TOMBO® No.9003-RPL

NAFLON™ RPL Tubing

In addition to the features of our NAFLON PTFE Tubing, NAFLON RPL Tubing has a spiral-shaped groove. This provides excellent flexibility, a small bending radius, low friction, and non-adhesivity. It also allows minimum loss of fluid from pressure and minimum attachment of fluid on the inner walls.

Features

- Excellent flexibility

Specifications

- Material: PTFE
- Maximum service temperature: 200°C
- Maximum usage pressure: Please refer to page 22.

Standard sizes/properties

- Standard inside diameter tubing (I)

Nomina diameter	Inside diameter of ends (mm)	Outside diameter of spiral part (mm)	Destructive pressure at ambient temp (MPa)	Minimum bending radius (mm)	Maximum length available (m)
6A	6	8.5	1.8	6.0	3.0
8A	8	10.5	1.4	7.0	3.0
10A	10	13.0	1.0	10.0	3.0
12A	12	16.0	0.9	15.0	3.0
15A (1)	16	17.5	0.8	25.0	3.0
1/4B	6.4	8.5	1.8	6.0	3.0
3/8B	9.5	13.0	1.0	10.0	3.0
1/2B	12.7	16.0	0.9	15.0	3.0

Measured by NICHIAS Corporation

- Standard outside diameter tubing (O)

Nomina diameter	Inside diameter of ends (mm)	Outside diameter of spiral part (mm)	Destructive pressure at ambient temp (MPa)	Minimum bending radius (mm)	Maximum length available (m)
6A	6	8.5	1.8	6.0	3.0
8A	8	9.5	1.6	7.0	3.0
10A	10	12.0	1.3	9.0	3.0
12A	12	14.5	1.0	10.0	3.0
1/4B	6.4	8.5	1.8	6.0	3.0
3/8B	9.5	12.0	1.3	9.0	3.0
1/2B	12.7	14.5	1.0	10.0	3.0

Measured by NICHIAS Corporation

Notes: (1) Edge shape type A is the standard for 15A.

※ The above dimensions are standard values. Please contact us separately about lengths greater than 3m.

※ The values given above are intended as representative values, not standard values.

※ Please consult us if you want to use them in applications involving repeated expansion or contraction and flexing.

Types

End sizes come in two types, an inner-diameter standard (I), and an outer-diameter standard (O), according to the application.

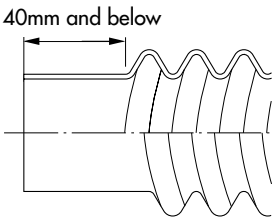
- Inner diameter standard tubing (I)

These tubing can be connected with pipes inside the tubing. These tubing can be connected with glass, metal and resin pipes

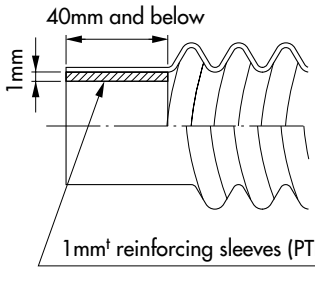
- Outer diameter standard tubing (I)

There tubing are suitable when using tubing joints. As for the end shapes, three types of structures are available according to the application. Please use Types B or C when using fluoropolymer tubing joints.

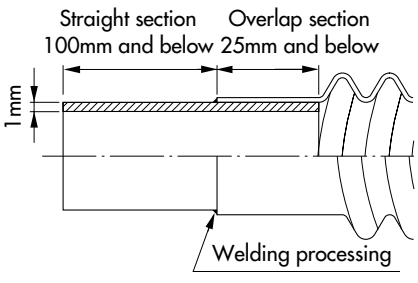
A Type
Straight at both ends



B Type
Reinforcing sleeves at both ends



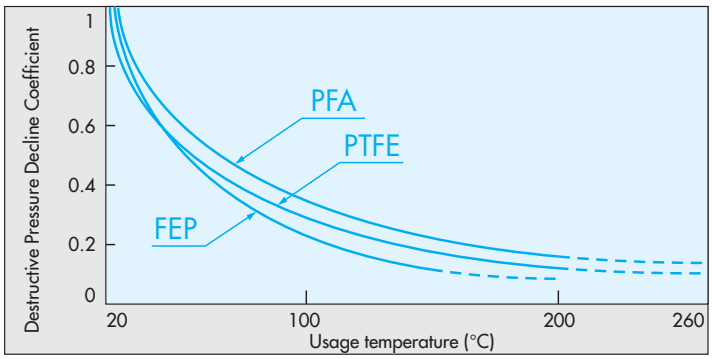
C Type
Straight welded at both ends



Maxmum Usage Pressure

Destructive Pressure Decline Coefficient

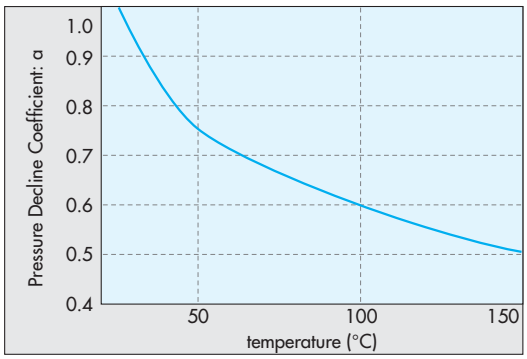
NAFLON PFA/FEP/PTFE Tubing



Measured by NICHIAS Corporationn

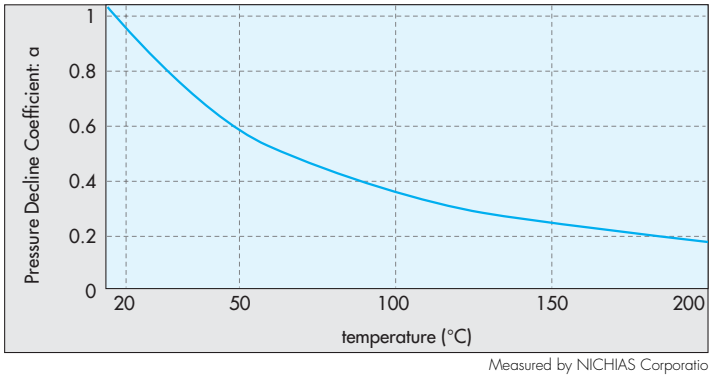
※The values given above are intended as representative values, not standard values.

NAFLON DPL Tubing



Measured by NICHIAS Corporation

ナフロンRPLチューブ



Measured by NICHIAS Corporatio

Please only use our tubing at pressures below PU.T as determined by the following formula:

$$P_{U.T} = S \times a \times P_{R.T}$$

- $P_{R.T}$: Tubing room temperature destructive pressure
- a: Destructive pressure decline coefficient
  ※The destructive pressure decline coefficient by material can be obtained from the table to the right.
- S: Safety factor (1/3–1/5)
  ※A safety factor of 1/3–1/5 is obtained according to the fluid types (gas or liquid), danger level and the existence of impact pressure levels.
- $P_{U.T}$: Maximum usage pressure at a given temperature.