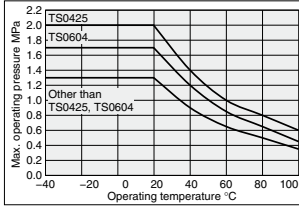


# Soft Nylon Tubing TS/TISA Series

RoHS

For general pneumatic tubing  
Pliable soft nylon tubing

## Max. Operating Pressure



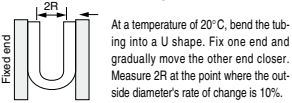
## ⚠️ Precautions

Be sure to read this before handling the products.  
Refer to back page 50 for Safety Instructions and pages 13 to 17 for Fittings and Tubing Precautions.

## ⚠️ Caution

- Compatible with water due to a change in materials. Compatible fluid types are printed on the tube body for differentiation, so please be sure to check this. <sup>Note 1</sup> If using the previous TS/TISA series with "water", the tube may shrink and cause air leakage or the tube may fall out.
- The products which changed the material are applicable for general industrial water. Please contact SMC if using other kinds of fluid. Surge pressure must be under the max. operating pressure. If the surge pressure exceeds the maximum operating pressure, it will result in damage to fittings and tubes.
- Please exercise caution when using this item in a clean room. There is a possibility of plasticizer and other materials precipitating on the tube surface and detracting from the cleanliness level of the room.

How to measure the minimum bending radius



## Made to Order

**100 m reel**

Metric size and Inch size except ø16: Suffix "-X3" to the end of part number. Ex.) TS0425R-100-X3

**Longer length reel**

Metric size: Suffix "-X3" to the end of part number. Ex.) TS0425G-500-X3

**20 m roll**

Inch size: Suffix "-X4" to the end of part number. Ex.) TISA01BU-20-X4

### Made to Order Availability

Part no.	Length	Model	TS0425	TS0604	TS0806	TS1075	TS1209	TISA01	TISA05	TISA07	TISA11	TISA13	Color
X3	100 m reel		○	○				○	○	○	○	○	Black, White, Red, Blue, Yellow, Green
	150 m reel				○								
	200 m reel												
X4	500 m reel		○	○									Red, Blue, Yellow, Green
	20 m roll							○	○	○	○		

## Model

● — 20 m roll □ — 100 m roll (TS1612 is reel.)

Model	Tubing size											
	Metric size (TS series)						Inch size (TISA series)					
Tubing O.D. (mm)	4	6	8	10	12	16	TISA01	TISA05	TISA07	TISA11	TISA13	
Tubing I.D. (mm)	2.5	4	6	7.5	9	12	2.18	3.48	4.57	6.99	9.56	
Black (B)	●	●	●	●	●	●	●	●	●	●	●	
White (W)	●	●	●	●	●	●	●	●	●	●	●	
Red (R)	●	●	●	●	●	●	●	●	●	●	●	
Blue (BU)	●	●	●	●	●	●	●	●	●	●	●	
Yellow (Y)	●	●	●	●	●	●	●	●	●	●	●	
Green (G)	●	●	●	●	●	●	●	●	●	●	●	

Nominal size (inch): 1/8", 3/16", 1/4", 3/8", 1/2"  
 Nominal size (mm): 3.2

## Specifications

Fluid	Air/Water <sup>Note 1)</sup>											
	20°C or less	2.0	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
Max. operating pressure	40°C	1.4	1.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
MPa	60°C	1.0	0.85	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	
	80°C	0.8	0.65	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
MPa	100°C	0.6	0.45	0.35	0.35	0.35	0.4	0.35	0.35	0.35	0.35	
	Applicable fittings <sup>Note 2)3)</sup>	One-touch fittings, Insert fittings, Self-align fittings, Miniature fittings										
Min. bending radius mm <sup>Note 2)</sup>	Min. bending radius mm <sup>Note 2)</sup>	15	23	45	55	65	90	18	27	30	55	65
	Bending radius Preference	12	17	34	42	50	70	12	15	23	42	50
Operating temperature <sup>Note 2)</sup>		-40 to +100°C, Water: 0 to +50°C (No freezing)										
Material		Nylon 12										

- Note 1) Refer to the "Printing/Fluid".  
 Note 2) Be sure to operate under the maximum operating pressure and operating temperature conditions using the lower specifications of either the tubing or fittings.  
 Note 3) Mount an inner sleeve when using metal One-touch fittings in high-temperature environments of 60°C or more. Use self-align fittings at a temperature of 60°C or less.  
 Note 4) The minimum bending radius is the representative value measured as shown in the left figure.  
 • Use a tube above the minimum bending radius.  
 • The tubing may be bent if used under the minimum bending radius. Therefore, refer to the bending value and make sure that the tubing is not bent or flattened.  
 • Please note that the bending value is not warranted because of the representative value when 2R is measured by the method in the left figure if the tubing is bent or flattened, etc.

## Printing/Fluid

	Print code	Fluid
Previous	SMC TS 0604 SOFTNYLON 6 x 4	Air
NEW	● SMC TS 0604 SOFTNYLON 6 x 4	Air/Water

## How to Order

**TS0604** **W** - **20**

Length per roll: 20 (20 m roll), 100 (100 m roll (Black and white only))

Color: B (Black (Translucent)), W (White (Material color)), R (Red (Translucent)), BU (Blue (Translucent)), Y (Yellow (Translucent)), G (Green (Translucent))

