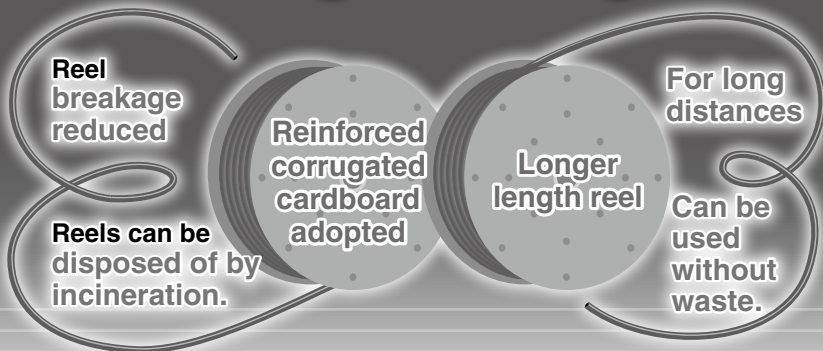


Reinforced corrugated cardboard specification

- Nylon tubing
- FEP tubing

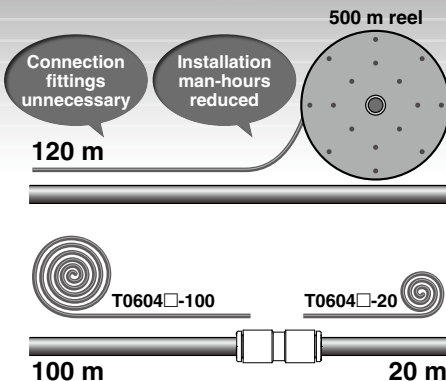
Longer Length Reel



Length per roll

500 m

250 m



Tubing

TU
T/TH
TK-6

Material

Nylon tubing/Series T
FEP tubing (Fluoropolymer)/Series TH

Compatible with the Food Sanitation Law (Series TH)

- 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.
- Complies with FDA (Food and Drug Administration) §177-1550 dissolution test.

Color

Black/White (Nylon)
Translucent (FEP tubing)

O.D.
x
I.D.

6 x 4 (mm)

• Maximum operating temperature

	Air, Inert gas (°C)	Water (°C)
Nylon tubing	100	70
FEP tubing (Fluoropolymer)	200	100



T0604/TH0604-X64



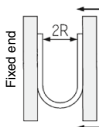
INDEX

Nylon Tubing Series T



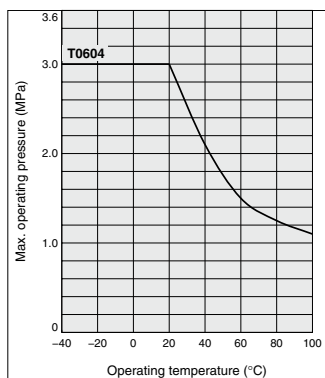
For general pneumatic
tubing
Nylon tubing

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%.

Max. Operating Pressure



Series

Model	T0604
Tubing O.D. (mm)	6
Tubing I.D. (mm)	4
Black (B)	●
White (W)	●
250 m reel	●
500 m reel	●

Specifications

Fluid		Air, Water
Max. operating pressure (MPa) <small>Note 1</small>	20°C or less	3.0
	40°C	2.1
	60°C	1.5
	80°C	1.25
	100°C	1.1
Applicable fittings <small>Note 1 Note 2</small>		One-touch fittings, Insert fittings, Self-align fittings, Miniature fittings
Min. bending radius (mm) <small>Note 3</small>	Min. bending radius	24
	Bending value (Reference)	18
Operating temperature <small>Note 1</small>		-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 and operating temperature conditions using the lower specifications 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 minimum bending radius.
- The tubing may be bent if used under the minimum bending radius. Therefore, refer to the bending value and make sure that the tubing is not bent or flattened.
- Please note that the bending value is not warranted because of the representative value when 2R is measured by the method in the left figure if the tubing is bent or flattened, etc.

How to Order

T0604 B - 500 - X64

Indication of tubing model

Color indication

Symbol	Color
B	Black (Translucent)
W	White (Material color)

Length per roll

Symbol	T0604
250	●
500	●

⚠ Precautions

Be sure to read before handling. Refer to page 1154 for Safety Instructions. For Fittings and Tubing Precautions, refer to "Handling Precautions for SMC Products" and the Operation Manual on SMC website, <http://www.smworld.com>

⚠ 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.

FEP Tubing (Fluoropolymer)

Metric Size

Series TH



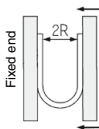
Operating Temperature: Max. 200°C

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

Compatible with the Food Sanitation Law

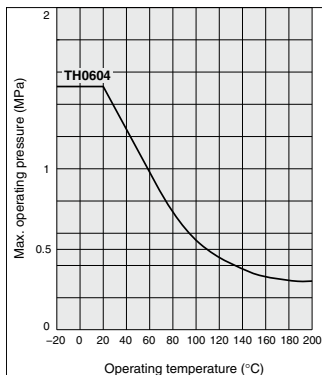
- Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.
- Complies with FDA (Food and Drug Administration) §177-1550 dissolution test.

