

Sag & Tension Tables (NESC: Medium)

Self-Support All-Dielectric Outdoor Drop Cable

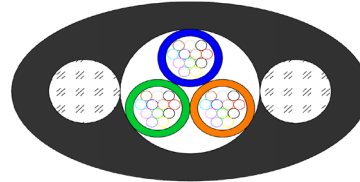
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Loading Conditions:	NESC MEDIUM	SI	US
Ice Thickness mm (in):		6.35	(0.3)
Wind Pressure N/m ² (lb/ft ²):		191.5	(4.0)
Temperature °C (°F):		-9.44	(15.0)
Safety Factor N/m (ft*lb):		2.92	(2.15)

Environmental Conditions			
Max. Environmental Load N (lbf):		1281	(288)
Max. Environmental Cable Strain (%):		0.60	(0.60)
Maximum Vertical Sag m (ft):		2.24	(7.4)



Design Specifications:		SI	US
Maximum Span m (ft):		71	(233)
Cable Weight kg/km (lb/mf):		31	(21)
Cable Diameter mm (in):		8.0	(0.31)
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):		214	(48)
Max. Install. Cable Strain (%):		0.13	(0.13)

Install Location	Max Span	Install Conditions at 20°C (68°F)				Loaded Conditions at -9°C (15°C)				
		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)	(%)

	40 (131)	0.40 (1.3)	1.00	156 (35)	0.10	2.27%	0.91 (3.0)	1.26 (4.1)	1010 (227)	0.47
	39 (128)	0.59 (1.9)	1.50	98 (22)	0.08	2.35%	0.92 (3.0)	1.27 (4.2)	947 (213)	0.44
	38 (125)	0.76 (2.5)	2.00	71 (16)	0.06	2.44%	0.93 (3.0)	1.28 (4.2)	890 (200)	0.42
	30 (98)	0.90 (3.0)	3.00	40 (9)	0.05	2.55%	0.77 (2.5)	1.06 (3.5)	672 (151)	0.31

	56 (184)	0.56 (1.8)	1.00	214 (48)	0.13	2.52%	1.41 (4.6)	1.96 (6.4)	1268 (285)	0.60
	60 (197)	0.90 (3.0)	1.50	156 (35)	0.10	2.69%	1.61 (5.3)	2.24 (7.3)	1277 (287)	0.60
	63 (207)	1.26 (4.1)	2.00	120 (27)	0.09	2.83%	1.78 (5.8)	2.47 (8.1)	1272 (286)	0.60
	71 (233)	2.13 (7.0)	3.00	89 (20)	0.07	3.16%	2.24 (7.4)	3.11 (10.2)	1281 (288)	0.60

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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
 Revision Date: 5/14/2024

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