

*Transcribed*

**ISO**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION  
**R 225**

**BOLTS, SCREWS AND STUDS**  
DIMENSIONING

~~1st EDITION~~

December 1961

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## BRIEF HISTORY

The ISO Recommendation R 225, *Bolts, Screws and Studs. Dimensioning*, 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 1949 and led in 1958 to the adoption of a Draft ISO Recommendation.

In January 1960, this Draft ISO Recommendation (No. 354) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to some editorial amendments, by the following Member Bodies:

Australia	Germany	Poland
Austria	Greece	Portugal
Belgium	Hungary	Romania
Burma	India	Spain
Chile	Ireland	Sweden
Colombia	Italy	Switzerland
Czechoslovakia	Japan	United Kingdom
Denmark	Netherlands	U.S.A.
Finland	New Zealand	U.S.S.R.
France	Norway	

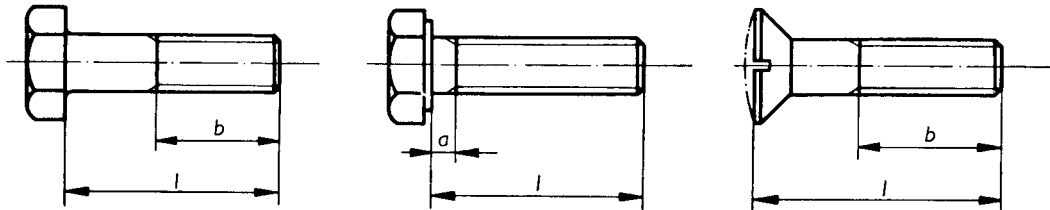
One Member Body opposed the approval of the Draft:

Israel.

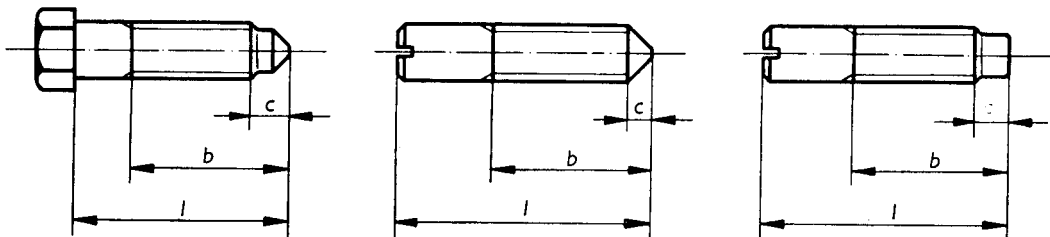
The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1961, to accept it as an ISO RECOMMENDATION.

**BOLTS, SCREWS AND STUDS**  
**DIMENSIONING**

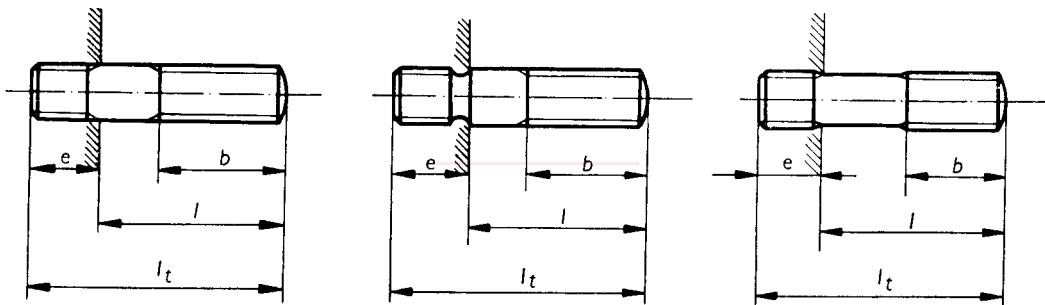
**I. Bolts and screws in tension or in shear**



**II. Screws in compression**



**III. Studs**



**1. Length *l***

In the case of	the length <i>l</i> extends
bolts and screws having plain bearing surfaces	from the extreme end to the underside of the head
bolts and screws with washer faces	from the extreme end to the washer face
countersunk screws	from the extreme end to the upper edge of the head
screws without head	from one extreme end to the other extreme end
studs *	from the extreme end of the nut end — to the extreme run-out of the thread of the metal end, or — to the point where the undercut joins the body

\* In the U.S.A. and the United Kingdom, the total length  $l_t$  extending from the extreme end of the nut end to the extreme end of the metal end of the studs is used as the standard designation.