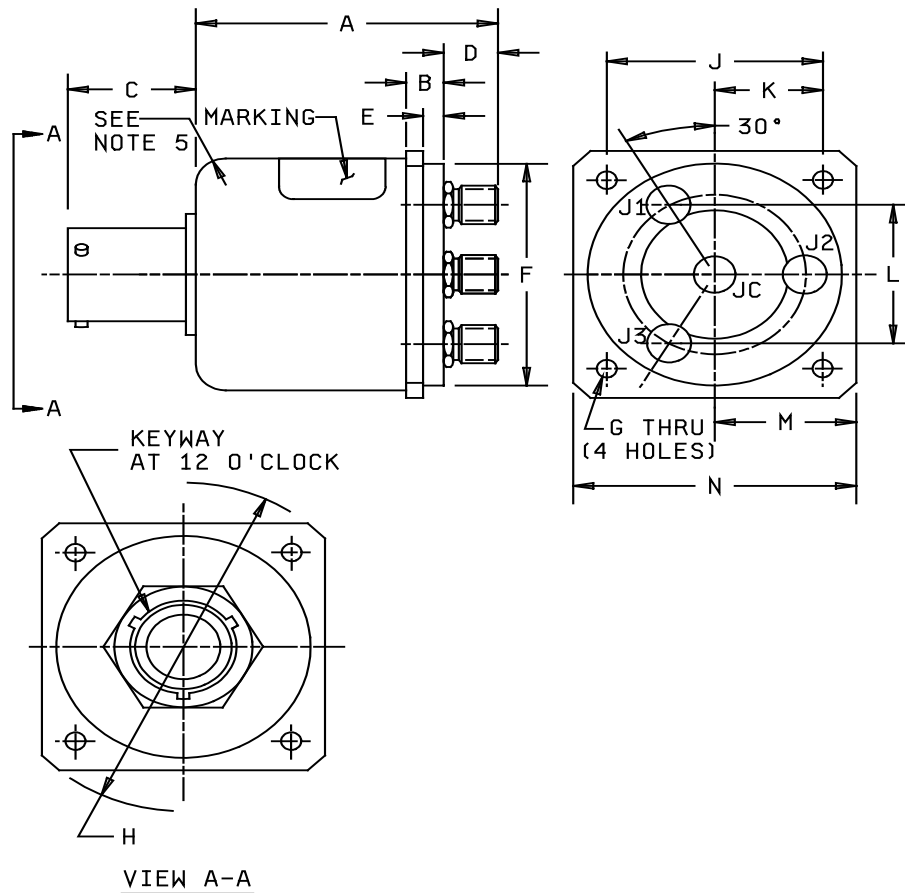
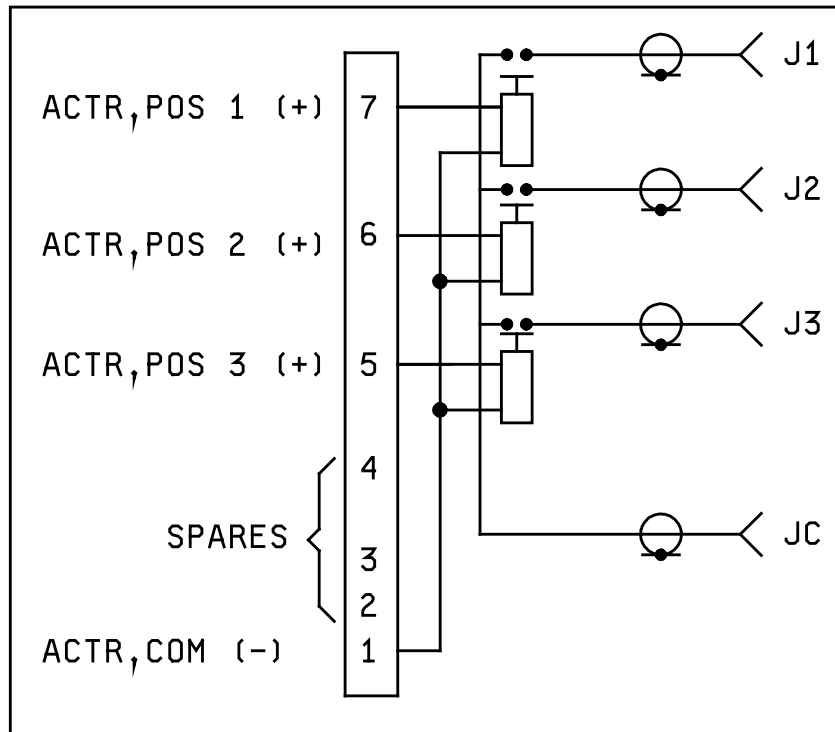


