

INTERNATIONAL STANDARD

ISO
45

Second edition
1990-12-01

Aircraft — Pressure refuelling connections

Aéronefs — Raccords de remplissage sous pression en combustible



Reference number
ISO 45:1990(E)

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 45 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*.

This second edition cancels and replaces the first edition (ISO 45:1980), of which it constitutes a minor revision.

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International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Aircraft — Pressure refuelling connections

1 Scope

This International Standard specifies the basic dimensions and access clearance for aircraft pressure refuelling connections.

2 Requirements

2.1 Basic dimensions

The basic dimensions for aircraft pressure refuelling connections shall be in accordance with those shown in figure 1 and given in table 1.

2.2 Access clearance

The clearance allowed around the connector shall be in accordance with figure 2.

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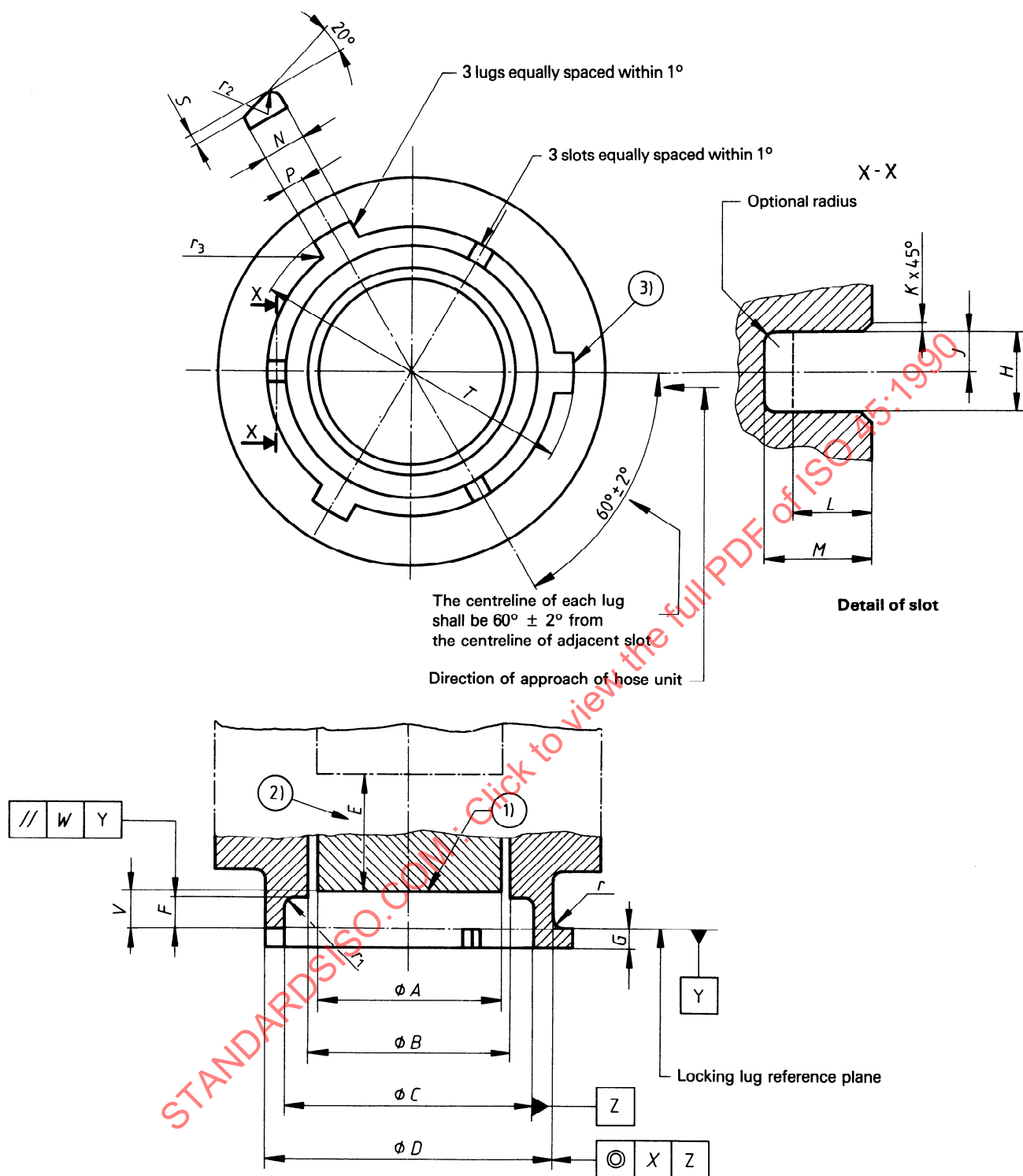
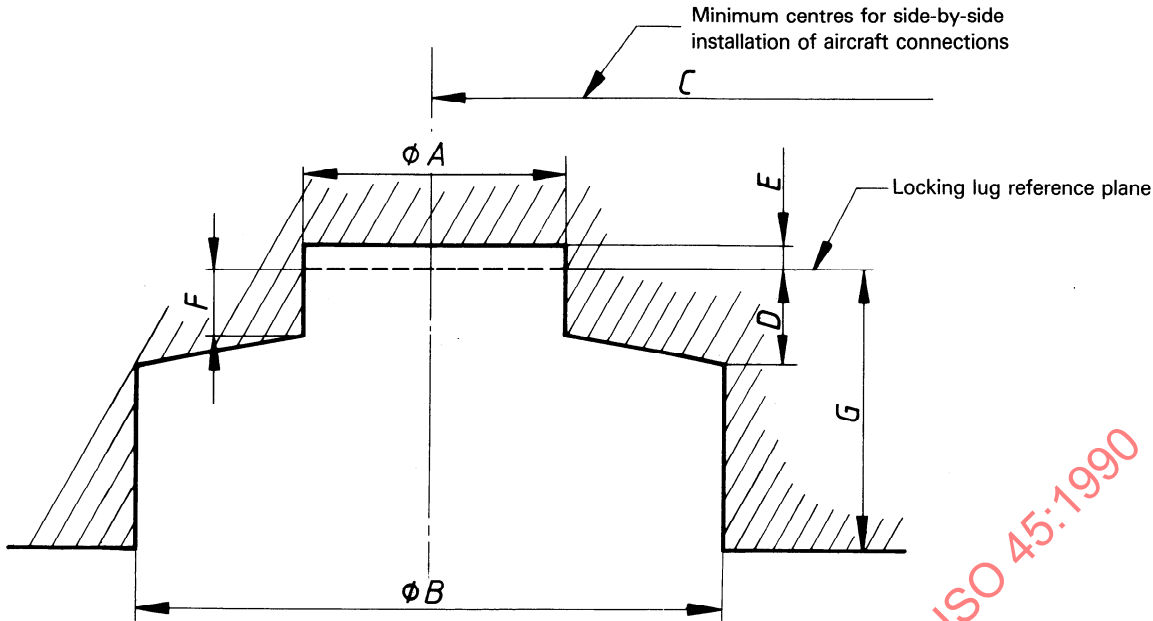


