# catalog | Optical Cables Atmos | DriKore



Standard central tube with 2-12f

Steel Messenger Self Supporting
Single Jacket

FTTH / FTTB Applications

#### **Application**

FTTH cables are used in the last portion of an all-optical network, such as fiber-to-the-home (FTTH) or fiber-to-the-business (FTTB) networks. Acts as a bridge between the distribution network and the subscriber premises.

#### Benefits

- Fiber Count up to 12f
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Easy access single tube design
- All dielectric design eliminates grounding and/or bonding
- Rapid deployment
- Single P€ Jacket suitable for shortspan applications

## Fiber types

- G.651 multi-mode fiber
- G.652D single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

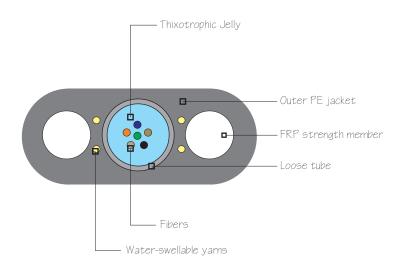
#### full range of applications

- Outdoor
- Aerial

#### **Optional protections**

N/A

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 12
Nominal outer diameter	5.5 mm (0.22 in.) X 8.5 mm (0.34 in.)
Cable weight	40 kg/km (27 lb/kft)
Max. bend radius	100 mm (3.94 in.)
Max. working tension	400 N (90 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & Approvals

Bellcore Standards ITU Standards TIA/EIA Standards



## Central Tube Optical Cables

Standard central tube with 2-12f

Steel Messenger Self Supporting
Single Jacket

FTTH / FTTB Applications

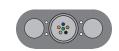
## Cable Properties

2-12 fibers FTTH/FTTB cable
1 thixotrophic jelly filled loose tube
Water swellable yarns
2 FRP rod strength elements
Medium density polyethylene outer jacket

Basic optical fiber	All MM and SM type fiber
Strength member	2 FRP rod, 1.6 mm (0.06 in.) O.D.
Number of fibers in each tube	2-4-6-8-10-12
Number of loose tubes	1
Loose tube diameter	2.90 mm (0.12 in.) O.D.
Tube material	PBT (Polybutylene Terephtalate)
Color of loose tube	Natural
Color of fibers	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tube filling compound	Thixotropic jelly
Core filling compound	No filling compound. There are water swellable yarns instead
Outer Jacket	Black PE 1.1 $\pm$ 0.1 mm (0.04 $\pm$ 0.01 in.) nominal thickness
Approximate overall diameter	5.5 mm (0.22 in.) / 8.5 mm (0.34 in.)

Mechanical Performance	Test Procedure	Specification
Tensile strength test	CIA/TIA-455-33	1350 N (during installation) 400 N (during operation)
Crush test	EIA/TIA-455-41	220 N/cm
Temperature cycling		-40°C / 70 °C (-40 °F / 158 °F)
Bend radius (during installation)	€IA/TIA-455-37	150 mm (5.19 in.)
Bend radius (during service)	EIA/TIA-455-37	100 mm (3.94 in.)
Water penetration test	EIA/TIA-455-82	1 m length in 24 hrs with no water leak







# Central Tube Optical Cables

Standard central tube with 2-12f

Steel Messenger Self Supporting
Single Jacket

FTTH / FTTB Applications

Single-mode Fiber Specifications	
Fiber Type	Single-mode
	G.652D
	1310/1550 nm
Attenuation (max)	0.40 dB/km (1310 nm) 0.22 dB/km (1550 nm)
Chromatic Dispersion (max)	3.5 ps/(nm x km) (1310 nm) 18 ps/(nm x km) (1550 nm)
MDF	9.2 ± 0.5 μm

Multi-mode Fiber Specifications		
Fiber Type	Multi-	mode
	62.5 μm	50 μm
	850/1300 nm	850/1300 nm
Attenuation (max)	3.5 dB/km (850 nm) 1.5 dB/km (1300 nm)	3.5 dB/km (850 nm) 1.5 dB/km (1300 nm)
Bandwidth (min)	200 MHz.km (850 nm) 500 MHz.km (1300 nm)	500 MHz.km (850 nm) 600 MHz.km (1300 nm)
Numerical Aparature	0.275 ± 0.015	0.2 ± 0.02

