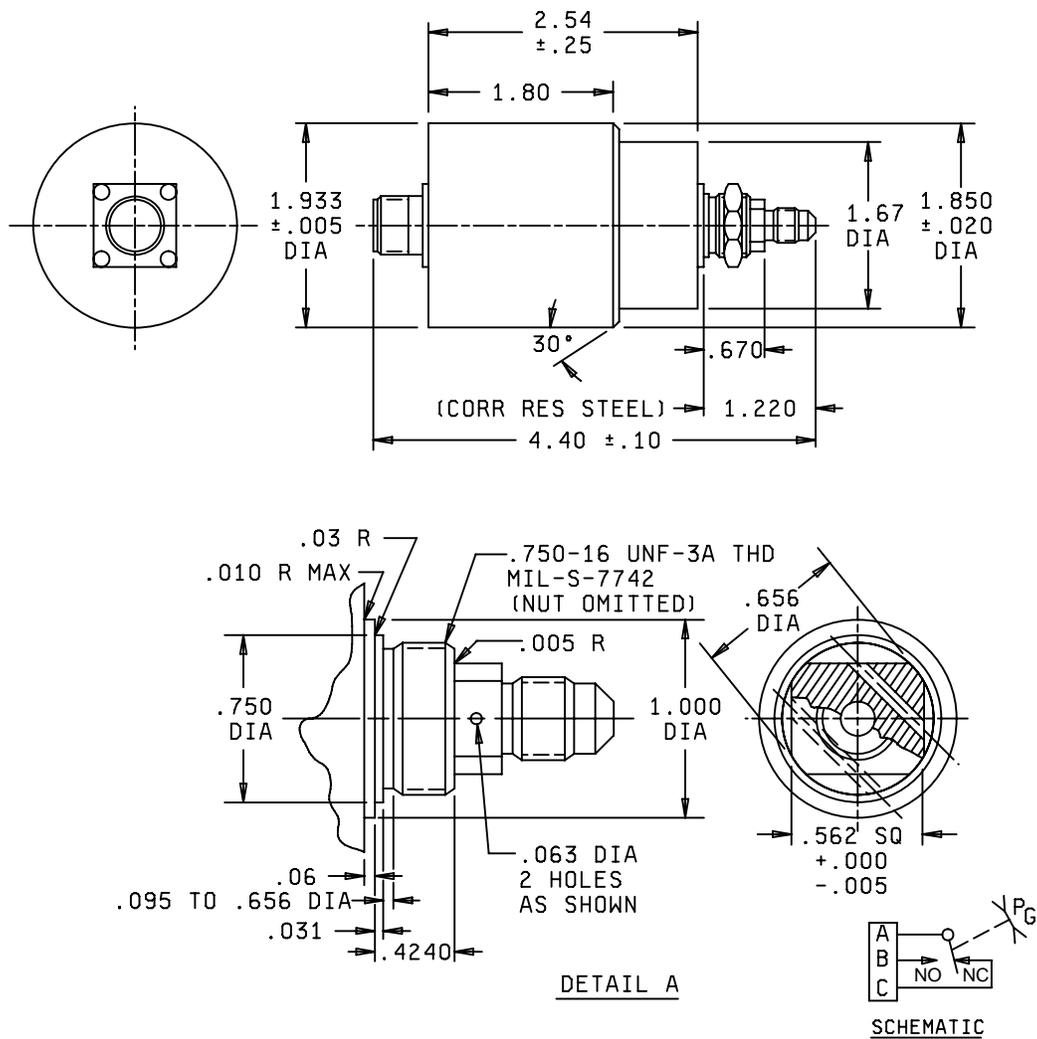


INCH-POUND  
MIL-DTL-9395/10F  
3 October 2006  
SUPERSEDING  
MIL-DTL-9395/10E  
30 May 2001

DETAIL SPECIFICATION SHEET  
SWITCHES, PRESSURE, (GAGE), TYPE II

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

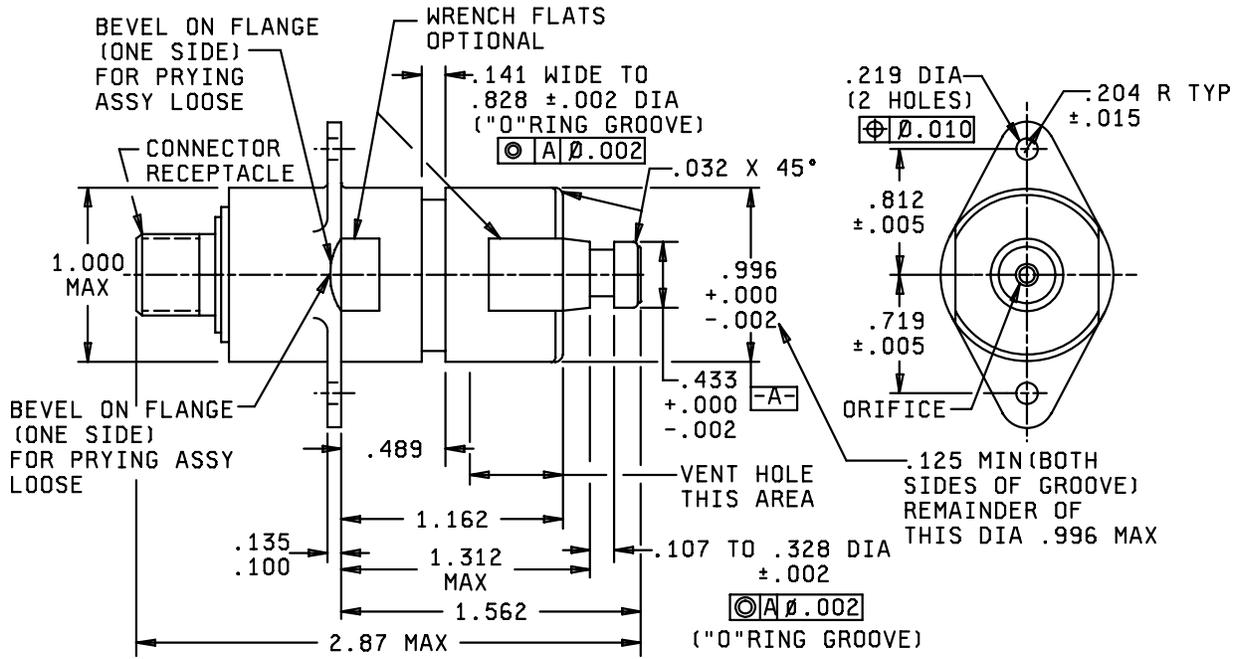
The requirements for acquiring the switches described herein shall consist of this document and MIL-DTL-9395.



