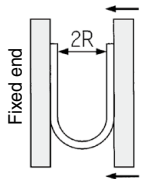


# Compatible with Food Sanitation Law Polyurethane Tubing



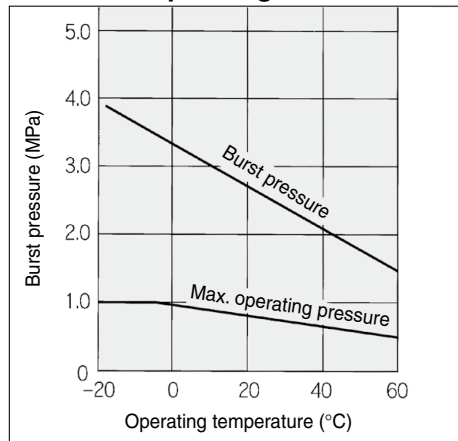
**Compatible with Food Sanitation Law**  
Compatible with the test conforming to Japan's Food Sanitation Law based on the 370th notice given by the Ministry of Health and Welfare in 1959.

- Color variations: Black, White, Blue, Clear
- Size variations (O.D./mm):  $\varnothing 4$ ,  $\varnothing 6$ ,  $\varnothing 8$ ,  $\varnothing 10$ ,  $\varnothing 12$
- Length per roll: 20 m



Bend the tube into a U shape at a temperature of 20°C. Fix one end and bend the loop gradually. Measure 2R when the tube breaks or is crushed.

### Burst Pressure Characteristics Curve and Operating Pressure



### Model

● - 20 m roll

Model	Tubing size (Metric size)				
	TU0425	TU0604	TU0805	TU1065	TU1208
O.D. (mm)	4	6	8	10	12
I.D. (mm)	2.5	4	5	6.5	8
Black (B)	●	●	●	●	●
White (W)	●	●	●	●	●
Blue (BU)	●	●	●	●	●
Clear (C)	●	●	●	●	●

### Specifications

Fluid	Air, Water
Max. operating pressure (at 20°C)	0.8 MPa
Burst pressure	Refer to the burst pressure characteristics curve.
Applicable fittings	One-touch fittings, Insert fittings, Miniature fittings
Min. bending radius (mm)	10    15    20    27    35
Operating temperature	-20 to +60°C, Water: 0 to 40°C (No freezing)
Material	Polyurethane

### ⚠ Precautions

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

### ⚠ Caution

1. Applicable for general industrial water. Please consult with SMC if using for the other kind of fluid. Also, the surge pressure must not exceed the maximum operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubes.
2. The value of the max. operating pressure is at a temperature of 20°C. Refer to the burst pressure characteristics curve for other temperatures. Furthermore, abnormal temperature rise caused by adiabatic compression may result in the tube bursting.
3. The value of the minimum bending radius is measured at the temperature of 20°C as shown in the figure above.

### How to Order

**TU0425 BU - 20 - X217**

● Tubing model

Model	O.D. x I.D. (mm)
TU0425	4 x 2.5
TU0604	6 x 4
TU0805	8 x 5
TU1065	10 x 6.5
TU1208	12 x 8

● Compatible with Food Sanitation Law

● 20 m roll

● Color

Symbol	Color
B	Black
W	White
BU	Blue
C	Clear

\* Note that the model number is not printed on the tube body.

# TU-X217



# Food-related laws and regulations compliant products

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

**Compatible with FDA (Food and Drug Administration)**  
 Compatible with the §177-1550 elution test approved by the United States FDA (Food and Drug Administration).

Series		Compatible with Food Sanitation Law	Compatible with FDA (Food and Drug Administration)
Tubing	TU-X217	●	—
	TL/TIL	●	●
	TLM/TILM	●	●
	TH/TH	●	●
	TD/TID	●	●
	TU-X214	—	●

## Tubing

### High Purity Fluoropolymer Tubing *TL/TIL*

Compatible with Food Sanitation Law    Compatible with FDA (Food and Drug Administration)

- Material: Super PFA
- Max. operating pressure: 1.0 MPa or less (at 20°C)\*
- Max. operating temperature: 260°C (This can vary according to operating pressure.)



\* This can vary according to size.

