

NAFLON™ PFA-NE Tubing

The NAFLON-PFA-NE Tubing is constructed with a PFA conducting stripe on surface of our PFA-HG Tubing. Thanks to the conducting PFA portion's shielding effect, these tubing are excellent at preventing fires that could occur due to sparking between an atmosphere of transported flammable gases and the exterior surface of the tubing.

Features

- **The conducting PFA's shielding effect**
 - Prevents the release of sparks that could result in the starting of fires.
 - Prevents tubing insulation damage that could result from electric release from an insulated atmosphere.
- **The fluid carrier portion being constructed from PFA-HG Tubing**
 - Little elution of fluorine ions.
 - Little permeation or accumulation of chemicals.
 - The same chemical resistance, heat resistance, and strength as PFA.
- **Compared with PFA Tubing coated with a shielding conductor as an anti-electrical measure**
 - No unsettling corrosion as with metallic wires and meshes.
 - Reduction in construction costs and variations in construction.
 - No risk of losing grounding due to variation in coating work.



Specifications

- Maximum usage temperature: Same as naflon PFA Tubing (Please refer to page 2.)
- Maximum usage pressure: Same as naflon PFA Tubing (Please refer to page 22.)
- Maximum bending radius: Same as naflon PFA Tubing (Please refer to page 9.)

※ Since the fluid-carrier portion is made of insulating PFA-HG, these tubing are considered to be ineffective in preventing insulation damage caused by flow electrification with liquids.

● Volumetric Resistance

units: (Ω·cm)

Material	Volumetric Resistance
Conductive PFA	5.3×10^2
PFA-HG	$> 10^{18}$

Measured by NICHIAS Corporation

Method of measurement: As per JIS K 7194

※ The values given above are intended as representative values, not standard values.

● Anti-Static Features

units: (V)

Tubing Types	Center of 1m Length tubing	Center of 15m Length tubing	Ends of 15m Length tubing
PFA-NE Tubing	0.5~0.7	0.5~0.7	0.5~0.7
PFA-HG Tubing	>2.0 (limit of measurement capability)	—	—

Method of measurement: One end was grounded, and cotton rubbed 50 times along a 20 cm span, either in the center or at the ends of the tubing. Electric potential was then measured in the applicable area.

※ The values given above are intended as representative values, not standard values.

Caution

- These tubing are not effective in preventing insulation damage caused by friction electrification between insulating fluids and these tubing.
- These tubing can be used with joints manufactured by different companies which use standard PFA Tubing.

Usage Notes

These tubing must always be grounded when used. Please use our conductive grounding band (sold separately) for grounding.



Grounding Band

※ Please contact us with any enquiry about product usage and selection.

※ The outer diameter of the applicable tubing is up to ø19.05.

■ Standard Dimensions

[Metric size]

Nominal Dimension (mm)	Outer Diameter (mm)		Wall Thickness (mm)		Thickness of conductive part (mm)		Width of conductive part (mm)	Number of stripes	Length (m)	
Inner Diameter × Outer Diameter	Standard Dimensions	Allowed Variance	Standard Dimensions	Allowed Variance					Standard Dimensions	Allowed Variance
2× 3	3.0	+0.15 −0.10	0.5	±0.07	0.03	+0.04 −0.01	0.6±0.3	4	10, 50, 100	+1% −0
2× 4	4.0		1.0		0.06	+0.06 −0.03	0.8±0.3			
3× 4	4.0		0.5		0.03	+0.04 −0.01	0.8±0.3			
4× 6	6.0		1.0		0.06	+0.06 −0.03	1.4±0.4			
6× 8	8.0		1.0		0.06	+0.06 −0.03	1.8±0.4			
8×10	10.0	+0.25 −0.10	1.0	±0.12	0.06	+0.06 −0.03	2.3±0.4	8	10, 50	
10×12	12.0		1.0		0.06	+0.06 −0.03	2.6±0.6			
16×19	19.0		1.5		0.06	+0.06 −0.03	3.8±0.8			
22×25	25.0		1.5		0.06	+0.06 −0.03	4.9±0.8			

※Please enquire for information relating to delivery dates and availability.

[Inch size]

Nominal Dimension (mm)	Outer Diameter (mm)		Wall Thickness (mm)		Thickness of conductive part (mm)		Width of conductive part (mm)	Number of stripes	Length (m)	
Inner Diameter × Outer Diameter	Standard Dimensions	Allowed Variance	Standard Dimensions	Allowed Variance					Standard Dimensions	Allowed Variance
2.17× 3.17	3.17	+0.15 −0.10	0.50	±0.07	0.03	+0.04 −0.01	0.6±0.3	4	10, 50, 100	+1% −0
4.35× 6.35	6.35		1.00	±0.07	0.06	+0.06 −0.03	1.5±0.4			
6.35× 9.52	9.52		1.59	±0.12	0.06	+0.06 −0.03	2.4±0.4			
7.52× 9.52	9.52		1.00	±0.07	0.06	+0.06 −0.03	2.2±0.4			
9.52× 12.70	12.70	+0.25 −0.10	1.59	±0.12	0.06	+0.06 −0.03	2.6±0.6	8	10, 50	
15.88× 19.05	19.05		1.59	±0.12	0.06	+0.06 −0.03	3.8±0.8			
22.22× 25.40	25.40		1.59	±0.12	0.06	+0.06 −0.03	4.9±0.8			

※Please enquire for information relating to delivery dates and availability.