Environmental & General Proper	ties	
Drum Size	35 in x 35 in x 39 in	90 cm x 90 cm x 100 cm
Drum Length	13123 ft ± 10%	4000 m ± 10%
Net Weight	27 lb/kft	40 kg/km







DriKore ADSS Loose Tube Optical Cables

Single Jacket

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Short span - average Light - 60 m (197 ft.) max

Medium - 46 m (151 ft.) max Heavy - 30 m (098 ft.) max

#### **Application**

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

- Fiber Count up to 216f
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Suitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- Single P€ Jacket suitable for shortspan applications

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### Full range of protections

Water blocked

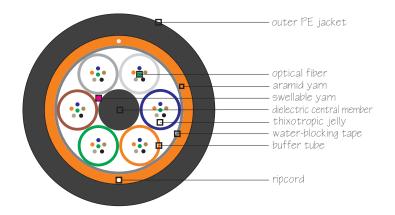
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

Track resistant

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	11.2 mm (0.44 in) to 18.8 mm (0.74 in)
Cable weight	110 kg/km (074 lbs/kft) to 300 kg/km (202
Max. bend radius	20 x cable O.D.
Max. working tension	2500 to 4000 N (562 to 899 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts		
Optical Cable Assemblies		



DriKore ADSS Loose Tube Optical Cables

Single Jacket

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Short span - average light - 60 m (197 ft.) max Medium - 46 m (151 ft.) max Heavy - 30 m (098 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NESC	Medium
002 - 036f	diameter	11.2 mm (0.44 in)	operating	2500
	weight	110 Kg/km (074 lbs/kft)	install	4800
037 - 060f	diameter	12.6 mm (0.50 in)	operation	2700
	weight	140 Kg/km (094 lbs/kft)	install	5000
061 - 072f	diameter	12.6 mm (0.50 in)	operating	2700
	weight	140 Kg/km (094 lbs/kft)	install	5000
073 - 096f	diameter	14.6 mm (0.58 in)	operating	3000
	weight	180 Kg/km (121 lbs/kft)	install	5500
097 - 120f	diameter	18.8 mm (0.74 in)	operating	4000
	weight	300 Kg/km (202 lbs/kft)	install	7500
121 - 144f	diameter	18.8 mm (0.74 in)	operating	4000
	weight	300 Kg/km (202 lbs/kft)	install	7500
145 - 216f	diameter	18.8 mm (0.74 in)	operating	4000
	weight	300 Kg/km (202 lbs/kft)	install	7500

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavų	060 m (197 ft.) max 046 m (151 ft.) max 030 m (098 ft.) max Sag 1.0%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging







DriKore ADSS Loose Tube Optical Cables

Single Jacket

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Light - 110 m (361 ft.) max Medium - 092 m (302 ft.) max Heavy - 054 m (177 ft.) max

Short span - average

#### Application

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

- Fiber Count up to 216f
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savingsSuitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- Single P€ Jacket suitable for shortspan applications

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### Full range of protections

Water blocked

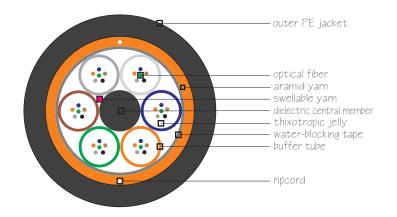
#### Full range of applications

- Outdoor
- Aerial

#### Optional protections

Track resistant

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	11.6 mm (0.46 in) to 19.2 mm (0.76 in)
Cable weight	110 kg/km (074 lbs/kft) to 300 kg/km (202
Max. bend radius	20 x cable O.D.
Max. working tension	3700 to 6700 N (832 to 1506 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts
Optical Cable Assemblies



DriKore ADSS Loose Tube Optical Cables

Single Jacket

All Dielectric Self Supporting

Standard buffer tube with 2-216f

Short span - average

Light - 110 m (361 ft.) max Medium - 092 m (302 ft.) max Heavy - 054 m (177 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NES	C Medium
002 - 036f	diameter	11.6 mm (0.46 in)	operating	3700
	weight	110 Kg/km (074 lbs/kft)	install	6500
037 - 060f	diameter	13.0 mm (0.51 in)	operation	4100
	weight	140 Kg/km (094 lbs/kft)	install	7500
061 - 072f	diameter	13.0 mm (0.51 in)	operating	4100
	weight	140 Kg/km (094 lbs/kft)	install	7500
073 - 096f	diameter	15.0 mm (0.59 in)	operating	4900
	weight	180 Kg/km (121 lbs/kft)	install	9000
097 - 120f	diameter	19.2 mm (0.76 in)	operating	6700
	weight	300 Kg/km (202 lbs/kft)	install	12000
121 - 144f	diameter	19.2 mm (0.76 in)	operating	6700
	weight	300 Kg/km (202 lbs/kft)	install	12000
145 - 216f	diameter	19.2 mm (0.76 in)	operating	6700
	weight	300 Kg/km (202 lbs/kft)	install	12000

