

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 461 CONNECTIONS FOR AIRCRAFT GROUND ELECTRICAL SUPPLIES

1st EDITION
November 1965

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations

BRIEF HISTORY

The ISO Recommendation R 461, *Connections for Aircraft Ground Electrical Supplies*, was drawn up by Technical Committee ISO/TC 20, *Aircraft*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question by the Technical Committee began in 1952 and led, in 1957, to the adoption of a Draft ISO Recommendation.

In May 1962, this Draft ISO Recommendation (No. 508) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies:

Australia	Israel	Sweden
Belgium	Italy	Switzerland
Chile	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
Denmark	New Zealand	U.S.S.R.
Finland	Portugal	Yugoslavia
France	Spain	

One Member Body opposed the approval of the Draft:

Germany

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council which decided, in November 1965, to accept it as an ISO RECOMMENDATION.

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— aircraft power	Figure 8 (a)
— external direct current power	Figure 8 (b)

CONNECTIONS FOR AIRCRAFT GROUND ELECTRICAL SUPPLIES

1. CONNECTIONS

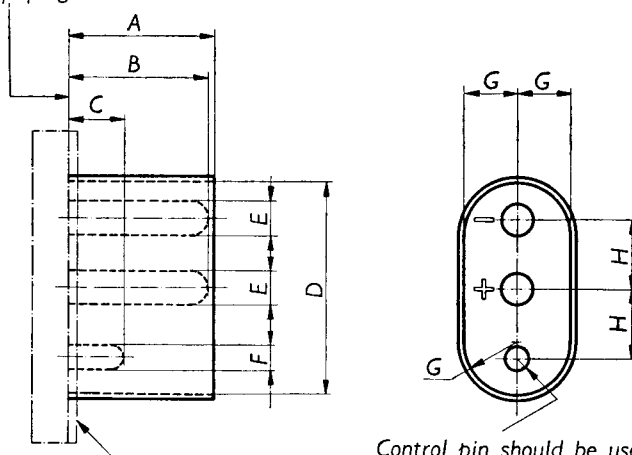
Connections for aircraft ground electrical supplies, i.e. aircraft plugs and ground supply sockets, should comply with the overall dimensions shown as follows.

1.1 Direct current

1.1.1 28 V

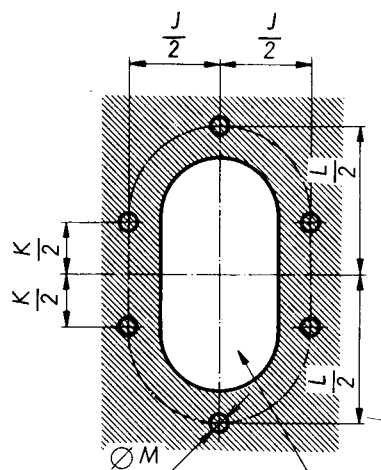
FIG. 1. — Aircraft plug

The length of engagement of the pins in the socket should not be affected by the method of mounting the aircraft plug.



On pressurized mountings, this surface should be suitable to enable a sealed joint to be made, when the shroud is passed through the aircraft structure.

Control pin should be used at positive polarity, at the voltage of the main positive pin.



Hole dimensions should be suitable for the particular plug.

Mounting dimensions

Dimension	Inches	Millimetres
A	2.125 ±0.03	54 ±0.8
B	2.0 ±0.015	50.8 ±0.4
C	0.75 ±0.015	19.1 ±0.4
D	3.062 $\begin{smallmatrix} +0.04 \\ 0 \end{smallmatrix}$	77.77 $\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$
E	0.437 $\begin{smallmatrix} 0 \\ -0.002 \end{smallmatrix}$	11.1 $\begin{smallmatrix} 0 \\ -0.05 \end{smallmatrix}$
F	0.312 $\begin{smallmatrix} 0 \\ -0.002 \end{smallmatrix}$	7.92 $\begin{smallmatrix} 0 \\ -0.05 \end{smallmatrix}$
G	0.765 ±0.02	19.43 ±0.5
H	1.0 ±0.01	25.4 ±0.25
J	2.234	56.7
K	1.672	42.5
L	3.859	98
M	0.24	6.1

