

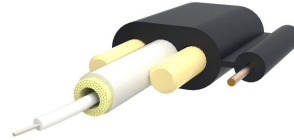
# Sag & Tension Tables (NESC: Heavy) Fiber + Tone Wire Outdoor Drop Cable O-001-DF-HY-F01NS/SP29/1X24AWG

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Loading Conditions:	NESC HEAVY	SI	US
Ice Thickness mm (in):	12.70	(0.5)	
Wind Pressure N/m <sup>2</sup> (lb/ft <sup>2</sup> ):	191.5	(4.0)	
Temperature °C (°F):	-17.8	(0.0)	
Safety Factor N/m (ft*lb):	4.38	(3.23)	


Environmental Conditions			
Max. Environmental Load N (lbf):	1334	(300)	
Max. Environmental Cable Strain (%):	0.49	(0.49)	
Maximum Vertical Sag m (ft):	1.38	(4.5)	





Design Specifications:		SI	US
Maximum Span m (ft):	35	(115)	
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):	151	(34)	
Max. Install. Cable Strain (%):	0.08	(0.08)	

Install Location	Max Span	Install Conditions at 20°C (68°F)				Loaded Conditions at -18°C (0°F)				
		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>28 (92)</b>	0.28 (0.9)	1.00	151 (34)	0.08	3.16%	0.88 (2.9)	0.70 (2.3)	1321 (297)	0.49
	<b>28 (92)</b>	0.42 (1.4)	1.50	98 (22)	0.06	3.28%	0.92 (3.0)	0.73 (2.4)	1272 (286)	0.47
	<b>27 (89)</b>	0.54 (1.8)	2.00	71 (16)	0.05	3.37%	0.91 (3.0)	0.72 (2.4)	1197 (269)	0.44
	<b>25 (82)</b>	0.75 (2.5)	3.00	44 (10)	0.04	3.63%	0.91 (3.0)	0.72 (2.4)	1028 (231)	0.37

	<b>28 (92)</b>	0.28 (0.9)	1.00	151 (34)	0.08	3.16%	0.88 (2.9)	0.70 (2.3)	1321 (297)	0.49
	<b>30 (98)</b>	0.45 (1.5)	1.50	107 (24)	0.06	3.35%	1.00 (3.3)	0.80 (2.6)	1334 (300)	0.49
	<b>31 (102)</b>	0.62 (2.0)	2.00	85 (19)	0.06	3.51%	1.09 (3.6)	0.87 (2.8)	1317 (296)	0.48
	<b>35 (115)</b>	1.05 (3.4)	3.00	62 (14)	0.05	3.95%	1.38 (4.5)	1.10 (3.6)	1321 (297)	0.49

	<b>28 (92)</b>	0.28 (0.9)	1.00	151 (34)	0.08	3.16%	0.88 (2.9)	0.70 (2.3)	1321 (297)	0.49
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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: 2/22/2024

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