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	61A/T1A-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavų	110 m (361 ft.) max 092 m (302 ft.) max 054 m (177 ft.) max Sag 1.0%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging





**Dual Jacket** All Dielectric Self Supporting Standard buffer tube with 2-216f

Short span - average

Light - 150 m (492 ft.) max Medium - 122 m (400 ft.) max Heavy - 074 m (243 ft.) max

#### Application

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

• Fiber Count up to 216f

Data Sheet

- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Suitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- · Available for long, medium and short spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

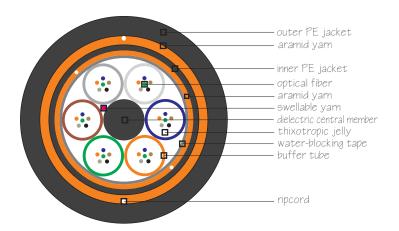
#### Full range of applications

- Outdoor
- Aerial

#### Optional protections

Track resistant

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	13.3 mm (0.52 in) to 20.5 mm (0.81 in)
Cable weight	145 kg/km (097 lbs/kft) to 355 kg/km (238
Max. bend radius	20 x cable O.D.
Max. working tension	5300 to 9400 N (1191 to 2113 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

1st ISSUE

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts
Optical Cable Assemblies



DriKore ADSS Loose Tube Optical Cables

**Dual Jacket** 

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Short span - average

Light - 150 m (492 ft.) max Medium - 122 m (400 ft.) max Heavy - 074 m (243 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NESC	Medium
002 - 036f	diameter	13.3 mm (0.52 in)	operating	5300
	weight	145 Kg/km (097 lbs/kft)	install	9500
037 - 060f	diameter	14.7 mm (0.58 in)	operation	5900
	weight	180 Kg/km (121 lbs/kft)	install	10000
061 - 072f	diameter	14.7 mm (0.58 in)	operating	5900
	weight	180 Kg/km (121 lbs/kft)	install	10000
073 - 096f	diameter	16.5 mm (0.65 in)	operating	7000
	weight	230 Kg/km (155 lbs/kft)	install	13000
097 - 120f	diameter	20.5 mm (0.81 in)	operating	9400
	weight	355 Kg/km (238 lbs/kft)	install	16000
121 - 144f	diameter	20.5 mm (0.81 in)	operating	9400
	weight	355 Kg/km (238 lbs/kft)	install	16000
145 - 216f	diameter	20.5 mm (0.81 in)	operating	9400
	weight	355 Kg/km (238 lbs/kft)	install	16000

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavų	150 m (492 ft.) max 122 m (400 ft.) max 074 m (243 ft.) max Sag 1.0%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging





Dual Jacket

All Dielectric Self Supporting

Standard buffer tube with 2-216f

Light - 290 m (951 ft.) max Medium - 250 m (820 ft.) max Heavy - 160 m (525 ft.) max

Medium span - average

#### Application

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

• Fiber Count up to 216f

Data Sheet

- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Suitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- Available for long, medium and short spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

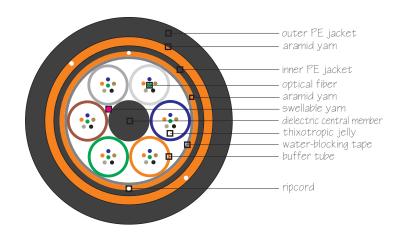
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

Track resistant

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	14.1 mm (0.56 in) to 21.2 mm (0.84 in)
Cable weight	165 kg/km (111 lbs/kft) to 380 kg/km (255
Max. bend radius	20 x cable O.D.
Max. working tension	9800 to 17600 N (2203 to 3957 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

1st ISSUE

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts		
Optical Cable Assemblies		



