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# INTERNATIONAL STANDARD



# 493

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Aircraft – Dimensions for single-hole mounting (Class 1 and Class 2) lever-operated manual switches

*Aéronefs – Dimensions des interrupteurs à levier à commande manuelle, avec fixation par un seul trou (Classes 1 et 2)*

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**Descriptors** : aircraft, switches, manual controls, dimensions.

## FOREWORD

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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.

International Standard ISO 493 was drawn up by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, and circulated to the Member Bodies in November 1973.

It has been approved by the Member Bodies of the following countries :

Belgium	Netherlands	Turkey
Canada	New Zealand	United Kingdom
Czechoslovakia	Poland	U.S.A.
Egypt, Arab Rep. of	Romania	U.S.S.R.
Germany	South Africa, Rep. of	Yugoslavia
Italy	Spain	
Japan	Thailand	

The Member Body of the following country expressed disapproval of the document on technical grounds :

France

This International Standard cancels and replaces ISO Recommendation R 493-1966, of which it constitutes a technical revision.

# Aircraft – Dimensions for single-hole mounting (Class 1 and Class 2) lever-operated manual switches

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard gives the overall dimensions for single-hole mounting (Class 1 and Class 2) lever-operated switches having the characteristics specified in ISO 1466, *Lever-operated manual switches for aircraft – Performance requirements*.

## 2 DIMENSIONAL REQUIREMENTS

**2.1** The overall dimensions shall be in accordance with those shown in figure 1 and the table, which are suitable for accommodating either terminal screws or integrated terminal ("poke-home" connections) on the face opposite the mounting bush.

**2.2** The switch shall have at the centre of the front face of the case a 12 mm diameter male thread of 1 mm or equivalent pitch for fixing to the mounting panel. The holes in the mounting panel for fixing the switch to the panel shall be as shown in figure 1a). The smaller hole, of diameter 3 mm, together with a keyway washer, which also

locates in a keyway in the switch mounting bush, shall be used to prevent rotation of the switch, and shall orientate the switch correctly.

TABLE – Dimensions

Dimension		mm	in
A		48,3 max.	1.9 max.
B	Single-pole	16,8 max.	0.66 max.
	Double-pole	22,6 max.	0.89 max.
	Three-pole	35,1 max.	1.38 max.
	Four-pole	46,0 max.	1.81 max.
C		34,3 max.	1.35 max.
D		12,3 max.	0.484 max.
E*		23,8 ± 1,6	0.938 ± 0.06
θ		20° ± 2°	

\* A lever length of 17,5 ± 0,8 mm (0.688 ± 0.03 in) is acceptable, but non-preferred.

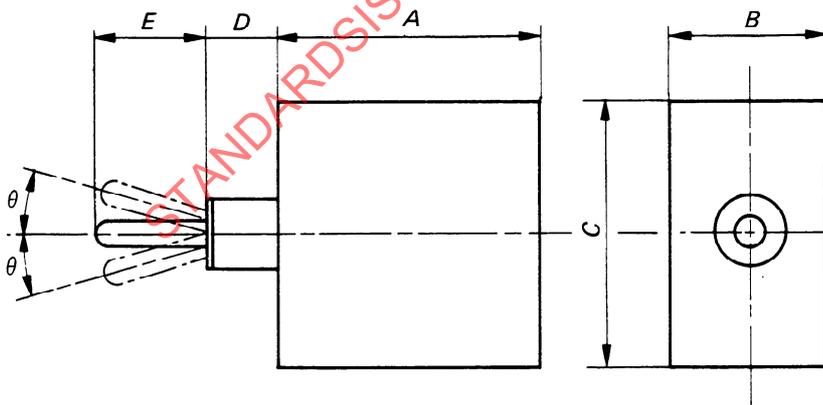


FIGURE 1 – Dimensions for single-hole mounting switch

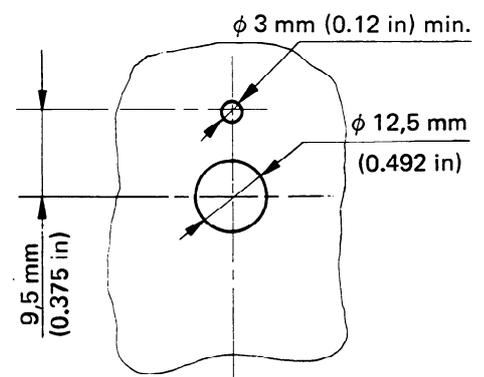


FIGURE 1a) – Panel drilling