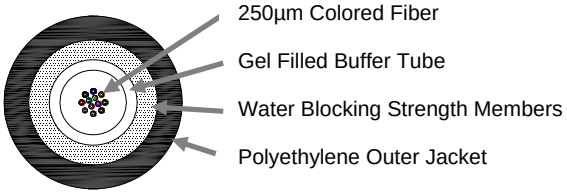
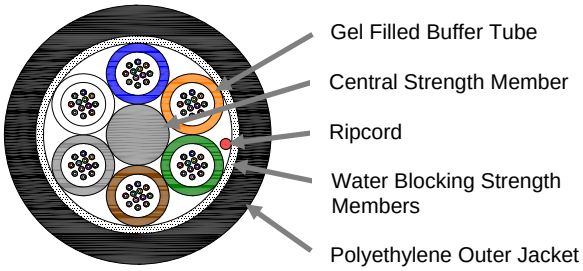
Fiber Optic Outside Plant Cables

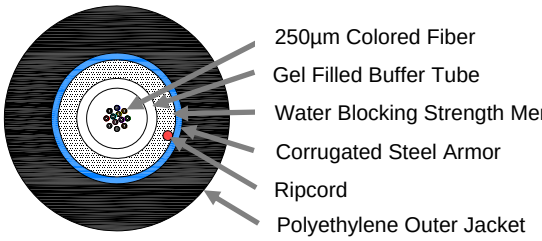


Central Tube Dielectric Cable
4-12 Fiber

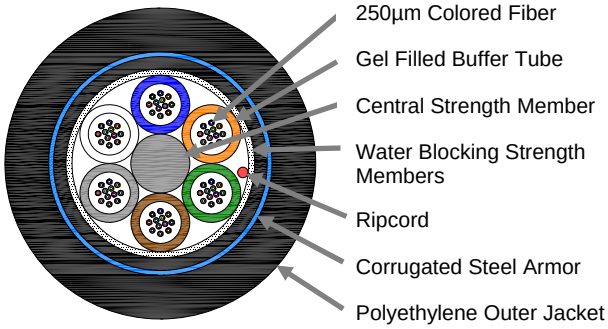


Multi-Tube Dielectric Cable
4-216 Fiber

The number of tubes changes depending on fiber count.



Central Tube Armored Cable
4-12 Fiber



Multi-Tube Armored Cable
4-144 Fiber

The number of tubes changes depending on fiber count.

Description:

TE Connectivity outside plant cables are designed for campus-type environments or for long runs between buildings in aerial lashed, duct or direct buried installations. The cables consist of 250µm inked fibers encased in color coded water blocked buffer tubes (dry or gel). Central tube designs (4 to 12 fibers) include a single tube surrounded by water blocking strength members and a medium-density polyethylene outer jacket. Stranded tube designs (24 to 288 fibers) include multiple tubes stranded around a central strength member, then covered by water blocking strength members and a medium-density polyethylene outer jacket. The cables are available in all dielectric and corrugated steel tape armored versions. All cables have a black outer jacket.

Standards Compliance:

TE Connectivity OSP cables are designed and tested to conform to the fiber and cable performance requirements of TIA 568, ISO 11801, Telcordia GR-20-CORE, ICEA S87-640, and REA/RUS PE-90 Standards.

Cable Print:

Cables will be marked every two feet with:

TE CONNECTIVITY OSP or OSPA *<fiber count>* *<fiber type>* *<flame rating>* *<date>* *<shop order number>* XXXXX FEET

Dry Water Blocked Tube Dielectric Part Numbers:

Fiber Count	Units x Fibers/Unit	62.5/125 OM1	50/125 OM2	OM3	OM4	OS2 BIF
12	1 x 12 (with 4 fillers)	-	-	-	-	6-1553734-3
24	2 x 12 (with 3 fillers)	-	-	-	-	6-2193199-3
36	3 x 12 (with 2 fillers)	-	-	-	-	6-2193229-3
48	4 x 12 (with 1 filler)	-	-	-	-	6-2193200-3
72	6 x 12	-	-	-	-	6-2193230-3
96	8 x 12	-	-	-	-	6-2193231-3
144	12 x 12	-	-	-	-	6-2193276-3
288	18 x 12	-	-	-	-	6-2193158-3

Gel Filled Tube Dielectric Part Numbers:

