



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: FAA Specification for L-823
Plug and Receptacle, Cable Connectors

Date: 12/16/2021
Initiated By: AAS-100

AC No: 150/5345-26E
Change:

1 **Purpose.**

This advisory circular (AC) contains the specification for plug and receptacle (cable connectors) used with underground power cables, isolation transformer leads, and light fixture leads for airport lighting systems.

2 **Effective Date.**

Effective six months after the issue date of this AC, only equipment that satisfies the testing requirements of the specifications herein will be listed per AC 150/5345-53, *Airport Lighting Equipment Certification Program*.

3 **Cancellation.**

AC 150/5345-26D, *FAA Specification for L-823 Plug and Receptacle, Cable Connectors*, dated September 30, 2008, is canceled.

4 **Application.**

The Federal Aviation Administration recommends the standards and guidelines in this AC to establish uniform application of L-823 plug and receptacle, and cable connectors. This AC does not constitute a regulation, is not mandatory and is not legally binding in its own right. It will not be relied upon as a separate basis by the FAA for affirmative enforcement action or other administrative penalty. Conformity with this AC is voluntary, and nonconformity will not affect rights and obligations under existing statutes and regulations, except as described in subparagraphs 2, 3 and 4 below:

1. The standards and guidelines contained in this AC are practices the FAA recommends to establish an acceptable level of safety, performance and operation for L-823 plug and receptacle, and cable connectors.
2. This AC provides one, but not the only, acceptable means of meeting the requirements of 14 CFR part 139, *Certification of Airports*.
3. Use of these standards and guidelines is mandatory for projects funded under Federal grant assistance programs, including the Airport Improvement Program (AIP). See Grant Assurance #34.

4. This AC is mandatory, as required by regulation, for projects funded by the Passenger Facility Charge program. See PFC Assurance #9.

5 **Principal Changes.**

The AC incorporates the following principal changes:

1. Removed and reworded references to “shall” from Figure A-2.
2. Reformatted figures in Appendix A.
3. Updated reference documents to current revisions.
4. Added a test for chemical resistance in paragraph 4.2.8 to compliment requirement in paragraph 3.4.2.
5. Added reference for requirements for cable used with Class A connectors to paragraph 3.4.4.1.
6. Provided clarification to couplings for resistance measurements to paragraph 4.2.2.2.
7. Provided clarification to instructions for testing connectors for shielded cables to paragraph 4.2.2.2.
8. Updated errors in the xenon-arc weathering test in paragraph 4.2.6.
9. Corrected errors in the ozone weathering test in paragraph 4.2.6.
10. The format of the document has been updated in this version, and minor editorial changes have been made throughout.

Hyperlinks (allowing the reader to access documents located on the internet and to maneuver within this document) are provided throughout this document and are identified with underlined text. When navigating within this document, return to the previously viewed page by pressing the “ALT” and “←” keys simultaneously.

Figures in this document are schematic representations and are not to scale.

6 **Use of Metrics.**

Throughout this AC, U.S. customary units are used followed with “soft” (rounded) conversion to metric units. The U.S. customary units govern.

7 **Where to Find this AC.**

You can view a list of all ACs at

http://www.faa.gov/regulations_policies/advisory_circulars/. You can view the Federal Aviation Regulations at http://www.faa.gov/regulations_policies/faa_regulations/.

8 **Feedback on this AC.**

If you have suggestions for improving this AC, you may use the Advisory Circular Feedback form at the end of this AC.

A handwritten signature in black ink, appearing to read "John R. Dermody". The signature is stylized and cursive, with a large initial "J" and "D".

John R. Dermody
Director of Airport Safety and Standards

Page Intentionally Blank

CONTENTS

Paragraph	Page
Chapter 1. SCOPE AND CLASSIFICATION.....	1-1
1.1 Scope.....	1-1
1.2 Classification.....	1-1
Chapter 2. REFERENCED DOCUMENTS	2-1
2.1 General.....	2-1
2.2 FAA Advisory Circulars.....	2-1
2.3 American Society for Testing and Materials (ASTM) Standards.....	2-1
2.4 Underwriters Laboratories (UL) Standards.	2-1
2.5 American National Standards Institute.	2-1
2.6 Joint Insulated Cable Engineers Association (ICEA) and National Electronic Manufacturer's Association (NEMA).	2-2
Chapter 3. EQUIPMENT REQUIREMENTS	3-1
3.1 General.....	3-1
3.2 Environmental Requirements.....	3-1
3.3 Performance Requirements.....	3-1
3.4 Fabrication and Materials.	3-2
Chapter 4. EQUIPMENT QUALIFICATION REQUIREMENTS.	4-1
4.1 Qualification Procedures.....	4-1
4.2 Qualification Tests.....	4-1
Chapter 5. PRODUCTION TEST REQUIREMENTS.....	5-1
5.1 Production Tests.....	5-1
Appendix A. Cable Connector Figures	A-1

FIGURES

Figure A-1. Class A, Type II, Plugs and Receptacles – Two Conductor, 20 Ampere.....	A-1
Figure A-2. Class A, Type I, Plugs and Receptacles – Single Conductor, 25 Ampere, 5000 Volts to Ground.....	A-3

CONTENTS

Paragraph	Page
Figure A-3. Class B, Type I, Style 3, Plugs and Class B, Style 10, Receptacle – Single Conductor, 5000 Volts, 25 Ampere.	A-4
Figure A-4. Class B, Type II, Style 4 Plug – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.	A-5
Figure A-5. Class B, Type II, Style 11, Receptacle – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.	A-6
Figure A-6. Class B, Type II, Style 12, Receptacle – Single Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.	A-7
Figure A-7. Class B, Type II, Style 5, Plug – Single Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.	A-8
Figure A-8. Class A, Type II, Style 6, Plug – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.	A-9

TABLES

Table A-1. Class A and B, Plugs and Receptacles – Dimensions.	A-2
--	-----

CHAPTER 1. SCOPE AND CLASSIFICATION

1.1 **Scope.**

This specification contains requirements for plugs and receptacles (cable connectors) to be used for underground cable connections, for power cables, isolation transformer leads, and light fixture leads for airport systems.

1.2 **Classification.**

Cable connectors are classified by this specification into two types, two classes, and six styles of plugs and two types, two classes, and six styles of receptacles. Formerly, cable connectors were classified only by a figure number. Figures in this specification are now numbered consecutively.

1.2.1 Type.

Plugs and receptacles with the following electrical characteristics are covered by the specification:

Type I 1 conductor, 25 ampere, 5000-volt

Type II 2 conductor, 20 ampere, 600-volt

1.2.2 Class.

Plugs and receptacles with the following attachment methods are covered by this specification:

Class A Factory molded to cable

Class B Field attached to cable

1.2.3 Style.

Plugs and receptacles with following styles of housing are covered by this specification:

Style 1 Plug, Figure A-1 (detail A)

Style 2 Plug, Figure A-2 (detail A)

Style 3 Plug, Figure A-3 (detail A and detail C)

Style 4 Plug, Figure A-4 (detail A, detail B, and detail C)

Style 5 Plug, Figure A-7 (detail A, detail B, and detail C).
Dimensions are defined in Table A-1.

