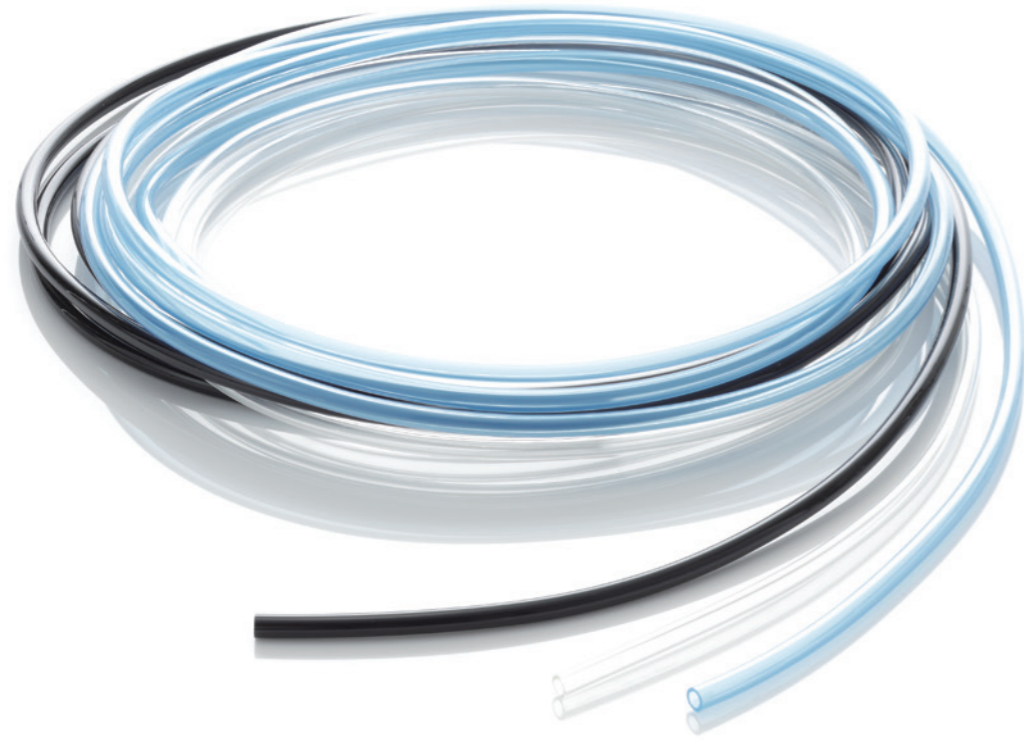


Polyurethane Tubing



Features

- Superior in mechanical strength, particularly in abrasion resistance.
- Superior in heat and cold resistance (resin no-load continuous operating temperature between -40 and +80°C).
- Flexible, and is highly resilient
- There are no risks of hazardous substances eluting.
- Bending radius is small, and has excellent operability.

(Note) If you would like to focus particularly on water resistance, please use Water Resistant Soft Polyurethane Tubing UF.

Use

- Pneumatic equipment tubing
- Fluidic element tubing
- Chemical plant pneumatic tubing

Specifications

Type	Shape	Fluid Used	Operating Temperature Range	Maximum Operating Pressure ^{*1} 23°C	Fitting Used ^{*2}	Fluid Used	Fitting Page
Extremely Soft Polyurethane Tubing: US	Straight	Air	-20~+60°C	<0.3MPa	Brass Fitting	Air	173~182
Handy-Touch Fitting					183~188		
Stainless Fitting: US2					193, 194, 209~212		
Soft Polyurethane Tubing: UH	Straight	Air	-20~+60°C	<0.7MPa	Instant Fitting: M Series	Air	139~153
					Instant Fitting: W Series		139, 140, 155~164
					Brass Fitting		173~182
Water Resistant Soft Polyurethane Tubing: UF	Straight	Air	-20~+60°C	Refer to Dimensions Table	Handy-Touch Fitting	Air, Water	183~188
		Water	0~+50°C		Stainless Fitting: US2		193, 194, 209~212
		Instant Fitting: M Series	139~153				
Low Friction Polyurethane Tubing: UFL	Straight	Air	-20~+60°C	<0.6MPa	Instant Fitting: W Series	Air, Water	139, 140, 155~164
					Brass Fitting		173~182
					Handy-Touch Fitting		183~188
Semi-Conductive Polyurethane Tubing: UE	Straight	Air	-20~+60°C	<0.6MPa	Stainless Fitting: US2	Air	193, 194, 209~212
					Instant Fitting: M Series		139~153
					Instant Fitting: W Series		139, 140, 155~164
Semi-Conductive Transparent Polyurethane Tubing: UC	Straight	Air	-20~+60°C	<0.6MPa	Brass Fitting	Air	173~182
					Handy-Touch Fitting		183~188
					Stainless Fitting: US2		193, 194, 209~212

*1 The maximum operating pressure in the above table and the dimensions table is pressure under conditions using air at 23°C.

