



Ruggedized Optical Cable (ROC®)

Fiber Optic Cable that withstands Extreme Hydrostatic Pressure

Cortland is an accomplished provider of custom-made cables. In one cable, we can provide a custom solution for power, signal, and strength.

Our engineering background and extensive experience allow us to integrate unique technologies into any cable design, creating cables that cope with even the most demanding environments. High strength cables can contain built-in power conductor signal wires and/or optical fibers. The ability to use any combination of wires or optical fibers into one compact designs makes Cortland an ideal provider of custom built cables.

Optical Cables

Optical fibers are the perfect choice when a large bandwidth is required. Whether it is a high strength application, or varying the buffer material to cope with higher temperature environments, or anything in between, Cortland can customize optical fibers to improve robustness in challenging environments.

The ROC Cable

Developed by Cortland, the Ruggedized Optical Cable (ROC®) is a variant of its patented Protected Optical Cable. These unique cables can be used as stand-alone fiber optic links, or as components in a more complex cable design. ROC® is robust, kink- and crush-resistant, yet flexible and enduring of repeated bending stresses. It is easy to terminate and is small to facilitate handling.

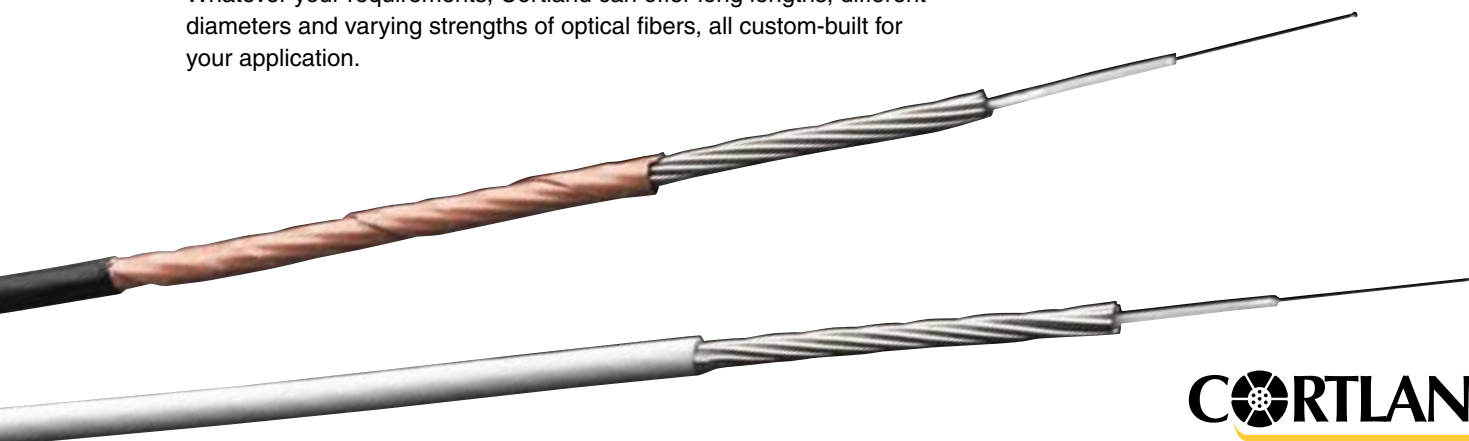
Whatever your requirements, Cortland can offer long lengths, different diameters and varying strengths of optical fibers, all custom-built for your application.

ROC® Cable Features

- Fiber optic cable that withstands extreme hydrostatic pressure
- Small, yet strong
- Crush resistant
- Kink resistant
- Flexible
- Oxidation/corrosion resistant

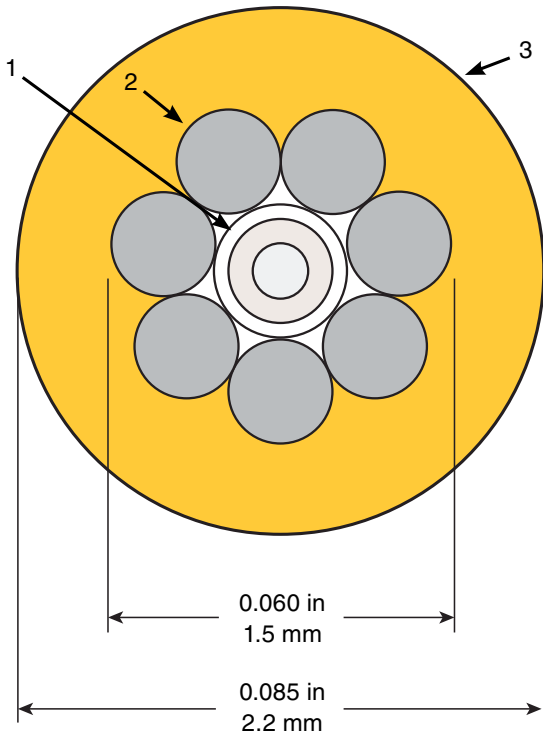
Applications

- Oceanographic
- Sporting events
- Security applications
- Battle field



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Ruggedized Optical Cable (ROC®)



1. Tight Buffered Fiber Optic:
primary buffer – UV cured acrylate
secondary buffer – UV cured acrylate, 600 μm
2. Strength member, preformed Inconel 625 wire armor
3. Hytrel® outer jacket (other jacket options available)

Optical Characteristics (nominal)

Fiber Type: AllWave® FLEX ZWP single-mode fiber

Attenuation: ≤ 0.5 dB/km @ 1310 nm

≤ 0.4 dB/km @ 1550 nm

Tensile Proof: 100 kpsi

Dimension: 8.3/125/245 μm

Operating Parameters

Recommended Bend Radius: 1.0 in (25.4 mm)

Dynamic Working Load: 150 lbf (68 kgf)

Rated Break Strength: 350 lbf (159 kgf)

Weight in Air: 8.2 lb/kft (12.2 kg/km)

Weight in Sea Water: 5.7 lb/kft (8.5 kg/km)

Hytrel® is a registered trademark of DuPont Company.

AllWave® is a registered trademark of Furukawa Electric North America.