

## TP

For clean, heat-resistant, cold-resistant, chemical-resistant use

### Features

- FEP (copolymer of tetrafluoroethylene – hexafluoropropylene) resin tubing with high chemical resistance.
- Produced, end-sealed, heat-sealed for shipping in a cleanroom.
- Easy cleaning with extremely little remaining fluid inside.
- Usable for clean fittings of Chemifit C1 series.
- Less aged deterioration and high weather resistance.
- Usable in ozone environment.
- 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)
					Translucent CWH
TP-4-4×2	4×2	2.5	15	20	○
TP-4-4×2.5	4×2.5	1.7	30	17	○
TP-4-6×4	6×4	1.6	25	34	○
TP-4-8×6	8×6	1.1	40	47	○
TP-4-10×8	10×8	0.8	60	61	○
TP-4-12×9	12×9	1.1		106	○
TP-4-12×10	12×10	0.7	90	74	○
TP-4-14×12	14×12	0.6	150	89	○
TP-4-21×18	21×18	0.6	500	200	○

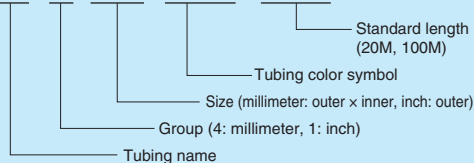
\*Made to Order

#### ● 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)
					Translucent CWH
TP-1-3/16	4.76×3.48	1.1	20	18	○
TP-1-1/4	6.35×4.57		30	33	○
TP-1-5/16	7.94×5.90		40	48	○
TP-1-3/8	9.53×6.99		50	71	○
TP-1-1/2	12.70×9.56		60	118	○

### Product number example

**TP - 4 - 6x4 - CWH - 100M**



### Standard length

20M, 100M  
 ☞ TP-4-14×12,  
 TP-4-21×18: 20M only



### Operating fluid, working temperature range

Operating fluid	Working temperature range
Air (clean air)	-65°C~+200°C
Water (pure water)	0°C~+100°C

- ☞ Contact us for various chemical liquids.
- ☞ See "Combination List of Tubing and Fitting" on page 8.

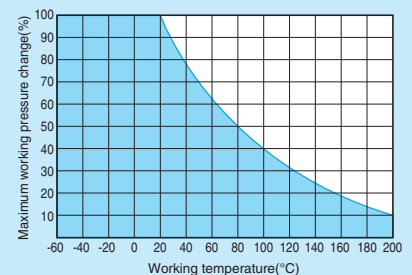
### Negative pressure performance

-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, 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

Chemifit C1 series 	Chemifit C1S series 	Chemifit CP series 	PushOne A series 	PushOne A series Mini type 	PushOne E series 	PushOne E series Brass body type 	QuickSeal series Insertion type (brass) 
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### Applicable fittings



### Related products and product introduction

Chemifit C1 Speed controller 	Various bending processing 	Flexible fluorocarbon resin bilayer tubing 
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### Reference

Chemical resistance specification table .....P.198  
 Effective sectional area ...P.168  
 Negative-pressure performance list .....P.169

(\*1) Combinatory use of TP 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.  
 (\*2) Contact us for specifications.