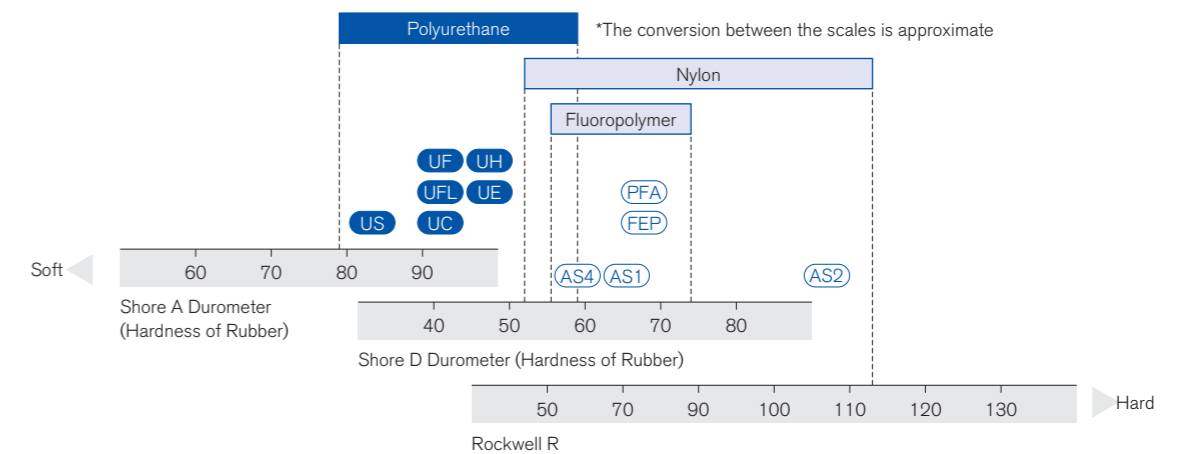
It will change depending on the fluid and temperature; please refer to page 35 and use at the pressure below.

Air: 1/4 or below the burst pressure by temperature

Water: 1/8 or below the burst pressure by temperature

*2 Excluding Water Resistant Soft Polyurethane Tubing for Barb Fitting: UF and Water Resistant Soft Polyurethane Tubing (Micro Tubing): UF on page 32.

Flexibility



Polyurethane Tubing

US | Extremely Soft Polyurethane Tubing



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Max. Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
15-04	4x2.5	1.4	<0.3	10	20 · 50
15-06	6x4	1.2	<0.3	14	20 · 50
15-08	8x5	1.4	<0.3	17	20 · 50
15-10	10x6.5	1.3	<0.3	24	20 · 50
15-12	12x8	1.2	<0.3	30	20 · 50

Standard Color: Yellow-Brown, Black

- For 15-06, we have Yellow-Brown, Black, Clear, Red, and Blue available for 20m rolls.
- For standard length and color, please refer to page 36.

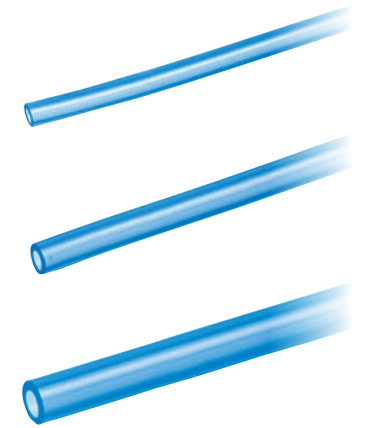


UF | Water Resistant Soft Polyurethane Tubing for Barb Fitting



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Max. Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
25-03B	3.5x2.0	3.2	<0.7	10	20 · 50
25-05B	4.5x2.7	2.9	<0.7	10	20 · 50
25-06B	6.0x3.5	3.2	<0.7	10	20 · 50

- Standard Color: Blue
- Please use commercially-available barb fittings (Handy-Touch Fittings cannot be used).
- It will be affected by the residual chlorine when tap water passes through.
- For standard length and color, please refer to page 36.

