



AEROSPACE STANDARD

AS6976™**REV. A**Issued 2022-12
Revised 2025-12

Superseding AS6976

Sleeving, Identification, Heat Shrinkable, General Specification
(Federal Supply Class 5970)

RATIONALE

Revised to clarify the weather resistance requirement as discussed in AE-8D committee meeting.

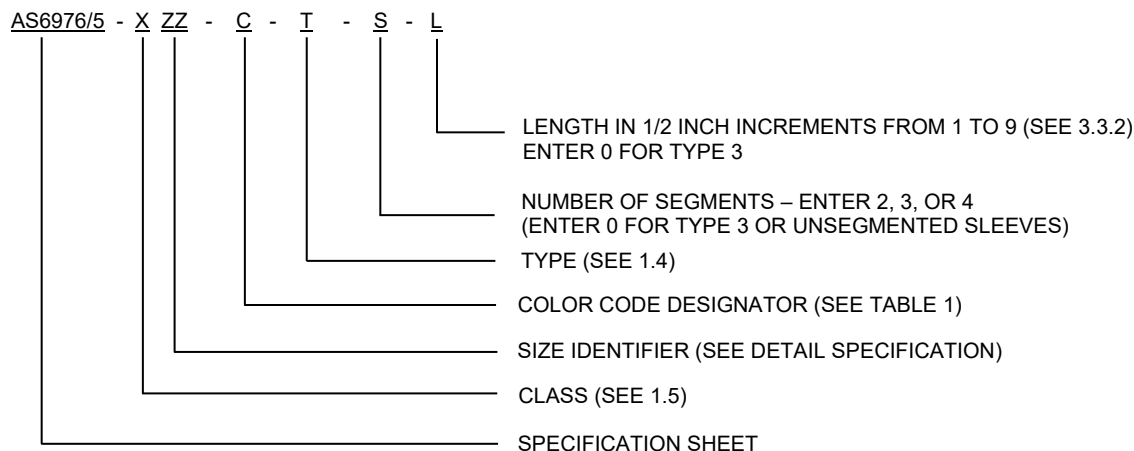
1. SCOPE

1.1 Scope

This SAE Aerospace Standard (AS) establishes the requirements for various types of identification sleeving that will shrink to a predetermined size upon the application of heat after it has been marked using AS23053 sleeves as basis material. This AS does not cover specific carrier configuration.

1.2 Part Numbers

The part numbers shall be defined as below, unless otherwise defined in detail specification:



EXAMPLE PART NUMBER: AS6976/1-301-4-3-0-0 DESIGNATES IDENTIFICATION SLEEVE IN ACCORDANCE WITH THIS DETAIL SPECIFICATION THAT IS CLASS 3, SIZE 01, AND YELLOW WITH NO SEGMENT SCORE(S), TYPE 3, AND SPOOLED.

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1.3 Color

Table 1 - Color definition

Designator	Color	Designator	Color
0	Black	7	Violet (purple)
1	Brown	8	Gray (slate)
2	Red	9	White
3	Orange	C	Clear
4	Yellow	P	Pink
5	Green	T	Tan
6	Blue		

1.4 Classification

Detail specification shall define additional part classification(s) not listed herein.

1.4.1 Construction

1.4.1.1 Type 1: Discrete Form Factor - Lateral Placement

The Type 1 sleeves shall be supplied in a printable medium in discrete lengths dispensed perpendicular to the feed direction. Each discrete sleeve may be perforated in segments to enable splitting the sleeve for shorter length labels. See part numbering for specifying number of split sections.

1.4.1.2 Type 2: Discrete Form Factor - Axial Placement

The Type 2 sleeves shall be supplied in a printable medium in discrete lengths dispensed in the same direction as the feed direction. Each discrete sleeve may be perforated segments to enable splitting the sleeve for shorter length labels. See part numbering for specifying number of split sections.

1.4.1.3 Type 3: for Continuous Form Factor

The Type 3 sleeves shall be provided in continuous length on a reel, spool, or coiled format. User may cut as required for the application as needed.

