

### 1. Applications and Features

Purpose	Gap adjustment of plumbing
Location	Water supply and hot water piping, faucet fittings, etc.
Features	General flexible tube for use around faucet fittings.

### 2. Structure and Parts

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

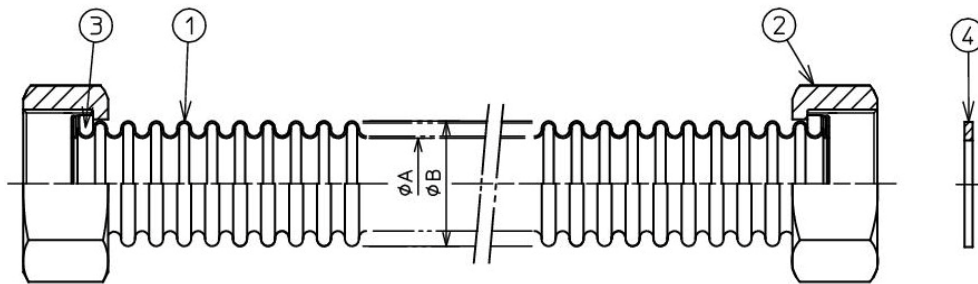


Figure 1 . Structure

Table1. Parts List

No.	Name	Material (Option)
1	Tube	Stainless steel 304 (20A:Stainless steel 316L)
2	Nut	Brass (Stainless steel 304)
3	Ring	Stainless steel 304
4	Gasket	Joint sheet without asbestos (NBR · EPDM · PTFE)

### 3. Dimensions and maximum working pressure

Table 2 shows dimensions and maximum working pressure.

Table2. Dimensions and maximum working pressure

Unit : mm

Item No.	Size	Tube			Screw standard	Max. working pressure (MPa)
		φ A	φ B	Thickness		
Z-109	1/2"	12.4	16.0	0.3	1/2"PF	0.98
Z-110	3/4"	15.8	20.0	0.3	3/4"PF	0.98
Z-111	1"	21.0	25.0	0.3	1"PF	0.98

※Maximum working pressure is at normal temperature.

### 4. Applicable temperature range

0℃~100℃

**5. Minimum Bending Radius and bolt tightening torque (recommended value)**

Table 4 shows minimum Bending Radius and bolt tightening torque.

Table 4. Minimum Bending Radius and bolt tightening torque

Size	Min. Bending Radius (mm)	Tightening torque (N · m)
1/2"	45	19.6
3/4"	60	24.5
1"	75	29.4

**6. Gasket material**

Joint sheet without asbestos (Standard)、NBR、EPDM、PTFE

**7. Inspection**

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

Frequency : ALL

**8. Notes**

- Where the water hammer generate in the piping system, the flexible joint might be damaged.  
Take appropriate impact prevention measures.
- Carry out the welding work of the piping before installing the flexible joint.  
If you have to carry out the welding work after installing the flexible joint, take ground the welding electricity, also put a protective cover around the flexible joint so that the **welding current** does not flow into the piping system.
- Please select the pipe size not to exceed 3m/s of flow velocity.
- In case of corrosive fluid for stainless steel, ZTF series products (fluoro-resin bellows) are recommended.
- When tightening the nut, be careful not to twist the product.
- Please refer to the "Installation Instructions" for installation procedures.