Style 6 Plug, Figure A-8.
Dimensions are defined in Table A-1.

Style 7 Receptacle, Figure A-1 (detail B)

Style 8 Receptacle, Figure A-1 (detail C)

Style 9 Receptacle, Figure A-2 (detail B)

- Style 10 Receptacle, Figure A-3 (detail B and detail D)
- Style 11 Receptacle, Figure A-5 (detail A, detail B, and detail C).
Dimensions are defined in Table A-1.
- Style 12 Receptacle, Figure A-6 (detail A, detail B, and detail C).
Dimensions are defined in Table A-1.

CHAPTER 2. REFERENCED DOCUMENTS

2.1 General.

The following documents, of the issue in effect on the date of application for qualification, are applicable to the extent specified in this AC.

2.2 FAA Advisory Circulars.

Copies of FAA Advisory Circulars may be obtained from www.faa.gov/airports/resources/advisory_circulars/.

AC 150/5345-7 *Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits*

AC 150/5345-53 *Airport Lighting Equipment Certification Program*

2.3 American Society for Testing and Materials (ASTM) Standards.

Copies of ASTM Standards may be obtained from <https://www.astm.org/index.html>.

B 33 *Tinned Soft or Annealed Copper Wire for Electrical Purposes, Specification for*

B 189-05(2015) *Lead-Coated and Lead Alloy Coated Soft Copper Wire for Electrical Purposes, Specification for*

D 1149-16 *Rubber Deterioration-Surface Ozone Cracking in a Chamber (Flat Specimens), Test for*

2.4 Underwriters Laboratories (UL) Standards.

Copies of UL standards may be obtained from <http://ulstandards.ul.com/>.

UL 1581 4th edition *Reference Standard for Electrical Wires, Cables, and Flexible Cords*

2.5 American National Standards Institute.

Copies of ANSI Standards may be obtained from <https://webstore.ansi.org/>.

ANSI/ASQC Z1.4 *Sampling Procedures and Tables for Inspection by Attributes*

ANSI/EIA557B *Statistical Process Control Systems*

2.6 **Joint Insulated Cable Engineers Association (ICEA) and National Electronic Manufacturer's Association (NEMA).**

Copies of NEMA Standards may be obtained from: <http://www.nema.org>

ICEA S-95-658/ NEMA WC 70 *Non-Shielded 0-2kV Power Cables*

ICEA S-96-659/NEMA WC 71 *Standard for Non-Shielded Cables Rated 2001-5000 Volts for use in the Distribution of Electrical Energy*

CHAPTER 3. EQUIPMENT REQUIREMENTS

3.1 **General.**

Plugs and receptacles (cable connectors) must be fabricated per all specification requirements.

3.2 **Environmental Requirements.**

The plugs and receptacles (cable connectors) must be designed for continuous use within a temperature range of -67° Fahrenheit (F) (-55° Celsius (C)) to +149°F (+65°C) while exposed to weather, submerged in water, or buried in the earth.

3.3 **Performance Requirements.**

3.3.1 Electrical Connection.

The electrical rating of each connector must not be less than 5000 Volts (V) for type I connectors, or 600 V for type II connectors. The voltage drop across the contacts of a connected plug and receptacle must not exceed 7.5 millivolts (mV) for the Type I connectors and must not exceed 6.0 mV for the Type II connectors.

3.3.2 Bonding Strength.

The completed Class A connector assembly must withstand a longitudinal pull of at least 30,000 pounds per square inch (psi) (207 Megapascals (MPa)), 75 percent of an average tensile strength of 40,000 psi, (276 MPa) for all wire sizes. Calculation of tensile strength should be done by considering the cross-sectional area of the conductor only. Separation between the molded-on connector and the cable must not exceed 0.03 inches (0.8 mm). The wires must be per with ASTM Specification B 33 and B 189-05(2015).

3.3.3 Mechanical Connection.

Each connected plug and receptacle must withstand a static pull load of 10 pounds (44 N) without showing evidence of separation. No damage must occur to the mating components when the connected plug and receptacle are separated by a greater static pull load.

3.3.4 Seal.

A watertight seal must be provided between the mated plug and receptacle and between the rubber and metal parts of the plug and receptacle.

3.4 **Fabrication and Materials.**

3.4.1 General.

Each plug and receptacle (cable connector), type, class, and style must be per the dimensions and construction requirements shown on the applicable figures in Appendix A of this specification.

3.4.2 Housing.

The connector housing must be molded from natural and/or synthetic elastomeric materials serving both as insulation and sheath to fully enclose the pins of the plug and sockets of the receptacle. The housing material must be suitable for direct earth burial, submergence in water, and capable of withstanding limited attack from chemicals, typically present on the airfield, including but not limited to, oil, de-icing fluids and/or gasoline. Material compounds used in connector housings must not contain more than 25 pounds (11 kilograms (kg)) of carbon black per 100 pounds (45 kg) of elastomer. Housings for Class A connectors must be fabricated from materials capable of bonding to cable sheaths or conductor insulation, during the manufacturing process, to provide a watertight bond.

3.4.3 Pins and Sockets.

The pins and sockets must conform to all dimensions and construction requirements per the applicable figures in Appendix A of this specification. Pins and sockets must be made of materials that contain at least 98 percent copper, or free cutting brass alloy 360 (AMS C36000) and in either case must be made of material at least "half hard". The contact portion of the pin and socket must be left "stock hard" and the crimping section, when necessary, fully annealed. The hardness transition must be limited to the locking section of the pin and socket. The pin and socket must be electroplated with tin or other suitable material to provide good electrical contact per paragraph 3.3.1. The sockets must be spring loaded or slotted and spring loaded to insure good electrical contact per paragraph 3.3.1, and Class A sockets must have a means that protects the sockets slots from filling with insulating compound during molding. The pin for the Style 3 connector must be provided with a visual indication that verifies proper assembly position. Pins and sockets provided for Class B connectors must have provisions for crimping to the cable conductor(s) and must not exhibit damage after crimping.

3.4.4 Connector Assemblies.

3.4.4.1 **Class A.**

Pins and sockets must be held perpendicular to the face of the block. Suitable electrical conductors must be mechanically and electrically connected to the pin(s) or socket(s). The connector housing must be molded per paragraph 3.4.2. Primary connectors must meet the requirements of ICEA S-96-659/NEMA WC 71, *Standard for Non-Shielded Cables Rated 2001-5000 Volts for use in the Distribution of Electrical Energy*, and be molded to an electrical cable having a voltage rating equal to or less than the specified voltage rating of the connector.

