

INTERNATIONAL STANDARD

ISO 1728

Third edition
2006-09-01

Road vehicles — Pneumatic braking connections between motor vehicles and towed vehicles — Interchangeability

*Véhicules routiers — Liaisons de freinage pneumatique entre
automobiles et véhicules tractés — Interchangeabilité*



Reference number
ISO 1728:2006(E)

© ISO 2006

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 1728 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 2, *Braking systems and equipment*.

This third edition cancels and replaces the second edition (ISO 1728:1980), which has been technically revised.

Road vehicles — Pneumatic braking connections between motor vehicles and towed vehicles — Interchangeability

1 Scope

This International Standard specifies the requirements which ensure interchangeability of the pneumatic braking connections between motor vehicles and towed vehicles.

It concerns vehicle combinations equipped with pneumatic braking systems with two lines: one control line and one supply line.

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 4009, *Commercial vehicles — Location of electrical and pneumatic connections between towing vehicles and trailers*

3 Interchangeability requirements

3.1 Coupling head type

The “Palm type” coupling head shall be used. It shall be fitted with an inhibiting device to prevent incorrect coupling (see Figures 1 and 2).

The towing vehicle shall be equipped with an automatic device ensuring, without manual operation, the continuity of the pipelines when they are coupled, and their closure on uncoupling. This device shall not affect the interchangeability.

The coupling head shall make provision for any type of valve to be fitted to the towing vehicle, provided that the valve can be opened by the standard coupling head on the towed vehicle and that the ability to be coupled with all coupling heads corresponding to this International Standard is not compromised.

3.2 Coupling head dimensions

The dimensions of the coupling heads shall be as given in Tables 1 and 2, and shown in Figures 1 and 2.

This International Standard specifies only the dimensional details necessary for the coupling. All other dimensions not shown, as well as details of design, are left to the discretion of the manufacturer.

3.3 Location of coupling heads and flexible pipe connections

The locations of both electrical and pneumatic connections between towing and towed vehicles are specified in ISO 4009. The location of coupling heads and flexible pipe connections on the towing and towed vehicles shall comply with ISO 4009.

3.4 Colour coding for connections

For the supply line: RED.

For the control line: YELLOW.

The colour shall be related to the coupling head or to a clearly visible point close to the head, for example, pipes or an identification tag.

3.5 Orientation of coupling heads

The coupling axis of the fixed coupling heads shall be horizontal. The vertical sealing face shall be located as follows, according to whether it concerns a road train or an articulated road train:

- truck: towards the right when the vehicle is viewed from the rear;
- semi-trailer: towards the left when the vehicle is viewed from the rear.

