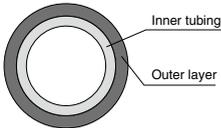


Flame Resistant (Equivalent to UL-94 Standard V-0) FR Double Layer Polyurethane Tubing

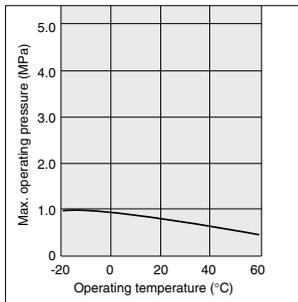
TRBU Series

RoHS



Sectional view of FR double layer tubing

Max. Operating Pressure



Model

● — 20 m roll □ — 100 m reel

Model	TRBU0604	TRBU0805	TRBU1065	TRBU1208
Inner tubing O.D. (mm)	6	8	10	12
Inner tubing I.D. (mm)	4	5	6.5	8
External layer thickness (mm)	1	1	1	1

External layer color	Note)	Color				
		TRBU0604	TRBU0805	TRBU1065	TRBU1208	
Black (B)	●	□	●	□	●	□
White (W)	●	□	●	□	●	□
Red (R)	●	□	●	□	●	□
Blue (BU)	●	□	●	□	●	□
Yellow (Y)	●	□	●	□	●	□
Green (G)	●	□	●	□	●	□

Minimum bending radius (mm)	TRBU0604	TRBU0805	TRBU1065	TRBU1208
	15	20	27	35

Specifications

Fluid	Air/Water	
Max. operating pressure (MPa)	20°C	0.8
	40°C	0.65
	60°C	0.5
Applicable fittings	FR one-touch fittings: KR-W2 series	
Ambient and fluid temperature	-20 to +60°C Water: 0 to 40°C (No freezing)	
Material	Internal tubing	Polyurethane
	Outer layer	Polyolefin (Equivalent to UL-94 standard V-0)

Note) The color of all inner tubing is black.

How to Order

TRBU1065 B - 100

Tubing model

Length per roll

Symbol	Length
20	20 m roll
100	100 m reel

Color

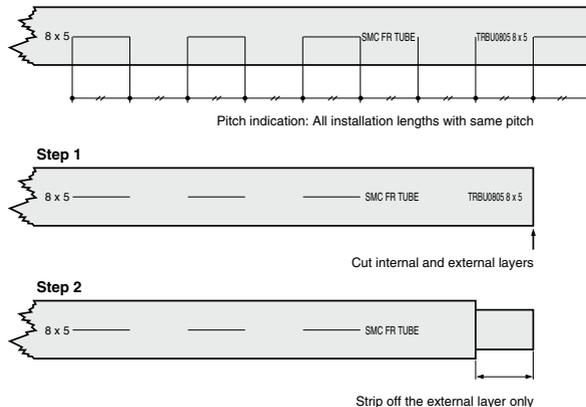
Symbol	Color	Symbol	Color
B	Black	BU	Blue
W	White	Y	Yellow
R	Red	G	Green

Note) The color of the outer layer of all tubing is opaque.

Installation on One-touch Fittings

⚠ Caution

Lengths of tubes to be inserted into One-touch fittings are indicated on the outer layer of TRBU tubes. Cut the tube according to this indication, (Step 1) and then strip off the outer layer (Step 2) for installing into fittings.

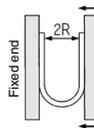


⚠ Precautions

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 for the other kind of fluid. Also, the surge voltage pressure must be under the maximum operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubes.
2. 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 on the right.



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

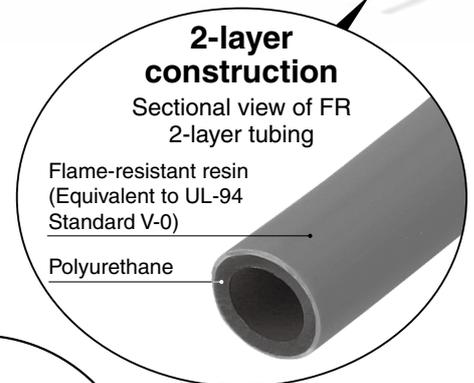
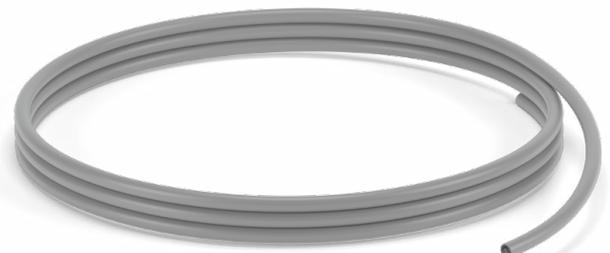
KQ2
KQB2
KS KX
KM
KF
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H/DL L/LL
KC
KK
KK130
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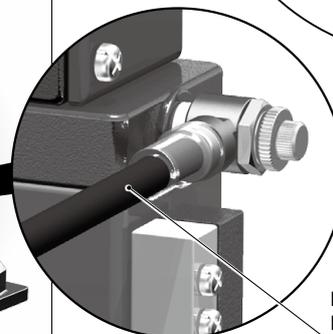
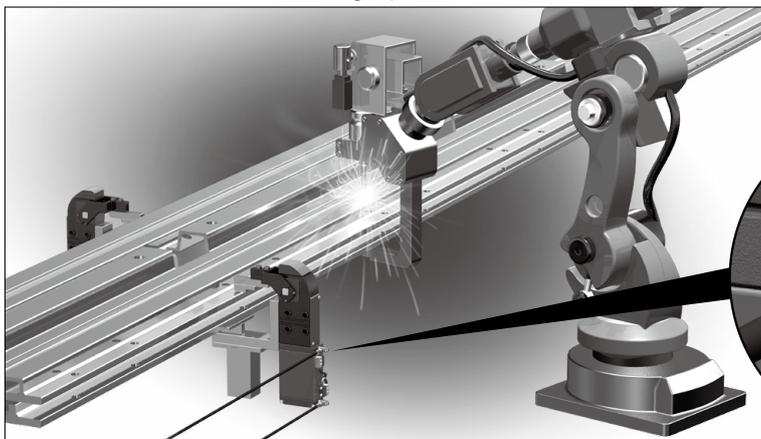
Flame Resistant (Equivalent to UL-94 Standard V-0) FR 2-Layer Soft Polyurethane Tubing

