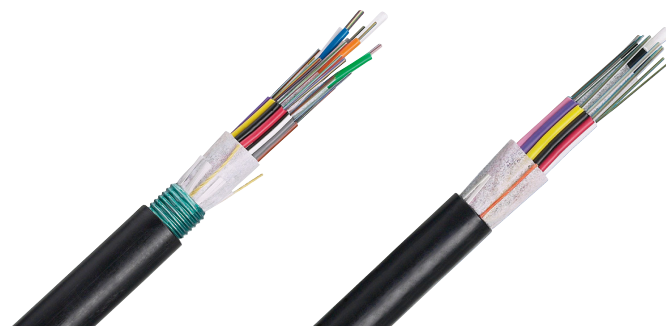


Opti-Core® Gel-Free Outside Plant Cable, Armored and Unarmored - Americas

specifications

The fiber cable shall contain up to 144 fibers and have a dry loose tube construction that is water-blocked and UV resistant for harsh outdoor environments. Cable construction shall be robust and include options for armored and non-armored (all-dielectric). It shall comply with common industry standards for outside plant applications and have options for singlemode (OS2) or multimode fibers (OM1 and laser optimized OM3 and OM4) to support common data transmission rates.



standards

✓ Telcordia GR-20-CORE
✓ IEC 60794-3-11

✓ RUS 7 CFR 1755 (PE90 listed)
✓ RoHS Compliant

✓ ICEA S-87-640

construction

Cable: Stranded loose tube design has twelve 250µm coated fibers per dry water-blocked sub-unit tube, except for the 6-fiber cable which has just six fibers in its sub-unit tube. Cable has a central strength member and may include filler tubes, depending on the fiber count. Sub-unit and filler tubes are wrapped with water-blocking tape and surrounded by outer strength members. Black outer sheath is water and UV-resistant MDPE and has two ripcords. Non-armored version is all-dielectric (metal-free). Armored version uses corrugated steel tape.

key features and benefits

Dry water-blocking elements	Expand to prevent water from entering the cable and damaging the optical fibers. Easier to work with than gel-filled cables.
UV Resistant outer jacket	Resists degradation due to sunlight exposure
Non-metallic option	Eliminates the need to ground or bond
Easy-prep armored option	Provides crush resistance and protection from rodents. Allows easy access to the core for mid-span entries.
Reverse oscillating lay of tubes	Facilitates mid-span access to the fibers. Individual tubes can easily be removed from the core.

applications

- For multi-purpose outdoor use including duct and lashed aerial installations
- Armored version is rodent resistant and suitable for direct burial

ribbon fiber color sequence

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua
											

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physical and mechanical properties

Non-Armored (Dielectric)

	6 to 48 fibers	72	96	144
Outside Diameter, Inches (mm):	0.40 (10.1)	0.43 (10.9)	0.50 (12.6)	0.64 (15.9)
Number of Sub-Unit Tubes + Filler Tubes:	5	6	8	12
Bend Radius (Installation / Short Term), Inches (cm):	8 (20)	8 (22)	10 (25)	13 (32)
Bend Radius (Operation / Long Term), Inches (cm):	4 (10)	4 (11)	5 (13)	6 (16)
Approximate Cable Weight, lb/kft (kg/km):	43 (64)	50 (75)	65 (97)	105 (156)
Tensile strength (Installation / Short Term):	600 lbf (2700 N)			
Tensile strength (Operation / Long Term):	180 lbf (800N)			
Temperature range:	Shipping and Storage: -40°F to +167°F (-40°C to +75°C)			
	Installation: -22°F to +140°F (-30°C to +60°C)			
	Operation: -40°F to +158°F (-40°C to +70°C)			

Armored

	6 to 48 fibers	72	96	144
Outside Diameter, Inches (mm):	0.46 (11.8)	0.50 (12.6)	0.56 (14.3)	0.69 (17.6)
Number of Sub-Unit Tubes + Filler Tubes:	5	6	8	12
Bend Radius (Installation / Short Term), Inches (cm):	9 (24)	10 (25)	11 (29)	14 (35)
Bend Radius (Operation / Long Term), Inches (cm):	5 (12)	5 (13)	6 (14)	7 (18)
Approximate Cable Weight, lb/kft (kg/km):	89 (132)	97 (145)	125 (186)	176 (262)
Tensile strength (Installation / Short Term):	600 lbf (2700 N)			
Tensile strength (Operation / Long Term):	180 lbf (800N)			
Temperature range:	Shipping and Storage: -40°F to +167°F (-40°C to +75°C)			
	Installation: -22°F to +140°F (-30°C to +60°C)			
	Operation: -40°F to +158°F (-40°C to +70°C)			

optical properties

Maximum Attenuation

OS2 Singlemode (ITU-T G.652.D):	0.4dB/km @1310nm, 0.3dB/km @1550nm
OM1, OM3, and OM4 Multimode:	3.5dB/km @ 850nm, 1.5dB/km @ 1300nm

ordering information

*Example: FSWN912, 9µm OS2 12-Fiber Outside Plant Armored Cable, Non-Rated, 250µm Fibers