Secondary connectors must meet the requirements of ICEA S-95-658/ NEMA WC 70 Non-Shielded 0-2kV Power Cables and be molded to an electrical cable having a voltage rating equal to or less than the specified voltage rating of the connector with the preferred being equal to the connector rating. A connector must never be molded to an electrical cable having a higher voltage rating than the specification requirements for the connector. After molding, the space between the pins of Type II plugs must not be less than 1/8 inch (3 mm) when the pins are pinched together with a force of 6 pounds (27 N) applied 1/2 inch (12.7 millimeters (mm)) out from the face of the plug. Also, the space between the ends of the pin of the Type II plugs must not be greater than 9/16 inch (14.3 mm) when the pins are pulled apart with a force of 6 pounds (27 N) applied 1/2 inch (12.7 mm) out from the face of the plug. The force is applied to the pins only. During testing for the above-mentioned requirements, the plug is to be held only to keep it from turning.

3.4.4.2 **Class B.**

3.4.4.2.1 Type I.

Each receptacle must be equipped with a disposable sleeve fitted into the receptacle's water seal to catch surplus silicone compound upon assembly. Each socket must be equipped with a disposable pin fitted tightly into the pin end of the socket to prevent entry of silicone compound on assembly and to provide a visual indication of proper socket position after assembly. The pin design must be such that proper internal dispersion of silicone compound in the assembly is assured. An adequate amount of silicone insulating compound must be furnished with each connector to ensure filling all internal voids when the connector is assembled. Each housing must be capped with a disposable shipping cap on the cable entrance end.

3.4.4.2.2 Type II.

Connector assemblies must be composed of two parts, an insert assembly and a housing. Pins or sockets must be held perpendicular to the face of each end of the molded insert assembly and fastened. After proper assembly, the space between the pins of the plug must not be less than 1/8 inch (3 mm) when the pins are pinched together with a force of 6 pounds (27 N) applied 1/2 inch (12.7 mm) out from the face of the plug. Also, the space between the ends of the pin must not be greater than 9/16 inch (14.3 mm) when the pins are pulled apart with a force of 6 pounds applied 1/2 inch (12.7 mm) out from the face of the plug. Inserts and housing must be molded as specified in paragraph 3.4.2, and must comply with the dimensions and styles per the applicable figures in Appendix A of this AC. When assembled the plug and receptacle assemblies must provide a watertight seal to prevent moisture from entering the housing.

3.4.5 Marking.

Each plug and receptacle must be marked with manufacturer's identification and L-823 designation with style number, e.g., L-823, Style 3.

3.4.6 Caps.

Caps must be supplied with Class A connectors (unless requested otherwise by the buyer) to protect plugs and receptacles prior to final connection. Caps must be made of a plastic material compatible with the housing materials per paragraph 3.4.2. When a series short circuiting plug type cap with internal jumpers is required for Type II receptacles, jumpers must be connected to the proper pins. The mating dimensions must be the same as the corresponding plug. The short-circuiting cap must be permanently marked with an "S".

3.4.7 Instructions.

Installation instructions must be furnished by the manufacturer with each Class B connector.

CHAPTER 4. EQUIPMENT QUALIFICATION REQUIREMENTS.

4.1 **Qualification Procedures.**

Procedures for qualifying equipment to be furnished under the Federal grant assistance program for airports are contained in AC 150/5345-53, *Airport Lighting Equipment Certification Program.*

4.2 **Qualification Tests.**

The following tests must be performed on each unit submitted for qualification to demonstrate compliance with all specifications in this AC. Should a conflict exist between this AC and referenced documents, the specification in this AC must apply.

4.2.1 General.

Assembled connectors, with conductors attached, must be subjected to electrical and physical tests. Class B connectors must be assembled per the manufacturer's instructions to lengths of wire or cable, as appropriate, of at least 24 inches (0.6 m) for all tests. Six pairs of mated connectors must be selected at random from a production run for each type of connector to be tested for approval. Each tested connector must pass all qualification tests. Failure of any one of the connectors in any one of the qualification tests causes rejection and indicates failure to comply with this specification.

4.2.2 Dielectric Tests.

4.2.2.1 **Plugs and Receptacles.**

Six test insert plugs made of nylon or equal material of suitable dielectric strength must be provided for the test. The test plugs must meet the mating dimensions of the corresponding standard plug intended for use with the receptacle being tested. Each plug must be checked with "go" and "no go" ring gauges to ensure compliance with specified dimensions. Each connector receptacle under test must be mated with one of the test plugs and allowed to soak for 24 hours in a tap water bath at room temperature, (68-77°F (20-25°C)). At the end of the soaking period, with the receptacle still immersed, apply a test voltage of 4.7 kilovolts (kV) dc for 5 minutes to Type II connectors and 15 kV dc to Type I connectors. One minute after the test voltage has been applied the minimum insulation resistance between the conductors and water, and between conductors measured with a 500-volt source must be 25,000 megohms minimum. Receptacles that have passed this test will then be used for testing the corresponding plugs in a like test.

4.2.2.2 **Connector Assembly.**

After the conclusion of the test in paragraph 4.2.2.1, each plug and receptacle being tested must be mated and immersed in a tap water bath at

room temperature, (68-77°F (20-25°C)). Immerse not more than 2 feet (0.6 m) of cable, 1 foot (0.3 m) of the plug, and 1 foot (0.3 m) of the receptacle. While immersed, each connector assembly must be manually flexed for 2 minutes and then left immersed for a minimum of 24 hours with its cable leads flexed and maintained 180° from its longitudinal axis. Measure the insulation resistance between the conductor(s) and water, and between conductors of each connected assembly after the 24-hour soaking period. The resistance measurements must be taken 1 minute after a test voltage of 4.7 kV dc has been applied for 5 minutes to Type II connectors and 15 kV dc to Type I connectors. The minimum resistance between the conductor(s) and water, and between conductors must be 25,000 megohms. Type I connectors intended for shielded cable must also have resistance measurements done between the shielded conductor and water, and between the shielded conductor and power conductor. Heat the tap water to 149°F (65°C) without removing the assemblies and maintain this temperature for at least 1 hour. Again, measure the resistance between the conductor(s) and water, and between conductors with a 500-volt source. The minimum acceptable resistance after the heated soaking period must be 10,000 megohms.

4.2.3 Bond Test.

The molded bond between cable and Class A connector must be subjected to a static longitudinal pull load of the magnitude per paragraph 3.3.2. When testing Class A, Type II, connectors of any Style the two conductors must be pulled as a single cable, not as individual conductors. The connector must be held in a manner that does not impart a crimping or clamping action to the connector that would affect the pull test. The connector molding cavity, or a similarly shaped fixture, is acceptable for holding the connector. Separation between the molded connector and the cable jacket or conductor insulation exceeding .03 inches must be cause for rejection.

4.2.4 Mechanical Connection Test.

Each plug and receptacle intended for mating must be connected together and subjected to the static pull load per paragraph 3.3.3. Any evidence of separation of the connection must be cause for rejection. An increasing load must be applied to the connector assembly until separation occurs. No damage must occur to the mating components when the connected plug and receptacle are separated by the greater static pull load. Any evidence of damage to plugs, receptacles, conductors, and/or the connector bond will be cause for rejection.

