

Soft Fluoropolymer Tubing

Flexibility: Approx. 20% improved

* SMC comparison (with fluoropolymer tubing TL/TIL series)

Applications

- Food • Semiconductor
- Life Science • Automobile
- Machine Tool



Conforms to Food Sanitation Law

- Passed Japan's Food Sanitation Law test in 1959.
- Passed the United States FDA (Food and Drug Administration) elution test §177-1550.

Material
**Denatured
PTFE**

Operating temperature^{Note)}

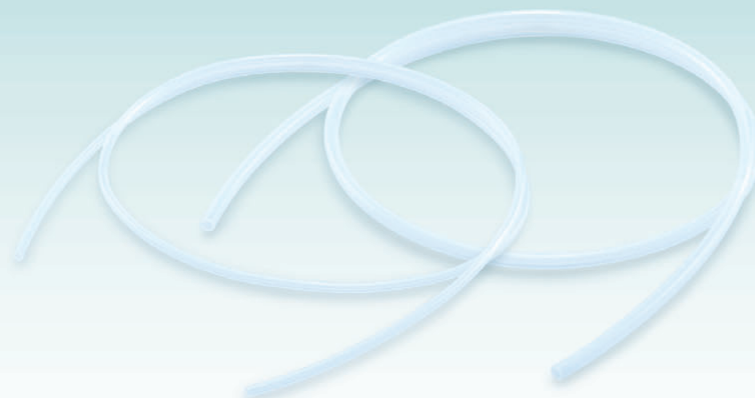
Max. 260°C

Note) Varies depending on the operating pressure.
See the maximum operating pressure graph on the back sheet.

Available in **10** sizes

Metric size: ø4 to ø12

Inch size: 1/8" to 1/2" (ø 3.18 to ø12.7)





Model/Specifications

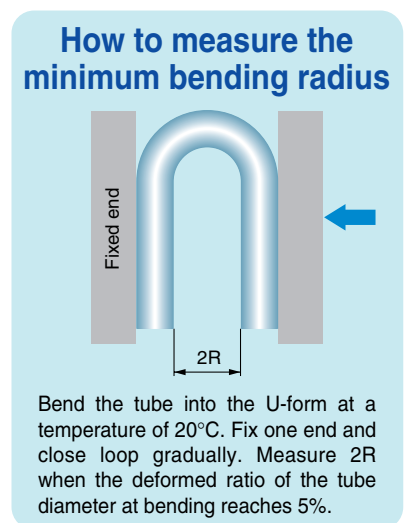
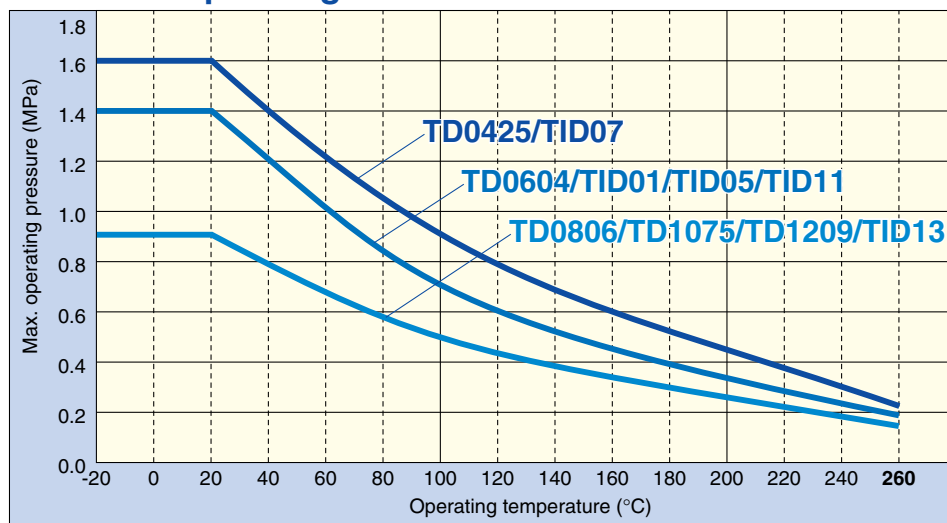
Size		Metric size					Inch size				
Model		TD0425	TD0604	TD0806	TD1075	TD1209	TID01	TID05	TID07	TID11	TID13
Tubing O.D.	inch	—	—	—	—	—	1/8"	3/16"	1/4"	3/8"	1/2"
	mm	4	6	8	10	12	3.18	4.75	6.35	9.53	12.7
Tubing I.D.	inch	—	—	—	—	—	0.086"	0.124"(1/8")	0.156"(5/32")	0.25"(1/4")	0.374"(3/8")
	mm	2.5	4	6	7.5	9	2.18	3.15	3.95	6.33	9.5
Roll	8 m	—	—	—	—	—	●	●	●	●	●
	10 m	●	●	●	●	●	—	—	—	—	—
	16 m	—	—	—	—	—	●	●	●	●	●
	20 m	●	●	●	●	●	—	—	—	—	—
Fluid ^{Note 1)}		Air, Water, Inert gas									
Applicable fittings ^{Note 2)}		Insert fitting KF series Stainless steel 316 insert fitting KFG series Miniature fitting M, MS series (Hose nipple type) Fluoropolymer fitting LQ2 series					Fluoropolymer fitting LQ2 series				
Max. operating pressure (MPa)	20°C	1.6	1.4	0.9	0.9	0.9	1.4	1.4	1.6	1.4	0.9
	100°C	0.9	0.7	0.5	0.5	0.5	0.7	0.7	0.9	0.7	0.5
	200°C	0.45	0.35	0.25	0.25	0.25	0.35	0.35	0.45	0.35	0.25
	260°C	0.23	0.2	0.15	0.15	0.15	0.2	0.2	0.23	0.2	0.15
^{Note 3)} Min. bending radius (mm)	Recommended radius	15	25	45	55	75	15	20	25	40	75
	Refraction value	8	16	31	35	41	9	10	15	23	42
Max. operating temperature (fixed usage)		260°C									
Material		Denatured 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 manner in which the 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. For other precautions, see the Fittings & Tubing precautions in the "Best Pneumatics 2004" Vol. 15 catalog. When using the fluoropolymer fittings, please refer to the precautions in the previous catalog CAT. ES70-17.

Note 3) The minimum bending radius is the representative value measured as shown below. • 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 shown below if the tube is bent or flattened, etc.

Maximum Operating Pressure



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