SLOVENSKI STANDARD
SIST EN 3083:2004

01-maj-2004

Aerospace series - Pipe coupling 8°30' in titanium alloy - Unions, bulkhead, long welded end, for repair

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Luft- und Raumfahrt - Rohrverschraubung 8°30' aus Titanlegierung - Gerade Schottverschraubungen, lang mit Anschweißende, für Reparatur

Série aérospatiale - Systeme de raccordement 8°30' en alliage de titane - Raccords droits a souder pour traversée de cloison, type long, pour réparation

Ta slovenski standard je istoveten z: EN 3083:2001

ICS:

49.080	Letalski in vesoljski hidravliḷ ni sistemi in deli	Aerospace fluid systems and components

SIST EN 3083:2004 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3083

October 2001

ICS 49.080

English version

Aerospace series - Pipe coupling 8°30' in titanium alloy - Unions, bulkhead, long welded end, for repair

Série aérospatiale - Système de raccordement 8°30' en alliage de titane - Raccords droits à souder pour traversée de cloison, type long, pour réparation

Luft- und Raumfahrt - Rohrverschraubung 8°30' aus Titanlegierung - Gerade Schottverschraubungen, lang mit Anschweißende, für Reparatur

This European Standard was approved by CEN on 20 January 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 3083:2001 E

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries 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 AECMA, 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 April 2002, and conflicting national standards shall be withdrawn at the latest by April 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the characteristics of unions, bulkhead, long, welded end for pipe couplings 8°30', in titanium alloy, for aerospace applications to be used as repair couplings to replace EN 3691.

Nominal pressure: up to 28 000 kPa

Temperature range: – 55 °C to 135 °C

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

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

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

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

EN 2656, *Aerospace series — Pipe coupling — Coupling ends, welded — Geometric configuration.*

EN 3267, *Aerospace series — Washers, bulkhead, in titanium alloy.*

EN 3274, *Aerospace series — Pipe coupling 8°30' — Thread ends — Geometric configuration.*

EN 3275, *Aerospace series — Pipe coupling 8°30' up to 28 000 kPa — Dynamic beam seal — Metric series — Technical specification.*

EN 3311, *Aerospace series — Titanium alloy TI-P64001 — Annealed — Bar for machining — $D \leq 150$ mm.*[1)]

EN 3314, *Aerospace series — Titanium alloy TI-P64001 — Solution treated and aged — Bar for machining — $D \leq 75$ mm.*[1)]

EN 3691, *Aerospace series — Pipe coupling 8°30' in titanium alloy — Unions, bulkhead, long, welded.*

3 Required characteristics

3.1 Configuration – Dimensions – Mass

According to figure 1 and figure 2 and table 1. The values apply before lubricating.

Dimensions not specified are at the manufacterer's option provided that the qualification and acceptance requirements of EN 3275, type II are met.

[1)] Published as AECMA Prestandard at the date of publication of this standard

3.2 Surface roughness

According to figure 1 and figure 2, unless otherwise specified in the design documentation.

3.3 Materials

According to EN 3311 or EN 3314.

3.4 Surface treatment

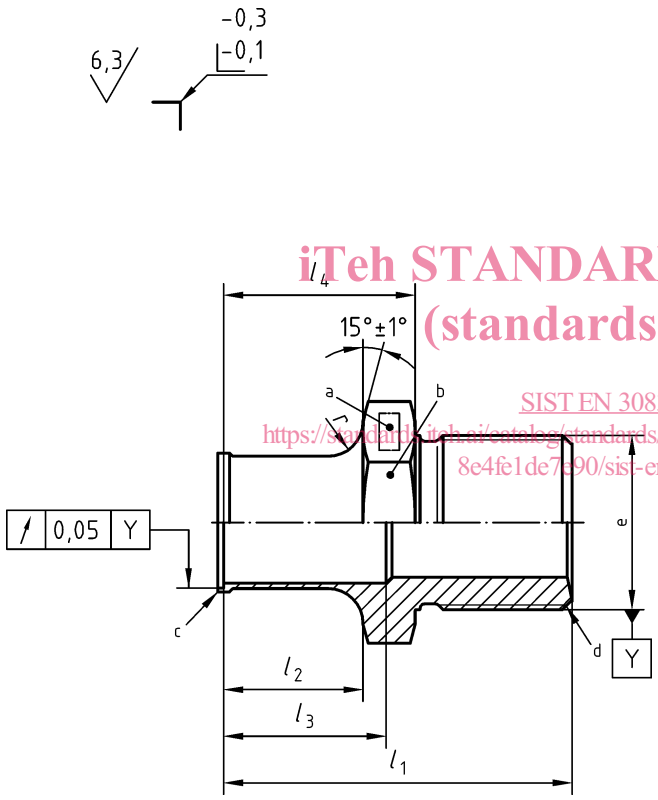
Welded end without surface treatment, min. 10 mm (outside and bore diameters).