FIGURE 1. Switch configuration and schematic, PIN M3928/16-02.

AMSC N/A

FSC 5985





SCHEMATIC (SHOWN IN DEENERGIZED POSITION)

Dimensions									
Letter	Inches		Millimeters		Letter	Inches		Millimeters	
	Max	Min	Max	Min		Max	Min	Max	Min
A	1.60	---	40.64	---	H	2.34 dia	2.28 dia	59.4 dia	57.9 dia
B	.260	.240	6.60	6.10	J	1.380	1.370	35.05	34.80
C	.62	.56	15.7	14.2	K	.697	.677	17.70	17.20
D	.34	.28	8.6	7.1	L	1.072 dia	1.052 dia	27.22 dia	26.72 dia
E	.130	.120	3.30	3.05	M	.885	.865	22.48	21.97
F	1.560 dia	1.556 dia	39.62 dia	39.52 dia	N	1.78	1.72	45.2	43.7
G	.154 dia	.139 dia	3.91 dia	3.53 dia					

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only (1.00 inch = 25.4 mm).
3. Metric equivalents are in parentheses.
4. Unless otherwise specified, tolerances are $\pm .010$ (± 0.25 mm) for three place decimals and $\pm .03$ (± 0.8 mm) for two place decimals.
5. Round corners of case may be squared.

FIGURE 1. Switch configuration and schematic, PIN M3928/16-02 - Continued.

TABLE I. Electrical and performance characteristics.

PIN M3928/16- <u>1/</u>	Fig. No.	Housing	Frequency range dc to GHz	VSWR	Insertion loss (dB)	Isolation (dB)	Switch time (ms)	Position indication circuit and rating	Life cycles x 1000	Fail-safe or latching	Operating current (A) <u>2/</u>	Holding current (A) <u>2/</u>	Nominal operating voltage	Pickup voltage (less than)	Dropout Voltage (less than)	Power and indicator connector	Weight (oz)
02 N, S	1	I	18	<u>Max</u> 1.3:1 at 8 GHz 1.5:1	<u>Max</u> 0.3 8 GHz 0.5 at 18 GHz	<u>Min</u> 60	<u>Max</u> 20	None	1000	None	<u>Max</u> .17	<u>Max</u> .17	28 V dc	20 V dc	16 V dc	RTK07-8-7P (Deutsch) or equal	<u>Max</u> 7

1/ PIN M3928/16-01 is deleted from this specification, there are no requirements for this item.

2/ At 28 V dc and 20 deg C.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Termination: Open.

Nominal impedance: 50 ohms.

RF connectors: Female connectors (4 places) shall meet the requirements of MIL-PRF-39012 and shall mate with SMA type male connectors in accordance with MIL-PRF-39012/55.

Electrical and performance characteristics: See table I.

RF power handling capability (average): 25 watts (minimum).

Operating temperature: -54 deg C to +85 deg C.

Vibration: Method I.

Part or Identifying Number (PIN): M3928/16- (and dash number from table I).

Referenced documents: In addition to MIL-DTL-3928, this specification sheet references the following
MIL-PRF-39012
MIL-PRF-39012/55

The margins of this specification sheet are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5985-2019-001)

Review activities:
Army - MI
Navy - AS, MC, OS, SH
Air Force - 19

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