



# AEROSPACE STANDARD

AS1339™

REV. J

Issued	1976-03
Reaffirmed	2007-07
Revised	2018-11

Superseding AS1339H

Hose Assembly, Polytetrafluoroethylene, Metallic Reinforced,  
3000 psi, 400 °F, Lightweight, Hydraulic and Pneumatic

## RATIONALE

Provide fitting OD max dimensions for fitting captured abrasion sleeve assemblies; add parts standards.

### 1. SCOPE

This SAE Aerospace Standard (AS) defines the requirements for a lightweight polytetrafluoroethylene (PTFE) lined, metallic reinforced, hose assembly suitable for use in high temperature, 400 °F, high pressure, 3000 psi, aircraft hydraulic systems, also for use in pneumatic systems which allow some gaseous diffusion through the PTFE wall.

### 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).

AMS2700	Passivation of Corrosion Resistant Steels
AMS5557	Steel, Corrosion and Heat-Resistant, Seamless or Welded Hydraulic Tubing 18.5Cr - 10.5Ni - 0.40Ti (SAE 30321) Solution Heat Treated
AMS5561	Steel, Corrosion and Heat-Resistant, Welded and Drawn or Seamless and Drawn Tubing 9.0Mn - 20Cr - 6.5Ni - 0.28N High-Pressure Hydraulic
AMS5565	Steel, Corrosion Resistant, Welded Tubing 19Cr - 9.5Ni (304) Solution Heat Treated
AMS5566	Steel, Corrosion Resistant, Seamless or Welded Hydraulic Tubing 19Cr - 10Ni (304) High Pressure, Cold Drawn
AMS5567	Steel, Corrosion Resistant, Seamless or Welded Hydraulic Tubing 19Cr - 10Ni (304) Solution Heat Treated

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AMS5570	Steel, Corrosion and Heat-Resistant, Seamless Tubing 18Cr - 11Ni - 0.40Ti (321) Solution Heat Treated
AMS5573	Steel, Corrosion and Heat-Resistant, Seamless Tubing 17Cr - 12Ni - 2.5Mo (SAE 30316) Solution Heat Treated
AMS5575	Steel, Corrosion and Heat-Resistant, Welded Tubing 18Cr - 10.5Ni - 0.70Cb (Nb) (347) Solution Heat Treated
AMS5581	Nickel Alloy, Corrosion and Heat-Resistant, Seamless or Welded Tubing 62Ni - 21.5Cr - 9.0Mo - 3.7Cb (Nb) Annealed
AMS5639	Steel, Corrosion-Resistant, Bars, Wire, Forgings, Mechanical Tubing, and Rings 19Cr - 10Ni Solution Heat Treated
AMS5643	Steel, Corrosion Resistant, Bars, Wire, Forgings, Mechanical Tubing, and Rings 16Cr - 4.0Ni - 0.30Cb (Nb) - 4.0Cu Solution Heat Treated, Precipitation Hardenable
AMS5644	Steel, Bars and Forgings, Corrosion Resistant, 17Cr - 7Ni - 1Al
AMS5645	Steel, Corrosion and Heat Resistant, Bars, Wire, Forgings, Tubing, and Rings 18Cr - 10Ni - 0.40Ti (321) Solution Heat Treated
AMS5646	Steel, Corrosion and Heat-Resistant, Bars, Wire, Forgings, Tubing, and Rings 18Cr - 11Ni - 0.60Cb(Nb) (347) Solution Heat Treated
AMS5647	Steel, Corrosion-Resistant, Bars, Wire, Forgings, Mechanical Tubing, and Rings 19Cr - 9.5Ni Solution Heat Treated
AMS5648	Steel, Corrosion and Heat-Resistant, Bars, Wire, Forgings, Tubing, and Rings, 17Cr - 12Ni - 2.5Mo (316) Solution Heat Treated
AMS5653	Steel, Corrosion and Heat-Resistant, Bars, Wire, Forgings, Tubing, and Rings 17Cr - 12Ni - 2.5Mo (0.030 Max C) (316L) Solution Heat Treated
AMS5659	Steel, Corrosion-Resistant, Bars, Wire, Forgings, Rings, and Extrusions 15Cr - 4.5Ni - 0.30Cb (Nb) -3.5Cu
AMS5666	Nickel Alloy, Corrosion and Heat-Resistant, Bars, Forgings, Extrusions, and Rings 62Ni - 21.5Cr -9.0Mo - 3.65Cb (Nb) Annealed
AMS5688	Steel, Corrosion-Resistant, Wire 18Cr - 9.0Ni (SAE 30302) Spring Temper
AMS5689	Steel, Corrosion and Heat Resistant, Wire 18Cr - 10.5Ni - 0.40Ti (321) Solution Heat Treated
AMS5690	Steel, Corrosion and Heat Resistant, Wire 17Cr - 12Ni - 2.5Mo (316) Solution Heat Treated
AMS5697	Steel, Corrosion-Resistant, Wire 19Cr - 9.5Ni (304) Solution Heat Treated
AMS5743	Steel, Corrosion and Heat-Resistant, Bars and Forgings 15.5Cr - 4.5Ni - 2.9Mo - 0.10N Solution Heat Treated, Sub-Zero Cooled, Equalized, and Over-Tempered
AMS-QQ-S-763	Steel, Corrosion Resistant, Bars, Wire, Shapes, and Forgings
AIR4092	Investigation of PTFE "Melt" Phenomenon for High Pressure Hoses
ARP908	Ø Torque Requirements, Installation and Qualification Test, Hose and Tube Fitting
ARP1835	Preparation for Delivery, General Requirements for Hose Assemblies
AS150	Hose Assembly, Type Classifications of, Basic Performance and Fire Resistance