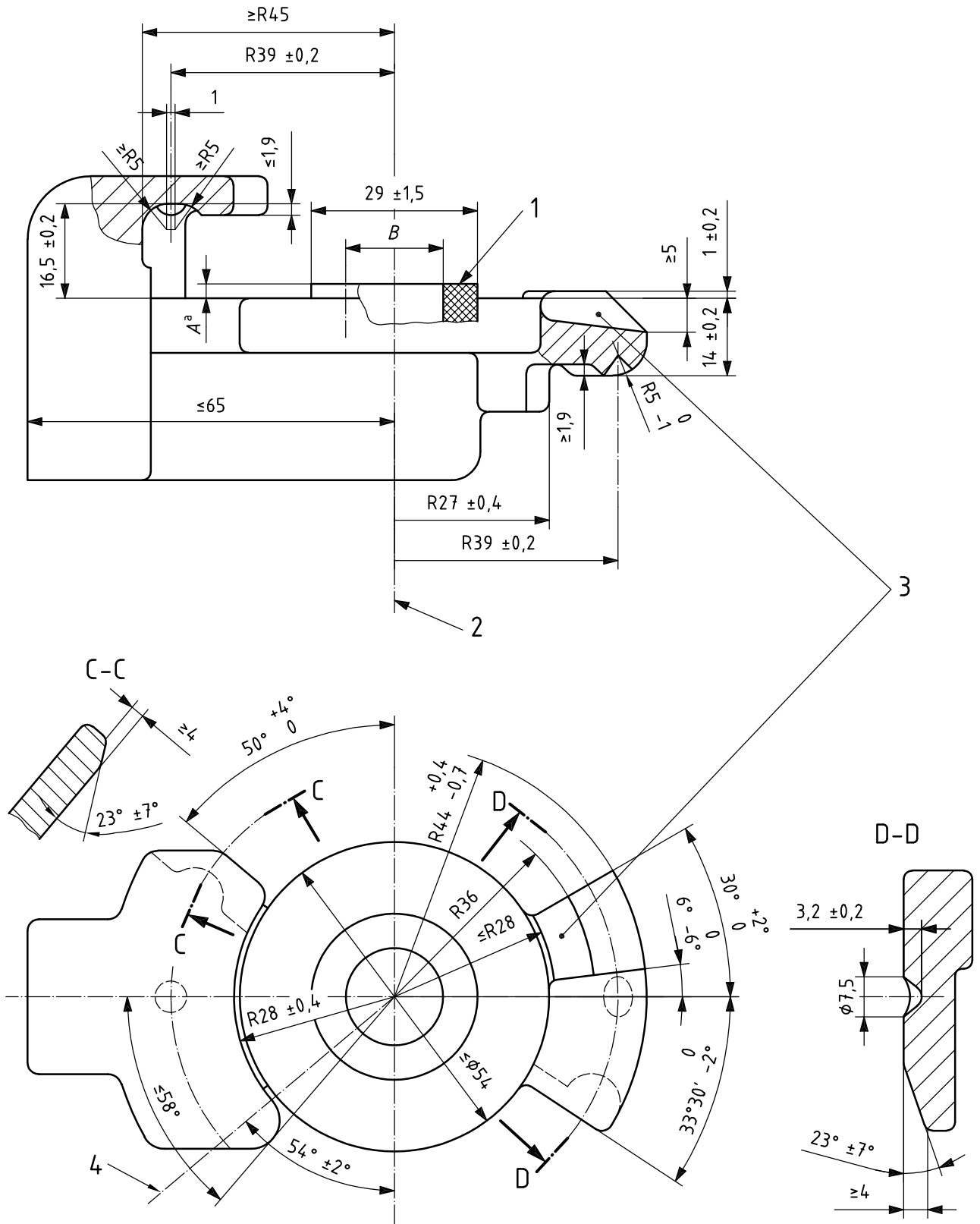
3.6 Length of flexible pipe connections

The length of the flexible pipe connections between towing and towed vehicles is specified in ISO 4009. The length of flexible pipe connections on the towing and towed vehicles shall comply with ISO 4009.

Table 1 — Dimensions for coupling head for supply line

Connection	A^a mm	B mm
With resilient sealing ring (for heads "tractor" and "trailer")	$2,7 \pm 0,5$	$\varnothing 19 \pm 2$
With mobile part providing for the opening of the automatic valve (see 3.1)	$3,5 + 1$	$\varnothing 21$ max. $\varnothing 11$ min.
^a The opening of the automatic device shall be assured even when two coupling heads with the most adverse tolerances for pushing down the mobile part are connected together. It shall be possible to push down the sealing face until the dimension A is at zero.		

