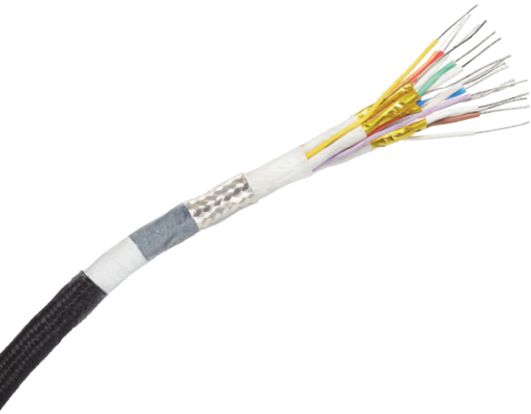


# GORE® Abrasion Resistant Cable Jacket



Engineered with a revolutionary fluoropolymer fiber material, Gore's cable jacket is proven to meet new stringent industry standards for durability without sacrificing size, weight or electrical performance (Table 1).

This rugged cable jacket is extremely abrasion resistant and meets EN3475-503 requirements. It eliminates the need for additional protective sleeving now required for copper cables installed in seats. Our state-of-the-art cable technology is thinner, lighter and more flexible with tighter bendability for straightforward routing and expedited installation in narrow seat configurations.

GORE® Abrasion Resistant Cable Jacket ensures all-around, lifetime mechanical protection and is ideal for packaging copper cables that support the latest standardized high data rate protocols such as HDMI and more.

## Standards Compliance

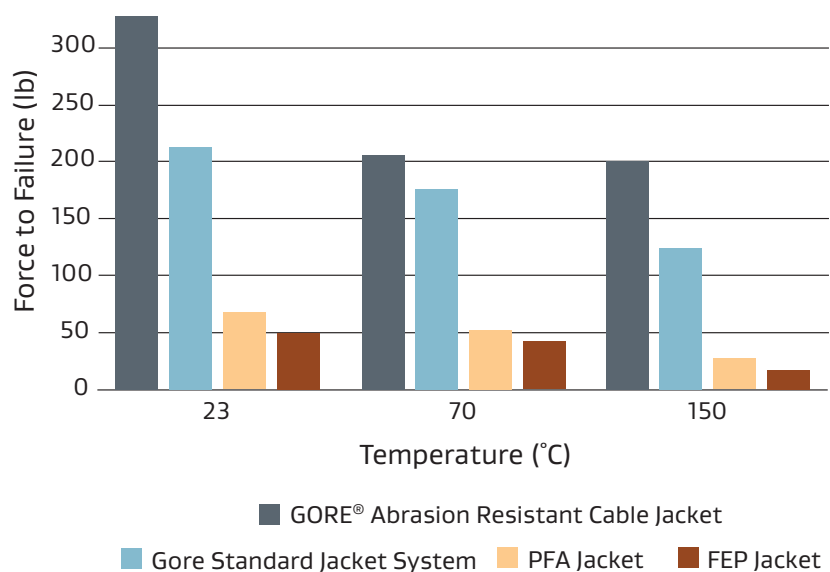
- ABD0031 (AITM 2.0005); BSS7230; FAR Part 25, Appendix F, Part I: Flammability
- ABD0031 (AITM 3.0008B); BSS7238; FAR Part 25, Appendix F, Part V: Smoke Density
- ABD0031 (AITM 3.0005); BSS7239: Toxicity
- EN3475-503: Test Methods for Scrape Abrasion
- SAE AS4373™: Test Methods for Insulated Electric Wire (Contact Gore for available data)

## Proven Superior Cut-Through Resistance

Using SAE AS4373, Method 703, Gore compared 100-ohm quadrx cables packaged with 4 different jacket types. Results indicated that GORE® Abrasion Resistant Cable Jacket drastically outperformed PFA and FEP materials for superior cut-through resistance at high temperatures (Figure 1).

Testing proved that our pioneering cable jacket can tolerate extreme operational conditions and complex routing without cracking or splitting. They ensure copper wires transmit data and video reliably in the intended application.

Figure 1: Cut-Through Resistance at High Temperatures



## GORE® Abrasion Resistant Cable Jacket

**Table 1: Cable Properties**

Typical values are based on the 2.0 version of GORE® HDMI Cables packaged with GORE® Abrasion Resistant Cable Jacket.

### Electrical

Property	Value
Signal Transmission Speed Gb/s	Up to 18
Standard Impedance Ohms	100 ± 10
Typical Operating Voltage V	< 15
Nominal Velocity of Propagation %	80
Nominal Time Delay ns/m (ns/ft)	4.10 (1.25)
Capacitance pF/m (pF/ft)	230.0 (70.0)
Maximum Skew Within Pair ps/m (ps/ft)	15.0 (4.6)
Dielectric Withstanding Voltage Vrms	
Conductor-to-Conductor	1500
Conductor-to-Shield	1000

### Mechanical / Environmental

Property	Value
Jacket Material	Engineered Fluoropolymer Fiber Braid
Jacket Color	Black
Conductor	Silver-Plated Copper or SPC Alloy
Conductor Color-Coding	High-Speed Pairs: Blue/White, Brown/White, Green/White, Red/White Singles: Orange, Violet, White, Yellow Triad: Gray, Pink, Tan
Dielectric Material	Expanded PTFE/PTFE
Cut-Through Resistance kg (lb) (SAE AS4373-703)	
23°C	122 (270)
70°C	73 (160)
150°C	59 (130)
Scrape Abrasion Resistance Cycles (EN3475-503) 30°C & 55°C / F = 1.2 daN	> 8,000
Temperature Range °C	-65 to +200

Table 2: Cable Characteristics

## HDMI 2.0 Version

Gore Part Number	AWG Size (Stranding)	Nominal Outer Diameter mm (in)	Minimum Bend Radius mm (in)	Nominal Weight kg/km (lb/1000 ft)	Typical Insertion Loss dB/30 m (100 ft)			
					825 MHz	2475 MHz	4125 MHz	5100 MHz
RCN9195	Data/Drains/Discrete Pairs: 26 (19/38) Capacitance-Controlled Singles: 28 (19/40)	6.6 (0.26)	13.0 (0.51)	77.5 (52.0)	5.0	12.0	20.0	25.0

## Ordering Information

The 2.0 version of GORE® HDMI Cables packaged with GORE® Abrasion Resistant Cable Jacket is available in a standard size (Table 2). To place an order, contact an authorized distributor for in-stock availability at [gore.com/cable-distributors](http://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® Abrasion Resistant Cable Jacket, contact a Gore representative today at [gore.com/aerospace-defense-contact](http://gore.com/aerospace-defense-contact).

Proven to meet new stringent requirements, Gore’s cable jacket with abrasion resistance eliminates the need for protective sleeving now required for copper cables installed in seats.



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