

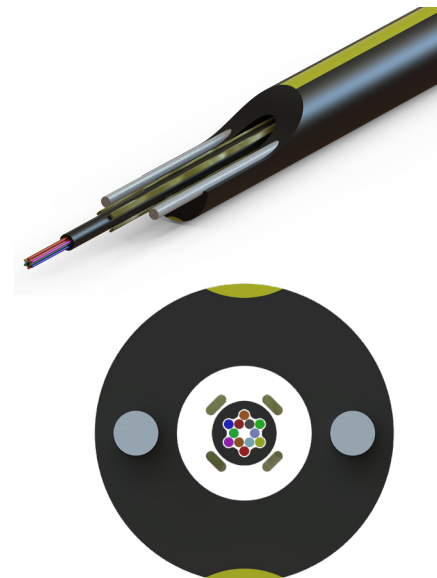
# Outside Plant Aerial Fiber Cables

## All Dielectric Self-Supporting (ADSS)



### Features & Benefits

- Small diameter - up to 12 fibers in 6 mm OD; 24 to 48 fibers in 7 mm OD
- Lightweight - approximately 22-35 kg/km (15-24 lbs/kft)
- Easy to handle - round concentric design
- Supported by existing poles and hardware
- All Dielectric Self Supporting (ADSS) construction
- Easy to strip – uses stripper Nos. 10-1323 (6 mm version) & 10-1325 (7 mm version)
- Self-supporting spans up to 110 m (360 ft)
- UV stabilized outer jacket guaranteed for 25 years outdoor use



### Compatibility:

- ITU-T G.657A1 single-mode & G.651
- Fusion and mechanical splice practices
- Spiral (formed wire) and wedge-type clamps and dead-ends

### Overview

PPC's ultra-light weight ADSS cable has an all dielectric construction that is substantially lighter than traditional aerial fiber cables. The cable's light weight allows existing poles to be used without the need for surveys, planning and remedial civil works, thereby facilitating rapid and cost effective aerial fiber optic network deployment. Due to the all dielectric construction, the cable can be safely located near high voltage overhead power lines.

The ADSS cable from PPC is smaller than competing self-support aerial cables; in-part because the strength members are embedded within the round cable jacket design. As well as being more aesthetically pleasing this reduces the loading effect of wind and ice when compared to other cable designs.

PPC's self-supporting ADSS cable uses a loose tube design with fiber counts of 2, 4, 8, and 12 depending on the total fiber count of the final cable. Utilizing a separate loose tube reduces the risk of fiber strain and offers better protection from abrasion, impacts and crushing forces, whilst simplifying fiber management and cable stripping.

### Applications

- FTTX Backbone Aerial Fiber
- Metropolitan Subscriber Networks
- Rural Broadband and SDU Deployments
- Direct Bury and Sub-Duct Routing

# Outside Plant Aerial Fiber Cables

## All Dielectric Self-Supporting (ADSS)



### Technical Data

#### Mechanical Performance

Fiber Count	PPC Part Number	Cable O.D.	Weight	Min. Bend Radius	Crush Resistance
250 $\mu$ m	numeric	mm (in)	kg (lbs/km)	mm (in)	N
1	10-1021	6.0 (.24)	22.2 (49)	60 (2.4)	2000
2	10-1232	6.0 (.24)	22.4 (49.4)	60 (2.4)	2000
4	10-1251	6.0 (.24)	22.6 (49.8)	60 (2.4)	2000
12	10-0891	6.0 (.24)	23.2 (51.1)	60 (2.4)	2000
24	10-1180	7.0 (.28)	32.8 (72.3)	70 (2.8)	2000
36	10-1181	7.0 (.28)	33.1 (73.0)	70 (2.8)	2000
48	10-1182	7.0 (.28)	34.8 (76.7)	70 (2.8)	2000
Jacket	Loose Tube	Operating Temp		Install Temp	Storage Temp
		°C (°F)		°C (°F)	°C (°F)
PE	PBT	-30 to 70 (-22 to 158)		-20 to 50 (-4 to 122)	-30 to +70 (-22 to 158)

#### Tensile Strength

Specification	1-24F	36F & 48F
Max Stringing Tension	250 N (55 lbs)	250 N (55 lbs)
Max Installation Tension	445 N (100 lbs)	445 N (100 lbs)
Max Loaded Tension/MRCL	1000 N (225 lbs)	1200 N (270 lbs)
Rated Breaking Strain	3000 N (674 lbs)	4000 N (899 lbs)

