SLOVENSKI STANDARD
SIST EN 4805:2017

01-oktober-2017

Aeronavtika - Prirobnične spojke - Varilna spojka, ravna, iz toplotno odpornega jekla - Palčne mere

Aerospace series - Flange couplings - Weld coupling, straight, in heat resisting steel - Inch series

Luft- und Raumfahrt - Rohrverschraubung mit Flanschen und Schweißstutzen, gerade, aus hochwarmfestem Stahl - Inch-Reihe

Série aérospatiale - Raccordement à bride - Raccord à souder, droit, en acier résistant à chaud - Série en inches

Ta slovenski standard je istoveten z: **EN 4805:2017**

ICS:

23.040.60	Prirobnice, oglavki in spojni elementi	Flanges, couplings and joints
49.025.10	Jekla	Steels
49.080	Letalski in vesoljski hidravlični sistemi in deli	Aerospace fluid systems and components

SIST EN 4805:2017 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4805

June 2017

ICS 49.080

English Version

Aerospace series - Flange couplings - Weld coupling, straight, in heat resisting steel - Inch series

Série aérospatiale - Raccordement à bride - Raccord à souder, droit, en acier résistant à chaud - Série en inches

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This European Standard was approved by CEN on 21 November 2016.

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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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 4805:2017 E

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European foreword

This document (EN 4805:2017) 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 European 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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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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1 Scope

This European Standard specifies the characteristics of straight welded couplings in heat resisting steel for swivel flange couplings for inch series aerospace applications.

Nominal pressure: The parts shall withstand nominal pressures given in Table 1. The nominal pressure of the assembly depends on associated seal, tube material characteristics, tube diameter and tube wall thickness (see EN 4814).

NOTE Assembly in accordance with TR 4815.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 2516, *Aerospace series — Passivation of corrosion resisting steels and decontamination of nickel base alloys*

EN 3363, *Aerospace series — Steel FE-CM68 — Solution treated — $R_m \geq 485$ MPa — Sand or investment casting*[1)]

EN 3468, *Aerospace series — Steel FE-PA13 — Softened — $500 \leq R_m \leq 700$ MPa — Forgings — $D_e \leq 100$ mm*[1)]

EN 3487, *Aerospace series — Steel FE-PA3601 (X6CrNiTi18-10) — Air melted — Softened — Bar for machining — a or D ≤ 250 mm — 500 MPa ≤ R_m ≤ 700 MPa*

EN 4814, *Aerospace series — Flange couplings up to 21 000 kPa — Technical specification — Inch series*

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defense Organizations*

TR 4815, *Aerospace series — Flange couplings up to 21 000 kPa — Design standard — Inch series*[2)]

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Table 1. Dimensions and tolerances are in millimetres, except otherwise specified.

3.2 Material and surface treatment

EN 3363 or EN 3468 or EN 3487.

Surface finish: Passivation EN 2516.

