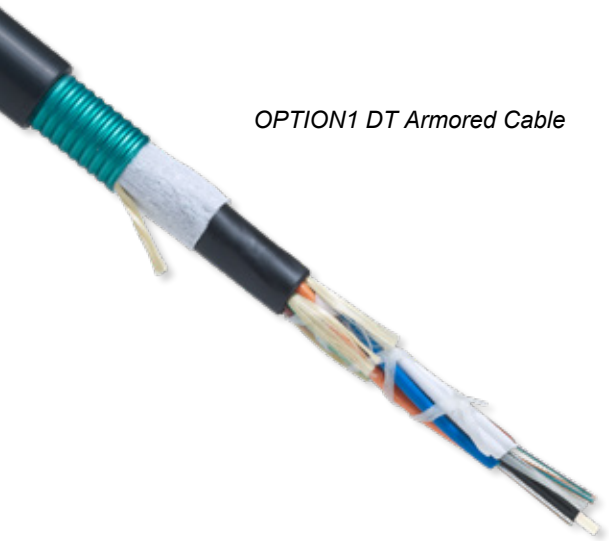
A Furukawa Company

OPTION1™ DT Armored Outdoor/Indoor Cable

Totally Gel-Free, Riser-Rated Cable Allows Faster, Less Costly Deployment for the Most Demanding Outdoor/Indoor Applications



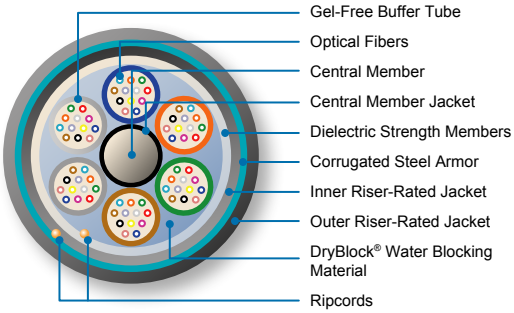
OPTION1 DT Armored Cable

Features and Benefits

- Totally gel-free cable saves on deployment time and expense
- Helps reduce cable preparation time by up to 80%[1]
- Streamlined installation with direct outdoor-to-indoor cable transitions
- Cleaner work environment helps support faster splicing with higher yields
- Eliminates multiple splice points for enhanced system performance
- Environmentally-friendly cable helps minimize waste and the need for special cleaning solvents
- Riser- and tray-rated; all-dielectric construction with OFNR approval; meets UL 1666 (riser-rated) for flame resistance
- UV-resistant jacket for reliable service in direct sunlight
- Fiber counts up to 288
- Available with OFS application-specific fibers including AllWave® Zero Water Peak (ZWP) and TrueWave® *RS* LWP Single-Mode, and Multimode Fibers

Product Description

The OPTION1 DT Armored Cable innovatively combines the safety features of an indoor, riser-rated cable with the strength and crush resistance critical for the most demanding outside plant (OSP) use, all in a single, gel-free cable that allows OPS applications to flow seamlessly indoors, using a single cable and no splices.



OPTION1 DT Armored Cable Cross-Section

Why the OPTION1 DT Armored Cable?

The OPTION1 DT Armored Cable replaces gels with a super-absorbent yarn specifically designed to provide outstanding water-blocking performance. By eliminating gels and filling compounds, this cable helps enable substantial savings on installation time and labor costs while providing excellent water penetration resistance. In fact, when compared with similar gel-filled outdoor/indoor cables, the OPTION1 DT Armored Cable can help reduce cable end preparation time by up to 80%[1], helping to significantly lower labor costs for splitting and terminations.

This cable also offers faster splicing with higher first pass yields due to a cleaner work environment. The gel-free OPTION1 DT Armored Cable allows virtually effortless splice preparation, while keeping your tools, workspace, closures and cabinets cleaner and safer. Gel-free cables are also significantly lighter in weight, making them easier to handle and less of a load on your crew and plant infrastructure.

The OPTION1 DT Armored Cable enables additional cost savings by helping to minimize or eliminate the need for special cleaning solvents and wipes, along with the added expense of cleaning splicer and cleaver equipment.

By removing the need for multiple cables, this cable streamlines installation and maintenance, helping to save even more time and money.

In summary, the OPTION1 DT Armored Cable is a prime cabling solution for demanding outside plant to building transitions along with inter-building applications, private networks, Local Area Networks (LANs), and campus environments that include harsh OSP or direct buried situations.

[1] In field trials, the gel-free OPTION1 DT Armored Cable reduced the time required for cable end preparation for splicing and terminations by up to 80% as compared with OFS and competitor gel-filled loose tube cables.

Specifications

Fiber Count:	2-72	73-96	97-120	121-144	145-216	217-240	241-288
Outer Diameter - in. (mm)	0.61 (15.4)	0.67 (17.0)	0.73 (18.6)	0.80 (20.4)	0.81 (20.5)	0.84 (21.3)	0.91 (23.1)
Weight - lb/kft (kgm/km)	171 (254)	206 (306)	243 (361)	290 (432)	261 (388)	281 (418)	328 (488)

Performance Standard

Tested per Applicable Requirements of ANSI/ICEA S-87-640, Telcordia GR-20 CORE and UL 1666 (Riser)

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: -40 °F to 158 °F (-40 °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]

Single-Mode Fiber	Fiber (S1)	Fiber (S2)	Fiber (SF)	Fiber Standards	Wavelengths (nm)	Typical * Attenuation (dB/km)	Maximum Cable on Reel Attenuation (dB/km)
AllWave® ZWP Fiber	3	B	E	G.652.D	1310/1385/1550	-	0.35/0.31/0.25
AllWave+ ZWP Fiber	3	C	E	G.652.D/G.657.A1	1310/1385/1550	-	0.35/0.31/0.25
AllWave *FLEX* ZWP Fiber	5	B	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	H	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	H	2	OM4 50 µm	850/1300	-	2.4/0.7

OPTION1 DT Armored Cable Ordering Information

Example: AT-3BEN2RT-*NNN* [1] Part Number: **AT-** *S1 S2 SF S3 S4 S5 S6* **-** *NNN*

S1 = **Fiber Selection**
See S1 in Fiber Type table above

S2 = **Fiber Transmission Performance**
See S2 in Fiber Type table above

SF = **Fiber Type** [2]
See SF in Fiber Type table above

S3 = **Sheath Construction**
N = Double Jacket Single Armor

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

S5 = **Core Type**
R = Totally Dry OPTION1 DT

S6 = **Fibers per Tube**
T = 12 fibers

NNN = **Fiber Count** = 002 – 288

[1] Part Number shown is for an OPTION1 DT Armored 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 OPTION1 DT Armored Cable: OFS OPTICAL CABLE AT-3BEN2RT-NNN [MM-YY] (UL) US TYPE OFNR [HANDSET SYMBOL] [NNN] F [SERIAL #]

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

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.

OFS Marketing Communications
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