

# ezPlan™ Medium Span (≤820 ft) Medium Load



## Cable Part Numbers

Count	Prysmian Part Number	Cable OD	Tube OD	F/Tube	Tube Type	Installed Sag	Loading	Max Span
12	X-ADES1525-12-HB-012-E3	0.496"	3mm	12	Gel PP	1.50%	NESC Medium	820'
24	X-ADES1525-12-HB-024-E3							
48	X-ADES1525-12-HB-048-E3							
72	X-ADES1525-12-HB-072-E3			24	Gel PBT			
96	X-ADLS1605-24-HB-096-E3							
144	X-ADLS1605-24-HB-144-E3							

## Pole-Line Part Numbers

Description	PLP#	Cable OD Range in. (mm)	Max. Install lbf	Max. MRCL lbf	Max. Dist. ft	Max. Deg.	M.x. Deg. String.
Medium tension dual layer DE with C1E1 thimble clevis extension link	2872100C1E1	0.482–0.510 (12.2–12.9)	2000	4000			
Aluminum suspension (FASN) with support rods & shackle	4470200S	0.476–0.500 (12.0–12.7)			1200	30	
Dielectric suspension for ADSS with shackle & eye nut	43004061S	0.477–0.503 (12.1–12.7)				40	
Plastic down lead cushion	8003042	0.469–0.562 (11.9–14.2)					
Plastic down lead cushion with H1 wood pole hardware	8003042H1	0.469–0.562 (11.9–14.2)					
Plastic down lead cushion with LTC2 lite duty lattice tower adapter	8003042LTC2	0.469–0.562 (11.9–14.2)					
Plastic down lead cushion with LTC1 standard duty lattice tower adapter	8003042LTC1	0.469–0.562 (11.9–14.2)					
Plastic down lead cushion with B1 (710010576) banding bracket	8003042B1	0.469–0.562 (11.9–14.2)					
FiberLign CLAS non-metallic storage system with uni-group guide & heavy duty cable ties	710012375U	0.400–1.000					
Dielectric spiral stamper	50502274	0.462–0.563 (11.7–14.2)					

## PLP Closures & Accessories

Description	Description & Comments	PLP PN
COYOTE® ONE Dome Closure <sup>1&amp;2</sup>	3-Port Dome Closure for up to a 72 Ct. Splice (1 40Ct. tray included)	800016876
COYOTE® 6.5"x17" Dome Closure <sup>1</sup>	4-Port Dome Closure for up to a 96 Ct. Splice (1 40Ct. tray included)	800016877
COYOTE® 6.5"x22" Dome Closure <sup>1</sup>	4-Port Dome Closure for up to a 216 Ct. Splice (1 72Ct. tray included)	800016878
COYOTE® 9.5"x28" Dome Closure <sup>1</sup>	7-Port Dome Closure for a 288+ Ct. Splice (1 72Ct. tray included)	800016880
LITE-GRIP® Short 40 Ct. Splice Tray	Additional 40 Ct. Splice Tray for use in 800016876 & 800016877	80808945
LITE-GRIP® Long 72 Ct. Splice Tray	Additional 72 Ct. Splice Tray for use in 800016878 & 800016880	LGSTS72
12" Plastic SLACKLOOP® Brackets	2-Pack; for storing slack cable in-span for cables up to 0.60" in diameter	FIS12A

<sup>1</sup> All Fiber Closures include (1) 80808945 or LGSTS72 Splice Tray, (2) 1-Hole 0.40"-0.60" Grommets, (2) 2-Hole 0.42"-0.60" Grommets, (1) 6-Hole 0.125"-0.250" & Flat Drop Grommet and Adjustable Aerial Hanger Bracket Kit

<sup>2</sup> 800016876 comes with one less 2-Hole 0.42"-0.60" Grommet



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# ADSS Sag and Tension Properties



**Part Number:** X-ADES1525-12-HB-yyy-E3, where yyy = fiber count (012/024/048/072)

**Description:** 12/24/48/72 count SMF ezSpan (PP 12F/Tube) SJ ADSS 1525lbs 0.496" OD

Fiber Count:	12, 24, 48, 72	Fibers
Maximum Span:	820	Feet
Installation Sag:	1.50	%
Installation Temperature:	60	°F
Fiber Strain:	SafeStrain	

## Cable Specifications:

Maximum Rated Cable Load:	1525	Lbs
Cable Diameter:	0.496	In
Cross Sectional Area:	0.193	In <sup>2</sup>
Cable Weight:	0.077	Lb/Ft
Ultimate Tensile Strength:	3823	Lbs
Sheath Configuration:	Single Jacket	
Outer Jacket Type:	HDPE	



## Loading Conditions: NESC Medium

Ice Thickness:	0.25	In	
Wind Pressure:	4.0	psf	
Temperature:	15	°F	
Safety Factor:	0.20	Lb/Ft	
Maximum Space Potential:	12.0	kV	Low Pollution per IEEE 1222-2019
Maximum Space Potential:	8.0	kV	High Pollution per IEEE 1222-2019

