

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 773

RECTANGULAR OR SQUARE PARALLEL KEYS

AND THEIR CORRESPONDING KEYWAYS

(Dimensions in millimetres)

1st EDITION

January 1969

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.

STANDARDSISO.COM : Click to view the full PDF of ISO/R 773:1969

BRIEF HISTORY

The ISO Recommendation R 773, *Rectangular or square parallel keys and their corresponding keyways (Dimensions in millimetres)*, was drawn up by Technical Committee ISO/TC 16, *Keys and keyways*, the Secretariat of which is held by the Institut Belge de Normalisation (IBN).

Work on this question by the Technical Committee led in 1965 to the adoption of a Draft ISO Recommendation.

In November 1966, this Draft ISO Recommendation (No. 1084) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Argentina	Greece	Spain
Austria	Hungary	Sweden
Belgium	India	Switzerland
Brazil	Italy	Turkey
Chile	Japan	U.A.R.
Denmark	Korea, Rep. of	United Kingdom
France	Netherlands	U.S.S.R.
Germany	South Africa, Rep. of	Yugoslavia

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in January 1969, to accept it as an ISO RECOMMENDATION.

**RECTANGULAR OR SQUARE PARALLEL KEYS
AND THEIR CORRESPONDING KEYWAYS**
(Dimensions in millimetres)

1. SCOPE

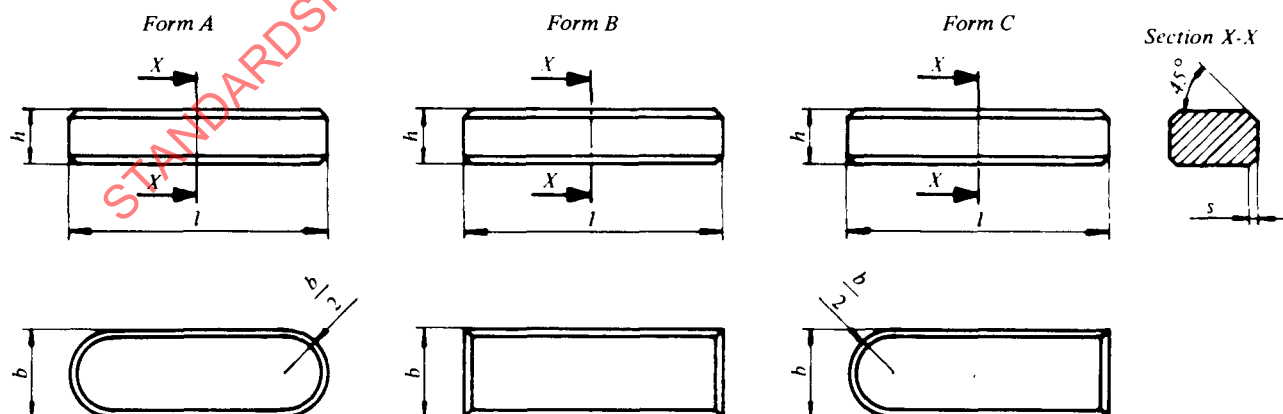
This ISO Recommendation specifies the dimensional characteristics of rectangular or square parallel keys and of their corresponding keyways in shaft and hub. It also gives the relations which should be observed between the diameter of shaft and section of key.

2. FIELD OF APPLICATION

This ISO Recommendation is for general purposes, for cylindrical shaft ends*, but it is recommended that the values given be adhered to even for special applications.

Attention is drawn to the fact that some ISO Recommendations, published previously, give dimensions and tolerances other than those appearing in the present ISO Recommendation.

3. DIMENSIONS AND TOLERANCES OF KEYS



* The relation between the diameter of conical shaft end and key section is given in ISO Recommendation R 775, *Cylindrical and 1/10 conical shaft ends*.