Fiber Count	Units x Fibers/Unit	62.5/125 OM1	50/125 OM2	OM3	OM4	OS2 BIF
4	1 x 4	6-1553386-1	6-1553386-2	6-1553386-4	6-1553386-5	6-1553386-3
6	1 x 6	6-1553387-1	6-1553387-2	6-1553387-4	6-1553387-5	6-1553387-3
8	1 x 8	6-1553388-1	6-1553388-2	6-1553388-4	6-1553388-5	6-1553388-3
12	1 x 12	6-1553389-1	6-1553389-2	6-1553389-4	6-1553389-5	6-1553389-3
24	2 x 12 (with 3 fillers)	6-1553390-1	6-1553390-2	6-1553390-4	6-1553390-5	6-1553390-3
36	3 x 12 (with 2 fillers)	6-1553391-1	6-1553391-2	6-1553391-4	6-1553391-5	6-1553391-3
48	4 x 12 (with 1 filler)	6-1553392-1	6-1553392-2	6-1553392-4	6-1553392-5	6-1553392-3
72	6 x 12	6-1553393-1	6-1553393-2	6-1553393-4	6-1553393-5	6-1553393-3
96	8 x 12	6-1553394-1	6-1553394-2	6-1553394-4	6-1553394-5	6-1553394-3
144	12 x 12	6-1553395-1	6-1553395-2	6-1553395-4	6-1553395-5	6-1553395-3
216	18 x 12	6-1553440-1	6-1553440-2	6-1553440-4	6-1553440-5	6-1553440-3

Gel Filled Tube Armored Part Numbers:

Fiber Count	Units x Fibers/Unit	62.5/125 OM1	50/125 OM2	OM3	OM4	OS2 BIF
4	1 x 4	6-1553396-1	6-1553396-2	6-1553396-4	6-1553396-5	6-1553396-3
6	1 x 6	6-1553397-1	6-1553397-2	6-1553397-4	6-1553397-5	6-1553397-3
8	1 x 8	6-1553398-1	6-1553398-2	6-1553398-4	6-1553398-5	6-1553398-3
12	1 x 12	6-1553399-1	6-1553399-2	6-1553399-4	6-1553399-5	6-1553399-3
24	2 x 12 (with 3 fillers)	6-1553400-1	6-1553400-2	6-1553400-4	6-1553400-5	6-1553400-3
36	3 x 12 (with 2 fillers)	6-1553401-1	6-1553401-2	6-1553401-4	6-1553401-5	6-1553401-3
48	4 x 12 (with 1 filler)	6-1553402-1	6-1553402-2	6-1553402-4	6-1553402-5	6-1553402-3
72	6 x 12	6-1553403-1	6-1553403-2	6-1553403-4	6-1553403-5	6-1553403-3
96	8 x 12	6-1553404-1	6-1553404-2	6-1553404-4	6-1553404-5	6-1553404-3
144	12 x 12	6-1553405-1	6-1553405-2	6-1553405-4	6-1553405-5	6-1553405-3

Composite Outdoor Cables:

Total Number of Fibers	OSP (dielectric) or OSPA (armored)	Dry or Gel Buffer Tubes	Number of Single-mode Fibers	Number of 62.5/125 OM1 Fibers	Number of 50/125 OM2 Fibers	Number of OM3 Fibers	Number of OM4 Fibers	Part Number
12	OSP	Gel	6	-	-	6	-	2111077-1
12	OSPA	Gel	6	6	-	-	-	2193275-8
18	OSPA	Gel	6	-	12	-	-	1499599-1
24	OSP	Gel	12	-	12	-	-	1553484-8
24	OSP	Gel	12	-	-	12	-	2111078-1
24	OSP	Gel	12	-	-	-	12	1499948-1
24	OSP	Gel	12	12	-	-	-	4-1664208-5
24	OSPA	Gel	12	-	-	-	12	1499951-1
24	OSPA	Gel	12	-	-	12	-	2111084-1
36	OSP	Gel	12	24	-	-	-	4-1664209-5
48	OSP	Dry	12	-	-	12	-	2193278-8
48	OSPA	Gel	24	-	24	-	-	1553296-1
48	OSP	Gel	24	24	-	-	-	1553602-8
72	OSP	Gel	24	48	-	-	-	4-1664210-5
96	OSP	Gel	72	-	-	-	24	1777231-1
96	OSPA	Gel	48	-	48	-	-	1553503-8
96	OSPA	Gel	48	-	-	48	-	1553504-8
144	OSPA	Gel	72	72	-	-	-	2193274-8

Note: Composite cables are constructed in order of core size from smallest to largest. (i.e. single-mode fibers taking the first positions, followed by 50/125µm then 62.5/125µm).

