



AEROSPACE STANDARD

AS4842™/2**REV. C**

Issued 1995-05
Reaffirmed 2015-06
Revised 2021-10

Superseding AS4842/2B

Fittings, Flareless to Pipe Threaded, Fluid Connection

RATIONALE

Add notes to clarify finish and color requirements for material code letter “-,” “F,” and no code letter, low carbon steel.

1. SCOPE

This SAE Aerospace Standard (AS) establishes the requirements for fluid fittings that combine both flareless and pipe threaded connections for use in all types of fluid systems.

1.1 Classification

Fittings shall be furnished in the types and styles designated by the applicable AS and other engineering standard drawings. This specification is the same as MIL-F-18280 as applicable to flareless fittings except for updated materials and process specifications and industry coordinated general improvements. It is intended to serve as a procurement specification for the fittings described herein and in Section 6.

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, Telephone: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS4375	Fitting End, Flareless, Design Standard
AS4842	Fittings and Bosses, Pipe Threaded, Fluid Connection
AS5201	Fitting End, External Taper Pipe Thread, Design Standard
AS18280	Fittings, 24° Cone Flareless, Fluid Connection, 3000 psi
AS33514	Fitting End, Standard Dimensions for Flareless Tube Connection and Gasket Seal

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For more information on this standard, visit
<https://www.sae.org/standards/content/AS4842/2C>

2.2 PRI Publications

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

AC7112 Nadcap Audit Criteria for Fluid Systems Component Manufacturers

AC7112/2 Nadcap Audit Criteria for Fittings and other Machined Components

PD1100 Nadcap Program Requirements

3. TECHNICAL REQUIREMENTS

3.1 Performance

Fittings supplied in accordance with this document shall be representative of products which have been subjected to and which have successfully passed the performance test requirements specified in this standard.

3.1.1 Manufacturer Accreditation

A manufacturer producing a product in conformance to this procurement specification shall be accredited in accordance with the requirements of AC7112 and AC7112/2 and shall be listed in a NADCAP Qualified Manufacturers List (QML). The QML is available at www.eAuditNet.com.

3.2 Material

Refer to AS4842.

3.3 Heat Treatment

Refer to AS4842.

3.4 Finish

Refer to AS4842 except as noted.

3.4.1 Carbon Steel: (Material Code “-,” “F,” and No Code Letter)

3.4.1.1 Carbon Steel Fittings

Carbon steel fittings shall be cadmium plated in accordance with AMS-QQ-P-416, Type II, Class 2. The color will be iridescent bronze to brown including olive drab and yellow due to the post plate chromate treatment. All such carbon steel fittings shall be dipped in oil conforming to MIL-PRF-6083 or MIL-PRF-83282. Fluid passage holes, other openings, and internal threads shall not be subject to a plating thickness requirement and may exhibit bare areas provided that they are protected with a light film of oil.

3.5 Design and Fabrication

The design and fabrication of the fittings shall be in accordance with the applicable drawings. The flareless and pipe threaded ends of fittings shall be in accordance with AS4375, AS33514, or AS5201 as applicable. The flareless fitting ends shall meet the requirements of AS18280 as applicable.

3.6 Identification of Product

Refer to AS4842.

3.7 Workmanship

Refer to AS4842 for pipe threaded fitting ends and AS18280 for the fitting body and flareless ends.