## DriKore ADSS Loose Tube Optical Cables

#### Dual Jacket

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Medium span - average Light - 290 m (951 ft.) max Medium - 250 m (820 ft.) max Heavy - 160 m (525 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NESC	Medium
002 - 036f	diameter	14.1 mm (0.56 in)	operating	9800
	weight	165 Kg/km (111 lbs/kft)	install	16000
037 - 060f	diameter	15.5 mm (0.61 in)	operation	11100
	weight	200 Kg/km (134 lbs/kft)	install	18000
061 - 072f	diameter	15.5 mm (0.61 in)	operating	11100
	weight	200 Kg/km (134 lbs/kft)	install	18000
073 - 096f	diameter	17.3 mm (0.68 in)	operating	12900
	weight	245 Kg/km (165 lbs/kft)	install	21000
097 - 120f	diameter	21.2 mm (0.84 in)	operating	17600
	weight	380 Kg/km (255 lbs/kft)	install	29000
121 - 144f	diameter	21.2 mm (0.84 in)	operating	17600
	weight	380 Kg/km (255 lbs/kft)	install	29000
145 - 216f	diameter	21.2 mm (0.84 in)	operating	17600
	weight	380 Kg/km (255 lbs/kft)	install	29000

Mechanical Performance	Test Procedure	Specification
Low № high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavy	290 m (951 ft.) max 250 m (820 ft.) max 160 m (525 ft.) max Sag 1.0%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	€IA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging





DriKore ADSS Loose Tube Optical Cables

**Dual Jacket** 

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Long span - average Light - 640 m (2100 ft.) max Medium - 500 m (1640 ft.) max Heavy - 320 m (1050 ft.) max

#### **Application**

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

- Fiber Count up to 216f
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Suitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- Available for long, medium and short spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

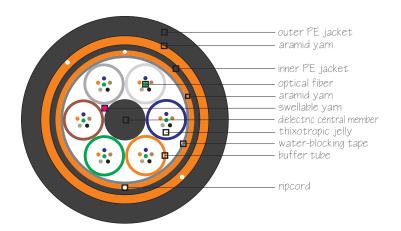
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

Track resistant

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	14.6 mm (0.58 in) to 21.8 mm (0.86 in)
Cable weight	180 kg/km (121 lbs/kft) to 405 kg/km (272
Max. bend radius	20 x cable O.D.
Max. working tension	16100 to 27000 N (3619 to 6070 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

1st ISSUE

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts				
Optical Cable Assemblies				



## DriKore ADSS Loose Tube Optical Cables

#### **Dual Jacket**

Standard buffer tube with 2-216f

All Dielectric Self Supporting

light - 640 m (2100 ft.) max Medium - 500 m (1640 ft.) max Heavy - 320 m (1050 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NESC	Medium
002 - 036f	diameter	14.6 mm (0.58 in)	operating	16100
	weight	180 Kg/km (121 lbs/kft)	install	27500
037 - 060f	diameter	16.0 mm (0.63 in)	operation	17300
	weight	215 Kg/km (144 lbs/kft)	install	30000
061 - 072f	diameter	16.0 mm (0.63 in)	operating	17300
	weight	215 Kg/km (144 lbs/kft)	install	30000
073 - 096f	diameter	17.8 mm (0.70 in)	operating	20000
	weight	265 Kg/km (178 lbs/kft)	install	35000
097 - 120f	diameter	21.8 mm (0.86 in)	operating	27500
	weight	405 Kg/km (272 lbs/kft)	install	45000
121 - 144f	diameter	21.8 mm (0.86 in)	operating	27000
	weight	405 Kg/km (272 lbs/kft)	install	45000
145 - 216f	diameter	21.8 mm (0.86 in)	operating	27000
	weight	405 Kg/km (272 lbs/kft)	install	45000

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavy	640 m (2100 ft.) max 500 m (1640 ft.) max 320 m (1050 ft.) max Sag 1.5%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	€IA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging





Dual Jacket
All Dielectric Self Supporting

Standard buffer tube with 2-216f

Transmission span - average Light - 950 m (3117 ft.) max Medium - 800 m (2625 ft.) max Heavy - 490 m (1608 ft.) max

#### Application

ADSS cables are used on overhead power lines and/or poles. The self supporting design allows installations independent of other wires/conductors.

