

1. Applications and Features

Purpose	Gap adjustment of plumbing, Absorbing lateral movement
Location	HVAC pipeline, various machine piping, etc.
Features	Metal-sealed joints eliminate the need for packing.

2. Structure and Parts

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

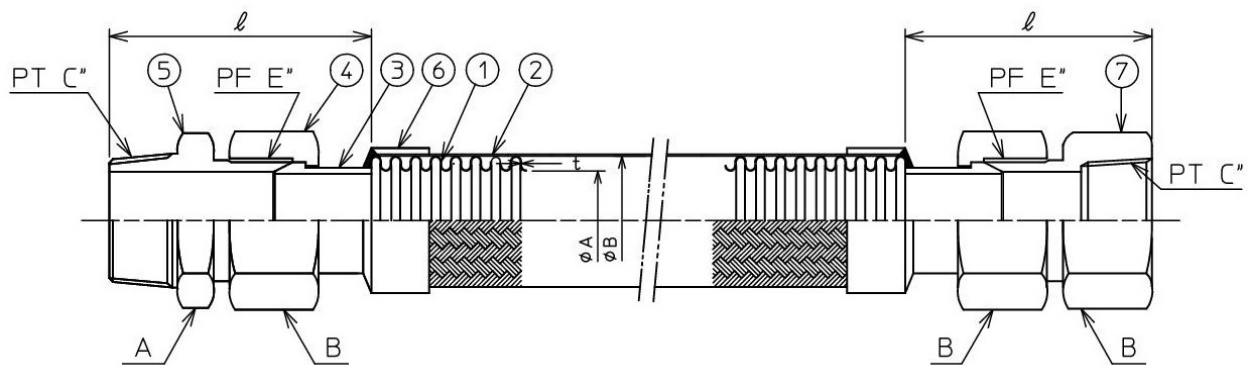


Figure 1 . Structure

Table1. Parts List

No.	Name	Material (Option)
1	Bellows	Stainless steel 304 (Stainless steel 316L)
2	Braide	Stainless steel 304
3	Sleeve	Carbon steel (Stainless steel 304) (Stainless steel 316L)
4	Nut	Carbon steel (Stainless steel 304) (Stainless steel 316L)
5	Male Nipple(Female nipple)	Carbon steel (Stainless steel 304) (Stainless steel 316L)
6	Braide cover	Stainless steel 304
7	Female Nipple(Male nipple)	Carbon steel (Stainless steel 304) (Stainless steel 316L)

※Nipple type : Male×Female、Male×Male、Female×Female

3. Dimensions and maximum working pressure

Table 2 shows dimensions and maximum working pressure.

Table2. Dimensions and maximum working pressure

Unit : mm

Size	Bellows			Metal seal joint					Max. working pressure (MPa)	
	ϕA	ϕB	t	A	B	C	E	ℓ	1 ply	2 ply
8A	7.2	11.1	0.2	14	17	1/4	1/4	44.5	1.0	2.0
10A	10.5	15.0	0.25	17	21	3/8	3/8	48.5	1.0	2.0
15A	13.0	18.4	0.25	22	26	1/2	1/2	58	1.0	2.0
20A	19.1	25.4	0.3	27	32	3/4	3/4	63	1.0	2.0
25A	25.5	32.2	0.3	35	38	1	1	72	1.0	2.0
32A	33.5	40.3	0.3	46	50	1 1/4	1 1/4	79	1.0	2.0
40A	39.5	47.6	0.35	50	55	1 1/2	1 1/2	82	1.0	2.0
50A	53.0	61.6	0.35	65	70	2	2	96	1.0	2.0

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

4. Total length required for each displacement

Table 3 shows total length required for each displacement

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Unit : mm

Size	Displacement					
	50	100	150	200	250	300
8A	300	400	450	500	550	600
10A	350	450	550	600	650	700
15A	350	450	550	600	650	700
20A	450	550	650	700	750	850
25A	500	600	700	800	850	900
32A	550	700	800	900	1000	1100
40A	550	750	850	950	1050	1150
50A	650	800	950	1050	1150	1250

<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. Tightening Torque(recommended)

Table 4 shows the tightening torques for metal seal fittings.

Table 4. Tightening torque

Size	Tightening torque (N·m)
8A	55~65
10A	55~65
15A	60~75
20A	85~100
25A	110~120
32A	120~135
40A	145~160
50A	180~200

7. Inspection

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

Frequency : ALL

8. Notes

- Please inquire separately when used for piping with severe vibration and pressure fluctuation.
- Please be careful not to scratch the metal seal during installation.
- Please do not remove the nipple after installation.
- Please refer to the "Installation Instructions" for installation procedures.