

1. Applications and Features

Purpose	Gap adjustment of plumbing, Absorbing pump vibration, Earthquake countermeasures
Location	Pump inlet / outlet, Inlet of water receiving tank
Features	The OM bellows has Ω shape that disperses stress concentration, and the non-welded construction is used for bellows assembly, providing excellent durability in areas subject to vibration and impact pressure. 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.

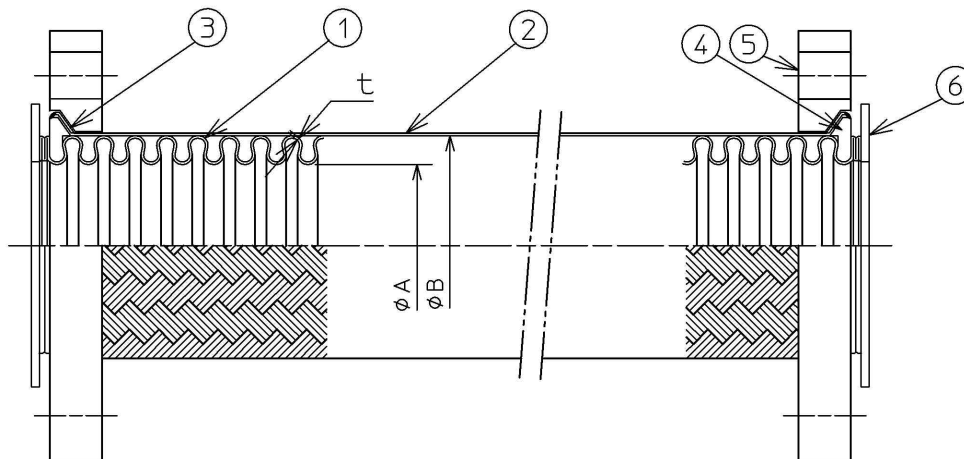


Figure 1 . Structure

Table1. Parts List

No.	Name	Material (Option)
1	Bellows	Stainless steel 304 (Stainless steel 316L)
2	Braid	Stainless steel 304
3	Ring cover	Stainless steel 304
4	Split ring	Forged steel (Stainless steel 304)
5	Loose flange	Carbon Steel (Stainless steel 304)
6	Gasket	Joint sheet without asbestos

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

※Genuine gasket included.

3. Dimensions and maximum working pressure

Table 2 shows dimensions and maximum working pressure.

Table2. Dimensions and maximum working pressure Unit : mm

Size	Bellows			Max. working pressure (MPa)	
	ϕA	ϕB	t	1 Ply	2 Ply
20A	26.8	36.5	0.3	1.0	2.0
25A	32.5	45.0	0.3	1.0	2.0
32A	41.1	54.5	0.35	1.0	2.0
40A	46.1	61.0	0.35	1.0	2.0
50A	54.1	70.5	0.4	1.0	2.0
65A	67.2	86.0	0.4	1.0	2.0
80A	79.2	100.5	0.4	1.0	1.94
100A	103.0	126.0	0.4	1.0	1.65
125A	129.1	154.0	0.5	1.0	1.88
150A	153.0	181.0	0.5	1.0	1.62
200A	199.0	230.0	0.5	1.0	1.19
250A	248.8	285.0	0.6	1.0	1.25
300A	300.8	336.0	0.6	0.74	0.96

※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
20A	350	450	550	650	700	750
25A	350	450	550	650	700	750
32A	400	550	650	700	800	850
40A	400	550	650	700	800	900
50A	400	550	700	750	850	950
65A	450	600	700	800	900	1000
80A	450	650	750	850	950	1050
100A	500	700	850	950	1100	1150
125A	550	750	950	1050	1150	1300
150A	600	850	1000	1150	1250	1350
200A	700	950	1150	1300	1450	1600
250A	750	1000	1250	1400	1600	1700
300A	800	1100	1300	1500	1650	1800

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

Temperature : Normal temperature

Number of times repeated : More than 3,000 times

5. Applicable temperature range

Standard gasket : -20℃~100℃

Steam gasket : 100℃~300℃

6. Mounting bolt length and bolt tightening torque (Recommended value)

Table 4 shows the length of the mounting bolt.

Table 5 shows the tightening torque of the bolt.

Table 4 . Mounting bolt length (JIS10K)

Size	Mounting bolt length		
	Bolt size	Length (Below Neck)	Quantity
20A	M12	55	8
25A	M16	60	8
32A	M16	65	8
40A	M16	65	8
50A	M16	65	8
65A	M16	70	8
80A	M16	70	16
100A	M16	70	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.

※Gasket thickness is calculated at 3 mm.

Table 5 . Torque of the bolt

Size	Torque (N·m)
20A~40A	50~80
50A~100A	80~100
125A~150A	140~180
200A~300A	160~200

※Tightening torques are for standard gaskets.

7. Inspection

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

Frequency : ALL

8. NOTES

- Due to the special dimensions of the gasket sealing surface, there is a risk of leakage with gaskets of commercially available dimensions.
Be sure to use the attached genuine gasket.
- Insert mounting bolt from product side.
And tighten bolts evenly in diagonal line order.
- Non asbestos joint gasket that normally attached on sealing face is not applied for steam line. Please use our steam gaskets for steam line. (Spiral wound gasket)
- Please refer to the "Installation Instructions" for installation procedures.