AS611	Hose Assembly and Tubing, Polytetrafluoroethylene, Cleaning Methods for
AS1055	Fire Testing of Flexible Hose, Tube Assemblies, Coils, Fittings, and Similar System Components
AS1072	Sleeve, Hose Assembly, Fire Protection
AS2078	Test Methods, Hose Assemblies, Polytetrafluoroethylene (PTFE)
AS4375	Fitting End, Flareless, Design Standard
AS4395	Fitting End, Flared, Tube Connection, Design Standard
AS7003	Nadcap Program Requirements
AS7112	National Aerospace and Defense Contractors Accreditation Program Requirements for Fluid System Components
AS8879	Screw Threads - UNJ Profile, Inch Controlled Radius Root with Increased Minor Diameter
AS33514	Fitting End, Standard Dimensions for Flareless Tube Connection and Gasket Seal
AS85421	Fittings, Tube, Fluid Systems, Separable, Beam Seal, 3000/4000 psi, General Specification For
AS85421/1	Fitting End, Standard Dimensions for Dynamic Beam Seal, Male

## 2.2 ASME Publications

Available from ASME, P.O. Box 2900, 22 Law Drive, Fairfield, NJ 07007-2900, Tel: 800-843-2763 (U.S./Canada), 001-800-843-2763 (Mexico), 973-882-1170 (outside North America), [www.asme.org](http://www.asme.org).

ASME B46.1	Surface Texture
ASME Y14.100M	Engineering Drawing Practices

## 2.3 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](http://www.astm.org).

ASTM A262	Standard Recommended Practices for Detecting Susceptibility to Intergranular Attack in Stainless Steel
ASTM A313	Standard Specification for Stainless Steel Spring Wire
ASTM A580	Specification for Stainless and Heat Resisting Steel Wire

## 2.4 NAS Standards

Available from Aerospace Industries Association, 1000 Wilson Boulevard, Suite 1700, Arlington, VA 22209-3928, Tel: 703-358-1000, [www.aia-aerospace.org](http://www.aia-aerospace.org).

NAS847	Caps and Plugs, Protective, Dust and Moisture Seal
NAS1760	Fitting End, Flareless Acorn, Standard Dimensions for