INTERNATIONAL STANDARD

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Tyre valves — ISO core chambers No. 1, No. 2 and No. 3

Valves pour pneumatiques — Logements de mécanismes ISO n° 1, n° 2 et n° 3

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Contents

Page

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 20562 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 9, *Valves for tube and tubeless tyres*.

This first edition of ISO 20562 cancels and replaces ISO 6762:1982 and ISO 7442:1982, of which it constitutes a technical revision.

Tyre valves — ISO core chambers No. 1, No. 2 and No. 3

1 Scope

This International Standard specifies the interchangeability dimensions of ISO core chambers Nos. 1, 2 and 3 for tyre valves. For the applicability of the core chambers, see ISO 9413.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

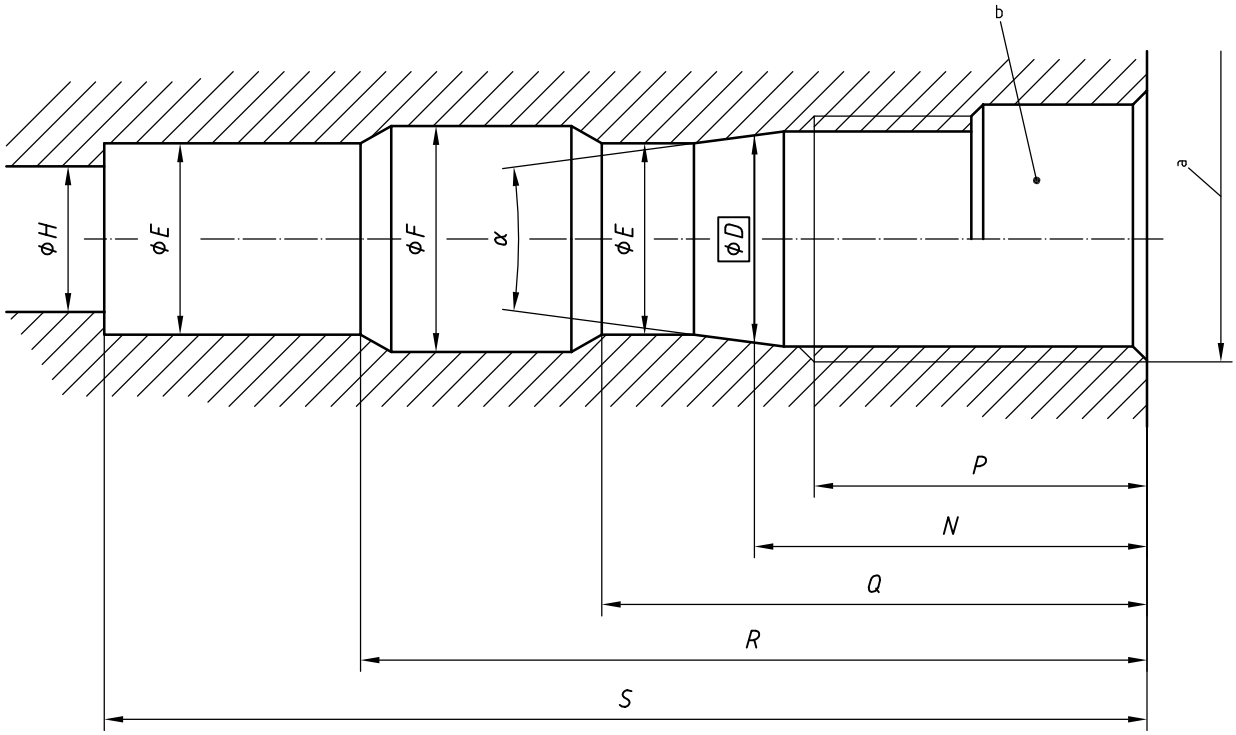
ISO 1502:1996, *ISO general-purpose metric screw threads — Gauges and gauging*

ISO 4570, *Tyre valve threads*

ISO 9413, *Tyre valves — Dimensions and designation*

3 ISO core chamber No. 1 — Dimensions and tolerances

ISO core chamber No. 1 (see Figure 1) can be used on all valves, provided the valve mouth is long enough to accept long cores. The core chamber dimensions shall be in accordance with Table 1 and the tolerances of the core head pin position in accordance with Figure 2.



a Thread 5V1 (see ISO 4570).

b The counterbore of the valve mouth is optional (for its dimensions, see Annex A).

Figure 1 — Core chamber No. 1

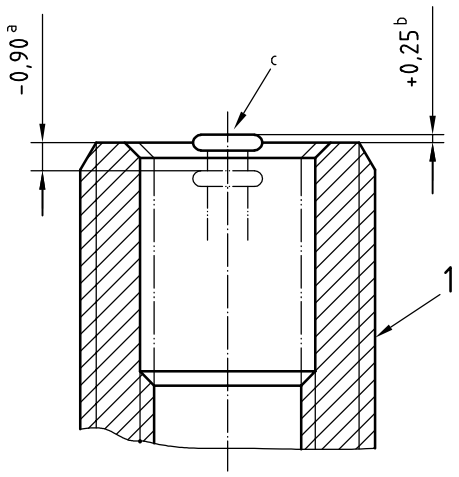
Table 1 — Core chamber No. 1 dimensions and angle α

Dimensions in millimetres

Dimension/angle	Min.	Max.
D	4,3	
E	3,82	3,94
F	4,27	4,70
H	—	3,2
N	10,0	10,4
P [a]	7,8	8,6
Q	13,5	14,5
R	22,7	25,0
S	30,5	31,0
α	16°	18°

a The length of the thread is determined by using a GO thread plug gauge (see ISO 1502:1996, 11.3 and Figure 12). The dimension shall be measured from the end of the gauge and shall include a chamfer length of 0,5 × pitch.

