



SLOVENSKI STANDARD
SIST EN 558-2:2000

01-september-2000

Industrial valves - Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems - Part 2: Class-designated valves

Industriearmaturen - Baulängen von Armaturen aus Metall zum Einbau in Rohrleitungen mit Flanschen - Teil 2: Nach Class bezeichnete Armaturen

Robinetterie industrielle - Dimensions face-a-face et face-a-axe de la robinetterie métallique utilisée dans les systèmes de canalisations à brides - Partie 2: Appareils de robinetterie désignés Class

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Ta slovenski standard je istoveten z: EN 558-2:1995

ICS:

23.060.01 Ventili na splošno Valves in general

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EUROPEAN STANDARD

EN 558-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 1995

ICS 23.060.00

Descriptors: industrial valves, valves-and fittings, flanged valves, metallurgical products, dimensions, dimensional tolerances

English version

**Industrial valves - Face-to-face and centre-to-face
dimensions of metal valves for use in flanged pipe
systems - Part 2: Class-designated valves**

Robinetterie industrielle Dimensions
face-à-face et face-à-axe de la robinetterie
métallique utilisée dans les systèmes de
canalisations à brides - Partie 2: Appareils de
robinetterie désignés Class

Industriearmaturen - Baulängen von Armaturen
aus Metall zum Einbau in Rohrleitungen mit
Flanschen - Teil 2: Nach Class bezeichnete
Armaturen

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 69 "Industrial valves" of which the secretariat is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1996, and conflicting national standards shall be withdrawn at the latest by April 1996.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

This standard was drawn up on the basis of the international draft standard ISO/DIS 5752 and contains two Parts which can be used separately:

EN 558-1 *Industrial valves — Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems — Part 1: PN-designated valves*

EN 558-2 *Industrial valves — Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems — Part 2: Class-designated valves*

The progress in work in the standardization of the different products can require a revision of the standard by adding or subtracting some basic series.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

0 Introduction

All tables of face-to-face and centre-to-face dimensions are drafted separately for PN-designated valves in EN 558-1 and for Class designated valves in EN 558-2.

The basic series in this standard are taken from the origin series shown in annex A (informative).

Changes made to the origin series will not be automatically incorporated into this standard.

The numbers of the basic series are maintained as in ISO/DIS 5752: 1993.

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1 Scope

This part of this standard specifies face-to-face (FTF) and centre-to-face (CTF) dimensions for Class designated metal valves used in flanged pipe systems.

This part of this standard covers valves having the following Class and DN values:

- Class 125, Class 150, Class 250, Class 300, Class 600.

- DN 10; DN 15; DN 20; DN 25; DN 32; DN 40; DN 50; DN 65; DN 80; DN 100; DN 125; DN 150; DN 200; DN 250; DN 300; DN 350; DN 400; DN 450; DN 500; DN 600; DN 700; DN 750; DN 800; DN 900; DN 1 000; DN 1 200; DN 1 400; DN 1 600; DN 1 800; DN 2 000.

Face-to-face dimensions of automatic steam traps are specified in EN 26554.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of the cited publication apply to this European Standard, only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 736-1	Valves - Terminology Part 1: Definitions of types of valves
EN 26554	Flanged automatic steam traps - Face-to-face dimensions

3 Definitions

For the purposes of this standard, prEN 736-1 and the following definitions apply:

3.1 face-to-face dimension (FTF) (for straight pattern valves): The distance, expressed in millimetres, between the two planes perpendicular to the valve axis located at the extremities of the body and ports or as may be specified in the relevant valve product standard (see figures 1 and 2).

3.2 centre-to-face dimension (CTF) (for angle pattern valves): The distance, expressed in millimetres, between the plane located at the extremity of either body end port and perpendicular to its axis and the axis of the other body end port (see figures 1 and 2).