#### Benefits

• Fiber Count up to 216f

Data Sheet

- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Suitable for all types of aerial lines
- Rapid deployment
- Installs on live power lines
- Available for long, medium and short spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

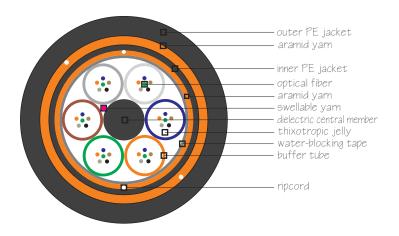
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

Track resistant

## Cable cut-away



Typical parameters	
Number of fibers	Uρ to 216
Nominal outer diameter	15.8 mm (0.62 in) to 23.0 mm (0.91 in)
Cable weight	210 kg/km (141 lbs/kft) to 470 kg/km (316
Max. bend radius	20 x cable O.D.
Max. working tension	22300 to 38000 N (5013 to 8543 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts				
Optical Cable Assemblies				



## DriKore ADSS Loose Tube Optical Cables

#### Dual Jacket

Standard buffer tube with 2-216f

All Dielectric Self Supporting

Transmission span - average Light - 950 m (3117 ft.) max Medium - 800 m (2625 ft.) max Heavy - 490 m (1608 ft.) max

Cable Properties		Weight & cube	Tensile strength (N) NESC	Medium
002 - 036f	diameter	15.8 mm (0.62 in)	operating	22300
	weight	210 Kg/km (141 lbs/kft)	install	38000
037 - 060f	diameter	17.1 mm (0.67 in)	operation	24800
	weight	245 Kg/km (165 lbs/kft)	install	42000
061 - 072f	diameter	17.1 mm (0.67 in)	operating	24800
	weight	245 Kg/km (165 lbs/kft)	install	42000
073 - 096f	diameter	19.0 mm (0.75 in)	operating	28000
	weight	290 Kg/km (195 lbs/kft)	install	48000
097 - 120f	diameter	23.0 mm (0.91 in)	operating	38000
	weight	470 Kg/km (316 lbs/kft)	install	58000
121 - 144f	diameter	23.0 mm (0.91 in)	operating	38000
	weight	470 Kg/km (316 lbs/kft)	install	58000
145 - 216f	diameter	23.0 mm (0.91 in)	operating	38000
	weight	470 Kg/km (316 lbs/kft)	install	58000

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length $\pm~180^\circ$
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	€IА/ТIА-455-37А FOTP-37	20 x cable O.D. 10 x cable O.D.
Span length on NESC conditions	Light Medium Heavų	950 m (3117 ft.) max 800 m (2625 ft.) max 490 m (1608 ft.) max Saa 2.0%

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	€IA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging





Standard central tube with 2-12f

Steel Messenger Self Supporting Fig-8 Sheath

Single Jacket

FTTH / FTTB Applications

#### **Application**

FTTH cables are used in the last portion of an all-optical network, such as fiber-to-the-home (FTTH) or fiber-to-the-business (FTTB) networks. Acts as a bridge between the distribution network and the subscriber premises.

#### Benefits

- Fiber Count up to 12f
- Easy access single tube design
- Rapid deployment
- Single P€ Jacket suitable for shortspan applications

#### Fiber types

- G.651 multi-mode fiber
- G.652D single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

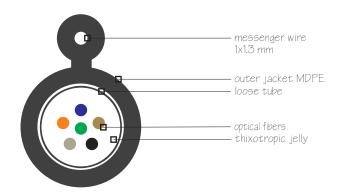
#### full range of applications

- Outdoor
- Aerial

#### Optional protections

N/A

#### Cable cut-away



Typical parameters	
Number of fibers	Uρ to 12
Nominal outer diameter	5.5 mm (0.22 in.) X 8.5 mm (0.34 in.)
Cable weight	47 kg/km (32 lbs/kft)
Max. bend radius	20 x cable O.D.
Max. working tension	1000 N (225 lbf)
Operating temperature range	-30°C / 70°C ( -22°F/ 158°F)



Qualifications & Approvals

Bellcore Standards
ITU Standards

TIA/EIA Standards



# Central Tube Optical Cables

Standard central tube with 2-12f

Steel Messenger Self Supporting Fig-8 Sheath
Single Jacket

FTTH / FTTB Applications

## Cable Properties

2-12 fibers FTTH/FTTB cable 1 thixotrophic jelly filled loose tube Medium density polyethylene outer jacket Steel Messenger Fig-8 (1.3 mm)

Basic optical fiber	All MM and SM type fiber
Number of fibers in each tube	2-4-6-8-10-12
Number of loose tubes	1
Loose tube diameter	3.0 mm (0.12 in.) O.D.
Tube material	PBT (Polybutylene Terephtalate)
Color of loose tube	Natural
Color of fibers	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tube filling compound	Thixotropic jelly
Core filling compound	No filling compound.
Outer Jacket	Black PE 1.1 $\pm$ 0.1 mm (0.04 $\pm$ 0.01 in.) nominal thickness
Steel messenger diameter	1.3 mm (0.05 in.)
Approximate overall diameter	10.7 mm (0.42 in.) X 5.2 mm (0.20 in.)

