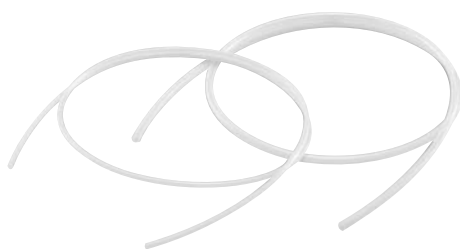


Soft Fluoropolymer Tubing Inch Size Series *TID*



Flexibility: Improved by approx. 20%

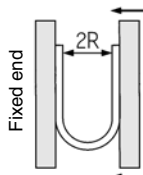
* SMC comparison (Fluoropolymer tubing, Series TL/TIL)

Applications: Food, semi-conductor, medical, automobile and machine tools fields

Compatible with the Food Sanitation Law

- Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.
- Compatible with the §177-1550 dissolution test approved by FDA (Food and Drug Administration).

How to measure the minimum bending radius



Bend the tube into the U-form at a temperature of 20°C. Fix one end and close loop gradually. Measure 2R when the deformed ratio of the tube diameter at bending reaches 5%.

Model/Specifications

Size		Inch size				
Model		TID01	TID05	TID07	TID11	TID13
Tubing O.D.	inch	1/8"	3/16"	1/4"	3/8"	1/2"
	mm	3.18	4.75	6.35	9.53	12.7
Tubing I.D.	inch	0.086"	0.124" (1/8")	0.156" (5/32")	0.25" (1/4")	0.374" (3/8")
	mm	2.18	3.15	3.95	6.33	9.5
Roll	8 m	●	●	●	●	●
	16 m	●	●	●	●	●
Color		Translucent (material color)				
Fluid ^{Note 1)}		Air, Water, Inert gas				
Applicable fittings ^{Note 2)}		Fluoropolymer fitting LQ1 series				
Max. operating pressure (MPa)	20°C	1.4	1.4	1.6	1.4	0.9
	100°C	0.7	0.7	0.9	0.7	0.5
	200°C	0.35	0.35	0.45	0.35	0.25
	260°C	0.2	0.2	0.23	0.2	0.15
Min. bending radius (mm) ^{Note 3)}	Recommended radius	15	20	25	40	75
	Refraction value	9	10	15	23	42
Max. operating temperature (fixed usage)		260°C				
Material		Modified PTFE (Polytetrafluoroethylene resin)				

Note 1) When using a liquid fluid, the surge pressure must be under the maximum operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubes. Furthermore, abnormal temperature rise caused by adiabatic compression may result in the tube bursting.

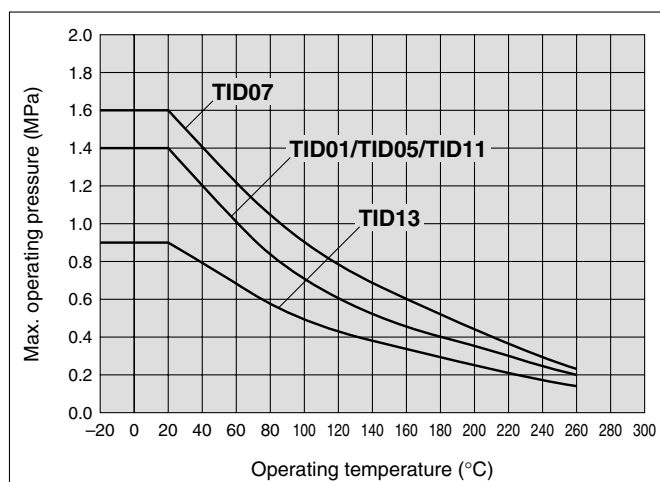
Note 2) Do not use this product in a matter in which the modified PTFE tube is not fixed.

Observe the lesser value of the maximum operating pressure between the tube and fitting. A material change over a long duration or due to high-temperature may cause leakage. Perform periodic maintenance and replace with a new product immediately when abnormalities are detected. (Refer to Maintenance in the Series TD/TID Precautions on page 396.)

Note 3) The minimum bending radius is the representative value measured as shown in the left figure.

- Use a tube above the recommended minimum bending radius.
- The tube may be bent if used under the recommended minimum bending radius. Therefore, refer to the refraction value and make sure that the tube is not bent or flattened.
- Please note that the refraction value is not warranted because of the value when 2R is measured by the method in the left figure if the tube is bent or flattened, etc.

Maximum Operating Pressure



How to Order

Inch size

TID01 - 8

Tubing model

Length per roll

Symbol	Length
8	25 ft (8 m) roll
16	50 ft (16 m) roll

Fluorine ion elution ^{Note 4)}

(μg/g)

Kind	Fluorine ion
Amount of elution	0.7

Cut the fluoropolymer tube into 15 g and clean it with pure water. After letting the 15 mL of 25% methyl alcohol elute for 24 hours at the room temperature, dilute the elute with ultrapure water. In accordance with the dissolution method, carry out the quantitative study of fluorine ions.

Metal ion elution ^{Note 4)}

(ng/cm²)

Kind	Al	Fe	Ni	Na	Ca
Amount of elution	0.1 or less	0.1 or less	0.1 or less	0.1	0.1 or less

Clean the inside of fluoropolymer tube with ultrapure water. Weight out about 20 g of ultrapure hydrofluoric acid (48%) and pull in the tube, and then cover both sides of the tube for a week at the room temperature. Dilute the elute with ultrapure water. In accordance with the dissolution method, carry out the quantitative study of Al, Fe, Ni, Na and Ca.

Note 4) The values in the table are not warranted, but the measured values.