

INCH - POUND

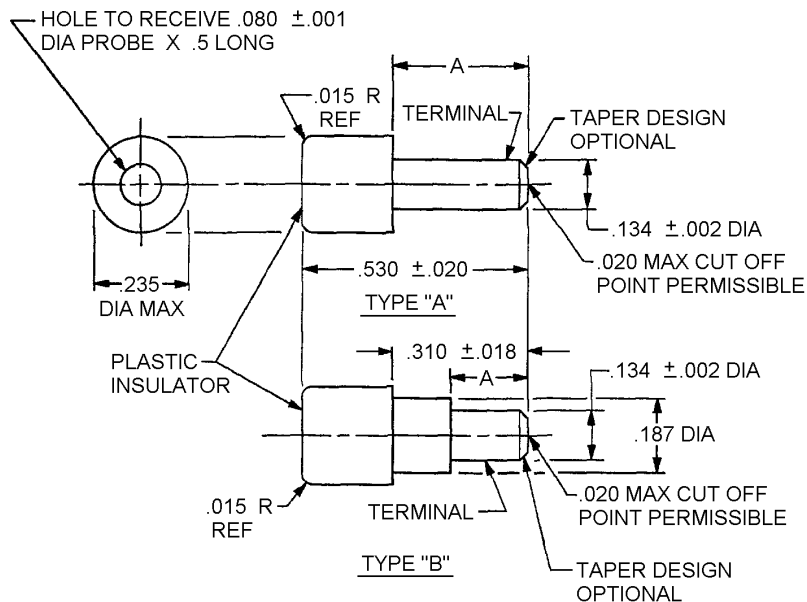
MIL-DTL-39024/15C
w/AMENDMENT 2
3 June 2020
SUPERSEDING
MIL-DTL-39024/15C
w/AMENDMENT 1
01 December 2018

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, TEST POINT TYPE, PRINTED WIRING TYPE;
SINGLE TEST POINT, 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 sheet and MIL-DTL-39024.



Inches	mm	Inches	mm
.001	0.03	.136	3.45
.002	0.05	.187	4.75
.015	0.38	.235	5.97
.018	0.46	.310	7.87
.020	0.51	.500	12.70
.080	2.03	.510	12.95
.132	3.35	.530	13.46
.134	3.40	.550	13.97

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only and are based on 1 inch = 25.4 mm.
2. Unless otherwise specified, tolerances are $\pm$.010 (0.25 mm).
3. All dimensionless pictorial configurations are for reference purposes only.

FIGURE 1. Configuration and dimensions.



MIL-DTL-39024/15C
w/AMENDMENT 2

TABLE I. Design and identification data.

Dash number	Terminal style	Dimension	Insulation	
		A (inches $\frac{1}{16}$)	Material	Color in accordance with SAE-AMS-STD-595
-01 -02 -03 -04 -05 -06 -07 -08 -09 -10 -11	Type "A" long	$\frac{.327}{.297}$ (8.31) (7.54)	L-P-410, ASTM D4066	White Red Black Brown Green Orange Blue Yellow Gray Purple Natural
-12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22	Type "B" med short	$\frac{.180}{.160}$ (4.57) (4.06)		White Red Black Brown Green Orange Blue Yellow Gray Purple Natural
-23 -24 -25 -26 -27 -28 -29 -30 -31 -32 -33	Type "B" short	$\frac{.120}{.100}$ (3.05) (2.54)		White Red Black Brown Green Orange Blue Yellow Gray Purple Natural
-34 -35 -36 -37 -38 -39 -40 -41 -42 -43 -44	Type "A" long	$\frac{.327}{.297}$ (8.31) (7.54)	ASTM D1710	White Red Black Brown Green Orange Blue Yellow Gray Purple Natural

See notes at end of table.

TABLE I. Design and identification data. – Continued.

Dash number	Terminal style	Dimension	Insulation	
		A (inches <u>1</u> /)	Material	Color in accordance with SAE-AMS-STD-595
-45 -46 -47 -48 -49 -50 -51 -52 -53 -54 -55	Type "B" med short	.180 (4.57) . .160 (4.06)	ASTM D1710	White Red Black Brown Green Orange Blue Yellow Gray Purple Natural
-56 -57 -58 -59 -60 -61 -62 -63 -64 -65 -66	Type "B" short	.120 (3.05) . .100 (2.54)		White Red Black Brown Green Orange Blue Yellow Gray Purple Natural

1/ Dimensions are in inches. Metric equivalents are given for information only.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1 and table I.

Insulation: Material as specified in table I.

Flammability: Dielectric materials shall be self-extinguishing in accordance with ASTM D635.

Test probe: 0.080 ± 0.001 inch in diameter and $\frac{1}{2}$ -inch (min) length. Test probe shall be engaged a minimum of $\frac{1}{2}$ inch.

Contact current rating: 5 amperes (max).

Contact resistance: A test probe in accordance with MIL-DTL-39024 shall be fully inserted in the connector. With a current of 5 amperes, potential drop shall be measured between the connector terminal and the extreme end of the solder cup on the test probe. Measured values shall be within the limits specified in table II.

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

Test	Before test	After test
Durability	6 mV	8 mV
Vibration	8 mV	10 mV
Salt spray (corrosion)	10 mV	15 mV

Dielectric withstanding voltage (at sea level):

Test voltage: 1,800 volts rms, 60 hertz, shall be applied for period of 15 seconds.

Insertion and withdrawal forces:

Insertion force: 5.0 pounds (max).

Withdrawal force: 0.4 pound (min).

Identification marking:

Part or Identifying Number (PIN): M39024/15-(dash number from table I).

Operating conditions:

Operating voltage is as follows:

1,200 volts rms, 60 hertz at sea level; 300 volts rms, 60 hertz at 80,000 feet.

Qualification: Not applicable.

First article inspection. First article inspection shall consist of Group A and B inspections. MIL-DTL-39024 paragraph 4.5 through 4.5.3.1.3 and Tables III through VII as applicable.

Conformance inspection. Inspection of successive lots for delivery shall consist of Group A inspections. MIL-DTL-39024 paragraph 4.5 through 4.5.3.1.3 and Tables III through VII as applicable.

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. 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:

ASTM D635
ASTM D1710
ASTM D4066
SAE-AMS-STD-595
L-P-410

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 5935-2020-083)

Review activities:

Army - MI

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>.