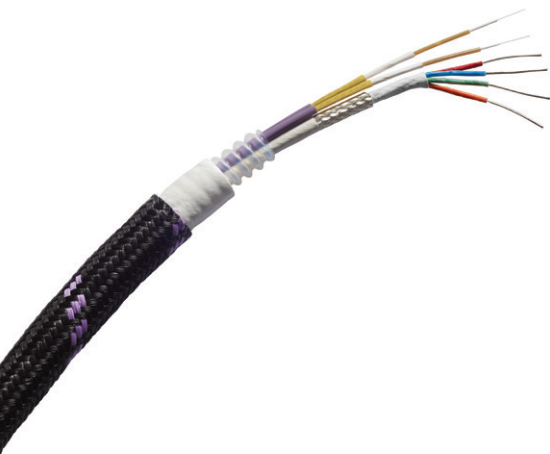


GORE® Cable Protection Systems



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 Convuluted Tubing Requirements

Built with crush- and abrasion-resistant materials, Gore's durable jacket 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 fiber optics and copper wires in highly flexible, 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, fiber and copper 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, allowing fiber and copper to be routed with controlled minimum bend radius limits to eliminate overbending. 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.

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

Connector Backshell	Gore Part Number				
	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 for aerospace and defense today.

Information in this publication corresponds to W. L. Gore & Associates’ current knowledge on the subject. It is offered solely to provide possible suggestions for user experimentations. It is NOT intended, however, to substitute for any testing the user may need to conduct to determine the suitability of the product for the user’s particular purposes. Due to the unlimited variety of potential applications for the product, the user must BEFORE production use, determine that the product is suitable for the intended application and is compatible with other component materials. The user is solely responsible for determining the proper amount and placement of the product. Information in this publication may be subject to revision as new knowledge and experience become available. W. L. Gore & Associates cannot anticipate all variations in actual end user conditions, and therefore, makes no warranties and assumes no liability in connection with any use of this information. No information in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

NOTICE — USE RESTRICTIONS APPLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.

Glenair is a registered trademark, and HatTrick is a trademark of Glenair, Inc.

GORE, *Together, improving life*, and designs are trademarks of W. L. Gore & Associates. © 2025 W. L. Gore & Associates, Inc.