



AEROSPACE STANDARD	AS39029™	REV. E
	Issued 2001-01 Revised 2022-01 Superseding AS39029D	
Contacts, Electrical Connector, General Specification for		

RATIONALE

Limited scope revision is required to correct the ASTM A342 title reference and to correct errors in Appendix A, remove the axial concentricity requirement for wired contacts size 8 and larger, and delete the unpublished detail sheet references (/115, /116, /119, and /120).

1. SCOPE

This specification covers the general requirements for removable crimp, solderless wrap, and solder type electrical contacts for use in connectors and other electric and electronic components (see 6.1) with stranded conductor wire. The contacts shall be capable of operating within the temperature range as specified (see 3.1).

1.1 Classification

1.1.1 Part Number and BIN (Basic Identification Number) Code

Each contact shall be identified by a non-significant, but distinctive three digit number indicating the BIN code as specified on the applicable specification sheet (see 3.1 and Appendix A). The part number shall be as specified in the specification sheets (see 3.1).

1.1.2 Class

Contacts shall be of the following classes as specified (see 3.1).

Class A - Maximum operating temperature +125 °C.

Class B - Maximum operating temperature +200 °C.

1.1.3 Type

Contacts and bushings shall be of the types shown in Table 1 as specified (see 3.1).

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Table 1 - Contact types

Type	Max. Operating Temperature	Material	Application/Specification
A	Class A - +125 °C Class B - +200 °C	Copper alloy	General purpose/ASTM B36, B121, B16, B16M, B124, or equivalent
B	+200 °C	Ferrous alloy	Hermetic/ASTM B829 or equivalent
C	Maximum operating temperature differs, based on the thermocouple alloys, (see 3.1)	Nickel-Chromium (formerly Chromel)	Thermocouple/ASTM E230 Type E or equivalent Thermocouple/ASTM E230 Type K or equivalent
		Nickel-Aluminum/Silicon (formerly Alumel)	Thermocouple/ASTM E230 Type K or equivalent
		Copper-Nickel Alloy (formerly Constantan)	Thermocouple/ASTM E230 Type E or equivalent Thermocouple/ASTM E230 Type J or equivalent Thermocouple/ASTM E230 Type T or equivalent
		Iron	Thermocouple/ASTM E230 Type J or equivalent
		Copper	Thermocouple/ASTM E230 Type T or equivalent
D	Maximum operating temperature differs based on the design and materials in each shielded contact	Copper alloy	Shielded (including coaxial, twin-axial, and tri-axial)/ ASTM B36, B121, B16, B16M, B124, or equivalent

1.2 Depletion of Stock

Depletion of stock manufactured to a revision letter prior to the revision letter specified in this basic specification and a specification sheet shall be specified herein and in the specification sheet.

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 the 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 U.S. Government Documents

Copies of these documents are available online at <https://quicksearch.dla.mil>.

MIL-DTL-55330	Connectors, Electrical and Fiber Optic, Packaging of
MIL-DTL-81381	Wire, Electric, Polyimide-Insulated, Copper or Copper Alloy
MIL-HDBK-454	Department of Defense Handbook, General Guidelines for Electronic Equipment
SD-6	Provisions Governing Qualification

2.2 Other Publications

The following documents form a part of the specification to the extent specified herein. Detail sheets that do not appear in the following list have been cancelled. Unless otherwise specified, the issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

2.2.1 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.

AIR1351	Manufacturers' Identification of Aerospace Electrical and Electronic Wiring Devices and Accessories
AS4461	Assembly and Soldering Criteria for High Quality/High Reliability Soldering Wire and Cable Termination in Aerospace Vehicles
AS5261	Contact, Wire Barrel, Crimp Style
AS22520	Crimping Tools, Wire Termination, General Specification for
AS22759	Wire, Electrical, Fluoropolymer-Insulated, Copper or Copper Alloy
AS31971	Gage Pin for Socket Contact Engagement Test
AS33481	Contact Bushing, Electric, Wire Barrel
AMS-P-81728	Plating, Tin-Lead (Electrodeposited)
AMS-QQ-N-290	Nickel Plating (Electrodeposited)

2.2.1.1 AS39029 Specification Sheets

AS39029/1	Contacts, Electrical Connector, Pin, Crimp Removable (for AS81714 Terminal Junction System)
AS39029/2**	Contacts, Electrical Connector, Pin, Crimp Removable (for MIL-C-81659 Series 1 Connectors)
AS39029/3**	Contacts, Electrical Connector, Socket, Crimp Removable (for MIL-C-81659 Series 1 Connectors)
AS39029/4	Contacts, Electrical Connector, Pin, Crimp Removable (for MIL-DTL-26482 Series 2, AS81703 Series 3, MIL-DTL-83723 Series I and III, and MIL-DTL-83733 Connectors)
AS39029/5	Contacts, Electrical Connector, Socket, Crimp Removable (for MIL-DTL-26482 Series 2, AS81703 Series 3, MIL-DTL-83723 Series I and III, and MIL-DTL-83733 Connectors and MIL-DTL-12883/40 and /41 Relay Sockets)
AS39029/7**	Contacts, Electrical Connector, Pin, Crimp Removable, Shielded (for MIL-C-26482 Series 2 and MIL-C-81703 Series 3 Connectors)
AS39029/8**	Contacts, Electrical Connector, Socket, Crimp Removable, Shielded (for MIL-C-26482 Series 2 and MIL-C-81703 Series 3 Connectors)
AS39029/9	Contacts, Electrical Connector, Pin, Crimp Removable, Thermocouple (for MIL-DTL-26482 Series 2, AS81703 Series 3, MIL-DTL-83723 Series I and III, and MIL-DTL-83733 Connectors)
AS39029/10	Contacts, Electrical Connector, Socket, Crimp Removable, Thermocouple (for MIL-DTL-26482 Series 2, AS81703 Series 3, MIL-DTL-83723 Series I and III, and MIL-DTL-83733 Connectors)
AS39029/11	Contacts, Electrical Connector, Pin, Crimp Removable (for AS81659 Series 2 Connectors)
AS39029/12	Contacts, Electrical Connector, Socket, Crimp Removable (for AS81659 Series 2 Connectors)
AS39029/16	Contacts, Electrical Connector, Socket, Crimp Removable (for MIL-C-81511 Series 4 Connectors)
AS39029/17	Contacts, Electrical Connector, Socket, Crimp Removable (for MIL-C-81511 Series 3 Connectors)