

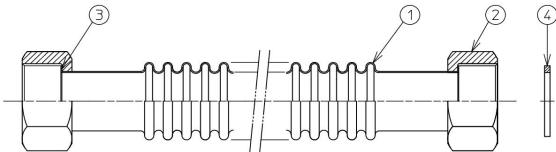
Installation Manual
for the Flexible Tube

WONDER TUBE • WONDER BRAID



Installation Procedure

1. Before installation



The shape of Wonder Tube

Table1 Parts List

No.	Name	Material
1	Tube	Stainless steel 316 low carbon
2	Nut	Brass ※1
3	Ring sheet	PTFE
4	Gasket	Joint sheet without asbestos ※2

※1 Nut type: Brass, Bronze, Stainless steel 304

※2 Gasket type : Joint sheet without asbestos, NBR, EPDM, PTFE

- Please confirm whether the diameter is correct.
- Please confirm whether there is any damage of sealing surface.

2. Installation

① Bent the tube in predetermined form.

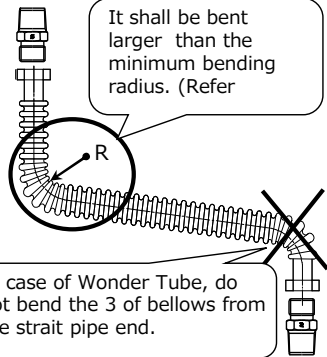
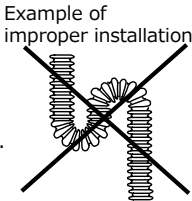


Table2 The minimum bending radius

Diameter	The minimum bending radius (mm)
1/2"	45
3/4"	60
1"	75
1 1/4"	96

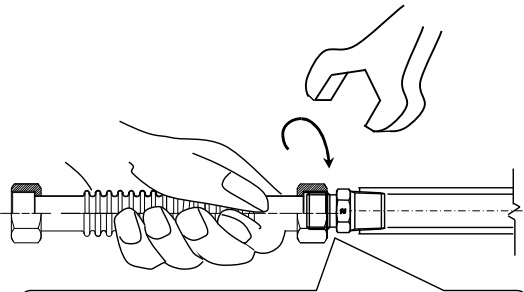
⚠ Please avoid a partial bend, and bend it in predetermined form not to add excessive power such as pulling, compression, twisting and kinking.

- ② Please confirm the gasket is fitted and set the nut in the piping side screw. The nut shall be tightened by hand.
- ③ The other side shall be tightened similarly.



3. Tightening of the nuts

① Hold the tube by hand not to move and tighten the nut by hand. After that, use a spanner and turn it approx. 1/4~1/3 rotation not to twist the tube.

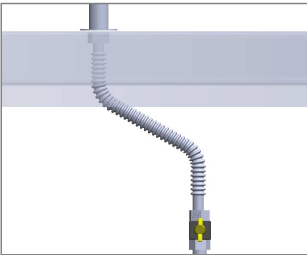


When you use a torque wrench, please tighten with the standard torque value of Table3.

Table3 Standard Torque

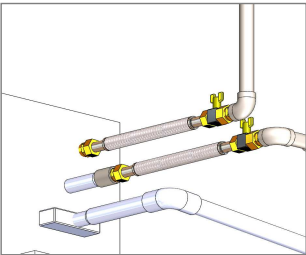
Diameter	Torque N · m (kgf · cm)
1/2"	19.6 (200)
3/4"	24.5 (250)
1"	29.4 (300)
1 1/4"	34.3 (350)

Completion



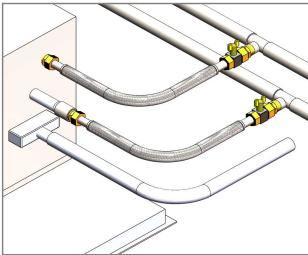
Wonder tube

Example of sink water pipe installation



Wonder braid
Fan coil unit

Example of 1 Straight line installation



Wonder braid
Fan coil unit

Example of 2 90-degree bending installation

NOTES

- Where the water hammer generate in the piping system, the flexible joint might be damaged. Please do appropriate impact prevention measures.
 - Please 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. (Inside diameter base)
 - 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.
 - If the product length is long and there is a possibility that the flexible tube may sag, review the length and mounting shape, or take measures to prevent sagging such as suspension support.
- ※ Guideline for suspension support installation
- When the product length exceeds 600 mm for straight line installation.
- When the product length exceeds 350 mm for bending installation.