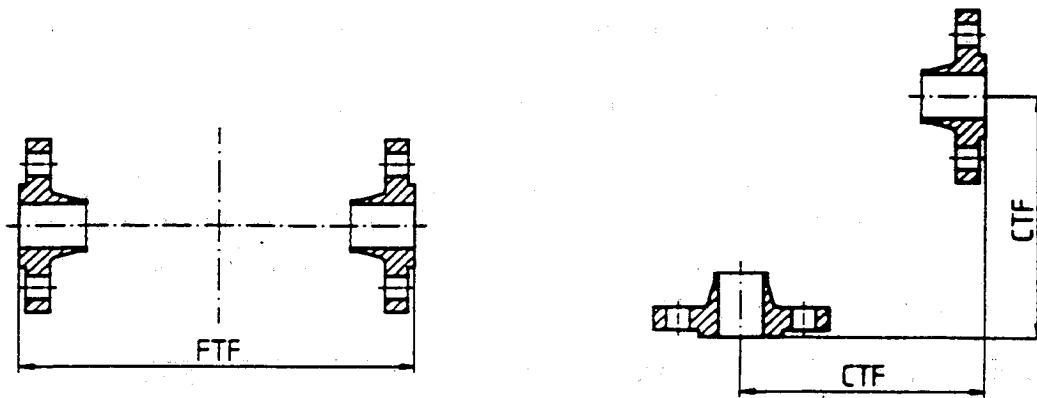
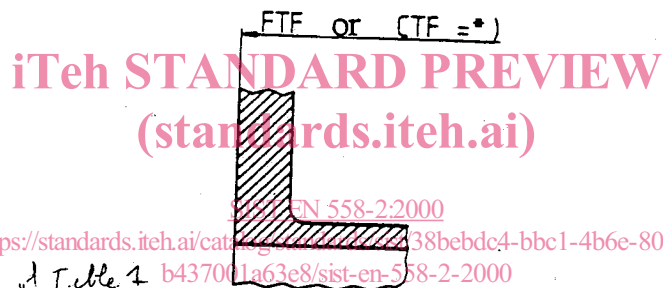
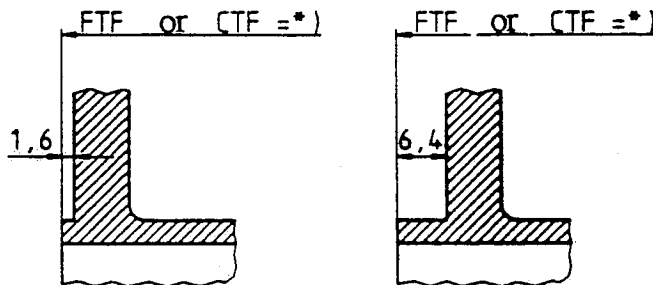


Figure 1:



* Dimensions of Table 4

Figure 2: Flat face flange



* Dimensions of Table 4

Figure 3: Raised face flange

4 Dimensions and tolerances

4.1 Basic series

The basic series of FTF and CTF dimensions shall be as given in table 1.

For each type of valve, the basic series to be taken into consideration are given in tables 3 to 17.

4.2 Dimensions for unlined valves

4.2.1 Flat face flanges

For valves having flanges with flat face:

- in grey cast iron Class 125;
- in copper alloy Class 150 and Class 360.

The FTF and CTF dimensions shall be in accordance with figures 1 and 2.

4.2.2 Raised face flanges

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For valves:

- having flanges with 1,6 mm raised face:
 - in grey cast iron, Class 250;
 - in ductile cast iron, Class 150 and Class 300;
 - in steel, Class 150 and Class 300;
- having flanges with 6,4 mm raised face:
 - in steel, Class 600.