Dimensions in millimetres

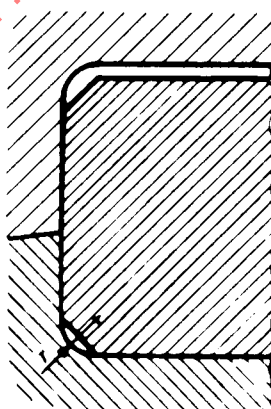
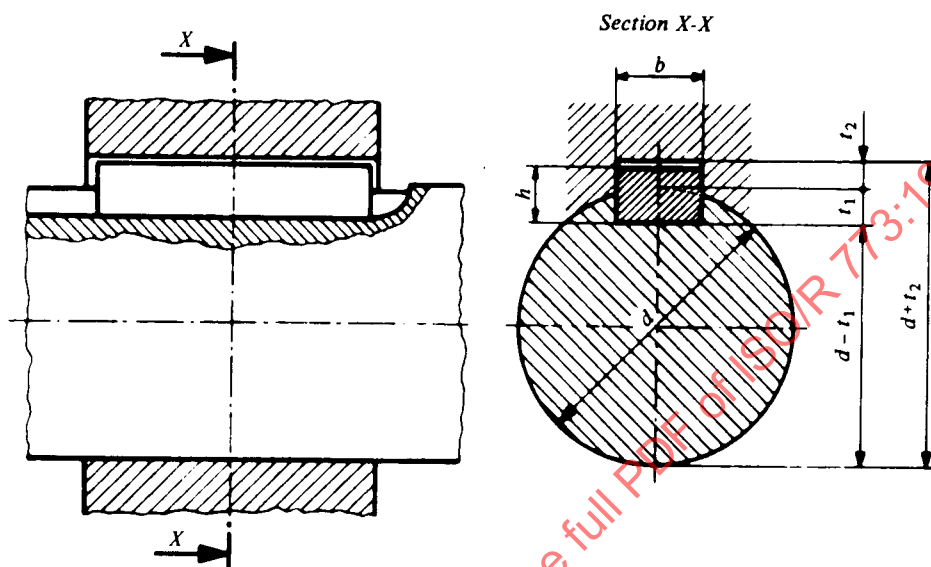
Width <i>b</i>		Thickness <i>h</i>		Chamfer <i>s</i>		Range of lengths <i>l</i> **	
nominal	Tolerance h9	nominal	Tolerance*	min.	max.	from	to
2	0	2	0	0.16	0.25	6	20
3	-0.025	3	-0.025	0.16	0.25	6	36
4	0 -0.030	4	0 -0.030	0.16	0.25	8	45
5		5		0.25	0.40	10	56
6		6		0.25	0.40	14	70
8	0 -0.036	7	0 -0.090	0.25	0.40	18	90
10		8		0.40	0.60	22	110
12	0 -0.043	8		0.40	0.60	28	140
14		9		0.40	0.60	36	160
16		10		0.40	0.60	45	180
18		11		0.40	0.60	50	200
20	0 -0.052	12	0 -0.110	0.60	0.80	56	220
22		14		0.60	0.80	63	250
25		14		0.60	0.80	70	280
28		16		0.60	0.80	80	320
32	0 -0.062	18	0 -0.130	0.60	0.80	90	360
36		20		1.00	1.20	100	400
40		22		1.00	1.20	—	—
45		25		1.00	1.20	—	—
50		28		1.00	1.20	—	—
56	0 -0.074	32	0 -0.160	1.60	2.00	—	—
63		32		1.60	2.00	—	—
70		36		1.60	2.00	—	—
80		40		2.50	3.00	—	—
90	0 -0.087	45		2.50	3.00	—	—
100		50		2.50	3.00	—	—

* Tolerance on thickness *h* of the key : square section : h9; rectangular section : h11.

** Preferred lengths of keys : 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 25 - 28 - 32 - 36 - 40 - 45 - 50 - 56 - 63 - 70 - 80 - 90 - 100 - 110 - 125 - 140 - 160 - 180 - 200 - 220 - 250 - 280 - 320 - 360 - 400.

NOTE. — Material : Steel having a tensile strength not less than 58.8 daN/mm² (60 kgf/mm²) in the finished condition, unless another specification is agreed between manufacturer and customer. (The mechanical properties of the steel will be specified later.)

4. DIMENSIONS AND TOLERANCES OF KEYWAYS

*Detail of keyway and key*