

# 518D Non-Conductive Hose

Designed specifically for the rigors of the aerial lift market including the highest level of non-conductivity, abrasion and permeation resistance.



Parflex 518D non-conductive thermoplastic hose was developed to handle the harshest environments, both internally and externally. The 518D hose, from Parker Hannifin, has a new core material that is more resistant to permeation and an outer jacket that has greater abrasion resistance than many other products on the market today.

Many end users are using hydraulic fluids with aggressive additives that can move through hoses over time (permeation). The core material in 518D is highly resistive to the permeation of these fluids. In addition, Parflex gave the 518D-4 a special reinforcement package to reduce the reinforcement diameter, allowing for an increase in the thickness of the special PFX cover. In lab studies, this improvement has shown to provide as much as 5x more abrasion resistance than 518C hose.

Parflex 518D hose uses the same fitting and crimp diameters as our current 518C product for a quick and easy replacement.



## Contact Information:

Parker Hannifin Corporation  
**Parflex Division**  
1300 North Freedom St.  
Ravenna, OH 44266

**phone 330 296 2871**  
**fax 330 296 8433**

[www.parker.com/parflex](http://www.parker.com/parflex)



## Product Features and Benefits:

- Many sizes available with quick connect, field attachable fittings or 56 series rapid assembly fittings for quicker installations
- Twin or multi-line constructions available
- Super high density braid for maximum impulse life without loss of flexibility
- "MADE IN USA" construction
- 4:1 design factor (SAE)
- Bonded construction; thicker jacket makes splitting easier routing

**ENGINEERING YOUR SUCCESS.**

# 518D - Non-Conductive Hose



## Construction

- Tube: Nylon: -2 to -12 Copolyester: -16
- Reinforcement: Fiber
- Cover: Polyurethane

## Fittings

- 561R Series 56 Series
- For most Parker products, Crimp Die Selection charts are found online at [www.parker.com/crimpsource](http://www.parker.com/crimpsource)

## Operating Parameters

- Temperature Range(except 518D-16):  
-40°F (-40°C) to 212°F (100°C)
- 518D-16 Temperature Range:
  - ◆ Petroleum based hydraulic fluids and lubricating oils within a temperature range -70°F (-57°C) to 212°F (100°C)
  - ◆ Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to 135°F (57°C)
- Vacuum Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure: (SAE requires 4:1 Design Factor)
  - 4:1 design factor required per SAE J517 100R7
  - 3:1 min design factor acceptable per ANSI A92.2

## Features

- Nylon core for maximum resistance to permeable fluids
- -4 construction features:
  - ◆ Super high density braid resulting in compact braid O.D.
  - ◆ Heavier polyurethane jacket improving abrasion resistance and multi/twin-line separation for bonded assemblies
- Low coefficient of friction cover
- Twin or multi-line constructions available
- Approved for use with 51R-Series Field Attachable and Rapid Assembly connections

## Compliance

- Meets SAE J517 electrical standards (non-conductivity)
- Meets/Exceeds SAE J517 100R7
- DNV-GL Type Approved
- ANSI A92.2
- ISO 3949-R7-2

## Notes

- Non-perforated cover
- Lay lines on this hose will have both ANSI and SAE maximum working pressure listed. ANSI A92.2 "Vehicle Mounted Elevating and Rotating Aerial Devices"
- Field attachable fittings are not intended for use on hose that has been previously in service

## Color

- ● Orange (non-conductive)

## Series 518D

[Visit the webpage](#)

| Part Number | Nominal I.D. |      | Maximum O.D. |      | ANSI A92.2 Maximum Working Pressure |      | SAE 100R7 Maximum Working Pressure |      | Minimum Bend Radius |     | Weight |        | Perm. Fitting Series | Field Attach. Fitting Series |
|-------------|--------------|------|--------------|------|-------------------------------------|------|------------------------------------|------|---------------------|-----|--------|--------|----------------------|------------------------------|
|             | inch         | mm   | inch         | mm   | psi                                 | MPa  | psi                                | MPa  | inch                | mm  | lbs/ft | kg/mtr |                      |                              |
| 518D-2      | 1/8          | 3.2  | 0.34         | 8.6  | 3,150                               | 21.7 | 3,000                              | 21   | 1/2                 | 13  | 0.03   | 0.05   | 56                   | -                            |
| 518D-3      | 3/16         | 5    | 0.43         | 10.9 | 3,250                               | 22.4 | 3,250                              | 22.4 | 3/4                 | 19  | 0.05   | 0.07   | 56                   | 51R                          |
| 518D-4      | 1/4          | 6.3  | 0.47         | 11.9 | 3,150                               | 21.7 | 3,000                              | 21   | 1-1/2               | 38  | 0.06   | 0.09   | 56                   | 51R                          |
| 518D-5      | 5/16         | 8    | 0.57         | 14.5 | 3,150                               | 21.7 | 2,500                              | 17.5 | 1-3/4               | 44  | 0.08   | 0.11   | 56                   | -                            |
| 518D-6      | 3/8          | 10   | 0.64         | 16.3 | 3,000                               | 21   | 2,250                              | 15.8 | 2                   | 51  | 0.1    | 0.14   | 56                   | 51R                          |
| 518D-8      | 1/2          | 12.5 | 0.81         | 20.6 | 3,000                               | 21   | 2,250                              | 15.8 | 3                   | 76  | 0.15   | 0.22   | 56                   | 51R                          |
| 518D-10     | 5/8          | 16   | 0.98         | 24.9 | 3,000                               | 21   | 2,250                              | 19.2 | 6                   | 152 | 0.21   | 0.31   | 56                   | -                            |
| 518D-12     | 3/4          | 19   | 1.09         | 27.7 | 1,660                               | 11.4 | 1,250                              | 8.8  | 5                   | 127 | 0.21   | 0.31   | 56                   | -                            |
| 518D-16     | 1            | 25   | 1.32         | 33.5 | 1,330                               | 9.2  | 1,000                              | 7    | 8                   | 203 | 0.27   | 0.4    | 56                   | -                            |

