

ISO

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1207

SLOTTED CHEESE (FILLISTER) HEAD SCREWS

METRIC SERIES

1st EDITION

June 1970

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Printed in Switzerland

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

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BRIEF HISTORY

The ISO Recommendation R 1207, *Slotted cheese (fillister) head screws – Metric series*, was drawn up by Technical Committee ISO/TC 2, *Bolts, nuts and accessories*, the Secretariat of which is held by the Deutscher Normenausschuss (DNA).

Work on this question led to the adoption of Draft ISO Recommendation No. 949, which was circulated to all the ISO Member Bodies for enquiry in May 1966. It was approved by a majority.

In the meantime, other types of slotted head screws were studied, and it was recommended to complete the Draft accordingly. A second Draft ISO Recommendation No. 949 was adopted and was circulated to all the ISO Member Bodies for enquiry in May 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Austria	Israel	South Africa, Rep. of
Belgium	Italy	Spain
Canada	Japan	Sweden
Chile	Korea, Rep. of	Switzerland
Czechoslovakia	Netherlands	Turkey
Denmark	New Zealand	U.A.R.
Finland	Norway	United Kingdom
Germany	Peru	U.S.A.
Hungary	Poland	U.S.S.R.
India	Portugal	
Iran	Romania	

The following Member Body opposed the approval of the second Draft :

France

This second Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

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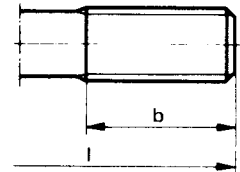
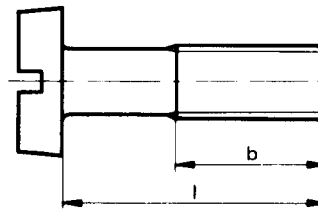
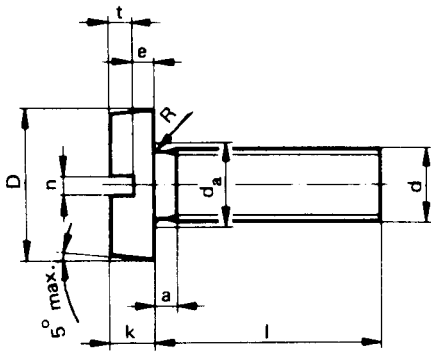
SLOTTED CHEESE (FILLISTER) HEAD SCREWS**METRIC SERIES****1. SCOPE**

This ISO Recommendation specifies dimensions of slotted cheese (fillister) head screws of the metric series and provides a system of standard lengths, i.e. recommended combinations of thread size, thread length and nominal length.

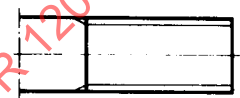
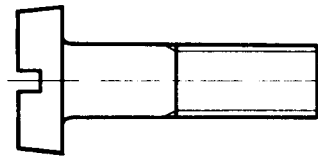
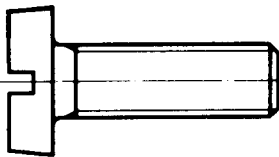
2. DIMENSIONS

Principal dimensions are given in Table 1, page 6. (Nominal lengths and thread lengths are given in section 3). The thread sizes in brackets should be avoided if possible. A slight radius of the top corner of the head is permissible.

NOTE. — According to the type of manufacturing process used, screw cutting or die-casting, the head may be cylindrical or tapered with a conicity of up to 5°.



shank diameter $\approx$ pitch diameter



shank diameter $\approx$ major diameter

TABLE 1 – Principal dimensions

Dimensions in millimetres

Thread size	d	1	1.2	(1.4)	1.6	2	(2.2)	2.5	3	(3.5)	4	(4.5)	5	6	8	10	12	(14)	16	(18)	20
D	h14	2	2.3	2.6	3	3.8	4	4.5	5.5	6	7	8	8.5	10	13	16	18	21	24	27	30
k	h13	0.7	0.8	0.9	1	1.3	1.5	1.6	2	2.4	2.6	3.1	3.3	3.9	5	6	7	8	9	10	11
n	Nom. value	0.25	0.3	0.3	0.4	0.5	0.6	0.6	0.8	0.8	1	1	1.2	1.6	2	2.5	3	3	4	4	5
	min.	0.31	0.36	0.36	0.46	0.56	0.66	0.66	0.86	0.86	1.06	1.06	1.26	1.66	2.06	2.56	3.06	3.06	4.07	4.07	5.07
	max.	0.45	0.50	0.50	0.60	0.70	0.80	0.80	1.00	1.00	1.20	1.20	1.51	1.91	2.31	2.81	3.31	3.31	4.37	4.37	5.37
e	min.	0.26	0.31	0.3	0.35	0.45	0.5	0.6	0.7	1	1	1.3	1.3	1.6	2.2	2.8	3.2	3.8	4.4	4.9	5.4
t	min.	0.3	0.35	0.4	0.45	0.6	0.7	0.7	0.9	1	1.2	1.4	1.5	1.8	2.3	2.7	3.2	3.6	4	4.5	5
	max.	0.44	0.49	0.6	0.65	0.85	1	1	1.3	1.4	1.6	1.8	2	2.3	2.8	3.2	3.8	4.2	4.6	5.1	5.6
R	min.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.25	0.4	0.4	0.6	0.6	0.6	0.6	0.8
d_a	max.	1.4	1.6	1.8	2	2.6	2.8	3.1	3.6	4.1	4.7	5.2	5.7	6.8	9.2	11.2	14.2	16.2	18.2	20.2	22.4
a	max.	0.5	0.5	0.6	0.7	0.8	0.9	0.9	1	1.2	1.4	1.5	1.6	2	2.5	3	3.5	4	4	5	5

NOTE. — Tolerance positions and grades : see ISO Recommendation R 286, *ISO System of limits and fits – Part I : General, tolerances and deviations.*