



OmniReach® FTTX Solutions

RealFlex™ Universal Drop Cable

CommScope's OmniReach® FTTX Solutions are the industry's first infrastructure solutions designed from the ground up to meet the unique requirements of FTTX networks. Designed for operational efficiency and scalability, OmniReach solutions simplify FTTX network installation, maintenance and management from the central office/headend to the outside plant.

CommScope's OmniReach RealFlex™ Universal Drop Cable is the latest innovation in drop cable technology for FTTX networks. The cable is designed to meet all outdoor drop cable requirements, as well as indoor drop cable requirements, in a single, all-in-one solution.

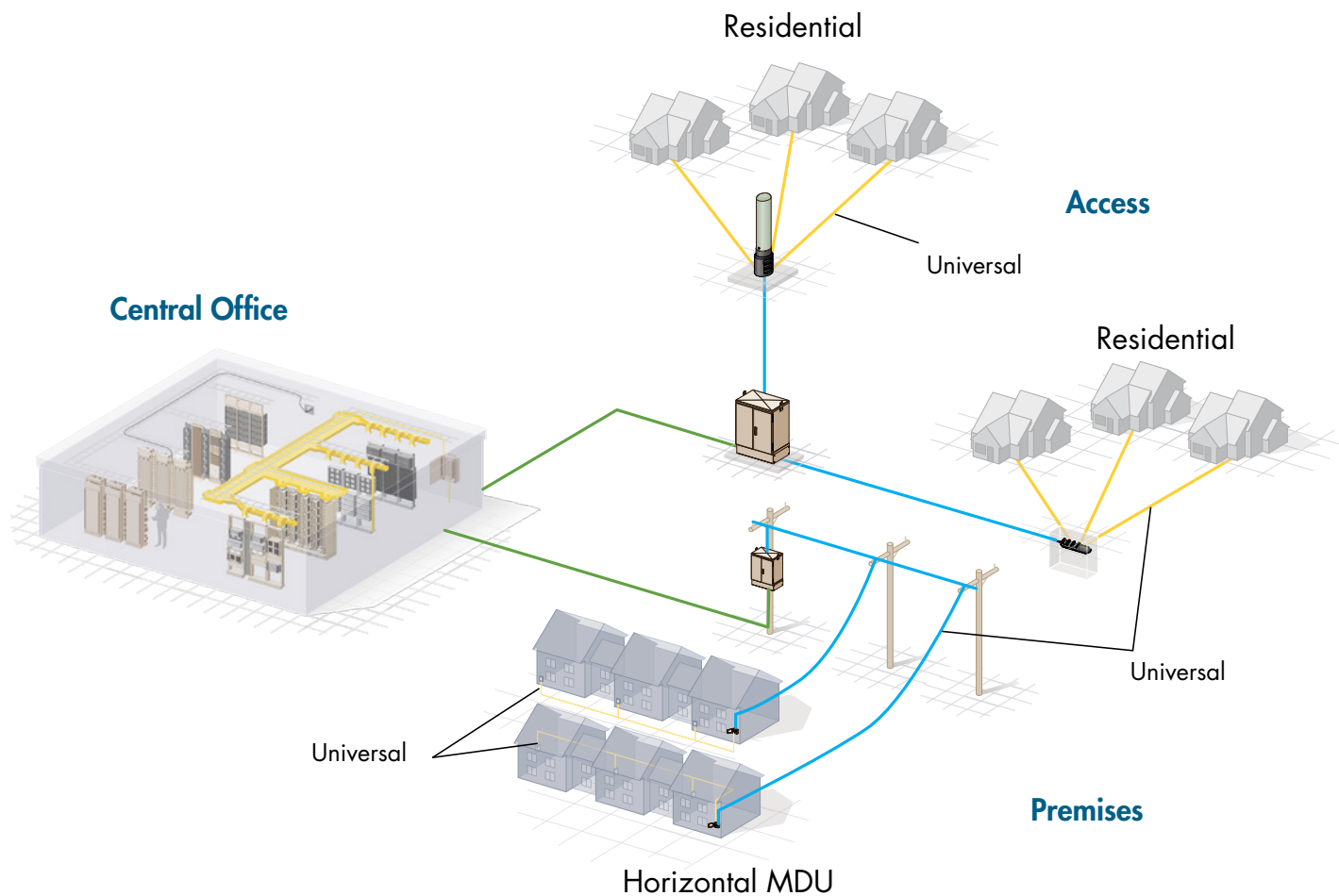
A cable within a cable, the RealFlex Universal Drop consists of a hardened flat drop exterior to weather the harsh outdoor conditions, plus an inner 3 mm simplex cable UL-listed and approved for indoor use. The hardened drop cable incorporates a legacy full size connector, which can be quickly mated to a service terminal on a pole, street or underground. The 3 mm inner simplex cable is equipped with a small SC connector, which can be easily transitioned into a building for connecting to an indoor ONT, splice cabinet or termination box.

