



# AEROSPACE STANDARD

AS85049™

REV. F

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Superseding AS85049E

## Connector Accessories, Electrical General Specification for

### RATIONALE

Revision required to modify the tin zinc finish code options, add additional qualification requirements for these finish codes, correct a number of the reference specification descriptions, make a minor change to Figure 4, and include known technical updates from industry user input.

#### 1. SCOPE

This specification covers connector accessories for use with electrical connectors; see 6.8.

##### 1.1 Connector Accessory Categories

Connector accessories covered in this specification shall include, but are not limited to, the following categories:

Category	Item	Description
1A Heavy Duty	Connector Accessory, Cable Sealing, Environmental	Provides waterproofing and environmental sealing under specific hydrostatic pressure. Straight, 90 degree, or 45 degree configurations. May include termination features for individual or overall EMI/RFI shielding. May include strain relief.  Withstands most severe shock, vibration, cable pullout, and external bending moment.
1B Medium Duty	Connector Accessory, Cable Sealing, Environmental	Same as Category 1A.  Withstands less severe shock, vibration, cable pullout, and external bending moment than Category 1A.
1C Light Duty	Connector Accessory, Cable Sealing, Environmental	Same as for Category 1A.  Withstands less severe shock, vibration, and external bending moment than Category 1B. No cable pullout capability.
2A Heavy Duty	Connector Accessory, Environmental	Does not provide waterproofing and environmental sealing under hydrostatic pressure. Straight, 90 degree, or 45 degree configurations. May include termination features for individual or overall EMI/RFI shielding. May include strain relief.  Withstands most severe shock, vibration, cable pullout, and external bending moment.

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Category	Item	Description
2B Medium Duty	Connector Accessory, Environmental	Same as Category 2A.  Withstands less severe shock, vibration, cable pullout, and external bending moment than Category 2A.
2C Light Duty	Connector Accessory, Environmental	Same as Category 2A.  Withstands less severe shock, vibration, and external bending moment than Category 2B. No cable pullout capability.
3A Heavy Duty	Connector Accessory, Nonenvironmental	May provide termination features for individual or overall, wire or cable, shielding. May extend working area for wire or cable termination. Straight, 90 degree or 45 degree configurations. May include termination features for individual or overall EMI/RFI shielding. May include strain relief.  Withstands most severe shock, vibration, cable pullout, and external bending moment.
3B Medium Duty	Connector Accessory, Nonenvironmental	Same as Category 3A.  Withstands less severe shock, vibration, cable pullout, and external bending moment than Category 3A.
3C Light Duty	Connector Accessory, Nonenvironmental	Same as Category 3A.  Withstands less severe shock, vibration, and external bending moment than Category 2B. No cable pullout capability.
4A Heavy Duty	Connector Accessory, Strain Relief, Nonenvironmental	Provides mechanical strain and side loading relief to wire bundles and cable support to jacketed cables. Straight, 90 degree, or 45 degree configurations. May be attached to wire bundle or cable by means of metal clamp, plastic straps, lacing cord, or twine.  Withstands same shock, vibration, cable pullout, and external bending moment as medium duty connector accessories of Categories 1, 2, and 3.
4B Medium Duty	Connector Accessory, Strain Relief, Nonenvironmental	Same as Category 4A.  Withstands less severe shock, vibration, cable pullout, and external bending moment than Category 4A.
4C Light Duty	Connector Accessory, Strain Relief, Nonenvironmental	Same as Category 4A.  Withstands less severe shock, vibration, cable pullout, and external bending moment than Category 4B.
5	Connector Accessory, Adapter, Shrink Boot and Ring, Potting Boot	Provides means of attaching heat shrinkable boot to connector.
7	Connector Accessory, Miscellaneous Devices	Examination of product.  This category defines connector accessories not otherwise identified or described within this specification. This category also includes accessories to be used with other connector accessories on other categories identified in this specification. In general, connector accessories included in this category may have additional test requirements which shall be defined on the individual specification sheet.
8A	Connector Accessory, Adapter, Conduit, Cable Sealing	Provides waterproofing and environmental sealing under hydrostatic pressure. Straight and angled configurations.

Category	Item	Description
8B	Connector Accessory, Adapter, Conduit, Nonenvironmental	Provides termination area for connector conduit. Straight or angled configurations.
9	Connector Accessory, Miscellaneous Components	Examination of product.  This category defines connector accessory components which do not require qualification. The manufacturer is required to maintain examination of product records as evidence of compliance on the first lot of each size produced. These records shall be made available to the user upon request.

## 1.2 Classification

Connector accessories shall be of the size, style, finish, and class as specified on the applicable detailed specification sheet (see 3.1).

## 2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

### 2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), [www.sae.org](http://www.sae.org).

NOTE: The detail sheet titles listed below contain the correct connector designators and may not match the detail sheet titles as currently published. However, the detail sheet titles affected will be updated at their next revision cycle.

AMS-C-26074	Electroless Nickel Coatings
AMS-QQ-A-225	Aluminum and Aluminum Alloy, Bar, Rod, Wire, or Special Shapes; Rolled, Drawn, or Cold Finished; General Specification for
AMS-QQ-P-35	Passivation Treatments for Corrosion-Resistant Steel
AMS-QQ-P-416	Plating, Cadmium (Electrodeposited)
AMS-QQ-S-763	Steel, Corrosion Resistant, Bars, Wire, Shapes, and Forgings
AMS2404	Plating, Electroless Nickel
AMS2417	Plating, Zinc-Nickel Alloy
AMS2434	Plating, Tin-Zinc Alloy
AMS2700	Passivation of Corrosion Resistant Steels
AMS5640	Steel, Corrosion-Resistant, Bars, Wire, and Forgings, 18Cr - 9.0Ni, Free Machining
AIR1351	Manufacturers' Identification of Aerospace Electrical and Electronic Wiring Devices and Accessories
AIR4789	Aerospace Information Report on Evaluating Corrosion Testing of Electrical Connectors and Accessories for the Purpose of Qualification