

1. Applications and Features

Purpose	Gap adjustment of plumbing, Absorbing lateral movement
Location	HVAC pipe line, Sanitary pipeline without drainage, etc.
Features	This is a general-purpose flexible joint that allows flexible changes in materials of main parts and flange standards. Fluid contacting part is stainless steel, loose flange type.

2. Structure and Parts

Figure 1 shows the structure, and Table 1 shows the part names and materials.

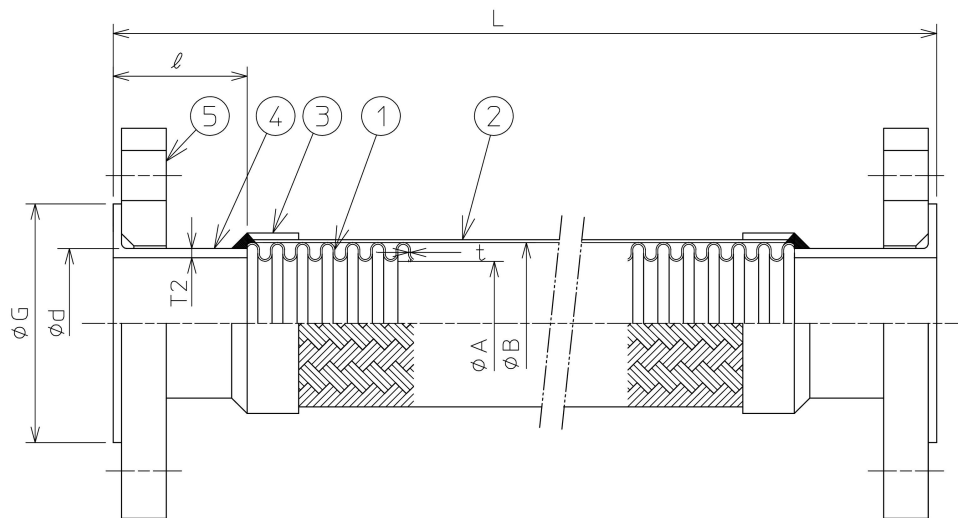


Figure 1. Structure

Table1. Parts List

No.	Name	Material (Option)
1	Bellows	Stainless steel 304 (Stainless steel 316L)
2	Braid	Stainless steel 304
3	Braid cover	Stainless steel 304
4	Lap joint	Stainless steel 304 (Stainless steel 316, 316L)
5	Loose flange	Carbon steel

※Flange rating : JIS 10K (Standard) , 5K, 7.5K, 20K, JPI

3. Dimensions and maximum working pressure

Table 2 shows dimensions and maximum working pressure.

Table2. Dimensions and maximum working pressure

Unit : mm

Size	Bellows			Lap joint				Max. working pressure (MPa)	
	ϕA	ϕB	t	ϕG	ℓ	ϕd	T2	1 Ply	2 Ply
10A	10.5	15.0	0.25	46	30	17.3	1.65	1.0	2.0
15A	13.0	18.4	0.25	51	30	21.7	2.1	1.0	2.0
20A	19.1	25.4	0.3	56	30	27.2	2.1	1.0	2.0
25A	25.5	32.2	0.3	67	50	34.0	2.8	1.0	2.0
32A	33.5	40.3	0.3	76	50	42.7	2.8	1.0	2.0
40A	39.5	47.6	0.35	81	50	48.6	2.8	1.0	2.0
50A	53.0	61.6	0.35	96	50	60.5	2.8	1.0	2.0
65A	66.0	77.0	0.4	116	50	76.3	3.0	1.0	2.0
80A	74.0	90.5	0.4	126	50	89.1	3.0	1.0	2.0
100A	98.5	118.0	0.4	151	50	114.3	3.0	1.0	1.92
125A	123.0	146.0	0.6	182	50	139.8	3.4	1.0	2.0
150A	148.8	174.0	0.6	212	50	165.2	3.4	1.0	2.0
200A	194.6	221.0	0.6	262	65	216.3	4.0	1.0	1.51
250A	244.6	278.0	0.8	324	65	267.4	4.5	1.0	1.68
300A	294.4	330.0	0.8	368	65	318.5	4.5	0.77	1.4

※Max. working pressure is based on SUS304 bellows material at normal temperature.

4. Total length required for each displacement

Table 3 shows the total length required for each displacement.

Table 3. Total length required for each displacement

Unit : mm

Size	Displacement					
	50	100	150	200	250	300
10A	300	400	500	550	600	650
15A	300	400	500	550	600	650
20A	350	500	550	650	700	750
25A	450	550	650	750	800	900
32A	500	650	750	850	950	1000
40A	500	650	800	900	1000	1050
50A	550	700	850	950	1050	1150
65A	600	750	900	1050	1150	1250
80A	550	700	850	950	1050	1150
100A	550	750	900	1000	1100	1200
125A	650	900	1050	1200	1300	1400
150A	700	900	1100	1250	1350	1450
200A	800	1050	1250	1400	1550	1700
250A	850	1150	1400	1550	1750	1850
300A	900	1200	1450	1600	1800	1950

<Design condition> Pressure : Maximum working pressure (B1)

Temperature : Normal temperature

Number of times repeated : More than 3,000 times

5. Applicable temperature range

-20℃~300℃

6. Mounting bolt length

Table 4 shows the length of the mounting bolt.

Table 4. Mounting bolt length (JIS10K)

Size	Mounting bolt length		
	Size	Length (Below Neck)	Quantity
10A	M12	50	8
15A	M12	50	8
20A	M12	55	8
25A	M16	60	8
32A	M16	65	8
40A	M16	65	8
50A	M16	65	8
65A	M16	65	8
80A	M16	65	16
100A	M16	65	16
125A	M20	75	16
150A	M20	80	16
200A	M20	80	24
250A	M22	85	24
300A	M22	85	32

※Mounting bolt length does not include the thickness of flat washers and spring washers.

7. Inspection

Inspection items : Visual inspection, Dimensional inspection (Overall length),
Leak inspection

Frequency : ALL

8. NOTES

- Please use Z-3000 for piping with severe vibration and pressure fluctuation, such as around pumps and water receiving tanks.
- Where the water hammer generate in the piping system, the flexible joint might be damaged.
Please do appropriate impact prevention measures.
Moreover, the use of Z-3000 composed of the tube for the vibrational absorption is recommended.
- Please refer to the “Installation Instructions” for installation procedures.