4.2.5 Electrical Connection Test.

Voltage drop measurements must be made across mated connectors while conducting their rated current. Voltage drops in excess of those in paragraph 3.3.1 must be cause for rejection. This test may be performed using unmolded contacts conducting rated current. This would permit the measurement to be made without damaging the molded connectors. This test must be performed on the equivalent of six connectors (six contact pairs for Type I connectors and twelve contact pairs for Type II connectors).

4.2.6 Weathering Test.

Slabs of connector housing material and sample pairs of connectors must be subjected to simulated sunlight by conditioning with xenon-arc radiation for 720 hours as per Section 1200.1 of UL 1581. The conditioned and unconditioned slabs of connector housing material must then be evaluated to Section 1200.15 of UL 1581 in accordance with the procedure found in UL 2556. Failure of the material test slab samples to meet the ratio requirements of section 1200.15 of UL 1581 must be cause for rejection. Cracking of the sample connectors must also be cause for rejection.

Additionally, slabs of connector housing material and sample pairs of connectors must be exposed to ozone per ASTM D1149-16 with 50 parts per hundred million (pphm) ozone, 38C, 20 percent sample extension (procedure B1 static strain), and 100 hours exposure. Cracking of the connectors, or test slabs as a result of the ozone exposure will be cause for rejection.

4.2.7 Metal Bond Test.

Class A assemblies must have their connector plug and receptacle placed in water, with 20 psi air pressure applied from the free end of the cable, for 10 minutes. There must be no air bubbles emanating from the assembly observed in the water.

4.2.8 Housing

Expose the material to the specified chemicals (not submersion) for a period of 20 days at the specified maximum temperature.

Page Intentionally Blank

CHAPTER 5. PRODUCTION TEST REQUIREMENTS

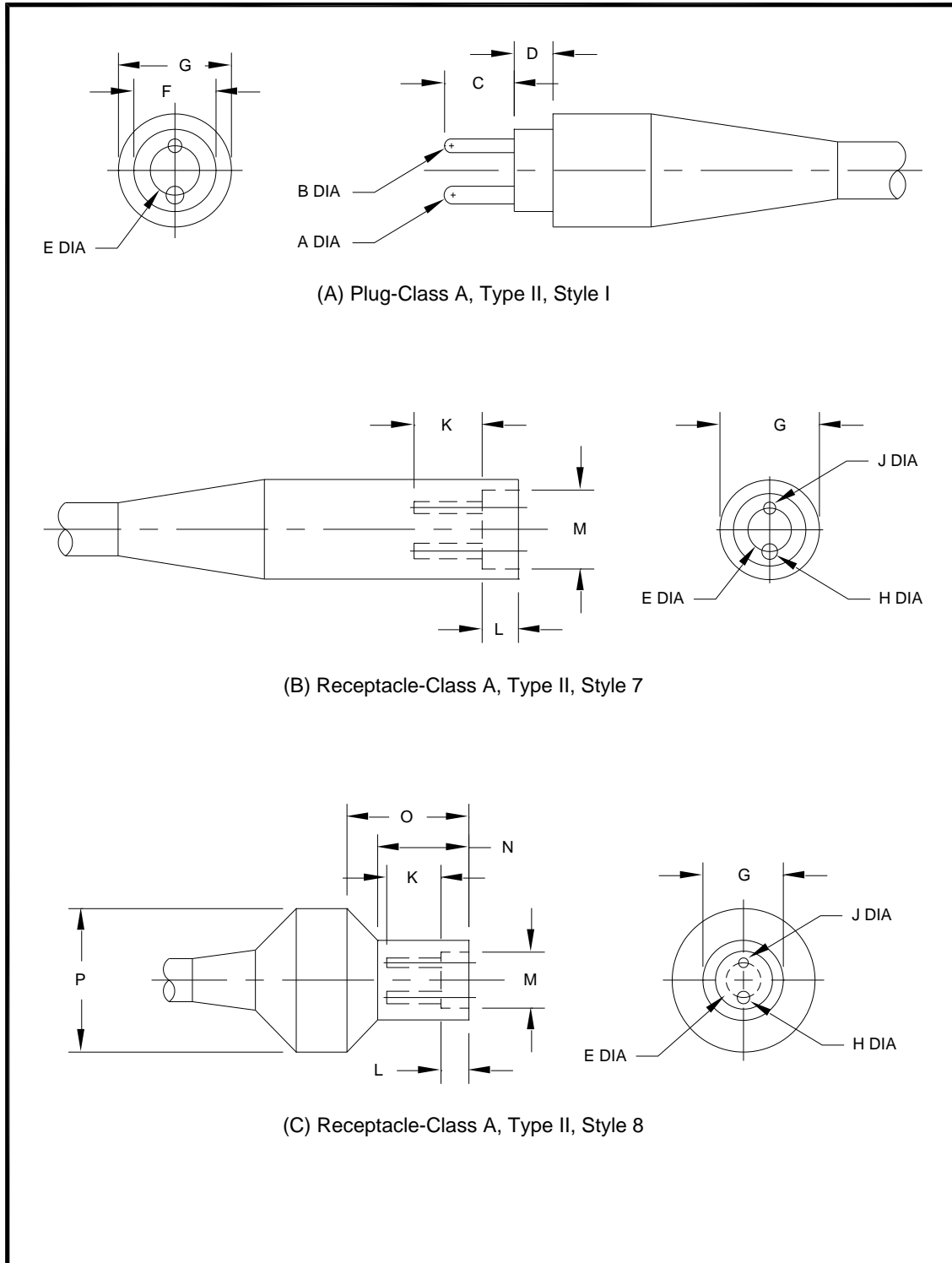
5.1 **Production Tests.**

Each connector must be visually inspected and interface dimensions checked per the process control below. Each plug and receptacle, cable connector (Class A) must be subjected to a dielectric and continuity test during the validation of a production run. The test voltage must be 4.7 kV dc for Type II connectors and 15 kV dc for Type I connectors. The minimum insulation resistance between the conductors must be 23,500 megohms for Type II connectors and 75,000 megohms for Type I connectors (0.2 micro amps leakage current). The application of the test voltage may be reduced to 1 second. For conventional testing, sampling is defined by ANSI/ASQC Z1.4-1993, Inspection Level II, AQL 2.5. For SPC systems, sample per ANSI/EIA557B 2015 and show statistical capability with a $C_{pk} \geq 1.0$ and $\sigma \geq 3.0$.

Page Intentionally Blank

APPENDIX A. CABLE CONNECTOR FIGURES

Figure A-1. Class A, Type II, Plugs and Receptacles – Two Conductor, 20 Ampere.

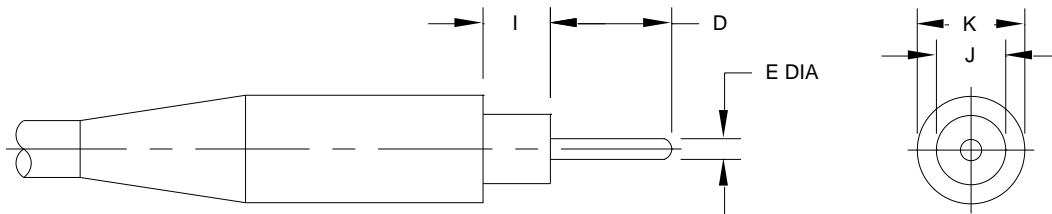


Note: Dimensions are defined in Table A-1.

