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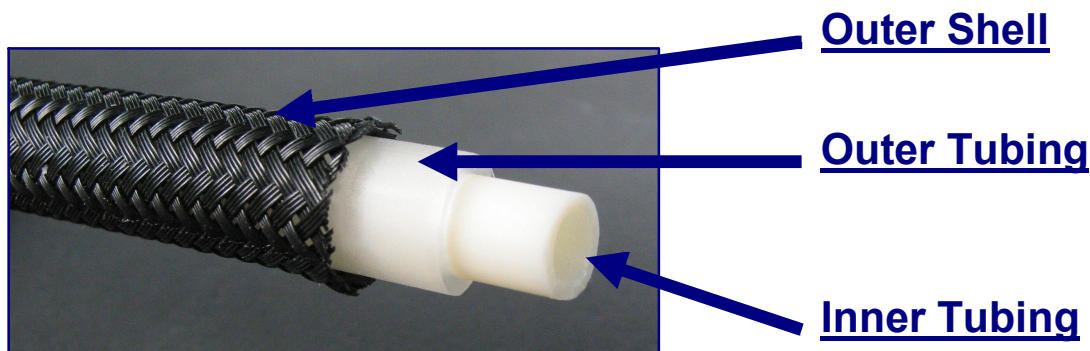


Tech Tip #28

AirBAT RF Tire Pressure Monitor Hose Construction

The AirBAT RF Tire Pressure Monitoring product features an innovative hose architecture specifically designed for use in the heavy duty environment.

The tubing is composed of three distinct layers as shown below. Materials were selected for their ability to reliably provide maximum protection to the AirBAT system. This lightweight, rugged hose assembly provides exceptional sealing performance.



- **Outer Shell.** This outer braided shell is constructed from a close weave of engineered polymer, designed for durability and rugged operation. The braid provides long-term protection for the tubing against wear and abrasion, and reinforces the hose assembly to prevent kinks.
- **Outer Tubing.** Composed of copolymer rubbers and specially formulated thermoplastic resins, the chemically resistant outer tubing material provides an outer sealing barrier against chemical exposure, road spray, and truck wash detergents. This material, designed to resist wear and maintain flexibility at low temperatures, further enhances the strength and capability of the inner tubing layer.

- **Inner Tubing.** The inner tubing layer forms the backbone of the AirBAT hose, providing sealing, rigidity and strength. This polyester thermoplastic elastomer is specially designed to consistently seal air pressures associated with this application.

Hose fittings are designed according to tire industry specifications for tube valves and fittings. Critical fitting details are controlled by STEMCO to ensure long life and maximum performance. Fittings are machined from corrosion resistant materials, and are attached using industry-proven assembly techniques. Each fitting is designed to interface easily with typical heavy duty application tire valves for rapid, reliable installation.



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