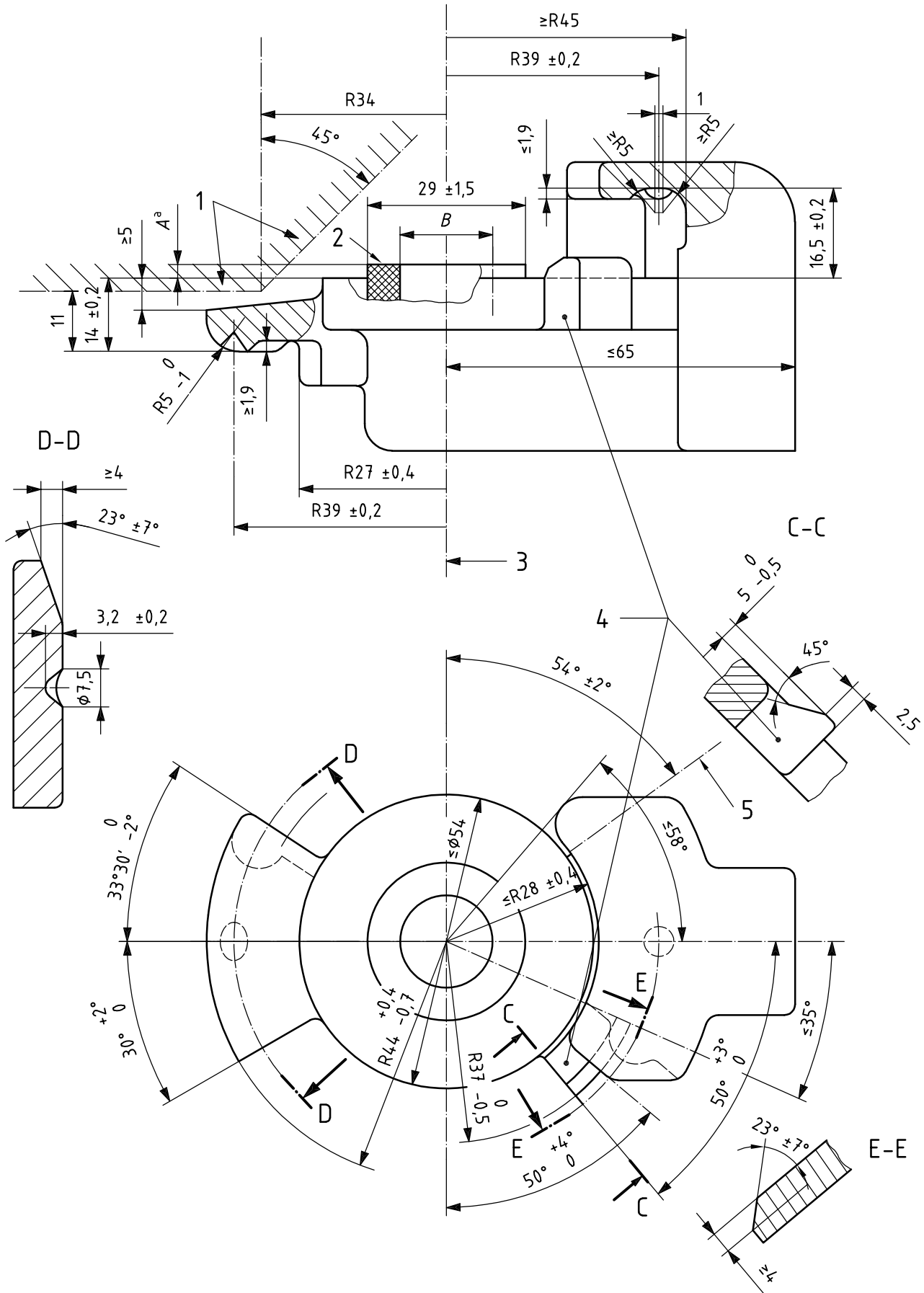
Dimensions in millimetres



Key

- | | | | |
|---|---------------|---|-------------------|
| 1 | sealing face | 3 | inhibiting device |
| 2 | coupling axis | 4 | stop |

Figure 1 — Coupling head for supply line



Key

- 1 minimum free space for the crossing of inhibiting device of the other head
- 2 sealing face
- 3 coupling axis
- 4 inhibiting device
- 5 stop

Figure 2 — Coupling head for control line**Table 2 — Dimensions for coupling head for control line**

Connection	A^a mm	B mm
With resilient sealing ring (for heads "tractor" and "trailer")	$2,7 \pm 0,5$	$\varnothing 19 \pm 2$
With mobile part providing for the opening of the automatic valve (see 3.1)	$3,5 + 1$	$\varnothing 21$ max. $\varnothing 11$ min.
^a The opening of the automatic device shall be assured even when two coupling heads with the most adverse tolerances for pushing down the mobile part are connected together. It shall be possible to push down the sealing face until the dimension A is at zero.		

Bibliography

- [1] ISO 1726, *Road vehicles — Mechanical coupling between tractors and semi-trailers — Interchangeability*

.....

© ISO 2006. All rights reserved.

ICS 43.040.40

Price based on 6 pages