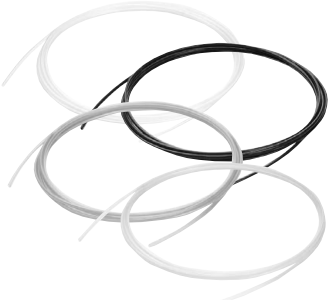


FEP Tubing (Fluoropolymer)

Inch Size

TIH Series



Operating Temperature: Max. 200°C

It varies depending on the operating pressure. Refer to the graph for the maximum operating pressure.

Compatible with the Food Sanitation Law

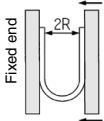
• Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.

FDA (Food and Drug Administration) Compliant

• Complies with FDA (Food and Drug Administration) § 177.1550 dissolution test.

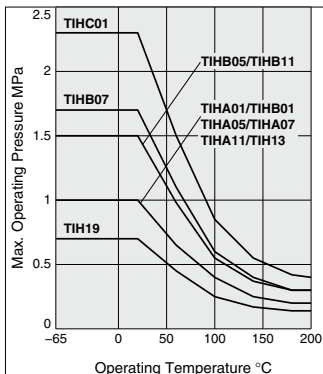
Flame Resistant (Equivalent to UL-94 Standard V-0)

How to measure the minimum bending radius.



At a temperature of 20°C, bend the tubing into a U shape. Fix one end and gradually move the other end closer. Measure 2R at the point where the outside diameter's rate of change is 5%.

Max. Operating Pressure



Note) The maximum operating pressure varies depending on the I.D. bore size even if the O.D. is the same.

Series

●-16 m (50 ft) roll □-33 m (100 ft) roll

Model		Inch size										
		TIHA01	TIHB01	TIHC01	TIHA05	TIHB05	TIHA07	TIHB07	TIHA11	TIHB11	TIH13	TIH19
Tubing O.D.	inch	1/8"			3/16"		1/4"		3/8"		1/2"	3/4"
	mm	3.18			4.75		6.35		9.53		12.7	19.05
Tubing I.D.	inch	0.093"	0.086"	0.065"	0.137"	0.124" (1/8")	0.18"	0.156" (5/32")	0.275" (1/4")	0.25" (1/4")	0.374" (3/8")	0.624" (5/8")
	mm	2.36	2.18	1.65	3.48	3.15	4.57	3.95	6.99	6.33	9.5	15.85

Color	Symbol	TIHA01	TIHB01	TIHC01	TIHA05	TIHB05	TIHA07	TIHB07	TIHA11	TIHB11	TIH13	TIH19
Translucent	N	●	●	●	●	●	●	●	●	●	●	●
Red	R	●	●	●	●	●	●	●	●	●	●	●
Blue	BU	●	●	●	●	●	●	●	●	●	●	●
Black	B	●	●	●	●	●	●	●	●	●	●	●

Specifications

Fluid	Air, Water ^{Note 1)} , Inert gas											
Applicable fittings ^{Note 2)}	One-touch fittings, Insert fittings ^{Note 3)} , Fluoropolymer fittings: LQ series ^{Note 4)}											
Max. operating pressure (MPa)	20°C or less	1	2.3	1	1.5	1	1.7	1	1.5	1	0.7	
	100°C	0.4	0.85	0.4	0.55	0.4	0.6	0.4	0.55	0.4	0.25	
	200°C	0.2	0.4	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.1	
Refer to the max. operating pressure curve.												
Min. bending radius (mm) ^{Note 5)}	Recommended radius	25	20	10	35	25	55	35	85	60	95	220
	Tube close bend radius	20	12	7	25	20	35	20	55	30	60	160
Operating temperature (fixed usage)	Air, Inert gas: -65 to 200°C Water: 0 to 100°C (No freezing)											
Material	FEP (Fluorinated Ethylene Propylene Resin)											

Note 1) When using a fluid in liquid form, the surge pressure must not exceed the maximum operating pressure. A surge pressure higher than the maximum operating pressure can cause breakage of the fittings, or rupture of the tubing. Furthermore, an abnormal temperature increase due to adiabatic compression can also result in ruptured tubing.

Note 2) Do not use in locations where the FEP tubing will move.

Be sure to operate under the maximum operating pressure conditions using the lower maximum operating specification of either the tubing or fittings.

After long term use or under high temperatures, some fittings leakage may occur due to material deterioration with age. Perform periodic inspections, and if any leakage is detected, replace with a new product immediately. When the insert and miniature fittings are used over extended periods of time, it may cause leakage due to the material deterioration of age. In such a case, give an additional tightening to the tube connection part. If leakage still occurs after giving an additional tightening, replace the fitting with a new product. For other precautions, refer to "Fittings & Tubing Precautions". When using the fluoropolymer fittings, refer to the precautions on pages 445 and 446. Select the size after confirming O.D. and I.D.

Note 3) As leakage may occur with the KFG2 series if the fluid is repeatedly heated and cooled or if there is a sudden change in the ambient temperature, we recommend considering the TID series.

Note 4) TIHA01, TIHC01, TIHA05, TIHA07 and TIHA11 are not available because of different internal diameters.

Note 5) 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 tubing may be bent if used under the recommended minimum bending radius. Therefore, refer to the tube close bend radius and make sure that the tubing is not bent or flattened.
- Please note that the tube close bend radius is not warranted because of the value when 2R is measured by the method in the left figure if the tubing is bent or flattened, etc.

How to Order

Inch size

TIHA01 N - 16

Indication of tubing model • Color indication • Length per roll

Symbol	Color	Symbol	Roll size
N	Translucent (Material color)	16	16 m (50 ft) roll
R	Red (Translucent)	33 ^{Note)}	33 m (100 ft) roll
BU	Blue (Translucent)		
B	Black (Opaque)		

Note) 33 m (100 ft) roll is available with translucent (color indication: N) only.