Figure 1 — Pressure refuelling connections

Table 1 — Dimensions for pressure refuelling connections

Dimension	mm	in
<i>A</i>	57,2 min.	2,25 min.
<i>B</i>	63,5 $\begin{smallmatrix} +0,25 \\ 0 \end{smallmatrix}$	2,5 $\begin{smallmatrix} +0,01 \\ 0 \end{smallmatrix}$
<i>C</i>	76,2 $\begin{smallmatrix} +0,127 \\ 0 \end{smallmatrix}$	3 $\begin{smallmatrix} +0,005 \\ 0 \end{smallmatrix}$
<i>D</i>	88,77 $\begin{smallmatrix} 0 \\ -1,32 \end{smallmatrix}$	3,495 $\begin{smallmatrix} 0 \\ -0,052 \end{smallmatrix}$
<i>E</i> ¹⁾	36,52	1,438
<i>F</i>	12,7 $\begin{smallmatrix} 0 \\ -0,25 \end{smallmatrix}$	0,5 $\begin{smallmatrix} 0 \\ -0,01 \end{smallmatrix}$
<i>G</i>	6,27 $\begin{smallmatrix} 0 \\ -0,13 \end{smallmatrix}$	0,247 $\begin{smallmatrix} 0 \\ -0,005 \end{smallmatrix}$
<i>H</i>	6,35 $\begin{smallmatrix} +0,25 \\ 0 \end{smallmatrix}$	0,25 $\begin{smallmatrix} +0,01 \\ 0 \end{smallmatrix}$
<i>J</i>	3,18 $\begin{smallmatrix} +0,12 \\ 0 \end{smallmatrix}$	0,125 $\begin{smallmatrix} +0,005 \\ 0 \end{smallmatrix}$
<i>K</i>	0,79	0,031
<i>L</i> ²⁾	6,15 min.	0,242 min.
<i>M</i>	8,46 max.	0,333 max.
<i>N</i>	12,7 $\begin{smallmatrix} 0 \\ -0,8 \end{smallmatrix}$	0,5 $\begin{smallmatrix} 0 \\ -0,032 \end{smallmatrix}$
<i>P</i>	6,35 $\begin{smallmatrix} 0 \\ -0,4 \end{smallmatrix}$	0,25 $\begin{smallmatrix} 0 \\ -0,016 \end{smallmatrix}$
<i>S</i>	2,29 ± 0,25	0,09 ± 0,01
<i>T</i>	101,47 $\begin{smallmatrix} 0 \\ -1,45 \end{smallmatrix}$	3,995 $\begin{smallmatrix} 0 \\ -0,057 \end{smallmatrix}$
<i>V</i>	13,1 $\begin{smallmatrix} +0,81 \\ 0 \end{smallmatrix}$	0,516 $\begin{smallmatrix} +0,032 \\ 0 \end{smallmatrix}$
<i>W</i>	0,05	0,002
<i>X</i>	0,13	0,005
<i>r</i>	0,38 max. 0,25 min.	0,015 max. 0,010 min.
<i>r</i> ₁	0,4 max.	0,016 max.
<i>r</i> ₂	0,51 max.	0,02 max.
<i>r</i> ₃	1 max.	0,04 max.
1) Minimum valve travel. 2) Minimum extent of slot of dimension <i>H</i> .		



Dimension	mm		in	
	max.	min.	max.	min.
A	—	165,1	—	6,5
B	—	381	—	15
C	—	355,6	—	14
D	63,5	—	2,5	—
E	—	14,48	—	0,57
F	44,45	—	1,75	—
G	152,4	—	6	—

NOTES

1. These dimensions permit "side-by side" installation of aircraft connections on 355,6 mm (14 in) centres where this is a requirement.

2. For design purposes, a hose of 76,2 mm (3 in) outside diameter with a minimum bend radius of 304,8 mm (12 in) shall be assumed.

Figure 2 — Access clearance

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