1.5 Class

Detail specification shall define each marker sleeve with the corresponding class to the applicable AS23053 detail specification.

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: 1-877-606-7323 (U.S. and Canada only) or 1-724-776-4970 (outside U.S. and Canada), www.sae.org.

AMS1424	Fluid, Aircraft Deicing/Anti-Icing, SAE Type I
AS1241	Fire Resistant Phosphate Ester Hydraulic Fluid for Aircraft
AS6976/5*	Sleeving, Identification, Heat Shrinkable, 125 °C and 135 °C, Polyolefin, Flexible, Crosslinked
AS9100	Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations
AS23053	Insulation Sleeving, Electrical, Heat Shrinkable, General Specification For

*AS6976 detail specifications.

2.1.2 ASQ Publications

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

ANSI/ASQ Z1.4	Sampling Procedures and Tables for Inspection by Attributes
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2.1.3 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9500, www.astm.org.

ASTM D2671	Standard Test Methods for Heat-Shrinkable Tubing for Electrical Use
ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials
ASTM G155	Standard Practice for Operating Xenon Arc Light Apparatus for Exposure for Non-Metallic Materials

2.1.4 ISO Publications

Copies of these documents are available online at <https://webstore.ansi.org/>.

ISO 9001	Quality management systems - Requirements
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories

2.1.5 U.S. Government Publications

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

A-A-694	Sodium Chloride, Technical
MIL-DTL-83133	Turbine Fuel, Aviation, Kerosene Type, JP-8 (NATO F-34), NATO F-35, and JP-8+100 (NATO F-37)
MIL-PRF-5606	Hydraulic Fluid, Petroleum Base; Aircraft, Missile, and Ordnance
MIL-PRF-7808	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base
MIL-PRF-23699	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO Code Numbers: O-152, O-154, O-156, and O-167
MIL-PRF-87937	Performance Specification, Cleaning Compound, Aerospace Equipment
MIL-STD-129	Military Marking for Shipment and Storage
MIL-STD-2073-1	Standard Practice for Military Packaging
SD-6	Provisions Governing Qualification
TT-I-735	Isopropyl Alcohol

2.2 Definitions

2.2.1 CRITICAL DEFECTS

A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product, or a defect that judgment and experience indicate is likely to prevent performance of the actual function of a major end item such as a ship, aircraft, tank, missile, or space vehicle.

2.2.2 DEFECT

A defect is any nonconformance of the unit of product with specified requirements.

2.2.3 MAJOR DEFECT

A major defect is a defect, other than critical, that is likely to result in failure or to reduce the usability of the unit of product for its intended purpose.

2.2.4 MINOR DEFECT

A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose or is a departure from established standards having little bearing on the effective use or operation of the unit.

3. REQUIREMENTS

3.1 Detail Specification

The product requirements shall be as specified herein and in accordance with the applicable detail specification.

3.2 Qualification

A qualified component shall be a product that has been tested and has passed the qualification tests specified herein and listed on or approved for listing on the applicable qualified products list (see 7.6) published by the qualifying activity.

3.3 Design and Construction

3.3.1 As supplied marker sleeve may be flattened or round. Design and construction shall be specified in detail specification.

3.3.2 Construction

3.3.2.1 Type 1 and Type 2: Discrete Form Factor

The Type 1 sleeves shall be supplied in a printable medium in discrete lengths. Each discrete sleeve shall be pre-scored to multiple segments for optimal use of the sleeve when specified in the part number at the time of order. See part numbering for specifying number of split sections. Typically, Type 1 and 2 construction shall be provided in a printer and manufacturer specific carrier, a backing, frame, cartridge, or similar, that maintains a certain layout enabling the printing operation.

Cut lengths shall be indicated in 1/2-inch increments in the part number. For Type 3 marker sleeves, the length shall be indicated as 0 (i.e., zero).