Tubing O.D.		Color
Metric size	Inch size	
ø4, ø6, ø8, ø10 ø12, ø19	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2", ø3/4", ø1"	Translucent

### Fluoropolymer Tubing (PFA) *TLM/TILM*

Compatible with Food Sanitation Law    Compatible with FDA (Food and Drug Administration)

- Material: PFA
- Max. operating pressure: 2.3 MPa or less (at 20°C)\*
- Max. operating temperature: 260°C (This can vary according to operating pressure.)



\* This can vary according to size.

Tubing O.D.		Color
Metric size	Inch size	
ø2, ø3, ø4, ø6, ø8, ø10 ø12, ø16, ø19, ø25	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2", ø3/4" ø1", ø1 1/4"	Translucent, Black, Blue, Red

### FEP Tubing (Fluoropolymer) *TH/TH*

Compatible with Food Sanitation Law    Compatible with FDA (Food and Drug Administration)

- Material: FEP
- Max. operating pressure: 2.3 MPa or less (at 20°C)\*
- Max. operating temperature: 200°C (This can vary according to operating pressure.)



\* This can vary according to size.

Tubing O.D.		Color
Metric size	Inch size	
ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2", ø3/4"	Translucent, Black, Red, Blue

### Soft Fluoropolymer Tubing *TD/TID*

Compatible with Food Sanitation Law    Compatible with FDA (Food and Drug Administration)

- Material: Modified PTFE
- Max. operating pressure: 1.6 MPa or less (at 20°C)\*
- Max. operating temperature: 260°C (This can vary according to operating pressure.)



\* This can vary according to size.

Tubing O.D.		Color
Metric size	Inch size	
ø4, ø6, ø8, ø10, ø12	ø1/8", ø3/16", ø1/4" ø3/8", ø1/2"	Translucent

### Polyurethane Tubing *TU-X214*

Compatible with FDA (Food and Drug Administration)

- Color variations: Blue, Clear, Black
  - Size variations: ø4, ø6, ø8, ø10, ø12
- \* Please contact SMC for details.  
 \* Note that the model number is not printed on the tube body.



Series		Compatible with Food Sanitation Law	Compatible with FDA (Food and Drug Administration)
Fittings	<b>KQG2</b>	●	—
	<b>KFG2</b>	●	—
	<b>KP</b>	●	—

## Fittings



### Stainless Steel 316 One-touch Fittings **KQG2**

Compatible with Food Sanitation Law

- Material: Metal parts/Stainless steel 316  
Seal parts/Special FKM
- Fluid temperature: -5 to 150°C
- Grease-free, Can be used with steam.



	Applicable tubing O.D.	Connection thread
Metric size	ø3.2, ø4, ø6, ø8, ø10, ø12, ø16	M5 R·Rc 1/8, 1/4, 3/8, 1/2
Inch size	ø1/8", ø5/32", ø1/4" ø5/16", ø3/8", ø1/2"	UNF10-32 NPT1/8, 1/4, 3/8, 1/2

### Stainless Steel 316 Insert Fittings **KFG2**

Compatible with Food Sanitation Law

- Material: Stainless steel 316,  
Rubber material is not used.  
(Except swivel elbow)
- Fluid temperature: -65 to 260°C  
(Swivel elbow: -5 to 150°C)
- Grease-free, Can be used with steam.



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

### Clean One-touch Fittings For Blowing **KP**

Compatible with Food Sanitation Law

- Liquid-contact areas are non-metallic
- Completely oil-free  
(Rubber parts are fluorine-coated.)
- Parts cleaning, assembly and double packaging in a clean room
- Can be used for vacuum (-100 kPa)




	Applicable tubing O.D.	Connection thread
	ø4, ø6, ø8, ø10, ø12	R 1/8, 1/4, 3/8, 1/2

#### **Warning**

**Avoid installing and using fittings and tubing inside a food zone.**

- **Not installable** Food zone : An environment where food which will be sold as merchandize, directly touches the fittings and tubing.
- **Installable** Splash zone : An environment where food which will not be sold as merchandize, directly touches the fittings and tubing.  
Non-food zone : An environment where there is no contact with food.

 **Safety Instructions** Be sure to read "Handling Precautions for SMC Products" (M-E03-3) before using.