



COMMSCOPE®

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Sag & Tension Tables (NESC: Heavy)

Fiber + Tone Wire Outdoor Drop Cable

O-012-DF-HY-F12NS/XY012/1X24AWG

Loading Conditions:	NESC HEAVY	SI	US
Ice Thickness mm (in):		12.70	(0.5)
Wind Pressure N/m ² (lb/ft ²):		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 kg (lbs):		150	(331)
Max. Environmental Cable Strain (%):		0.40	(0.40)
Maximum Vertical Sag m (ft):		1.38	(5)

Design Specifications:		SI	US
Maximum Span m (ft):		36.5	(120)
Cable Weight kg/km (lb/mf):		49	(33)
Cable Diameter mm (in):		10.2	(0.40)
Cable Height mm (in):		4.5	(0.18)
Install Temp °C (°F):		20	(68.0)



Maximum Allowable Install Load and Strain			
Max. Install. Load kg (lb):		32	(71)
Max. Install. Cable Strain (%):		0.10	(0.10)

Install Location	Install Conditions at 20 °C					Loading Conditions at -18 °C						
	Max Span	Sag	Install Sag	Tension	Cable Strain	Vertical Sag % of Span	Vertical Sag	Horizontal Sag	Resultant Sag	Tension	Cable Strain	Blowout Angle
	m (ft)	m (ft)	(%)	kg (lbs)	(%)	(%)	m (ft)	(m)	(m)	kg (lbs)	(%)	(°)

	26 (86)	0.13 (0.4)	0.50	32 (71)	0.10	2.70%	0.71 (2.3)	0.56	0.90	150 (330)	0.40	38.30
	29 (93)	0.29 (0.9)	1.00	17 (38)	0.05	2.94%	0.84 (2.7)	0.66	1.07	149 (329)	0.40	38.30
	31 (100)	0.46 (1.5)	1.50	12 (27)	0.04	3.13%	0.96 (3.1)	0.75	1.22	150 (330)	0.40	38.30
	33 (107)	0.65 (2.1)	2.00	10 (22)	0.03	3.33%	1.08 (3.5)	0.85	1.38	150 (331)	0.40	38.30

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	37 (120)	1.10 (3.6)	3.00	7 (16)	0.02	3.77%	1.38 (4.5)	1.09	1.76	149 (328)	0.40	38.30

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* Long Distances with exceptionally large cable sags. † Street crossing distances with 18.0 ft attachment height and a 3.0 ft maximum sag ‡ Pedestrian crossing distances with 18.0 ft attachment height and a 9.0 ft maximum sag

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