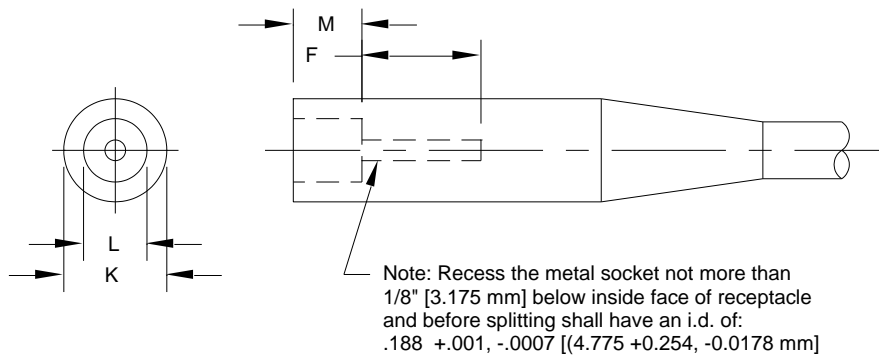
Table A-1. Class A and B, Plugs and Receptacles – Dimensions.

Dimension	Inches	Millimeters	References
A	.155 ± .001	3.937 ± .025	Connector
B	.124 ± .001	3.150 ± .025	Connector
C	.625 ± .015	15.875 ± .381	Plug, pin
D	.343 + .031, -.000	8.712 + .787, -.000	Plug
E	.435 ± .010	11.049 ± .254	Plug, receptacle
F	.725 + .020, -.000	18.415 + .508, -.000	Plug
G	1.000 + .000, -.031	25.40 + .000, -.787	Plug, receptacle
H	.1570 + .0010, -.0007	3.988 + .0254, -.018	Socket, diameter before splitting
J	.1260 + .0010, -.0007	3.2004 + .0254, -.018	Receptacle
K	.641 Minimum	16.28 Minimum	Depth of socket includes .125" [3.18 mm] recess below inside face of receptacle
L	.358 + .000, -.015	9.093 + .000, -.381	Receptacle
M	.694 ± .010	17.628 ± .254	Receptacle
N	1.125 ± .031	28.575 ± .787	Receptacle
O	1.500 ± .031	38.10 ± .787	Receptacle
P	1.750 ± .031	44.45 ± .787	Receptacle

Figure A-2. Class A, Type I, Plugs and Receptacles – Single Conductor, 25 Ampere, 5000 Volts to Ground.



(A) Plug-Class A, Type I, Style 2



(B) Receptacle-Class A, Type I, Style 9

Dimension	Inches	Millimeters
D	1.062 ± .015	26.975 ± .381
E	.186 ± .001	4.7244 ± .0254
F	1.080 Minimum	27.432 Minimum
I	.593 + .015, - .000	15.062 + .381, - .000
J	.604 + .010, - .000	15.342 + .254, - .000
K	.937 + .000, - .031	23.800 + .000, - .787
L	.573 ± .010	14.554 ± .254
M	.608 + .000, - .015	15.443 + .000, -.381

Figure A-3. Class B, Type I, Style 3, Plugs and Class B, Style 10, Receptacle – Single Conductor, 5000 Volts, 25 Ampere.