Configuration 1

FIGURE 1. Switches.

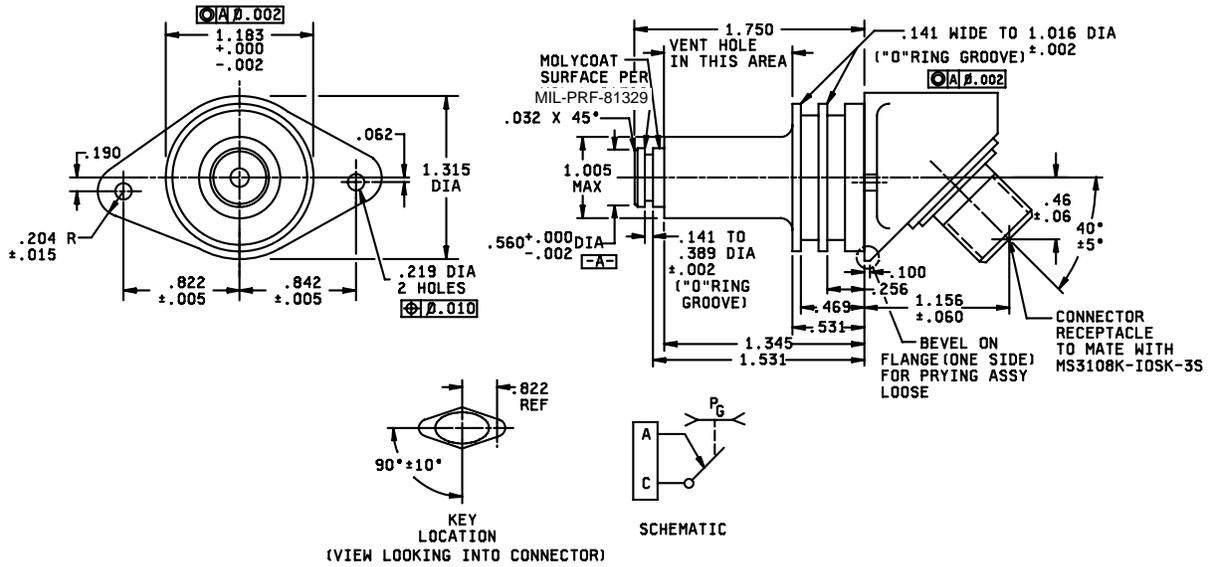
MIL-DTL-9395/10F



CONFIGURATION	ELECTRICAL CONNECTOR TO MATE WITH	SCHEMATIC	KEY LOCATION (VIEW LOOKING INTO CONNECTOR)
2	AMPHENOL 115-5035 OR EQUIV		
5	MS3106R-IOSL-35		
6	AMPHENOL 115-5035 OR EQUIV		
7	MS3106R-IOSL-35		

FIGURE 1. Switches - Continued.

