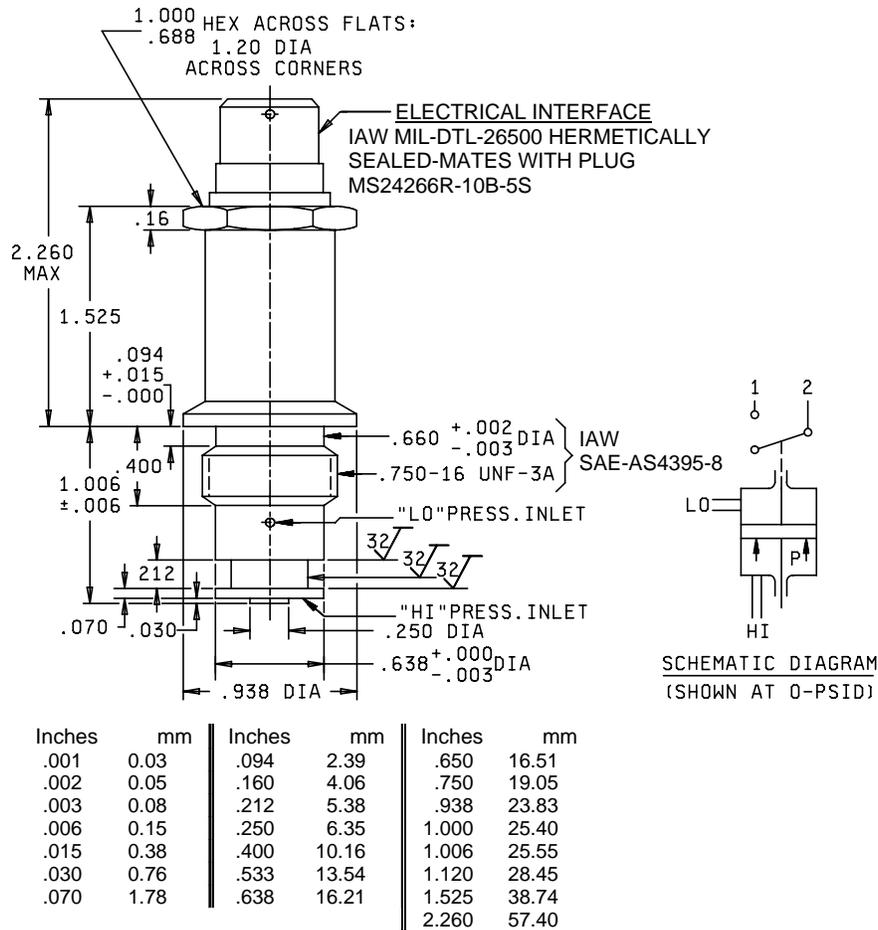


DETAIL SPECIFICATION SHEET

SWITCHES, PRESSURE, (DIFFERENTIAL), TYPE III, 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.



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 (.13 mm) for three place decimals and .03 (.76 mm) for two place decimals.

FIGURE 1. Switch.

REQUIREMENTS:

Dimensions, configuration, and electrical schematic: See figure 1.

Weight: 0.14 pound, maximum.

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

Proof pressure: 3,000  $\text{lb}_f/\text{in}^2$  high over low and simultaneously.

System pressure: 1,500  $\text{lb}_f/\text{in}^2$  high over low and simultaneously.

Burst pressure: 7,500  $\text{lb}_f/\text{in}^2$  high over low and simultaneously.

Electrical ratings:

Operating voltage: 28 V dc.

Current rating: 5 amperes resistive  
3 amperes inductive.

Seal:

High pressure chamber: Media proof. Subject switches to proof pressure for 2 minutes using hydraulic fluid IAW MIL-PRF-6083 with chamber pressure continuously being monitored. Isolate the chamber at proof pressure with the chamber disconnected from the pressure source. Under that condition, the pressure shall not drop more than 1  $\text{lb}_f/\text{in}^2$  for the first 30 seconds to allow stabilization of test equipment; no pressure loss is allowed thereafter.

Low pressure chamber: Media proof. Tested as above except low pressure port is connected to high pressure port.

Electrical chamber: Unsealed.

Electrical connector: See figure 1.

Pressure ports: 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 (100,000 cycles).

Life electrical: C (50,000 cycles).

Acceleration: C (8 G).