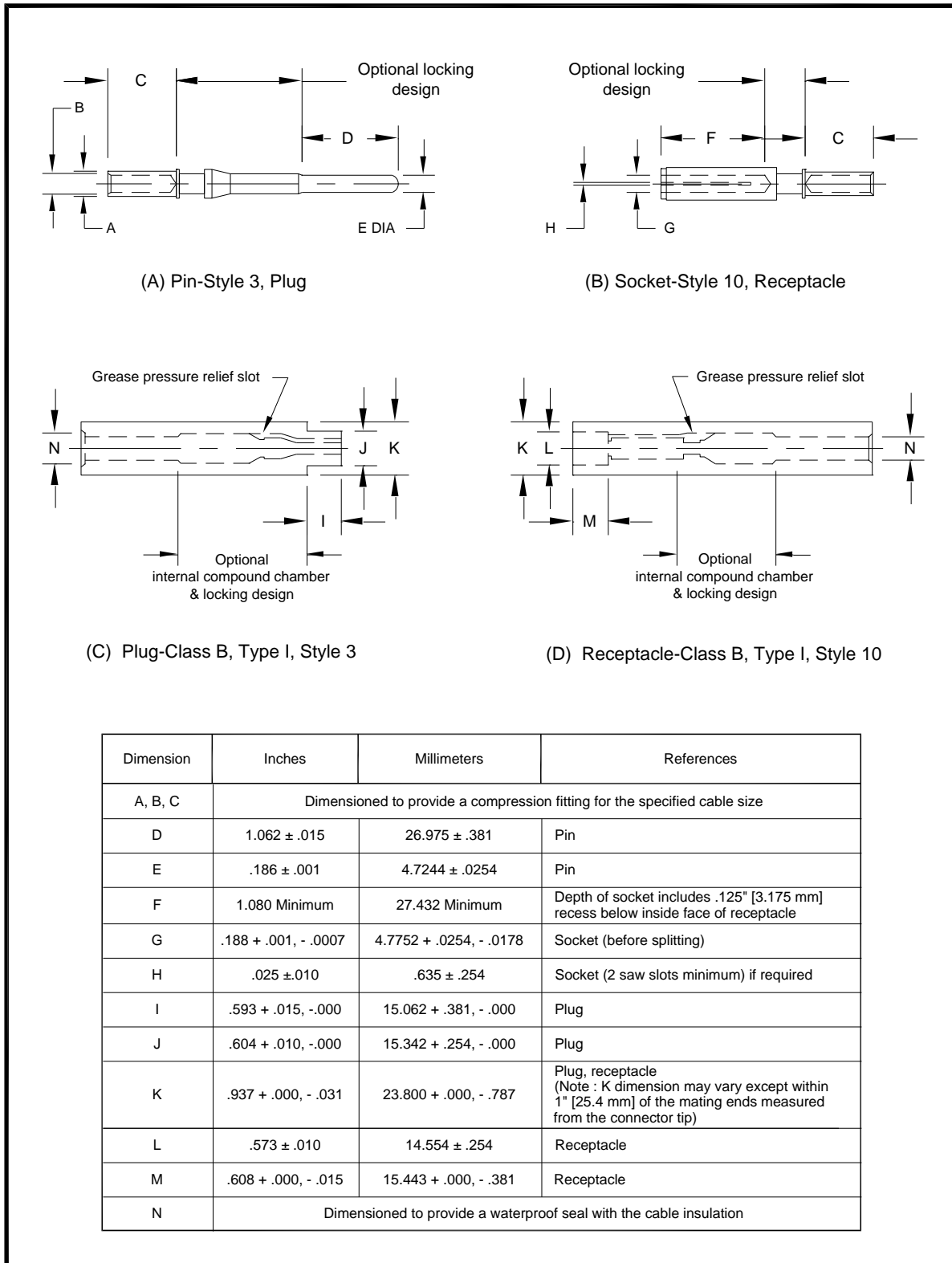
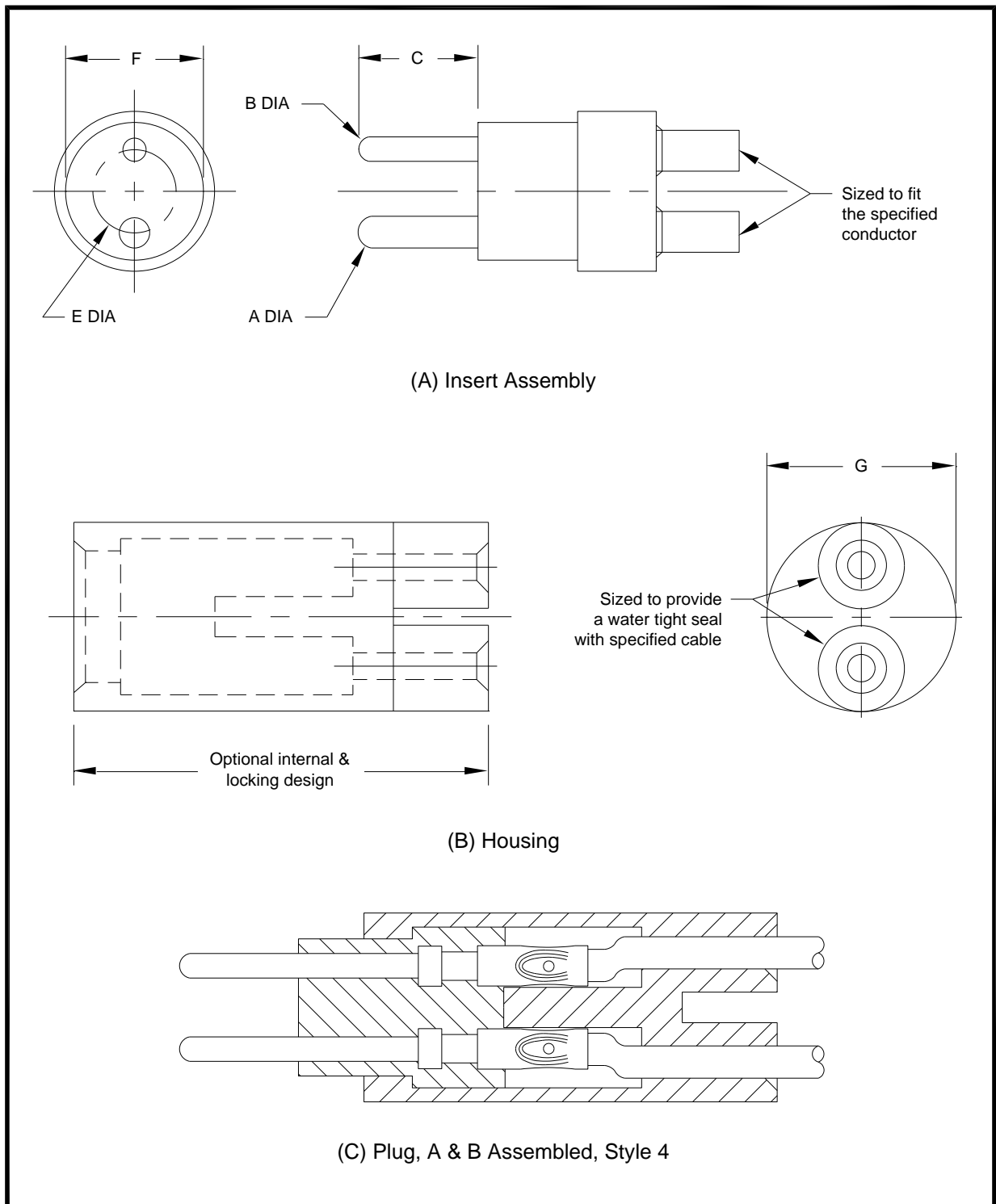
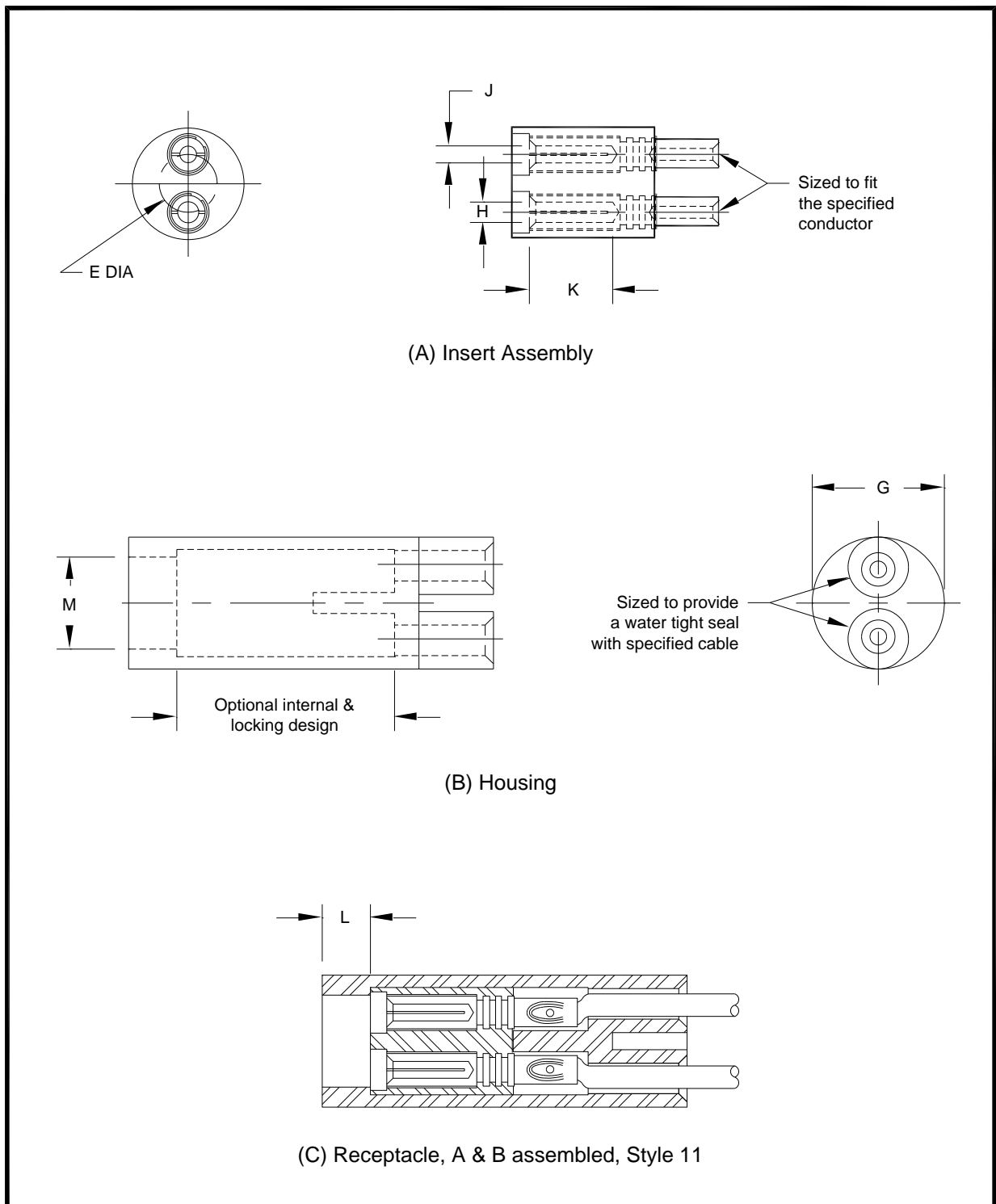


