
INTERNATIONAL STANDARD



4570 / II

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

Tyre valve threads — Part II : Threads 9V1, 10V2, 12V1, 13V1

Filetages de valves pour pneumatiques — Partie II : Filetages 9V1, 10V2, 12V1, 13V1

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[ISO 4570-2:1979](https://standards.iteh.ai/catalog/standards/sist/eac221d9-d768-4da8-9675-693fe1b26e97/iso-4570-2-1979)

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Descriptors : pneumatic tyres, tyre valves, screw threads, designation, dimensions, dimensional tolerances, dimensional control, gauges.

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 4570/II was developed by Technical Committee ISO/TC 31, *Tyres, rims and valves*, and was circulated to the member bodies in January 1978.

It has been approved by the member bodies of the following countries :

Austria	Italy	Sweden
Brazil	Japan	Switzerland
Bulgaria	Korea, Rep. of	Thailand
Canada	Mexico	Turkey
Chile	Netherlands	United Kingdom
Czechoslovakia	Poland	USA
Egypt, Arab Rep. of	Romania	USSR
France	South Africa, Rep. of	Yugoslavia
Israel	Spain	

The member body of the following country expressed disapproval of the document on technical grounds :

Germany, F. R.

Tyre valve threads — Part II : Threads 9V1, 10V2, 12V1, 13V1

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies limit dimensions and tolerances for tyre valve threads 9V1, 10V2, 12V1, 13V1. See the figure and table 2.

4 PROFILE

2 REFERENCES

ISO 1502, *ISO general purpose metric threads — Gauging*.

ISO 4570/I, *Tyre valve threads — Part I : Threads 5V1, 5V2, 6V1 and 8V1*.

ANSI Standard B1.2-1974, *Gages and gaging for unified screw threads*.

3 DESIGNATION

The designation of tyre valve threads shall be as given in table 1.

TABLE 1 — Designation

Nominal dimensions mm	Designation
9,4 × 0,794*	9V1
10,3 × 0,907	10V2
12,2 × 0,977	12V1
12,6 × 1,270	13V1

* Previously 9,525 × 0,794

5 THREAD GAUGING

5.1 9V1, 10V2 and 12V1 threads

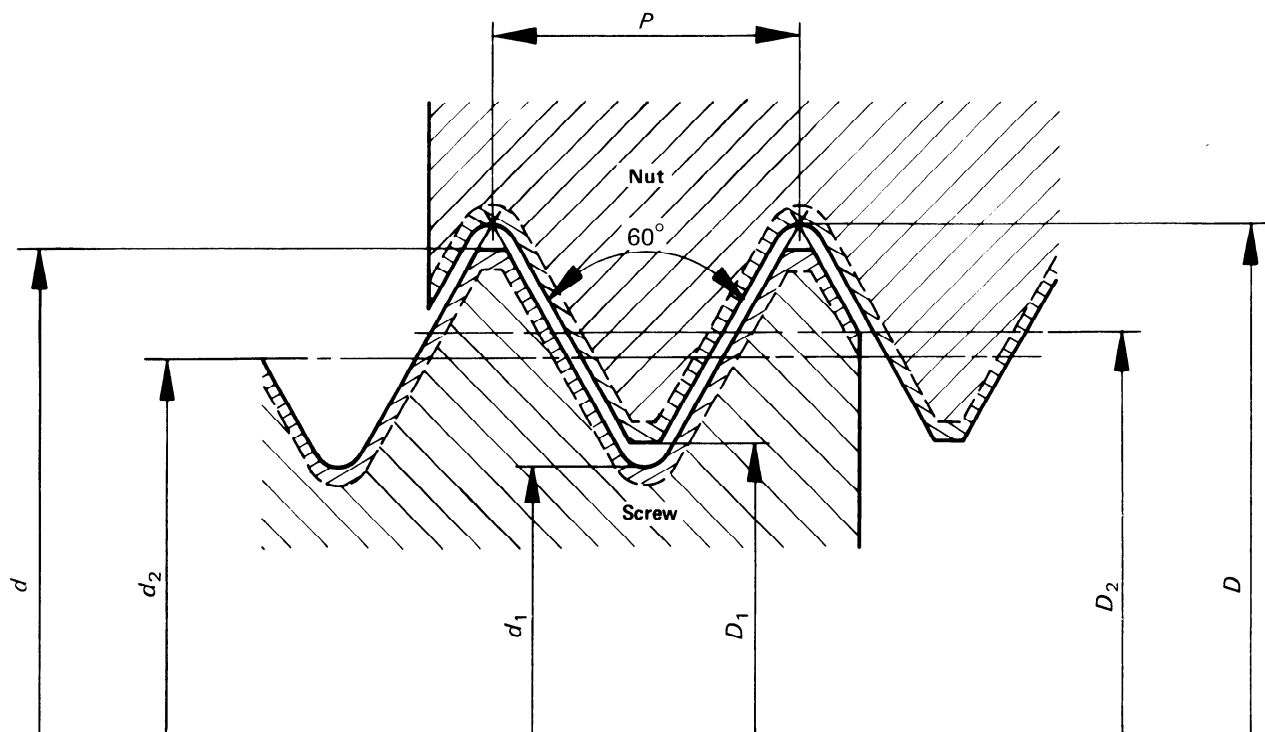
The minimum and maximum values have been calculated so that it is possible to apply to the threads thus defined the limit gauge inspection principles specified in ISO 1502.