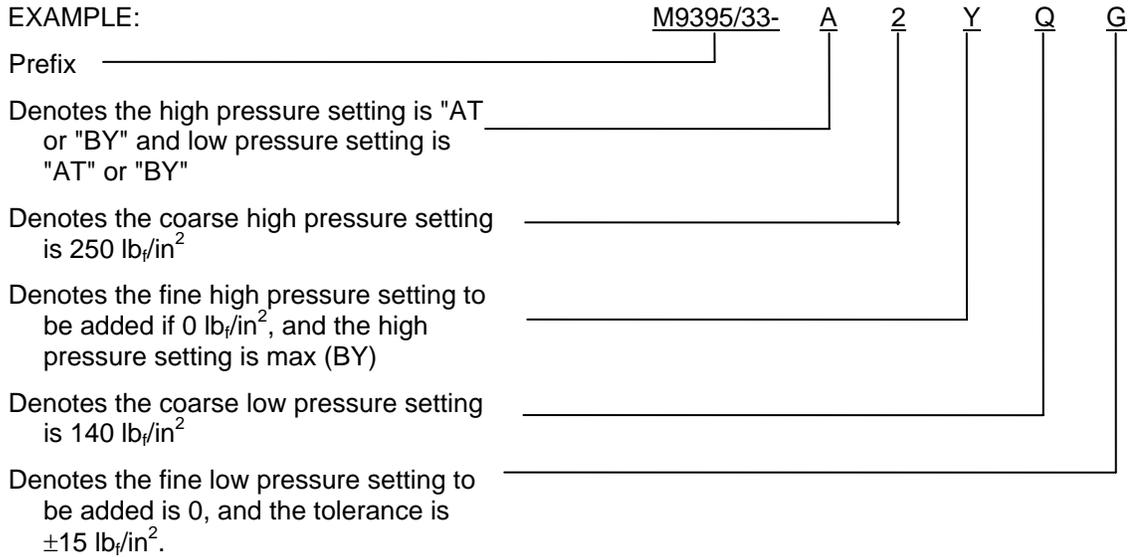
Pulsation amplitude: A (0%).

Pulsation frequency: A (0 Hz).

Pressure surge: B (more than 1,000  $\text{lb}_f/\text{in}^2/\text{sec}$ ).

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PART NUMBER: The part number consists of the prefix M9395/33- followed by five code characters, the first from table I (denoting setting mode), the second from table II, the third from table III (denoting high pressure setting), the fourth from table II, and the fifth from table III (denoting the low pressure setting). The following example illustrates the method used in generating a coded part number:



M9395/33-A2YQG is the part number for a switch that is actuated on increasing pressure by 250 lb<sub>f</sub>/in<sup>2</sup> and that is deactivated on decreasing pressure at 140 ±15 lb<sub>f</sub>/in<sup>2</sup>.

Supersession data: M9395/33-01 is superseded by M9395/33-A2YQG.

TABLE I. Code for pressure setting modes.

Code character	Setting modes	
	High pressure	Low pressure
A	AT (or BY)	AT (or BY)
B	AT (or BY)	Differential
C	Differential	AT (or BY)

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TABLE II. Codes for coarse pressure setting (within lb<sub>f</sub>/in<sup>2</sup>).

Code	Coarse pressure setting (lb <sub>f</sub> /in <sup>2</sup> )	Code	Coarse pressure setting (lb <sub>f</sub> /in <sup>2</sup> )	Code	Coarse pressure setting (lb <sub>f</sub> /in <sup>2</sup> )
A	0	N	120	1	240
B	10	P	130	2	250
C	20	Q	140	3	260
D	30	R	150	4	270
E	40	S	160	5	280
F	50	T	170	6	290
G	60	U	180	7	300
H	70	V	190	8	310
J	80	W	200	9	320
K	90	X	210	0	340
L	100	Y	220		
M	110	Z	230		

TABLE III. Code for combination of fine pressure setting and tolerance.  
(This quantity should be added to coarse setting selected from table II).

Fine pressure setting (lb <sub>f</sub> /in <sup>2</sup> )	Code characters (tolerance lb <sub>f</sub> /in <sup>2</sup> )											
	Min	±5	±10	±15	±20	±25	±30	±35	±40	±50	±60	Max
0	A	C	E	G	J	L	N	Q	S	U	W	Y
5	B	D	F	H	K	M	P	R	T	V	X	Z

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced Documents:

MIL-PRF-6083	MIL-DTL-9395
MIL-PRF-83282	MIL-DTL-26500
MIL-STD-202	

Custodians:  
 Air Force - 11  
 DLA - CC

Preparing activity:  
 DLA - CC

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Review activities:  
 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 <http://assist.daps.dla.mil/> .