



# AEROSPACE STANDARD

**AS22520™**

Issued	2011-10
Reaffirmed	2018-02

**Crimping Tools, Wire Termination, General Specification For**
**FSC 5120**

## RATIONALE

The document is written to permit the cancellation and supersession of MIL-DTL-22520 with this document. It includes qualifying activity requirements. Technical changes previously approved by military Preparing Activity were added. Government documentation references have been removed.

### 1. SCOPE

1.1 Scope (see 6.5). This specification covers the general requirements for crimping tools, accessories and inspection gages used for connecting removable contacts (such as; signal, power, coaxial, shielded, thermocouple, and filter pin contacts) coaxial connectors, shielded connectors, ferrules, terminals, end caps and splices to wire conductors for use in electric connectors, terminal junction systems, and other electric or electronic components.

1.2 Classification. Crimping tools covered by this specification are of the following

Types (see 6.2):

- Type I - Tools that produce an indent termination.
- Type II - Tools that produce a formed termination.
- Type III - Tools that produce a compression termination.

### 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 General

The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

#### 2.2 Non-Government Publications

The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation.

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Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

### 2.3 SAE Publications

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

AIR1351	Aerospace Electrical & Electronic Wiring, Devices and Accessories, Manufacturers' Identification of
AS7928	Terminals, Lug Splices, Conductor; Crimp Style, Copper, General Specification for
AS21608	Ferrule, Shield Terminating, Crimp Style
AS22520/1*	Crimping Tools, Type 1, Terminal, Hand, Wire Termination for Wire Barrel Sizes 12 through 20
AS22520/2*	Crimping Tools, Type 1, Terminal, Hand, Wire Termination for Wire Barrel Sizes 20 through 28
AS22520/3*	Crimping Tools, Terminal, Hand, Wire Termination, In-service Inspection Gages for Type I and II Tools
AS22520/4*	Crimping Tool, Type 2, Contact, Electric, Hand for Shielded Outer Contacts
AS22520/5*	Crimping Tools, Type 2, Terminal, Hand, Wire Termination, Large Frame for Coaxial, Shielded Contacts and Ferrules, Terminal Lugs, Splices and End Caps
AS22520/6*	Crimping Tools, Terminal, Hand, Wire Termination, In-service Inspection Gages for Type II Tools
AS22520/7*	Crimping Tools, Type 1, Terminal, Hand, Wire Termination for Wire Barrel Sizes 16, 20 and 22
AS22520/10*	Crimping Tool, Type 2, Terminal, Hand, Wire Termination Small Frame for Coaxial, Shielded Contacts and Ferrules, Terminal Lugs, Splices and End Caps
AS22520/17*	Crimping Tools, Type 2, Terminal, Hand, Wire Termination for Crimp Type Removable Contacts, Electric Connectors
AS22520/18*	Crimping Tools, Terminal, Hand, Wire Termination In-service Inspection Gage for AS22520/17 Tool
AS22520/19*	Crimping Tool, Type 2, Terminal, Hand, Wire Termination for Size 16 Shielded Contacts (Outer Contact)
AS22520/20*	Crimping Tools, Type 2, Terminal, Hand, Wire Termination for Size 16 Shielded Contacts (Shield Crimp Sleeve)
AS22520/21*	Crimp Tool, Type 2, Terminal, Hand, Wire Termination for Size 12 Shielded Contacts (Outer Contact)
AS22520/22*	Crimp Tool, Type 2, Terminal, Hand, Wire Termination for Size 12 Shielded Contacts (Shielded Crimp Sleeve)
AS22520/23*	Crimping Tools, Type 1, Terminal, Hand or Power Actuated, Wire Termination, Pneumatic Tool For Wire Barrel Sizes 0000 through 8
AS22520/24*	Crimping Tools, Type 2, Terminal, Hand or Power Actuated, Wire Termination, Tool, For Lug Terminal and External Power Plug Socket Contacts, Size 22-10
AS22520/28*	Crimping Tools, Type 2, Terminal, Hand or Power Actuated, Wire Termination, Pneumatic Tool for Wire Barrel Sizes 20 through 28
AS22520/29*	Crimping Tools, Type 1, Terminal, Hand or Power Actuated, Wire Termination, Pneumatic Tool for Wire Barrel Sizes 12 through 20

AS22520/30*	Crimping Tools, Terminal, Hand or Power Actuated, Wire Termination, Accessory Hardware for MIL-C-22520/28 and MIL-C-22520/29 Tools
AS22520/31*	Crimping Tool, Type 2, Terminal, Hand, for Shielded Size 12 Outer Contacts
AS22520/34*	Crimping Tools, Type 1, Terminal, Hand, Wire Termination, for Crimp Type Removable Contacts for MIL-C-28840 Connectors
AS22520/35*	Crimping Tools, Terminal, Hand, Wire Termination; In-service Inspection Gages for AS22520/34 Tools
AS22520/36*	Compression Tool, Hand, Type 3 for Semirigid Coaxial Cable (Category F Connectors)
AS22520/37*	Crimping Tool, Type 2, Electrical, Wire Splicing, Hand Actuated, Type II, For Environmental Splices, Wire Range 26-12 AWG
AS22520/38*	Crimping Tool, Type 2, Terminal, Hand Actuated, Wire Termination, Type II, For External Power Plug Socket Contacts Lug and Terminal Sizes 22-10
AS22520/39*	Crimping Tool, Terminal, Hand Actuated, Wire Termination, In-service Inspection Gages for AS22520/37 and /38 Tools
AS22520/40*	Crimping Tools, Terminal, Type 2, Hand, Wire Termination, T-Head for Terminal Lugs and Splices, Wire 22-14
AS22520/41*	Crimping Tools, Terminal, Type 2, Hand, Wire Termination, for Terminals and Splices, Wire 10-14
AS22520/42*	Crimping Tools, Terminal, Hand, Wire Termination, In-Service Inspection Gage for AS22520/41 Tools
AS22520/43*	Crimping Tools, Wire Termination, In-service Inspection Gages for AS22520/40 Tools
AS22520/44*	Crimping Tool, Type 2, Hand Actuated, for Single Piece Splice
AS22759	Wire, Electric, Fluoropolymer-Insulated, Copper or Copper Alloy
AS39029	Contacts, Electrical Connector, General Specification For
AS81044	Wire, Electric, Crosslinked Polyalkene, Crosslinked Alkane-Imide Polymer, or Polyethylene Insulated, Copper or Copper Alloy
AS81824	Splice, Electric, Permanent, Crimp Style, Copper, Insulated, Environment Resistant

\* AS22520 Detail specifications

#### 2.4 ANSI Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, [www.ansi.org](http://www.ansi.org).

ANSI-Z540.1 Laboratories, Calibration and Measuring Test Equipment

#### 2.5 ASME Publications

Available from American Society of Mechanical Engineers, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900, Tel: 973-882-1170, [www.asme.org](http://www.asme.org).

ASME-Y14.5 Dimensioning and Tolerancing