

INCH-POUND

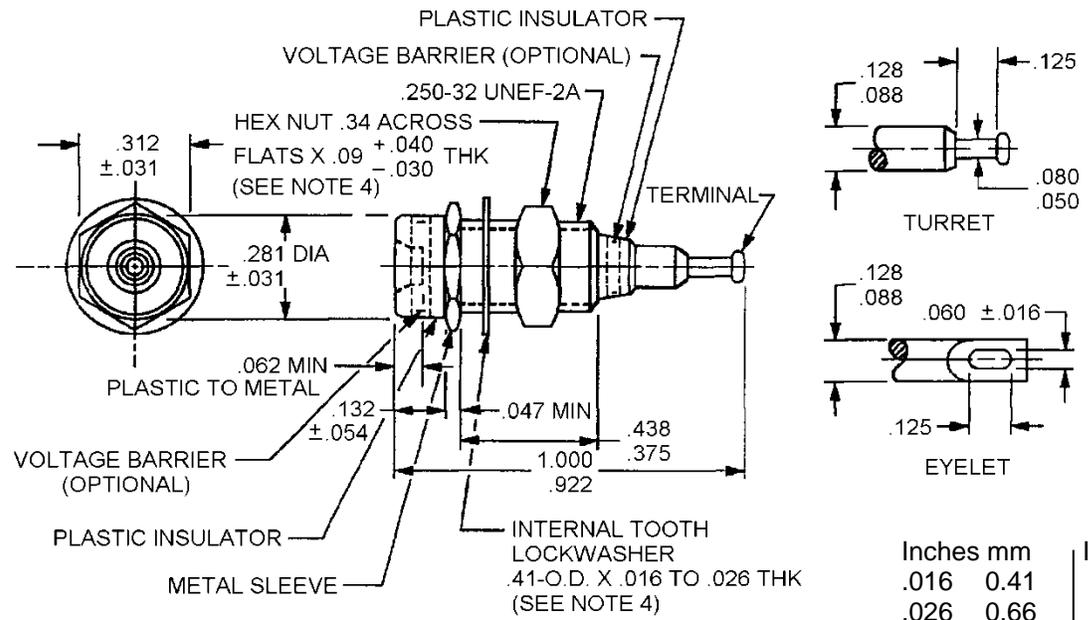
MIL-DTL-39024/10F
 18 October 2015
 SUPERSEDING
 MIL-DTL-39024/10E
 3 February 2003

DETAIL SPECIFICATION SHEET

JACK, TIP (TEST POINT TYPE, PANEL TYPE; SINGLE
 TEST POINT (THREADED) LOW VOLTAGE, .080)

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

The requirements for acquiring the product described herein
 shall consist of this specification and MIL-DTL-39024.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ± .010 (0.25 mm) for three place decimals and ± .03 (0.76 mm) for two place decimals.
4. One hex nut and one washer are to be supplied unassembled.

Inches	mm	Inches	mm
.016	0.41	.125	3.18
.026	0.66	.128	3.25
.030	0.76	.132	3.35
.031	0.79	.250	6.35
.040	1.02	.281	7.14
.047	1.19	.312	7.92
.050	1.27	.34	8.64
.054	1.37	.375	9.52
.060	1.52	.41	10.41
.062	1.57	.438	11.12
.080	2.03	.922	23.42
.088	2.24	1.000	25.40
.09	2.29		

FIGURE 1. Configuration and dimensions.



MIL-DTL-39024/10F

TABLE I. Design and identification data.

Dash number	Supersedes MS16108	Style	Insulation	
			Color	Number in accordance with FED-STD-595
-01	-1A, -11A, -12A	Turret	White	17875
-02	-2A		Red	11105
-03	-3A		Black	17038
-04	-4A		Brown	10075
-05	-5A		Green	14110
-06	-6A		Orange	12246
-07	-7A		Blue	15123
-08	-8A		Yellow	13655
-09	-9A		Gray	16187
-10	-10A		Purple	27144
-11	-1C, -11C, -12C	Eyelet	White	17875
-12	-2C		Red	11105
-13	-3C		Black	17038
-14	-4C		Brown	10075
-15	-5C		Green	14110
-16	-6C		Orange	12246
-17	-7C		Blue	15123
-18	-8C		Yellow	13655
-19	-9C		Gray	16187
-20	-10C		Purple	27144

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1 and table I.

Insulation: Material shall be polyamide in accordance with L-P-410 or ASTM-D4066.

Terminals: Shall be capable of being wired with two type E, AWG 20 wires in accordance with NEMA-HP3.

Metals and finishes: Shall conform to requirements of MIL-DTL-39024, except that the minimum nickel plating thickness for copper and copper alloys, except for contacts and terminals, shall be .0002 inch.

Test probe: 0.080 ± 0.001 inch in diameter and ½ -inch (min) length.

Contact current rating: 5 amperes (max).

Contact resistance: A test probe in accordance with MIL-DTL-39024 shall be fully inserted into the connector.

Test current: 5 amperes.

Points of measurement: Between the connector terminal and the extreme end of the solder cup on the test probe.

MIL-DTL-39024/10F

Measured values: See table II.

Dielectric withstanding voltage (at sea level):

Test voltage: 3,000 volts rms, 60 hertz, shall be applied to insulating material for a period of 15 seconds.

Insertion and withdrawal forces:

Insertion force: 5.0 pounds (max).
Withdrawal force: 0.4 pounds (min).

Durability: One thousand insertion-withdrawal cycles shall be performed. After the tests, connectors shall meet the initial measurements of insertion and withdrawal force, and contact resistance in table II.

TABLE II. Potential drop (max) with 5 amperes of current.

Test	Voltage drop (max)
Initial	6 mV
After durability	8 mV
After vibration	10 mV
After salt spray (corrosion)	15 mV

Operating conditions:

Operating voltage: 2,000 volts rms, 60 hertz at sea level; 350 volts rms, 60 hertz at 80,000 feet.

Qualification: Qualification is not required for this specification sheet.

First article testing (FAT): FAT shall be in accordance with MIL-DTL-39024, qualification inspection.

Revision notations. 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. In addition to MIL-DTL-39024, this document references the following:

- L-P-410
- FED-STD-595/10075
- FED-STD-595/11105
- FED-STD-595/12246
- FED-STD-595/13655
- FED-STD-595/14110
- NEMA-HP3
- FED-STD-595/15123
- FED-STD-595/16187
- FED-STD-595/17038
- FED-STD-595/17875
- FED-STD-595/27144
- ASTM-D4066

MIL-DTL-39024/10F

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2015-170)

Review activities:

Army - AR, CR4, EA, MI
Navy - AS, CG, MC, OS
Air Force – 19

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/>