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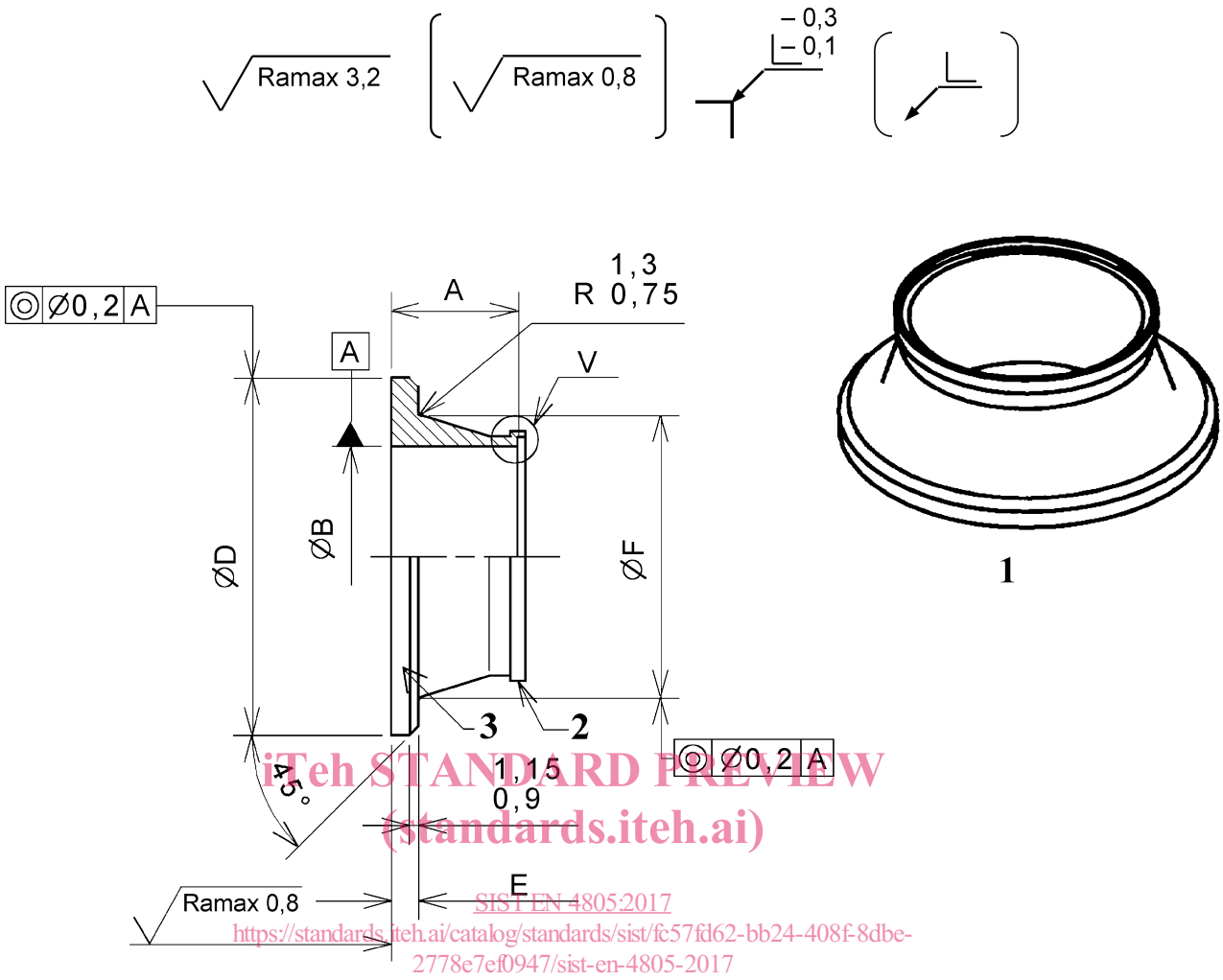
1) Published as ASD-STAN Prestandard at the date of publication of this European Standard. (http://www.asd-stan.org/)

2) Published as ASD-STAN Technical Report at the date of publication of this European Standard. (http://www.asd-stan.org/)



Key

1 3D view (for information only)
2 Marking of identity block
3 Marking of manufacturer's monogram

Figure 1

Table 1

Dimensional code[a]	Nominal diameter		Wall thickness of tube	*A*		*ØB*	*ØD*		*E*		*ØF*	*V*	Mass[b]
	inch	mm		min	max	+0,1 0	min.	max	min	max	0 −0,4		
A10	.625	15,875	0,711	28,45	28,60	14,38	12,45	12,95	2,80	3,05	19,70	EN4549A010	16,40
B10			0,889			13,95						EN4549B010	
A12	.750	19,050	0,711	31,60	31,75	17,55	12,70	13,20	2,80	3,05	23,80	EN4549A012	19,00
B12			0,889			17,10						EN4549B012	
A16	1.000	25,400	0,711	38,00	38,10	23,90	13,20	14,20	2,80	3,05	30,20	EN4549A016	28,10
B16			0,889			23,45						EN4549B016	
A20	1.250	31,750	0,711	46,70	46,85	30,25	13,70	14,20	3,05	3,20	36,50	EN4549A020	37,80
B20			0,889			29,80						EN4549B020	

Dimensional code[a]	Nominal diameter		Wall thickness of tube	*A*		*ØB*	*ØD*		*E*		*ØF*	*V*	Mass[b]
	inch	mm		min	max	+0,1 0	min.	max	min	max	0 −0,4		
A24	1.500	38,100	0,711	53,85	54,00	36,60	14,20	14,75	3,30	3,45	42,00	EN4549A024	47,10
B24			0,889			36,15						EN4549B024	
A28	1.750	44,450	0,711	60,20	60,35	42,95	14,75	15,25	3,55	3,70	49,60	EN4549A028	59,20
B28			0,889			42,50						EN4549B028	
A32	2.000	50,800	0,711	69,70	69,85	49,30	14,75	15,25	3,55	3,70	56,00	EN4549A032	77,30
B32			0,889			48,90						EN4549B032	

a This code is composed with the following elements:
- Tube wall thickness code (*A*: 0,711 mm; *B*: 0,889 mm);
- Nominal diameter given in 16th of inches within 2 digit.

b Mass ≈ quoted in kg/1 000 parts.

4 Designation

EXAMPLE

Description block	Identity block
COUPLING, STRAIGHT, WELD	EN4805-A10

Number of this standard

Dimensional code (see Table 1)

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

5 Identification marking

EN 2424, category A, as indicated on Figure 1.

6 Technical specification

See EN 4814.

7 Quality Assurance

Approval of the manufactures.

See EN 9100.