

Fortex[™] DT Single Jacket Loose Tube Fiber Optic Cable

Lose the Gel with Completely Gel-Free Fiber Optic Cable for Cleaner, Faster Installations



Gel-Free Buffer Tube

Optical Fibers

Central Member

Central Member

Jacket

Dielectric Strength

Elements

Outer PE Jacket

DryBlock® WaterBlocking Material

Features and Benefits

- Totally gel-free fiber optic cable design for cleaner, faster installations
- Highly durable and reliable for duct and lashed aerial installations (including duct-to-lashed aerial) as well as general OSP installations
- Smaller, more flexible buffer tubes for easier installation and routing
- · Optical fiber counts to 288
- Available with OFS applicationspecific fibers including AllWave®
 Zero Water Peak (ZWP) and AllWave+ Single-Mode, TrueWave®
 RS LWP Single-Mode, and Multimode optical fibers

Product Description

OFS' Fortex™ DT Single Jacket Loose Tube Cable delivers the durability and reliability essential for outside plant (OSP) use in an innovative, completely gel-free cable design.

To construct this all-dielectric 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 gel-free, super-absorbent material is applied to the cable core to offer exceptional water-blocking performance and faster cable preparation. Dielectric strength elements, a ripcord, and a durable polyethylene jacket complete the cable construction.

Why The Fortex DT Cable Single Jacket?

As the industry's first 100%¹ gel-free loose tube cable to meet the water-blocking requirements of ANSI/ICEA and Telcordia OSP cable standards, Fortex DT Single Jacket Cable offers all the benefits of a standard loose tube cable plus it's completely gel-free – even inside of the buffer tubes!

Unlike traditional OSP fiber optic cables that use gels in direct contact with optical fibers, Fortex DT Single Jacket 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 cleaner. Gel-free cables are also lighter in weight, making them easier to handle and less of a load on your work crew and plant infrastructure.

In addition to being completely gel-free, Fortex DT Single Jacket Cable offers the same high-performance features as OFS' traditional loose tube cables. Our 2.5 mm buffer tubes – among the smallest standard tubes in the industry – create far less bulk to be stored in closures and pedestals. Smaller, more flexible buffer tubes also coil more easily and into tighter diameters.

^{1 1 &}quot;100% gel free" indicates that no oils, gels, or flooding compounds are used to block water penetration under the fiber optic cable sheath or through the core.

Specifications 2-60 61-72 73-96 97-120 121-144 145-216 217-240 241-288 **Fiber Count** Cable Outer Diameter - in. (mm) 0.39(9.9)0.41 (10.5) 0.48 (12.3) 0.55 (13.9) 0.62 (15.7) 0.61 (15.5) 0.64 (16.3) 0.71 (18.0) Weight - Ib/kft (kgm/km) 42 (62) 48 (72) 65 (96) 85 (126) 107 (159) 102 (152) 126 (187) 90 (134) Performance Standard (all cables)

Tested per Applicable Requirements of ANSI/ICEA S-87-640 and Telcorida GR-20-Core Issue 4.

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 -22 °F to 140 °F (-30 °C to 60 °C)

Operation -76 °F to 158 °F (-60 °C to 70 °C) Storage -40 °F to 167 °F (-40 °C to 75 °C)

* NOTE: OD = Outer Diameter of Cable, minimum of 6 in. (15 cm). See OFS Installation Procedure 042 for sheath preparation and coiling instructions.

Fiber Type ²									
	Fiber	Fiber	Fiber	Fiber		Typical *	Maximum Cable on Reel		
Single-Mode Fiber	(S1)	(S2)	(SF)	Standards	Wavelengths (nm)	Attenuation (dB/km)	Attenuation (dB/km)		
AllWave® ZWP Fiber	3	В	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25		
AllWave+ ZWP Fiber	3	С	Е	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25		
AllWave FLEX ZWP Fiber	5	В	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25		
AllWave One Fiber	3	F	E	G.652.D/G.657.A1	1310/1385/1550	0.33/0.31/0.19	0.34/0.31/0.22		
AllWave ULL Fiber	3	Н	E	G.652.D/G.657.B	1310/1550	0.31/0.17	0.33/0.19		
TrueWave® RS LWP Fiber	6	2	6	G.655.C&D	1550	0.21	0.25		
TeraWave® Fiber	6	2	R	G.654.B	1550	0.19	0.25		
TeraWave ULL Fiber	6	9	R	G.654.B	1550	0.18	0.22		
Multimode Fiber									
62.5 µm Fiber	R	U	9	OM1 62.5 μm	850/1300	-	3.4/1.0		
LaserWave® FLEX 300 Fiber	L	F	2	OM3 50 μm	850/1300	-	2.4/0.7		
LaserWave FLEX 550 Fiber	L	Н	2	OM4 50 μm	850/1300	-	2.4/0.7		

Fortex DT Single Jacket Loose Tube Cable Ordering Information

Example: AT-3BE12YT-NNN 1 Part Number: AT- <u>S1 S2 SF S3 S4 S5 S6 - NNN</u>

S1 = Fiber Selection
See S1 in Fiber Type table above

S3 = Sheath Construction
1 = Single Jacket All Dielectric

S5 = Core Type
Y = Totally Gel-Free Loose Tube

S2 = Fiber Transmission Performance See S2 in Fiber Type table above S4 = Tensile Load 2 = 600 lb. (2700 N) S6 = Fibers per Tube
T = 12 fibers

SF = Fiber Type²

See SF in Fiber Type table above

NNN = Fiber Count = 002 - 288

¹ Part Number shown is for a Fortex DT.Single Jacket Cable with 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 for Fortex DT Single Jacket Cable:: OFS OPTICAL CABLE AT-3BE12YT-NNN [MM-YY] (UL) US TYPE OFNR [HANDSET SYMBOL] [NNN] F [SERIAL #]

NOTE: For more information regarding typical attenuation as well as attenuation parameters on Link Design Value (LDV) (Maximum end-to-end attenuation over a concatenated span), please see OFS Application Note AN-111 which can be downloaded at www.ofsoptics.com or contact your OFS representative.

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.







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