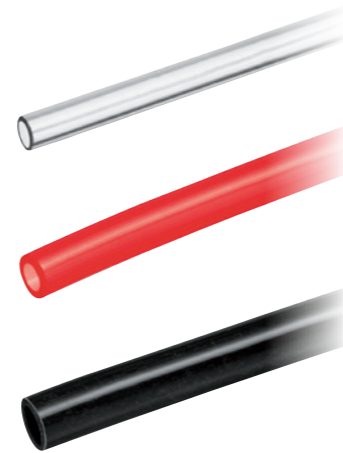


UH | Soft Polyurethane Tubing



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Max. Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
30-04	4x2.5	2.9	<0.7	10	20 · 100
30-06	6x4	2.7	<0.7	14	20 · 100
30-08	8x5	2.9	<0.7	16	20 · 100
30-10	10x6.5	2.7	<0.7	22	20 · 100
30-12	12x8	2.7	<0.7	28	20 · 100

- Standard Color: Black (Black, Clear, Red, Blue, Yellow, Green for 20m rolls only)
- For standard length and color, please refer to page 36.



UF | Water Resistant Soft Polyurethane Tubing (Micro Tubing)



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Max. Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
UF-M016	1.6x0.8	3.6	<0.9	5	100
UF-M020	2.0x1.0	3.6	<0.9	5	100
UF-M025	2.5x1.2	3.6	<0.9	7	100
UF-M030	3.0x1.5	3.6	<0.9	7	100
UF-M035	3.5x2.0	3.2	<0.7	10	100

- Standard Color: Clear
- It will be affected by the residual chlorine when tap water passes through.
- For standard length and color, please refer to page 36.

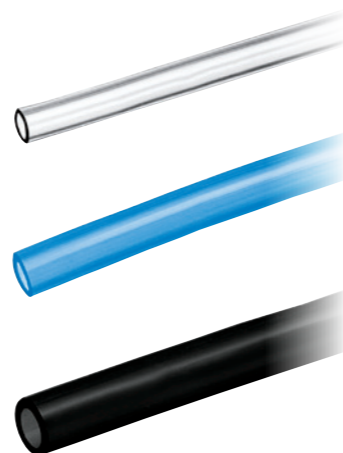


UF | Water Resistant Soft Polyurethane Tubing



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Max. Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
25-04	4x2.5	2.7	<0.6	10	20 · 50
25-06	6x4	2.3	<0.6	14	20 · 50
25-08	8x5	2.7	<0.6	16	20 · 50
25-10	10x6.5	2.4	<0.6	22	20 · 50
25-12	12x8	2.3	<0.6	28	20 · 50

- Standard Colors: Black, Blue (Black, Clear, Red, Blue, Yellow, Green, and White available for 20m rolls and 25-06 50m rolls only)
- It will be affected by the residual chlorine when tap water passes through.
- For standard length and color, please refer to page 36.



Polyurethane Tubing

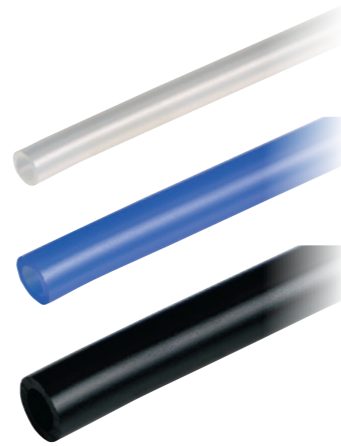
UFL | Low Friction Polyurethane Tubing



Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Maximum Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
25L-04	4x2.5	2.7	<0.6	10	20 · 100
25L-06	6x4	2.3	<0.6	14	20 · 100
25L-08	8x5	2.7	<0.6	16	20 · 100
25L-10	10x6.5	2.4	<0.6	22	20 · 100
25L-12	12x8	2.3	<0.6	28	20 · 100

Standard Colors: Black, Blue, Milky-White

- It will be affected by the residual chlorine when tap water passes through.
- For standard length and color, please refer to page 36.