Dry Water Blocked Tube Mechanical Specifications:

Cable Type	Fiber Count (tubes x fibers per tube)	Cable O.D. mm (in)	Tube O.D. mm (in)	Nominal Weight kg/km (lbs/1000ft)	Rated Tensile Load		Minimum Bend Radius	
					Install N (lbf)	Long Term N (lbf)	Install mm (in)	Long Term mm (in)
Dielectric	24 (1 x 12 with 4 fillers)	10.1±0.5 (0.40±0.02)	2.5±0.3 (0.10±0.01)	64 (43)	2670 (600)	890 (200)	200 (8)	100 (4)
	24 (2 x 12 with 3 fillers)	10.1±0.5 (0.40±0.02)	2.5±0.3 (0.10±0.01)	64 (43)	2670 (600)	890 (200)	200 (8)	100 (4)
	36 (3 x 12 with 2 fillers)	10.1±0.5 (0.40±0.02)	2.5±0.3 (0.10±0.01)	64 (43)	2670 (600)	890 (200)	200 (8)	100 (4)
	48 (4 x 12 with 1 fillers)	10.1±0.5 (0.40±0.02)	2.5±0.3 (0.10±0.01)	64 (43)	2670 (600)	890 (200)	200 (8)	100 (4)
	72 (6 x 12)	10.9±0.5 (0.43±0.02)	2.5±0.3 (0.10±0.01)	75 (50)	2670 (600)	890 (200)	220 (8)	110 (4)
	96 (8 x 12)	12.6±0.5 (0.5±0.02)	2.5±0.3 (0.10±0.01)	97 (65)	2670 (600)	890 (200)	250 (10)	130 (5)
	144 (12 x 12)	15.9±0.5 (0.63±0.02)	2.5±0.3 (0.10±0.01)	156 (105)	2670 (600)	890 (200)	320 (13)	160 (6)
	288 (24 x 12)	18.3±0.5 (0.72±0.02)	2.5±0.3 (0.10±0.01)	216 (145)	2670 (600)	890 (200)	370 (14)	180 (7)

Gel Filled Tube Mechanical Specifications:

Cable Type	Fiber Count (tubes x fibers per tube)	Cable O.D. mm (in)	Tube O.D. mm (in)	Nominal Weight kg/km (lbs/1000ft)	Rated Tensile Load		Minimum Bend Radius	
					Install N (lbf)	Long Term N (lbf)	Install mm (in)	Long Term mm (in)
Dielectric	4 (1 x 4)	7.8±0.3 (0.31±0.01)	4.2±0.3 (0.16±0.01)	50 (34)	2670 (600)	890 (200)	156 (6.1)	78 (3.1)
	6 (1 x 6)	7.8±0.3 (0.31±0.01)	4.2±0.3 (0.16±0.01)	50 (34)	2670 (600)	890 (200)	156 (6.1)	78 (3.1)
	8 (1 x 8)	7.8±0.3 (0.31±0.01)	4.2±0.3 (0.16±0.01)	50 (34)	2670 (600)	890 (200)	156 (6.1)	78 (3.1)
	12 (1 x 12)	7.8±0.3 (0.31±0.01)	4.2±0.3 (0.16±0.01)	50 (34)	2670 (600)	890 (200)	156 (6.1)	78 (3.1)
	24 (2 x 12 with 3 fillers)	10.2±0.9 (0.40±0.03)	2.6±0.3 (0.10±0.01)	90 (60)	2670 (600)	890 (200)	210 (8.3)	105 (4.1)
	36 (3 x 12 with 2 fillers)	10.2±0.9 (0.40±0.03)	2.6±0.3 (0.10±0.01)	90 (60)	2670 (600)	890 (200)	210 (8.3)	105 (4.1)
	48 (4 x 12 with 1 fillers)	10.2±0.9 (0.40±0.03)	2.6±0.3 (0.10±0.01)	90 (60)	2670 (600)	890 (200)	210 (8.3)	105 (4.1)
	72 (6 x 12)	10.9±1.1 (0.43±0.04)	2.6±0.3 (0.10±0.01)	105 (71)	2670 (600)	890 (200)	229 (9)	115 (4.5)
	96 (8 x 12)	12.6±1.2 (0.50±0.1)	2.6±0.3 (0.10±0.01)	125 (84)	2670 (600)	890 (200)	266 (10.5)	133 (5.2)
	144 (12 x 12)	16.2±1.3 (0.64±0.05)	2.6±0.3 (0.10±0.01)	220 (148)	2670 (600)	890 (200)	340 (13.4)	170 (6.7)
	216 (18 x 12)	16.4±1.5 (0.65±0.06)	2.6±0.3 (0.10±0.01)	223 (150)	2670 (600)	890 (200)	348 (13.7)	174 (6.9)
Armored	4 (1 x 4)	11.0±1.7 (0.43±0.06)	3.6±0.7 (0.14±0.03)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	6 (1 x 6)	11.0±1.7 (0.43±0.06)	3.6±0.7 (0.14±0.03)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	8 (1 x 8)	11.0±1.7 (0.43±0.06)	3.6±0.7 (0.14±0.03)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	12 (1 x 12)	11.0±1.7 (0.43±0.06)	3.6±0.7 (0.14±0.03)	140 (94)	2670 (600)	890 (200)	244 (9.6)	122 (4.8)
	24 (2 x 12 with 3 fillers)	12.6±1.6 (0.49±0.06)	2.6±0.3 (0.10±0.01)	160 (108)	2670 (600)	890 (200)	272 (10.7)	136 (5.4)
	36 (3 x 12 with 2 fillers)	12.6±1.6 (0.49±0.06)	2.6±0.3 (0.10±0.01)	218 (146)	2670 (600)	890 (200)	272 (10.7)	136 (5.4)
	48 (4 x 12 with 1 fillers)	12.6±1.6 (0.49±0.06)	2.6±0.3 (0.10±0.01)	223 (150)	2670 (600)	890 (200)	272 (10.7)	136 (5.4)
	72 (6 x 12)	13.4±1.6 (0.53±0.06)	2.6±0.3 (0.10±0.01)	181 (122)	2670 (600)	890 (200)	288 (11.3)	144 (5.7)
	96 (8 x 12)	15.3±1.5 (0.60±0.06)	2.6±0.3 (0.10±0.01)	215 (144)	2670 (600)	890 (200)	326 (12.8)	163 (6.4)
	144 (12 x 12)	18.8±1.7 (0.74±0.07)	2.6±0.3 (0.10±0.01)	280 (188)	2670 (600)	890 (200)	400 (15.7)	200 (7.9)

Optical Fiber Types:

	62.5/125 µm OM1 (850nm/1300nm)	Bend Insensitive 50/125 µm OM2 (850nm/1300nm)	Bend Insensitive OM3 (850nm/1300nm)	Bend Insensitive OM4 (850nm/1300nm)	Bend Insensitive Single-mode OS2 (1310nm/1550nm)
Maximum Cable Attenuation	3.5/1.2 dB/km	3.5/1.5 dB/km	3.0/1.0 dB/km	3.0/1.0 dB/km	0.4/0.3dB/km
OFL Bandwidth	200/500 MHz·km	500/500 MHz·km	1500/500 MHz·km	3500/500 MHz·km	Not Applicable
850nm Effective Modal Bandwidth	Not Applicable	Not Applicable	2000 MHz·km	4700 MHz·km	Not Applicable
10 Gigabit Ethernet at 850nm Maximum Distance	33m	82m	300m	550m	Not Applicable
Fiber Specification	TIA-492AAAA IEC 60793-2-10 A1b	TIA-492AAAB IEC 60793-2-10 A1a.1	TIA-492AAAC IEC 60793-2-10 A1a.2	TIA-492AAAD IEC 60793-2-10 A1a.3	ITU-T G.657.A1

Temperature Ratings:

Operation	Installation	Storage/Shipping
-40°C to +70°C (-40°F to +158°F)	-30°C to +60°C (-22°F to +140°F)	-40°C to +70°C (-40°F to +158°F)

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