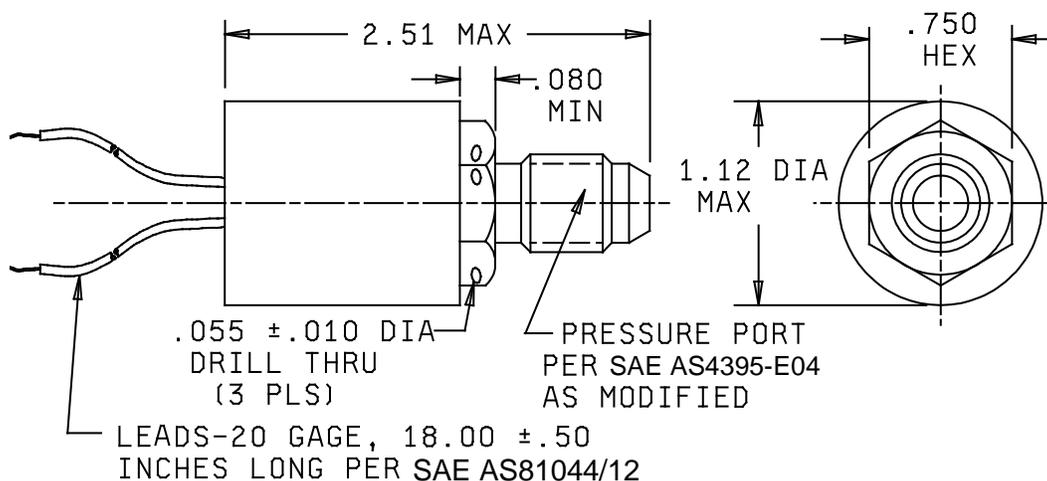


DETAIL SPECIFICATION SHEET

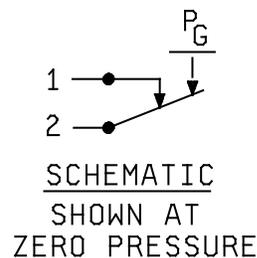
SWITCHES, PRESSURE, (GAGE), TYPE II, SPST, 5 AMPERES

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

The requirements for acquiring the switches described herein shall consist of this document and MIL-DTL-9395.



Inches	mm
.010	0.25
.055	1.40
.080	2.03
.500	12.70
.750	19.05
1.12	28.45
2.51	63.75
18.00	457.20



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± .005 (0.13 mm) for three decimals and ±.02 (0.51 mm) for two place decimals.
4. Exact shape of switch optional provided dimensions specified are not exceeded.

FIGURE 1. Switches.

MIL-DTL-9395/5F

REQUIREMENTS:

Dimensions and electrical schematic: See figure 1.

Weight: 0.2 pound maximum.

Calibration: See tables I, II, III, and IV.

Proof pressure: 4,500 lb_f/in².

System pressure: 3,000 lb_f/in².

Burst pressure: 7,500 lb_f/in².

Electrical ratings:

Operating voltage: 28 Vdc.

Current rating: 5 amperes resistive.
2.5 amperes inductive.

Seal:

Electrical chamber: Hermetic.

Pressure chamber: Hermetic.

Reference chamber: Sealed or unsealed.

Pressure port: See figure 1.

Media: Hydraulic fluid IAW MIL-PRF-6083 or MIL-PRF-83282.

High temperature (operating and nonoperating): B (+275°F).

Low temperature (operating and nonoperating): D (-65°F).

Altitude: C (70,000 feet).

Shock: C (100 G).

Vibration: S (test condition D, method 204 of MIL-STD-202).

Life (mechanical): A (100,00 cycles).

Life (electrical): C (50,000 cycles).

Acceleration: C (8 G).

Pulsation amplitude: C (5 percent).

Pulsation frequency: D (500 ±50 Hz).

Pressure rise: F (500,00 lb_f/in²).

Dielectric withstanding voltage (at reduced barometric pressure): Applicable.

Terminal strength (wire-lead terminals): Method 211 of MIL-STD-202, test condition A, except apply 25 pounds for 5 minutes in a direction straight away from the switch.

QUALIFICATION:

Single submission: Restricted to switch submitted.

Group submission: See table V.

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PART NUMBER: Consists of the prefix "M9395/5-" followed by a five-character code. The code identifies the pressure setting mode (code from table I); high-pressure setting to within 100 lb_f/in² (code from table II) followed by high-pressure setting to within 25 lb_f/in² and applicable tolerance (code from table III); and low-pressure setting to within 100 lb_f/in² (code from table II) followed by low-pressure setting to within 25 lb_f/in² and applicable tolerance (code from table III). The five-character code used in the following example identifies a switch which actuates on increasing pressure at 300 ±25 lb_f/in², and deactuates on decreasing pressure at 150 ±lb_f/in².