Lubrication: according to EN 2491, on thread and sealing face.

Prior to application of the lubricant, the surface shall be abrasive blasted using non-metallic grit.

Film thickness 0,005 mm to 0,013 mm.

Dimensions in millimetres

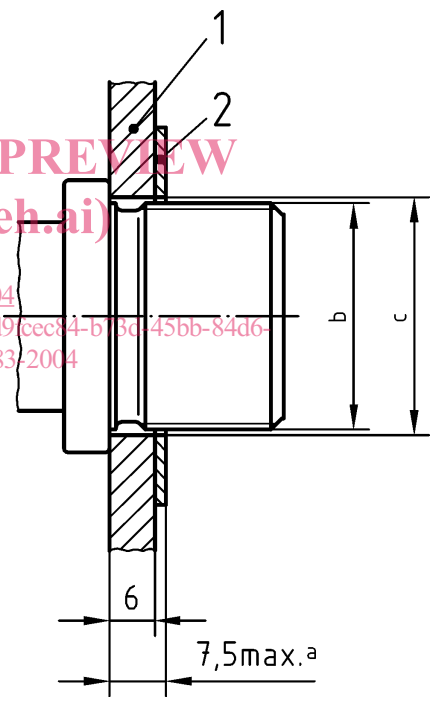


[a] Area for marking
[b] Across flats s
[c] According to EN 2656
[d] According to EN 3274, form J
[e] Thread

NOTE Pipe internal diameter d_1 in accordance with EN 2656 > diameter d_1 in accordance with EN 3274.

Figure 1

Dimensions in millimetres



[a] Area for marking
[b] Across flats s
[c] According to EN 2656
[d] According to EN 3274, form J
[e] Thread

NOTE Pipe internal diameter d_1 in accordance with EN 2656 < diameter d_1 in accordance with EN 3274.

Figure 2

Table 1

Dimensions in millimetres

Code[a,b]	Thread[c] 4g6g	l_1[d]	l_2 ± 0,2	l_3 ± 0,5	l_4 ± 0,2	r $^{+0,2}_{0}$	s h13	Mass g/piece max.
0504 **0505**	MJ10 × 1	46	17	23	26,5	5	14	11,96 12,10
0605	MJ12 × 1,25	48	17	22	26	5	17	17,92
0805 **0806**	MJ14 × 1,5	50	17	21	25	5	19	22,02 22,22
1005 **1008**	MJ16 × 1,5	51	17	21	25	5	22	27,99 28,77
1205 **1206** **1209**	MJ18 × 1,5	53	17	21	26	5	24	34,98 35,34 36,30
1405 **1408** **1410**	MJ20 × 1,5	55	19	23	28	5	27	44,28 45,61 46,40
1605 **1606** **1610** **1612**	MJ22 × 1,5	57	21	25	30	5	30	55,98 56,53 58,63 59,62
1805 **1807** **1810** **1813**	MJ24 × 1,5	59	23	27	32	6	32	58,55 59,90 61,81 63,65
2006 **2007** **2012** **2015**	MJ27 × 1,5	60	24	28	33	7	34	67,27 68,05 71,70 73,79
2208 **2212** **2216**	MJ30 × 1,5	60	24	28	33	7	36	76,65 79,91 83,01
2508 **2509** **2514** **2518**	MJ33 × 1,5	61	25	29	34	7	41	98,66 99,63 104,33 107,97
2808 **2810** **2816** **2820**	MJ36 × 1,5	62,5	25	29	34	8	46	117,45 119,61 125,94 130,02
3210 **3212**	MJ39 × 1,5	64,5	27	31	36	8	50	135,48 147,25

[a] Corresponds to the pipe nominal outside diameter and wall thickness.

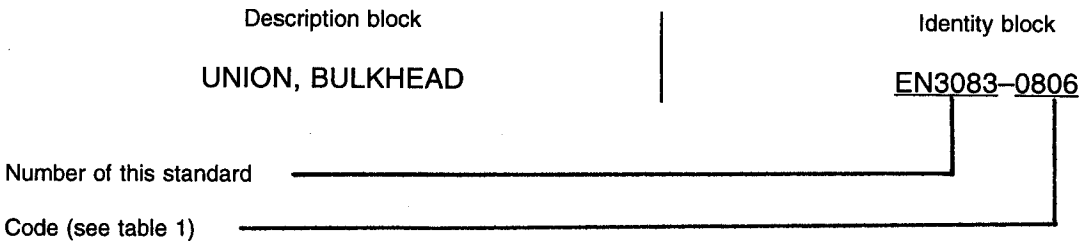
[b] Relationship between code and pressure classification according to EN 2656.

[c] According to ISO 5855-3.

[d] According to l_4 and EN 3274, form J.

4 Designation

EXAMPLE



NOTE If necessary, the code I9005 shall be placed between the description block and the identity block.

5 Marking

According to EN 2424, style A and figures 1 and 2.

6 Technical specification

According to EN 3275, type II.