

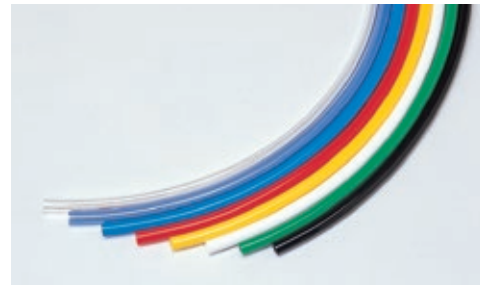
# Polyurethane Tubing

## U2

For general air pressure

### Features

- Well balanced between flexibility and pressure-resistant performance, and high workability. Most suitable for general air pressure piping usage.
- Ether polyurethane resin is used to prevent degradation by water or mold under high temperature and high humidity.
- Coil processing and welding can be performed on request.



### Product number table

#### ● Millimeter size type (Group 4)

Type	Outer diameter × Inner diameter (mm)	Max. working pressure (MPa at 20°C)	Min. bending radius (mm)	Weight (g/m)	Standard color (color symbol)								
					Black	White	Yellow	Blue	Green	Red	Clear	Clear blue	
					BK	WH	YL	BU	GN	RE	CL	CBU	
U2-4-3×2	3×2	(Air) 0.8	10	5	●	—	—	—	—	—	—	—	—
U2-4-4×2.5	4×2.5		10	9	●	○	●	●	●	●	○	○	
U2-4-6×4	6×4	(Water) 0.6	15	19	●	○	●	●	●	●	○	○	
U2-4-8×5	8×5		23	35	●	○	●	●	●	●	○	○	
U2-4-10×6.5	10×6.5		30	52	●	○	●	●	●	●	○	○	
U2-4-12×8	12×8		35	72	●	○	●	●	●	●	○	○	
U2-4-16×12	16×12		50	103	●	—	—	—	—	—	—	—	

#### ● Inch size type (Group 1)

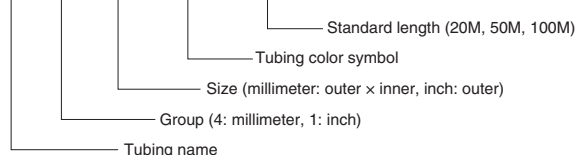
Type	Outer diameter × Inner diameter (mm)	Max. working pressure (MPa at 20°C)	Min. bending radius (mm)	Weight (g/m)	Standard color (color symbol)					
					Black	Yellow	Blue	Green	Red	Clear
					BK	YL	BU	GN	RE	CL
U2-1-3/16	4.76×3.48	(Air) 0.6	13	10	●	●	●	●	●	○
U2-1-1/4	6.35×4.57		20	18	●	●	●	●	●	○
U2-1-5/16	7.94×5.90		27	26	●	●	●	●	●	○
U2-1-3/8	9.53×6.99	(Water) 0.4	28	39	●	●	●	●	●	○
U2-1-1/2	12.70×9.56		35	65	●	●	●	●	●	○

### Standard length

20M, 100M ☞ U2-4-16×12: 50M only

### Product number example

**U2 - 4 - 6x4 - BK - 100M**



### Operating fluid, working temperature range

Operating fluid	Working temperature range
Air	-40°C~+80°C
Water	0°C~+50°C

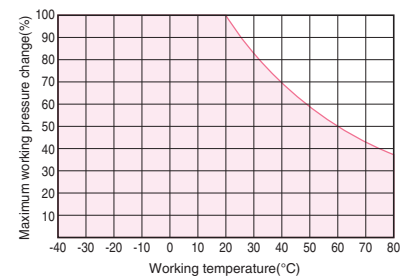
### Negative pressure performance

-101.294kPa

### Relation between the working temperature and the maximum working pressure

The maximum working pressure varies with the working temperature (environmental temperature). For use at an abnormal temperature, always check the maximum working pressure change in the graph below and keep the pressure within the indicated range.

⚠ Caution: Using tubes at a pressure outside the range may cause accidents or damage, for which Nitta is not liable.



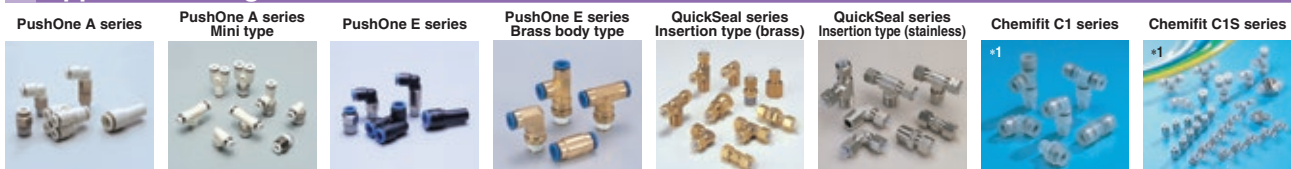
### Handling instructions

⚠ Caution: When water is used as the operating fluid, the tubing material might degrade depending on the additive. Contact us for details.

⚠ Caution: When water is used as the operating fluid, keep the surge pressure below the maximum working pressure. Also, do not allow the water to freeze.

☞ See page 10 for common instructions for tubing products.

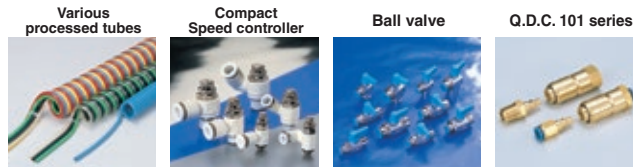
### Applicable fittings



### Applicable fittings



### Related products and product introduction



### Reference

Chemical resistance specification table .....P.198  
Effective sectional area ...P.168  
Negative-pressure performance list .....P.169

(\*1) Combinatory use of U2 tubing and Chemifit series mixes general and clean type performances. When using them together in a clean environment, be aware of how this could lower the cleanliness level.