ICS 49.080 SLOVENSKÁ TECHNICKÁ NORMA Január 2019

STN	**Letectvo a kozmonautika Rúrkové guľové spojky 60° zo zliatiny titánu TI-P64001, priame adaptéry obojstranné s poistným krúžkom**	**STN EN 4510 31 3697**

Aerospace series - Pipe couplings, 60, spherical, in titanium alloy TI-P64001, adapters, straight, double end, with locking ring

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/18

Obsahuje: EN 4510:2018

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4510

July 2018

ICS 49.080

English Version

Aerospace series - Pipe couplings, 60°, spherical, in titanium alloy TI-P64001, adapters, straight, double end, with locking ring

Série aérospatiale - Raccords sphériques, 60°, en alliage de titane TI-P64001, raccords droits, à planter, avec bague de sécurité

Luft- und Raumfahrt - Rohrverschraubungen mit Kugelbuchsen, 60°, aus Titanlegierung TI-P64001, gerade Anschlussverschraubungen mit Sicherungsring

This European Standard was approved by CEN on 13 May 2018.

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

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

Ref. No. EN 4510:2018 E

Contents

European foreword

This document (EN 4510:2018) 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of an identical text or by endorsement, at the latest by January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.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.

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Introduction

This European standard is a co-owned standard and a functional equivalent of SAE MA 2113. Further revisions to this European standard shall be coordinated with the SAE committee.

1 Scope

This European standard specifies the characteristics of the pipe coupling adapter, 60° spherical sealing face manufactured in titanium alloy with locking ring, for installing in a boss for aerospace applications.

These adapters shall be installed into port connections manufactured in accordance with EN 2602 using ISO 3601-1 sealing O-rings selected sizes. O-ring material depends on the system fluid and operation conditions. The installation shall be performed in accordance with EN 2608.

Nominal working pressure: up to 28 000 kPa.

Temperature range: limited by elastomeric sealing ring, −54 °C to +135 °C.

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 2491, *Aerospace series — Molybdenum disulphide dry lubricants — Coating methods*

EN 2602, *Aerospace series — Ports for adaptors, threaded, with lockring — Geometric configuration*

EN 2603, *Aerospace series — Port ends for adaptors, threaded, with lockring — Geometric configuration*

EN 2606, *Aerospace series — 60° interface for adaptors, threaded, with lockring — Geometric configuration*

EN 2608, *Aerospace series — Installation and removal requirements for 8°30′ adaptors, threaded, with lockring*

EN 2645, *Aerospace series — Lockrings for adaptors, threaded, with lockring — Dimensions*

EN 3079, *Aerospace series — Pipe coupling 8°30′ up to 28000 kPa — Adaptors — Metric series — Technical specification*

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 ISO 286-2, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts*

ISO 3601-1, *Fluid power systems — O-rings — Part 1: Inside diameters, cross-sections, tolerances and designation codes*

ISO 5855-3, *Aerospace — MJ threads — Part 3: Limit dimensions for fittings for fluid systems*

ISO 7169, *Aerospace — Separable tube fittings for fluid systems 24° cone — General specification*