Figure A-4. Class B, Type II, Style 4 Plug – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.



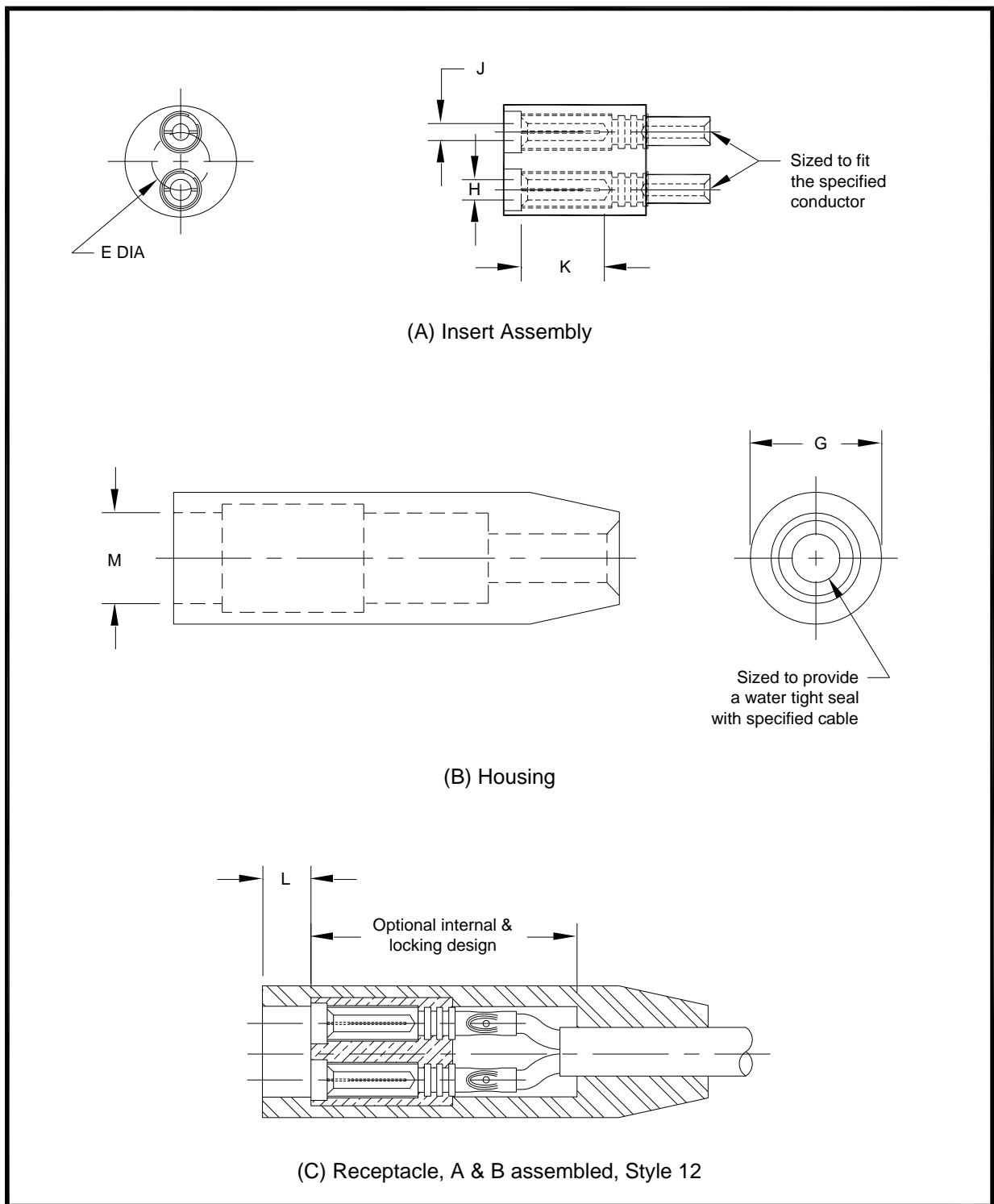
Note: Dimensions are defined in Table A-1.

Figure A-5. Class B, Type II, Style 11, Receptacle – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.