Character

Example*

1	2	3	4	5	6	7
F	S	W	N	9	1	2

1 and 2 – Fiber Product, Region

FS = Fiber Cable, OM1 & OS2, Americas
FO = Fiber Cable, OM3 & OM4, Americas

3 – Cable Construction

T = Outside Plant Cable, Unarmored
W = Outside Plant Cable, Armored

4 – Flame Rating

N = Non-rated

5 – Fiber Type

9 = OS2 9/125µm
6 = OM1 62.5/125µm
(Armored with 6, 12, and 24 fibers only)
X = OM3 50/125µm
Z = OM4 50/125µm

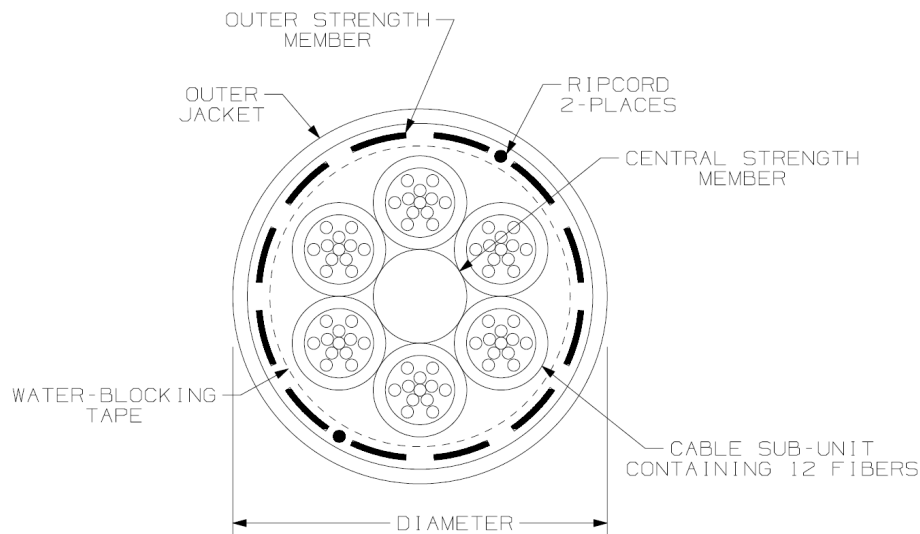
6 and 7 – Fiber Count

06 = 6-fiber
12 = 12-fiber
24 = 24-fiber
48 = 48-fiber
72 = 72-fiber
96 = 96-fiber
1A = 144-fiber

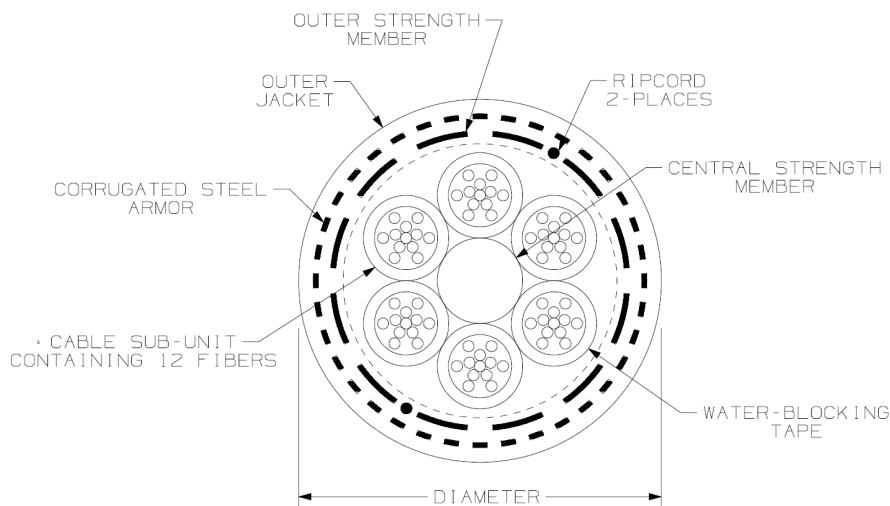
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engineering drawings (representative)

Non-Armored (Dielectric)



Armored



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