# Fortex<sup>™</sup> DT Cable



# Light Armor

Lose The Gel With Durable, Totally Dry Cable for Cleaner, Faster Installations

### **Product Description**

The OFS Fortex™ DT Light Armor Loose Tube Cable delivers the rugged durability and reliability essential for outside plant (OSP) use in an innovative, completely dry cable design.

To construct this cable, the optical fibers are placed in space-efficient, 2.5 mm buffer tubes that contain a specially-engineered, super-absorbent yarn that delivers water blocking "on demand". The color-coded buffer tubes are then stranded around a dielectric central member using the reverse oscillating lay (ROL) stranding technique for easy, mid-span fiber access.

Additional dry, super-absorbent material is applied to the cable core for exceptional water-blocking performance and faster cable preparation. Dielectric strength elements and a layer of corrugated electrolytically chrome-coated steel (ECCS) armor are applied lengthwise over the cable core to provide rugged durability. Finally, a ripcord and a durable polyethylene (PE) jacket are added to complete the cable construction.

## Why the Fortex DT Light Armor Cable?

s the industry's first 100% dry¹, loose tube cable to meet the water-blocking requirements of ANSI/ICEA and Telcordia OSP cable standards, the Fortex DT Light Armor Cable offers all the benefits of a standard light armor loose tube cable plus it's completely dry – even inside the buffer tubes!

Unlike traditional OSP cables that use gels in direct contact with optical fibers, the Fortex DT Light Armor Cable replaces gels with a specially-designed, super-absorbent yarn in each buffer tube that provides water blocking "on demand". By eliminating gels and filling compounds, this cable offers virtually effortless splice preparation, while keeping your tools, workspace, closures, and cabinets

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#### **Features and Benefits**

- Totally dry, gel-free cable design for cleaner, faster installations
- Easy to handle and install
- Highly durable and reliable for underground duct and lashed aerial installations (including duct-to-lashed aerial) as well as general OSP installations, including direct buried in harsh environments
- PE coated ECCS armor offers additional crush resistance and protection from rodent attack
- Smaller, more flexible buffer tubes for easier installation and routing
- Fiber counts to 288
- RDUP (formerly RUS) listed and compliant with ANSI/ICEA, Telcordia, and IEC specifications for reliable performance
- Available with OFS AllWave<sup>®</sup> Zero Water Peak (ZWP) Single-Mode, TrueWave<sup>®</sup> RS LWP Single-Mode, and Multimode Fibers.





<sup>1 &</sup>quot;100% dry" indicates that no oils, gels, or flooding compounds are used to block water penetration under the fiber optic cable sheath or through the core.

cleaner. The Fortex DT Light Armor Cable is also lighter in weight, making it easier to handle and less of a load on your work crew and plant infrastructure.

In addition to being completely gel-free, the Fortex DT Light Armor Cable offers the same high-performance features as OFS' traditional Light Armor Loose Tube Cable. Our flexible, craft-friendly 2.5 mm buffer tubes – among the smallest standard tubes in the industry – create far less bulk to be stored in closures and ped-

estals, and coil more easily and into tighter diameters. Plus, the Fortex DT Light Armor Cable combines this ease of handling with rugged durability and added rodent resistance. The result is a durable, reliable cable that remains lightweight, flexible, and easy to install – making it an excellent choice for a variety of OSP applications including duct, lashed aerial, and direct buried in harsh environments.

Specifications								
Fiber Count	2-60	61-72	73-96	97-120	121-144	145-216	217-240	241-288
Cable Outer Diameter	0.45	0.48	0.54	0.61	0.68	0.67	0.70	0.77
in. (mm)	(11.3)	(12.2)	(13.8)	(15.4)	(17.2)	(16.9)	(17.7)	(19.5)
Cable Weight	84	95	114	142	176	153	169	202
lb/kft (kgm/km)	(125)	(142)	(169)	(212)	(262)	(228)	(252)	(300)

#### **Performance Standard**

Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcordia GR-20-CORE Issue 2

#### Handling

Minimum Bend Radius, With Load:	15 x OD*				
Minimum Bend Radius, With No Load:	10 x OD				
Minimum Bend Radius, Storage Coils:	10 x OD				
Maximum Rated Cable Load (MRCL):	600 lbf (2700 N)				
Maximum Long Term Load:	180 lbf (800 N)				
Temperature	Installation: -30°C to 60°C (-22°F to 140°F)				
	Operation: -60°C to 70°C (-76°F to 158°F)				
	Storage: $-40^{\circ}$ C to $75^{\circ}$ C ( $-40^{\circ}$ F to $167^{\circ}$ F)				
* <i>Note:</i> OD = Outer Diameter of Cable					



#### **Fortex DT Light Armor Cable Ordering Information**

Example: AT-3BEH2YT-NNN1

Part Number: AT-  $\underbrace{S1}_{52}\underbrace{SF}_{53}\underbrace{S4}_{55}\underbrace{S5}_{6}$  -  $\underbrace{NNN}_{51}$ 

S1 = Fiber Selection

3 = 1310/1550 nm (AllWave® ZWP Fiber) 6 = 1550 nm (TrueWave® RS LWP Fiber)

R = 850/1300 nm (Multimode)
S2 = Fiber Transmission Performance

B = 0.35/0.31/0.27/0.25/0.27 dB/km (1310/1385/1490/1550/1625 nm AllWave ZWP) 2 = 0.25 dB/km (TrueWave *RS* LWP)

v = 3.4/1.0 dB/km and 200/500 MHz-km (850/1300 nm Multimode) K = 2.5/0.7 dB/km and 500/500 MHz-km (50 um Multimode) SF = Fiber Type
E = AllWave ZWP

E = AllWave ZWP 6 = TrueWave RS LWP 9 = 62.5/125 μm Multimode 2 = 50/125 μm Multimode S5 = Core Type

S6 = Fibers Per Tube

T = 12 fibers

NNN = Fiber Count = 002 to 288

Y = Totally Dry Loose Tube

9 = 62.5/125 μm Multimode 2 = 50/125 μm Multimode S3 = Sheath Construction

H = Single Jacket, Single Armor

S4 = Tensile Load 2 = 600 lb (2700 N)

Part Number shown is for standard AllWave ZWP attenuation and standard cable print:

Maximum AllWave ZWP attenuation: 0.35/0.31/0.27/0.25/0.27 dB/km (1310/1385/1490/1550/1625 nm)

Standard Print, example (Fortex DT Light Armor Cable):

OFS OPTICAL CABLE AT-3BEH2YT-NNN [MM-YY] [HANDSET SYMBOL] [NNN] F [SERIAL #]

<sup>2</sup> Contact OFS Order Management for information on other cable variations, including additional fiber types, attenuation, and custom cable print.



ofs A Furukawa Company