

Features and Benefits

Loose tube design

Stable performance and compatibility with all common fiber types

Self-supporting

Easy, one-step installation

Track-resistant jacket available

Suitable for installations up to 25 kV electric field potential

Innovative waterblocking cable core

Provides efficient and craft-friendly cable preparation

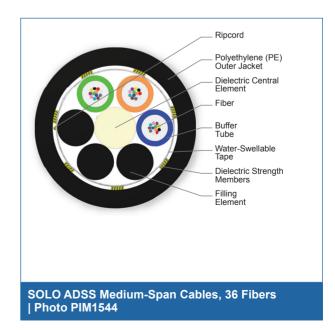
Standards

Approvals and Listings	RDUP 7 CFR 1755.900 (formerly RUS)
Common Installations	Outdoor self-supporting aerial
Design and Test Criteria	ANSI/ICEA S-87-640
Preformed Line Products® (PLP®) Dead-End Product	FIBERLIGN dead-end for ADSS medium tension de- ad-end

Corning SOLO® ADSS medium-span cables are all-dielectric, self-supporting (ADSS) cables designed for easy and economical one-step installation in campus backbones with self-supporting installations where metallic messengers cannot be used. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber. The economical single-jacket design can span distances of 800 ft in NESC light conditions, 650 ft in NESC medium conditions and 450 ft in NESC heavy conditions

This cable incorporates innovative waterblocking materials, eliminating the need for traditional flooding compound and providing efficient and craft-friendly cable preparation. While the concentric, self-supporting cable design allows easy, one-step installation using standard hardware and installation methods, the SZ-stranded, loose tube design isolates optical fibers from installation and environmental rigors and facilitates mid-span access. The ADSS optical cables are also available with a proprietary track-resistant polyethylene (TRPE) jacket suitable for installation in electric field potentials up to 25 kV.













Specifications

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

^{*} Note: Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Fiber Count	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Instal- lation	Min. Bend Radius Ope- ration
12 - 72	6	1 - 6	97 kg/km (65 lb/1000 ft)	11.3 mm (0.45 in)	170 mm (6.7 in)	113 mm (4.5 in)
96	8	8	130 kg/km (87 lb/1000 ft)	13.1 mm (0.52 in)	197 mm (7.8 in)	131 mm (5.2 in)
144	12	12	201 kg/km (135 lb/1000 ft)	16.4 mm (0.65 in)	246 mm (9.8 in)	164 mm (6.5 in)

^{*} Longer spans available on request.

