
INTERNATIONAL STANDARD



3096

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Needle roller bearings — Needle rollers — Dimensions — Metric series

Roulements à aiguilles — Aiguilles — Dimensions — Série métrique

First edition — 1974-04-01

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UDC 621.822.68-181

Ref. No. ISO 3096-1974 (E)

Descriptors : bearings, rolling bearings, roller bearings, needle bearings, dimensions.

Price based on 1 page

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3096 was drawn up by Technical Committee ISO/TC 4, *Rolling bearings*, and circulated to the Member Bodies in January 1973.

It has been approved by the Member Bodies of the following countries:

Austria	Hungary	Sweden
Belgium	India	Switzerland
Bulgaria	Italy	Thailand
Canada	Japan	Turkey
Egypt, Arab Rep. of	Mexico	United Kingdom
France	Netherlands	U.S.A.
Germany	Romania	

This International Standard has also been approved by the International Union of Railways (UIC).

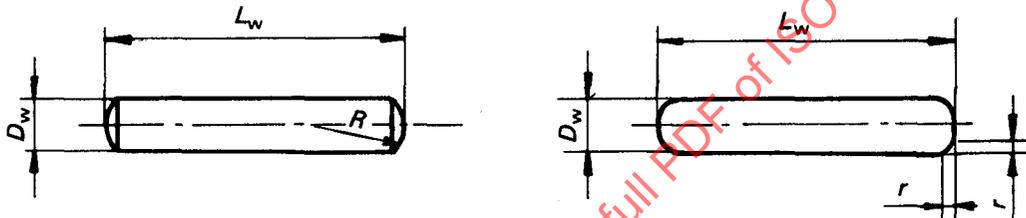
No Member Body expressed disapproval of the document.

Needle roller bearings – Needle rollers – Dimensions – Metric series

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the preferred dimensions of needle rollers.

2 SYMBOLS



D_w = needle roller diameter, nominal

L_w = needle roller length, nominal

R = needle roller rounded end radius

$r^{1)}$ = corner dimension for flat end needle rollers, nominal

3 DIMENSIONS

Dimensions in millimetres

D_w	L_w																	$r^{1)}$
	5,8	6,8	7,8	9,8	11,8	13,8	15,8	17,8	19,8	21,8	23,8	25,8	27,8	29,8	34,8	39,8	49,8	
1	X	X	X	X														
1,5	X	X	X	X	X	X												
2			X	X	X	X	X	X	X									
2,5			X	X	X	X	X	X	X	X	X							
3				X	X	X	X	X	X	X	X	X	X	X				
3,5					X	X	X	X	X	X	X	X	X	X	X			
4							X	X	X	X	X	X	X	X	X	X		
5									X	X	X	X	X	X	X	X	X	

Radius limits for rounded end needle rollers

$$R_{\min} = \frac{D_w}{2} \quad \text{and} \quad R_{\max} = \frac{L_w}{2}$$

1) Nominal corner dimension for flat end needle rollers corresponds to the minimum dimension.