## Maximum Tension at Maximum Span:

Long Term:	526	Lbs
Short Term:	1524	Lbs

## Additional Design Information for PLS-CADD & SAG10:

Initial Modulus of Elasticity (Stress-Strain A1):	931 kpsi	9310 psi/100
10-Year Modulus of Elasticity (Creep A1):	855 kpsi	8554 psi/100
Final Modulus of Elasticity:	931 kpsi	9310 psi/100
Coefficient of Thermal Expansion:	0.160E-05 1/°F	0.160E-03 /100°F

### Installation

Span Ft	Installation Sag		Install Tension Lb
	Ft	% Span	
81.8	1.2	1.5%	53
163.6	2.5	1.5%	105
254.4	3.7	1.5%	158
327.2	4.9	1.5%	210
409.0	6.1	1.5%	263
490.8	7.4	1.5%	316
572.6	8.6	1.5%	368
654.4	9.8	1.5%	421
736.2	11.0	1.5%	473
818.0	12.3	1.5%	526

### Maximum Loading Conditions

Span Ft	Loaded Vert. Sag Ft	Loaded Horiz. Sag Ft	Maximum Tension Lb	Cable Angle Degrees	No Wind Vert. Sag Ft
81.8	1.2	1.3	306	47	1.6
163.6	3.1	3.3	490	47	4.1
254.4	5.2	5.6	649	47	6.9
327.2	7.6	8.2	794	47	10.0
409.0	10.1	10.9	959	47	13.4
490.8	12.9	13.8	1057	47	16.9
572.6	15.7	16.9	1179	47	20.7
654.4	18.7	20.1	1298	47	24.5
736.2	21.7	23.4	1412	47	28.5
818.0	24.9	26.8	1524	47	32.6



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# ADSS Sag and Tension Properties (Continued)



**Part Number:** X-ADLS1605-24-HB-yyy-E3, where yyy = fiber count (096/144)

**Description:** 96/144 count SMF LongSpan (PBT 24F/Tube) SJ ADSS 1605lbs 0.496" OD

Fiber Count:	96,144	Fibers
Maximum Span:	835	Feet
Installation Sag:	1.50	%
Installation Temperature:	60	°F
Fiber Strain:	SafeStrain	

## Cable Specifications:

Maximum Rated Cable Load:	1605	Lbs
Cable Diameter:	0.496	In
Cross Sectional Area:	0.193	In <sup>2</sup>
Cable Weight:	0.085	Lb/Ft
Ultimate Tensile Strength:	4048	Lbs
Sheath Configuration:	Single Jacket	
Outer Jacket Type:	HDPE	



## Loading Conditions: NESC Medium

Ice Thickness:	0.25	In	
Wind Pressure:	4.0	psf	
Temperature:	15	°F	
Safety Factor:	0.20	Lb/Ft	
Maximum Space Potential:	12.0	kV	Low Pollution per IEEE 1222-2019
Maximum Space Potential:	8.0	kV	High Pollution per IEEE 1222-2019

## Maximum Tension at Maximum Span:

Long Term:	594	Lbs
Short Term:	1605	Lbs

## Additional Design Information for PLS-CADD & SAG10:

Initial Modulus of Elasticity (Stress-Strain A1):	986 kpsi	9858 psi/100
10-Year Modulus of Elasticity (Creep A1):	906 kpsi	9057 psi/100
Final Modulus of Elasticity:	986 kpsi	9858 psi/100
Coefficient of Thermal Expansion:	0.160E-05 1/°F	0.160E-03 /100°F

### Installation

Span Ft	Installation Sag		Install Tension Lb
	Ft	% Span	
83.6	1.3	1.5%	59
167.2	2.5	1.5%	119
250.8	3.8	1.5%	178
334.4	5.0	1.5%	238
418.0	6.3	1.5%	297
501.6	7.5	1.5%	356
585.2	8.8	1.5%	416
668.8	10.0	1.5%	475
752.4	11.3	1.5%	534
836.0	12.5	1.5%	594

### Maximum Loading Conditions

Span Ft	Loaded Vert. Sag Ft	Loaded Horiz. Sag Ft	Maximum Tension Lb	Cable Angle Degrees	No Wind Vert. Sag Ft
83.6	1.2	1.3	320	46	1.6
167.2	3.1	3.3	514	46	4.1
250.8	5.3	5.6	681	46	6.9
334.4	7.7	8.1	833	46	10.1
418.0	10.3	10.8	975	46	13.4
501.6	13.1	13.7	1111	46	17.0
585.2	15.9	16.7	1240	46	20.7
668.8	18.9	19.8	1365	46	24.6
752.4	22.0	23.1	1487	46	28.5
836.0	25.2	26.4	1605	46	32.6



