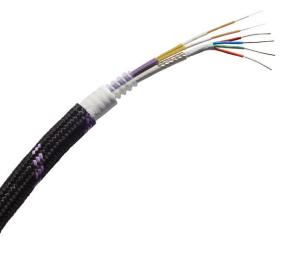
# GORE® Cable Protection Systems



Built with crush- and abrasion-resistant materials, Gore's durable cable systems provide some of the highest levels of protection available in the industry today (Table 1). They meet the demands of OEMs and system suppliers requiring more protection for packaging copper wires and fiber optics in thin, lightweight and routable designs. These cable protection systems routinely tolerate complicated routing and defend against harsh aerospace and defense conditions such as fluctuating temperatures and severe vibration.

## Quick & Easy Installation

Within GORE® Cable Protection Systems, copper and fiber can float freely without getting damaged during installation in cable runs and sharp edges in airframes and vehicles. Gore's highly flexible designs offer tighter bending capability that allows copper and fiber to be routed without exceeding the minimum bend radius eliminating over bending. Installers will find it quicker and easier to route copper and fiber packaged with Gore's cable protection systems in less space without having to worry about breakage or failure.

## Standards Compliance

- ABD0031 (AITM 2.0005);
  BSS7230; FAR Part 25, Appendix
  F, Part I: Flammability
- ABD0031 (AITM 3.0005);
  BSS7239: Toxicity
- ABD0031 (AITM 3.0008B);
  BSS7238; FAR Part 25, Appendix
  F, Part V: Smoke Density
- SAE AS81914™/1-6: Plastic Convoluted Tubing Requirements

#### **Table 1: Cable System Properties**

## Mechanical / Environmental

Property	Value		
Jacket Material	Expanded PTFE/PTFE		
Jacket Color	Black with Violet Stripes		
Temperature Range °C	-65 to +260		



GORE® Cable Protection Systems are designed to fit a selection of high-speed aerospace and defense connector system backshells (Table 2). Contact a Gore representative for additional connector system backshells not listed in the table.

Visit **gore.com/cps-termination-instructions** to download Gore's best practices for terminating GORE® Cable Protection Systems with M85049/88 connector backshells, adapters, and backshells with a similar banding platform.

**Table 2: Recommended Connector Backshells** 

	Gore Part Number				
Connector Backshell	FON1594	FON1580	FON1611	FON1612	FON1599
Mil-Spec M85049/88	•	•	•	•	•
Glenair® HatTrick™ System, Series 713-355		•	•	•	•

**Table 3: Cable System Characteristics** 

Gore Part Number	Overall Size mm (in)	Minimum Convoluted Tubing ID mm (in)	Maximum Convoluted Tubing OD mm (in)	Minimum Bend Radius mm (in)	Nominal Weight Kg/km (lb/1000 ft)
FON1594	7.2 (0.29)	3.2 (0.13)	3.9 (0.15)	9.5 (0.38)	30.0 (20.0)
FON1580	9.4 (0.37)	4.6 (0.18)	8.1 (0.32)	8.0 (0.31)	74.4 (50.0)
FON1611	13.5 (0.53)	7.8 (0.31)	11.4 (0.45)	11.1 (0.44)	116.0 (78.0)
FON1612	17.1 (0.68)	10.8 (0.43)	15.0 (0.59)	12.7 (0.50)	149.0 (100.0)
FON1599	17.9 (0.71)	12.4 (0.49)	16.8 (0.66)	19.1 (0.75)	164.0 (110.0)

### **Ordering Information**

GORE® Cable Protection Systems are available in standard sizes (Table 3). To place an order, contact an authorized distributor for in-stock availability at **gore.com/cable-distributors**.

For more information or to discuss specific characteristic limits and application needs regarding Gore's full portfolio of high-speed data cables packaged with GORE® Cable Protection Systems, contact a Gore representative today at gore.com/aerospace-defense-contact.

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