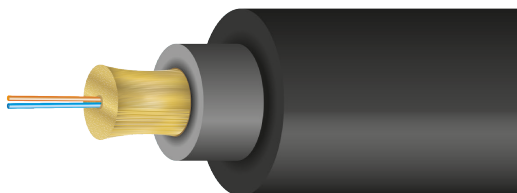


# TWF2R-Custom

Certified Premium 2Fiber Ruggedized Cable with TotalWire™ Technology

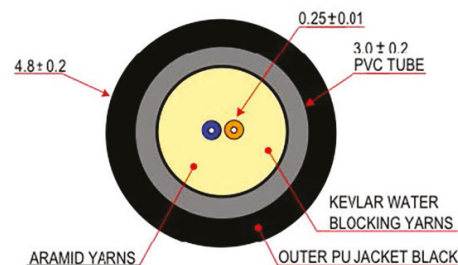


The TotalWire **TWF2R-Custom** 2 Fiber Ruggedized Cable is designed for installations where cables may need to be removed or changed, such as rental or staging applications. The rugged PU jacket provides increased durability, UV and chemical resistance, and extreme flexibility. The **TWF2R-Custom** cable is outdoor rated and has advanced optical glass fibers that are much stronger, safer, and faster (**SSFTM Technology\***) terminating than typical fibers.

*\*Note: PureLink's Advanced SSF™ Technology provides superior strength and durability for simplified and safe field termination.*

## Key Features

- All dielectric construction - no grounding/bonding required
- High mechanical strength and superior fatigue/durability
- Compatible with common connector systems for 50/125 multimode fibers
- Up to 10,000x the bend longevity of traditional fiber
- Integral SSF™ coating provides glass protection
- Increased safety due to incredible bend insensitivity
- Exclusive 250um Soft Peel jacket identifier



## Applications

- Installations requiring portability - cable can be retracted onto a reel
- Harsh environments: temporary or permanent industrial, broadcast, or abrasive/chemical environments
- High crush environments

## Fiber Construction

Number of Fibers = 2  
 50/125 Multimode OM3  
 250um "Soft Peel" S-Type Coating  
 Color Coding per TIA/EIA 568C

## Jacket Construction

Type = Rugged Polyurethane (PU), Outdoor  
 Color = Black  
 Outer Diameter = 4.8mm  
 Subunit Jacket = 3.0mm Flame Retardant PVC  
 Sequential Foot Markings  
 Strength Member = Kevlar+water blocking yarns

## Physical Data

Storage Temperature Range	-40°C to +80°C
Operating Temperature Range	-20°C to +75°C
Max Tensile Load (Installation)	1000 N (225 lbf)
Max Tensile Load Long Term	500 N (112 lbf)
Cable Outside Diameter, Nominal	4.8 mm
Min. Bend Radius, Installation	11.5 cm
Min. Bend Radius, Operation	5.0 cm
Subunit Min. Bend Radius, Unloaded	3.0 mm
Cable Package	Customer requested custom lengths
Rating	Outdoor
Crush Resistance (TIA/EIA 455-41A)	100 kgf / mm
Impact Resistance (TIA/EIA 455-25B)	1500 impact cycles
Flexing@90 degrees (TIA/EIA 455-104A)	2000 flexing cycles

## Physical Characteristics

Core Diameter	50.0 ± 2.5 μm
Core Non-Circularity	≤ 6%
Core/Hybrid Cladding Concentricity Error	≤ 3.0 μm
Hybrid Cladding Diameter	125 ± 0.7 μm
Hybrid Cladding Non-Circularity Error	≤ 3.0%
Soft Peel Jacket Identifier	11.5 cm
Coating Strip Force	100 g
Fiber Curl	≥ 2m
Proof Test	100 kpsi
Dynamic Fatigue 23°C, 41% R.H.	> 30nD
Bend Induced Attenuation, 1300 nm Length	100 turns around 75mm diameter mandres ≤ 1.0 dB Custom

## Environmental Characteristics

Temperature Dependence, 850 nm and 1300 nm =	≤ 0.5 dB/km
Induced Attenuation = -60°C to +85°C	
Watersoak Dependence, 850 nm and 1300 nm =	≤ 0.5 dB/km
Induced Attenuation at 20°C for 30 days	
Damp Heat Dependence, 850 nm and 1300 nm =	≤ 0.5 dB/km
Induced Attenuation at 85°C, 85% R.H., 30 days	
Dry Heat Dependence, 850 nm and 1300 nm =	≤ 0.5 dB/km
Induced Attenuation at 85°C, 30 days	

## Optical Characteristics

Attenuation Coefficient	850 nm	≤ 3.0 dB/km
	1300 nm	≤ 1.0 dB/km
Numerical Aperture		0.200 ± 0.015
Overfilled Modal Bandwidth	850 nm	≥ 1500 MHz · km
	1300 nm	≥ 500 MHz · km
High Performance EMB	850 nm	≥ 2000 MHz · km

## Backscatter Characteristics

Attenuation Directional Uniformity		≤ 0.05 dB/km
Attenuation Uniformity		≤ 0.05 dB/km
Group Index of Refraction	850 nm	1.481
	1300 nm	1.476

## Compliance

IECA S-104-696. GR-409 RoHS Compliant Directive 2011/65/EU

SSF™ conforms to the requirement of IEC 60793-2-10 A1a.3, ISO/IEC 11801 & ITU-T G.651.1 850 nm Laser-Optimized 50μm core multimode fiber for 10 Gb/s and above applications.