SHPI



# Polyurethane Tubing Ester

***US series***

PU Ester is pneumatic tubing for general industrial use, suitable for automation equipment and standard industrial pneumatic systems.

Made from polyester-based polyurethane, it provides good flexibility, elasticity, abrasion resistance, and oil resistance.

Multiple colors are available for circuit identification.

## Key Features

- High flexibility
- Good elasticity
- Smooth surface
- Good oil resistance
- Good abrasion resistance
- Multiple colors for circuit identification

## Applications

- General industrial pneumatic systems
- Automation equipment and pneumatic modules
- Applications involving repeated flexing during equipment movement or installation in limited spaces

## Regulatory Compliance

- RoHS compliant
- REACH compliant

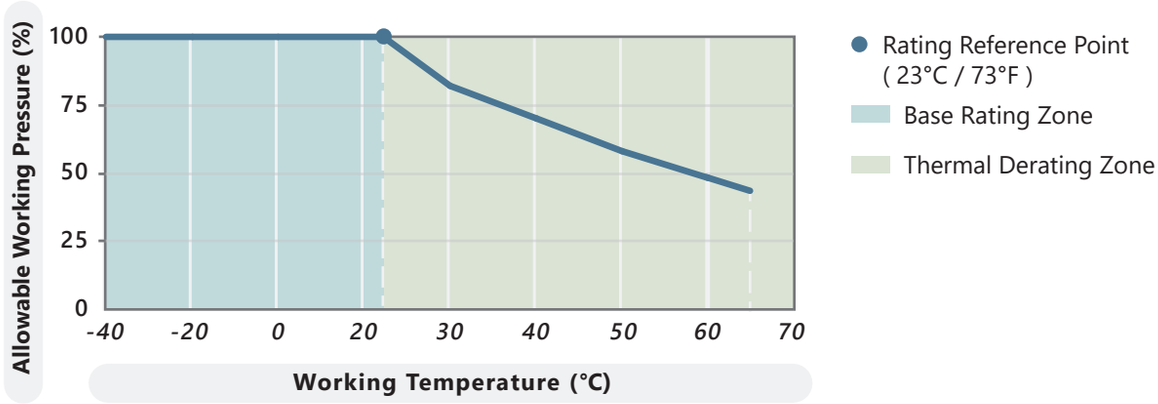
## Technical Specifications

| | |
|---|---|
| Material | Polyester-based Polyurethane |
| Hardness | 98 Shore A |
| Operating Temp. Range | -40°C to 65°C (-40°F to 150°F) |
| Safety Factor | 3：1 |

## Tube Tolerance

| Tube O.D. | O.D. Tolerance |
|---|---|
| 3 – 8 mm | ±0.10 mm |
| 10 – 12 mm | ±0.15 mm |
| 14 – 16 mm | ±0.20 mm |

