

INTERNATIONAL
STANDARD

ISO
9803

First edition
1993-02-01

**Vacuum technology — Pipeline fittings —
Mounting dimensions**

iTeh *Technique du vide — Connexions à vide pour les pipelines — Dimensions
de montage*
(standards.iteh.ai)

ISO 9803:1993

<https://standards.iteh.ai/catalog/standards/sist/0b0509c6-2406-462e-b126-cff5322acb56/iso-9803-1993>



Reference number
ISO 9803:1993(E)

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.

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.

International Standard ISO 9803 was prepared by Technical Committee ISO/TC 112, *Vacuum technology*, Sub-Committee SC 1, *Vacuum flanges and fittings*.

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International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Vacuum technology — Pipeline fittings — Mounting dimensions

1 Scope

This International Standard specifies mounting dimensions for vacuum pipeline fittings (elbows, tees and crosses) for nominal bores from 10 mm to 250 mm of the R5 series.

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 indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1609:1986, *Vacuum technology — Flange dimensions*.

ISO 2861-1:1974, *Vacuum technology — Quick-release couplings — Dimensions — Part 1: Clamped type*.

3 Dimensions

3.1 Mounting dimensions of the vacuum pipeline fittings shall be as specified in table 1. See figures 1 to 3.

3.2 The flange dimensions shall be as specified in ISO 1609 and ISO 2861-1.

3.3 The positions of the bolt holes in the flanges specified in ISO 1609 shall be as shown in figure 4. Angle α is a function of the number of bolt holes.

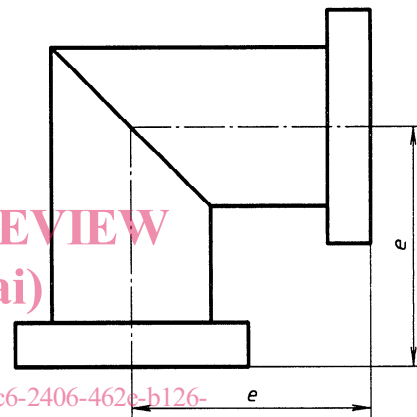


Figure 1 — Elbow

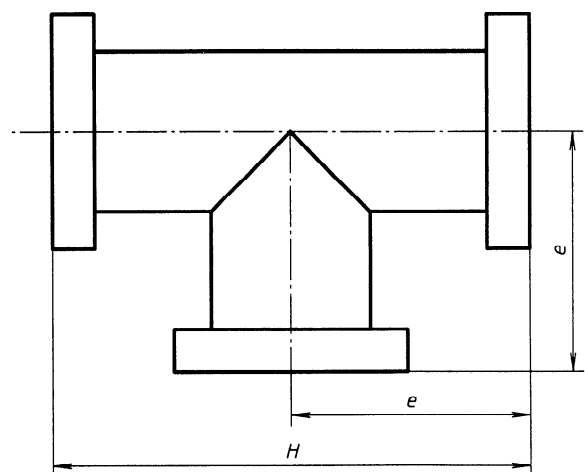


Figure 2 — Tee

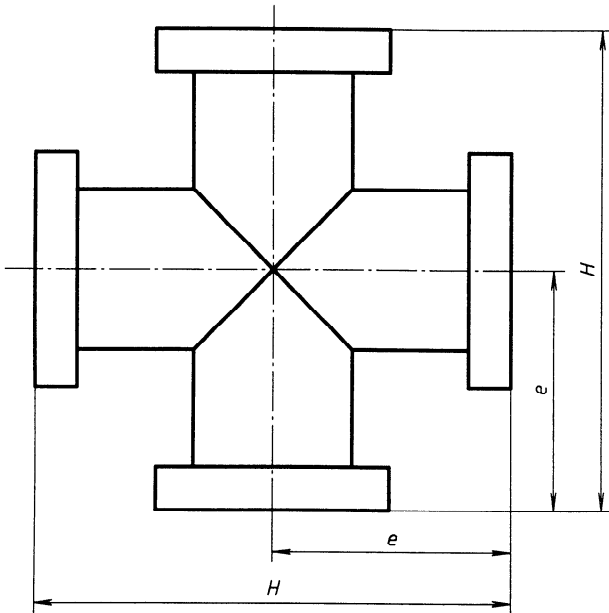


Figure 3 — Cross

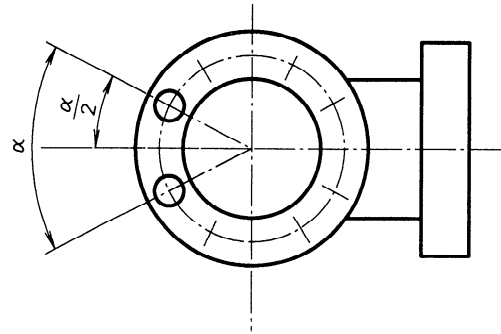


Figure 4 — Position of bolt holes

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Table 1 — Dimensions of pipelines fittings

Dimensions in millimetres

Nominal bore	e	ISO 9803:1993		Perpendicularity tolerance for the two mating faces for the two flanges specified in	
		tol.	H	ISO 2661-1	ISO 1609
10	30 40*)	± 1,5	60 80*)	± 2°	± 1°
16	40		80		
25	50		100		
40	65		130		
63	88	± 2	176	—	± 0° 30'
100	108		216		
160	138		276		
250	208	± 2	416	± 3	

*) These values shall be used only for flanges specified in ISO 1609.

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UDC 621.643.06:533.59

Descriptors: vacuum technology, pipelines, pipe fittings, dimensions, mounting dimensions.

Price based on 2 pages
