

# ezPlan™ Medium Span (≤1140 ft) Light 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 Light	1140'
24	X-ADES1525-12-HB-024-E3							
48	X-ADES1525-12-HB-048-E3							
72	X-ADES1525-12-HB-072-E3							
96	X-ADES1525-24-HB-096-E3			24	Gel PBT			
144	X-ADLS1605-24-HB-144-E3	1155'						

## 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 and shackle	4470200S	0.476–0.500 (12.01–12.7)			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	80032042LTC2	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 (11.72–14.2)					

## 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



**Prysmian**

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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:	1140	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 Light

Ice Thickness:	0.00	In	
Wind Pressure:	9.0	psf	
Temperature:	30	°F	
Safety Factor:	0.1	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:	732	Lbs
Short Term:	1574	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	
113.9	1.7	1.5%	73
227.8	3.4	1.5%	146
341.7	5.1	1.5%	220
455.6	6.8	1.5%	293
569.5	8.5	1.5%	366
683.4	10.3	1.5%	439
797.3	12.0	1.5%	513
911.2	13.7	1.5%	586
1025.1	15.4	1.5%	659
1139.0	17.1	1.5%	732

### Maximum Loading Conditions

Span Ft	Loaded Vert. Sag Ft	Loaded Horiz. Sag Ft	Maximum Tension Lb	Cable Angle Degrees	No Wind Vert. Sag Ft
113.9	0.5	2.4	281	78	1.5
227.8	1.2	5.9	464	78	3.5
341.7	2.1	9.9	624	78	5.6
455.6	3.0	14.3	770	78	7.9
569.5	3.9	19.0	908	78	10.3
683.4	5.0	23.9	1039	78	12.7
797.3	6.0	29.1	1166	78	15.2
911.2	7.1	34.4	1288	78	17.7
1025.1	8.3	39.9	1408	78	20.3
1139.0	9.4	45.5	1524	78	22.8



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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:	1155	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:	2811	Lbs
Sheath Configuration:	Single Jacket	
Outer Jacket Type:	HDPE	



### Loading Conditions: NESC Light

Ice Thickness:	0.00	In	
Wind Pressure:	9.0	psf	
Temperature:	30	°F	
Safety Factor:	0.05	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:	821	Lbs
Short Term:	1604	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	
115.2	1.7	1.5%	82
231.2	3.5	1.5%	164
346.8	5.2	1.5%	246
462.4	6.9	1.5%	328
578.0	8.7	1.5%	411
693.6	10.4	1.5%	493
809.2	12.1	1.5%	575
924.8	13.9	1.5%	657
1040.4	15.6	1.5%	739
1156.0	17.3	1.5%	821

#### Maximum Loading Conditions

Span Ft	Loaded Vert. Sag Ft	Loaded Horiz. Sag Ft	Maximum Tension Lb	Cable Angle Degrees	No Wind Vert. Sag Ft
115.2	0.6	2.4	293	77	1.5
231.2	1.3	5.8	484	77	3.5
346.8	2.2	9.8	652	77	5.7
462.4	3.2	14.1	806	77	7.9
578.0	4.3	18.7	951	77	10.3
693.6	5.4	23.5	1090	77	12.7
809.2	6.5	28.5	1224	77	15.2
924.8	7.7	33.7	1354	77	17.7
1040.4	8.9	39.0	1480	77	20.2
1156.0	10.2	44.5	1604	77	22.7



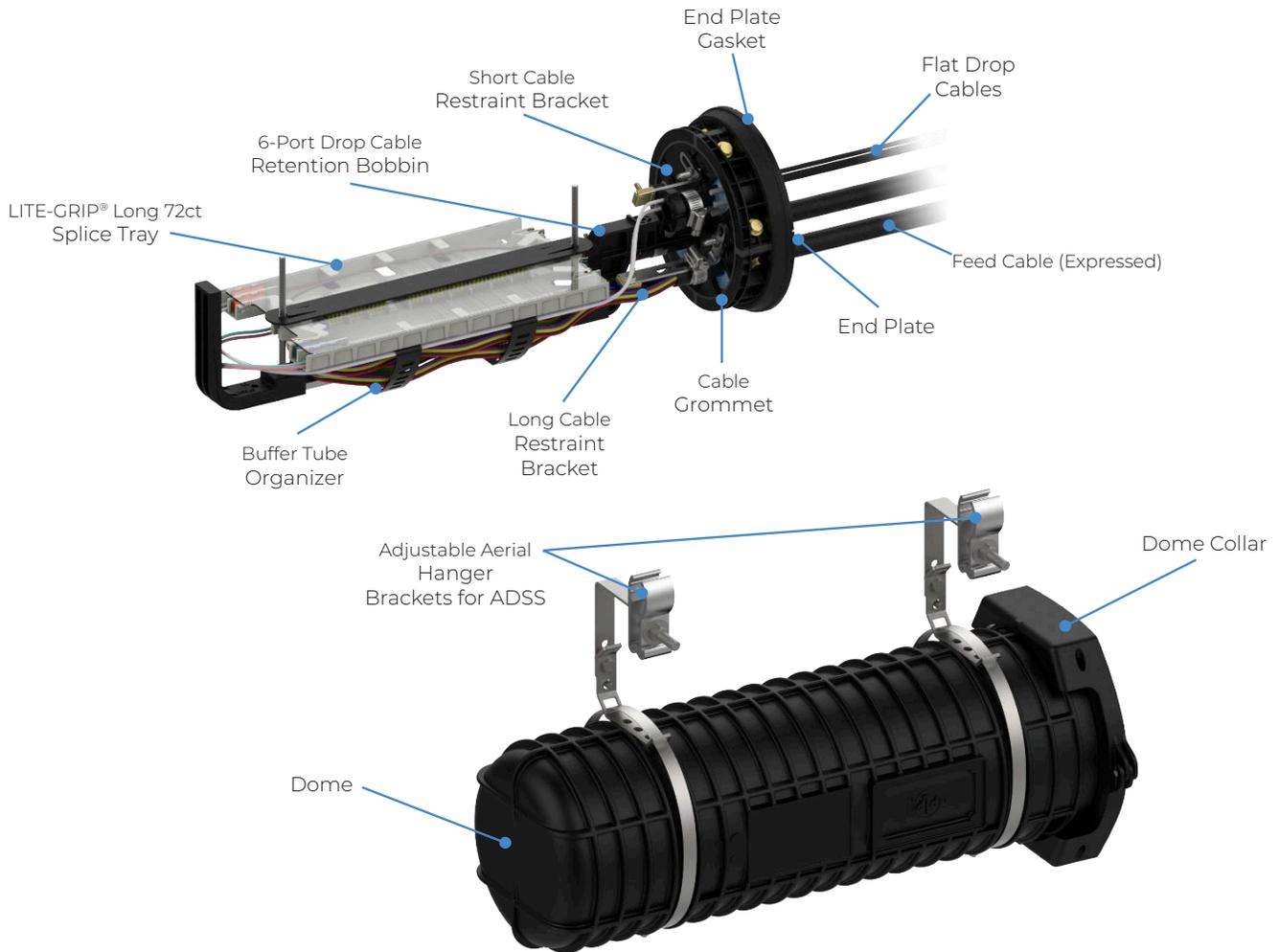
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## Typical Closure Configuration

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