

Increase high-speed data and video with lighter, high-flex cable design



Modern vectorics and soldier-worn equipment require cables to deliver data and video at the highest speeds without losing connectivity to ensure operational readiness, success, and safety. These cables must also tolerate extreme environments, such as electromagnetic interference (EMI), vibration, weather, temperatures, and terrain. At the same time, they must be highly flexible to expand and retract quickly and easily, lighter to save weight, and comfortable for soldiers to wear.

Benefits

- Reliable signals for high-speed data and video transmission up to 10 Gb/s
- Less RF interference among systems due to superior shielding effectiveness
- Rugged protection against challenging combat conditions for long-term product life
- Less weight and more comfortable with smaller, lighter cable design
- More flexibility to expand to desired lengths, retract to original form without any effort
- Customized versions to meet precise high-speed protocol requirements
- Compatible with a variety of high-speed connector systems and backshells

Typical Applications

- Augmented reality solutions
- Digital camera/video systems
- Helmet-mounted displays
- Mission/radar systems
- Radio/communications systems
- Soldier-worn systems
- Tactical links
- Telescopic masts for optronics
- Vectorics digital networks



Image courtesy of Rheinmetall©

Fast Data & Video Transmission

GORE® Coiled Cables offer customized solutions in a unique design to meet the military's high-speed data and video protocols over conventional substitutes. They significantly improve signal speed and integrity for fast, reliable data and video transmission up to 10 Gb/s. They also effectively shield wires from RF interference among vectorics and carry-on equipment. Our cables are proven to deliver optimal situational awareness so troops can make accurate tactical decisions using real-time Intel.

GORE® Coiled Cables For Defense Land Systems

More Protection & Comfort

We engineer GORE® Coiled Cables with a high level of ruggedness to handle extreme wear and tear for long-term protection and service life (Table 1). They are proven to combat challenging environmental factors and in-vehicle conditions, such as changing weather patterns, fluctuating temperatures, dangerous terrain, severe vibration, and more. They have undergone substantial qualification testing to ensure they meet the most current industry standards and requirements.

Our coiled cables also offer more advantages over conventional substitutes. The unique design of our cables is 24% smaller and 25% lighter, so they save weight and are comfortable to wear (Figure 1). These highly flexible cables expand to desired lengths and effortlessly retract to their original form while minimizing stress on fragile wires. Soldiers can easily connect them to vehicular radio systems and carry-on equipment or weave them inside military uniforms.

With this high level of long-term protection and unfailing high-speed performance, GORE® Coiled Cables are a proven replacement to conventional substitutes in a variety of land-based and soldier-worn applications.

Figure 1: Rugged, Lightweight Construction

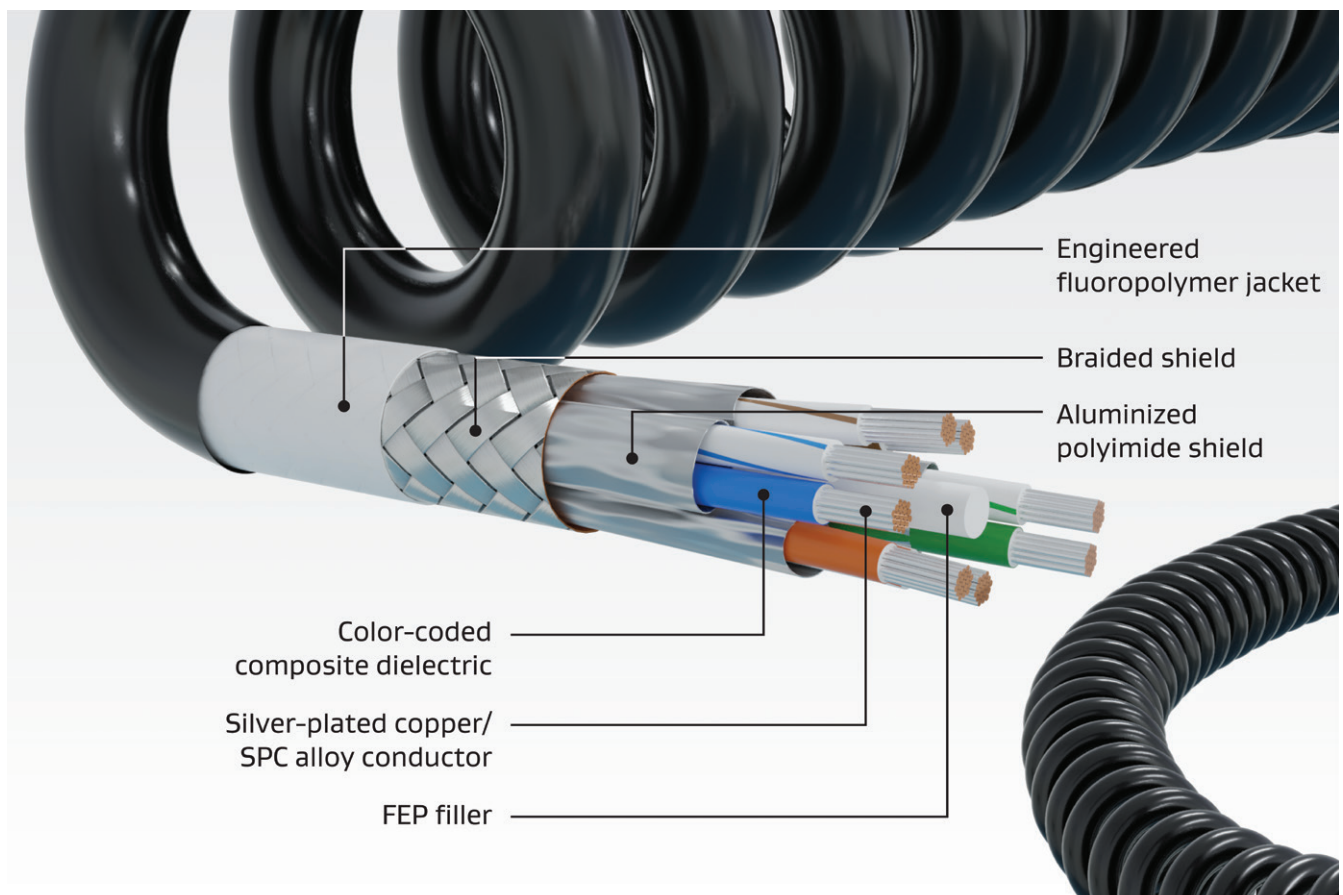


Table 1: Cable Properties

Mechanical / Environmental

Property	Value
Jacket Material	Thermoplastic Elastomer
Jacket Color	Black (Laser Markable)
Conductor	Silver-Plated Copper/SPC Alloy
Conductor Color Coding	Solid Blue & White/Blue Stripe, Solid Orange & White/Orange Stripe, Solid Green & White/Green Stripe, Solid Brown & White/Brown Stripe
Dielectric Material	Expanded PTFE/PTFE
Temperature Range °C	-40 to +100

Ordering Information

GORE® Coiled Cables are available in customized versions to meet your precise high-speed data and video protocol requirements. To discuss your specific application and place an order, please contact a Gore representative at gore.com/products/contact.

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