EXAMPLE:

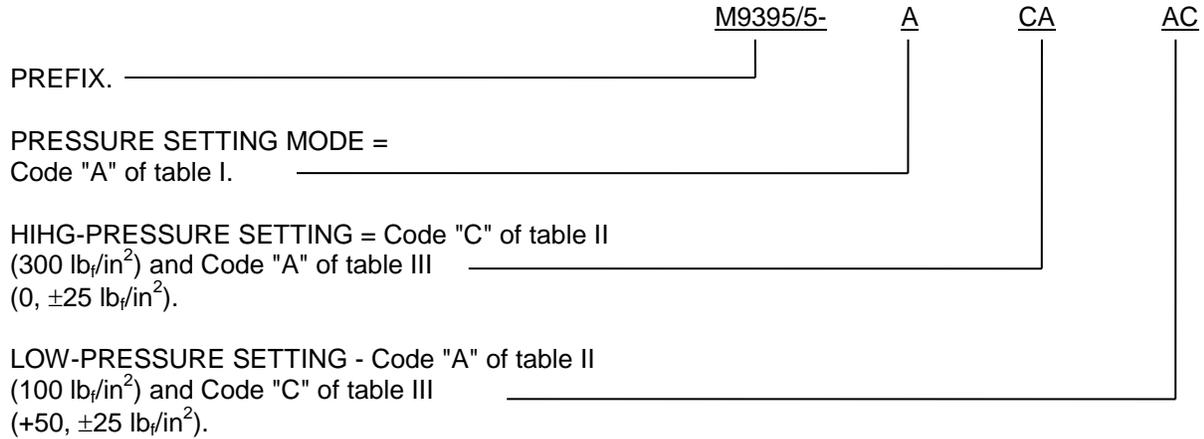


TABLE I. Codes for pressure setting modes.

Code	Pressure Setting mode	
	High setting	Low setting
A-----	At (or max) <u>1/</u>	At (or min) <u>1/</u>
B-----	At (or max) <u>1/</u>	Differential <u>2/</u>
C-----	Differential <u>2/</u>	At (or min) <u>1/</u>

1/ Setting values are designated by codes from table II and III.
2/ Setting values are designated by codes from table IV.

TABLE II. Codes for pressure settings to within 100 lb_f/in².

Code	Pressure (lb _f /in ²)	Code	Pressure (lb _f /in ²)	Code	Pressure (lb _f /in ²)
A-----	100	L-----	1100	A-----	2100
B-----	200	M-----	1200	B-----	2200
C-----	300	N-----	1300	Y-----	2300
D-----	400	P-----	1400	Z-----	2400
E-----	500	Q-----	1500	1-----	2500
F-----	600	R-----	1600	2-----	2600
G-----	700	S-----	1700	3-----	2700
H-----	800	T-----	1800	4-----	2800
J-----	900	U-----	1900	5-----	2900
K-----	1000	V-----	2000	6-----	3000

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TABLE III. Codes for pressure settings to within 25 lb_f/in² and tolerances.

	Unit				Tolerance (lb _f /in ²)
	0	+25	+50	+75	
Code -----	A	B	C	D	±25
Code -----	E	F	G	H	±50
Code -----	J	K	L	M	±75
Code -----	N	P	Q	R	±100
Code -----	S	T	U	V	±150
Code -----	W	X	Y	Z	±200
Code -----	1	2	3	4	±300
Code -----	5	6	7	8	±400
Code -----	9	0	I	-	Min or Max

TABLE IV. Codes for differential pressure settings.

Code	Pressure (lb _f /in ²)	Code	Pressure (lb _f /in ²)
A -----	0	M -----	275
B -----	25	N -----	300
C -----	50	P -----	325
D -----	75	Q -----	350
E -----	100	R -----	375
F -----	125	S -----	400
G -----	150	T -----	425
H -----	175	U -----	450
J -----	200	V -----	475
K -----	225	W -----	500
L -----	250		

TABLE V. Extent of qualification.

Part number	Number of samples required	Tests	Qualifies
M9395/5-AADAA ↓ -AADAA -A4ZXV ↓ -A4ZXV	1 each inductive 1 each resistive 1 each inductive 1 each resistive	Complete per qualification inspection of MIL-DTL-9395	ALL configurations

SUPERSESSON DATA: Part number M9395/5-01 is superseded by part number M9395/5-AJEF-.

NOTES:

- Design limitations (actuation values and tolerances, deadband and deactuatuions values and tolerances) should be coordinated with manufacturer(s) listed on the QPL for this specification sheet before specifying a particular "M" number. The fact that operating characteristics can be coded does not necessarily mean that is can be manufactured or acquired.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where modifications from this revision were made. 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.

Referenced Documents:

MIL-PRF-6083
MIL-DTL-9395
MIL-PRF-83282
MIL-STD-202
SAE-AS81044/12

Custodians:

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

Preparing activity:

DLA - CC

(Project 5930-2013-014)

Review activities:

Navy - MC, SH
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 <https://assist.dla.mil/>