

# Sag & Tension Tables (NESC: Medium) Self-Support All-Dielectric Outdoor Drop Cable O-001-DF-XY-F01NS/SP29

(800) 982-1708

(828) 324-2200

Fax: (828) 328-3400

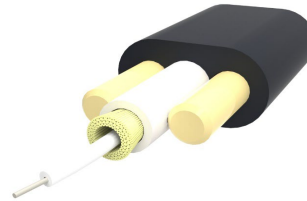
Int'l Fax: (828) 323-4989

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Loading Conditions:	NESC MEDIUM	SI	US
Ice Thickness mm (in):		6.35	(0.3)
Wind Pressure N/m <sup>2</sup> (lb/ft <sup>2</sup> ):		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):		1334	(300)
Max. Environmental Cable Strain (%):		0.51	(0.51)
Maximum Vertical Sag m (ft):		2.04	(6.7)



Design Specifications:		SI	US
Maximum Span m (ft):		68	(223)
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			
Max. Install. Load N (lbf):		249	(56)
Max. Install. Cable Strain (%):		0.12	(0.12)

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

	<b>42 (138)</b>	0.42 (1.4)	1.00	200 (45)	0.10	2.17%	0.91 (3.0)	1.23 (4.0)	1130 (254)	0.43
	<b>41 (134)</b>	0.62 (2.0)	1.50	129 (29)	0.07	2.26%	0.93 (3.0)	1.26 (4.1)	1054 (237)	0.40
	<b>39 (128)</b>	0.78 (2.6)	2.00	93 (21)	0.06	2.34%	0.91 (3.0)	1.24 (4.1)	970 (218)	0.36
	<b>30 (98)</b>	0.90 (3.0)	3.00	49 (11)	0.04	2.48%	0.74 (2.4)	1.00 (3.3)	707 (159)	0.26

	<b>53 (174)</b>	0.53 (1.7)	1.00	249 (56)	0.12	2.33%	1.24 (4.1)	1.67 (5.5)	1326 (298)	0.50
	<b>57 (187)</b>	0.86 (2.8)	1.50	178 (40)	0.09	2.50%	1.43 (4.7)	1.93 (6.3)	1330 (299)	0.50
	<b>61 (200)</b>	1.22 (4.0)	2.00	142 (32)	0.08	2.67%	1.63 (5.3)	2.20 (7.2)	1334 (300)	0.51
	<b>68 (223)</b>	2.04 (6.7)	3.00	107 (24)	0.06	3.00%	2.04 (6.7)	2.76 (9.1)	1321 (297)	0.50

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	<b>68 (223)</b>	2.04 (6.7)	3.00	107 (24)	0.06	3.00%	2.04 (6.7)	2.76 (9.1)	1321 (297)	0.50

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: 2/22/2024

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