



# Sag & Tension Tables (NESC: Heavy)

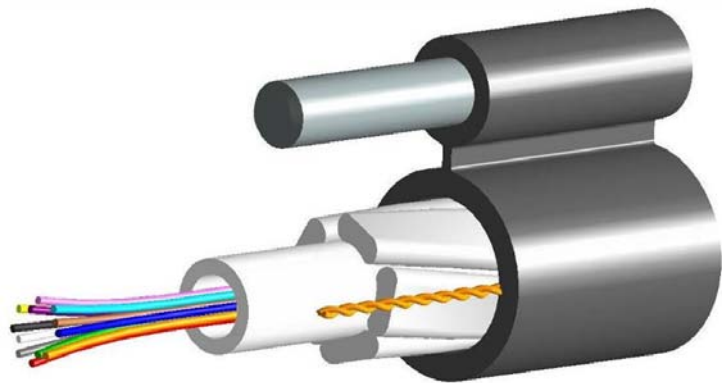
## Self-Support Non-Armor Figure-8 Outdoor Drop Cable

### M-012-DN-XY-F12NS/GSM

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		SI	US
Max. Environmental Load kg (lbs):		249	(550)
Max. Environmental Cable Strain (%):		0.24	(0.24)
Maximum Vertical Sag m (ft):		1.69	(6)

Design Specifications:		SI	US
Maximum Span m (ft):		51	(167)
Cable Weight kg/km (lb/mft):		70	(47)
Cable Diameter mm (in):		6.6	(0.26)
Cable Height mm (in):		11.3	(0.44)
Install Temp °C (°F):		20	(68.0)



Maximum Allowable Install Load and Strain		SI	US
Max. Install. Load kg (lb):		55	(120)
Max. Install. Cable Strain (%):		0.07	(0.07)

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)	(%)	(°)

	31 (102)	0.16 (0.5)	0.50	55 (120)	0.07	2.03%	0.63 (2.1)	0.48	0.79	248 (546)	0.24	37.28
	35 (115)	0.35 (1.1)	1.00	31 (68)	0.04	2.30%	0.81 (2.6)	0.61	1.01	246 (543)	0.24	37.28
	37 (121)	0.56 (1.8)	1.50	22 (48)	0.03	2.49%	0.92 (3.0)	0.70	1.16	241 (531)	0.23	37.28
	35 (115)	0.70 (2.3)	2.00	15 (34)	0.02	2.61%	0.91 (3.0)	0.69	1.15	218 (480)	0.20	37.28

	35 (115)	0.35 (1.1)	1.00	31 (68)	0.04	2.30%	0.81 (2.6)	0.61	1.01	246 (543)	0.24	37.28
	42 (138)	0.84 (2.8)	2.00	18 (41)	0.02	2.76%	1.16 (3.8)	0.88	1.46	247 (544)	0.24	37.28
	51 (167)	1.53 (5.0)	3.00	15 (33)	0.02	3.31%	1.69 (5.5)	1.29	2.12	249 (550)	0.24	37.28

	35 (115)	0.35 (1.1)	1.00	31 (68)	0.04	2.30%	0.81 (2.6)	0.61	1.01	246 (543)	0.24	37.28
	42 (138)	0.84 (2.8)	2.00	18 (41)	0.02	2.76%	1.16 (3.8)	0.88	1.46	247 (544)	0.24	37.28
	51 (167)	1.53 (5.0)	3.00	15 (33)	0.02	3.31%	1.69 (5.5)	1.29	2.12	249 (550)	0.24	37.28

\* 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