Mechanical Performance	Test Procedure	Specification
Tensile strength test	I€C 60794-1-€1	1000 N (225 lbf)
Crush test	IEC 60794-1-E3	300 N/cm
Temperature cycling		-30°C / 70°C ( -22°F/ 158°F)
Bend radius (during installation)	IEC 60794-1-E11	20 x cable O.D.
Bend radius (during service)	IEC 60794-1-E11	15 x O.D.
Water penetration test	IEC 794-1-F5	1 m length in 24 hrs with no water leak







# Central Tube Optical Cables

Standard central tube with 2-12f

Steel Messenger Self Supporting Fig-8 Sheath
Single Jacket

FTTH / FTTB Applications

Single-mode Fiber Specifications	
Fiber Type	Single-mode
	G.652D
	1310/1550 nm
Attenuation (max)	0.40 dB/km (1310 nm) 0.22 dB/km (1550 nm)
Chromatic Dispersion (max)	3.5 ps/(nm x km) (1310 nm) 18 ps/(nm x km) (1550 nm)
MDF	9.2 ± 0.5 μm

Multi-mode Fiber Specifications		
Fiber Type	Multi-mode	
	62.5 μm	50 μm
	850/1300 nm	850/1300 nm
Attenuation (max)	3.5 dB/km (850 nm) 1.5 dB/km (1300 nm)	3.5 dB/km (850 nm) 1.5 dB/km (1300 nm)
Bandwidth (min)	200 MHz.km (850 nm) 500 MHz.km (1300 nm)	500 MHz.km (850 nm) 600 MHz.km (1300 nm)
Numerical Aparature	0.275 ± 0.015	0.2 ± 0.02

Environmental & General Proper	ties	
Drum Size	35 in x 35 in x 39 in	90 cm x 90 cm x 100 cm
Drum Length	13123 ft ± 10%	4000 m ± 10%
Net Weight	32 lb/kft	47 kg/km







DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

Single Jacket / Dielectric Core

#### Application

Self supporting outdoor fiber optic cable in a figure 8 configuration for aerial installation on telecom poles. Designed for maximum typical span lengths of 152 m (500 ft.) under NESC heavy loading conditions.

#### Benefits

- Fiber Count up to 288f
- Suitable for all types of light aerial applications except power lines
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Excellent handling characteristics
- Utilizes traditional aerial cable hardware
- Suitable for short and medium spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### full range of protections

Water blocked

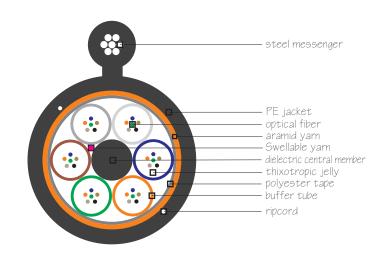
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

- HDPE jacket
- Single jacket / single armor
- Dual jacket / single armor

## Cable cut-away



Typical parameters		
Number of fibers		Uρ to 288
Diometer	minor axes	11.6 mm (0.46 in)
Diameter	major axes	11.5 mm (0.45 in) to 21.5 mm(0.85)
Cable weight	316 kg/km (	(212 lbs/kft) to 522 kg/km (351 lbs/kft)
Max. bend radius		20 x cable O.D.
Max. working tension		13360 N (3000 lbf)
Operating temperature range		-40 °C / 70 °C (-40 °F / 158 °F)