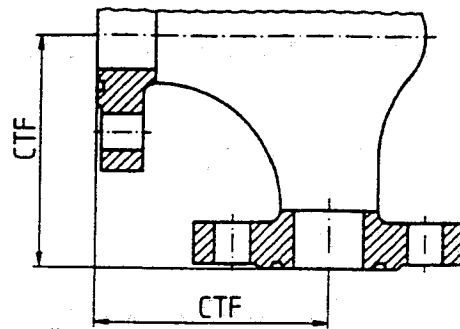
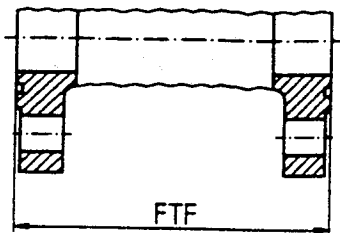
The FTF and CTF dimensions shall be in accordance with figures 1 and 3.

4.2.3 Ring joint flanges

For valves with flange facings designed to be used with metallic ring joints having octagonal or oval section, the FTF or CTF dimensions shall be in accordance with figure 4.

4.2.4 Other flange facings

For Class 150; Class 300 and Class 600 valves with large and small male and female faces and large and small tongue and groove facings, the FTF and CTF dimensions shall be in accordance with figures 1 and 5.



FTF = Table 1 dimension + \times

CTF = Table 1 dimension + $0,5 \times$

Dimensions in millimetres

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Nominal size	Additional length \times for ring joint flanges		
	Class 150	Class 300	Class 600
DN			
15	11,1	11,1	- 1,6
20	12,7	12,7	0
25			
32			
40			
50			
65	12,7	15,9	3,2
80			
100			
125			
150			
200			
250			
300			
350			
400			
450			
500		19,1	6,4
600		22,2	9,5
700		25,4	12,7
750			
800		28,6	15,9
900			
1 000			

Figure 4:

Dimensions in millimetres

	Class 150 and Class 300	Class 600
Large or small male face	$\begin{array}{l} \text{FTF} = *) + 12,7 \\ \text{CTF} = *) + 6,4 \\ 6,4 \quad *) \end{array}$	$\begin{array}{l} \text{FTF OR CTF} = *) \\ 6,4 \end{array}$
Large or small female face	$\begin{array}{l} \text{FTF} = *) + 9,6 \\ \text{CTF} = *) + 4,8 \\ 4,8 \quad *) \end{array}$	$\begin{array}{l} *) \\ \text{FTF} = *) - 3,2 \\ \text{CTF} = *) - 1,6 \\ 1,6 \end{array}$
Large or small tongue	$\begin{array}{l} \text{FTF} = *) + 12,7 \\ \text{CTF} = *) + 6,4 \\ 6,4 \quad *) \end{array}$	$\begin{array}{l} \text{FTF OR CTF} = *) \\ 6,4 \end{array}$
Large or small groove	$\begin{array}{l} \text{FTF} = *) + 9,6 \\ \text{CTF} = *) + 4,8 \\ 4,8 \quad *) \end{array}$	$\begin{array}{l} *) \\ \text{FTF} = *) - 3,2 \\ \text{CTF} = *) - 1,6 \\ 1,6 \end{array}$

* Dimensions of table 1

Figure 5:

4.3 Dimensions for lined valves

4.3.1 For valves having a resilient lining which forms the gasket joint with the mating flanges, the FTF and CTF dimensions shall be the distance between the extremities of the valve in the installed condition.

The overall valve dimensions before assembly shall be provided by the manufacturer.

4.3.2 For valves having resilient or hard linings as a regular production feature the thickness of the lining on the mating surface shall be included in the FTF and CTF dimensions given in table 1 unless the design of the valve precludes such an inclusion.

Where the design does not permit the lining to be included in the FTF and CTF dimensions given in table 1, then the thickness of the lining may be added to the basic dimension.

4.3.3 For valves having resilient or hard linings which are not normally a regular production feature, the thickness of the lining on the flange faces may be added to the FTF and CTF dimensions given in table 1.

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4.4 Tolerances

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Tolerances on FTF and CTF dimensions are given in table 2.

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