

INCH POUND

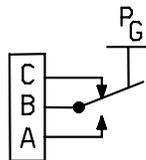
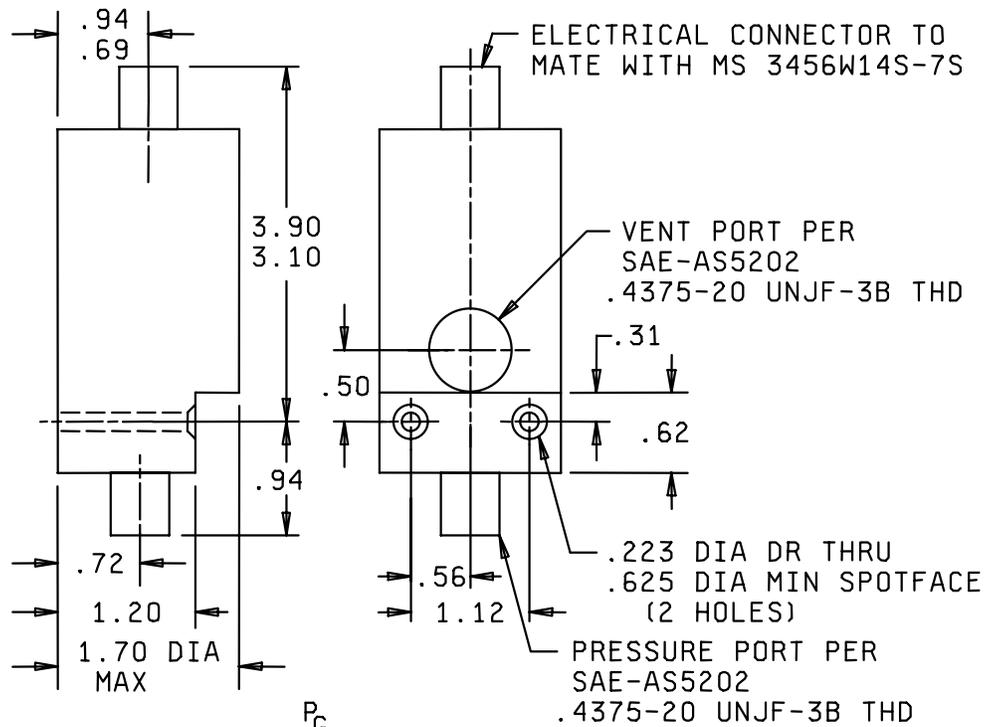
MIL-DTL-9395/2E  
 8 December 2003  
 SUPERSEDING  
 MIL-DTL-9395/2D  
 30 May 2001

DETAIL SPECIFICATION SHEET

SWITCHES, PRESSURE, (GAGE),  
 TYPE II, SPDT, 4 AMPERES

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

The complete requirements for procuring the pressure switches described herein shall consist of this document and the latest issue of Specification MIL-DTL-9395.



SCHEMATIC

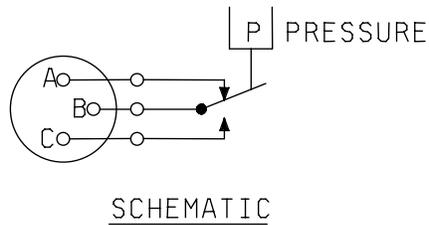
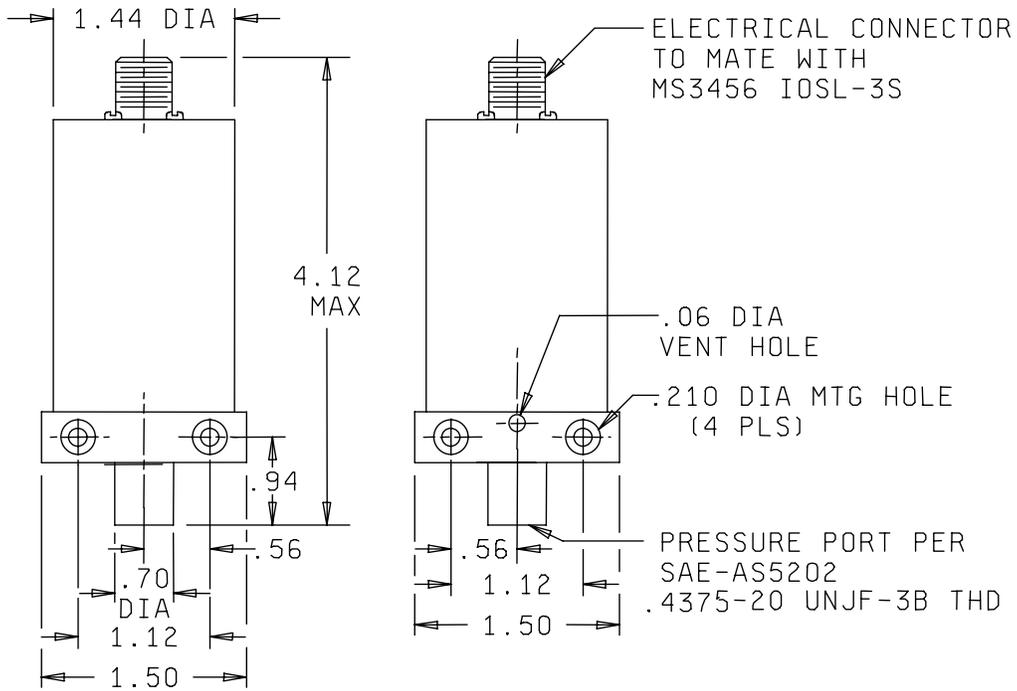
P<sub>G</sub> = GAGE PRESSURE

