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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Aerospace — Gaseous oxygen replenishment connection for use in fluid systems (new type) — Dimensions (Inch series)

Aéronautique et espace — Raccordement pour l'alimentation en oxygène gazeux dans les systèmes de fluide (nouveau modèle) — Dimensions (Série en inches)

Reference number
ISO 8775 : 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8775 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles.* It replaces ISO 1022 for new designs.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Aerospace — Gaseous oxygen replenishment connection for use in fluid systems (new type) — Dimensions (Inch series)

1 Scope and field of application

This International Standard specifies the mating dimensions and access clearance for a gaseous oxygen replenishment coupling for aircraft.

2 References

ISO 725, *ISO inch screw threads — Basic dimensions.*

ISO 1101, *Technical drawings — Geometrical tolerancing — Tolerancing of form, orientation, location and run-out — Generalities, definitions, symbols, indications on drawings.*

ISO 1302, *Technical drawings — Method of indicating surface texture on drawings.*

ISO 3161, *UNJ threads, with controlled root radius, for aerospace — Inch series.*

3 Requirements

3.1 Coupling mating dimensions

The mating end of the coupling shall conform to the dimensions shown in figure 1 and table 1.

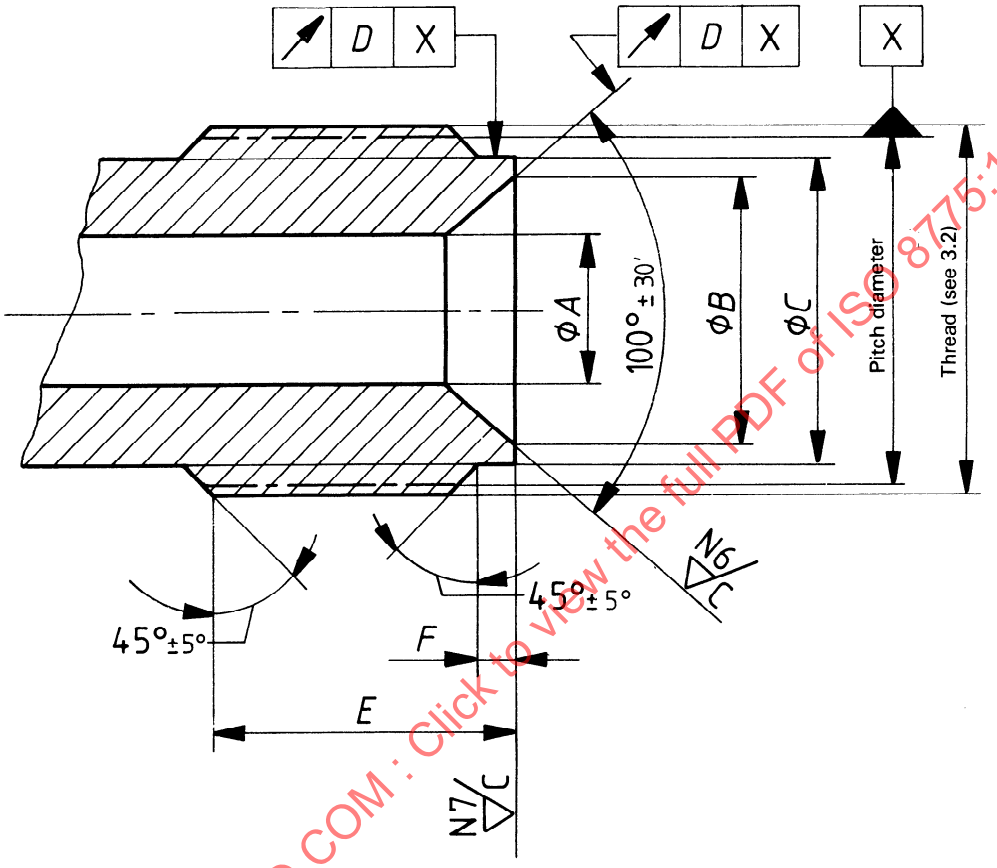

Figure 1

Table 1 — Coupling mating dimensions

Mating end of coupling																													
Dimensions and run-out tolerance[1]																										Surface roughness[2] R_a			
A				*B*				*C*				*D*		*E*				*F*				Grade number			
min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.			min.	max.	min.	max.	min.	max.	min.	max.	N6		N7	
in		mm		in		mm		in		mm		in	mm	in		mm		in		mm		µin	µm	µin	µm
0,118	0.166	3	4,22	0.276	0.286	7,01	7,26	0.305	0.31	7,75	7,87	0.004	0,1	0.297	0.327	7,54	8,31	0.042	0.052	1,07	1,32	32	0,8	63	1,6

1) Run-out tolerance, see ISO 1101.

2) Surface texture, see ISO 1302.

3.2 Thread

The connecting thread shall be either

— 3/8-24 UNF-3A, in accordance with the general requirements of ISO 725 and with dimensions as given in table 2, or

— 0,375-24 UNJF-3A, in accordance with ISO 3161.

Table 2 — Dimensions for 3/8-24 UNF-3A thread[1)]

Thread designation	Thread dimensions															
	Major diameter				Pitch diameter				Minor diameter				Root radius			
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
	in		mm		in		mm		in		mm		in		mm	
3/8-24 UNF-3A	0.367 8	0.375	9,343	9,525	0.345	0.347 9	8,763	8,836	0.318	0.323 9	8,077	8,227	0.004 5	0.006	0,114	0,152

1) Based on ISO 725.

3.3 Access clearance

The dimensions of the clearance allowed around the coupling shall be in accordance with the dimensions shown in figure 2 and table 3.

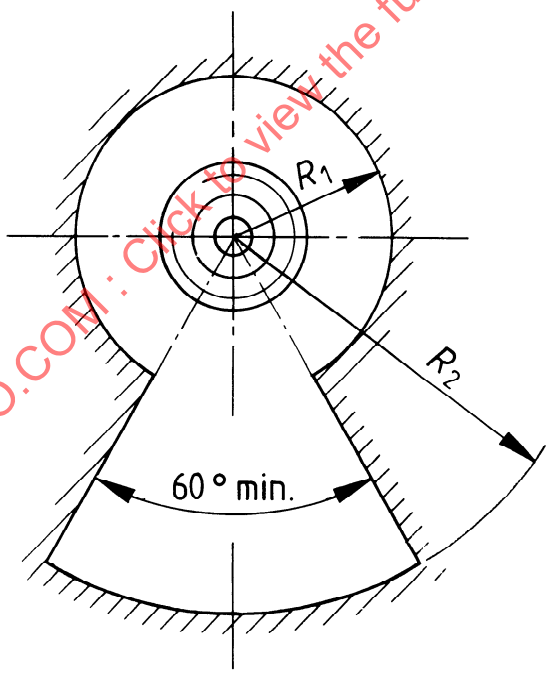

Figure 2

Table 3 — Dimensions of access clearance

Dimensions of access clearance			
R_1 min.		R_2 min.	
in	mm	in	mm
2.2	55	7.5	190

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