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British Standard
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British Standard Aerospace Series: Specification for

Aircraft tyre valves: interchangeability dimensions

Série Aérospatiale : Valves pour pneumatiques d'aéronefs — Spécifications : dimensions d'interchangeabilité

Luft-und Raumfahrt-Reihe : Ventile für Flugzeugreifen : Austauschmaße

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National foreword

This British Standard, which has been prepared under the direction of the Aerospace Standards Committee, is a revision of British Standard C7 : 1967, which is withdrawn. It is identical to ISO 7295-1982 'Tyre valves—Aircraft—Interchangeability dimensions', published by the International Organization for Standardization (ISO).

Terminology and conventions. The text of the international standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Where the words 'International Standard' appear, referring to this standard, they should be read as 'British Standard'.

Cross-references

International standard	Corresponding British Standard
	BS AU 50 Tyres and wheels Part 3 Valves
ISO 4570/1—1977	Section 2 : 1977 Tyre valve threads 5V1, 5V2, 6V1 and 8V1 (Identical)
ISO 7442—1982	Section 5 : 1983 Dimensions for ISO core chamber No. 1 for tyre inflation valves (Identical)

The Technical Committee has reviewed the provisions of ISO 3877/2—1978, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard. There is no equivalent British Standard.

Textual errors. When adopting the text of the international standard, the textual errors listed below were discovered. They have been marked in the text and have been reported to the International Organization for Standardization in a proposal to amend the text of the international standard.

In figures 5, 6 and 7, the diameter symbol '*0' should be deleted and substituted by 'Across flats'.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

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1 Scope and field of application

This International Standard specifies the basic dimensional requirements for interchangeability of tyre valve core with the tyre valve stem and to permit assembly of the cap and ground inflation connection of the source of compressed air or nitrogen supply to the tyre. Functional requirements of the valve core or valve cap are excluded.

2 References

ISO 3877/2, *Tyres, valves and tubes — List of equivalent terms — Part 2 : Tyre valves.*

ISO 4570/1, *Tyre valve threads — Part 1 : Threads 5V1, 5V2, 6V1 and 8V1.*

ISO 7442, *Tyre valves — ISO core chamber No. 1.*

3 Dimensions and tolerances

3.1 The dimensions ensuring interchangeability between the tyre valve stem, core and cap shall be in accordance with the normal commercial design of the tyre valve manufacturer.

3.2 Figures 1 and 2 illustrate the general assembly of the stem, core and cap for both long and short cores.

3.3 Figures 3 and 4 present dimensions essential for interchangeability between stem and cap, and stem and core. The core chamber in the valve stem shall accommodate the long valve core to ensure that both the long and short valve cores may be used as required.

3.4 Figures 5, 6 and 7 set out the interchangeability dimensions for short and long cores of the tyre valve.

3.5 Figure 8 presents the dimensional characteristics necessary for the cap assembly intended for a sealable connection on valves having a thread as given in figure 3 and a valve mouth as noted in note 2 of figure 3.

3.6 Tyre valve assembled in an aircraft wheel fitted to an aircraft shall have an access space sufficient to enable connection of the ground inflation hose and connector, also for assembly of the valve core and valve cap when arctic gloves are worn. This access space shall conform to the dimensions given in the annex.

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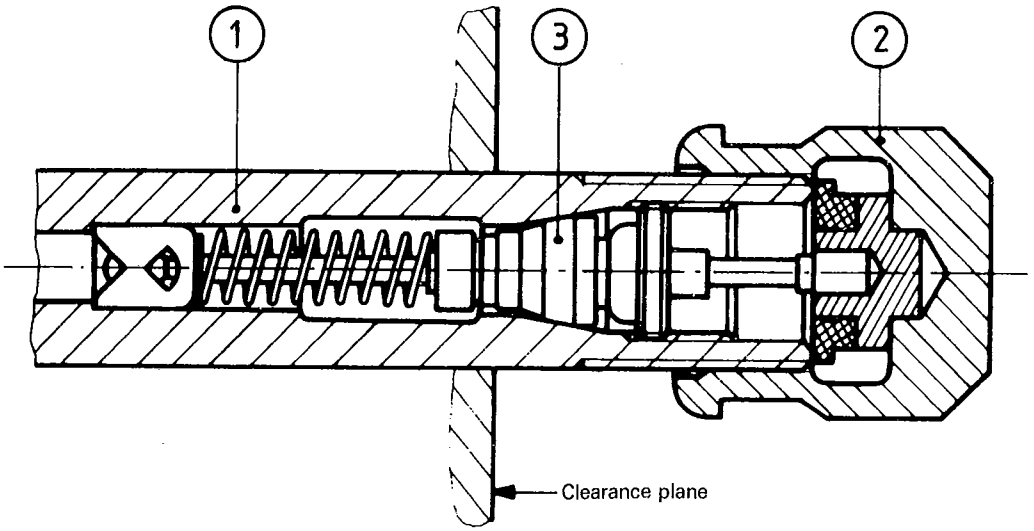

Figure 1 — General assembly — Long core

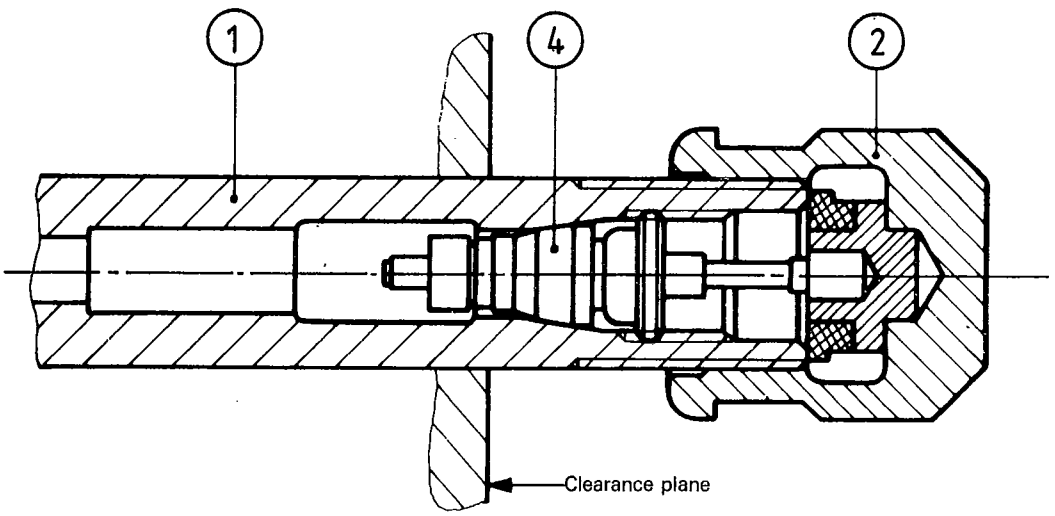

Figure 2 — General assembly — Short core

Key for figures 1 and 2

No.	Designation
1	Valve stem
2	Valve cap
3	Long valve core
4	Short valve core

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