

# PN

For clean piping (Super flexible)

## Features

- A clean tubing suitable for equipment and applications with fluids such as clean air, N2 gas, pure water and various chemical liquids.
- Environment-friendly eco tubing. When burned at 750°C, PL tubing generates only carbon dioxide gas, no nitrogen oxides (NOx), no sulfur oxides (SOx), and absolutely no dioxin.
- Produced, end-sealed, heat-sealed for shipping in a cleanroom.
- Made of special polyolefin resin with high water barrier performance and higher flexibility than PL tubes.
- Low cost compared to fluorocarbon resin tubes.
- Compliant with the MHLW Ministerial Notification No.201(2006), MHW Ministerial Notification No.370(1959), Japan.

## 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	Milky white	Clear red	Clear blue	Clear yellow	Clear green
					BK	MW	CRE	CBU	CYL	CGN
PN-4-3×2	3×2	0.7	7	4	●*	○	●*	●*	●*	●*
PN-4-4×2.5	4×2.5		10	7	●	○	●	●	●	●
PN-4-6×4	6×4		20	14	28	●	○	●	●	●
PN-4-8×5	8×5					●*	○	●*	●*	●*
PN-4-10×6.5	10×6.5		30	41	●*	○	●*	●*	●*	●*
PN-4-12×8	12×8		40	57	●*	○	●*	●*	●*	●*

\* Made to Order

### ● 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	Milky white	Clear red	Clear blue	Clear yellow	Clear green
					BK	MW	CRE	CBU	CYL	CGN
PN-1-1/4	6.35×4.57	0.5	20	14	●*	○*	●*	●*	●*	●*
PN-1-3/8	9.53×6.99		30	30	●*	○*	●*	●*	●*	●*
PN-1-1/2	12.70×9.56		50	50	●*	○*	●*	●*	●*	●*

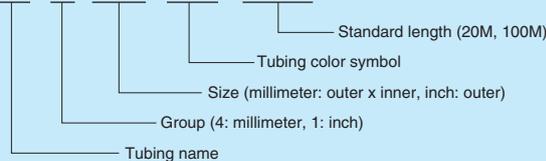
\* Made to Order

## Standard length

20M, 100M

## Product number example

**PN - 4 - 6x4 - MW - 100M**



## Operating fluid, working temperature range

Operating fluid	Working temperature range
Air (clean air)	-60°C~+80°C
Water (pure water)	0°C~+80°C

☞ Contact us for various chemical liquids.

☞ See "Combination List of Tubing and Fitting" on page 8.

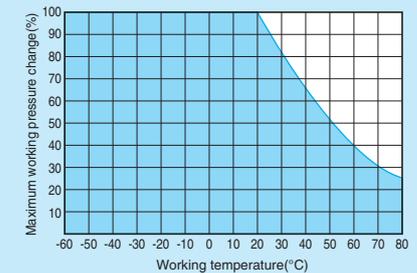
## Negative pressure performance

-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.

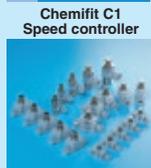
## Applicable fittings



## 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 PN tubing and PushOne series / QuickSeal 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.

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