Reinforced corrugated cardboard specification



Longer Length Reel

Reel breakage reduced

Reels can be disposed of by incineration.

Reinforced corrugated cardboard adopted

Longer length reel

For long distances

Can be used without waste.

500 m reel

500 m 250 m

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.

Black/White (Nylon)
Translucent (FEP tubing)

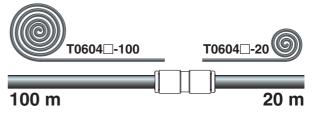


6 x 4 [mm]

Maximum operating temperature

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

Connection fittings unnecessary Installation man-hours reduced









Nylon Tubing Series T





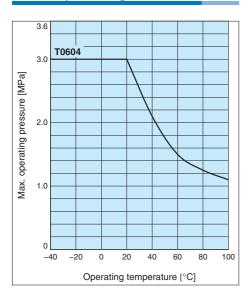
For general pneumatic tubing Nylon tubing

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

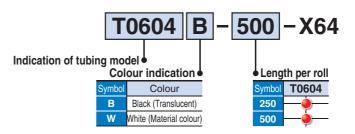
001100	
Model	T0604
Tubing O.D. [mm]	6
Tubing I.D. [mm]	4
Black (B)	
Didok (B)	<u> </u>
White (W)	
write (w)	<u> </u>
250 m reel	
250 111 1661	war a same a
E00 m rool	
500 m reel	

Specifications

Fluid		Air, Water					
	20°C or less	3.0					
Note 1)	40°C	2.1					
Max. operating Note 1) pressure [MPa]	60°C	1.5					
pressure [mi a]	80°C	1.25					
	100°C	1.1					
Applicable fitting	s Note 1) Note 2)	One-touch fittings, Insert fittings, Self-align fittings, Miniature fittings					
Min. bending radius	Min. bending radius	24					
[mm] Note 3)	Bending value (Reference)	18					
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 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



Precautions

Be sure to read before handling. For Safety Instructions and Fittings I and Tubing Precautions, refer to "Handling Precautions for SMC I Products" on SMC website, http://www.smcworld.com

- 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.
- 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

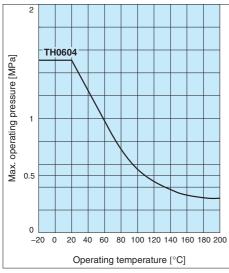
- \cdot Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.
- · Complies with FDA (Food and Drug Administration) §177-1550 dissolution test.

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

301103	
Model	TH0604
Tubing O.D. [mm]	6
Tubing I.D. [mm]	4
Translucent (N)	<u> </u>
250 m reel	<u> </u>
500 m reel	<u> </u>

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)				
	20°C	1.5				
Max. operating	100°C	0.55				
pressure [MPa]	200°C	0.3				
		Refer to below "Max. Operating Pressure."				
Min. bending radius	Min. bending radius	35				
[mm] Note 3)	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.

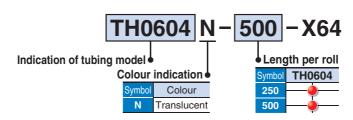
When the insert and miniature fittings are used over extended periods of time, it may cause leakage due to the material deterioration of age. In such a case, give an additional tightening to the tube connection part. If leakage still occurs after giving an additional tightening, replace the fitting with a new product.

For other precautions, refer to "Fittings & Tubing Precautions." When using the fluoropolymer fittings, refer to the precautions for fluoropolymer fittings 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.

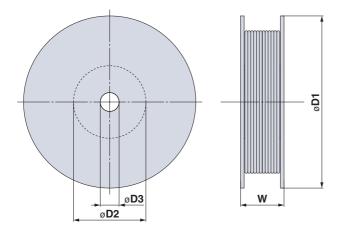
- · Use a tube above the recommended minimum bending radius.
- · The tubing may be bent if used under the recommended minimum bending radius. Therefore, refer to the bending value and make sure that the tubing is not bent or flattened.
- Please note that the bending value is not warranted because of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

How to Order





Dimensions



Dimensions

Model	ø D1	ø D2	ø D 3	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

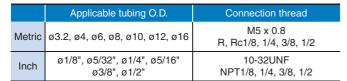
Fluid temperature: –5 to 150°C



	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



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 *	Colour
Vo.	100 m reel							_				
	150 m reel											Black, White,
X3	200 m reel											Red, Blue, Yellow, Green
	500 m reel		•									

SMC Corporation

SMC CORPORATION

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