## Maximum Working Pressure Derating Curve



## Specifications

| Model Number | Tube OD | Tube ID | Wall Thickness | Weight | Max. Working Pressure 23℃ (73℉) | Min. Burst Pressure 23℃ (73℉) | Min. Bend Radius | Packing Length | Color | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +Color | mm | mm | mm | g/m | bar | bar | mm | m | NA | BK | BU | G | R | Y |
| US301825M_ | | | | | | | | 25 | | | | | | |
| US301850M_ | 3.0 | 1.8 | 0.60 | 5.6 | 20 | 60 | 10 | 50 | □ | | ■ | | | |
| US3018100M_ | | | | | | | | 100 | | | | | | |
| US402525M_ | | | | | | | | 25 | | | | | | |
| US402550M_ | 4.0 | 2.5 | 0.75 | 9.4 | 15 | 45 | 15 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| US4025100M_ | | | | | | | | 100 | | | | | | |
| US402025M_ | | | | | | | | 25 | | | | | | |
| US402050M_ | 4.0 | 2.0 | 1.00 | 11.6 | 22 | 66 | 15 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| US4020100M_ | | | | | | | | 100 | | | | | | |
| US503025M_ | | | | | | | | 25 | | | | | | |
| US503050M_ | 5.0 | 3.0 | 1.00 | 15.4 | 16 | 48 | 20 | 50 | □ | | ■ | | | |
| US5030100M_ | | | | | | | | 100 | | | | | | |
| US604025M_ | | | | | | | | 25 | | | | | | |
| US604050M_ | 6.0 | 4.0 | 1.00 | 19.3 | 14 | 42 | 25 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| US6040100M_ | | | | | | | | 100 | | | | | | |
| US805025M_ | | | | | | | | 25 | | | | | | |
| US805050M_ | 8.0 | 5.0 | 1.50 | 37.7 | 15 | 45 | 30 | 50 | □ | ■ | ■ | | ■ | ■ |
| US8050100M_ | | | | | | | | 100 | | | | | | |
| US805525M_ | | | | | | | | 25 | | | | | | |
| US805550M_ | 8.0 | 5.5 | 1.25 | 32.6 | 12 | 36 | 40 | 50 | □ | ■ | ■ | | ■ | ■ |
| US8055100M_ | | | | | | | | 100 | | | | | | |
| * US806025M_ | | | | | | | | 25 | | | | | | |
| * US806050M_ | 8.0 | 5.7 | 1.15 | 30.4 | 11 | 33 | 40 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| * US8060100M_ | | | | | | | | 100 | | | | | | |
| US106525M_ | | | | | | | | 25 | | | | | | |
| US106550M_ | 10.0 | 6.5 | 1.75 | 55.8 | 14 | 42 | 40 | 50 | □ | ■ | ■ | | ■ | ■ |
| US1065100M_ | | | | | | | | 100 | | | | | | |
| US107025M_ | | | | | | | | 25 | | | | | | |
| US107050M_ | 10.0 | 7.0 | 1.50 | 49.2 | 11 | 33 | 50 | 50 | □ | ■ | ■ | | ■ | ■ |
| US1070100M_ | | | | | | | | 100 | | | | | | |
| US107525M_ | | | | | | | | 25 | | | | | | |
| US107550M_ | 10.0 | 7.5 | 1.25 | 42.2 | 9 | 27 | 60 | 50 | □ | ■ | ■ | | ■ | ■ |
| US1075100M_ | | | | | | | | 100 | | | | | | |
| * US108025M_ | | | | | | | | 25 | | | | | | |
| * US108050M_ | 10.0 | 7.7 | 1.15 | 39.3 | 8 | 24 | 65 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| * US1080100M_ | | | | | | | | 100 | | | | | | |
| US128025M_ | | | | | | | | 25 | | | | | | |
| US128050M_ | 12.0 | 8.0 | 2.00 | 77.2 | 13 | 39 | 50 | 50 | □ | ■ | ■ | | ■ | ■ |
| US1280100M_ | | | | | | | | 100 | | | | | | |
| US129025M_ | | | | | | | | 25 | | | | | | |
| US129050M_ | 12.0 | 9.0 | 1.50 | 60.8 | 9 | 27 | 70 | 50 | □ | ■ | ■ | ■ | ■ | ■ |
| US1290100M_ | | | | | | | | 100 | | | | | | |
| US141025M_ | | | | | | | | 25 | | | | | | |
| US141050M_ | 14.0 | 10.0 | 2.00 | 92.7 | 11 | 33 | 70 | 50 | □ | ■ | ■ | | | |
| US1410100M_ | | | | | | | | 100 | | | | | | |
| US141125M_ | | | | | | | | 25 | | | | | | |
| US141150M_ | 14.0 | 11.0 | 1.50 | 72.4 | 8 | 24 | 100 | 50 | □ | ■ | ■ | | | |
| US1411100M_ | | | | | | | | 100 | | | | | | |
| US161125M_ | | | | | | | | 25 | | | | | | |
| US161150M_ | 16.0 | 11.0 | 2.50 | 130.3 | 12 | 36 | 75 | 50 | □ | ■ | ■ | | | |
| US1611100M_ | | | | | | | | 100 | | | | | | |
| US161225M_ | | | | | | | | 25 | | | | | | |
| US161250M_ | 16.0 | 12.0 | 2.00 | 108.1 | 9 | 27 | 100 | 50 | □ | ■ | ■ | | | |
| US1612100M_ | | | | | | | | 100 | | | | | | |

* *Note : For certain sizes, the I.D. code in the model number may not directly correspond to the actual tube I.D. Please refer to the specification table for actual dimensions.*

*Selected hardness levels, sizes, and colors may be available upon request. Please contact SHPI for availability.*

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## Ordering Information

US 30 18 25M NA

| Material | |
|---|---|
| US | Polyurethane - Ester |

| Outside Diameter | |
|---|---|
| 30 | 3.0 mm |
| 40 | 4.0 mm |
| 50 | 5.0 mm |
| 60 | 6.0 mm |
| 80 | 8.0 mm |
| 10 | 10.0 mm |
| 12 | 12.0 mm |
| 14 | 14.0 mm |
| 16 | 16.0 mm |

| Inside Diameter | |
|---|---|
| 18 | 1.8 mm |
| 20 | 2.0 mm |
| 25 | 2.5 mm |
| 30 | 3.0 mm |
| 40 | 4.0 mm |
| 50 | 5.0 mm |
| 55 | 5.5 mm |
| * 60 | 5.7 mm |
| 65 | 6.5 mm |
| 70 | 7.0 mm |
| 75 | 7.5 mm |
| * 80 | 7.7 mm |
| 80 | 8.0 mm |
| 90 | 9.0 mm |
| 10 | 10.0 mm |
| 11 | 11.0 mm |
| 12 | 12.0 mm |

| Package Length | |
|---|---|
| 25M | 25 Meters |
| 50M | 50 Meters |
| 100M | 100 Meters |

| Color Code | |
|---|---|
| NA | Natural |
| BK | Black |
| BU | Blue |
| G | Green |
| R | Red |
| Y | Yellow |

## Contact Info

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