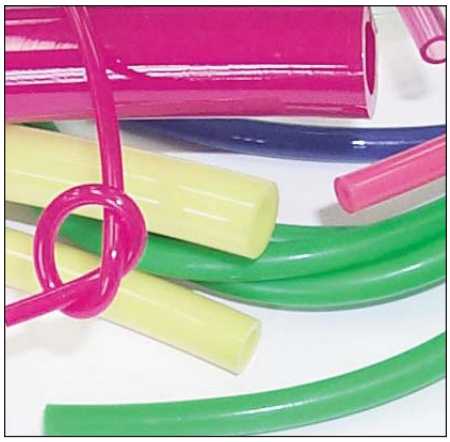
Tube Cutter

Product Number	Description
TC-1000	Tube Cutter
TCR	Blade Replacement

Precision cutter makes quick, clean and square cuts on all plastic tubing materials.

All dimensions and specifications are subject to change without notice



Polyurethane tubing characteristics include minimal water absorption, high flexibility and opaque color pigments

Durometer Defined

70A Durometer tubing is a softer compound that has a very lively, rubbery characteristic. It is extremely flexible, has good memory, resists kinking. This supple tubing installs easily onto barbed fittings but is recommended only for low pressure applications.

85A Durometer tubing is flexible enough to make tight bends without kinking and is designed to work with mini-barb fittings. The materials outstanding memory provides a tight grip requiring no clamping up to 100 psi.

90A Durometer hardness gives additional burst pressure strength needed for larger diameter sizes of PUR tubing. The 1/4 x .170 and 1/4 x 3/16 sizes are designed for optimal flow characteristics, but should only be used with barbed type fittings. Careful attention should be paid to the lower working pressure capabilities of these thinner wall tubings.

95A Durometer tubing is a slightly harder compound that increases wall rigidity to enable it to work with most brands of push-to-connect pneumatic fittings. It offers outstanding toughness and significantly higher working pressures, yet sacrifices very little flexibility.

Working Pressure Information

Temperature consideration

Thermoplastic tubing is affected by temperature. Careful consideration must be given to the reduced pressure capabilities of tubing as temperatures are increased.

The Pressure rating of polyurethane tubing is determined by testing the short term bursting pressure at 75°F. The working pressure is calculated as a ratio of the burst pressure by dividing the burst pressure by an appropriate safety factor. Three-to-one, or four-to-one safety factors are commonly used depending upon the severity of the application. If required, reinforced tubing can offer significantly higher pressure ratings.

Example: If tubing burst pressure is 450 psi @ 75°F, the working pressure with a 3 to 1 safety factor is 150 psi, or with a 4 to 1 safety factor the working pressure would be 112 psi. Safety factors of less than 3 to 1 are not recommended.

Formula:

$$\frac{\text{Burst pressure}}{\text{Safety factor}} = \text{Working pressure}$$

Example:

$$\frac{\text{450 psi @ 75°F}}{\text{3 to 1 safety factor}} = \text{150 psi Working pressure}$$