The Universal Drop Cable realizes savings on several fronts. One, the SC connector eliminates the need for splice labor and termination equipment at the premises wall. The SC connector can also be connected to a less expensive indoor ONT device, which doesn't require an electrician to install. Two, the Universal Drop Cable eliminates the need to purchase, warehouse and deploy multiple cable types for service drop cable applications. A single "universal" drop cable can be used for all service provider planning, builds and truck rolls—simplifying network operations and improving cost efficiencies for outside plant construction.

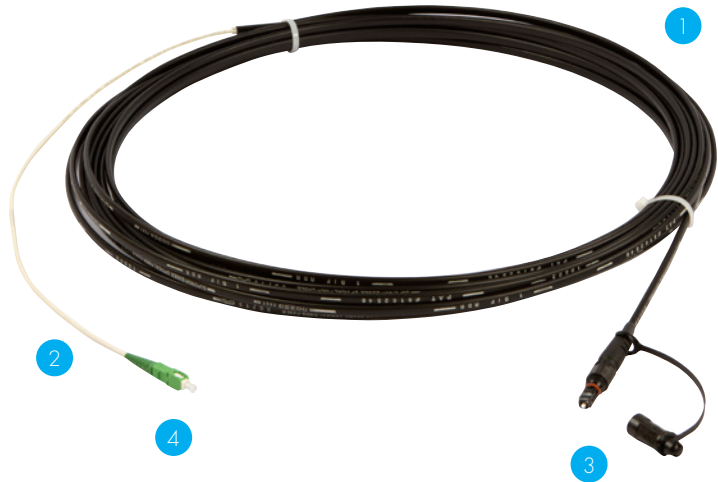
Features and Benefits

- Innovative outdoor/indoor cable can be used for all OSP drop cable applications
- Ruggedly designed and tested to meet the highest quality standards for outside plant use
- Factory preconnectorized solution speeds construction throughout the FTTP network
- Universal Drop Cable promotes highly flexible network infrastructures

RealFlex™ Universal Drop Cable in the Fiber to the Premises (FTTP) Network



The Universal Drop Cable can be used in any outdoor or outdoor-indoor drop cable application in the FTTP network.



- 1 **Cable Exterior:** Standard hardened flat drop provides protection from harsh outdoor temperatures and conditions
- 2 **Cable Interior:** 3 mm simplex drop cable is riser-rated and suitable for OFNR applications
- 3 **Connector 1:** Miniaturized hardened connectors meets environmental demands for outside plant use
- 4 **Connector 2:** Small SC connector transitions to any indoor structure and promotes the use of indoor ONT applications

Benefits

- **Simplification:** Combination indoor/outdoor drop cable can be used for all OSP cable requirements
- **Faster Construction:** Facilitates rapid, plug-and-play cable installation from the service terminal to the indoor ONT
- **Less Inventory:** Eliminates need for stocking multiple cable types, simplifies purchasing and frees warehouse space
- **Cost Savings:** Eliminates splice labor requirements at service terminal and residence. Promotes use of less expensive indoor ONT equipment
- **Reduces Equipment:** No transition box or termination equipment is required at the wall of the premises
- **High Performance:** Reduced bend radius fiber can be handled with less insertion loss, improves overall network reliability
- **Storage:** Excess cable slack can be easily stored in small OSP enclosures

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RealFlex™ Universal Drop Cable

Mesh pulling sock provides added protection and strength for pulling SC connector through conduit and other tight spaces



Once stripped from the hardened exterior, the inner 3 mm simplex cable offers its own unique benefits for in-building construction:



Rugged 3 mm inner cable can be stapled around tight corners



Seamlessly integrates into an indoor ONT, wall splice cabinet or termination box

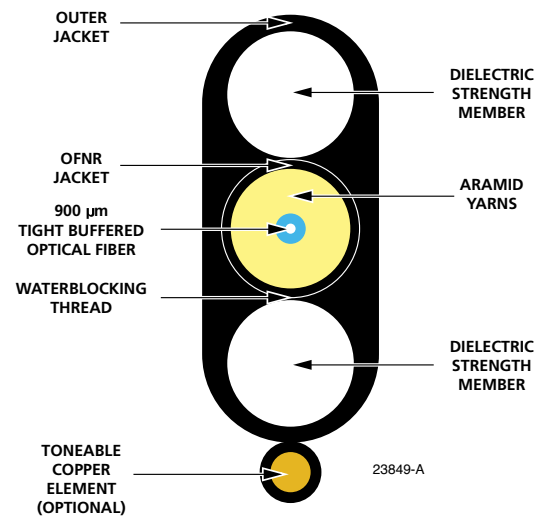


Reduced bend radius technology eliminates attenuation from tight bends, slack storage and handling by technicians



Features

- Unique cable in a cable design
- Miniaturized hardened connector on one end, SC/APC connector on other with pulling sock
- Designed for aerial, buried or conduit OSP applications
- Inner 3 mm simplex cable is UL listed to meet in-building flammability requirements
- Water-blocking thread promotes moisture protection
- Offers superior crush resistance
- Available in dielectric and toneable designs



View of Transition from Hardened Drop to 3 mm Drop Cable

Ordering Information

FHD - XP1X - XXXX X

Connector 1

H	Hardened ASC
X	DLX Connector

Connector 2

P	SC/APC
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Cable Type

C	Universal Flat, Dielectric
D	Universal Flat Locatable / Tenable

Mounting Style*

	Coiled
L	Spoiled: Connector 1 deploys first from spool
R	Spoiled: Connector 2 deploys first from spool

* Connector 1 Hardened ASC: cable length 0 to 1000 FT is automatically coiled unless the code "L" or "R" is specified.
Connector 1 DLX Connector: cable length 0 to 500 FT is automatically coiled unless the code "L" or "R" is specified.

Cable Length *

050F	50 feet
100F	100 feet
150F	150 feet
200F	200 feet
250F	250 feet
300F	300 feet
400F	400 feet
500F	500 feet
015M	15 meters
030M	30 meters
050M	50 meters
080M	80 meters
150M	150 meters
220M	220 meters

* Cable lengths shown are for example; additional cable lengths are available in feet or meters upon request

Spool Specifications

Connector 1 Hardened ASC Spool Specifications

Spool	Dimensions	Cable Length: Dielectric	Cable Length: Toneable	Quantity per Pallet
Medium	20 x 20 Flange, 9" CORE	1001' - 2000'	1001' - 1500'	12
Large	20 x 20 Flange, 12.5" CORE	2001' - 3000'	1501' - 2500'	8

Connector 1 DLX Connector Spool Specifications

Spool	Dimensions	Cable Length: Dielectric	Cable Length: Toneable	Quantity per Pallet
Small	20 x 20 Flange, 5.5" CORE	501' - 1000'	501' - 750'	16
Medium	20 x 20 Flange, 9" CORE	1001' - 2000'	751' - 1500'	12
Large	20 x 20 Flange, 12.5" CORE	2001' - 3000'	1501' - 2500'	8

Specifications

Connectors

Angle:	8°
Max Insertion Loss:	≤ 0.40 dB (at 1310 / 1490 / 1550 / 1625 nm wavelengths)
Minimum Return Loss:	65 dB (at 1310 / 1490 / 1550 / 1625 nm wavelengths)
Agency Specifications	Hardened Connectors: Based on GR-3120/TPR-9418
Non-Hardened Connectors:	Based on GR-326/TPR-9409

Cable

Dimensions (mm)	
Dielectric:	4.4 x 7.4
Toneable:	4.6 x 9.0
Length (cm)	
3mm Exposed Cable:	70 (24 in). From SC connector tip to start of stripped outer jacket
Agency Specifications:	Meets applicable sections of GR-20 and GR-409

Environmental

Operating:	-40° C to +70° C (-40° F to 158° F)
Installation:	-30° C to +60° C (-22° F to 140° F)
Storage/Shipping:	-40° C to +75° C (-40° F to 158° F)

Mechanical

Max Tensile Load N (lbf)	
Short Term:	300 (1350)
Long Term:	90 (405)
Minimum Bend Radius mm (in.)	
Installed:	58 (2.2)
Unloaded:	30 (1.2)

Axial Pull Max Load (lbf)

Through Dust Cap:	167
Plug/adaptor Connector Strength:	50

Notices

FOC tested and accepted

Note: Cable span distances are dependent on customer load and sag specifications



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