

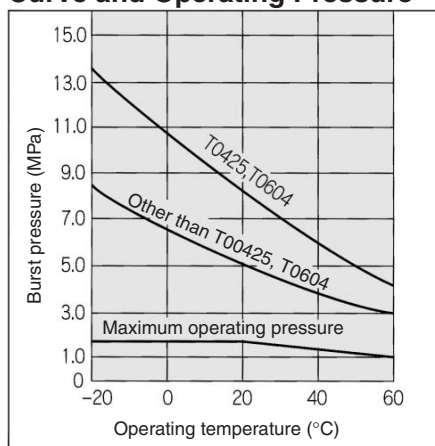
# Nylon Tubing

## Series T/TIA



For general pneumatic tubing, Nylon tubing

### Burst Pressure Characteristics Curve and Operating Pressure



### ⚠ Precautions

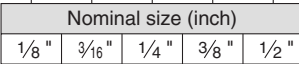
Be sure to read before handling.  
Refer to pages 15-18-3 to 4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-1-10 to 11 for Precautions on every series.

### ⚠ Caution

- Applicable for general industrial water. Please consult with 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.
- The value of the max. operating pressure is at a temperature of 20°C. Refer to the burst pressure characteristics curve for other temperatures. Furthermore, abnormal temperature rises caused by adiabatic compression may result in the burst of the tube.

### Model/Specifications

● — 20 m roll □ — 100 m roll (T1613 is reel.)

|                                   | Tubing size                                                                       |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |
|-----------------------------------|-----------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------|-------|-------|
|                                   | Metric size (Series T)                                                            |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | Inch size (Series TIA)                                                              |                                                                                     |        |       |       |       |
| Model                             | T0425                                                                             | T0403 | T0604                                                                             | T0645                                                                             | T0806                                                                               | T1075                                                                               | T1209                                                                               | T1613                                                                               | TIA01                                                                               | TIA05  | TIA07 | TIA11 | TIA13 |
| Tubing O.D. (mm)                  | 4                                                                                 | 4     | 6                                                                                 | 6                                                                                 | 8                                                                                   | 10                                                                                  | 12                                                                                  | 16                                                                                  | 3.18                                                                                | 4.76   | 6.35  | 9.53  | 12.7  |
| Tubing I.D. (mm)                  | 2.5                                                                               | 3     | 4                                                                                 | 4.5                                                                               | 6                                                                                   | 7.5                                                                                 | 9                                                                                   | 13                                                                                  | 2.18                                                                                | 3.48   | 4.57  | 6.99  | 9.56  |
| Black (B)                         |  | ●     |  |  |  |  |  |  | ●                                                                                   | ●      | ●     | ●     | ●     |
| White (W)                         |  | ●     |  | ●                                                                                 |  |  |  |  | ●                                                                                   | ●      | ●     | ●     | ●     |
| Red (R)                           | ●                                                                                 |       | ●                                                                                 |                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |       |       |       |
| Blue (BU)                         | ●                                                                                 |       | ●                                                                                 |                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |       |       |       |
| Yellow (Y)                        | ●                                                                                 |       | ●                                                                                 |                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |       |       |       |
| Green (G)                         | ●                                                                                 |       | ●                                                                                 |                                                                                   | ●                                                                                   | ●                                                                                   | ●                                                                                   |                                                                                     |                                                                                     |        |       |       |       |
|                                   |  |       |                                                                                   |                                                                                   |    |                                                                                     |                                                                                     |                                                                                     |  |        |       |       |       |
|                                   | 5/32 "                                                                            |       |                                                                                   |                                                                                   | 5/16 "                                                                              |                                                                                     |                                                                                     |                                                                                     | Nominal size (inch)                                                                 |        |       |       |       |
|                                   |                                                                                   |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 1/8 "                                                                               | 3/16 " | 1/4 " | 3/8 " | 1/2 " |
| Fluid                             | Air/Water                                                                         |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |
| Max. operating pressure (at 20°C) | 1.5 MPa                                                                           |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |
| Burst pressure                    | Refer to the burst pressure characteristics curve.                                |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |
| Min. bending radius (mm)          | 13                                                                                | 25    | 24                                                                                | 36                                                                                | 48                                                                                  | 60                                                                                  | 75                                                                                  | 100                                                                                 | 15                                                                                  | 20     | 30    | 60    | 75    |
| Operating temperature             | -20 to +60°C (Water: 0 to 40°C) (No freezing)                                     |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |
| Material                          | Nylon 12                                                                          |       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |       |       |       |

### How to Order

**T0425 B 20**

Tubing model

Color

| Symbol | Color | Symbol | Color  |
|--------|-------|--------|--------|
| B      | Black | BU     | Blue   |
| W      | White | Y      | Yellow |
| R      | Red   | G      | Green  |

Length per roll

| Symbol | Length *                          |
|--------|-----------------------------------|
| 20     | 20 m roll                         |
| 100    | 100 m roll (Black and white only) |

### Made to Order

(Please contact SMC for specifications in detail, dimensions, delivery and specifications other than those mentioned above.)

|                           |                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------|
| <b>100 m reel</b>         | Metric size and Inch size except ø16: Suffix "-X3" to the end of part number. Ex.) TS0425R-100-X3 |
| <b>Longer length reel</b> | Metric size: Suffix "-X3" to the end of part number. Ex.) TS0425G-500-X3                          |
| <b>20 m roll</b>          | Inch size: Suffix "-X4" to the end of part number. Ex.) TISA01BU-20-X4                            |

### Made to Order Availability

| Part no. | Length     | Model | T0425 * | T0604 * | T0806 * | T1075 * | T1209 * | TIA01 * | TIA05 * | TIA07 * | TIA11 * | TIA13 * | Color                                  |
|----------|------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------------------------|
| X3       | 100 m reel |       | ○       | ○       | ○       | ○       | ○       | ○       | ○       | ○       | ○       | ○       | Black, White, Red, Blue, Yellow, Green |
|          | 150 m reel |       |         |         |         | ○       |         |         |         |         |         |         |                                        |
|          | 200 m reel |       |         |         | ○       |         |         |         |         |         |         |         |                                        |
|          | 500 m reel |       | ○       | ○       |         |         |         |         |         |         |         |         |                                        |
| X4       | 20 m roll  |       |         |         |         |         |         | ○       | ○       | ○       | ○       | ○       | Red, Blue, Yellow, Green               |