

## Why Thermoplastics?

### Reducing weight optimizes payload

Parker Parflex reinforced thermoplastic hose can reduce weight by up to 70% when compared to steel tubing or traditional wire-reinforced rubber hose. By reducing the overall weight of the fluid conveyance system, critical payload weight can be optimized.

On a recent military application, Parflex thermoplastic hose reduced weight by 27.5 pounds. (39% reduction)

- **Light weight**  
30% - 70% weight reduction
- **Abrasion resistant**  
Tough, outer jacket
- **Compact O.D.**  
10% - 30% reduction for easier routing  
Lower force to flex
- **Clean core tube**
- **Resistant to pin hole leaks**
- **Resistant to erosion**
- **Low length change under pressure**
- **Noise reduction**
- **Low permeation**
- **Wide chemical compatibility**
- **Long lengths**  
Up to 10,000 feet
- **Coiled hoses**
- **Bonded hoses**  
Reduce tangling and abrasion, up to 11 lines
- **Formed hoses**



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Bul. 4660-MIL-Tri 0- 12/20  
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## Parflex "EXTREME"

### Light Weight Hose

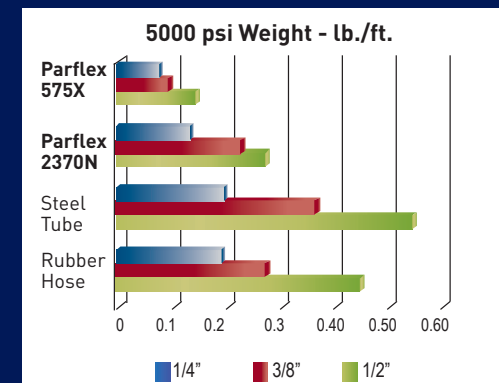
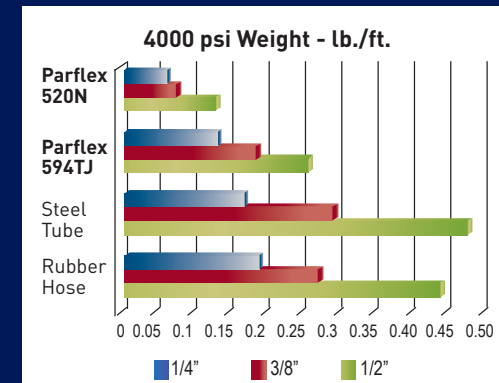
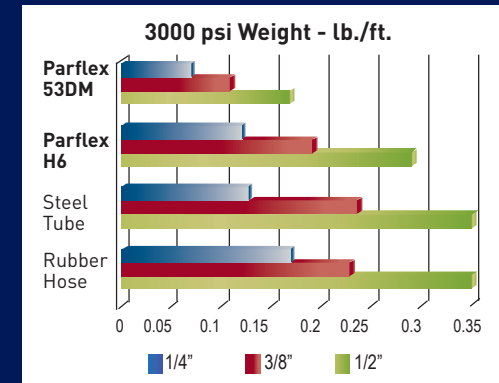


ENGINEERING YOUR SUCCESS.

# Parflex "EXTREME" Light Weight Hose

Our newest hoses, the TOUGHJACKET™ product line, combine light weight, small O.D., long continuous lengths, low length change under pressure and 650x the abrasion resistance of standard rubber hose to create one of the most durable hoses available for rugged terrain.

Hose	Specification	Pressure	Core Tube	Temperature Range
563TJ - Up to 42% lighter than comparables; 650x abrasion resistance of standard rubber hose				<ul style="list-style-type: none"><li>◆ Petroleum based hydraulic fluids and lubricating oils within a temperature range -40°F (-40°C) to 250°F (121°C)</li><li>◆ Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to 185°F (85°C)</li><li>◆ Water/glycol hydraulic fluids limited to 135°F (57°C)</li></ul>
Lowest length change under pressure	SAE 100R17	Constant 3,000 psi	Copolyester	
594TJ - Two wire strength, one wire construction; 650x abrasion resistance of standard rubber hose				
Long continuous lengths	SAE 100R19	Constant 4,000 psi	Copolyester	
H6 - Largest temperature range in medium pressure hose				<ul style="list-style-type: none"><li>◆ Petroleum based hydraulic fluids and lubricating oils within a temperature range: H604 to H608 -70°F (-57°C) to 250°F (121°C) H610 to H612 -50°F (-45°C) to 250°F (121°C)</li><li>◆ Synthetic, synthetic blend, water, and water/oil emulsion 135°F (57°C)</li></ul>
Low length change under pressure	SAE 100R17	Constant 3,045 psi	Copolyester	
53DM - Low coefficient of friction cover; Superior flexibility in cold temperatures				<ul style="list-style-type: none"><li>◆ Petroleum based hydraulic fluids and lubricating oils within a temperature range -70°F (-57°C) to 212°F (100°C)</li><li>◆ Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to 135°F (57°C)</li></ul>
Smaller O.D.'s than 100R7 and 100R18	SAE 100R18	Constant 3,000 psi	Copolyester	
520N - Fast Response; Lighter and smaller O.D. than 100R2				-40°F (-40°C) to +212°F (100°C)
Twinline and multi-line available	SAE 100R8; MSHA	3,500 to 5,000 psi	Nylon	
2370N - Great chemical compatibility				
High pressure service	-	5,075 to 6,740 psi	Polyamide	
575X - Fast response even over longer length				-40°F (-40°C) to +212°F (100°C)
Low length change under pressure; Low volumetric expansion	MSHA	Constant 5,000 psi	Nylon	



## Reduce weight without compromising performance

On a recent military application, Parflex thermoplastic hose reduced weight by 27.5 pounds. (39% reduction)

