

Corrugated tubing vs. triflex® R on multi-axis robots

For the past 30 years, managing your cables on multi-axis robots has meant stuffing them inside ribbed corrugated tubes that offer barely any protection. The tubes resist the torsion created by complex robotic movements, forcing the cables and hoses to absorb all of the mechanical stress. Oftentimes, corrugated tubing is offered in limited sizes, which can lead to overfilling, premature cable wear and eventual failure. Now, there's a better way to manage your cables with triflex® R.

triflex® R is a multi-axis energy chain designed for use in a wide variety of robotic applications, including material handling and welding. It offers a built-in torsion stop, defined bend radius and split cavity. It also comes in nine sizes and is easy to shorten and lengthen.

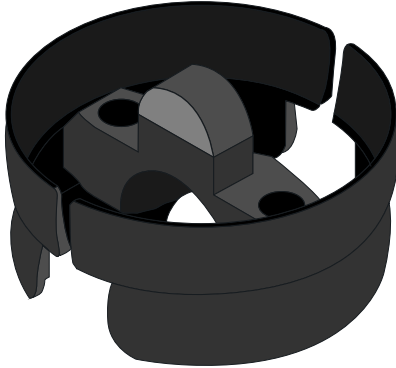
Product Design Features

Unlike corrugated tubing, triflex® R is designed with ball and socket links that enable individual pieces of the system to be replaced if one of them is damaged. You can add or remove links if your system is too short, too long or if your robot needs to be repurposed.

triflex® R also puts less stress on your cables since it moves with your robot. The defined bend radius ensures the bend radius of your cables won't be violated. The built-in torsion stop means that mechanical stress created by the robot's motion is shared between triflex® R and the cables. The split cavity acts as a separator and helps reduce excessive cable wear. It can also be used to keep high voltage cables apart from communication cables, which helps with "noise" reduction. These three features greatly reduce cable damage and premature wear, decreasing downtime and improving production.

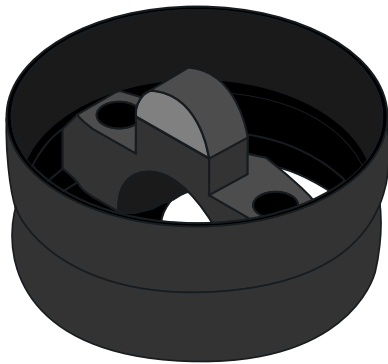


Choose between five different systems



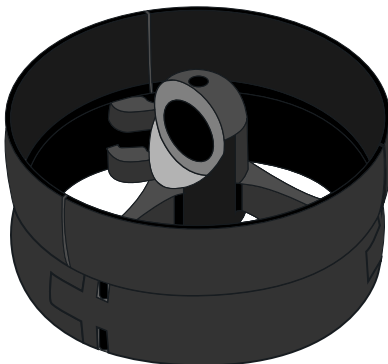
TRE Series

- Most common style
- Easy fill – fast cable installation and removal
- Reduces time to change cables by 75%
- High strength due to external stop-dogs
- Two chambers for cable separation



TRC Series

- Closed design to repel debris
- Impact and abrasion resistant
- Easy assembly and disassembly
- Two chambers for cable separation

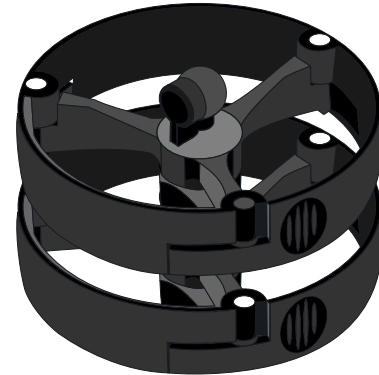


TRCF

- Closed design with snap-lock mechanism for fast opening with screwdriver
- Impact and abrasion resistant
- Easy assembly and disassembly
- Available with special bend radii for laser welding
- Three chambers for cable separation

TRLF Series

- Snap-lock mechanism for fast opening by hand or with screwdriver
- Economical option for less demanding applications
- Best for large, stiff hoses or multiple cables
- Easy assembly and disassembly
- Not recommended for axis 3-6



TRL Series

- Easy fill – fast cable installation and removal
- Economical option for less demanding applications
- Easy assembly and disassembly
- Extremely lightweight
- Not recommended for axis 3-6

