JAPANESE INDUSTRIAL STANDARD

JIS B 2352-1994

Bellows type expansion joints

October, 1996

ERRATA

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Subclause 3.3(1)

Replace the equation (2)

$$e_y = \frac{3d_pY}{L + X_c} \quad \cdots\cdots\cdots (2)$$

by the following :

$$e_y = \frac{3d_pY}{N\,(L + X_c)} \quad \cdots\cdots\cdots (2)$$

Remarks: This errata is for correcting the first edition of this Standard.

Japanese Standards Association

UDC 621.643.43

JIS

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In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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JAPANESE INDUSTRIAL STANDARD J I S

Bellows type expansion joints B 2352-1994

1. Scope This Japanese Industrial Standard specifies the bellows type expansion joints (hereafter referred to as "pipe joints") of nominal pressure 10 K to be used for absorbing the expansion and contraction of the pipes in axial direction resulting from temperature changes in the pipings for steam, air, gas, water, oil, etc.

Remarks 1. The strength evaluation standards and installation standards of the pipe joints of nominal pressure 10 K and other than 10 K (those different in construction from the pipe joints specified in the text, such as universal type and hinged type, are also included) are given in Informative reference 1 and 2.

2. The standards cited in this Standard are given in Attached Table 1.

3. In this Standard, the units and numerical values given in { } are based on the traditional units, and are appended for informative reference.

Informative reference: The nominal pressure 10 K generally means that the maximum working pressure is 0.98 MPa {10 kgf/cm^2} (see 4.).

2. Definitions For the main terms used in this Standard, the definitions in JIS B 0151 apply.

3. Types The types of the pipe joints shall be as given in Table 1 according to the construction of bellows, coupling system, uses, and sizes of pipe joints (nominal diameters). The sizes of pipe joints shall be 500 or under for the uses of symbol A and 50 or over for the uses of symbol B.

Table 1. Types

Construction of bellows		Coupling system	Symbol of use	Size of pipe joint (nominal diameter)
With rods and without reinforcing rings	Single style, Double style	Welded type, Flanged type	A, B	15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650
With rods and reinforcing rings				
With outer cylinder				

Remarks 1. The symbols of uses shall indicate the following division of use:

A : pipe joints to be used mainly for cooling and heating, air conditioning and sanitary piping

B : pipe joints to be used mainly for industrial pipings

2. The size of pipe joints shall indicate the nominal diameter of the pipe to be connected.

4. Maximum working pressure When the state of fluid is steam, air, gas, water or oil at 220°C or lower, the maximum working pressure of the pipe joints shall be 0.98 MPa {10 kgf/cm^2}.

5. Construction The fundamental construction of the pipe joints shall be the single style with rods and without reinforcing rings, double style with rods and without reinforcing rings, single style with rods and reinforcing rings, double style with rods and reinforcing rings, single style with outer cylinder and double style with outer cylinder, according to the construction and the number of combined bellows.

In addition, the welded type in the coupling system shall be of the construction to connect with the pipes by butt welding, attaching the end pipes to the front and rear of the bellows, and the flanged type shall be of the construction to connect with the pipes by pipe flanges, attaching the end pipes and pipe flanges to the front and rear of the bellows. The basic dimensions of the pipe flanges to be used for the flanged pipe joints shall be in accordance with JIS B 2210.

Further, examples of the fundamental construction of the pipe joints shall be given in Figs. 1 to 6.

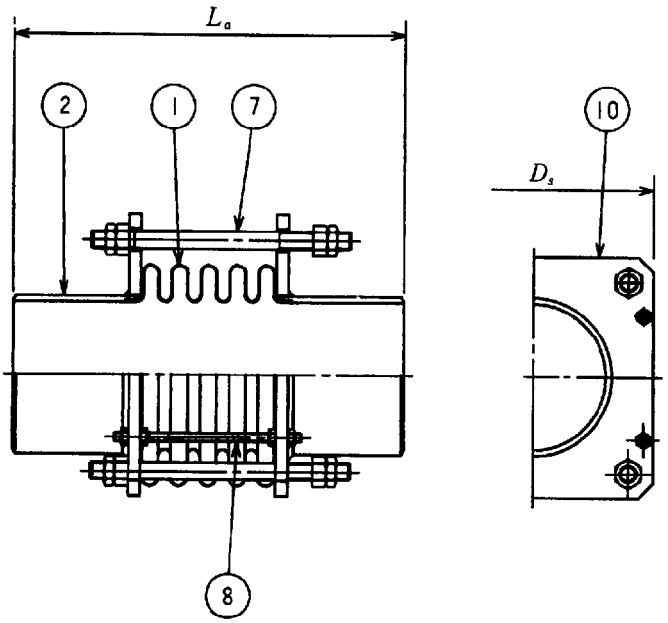
Remarks 1. The construction other than those given in Figs. 1 to 6 may be permissible, according to the combination of the components of the pipe joints.

2. The numbers of components of the pipe joints given in Figs. 1 to 6 shall indicate the names of the components as follows:

① bellows ② end pipe ③ pipe flange ④ outer cylinder ⑤ inner cylinder ⑥ reinforcing ring or adjusting ring (see 3.4.4 Remarks 2. of Informative reference 1) ⑦ stay bolt ⑧ set bolt ⑨ anchor base ⑩ stay plate ⑪ supporting ring

Fig. 1. Single style with rods and without reinforcing rings

Welded type



Flanged type