**Qualifications & approvals**REA PE-90

Bellcore Standards ITU Standards TIA/EIA Standards



DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

#### **Single Jacket / Dielectric Core**

Cable Properties		Diameter	Weight
002 - 060f	Jacket core diameter Jacket messenger diameter	11.5 mm (0.45 in) 11.6 mm (0.46 in)	316 kg/km (212 lbs/kft)
061 - 072f	Jacket core diameter Jacket messenger diameter	12.2 mm (0.48 in) 11.6 mm (0.46 in)	330 kg/km (222 lbs/kft)
073 - 096f	Jacket core diameter Jacket messenger diameter	14.1 mm (0.56 in) 11.6 mm (0.46 in)	364 kg/km (245 lbs/kft)
097 - 120f	Jacket core diameter Jacket messenger diameter	16.1 mm (0.63 in) 11.6 mm (0.46 in)	405 kg/km (272 lbs/kft)
121 - 192f	Jacket core diameter Jacket messenger diameter	17.6 mm (0.69 in) 11.6 mm (0.46 in)	420 kg/km (282 lbs/kft)
193 - 216f	Jacket core diameter Jacket messenger diameter	18.4 mm (0.72 in) 11.6 mm (0.46 in)	441 kg/km (296 lbs/kft)
217 - 240f	Jacket core diameter Jacket messenger diameter	19.5 mm (0.77 in) 11.6 mm (0.46 in)	467 kg/km (314 lbs/kft)
241 - 288f	Jacket core diameter Jacket messenger diameter	21.5 mm (0.85 in) 11.6 mm (0.46 in)	522 kg/km (351 lbs/kft)

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length ± 180°
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Max. tensile load	EIA/TIA-455-33 FOTP-33	13360 N (3000 lbf)

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging







DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

**Dual Jacket / Single Armor** 

#### Application

Self supporting outdoor fiber optic cable in a figure 8 configuration for aerial installation on telecom poles. Designed for heavy duty applications and maximum typical span lengths of 152 m (500 ft.) under NESC heavy loading conditions.

#### Benefits

- Fiber Count up to 288f
- Suitable for all types of light aerial applications except power lines
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Excellent handling characteristics
- Utilizes traditional aerial cable hardware
- Suitable for short and medium spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

#### Full range of protections

- Water blocked
- Rodent resistant

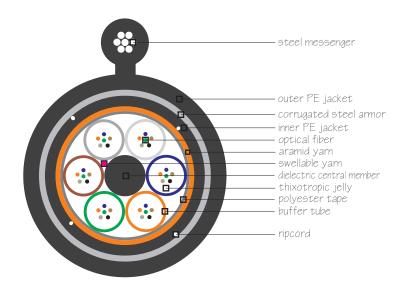
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

- HDPE jacket
- Single jacket
- Single jacket / single armor

## Cable cut-away



Typical parameters		
Number of fibers		Up to 288
Diamaka	minor axes	11.6 mm (0.46 in)
Diameter	major axes	15.3 mm (0.60 in) to 25.5 mm(1.00)
Cable weight	424 kg/km	(285 lbs/kft) to 718 kg/km (482 lbs/kft)
Max. bend radius		20 x cable O.D.
Max. working tension		13360 N (3000 lbf)
Operating temperature range		-40 °C / 70 °C (-40 °F / 158 °F)



Qualifications & approvals

REA PE-90 Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts
Optical Cable Assemblies

# Atmo/

## Technical Data Sheet

DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

**Dual Jacket / Single Armor** 

Cable Properties		Diameter	Weight
002 - 060f	Jacket core diameter Jacket messenger diameter	15.3 mm (0.60 in) 11.6 mm (0.46 in)	424 kg/km (285 lbs/kft)
061 - 072f	Jacket core diameter Jacket messenger diameter	16.2 mm (0.64 in) 11.6 mm (0.46 in)	450 kg/km (302 lbs/kft)
073 - 096f	Jacket core diameter Jacket messenger diameter	18.1 mm (0.71 in) 11.6 mm (0.46 in)	498 kg/km (335 lbs/kft)
097 - 120f	Jacket core diameter Jacket messenger diameter	20.1 mm (0.79 in) 11.6 mm (0.46 in)	556 kg/km (374 lbs/kft)
121 - 192f	Jacket core diameter Jacket messenger diameter	21.5 mm (0.85 in) 11.6 mm (0.46 in)	578 kg/km (388 lbs/kft)
193 - 216f	Jacket core diameter Jacket messenger diameter	22.4 mm (0.88 in) 11.6 mm (0.46 in)	610 kg/km (410 lbs/kft)
217 - 240f	Jacket core diameter Jacket messenger diameter	23.5 mm (0.93 in) 11.6 mm (0.46 in)	645 kg/km (433 lbs/kft)
241 - 288f	Jacket core diameter Jacket messenger diameter	25.5 mm (1.00 in) 11.6 mm (0.46 in)	718 kg/km (482 lbs/kft)

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	61A/T1A-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length ± 180°
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Max. tensile load	EIA/TIA-455-33 FOTP-33	13360 N (3000 lbf)

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging







DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

Single Jacket / Single Armor

#### **Application**

Self supporting outdoor fiber optic cable in a figure 8 configuration for aerial installation on telecom poles. Designed for maximum typical span lengths of 152 m (500 ft.) under NESC heavy loading conditions.

