

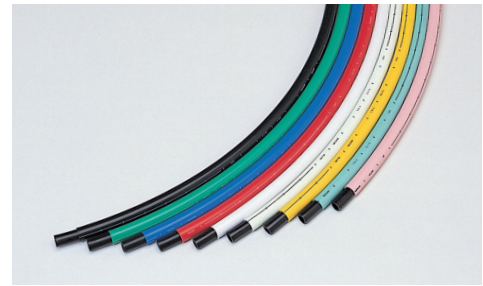
Flame-resistant Tubing

FW

For spot welding piping (bilayer)

Features

- A double-layer structure with a flame-retardant resin for inner and outer layers.
- 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)										
						Inner tubing	Outer cover									Greenish white
							Black	White	Yellow	Blue	Green	Red	Light green	Pink		
BK	WH	YL	BU	GN	RE	LGN	PK	GWH								
FW-4-6×4	6×4	1.0	1.0	14	49	Black	●	○	●	●	●	●	○	○	○	
FW-4-8×6	8×6	1.0	0.8	23	65		●	○	●	●	●	●	○	○	○	
FW-4-10×7.5	10×7.5	1.0		27	89		●	○	●	●	●	●	●	○	○	
FW-4-12×9	12×9	1.0	31	116	●		○	○	●	●	●	●	○	○		

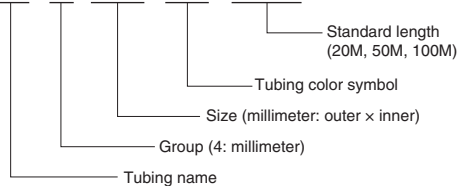
⚠ Caution: Before using FW tubes, peel off outer covers.
Use Nitta's special cutter (TC02, TC03) to peel off covers.

Standard length

20M, 100M 📏 FW-4-12x9: 50M only

Product number example

FW - 4 - 6x4 - BK - 100M



Insertion length markings

Markings along the tubing as an insertion length indicator.



Operating fluid, working temperature range

Operating fluid	Working temperature range
Air	-40°C~+80°C
Water	0°C~+70°C

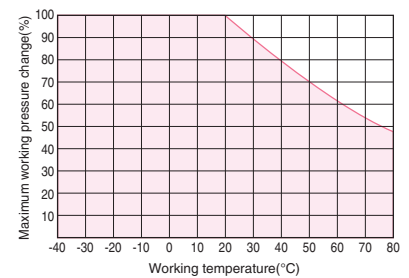
Negative pressure performance

-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.

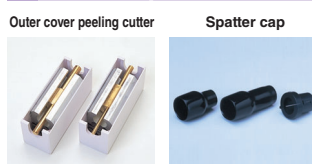
📖 See page 10 for common instructions for tubing products.

Applicable fittings



(*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

Tubing

Clean tubing

Processed tubing

PushOne fitting

QuickSeal fitting

Clean fitting/Chemifit

Bamboo-shoot fitting

Control switch/Detachable series

Jig/Tool/Accessory

Technical information

Reference