

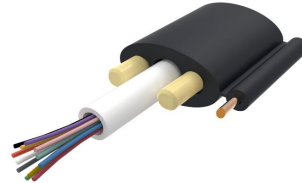
# Sag & Tension Tables (NESC: Light) Fiber + Tone Wire Outdoor Drop Cable Elliptical Tearable Drop

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Loading Conditions:	NESC LIGHT	SI	US
Ice Thickness mm (in):		0.00	(0.0)
Wind Pressure N/m <sup>2</sup> (lb/ft <sup>2</sup> ):		430.92	(9.0)
Temperature °C (°F):		-1.1	(30.0)
Safety Factor N/m (ft*lb):		0.73	(0.54)

Environmental Conditions			
Max. Environmental Load N (lbf):		1343	(302)
Max. Environmental Cable Strain (%):		0.62	(0.62)
Maximum Vertical Sag m (ft):		0.56	(1.8)



Design Specifications:		SI	US
Maximum Span m (ft):		112	(367)
Cable Weight kg/km (lb/mf):		42	(28)
Cable Diameter mm (in):		9.9	(0.39)
Cable Height mm (in):		4.5	(0.18)
Install Temp °C (°F):		20	(68.0)

Maximum Allowable Install Load and Strain			
Max. Install. Load N (lbf):		427	(96)
Max. Install. Cable Strain (%):		0.23	(0.23)

Install Location	Install Conditions at 20°C (68°F)					Loaded Conditions at -1°C (30°F)				
	Max Span	Sag	Install Sag	Tension	Cable Strain	Vertical Sag % of Span	Vertical Sag	Horizontal Sag	Tension	Cable Strain
	m (ft)	m (ft)	(%)	N (lbf)	(%)	(%)	m (ft)	m (ft)	N (lbf)	(%)

	84 (276)	0.84 (2.8)	1.00	427 (96)	0.23	0.37%	0.31 (1.0)	3.30 (10.8)	1330 (299)	0.62
	60 (197)	0.90 (3.0)	1.50	205 (46)	0.13	0.36%	0.22 (0.7)	2.29 (7.5)	983 (221)	0.45
	45 (148)	0.90 (3.0)	2.00	116 (26)	0.08	0.35%	0.16 (0.5)	1.67 (5.5)	756 (170)	0.35
	30 (98)	0.90 (3.0)	3.00	49 (11)	0.05	0.37%	0.11 (0.4)	1.17 (3.8)	480 (108)	0.22

	84 (276)	0.84 (2.8)	1.00	427 (96)	0.23	0.37%	0.31 (1.0)	3.30 (10.8)	1330 (299)	0.62
	92 (302)	1.38 (4.5)	1.50	311 (70)	0.18	0.41%	0.38 (1.2)	3.97 (13.0)	1330 (299)	0.62
	100 (328)	2.00 (6.6)	2.00	254 (57)	0.15	0.44%	0.44 (1.4)	4.65 (15.3)	1343 (302)	0.62
	112 (367)	3.36 (11.0)	3.00	191 (43)	0.12	0.50%	0.56 (1.8)	5.88 (19.3)	1330 (299)	0.62

	84 (276)	0.84 (2.8)	1.00	427 (96)	0.23	0.37%	0.31 (1.0)	3.30 (10.8)	1330 (299)	0.62
	92 (302)	1.38 (4.5)	1.50	311 (70)	0.18	0.41%	0.38 (1.2)	3.97 (13.0)	1330 (299)	0.62
	100 (328)	2.00 (6.6)	2.00	254 (57)	0.15	0.44%	0.44 (1.4)	4.65 (15.3)	1343 (302)	0.62
	112 (367)	3.36 (11.0)	3.00	191 (43)	0.12	0.50%	0.56 (1.8)	5.88 (19.3)	1330 (299)	0.62

Note: Assumptions made regarding Install Locations. Changes to these assumptions may change the Max Spans.

† Street crossing distances with 18.0 ft attachment height and a 3.0 ft maximum vertical sag.

‡ Pedestrian crossing distances with 18.0 ft attachment height and a 9.0 ft maximum vertical sag.

\* Max span with no limits imposed on sag.

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