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU





Installation Conditions

Spans in italics can also use short span cables

12-72 Fibers								
Code Medium MDPE	1% Initial Installation SAG (Vertical)	NESC Light		NESC Medium		NESC Heavy		
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	
50 ft (15 m)	41 lbf (181 N)	0.4	111 lbf (495 N)	1.6	161 lbf (717 N)	2.3	246 lbf (1092 N)	
100 ft (30 m)	81 lbf (362 N)	0.5	201 lbf (893 N)	1.9	282 lbf (1256 N)	2.7	419 lbf (1862 N)	
150 ft (46 m)	122 lbf (543 N)	0.5	281 lbf (1249 N)	2.1	389 lbf (1728 N)	2.9	568 lbf (2527 N)	
200 ft (61 m)	163 lbf (725 N)	0.5	355 lbf (1580 N)	2.2	486 lbf (2162 N)	3.2	704 lbf (3133 N)	
250 ft (76 m)	204 lbf (906 N)	0.6	426 lbf (1894 N)	2.3	577 lbf (2569 N)	3.4	831 lbf (3698 N)	
300 ft (91 m)	244 lbf (1087 N)	0.6	493 lbf (2195 N)	2.4	665 lbf (2956 N)	3.5	952 lbf (4233 N)	
350 ft (107 m)	285 lbf (1268 N)	0.6	559 lbf (2485 N)	2.5	748 lbf (3328 N)	3.7	1067 lbf (4745 N)	
400 ft (122 m)	326 lbf (1449 N)	0.6	622 lbf (2768 N)	2.6	829 lbf (3688 N)	3.8	1178 lbf (5238 N)	
450 ft (137 m)	366 lbf (1630 N)	0.6	684 lbf (3043 N)	2.7	908 lbf (4037 N)	3.9	1285 lbf (5715 N)	
500 ft (152 m)	407 lbf (1811 N)	0.6	745 lbf (3313 N)	2.7	984 lbf (4377 N)	4.1	1389 lbf (6179 N)	
550 ft (168 m)	448 lbf (1992 N)	0.6	804 lbf (3577 N)	2.8	1059 lbf (4710 N)	4.2	1491 lbf (6631 N)	
600 ft (183 m)	489 lbf (2174 N)	0.7	863 lbf (3837 N)	2.8	1132 lbf (5036 N)	4.3	1590 lbf (7073 N)	
650 ft (198 m)	529 lbf (2355 N)	0.7	920 lbf (4093 N)	2.9	1204 lbf (5355 N)	4.4	1687 lbf (7506 N)	
700 ft (213 m)	570 lbf (2536 N)	0.7	977 lbf (4346 N)	2.9	1275 lbf (5670 N)	4.4	1783 lbf (7931 N)	
750 ft (229 m)	611 lbf (2717 N)	0.7	1033 lbf (4595 N)	3.0	1344 lbf (5980 N)			
800 ft (244 m)	652 lbf (2898 N)	0.7	1088 lbf (4842 N)	3.0	1413 lbf (6285 N)			
850 ft (259 m)	692 lbf (3079 N)	0.7	1143 lbf (5086 N)	3.1	1481 lbf (6586 N)			
900 ft (274 m)	733 lbf (3260 N)	0.7	1198 lbf (5328 N)	3.1	1548 lbf (6884 N)			
950 ft (290 m)	774 lbf (3441 N)	0.7	1252 lbf (5567 N)	3.2	1614 lbf (7178 N)			
1000 ft (305 m)	814 lbf (3623 N)	0.7	1305 lbf (5804 N)	3.2	1679 lbf (7469 N)			
1050 ft (320 m)	855 lbf (3804 N)	0.7	1358 lbf (6040 N)	3.2	1744 lbf (7757 N)			
1100 ft (335 m)	896 lbf (3985 N)	0.7	1410 lbf (6274 N)	3,3	1808 lbf (8043 N)			
1150 ft (351 m)	937 lbf (4166 N)	0.7	1463 lbf (6506 N)					
1200 ft (366 m)	977 lbf (4347 N)	0.8	1514 lbf (6737 N)					
1250 ft (381 m)	1018 lbf (4528 N)	0.8	1566 lbf (6966 N)					
1300 ft (396 m)	1059 lbf (4709 N)	0.8	1617 lbf (7194 N)					
1350 ft (411 m)	1099 lbf (4891 N)	0.8	1668 lbf (7421 N)					
1400 ft (427 m)	1140 lbf (5072 N)	0.8	1719 lbf (7646 N)					
1450 ft (442 m)	1181 lbf (5253 N)	0.8	1769 lbf (7871 N)					
1500 ft (457 m)	1222 lbf (5434 N)	0.8	1820 lbf (8094 N)					

Vertical component of total SAG. Contact ES if more information needed.



