INTERNATIONAL STANDARD ISO 1092

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

Adding machines and calculating machines — Numeric section of ten-key keyboards

Machines à additionner et machines à calculer — Partie numérique des claviers réduits

First edition — 1974-05-15

UDC 651.2 : 681.321 — 51 **Ref. No. ISO 1092-1974 (E)**

Descriptors : office machines, adding machines, calculators, keyboards, specifications.

Price based on 1 page

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 95 has reviewed ISO Recommendation R 1092 and found it suitable for transformation. International Standard ISO 1092 therefore replaces ISO Recommendation R 1092-1969.

ISO Recommendation R 1092 was approved by the Member Bodies of the following countries :

Australia	Greece	Portugal
Chile	India	Spain
Czechoslovakia	Israel	Sweden
Denmark	Italy	Switzerland
Egypt, Arab Rep. of	Korea, Rep. of	United Kingdom
France	Netherlands	Yugoslavia
Germany	Poland	

The Member Bodies of the following countries have subsequently approved this Recommendation :

Finland
South Africa, Rep. of

The Member Bodies of the following countries expressed disapproval of the Recommendation on technical grounds :

Ireland
Japan
U.S.A.

No Member Body disapproved the transformation of ISO/R 1092 into an International Standard.

Printed in Switzerland

Adding machines and calculating machines — Numeric section of ten-key keyboards

1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes the composition and layout of ten-key keyboards for adding and calculating machines, as well as the shape of keys, the slope of the keyboard plane, the maximum key stroke and the spacing of keys.

It applies only to numerical keys which constitute ten-key keyboards, and not to function keys employed with such a keyboard, which may be the subject of a separate International Standard.

2 COMPOSITION AND LAYOUT

The numeric section of a ten-key keyboard shall contain the ten keys corresponding to the numbers 0 to 9, arranged according to the layout illustrated in figure 1.

In addition, keys for the double zero (00), the triple zero (000), the decimal symbol (, or .) and the minus symbol (−) may be provided.

All zero keys shall be included in the zero zone indicated by the reference "Z" in figure 1; when multiple zero keys are provided, they shall be arranged from left to right in the following sequence :

0, 00, 000.

3 SHAPE OF KEYS

The top surface of all keys shall be such as to minimize the possibility of fingers slipping off them during operation. The key numbered 5 or the keys of the row 4, 5 and 6 may differ perceptibly in top surface from the other keys, to facilitate touch operation.

4 SLOPE OF KEYBOARD PLANE

In order to facilitate operation, the plane P – P containing points corresponding to the keytop surfaces shall have an angle α preferably between 10 and 20° with reference to the horizontal plane H – H (see figure 2).

5 KEY STROKE

The depth of depression required to operate the keys shall not exceed 7 mm (9/32 in).

6 SPACING OF KEYS

The distances *a* and *b* between the centres of adjacent keys (see figure 1) shall be :

$19 \begin{smallmatrix} +1,5 \\ -1,0 \end{smallmatrix}$ mm $\left(3/4 \begin{smallmatrix} +1/16 \\ -3/64 \end{smallmatrix} \text{ in}\right)$

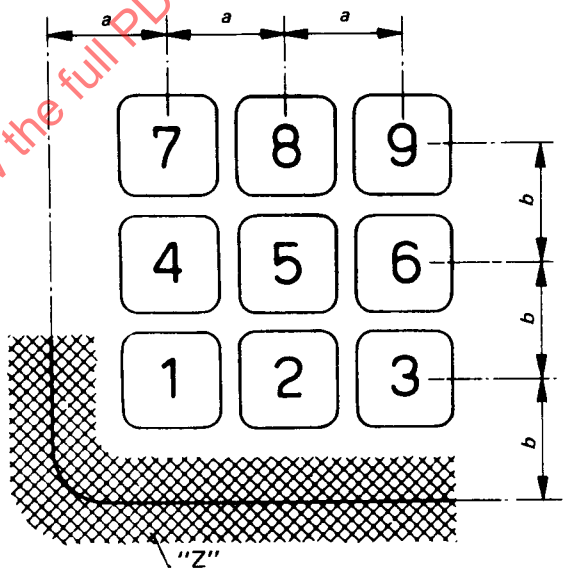

FIGURE 1 — **Plan view of keyboard**

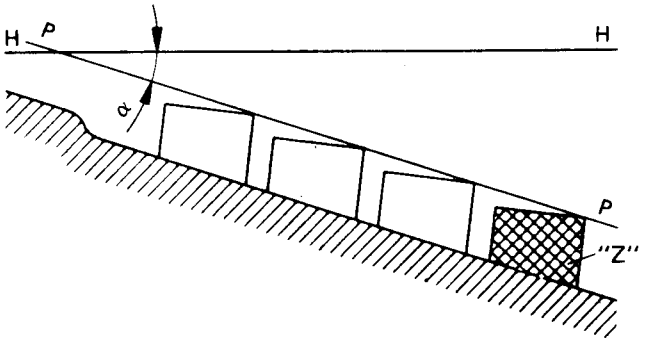

FIGURE 2 — **Side elevation view of keyboard**