

# Tyre valves for aircraft — Interchangeability dimensions

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# National foreword

This British Standard is the UK implementation of ISO 7295:1988+A1:2014. It supersedes BS 3C 7:1989, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/1, International and European Aerospace Policy and Processes.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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## Amendments/corrigenda issued since publication

| Date          | Comments                                                                                                                    |
|---------------|-----------------------------------------------------------------------------------------------------------------------------|
| 30 April 2014 | Implementation of ISO amendment 1:2014: Figure 4 updated. BS title and identifier updated to match ISO title and identifier |
|               |                                                                                                                             |
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## 1 Scope

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 not covered by this International Standard.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4570-1:1977, *Tyre valve threads — Part 1: Threads 5V1, 5V2, 6V1 and 8V1*.

ISO 7442:1982, *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** Figure 1 and Figure 2 illustrate the general assembly of the stem, core and cap for both long and short cores.

**3.3** Figure 3 and Figure 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** Figure 5, Figure 6 and Figure 7 specify the interchangeability dimensions for short and long cores of the tyre valve.

**3.5** Figure 8 specifies the dimensions 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 described in note 2 of Figure 3.

**3.6** A 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, and 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 Annex A.

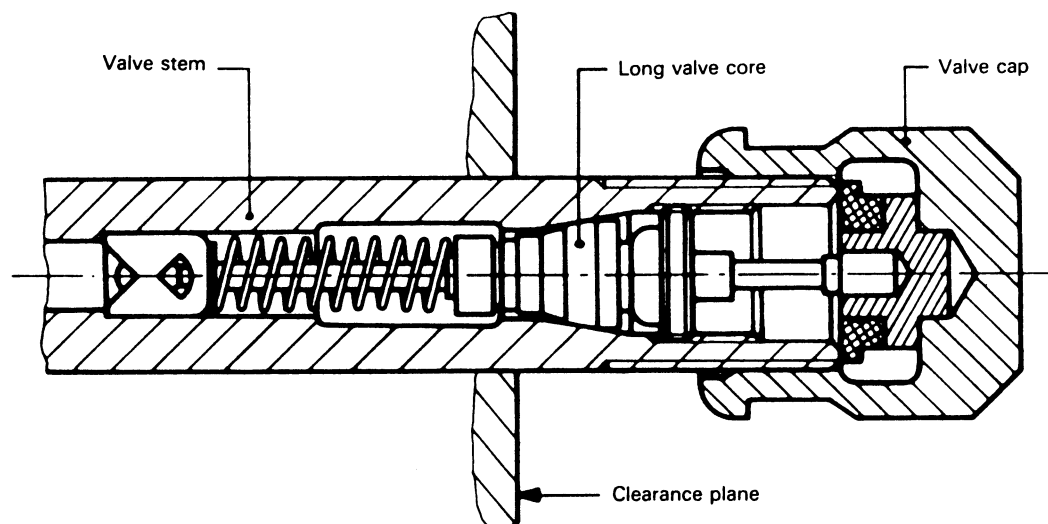


Figure 1 — General assembly for long core

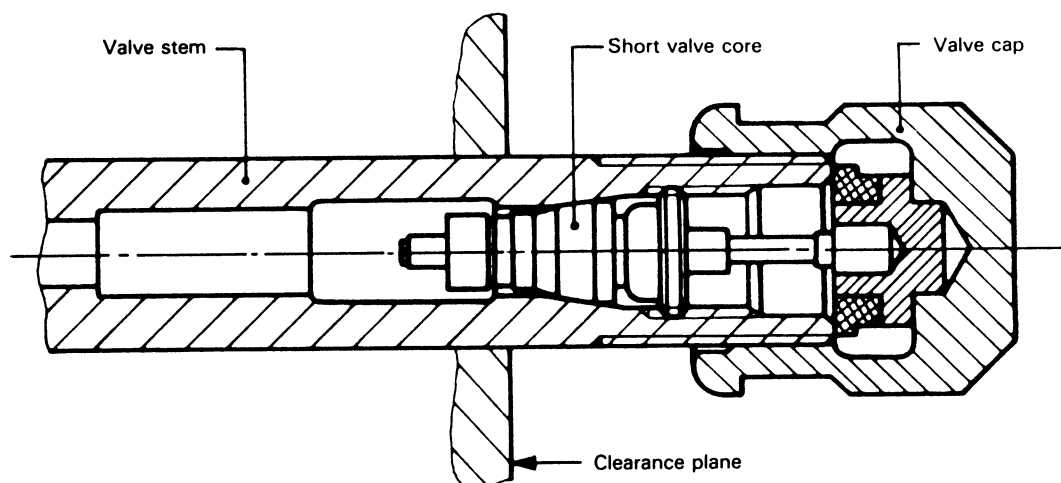


Figure 2 — General assembly for short core