



MIL-PRF-8805/109B

Inches	mm	Inches	mm	Inches	mm
.001	.03	.062	1.57	.180	4.57
.002	.05	.063	1.60	.187	4.75
.005	.13	.070	1.78	.188	4.78
.010	.25	.087	2.21	.255	6.48
.015	.38	.088	2.24	.290	7.37
.020	.51	.090	2.29	.320	8.13
.030	.76	.096	2.44	.350	8.89
.040	1.02	.120	3.05	.374	9.50
.060	1.52	.156	3.96	.510	12.95

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerance is  $\pm 0.010$ .
3. Metric equivalents are given for general information only.
4. Mounting holes will accept pins or screws of .087 maximum diameter on  $.188 \pm 0.002$  centers.
5. Double turret terminals shall accept two AN-20 wires or equivalent.

FIGURE 1. Configurations and dimensions - continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 1 (Unsealed).

Temperature characteristic: 1 (-55°C to +85°C).

Shock type: M(100 g).

Vibration grade: 1 (10 to 500 Hz).

Weight: .003 pound maximum.

Operating characteristics:

Actuating force: 5 ounces maximum.

Releasing force: 1 ounce minimum.

Movement differential: .005 inch maximum.

Pretravel: .020 inch maximum.

Overtravel: .004 inch minimum.

Terminals: Terminal finish may be .000030 inch minimum to .000100 inch maximum thick gold plate or equivalent.

Terminal strength: 5 pounds, all directions.

Mechanical endurance: 50,000 cycles at .004 +.001, -.000 inch overtravel.

Dielectric withstanding voltage:

Sea level: 1050 V rms.

Altitude (50,000 ft): 400 V rms.

Electrical endurance: 25,000 cycles.

Electrical ratings: See tables I and II.

Part or Identifying Number (PIN): See table III.

Low level circuit: 25,000 cycles, applicable to switches with gold contacts (PIN's M8805/109-03 and 04).

Intermediate current: 25,000 cycles.

Qualification:

Group submission: See table IV.

TABLE I. Electrical ratings – silver contacts.

Load	Sea level		50,000 feet
	28 V dc	115 V ac, 60 Hz	28 V dc
	amperes	amperes	amperes
Resistive	7.0	7.0	4.0
Inductive	4.0	7.0	2.5
Lamp	2.5	2.0	2.5

TABLE I. Electrical ratings – gold contacts.

Load	Sea level 28 V dc	50,000 feet 28 V dc
	amperes	amperes
Resistive	1	1
Inductive	.5	.5

TABLE III. PIN's and characteristics.

PIN's	Contact material	Terminals
M8805/109-01	Silver	Single turret
M8805/109-02	Silver	Double turret
M8805/109-03	Gold	Single turret
M8805/109-04	Gold	Double turret

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TABLE IV. Qualification inspection.

PIN's	Inspection	Extent of approval
-02	Qualification inspection table of MIL-PRF-8805	All
-03 (10 sample units)	Groups I, VII, and X of qualification inspection table	

Custodians:  
Navy - EC  
DLA - CC

Preparing activity:  
DLA - CC

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