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 dependent on the I.D. bore size even if the O.D. is the same.

Series

Model	TH0604
Tubing O.D. (mm)	6
Tubing I.D. (mm)	4
Translucent (N)	<input type="checkbox"/>
250 m reel	<input type="checkbox"/>
500 m reel	<input type="checkbox"/>

Specifications

Fluid	Air, Water ^{Note 1)} , Inert gas	
Applicable fittings ^{Note 2)}	One-touch fittings, Insert fittings Fluoropolymer fittings: Series LQ Miniature fittings: Series M, MS (Hose nipple type)	
Max. operating pressure (MPa)	20°C	1.5
	100°C	0.55
	200°C	0.3
Refer to below "Max. Operating Pressure."		
Min. bending radius (mm) ^{Note 3)}	Min. bending radius	35
	Bending value (Reference)	20
Operating temperature	Air, Inert gas: -20 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 and operating temperature conditions using the lower specifications 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 for fluoropolymer fittings in Best Pneumatics No. 6. Select the size after confirming O.D. and I.D.

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 bending value and make sure that the tubing is not bent or flattened.

Please note that the bending 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

TH0604 N - 500 - X64

Indication of tubing model •

Color indication •

Symbol	Color
N	Translucent

Length per roll •

Symbol	TH0604
250	<input type="checkbox"/>
500	<input checked="" type="checkbox"/>

Tubing

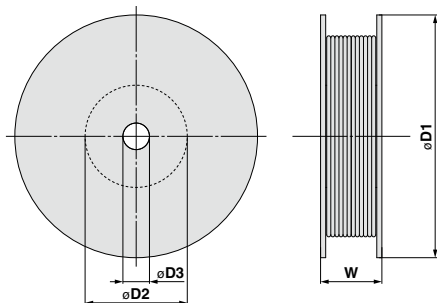
TU

T/TH

TK-6

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Dimensions



Dimensions

Model	oD1	oD2	oD3	W	Weight (kg)
T0604□-250-X64	475	200	52	120	5.1
T0604□-500-X64	475	200	52	200	9.4
TH0604N-250-X64	475	200	52	120	9.4
TH0604N-500-X64	475	200	52	220	18.5

Related Products

One-touch Fittings KQ2

Body type: Total 51 models



	Applicable tubing O.D.	Connection thread
Metric	ø2, ø3.2, ø4, ø6, ø8 ø10, ø12, ø16	M3 x 0.5, M5 x 0.8, M6 x 1.0 R, Rc1/8, 1/4, 3/8, 1/2
Inch	ø1/8", ø5/32", ø3/16", ø1/4" ø5/16", ø3/8", ø1/2"	10-32UNF NPT1/16, 1/8, 1/4, 3/8, 1/2
	ø1/8", ø3/16", ø1/4" ø5/16", ø3/8", ø1/2"	M5 x 0.8 R, Rc1/8, 1/4, 3/8, 1/2

Metal One-touch Fittings KQB2

Fluid temperature: -5 to 150°C



	Applicable tubing O.D.	Connection thread
Metric	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16	M5 x 0.8 R, Rc, G1/8, 1/4, 3/8, 1/2
Inch	ø1/8", ø5/32", ø1/4", ø5/16" ø3/8", ø1/2"	10-32UNF NPT1/8, 1/4, 3/8, 1/2

Stainless Steel 316 One-touch Fittings KQG2

Fluid temperature: -5 to 150°C

Compatible with the Food Sanitation Law



	Applicable tubing O.D.	Connection thread
Metric	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16	M5 x 0.8 R, Rc1/8, 1/4, 3/8, 1/2
Inch	ø1/8", ø5/32", ø1/4", ø5/16" ø3/8", ø1/2"	10-32UNF NPT1/8, 1/4, 3/8, 1/2

Stainless Steel 316 Insert Fittings KFG2

Fluid temperature: -65 to 260°C (Swivel elbow: -5 to 150°C)

Compatible with the Food Sanitation Law



	Applicable tubing O.D.	Connection thread
Metric	ø4, ø6, ø8, ø10, ø12, ø16	R, Rc1/8, 1/4, 3/8, 1/2
Inch	ø1/8", ø5/32", ø1/4", ø5/16" ø3/8", ø1/2"	NPT1/8, 1/4, 3/8, 1/2

Longer Length Reel-X3

Made to Order

Suffix "-X3" to the end of part number. Ex.)T0425G-500-X3

(Please contact SMC for specifications in detail, dimensions, delivery and specifications other than those mentioned above.)

Part no.	Length	Model	T0425 *	T0604 *	T0806 *	T1075 *	T1209 *	TIA01 *	TIA05 *	TIA07 *	TIA11 *	TIA13 *	Color
X3	100 m reel		●	●	●	●	●	●	●	●	●	●	Black, White, Red, Blue, Yellow, Green
	150 m reel					●							
	200 m reel				●								
	500 m reel		●	●									