

# Sag & Tension Tables (NESC: Medium) Fiber + Tone Wire Outdoor Drop Cable O-001-DF-HY-F01NS/SP29/1X24AWG

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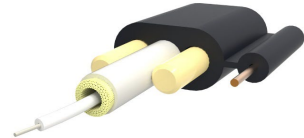
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Loading Conditions:	NESC MEDIUM	SI	US
Ice Thickness mm (in):		6.35	(0.3)
Wind Pressure N/m <sup>2</sup> (lb/ft <sup>2</sup> ):		191.5	(4.0)
Temperature °C (°F):		-9.44	(15.0)
Safety Factor N/m (ft*lb):		2.92	(2.15)

Environmental Conditions			
Max. Environmental Load N (lbf):		1334	(300)
Max. Environmental Cable Strain (%):		0.50	(0.50)
Maximum Vertical Sag m (ft):		1.96	(6.4)



Design Specifications:		SI	US
Maximum Span m (ft):		64	(210)
Cable Weight kg/km (lb/mf):		43	(29)
Cable Diameter mm (in):		10.0	(0.39)
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):		262	(59)
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>41 (134)</b>	0.41 (1.3)	1.00	218 (49)	0.11	2.23%	0.92 (3.0)	1.19 (3.9)	1174 (264)	0.44
	<b>39 (128)</b>	0.59 (1.9)	1.50	138 (31)	0.08	2.32%	0.90 (3.0)	1.18 (3.9)	1076 (242)	0.40
	<b>38 (125)</b>	0.76 (2.5)	2.00	102 (23)	0.06	2.42%	0.92 (3.0)	1.20 (3.9)	1005 (226)	0.37
	<b>30 (98)</b>	0.90 (3.0)	3.00	53 (12)	0.04	2.56%	0.77 (2.5)	1.00 (3.3)	747 (168)	0.28
	<b>49 (161)</b>	0.49 (1.6)	1.00	262 (59)	0.12	2.36%	1.16 (3.8)	1.51 (5.0)	1326 (298)	0.50
	<b>53 (174)</b>	0.80 (2.6)	1.50	187 (42)	0.10	2.54%	1.35 (4.4)	1.76 (5.8)	1330 (299)	0.50
	<b>56 (184)</b>	1.12 (3.7)	2.00	151 (34)	0.08	2.70%	1.51 (5.0)	1.97 (6.5)	1326 (298)	0.50
	<b>64 (210)</b>	1.92 (6.3)	3.00	116 (26)	0.07	3.07%	1.96 (6.4)	2.56 (8.4)	1334 (300)	0.50
	<b>49 (161)</b>	0.49 (1.6)	1.00	262 (59)	0.12	2.36%	1.16 (3.8)	1.51 (5.0)	1326 (298)	0.50
	<b>53 (174)</b>	0.80 (2.6)	1.50	187 (42)	0.10	2.54%	1.35 (4.4)	1.76 (5.8)	1330 (299)	0.50
	<b>56 (184)</b>	1.12 (3.7)	2.00	151 (34)	0.08	2.70%	1.51 (5.0)	1.97 (6.5)	1326 (298)	0.50
	<b>64 (210)</b>	1.92 (6.3)	3.00	116 (26)	0.07	3.07%	1.96 (6.4)	2.56 (8.4)	1334 (300)	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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