Features

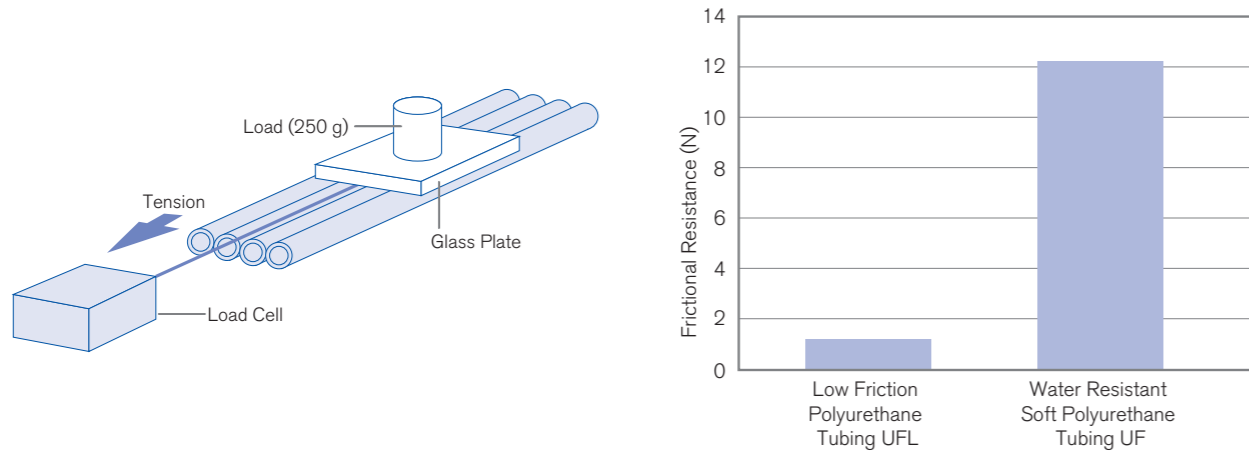
- By applying grain finish to the tubing surface, low friction is achieved and slipperiness is improved.
- The surface of the tubing does not feel sticky, realizing excellent operability in high-density (space-saving) piping.
- Reduces wear and abnormal sounds generated due to the movement of the cable carrier
- Basic properties (flexibility, mechanical strength, low elution, low bleeding) are equivalent to the Water Resistant Soft Polyurethane Tubing UF.

Use

- Tubing for moving parts such as sliding parts
- Tubing inside the cable carrier
- Tubing in space-saving, high-density areas

Sliding properties

- The force generated by sliding a glass plate with a 250 g load on the surface of tubes was measured, and the force on the Low Friction Polyurethane Tubing UFL was 1/10 that of the UF tubing.



UE | Semi-Conductive Polyurethane Tubing

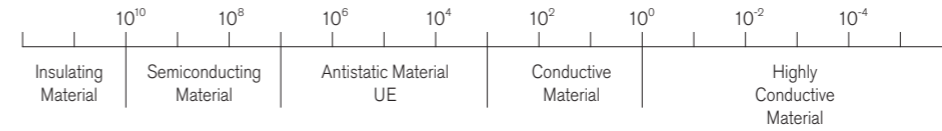


Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Maximum Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
30E-04	4x2.5	2.4	<0.6	10	50
30E-06	6x4	2.4	<0.6	14	50
30E-08	8x5	2.4	<0.6	16	50
30E-10	10x6.5	2.4	<0.6	22	50
30E-12	12x8	2.4	<0.6	28	50

- Standard Color: Black

- For standard length and color, please refer to page 36.

Electrical Property Category of Plastic (Volume Resistivity Ω·cm)



Features

- Static electricity does not build up, preventing dirt and dust from being attracted. In addition, sparks caused by static electricity will not be generated.

Use

- Tubing for pneumatic equipment sensitive to static buildup



UC | Semi-Conductive Transparent Polyurethane Tubing

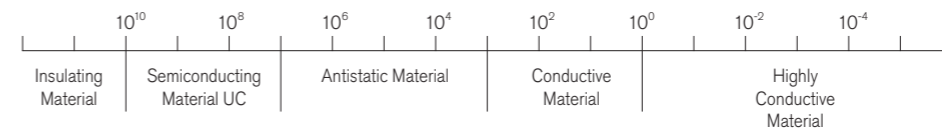


Part No.	Tube Size O.D.x I.D. (mm)	Burst Pressure 23°C (MPa)	Maximum Operating Pressure 23°C (MPa)	Min. Bending Radius (mm)	Standard Length (m)
25C-04	4x2.5	2.7	<0.6	10	20
25C-06	6x4	2.3	<0.6	14	20
25C-08	8x5	2.7	<0.6	16	20
25C-10	10x6.5	2.4	<0.6	22	20
25C-12	12x8	2.3	<0.6	28	20

- Standard Color: Clear

- For standard length and color, please refer to page 36.

Electrical Property Category of Plastic (Volume Resistivity Ω·cm)



Features

- Clear
- Does not contaminate the fluid
- Static electricity does not build up, preventing dirt and dust from being attracted. In addition, sparks caused by static electricity will not be generated.

Use

- Tubing for transferring insulating fluid in a clean environment
- Tubing for pneumatic equipment sensitive to static buildup



