



AEROSPACE STANDARD	AS23190™	REV. D
	Issued 1998-08 Reaffirmed 2004-02 Revised 2020-11 Superseding AS23190C	
Wiring, Positioning, and Support Accessories		FSC 5975

RATIONALE

An alternate acceptance method for weather-stabilized nylon 66 is added to allow for qualification of materials not in compliance with PA0191 in ASTM D4066. ASTM A580/A580M is added as there is no current reference specification for stainless steel barbs. Also removed reference revision level to ASTM D4066.

1. SCOPE

AS23190 is a procurement specification that covers a series of plastic and metal components and devices used for the tying, positioning, and supporting cable, cable assemblies, wire, and wire bundles in electrical, electronic, and communication equipment, and in interconnection systems.

1.1 Classification

Components for cable harness tying and support shall be of the following types and classes, as specified (see 6.5):

Type I - Strap, Tie Down, Adjustable, Plastic

Type II - Strap, Tie Down, Identification, Adjustable, Plastic

Type III - Clamp, Loop, Plastic, Wire Support

Type IV - Plastic Mounting Hardware for Type I and Type II Straps

Type V - Clamp, Loop, Cushioned, Metal, Wire Support

Type VI - Strap, Tie Down, Adjustable, Metal

Class 1 - Components which conform to all the requirements and the applicable detail specification.

Class 2 - Components which conform to the material, marking and performance requirements, are replaceable by Class 1 components and, where applicable, installed with a tool recommended by the component manufacturer. Class 2 components shall be within the envelope dimensions of the replacement Class 1 components.

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<https://www.sae.org/standards/content/AS23190D>

2. REFERENCES

2.1 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.

2.1.1 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
AS14243*	Clamp, Loop, Nylon, Metric
AS14487*	Clamp, Loop, Plastic, Wire Support, Metric
AS14488*	Clamp, Loop, Plastic, Wire Support, Ribbed Inner Diameter, Metric
AS23190/1*	Straps, Clamps, and Mounting Hardware, Plastic for Cable Harness Tying and Support Clamp, Loop, Nylon, Adjustable, Wire Support, Type III, Class 1
AS23190/2*	Straps, Clamps, Plastic and Metal, and Mounting Hardware, Plastic for Cable Harness Tying and Support Clamp, Loop, Metal, Cushioned, Adjustable, Wire Support, Type V, Class 1
AS23190/3*	Straps, Clamps, and Mounting Hardware, Plastic and Metal for Cable Harness Tying and Support Strap, Tie Down, Adjustable, Corrosion Resistant Steel, Type VI, Class 1
AS23190/4*	Mounting Hardware, Cushion Clamp, Metal for Cable Harness Tying and Support, Type V, Class 1
AS25281*	Clamp, Loop, Plastic, Wire Support
AS33391*	Plate, Mounting, Plastic for Use with MS3367 Plastic Tiedown Straps
AS33401*	Bulkhead Bracket for Use with MS3367 Plastic Tiedown Straps
AS33411*	Bracket, Mounting, Plastic for Use with MS3367 Plastic Tiedown Straps
AS33671*	Strap, Tiedown, Electrical Components, Adjustable, Self-Clinching, Plastic, Type I, Class 1
AS33681*	Strap, Tiedown, Electrical Components, Identification, Adjustable, Self-Clinching, Plastic, Type II, Class 1
AS50881	Wiring, Aerospace Vehicle
AS90387	Wiring Installation Tools for Plastic and Metal Tiedown Straps

* AS23190 detail specifications (see 3.1).

2.1.2 U.S. Government Publications

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

TT-I-735	Isopropyl Alcohol
MIL-DTL-5624	Turbine Fuel, Aviation, Grades JP-4 and JP-5
MIL-PRF-5606	Hydraulic Fluid, Petroleum Base, Aircraft, Missile, and Ordnance
MIL-P-46183	Plastic Molding and Extrusion Material, Polyetheretherketone (PEEK)
MIL-PRF-7808	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base
MIL-STD-129	Military Marking for Shipment and Storage
MIL-STD-202	Test Methods for Electronic and Electrical Components Parts
MIL-STD-2073-1	Military Packaging, Standard Practice for
SD-6	Provisions Governing Qualification

2.1.3 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM A240/A240M	Chromium and Chromium-Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications
ASTM A580/A580M	Standard Specification for Stainless Steel Wire
ASTM A666	Annealed or Cold Worked Austenitic Stainless Steel Sheet, Strip, Plate and Flat Bar
ASTM D1974/D1974M	Standard Practice for Method of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers
ASTM D3159	Modified ETFE-Fluoropolymer Molding and Extrusion Materials
ASTM D3951	Standard Practices Commercial Packaging
ASTM D4066	Nylon, Injection and Extrusion Materials (PA)

2.1.4 National Conference of Standards Laboratories (NCSL) Publications

Available from NCSL International, 2995 Wilderness Place, Suite 107, Boulder, CO 80301, Tel: 303-440-3339, www.ncsli.org.

NCSL Z540.3 General Requirements for Calibration Laboratories and Measuring and Test Equipment

2.1.5 ASQ Publications

Available from American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203, Tel: 800-248-1946 (United States or Canada), 001-800-514-1564 (Mexico), or +1-414-272-8575 (all other locations), www.asq.org.

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