#### Benefits

- Fiber Count up to 288f
- Suitable for all types of light aerial applications except power lines
- The dry water blocking materials can easily be removed without the use of cable cleaning solvents, yielding significant labor cost savings
- Excellent handling characteristics
- Utilizes traditional aerial cable hardware
- Suitable for short and medium spans

#### Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications
- Full range of protections
- Water blocked
- Rodent resistant

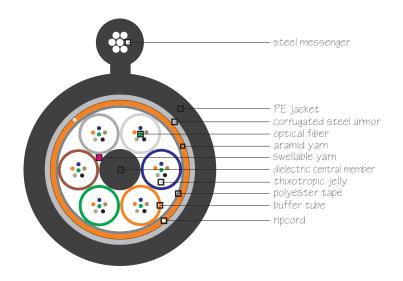
#### Full range of applications

- Outdoor
- Aerial

#### **Optional protections**

- HDPE jacket
- Single jacket
- Dual jacket / single armor

## Cable cut-away



Typical parameters			
Number of fibers		Uρ to 288	
Diamaka	minor axes	11.6 mm (0.46 in)	
Diameter	major axes	13.4 mm (0.53 in) to 23.5 mm(0.93)	
Cable weight	370 kg/km (249 lbs/kft) to 620 kg/km (417 lbs/kft)		
Max. bend radius		20 x cable O.D.	
Max. working tension		13360 N (3000 lbf)	
Operating temperature range		-40 °C / 70 °C (-40 °F / 158 °F)	



**Qualifications & approvals**REA PE-90

Bellcore Standards ITU Standards TIA/EIA Standards

4SProducts			
Optical Cable Asse	mblies		



DriKore Loose Tube Optical Cables

NESC Heavy Conditions

Standard buffer tube with 2-288f

Max. Span 152 m (500 ft.)

Steel Messenger Self Supporting Fig-8 Sheath

Single Jacket / Single Armor

Cable Properties		Diameter	Weight
002 - 060f	Jacket core diameter Jacket messenger diameter	13.4 mm (0.53 in) 11.6 mm (0.46 in)	370 kg/km (249 lbs/kft)
061 - 072f	Jacket core diameter Jacket messenger diameter	14.2 mm (0.56 in) 11.6 mm (0.46 in)	390 kg/km (262 lbs/kft)
073 - 096f	Jacket core diameter Jacket messenger diameter	16.1 mm (0.63 in) 11.6 mm (0.46 in)	431 kg/km (290 lbs/kft)
097 - 120f	Jacket core diameter Jacket messenger diameter	18.1 mm (0.71 in) 11.6 mm (0.46 in)	480 kg/km (323 lbs/kft)
121 - 192f	Jacket core diameter Jacket messenger diameter	19.6 mm (0.77 in) 11.6 mm (0.46 in)	499 kg/km (335 lbs/kft)
193 - 216f	Jacket core diameter Jacket messenger diameter	20.4 mm (0.80 in) 11.6 mm (0.46 in)	523 kg/km (351 lbs/kft)
217 - 240f	Jacket core diameter Jacket messenger diameter	21.5 mm (0.85 in) 11.6 mm (0.46 in)	556 kg/km (374 lbs/kft)
241 - 288f	Jacket core diameter Jacket messenger diameter	23.5 mm (0.93 in) 11.6 mm (0.46 in)	620 kg/km (417 lbs/kft)

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length ± 180°
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Max. tensile load	EIA/TIA-455-33 FOTP-33	13360 N (3000 lbf)

Environmental Performance	Test Procedure		Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation Installation Storage/Shipping	-40 to +70 °C (-40 to +158 °F) -20 to +70 °C (-04 to +158 °F) -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37		168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98		Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82		1meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81		75 °C
Color coding permanence	Telcordia GR-20		Colors stable after aging