For the fabrication of the gauges, the following tolerances extracted from ISO 1502 have been chosen :

- pitch diameter of external thread d_2 :
 $24 \mu\text{m} < T_{d_2} < 50 \mu\text{m}$
- outside diameter of external thread d :
 $36 \mu\text{m} < T_d < 85 \mu\text{m}$
- pitch diameter of internal thread D_2 :
 $24 \mu\text{m} < T_{D_2} < 50 \mu\text{m}$
- inside diameter of internal thread D_1 :
 $38 \mu\text{m} < T_{D_1} < 100 \mu\text{m}$

5.2 13V1 threads

The 13V1 thread should be verified according to ANSI Standard B1.2-1974.



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P Pitch
 D Major diameter
 D₂ Pitch diameter
 D₁ Minor diameter
 d Major diameter
 d₂ Pitch diameter
 d₁ Minor diameter

Nut

Screw

<https://standards.iteh.ai/catalog/standards/sist/cae221d9-d768-4da8-9675-000000000000/iso-4570-2-1979>
 ISO 4570-2:1979

TABLE 2 – Limit dimensions

Designation	Nominal dimensions Diameter X Pitch	Screw							Nut						
		Major diameter			Pitch diameter			Minor diameter	Major diameter <i>D</i>	Pitch diameter			Minor diameter		
		<i>d</i>			<i>d</i> ₂			<i>d</i> ₁		<i>D</i> ₂			<i>D</i> ₁		
		max.	tol. <i>T_d</i>	min.	max.	tol. <i>T_{d2}</i>	min.	max.		max.	tol. <i>T_{D2}</i>	min.	max.	tol. <i>T_{D1}</i>	min.
9V1	9,4 × 0,794	9,423	0,152	9,271	8,981	0,129	8,852	8,527	9,525	9,121	0,111	9,010	8,865	0,204	8,661
10V2	10,3 × 0,907	10,312	0,212	10,100	9,760	0,184	9,576	9,180	10,414	9,940	0,125	9,815	9,550	0,200	9,350
12V1	12,2 × 0,977	12,243	0,213	12,030	11,614	0,159	11,455	10,990	12,319	11,794	0,125	11,669	11,379	0,203	11,176
13V1	12,6 × 1,270	12,667	0,206	12,461	11,841	0,109	11,732	11,110	12,700	12,017	0,142	11,875	11,608	0,280	11,328