

Sag & Tension Tables (NESC: Light)

Self-Support All-Dielectric Outdoor Drop Cable

O-001-DF-XY-F01NS/SP29

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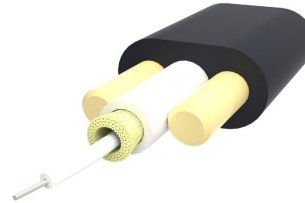
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Loading Conditions:	NESC LIGHT	SI	US
Ice Thickness mm (in):		0.00	(0.0)
Wind Pressure N/m ² (lb/ft ²):		430.92	(9.0)
Temperature °C (°F):		-1.1	(30.0)
Safety Factor N/m (ft*lb):		0.73	(0.54)

Environmental Conditions		SI	US
Max. Environmental Load N (lbf):		136	(31)
Max. Environmental Cable Strain (%):		0.51	(0.51)
Maximum Vertical Sag m (ft):		0.52	(1.7)



Design Specifications:		SI	US
Maximum Span m (ft):		110	(361)
Cable Weight kg/km (lb/mf):		39	(26)
Cable Diameter mm (in):		8.0	(0.31)
Cable Height mm (in):		4.6	(0.18)
Install Temp °C (°F):		20	(68.0)

Maximum Allowable Install Load and Strain		SI	US
Max. Install. Load N (lbf):		44	(10)
Max. Install. Cable Strain (%):		0.19	(0.19)

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)	(%)

	90 (295)	0.90 (3.0)	1.00	43 (96)	0.19	0.39%	0.35 (1.2)	3.22 (10.6)	134 (295)	0.51
	60 (197)	0.90 (3.0)	1.50	19 (43)	0.10	0.37%	0.22 (0.7)	2.06 (6.7)	93 (205)	0.35
	45 (148)	0.90 (3.0)	2.00	11 (24)	0.06	0.37%	0.17 (0.5)	1.53 (5.0)	71 (156)	0.27
	30 (98)	0.90 (3.0)	3.00	5 (11)	0.04	0.40%	0.12 (0.4)	1.10 (3.6)	43 (96)	0.16

	92 (302)	0.92 (3.0)	1.00	44 (98)	0.19	0.39%	0.36 (1.2)	3.32 (10.9)	136 (299)	0.51
	102 (335)	1.53 (5.0)	1.50	33 (72)	0.15	0.44%	0.44 (1.5)	4.07 (13.3)	136 (300)	0.51
	110 (361)	2.20 (7.2)	2.00	27 (59)	0.12	0.47%	0.52 (1.7)	4.73 (15.5)	136 (300)	0.51
	91 (298)	2.73 (9.0)	3.00	15 (32)	0.08	0.50%	0.45 (1.5)	4.16 (13.6)	106 (233)	0.40

	92 (302)	0.92 (3.0)	1.00	44 (98)	0.19	0.39%	0.36 (1.2)	3.32 (10.9)	136 (299)	0.51
	102 (335)	1.53 (5.0)	1.50	33 (72)	0.15	0.44%	0.44 (1.5)	4.07 (13.3)	136 (300)	0.51
	110 (361)	2.20 (7.2)	2.00	27 (59)	0.12	0.47%	0.52 (1.7)	4.73 (15.5)	136 (300)	0.51
	125 (410)	3.75 (12.3)	3.00	196 (44)	0.10	0.54%	0.67 (2.2)	6.16 (20.2)	1321 (297)	0.51

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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Specifications Subject to Change
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