

# PRODUCT DESCRIPTION

Our PFP Medical hybrid cables combine fiber optics and copper conductors in a single structure, allowing simultaneous transmission of data and power. These cables are ideal for use in medical devices, monitoring systems, and imaging equipment where high-speed transmission and reliability are required.

## **PRODUCT FEATURES**

#### Data and Power Transmission:

- Fiber Optic: Enables high-speed data transmission without electromagnetic interference (EMI).
- **Copper Conductors:** Provide electrical power to medical devices. Available in various gauges, depending on the current requirements.

#### Internal Components:

- Fiber Optic Core: Glass with a protective coating to prevent signal loss.
- Copper Wires: Insulated to prevent short circuits and ensure safety.
- Filler Materials: Water-blocking materials and mechanical protection.
- Central Strength Member: Mechanical reinforcement to prevent cable breakage.
- Metallic Shielding: Optional, protects against external interference and adds durability.

#### **Outer Jacket:**

• Matte polyurethane (medical grade). Durable and safe, resistant to chemicals and extreme conditions.

## **APPLICATIONS**

- Medical Imaging Equipment (MRI, CT, ultrasound).
- Patient Monitoring Systems and Wearable Devices.
- · Robotic Surgical Instruments.
- Medical Telecommunication Systems.

## **ADVANTAGES**

- Immunity to Electromagnetic Interference (EMI): Ideal for sensitive medical environments.
- Simultaneous Transmission: Space-saving and reduced cable complexity.
- Durability: Resistant to bending, chemicals, and harsh environments.
- Customization: Can be designed according to specific customer requirements, such as length, copper conductor gauge, number of fiber optics, and jacket type.

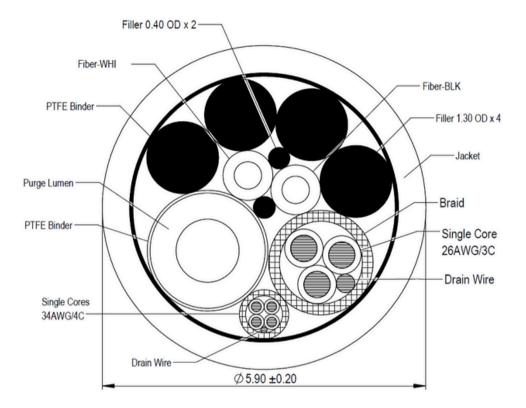
## **ENGINEERING SERVICE**

Precision Fiber Products, Inc. offers full engineering service for these hybrid cables to meet each client's specific needs.

### **SPECIFICATIONS**

Parameter	Specification
Fiber Type	PFP Specialty SM Fiber PFP Specialty MM Fiber PFP Specialty MM Radiation Resistant Fibers PFP S200/22A, Specialty MM Fiber
Copper Gauge	Customer's requirements
Jacket Material	Matte polyurethane (medical grade).
Operating Temperature	10°C~50°C
Storage Temperature	0°C~70°C
Cable Weight	(depending on configuration)
The Environmental Statement	All the parts, materials and products conform to RoHS.





This drawing represents a customized configuration based on the customer's specific request. Please note that the appearance of the drawing may vary accordingly.