INCHES	MM	INCHES	MM
.223	5.66	.72	18.29
.31	7.87	.94	23.88
.50	12.70	1.12	28.45
.56	14.22	1.20	30.48
.62	15.75	1.70	43.18
.625	15.88	3.10	78.74
.69	17.53	3.90	99.06

Configuration 1

FIGURE 1. Switches.

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INCHES	MM	INCHES	MM
.06	1.5	1.12	28.4
.210	5.33	1.44	36.6
.56	14.2	1.50	38.1
.70	17.8	4.12	104.6
.94	23.9		

Configuration 2

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are  $\pm 0.005$  (.13 mm) for three decimals and  $\pm 0.02$  (.51 mm) for two decimals.
4. Exact shape of switch optional provided dimensions specified are not exceeded.
5. Schematic illustrated at sea level barometric pressure 29.92 in (759.97 mmHg).

FIGURE 1. Switches - Continued.

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REQUIREMENTS:

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

Weight: 9 ounces maximum.

Calibration: See table I.

Proof pressure: 4,500 lb<sub>f</sub>/in<sup>2</sup>.

Vent port proof pressure (configuration 1 only): Leakage from the return vent port shall not exceed 1 drop per minute with system pressure applied to pressure port.

System pressure: 3,000 lb<sub>f</sub>/in<sup>2</sup>.

Burst pressure: 7,500 lb<sub>f</sub>/in<sup>2</sup>.

Electrical ratings:

Operating voltage - 28 Vdc.

Current rating - 4 amperes resistive.

2 amperes inductive (L/R ratio = .026)

Seal:

Electrical chamber: Unsealed.

Pressure chamber: Water tight.

Reference chamber: Unsealed.

Media: Hydraulic fluid per MIL-PRF-6083, MIL-PRF-46170, MIL-PRF-83282 or MIL-PRF-87257.

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, except 10 - 2,000 Hz, 20 G).

Life:

Mechanical - A (100,000 cycles).

Electrical - A (100,000 cycles).

Acceleration: B (4 G).

Pulsation amplitude: C (5 percent).

Pulsation frequency: D (500 ±50 Hz).

Pressure rise: F (500,000 lb<sub>f</sub>/in<sup>2</sup>).

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

Connector torque: Applicable.

Part number: M9395/2- (dash number from table I).

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TABLE I. Dash number and pressure switch settings.

Dash no.	Pressure switch settings		Minimum dead band lb <sub>f</sub> /in <sup>2</sup>	Configuration
	Increasing lb <sub>f</sub> /in <sup>2</sup>	Decreasing lb <sub>f</sub> /in <sup>2</sup>		
01	1,200 ±250	By 700	100	1
02	2,900 ±150	By 2,400	200	1
03	By 2,000	At 1,700 ±100	---	2
04	By 2,875	At 2,600 ±100	---	2

NOTES

Referenced documents. In addition to MIL-DTL-9395, this specification sheet references the following documents.

MIL-PRF-6083  
MIL-PRF-46170  
MIL-PRF-83282  
MIL-PRF-87257  
MS3456  
MIL-STD-202  
SAE-AS5202

Custodians:  
Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 5930-1782)

Review activities:  
Army - AV  
Navy - AS, MC  
Air Force - 99