Installation Conditions

Spans in italics can also use short span cables

installation Conditions									
73-96 Fibers									
Code Medium MDPE	1% Initial Installation SAG (Vertical)	NESC Light		NESC Medium		NESC Heavy			
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension		
50 ft (15 m)	55 lbf (243 N)	0.5	130 lbf (578 N)	1.6	181 lbf (803 N)	2.2	274 lbf (1220 N)		
100 ft (30 m)	109 lbf (485 N)	0.5	238 lbf (1058 N)	1.8	321 lbf (1429 N)	2.5	474 lbf (2108 N)		
150 ft (46 m)	164 lbf (728 N)	0.6	336 lbf (1493 N)	2.0	446 lbf (1984 N)	2.8	647 lbf (2879 N)		
200 ft (61 m)	218 lbf (970 N)	0.6	427 lbf (1899 N)	2.1	561 lbf (2496 N)	3.0	806 lbf (3584 N)		
250 ft (76 m)	273 lbf (1213 N)	0.6	514 lbf (2286 N)	2.2	669 lbf (2978 N)	3.2	954 lbf (4243 N)		
300 ft (91 m)	327 lbf (1456 N)	0.6	598 lbf (2658 N)	2.3	773 lbf (3439 N)	3.3	1094 lbf (4868 N)		
350 ft (107 m)	382 lbf (1698 N)	0.6	679 lbf (3019 N)	2.4	873 lbf (3882 N)	3.4	1229 lbf (5467 N)		
400 ft (122 m)	436 lbf (1941 N)	0.7	758 lbf (3370 N)	2.5	969 lbf (4312 N)	3.6	1359 lbf (6045 N)		
450 ft (137 m)	491 lbf (2183 N)	0.7	835 lbf (3714 N)	2.5	1063 lbf (4730 N)	3.7	1485 lbf (6604 N)		
500 ft (152 m)	545 lbf (2426 N)	0.7	911 lbf (4051 N)	2.6	1155 lbf (5138 N)	3.8	1607 lbf (7149 N)		
550 ft (168 m)	600 lbf (2668 N)	0.7	985 lbf (4382 N)	2.6	1245 lbf (5537 N)	3.9	1727 lbf (7680 N)		
600 ft (183 m)	654 lbf (2911 N)	0.7	1058 lbf (4708 N)	2.7	1333 lbf (5929 N)	4.0	1843 lbf (8200 N)		
650 ft (198 m)	709 lbf (3154 N)	0.7	1131 lbf (5030 N)	2.7	1420 lbf (6314 N)	4.0	1958 lbf (8709 N)		
700 ft (213 m)	763 lbf (3396 N)	0.7	1202 lbf (5347 N)	2.8	1505 lbf (6694 N)	4.1	2070 lbf (9209 N)		
750 ft (229 m)	818 lbf (3639 N)	0.7	1273 lbf (5661 N)	2.8	1589 lbf (7067 N)	4.2	2181 lbf (9701 N)		
800 ft (244 m)	873 lbf (3881 N)	0.7	1343 lbf (5972 N)	2.9	1672 lbf (7436 N)	4.3	2290 lbf (10185 N)		
850 ft (259 m)	927 lbf (4124 N)	0.7	1412 lbf (6280 N)	2.9	1754 lbf (7801 N)	4.3	2397 lbf (10663 N)		
900 ft (274 m)	982 lbf (4367 N)	0.8	1481 lbf (6586 N)	2.9	1835 lbf (8162 N)				
950 ft (290 m)	1036 lbf (4609 N)	0.8	1549 lbf (6889 N)	3.0	1915 lbf (8518 N)				
1000 ft (305 m)	1091 lbf (4852 N)	8.0	1616 lbf (7189 N)	3.0	1994 lbf (8872 N)				
1050 ft (320 m)	1145 lbf (5094 N)	0.8	1683 lbf (7488 N)	3.0	2073 lbf (9222 N)				
1100 ft (335 m)	1200 lbf (5337 N)	0.8	1750 lbf (7785 N)	3.1	2151 lbf (9569 N)				
1150 ft (351 m)	1254 lbf (5579 N)	0.8	1816 lbf (8079 N)	3.1	2228 lbf (9913 N)				
1200 ft (366 m)	1309 lbf (5822 N)	0.8	1882 lbf (8373 N)	3.1	2305 lbf (10254 N)				
1250 ft (381 m)	1363 lbf (6065 N)	8.0	1948 lbf (8664 N)	3.2	2381 lbf (10593 N)				
1300 ft (396 m)	1418 lbf (6307 N)	0.8	2013 lbf (8954 N)						
1350 ft (411 m)	1472 lbf (6550 N)	0.8	2078 lbf (9243 N)						
1400 ft (427 m)	1527 lbf (6792 N)	0.8	2143 lbf (9530 N)						
1450 ft (442 m)	1582 lbf (7035 N)	0.8	2207 lbf (9817 N)						
1500 ft (457 m)	1636 lbf (7278 N)	0.8	2271 lbf (10102 N)						
1550 ft (472 m)	1691 lbf (7520 N)	0.8	2335 lbf (10385 N)						
1600 ft (488 m)	1745 lbf (7763 N)	0.8	2398 lbf (10668 N)						

Vertical component of total SAG. Contact ES if more information needed.





