

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION R 99

DIAMETERS OF PULLEYS  
FOR FLAT TRANSMISSION BELTS

1st EDITION

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## BRIEF HISTORY

The ISO Recommendation R 99, *Diameters of Pulleys for Flat Transmission Belts*, was drawn up by Technical Committee ISO/TC 41, *Pulleys and Belts (including Vee-Belts)*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

It was at its third meeting, held in Stockholm, in June 1955, that the Technical Committee unanimously adopted by the delegates present the resolution on which this ISO Recommendation is based.

At the end of the Stockholm meeting, a draft proposal was distributed to the members of the Technical Committee. The comments formulated during this enquiry were examined by the appropriate Working Group which met in Munich, in October 1956, and proposed a few modifications. A second draft proposal was then distributed to the members of the Technical Committee and was adopted as a Draft ISO Recommendation.

On 16 May 1957, the Draft ISO Recommendation was distributed to all the ISO Member Bodies and was approved, without reserve, by the following 24 (out of a total of 38) Member Bodies:

*Austria	Germany	Romania
Belgium	*Greece	Spain
*Bulgaria	*India	Sweden
*Canada	*Ireland	Switzerland
Czechoslovakia	Italy	Union of South Africa
Denmark	Japan	United Kingdom
Finland	Pakistan	U.S.A.
France	*Portugal	U.S.S.R.

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 February 1959, to accept it as an ISO RECOMMENDATION.

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\* These Member Bodies stated that they had no objection to the Draft being approved.

## DIAMETERS OF PULLEYS FOR FLAT TRANSMISSION BELTS

### 1. PURPOSE

This ISO Recommendation lays down the diameters and tolerances of pulleys for flat transmission belts. \*

### 2. DEFINITION

The diameter of a pulley for a flat transmission belt is the diameter measured in the plane of symmetry of its rim.

### 3. DIAMETERS

TABLE 1. — Series of diameters

Millimetres	Inches	Millimetres	Inches	Millimetres	Inches
40	1.6	160	6.3	630	25
45	1.8	180	7.1	710	28
50	2	200	8	800	31.5
56	2.24	224	9	900	35.5
63	2.5	250	10	1 000	40
71	2.8	280	11.2	1 120	45
80	3.15	315	12.5	1 250	50
90	3.55	355	14	1 400	56
100	4	400	16	1 600	63
112	4.5	450	18	1 800	71
125	5	500	20	2 000	80
140	5.6	560	22.4		

The values given in Table 1 are taken from the R 20 series of preferred numbers as given in ISO Recommendation R 3, *Preferred Numbers - Series of Preferred Numbers*.

### NOTES

1. These diameters differ slightly according to whether they are expressed in metric units or inches. For practical purposes they may be considered as equivalents.
2. In the present state of engineering practice, the following rounding off is permitted in the case of certain inch values.

TABLE 2. — Rounding off in inches

Normal values	Rounded-off values	Normal values	Rounded-off values
1.6	1 ½	11.2	11
1.8	1 ¾	12.5	12
2.8	2 ¾	22.4	22
3.15	3	31.5	32
3.55	3 ½	35.5	36
5.6	5 ½	56	55
6.3	6	63	62
7.1	7	71	70

\* The rim-widths and the crowns of these pulleys are given respectively in ISO Recommendations R 22, *Widths of flat transmission belts and corresponding pulleys* and R 100, *Crowns of pulleys for flat transmission belts*.