



AEROSPACE STANDARD	AS38404™	REV. A
	Issued 1999-07 Reaffirmed 2013-01 Stabilized 2026-06 Superseding AS38404	
Couplings, Hose, Reattachable Screw-On		

RATIONALE

This technical report is being stabilized because it covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

STABILIZED NOTICE

This document has been declared “STABILIZED” by SAE G-3, Aerospace Couplings, Fittings, Hose, Tubing Assemblies Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

SAE Executive Standards Committee Rules provide that: “This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user.”

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2026 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, or used for text and data mining, AI training, or similar technologies, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 1-877-606-7323 (U.S. and Canada only)
Tel: 1-724-776-4970 (outside U.S. and Canada)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: SAE AS38404A

For more information on this standard, visit
<https://www.sae.org/standards/content/AS38404A/>



Documents

Document Sharing Hub

INTRODUCTION

This Aerospace Standard is a conversion of Military Specification MIL-C-38404E, "Couplings, Hose, Reattachable Screw-On," which has been cancelled. It should be noted that this standard is not a "word-for-word" conversion of the DOD document.

1. SCOPE:

This document establishes the requirements for screw-on type reattachable couplings for use in low temperature hose assemblies.

1.1 Classification:

1.1.1 Types: Hose couplings furnished under this document may be of two types:

- a. Type I: External NPT thread
- b. Type II: Internal NPSH thread with swivel

1.1.2 Classes: Hose couplings furnished under this document may be of two classes:

- a. Class 1: Fuel service
- b. Class 2: Demineralized water service

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, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 4614	Brass Forgings, Free Cutting, 60Cu - 2.0Pb - 37.5Zn, As Forged
AMS-R-6855	Elastomer, Synthetic, Sheets, Strips, Molded or Extruded Shapes, General Specification for
AS8879	Screw Threads - UNJ Profile, Inch

2.2 ANSI Publications:

Available from the Aluminum Association, Inc., 900 19th Street, N.W., Suite 300, Washington, D.C. 20006-2168.

ANSI/AA H35.1	Alloy and Temper Designation Systems for Aluminum
---------------	---

2.3 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM B 283	Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed)
ASTM B 633	Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel

2.4 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

MIL-DTL-6615	Hose Assemblies, Rubber, Fuel and Water, With Reattachable Couplings, Low Temperature
MIL-A-8625	Anodic Coatings for Aluminum and Aluminum Alloys
FED-STD-595	Colors Used in Government Procurement
MIL-STD-100	Standard Practice for Engineering Drawings
MIL-STD-810	Environmental Test Methods and Engineering Guidelines
MIL-STD-831	Test Reports, Preparation of

2.4.1 Available from the Defense Logistics Services Center, 74 North Washington Avenue, Battle Creek, MI 49017-3094.

Cataloging Handbook H4/H8 Commercial and Government Entity Code

3. REQUIREMENTS:

3.1 First Article:

When specified in the contract or purchase order, a hose coupling sample shall be subjected to first article inspection (see 4.3) to verify conformance to the requirements specified herein. Any changes or deviations of production couplings from an approved first article sample during production will be as agreed upon by the manufacturer and the procuring activity.

3.2 Materials:

Hose coupling materials shall be uniform in quality, free from defects, consistent with good manufacturing practice, and shall conform to applicable specifications and the requirements specified herein. Materials used for Class 1 and Class 2 couplings shall be as specified in Table 1. Materials not specifically described herein shall be corrosion resistant or treated to resist corrosion due to exposure to fuels, salt spray, or atmospheric conditions during normal service or in storage, and shall be suitable for the purpose intended.

TABLE 1 - Coupling Materials

Component	Material Description
Class 1	
Body	High-quality high-grade forging brass containing 58.0-61.0% copper (UNS No. C37700) in accordance with ASTM B 283 or AMS 4614.
Sleeve	High-quality high-grade brass castings or forgings containing a minimum of 58% copper.
Grip	Electrodeposited zinc in accordance with ASTM B 633, Type II, SC 1.
Class 2	
Body and Sleeve	300-series stainless steel, Type B214 or 356 aluminum casting alloy, or aluminum alloys other than 2000, 4000, and 7000 series in accordance with ANSI/AA H35.1. Aluminum alloys shall be anodized in accordance with MIL-A-8625, Type II. The color shall be similar to Color No. 24087 of FED-STD-595 (olive drab).
Grip	Electrodeposited zinc in accordance with ASTM B 633, Type II, SC 1.

3.3 Design and Construction:

The couplings shall be designed and constructed for use in hose assemblies conforming to MIL-DTL-6615, Type I or Type II. They shall be reattachable and shall consist of three major components: the body, sleeve, and grip as shown in Figure 1. Cements, sealants, or adhesives shall not be required for installation except to seal the cut ends of the hose.