

# TES

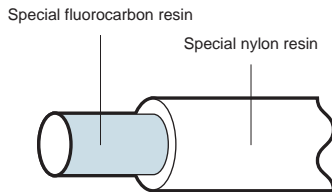
For coating (flexible, abrasion resistant)

## Features

- Bilayer structure of inner (special fluorocarbon resin) and outer (special nylon resin) layers
- Super flexible and suitable for movable piping for robots.
- Highly smooth and highly chemical resistant inner surface, and highly abrasion resistant outer surface
- The translucent tube enables the fluid to be seen.



## Structure diagram



## 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
TES-4-4×2.5	4×2.5	1.8	15	9	○	
TES-4-6×4	6×4	1.8	20	18	○	
TES-4-8×6	8×6	1.6	35	26	○	
TES-4-10×8	10×8	1.1	50	33	○	

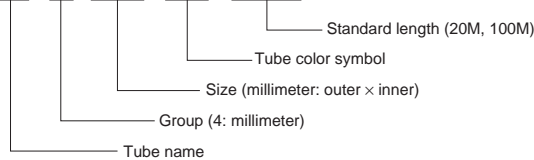
☞ Inch size type is available on request. Contact us for details.

## Standard length

20M, 100M

## Product number example

**TES - 4 - 6×4 - BK - 100M**



## Operating fluid, working temperature range

Operating fluid	Working temperature range
Air	-40°C~+100°C
Water	0°C~+70°C
Water-based paint (*)	0°C~+40°C

(\*) Water-based paint, or aliphatic or aromatic carbon hydride solvent.  
☞ Contact us for other operating fluids.

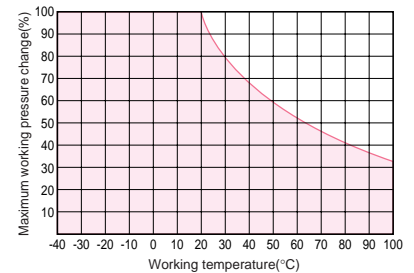
## Negative pressure performance

-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

QuickSeal series  
Insertion type (brass)



P.76

QuickSeal series  
Insertion type (stainless)



P.88

Chemifit CSA series



P.118

Chemifit CS series



P.126

(\*1) Combinatory use of TES 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.

## Reference

Chemical resistance specification table .....P.209  
Effective cross-sectional area .....P.178  
Negative-pressure performance list .....P.179