

Product Description: AT-XXX27DT-048-CLDB - Maximum Span 450 ft

Loading Conditions: NESC HEAVY

Ice Thickness	12.7 mm	0.5 in.
Wind Pressure	192 N/m ² (63.6 km/hr)	4 psf (39.5 MPH)
Temperature	-17.8 C	0 F
Safety Factor	4.38 N/m	0.3 lb/ft

Tension @ Maximum Span for 1.5 % Installation Sag

Short Term	556 kg	1226 lb
Long Term	152 kg	336 lb

Specifications:

Maximum Span	137.2 m	450 ft
Cable Weight	0.133 kg/m	0.09 lb/ft
Cable Diameter	13.2 mm	0.519 in
Installation Temp	20 C	68 F
Cable Modulus	380.3 kg/mm ²	541 kpsi
Linear Expansion Coefficient	0.00001532 1 / C	0.00000851 1 / F
Estimated Break Load	780 kg	1719 lb

Maximum Cable Length: Dependent on construction and/or fiber type

Singlemode	12,900 m	42,323 ft
62.5/125 Multimode	8,000 m	26,247 ft

No Loading @ Install Temperature: 68 F

Span ft	Sag ft	Install Sag %	Tension lb	Vertical Sag % of Span
25	0.4	1.50	19	1.8
50	0.7	1.50	37	2.3
75	1.1	1.50	56	2.6
100	1.5	1.50	75	2.8
125	1.9	1.50	93	3.0
150	2.2	1.50	112	3.2
175	2.6	1.50	131	3.3
200	3.0	1.50	149	3.5
225	3.4	1.50	168	3.6
250	3.7	1.50	187	3.7
275	4.1	1.50	205	3.8
300	4.5	1.50	224	3.9
325	4.9	1.50	243	4.0
350	5.2	1.50	261	4.1
375	5.6	1.50	280	4.2
400	6.0	1.50	299	4.3
425	6.4	1.50	317	4.4
450	6.7	1.50	336	4.4

All Loading Conditions @ Temperature: 0 F

Tension lb	Vertical Sag ft	Horizontal Sag ft	Angle Deg
164	0.5	0.3	35
269	1.1	0.8	35
354	1.9	1.3	35
431	2.8	2.0	35
503	3.8	2.6	35
570	4.8	3.3	35
634	5.8	4.1	35
696	7.0	4.9	35
755	8.1	5.7	35
813	9.3	6.5	35
869	10.5	7.4	35
923	11.8	8.3	35
976	13.1	9.2	35
1028	14.4	10.1	35
1078	15.8	11.1	35
1128	17.2	12.0	35
1177	18.6	13.0	35
1226	20.0	14.0	35

The recommended maximum space potential at ADSS attachment point is 12 kV

Dead End Assembly:

PLP Dead-End: 2872005C1E1, Max. Tension: 2,500 lbs. (1135 kg)

Slack Storage Devices: Not recommended for TR cables

PLP Fiberlign@ CLAS Storage System w/cable guide: 710012375U

Fixed Tangent Support (Line Angle Changes <= 20 deg & Spans <= 600 ft (183 m))

PLP: Dielectric block: 44009952
PLP: Aluminum Support: 4450100

Heliformed Suspension Units (Line angle changes <= 30 degrees):

PLP: 43009922YC :Spans 1200ft to 2000ft (365m to 610m)
PLP: 4470201-S Aluminum Suspension with SRR rods, Max Span: 1200 ft (365m)

Suspended Support (Line Angle Changes <= 20 deg & Spans <= 600 ft (183 m))

PLP: Aluminum Suspension: 4450200-S

Vibration Dampers, see Application Note 812 for recommendations:

PLP Vibration Dampers: 50502274

Low Tension / Short Span Hardware:

PLP: Lite Tension DE: 2875004TE, Max. Tension: 800 lbs. (362 kg)
PLP: Lite Support: 4800114, Max.Span 300 ft (91 m)
PLP PGTTH Dead End: Not Available

Down Lead Cushion & Abrasion Protector:

PLP: 8003042, Add "H1" - Wood Attachment Kit & "LTC1" - Lattice Clamp Kit
PLP Abrasion Protector: PTG-0203 Length: 6 ft

Corona coils not required

PLP: Sized to fit appropriate hardware, part numbers available upon request