

PL

For clean piping (flexible)

Features

- A clean tube suitable for equipment and applications with fluids such as clean air, N₂ gas, pure water and various chemical liquids
- Environment-friendly eco tube. When burned at 750°C, PL tube generates only carbon dioxide gas, no nitrogen oxides (NO_x), no sulfur oxides (SO_x), 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 flexibility
- Low cost compared to fluorocarbon resin tubes



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 | Red | Blue | Yellow | Green |
| | | | | | BK | MW | RE | BU | YL | GN |
| PL-4-4×2 | 4×2 | 1.5 | 15 | 10 | ● | ○ | ● | ● | ● | ● |
| PL-4-6×4 | 6×4 | 1.0 | 25 | 15 | ● | ○ | ● | ● | ● | ● |
| PL-4-8×6 | 8×6 | 0.7 | 35 | 20 | ● | ○ | ● | ● | ● | ● |
| PL-4-10×7.5 | 10×7.5 | | 45 | 30 | — | ○ | — | — | — | — |
| PL-4-10×8 | 10×8 | 0.5 | 45 | 25 | ● | ○ | ● | ● | ● | ● |
| PL-4-12×9 | 12×9 | 0.7 | 55 | 45 | ● | ○ | ● | ● | ● | ● |

● 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 | Red | Blue | Yellow | Green |
| | | | | | BK | MW | RE | BU | YL | GN |
| PL-1-1/4 | 6.35×4.57 | 0.7 | 30 | 14 | ● | ○ | ● | ● | ● | ● |
| PL-1-3/8 | 9.53×6.99 | | 40 | 30 | ● | ○ | ● | ● | ● | ● |
| PL-1-1/2 | 12.70×9.56 | | 55 | 50 | ● | ○ | ● | ● | ● | ● |

● Inch size type (Group 5)

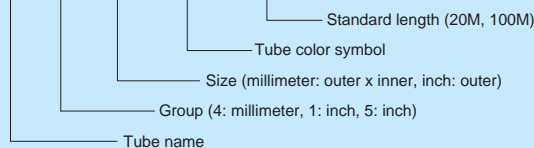
| Type | Outer diameter × Inner diameter (mm) | Outer diameter | Max. working pressure (MPa at 20°C) | Min. bending radius (mm) | Weight (g/m) | Standard color (color symbol) | |
|-------------|---|----------------|--|-----------------------------------|-----------------|-------------------------------|----|
| | | | | | | Milky white | MW |
| PL-5-3.18×2 | 3.18×2 | 1/8 | 0.9 | 7 | 4 | ○ | ○ |

☞ Applicable fittings for Group 5 are Chemifit C1 series and Chemifit C1S series with the same outer diameter.

Product number example

PL - 4 - 6×4 - BK - 100M

20M, 100M



Standard length

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 Tube and Fitting" on page 8.

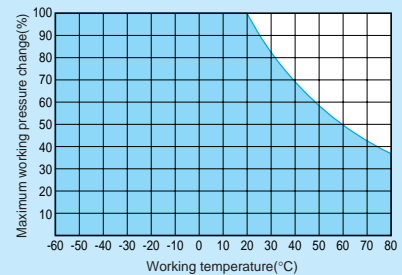
Negative pressure performance

-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 Moore is not liable.











Handling instructions

⚠ Caution When water is used as the operating fluid, the tube 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 tube products.

Applicable fittings

| | | | | | | | |
|---|--|--|---|---|---|--|--|
| Chemifit C1 series  P.104 | Chemifit C1S series  P.112 | Chemifit CSA series  P.118 | Chemifit CS series  P.126 | Chemifit CP series  P.134 | PushOne A series  P.36 | PushOne E series  P.50 | PushOne E series Mini type  P.66 |
|---|--|--|---|---|---|--|--|

Applicable fittings

| | |
|---|---|
| QuickSeal series Insertion type (brass)  P.76 | QuickSeal series Insertion type (stainless)  P.88 |
|---|---|

Allied products and product introduction

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|---|
| Chemifit C1 Speed controller  P.146 |
|---|

Reference

Chemical resistance specification tableP.209
Effective cross-sectional areaP.178
Negative-pressure performance listP.179

(*) Combinatory use of PL tube and Chemifit series mixes general and clean type performances. When using them in a clean environment, pay attention to the clean level that could be lowered.