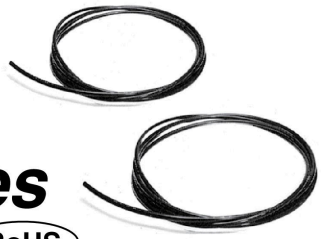
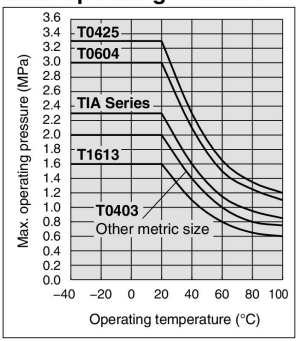
Nylon Tubing
T/TIA Series



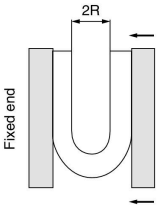
RoHS

For general pneumatic tubing, Nylon tubing

Max. Operating Pressure



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 10%.

Model

● — 20 m roll □ — 100 m roll (T1613 is reel.)

	Tubing size												
	Metric size (T series)								Inch size (TIA series)				
Model	T0425	T0403	T0604	T0645	T0806	T1075	T1209	T1613	TIA01	TIA05	TIA07	TIA11	TIA13
Tubing O.D. (mm)	4	4	6	6	8	10	12	16	3.18	4.76	6.35	9.53	12.7
Tubing I.D. (mm)	2.5	3	4	4.5	6	7.5	9	13	2.18	3.48	4.57	6.99	9.56
Black (B)	●	●	●	●	●	●	●	●	●	●	●	●	●
White (W)	●	●	●	●	●	●	●	●	●	●	●	●	●
Red (R)	●		●		●	●	●						
Blue (BU)	●		●		●	●	●						
Yellow (Y)	●		●		●	●	●						
Green (G)	●		●		●	●	●						
Nominal size (inch)		5/32"			5/16"				1/8"	3/16"	1/4"	3/8"	1/2"
Nominal size (mm)									3.2				

Specifications

Fluid		Air/Water												
Max. operating pressure Note 1) (MPa)	20°C or less	3.3	2.0	3.0	2.0	2.0	2.0	2.0	1.6	2.3	2.3	2.3	2.3	2.3
	40°C	2.3	1.4	2.1	1.4	1.4	1.4	1.4	1.1	1.6	1.6	1.6	1.6	1.6
	60°C	1.65	1.0	1.5	1.0	1.0	1.0	1.0	0.8	1.15	1.15	1.15	1.15	1.15
	80°C	1.35	0.8	1.25	0.8	0.8	0.8	0.8	0.65	0.95	0.95	0.95	0.95	0.95
	100°C	1.2	0.75	1.1	0.75	0.75	0.75	0.75	0.6	0.85	0.85	0.85	0.85	0.85
Applicable fittings Note 1) Note 2)		One-touch fittings, Insert fittings, Self-align fittings, Miniature fittings												
Min. bending radius (mm) Note 3)	Min. bending radius	13	20	24	30	40	50	60	100	15	25	30	50	65
	Bending value (Reference)	10	15	18	23	30	40	45	75	12	20	23	40	48
Operating temperature Note 1)		–40 to +100°C, Water: 0 to +70°C (No freezing)												
Material		Nylon 12												

Note 1) Be sure to operate under the maximum operating pressure conditions using the lower maximum operating specification of either the tubing or fittings.
Note 2) Mount an inner sleeve when using metal One-touch fittings in high-temperature environments of 60°C or more. Use self-align fittings at a temperature of 60°C or less.
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 tubing may be bent if used under the recommended minimum bending radius. Therefore, refer to the refraction value and make sure that the tubing 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 tubing is bent or flattened, etc.

How to Order

T0425 B – 20

Tubing model

Color

Symbol	Color
B	Black (Opaque)
W	White (Material color)
R	Red (Opaque)
BU	Blue (Opaque)
Y	Yellow (Opaque)
G	Green (Opaque)

Length per roll

Symbol	Length
20	20 m roll
100	100 m roll (Black and white only)

⚠ Precautions

Be sure to read this before handling the products. Refer to back page 50 for Safety Instructions and pages 13 to 17 for Fittings and Tubing Precautions.

⚠ Caution

1. Applicable for general industrial water. Please consult with SMC if using other kinds of fluid. Surge pressure must be under the max. operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubes.
2. Please exercise caution when using this item in a clean room. There is a possibility of plasticizer and other materials precipitating on the tube surface and detracting from the cleanliness level of the room.