

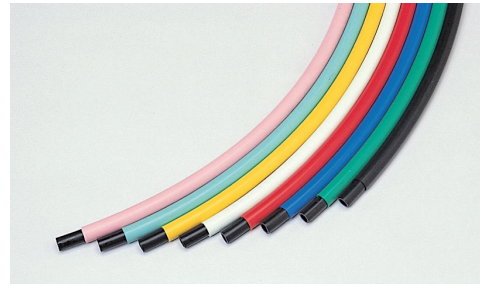
Flame-resistant Tubing

FWU

For spot welding piping (flexible)

Features

- Tubes with higher flexibility than FW, with a double-layer structure which utilizes a flame-retardant resin for the outer layer and an ether-based polyurethane resin for the inner layer.
- Markings along the tubing as an insertion length indicator.



Product number table

● Millimeter size type (Group 4)

Type	Inner tubing Outer diameter × Inner diameter (mm)	Outer cover Cover thickness	Max. working pressure (MPa at 20°C)	Min. bending radius (mm)	Weight (g/m)	Standard color (color symbol)							
						Outer cover							
						Black	Red	Blue	Green	Yellow	Light green	Pink	Greenish white
FWU-4-6x4	6x4	1.0	0.9	14	50	BK	RE	BU	GN	YL	LGN	PK	GWH
FWU-4-8x5	8x5	1.0		20	73	●	—	—	—	—	—	—	—
FWU-4-10x6.5	10x6.5	1.0	0.6	30	98	●	●	●	—	—	●	●	○
FWU-4-12x8	12x8	1.0		35	126	●	●	●	●	●	●	●	○

⚠ Caution Before using FWU tubes, peel off outer covers.
Use Nitta's special cutter (TC02, TC03) to peel off covers.

Operating fluid, working temperature range

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

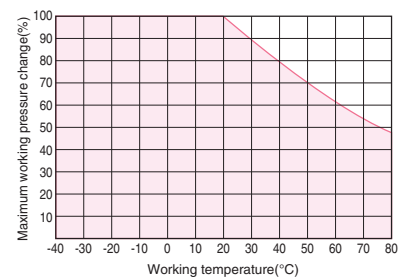
Negative pressure performance

-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.

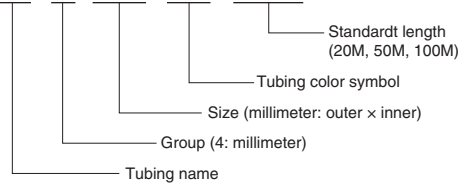


Standard length

20M, 100M 📄 FWU-4-12x8: 50M only

Product number example

FWU - 4 - 6x4 - BK - 100M



Insertion length markings

Markings along the tubing as an insertion length indicator.



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.

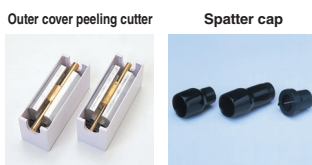
📄 See page 10 for common instructions for tubing products.

Applicable fittings



(*1) When QuickSeal series fittings are used on a spatter-resistant line, replace the nylon sleeve with a brass sleeve.

Related products and product introduction



Reference

UL-94 standard
flame testP.195
Effective sectional area.....P.168
Negative-pressure
performance list.....P.169