

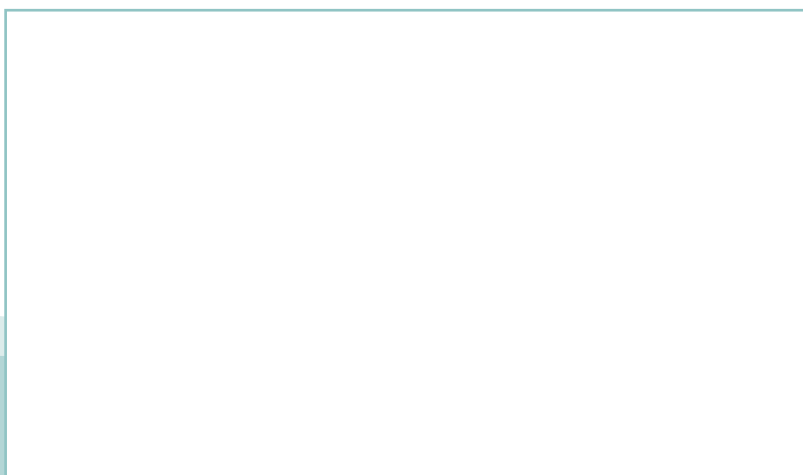
SVENSK STANDARD

SS-EN 4833:2018

Fastställt/Approved: 2018-08-06
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 49.080

Flyg- och rymdteknik – Rörkoppling med 24° kona för upp till 35 000 kPa (5080 psi), fäste med låsring – Ändstycke utan XXX (utelämnat i fr o ty) – Tumserie – Extra fin gängstigning

Aerospace series – Pipe coupling 24° Cone up to 35 000 kPa (5 080 psi) Ring-locked fitting – Flareless End – Inch Series – Extra Fine Thread Pitch



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The European Standard EN 4833:2018 has the status of a Swedish Standard. This document contains the official version of EN 4833:2018.

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EUROPEAN STANDARD

EN 4833

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2018

ICS 49.080

English Version

**Aerospace series - Pipe coupling 24° Cone up to 35 000
kPa (5 080 psi) Ring-locked fitting - Flareless End - Inch
Series - Extra Fine Thread Pitch**

Série aérospatiale - Système de raccordement interface
conique 24° jusqu'à 35 000 kPa (5 080 psi) Raccord à
implanter avec bague de sécurité - Série inch - Filetage
à pas extra-fin

Luft- und Raumfahrt - Rohrverschraubung 24° Konus
bis 35 000 kPa (5 080 psi) gerade
Anschlussverschraubung mit Sicherungsring - Inch-
Reihe - extra feine Gewindesteigung

This European Standard was approved by CEN on 3 December 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 4833:2018) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

SS-EN 4833:2018 (E)**Introduction**

This European Standard is co-owned standard and a functional equivalent of AS5550. There should be no technical objection to use AS5550 as replacement of EN 4833 parts. Table 3 shows the equivalent cross reference of EN 4833 part numbers to AS5550 part numbers. Further revisions to this standard shall be coordinated with the SAE committee.

European standards use the International System of units (SI); however, large segments of the aerospace industry make use of other measurement systems as a matter of common working practice. All dimensions and units used in this standard are given in SI units, with other units also indicated for the convenience of the user.

The decimal sign used in European standards is the comma (“,”); however, the comma is not used in common working practice with non-SI dimensions. Therefore, in common with many other aerospace standards, the decimal point (“.”) is used in this standard when providing dimensions in inch-pound units.

NOTE The use of non-SI units and the decimal point in this standard does not constitute general acceptance of measurement systems other than SI within European standards.

1 Scope

This European Standard specifies the dimensions, tolerances, required characteristics and the mass of an adaptor, flareless tube end EN 6123, ring locked type, for use in 35 000 kPa (5 080 psi) working pressure systems.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2424, *Aerospace series — Marking of aerospace products*

EN 3311, *Aerospace series — Titanium alloy TI-P64001 (Ti-6Al-4V) — Annealed — Bar for machining $D < 110$ mm*

EN 3314, *Aerospace series — Titanium alloy TI-P64001, solution treated and aged; bar for machining $D \leq 75$ mm*

EN 4315, *Aerospace series — Heat resisting alloy FE-PA2601 (X6NiCrTiMoV26-15) — Solution treated and precipitation treated, bar and section a or $D \leq 100$ mm, $R_m \geq 900$ MPa*

