



AEROSPACE STANDARD	AS1710	REV. D
	Issued 1982-05 Revised 2009-02 Reaffirmed 2014-11	
Superseding AS1710C		
Coupling, Fuel, Flexible, Variable Cavity, Threaded Type With Ferrules		

RATIONALE

AS1710D has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE

This SAE Aerospace Standard (AS) defines the requirements for a threaded flexible coupling assembly, which utilizes ferrules or machined tube end fittings to join tubing and components in aircraft fuel and fuel vent or other systems. This coupling assembly is designed for use from -65 to +200 °F and at 125 psig peak working pressure, and the coupling assembly may be used in other fluid systems when requirements are within the limits.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein.

2.1 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

AMS-R-25988	Rubber, Fluorosilicone Elastomer, Oil-and-Fuel-Resistant, Sheet, Strips, Molded Parts, and Extruded Shapes
AMS-WW-T-700/6	Tube, Aluminum Alloy, Drawn, Seamless, 6061
ARP9013	Statistical Product Acceptance Requirements
AS567	Safety Cable, Safety Wire, Key Washers, and Cotter Pins for Propulsion Systems, General Practices for Use of
AS568	Aerospace Size Standard for O-rings
AS1055	Fire Testing of Flexible Hose, Tube Assemblies, Coils, Fittings, and Similar System Components
AS1711	Coupling, Flexible, Variable Cavity, Threaded Ferrule Type Tube Ends, Envelope Dimensions Design Standard
AS1712	Coupling Subassembly, Flexible, Variable Cavity, Threaded, Ferrule Type Tube Ends

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AS1713	Half Coupling Subassembly, Flexible, Variable Cavity, Threaded, Ferrule Type Tube Ends
AS1714	Nut Assembly, Coupling, Flexible, Variable Cavity, Threaded, Ferrule Type Tube Ends
AS1715	Washer, Coupling, Flexible, Variable Cavity, Threaded, Ferrule Type Tube Ends
AS1716	Ferrule, Coupling, Flexible, Variable Cavity, Threaded, Ferrule Tube End
AS1717	Retainer, Coupling, Flexible, Variable Cavity, Threaded Ferrule Type Tube Ends
AS1718	Coupling Body, Flexible, Variable Cavity, Threaded Ferrule Type Tube Ends
AS1719	Fitting End, Half-Coupling, Flexible Variable Cavity Threaded, Ferrule Type Design Standard
AS1720	Ferrule End, Coupling, Flexible Variable Cavity, Threaded, Ferrule Type, Design Standard
AS4060	Tube Fitting Swaged Joint, Roller Expander, Manual Process, Requirements for
AS7003	NADCAP Program Requirements
AS7112	National Aerospace and Defense Contractors Accreditation Program Requirements for Fluid System Components

2.2 U.S. Government Publications

Available from Document Automation and Production Service (DAPS), Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6257, <http://assist.daps.dla.mil/quicksearch/>.

FED-STD-H28/2	Screw-Thread Standards for Federal Services Section 2: Unified Inch Screw Threads - UN and UNR Thread Forms
MIL-HDBK-831	Military Handbook, Preparation of Test Reports
MIL-L-10547	Liners, Case and Sheet, Overwrap; Water-Vaporproof or Waterproof, Flexible
MIL-PRF-680	Performance Specification, Degreasing Solvent (Stoddard Solvent)
MIL-PRF-7024	Performance Specification, Calibrating Fluids, Aircraft Fuel System Components
MIL-STD-129	Military Marking for Shipment and Storage
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-810	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-889	Dissimilar Metals
MIL-STD-2073-1	Department of Defense, Standard Practice for Military Packaging
PPP-B-566	Boxes, Folding, Paperboard
PPP-B-585	Boxes, Wood, Wirebound
PPP-B-676	Boxes, Set-up
VV-P-236	Petrolatum, Technical

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.

ASTM D 473	Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method
ASTM D 5118/D5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes
ASTM D 5486/D5486M	Standard Specification for Pressure Sensitive Tape for Packaging, Box Closure, and Sealing
ASTM D 6251/D6251M	Standard Specification for Wood Cleated Panelboard Shipping Boxes

2.4 PRI Publications

Available from Performance Review Institute, 161 Thornhill Road, Warrendale, PA 15086-7527, Tel: 724-772-1616, www.pri-network.org.

PD2001	Qualified Product Management Council Procedures for Qualified Products Group
PD2101	Aerospace Quality Assurance, Product Standard, Qualification Procedures, Fluid Systems

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.

ASME B1.1 Unified Inch Screw Threads (UN and UNR Thread Form)

2.6 ANSI Publications

Available on-line at www.asq.org or from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ANSI/ASQC Z.1.4 Sampling Procedures and Tables for Inspection by Attributes.

3. TECHNICAL REQUIREMENTS

3.1 Qualification

Full coupling assemblies furnished under this document shall be products that are qualified by meeting all of the requirements covered by this document. Manufacturers choosing to produce only a part or parts of the coupling assembly shall qualify the part or parts by complying with the requirements and performing all tests of this document. The test specimens for qualification of a part or parts shall be completed with a qualified part or parts made by other manufacturers. Half coupling parts shall be qualified parts of the full coupling.

3.1.1 Manufacturer Qualification

A manufacturer producing a product in conformance to this procurement specification shall be accredited in accordance with the requirements of PD2101, AS7003 and AS7112, and shall be listed in a Performance Review Institute (PRI) Qualified Manufacturers List (QML).

3.1.2 Product Qualification

All products shall conform to the requirements of this procurement specification and shall be approved in accordance with the requirements of PD2001 and PD2101 for listing in a Performance Review Institute (PRI) Qualified Parts List (QPL).