Installation Conditions

Spans in italics can also use short span cables

97-144 Fibers								
Code	1% Initial							
Medium	Installation	NESC Light		NESC I	NESC Medium		NESC Heavy	
MDPF	SAG (Vertical)					· ·		
Span	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	Vertical SAG (%)	Tension	
50 ft (15 m)	84 lbf (375 N)	0.6	161 lbf (717 N)	1.7	206 lbf (917 N)	2.3	301 lbf (1338 N)	
100 ft (30 m)	169 lbf (750 N)	0.6	294 lbf (1309 N)	2.0	367 lbf (1631 N)	2.6	519 lbf (2306 N)	
150 ft (46 m)	253 lbf (1126 N)	0.7	416 lbf (1849 N)	2.1	510 lbf (2270 N)	2.9	709 lbf (3155 N)	
200 ft (61 m)	337 lbf (1501 N)	0.7	530 lbf (2359 N)	2.2	644 lbf (2865 N)	3.1	885 lbf (3935 N)	
250 ft (76 m)	422 lbf (1876 N)	0.7	641 lbf (2849 N)	2.3	771 lbf (3432 N)	3.3	1050 lbf (4670 N)	
300 ft (91 m)	506 lbf (2251 N)	0.7	747 lbf (3325 N)	2.4	894 lbf (3977 N)	3.4	1207 lbf (5371 N)	
350 ft (107 m)	590 lbf (2626 N)	0.8	852 lbf (3789 N)	2.5	1013 lbf (4506 N)	3,5	1359 lbf (6046 N)	
400 ft (122 m)	675 lbf (3002 N)	0.8	954 lbf (4244 N)	2.5	1129 lbf (5021 N)	3.7	1506 lbf (6700 N)	
450 ft (137 m)	759 lbf (3377 N)	0.8	1055 lbf (4692 N)	2.6	1242 lbf (5526 N)	3.8	1649 lbf (7336 N)	
500 ft (152 m)	843 lbf (3752 N)	0.8	1154 lbf (5134 N)	2.7	1354 lbf (6021 N)	3.9	1789 lbf (7958 N)	
550 ft (168 m)	928 lbf (4127 N)	0.8	1252 lbf (5571 N)	2.7	1463 lbf (6509 N)	3.9	1926 lbf (8567 N)	
600 ft (183 m)	1012 lbf (4502 N)	0.8	1350 lbf (6003 N)	2.8	1571 lbf (6990 N)	4.0	2060 lbf (9164 N)	
650 ft (198 m)	1097 lbf (4878 N)	0.8	1446 lbf (6432 N)	2.8	1678 lbf (7465 N)			
700 ft (213 m)	1181 lbf (5253 N)	0.8	1542 lbf (6857 N)	2.8	1784 lbf (7934 N)			
750 ft (229 m)	1265 lbf (5628 N)	0.9	1636 lbf (7279 N)	2.9	1888 lbf (8399 N)			
800 ft (244 m)	1350 lbf (6003 N)	0.9	1731 lbf (7699 N)	2.9	1992 lbf (8859 N)			
850 ft (259 m)	1434 lbf (6378 N)	0.9	1824 lbf (8116 N)	2.9	2094 lbf (9316 N)			
900 ft (274 m)	1518 lbf (6754 N)	0.9	1918 lbf (8530 N)					
950 ft (290 m)	1603 lbf (7129 N)	0.9	2011 lbf (8943 N)					
1000 ft (305 m)	1687 lbf (7504 N)	0.9	2103 lbf (9354 N)					

Vertical component of total SAG. Contact ES if more information needed.



