
International Standard



5752

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Metal valves for use in flanged pipe systems — Face-to-face and centre-to-face dimensions

Appareils de robinetterie métalliques utilisés dans les tuyauteries à brides — Dimensions face-à-face et face-à-axe

Second edition — 1982-06-01

UDC 621.646

Ref. No. ISO 5752-1982 (E)

Descriptors : piping, valves and fittings, industrial valves, cocks, pipe flanges, nomenclature, connecting dimensions.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 5752 was developed by Technical Committee ISO 153, *Valves*.

The first edition (ISO 5752-1979) had been approved by the member bodies of the following countries :

Australia	Italy	Spain
Austria	Japan	Sweden
Canada	Mexico	Switzerland
Denmark	Netherlands	United Kingdom
Finland	Norway	USA
Germany, F. R.	Poland	
India	Romania	

The member bodies of the following countries had expressed disapproval of the document on technical grounds

Belgium
France
South Africa, Rep. of
USSR

This second edition, which cancels and replaces ISO 5752-1979, incorporates draft Amendment 1, which was circulated to the member bodies in January 1981 and has been approved by the member bodies of the following countries :

Australia	Germany, F. R.	Romania
Austria	India	South Africa, Rep. of
Belgium	Iraq	Sweden
Canada	Italy	Switzerland
Denmark	Japan	United Kingdom
Egypt, Arab Rep. of	Korea, Rep. of	USA
Finland	Netherlands	
France	Norway	

The member body of the following country expressed disapproval of the document on technical grounds :

USSR

Metal valves for use in flanged pipe systems — Face-to-face and centre-to-face dimensions

0 Introduction

The object of this International Standard is the establishment of face-to-face and centre-to-face dimensions for metal valves to permit a degree of dimensional interchangeability. It is intended for use in preparing product standards for industrial valves.

Although the tables of face-to-face dimensions in this International Standard represent a considerable rationalization of international practices it has not been possible to reduce these to a single series of dimensions for the various types of valves. Alternatives have been included. For convenience these have been called short, medium and long, but these terms are not used in a purely descriptive sense.

The pressure/temperature ratings for the different types of valves are those to be specified in the valve product standards for the types of valve and materials used.

Where dimensions from inch series of valves have been converted into millimetres, the exact values obtained have been rounded to the whole millimetre below when the decimal value obtained in conversion has been less than 0,5 mm, and to whole millimetre above when the decimal value obtained in conversion has been equal to or greater than 0,5 mm.

Throughout this International Standard, nominal sizes DN 550 and DN 650 are shown in parenthesis to indicate non-preferred sizes.

1 Scope and field of application

1.1 This International Standard specifies the basic series of face-to-face or centre-to-face dimensions for two-way metal valves used in flanged pipe systems. Each basic series of face-to-face or centre-to-face dimensions may be used as required with flanges of mating dimensions conforming to ISO 2084 or ISO 2229.

1.2 The range of pressure ratings, in PN values, is

1 — 1,6 — 2,5 — 4 — 6 — 10 — 16 — 25 and 40.
and classes 125 — 150 — 250 — 300 and 600.

1.3 The range of nominal sizes, in DN values, is

10 — 15 — 20 — 25 — 32 — 40 — 50 — 65 — 80 — 100 —
125 — 150 — 200 — 250 — 300 — 350 — 400 — 450 —
500 — (550) — 600 — (650) — 700 — 750 — 800 — 900 —
1 000 — 1 200 — 1 400 — 1 600 — 1 800 and 2 000.

2 Definitions

2.1 nominal size (DN) : A numerical designation of size which is common to all components in a piping system other than components designated by outside diameters. It is a convenient round number for reference purposes and it is normally only loosely related to manufacturing dimensions.

It shall be designated by the letters DN, followed by a number.

2.2 nominal pressure : The nominal pressures in this International Standard follow one of two systems, the PN rating system or the class rating system.

2.3 face-to-face dimension (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 end ports or as may be specified in the relevant valve products standards.

The face-to-face dimension for butterfly valves is the distance between the extremities of the valve in the installed conditions.

2.4 centre-to-face dimension (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 other body end port axis.