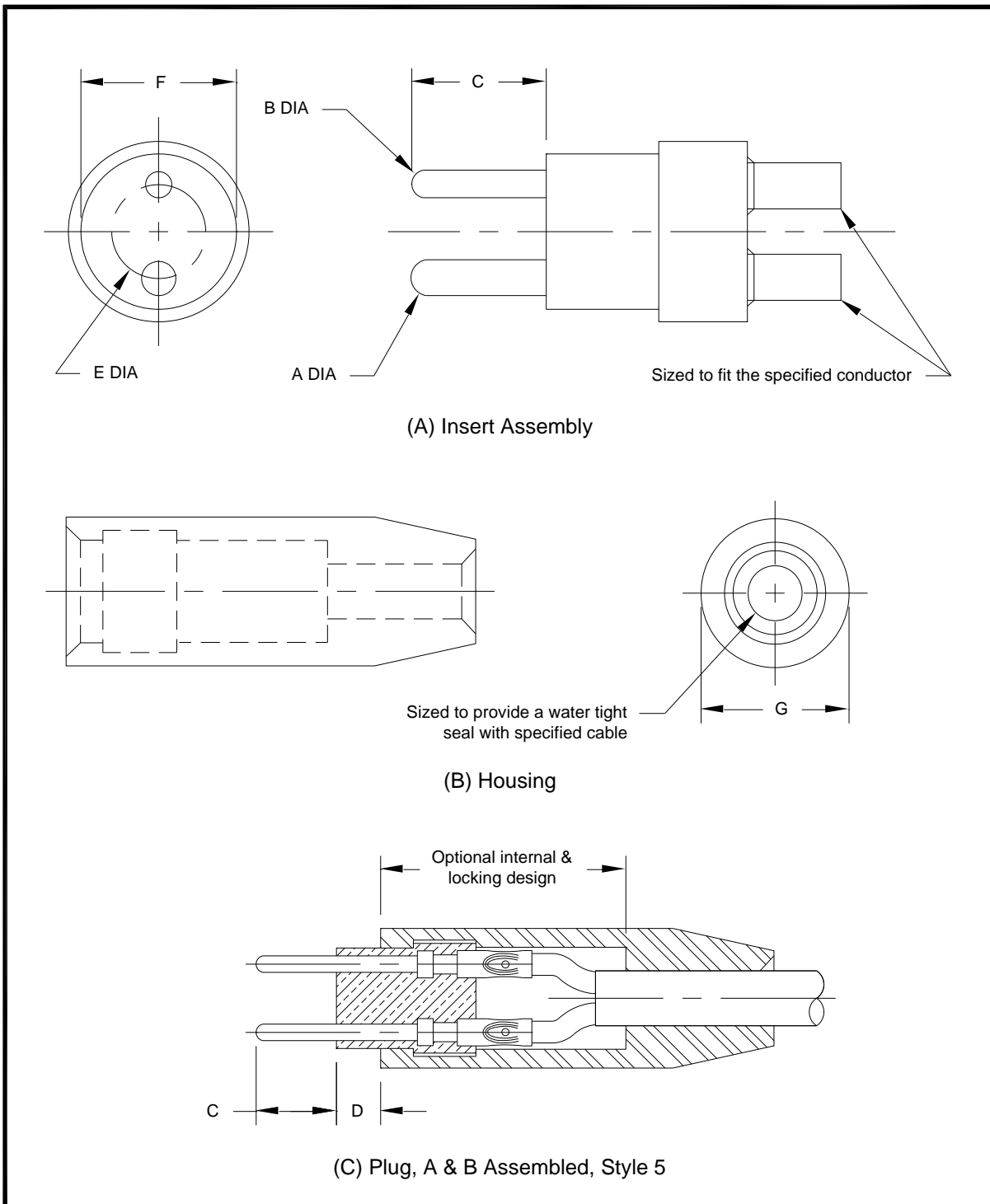
Note: Dimensions are defined in Table A-1.

Figure A-6. Class B, Type II, Style 12, Receptacle – Single Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.



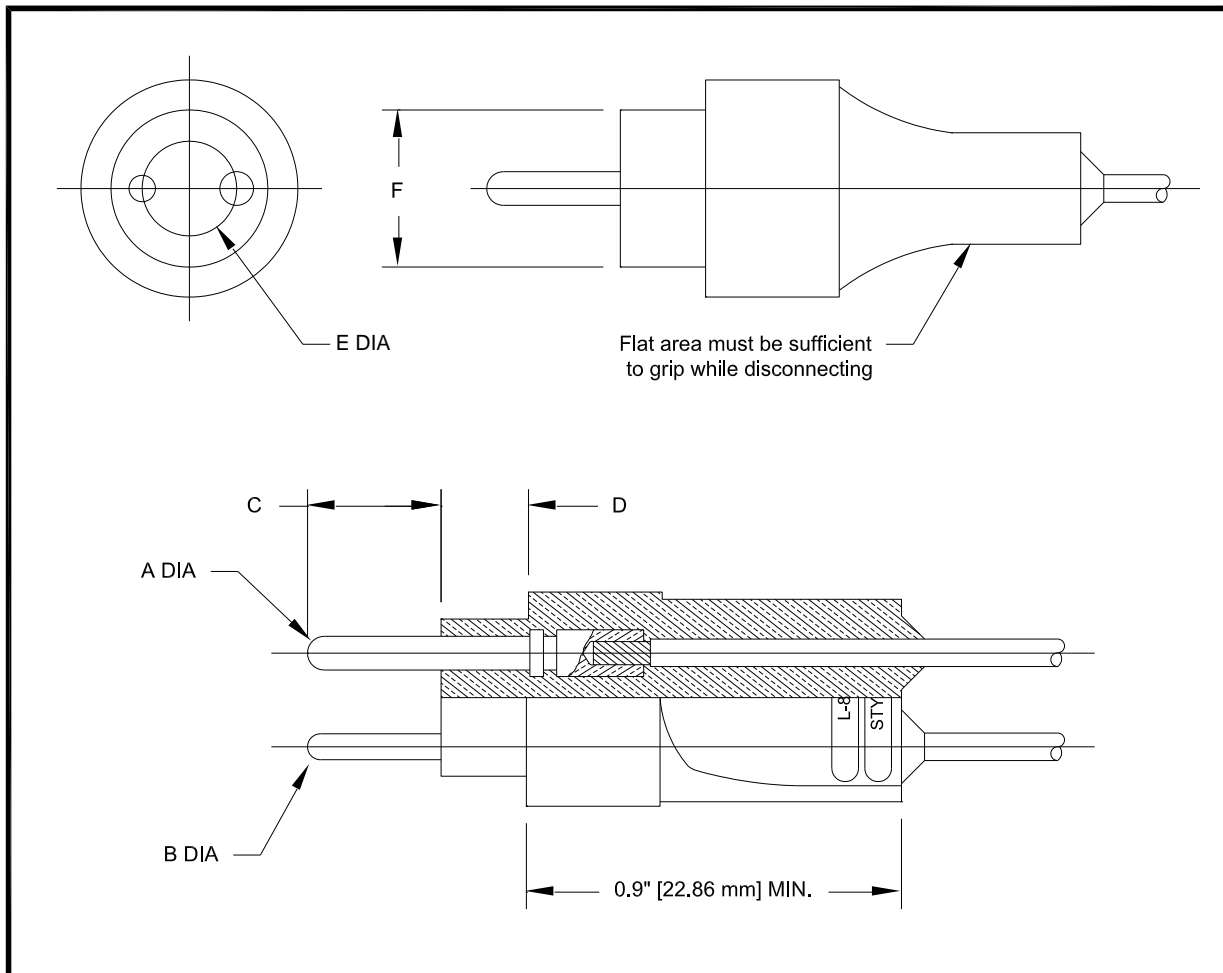
Note: Dimensions are defined in Table A-1.

Figure A-7. Class B, Type II, Style 5, Plug – Single Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.



Note: Dimensions are defined in Table A-1.

Figure A-8. Class A, Type II, Style 6, Plug – Two Conductor, 20 Ampere, 600 Volts Between Contacts, 1500 Volts to Ground.



Note: Dimensions are defined in [Table A-1](#).

Advisory Circular Feedback Form

Paperwork Reduction Act Burden Statement: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0746. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are voluntary to obtain or retain benefits per 14 CFR 77. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to Manager, Airport Engineering Division, Federal Aviation Administration ATTN: AAS-100, 800 Independence Avenue SW, Washington DC 20591 or (2) faxing it to the attention of the Office of Airport Safety and Standards at (202) 267-5383.

Subject: AC 150/5345-26E

Date: _____

Please check all appropriate line items:

An error (procedural or typographical) has been noted in paragraph _____ on page __.

Recommend paragraph _____ on page _____ be changed as follows:

In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

Other comments:

I would like to discuss the above. Please contact me at (phone number, email address).

Submitted by: _____

Date: _____