

*Transformed*

**ISO**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION  
R 519**

**DIMENSIONS OF SMALL FLASH CONNECTIONS  
FOR HAND-HELD CAMERAS**

1<sup>st</sup> EDITION  
November 1966

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

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

## BRIEF HISTORY

The ISO Recommendation R 519, *Dimensions of Small Flash Connections for Hand-Held Cameras*, was drawn up by Technical Committee ISO/TC 42, *Photography*, the Secretariat of which was held by the American Standards Association, Inc. (ASA).

Work on this question by the Technical Committee began in 1955 and led, in 1959, to the adoption of a Draft ISO Recommendation.

In August 1961, this Draft ISO Recommendation (No. 429) was circulated to all the ISO Member Bodies for enquiry. It was approved by the following Member Bodies:

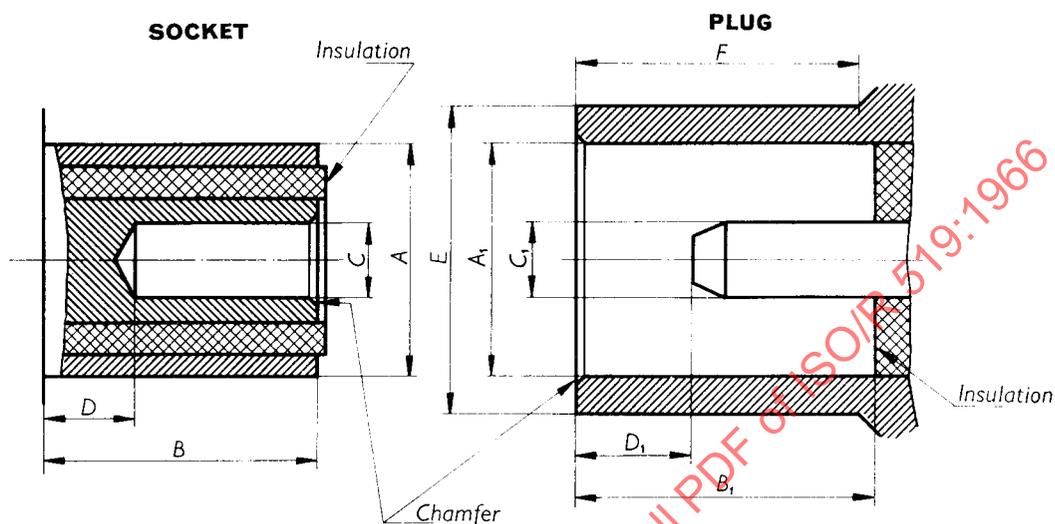
Belgium	Italy	Sweden
Brazil	Japan	Switzerland
Canada	Netherlands	United Kingdom
Chile	New Zealand	U.S.A.
France	Romania	U.S.S.R.

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 1966, to accept it as an ISO RECOMMENDATION.

## DIMENSIONS OF SMALL FLASH CONNECTIONS FOR HAND-HELD CAMERAS



Dimensions

Dimension	Socket		Dimension	Plug	
	millimetres	inches		millimetres	inches
A	3.0 $\begin{smallmatrix} 0.000 \\ -0.025 \end{smallmatrix}$	0.1181 $\begin{smallmatrix} 0.0000 \\ -0.0010 \end{smallmatrix}$	A <sub>1</sub>	3.0 *	0.12 *
B	3.5 ± 0.2	0.14 ± 0.01	B <sub>1</sub>	4.0 minimum	0.16 minimum
C	1.003 $\begin{smallmatrix} +0.025 \\ -0.000 \end{smallmatrix}$	0.0395 $\begin{smallmatrix} +0.0010 \\ -0.0000 \end{smallmatrix}$	C <sub>1</sub>	1.0 $\begin{smallmatrix} 0.000^{**} \\ -0.025 \end{smallmatrix}$	0.0394 $\begin{smallmatrix} 0.0000^{**} \\ -0.0010 \end{smallmatrix}$
D	1.2 maximum	0.05 maximum	D <sub>1</sub>	1.5 ± 0.3	0.06 ± 0.01
			E	4.0 maximum	0.16 maximum
			F	3.5 minimum	0.14 minimum

\* The plug bush should be fitted with a spring, such that the plug is so secured to the socket that an axial force of 500 to 1500 gf is required to withdraw the plug.

\*\* To ensure good electrical contact, the inner pin should be eccentric with the outer bush.

To accommodate some freedom of design and use of materials, the cone-shaped tip of the plug pin and the protruding length of socket insulation are not specifically dimensioned in this ISO Recommendation. Both influence the overall length of electrical coupling, however, and they should not be excessively long.