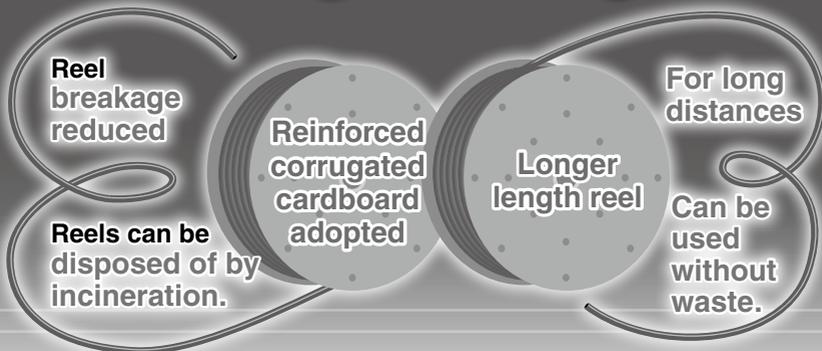


Reinforced corrugated cardboard specification

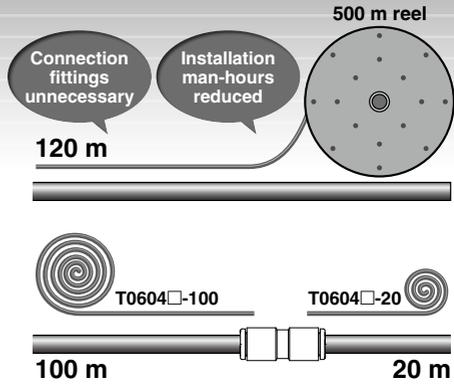
- Nylon tubing
- FEP tubing

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



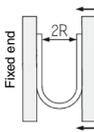
INDEX

Nylon Tubing Series T



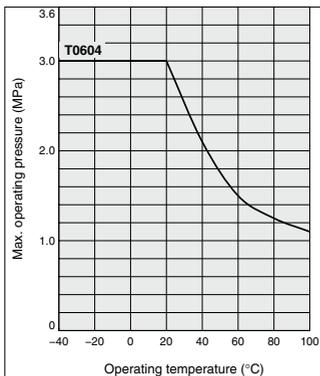
For general pneumatic
tubing
Nylon tubing

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) | 20°C or less | 3.0 |
| | 40°C | 2.1 |
| | 60°C | 1.5 |
| | 80°C | 1.25 |
| | 100°C | 1.1 |
| Applicable fittings | | One-touch fittings, Insert fittings, Self-align fittings, Miniature fittings |
| Min. bending radius (mm) | Min. bending radius | 24 |
| | Bending value (Reference) | 18 |
| Operating temperature | | -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

RoHS



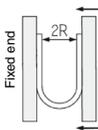
Operating Temperature: Max. 200°C

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

Compatible with the Food Sanitation Law

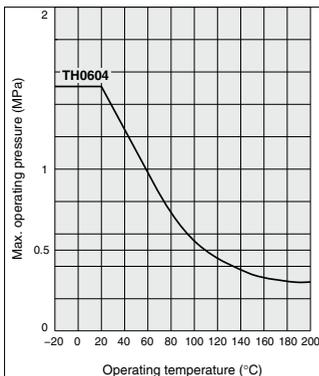
- Compatible with the test conforming to the Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.
- Complies with FDA (Food and Drug Administration) §177-1550 dissolution test.

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

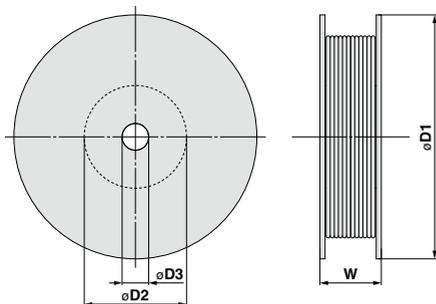
TU

T/TH

TK-6

INDEX

Dimensions



Dimensions

| Model | $\phi D1$ | $\phi D2$ | $\phi D3$ | 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 | $\phi 2, \phi 3.2, \phi 4, \phi 6, \phi 8, \phi 10, \phi 12, \phi 16$ | M3 x 0.5, M5 x 0.8, M6 x 1.0 R, Rc1/8, 1/4, 3/8, 1/2 |
| Inch | $\phi 1/8", \phi 5/32", \phi 3/16", \phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$ | 10-32UNF NPT1/16, 1/8, 1/4, 3/8, 1/2 |
| | $\phi 1/8", \phi 3/16", \phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$ | 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 | $\phi 3.2, \phi 4, \phi 6, \phi 8, \phi 10, \phi 12, \phi 16$ | M5 x 0.8 R, Rc, G1/8, 1/4, 3/8, 1/2 |
| Inch | $\phi 1/8", \phi 5/32", \phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$ | 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 | $\phi 3.2, \phi 4, \phi 6, \phi 8, \phi 10, \phi 12, \phi 16$ | M5 x 0.8 R, Rc1/8, 1/4, 3/8, 1/2 |
| Inch | $\phi 1/8", \phi 5/32", \phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$ | 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 | $\phi 4, \phi 6, \phi 8, \phi 10, \phi 12, \phi 16$ | R, Rc1/8, 1/4, 3/8, 1/2 |
| Inch | $\phi 1/8", \phi 5/32", \phi 1/4", \phi 5/16", \phi 3/8", \phi 1/2"$ | 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 | | ● | ● | | | | | | | | | |