#### Installation Performance

Cable Size	Installation Sag	Light [no ice, <90mph wind]	Medium [¼ inch ice, <40mph wind]	High [½ inch ice, <40mph wind]
	%	Max Span   m (ft)	Max Span   m (ft)	Max Span   m (ft)
6 mm	0.5	80 (262)	55 (180)	30 (98)
6 mm	1.0	105 (344)	70 (229)	35 (114)
7 mm	0.5	85 (278)	45 (147)	30 (98)
7 mm	1.0	90 (295)	50 (164)	35 (114)

#### Reel (Packaging) Information

Reel Diameter	Reel Width	Total Weight
mm (in)	mm (in)	kg (lbs)
750 (30)	400 (16)	6.5 (14.3)



These products may be protected by one or more patents • For further information, please visit: [www.ppc-online.com/patents](http://www.ppc-online.com/patents)

customerservice@ppc-online.com • 1-800-800-6652 • [www.ppc-online.com](http://www.ppc-online.com)

# Outside Plant Aerial Fiber Cables

## All Dielectric Self-Supporting (ADSS)



### Transmission Performance

Specification	G657 A1
Attenuation (850/1300 nm)	n/a
Attenuation (1310/1550 nm)	≤ 0.4/0.4 dB/km
Refractive Index at 1310nm, 1550nm	1.467, 1.468
Refractive Index at 850nm, 1300nm	n/a
Proof test - GPa (kpsi)	0.69 GPa (100 kpsi), 1% min.
Cladding diameter	125 ± 0.7µm
Coated diameter	235µm to 245µm
Core/Cladding concentricity error	≤ 0.5µm
Coating concentricity error	≤ 12µm
Macro bend loss	(1550 nm)
• 10 turns at Ø50mm	≤ 0.01 dB
• 10 turns at Ø30mm	≤ 0.2 dB
• 1 turn at Ø20mm	≤ 0.2 dB
Temp. range (operation) -30°C to 70°C (-22°F to 158°F)	Max attenuation change: ≤ 0.1 dB/km
Coating Strip Force	1.3 to 8.9 N

### Ordering Information

Fiber Count	PPC Part No.	SKU Length	SKU Weight	Cable Weight	Reel Dimensions	Product Code Description
250 µm G.657A1		m (ft)	kg (lb)	kg/km (lbs/kft)	mm (in)	
1F	10-1021	2000 (6500)	51.0 (112.4)	22.2 (14.9)	750x350x400 (29.5x13.8x15.7)	ADSS-016-PE-BLK-PBT-WHT-A1-250
2F	10-1232	2000 (6500)	51.3 (113.1)	22.4 (15.0)	750x350x400 (29.5x13.8x15.7)	ADSS-026-PE-BLK-PBT-WHT-A1-250
4F	10-1251	2000 (6500)	51.7 (114.0)	22.6 (15.2)	750x350x400 (29.5x13.8x15.7)	ADSS-046-PE-BLK-PBT-WHT-A1-250
12F	10-0891	2000 (6500)	52.9 (116.6)	23.2 (15.6)	750x350x400 (29.5x13.8x15.7)	ADSS-126-PE-BLK-PBT-WHT-A1-250
24F	10-1180	2000 (6500)	72.1 (159.0)	32.8 (22.0)	750x350x400 (29.5x13.8x15.7)	ADSS-247-PE-BLK-PBT-WHT-A1-250
36F	10-1181	2000 (6500)	72.7 (160.3)	33.1 (22.2)	750x350x400 (29.5x13.8x15.7)	ADSS-367-PE-BLK-PBT-WHT-A1-250
48F	10-1182	2000 (6500)	76.1 (167.8)	34.8 (23.4)	750x350x400 (29.5x13.8x15.7)	ADSS-487-PE-BLK-PBT-WHT-A1-250

#### NOTES

1. All part numbers are supplied on a standard reel (see Reel Information above) with 2000m or 6500ft of cable
2. 1F to 4F count cables use a 1.4 mm loose tube
3. 12F, 24F, 36F & 48F cables use 1, 2, 3, or 4 12F loose tubes as appropriate
4. 24F count cable can also be supplied with one (1) 24F loose tube of 2.2mm OD

Information on the stripping tools can be found at <https://www.ppc-online.com/aerial-fiber-cable-stripping-tools>.