

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 885

BOLTS AND SCREWS
RADII UNDER THE HEAD
FOR GENERAL PURPOSE BOLTS AND SCREWS
METRIC SERIES

1st EDITION
December 1968

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 885, *Bolts and screws – Radii under the head for general purpose bolts and 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 by the Technical Committee began in 1959 and led, in 1965, to the adoption of a Draft ISO Recommendation concerning radii under the head of general purpose bolts and screws up to 39 mm thread diameter for the metric series and up to 2 in for the inch series.

This first Draft ISO Recommendation (No. 987) was circulated in May 1966 to all the ISO Member Bodies for enquiry and was approved by a majority of ISO Member Bodies. However, at a meeting held in October 1966, the Technical Committee recommended the establishment of a second Draft ISO Recommendation relating to bolts and screws with thread diameters up to and including 150 mm, and proposed a separate Draft ISO Recommendation for inch series bolts and screws.

In August 1967, this second Draft ISO Recommendation 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 :

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

No Member Body opposed the approval of the second Draft.

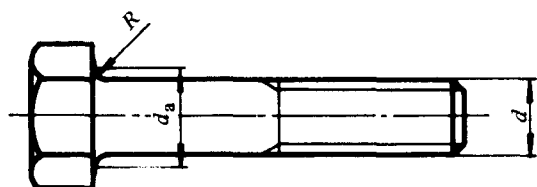
The second Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1968, to accept it as an ISO RECOMMENDATION.

BOLTS AND SCREWS

RADII UNDER THE HEAD

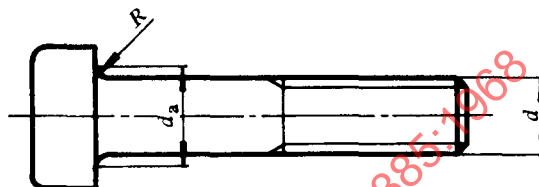
FOR GENERAL PURPOSE BOLTS AND SCREWS

METRIC SERIES



Dimensions in millimetres

Thread diameter d	Radius R minimum for finished and semifinished products	Transition diameter d_a maximum	
		finished products	semifinished and regular products
1.6	0.1	2	—
2	0.1	2.6	—
2.2	0.1	2.8	—
2.5	0.1	3.1	—
3	0.1	3.6	—
3.5	0.1	4.1	—
4	0.2	4.7	—
4.5	0.2	5.2	—
5	0.2	5.7	6.0
6	0.25	6.8	7.2
7	0.25	7.8	8.2
8	0.4	9.2	10.2
10	0.4	11.2	12.2
12	0.6	14.2	15.2
14	0.6	16.2	17.2
16	0.6	18.2	19.2
18	0.6	20.2	21.2
20	0.8	22.4	24.4
22	0.8	24.4	26.4
24	0.8	26.4	28.4
27	1	30.4	32.4
30	1	33.4	35.4
33	1	36.4	38.4
36	1	39.4	42.4
39	1	42.4	45.4



Dimensions in millimetres

Thread diameter d	Radius R minimum for finished and semifinished products	Transition diameter d_a maximum	
		finished products	semifinished and regular products
42	1.2	45.6	48.6
45	1.2	48.6	52.6
48	1.6	52.6	56.6
52	1.6	56.6	62.6
56	2	63	67
60	2	67	71
64	2	71	75
68	2	75	79
72	2	79	83
76	2	83	87
80	2	87	92
85	2	92	97
90	2.5	97	102
95	2.5	102	108
100	2.5	108	113
105	2.5	113	118
110	2.5	118	123
115	2.5	123	128
120	2.5	128	133
125	2.5	133	138
130	2.5	138	145
140	2.5	148	156
150	2.5	159	166

The transition diameter d_a is the diameter of the circle formed at the transition between the radius R and the bearing surface of the head.