EN 4317, *Aerospace series — Heat resisting alloy FE-PA2601 (X6NiCrTiMoV26-15) — Non heat treated, forging stock a or $D \leq 200$ mm*

EN 4832, *Aerospace series — Pipe coupling 24° Cone up to 35 000 kPa (5 080 psi) Ring-locked fitting and Ring-locked fitting-reducer — Inch Series — Technical specification¹⁾*

EN 4835, *Aerospace series — Installation and removal requirements for Ring locked fitting and reducer, 24° Cone up to 35 000 kPa (5 080 psi) — Inch Series¹⁾*

EN 6123, *Aerospace series — Fitting end, 24° internal cone, external thread, flareless type — Extra fine thread pitch — Inch series — Design standard*

ISO 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*

ISO 4287, *Geometrical Product Specification (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters*

AMS 2486, *Conversion coating of titanium alloys fluoride-phosphate type²⁾*

AMS 2488, *Anodic treatment — titanium and titanium alloys solution pH 13 or higher²⁾*

AMS 2700, *Passivation of corrosion resistant steels²⁾*

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

2) Published by: SAE International (www.sae.org).

SS-EN 4833:2018 (E)

AMS 5731, *Steel, corrosion and heat resistant, bars, forgings, tubing, and rings 15Cr 25.5Ni 1.2Mo 2.1Ti 0.006B 0.30V, consumable electrode melted, 1 800 °F (982 °C) solution heat treated²⁾*

AMS 5732, *Steel, corrosion and heat restant, bars, wire, forgings, tubing and rings 15Cr 25.5Ni 1.2Mo 2.1Ti 0.006B 0.30V consumable electrode melted, 1 800 °F (982 °C), solution and precipitation heat treated²⁾*

AMS 5734, *Steel, corrosion and heat resistant, bars, forgings, and tubing 15Cr 25.5Ni 1.2Mo 2.1Ti 0.006B 0.30V, consumable electrode melted, 1 650 °F (899 °C) solution heat treated²⁾*

AMS 5737, *Steel, corrosion and heat resistant, bars, wire, forgings and tubing 15Cr 25.5Ni 1.2Mo 2.1Ti 0.006B 0.30V, consumable electrode melted, 1 650 °F (899 °C), solution and precipitation heat treated²⁾*

AMS 5853, *Steel, corrosion and heat resistant, bars and wire 15Cr 25.5Ni 1.2Mo 2.1Ti 0.006B 0.30V, consumable electrode melted 1 800°F (982 °C) solution treated and work-strengthened 160 ksi (1 103 MPa) tensile strength²⁾*

3 Requirements

3.1 Configuration, Dimensions, Tolerances and Mass

The configuration, dimensions, tolerances and mass shall conform to Figure 1 and Table 2.

Dimensions are expressed in millimetres (inch).

Unless otherwise specified, the following tolerances are applicable:

- Linear dimensions $\pm 0,13$ mm (± 0.005 0 in);
- Angular tolerances ± 0 degrees° 30 minutes’;
- Break edges 0,08 mm (0.003 0 in) to 0,38 mm (0.015 0 in).

3.2 Material, Heat and Surface Treatment

The material, heat and surface treatment shall be in accordance with Table 1.

Table 1 — Material, heat and surface treatment

Element	Material	Heat treatment	Surface treatment
Adapter	Titanium alloy type Ti-6Al-4V according to EN 3311 or EN 3314 ^a	130 KSI UTS min.	Anodic treatment according to AMS 2488, type 2 or fluoride-phosphate conversion according to AMS 2486
Lockring	CRES A286 according to AMS 5731, AMS 5732, or EN 4315, EN 4317, AMS 5734, AMS 5737 or AMS 5853	34 to 40 HRC	Passivated according to AMS 2700, Type 2 or 8. White colour PTFE Coating for pressure class identification
^a Standards are equivalent to AMS 4928 or AMS 4965 or AMS 4967.			

3.3 Surface texture

3.3.1 General

Surface texture shall be in accordance with ISO 4287.

Symbols shall be in accordance with ISO 1302.

3.3.2 Surface roughness

Unless otherwise specified, the following surface roughness is applicable:

- Machined surfaces shall be 3,175 µm (125 µin) Ramax;
- Sealing surface shall be 1,6 µm (63 µin) Ramax.

3.4 Sealing areas

Sealing surfaces shall have no visible defects.

3.5 Installation

Fitting assembly shall be installed according to EN 4835 (equivalent to AS5551).