Peeling of the outer layer not required to connect fittings
Reduced labor time, Improved workability

- Improved flexibility (Compared with the TRBU)
- No inner tubing exposure when connecting fittings
- Lightweight and Compact
Weight: **57%** reduction,
Cross sectional area: **37%** reduction
(Compared with the TRBU0805)
- Suitable for air and water piping in environments where spot welding spatter may be a problem
- Increased flow rate due to I.D. expansion:
Max. 69% improvement
(Comparison between the TRBU1208 and the TRBU1210-X259)



Environment where welding spatter scatters



Series Comparison

		TRBU-X259	TRBU
Tubing model			
Tubing construction		2-layer (Outer layer peeling not required)	2-layer
Inner tubing	Material	Polyurethane	
Outer layer	Material	Flame-resistant resin	Flame-resistant polyolefin
	Flame resistant	Equivalent to V-0	Equivalent to V-0
Flexibility		◎	○
Spatter resistant		○	◎
Abrasion resistant		◎	○

◎: Excellent ○: Good

* Relative comparison based on SMC's testing conditions

TRBU-X259



TRBU-X259

Model*1

● — 100 m reel

Model	Tubing size (Metric size)							
	TRBU3220	TRBU0425	TRBU0604	TRBU0805	TRBU1065	TRBU1007	TRBU1285	TRBU1210
O.D. [mm]	3.2	4	6	8	10	10	12	12
I.D. [mm]	2	2.5	4	5	6.5	7	8.5	10
Color*2	Black (B)	●	●	●	●	●	●	○
	White (W)	○	●	●	●	●	●	●
	Red (R)	○	●	●	●	●	○	○
	Blue (BU)	○	●	●	●	●	●	○
	Yellow (Y)	○	●	●	●	●	○	○
	Green (G)	○	●	●	●	●	●	○
	Light red (RP)	○	○	○	○	○	○	●
	Light green (GP)	○	○	○	○	○	○	●

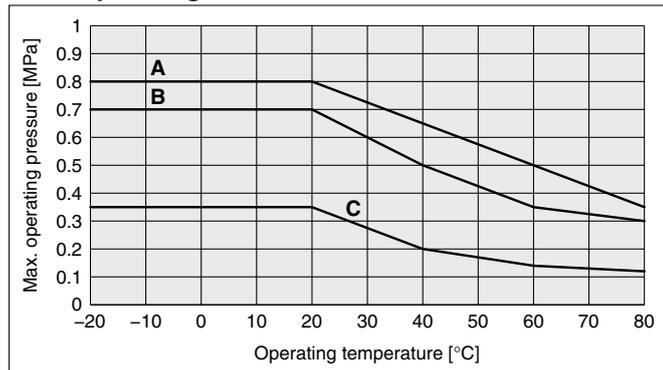
Specifications

Fluid		Air, Water							
Max. operating pressure [MPa]	20°C or less	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.35
	40°C	0.65	0.65	0.65	0.65	0.65	0.5	0.5	0.2
	60°C	0.5	0.5	0.5	0.5	0.5	0.35	0.35	0.14
	80°C	0.35	0.35	0.35	0.35	0.35	0.3	0.3	0.12
Applicable fittings		FR One-touch fittings KR-W2 series, Metal One-touch fittings KQB2 series, Insert fittings KF series							
Operating temperature		-20 to +80°C, Water: 0 to 60°C (No freezing)							
Material	Inner tubing	Polyurethane							
	Outer layer	Flame-resistant resin (Equivalent to UL-94 Standard V-0)							

*1 Products marked with "○" are available as a special order.

*2 The colors are opaque.

Max. Operating Pressure



Group	Model	Max. operating pressure [MPa]			
		20°C or less	40°C	60°C	80°C
A	TRBU3220	0.8	0.65	0.5	0.35
	TRBU0425				
	TRBU0604				
	TRBU0805				
B	TRBU1007	0.7	0.5	0.35	0.3
	TRBU1285				
C	TRBU1210	0.35	0.2	0.14	0.12

How to Order

TRBU0604 B - 100 - X259

Tubing model

Length per roll

Symbol	Length
100	100 m reel

Color

Symbol	Color	Symbol	Color
B	Black	Y	Yellow
W	White	G	Green
R	Red	RP	Light red
BU	Blue	GP	Light green

⚠ Precautions

Be sure to read this before handling the products. For safety instructions and fittings & tubing precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: <https://www.smcworld.com>

⚠ Caution

- Applicable for general industrial water. Please consult with SMC if using any 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.
- Abnormal temperature rises caused by adiabatic compression may result in the tube bursting.

⚠ Safety Instructions Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and "Operation Manual" before use.