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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Hexagonal dienuts

Filières hexagonales de filetage à main

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Reference number
ISO 7226 : 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7226 was prepared by Technical Committee ISO/TC 29, *Small tools*.

This second edition cancels and replaces the first edition (ISO 7226 : 1985), of which it constitutes a minor revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Hexagonal dienuts

0 Introduction

Circular screwing dies are specified for certain thread forms in ISO 2568, ISO 4230 and ISO 4231. For certain sizes of these threads, it is convenient for some purposes to use hexagonal dienuts instead of circular dies and, for purposes connected with their manufacture and use, it is desirable that certain dimensions of these dienuts should be standardized.

1 Scope and field of application

This International Standard specifies the general dimensions of hexagonal dienuts for certain sizes of ISO metric threads (coarse and fine pitch series — see ISO 68 and ISO 261), ISO inch threads (UNC and UNF series — see ISO 68 and ISO 263), and pipe threads (G and R series — see ISO 7-1 and ISO 228-1), as well as the non-preferred thread series BSW, BSF and BA.

2 References

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Designation, dimensions and tolerances*.

ISO 68, *ISO general purpose screw threads — Basic profile*.

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Designation, dimensions and tolerances*.

ISO 261, *ISO general purpose metric screw threads — General plan*.

ISO 263, *ISO inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0,06 to 6 in.*

ISO 2568, *Hand- and machine-operated circular screwing dies and hand-operated die stocks*.

ISO 4230, *Hand- and machine-operated circular screwing dies for taper pipe threads — R series*.

ISO 4231, *Hand- and machine-operated circular screwing dies for parallel pipe threads — G series*.

3 Dimensions and tolerances

See the figure, and tables 1 and 2.

4 Marking

Dienuts having dimensions in accordance with those given in table 1 shall be marked with the relevant thread designation specified in ISO 2568.

Dienuts having dimensions in accordance with those given in table 2 shall be marked with the letter R immediately followed by the designation of the thread.

Example:

A hexagonal dienut for R series pipe threads with designation 1/8 shall be marked as follows:

R 1/8

Where tools comply in all respects with the relevant International Standards, the symbol ISO may be appended to the mark at the discretion of the manufacturer.

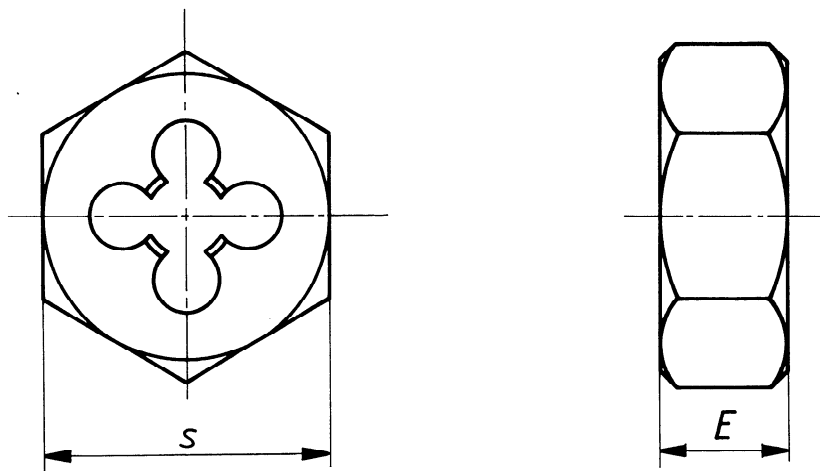


Figure — Dimensions

Table 1 — General table of dimensional characteristics of hexagonal die nuts for metric and inch threads
(except R series pipe threads)

Range of thread diameter, <i>d</i>				<i>s</i> h13 mm	Metric pitches																
mm		in			0,35 0,7	0,73 0,81	0,9 1	1,25	1,5	1,75	2	2,5	3	3,5	4 4,5	5 5,5					
Over	Up to and including	Over	Up to and including		Number of threads per inch																
					48 40	36 32	28 24	22 18	16	14	13 12	11 10	9 8	7	6	5 4 1/2					
Cutting width, <i>E</i> (mm) js13																					
2,65	4	0,104 3	0,157 5	18	5*	7															
4	6,35	0,157 5	0,25			7	7	7													
6,35	9	0,25	0,354 3		21		9	9	9												
9	11,2	0,354 3	0,440 9		27			11	11	11	11										
11,2	15	0,440 9	0,590 6		36				10*	10*	14	14									
15	21,2	0,590 6	0,834 6		41					14*	14*	14*	18	18							
21,2	26,5	0,834 6	1,043 3		50						16*	16*	16*	22	22						
26,5	37,5	1,043 3	1,476 4		60							18*	18*	18*	18*	25	25	25			
37,5	42,5	1,476 4	1,673 2		70								20*		20*	20*	30		30		
42,5	53	1,673 2	2,086 6		85									22*		22*	22*	36	36	36	36
53	63	2,086 6	2,480 3	100										22*		22*	22*	36		36	36

* These cutting widths, which are the lower of the two values specified for each range of thread diameter, may be increased to the higher value given in the table at the discretion of the manufacturer.

**Table 2 — Table of dimensional characteristics of hexagonal die nuts
for R series pipe threads**

Designation	Basic diameter mm	Approximate pitch mm	s_{h13} mm	Cutting width, E_{js13} mm
1/16	7,723	0,907	21	10
1/8	9,728	0,907	27	10
1/4	13,157	1,337	36	14
3/8	16,662	1,337	41	15
1/2	20,955	1,814	50	19
3/4	26,441	1,814	60	20
1	33,249	2,309	60	24
1 1/4	41,91	2,309	85	26
1 1/2	47,803	2,309	85	26
2	59,614	2,309	100	31

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