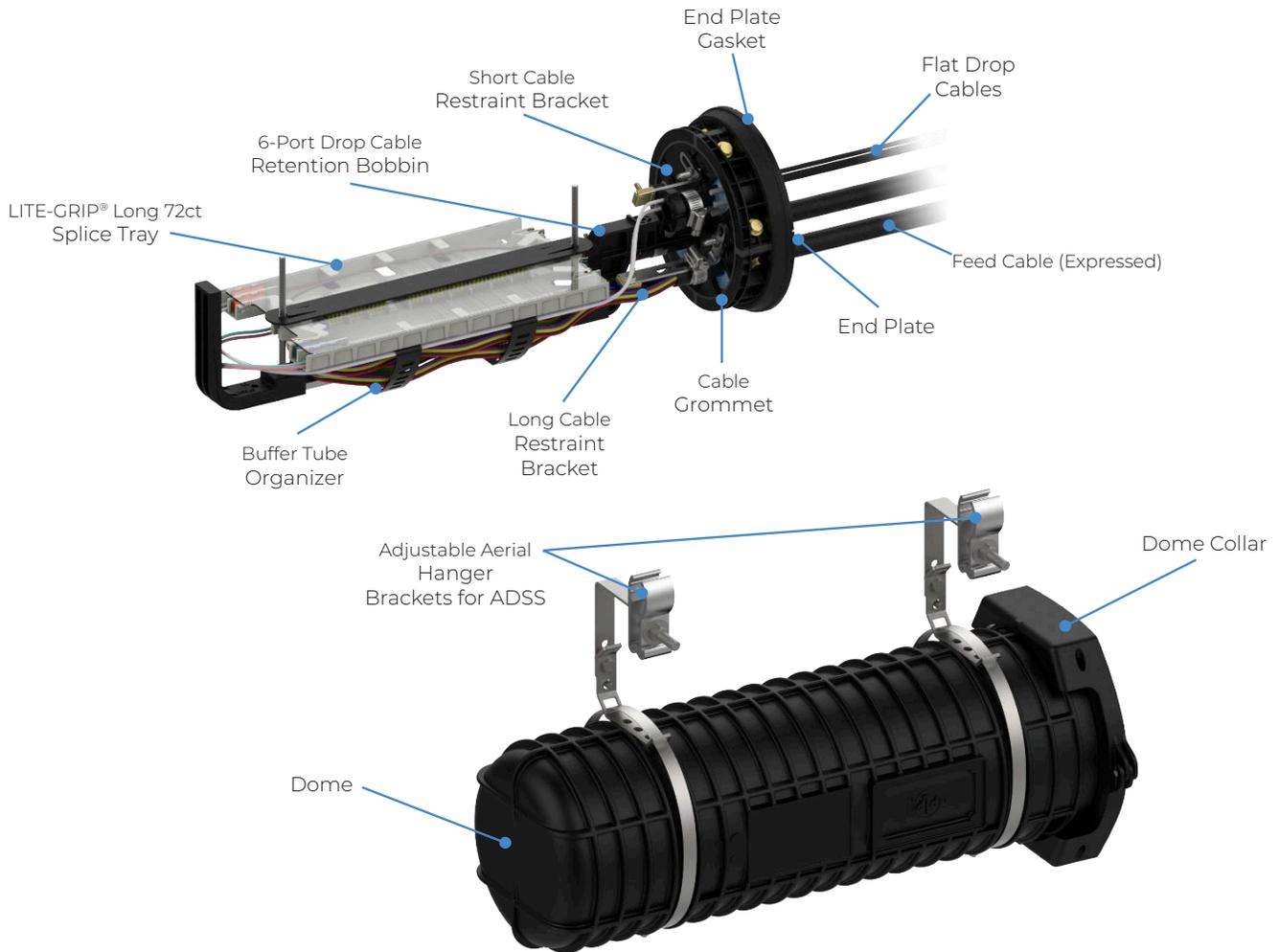
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## Typical Closure Configuration

The sample below is a COYOTE® 6.5" x 22" Dome Closure. Dimensions and port counts vary by model, but all are kitted the same way, with the following exceptions:

- The COYOTE® ONE Dome Closure has only three ports and is kitted with one less 2-hole grommet.
- As indicated on page 1, the shorter dome designs are kitted with a 40-count short splice tray.



## Bill of Materials

Component	Quantity
4-Port Segmented End Plate with Buffer Tube Organizer	1
Dome End Plate Gasket	1
Dome	1
Dome Collar	1
1 Hole Grommet for Cables Diameters 0.40" - 0.60"	2
2 Hole Grommet for Cables Diameters 0.42" - 0.60"	2
6 Hole Grommet for Cables Diameters 0.125" - 0.25" or Flat Drop Cable	1
6 Port Drop Cable Retention Bobbin	1
Short Cable Retention Bracket w/ Hose Clamp	2
Long Cable Retention Bracket w/ Hose Clamp	2
LITE-GRIP® Long 72 Ct. Splice Tray	1
Adjustable Aerial Hanger Bracket Kit for ADSS Cable	1