MIL-DTL-9395/10F



Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	0.05	.135	3.43	.531	13.49	1.162	29.51
.005	0.13	.141	3.58	.560	14.22	1.183	30.05
.010	0.25	.188	4.78	.562	14.27	1.220	30.99
.015	0.38	.190	4.83	.656	16.66	1.312	33.32
.020	0.51	.204	5.18	.670	17.02	1.315	33.40
.03	0.76	.219	5.56	.719	18.26	1.354	34.39
.031	0.79	.25	6.4	.750	19.05	1.531	38.89
.032	0.81	.265	6.73	.812	20.62	1.562	39.67
.060	1.52	.266	6.76	.822	20.88	1.67	42.4
.062	1.57	.328	8.33	.828	21.03	1.750	44.45
.063	1.60	.389	9.88	.842	21.39	1.80	45.7
.09	2.3	.420	10.67	.996	25.30	1.850	46.99
.094	2.39	.433	11.00	1.000	25.40	1.933	49.10
.100	2.54	.46	11.7	1.005	25.53	2.54	64.5
.107	2.72	.469	11.91	1.016	25.81	2.87	72.9
.125	3.18	.489	12.42	1.156	29.36	4.40	111.8

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 XX ±.03 and XXX ±.010.
4. All "O" ring grooves 32 rms maximum surface finish.
5. Contour of switches optional provided maximum dimensions specified are not exceeded.

FIGURE 1. Switches - Continued.

REQUIREMENTS:

Dimensions and electrical schematic: See figure 1.

Weight (maximum):

- .7 lb (configuration 1).
- .2 lb (configuration 2, 3, 5, 6, 7).

Proof pressure: 800 lb<sub>f</sub>/in<sup>2</sup>.

System pressure: 500 lb<sub>f</sub>/in<sup>2</sup>.

Burst pressure: 1,200 lb<sub>f</sub>/in<sup>2</sup>.

Dead band: 25 lb<sub>f</sub>/in<sup>2</sup>.

Electrical ratings:

- Operating voltage - 28 V dc.
- Current rating - 10 amperes inductive (configuration 1) or 2 amperes inductive (configuration 2, 3, 5, 6, 7).
- 5 amperes lamp load (configuration 1).
- 10 amperes resistive (configuration 1).

Seal:

- Electrical chamber: Watertight.
- Pressure chamber: Watertight.
- Reference chamber: Watertight.

Electrical connector, electrical connector mating, and key location: See figure 1.

Pressure port: See figure 1.

Media: Oil IAW MIL-PRF-7808.

High temperature (operating): B (+275°F) for configuration 1; or C (+350°F) for configuration 2, 3, 5, 6, 7.

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

Altitude: D (100,000 feet).

Shock: A (50 G).

Vibration: S (test condition D, method 204 of MIL-STD-202, except 10 - 2000 Hz, 40 G).

Life (mechanical): A (100,000 cycles).

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

Acceleration: C (8 G) for configuration 1; or D (12 G) for configuration 2, 3, 5, 6, 7.

Pulsation amplitude: E (10 percent) for configuration 1; or 50 percent of system pressure for configuration 2, 3, 5, 6, 7.

Pulsation frequency: C (200 ±20 Hz) for configuration 1; or D (500 ±50 Hz) for configuration 2, 3, 5, 6, 7.

Pulsation rise: E (250,000 lb<sub>f</sub>/in<sup>2</sup>/sec) for configuration 1 or G (1,000,000 lb<sub>f</sub>/in<sup>2</sup>/sec for configuration 2, 3, 5, 6, 7.

Connector torque: Applicable (15 ft lb - both directions).

QUALIFICATION:

- Single submission: Restricted to switch submitted.
- Group submission: See table IV.

MIL-DTL-9395/10F

PART NUMBER: The part number shall consist of the prefix "M9395/10-" followed in turn by a character from table I, a character from table II and a character from table III denoting the high pressure setting, and a character from table II and a character from table III denoting the low pressure setting. Part number M9395/10-AJKGE identifies a pressure switch of configuration 1 which actuates at  $85 \pm 20 \text{ lb}_f/\text{in}^2$ , and deactuates at  $60 \pm 10 \text{ lb}_f/\text{in}^2$ .