Transmission Performance

Multimode						
Fiber Core Diameter (µm)	62.5	50	50	50		
Fiber Category	OM1	OM2	OM3	OM4		
Fiber Code	K	Т	Т	Т		
Performance Option Code	30	31	80	90		
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300		
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0		
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600		
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-		
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500		
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-		

Single-mode								
Fiber Name	SMF-28e+® LL	SMF-28® Ultra fiber**	Single-mode (OS2)	Single-mode (OS2)	LEAF® fiber			
Fiber Category	G.652.D	G.652.D/G.657.A1	G.652.D	G.652.D	G.655			
Fiber Code	L	Z	E	E	F			
Performance Option Code	22	22	00	01	01			
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550			
Maximum Attenuation (dB/km)	0.34/0.34/0.22	0.34/0.34/0.22	0.35/0.35/0.25	0.4/0.4/0.3	-/-/0.25			
Typical Attenuation* (dB/km)	0.32/0.32/0.18	0.32/0.32/0.18	-	-	-/-/0.19			
Fiber Name	SMF-28® ULL							
Fiber Category	G.652							
Fiber Code	Р							
Performance Option Code	19							
Wavelengths (nm)	1310/1383/1550							
Maximum Attenuation (dB/km)	0.33/-/0.19							
Typical Attenuation* (dB/km)	0.31/-/0.17							

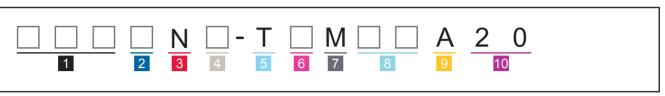
^{*} For more information on typical attenuation please see the Corning whitepaper at http://csmedia.corning.com/opcomm//Resource_Documents/whitepapers_rl/LAN-1863-AEN.pdf



^{* *} SMF-28® Ultra fiber delivers up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.



Ordering Information | Note: Contact Customer Care at 1-800-743-2675 for other options.



- 1 Select fiber count. Standard offerings: 012-144
- 2 Select fiber code.
 - $K = 62.5 \mu m \text{ multimode (OM1)}$
 - T = 50 μ m multimode (OM2/OM3/OM4)
 - E = Single-mode (G.652.D)
 - Z = Single-mode (G.652.D/ G.657.A1) SMF-28[®] Ultra fiber
 - P = Single-mode (G.652) SMF-28® ULL
 - F = Single-mode (G.655) LEAF®
- 3 Defines cable type.
 N = SOLO® single-jacket cable

- 4 Select outer jacket.
 - 4 = PE jacket (standard)
 - A = TRPE jacket
- 5 Defines fiber placement.
 - T = 12 fibers/buffer tube (standard)
- 6 Select length markings.
 - 3 = Markings in meters
 - 4 = Markings in feet (standard)
- 7 Defines tensile strength.
 M= SOLO medium-span
 cable

- 8 Select performance option code.
 - $30 = 62.5 \mu m \text{ multimode (OM1)}$
 - 31 = 50 µm multimode (OM2)
 - $80 = 50 \mu m \text{ multimode (OM3)}$
 - $90 = 50 \mu m \text{ multimode (OM4)}$
 - 01 = Single-mode (OS2) (Max. attenuation 0.4/0.4/0.3 dB/km)
 - 00 = Single-mode (OS2) (Max. attenuation 0.35/0.35/0.25 dB/km)
 - 22 = Single-mode (OS2) (Max. attenuation 0.34/0.34/0.22 dB/km)
 - 19 = Single-mode (Ultra Low-Loss) (Max. attenuation 0.33/–/0.19 dB/km)
 - 01 = Single-mode NZDSF* (Max. attenuation -/-/0.25 dB/km)

*Non-Zero Disperson-Shifted Single-mode Fiber

- 9 Defines cable type.
 - A = Gel-filled cable
- 10 Defines special manufacturing code.
 - 20 = No special requirements



Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA 800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2021 Corning Optical Communications. All rights reserved.