



HERO Fiber

**METAL-COATED
FIBERS FOR THE
MOST DEMANDING
APPLICATIONS**

FEATURES

Operating temperatures from **-270°C to 700°C**

Sealed fiber structure

Enables hermetic packaging

Safe for explosive environment – **spark-free**

Resistant to acids (sulphuric, nitric, hydrochloric, hydrofluoric) and **alkalines** (sodium or potassium hydroxide)

Radiation-hardened

Allows **distributed sensing** along the entire fiber length, easy to install in the **most confined spaces**

Various metal coatings possible

Cold **bonding to metallic surfaces**

Highly **customizable coating thickness**

Various **microstructure designs** available

Long lifespan



SPECS*
HERO Fiber 600 125/50

- Operating temperature:
-200°C to 700°C
(up to 900°C short term)
- Fiber diameter with coating:
170 μm ± 10 μm
- Bending radius:
10 mm short term, 25 mm long term
- Fiber type:
single or multimode
- Proof test:
100 kpsi
- Chemical resistance:

H ₂ SO ₄ >95% to 300°C	HF >40% to 100°C
HNO ₃ 65% to 100°C	NaOH >50% to 300°C
HCl 35% to 100°C	KOH >50% to 300°C

* All orders are customized to the particular needs of our clients. Please, contact us to discuss your requirements and specifications.



APPLICATIONS

- Measurements in extreme conditions for industrial process monitoring (temperature, strain, vibrations, flow, pressure, deformation)
- Oil & gas: down-hole sensing;
- Metallurgy: continuous monitoring of furnace's structure
- Energy: boiler structural health and temperature monitoring; steam and liquids flow monitoring in extreme heat and radiation
- Telecom and IT: resilient and high-capacity emergency and back-up networks
- Aviation and space: monitoring of rocket and jet engines; space-capable sensors and wiring
- Chemical industry: sensors for hazardous, corrosive and caustic environments; high and cryogenic temperature monitoring
 - Ex areas: safe sensors and wiring
 - Structure and material wear sensing
- High vacuum and high pressure devices
 - Radiation-resilient sensors