EXAMPLE:

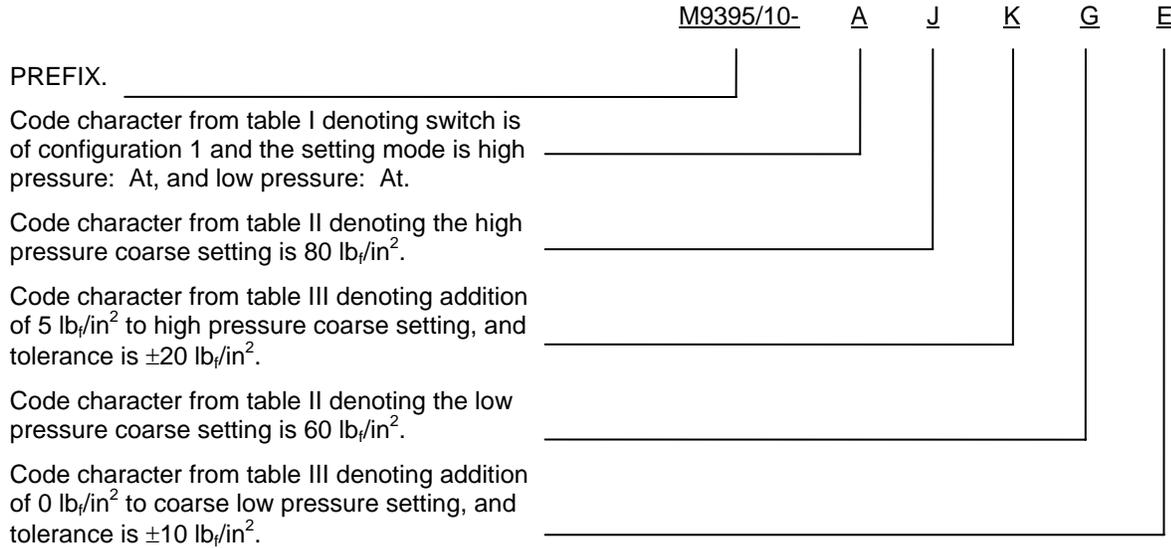


TABLE I. Code character for combination of configuration and setting mode.

Configuration	Code character		
	Pressure setting mode		
	High pressure: At Low pressure: At	High pressure: At Low pressure: Differential	High pressure: Differential Low pressure: At
1	A	B	C
2	D	E	F
3	G	H	J
4 (unused)	---	---	---
5	K	L	M
6	N	P	Q
7	R	S	T

MIL-DTL-9395/10F

TABLE II. Code character for coarse pressure setting (within 10 lb<sub>f</sub>/in<sup>2</sup>).

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

TABLE III. Code character for combination of fine pressure setting addition and tolerance.

Fine pressure setting (to be added to coarse pressure setting) (lb <sub>f</sub> /in <sup>2</sup> )	Code character												
	Tolerance (lb <sub>f</sub> /in <sup>2</sup> )												
	Min	±5	±10	±15	±20	±25	±30	±40	±50	±60	±80	±100	Max
0	A	C	E	G	J	L	N	Q	S	U	W	Y	1
5	B	D	F	H	K	M	P	R	T	V	X	Z	2

TABLE IV. Extent of qualification.

Part number	Number of samples required	Tests	Qualifies
MS9395/10-AECBC	1 each lamp	Complete per qualification inspection of MIL-DTL-9395	All configurations
MS9395/10-GECBC	1 each inductive		
MS9395/10-A7LYE	1 each inductive		
MS9395/10-G7LYE	1 each inductive		

SUPERSESION AND USAGE DATA: See table V.

TABLE V. Supersession and usage data.

New part number	Old part number	Used on
MS9395/10-AJKGE	MIL-DTL-9395/10-01	KC-135, B-52F F-101, F-102
MS9395/10-DRIFA	MIL-DTL-9395/10-02	F-4, B-57
MS9395/10-GRIFA	MIL-DTL-9395/10-03	EC/RC 135
MS9395/10-KRIFA	MIL-DTL-9395/10-05	B-52G
MS9395/10-NRIFA	MIL-DTL-9395/10-06	C-141
MS9395/10-RRIFA	MIL-DTL-9395/10-07	C-5A

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-S-7742  
MIL-PRF-7808  
MIL-DTL-9395  
MIL-PRF-81329  
MIL-STD-202

Custodians:

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

Preparing activity:  
DLA - CC

(Project 5930-2006-047)

Review activities:

Army - AV  
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 <http://assist.daps.dla.mil/>.