Examples:

0.50-inch length sleeve code = 1

2.00-inch length sleeve code = 4

4.50-inch length sleeve code = 9

3.3.2.2 Type 3

Continuous identification sleeving shall be supplied in flat or round format on reels, spools, or coiled. A unit of reels, spools, cartridges, or coils shall not contain any splices within.

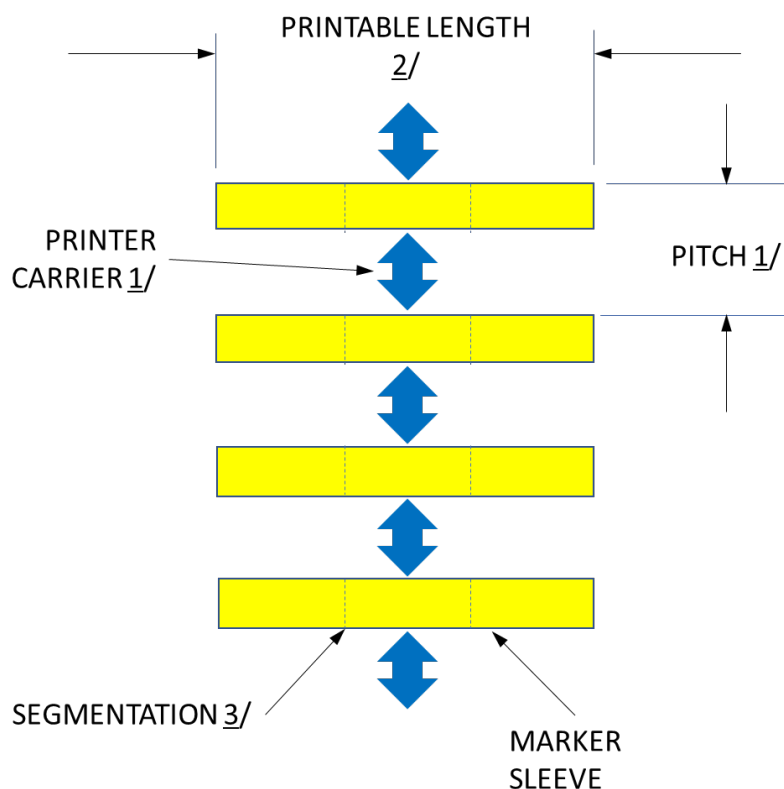


Figure 1 - Construction details Type 1, lateral form factor

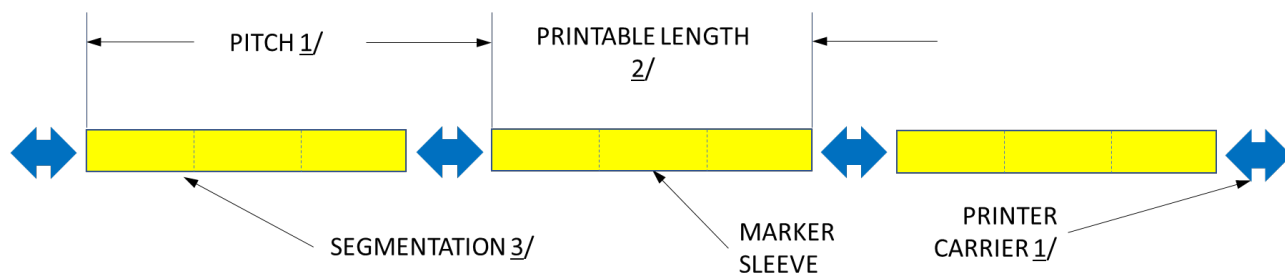


Figure 2 - Construction detail Type 2, axial form factor

- 1/ Carrier configuration equipment including pitch, width, and capacity of the mounted marker sleeves shall be specific to the printing equipment. See printer equipment manufacturer's construction requirement details for the proper marking and feeding.
- 2/ Usable/printable length shall be based on the sleeve attachment method used by a manufacturer and the printer used to mark sleeves.
- 3/ Optional segmentation.