Dimensions in millimetres



Key

1 valve stem

a Low limit.

b High limit.

c The pin head shall not be more than 0,25 mm above, or 0,90 mm below, the valve mouth after insertion of the core at a torque of

— 0,17 N·m to 0,34 N·m for a core with an elastomeric barrel gasket, or

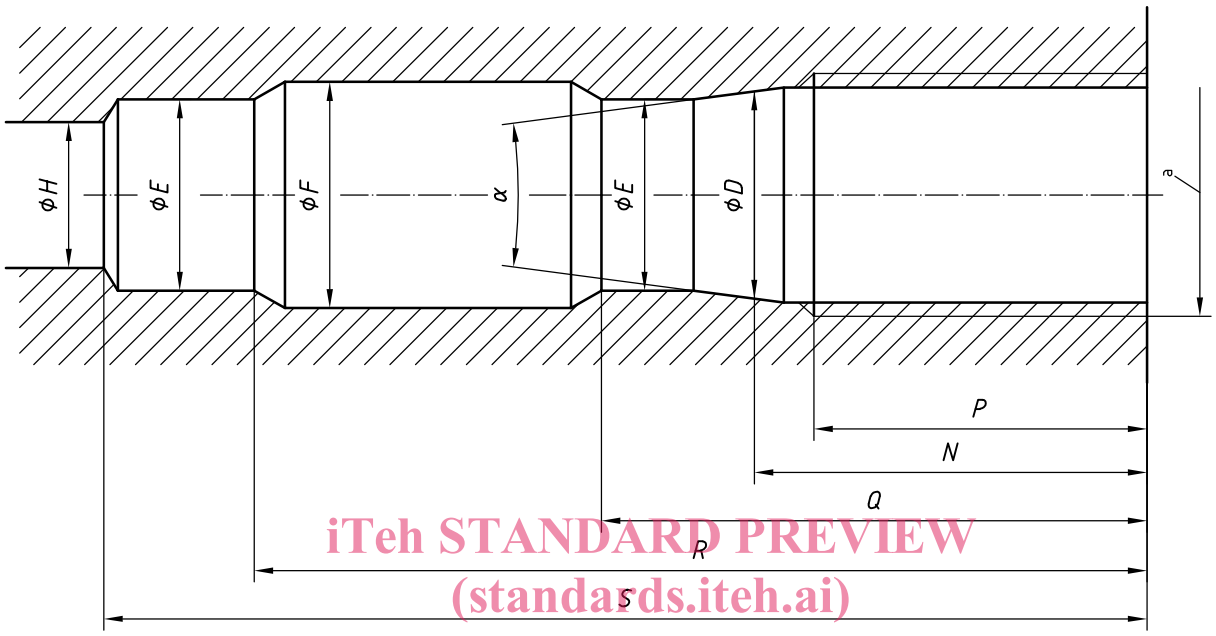
— 0,34 N·m to 0,54 N·m for a core with a metallic sealing gasket.

Figure 2 — Core pin head position — Tolerances

4 ISO core chamber No. 2 (large bore) — Dimensions and tolerances

ISO core chamber No. 2 (large bore) is designed principally for valves used on tyres of agricultural machines, earth-moving machines and civil aircraft.

The dimensions of the core chamber (see Figure 3) shall be in accordance with Table 2 and the tolerances of the core pin head position in accordance with Figure 4.



a Thread 8V1 (see ISO 4570).

Figure 3 — Core chamber No. 2

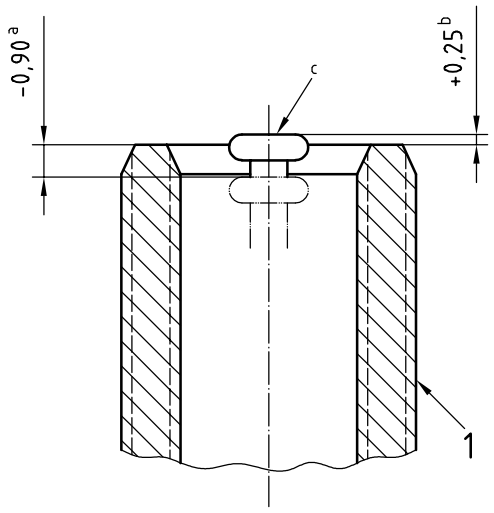
Table 2 — Core chamber No. 2 dimensions and angle α

Dimensions in millimetres

Dimension/angle	Min.	Max.
D	6,7	
E	6,3	6,4
F	7,3	7,7
H	4,6	4,9
N	13,82	14,22
P[a]	11,5	12,3
Q	17,8	18,5
R	30,5	31,5
S	34,3	35,1
α	16°	18°

a The length of the thread is determined by using a GO thread plug gauge (see ISO 1502:1996, 11.3 and Figure 12). The dimension shall be measured from the end of the gauge and shall include a chamfer length of 0,5 × pitch.

Dimensions in millimetres



Key

1 valve stem

a Low limit.

b High limit.

c The pin head shall not be more than 0,25 mm above, or 0,90 mm below, the valve mouth after insertion of the core at a torque of

— 0,34 N·m to 0,56 N·m for a core with an elastomeric barrel gasket, or

— 0,60 N·m to 0,80 N·m for a core with a metallic sealing barrel gasket.

Figure 4 — Core pin head position — Tolerances